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**Engine Series:**  
300

**Engine Desc:**  
To ESN  
154,765

**Engine Data:**  
O'rings on Liner

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 3.86 in /  
98 mm Pin Ø:  
1.1878 in / (+/-  
.0001)=30mm

**Block (M):**  
T24963,  
T26935

**Con Rod (M):**  
T20007,  
R81410

**Piston (M):**  
T23481

**Farm Tractors**  
820  
1020  
1030

**Backhoe Loaders**  
300  
300A

**Crawler Dozers**  
350A  
350B

**Forklifts**  
380



- 1) **Engine O/H Kit**  
‣ TOK3481
- 2) **Engine I/F Kit**  
‣ TIK3481



- Piston-Liner Kit**  
‣ TPLK481
- Consists of:**
- a) TT23481
- b) TAR70633
- c) TT23482
- d) TAR51902
- e) TR51112



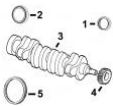
- Main Bearing**  
‣ TRE27352 *Std.*  
‣ TRE27353 *0.010*  
‣ TRE27360 *0.020*  
‣ TRE27368 *0.030*
- Use 3**



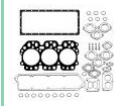
- Thrust Bearing**  
‣ TAT21139 *Std.*  
‣ TAT21132 *0.010*  
‣ TAT21134 *0.020*  
‣ TAT21136 *0.030*
- Use 1**



- Con Rod Bearing**  
‣ TRE27348 *Std.*  
‣ TRE27349 *0.010*  
‣ TRE27358 *0.020*  
‣ TRE27364 *0.030*
- Use 3**



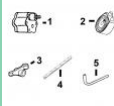
- 1) **Front Seal**  
‣ TAR67942
- 2) **Rear Seal**  
‣ TRE44574
- 3) **Crankshaft**  
‣ TAT18031
- 4) **Crankshaft, Gear**  
‣ TT20094
- 5) **Ring Gear**  
‣ TR114282 *(142T)*



- 1) **O/H Gasket Set**  
‣ TRE38570
- 2) **Head Gasket Set**  
‣ TRE38848
- 3) **Head Gasket**  
‣ TR98460
- 4) **Oil Pan Gasket**  
‣ TR97341
- 5) **Rocker Cover Gsk**  
‣ TR75729
- 6) **Timing Cover Gasket**  
‣ TT20273
- 7) **Gasket Thermostat Housing**  
‣ TT20219



- 1) **Bush, Con Rod**  
‣ TT23471 *x3*
- 2) **Bolt, Con Rod**  
‣ TR74194 *x6*
- 3) **Camshaft Kit**  
‣ TRE55900
- 4) **Con Rod**  
‣ TAT18005



- 1) **Pump, Oil**  
‣ TRE55343
- 2) **Oil Cooler**  
‣ TRE31929
- 3) **Rocker Arm**  
‣ TRE31973
- 4) **Rocker Shaft**  
‣ TR54985
- 5) **Pump, Oil Tube**  
‣ TR113752
- 6) **Oil Pump O'Ring**  
‣ TR61871



- 1) **Lower Gear**  
‣ TAT24252
- 2) **Lower Bushing**  
‣ TT26321
- 3) **Upper Gear**  
‣ TAT18009
- 4) **Upper Bushing**  
‣ TT20034
- 5) **Pump, Follower**  
‣ TT20073 *x6*
- 6) **Cam. Gear**  
‣ TT20070
- 7) **Camshaft Kit**  
‣ TRE55900

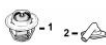
- Valve, Intake**  
‣ TR79623 *Std.*  
‣ TR79628 *0.003*  
‣ TR79629 *0.015*

- Valve, Exhaust**  
‣ TR79624 *Std.*  
‣ TR79625 *0.003*  
‣ TR79626 *0.015*

- 1) **Insert, Valve In**  
‣ TR73064 *Std.*
- 2) **Insert, Valve Ex**  
‣ TR51734 *Std.*

- 1) **Cap, Valve**  
‣ TT20129
- 2) **Lock, Valve**  
‣ TT20077

- 1) **Spring, Valve**  
‣ TR26125
- 2) **Rotator, Valve**  
‣ TRE11410
- 3) **O'ring, Valve**  
‣ TR87627



- 1) **Thermostat**  
‣ TRE33705 *180° F*
- 2) **Thermostat Cover**  
‣ TT23620
- 3) **Thermostat Cover Gsk**  
‣ TT20215



- 1) **Fuel Transfer Pump**  
‣ TRE42211
- 2) **Fuel Pump Gasket**  
‣ TR27285



- Water Pump Repair Kit**  
‣ **Without Impeller**  
‣ TRE19507
- **With Impeller**
- 2) **Water Pump Gasket**  
‣ TT20242  
‣ TT20268



- 1) **Injector, Pencil**  
‣ TAR89564
- 2) **Kit, Grommet**  
‣ TMX504
- 3) **Cap**  
‣ TAT27622  
‣ TAR85618
- 4) **Washer**  
‣ TT29539
- 5) **Tube Nut**  
‣ TR51937



- Seal, Injector**  
‣ TR60746  
‣ TR48000

(1): Do not use with Flywheel Housing (m) T20300, T22991.

(3): Conversion Kit TMX386: Available Consists of: TT31306 X1 Nipple TR99802 X2 Hose.

(5): Camshaft has a 40 mm wide front bearing journal and made for a rear press in tachometer drive, it will replace early camshafts with narrower front bearing journal without any issue. Replaces camshafts marked T20015, T20016, R79643, R106957 and RE522311.

(2): Do not use with Housing (m) R54096, R70741, R74549.

(4): Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.

(6): See the Water Pump Identification Chart to make sure these part numbers are correct. You will need the water pump casting number and will need to know if you have a stamped steel pulley or a cast iron pulley.

# JOHN DEERE 3.152 O'RINGS ON BLOCK

**Engine Series:**  
300

**Engine Model:**  
3.152

**Engine Desc:**  
From ESN  
154,766

**Engine Data:**  
O'rings on  
Block

**Engine Dimensions:**  
Bore: 3.86 in /  
98 mm Pin Ø:  
1.1878 in / (+/-  
.0001) = 30mm

**Block (M):**  
R53240,  
R55100,  
R72967,  
T32339

**Con Rod (M):**  
T20007,  
R81410

**Piston (M):**  
AR87736,  
AR90550

**Farm Tractors**

820  
830  
1020  
1030

**Backhoe Loaders**

300  
300A  
300B  
301  
301A

**Crawler Dozers**

350A  
350B

**Forklifts**

380



- 1) **Engine O/H Kit**
- › TOK3591
- 2) **Engine I/F Kit**
- › TIK3591



- 1) **Piston-Liner Kit**
- › TAR71591
- Consists of:**
- a) TT23481
- b) TAR70633
- c) TT23482
- d) TT32340
- e) TAR71617
- f) TR51112



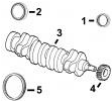
- 1) **Main Bearing**
- › TRE27352 *Std.*
- › TRE27353 *0.010*
- › TRE27360 *0.020*
- › TRE27368 *0.030*
- Use 3**



- 1) **Thrust Bearing**
- › TAT21139 *Std.*
- › TAT21132 *0.010*
- › TAT21134 *0.020*
- › TAT21136 *0.030*
- Use 1**

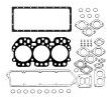


- 1) **Con Rod Bearing**
- › TRE27348 *Std.*
- › TRE27349 *0.010*
- › TRE27358 *0.020*
- › TRE27364 *0.030*
- Use 3**



- 1) **Front Seal**
- › TAR67942
- 2) **Rear Seal**
- › TRE44574
- 3) **Crankshaft**
- › TAT18031
- 4) **Crankshaft, Gear**
- › TT20094
- 5) **Ring Gear**
- › TR114282 *(142T)*

1

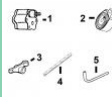


- 1) **O/H Gasket Set**
- › TRE38570
- 2) **Head Gasket Set**
- › TRE38848
- 3) **Head Gasket**
- › TR98460
- 4) **Oil Pan Gasket**
- › TR97341
- 5) **Rocker Cover Gsk**
- › TR75729
- 6) **Timing Cover Gasket**
- › TT20273
- 7) **Gasket Thermostat Housing**
- › TT20219



- 1) **Bush, Con Rod**
- › TT23471 *x3*
- 2) **Bolt, Con Rod**
- › TR74194 *x6*
- 3) **Camshaft Kit**
- › TRE55900
- 4) **Con Rod**
- › TAT18005

4



- 1) **Pump, Oil**
- › TRE55343
- 2) **Oil Cooler**
- › TRE31929
- 3) **Rocker Arm**
- › TRE31973
- 4) **Rocker Shaft**
- › TR54985
- 5) **Pump, Oil Tube**
- › TR113752
- 6) **Oil Pump O'Ring**
- › TR61871

3



- 1) **Lower Gear**
- › TAT24252
- 2) **Lower Bushing**
- › TT26321
- 3) **Upper Gear**
- › TAT18009
- 4) **Upper Bushing**
- › TT20034
- 5) **Cam. Follower**
- › TT20073 *x6*
- 6) **Cam. Gear**
- › TT20070
- 7) **Camshaft Kit**
- › TRE55900

5

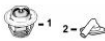
- 1) **Valve, Intake**
- › TR79623 *Std.*
- › TR79628 *0.003*
- › TR79629 *0.015*

- 1) **Valve, Exhaust**
- › TR79624 *Std.*
- › TR79625 *0.003*
- › TR79626 *0.015*

- 1) **Insert, Valve In**
- › TR73064 *Std.*
- 2) **Insert, Valve Ex**
- › TR51734 *Std.*

- 1) **Cap, Valve**
- › TT20129
- 2) **Lock, Valve**
- › TT20077

- 1) **Spring, Valve**
- › TR26125
- 2) **Rotator, Valve**
- › TRE11410
- 3) **O'ring, Valve**
- › TR87627



- 1) **Thermostat**
- › TRE33705 *180° F*
- 2) **Thermostat Cover**
- › TT23620
- 3) **Thermostat Cover Gsk**
- › TT20215

2



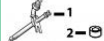
- 1) **Fuel Transfer Pump**
- › TRE42211
- 2) **Fuel Pump Gasket**
- › TR27285



- 1) **Water Pump Repair Kit**
- › **Without Impeller**
- › TRE19507
- › **With Impeller**
- › TRE62658
- › **Water Pump Gasket**
- › TT20242
- › TT20268

6

6



- 1) **Injector, Pencil**
- › TAR89564
- 2) **Kit, Grommet**
- › TMX504
- 3) **Cap**
- › TAT27622
- › TAR85618
- 4) **Washer**
- › TT29539
- 5) **Tube Nut**
- › TR51937



- 1) **Seal, Injector**
- › TR60746
- › TR48000

(1): Do not use with Flywheel Housing (m) T20300, T22991.

(2): Do not use with Housing (m) R54096, R70741, R74549.

(3): Conversion Kit TMX386: Available Consists of: TT31306 X1 Nipple TR99802 X2 Hose.

(4): Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.

(5): Camshaft has a 40 mm wide front bearing journal and made for a rear press in tachometer drive, it will replace early camshafts with narrower front bearing journal without any issue. Replaces camshafts marked T20015, T20016, R79643, R106957 and RE522311.

(6): See the Water Pump Identification Chart to make sure these part numbers are correct. You will need the water pump casting number and will need to know if you have a stamped steel pulley or a cast iron pulley.

JOHN DEERE 3.164 SMALL PIN, O'RINGS ON LINER

**Engine Series:**  
300

**Engine Model:**  
3.164

**Engine Desc:**  
To ESN  
179,601

**Engine Data:**  
Small Pin,  
O'rings on Liner

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 4.02 in /  
102 mm Pin Ø:  
1.1878 in / (+/-  
.0001) = 30mm

**Con Rod (M):**  
T20007,  
R81410

**Piston (M):**  
AR78310

**Farm Tractors**  
1520

**Backhoe  
Loaders**

302  
302A



- 1) **Engine O/H Kitt**
  - › TOK3310
- 2) **Engine I/F Kit**
  - › TIK3310



- Piston-Liner Kit**
  - › TPLK310
- Consists of:**
  - › a) TAR78310
  - › b) TAR55759
  - › c) TT26149
  - › d) TAR51903
  - › e) TR51112



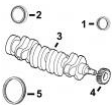
- Main Bearing**
  - › TRE27352 **Std.**
  - › TRE27353 **0.010**
  - › TRE27360 **0.020**
  - › TRE27368 **0.030**
- Use 3**



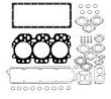
- Thrust Bearing**
  - › TAT21139 **Std.**
  - › TAT21132 **0.010**
  - › TAT21134 **0.020**
  - › TAT21136 **0.030**
- Use 1**



- Con Rod Bearing**
  - › TRE27348 **Std.**
  - › TRE27349 **0.010**
  - › TRE27358 **0.020**
  - › TRE27364 **0.030**
- Use 3**



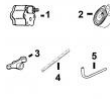
- 1) **Front Seal**
  - › TAR67942
- 2) **Rear Seal**
  - › TRE44574
- 3) **Crankshaft**
  - › TAT18031
- 4) **Crankshaft, Gear**
  - › TT20094
- 5) **Ring Gear**
  - › TR114282 (142T)



- 1) **O/H Gasket Set**
  - › TRE501578
- 2) **Head Gasket Set**
  - › TRE38850
- 3) **Head Gasket**
  - › TR97356
- 4) **Oil Pan Gasket**
  - › TR97341
- 5) **Rocker Cover Gsk**
  - › TR75729



- 1) **Bush, Con Rod**
  - › TT23471 x3
- 2) **Bolt, Con Rod**
  - › TR74194 x6
- 3) **Camshaft Kit**
  - › TRE55900
- 4) **Con Rod**
  - › TAT18005



- 1) **Pump, Oil**
  - › TRE55343
- 2) **Oil Cooler**
  - › TRE31929
- 3) **Rocker Arm**
  - › TRE31973
- 4) **Rocker Shaft**
  - › TR54985
- 5) **Pump, Oil Tube**
  - › TR113752
- 6) **Oil Pump O'Ring**
  - › TR61871



- 1) **Lower Gear**
  - › TAT24252
- 2) **Lower Bushing**
  - › TT26321
- 3) **Upper Gear**
  - › TAT18009
- 4) **Upper Bushing**
  - › TT20034
- 5) **Cam. Follower**
  - › TT20073 x6
- 6) **Cam. Gear**
  - › TT20070
- 7) **Camshaft Kit**
  - › TRE55900

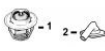
- Valve, Intake**
  - › TR79623 **Std.**
  - › TR79628 **0.003**
  - › TR79629 **0.015**

- Valve, Exhaust**
  - › TR79624 **Std.**
  - › TR79625 **0.003**
  - › TR79626 **0.015**

- 1) **Insert, Valve In**
  - › TR73064 **Std.**
- 2) **Insert, Valve Ex**
  - › TR51734 **Std.**

- 1) **Cap, Valve**
  - › TT20129
- 2) **Lock, Valve**
  - › TT20077

- 1) **Spring, Valve**
  - › TR26125
- 2) **Rotator, Valve**
  - › TRE11410
- 3) **O'ring, Valve**
  - › TR87627



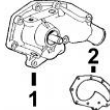
- 1) **Thermostat**
  - › TRE33705 **180° F**
- 2) **Thermostat Cover**
  - › TT23620
- 3) **Thermostat Cover Gsk**
  - › TT20215



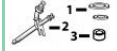
- 1) **Fuel Transfer Pump**
  - › TRE42211
- 2) **Fuel Pump Gasket**
  - › TR27285



- Water Pump Repair Kit**
  - › **Without Impeller**
    - › TRE19507
  - › **With Impeller**
    - › TRE62658



- 1) **Water Pump**
  - › TAT27018
- 2) **Water Pump Gasket**
  - › TT20242
  - › TT20268



- 1) **Seal, Injector**
  - › TR60746
  - › TR48000
- 2) **Injector, Pencil**
  - › TAR89564
- 3) **Kit, Grommet**
  - › TMX504
- 4) **Cap**
  - › TAT27622
  - › TAR85618
- 5) **Washer**
  - › TT29539
- 6) **Tube Nut**
  - › TR51937

(1): Do not use with Housing (m) R54096, R70741, R74549.

(3): Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.









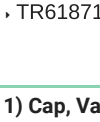

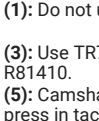
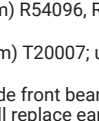
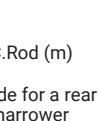
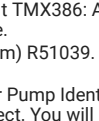
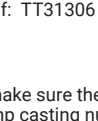
(5): Camshaft has a 40 mm wide front bearing journal and made for a rear press in tachometer drive, it will replace early camshafts with narrower front bearing journal without any issue. Replaces camshafts marked T20015, T20016, R79643, R106957 and RE522311.

(2): Conversion Kit TMX386: Available Consists of: TT31306 x1 Nipple TR99802 x2 Hose.

(4): (m) R48997, (m) R51039.

(6): See the Water Pump Identification Chart to make sure these part numbers are correct. You will need the water pump casting number and will need to know if you have a stamped steel pulley or a cast iron pulley.

JOHN DEERE 3.164 SMALL PIN, O'RINGS ON BLOCK

|   |  |  |  |   |   |
|---|--|--|--|---|---|
| <p><b>Engine Series:</b><br/>300</p> <p><b>Engine Model:</b><br/>3.164</p> <p><b>Engine Desc:</b><br/>To ESN<br/>179,601</p> <p><b>Engine Data:</b><br/>Small Pin,<br/>O'rings on<br/>Block</p> <p><b>Engine Info:</b><br/>3 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.02 in /<br/>102 mm Pin Ø:<br/>1.1878 in / (+/-<br/>.0001) = 30mm</p> <p><b>Con Rod (M):</b><br/>T20007,<br/>R81410</p> <p><b>Piston (M):</b><br/>AR87736,<br/>AR90550</p> |  <p>1) <b>Engine O/H Kit</b><br/>‣ TOK3593</p> <p>2) <b>Engine I/F Kit</b><br/>‣ TIK3593</p>   |  <p><b>Piston-Liner Kit</b><br/>‣ TAR71593</p> <p><b>Consists of:</b></p> <p>‣ a) TAR78310<br/>‣ b) TAR55759<br/>‣ c) TT26149<br/>‣ d) TR116463<br/>‣ e) TAR71618<br/>‣ f) TR51112</p>   |  <p><b>Main Bearing</b><br/>‣ TRE27352 Std.<br/>‣ TRE27353 0.010<br/>‣ TRE27360 0.020<br/>‣ TRE27368 0.030</p> <p><b>Use 3</b></p>   |  <p><b>Thrust Bearing</b><br/>‣ TAT21139 Std.<br/>‣ TAT21132 0.010<br/>‣ TAT21134 0.020<br/>‣ TAT21136 0.030</p> <p><b>Use 1</b></p>  |  <p><b>Con Rod Bearing</b><br/>‣ TRE27348 Std.<br/>‣ TRE27349 0.010<br/>‣ TRE27358 0.020<br/>‣ TRE27364 0.030</p> <p><b>Use 3</b></p>   |
| <p><b>Farm Tractors</b><br/>1420<br/>1520<br/>1530</p> <p><b>Crawler Dozers</b><br/>350B</p>  |  <p>1) <b>Front Seal</b><br/>‣ TAR67942</p> <p>2) <b>Rear Seal</b><br/>‣ TRE44574</p> <p>3) <b>Crankshaft</b><br/>‣ TAT18031</p> <p>4) <b>Crankshaft, Gear</b><br/>‣ TT20094</p> <p>5) <b>Ring Gear</b><br/>‣ TR114282 (142T)</p> |  <p>1) <b>O/H Gasket Set</b><br/>‣ TRE501578</p> <p>2) <b>Head Gasket Set</b><br/>‣ TRE38850</p> <p>3) <b>Head Gasket</b><br/>‣ TR97356</p> <p>4) <b>Oil Pan Gasket</b><br/>‣ TR97341</p> <p>5) <b>Rocker Cover Gsk</b><br/>‣ TR75729</p> |  <p>1) <b>Bush, Con Rod</b><br/>‣ TT23471 x3</p> <p>2) <b>Bolt, Con Rod</b><br/>‣ TR74194 x6</p> <p>3) <b>Camshaft Kit</b><br/>‣ TRE55900</p> <p>4) <b>Con Rod</b><br/>‣ TAT18005</p> |  <p>1) <b>Pump, Oil</b><br/>‣ TRE55343</p> <p>2) <b>Oil Cooler</b><br/>‣ TRE31929</p> <p>3) <b>Rocker Arm</b><br/>‣ TRE31973</p> <p>4) <b>Rocker Shaft</b><br/>‣ TR54985</p> <p>5) <b>Pump, Oil Tube</b><br/>‣ TR113752</p> <p>6) <b>Oil Pump O'Ring</b><br/>‣ TR61871</p> |  <p>1) <b>Lower Gear</b><br/>‣ TAT24252</p> <p>2) <b>Lower Bushing</b><br/>‣ TT26321</p> <p>3) <b>Upper Gear</b><br/>‣ TAT18009</p> <p>4) <b>Upper Bushing</b><br/>‣ TT20034</p> <p>5) <b>Cam. Follower</b><br/>‣ TT20073 x6</p> <p>6) <b>Cam. Gear</b><br/>‣ TT20070</p> <p>7) <b>Camshaft Kit</b><br/>‣ TRE55900</p> |
|   | <p><b>Valve, Intake</b><br/>‣ TR79623 Std.<br/>‣ TR79628 0.003<br/>‣ TR79629 0.015</p>   | <p><b>Valve, Exhaust</b><br/>‣ TR79624 Std.<br/>‣ TR79625 0.003<br/>‣ TR79626 0.015</p>  | <p>1) <b>Insert, Valve In</b><br/>‣ TR73064 Std.</p> <p>2) <b>Insert, Valve Ex</b><br/>‣ TR51734 Std.</p>  | <p>1) <b>Cap, Valve</b><br/>‣ TT20129</p> <p>2) <b>Lock, Valve</b><br/>‣ TT20077</p>  | <p>1) <b>Spring, Valve</b><br/>‣ TR26125</p> <p>2) <b>Rotator, Valve</b><br/>‣ TRE11410</p> <p>3) <b>O'ring, Valve</b><br/>‣ TR87627</p>  |
|   |  <p>1) <b>Thermostat</b><br/>‣ TRE33705 180° F</p> <p>2) <b>Thermostat Cover</b><br/>‣ TT23620</p> <p>3) <b>Thermostat Cover Gsk</b><br/>‣ TT20215</p>  |  <p>1) <b>Fuel Transfer Pump</b><br/>‣ TRE42211</p> <p>2) <b>Fuel Pump Gasket</b><br/>‣ TR27285</p>   |  <p><b>Water Pump Repair Kit</b><br/>‣ Without Impeller</p> <p>‣ TRE19507</p> <p>‣ With Impeller</p> <p>‣ TRE62658</p>  |  <p>1) <b>Water Pump</b><br/>‣ TAT27018</p> <p>2) <b>Water Pump Gasket</b><br/>‣ TT20242<br/>‣ TT20268</p>   |  <p>1) <b>Seal, Injector</b><br/>‣ TR60746<br/>‣ TR48000</p> <p>2) <b>Injector, Pencil</b><br/>‣ TAR89564</p> <p>3) <b>Kit, Grommet</b><br/>‣ TMX504</p> <p>4) <b>Cap</b><br/>‣ TAT27622<br/>‣ TAR85618</p> <p>5) <b>Washer</b><br/>‣ TT29539</p> <p>6) <b>Tube Nut</b><br/>‣ TR51937</p>                            |

(1): Do not use with Housing (m) R54096, R70741, R74549.

(2): Conversion Kit TMX386: Available Consists of: TT31306 X1 Nipple TR99802 X2 Hose.

(3): Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.

(4): (m) R48997, (m) R51039.

(5): Camshaft has a 40 mm wide front bearing journal and made for a rear press in tachometer drive, it will replace early camshafts with narrower front bearing journal without any issue. Replaces camshafts marked T20015, T20016, R79643, R106957 and RE522311.

(6): See the Water Pump Identification Chart to make sure these part numbers are correct. You will need the water pump casting number and will need to know if you have a stamped steel pulley or a cast iron pulley.

JOHN DEERE 3.164 LARGE PIN, O'RINGS ON BLOCK

**Engine Series:**  
300

**Engine Model:**  
3.164

**Engine Desc:**  
From ESN  
179,602

**Engine Data:**  
Large Pin,  
O'rings on  
Block

**Engine Dimensions:**  
Bore: 4.02 in /  
102 mm Pin Ø:  
1.3750 in / (+/-  
.0002) = 35mm

**Block (M):**  
R55100,  
R72967,  
R72965,  
R80408

**Con Rod (M):**  
RE19733 (SUB  
FOR AT18005)

**Piston (M):**  
AR77762

**Farm Tractors**

1530  
2040  
2330

**Backhoe Loaders**

301A  
302  
302A  
310

**Crawler Dozers**

350B  
350C  
350D



- 1) **Engine O/H Kit**
- ↳ TOK3041
- 2) **Engine I/F Kit**
- ↳ TIK3041



- Piston-Liner Kit**
- ↳ TAR78041
- Consists of:**
- a) TAR77762
- b) TAR55759
- c) TR125754
- d) TR116463
- e) TAR71618
- f) TM41029



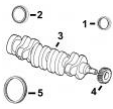
- Main Bearing**
- ↳ TRE27352 Std.
- ↳ TRE27353 0.010
- ↳ TRE27360 0.020
- ↳ TRE27368 0.030
- Use 3**



- Thrust Bearing**
- ↳ TAT21139 Std.
- ↳ TAT21132 0.010
- ↳ TAT21134 0.020
- ↳ TAT21136 0.030
- Use 1**



- Con Rod Bearing**
- ↳ TRE27348 Std.
- ↳ TRE27349 0.010
- ↳ TRE27358 0.020
- ↳ TRE27364 0.030
- Use 3**



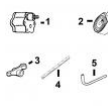
- 1) **Front Seal**
- ↳ TAR67942
- 2) **Rear Seal**
- ↳ TRE44574
- 3) **Crankshaft**
- ↳ TAT18031
- 4) **Crankshaft, Gear**
- ↳ TT20094
- 5) **Ring Gear**
- ↳ TR114282 (142T)



- 1) **O/H Gasket Set**
- ↳ TRE501578
- 2) **Head Gasket Set**
- ↳ TRE38850
- 3) **Head Gasket**
- ↳ TR97356
- 4) **Oil Pan Gasket**
- ↳ TR97341
- 5) **Rocker Cover Gsk**
- ↳ TR75729



- 1) **Bush, Con Rod**
- ↳ TR55647 x3
- 2) **Bolt, Con Rod**
- ↳ TR74194 x6
- 3) **Camshaft Kit**
- ↳ TRE55900
- 4) **Con Rod**
- ↳ TRE16495



- 1) **Pump, Oil**
- ↳ TRE55343
- 2) **Oil Cooler**
- ↳ TRE31929
- 3) **Rocker Arm**
- ↳ TRE31973
- 4) **Rocker Shaft**
- ↳ TR54985
- 5) **Pump, Oil Tube**
- ↳ TR113752
- 6) **Oil Pump O'Ring**
- ↳ TR61871



- 1) **Lower Gear**
- ↳ TAT24252
- 2) **Lower Bushing**
- ↳ TT26321
- 3) **Upper Gear**
- ↳ TAT18009
- 4) **Upper Bushing**
- ↳ TT20034
- 5) **Cam. Follower**
- ↳ TT20073 x6
- 6) **Cam. Gear**
- ↳ TT20070
- 7) **Camshaft Kit**
- ↳ TRE55900

**Valve, Intake**

- ↳ TR79623 Std.
- ↳ TR79628 0.003
- ↳ TR79629 0.015

**Valve, Exhaust**

- ↳ TR79624 Std.
- ↳ TR79625 0.003
- ↳ TR79626 0.015

**1) Insert, Valve In**

- ↳ TR73064 Std.
- 2) **Insert, Valve Ex**
- ↳ TR51734 Std.

**1) Cap, Valve**

- ↳ TT20129
- 2) **Lock, Valve**
- ↳ TT20077

**1) Spring, Valve**

- ↳ TR26125
- 2) **Rotator, Valve**
- ↳ TRE11410
- 3) **O'ring, Valve**
- ↳ TR87627



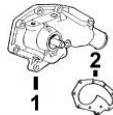
- 1) **Thermostat**
- ↳ TRE33705 180° F 1
- 2) **Thermostat Cover**
- ↳ TT23620
- 3) **Water Temp Sensor**
- ↳ TRE51774 6
- 4) **Thermostat Cover Gsk**
- ↳ TT20215



- 1) **Fuel Transfer Pump**
- ↳ TRE42211
- 2) **Fuel Pump Gasket**
- ↳ TR27285



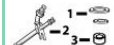
- Water Pump Repair Kit**
- ↳ Without Impeller
- ↳ TRE19507 7
- With Impeller**
- ↳ TRE62658 7



- 1) **Water Pump**
- ↳ TAT27018
- 2) **Water Pump Gasket**
- ↳ TT20242
- ↳ TT20268



- Transmission Oil Pump**
- ↳ TAL120106 4



- 1) **Seal, Injector**
- ↳ TR60746
- ↳ TR48000
- 2) **Injector, Pencil**
- ↳ TAR89564
- 3) **Kit, Grommet**
- ↳ TMX504
- 4) **Cap**
- ↳ TAT27622
- ↳ TAR85618
- 5) **Washer**
- ↳ TT29539
- 6) **Tube Nut**
- ↳ TR51937

(1): Do not use with Housing (m) R54096, R70741, R74549.

(2): Conversion Kit TMX386: Available Consists of: TT31306 x1 Nipple TR99802 x2 Hose.

(3): For Connecting Rods RE16495 and RE21076 Use Connecting Rod Bolt TR80033.

(4): (m) R48997, (m) R51039.

(5): Camshaft has a 40 mm wide front bearing journal and made for a rear press in tachometer drive, it will replace early camshafts with narrower front bearing journal without any issue. Replaces camshafts marked T20015, T20016, R79643, R106957 and RE522311.

(6): Check for Proper Application.

(7): See the Water Pump Identification Chart to make sure these part numbers are correct. You will need the water pump casting number and will need to know if you have a stamped steel pulley or a cast iron pulley.

**Engine Series:**  
300

**Engine Model:**  
3.179D

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 4.19 in /  
106 mm Pin Ø:  
1.3750 in / (+/-  
.0002) = 35mm

**Con Rod (M):**  
R80034

**Piston (M):**  
RE24458 ,  
RE24539,  
RE30250

**Farm Tractors**

- 1140
- 1140
- 1350
- 1550
- 1630
- 1750
- 1850
- 2040
- 2150
- 2155
- 2240
- 5000

**Crawler Dozers**  
350D  
355D

**Ditch Witch**

JT2320  
Directional  
Boring System



- 1) **Engine O/H Kit**
  - TRE47653
- 2) **Engine I/F Kit**
  - TIK47653



- Piston-Liner Kit**
- TRE30250
- Consists of:**
- a) TRE19282
  - b) TRE66820
  - c) TR125754
  - d) TR116281
  - e) TAR65507
  - f) TM41029



- Main Bearing**
- TRE27352 *Std.*
  - TRE27353 *0.010*
  - TRE27360 *0.020*
  - TRE27368 *0.030*
- Use 3**



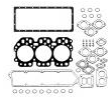
- Thrust Bearing**
- TAT21139 *Std.*
  - TAT21132 *0.010*
  - TAT21134 *0.020*
  - TAT21136 *0.030*
- Use 1**



- Con Rod Bearing**
- TRE27348 *Std.*
  - TRE27349 *0.010*
  - TRE27358 *0.020*
  - TRE27364 *0.030*
- Use 3**



- 1) **Front Seal**
  - TAR67942
- 2) **Rear Seal**
  - TRE44574
- 3) **Crankshaft**
  - TAT18031
- 4) **Crankshaft, Gear**
  - TT20094
- 5) **Ring Gear**
  - TR114282 *(142T)*
- 6) **Sleeve, Front**
  - TR81989
- 7) **Packing, Sleeve**
  - TH35244



- 1) **O/H Gasket Set**
  - TRE501578
- 2) **Head Gasket Set**
  - TRE38850
- 3) **Head Gasket**
  - TR97356
- 4) **Oil Pan Gasket**
  - TR97341
- 5) **Rocker Cover Gsk**
  - TR75729



- 1) **Bush, Con Rod**
  - TR55647 *x3*
- 2) **Bolt, Con Rod**
  - TR80033 *x6*
- 3) **Camshaft Kit**
  - TR55900
- 4) **Con Rod**
  - TRE16495



- 1) **Pump, Oil**
  - TRE55343
- 2) **Oil Cooler**
  - TRE31929
- 3) **Rocker Arm**
  - TRE31973
- 4) **Rocker Shaft**
  - TR54985
- 5) **Pump, Oil Tube**
  - TR113752
- 6) **Cyl Hd Cap Screw**
  - TR85363 *x14*
- 7) **Oil Pump O'Ring**
  - TR61871



- 1) **Lower Gear**
  - TAT24252
- 2) **Lower Bushing**
  - TT26321
- 3) **Upper Gear**
  - TAT18009
- 4) **Upper Bushing**
  - TT20034
- 5) **Cam. Follower**
  - TT20073 *x6*
- 6) **Cam. Gear**
  - TT20070
- 7) **Camshaft Kit**
  - TRE55900
- 8) **Camshaft**
  - TR106957

- Valve, Intake**
- TR79623 *Std.*
  - TR79628 *0.003*
  - TR79629 *0.015*

- Valve, Exhaust**
- TR79624 *Std.*
  - TR79625 *0.003*
  - TR79626 *0.015*

- 1) **Insert, Valve In**
  - TR73064 *Std.*
- 2) **Insert, Valve Ex**
  - TR51734 *Std.*

- 1) **Cap, Valve**
  - TT20129
- 2) **Lock, Valve**
  - TT20077

- 1) **Spring, Valve**
  - TR26125
- 2) **Rotator, Valve**
  - TRE11410
- 3) **O'ring, Valve**
  - TR87627



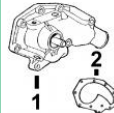
- 1) **Thermostat**
  - TRE33705 *180° F*
- 2) **Thermostat Cover**
  - TT23620
- 3) **Water Temp Sensor**
  - TRE51774
- 4) **Thermostat Cover Gsk**
  - TT20215



- 1) **Fuel Transfer Pump**
  - TRE42211
- 2) **Fuel Pump Gasket**
  - TR27285



- Water Pump Repair Kit**
- Without Impeller
    - TRE19507
  - With Impeller
    - TRE62658



- 1) **Water Pump**
  - TAR97708U
  - TRE60489
  - TAR92641
- 2) **Water Pump Gasket**
  - TT20242
  - TT20268



- Transmission Oil Pump**
- TAL120106
  - TAL68094



- 1) **Seal, Injector**
  - TR60746
  - TR48000
- 2) **Injector, Pencil**
  - TAR89564
- 3) **Kit, Grommet**
  - TMX504
- 4) **Glow Plug**
  - TRE502079
- 5) **Cap**
  - TAT27622
  - TAR85618
- 6) **Washer**
  - TT29539
- 7) **Tube Nut**
  - TR51937

(1): Crankshaft (m) T23516 (36 mm / 1.37" Snout). This engine may use TRE50979 (60 mm / 2.36" Snout) (m) R91834.

(3): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(5): (m) R73604.

(7): Check your application for proper usage.

(2): Do not use with Housing (m) R54096, R70741, R74549. For Saran Repower Engines use TRE64354.

(4): Use on engines ESN 794193, after this ESN use TRE61767.

(6): (m) R78286, (m) R70437, (m) R100812, (m) R127337, (m) R127918, (m) R55164.

(8): Camshaft has a 40 mm wide front bearing journal and made for a rear press in tachometer drive, it will replace early camshafts with narrower front bearing journal without any issue. Replaces camshafts marked T20015, T20016, R79643, R106957 and RE522311.

**Engine Series:**  
300

**Engine Model:**  
3029D

**Engine Desc:**  
Liter  
Designated

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 4.19 in /  
106.5 mm Pin  
Ø: 1.3750 in /  
(+/- .0002) =  
35mm

**Con Rod (M):**  
R51727,  
R80034

**Piston (M):**  
RE30250

**Farm Tractors**  
5200  
5300  
5400

**Skid Steers**  
240  
240 Series II



- 1) **Engine O/H Kit**  
‣ TRE47653
- 2) **Engine I/F Kit**  
‣ TIK47653



- Piston-Liner Kit**  
‣ TRE30250
- Consists of:**
- a) TRE19282
  - b) TRE66820
  - c) TR125754
  - d) TR116281
  - e) TAR65507
  - f) TM41029



- Main Bearing**  
‣ TRE27352 *Std.*  
‣ TRE27353 0.010  
‣ TRE27360 0.020  
‣ TRE27368 0.030
- Use 3**



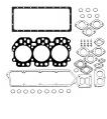
- Thrust Bearing**  
‣ TAT21139 *Std.*  
‣ TAT21132 0.010  
‣ TAT21134 0.020  
‣ TAT21136 0.030
- Use 1**



- Con Rod Bearing**  
‣ TRE27348 *Std.*  
‣ TRE27349 0.010  
‣ TRE27358 0.020  
‣ TRE27364 0.030
- Use 3**



- 1) **Front Seal**  
‣ TAR67942
- 2) **Rear Seal**  
‣ TRE44574
- 3) **Crankshaft**  
‣ TRE521348 5
- 4) **Crankshaft, Gear**  
‣ TT20094 3
- 5) **Ring Gear**  
‣ TR114282 (142T)
- 6) **Sleeve, Front**  
‣ TR81989
- 7) **Packing, Sleeve**  
‣ TH35244



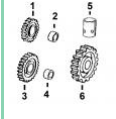
- 1) **O/H Gasket Set**  
‣ TRE501578
- 2) **Head Gasket Set**  
‣ TRE38850
- 3) **Head Gasket**  
‣ TR97356 5
- 4) **Oil Pan Gasket**  
‣ TR97341 3
- 5) **Rocker Cover Gsk**  
‣ TR75729 2  
‣ TR106796 1



- 1) **Bush, Con Rod**  
‣ TR55647 x3
- 2) **Bolt, Con Rod**  
‣ TR80033 x6
- 3) **Camshaft Kit**  
‣ TRE55900
- 4) **Con Rod**  
‣ TRE16495



- 1) **Pump, Oil**  
‣ TRE55343
- 2) **Oil Cooler**  
‣ TRE61767
- 5) **Pump, Oil Tube**  
‣ TR113752
- 4) **Cyl Hd Cap Screw**  
‣ TR85363 x14 4
- 5) **Oil Pump O'Ring**  
‣ TR61871



- 1) **Lower Gear**  
‣ TAT24252 3
- 2) **Lower Bushing**  
‣ TT26321
- 3) **Upper Gear**  
‣ TAT18009 3
- 4) **Upper Bushing**  
‣ TT20034
- 5) **Cam. Follower**  
‣ TT20073 x6
- 6) **Cam. Gear**  
‣ TT20070 3
- 7) **Camshaft Kit**  
‣ TRE55900 9
- 8) **Camshaft**  
‣ TR106957 9

- Valve, Intake**  
‣ TR98062 *Std.*  
‣ TR97490 0.015

- Valve, Exhaust**  
‣ TR90692 *Std.*  
‣ TR97492 0.015

- 1) **Insert, Valve In**  
‣ TR98063 *O/S*  
‣ TR98335 *O/S*
- 2) **Insert, Valve Ex**  
‣ TR51734 *Std.*  
‣ TR93910 *O/S*

- 1) **Seal, Valve**  
‣ TRE31617
- 2) **Lock, Valve**  
‣ TR91889

- 1) **Spring, Valve**  
‣ TR26125
- 2) **Rotator, Valve**  
‣ TRE60005



- 1) **Thermostat**  
‣ TRE64354 180° F
- 2) **Thermostat Cover**  
‣ TT23620
- 3) **Water Temp Sensor**  
‣ TRE51774 8
- 4) **Thermostat Cover Gsk**  
‣ TT20215



- 1) **Fuel Transfer Pump**  
‣ TRE42211
- 2) **Fuel Pump Gasket**  
‣ TR27285



- Water Pump Repair Kit**  
‣ Without Impeller 10  
‣ TRE19507 7  
**With Impeller** 10  
‣ TRE62658 10



- 1) **Water Pump**  
‣ TAR97708U 6  
‣ TRE60489 7  
‣ TAR92641 8
- 2) **Water Pump Gasket**  
‣ TT20242  
‣ TT20268



- 1) **Seal, Injector**  
‣ TR60746  
‣ TR48000
- 2) **Injector, Pencil**  
‣ TRE36936
- 3) **Kit, Grommet**  
‣ TMX504

(1): Not included in Gasket Set. Used in Saran Engines (Order Separately). (2): Reusable.  
 (3): Helicoidal Gears. (4): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.  
 (5): Kit contains TT20094 helical gear to convert to a TRE50979 Crankshaft. (6): (m) R73604.  
 (7): (m) R100812, (m) R127337, (m) R127918, (m) R55164. (8): Check your application for proper usage.  
 (9): Camshaft has a 40 mm wide front bearing journal and made for a rear press in tachometer drive, it will replace early camshafts with narrower front bearing journal without any issue. Replaces camshafts marked T20015, T20016, R79643, R106957 and RE522311. (10): See the Water Pump Identification Chart to make sure these part numbers are correct. You will need the water pump casting number and will need to know if you have a stamped steel pulley or a cast iron pulley.



**Engine Series:**  
300

**Engine Model:**  
3.179T

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 4.19 in / 106.5 mm Pin Ø: 1.6250 in / (+/- .0002) = 41mm

**Con Rod (M):**  
R80032

**Piston (M):**  
RE22678

**Farm Tractors**  
2355NCS  
2355NTSS

**Ditch Witch**  
JT2321  
Directional Boring System



- 1) **Engine O/H Kit**
  - ↳ TOK3115
- 2) **Engine I/F Kit**
  - ↳ TIK3115



- Piston-Liner Kit**
  - ↳ TRE33115
- Consists of:**
  - a) TRE19278
  - b) TRE66820
  - c) TR124230
  - d) TR116281
  - e) TAR65507
  - f) TR54114



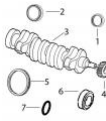
- Main Bearing**
  - ↳ TRE27352 Std.
  - ↳ TRE27353 0.010
  - ↳ TRE27360 0.020
  - ↳ TRE27368 0.030
- Use 3**



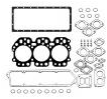
- Thrust Bearing**
  - ↳ TAT21139 Std.
  - ↳ TAT21132 0.010
  - ↳ TAT21134 0.020
  - ↳ TAT21136 0.030
- Use 1**



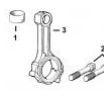
- Con Rod Bearing**
  - ↳ TRE27348 Std.
  - ↳ TRE27349 0.010
  - ↳ TRE27358 0.020
  - ↳ TRE27364 0.030
- Use 3**



- 1) **Front Seal**
  - ↳ TAR67942
- 2) **Rear Seal**
  - ↳ TRE44574
- 3) **Crankshaft**
  - ↳ TAT18031
- 4) **Crankshaft, Gear**
  - ↳ TT20094
- 5) **Ring Gear**
  - ↳ TR114282 (142T)
- 6) **Sleeve, Front**
  - ↳ TR81989
- 7) **Packing, Sleeve**
  - ↳ TH35244



- 1) **O/H Gasket Set**
  - ↳ TRE501578
- 2) **Head Gasket Set**
  - ↳ TRE38850
- 3) **Head Gasket**
  - ↳ TR97356
- 4) **Oil Pan Gasket**
  - ↳ TR97341
- 5) **Rocker Cover Gsk**
  - ↳ TR75729



- 1) **Bush, Con Rod**
  - ↳ TR57451 x3
- 2) **Bolt, Con Rod**
  - ↳ TR80033 x6
- 3) **Con Rod**
  - ↳ TRE58347
- 4) **Kit, Piston Pin**
  - ↳ TRE63913 x3



- 1) **Pump, Oil**
  - ↳ TRE55343
- 2) **Oil Cooler**
  - ↳ TRE31929
- 3) **Rocker Arm**
  - ↳ TRE31973
- 4) **Rocker Shaft**
  - ↳ TR54985
- 5) **Pump, Oil Tube**
  - ↳ TR113752
- 6) **Cyl Hd Cap Screw**
  - ↳ TR85363 x14
- 7) **Oil Pump O'Ring**
  - ↳ TR61871



- 1) **Lower Gear**
  - ↳ TAT24252
- 2) **Lower Bushing**
  - ↳ TT26321
- 3) **Upper Gear**
  - ↳ TAT18009
- 4) **Upper Bushing**
  - ↳ TT20034
- 5) **Cam. Follower**
  - ↳ TT20073 x6
- 6) **Cam. Gear**
  - ↳ TT20070
- 7) **Camshaft Kit**
  - ↳ TRE55900
- 8) **Camshaft**
  - ↳ TR106957

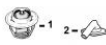
- Valve, Intake**
  - ↳ TR83071 Std.
  - ↳ TR89223 0.003
  - ↳ TR89224 0.015

- Valve, Exhaust**
  - ↳ TR79624 Std.
  - ↳ TR79625 0.003
  - ↳ TR79626 0.015

- 1) **Insert, Valve In**
  - ↳ TR73064 Std.
- 2) **Insert, Valve Ex**
  - ↳ TR51734 Std.

- 1) **Cap, Valve**
  - ↳ TT20129
- 2) **Lock, Valve**
  - ↳ TT20077

- 1) **Spring, Valve**
  - ↳ TR26125
- 2) **Rotator, Valve**
  - ↳ TRE11410
- 3) **O'ring, Valve**
  - ↳ TR87627



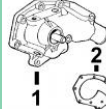
- 1) **Thermostat**
  - ↳ TRE33705 180° F
- 2) **Thermostat Cover**
  - ↳ TT23620
- 3) **Thermostat Cover Gsk**
  - ↳ TT20215



- 1) **Fuel Transfer Pump**
  - ↳ TRE42211
- 2) **Fuel Pump Gasket**
  - ↳ TR27285



- Water Pump Repair Kit**
  - ↳ Without Impeller
  - ↳ TRE19507
- With Impeller**
  - ↳ TRE62658



- 1) **Water Pump**
  - ↳ TAR97708U
  - ↳ TRE60489
  - ↳ TAR92641
- 2) **Water Pump Gasket**
  - ↳ TT20242
  - ↳ TT20268



- 1) **Seal, Injector**
  - ↳ TR60746
  - ↳ TR48000
- 2) **Injector, Pencil**
  - ↳ TRE37503
- 3) **KIT, GROMMET**
  - ↳ TMX504
- 4) **Glow Plug**
  - ↳ TRE502079






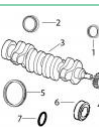
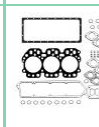
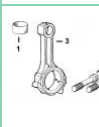
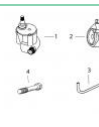
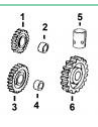





(1): Do not use with Housing (m) R54096, R70741, R74549. For Saran Repower Engines use TRE64354.  
 (3): Crankshaft (m) T23516 (36 mm / 1.37" Snout.) This engine may use TRE50979 (60 mm / 2.36" Snout) (m) R91834.  
 (5): (m) R73604.  
 (7): Check your application for proper usage.

(2): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.  
 (4): Use on engines ESN 794193, after this ESN use TRE61767.

(6): (m) R100812, (m) R127337, (m) R127918, (m) R55164.

(8): Camshaft has a 40 mm wide front bearing journal and made for a rear press in tachometer drive, it will replace early camshafts with narrower front bearing journal without any issue. Replaces camshafts marked T20015, T20016, R79643, R106957 and RE522311.

(9): See the Water Pump Identification Chart to make sure these part numbers are correct. You will need the water pump casting number and will need to know if you have a stamped steel pulley or a cast iron pulley.

|  |   |   |  |  |  |
|--|---|---|--|--|--|
| <p><b>Engine Series:</b><br/>300</p> <p><b>Engine Model:</b><br/>3029T</p> <p><b>Engine Desc:</b><br/>Liter Designated</p> <p><b>Engine Info:</b><br/>3 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.19 in / 106.5 mm<br/>Pin Ø: 1.6250 in / (+/- .0002) = 41mm</p> <p><b>Con Rod (M):</b><br/>R80032, R58979, R113612</p> <p><b>Piston (M):</b><br/>RE48368</p> |  <p>1) <b>Engine O/H Kit</b><br/>↳ TOK3115</p> <p>2) <b>Engine I/F Kit</b><br/>↳ TIK3115</p>  |  <p><b>Piston-Liner Kit</b><br/>↳ TRE33115</p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>↳ a) TRE19278</li> <li>↳ b) TRE66820</li> <li>↳ c) TR124230</li> <li>↳ d) TR116281</li> <li>↳ e) TAR65507</li> <li>↳ f) TR54114</li> </ul> |  <p><b>Main Bearing</b><br/>↳ TRE27352 Std.<br/>↳ TRE27353 0.010<br/>↳ TRE27360 0.020<br/>↳ TRE27368 0.030</p> <p><b>Use 3</b></p>   |  <p><b>Thrust Bearing</b><br/>↳ TAT21139 Std.<br/>↳ TAT21132 0.010<br/>↳ TAT21134 0.020<br/>↳ TAT21136 0.030</p> <p><b>Use 1</b></p>   |  <p><b>Con Rod Bearing</b><br/>↳ TRE27348 Std.<br/>↳ TRE27349 0.010<br/>↳ TRE27358 0.020<br/>↳ TRE27364 0.030</p> <p><b>Use 3</b></p>  |
| <p><b>Farm Tractors</b><br/>5500</p> <p><b>Skid Steers</b><br/>250<br/>250 Series II<br/>260<br/>260 Series II<br/>8875</p>  |  <p>1) <b>Front Seal</b><br/>↳ TAR67942</p> <p>2) <b>Rear Seal</b><br/>↳ TRE44574</p> <p>3) <b>Crankshaft</b><br/>↳ TRE521348</p> <p>4) <b>Crankshaft, Gear</b><br/>↳ TT20094</p> <p>5) <b>Ring Gear</b><br/>↳ TR114282 (142T)</p> <p>6) <b>Sleeve, Front</b><br/>↳ TR81989</p> <p>7) <b>Packing, Sleeve</b><br/>↳ TH35244</p> |  <p>1) <b>O/H Gasket Set</b><br/>↳ TRE501578</p> <p>2) <b>Head Gasket Set</b><br/>↳ TRE38850</p> <p>3) <b>Head Gasket</b><br/>↳ TR97356</p> <p>4) <b>Oil Pan Gasket</b><br/>↳ TR97341</p> <p>5) <b>Rocker Cover Gsk</b><br/>↳ TR75729<br/>↳ TR106796</p>   |  <p>1) <b>Bush, Con Rod</b><br/>↳ TR57451 x3</p> <p>2) <b>Bolt, Con Rod</b><br/>↳ TR80033 x6</p> <p>3) <b>Con Rod</b><br/>↳ TRE58347</p> <p>4) <b>Kit, Piston Pin</b><br/>↳ TRE63913 x3</p> |  <p>1) <b>Pump, Oil</b><br/>↳ TRE55343</p> <p>2) <b>Oil Cooler</b><br/>↳ TRE61767</p> <p>3) <b>Pump, Oil Tube</b><br/>↳ TR113752</p> <p>4) <b>Cyl Hd Cap Screw</b><br/>↳ TR85363 x14</p> <p>5) <b>Oil Pump O'Ring</b><br/>↳ TR61871</p> |  <p>1) <b>Lower Gear</b><br/>↳ TAT24252</p> <p>2) <b>Lower Bushing</b><br/>↳ TT26321</p> <p>3) <b>Upper Gear</b><br/>↳ TAT18009</p> <p>4) <b>Upper Bushing</b><br/>↳ TT20034</p> <p>5) <b>Cam. Follower</b><br/>↳ TT20073 x6</p> <p>6) <b>Cam. Gear</b><br/>↳ TT20070</p> <p>7) <b>Camshaft Kit</b><br/>↳ TRE55900</p> <p>8) <b>Camshaft</b><br/>↳ TR106957</p> |
| <p><b>Engine Model</b><br/>3029DLV51<br/>3029DLV52<br/>3029DLV53<br/>3029DLV55<br/>3029DLV56<br/>3029DLV57<br/>3029TLV52</p>   | <p><b>Valve, Intake</b><br/>↳ TR98062 Std.<br/>↳ TR97490 0.015</p>  | <p><b>Valve, Exhaust</b><br/>↳ TR90692 Std.<br/>↳ TR97492 0.015</p>   | <p>1) <b>Insert, Valve In</b><br/>↳ TR98063 O/S<br/>↳ TR98335 O/S</p> <p>2) <b>Insert, Valve Ex</b><br/>↳ TR51734 Std.<br/>↳ TR93910 O/S</p>   | <p>1) <b>Seal, Valve</b><br/>↳ TRE31617</p> <p>2) <b>Lock, Valve</b><br/>↳ TR91889</p>   | <p>1) <b>Spring, Valve</b><br/>↳ TR26125</p> <p>2) <b>Rotator, Valve</b><br/>↳ TRE60005</p>  |
| <p><b>Ditch Witch</b><br/>JT2321<br/>Directional Boring System</p>   |  <p>1) <b>Thermostat</b><br/>↳ TRE64354 180° F</p> <p>2) <b>Thermostat Cover</b><br/>↳ TT23620</p> <p>3) <b>Water Temp Sensor</b><br/>↳ TRE51774</p> <p>4) <b>Thermostat Cover Gsk</b><br/>↳ TT20215</p>   |  <p>1) <b>Fuel Transfer Pump</b><br/>↳ TRE42211</p> <p>2) <b>Fuel Pump Gasket</b><br/>↳ TR27285</p>  |  <p><b>Water Pump Repair Kit</b><br/>↳ Without Impeller<br/>↳ TRE19507</p> <p><b>With Impeller</b><br/>↳ TRE62658</p>   |  <p>1) <b>Water Pump</b><br/>↳ TAR97708U<br/>↳ TRE60489<br/>↳ TAR92641</p> <p>2) <b>Water Pump Gasket</b><br/>↳ TT20242<br/>↳ TT20268</p>   |  <p>1) <b>Seal, Injector</b><br/>↳ TR60746<br/>↳ TR48000</p> <p>2) <b>Injector, Pencil</b><br/>↳ TRE38087<br/>↳ TRE50833</p> <p>3) <b>Inj Grommet Kit</b><br/>↳ TMX504</p>  |

(1): Not included in Gasket Set. Used in Saran Engines (Order separately). (2): Reusable.






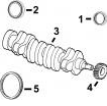

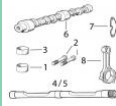
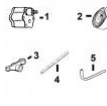

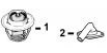


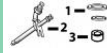
(3): Helicoidal Gears. (4): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(5): Kit contains TT20094 helical gear to convert to a TRE50979 Crankshaft. (6): (m) R73604.

(7): (m) R100812, (m) R127337, (m) R127918, (m) R55164. (8): Check your application for proper usage.

(9): Camshaft has a 40 mm wide front bearing journal and made for a rear press in tachometer drive, it will replace early camshafts with narrower front bearing journal without any issue. Replaces camshafts marked T20015, T20016, R79643, R106957 and RE522311.

# JOHN DEERE 4.202 O'RINGS ON LINER

|   |  |  |   |  |  |
|---|--|--|---|--|--|
| <p><b>Engine Series:</b><br/>300</p> <p><b>Engine Model:</b><br/>4.202</p> <p><b>Engine Desc:</b><br/>To 158,257</p> <p><b>Engine Data:</b><br/>O'rings on Liner</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.86 in / 98 mm (2) Pin Ø: 1.1878 in (+/- .0001) = 30mm</p> <p><b>Block (M):</b><br/>T23406, T24961, T26933</p> <p><b>Con Rod (M):</b><br/>RE19733 (SUB FOR AT18005)</p> <p><b>Piston (M):</b><br/>T23481</p> |  <p>1) <b>Engine O/H Kit</b><br/>‣ TOK4481</p> <p>2) <b>Engine I/F Kit</b><br/>‣ TIK4481</p>   |  <p><b>Piston-Liner Kit</b><br/>‣ TPLK481</p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>‣ a) TT23481</li> <li>‣ b) TAR70633</li> <li>‣ c) TT23482</li> <li>‣ d) TAR51902</li> <li>‣ e) TR51112</li> </ul>  |  <p><b>Main Bearing</b><br/>‣ TRE27352 <i>Std.</i><br/>‣ TRE27353 <i>0.010</i><br/>‣ TRE27360 <i>0.020</i><br/>‣ TRE27368 <i>0.030</i></p> <p><b>Use 4</b></p>  |  <p><b>Thrust Bearing</b><br/>‣ TAT21139 <i>Std.</i><br/>‣ TAT21132 <i>0.010</i><br/>‣ TAT21134 <i>0.020</i><br/>‣ TAT21136 <i>0.030</i></p> <p><b>Use 1</b></p>   |  <p><b>Con Rod Bearing</b><br/>‣ TRE27348 <i>Std.</i><br/>‣ TRE27349 <i>0.010</i><br/>‣ TRE27358 <i>0.020</i><br/>‣ TRE27364 <i>0.030</i></p> <p><b>Use 4</b></p>  |
| <p><b>Farm Tractors</b><br/>2020<br/>2510</p> <p><b>Backhoe Loaders</b><br/>400</p> <p><b>Crawler Dozers</b><br/>450</p> <p><b>Skidders</b><br/>440</p> <p><b>Forklifts</b><br/>480</p>   |  <p>1) <b>Front Seal</b><br/>‣ TAR67942</p> <p>2) <b>Rear Seal</b><br/>‣ TRE44574</p> <p>3) <b>Crankshaft</b><br/>‣ TAT18030</p> <p>4) <b>Crankshaft, Gear</b><br/>‣ TT20094</p> <p>5) <b>Ring Gear</b><br/>‣ TR114282 (142T)</p> |  <p>1) <b>O/H Gasket Set</b><br/>‣ TRE38558</p> <p>2) <b>Head Gasket Set</b><br/>‣ TRE38847</p> <p>3) <b>Head Gasket</b><br/>‣ TR98461</p> <p>4) <b>Oil Pan Gasket</b><br/>‣ TR97342</p> <p>5) <b>Rocker Cover Gsk</b><br/>‣ TR73521</p> <p>6) <b>Exhaust Manifold Gsk</b><br/>‣ TR90658</p> <p>7) <b>Gasket Thermostat Housing</b><br/>‣ TT20219</p> |  <p>1) <b>Bush, Con Rod</b><br/>‣ TT23471 x4</p> <p>2) <b>Bolt, Con Rod</b><br/>‣ TR74194 x8</p> <p>3) <b>Bush, Bal. Shaft</b><br/>‣ TR57160 x6</p> <p>4) <b>Bal. Shaft R/H</b><br/>‣ TRE26282 <i>R/H</i></p> <p>5) <b>Bal. Shaft L/H</b><br/>‣ TRE26283 <i>L/H</i></p> <p>6) <b>Camshaft</b><br/>‣ TR82820</p> <p>7) <b>Bal. Shaft Stop</b><br/>‣ TR88112</p> <p>8) <b>Con Rod</b><br/>‣ TAT18005</p> |  <p>1) <b>Pump, Oil</b><br/>‣ TRE55343</p> <p>2) <b>Oil Cooler</b><br/>‣ TRE31929</p> <p>3) <b>Rocker Arm</b><br/>‣ TRE31973</p> <p>4) <b>Rocker Shaft</b><br/>‣ TR54987</p> <p>5) <b>Pump, Oil Tube</b><br/>‣ TR113752</p> <p>6) <b>Oil Pump O'Ring</b><br/>‣ TR61871</p>                  |  <p>1) <b>Lower Gear</b><br/>‣ TAT24252</p> <p>2) <b>Lower Bushing</b><br/>‣ TT26321</p> <p>3) <b>Upper Gear</b><br/>‣ TAT18009</p> <p>4) <b>Upper Bushing</b><br/>‣ TT20034</p> <p>5) <b>Cam. Follower</b><br/>‣ TT20073 x8</p> <p>6) <b>Cam. Gear</b><br/>‣ TT20070</p> |
|   | <p><b>Valve, Intake</b><br/>‣ TR79623 <i>Std.</i><br/>‣ TR79628 <i>0.003</i><br/>‣ TR79629 <i>0.015</i></p>  | <p><b>Valve, Exhaust</b><br/>‣ TR79624 <i>Std.</i><br/>‣ TR79625 <i>0.003</i><br/>‣ TR79626 <i>0.015</i></p>   | <p>1) <b>Insert, Valve In</b><br/>‣ TR73064 <i>Std.</i></p> <p>2) <b>Insert, Valve Ex</b><br/>‣ TR51734 <i>Std.</i></p>   | <p>1) <b>Cap, Valve</b><br/>‣ TT20129</p> <p>2) <b>Lock, Valve</b><br/>‣ TT20077</p>   | <p>1) <b>Spring, Valve</b><br/>‣ TR26125</p> <p>2) <b>Rotator, Valve</b><br/>‣ TRE11410</p> <p>3) <b>O'ring, Valve</b><br/>‣ TR87627</p>   |
|   |  <p>1) <b>Thermostat</b><br/>‣ TRE33705 <i>180° F</i></p> <p>2) <b>Thermostat Cover</b><br/>‣ TT23620</p> <p>3) <b>Thermostat Cover Gsk</b><br/>‣ TT20215</p>   |  <p>1) <b>Fuel Transfer Pump</b><br/>‣ TRE42211</p> <p>2) <b>Fuel Pump Gasket</b><br/>‣ TR27285</p>   |  <p><b>Water Pump Repair Kit</b><br/>‣ Without Impeller<br/>‣ TRE19507</p> <p><b>With Impeller</b><br/>‣ TRE62658</p> <p><b>Water Pump Gasket</b><br/>‣ TT20242<br/>‣ TT20268</p>   |  <p>1) <b>Seal, Injector</b><br/>‣ TR60746<br/>‣ TR48000</p> <p>2) <b>Injector, Pencil</b><br/>‣ TAR89564</p> <p>3) <b>Kit, Grommet</b><br/>‣ TMX504</p> <p>4) <b>Cap</b><br/>‣ TAT27622<br/>‣ TAR85618</p> <p>5) <b>Washer</b><br/>‣ TT29539</p> <p>6) <b>Tube Nut</b><br/>‣ TR51937</p> |  |

(1): Do not use with Flywheel Housing (m) T20300, T22991.

(4): Do not use with Housing (m) R54096, R70741, R74549.

(6): TR91708 (Outer Diam. 2.00 mm / 0.078 in ) Larger and TR57160R (Inner Diam 0.5 mm / 0.020 in ) Smaller, are also available.

(3): Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.

(5): Threaded Type.

JOHN DEERE 4.202 O'RINGS ON BLOCK

**Engine Series:**  
300

**Engine Model:**  
4.202

**Engine Desc:**  
From 158,258

**Engine Data:**  
O'rings on  
Block

**Engine Dimensions:**  
Bore: 3.86 in /  
98 mm (2) Pin  
Ø: 1.1878 in /  
(+/- .0001) =  
30mm

**Block (M):**  
R53230,  
R53250,  
R55034,  
R72973,  
T32342

**Con Rod (M):**  
RE19733 (SUB  
FOR AT18005)

**Piston (M):**  
T23481

**Farm Tractors**  
2020  
2120  
2510

**Backhoe  
Loaders**  
400

**Forklifts**  
480

**Skidders**  
440



- 1) **Engine O/H Kit**  
‣ TOK4591
- 2) **Engine I/F Kit**  
‣ TIK4591



- Piston-Liner Kit**  
‣ TAR71591
- Consists of:**
  - a) TT23481
  - b) TAR70633
  - c) TT23482
  - d) TT32340
  - e) TAR71617
  - f) TR51112



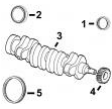
- Main Bearing**
  - TRE27352 *Std.*
  - TRE27353 *0.010*
  - TRE27360 *0.020*
  - TRE27368 *0.030*
- Use 4**



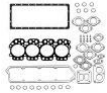
- Thrust Bearing**
  - TAT21139 *Std.*
  - TAT21132 *0.010*
  - TAT21134 *0.020*
  - TAT21136 *0.030*
- Use 1**



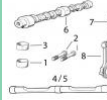
- Con Rod Bearing**
  - TRE27348 *Std.*
  - TRE27349 *0.010*
  - TRE27358 *0.020*
  - TRE27364 *0.030*
- Use 4**



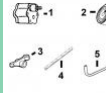
- 1) **Front Seal**  
‣ TAR67942
- 2) **Rear Seal**  
‣ TRE44574
- 3) **Crankshaft**  
‣ TAT18030
- 4) **Crankshaft, Gear**  
‣ TT20094
- 5) **Ring Gear**  
‣ TR114282 *(142T)*



- 1) **O/H Gasket Set**  
‣ TRE38558
- 2) **Head Gasket Set**  
‣ TRE38847
- 3) **Head Gasket**  
‣ TR98461
- 4) **Oil Pan Gasket**  
‣ TR97342
- 5) **Rocker Cover Gsk**  
‣ TR73521
- 6) **Exhaust Manifold Gsk**  
‣ TR90658
- 7) **Gasket Thermostat Housing**  
‣ TT20219



- 1) **Bush, Con Rod**  
‣ TT23471 *x4*
- 2) **Bolt, Con Rod**  
‣ TR74194 *x8*
- 3) **Bush, Bal. Shaft**  
‣ TR57160 *x6*
- 4) **Bal. Shaft R/H**  
‣ TRE26282 *R/H*
- 5) **Bal. Shaft L/H**  
‣ TRE26283 *L/H*
- 6) **Camshaft**  
‣ TR82820
- 7) **Bal. Shaft Stop**  
‣ TR88112
- 8) **Con Rod**  
‣ TAT18005



- 1) **Pump, Oil**  
‣ TRE55343
- 2) **Oil Cooler**  
‣ TRE31929
- 3) **Rocker Arm**  
‣ TRE31973
- 4) **Rocker Shaft**  
‣ TR54987
- 5) **Pump, Oil Tube**  
‣ TR113752
- 6) **Oil Pump O'Ring**  
‣ TR61871



- 1) **Lower Gear**  
‣ TAT24252
- 2) **Lower Bushing**  
‣ TT26321
- 3) **Upper Gear**  
‣ TAT18009
- 4) **Upper Bushing**  
‣ TT20034
- 5) **Cam. Follower**  
‣ TT20073 *x8*
- 6) **Cam. Gear**  
‣ TT20070

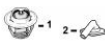
- Valve, Intake**
  - TR79623 *Std.*
  - TR79628 *0.003*
  - TR79629 *0.015*

- Valve, Exhaust**
  - TR79624 *Std.*
  - TR79625 *0.003*
  - TR79626 *0.015*

- 1) **Insert, Valve In**  
‣ TR73064 *Std.*
- 2) **Insert, Valve Ex**  
‣ TR51734 *Std.*

- 1) **Cap, Valve**  
‣ TT20129
- 2) **Lock, Valve**  
‣ TT20077

- 1) **Spring, Valve**  
‣ TR26125
- 2) **Rotator, Valve**  
‣ TRE11410
- 3) **O'ring, Valve**  
‣ TR87627



- 1) **Thermostat**  
‣ TRE33705 *180° F*
- 2) **Thermostat Cover**  
‣ TT23620
- 3) **Thermostat Cover Gsk**  
‣ TT20215



- 1) **Fuel Transfer Pump**  
‣ TRE42211
- 2) **Fuel Pump Gasket**  
‣ TR27285



- Water Pump Repair Kit**
  - Without Impeller  
‣ TRE19507
  - With Impeller**  
‣ TRE62658
  - Water Pump Gasket**  
‣ TT20242  
‣ TT20268



- 1) **Seal, Injector**  
‣ TR60746  
‣ TR48000
- 2) **Injector, Pencil**  
‣ TAR89564
- 3) **Kit, Grommet**  
‣ TMX504
- 4) **Cap**  
‣ TAT27622  
‣ TAR85618
- 5) **Washer**  
‣ TT29539
- 6) **Tube Nut**  
‣ TR51937

(1): Do not use with Flywheel Housing (m) T20300, T22991.

(3): Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.

(5): Threaded Type.

(2): Always verify Bore diameter, on Block Replacement is 4.016"/102mm.

(4): Do not use with Housing (m) R54096, R70741, R74549.

(6): TR91708 (Outer Diam. 2.00 mm / 0.078 in ) Larger and TR57160R (Inner Diam 0.5 mm / 0.020 in ) Smaller, are also available.

JOHN DEERE 4.219 SMALL PIN, O'RINGS ON LINER

**Engine Series:**  
300

**Engine Model:**  
4.219

**Engine Desc:**  
To ESN  
275,483

**Engine Data:**  
O'rings on Liner  
Small Pin

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.02 in /  
102 mm Pin Ø:  
1.1878 in / (+/-  
.0001) = 30mm

**Con Rod (M):**  
T20007,  
R81410

**Piston (M):**  
RE53265

**Farm Tractors**

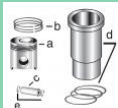
2520

**Skidders**

440A



- 1) **Engine O/H Kit**  
‣ TOK4310
- 2) **Engine I/F Kit**  
‣ TIK4310



- Piston-Liner Kit**  
‣ TPLK310
- Consists of:**
- a) TAR78310
- b) TAR55759
- c) TT26149
- d) TAR51903
- e) TR51112



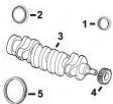
- Main Bearing**  
‣ TRE27352 Std.  
‣ TRE27353 0.010  
‣ TRE27360 0.020  
‣ TRE27368 0.030
- Use 4**



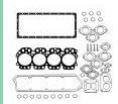
- Thrust Bearing**  
‣ TAT21139 Std.  
‣ TAT21132 0.010  
‣ TAT21134 0.020  
‣ TAT21136 0.030
- Use 1**



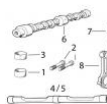
- Con Rod Bearing**  
‣ TRE27348 Std.  
‣ TRE27349 0.010  
‣ TRE27358 0.020  
‣ TRE27364 0.030
- Use 4**



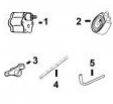
- 1) **Front Seal**  
‣ TAR67942
- 2) **Rear Seal**  
‣ TRE44574
- 3) **Crankshaft**  
‣ TAT18030
- 4) **Crankshaft, Gear**  
‣ TT20094
- 5) **Ring Gear**  
‣ TR114282 (142T)



- 1) **O/H Gasket Set**  
‣ TRE501579
- 2) **Head Gasket Set**  
‣ TRE38851
- 3) **Head Gasket**  
‣ TR125863
- 4) **Oil Pan Gasket**  
‣ TR97342
- 5) **Rocker Cover Gsk**  
‣ TR73521
- 6) **Gasket, Injection Pump**  
‣ TR125066
- 7) **Gasket, Turbo Mount**  
‣ TR89879



- 1) **Bush, Con Rod**  
‣ TT23471 x4
- 2) **Bolt, Con Rod**  
‣ TR74194 x8
- 3) **Bush, Bal. Shaft**  
‣ TR57160 x6
- 4) **Bal. Shaft R/H**  
‣ TRE26282 R/H
- 5) **Bal. Shaft L/H**  
‣ TRE26283 L/H
- 6) **Camshaft**  
‣ TR82820
- 7) **Bal. Shaft Stop**  
‣ TR88112
- 8) **Con Rod**  
‣ TAT18005



- 1) **Pump, Oil**  
‣ TRE55343
- 2) **Oil Cooler**  
‣ TRE31929
- 3) **Rocker Arm**  
‣ TRE31973
- 4) **Rocker Shaft**  
‣ TR54987
- 5) **Pump, Oil Tube**  
‣ TR113752
- 6) **Oil Pump O'Ring**  
‣ TR61871



- 1) **Lower Gear**  
‣ TAT24252
- 2) **Lower Bushing**  
‣ TT26321
- 3) **Upper Gear**  
‣ TAT18009
- 4) **Upper Bushing**  
‣ TT20034
- 5) **Cam. Follower**  
‣ TT20073 x8
- 6) **Cam. Gear**  
‣ TT20070

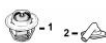
- Valve, Intake**  
‣ TR79623 Std.  
‣ TR79628 0.003  
‣ TR79629 0.015

- Valve, Exhaust**  
‣ TR79624 Std.  
‣ TR79625 0.003  
‣ TR79626 0.015

- 1) **Insert, Valve In**  
‣ TR73064 Std.
- 2) **Insert, Valve Ex**  
‣ TR51734 Std.

- 1) **Cap, Valve**  
‣ TT20129
- 2) **Lock, Valve**  
‣ TT20077

- 1) **Spring, Valve**  
‣ TR26125
- 2) **Rotator, Valve**  
‣ TRE11410
- 3) **O'ring, Valve**  
‣ TR87627



- 1) **Thermostat**  
‣ TRE33705 180° F
- 2) **Thermostat Cover**  
‣ TT23620
- 3) **Thermostat Cover Gsk**  
‣ TT20215



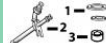
- 1) **Fuel Transfer Pump**  
‣ TRE42211
- 2) **Fuel Pump Gasket**  
‣ TR27285



- Water Pump Repair Kit**  
‣ Without Impeller  
‣ TRE19507
- With Impeller**  
‣ TRE62658



- 1) **Water Pump**  
‣ TAT27018
- 2) **Water Pump Gasket**  
‣ TT20242  
‣ TT20268



- 1) **Seal, Injector**  
‣ TR60746  
‣ TR48000
- 2) **Injector, Pencil**  
‣ TAR89564
- 3) **Kit, Grommet**  
‣ TMX504
- 4) **Cap**  
‣ TAT27622  
‣ TAR85618
- 5) **Washer**  
‣ TT29539
- 6) **Tube Nut**  
‣ TR51937

(1): Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.






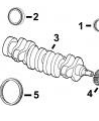

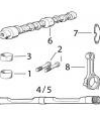
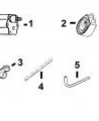






(3): Threaded Type.

(5): (m) R48997, (m) R51039.

(2): Do not use with Housing (m) R54096, R70741, R74549.

(4): TR91708 (Outer Diam. 2.00 mm / 0.078 in.) Larger and TR57160R (Inner Diam 0.5 mm / 0.020 in.) Smaller, are also available.

JOHN DEERE 4.219 SMALL PIN, O'RINGS ON BLOCK

|  |  |   |   |   |  |
|--|--|---|---|---|--|
| <p><b>Engine Series:</b><br/>300</p> <p><b>Engine Model:</b><br/>4.219</p> <p><b>Engine Desc:</b><br/>To ESN<br/>275,483</p> <p><b>Engine Data:</b><br/>O'rings on<br/>Block<br/>Small Pin</p>   |  <p>1) <b>Engine O/H Kit</b><br/>↳ TOK4593</p> <p>2) <b>Engine I/F Kit</b><br/>↳ TIK4593</p>   |  <p><b>Piston-Liner Kit</b><br/>↳ TAR71593</p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>↳ a) TAR78310</li> <li>↳ b) TAR55759</li> <li>↳ c) TT26149</li> <li>↳ d) TR116463</li> <li>↳ e) TAR71618</li> <li>↳ f) TR51112</li> </ul>  |  <p><b>Main Bearing</b><br/>↳ TRE27352 <i>Std.</i><br/>↳ TRE27353 0.010<br/>↳ TRE27360 0.020<br/>↳ TRE27368 0.030</p> <p><b>Use 4</b></p>   |  <p><b>Thrust Bearing</b><br/>↳ TAT21139 <i>Std.</i><br/>↳ TAT21132 0.010<br/>↳ TAT21134 0.020<br/>↳ TAT21136 0.030</p> <p><b>Use 1</b></p>   |  <p><b>Con Rod Bearing</b><br/>↳ TRE27348 <i>Std.</i><br/>↳ TRE27349 0.010<br/>↳ TRE27358 0.020<br/>↳ TRE27364 0.030</p> <p><b>Use 4</b></p>   |
| <p><b>Engine Dimensions:</b><br/>Bore: 4.02 in /<br/>102 mm Pin Ø:<br/>1.1878 in / (+/-<br/>.0001) = 30mm</p> <p><b>Block (M):</b><br/>T32342</p> <p><b>Con Rod (M):</b><br/>T20007,<br/>R81410</p> <p><b>Piston (M):</b><br/>RE53265,<br/>T30015,<br/>R51451,<br/>AR78310</p> |  <p>1) <b>Front Seal</b><br/>↳ TAR67942</p> <p>2) <b>Rear Seal</b><br/>↳ TRE44574</p> <p>3) <b>Crankshaft</b><br/>↳ TAT18030</p> <p>4) <b>Crankshaft, Gear</b><br/>↳ TT20094</p> <p>5) <b>Ring Gear</b><br/>↳ TR114282 (142T)</p> |  <p>1) <b>O/H Gasket Set</b><br/>↳ TRE501579</p> <p>2) <b>Head Gasket Set</b><br/>↳ TRE38851</p> <p>3) <b>Head Gasket</b><br/>↳ TR125863</p> <p>4) <b>Oil Pan Gasket</b><br/>↳ TR97342</p> <p>5) <b>Rocker Cover Gsk</b><br/>↳ TR73521</p> <p>6) <b>Gasket, Injection Pump</b><br/>↳ TR125066</p> <p>7) <b>Gasket, Turbo Mount</b><br/>↳ TR89879</p> |  <p>1) <b>Bush, Con Rod</b><br/>↳ TT23471 x4</p> <p>2) <b>Bolt, Con Rod</b><br/>↳ TR74194 x8</p> <p>3) <b>Bush, Bal. Shaft</b><br/>↳ TR57160 x6</p> <p>4) <b>Bal. Shaft R/H</b><br/>↳ TRE26282 R/H</p> <p>5) <b>Bal. Shaft L/H</b><br/>↳ TRE26283 L/H</p> <p>6) <b>Camshaft</b><br/>↳ TR82820</p> <p>7) <b>Bal. Shaft Stop</b><br/>↳ TR88112</p> <p>8) <b>Con Rod</b><br/>↳ TAT18005</p> |  <p>1) <b>Pump, Oil</b><br/>↳ TRE55343</p> <p>2) <b>Oil Cooler</b><br/>↳ TRE31929</p> <p>3) <b>Rocker Arm</b><br/>↳ TRE31973</p> <p>4) <b>Rocker Shaft</b><br/>↳ TR54987</p> <p>5) <b>Pump, Oil Tube</b><br/>↳ TR113752</p> <p>6) <b>Oil Pump O'Ring</b><br/>↳ TR61871</p> |  <p>1) <b>Lower Gear</b><br/>↳ TAT24252</p> <p>2) <b>Lower Bushing</b><br/>↳ TT26321</p> <p>3) <b>Upper Gear</b><br/>↳ TAT18009</p> <p>4) <b>Upper Bushing</b><br/>↳ TT20034</p> <p>5) <b>Cam. Follower</b><br/>↳ TT20073 x8</p> <p>6) <b>Cam. Gear</b><br/>↳ TT20070</p>                   |
| <p><b>Cotton Pickers</b><br/>499</p> <p><b>Farm Tractors</b><br/>2030<br/>2120</p> <p><b>Windrowers</b><br/>2270<br/>2320<br/>2420</p>   | <p><b>Valve, Intake</b><br/>↳ TR79623 <i>Std.</i><br/>↳ TR79628 0.003<br/>↳ TR79629 0.015</p>  | <p><b>Valve, Exhaust</b><br/>↳ TR79624 <i>Std.</i><br/>↳ TR79625 0.003<br/>↳ TR79626 0.015</p>  | <p>1) <b>Insert, Valve In</b><br/>↳ TR73064 <i>Std.</i></p> <p>2) <b>Insert, Valve Ex</b><br/>↳ TR51734 <i>Std.</i></p>   | <p>1) <b>Cap, Valve</b><br/>↳ TT20129</p> <p>2) <b>Lock, Valve</b><br/>↳ TT20077</p>  | <p>1) <b>Spring, Valve</b><br/>↳ TR26125</p> <p>2) <b>Rotator, Valve</b><br/>↳ TRE11410</p> <p>3) <b>O'ring, Valve</b><br/>↳ TR87627</p>   |
| <p><b>Backhoe Loaders</b><br/>401<br/>401A</p> <p><b>Crawler Dozers</b><br/>450A<br/>450B</p> <p><b>Skidders</b><br/>440<br/>440B</p> <p><b>Forklifts</b><br/>480A</p>   |  <p>1) <b>Thermostat</b><br/>↳ TRE33705 180° F</p> <p>2) <b>Thermostat Cover</b><br/>↳ TT23620</p> <p>3) <b>Thermostat Cover Gsk</b><br/>↳ TT20215</p>  |  <p>1) <b>Fuel Transfer Pump</b><br/>↳ TRE42211</p> <p>2) <b>Fuel Pump Gasket</b><br/>↳ TR27285</p>  |  <p><b>Water Pump Repair Kit</b><br/>↳ Without Impeller<br/>↳ TRE19507</p> <p><b>With Impeller</b><br/>↳ TRE62658</p>  |  <p>1) <b>Water Pump</b><br/>↳ TAT27018</p> <p>2) <b>Water Pump Gasket</b><br/>↳ TT20242<br/>↳ TT20268</p>   |  <p>1) <b>Seal, Injector</b><br/>↳ TR60746<br/>↳ TR48000</p> <p>2) <b>Injector, Pencil</b><br/>↳ TAR89564</p> <p>3) <b>Kit, Grommet</b><br/>↳ TMX504</p> <p>4) <b>Cap</b><br/>↳ TAT27622<br/>↳ TAR85618</p> <p>5) <b>Washer</b><br/>↳ TT29539</p> <p>6) <b>Tube Nut</b><br/>↳ TR51937</p> |

(1): Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.






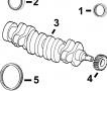
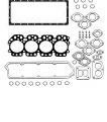

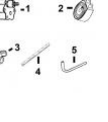
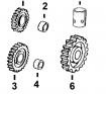



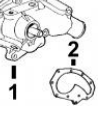
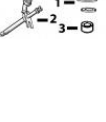
(3): Threaded Type.

(5): (m) R48997, (m) R51039.

(2): Do not use with Housing (m) R54096, R70741, R74549.

(4): TR91708 (Outer Diam. 2.00 mm / 0.078 in ) Larger and TR57160R (Inner Diam 0.5 mm / 0.020 in ) Smaller, are also available.

JOHN DEERE 4.219 LARGE PIN, O'RINGS ON BLOCK

|   |  |   |   |  |  |
|---|--|---|---|--|--|
| <p><b>Engine Series:</b><br/>300</p> <p><b>Engine Model:</b><br/>4.219 (1)</p> <p><b>Engine Desc:</b><br/>From ESN<br/>275,484</p> <p><b>Engine Data:</b><br/>O'rings on<br/>Block<br/>Large Pin</p> <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.02 in /<br/>102 mm Pin Ø:<br/>1.3750 in / (+/-<br/>.0002) = 35mm</p> <p><b>Con Rod (M):</b><br/>R51727,<br/>R80034</p> |  <p>1) <b>Engine O/H Kit</b><br/>‣ TAT86984</p> <p>2) <b>Engine I/F Kit</b><br/>‣ TIK86984</p>   |  <p><b>Piston-Liner Kit</b><br/>‣ TAR78041</p> <p><b>Consists of:</b></p> <p>a) TAR77762<br/>b) TAR55759<br/>c) TR125754<br/>d) TR116463<br/>e) TAR71618<br/>f) TM41029</p>   |  <p><b>Main Bearing</b><br/>‣ TRE27352 <i>Std.</i><br/>‣ TRE27353 0.010<br/>‣ TRE27360 0.020<br/>‣ TRE27368 0.030</p> <p><b>Use 4</b></p>   |  <p><b>Thrust Bearing</b><br/>‣ TAT21139 <i>Std.</i><br/>‣ TAT21132 0.010<br/>‣ TAT21134 0.020<br/>‣ TAT21136 0.030</p> <p><b>Use 1</b></p>  |  <p><b>Con Rod Bearing</b><br/>‣ TRE27348 <i>Std.</i><br/>‣ TRE27349 0.010<br/>‣ TRE27358 0.020<br/>‣ TRE27364 0.030</p> <p><b>Use 4</b></p>   |
| <p>Please see page 379 for a complete list of equipment models.</p>   |  <p>1) <b>Front Seal</b><br/>‣ TAR67942</p> <p>2) <b>Rear Seal</b><br/>‣ TRE44574</p> <p>3) <b>Crankshaft</b><br/>‣ TAT18030</p> <p>4) <b>Crankshaft, Gear</b><br/>‣ TT20094</p> <p>5) <b>Ring Gear</b><br/>‣ TR114282 (142T)</p> |  <p>1) <b>O/H Gasket Set</b><br/>‣ TRE501579</p> <p>2) <b>Head Gasket Set</b><br/>‣ TRE38851</p> <p>3) <b>Head Gasket</b><br/>‣ TR125863</p> <p>4) <b>Oil Pan Gasket</b><br/>‣ TR97342</p> <p>5) <b>Rocker Cover Gsk</b><br/>‣ TR73521</p> <p>6) <b>Gasket, Injection Pump</b><br/>‣ TR125066</p> <p>7) <b>Gasket, Turbo Mount</b><br/>‣ TR89879</p> |  <p>1) <b>Bush, Con Rod</b><br/>‣ TR55647 x4</p> <p>2) <b>Bolt, Con Rod</b><br/>‣ TR74194 x8</p> <p>3) <b>Bush, Bal. Shaft</b><br/>‣ TR57160 x6</p> <p>4) <b>Bal. Shaft R/H</b><br/>‣ TRE26282 R/H</p> <p>5) <b>Bal. Shaft L/H</b><br/>‣ TRE26283 L/H</p> <p>6) <b>Camshaft</b><br/>‣ TR82820</p> <p>7) <b>Bal. Shaft Stop</b><br/>‣ TR88112</p> <p>8) <b>Con Rod</b><br/>‣ TRE16495</p> |  <p>1) <b>Pump, Oil</b><br/>‣ TRE55343</p> <p>2) <b>Oil Cooler</b><br/>‣ TRE31929</p> <p>3) <b>Rocker Arm</b><br/>‣ TR31973</p> <p>4) <b>Rocker Shaft</b><br/>‣ TR54987</p> <p>5) <b>Pump, Oil Tube</b><br/>‣ TR113752</p> <p>6) <b>Oil Pump O'Ring</b><br/>‣ TR61871</p>                   |  <p>1) <b>Lower Gear</b><br/>‣ TAT24252</p> <p>2) <b>Lower Bushing</b><br/>‣ TT26321</p> <p>3) <b>Upper Gear</b><br/>‣ TAT18009</p> <p>4) <b>Upper Bushing</b><br/>‣ TT20034</p> <p>5) <b>Cam. Follower</b><br/>‣ TT20073 x8</p> <p>6) <b>Cam. Gear</b><br/>‣ TT20070</p> |
| <p><b>Valve, Intake</b><br/>‣ TR79623 <i>Std.</i><br/>‣ TR79628 0.003<br/>‣ TR79629 0.015</p>   | <p><b>Valve, Exhaust</b><br/>‣ TR79624 <i>Std.</i><br/>‣ TR79625 0.003<br/>‣ TR79626 0.015</p>   | <p>1) <b>Insert, Valve In</b><br/>‣ TR73064 <i>Std.</i></p> <p>2) <b>Insert, Valve Ex</b><br/>‣ TR51734 <i>Std.</i></p>   | <p>1) <b>Cap, Valve</b><br/>‣ TT20129</p> <p>2) <b>Lock, Valve</b><br/>‣ TT20077</p>  | <p>1) <b>Spring, Valve</b><br/>‣ TR26125</p> <p>2) <b>Rotator, Valve</b><br/>‣ TRE11410</p> <p>3) <b>O'ring, Valve</b><br/>‣ TR87627</p>   |  |
|  <p>1) <b>Thermostat</b><br/>‣ TRE33705 180° F</p> <p>2) <b>Thermostat Cover</b><br/>‣ TT23620</p> <p>3) <b>Water Temp Sensor</b><br/>‣ TRE51774</p> <p>4) <b>Thermostat Cover Gsk</b><br/>‣ TT20215</p>   |  <p>1) <b>Fuel Transfer Pump</b><br/>‣ TRE42211</p> <p>2) <b>Fuel Pump Gasket</b><br/>‣ TR27285</p>   |  <p><b>Water Pump Repair Kit</b><br/>‣ Without Impeller<br/>‣ TRE19507</p> <p><b>With Impeller</b><br/>‣ TRE62658</p>  |  <p>1) <b>Water Pump</b><br/>‣ TAT27018</p> <p>2) <b>Water Pump Gasket</b><br/>‣ TT20242<br/>‣ TT20268</p>   |  <p>1) <b>Seal, Injector</b><br/>‣ TR60746<br/>‣ TR48000</p> <p>2) <b>Injector, Pencil</b><br/>‣ TAR89564</p> <p>3) <b>Kit, Grommet</b><br/>‣ TMX504</p> <p>4) <b>Cap</b><br/>‣ TAT27622<br/>‣ TAR85618</p> <p>5) <b>Washer</b><br/>‣ TT29539</p> <p>6) <b>Tube Nut</b><br/>‣ TR51937</p> |  |

(1): Some of these engines maybe turbocharged.

(3): Do not use with Housing (m) R54096, R70741, R74549.

(5): TR91708 (Outer Diam. 2.00 mm / 0.078 in ) Larger and TR57160R (Inner Diam 0.5 mm / 0.020 in ) Smaller, are also available.

(7): Check for proper Application.

(2): For Connecting Rods TRE16495 and RE21076 Use Connecting Rod Bolt TR80033.

(4): Threaded Type.

(6): (m) R48997, (m) R51039.

**Engine Series:**  
300

**Engine Model:**  
4.239D






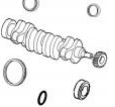
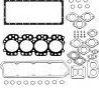
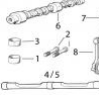

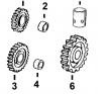



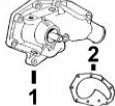


**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.19 in / 106.5 mm Pin Ø: 1.3750 in / (+/- .0002) = 35mm

**Con Rod (M):**  
R80034

**Piston (M):**  
RE30250

Please see page 380 for a complete list of equipment models.

|   |  |  |  |  |  |
|---|--|--|--|--|--|
|  <p>1) <b>Engine O/H Kit</b><br/>                 † TAT86992<br/>                 2) <b>Engine I/F Kit</b><br/>                 † TIK86992</p>  |  <p><b>Piston-Liner Kit</b><br/>                 † TRE30250<br/> <b>Consists of:</b><br/>                 † a) TRE19282<br/>                 † b) TRE66820<br/>                 † c) TR125754<br/>                 † d) TR116281<br/>                 † e) TAR65507<br/>                 † f) TM41029</p>  |  <p><b>Main Bearing</b><br/>                 † TRE27352 Std.<br/>                 † TRE27353 0.010<br/>                 † TRE27360 0.020<br/>                 † TRE27368 0.030<br/> <b>Use 4</b></p>   |  <p><b>Thrust Bearing</b><br/>                 † TAT21139 Std.<br/>                 † TAT21132 0.010<br/>                 † TAT21134 0.020<br/>                 † TAT21136 0.030<br/> <b>Use 1</b></p>   |  <p><b>Con Rod Bearing</b><br/>                 † TRE27348 Std.<br/>                 † TRE27349 0.010<br/>                 † TRE27358 0.020<br/>                 † TRE27364 0.030<br/> <b>Use 4</b></p>  |  |
|  <p>1) <b>Front Seal</b><br/>                 † TAR67942<br/>                 2) <b>Rear Seal</b><br/>                 † TRE44574<br/>                 3) <b>Crankshaft</b><br/>                 † TAT18030<br/>                 † TRE20585<br/>                 4) <b>Crankshaft, Gear</b><br/>                 † TT20094<br/>                 5) <b>Ring Gear</b><br/>                 † TR114282 (142T)<br/>                 6) <b>Sleeve, Front</b><br/>                 † TR81989<br/>                 7) <b>Packing, Sleeve</b><br/>                 † TH35244</p> |  <p>1) <b>O/H Gasket Set</b><br/>                 † TRE501579<br/>                 2) <b>Head Gasket Set</b><br/>                 † TRE38851<br/>                 3) <b>Head Gasket</b><br/>                 † TR125863<br/>                 4) <b>Oil Pan Gasket</b><br/>                 † TR97342<br/>                 5) <b>Rocker Cover Gsk</b><br/>                 † TR73521<br/>                 6) <b>Gasket, Injection Pump</b><br/>                 † TR125066<br/>                 7) <b>Gasket, Turbo Mount</b><br/>                 † TR89879</p> |  <p>1) <b>Bush, Con Rod</b><br/>                 † TR55647 x4<br/>                 2) <b>Bolt, Con Rod</b><br/>                 † TR80033 x8<br/>                 3) <b>Bush, Bal. Shaft</b><br/>                 † TR57160 x6<br/>                 4) <b>Bal. Shaft R/H</b><br/>                 † TRE26282<br/>                 † TAR69710<br/>                 5) <b>Bal Shaft L/H</b><br/>                 † TRE26283<br/>                 † TAR69711<br/>                 6) <b>Camshaft</b><br/>                 † TR82820<br/>                 7) <b>Bal Shaft Stop</b><br/>                 † TR88112<br/>                 8) <b>Con Rod</b><br/>                 † TRE16495<br/>                 9) <b>Cam Bearing</b><br/>                 † TR119874</p> |  <p>1) <b>Pump, Oil</b><br/>                 † TRE55343<br/>                 2) <b>Oil Cooler</b><br/>                 † TRE31929<br/>                 3) <b>Rocker Arm</b><br/>                 † TRE31973<br/>                 4) <b>Rocker Shaft</b><br/>                 † TR54987<br/>                 5) <b>Pump, Oil Tube</b><br/>                 † TR113752<br/>                 6) <b>Cyl Hd Cap Screw</b><br/>                 † TR85363 x18<br/>                 7) <b>Oil Pump O'Ring</b><br/>                 † TR61871</p> |  <p>1) <b>Lower Gear</b><br/>                 † TAT24252<br/>                 2) <b>Lower Bushing</b><br/>                 † TT26321<br/>                 3) <b>Upper Gear</b><br/>                 † TAT18009<br/>                 4) <b>Upper Bushing</b><br/>                 † TT20034<br/>                 5) <b>Cam. Follower</b><br/>                 † TT20073 x8<br/>                 6) <b>Cam. Gear</b><br/>                 † TT20070</p> |  |
| <p><b>Valve, Intake</b><br/>                 † TR79623 Std.<br/>                 † TR79628 0.003<br/>                 † TR79629 0.015</p>   | <p><b>Valve, Exhaust</b><br/>                 † TR79624 Std.<br/>                 † TR79625 0.003<br/>                 † TR79626 0.015</p>   | <p>1) <b>Insert, Valve In</b><br/>                 † TR73064 Std.<br/>                 2) <b>Insert, Valve Ex</b><br/>                 † TR51734 Std.</p>  | <p>1) <b>Cap, Valve</b><br/>                 † TT20129<br/>                 2) <b>Lock, Valve</b><br/>                 † TT20077</p>   | <p>1) <b>Spring, Valve</b><br/>                 † TR26125<br/>                 2) <b>Rotator, Valve</b><br/>                 † TRE11410<br/>                 3) <b>O'ring, Valve</b><br/>                 † TR87627</p>  |  |
|  <p>1) <b>Thermostat</b><br/>                 † TRE33705 180° F<br/>                 2) <b>Thermostat Cover</b><br/>                 † TT23620<br/>                 3) <b>Water Temp Sensor</b><br/>                 † TRE51774<br/>                 4) <b>Thermostat Cover Gsk</b><br/>                 † TT20215</p>   |  <p>1) <b>Fuel Transfer Pump</b><br/>                 † TRE42211<br/>                 2) <b>Fuel Pump Gasket</b><br/>                 † TR27285</p>   |  <p><b>Water Pump Repair Kit</b><br/>                 † Without Impeller<br/>                 † TRE19507<br/> <b>With Impeller</b><br/>                 † TRE62658</p>  |  <p>1) <b>Water Pump</b><br/>                 † TAR97708U<br/>                 † TAR92641<br/>                 2) <b>Water Pump Gasket</b><br/>                 † TT20242<br/>                 † TT20268</p>   |  <p><b>Transmission Oil Pump</b><br/>                 † TAL120106<br/>                 † TAL68094</p>   |  <p>1) <b>Seal, Injector</b><br/>                 † TR60746<br/>                 † TR48000<br/>                 2) <b>Injector, Pencil</b><br/>                 † TAR89564<br/>                 3) <b>Kit, Grommet</b><br/>                 † TMX504<br/>                 4) <b>Glow Plug</b><br/>                 † TRE502079<br/>                 5) <b>Cap</b><br/>                 † TAT27622<br/>                 † TAR85618<br/>                 6) <b>Washer</b><br/>                 † TT29539<br/>                 7) <b>Tube Nut</b><br/>                 † TR51937</p> |

(1): TAT18030 Crankshaft 36mm (short) snout, (m) T23517.

(3): For Connecting Rod (m) R58979, use TR74194 Connecting Rod Bolt available upon request.

(5): TR91708 (Outer Diam. 2.00 mm / 0.078 in.) Larger and TR57160R (Inner Diam 0.5 mm / 0.020 in.) Smaller, are also available.

(7): (m) R73604.

(9): The cam bearing is used in the late style blocks and it is not included in the overhaul kit.

(2): TRE20585 Crankshaft 60mm (long) snout, (m) R81959 or R121018.

(4): Threaded Type.

(6): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(8): Check for proper application.



**Engine Series:**  
300

**Engine Model:**  
4039D

**Engine Desc:**  
Liter  
Designated

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.19 in /  
106.5 mm Pin  
Ø: 1.3750 in /  
(+/- .0002) =  
35mm

**Block (M):**  
R88984

**Con Rod (M):**  
R80034

**Piston (M):**  
RE30250,  
RE18697

**Farm Tractors**  
5600

**Backhoe  
Loaders**

210D  
310C  
310D  
315C  
315D  
515B

**Excavators**  
290D  
70D

**Crawler Dozers**  
400G

**Forklifts**  
482C



- 1) **Engine O/H Kit**
  - › TAT86992
- 2) **Engine I/F Kit**
  - › TIK86992



- 1) **Piston-Liner Kit**
  - › TRE30250
- Consists of:**
  - › a) TRE19282
  - › b) TRE66820
  - › c) TR125754
  - › d) TR116281
  - › e) TAR65507
  - › f) TM41029



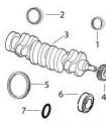
- 1) **Main Bearing**
  - › TRE27352 *Std.*
  - › TRE27353 *0.010*
  - › TRE27360 *0.020*
  - › TRE27368 *0.030*
- Use 4**



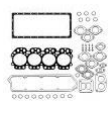
- 1) **Thrust Bearing**
  - › TAT21139 *Std.*
  - › TAT21132 *0.010*
  - › TAT21134 *0.020*
  - › TAT21136 *0.030*
- Use 1**



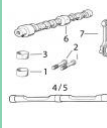
- 1) **Con Rod Bearing**
  - › TRE27348 *Std.*
  - › TRE27349 *0.010*
  - › TRE27358 *0.020*
  - › TRE27364 *0.030*
- Use 4**



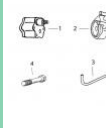
- 1) **Front Seal**
  - › TAR67942
- 2) **Rear Seal**
  - › TRE44574
- 3) **Crankshaft**
  - › TAT18030
  - › TRE20585
- 4) **Crankshaft, Gear**
  - › TT20094
- 5) **Ring Gear**
  - › TR114282 *(142T)*
- 6) **Sleeve, Front**
  - › TR81989
- 7) **Packing, Sleeve**
  - › TH35244



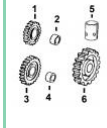
- 1) **O/H Gasket Set**
  - › TRE501579
- 2) **Head Gasket Set**
  - › TRE38851
- 3) **Head Gasket**
  - › TR125863
- 4) **Oil Pan Gasket**
  - › TR97342
- 5) **Rocker Cover Gsk**
  - › TR73521
  - › TR106796
- 6) **Gasket, Injection Pump**
  - › TR125066
- 7) **Gasket, Turbo Mount**
  - › TR89879



- 1) **Bush, Con Rod**
  - › TR55647 *x4*
- 2) **Bolt, Con Rod**
  - › TR80033 *x8*
- 3) **Bush, Bal. Shaft**
  - › TR57160 *x6*
- 4) **Bal. Shaft R/H**
  - › TRE26282
  - › TAR69710
- 5) **Bal Shaft L/H**
  - › TRE26283
  - › TAR69711
- 6) **Camshaft**
  - › TR82820
- 7) **Camshaft Kit**
  - › TRE55901
- 8) **Con Rod**
  - › TRE16495
- 9) **Cam Bearing**
  - › TR119874



- 1) **Pump, Oil**
  - › TRE55343
- 2) **Oil Cooler**
  - › TRE31929
- 3) **Pump, Oil Tube**
  - › TR113752
- 4) **Cyl Hd Cap Screw**
  - › TR85363 *x18*
- 5) **Oil Pump O'Ring**
  - › TR61871



- 1) **Lower Gear**
  - › TAT24252
- 2) **Lower Bushing**
  - › TT26321
- 3) **Upper Gear**
  - › TAT18009
- 4) **Upper Bushing**
  - › TT20034
- 5) **Cam. Follower**
  - › TT20073 *x8*
- 6) **Cam. Gear**
  - › TT20070

- 1) **Valve, Intake**
  - › TR98062 *Std.*
  - › TR97490 *0.015*

- 1) **Valve, Exhaust**
  - › TR90692 *Std.*
  - › TR97492 *0.015*

- 1) **Insert, Valve In**
  - › TR98063 *Std.*
  - › TR98335 *O/S.*
- 2) **Insert, Valve Ex**
  - › TR85687 *Std.*
  - › TR93910 *O/S*

- 1) **Seal, Valve**
  - › TRE31617
- 2) **Lock, Valve**
  - › TR91889

- 1) **Spring, Valve**
  - › TR26125
- 2) **Rotator, Valve**
  - › TRE60005



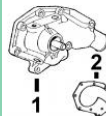
- 1) **Thermostat**
  - › TAR48675 *180° F*
- 2) **Thermostat Cover**
  - › TT23620
- 3) **Water Temp Sensor**
  - › TRE51774
- 4) **Thermostat Cover Gsk**
  - › TT20215



- 1) **Fuel Transfer Pump**
  - › TRE42211
  - › TRE38009
- 2) **Fuel Pump Gasket**
  - › TR27285



- 1) **Water Pump Repair Kit**
  - › Without Impeller
    - › TRE19507
  - › With Impeller
    - › TRE62658



- 1) **Water Pump**
  - › TAR97708U
  - › TRE60489
  - › TRE16666
  - › TAR92641
- 2) **Water Pump Gasket**
  - › TT20242
  - › TT20268



- 1) **Seal, Injector**
  - › TR60746
  - › TR48000
- 2) **Injector, Pencil**
  - › TRE36936
- 3) **KIT, GROMMET**
  - › TMX504
- 4) **Glow Plug**
  - › TRE502079

(1): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.  
(2): May use High cap. Pump, Oil TRE65580.  
(3): O'ring not included in Gasket Set. Used in Saran Engines. Order separately.  
(4): TR91708 (Outer Diam. 2.00 mm / 0.078 in ) Larger and TR57160R (Inner Diam 0.5 mm / 0.020 in ) Smaller, are also available.  
(5): Saran engines may use TRE64354.  
(6): Helicoidal Gears.  
(7): Saran Engines.  
(8): Threaded Type.  
(9): (m) R73604.  
(10): (m) R100812, (m) R127337, (m) R127918, (m) R55164.  
(11): Check application for proper usage.  
(12): For Late 4039 models.  
(13): TAT18030 Crankshaft 36mm (short) snout, (m) T23517.  
(14): TRE20585 Crankshaft 60mm (long) snout, (m) R81959 or R121018.  
(15): These shafts are made for bolt on weights.

(9): (m) R73604.  
(10): (m) R100812, (m) R127337, (m) R127918, (m) R55164.  
(11): Check application for proper usage.  
(12): For Late 4039 models.  
(13): TAT18030 Crankshaft 36mm (short) snout, (m) T23517.  
(14): TRE20585 Crankshaft 60mm (long) snout, (m) R81959 or R121018.  
(15): These shafts are made for bolt on weights.

**Engine Series:**  
300

**Engine Model:**  
4.239T

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.19 in / 106.5 mm Pin Ø: 1.6250 in / (+/- .0002) = 41mm

**Con Rod (M):**  
R80032, R113612, R122191

**Piston (M):**  
RE33115

Please see page 381 for a complete list of equipment models.



- 1) **Engine O/H Kit**
  - › TRE54709
- 2) **Engine I/F Kit**
  - › TIK54709



- Piston-Liner Kit**  
› TRE33115
- Consists of:**
- › a) TRE19278
  - › b) TRE66820
  - › c) TR124230
  - › d) TR116281
  - › e) TAR65507
  - › f) TR54114



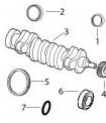
- Main Bearing**
- › TRE27352 Std.
  - › TRE27353 0.010
  - › TRE27360 0.020
  - › TRE27368 0.030
- Use 4**



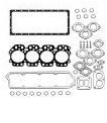
- Thrust Bearing**
- › TAT21139 Std.
  - › TAT21132 0.010
  - › TAT21134 0.020
  - › TAT21136 0.030
- Use 1**



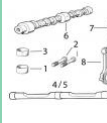
- Con Rod Bearing**
- › TRE27348 Std.
  - › TRE27349 0.010
  - › TRE27358 0.020
  - › TRE27364 0.030
- Use 4**



- 1) **Front Seal**
  - › TAR67942
- 2) **Rear Seal**
  - › TRE44574
- 3) **Crankshaft**
  - › TAT18030
  - › TRE20585
- 4) **Crankshaft, Gear**
  - › TT20094
- 5) **Ring Gear**
  - › TR114282 (142T)
- 6) **Sleeve, Front**
  - › TR81989
- 7) **Packing, Sleeve**
  - › TH35244



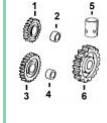
- 1) **O/H Gasket Set**
  - › TRE501579
- 2) **Head Gasket Set**
  - › TRE38851
- 3) **Head Gasket**
  - › TR125863
- 4) **Oil Pan Gasket**
  - › TR97342
- 5) **Rocker Cover Gsk**
  - › TR73521
- 6) **Gasket, Injection Pump**
  - › TR125066
- 7) **Gasket, Turbo Mount**
  - › TR89879



- 1) **Bush, Con Rod**
  - › TR57451 x4
- 2) **Bolt, Con Rod**
  - › TR80033 x8
- 3) **Bush, Bal. Shaft**
  - › TR57160 x6
- 4) **Bal. Shaft R/H**
  - › TRE26282
  - › TAR69710
- 5) **Bal Shaft L/H**
  - › TRE26283
  - › TAR69711
- 6) **Camshaft**
  - › TR82820
- 7) **Bal Shaft Stop**
  - › TR88112
- 8) **Con Rod**
  - › TRE58347
- 9) **Kit, Piston Pin**
  - › TRE63913 x4
- 10) **Cam Bearing**
  - › TR119874



- 1) **Pump, Oil**
  - › TRE55343
- 2) **Oil Cooler**
  - › TRE31929
- 3) **Rocker Arm**
  - › TRE31973
- 4) **Rocker Shaft**
  - › TR54987
- 5) **Pump, Oil Tube**
  - › TR113752
- 6) **Cyl Hd Cap Screw**
  - › TR85363 x18
- 7) **Oil Pump O'Ring**
  - › TR61871



- 1) **Lower Gear**
  - › TAT24252
- 2) **Lower Bushing**
  - › TT26321
- 3) **Upper Gear**
  - › TAT18009
- 4) **Upper Bushing**
  - › TT20034
- 5) **Cam. Follower**
  - › TT20073 x8
- 6) **Cam. Gear**
  - › TT20070

**Valve, Intake**

- › TR83071 Std.
- › TR89223 0.003
- › TR89224 0.015

**Valve, Exhaust**

- › TR79624 Std.
- › TR79625 0.003
- › TR79626 0.015

**1) Insert, Valve In**

- › TR73064 Std.
- 2) Insert, Valve Ex**
- › TR51734 Std.

**1) Cap, Valve**

- › TT20129
- 2) Lock, Valve**
- › TT20077

**1) Spring, Valve**

- › TR26125
- 2) Rotator, Valve**
- › TRE11410
- 3) O'ring, Valve**
- › TR87627



- 1) **Thermostat**
  - › TAR48675 180° F
- 2) **Thermostat Cover**
  - › TT23620
- 3) **Water Temp Sensor**
  - › TRE51774
- 4) **Thermostat Cover Gsk**
  - › TT20215



- 1) **Fuel Transfer Pump**
  - › TRE42211
- 2) **Fuel Pump Gasket**
  - › TR27285



- Water Pump Repair Kit**
- › See Chart



- Water Pump**
- › TAR97708U
  - › TAR92641



- Transmission Oil Pump**
- › TAL120106
  - › TAL68094



- 1) **Seal, Injector**
  - › TR60746
  - › TR48000
- 2) **Injector, Pencil**
  - › TRE37503
- 3) **KIT, GROMMET**
  - › TMX504
- 4) **Glow Plug**
  - › TRE502079

(1): TAT18030 Crankshaft 36mm (short) snout, (m) T23517.

(3): TR91708 (Outer Diam. 2.00 mm / 0.078 in ) Larger and TR57160R (Inner Diam 0.5 mm / 0.020 in ) Smaller, are also available.

(5): Threaded Type.

(7): (m) R73604.

(9): The cam bearing is used in the late style blocks and it is not included in the overhaul kit.

(2): May use High cap. Pump, Oil TRE65580.

(4): TRE20585 Crankshaft 60mm (long) snout, (m) R81959 or R121018.

(6): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(8): Check your application for proper usage.

(10): These shafts are made for bolt on weights.

**Engine Series:**  
300

**Engine Model:**  
4039T

**Engine Desc:**  
Liter  
Designated

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.19 in /  
106.5 mm Pin  
Ø: 1.6250 in /  
(+/- .0002) =  
41mm

**Con Rod (M):**  
R80032,  
R122191,  
R113612

**Piston (M):**  
RE19282,  
RE30250

**Farm Tractors**  
5500N  
5700  
6200  
6200L  
SE6200  
6210  
6300  
6300L  
SE6300  
6310

**Backhoe Loaders**  
300D  
310C  
315C  
315D  
515B



- 1) **Engine O/H Kit**
  - › TRE54709
- 2) **Engine I/F Kit**
  - › TIK54709



- Piston-Liner Kit**
  - › TRE33115
- Consists of:**
  - › a) TRE19278
  - › b) TRE66820
  - › c) TR124230
  - › d) TR116281
  - › e) TAR65507
  - › f) TR54114



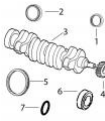
- Main Bearing**
  - › TRE27352 Std.
  - › TRE27353 0.010
  - › TRE27360 0.020
  - › TRE27368 0.030
- Use 4**



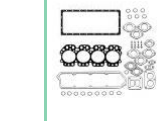
- Thrust Bearing**
  - › TAT21139 Std.
  - › TAT21132 0.010
  - › TAT21134 0.020
  - › TAT21136 0.030
- Use 1**



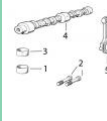
- Con Rod Bearing**
  - › TRE27348 Std.
  - › TRE27349 0.010
  - › TRE27358 0.020
  - › TRE27364 0.030
- Use 4**



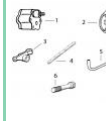
- 1) **Front Seal**
  - › TAR67942
- 2) **Rear Seal**
  - › TRE44574
- 3) **Crankshaft**
  - › TAT18030
  - › TRE20585
- 4) **Crankshaft, Gear**
  - › TT20094
- 5) **Ring Gear**
  - › TR114282 (142T)
- 6) **Sleeve, Front**
  - › TR81989
- 7) **Packing, Sleeve**
  - › TH35244



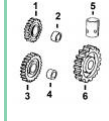
- 1) **O/H Gasket Set**
  - › TRE501579
- 2) **Head Gasket Set**
  - › TRE38851
- 3) **Head Gasket**
  - › TR125863
- 4) **Oil Pan Gasket**
  - › TR97342
- 5) **Rocker Cover Gsk**
  - › TR73521
  - › TR106796
- 6) **Gasket, Injection Pump**
  - › TR125066
- 7) **Gasket, Turbo Mount**
  - › TR89879



- 1) **Bush, Con Rod**
  - › TR57451 x4
- 2) **Bolt, Con Rod**
  - › TR80033 x8
- 3) **Bush, Bal. Shaft**
  - › TR57160 x6
- 4) **Camshaft**
  - › TR82820
- 5) **Con Rod**
  - › TRE58347
- 6) **Bal Shaft R/H**
  - › TRE26282
  - › TAR69710
- 7) **Bal Shaft L/H**
  - › TRE26283
  - › TAR69711
- 8) **Camshaft Kit**
  - › TRE55901
- 9) **Kit, Piston Pin**
  - › TRE63913 x4
- 10) **Cam Bearing**
  - › TR119874



- 1) **Pump, Oil**
  - › TRE55343
- 2) **Oil Cooler**
  - › TRE31929
- 3) **Rocker Arm**
  - › TRE31973
- 4) **Rocker Shaft**
  - › TR54987
- 5) **Pump, Oil Tube**
  - › TR113752
- 6) **Cyl Hd Cap Screw**
  - › TR85363 x18
- 7) **Oil Pump O'Ring**
  - › TR61871



- 1) **Lower Gear**
  - › TAT24252
- 2) **Lower Bushing**
  - › TT26321
- 3) **Upper Gear**
  - › TAT18009
- 4) **Upper Bushing**
  - › TT20034
- 5) **Cam. Follower**
  - › TT20073 x8
- 6) **Cam. Gear**
  - › TT20070

- Valve, Intake**
  - › TR98062 Std.
  - › TR97490 0.015

- Valve, Exhaust**
  - › TR90692 Std.
  - › TR97492 0.015

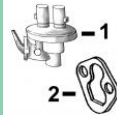
- 1) **Insert, Valve In**
  - › TR98063 O/S
  - › TR98335 O/S
- 2) **Insert, Valve Ex**
  - › TR85687 Std.
  - › TR93910 O/S

- 1) **Seal, Valve**
  - › TRE31617
- 2) **Lock, Valve**
  - › TR91889

- 1) **Spring, Valve**
  - › TR26125
- 2) **Rotator, Valve**
  - › TRE60005



- 1) **Thermostat**
  - › TAR48675 180° F
- 2) **Thermostat Cover**
  - › TT23620
- 3) **Water Temp Sensor**
  - › TRE51774
- 4) **Thermostat Cover Gsk**
  - › TT20215



- 1) **Fuel Transfer Pump**
  - › TRE42211
  - › TRE38009
- 2) **Fuel Pump Gasket**
  - › TR27285



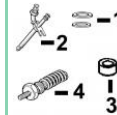
- Water Pump Repair Kit**
  - › See Chart



- Water Pump**
  - › TAR97708U
  - › TRE60489
  - › TRE16666
  - › TAR92641



- Water Pump**
  - › TRE41157



- 1) **Seal, Injector**
  - › TR60746
  - › TR48000
- 2) **Injector, Pencil**
  - › TRE38087
- 3) **KIT, GROMMET**
  - › TMX504
- 4) **Glow Plug**
  - › TRE502079

(1): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(3): May use High cap. Pump, Oil TRE65580.

(5): Saran engines may use TRE64354.

(7): Saran Engines.

(9): (m) R73604.

(11): Check application for proper usage.

(13): TAT18030 Crankshaft 36mm (short) snout, (m) T23517.

(15): These shafts are made for bolt on weights.

(2): Saran engines, O'ring not included in Gasket Set. Order separately.

(4): TR91708 (Outer Diam. 2.00 mm / 0.078 in ) Larger and TR57160R (Inner Diam 0.5 mm / 0.020 in ) Smaller, are also available.






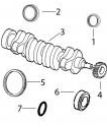
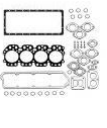

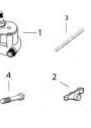




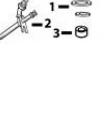
(6): Helicoidal Gears.

(8): Threaded Type.

(10): (m) R100812, (m) R127337, (m) R127918, (m) R55164.

(12): For Late 4039 models.






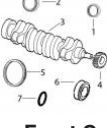



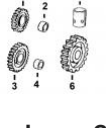




(14): TRE20585 Crankshaft 60mm (long) snout, (m) R81959 or R121018.

|   |   |  |  |   |  |
|---|---|--|--|---|--|
| <p><b>Engine Series:</b><br/>300</p> <p><b>Engine Model:</b><br/>4.276D</p> <p><b>Engine Desc:</b><br/>Small Pin</p> <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.19 in / 106.5 mm Pin Ø: 1.375 in / 35 mm</p>   |  <p><b>1) Engine O/H Kit</b><br/>› TAT86990</p> <p><b>2) Engine I/F Kit</b><br/>› TIK86990</p>  |  <p><b>Piston-Liner Kit</b><br/>› TRE19831</p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>› a) TAR63342</li> <li>› b) TRE66820</li> <li>› c) TR125754</li> <li>› d) TR80500</li> <li>› e) TAR65507</li> <li>› f) TM41029</li> </ul> |  <p><b>Main Bearing</b></p> <ul style="list-style-type: none"> <li>› TRE27352 Std.</li> <li>› TRE27353 0.010</li> <li>› TRE27360 0.020</li> <li>› TRE27368 0.030</li> </ul> <p><b>Use 4</b></p>  |  <p><b>Thrust Bearing</b></p> <ul style="list-style-type: none"> <li>› TAT21139 Std.</li> <li>› TAT21132 0.010</li> <li>› TAT21134 0.020</li> <li>› TAT21136 0.030</li> </ul> <p><b>Use 1</b></p> |  <p><b>Con Rod Bearing</b></p> <ul style="list-style-type: none"> <li>› TAR97517 Std.</li> <li>› TAR97653 0.010</li> <li>› TAR97654 0.020</li> <li>› TAR97655 0.030</li> </ul> <p><b>Use 4</b></p>   |
| <p><b>Farm Tractors</b></p> <p>2630<br/>2640</p> <p><b>Backhoe Loaders</b></p> <p>410C</p>  |  <p><b>1) Front Seal</b><br/>› TAR67942</p> <p><b>2) Rear Seal</b><br/>› TRE44574</p> <p><b>3) Crankshaft</b><br/>› TRE56792</p> <p><b>4) Crankshaft, Gear</b><br/>› TT20094</p> <p><b>5) Ring Gear</b><br/>› TR114282 (142T)<br/>› TR28811 (129T)</p> <p><b>6) Sleeve, Front</b><br/>› TR81989</p> <p><b>7) Packing, Sleeve</b><br/>› TH35244</p> |  <p><b>1) O/H Gasket Set</b><br/>› TRE501568</p> <p><b>2) Head Gasket Set</b><br/>› TRE38851</p> <p><b>3) Head Gasket</b><br/>› TR125863</p> <p><b>4) Oil Pan Gasket</b><br/>› TR97342</p> <p><b>5) Rocker Cover Gsk</b><br/>› TR73521</p>                |  <p><b>1) Bush, Con Rod</b><br/>› TR57450 x4</p> <p><b>2) Bolt, Con Rod</b><br/>› TR74195 x8</p> <p><b>3) Bush, Bal. Shaft</b><br/>› TR57160 x6</p> <p><b>4) Bal. Shaft R/H</b><br/>› TRE26282<br/>› TAR69710</p> <p><b>5) Bal Shaft L/H</b><br/>› TRE26283<br/>› TAR69711</p> <p><b>Camshaft</b><br/>› TR82820</p> |  <p><b>1) Pump, Oil</b><br/>› TRE65580</p> <p><b>2) Rocker Arm</b><br/>› TRE31973</p> <p><b>3) Rocker Shaft</b><br/>› TR54987</p> <p><b>4) Cyl Hd Cap Screw</b><br/>› TR85363 x18</p>            |  <p><b>1) Lower Gear</b><br/>› TAT24252</p> <p><b>2) Lower Bushing</b><br/>› TT26321</p> <p><b>3) Upper Gear</b><br/>› TAT18009</p> <p><b>4) Upper Bushing</b><br/>› TT20034</p> <p><b>5) Cam. Follower</b><br/>› TT20073 x8</p> <p><b>6) Cam. Gear</b><br/>› TT20070</p> |
| <p><b>Valve, Intake</b></p> <ul style="list-style-type: none"> <li>› TR79623 Std.</li> <li>› TR79628 0.003</li> <li>› TR79629 0.015</li> </ul>  | <p><b>Valve, Exhaust</b></p> <ul style="list-style-type: none"> <li>› TR79624 Std.</li> <li>› TR79625 0.003</li> <li>› TR79626 0.015</li> </ul>   | <p><b>1) Insert, Valve In</b><br/>› TR73064 Std.</p> <p><b>2) Insert, Valve Ex</b><br/>› TR51734 Std.</p>  | <p><b>1) Cap, Valve</b><br/>› TT20129</p> <p><b>2) Lock, Valve</b><br/>› TT20077</p>   | <p><b>1) Spring, Valve</b><br/>› TR26125</p> <p><b>2) Rotator, Valve</b><br/>› TRE11410</p> <p><b>3) O'ring Valve</b><br/>› TR87627</p>   |  |
|  <p><b>1) Thermostat</b><br/>› TAR48675 180° F</p> <p><b>2) Thermostat Cover</b><br/>› TT23620</p> <p><b>3) Water Temp Sensor</b><br/>› TRE51774</p> <p><b>4) Thermostat Cover Gsk</b><br/>› TT20215</p> |  <p><b>1) Fuel Transfer Pump</b><br/>› TRE42211</p> <p><b>2) Fuel Pump Gasket</b><br/>› TR27285</p>  |  <p><b>Water Pump Repair Kit</b></p> <ul style="list-style-type: none"> <li>› <b>Without Impeller</b><br/>› TRE19507</li> <li>› <b>With Impeller</b><br/>› TRE62658</li> <li>› <b>Water Pump Gasket</b><br/>› TT20242<br/>› TT20268</li> </ul>         |  <p><b>1) Seal, Injector</b><br/>› TR60746<br/>› TR48000</p> <p><b>2) Injector, Pencil</b><br/>› TRE37503</p> <p><b>3) KIT, GROMMET</b><br/>› TMX504</p>  |   |  |

(1): This engine may use standard flow Pump, Oil TRE55343.  
 (3): From ESN 137128 Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.  
 (5): Check for proper application.

(2): Threaded Type.  
 (4): When used on connecting rods marked R54617, torque bolts to 95 ft.lbs. Only.  
 (6): See the Water Pump Identification Chart to make sure these part numbers are correct. You will need the water pump casting number and will need to know if you have a stamped steel pulley or a cast iron pulley.

(7): These shafts are made for bolt on weights.

|   |   |  |  |   |   |
|---|---|--|--|---|---|
| <p><b>Engine Series:</b><br/>300</p> <p><b>Engine Model:</b><br/>4.276D</p> <p><b>Engine Desc:</b><br/>Large Pin</p> <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.19 in / 106.5 mm Pin Ø: 1.625 in / 41 mm</p>   |  <p><b>1) Engine O/H Kit</b><br/>                 › TRE63694</p> <p><b>2) Engine I/F Kit</b><br/>                 › TIK63694</p>  |  <p><b>Piston-Liner Kit</b><br/>                 › TRE28966</p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>› a) TRE28919</li> <li>› b) TRE66820</li> <li>› c) TR124230</li> <li>› d) TR80500</li> <li>› e) TAR65507</li> <li>› f) TR54114</li> </ul>  |  <p><b>Main Bearing</b><br/>                 › TRE27352 <i>Std.</i><br/>                 › TRE27353 <i>0.010</i><br/>                 › TRE27360 <i>0.020</i><br/>                 › TRE27368 <i>0.030</i></p> <p><b>Use 4</b></p>   |  <p><b>Thrust Bearing</b><br/>                 › TAT21139 <i>Std.</i><br/>                 › TAT21132 <i>0.010</i><br/>                 › TAT21134 <i>0.020</i><br/>                 › TAT21136 <i>0.030</i></p> <p><b>Use 1</b></p>                              |  <p><b>Con Rod Bearing</b><br/>                 › TAR97517 <i>Std.</i><br/>                 › TAR97653 <i>0.010</i><br/>                 › TAR97654 <i>0.020</i><br/>                 › TAR97655 <i>0.030</i></p> <p><b>Use 4</b></p>   |
| <p><b>Wheel Loaders</b><br/>344E</p> <p><b>Backhoe Loaders</b><br/>410C<br/>410D<br/>510B</p> <p><b>Crawler Dozers</b><br/>450E<br/>450G<br/>455E<br/>455G</p> <p><b>Excavators</b><br/>490D<br/>493D</p> <p><b>Skidders</b><br/>340D<br/>440C</p>  |  <p><b>1) Front Seal</b><br/>                 › TAR67942</p> <p><b>2) Rear Seal</b><br/>                 › TRE44574</p> <p><b>3) Crankshaft</b><br/>                 › TRE56792</p> <p><b>4) Crankshaft, Gear</b><br/>                 › TT20094</p> <p><b>5) Ring Gear</b><br/>                 › TR114282 <i>(142T)</i><br/>                 › TR28811 <i>(129T)</i></p> <p><b>6) Sleeve, Front</b><br/>                 › TR81989</p> <p><b>7) Packing, Sleeve</b><br/>                 › TH35244</p> |  <p><b>1) O/H Gasket Set</b><br/>                 › TRE501568</p> <p><b>2) Head Gasket Set</b><br/>                 › TRE38851</p> <p><b>3) Head Gasket</b><br/>                 › TR125863</p> <p><b>4) Oil Pan Gasket</b><br/>                 › TR97342</p> <p><b>5) Rocker Cover Gsk</b><br/>                 › TR73521</p> |  <p><b>1) Bush, Con Rod</b><br/>                 › TR57451 <i>x4</i></p> <p><b>2) Bolt, Con Rod</b><br/>                 › TR74195 <i>x8</i></p> <p><b>3) Bush, Bal. Shaft</b><br/>                 › TR57160 <i>x6</i></p> <p><b>4) Bal. Shaft R/H</b><br/>                 › TRE26282<br/>                 › TAR69710</p> <p><b>5) Bal Shaft L/H</b><br/>                 › TRE26283<br/>                 › TAR69711</p> <p><b>6) Camshaft</b><br/>                 › TR82820</p> <p><b>7) Kit, Piston Pin</b><br/>                 › TRE63913 <i>x4</i></p> <p><b>8) Con Rod</b><br/>                 › TRE53716</p> |  <p><b>1) Pump, Oil</b><br/>                 › TRE65580</p> <p><b>2) Rocker Arm</b><br/>                 › TRE31973</p> <p><b>3) Rocker Shaft</b><br/>                 › TR54987</p> <p><b>4) Cyl Hd Cap Screw</b><br/>                 › TR85363 <i>x18</i></p> |  <p><b>1) Lower Gear</b><br/>                 › TAT24252</p> <p><b>2) Lower Bushing</b><br/>                 › TT26321</p> <p><b>3) Upper Gear</b><br/>                 › TAT18009</p> <p><b>4) Upper Bushing</b><br/>                 › TT20034</p> <p><b>5) Cam. Follower</b><br/>                 › TT20073 <i>x8</i></p> <p><b>6) Cam. Gear</b><br/>                 › TT20070</p> |
| <p><b>Valve, Intake</b><br/>                 › TR79623 <i>Std.</i><br/>                 › TR79628 <i>0.003</i><br/>                 › TR79629 <i>0.015</i></p>  | <p><b>Valve, Exhaust</b><br/>                 › TR79624 <i>Std.</i><br/>                 › TR79625 <i>0.003</i><br/>                 › TR79626 <i>0.015</i></p>   | <p><b>1) Insert, Valve In</b><br/>                 › TR73064</p> <p><b>2) Insert, Valve Ex</b><br/>                 › TR51734 <i>Std.</i><br/>                 › TR93910</p>   | <p><b>1) Cap, Valve</b><br/>                 › TT20129</p> <p><b>2) Lock, Valve</b><br/>                 › TT20077</p>   | <p><b>1) Spring, Valve</b><br/>                 › TR26125</p> <p><b>2) Rotator, Valve</b><br/>                 › TRE11410</p> <p><b>3) O'ring Valve</b><br/>                 › TR87627</p>  |   |
|  <p><b>1) Thermostat</b><br/>                 › TAR48675 <i>180° F</i></p> <p><b>2) Thermostat Cover</b><br/>                 › TT23620</p> <p><b>3) Thermostat Cover Gsk</b><br/>                 › TT20215</p> |  <p><b>1) Fuel Transfer Pump</b><br/>                 › TRE42211</p> <p><b>2) Fuel Pump Gasket</b><br/>                 › TR27285</p>  |  <p><b>Water Pump Repair Kit</b><br/>                 › Without Impeller<br/>                 › TRE19507</p> <p><b>With Impeller</b><br/>                 › TRE62658</p> <p><b>Water Pump Gasket</b><br/>                 › TT20242<br/>                 › TT20268</p>  |  <p><b>1) Seal, Injector</b><br/>                 › TR60746<br/>                 › TR48000</p> <p><b>2) Injector, Pencil</b><br/>                 › TRE37503</p> <p><b>3) KIT, GROMMET</b><br/>                 › TMX504</p>  |   |   |

(1): This engine may use standard flow Pump, Oil TRE55343.  
 (3): From ESN 137128 Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.  
 (5): These shafts are made for bolt on weights.

(2): Threaded Type.  
 (4): When used on connecting rods marked R56187, torque bolts to 95 ft.lbs. Only.

**Engine Series:**  
300







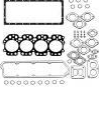


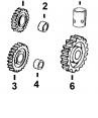






**Engine Model:**  
4045D

**Engine Desc:**  
Liter  
Designated

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.19 in /  
106.5 mm Pin  
Ø: 1.625 in / 41  
mm

Please see  
page **382** for a  
complete list of  
equipment  
models.

|   |   |  |   |   |   |
|---|---|--|---|---|---|
|  <p>1) <b>Engine O/H Kit</b><br/>‣ TRE63694<br/>2) <b>Engine I/F Kit</b><br/>‣ TIK63694</p>   |  <p><b>Piston-Liner Kit</b><br/>‣ TRE28966<br/><b>Consists of:</b><br/>‣ a) TRE28919<br/>‣ b) TRE66820<br/>‣ c) TR124230<br/>‣ d) TR80500<br/>‣ e) TAR65507<br/>‣ f) TR54114</p>  |  <p><b>Main Bearing</b><br/>‣ TRE27352 <i>Std.</i><br/>‣ TRE27353 0.010<br/>‣ TRE27360 0.020<br/>‣ TRE27368 0.030<br/><b>Use 4</b></p>   |  <p><b>Thrust Bearing</b><br/>‣ TAT21139 <i>Std.</i><br/>‣ TAT21132 0.010<br/>‣ TAT21134 0.020<br/>‣ TAT21136 0.030<br/><b>Use 1</b></p>  |  <p><b>Con Rod Bearing</b><br/>‣ TAR97517 <i>Std.</i><br/>‣ TAR97653 0.010<br/>‣ TAR97654 0.020<br/>‣ TAR97655 0.030<br/><b>Use 4</b></p>   |   |
|  <p>1) <b>Front Seal</b><br/>‣ TAR67942<br/>2) <b>Rear Seal</b><br/>‣ TRE44574<br/>3) <b>Crankshaft</b><br/>‣ TRE56792<br/>4) <b>Crankshaft, Gear</b><br/>‣ TT20094<br/>5) <b>Ring Gear</b><br/>‣ TR114282 (142T)<br/>‣ TR28811 (129T)<br/>6) <b>Sleeve, Front</b><br/>‣ TR81989<br/>7) <b>Packing, Sleeve</b><br/>‣ TH35244</p> |  <p>1) <b>O/H Gasket Set</b><br/>‣ TRE501568<br/>2) <b>Head Gasket Set</b><br/>‣ TRE38851<br/>3) <b>Head Gasket</b><br/>‣ TR125863<br/>4) <b>Oil Pan Gasket</b><br/>‣ TR97342<br/>5) <b>Rocker Cover Gsk</b><br/>‣ TR73521</p> |  <p>1) <b>Bush, Con Rod</b><br/>‣ TR57451 x4<br/>2) <b>Bolt, Con Rod</b><br/>‣ TR74195 x8<br/>3) <b>Bush, Bal. Shaft</b><br/>‣ TR57160 x6<br/>4) <b>Camshaft</b><br/>‣ TR82820<br/>5) <b>Bal Shaft R/H</b><br/>‣ TRE26282<br/>‣ TAR69710<br/>6) <b>Bal Shaft L/H</b><br/>‣ TRE26283<br/>‣ TAR69711<br/>7) <b>Kit, Piston Pin</b><br/>‣ TRE63913 x4<br/>8) <b>Con Rod</b><br/>‣ TRE53716<br/>9) <b>Camshaft Kit</b><br/>‣ TRE55901</p> |  <p>1) <b>Pump, Oil</b><br/>‣ TRE65580<br/>2) <b>Oil Cooler</b><br/>‣ TRE31929<br/>3) <b>Rocker Arm</b><br/>‣ TRE31973<br/>4) <b>Rocker Shaft</b><br/>‣ TR54987<br/>5) <b>Cyl Hd Cap Screw</b><br/>‣ TR85363 x18</p> |  <p>1) <b>Lower Gear</b><br/>‣ TAT24252<br/>2) <b>Lower Bushing</b><br/>‣ TT26321<br/>3) <b>Upper Gear</b><br/>‣ TAT18009<br/>4) <b>Upper Bushing</b><br/>‣ TT20034<br/>5) <b>Cam. Follower</b><br/>‣ TT20073 x8<br/>6) <b>Cam. Gear</b><br/>‣ TT20070</p> |   |
| <p><b>Valve, Intake</b><br/>‣ TR98062 <i>Std.</i><br/>‣ TR97490 0.015</p>   | <p><b>Valve, Exhaust</b><br/>‣ TR90692 <i>Std.</i><br/>‣ TR97492 0.015</p>  | <p>1) <b>Insert, Valve In</b><br/>‣ TR98063 <i>Std.</i><br/>‣ TR98335 <i>O/S</i><br/>2) <b>Insert, Valve Ex</b><br/>‣ TR85687 <i>Std.</i><br/>‣ TR93910 <i>O/S</i></p>   | <p>1) <b>Seal, Valve</b><br/>‣ TRE31617<br/>2) <b>Lock, Valve</b><br/>‣ TR91889</p>   | <p>1) <b>Spring, Valve</b><br/>‣ TR26125<br/>2) <b>Rotator, Valve</b><br/>‣ TRE60005</p>  |   |
|  <p>1) <b>Thermostat</b><br/>‣ TAR48675 180° F<br/>2) <b>Thermostat Cover</b><br/>‣ TT23620<br/>3) <b>Thermostat Cover Gsk</b><br/>‣ TT20215</p>   |  <p>1) <b>Fuel Transfer Pump</b><br/>‣ TRE42211<br/>‣ TRE38009<br/>2) <b>Fuel Pump Gasket</b><br/>‣ TR27285</p>  |  <p><b>Water Pump Repair Kit</b><br/>‣ See Chart</p>  |  <p><b>Water Pump</b><br/>‣ TAR97708U<br/>‣ TRE60489<br/>‣ TRE16666</p>   |  <p><b>Water Pump</b><br/>‣ TRE41157</p>   |  <p>1) <b>Seal, Injector</b><br/>‣ TR60746<br/>‣ TR48000<br/>2) <b>Injector, Pencil</b><br/>‣ TRE38087<br/>3) <b>KIT, GROMMET</b><br/>‣ TMX504<br/>4) <b>Glow Plug</b><br/>‣ TRE502079</p> |

(1): Saran engines use TRE55343 Standard flow.

(3): Saran Engines.

(5): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(7): When used on connecting rods marked R56187, torque bolts to 95 ft.lbs.

(9): (m) R100812, (m) R127337, (m) R127918, (m) R55164.

(11): For Late 4039 models.

(2): Saran engines may use TRE64354.

(4): Threaded Type.(5) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(6): Always verify Oil Cooler Type.

(8): (m) R73604.

(10): Crankshaft (m) R54501. This Engines model may also use crankshaft TRE54883 60mm Snout; (m) R90825, R120009. PLEASE VERIFY.

(12): These shafts are made for bolt on weights.

**Engine Series:**  
300

**Engine Model:**  
4.276T

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.19 in /  
106.5 mm Pin  
Ø: 1.625 in / 41  
mm



- 1) **Engine O/H Kit**
  - › TRE61612
- 2) **Engine I/F Kit**
  - › TIK61612



- Piston-Liner Kit**
- › TRE53073
- Consists of:**
- a) TRE48469
  - b) TRE66820
  - c) TR124230
  - d) TR80500
  - e) TAR65507
  - f) TR54114



- Main Bearing**
- › TRE27352 Std.
  - › TRE27353 0.010
  - › TRE27360 0.020
  - › TRE27368 0.030
- Use 4**

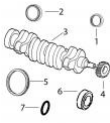


- Thrust Bearing**
- › TAT21139 Std.
  - › TAT21132 0.010
  - › TAT21134 0.020
  - › TAT21136 0.030
- Use 1**

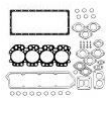


- Con Rod Bearing**
- › TAR97517 Std.
  - › TAR97653 0.010
  - › TAR97654 0.020
  - › TAR97655 0.030
- Use 4**

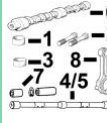
Please see page 383 for a complete list of equipment models.



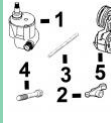
- 1) **Front Seal**
  - › TAR67942
- 2) **Rear Seal**
  - › TRE44574
- 3) **Crankshaft**
  - › TRE56792
- 4) **Crankshaft, Gear**
  - › TT20094
- 5) **Ring Gear**
  - › TR114282 (142T)
  - › TR28811 (129T)
- 6) **Sleeve, Front**
  - › TR81989
- 7) **Packing, Sleeve**
  - › TH35244



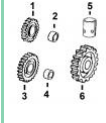
- 1) **O/H Gasket Set**
  - › TRE501568
- 2) **Head Gasket Set**
  - › TRE38851
- 3) **Head Gasket**
  - › TR125863
- 4) **Oil Pan Gasket**
  - › TR97342
- 5) **Rocker Cover Gsk**
  - › TR73521
  - › TR106796



- 1) **Bush, Con Rod**
  - › TR57451 x4
- 2) **Bolt, Con Rod**
  - › TR74195 x8
- 3) **Bush, Bal. Shaft**
  - › TR57160 x6
- 4) **Bal. Shaft R/H**
  - › TRE26282
  - › TAR69710
- 5) **Bal Shaft L/H**
  - › TRE26283
  - › TAR69711
- 6) **Camshaft**
  - › TR82820
- 7) **Kit, Piston Pin**
  - › TRE63913 x4
- 8) **Con Rod**
  - › TRE53716



- 1) **Pump, Oil**
  - › TRE65580
- 2) **Rocker Arm**
  - › TRE31973
- 3) **Rocker Shaft**
  - › TR54987
- 4) **Cyl Hd Cap Screw**
  - › TR85363 x18
- 5) **Tensioner Belt**
  - › TAL110621



- 1) **Lower Gear**
  - › TAT24252
- 2) **Lower Bushing**
  - › TT26321
- 3) **Upper Gear**
  - › TAT18009
- 4) **Upper Bushing**
  - › TT20034
- 5) **Cam. Follower**
  - › TT20073 x8
- 6) **Cam. Gear**
  - › TT20070

- Valve, Intake**
- › TR83071 Std.
  - › TR89223 0.003
  - › TR89224 0.015

- Valve, Exhaust**
- › TR79624 Std.
  - › TR79625 0.003
  - › TR79626 0.015

- 1) **Insert, Valve In**
  - › TR73064 Std.
- 2) **Insert, Valve Ex**
  - › TR51734 Std.

- 1) **Cap, Valve**
  - › TT20129
- 2) **Lock, Valve**
  - › TT20077

- 1) **Spring, Valve**
  - › TR26125
- 2) **Rotator, Valve**
  - › TRE11410
- 3) **O'ring Valve**
  - › TR87627



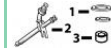
- 1) **Thermostat**
  - › TAR48675 180° F
- 2) **Thermostat Cover**
  - › TT23620
- 3) **Water Temp Sensor**
  - › TRE51774
- 4) **Thermostat Cover Gsk**
  - › TT20215



- 1) **Fuel Transfer Pump**
  - › TRE42211
- 2) **Fuel Pump Gasket**
  - › TR27285



- Water Pump Repair Kit**
- › **Without Impeller**
    - › TRE19510
  - › **With Impeller**
    - › TRE11348



- 1) **Seal, Injector**
  - › TR60746
  - › TR48000
- 2) **Injector, Pencil**
  - › TRE37503
- 3) **KIT, GROMMET**
  - › TMX504

(1): This engine may use Standard Flow Pump, Oil TRE55343.

(3): Threaded Type

(5): When used on connecting rods marked R56187, torque bolts to 95 ft.lbs. Only.

(7): Saran engines, O'ring not included in Gasket Set. Order separately.

(2): Do not use 45 degree Valves with RE56545 Head.

(4): From ESN 137128 Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363

(6): Check for proper application

(8): These shafts are made for bolt on weights.

**Engine Series:**  
300

**Engine Model:**  
4045T

**Engine Desc:**  
Liter  
Designated

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.19 in /  
106.5 mm Pin  
Ø: 1.625 in / 41  
mm

Please see  
page **384** for a  
complete list of  
equipment  
models.



- 1) **Engine O/H Kit**
  - › TRE61612
- 2) **Engine I/F Kit**
  - › TIK61612



- Piston-Liner Kit**  
› TRE53073
- Consists of:**
- › a) TRE48469
  - › b) TRE66820
  - › c) TR124230
  - › d) TR80500
  - › e) TAR65507
  - › f) TR54114



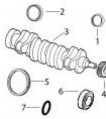
- Main Bearing**
- › TRE27352 *Std.*
  - › TRE27353 *0.010*
  - › TRE27360 *0.020*
  - › TRE27368 *0.030*
- Use 4**



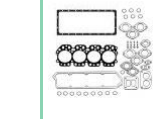
- Thrust Bearing**
- › TAT21139 *Std.*
  - › TAT21132 *0.010*
  - › TAT21134 *0.020*
  - › TAT21136 *0.030*
- Use 1**



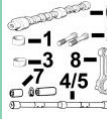
- Con Rod Bearing**
- › TAR97517 *Std.*
  - › TAR97653 *0.010*
  - › TAR97654 *0.020*
  - › TAR97655 *0.030*
- Use 4**



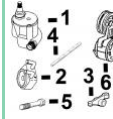
- 1) **Front Seal**
  - › TAR67942
- 2) **Rear Seal**
  - › TRE44574
- 3) **Crankshaft**
  - › TRE56792
- 4) **Crankshaft, Gear**
  - › TT20094
- 5) **Ring Gear**
  - › TR114282 *(142T)*
  - › TR28811 *(129T)*
- 6) **Sleeve, Front**
  - › TR81989
- 7) **Packing, Sleeve**
  - › TH35244



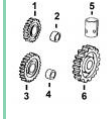
- 1) **O/H Gasket Set**
  - › TRE501568
- 2) **Head Gasket Set**
  - › TRE38851
- 3) **Head Gasket**
  - › TR125863
- 4) **Oil Pan Gasket**
  - › TR97342
- 5) **Rocker Cover Gsk**
  - › TR73521
  - › TR106796



- 1) **Bush, Con Rod**
  - › TR57451 *x4*
- 2) **Bolt, Con Rod**
  - › TR74195 *x8*
- 3) **Bush, Bal. Shaft**
  - › TR57160 *x6*
- 4) **Camshaft**
  - › TR82820
- 5) **Bal Shaft R/H**
  - › TRE26282
  - › TAR69710
- 6) **Bal Shaft L/H**
  - › TRE26283
  - › TAR69711
- 7) **Kit, Piston Pin**
  - › TRE63913 *x4*
- 8) **Con Rod**
  - › TRE53716
- 9) **Camshaft Kit**
  - › TRE55901



- 1) **Pump, Oil**
  - › TRE65580
- 2) **Oil Cooler**
  - › TRE31929
- 3) **Rocker Arm**
  - › TRE31973
- 4) **Rocker Shaft**
  - › TR54987
- 5) **Cyl Hd Cap Screw**
  - › TR85363 *x18*
- 6) **Tensioner Belt**
  - › TAL110621



- 1) **Lower Gear**
  - › TAT24252
- 2) **Lower Bushing**
  - › TT26321
- 3) **Upper Gear**
  - › TAT18009
- 4) **Upper Bushing**
  - › TT20034
- 5) **Cam. Follower**
  - › TT20073 *x8*
- 6) **Cam. Gear**
  - › TT20070

- Valve, Intake**
- › TR98062 *Std.*
  - › TR97490 *0.015*

- Valve, Exhaust**
- › TR90692 *Std.*
  - › TR97492 *0.015*

- 1) **Insert, Valve In**
- › TR98063 *Std.*
  - › TR98335 *O/S*
- 2) **Insert, Valve Ex**
- › TR85687 *Std.*
  - › TR93910 *O/S*

- 1) **Seal, Valve**
- › TRE31617
- 2) **Lock, Valve**
- › TR91889

- 1) **Spring, Valve**
- › TR26125
- 2) **Rotator, Valve**
- › TRE60005



- 1) **Thermostat**
  - › TAR48675 *180° F*
- 2) **Thermostat Cover**
  - › TT23260
- 3) **Water Temp Sensor**
  - › TRE51774



- 1) **Fuel Transfer Pump**
  - › TRE42211
  - › TRE38009
- 2) **Fuel Pump Gasket**
  - › TR27285



- Water Pump Repair Kit**
- › See Chart



- Water Pump**
- › TAR97708U
  - › TRE60489
  - › TRE16666



- Water Pump**
- › TRE41157



- 1) **Seal, Injector**
  - › TR60746
  - › TR48000
- 2) **Injector, Pencil**
  - › TRE38087
- 3) **KIT, GROMMET**
  - › TMX504
- 4) **Glow Plug**
  - › TRE502079

(1): Saran engines use TRE55343 Standard flow.

(3): Saran Engines.

(5): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(7): When used on connecting rods marked R56187, torque bolts to 95 ft. lbs.

(9): (m) R100812, (m) R127337, (m) R127918, (m) R55164.

(11): Crankshaft (m) R54501. This Engines model may also use crankshaft TRE54883 60mm Snout; (m) R90825, R120009. PLEASE VERIFY.

(13): Saran engines, O'ring not included in Gasket Set. Order separately.

(2): Saran engines may use TRE64354.

(4): Threaded Type.

(6): Always verify Oil Cooler Type.

(8): (m) R73604.

(10): Check application for proper usage.

(12): For Late 4039 models.

(14): These shafts are made for bolt on weights.



# JOHN DEERE 6.303 O'RINGS ON LINER

**Engine Series:**  
300

**Engine Model:**  
6.303

**Engine Desc:**  
To ESN  
158,975

**Engine Data:**  
O'rings on Liner

**Engine Dimensions:**  
Bore: 3.86 in /  
98 mm Pin Ø:  
1.1878 in / (+/-  
.0001) = 30mm

**Block (M):**  
T24967,  
T24968

**Con Rod (M):**  
T20007,  
R81410

**Piston (M):**  
T23481

**Wheel Loaders**  
544



- 1) **Engine O/H Kit**  
‣ TOK6481
- 2) **Engine I/F Kit**  
‣ TIK6481



- Piston-Liner Kit**  
‣ TPLK481
- Consists of:**
- a) TT23481
  - b) TAR70633
  - c) TT23482
  - d) TAR51902
  - e) TR51112



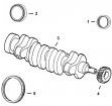
- Main Bearing**
- TRE27352 *Std.*
  - TRE27353 *0.010*
  - TRE27360 *0.020*
  - TRE27368 *0.030*
- Use 6**



- Thrust Bearing**
- TAT21139 *Std.*
  - TAT21132 *0.010*
  - TAT21134 *0.020*
  - TAT21136 *0.030*
- Use 1**



- Con Rod Bearing**
- TRE27348 *Std.*
  - TRE27349 *0.010*
  - TRE27358 *0.020*
  - TRE27364 *0.030*
- Use 6**



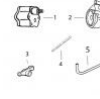
- 1) **Front Seal**  
‣ TAR67942
- 2) **Rear Seal**  
‣ TRE44574
- 3) **Crankshaft**  
‣ TAT22562
- 4) **Crankshaft, Gear**  
‣ TT20094
- 5) **Ring Gear**  
‣ TR114282 *(142T)*



- 1) **O/H Gasket Set**  
‣ TRE38568
- 2) **Head Gasket Set**  
‣ TRE38571
- 3) **Head Gasket**  
‣ TR98462
- 4) **Oil Pan Gasket**  
‣ TR97344
- 5) **Rocker Cover Gsk**  
‣ TR75728



- 1) **Bush, Con Rod**  
‣ TT23471 *x6*
- 2) **Bolt, Con Rod**  
‣ TR74194 *x12*
- 3) **Camshaft**  
‣ TR82821
- 4) **Con Rod**  
‣ TAT18005



- 1) **Pump, Oil**  
‣ TRE55343
- 2) **Oil Cooler**  
‣ TRE31929
- 3) **Rocker Arm**  
‣ TRE31973
- 4) **Rocker Shaft**  
‣ TR54986
- 5) **Pump, Oil Tube**  
‣ TR113752
- 6) **Oil Pump O'Ring**  
‣ TR61871



- 1) **Lower Gear**  
‣ TAT24252
- 2) **Lower Bushing**  
‣ TT26321
- 3) **Upper Gear**  
‣ TAT18009
- 4) **Upper Bushing**  
‣ TT20034
- 5) **Cam. Follower**  
‣ TT20073 *x12*
- 6) **Cam. Gear**  
‣ TT20070

- Valve, Intake**
- TR79623 *Std.*
  - TR79628 *0.003*
  - TR79629 *0.015*

- Valve, Exhaust**
- TR79624 *Std.*
  - TR79625 *0.003*
  - TR79626 *0.015*

- 1) **Insert, Valve In**  
‣ TR73064 *Std.*
- 2) **Insert, Valve Ex**  
‣ TR51734 *Std.*

- 1) **Cap, Valve**  
‣ TT20129
- 2) **Lock, Valve**  
‣ TT20077

- 1) **Spring, Valve**  
‣ TR26125
- 2) **Rotator, Valve**  
‣ TRE11410
- 3) **O'ring Valve**  
‣ TR87627



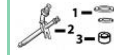
- Thermostats**
- TAR70601 *180° F*
  - TAR77411 *195° F*



- 1) **Fuel Transfer Pump**  
‣ TRE42211
- 2) **Fuel Pump Gasket**  
‣ TR27285



- Water Pump Repair Kit**
- **Without Impeller**  
‣ TRE19510
  - **With Impeller**  
‣ TMX132








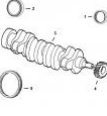
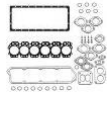

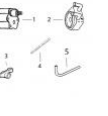





- 1) **Seal, Injector**  
‣ TR60746  
‣ TR48000
- 2) **Injector, Pencil**  
‣ TAR89564
- 3) **Kit, Grommet**  
‣ TMX506
- 4) **Cap**  
‣ TAT27622  
‣ TAR85618
- 5) **Washer**  
‣ TT29539
- 6) **Tube Nut**  
‣ TR51937

(1): Do not use with flywheel housing (m) T20300,T22991.






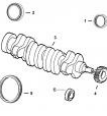


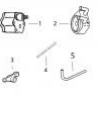
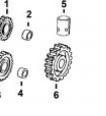



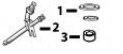
(3): Threaded Type.

(2): Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.

(4): Verify JD parts manual.






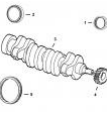


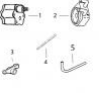
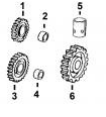



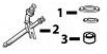
|  |  |  |  |   |   |
|--|--|--|--|---|---|
| <p><b>Engine Series:</b><br/>300</p> <p><b>Engine Model:</b><br/>6.303</p> <p><b>Engine Desc:</b><br/>From ESN<br/>158,976</p> <p><b>Engine Data:</b><br/>O'rings on<br/>Block</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.86 in /<br/>98 mm Pin Ø:<br/>1.1878 in / (+/-<br/>.0001) = 30mm</p> <p><b>Block (M):</b><br/>R53260,<br/>R55035,<br/>R55351,<br/>R72970,<br/>R79280,<br/>T32346</p> <p><b>Con Rod (M):</b><br/>T20007,<br/>R81410</p> <p><b>Piston (M):</b><br/>T23481</p> |  <p><b>1) Engine O/H Kit</b><br/>› TOK6591</p> <p><b>2) Engine I/F Kit</b><br/>› TIK6591</p>   |  <p><b>Piston-Liner Kit</b><br/>› TAR71591</p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>› a) TT23481</li> <li>› b) TAR70633</li> <li>› c) TT23482</li> <li>› d) TT32340</li> <li>› e) TAR71617</li> <li>› f) TR51112</li> </ul> |  <p><b>Main Bearing</b></p> <ul style="list-style-type: none"> <li>› TRE27352 Std.</li> <li>› TRE27353 0.010</li> <li>› TRE27360 0.020</li> <li>› TRE27368 0.030</li> </ul> <p><b>Use 6</b></p>  |  <p><b>Thrust Bearing</b></p> <ul style="list-style-type: none"> <li>› TAT21139 Std.</li> <li>› TAT21132 0.010</li> <li>› TAT21134 0.020</li> <li>› TAT21136 0.030</li> </ul> <p><b>Use 1</b></p>   |  <p><b>Con Rod Bearing</b></p> <ul style="list-style-type: none"> <li>› TRE27348 Std.</li> <li>› TRE27349 0.010</li> <li>› TRE27358 0.020</li> <li>› TRE27364 0.030</li> </ul> <p><b>Use 6</b></p>  |
| <p><b>Farm Tractors</b><br/>3420</p> <p><b>Skidders</b><br/>540</p> <p><b>Wheel Loaders</b><br/>544</p>  |  <p><b>1) Front Seal</b><br/>› TAR67942</p> <p><b>2) Rear Seal</b><br/>› TRE44574</p> <p><b>3) Crankshaft</b><br/>› TAT22562</p> <p><b>4) Crankshaft, Gear</b><br/>› TT20094</p> <p><b>5) Ring Gear</b><br/>› TR114282 (142T)</p> |  <p><b>1) O/H Gasket Set</b><br/>› TRE38568</p> <p><b>2) Head Gasket Set</b><br/>› TRE38571</p> <p><b>3) Head Gasket</b><br/>› TR98462</p> <p><b>4) Oil Pan Gasket</b><br/>› TR97344</p> <p><b>5) Rocker Cover Gsk</b><br/>› TR75728</p>                |  <p><b>1) Bush, Con Rod</b><br/>› TT23471 x6</p> <p><b>2) Bolt, Con Rod</b><br/>› TR74194 x12</p> <p><b>3) Camshaft</b><br/>› TR82821</p> <p><b>4) Con Rod</b><br/>› TAT18005</p>   |  <p><b>1) Pump, Oil</b><br/>› TRE55343</p> <p><b>2) Oil Cooler</b><br/>› TRE31929</p> <p><b>3) Rocker Arm</b><br/>› TRE31973</p> <p><b>4) Rocker Shaft</b><br/>› TR54986</p> <p><b>5) Pump, Oil Tube</b><br/>› TR113752</p> <p><b>6) Oil Pump O'Ring</b><br/>› TR61871</p> |  <p><b>1) Lower Gear</b><br/>› TAT24252</p> <p><b>2) Lower Bushing</b><br/>› TT26321</p> <p><b>3) Upper Gear</b><br/>› TAT18009</p> <p><b>4) Upper Bushing</b><br/>› TT20034</p> <p><b>5) Cam. Follower</b><br/>› TT20073 x12</p> <p><b>6) Cam. Gear</b><br/>› TT20070</p> |
| <p><b>Valve, Intake</b></p> <ul style="list-style-type: none"> <li>› TR79623 Std.</li> <li>› TR79628 0.003</li> <li>› TR79629 0.015</li> </ul>   | <p><b>Valve, Exhaust</b></p> <ul style="list-style-type: none"> <li>› TR79624 Std.</li> <li>› TR79625 0.003</li> <li>› TR79626 0.015</li> </ul>  | <p><b>1) Insert, Valve In</b><br/>› TR73064 Std.</p> <p><b>2) Insert, Valve Ex</b><br/>› TR51734 Std.</p>  | <p><b>1) Cap, Valve</b><br/>› TT20129</p> <p><b>2) Lock, Valve</b><br/>› TT20077</p>   | <p><b>1) Spring, Valve</b><br/>› TR26125</p> <p><b>2) Rotator, Valve</b><br/>› TRE11410</p> <p><b>3) O'ring Valve</b><br/>› TR87627</p>   |   |
|  <p><b>Thermostats</b></p> <ul style="list-style-type: none"> <li>› TAR70601 180° F</li> <li>› TAR77411 195°F</li> </ul>  |  <p><b>1) Fuel Transfer Pump</b><br/>› TRE42211</p> <p><b>2) Fuel Pump Gasket</b><br/>› TR27285</p>   |  <p><b>Water Pump Repair Kit</b></p> <ul style="list-style-type: none"> <li>› Without Impeller<br/>› TRE19510</li> <li>› With Impeller<br/>› TMX132</li> </ul>  |  <p><b>1) Seal, Injector</b><br/>› TR60746<br/>› TR48000</p> <p><b>2) Injector, Pencil</b><br/>› TAR89564</p> <p><b>3) Kit, Grommet</b><br/>› TMX506</p> <p><b>4) Cap</b><br/>› TAT27622<br/>› TAR85618</p> <p><b>5) Washer</b><br/>› TT29539</p> <p><b>6) Tube Nut</b><br/>› TR51937</p> |   |   |
| <p>(1): Do not use with flywheel housing (m) T20300,T22991.</p> <p>(3): Threaded Type.</p>   |  | <p>(2): Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.</p> <p>(4): Verify JD parts manual.</p>  |  |   |   |

JOHN DEERE 6.329 SMALL PIN, O'RINGS ON LINER

|   |   |  |  |   |   |
|---|---|--|--|---|---|
| <p><b>Engine Series:</b><br/>300</p> <p><b>Engine Model:</b><br/>6.329</p> <p><b>Engine Desc:</b><br/>To ESN<br/>277,548</p> <p><b>Engine Data:</b><br/>O'rings on Liner<br/>Small Pin</p>  |  <p><b>1) Engine O/H Kit</b><br/>         † TOK6310<br/> <b>2) Engine I/F Kit</b><br/>         † TIK6310</p>  |  <p><b>Piston-Liner Kit</b><br/>         † TPLK310<br/> <b>Consists of:</b><br/>         † a) TAR78310<br/>         † b) TAR55759<br/>         † c) TT26149<br/>         † d) TAR51903<br/>         † e) TR51112</p>   |  <p><b>Main Bearing</b><br/>         † TRE27352 Std.<br/>         † TRE27353 0.010<br/>         † TRE27360 0.020<br/>         † TRE27368 0.030<br/> <b>Use 6</b></p>   |  <p><b>Thrust Bearing</b><br/>         † TAT21139 Std.<br/>         † TAT21132 0.010<br/>         † TAT21134 0.020<br/>         † TAT21136 0.030<br/> <b>Use 1</b></p>  |  <p><b>Con Rod Bearing</b><br/>         † TRE27348 Std.<br/>         † TRE27349 0.010<br/>         † TRE27358 0.020<br/>         † TRE27364 0.030<br/> <b>Use 6</b></p>   |
| <p><b>Engine Info:</b><br/>6 Cyl, Block (m)<br/>T24968</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.02 in /<br/>102 mm Pin Ø:<br/>1.1878 in / (+/-<br/>.0001) = 30mm</p> <p><b>Con Rod (M):</b><br/>T20007,<br/>R81410</p> <p><b>Piston (M):</b><br/>RE53265,<br/>T30015,<br/>R51451,<br/>AR78310</p> |  <p><b>1) Front Seal</b><br/>         † TAR67942<br/> <b>2) Rear Seal</b><br/>         † TRE44574<br/> <b>3) Crankshaft</b><br/>         † TAT22562<br/> <b>4) Crankshaft, Gear</b><br/>         † TT20094<br/> <b>5) Ring Gear</b><br/>         † TR114282 (142T)<br/> <b>6) Sleeve, Front</b><br/>         † TR81989</p> |  <p><b>1) O/H Gasket Set</b><br/>         † TRE501580<br/> <b>2) Head Gasket Set</b><br/>         † TRE38852<br/> <b>3) Head Gasket</b><br/>         † TR114157<br/> <b>4) Oil Pan Gasket</b><br/>         † TR97344<br/> <b>5) Rocker Cover Gsk</b><br/>         † TR75728<br/> <b>6) Gasket, Turbo Mount</b><br/>         † TR89879<br/> <b>7) Gasket Thermostat Housing</b><br/>         † TT20219</p> |  <p><b>1) Bush, Con Rod</b><br/>         † TT23471 x6<br/> <b>2) Bolt, Con Rod</b><br/>         † TR74194 x12<br/> <b>3) Camshaft</b><br/>         † TR82821<br/> <b>4) Con Rod</b><br/>         † TAT18005</p>   |  <p><b>1) Pump, Oil</b><br/>         † TRE55343<br/> <b>2) Oil Cooler</b><br/>         † TRE31929<br/> <b>3) Rocker Arm</b><br/>         † TRE31973<br/> <b>4) Rocker Shaft</b><br/>         † TR54986<br/> <b>5) Pump, Oil Tube</b><br/>         † TR113752<br/> <b>6) Oil Pump O'Ring</b><br/>         † TR61871</p> |  <p><b>1) Lower Gear</b><br/>         † TAT24252<br/> <b>2) Lower Bushing</b><br/>         † TT26321<br/> <b>3) Upper Gear</b><br/>         † TAT18009<br/> <b>4) Upper Bushing</b><br/>         † TT20034<br/> <b>5) Cam. Follower</b><br/>         † TT20073 x12<br/> <b>6) Cam. Gear</b><br/>         † TT20070</p> |
| <p><b>Farm Tractors</b><br/>3120</p> <p><b>Skidders</b><br/>540A</p> <p><b>Cotton Pickers</b><br/>699</p>   | <p><b>Valve, Intake</b><br/>         † TR79623 Std.<br/>         † TR79628 0.003<br/>         † TR79629 0.015</p>   | <p><b>Valve, Exhaust</b><br/>         † TR79624 Std.<br/>         † TR79625 0.003<br/>         † TR79626 0.015</p>   | <p><b>1) Insert, Valve In</b><br/>         † TR73064 Std.<br/> <b>2) Insert, Valve Ex</b><br/>         † TR51734 Std.</p>  | <p><b>1) Cap, Valve</b><br/>         † TT20129<br/> <b>2) Lock, Valve</b><br/>         † TT20077</p>  | <p><b>1) Spring, Valve</b><br/>         † TR26125<br/> <b>2) Rotator, Valve</b><br/>         † TRE11410<br/> <b>3) O'ring Valve</b><br/>         † TR87627</p>  |
|  <p><b>Thermostats</b><br/>         † TAR70601 180° F<br/>         † TAR77411 195° F</p>   |  <p><b>1) Fuel Transfer Pump</b><br/>         † TRE42211<br/> <b>2) Fuel Pump Gasket</b><br/>         † TR27285</p>  |  <p><b>Water Pump Repair Kit</b><br/>         † Without Impeller<br/>         † TMX9398<br/> <b>With Impeller</b><br/>         † TMX131</p>  |  <p><b>1) Seal, Injector</b><br/>         † TR60746<br/>         † TR48000<br/> <b>2) Injector, Pencil</b><br/>         † TAR89564<br/> <b>3) Kit, Grommet</b><br/>         † TMX506<br/> <b>4) Cap</b><br/>         † TAT27622<br/>         † TAR85618<br/> <b>5) Washer</b><br/>         † TT29539<br/> <b>6) Tube Nut</b><br/>         † TR51937</p> |   |   |

(1): Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410. (2): Threaded Type.  
 (3): Verify JD parts manual.

JOHN DEERE 6.329 SMALL PIN, O'RINGS ON BLOCK

|  |  |   |  |   |  |
|--|--|---|--|---|--|
| <p><b>Engine Series:</b><br/>300</p> <p><b>Engine Model:</b><br/>6.329</p> <p><b>Engine Desc:</b><br/>To ESN<br/>277,549</p> <p><b>Engine Data:</b><br/>O'rings on<br/>Block<br/>Small Pin</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.02 in /<br/>102 mm Pin Ø:<br/>1.1878 in / (+/-<br/>.0001) = 30mm</p> <p><b>Con Rod (M):</b><br/>T20007,<br/>R81410</p> <p><b>Piston (M):</b><br/>RE53265,<br/>T30015,<br/>AR78310</p> |  <p>1) <b>Engine O/H Kit</b><br/>‣ TOK6593</p> <p>2) <b>Engine I/F Kit</b><br/>‣ TIK6593</p>   |  <p><b>Piston-Liner Kit</b><br/>‣ TAR71593</p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>‣ a) TAR78310</li> <li>‣ b) TAR55759</li> <li>‣ c) TT26149</li> <li>‣ d) TR116463</li> <li>‣ e) TAR71618</li> <li>‣ f) TR51112</li> </ul>  |  <p><b>Main Bearing</b><br/>‣ TRE27352 <i>Std.</i><br/>‣ TRE27353 0.010<br/>‣ TRE27360 0.020<br/>‣ TRE27368 0.030</p> <p><b>Use 6</b></p>  |  <p><b>Thrust Bearing</b><br/>‣ TAT21139 <i>Std.</i><br/>‣ TAT21132 0.010<br/>‣ TAT21134 0.020<br/>‣ TAT21136 0.030</p> <p><b>Use 1</b></p>   |  <p><b>Con Rod Bearing</b><br/>‣ TRE27348 <i>Std.</i><br/>‣ TRE27349 0.010<br/>‣ TRE27358 0.020<br/>‣ TRE27364 0.030</p> <p><b>Use 6</b></p>   |
| <p><b>Cotton Pickers</b><br/>499<br/>699</p> <p><b>Farm Tractors</b><br/>3120<br/>4030<br/>4420</p> <p><b>Wheel Loaders</b><br/>544A</p> <p><b>Motor Graders</b><br/>570A</p> <p><b>Skidders</b><br/>540A</p>  |  <p>1) <b>Front Seal</b><br/>‣ TAR67942</p> <p>2) <b>Rear Seal</b><br/>‣ TRE44574</p> <p>3) <b>Crankshaft</b><br/>‣ TAT22562</p> <p>4) <b>Crankshaft, Gear</b><br/>‣ TT20094</p> <p>5) <b>Ring Gear</b><br/>‣ TR114282 (142T)</p> |  <p>1) <b>O/H Gasket Set</b><br/>‣ TRE501580</p> <p>2) <b>Head Gasket Set</b><br/>‣ TRE38852</p> <p>3) <b>Head Gasket</b><br/>‣ TR114157</p> <p>4) <b>Oil Pan Gasket</b><br/>‣ TR97344</p> <p>5) <b>Rocker Cover Gsk</b><br/>‣ TR75728</p> <p>6) <b>Gasket, Turbo Mount</b><br/>‣ TR89879</p> <p>7) <b>Gasket Thermostat Housing</b><br/>‣ TT20219</p> |  <p>1) <b>Bush, Con Rod</b><br/>‣ TT23471 x6</p> <p>2) <b>Bolt, Con Rod</b><br/>‣ TR74194 x12</p> <p>3) <b>Camshaft</b><br/>‣ TR82821</p> <p>4) <b>Con Rod</b><br/>‣ TAT18005</p> |  <p>1) <b>Pump, Oil</b><br/>‣ TRE55343</p> <p>2) <b>Oil Cooler</b><br/>‣ TRE31929</p> <p>3) <b>Rocker Arm</b><br/>‣ TRE31973</p> <p>4) <b>Rocker Shaft</b><br/>‣ TR54986</p> <p>5) <b>Pump, Oil Tube</b><br/>‣ TR113752</p> <p>6) <b>Oil Pump O'Ring</b><br/>‣ TR61871</p> |  <p>1) <b>Lower Gear</b><br/>‣ TAT24252</p> <p>2) <b>Lower Bushing</b><br/>‣ TT26321</p> <p>3) <b>Upper Gear</b><br/>‣ TAT18009</p> <p>4) <b>Upper Bushing</b><br/>‣ TT20034</p> <p>5) <b>Cam. Follower</b><br/>‣ TT20073 x12</p> <p>6) <b>Cam. Gear</b><br/>‣ TT20070</p>                  |
|  | <p><b>Valve, Intake</b><br/>‣ TR79623 <i>Std.</i><br/>‣ TR79628 0.003<br/>‣ TR79629 0.015</p>  | <p><b>Valve, Exhaust</b><br/>‣ TR79624 <i>Std.</i><br/>‣ TR79625 0.003<br/>‣ TR79626 0.015</p>  | <p>1) <b>Insert, Valve In</b><br/>‣ TR73064 <i>Std.</i></p> <p>2) <b>Insert, Valve Ex</b><br/>‣ TR51734 <i>Std.</i></p>  | <p>1) <b>Cap, Valve</b><br/>‣ TT20129</p> <p>2) <b>Lock, Valve</b><br/>‣ TT20077</p>  | <p>1) <b>Spring, Valve</b><br/>‣ TR26125</p> <p>2) <b>Rotator, Valve</b><br/>‣ TRE11410</p> <p>3) <b>O'ring Valve</b><br/>‣ TR87627</p>  |
|  |  <p><b>Thermostats</b><br/>‣ TAR70601 180° F<br/>‣ TAR77411 195° F</p>  |  <p>1) <b>Fuel Transfer Pump</b><br/>‣ TRE42211</p> <p>2) <b>Fuel Pump Gasket</b><br/>‣ TR27285</p>  |  <p><b>Water Pump Repair Kit</b><br/>‣ Without Impeller<br/>‣ TMX9398</p> <p><b>With Impeller</b><br/>‣ TMX131</p>   |   |  <p>1) <b>Seal, Injector</b><br/>‣ TR60746<br/>‣ TR48000</p> <p>2) <b>Injector, Pencil</b><br/>‣ TAR89564</p> <p>3) <b>Kit, Grommet</b><br/>‣ TMX506</p> <p>4) <b>Cap</b><br/>‣ TAT27622<br/>‣ TAR85618</p> <p>5) <b>Washer</b><br/>‣ TT29539</p> <p>6) <b>Tube Nut</b><br/>‣ TR51937</p> |






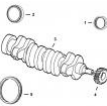


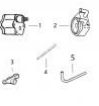





(1): For Tractor Model 4030 order TR97345.

(2): Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.

(3): Threaded Type.

(4): Verify JD parts manual.

JOHN DEERE 6.329 LARGE PIN, O'RINGS ON BLOCK

|  |   |  |  |   |   |
|--|---|--|--|---|---|
| <p><b>Engine Series:</b><br/>300</p> <p><b>Engine Model:</b><br/>6.329</p> <p><b>Engine Desc:</b><br/>From ESN<br/>277,549</p> <p><b>Engine Data:</b><br/>O'rings on<br/>Block<br/>Large Pin</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.02 in /<br/>102 mm Pin Ø:<br/>1.3750 in / (+/-<br/>.0002) = 35mm</p> <p><b>Con Rod (M):</b><br/>RE16495</p> <p><b>Piston (M):</b><br/>AR77762</p> |  <p>1) <b>Engine O/H Kit</b><br/>         † TAT86986</p> <p>2) <b>Engine I/F Kit</b><br/>         † TIK86986</p>  |  <p><b>Piston-Liner Kit</b><br/>         † TAR78041</p> <p><b>Consists of:</b></p> <p>‡ a) TAR77762<br/>         ‡ b) TAR55759<br/>         ‡ c) TR125754<br/>         ‡ d) TR116463<br/>         ‡ e) TAR71618<br/>         ‡ f) TM41029</p>  |  <p><b>Main Bearing</b><br/>         † TRE27352 Std.<br/>         † TRE27353 0.010<br/>         † TRE27360 0.020<br/>         † TRE27368 0.030</p> <p><b>Use 6</b></p>   |  <p><b>Thrust Bearing</b><br/>         † TAT21139 Std.<br/>         † TAT21132 0.010<br/>         † TAT21134 0.020<br/>         † TAT21136 0.030</p> <p><b>Use 1</b></p>  |  <p><b>Con Rod Bearing</b><br/>         † TRE27348 Std.<br/>         † TRE27349 0.010<br/>         † TRE27358 0.020<br/>         † TRE27364 0.030</p> <p><b>Use 6</b></p>   |
| <p><b>Cotton Pickers</b><br/>499</p> <p><b>Combines</b><br/>950<br/>960<br/>4400</p> <p><b>Farm Tractors</b><br/>2840<br/>3130<br/>3530<br/>4030<br/>4425</p>  |  <p>1) <b>Front Seal</b><br/>         † TAR67942</p> <p>2) <b>Rear Seal</b><br/>         † TRE44574</p> <p>3) <b>Crankshaft</b><br/>         † TAT22562</p> <p>4) <b>Crankshaft, Gear</b><br/>         † TT20094</p> <p>5) <b>Ring Gear</b><br/>         † TR114282 (142T)</p> |  <p>1) <b>O/H Gasket Set</b><br/>         † TRE501580</p> <p>2) <b>Head Gasket Set</b><br/>         † TRE38852</p> <p>3) <b>Head Gasket</b><br/>         † TR114157</p> <p>4) <b>Oil Pan Gasket</b><br/>         † TR97344</p> <p>5) <b>Rocker Cover Gsk</b><br/>         † TR75728</p> <p>6) <b>Gasket, Turbo Mount</b><br/>         † TR89879</p> <p>7) <b>Gasket Thermostat Housing</b><br/>         † TT20219</p> |  <p>1) <b>Bush, Con Rod</b><br/>         † TR55647 x6</p> <p>2) <b>Bolt, Con Rod</b><br/>         † TR74194 x12</p> <p>3) <b>Camshaft</b><br/>         † TR82821</p> <p>4) <b>Con Rod</b><br/>         † TRE16495</p>   |  <p>1) <b>Pump, Oil</b><br/>         † TRE55343</p> <p>2) <b>Oil Cooler</b><br/>         † TRE31929</p> <p>3) <b>Rocker Arm</b><br/>         † TRE31973</p> <p>4) <b>Rocker Shaft</b><br/>         † TR54986</p> <p>5) <b>Pump, Oil Tube</b><br/>         † TR113752</p> <p>6) <b>Oil Pump O'Ring</b><br/>         † TR61871</p> |  <p>1) <b>Lower Gear</b><br/>         † TAT24252</p> <p>2) <b>Lower Bushing</b><br/>         † TT26321</p> <p>3) <b>Upper Gear</b><br/>         † TAT18009</p> <p>4) <b>Upper Bushing</b><br/>         † TT20034</p> <p>5) <b>Cam. Follower</b><br/>         † TT20073 x12</p> <p>6) <b>Cam. Gear</b><br/>         † TT20070</p> |
| <p><b>Wheel Loaders</b><br/>444<br/>444C<br/>444D<br/>444CH<br/>544A</p> <p><b>Motor Graders</b><br/>570A</p> <p><b>Backhoe Loaders</b><br/>710B</p>   | <p><b>Valve, Intake</b><br/>         † TR79623 Std.<br/>         † TR79628 0.003<br/>         † TR79629 0.015</p>   | <p><b>Valve, Exhaust</b><br/>         † TR79624 Std.<br/>         † TR79625 0.003<br/>         † TR79626 0.015</p>   | <p>1) <b>Insert, Valve In</b><br/>         † TR73064 Std.</p> <p>2) <b>Insert, Valve Ex</b><br/>         † TR51734 Std.</p>  | <p>1) <b>Cap, Valve</b><br/>         † TT20129</p> <p>2) <b>Lock, Valve</b><br/>         † TT20077</p>  | <p>1) <b>Spring, Valve</b><br/>         † TR26125</p> <p>2) <b>Rotator, Valve</b><br/>         † TRE11410</p> <p>3) <b>O'ring Valve</b><br/>         † TR87627</p>  |
|  <p>1) <b>Thermostats</b><br/>         † TAR70601 180° F<br/>         † TAR77411 195° F<br/>         † TRE33705 180° F</p> <p>2) <b>Water Temp Sensor</b><br/>         † TRE51774</p>   |  <p>1) <b>Fuel Transfer Pump</b><br/>         † TRE42211</p> <p>2) <b>Fuel Pump Gasket</b><br/>         † TR27285</p>  |  <p><b>Water Pump Repair Kit</b><br/>         † Without Impeller<br/>         † TMX9398</p> <p><b>With Impeller</b><br/>         † TMX131</p>   |  <p>1) <b>Seal, Injector</b><br/>         † TR60746<br/>         † TR48000</p> <p>2) <b>Injector, Pencil</b><br/>         † TAR89564</p> <p>3) <b>Kit, Grommet</b><br/>         † TMX506</p> <p>4) <b>Cap</b><br/>         † TAT27622<br/>         † TAR85618</p> <p>5) <b>Washer</b><br/>         † TT29539</p> <p>6) <b>Tube Nut</b><br/>         † TR51937</p> |   |   |

(1): For Tractor Model 4030 order TR97345.

(2): Threaded Type.

(3): For Connecting Rods RE16495 and RE21076 Use Connecting Rod Bolt TR80033.

(4): Check for proper application.

(5): Verify JD parts manual.

**Engine Series:**  
300

**Engine Model:**  
6.359D






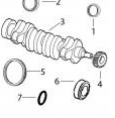










**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 4.19 in /  
106.5 mm Pin  
Ø: 1.3750 in /  
(+/- .0002) =  
35mm

**Con Rod (M):**  
R80034

**Piston (M):**  
RE30250

Please see page 385 for a complete list of equipment models.

|  |  |  |  |   |  |
|--|--|--|--|---|--|
|  <p>1) <b>Engine O/H Kit</b><br/>                 † TRE50784<br/>                 2) <b>Engine I/F Kit</b><br/>                 † TIK50784</p>   |  <p><b>Piston-Liner Kit</b><br/>                 † TRE30250<br/> <b>Consists of:</b><br/>                 † a) TRE19282<br/>                 † b) TRE66820<br/>                 † c) TR125754<br/>                 † d) TR116281<br/>                 † e) TAR65507<br/>                 † f) TM41029</p>  |  <p><b>Main Bearing</b><br/>                 † TRE27352 Std.<br/>                 † TRE27353 0.010<br/>                 † TRE27360 0.020<br/>                 † TRE27368 0.030<br/> <b>Use 6</b></p>   |  <p><b>Thrust Bearing</b><br/>                 † TAT21139 Std.<br/>                 † TAT21132 0.010<br/>                 † TAT21134 0.020<br/>                 † TAT21136 0.030<br/> <b>Use 1</b></p>   |  <p><b>Con Rod Bearing</b><br/>                 † TRE27348 Std.<br/>                 † TRE27349 0.010<br/>                 † TRE27358 0.020<br/>                 † TRE27364 0.030<br/> <b>Use 6</b></p>   |  |
|  <p>1) <b>Front Seal</b><br/>                 † TAR67942<br/>                 2) <b>Rear Seal</b><br/>                 † TRE44574<br/>                 3) <b>Crankshaft</b><br/>                 † TAT22562<br/>                 4) <b>Crankshaft, Gear</b><br/>                 † TT20094<br/>                 5) <b>Ring Gear</b><br/>                 † TR28811 (129T)<br/>                 6) <b>Sleeve, Front</b><br/>                 † TR81989<br/>                 7) <b>Packing, Sleeve</b><br/>                 † TH35244</p> |  <p>1) <b>O/H Gasket Set</b><br/>                 † TRE501580<br/>                 2) <b>Head Gasket Set</b><br/>                 † TRE38852<br/>                 3) <b>Head Gasket</b><br/>                 † TR114157<br/>                 4) <b>Oil Pan Gasket</b><br/>                 † TR97344<br/>                 5) <b>Rocker Cover Gsk</b><br/>                 † TR75728<br/>                 6) <b>Gasket, Turbo Mount</b><br/>                 † TR89879<br/>                 7) <b>Gasket Thermostat Housing</b><br/>                 † TT20219</p> |  <p>1) <b>Bush, Con Rod</b><br/>                 † TR55647 x6<br/>                 2) <b>Bolt, Con Rod</b><br/>                 † TR80033 x12<br/>                 3) <b>Camshaft</b><br/>                 † TR28281<br/>                 4) <b>Con Rod</b><br/>                 † TRE16495</p> |  <p>1) <b>Pump, Oil</b><br/>                 † TRE55343<br/>                 2) <b>Oil Cooler</b><br/>                 † TRE31929<br/>                 3) <b>Rocker Arm</b><br/>                 † TRE31973<br/>                 4) <b>Rocker Shaft</b><br/>                 † TR54986<br/>                 5) <b>Pump, Oil Tube</b><br/>                 † TR113752<br/>                 6) <b>Cyl Hd Cap Screw</b><br/>                 † TR85363 x26<br/>                 7) <b>Oil Pump O'Ring</b><br/>                 † TR61871</p> |  <p>1) <b>Lower Gear</b><br/>                 † TAT24252<br/>                 2) <b>Lower Bushing</b><br/>                 † TT26321<br/>                 3) <b>Upper Gear</b><br/>                 † TAT18009<br/>                 4) <b>Upper Bushing</b><br/>                 † TT20034<br/>                 5) <b>Cam. Follower</b><br/>                 † TT20073 x12<br/>                 6) <b>Cam. Gear</b><br/>                 † TT20070</p> |  |
| <p><b>Valve, Intake</b><br/>                 † TR79623 Std.<br/>                 † TR79628 0.003<br/>                 † TR79629 0.015</p>  | <p><b>Valve, Exhaust</b><br/>                 † TR79624 Std.<br/>                 † TR79625 0.003<br/>                 † TR79626 0.015</p>   | <p>1) <b>Insert, Valve In</b><br/>                 † TR73064 Std.<br/>                 2) <b>Insert, Valve Ex</b><br/>                 † TR51734 Std.</p>  | <p>1) <b>Cap, Valve</b><br/>                 † TT20129<br/>                 2) <b>Lock, Valve</b><br/>                 † TT20077</p>   | <p>1) <b>Spring, Valve</b><br/>                 † TR26125<br/>                 2) <b>Rotator, Valve</b><br/>                 † TRE11410<br/>                 3) <b>O'ring Valve</b><br/>                 † TR87627</p>  |  |
|  <p>1) <b>Thermostat</b><br/>                 † TAR48675 180° F (1)<br/>                 2) <b>Water Temp Sensor</b><br/>                 † TRE51774 (6)</p>  |  <p>1) <b>Fuel Transfer Pump</b><br/>                 † TRE42211<br/>                 2) <b>Fuel Pump Gasket</b><br/>                 † TR27285</p>   |  <p><b>Water Pump Repair Kit</b><br/>                 † See Chart</p>   |  <p><b>Water Pump</b><br/>                 † TRE31600 (5)</p>  |  <p><b>Transmission Oil Pump</b><br/>                 † TAL120106<br/>                 † TAL68094</p>  |  <p>1) <b>Seal, Injector</b><br/>                 † TR60746<br/>                 † TR48000<br/>                 2) <b>Injector, Pencil</b><br/>                 † TAR89564<br/>                 3) <b>Kit, Grommet</b><br/>                 † TMX506<br/>                 4) <b>Cap</b><br/>                 † TAT27622<br/>                 † TAR85618<br/>                 5) <b>Washer</b><br/>                 † TT29539<br/>                 6) <b>Tube Nut</b><br/>                 † TR51937</p> |

(1): Saran engines may use TRE64354.

(3): Threaded Type.

(5): Check serial number for proper application.

(2): Some Engines Models may use High Capacity Pump, Oil TRE65580.

(4): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(6): Check for proper application.

JOHN DEERE 6059D LITER DESIGNATED

**Engine Series:**  
300

**Engine Model:**  
6059D

**Engine Desc:**  
Liter  
Designated

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 4.19 in /  
106.5 mm Pin  
Ø: 1.3750 in /  
(+/- .0002) =  
35mm

**Con Rod (M):**  
R80034

**Piston (M):**  
RE30250

**Farm Tractors**

2955  
3155  
3155TSS  
3255  
3640  
3650

**Cotton Pickers**

9900  
9910  
9920

**Wheel Loaders**

444D

**Motor Graders**

570B



- 1) **Engine O/H Kit**
  - › TRE50784
- 2) **Engine I/F Kit**
  - › TIK50784



- 1) **Piston-Liner Kit**
  - › TRE30250
- Consists of:**
  - › a) TRE19282
  - › b) TRE66820
  - › c) TR125754
  - › d) TR116281
  - › e) TAR65507
  - › f) TM41029



- 1) **Main Bearing**
  - › TRE27352 Std.
  - › TRE27353 0.010
  - › TRE27360 0.020
  - › TRE27368 0.030
- Use 6**



- 1) **Thrust Bearing**
  - › TAT21139 Std.
  - › TAT21132 0.010
  - › TAT21134 0.020
  - › TAT21136 0.030
- Use 1**



- 1) **Con Rod Bearing**
  - › TRE27348 Std.
  - › TRE27349 0.010
  - › TRE27358 0.020
  - › TRE27364 0.030
- Use 6**



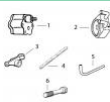
- 1) **Front Seal**
  - › TAR67942
- 2) **Rear Seal**
  - › TRE44574
- 3) **Crankshaft**
  - › TAT22562
- 4) **Crankshaft, Gear**
  - › TT20094
- 5) **Ring Gear**
  - › TR28811 (129T)
  - › TR114282 (142T)
- 6) **Sleeve, Front**
  - › TR81989
- 7) **Packing, Sleeve**
  - › TH35244



- 1) **O/H Gasket Set**
  - › TRE501580
- 2) **Head Gasket Set**
  - › TRE38852
- 3) **Head Gasket**
  - › TR114157
- 4) **Oil Pan Gasket**
  - › TR97344
- 5) **Rocker Cover Gsk**
  - › TR75728
- 6) **Gasket, Turbo Mount**
  - › TR89879
- 7) **Gasket Thermostat Housing**
  - › TT20219



- 1) **Bush, Con Rod**
  - › TR55647 x6
- 2) **Bolt, Con Rod**
  - › TR80033 x12
- 3) **Camshaft**
  - › TR82821
- 4) **Con Rod**
  - › TRE16495



- 1) **Pump, Oil**
  - › TRE55343
- 2) **Oil Cooler**
  - › TRE31929
- 3) **Rocker Arm**
  - › TRE31973
- 4) **Rocker Shaft**
  - › TR54986
- 5) **Pump, Oil Tube**
  - › TR113752
- 6) **Cyl Hd Cap Screw**
  - › TR85363 x26
- 7) **Oil Pump O'Ring**
  - › TR61871



- 1) **Lower Gear**
  - › TAT24252
- 2) **Lower Bushing**
  - › TT26321
- 3) **Upper Gear**
  - › TAT18009
- 4) **Upper Bushing**
  - › TT20034
- 5) **Cam. Follower**
  - › TT20073 x12
- 6) **Cam. Gear**
  - › TT20070

- 1) **Valve, Intake**
  - › TR98062 Std.
  - › TR97490 0.015

- 1) **Valve, Exhaust**
  - › TR90692 Std.
  - › TR97492 0.015

- 1) **Insert, Valve In**
  - › TR98063 Std.
  - › TR98335 O/S
- 2) **Insert, Valve Ex**
  - › TR85687 Std.
  - › TR93910 O/S

- 1) **Seal, Valve**
  - › TRE31617
- 2) **Lock, Valve**
  - › TR91889

- 1) **Spring, Valve**
  - › TR26125
- 2) **Rotator, Valve**
  - › TRE60005



- 1) **Thermostat**
  - › TAR48675 180° F
- 2) **Water Temp Sensor**
  - › TRE51774



- 1) **Fuel Transfer Pump**
  - › TRE42211
  - › TRE38009
- 2) **Fuel Pump Gasket**
  - › TR27285



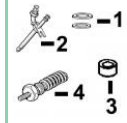
- 1) **Water Pump Repair Kit**
  - › See Chart



- 1) **Water Pump**
  - › TAR97708U
  - › TRE16666
  - › TAR92641
  - › TRE31600



- 1) **Transmission Oil Pump**
  - › TAL120106
  - › TAL68094



- 1) **Seal, Injector**
  - › TR60746
  - › TR48000
- 2) **Injector, Pencil**
  - › TRE36936
- 3) **KIT, GROMMET**
  - › TMX506
- 4) **Glow Plug**
  - › TRE502079

(1): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.  
 (3): Saran engines may use TRE64354.  
 (5): To ESN 379968.  
 (7): Threaded Type.  
 (9): Check application for proper usage.

(2): Some Engines Models may use High Capacity Pump, Oil TRE65580.  
 (4): Helicoidal Gears.  
 (6): Saran Engines.  
 (8): (m) R73604.  
 (10): Check serial number for proper application.

**Engine Series:**  
300

**Engine Model:**  
6.359T

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 4.19 in /  
106.5 mm Pin Ø:  
1.6250 in / (+/-  
.0002) = 41mm

**Con Rod (M):**  
R80032,  
R113612

**Piston (M):**  
RE22678,  
RE19278

**Combines**  
9400

**Cotton Pickers**  
7445  
7484  
9930

**Farm Tractors**  
3140C  
3540  
3550  
4050  
7200

**Backhoe Loaders**  
710B  
710C

**Wheel Loaders**  
444D  
544E  
544EH  
544G



- 1) **Engine O/H Kit**  
‣ TRE50783
- 2) **Engine I/F Kit**  
‣ TIK50783



- Piston-Liner Kit**  
‣ TRE33115
- Consists of:**
  - a) TRE19278
  - b) TRE66820
  - c) TR124230
  - d) TR116281
  - e) TAR65507
  - f) TR54114



- Main Bearing**
  - TRE27352 **Std.**
  - TRE27353 0.010
  - TRE27360 0.020
  - TRE27368 0.030
- Use 6**



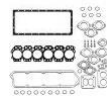
- Thrust Bearing**
  - TAT21139 **Std.**
  - TAT21132 0.010
  - TAT21134 0.020
  - TAT21136 0.030
- Use 1**



- Con Rod Bearing**
  - TRE27348 **Std.**
  - TRE27349 0.010
  - TRE27358 0.020
  - TRE27364 0.030
- Use 6**



- 1) **Front Seal**  
‣ TAR67942
- 2) **Rear Seal**  
‣ TRE44574
- 3) **Crankshaft**  
‣ TAT22562
- 4) **Crankshaft, Gear**  
‣ TT20094
- 5) **Ring Gear**  
‣ TR28811 (129T)  
‣ TR114282 (142T)
- 6) **Sleeve, Front**  
‣ TR81989
- 7) **Packing, Sleeve**  
‣ TH35244



- 1) **O/H Gasket Set**  
‣ TRE501580
- 2) **Head Gasket Set**  
‣ TRE38852
- 3) **Head Gasket**  
‣ TR114157
- 4) **Oil Pan Gasket**  
‣ TR97344
- 5) **Rocker Cover Gsk**  
‣ TR75728
- 6) **Gasket, Turbo Mount**  
‣ TR89879
- 7) **Gasket Thermostat Housing**  
‣ TT20219



- 1) **Bush, Con Rod**  
‣ TR57451 x6
- 2) **Bolt, Con Rod**  
‣ TR80033 x12
- 3) **Camshaft**  
‣ TR82821
- 4) **Con Rod**  
‣ TRE58347
- 5) **Kit, Piston Pin**  
‣ TRE63913 x6



- 1) **Pump, Oil**  
‣ TRE65580
- 2) **Oil Cooler**  
‣ TRE31929
- 3) **Rocker Arm**  
‣ TRE31973
- 4) **Rocker Shaft**  
‣ TR54986
- 5) **Pump, Oil Tube**  
‣ TR113752
- 6) **Cyl Hd Cap Screw**  
‣ TR85363 x26



- 1) **Lower Gear**  
‣ TAT24252
- 2) **Lower Bushing**  
‣ TT26321
- 3) **Upper Gear**  
‣ TAT18009
- 4) **Upper Bushing**  
‣ TT20034
- 5) **Cam. Follower**  
‣ TT20073 x12
- 6) **Cam. Gear**  
‣ TT20070

- Valve, Intake**
  - TR83071 **Std.**
  - TR89223 0.003
  - TR89224 0.015

- Valve, Exhaust**
  - TR79624 **Std.**
  - TR79625 0.003
  - TR79626 0.015

- 1) **Insert, Valve In**  
‣ TR73064 **Std.**
- 2) **Insert, Valve Ex**  
‣ TR51734 **Std.**

- 1) **Cap, Valve**  
‣ TT20129
- 2) **Lock, Valve**  
‣ TT20077

- 1) **Spring, Valve**  
‣ TR26125
- 2) **Rotator, Valve**  
‣ TRE11410
- 3) **O'ring Valve**  
‣ TR87627



- 1) **Thermostat**  
‣ TAR48675 180° F
- 2) **Water Temp Sensor**  
‣ TRE51774
- 3) **Water Temp Sensor**  
‣ TRE52722



- 1) **Fuel Transfer Pump**  
‣ TRE42211
- 2) **Fuel Pump Gasket**  
‣ TR27285



- Water Pump Repair Kit**  
‣ See Chart



- Transmission Oil Pump**  
‣ TAL120106






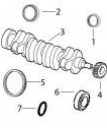
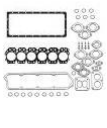










- 1) **Seal, Injector**  
‣ TR60746  
‣ TR48000
- 2) **Injector, Pencil**  
‣ TRE37503
- 3) **KIT, GROMMET**  
‣ TMX506

(1): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.  
 (3): Some Engines Models may use Standard Capacity Pump, Oil TRE55343.  
 (5): To ESN 379968.  
 (7): Check for proper application.

(2): Saran engines may use TRE64354.  
 (4): Do not use 45 Degrees Valves with RE56545 Head.  
 (6): Threaded Type.



|   |   |   |  |  |  |
|---|---|---|--|--|--|
| <p><b>Engine Series:</b><br/>300</p> <p><b>Engine Model:</b><br/>6059T</p> <p><b>Engine Desc:</b><br/>Liter Designated</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.19 in / 106.5 mm Pin Ø: 1.6250 in / (+/- .0002) = 41mm</p> <p><b>Con Rod (M):</b><br/>R80032</p> <p><b>Piston (M):</b><br/>RE22678</p> |  <p><b>1) Engine O/H Kit</b><br/>› TRE50783</p> <p><b>2) Engine I/F Kit</b><br/>› TIK50783</p>  |  <p><b>Piston-Liner Kit</b><br/>› TRE33115</p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>› a) TRE19278</li> <li>› b) TRE66820</li> <li>› c) TR124230</li> <li>› d) TR116281</li> <li>› e) TAR65507</li> <li>› f) TR54114</li> </ul>   |  <p><b>Main Bearing</b><br/>› TRE27352 <i>Std.</i><br/>› TRE27353 <i>0.010</i><br/>› TRE27360 <i>0.020</i><br/>› TRE27368 <i>0.030</i></p> <p><b>Use 6</b></p>   |  <p><b>Thrust Bearing</b><br/>› TAT21139 <i>Std.</i><br/>› TAT21132 <i>0.010</i><br/>› TAT21134 <i>0.020</i><br/>› TAT21136 <i>0.030</i></p> <p><b>Use 1</b></p>                                 |  <p><b>Con Rod Bearing</b><br/>› TRE27348 <i>Std.</i><br/>› TRE27349 <i>0.010</i><br/>› TRE27358 <i>0.020</i><br/>› TRE27364 <i>0.030</i></p> <p><b>Use 6</b></p>  |
| <p><b>Farm Tractors</b><br/>3140C<br/>6600<br/>7200</p> <p><b>Cotton Pickers</b><br/>7445<br/>7484<br/>9930</p> <p><b>Combines</b><br/>9400</p> <p><b>Wheel Loaders</b><br/>444D<br/>544E<br/>544EH<br/>544G</p>  |  <p><b>1) Front Seal</b><br/>› TAR67942</p> <p><b>2) Rear Seal</b><br/>› TRE44574</p> <p><b>3) Crankshaft</b><br/>› TAT22562</p> <p><b>4) Crankshaft, Gear</b><br/>› TT20094</p> <p><b>5) Ring Gear</b><br/>› TR28811 <i>(129T)</i><br/>› TR114282 <i>(142T)</i></p> <p><b>6) Sleeve, Front</b><br/>› TR81989</p> <p><b>7) Packing, Sleeve</b><br/>› TH35244</p> |  <p><b>1) O/H Gasket Set</b><br/>› TRE501580</p> <p><b>2) Head Gasket Set</b><br/>› TRE38852</p> <p><b>3) Head Gasket</b><br/>› TR114157</p> <p><b>4) Oil Pan Gasket</b><br/>› TR97344</p> <p><b>5) Rocker Cover Gsk</b><br/>› TR75728</p> <p><b>6) Gasket, Turbo Mount</b><br/>› TR89879</p> <p><b>7) Gasket Thermostat Housing</b><br/>› TT20219</p> |  <p><b>1) Bush, Con Rod</b><br/>› TR57451 <i>x6</i></p> <p><b>2) Bolt, Con Rod</b><br/>› TR80033 <i>x12</i></p> <p><b>3) Camshaft</b><br/>› TR82821</p> <p><b>4) Con Rod</b><br/>› TRE58347</p> <p><b>5) Kit, Piston Pin</b><br/>› TRE63913 <i>x6</i></p> |  <p><b>1) Pump, Oil</b><br/>› TRE65580</p> <p><b>2) Oil Cooler</b><br/>› TRE31929</p> <p><b>3) Pump, Oil Tube</b><br/>› TR113752</p> <p><b>4) Cyl Hd Cap Screw</b><br/>› TR85363 <i>x26</i></p> |  <p><b>1) Lower Gear</b><br/>› TAT24252</p> <p><b>2) Lower Bushing</b><br/>› TT26321</p> <p><b>3) Upper Gear</b><br/>› TAT18009</p> <p><b>4) Upper Bushing</b><br/>› TT20034</p> <p><b>5) Cam. Follower</b><br/>› TT20073 <i>x12</i></p> <p><b>6) Cam. Gear</b><br/>› TT20070</p> |
| <p><b>Backhoe Loaders</b><br/>710B<br/>710C</p>   | <p><b>Valve, Intake</b><br/>› TR98062 <i>Std.</i><br/>› TR97490 <i>0.015</i></p>  | <p><b>Valve, Exhaust</b><br/>› TR90692 <i>Std.</i><br/>› TR97492 <i>0.015</i></p>   | <p><b>1) Insert, Valve In</b><br/>› TR98063 <i>Std.</i><br/>› TR98335 <i>O/S</i></p> <p><b>2) Insert, Valve Ex</b><br/>› TR85687 <i>Std.</i><br/>› TR93910 <i>O/S</i></p>  | <p><b>1) Seal, Valve</b><br/>› TRE31617</p> <p><b>2) Lock, Valve</b><br/>› TR91889</p>   | <p><b>1) Spring, Valve</b><br/>› TR26125</p> <p><b>2) Rotator, Valve</b><br/>› TRE60005</p>  |
| <p><b>Motor Grader</b><br/>570B</p> <p><b>Skidder</b><br/>540E<br/>540G<br/>548E<br/>548G</p>   |  <p><b>1) Fuel Transfer Pump</b><br/>› TRE42211<br/>› TRE38009</p> <p><b>2) Thermostat</b><br/>› TAR48675 <i>180° F</i></p> <p><b>3) Water Temp Sensor</b><br/>› TRE51774</p> <p><b>4) Water Temp Sensor</b><br/>› TRE52722</p>  |  <p><b>Water Pump Repair Kit</b><br/>› See Chart</p>   |  <p><b>Water Pump</b><br/>› TAR97708U<br/>› TRE16666<br/>› TRE41157<br/>› TAR92641</p>  |  <p><b>Transmission Oil Pump</b><br/>› TAL120106</p>  |  <p><b>1) Seal, Injector</b><br/>› TR60746<br/>› TR48000</p> <p><b>2) Injector, Pencil</b><br/>› TRE38087</p> <p><b>3) KIT, GROMMET</b><br/>› TMX506</p> <p><b>4) Glow Plug</b><br/>› TRE502079</p>   |

(1): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.  
 (3): Some Engine Models may use Standard Capacity Pump, Oil TRE55343.  
 (5): Saran Engines.  
 (7): (m) R73604.

(2): Saran engines may use TRE64534.  
 (4): Helicoidal Gears.  
 (6): Threaded Type.  
 (8): Check for proper application.

JOHN DEERE 6.414D LARGE PIN

**Engine Series:**  
300

**Engine Model:**  
6.414D

**Engine Desc:**  
Large Pin

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 4.19 in /  
106.5 mm Pin Ø:  
1.62 in / 41 mm

**Wheel Loaders**  
544C

**Engine Model**  
Marine  
Ag



- 1) **Engine O/H Kit**
  - › TOK3694
- 2) **Engine I/F Kit**
  - › TIK3694



- Piston-Liner Kit**
  - › TRE28966
- Consists of:**
  - › a) TRE28919
  - › b) TRE66820
  - › c) TR124230
  - › d) TR80500
  - › e) TAR65507
  - › f) TR54114



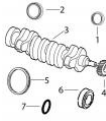
- Main Bearing**
  - › TRE27352 *Std.*
  - › TRE27353 0.010
  - › TRE27360 0.020
  - › TRE27368 0.030
- Use 6**



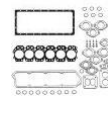
- Thrust Bearing**
  - › TAT21139 *Std.*
  - › TAT21132 0.010
  - › TAT21134 0.020
  - › TAT21136 0.030
- Use 1**



- Con Rod Bearing**
  - › TAR97517 *Std.*
  - › TAR97653 0.010
  - › TAR97654 0.020
  - › TAR97655 0.030
- Use 6**



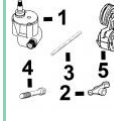
- 1) **Front Seal**
  - › TAR67942
- 2) **Rear Seal**
  - › TRE44574
- 3) **Crankshaft**
  - › TRE45517
- 4) **Crankshaft, Gear**
  - › TT20094
- 5) **Ring Gear**
  - › TR28811 (129T)
  - › TR114282 (142T)
- 6) **Sleeve, Front**
  - › TR81989
- 7) **Packing, Sleeve**
  - › TH35244



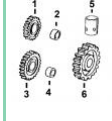
- 1) **O/H Gasket Set**
  - › TRE501580
- 2) **Head Gasket Set**
  - › TRE38852
- 3) **Head Gasket**
  - › TR114157
- 4) **Oil Pan Gasket**
  - › TR97344
- 5) **Rocker Cover Gsk**
  - › TR75728
- 6) **Gasket, Turbo Mount**
  - › TR89879
- 7) **Gasket Thermostat Housing**
  - › TT20219



- 1) **Bush, Con Rod**
  - › TR57451 x6
- 2) **Bolt, Con Rod**
  - › TR74195 x12
- 3) **Camshaft**
  - › TR82821
- 4) **Kit, Piston Pin**
  - › TRE63913 x6
- 5) **Con Rod**
  - › TRE53716



- 1) **Pump, Oil**
  - › TRE65580
- 2) **Rocker Arm**
  - › TRE31973
- 3) **Rocker Shaft**
  - › TR54986
- 4) **Cyl Hd Cap Screw**
  - › TR85363 x26
- 5) **Tensioner Belt**
  - › TAL110621



- 1) **Lower Gear**
  - › TAT24252
- 2) **Lower Bushing**
  - › TT26321
- 3) **Upper Gear**
  - › TAT18009
- 4) **Upper Bushing**
  - › TT20034
- 5) **Cam. Follower**
  - › TT20073 x12
- 6) **Cam. Gear**
  - › TT20070

- Valve, Intake**
  - › TR79623 *Std.*
  - › TR79628 0.003
  - › TR79629 0.015

- Valve, Exhaust**
  - › TR79624 *Std.*
  - › TR79625 0.003
  - › TR79626 0.015

- 1) **Insert, Valve In**
  - › TR73064 *Std.*
- 2) **Insert, Valve Ex**
  - › TR51734 *Std.*

- 1) **Cap, Valve**
  - › TT20129
- 2) **Lock, Valve**
  - › TT20077

- 1) **Spring, Valve**
  - › TR26125
- 2) **Rotator, Valve**
  - › TRE11410
- 3) **O'ring, Valve**
  - › TR87627



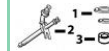
- Thermostat**
  - › TAR48675 180° F



- 1) **Fuel Transfer Pump**
  - › TRE42211
- 2) **Fuel Pump Gasket**
  - › TR27285



- Water Pump Repair Kit**
  - › Without Impeller
    - › TRE19510
  - With Impeller**
    - › TRE11348



- 1) **Seal, Injector**
  - › TR60746
  - › TR48000
- 2) **Injector, Pencil**
  - › TRE37503
- 3) **KIT, GROMMET**
  - › TMX506

(1): Crankshaft (m) R104523.

(3): From ESN 137165 The Cylinder Head Cap Screw is 4.5 in (114 mm) in Length.

(2): Threaded Type.

(4): When used on connecting rods marked R56187, torque bolts to 95 ft.lbs. Only.

**Engine Series:**  
300

**Engine Model:**  
6068D

**Engine Desc:**  
Large Pin Liter Designated

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 4.19 in / 106.5 mm Pin Ø: 1.62 in / 41 mm

**Farm Tractors**  
6506

**Renault Tractors**

Ares 630 RX  
Ares 630 RZ  
Ares 640 RZ  
Ares 710 RZ  
Ares 720 RZ  
Ares 735 RZ  
Ares 815 RZ  
Ares 825 RZ

**Engine Model**  
Marine  
Ag



- 1) **Engine O/H Kit**  
‣ TOK3694
- 2) **Engine I/F Kit**  
‣ TIK3694



- Piston-Liner Kit**  
‣ TRE28966
- Consists of:**
  - a) TRE28919
  - b) TRE66820
  - c) TR124230
  - d) TR80500
  - e) TAR65507
  - f) TR54114



- Main Bearing**
  - TRE27352 *Std.*
  - TRE27353 0.010
  - TRE27360 0.020
  - TRE27368 0.030
- Use 6**



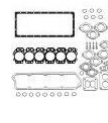
- Thrust Bearing**
  - TAT21139 *Std.*
  - TAT21132 0.010
  - TAT21134 0.020
  - TAT21136 0.030
- Use 1**



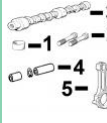
- Con Rod Bearing**
  - TAR97517 *Std.*
  - TAR97653 0.010
  - TAR97654 0.020
  - TAR97655 0.030
- Use 6**



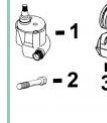
- 1) **Front Seal**  
‣ TAR67942
- 2) **Rear Seal**  
‣ TRE44574
- 3) **Crankshaft**  
‣ TRE45517
- 4) **Crankshaft, Gear**  
‣ TT20094
- 5) **Ring Gear**  
‣ TR28811 (129T)  
‣ TR114282 (142T)
- 6) **Sleeve, Front**  
‣ TR81989
- 7) **Packing, Sleeve**  
‣ TH35244



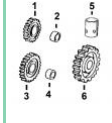
- 1) **O/H Gasket Set**  
‣ TRE501580
- 2) **Head Gasket Set**  
‣ TRE38852
- 3) **Head Gasket**  
‣ TR114157
- 4) **Oil Pan Gasket**  
‣ TR97344
- 5) **Rocker Cover Gsk**  
‣ TR75728
- 6) **Gasket, Turbo Mount**  
‣ TR89879
- 7) **Gasket Thermostat Housing**  
‣ TT20219



- 1) **Bush, Con Rod**  
‣ TR57451 x6
- 2) **Bolt, Con Rod**  
‣ TR74195 x12
- 3) **Camshaft**  
‣ TR82821
- 4) **Kit, Piston Pin**  
‣ TRE63913 x6
- 5) **Con Rod**  
‣ TRE53716



- 1) **Pump, Oil**  
‣ TRE65580
- 2) **Cyl Hd Cap Screw**  
‣ TR85363 x26
- 3) **Tensioner Belt**  
‣ TAL110621



- 1) **Lower Gear**  
‣ TAT24252
- 2) **Lower Bushing**  
‣ TT26321
- 3) **Upper Gear**  
‣ TAT18009
- 4) **Upper Bushing**  
‣ TT20034
- 5) **Cam. Follower**  
‣ TT20073 x12
- 6) **Cam. Gear**  
‣ TT20070

- Valve, Intake**
  - TR98062 *Std.*
  - TR97490 0.015

- Valve, Exhaust**
  - TR90692 *Std.*
  - TR97492 0.015

- 1) **Insert, Valve In**  
‣ TR98063 *Std.*  
‣ TR98335 O/S
- 2) **Insert, Valve Ex**  
‣ TR85687 *Std.*  
‣ TR93910 O/S

- 1) **Seal, Valve**  
‣ TRE31617
- 2) **Lock, Valve**  
‣ TR91889

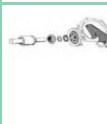
- 1) **Spring, Valve**  
‣ TR26125
- 2) **Rotator, Valve**  
‣ TRE60005



- Thermostat**  
‣ TRE64354 180° F



- 1) **Fuel Transfer Pump**  
‣ TRE42211
- 2) **Fuel Pump Gasket**  
‣ TR27285



- Water Pump Repair Kit**
  - Without Impeller  
‣ TRE19510
  - With Impeller  
‣ TRE11348



- Water Pump**
  - TRE41157
  - TRE16666



- 1) **Seal, Injector**  
‣ TR60746  
‣ TR48000
- 2) **Injector, Pencil**  
‣ TRE38087
- 3) **KIT, GROMMET**  
‣ TMX506
- 4) **Glow Plug**  
‣ TRE502079

(1): Helicoidal Gears.














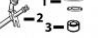
(3): Crankshaft (m) R104523.

(5): When used on connecting rods marked R56187, torque bolts to 95 ft.lbs. Only.

(2): Threaded Type.

(4): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(6): Check application for proper usage.

|   |   |   |   |  |   |
|---|---|---|---|--|---|
| <p><b>Engine Series:</b><br/>300</p> <p><b>Engine Model:</b><br/>6.414T</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.19 in / 106.5 mm Pin Ø: 1.62 in / 41 mm</p> |  <p>1) <b>Engine O/H Kit</b><br/>‣ TOK61614</p> <p>2) <b>Engine I/F Kit</b><br/>‣ TIK61614</p>  |  <p><b>Piston-Liner Kit</b><br/>‣ TRE53073</p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>‣ a) TRE48469</li> <li>‣ b) TRE66820</li> <li>‣ c) TR124230</li> <li>‣ d) TR80500</li> <li>‣ e) TAR65507</li> <li>‣ f) TR54114</li> </ul>  |  <p><b>Main Bearing</b><br/>‣ TRE27352 <i>Std.</i><br/>‣ TRE27353 0.010<br/>‣ TRE27360 0.020<br/>‣ TRE27368 0.030</p> <p><b>Use 6</b></p>   |  <p><b>Thrust Bearing</b><br/>‣ TAT21139 <i>Std.</i><br/>‣ TAT21132 0.010<br/>‣ TAT21134 0.020<br/>‣ TAT21136 0.030</p> <p><b>Use 1</b></p>  |  <p><b>Con Rod Bearing</b><br/>‣ TAR97517 <i>Std.</i><br/>‣ TAR97653 0.010<br/>‣ TAR97654 0.020<br/>‣ TAR97655 0.030</p> <p><b>Use 6</b></p>  |
| <p>Please see page 386 for a complete list of equipment models.</p>   |  <p>1) <b>Front Seal</b><br/>‣ TAR67942</p> <p>2) <b>Rear Seal</b><br/>‣ TRE44574</p> <p>3) <b>Crankshaft</b><br/>‣ TRE45517</p> <p>4) <b>Crankshaft, Gear</b><br/>‣ TT20094</p> <p>5) <b>Ring Gear</b><br/>‣ TR28811 (129T)<br/>‣ TR114282 (142T)</p> <p>6) <b>Sleeve, Front</b><br/>‣ TR81989</p> <p>7) <b>Packing, Sleeve</b><br/>‣ TH35244</p> |  <p>1) <b>O/H Gasket Set</b><br/>‣ TRE501580</p> <p>2) <b>Head Gasket Set</b><br/>‣ TRE38852</p> <p>3) <b>Head Gasket</b><br/>‣ TR114157</p> <p>4) <b>Oil Pan Gasket</b><br/>‣ TR97344</p> <p>5) <b>Rocker Cover Gsk</b><br/>‣ TR75728</p> <p>6) <b>Gasket, Turbo Mount</b><br/>‣ TR89879</p> <p>7) <b>Gasket Thermostat Housing</b><br/>‣ TT20219</p> |  <p>1) <b>Bush, Con Rod</b><br/>‣ TR57451 x6</p> <p>2) <b>Bolt, Con Rod</b><br/>‣ TR74195 x12</p> <p>3) <b>Camshaft</b><br/>‣ TR82821</p> <p>4) <b>Kit, Piston Pin</b><br/>‣ TRE63913 x6</p> <p>5) <b>Con Rod</b><br/>‣ TRE53716</p> |  <p>1) <b>Pump, Oil</b><br/>‣ TRE65580</p> <p>2) <b>Rocker Arm</b><br/>‣ TRE31973</p> <p>3) <b>Rocker Shaft</b><br/>‣ TR54986</p> <p>4) <b>Cyl Hd Cap Screw</b><br/>‣ TR85363 x26</p> <p>5) <b>Tensioner Belt</b><br/>‣ TAL110621</p> |  <p>1) <b>Lower Gear</b><br/>‣ TAT24252</p> <p>2) <b>Lower Bushing</b><br/>‣ TT26321</p> <p>3) <b>Upper Gear</b><br/>‣ TAT18009</p> <p>4) <b>Upper Bushing</b><br/>‣ TT20034</p> <p>5) <b>Cam. Follower</b><br/>‣ TT20073 x12</p> <p>6) <b>Cam. Gear</b><br/>‣ TT20070</p> |
| <p><b>Valve, Intake</b><br/>‣ TR83071 <i>Std.</i><br/>‣ TR89223 0.003<br/>‣ TR89224 0.015</p>   | <p><b>Valve, Exhaust</b><br/>‣ TR79624 <i>Std.</i><br/>‣ TR79625 0.003<br/>‣ TR79626 0.015</p>  | <p>1) <b>Insert, Valve In</b><br/>‣ TR73064 <i>Std.</i></p> <p>2) <b>Insert, Valve Ex</b><br/>‣ TR51734 <i>Std.</i></p>   | <p>1) <b>Cap, Valve</b><br/>‣ TT20129</p> <p>2) <b>Lock, Valve</b><br/>‣ TT20077</p>  | <p>1) <b>Spring, Valve</b><br/>‣ TR26125</p> <p>2) <b>Rotator, Valve</b><br/>‣ TRE11410</p> <p>3) <b>O'ring Valve</b><br/>‣ TR87627</p>  |   |
|  <p>1) <b>Thermostat</b><br/>‣ TAR48675 180° F</p> <p>2) <b>Water Temp Sensor</b><br/>‣ TRE51774</p>               |  <p>1) <b>Fuel Transfer Pump</b><br/>‣ TRE42211</p> <p>2) <b>Fuel Pump Gasket</b><br/>‣ TR27285</p>  |  <p><b>Water Pump Repair Kit</b><br/>‣ See Chart</p>  |  <p>1) <b>Seal, Injector</b><br/>‣ TR60746<br/>‣ TR48000</p> <p>2) <b>Injector, Pencil</b><br/>‣ TRE37503</p> <p>3) <b>KIT, GROMMET</b><br/>‣ TMX506</p>   |  |   |
| <p>(1): Do not use 45 Degree Valves with RE56545 Head.</p> <p>(3): Crankshaft (m) R104523.</p> <p>(5): When used on connecting rods marked R56187, torque bolts to 95 ft.lbs. Only.</p>               |   | <p>(2): Threaded Type.</p> <p>(4): From ESN 137165 The Cylinder Head Cap Screw is 4.5 in (114 mm) in Length.</p> <p>(6): Check for proper application.</p>  |   |  |   |

**Engine Series:**  
300

**Engine Model:**  
6068T









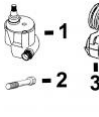






**Engine Desc:**  
Liter  
Designated

**Engine Info:**  
6 Cyl

**Engine Dimensions:**

Bore: 4.19 in /  
106.5 mm Pin Ø:  
1.62 in / 41 mm

Please see page 387 for a complete list of equipment models.

|   |   |  |  |   |
|---|---|--|--|---|
|  <p>1) <b>Engine O/H Kit</b><br/>› TOK61614</p> <p>2) <b>Engine I/F Kit</b><br/>› TIK61614</p>  |  <p><b>Piston-Liner Kit</b><br/>› TRE53073</p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>› a) TRE48469</li> <li>› b) TRE66820</li> <li>› c) TR124230</li> <li>› d) TR80500</li> <li>› e) TAR65507</li> <li>› f) TR54114</li> </ul>  |  <p><b>Main Bearing</b></p> <ul style="list-style-type: none"> <li>› TRE27352 <i>Std.</i></li> <li>› TRE27353 0.010</li> <li>› TRE27360 0.020</li> <li>› TRE27368 0.030</li> </ul> <p><b>Use 6</b></p> |  <p><b>Thrust Bearing</b></p> <ul style="list-style-type: none"> <li>› TAT21139 <i>Std.</i></li> <li>› TAT21132 0.010</li> <li>› TAT21134 0.020</li> <li>› TAT21136 0.030</li> </ul> <p><b>Use 1</b></p> |  <p><b>Con Rod Bearing</b></p> <ul style="list-style-type: none"> <li>› TAR97517 <i>Std.</i></li> <li>› TAR97653 0.010</li> <li>› TAR97654 0.020</li> <li>› TAR97655 0.030</li> </ul> <p><b>Use 6</b></p>   |
|  <p>1) <b>Front Seal</b><br/>› TAR67942</p> <p>2) <b>Rear Seal</b><br/>› TRE44574</p> <p>3) <b>Crankshaft</b><br/>› TRE45517</p> <p>4) <b>Crankshaft, Gear</b><br/>› TT20094</p> <p>5) <b>Ring Gear</b><br/>› TR28811 (129T)<br/>› TR114282 (142T)</p> <p>6) <b>Sleeve, Front</b><br/>› TR81989</p> <p>7) <b>Packing, Sleeve</b><br/>› TH35244</p> |  <p>1) <b>O/H Gasket Set</b><br/>› TRE501580</p> <p>2) <b>Head Gasket Set</b><br/>› TRE38852</p> <p>3) <b>Head Gasket</b><br/>› TR114157</p> <p>4) <b>Oil Pan Gasket</b><br/>› TR97344</p> <p>5) <b>Rocker Cover Gsk</b><br/>› TR75728</p> <p>6) <b>Gasket, Turbo Mount</b><br/>› TR89879</p> <p>7) <b>Gasket Thermostat Housing</b><br/>› TT20219</p> |  <p>1) <b>Bush, Con Rod</b><br/>› TR57451 x6</p> <p>2) <b>Bolt, Con Rod</b><br/>› TR74195 x12</p> <p>3) <b>Camshaft</b><br/>› TR82821</p> <p>4) <b>Kit, Piston Pin</b><br/>› TRE63913 x6</p>          |  <p>1) <b>Pump, Oil</b><br/>› TRE65580</p> <p>2) <b>Cyl Hd Cap Screw</b><br/>› TR85363 x26</p> <p>3) <b>Tensioner Belt</b><br/>› TAL110621</p>  |  <p>1) <b>Lower Gear</b><br/>› TAT24252</p> <p>2) <b>Lower Bushing</b><br/>› TT26321</p> <p>3) <b>Upper Gear</b><br/>› TAT18009</p> <p>4) <b>Upper Bushing</b><br/>› TT20034</p> <p>5) <b>Cam. Follower</b><br/>› TT20073 x12</p> <p>6) <b>Cam. Gear</b><br/>› TT20070</p> |
| <p><b>Valve, Intake</b></p> <ul style="list-style-type: none"> <li>› TR98062 <i>Std.</i></li> <li>› TR97490 0.015</li> </ul>  | <p><b>Valve, Exhaust</b></p> <ul style="list-style-type: none"> <li>› TR90692 <i>Std.</i></li> <li>› TR97492 0.015</li> </ul>   | <p>1) <b>Insert, Valve In</b><br/>› TR98063 <i>Std.</i><br/>› TR98335 O/S</p> <p>2) <b>Insert, Valve Ex</b><br/>› TR85687 <i>Std.</i><br/>› TR93910 O/S</p>  | <p>1) <b>Seal, Valve</b><br/>› TRE31617</p> <p>2) <b>Lock, Valve</b><br/>› TR91889</p>   | <p>1) <b>Spring, Valve</b><br/>› TR26125</p> <p>2) <b>Rotator, Valve</b><br/>› TRE60005</p>   |
|  <p>1) <b>Thermostat</b><br/>› TRE33705 180° F</p> <p>2) <b>Water Temp Sensor</b><br/>› TRE51774</p> <p>3) <b>Water Temp Sensor</b><br/>› TRE52722</p> <p>4) <b>Thermostat Cover Gsk</b><br/>› TT20215</p>   |  <p>1) <b>Fuel Transfer Pump</b><br/>› TRE42211</p> <p>2) <b>Fuel Pump Gasket</b><br/>› TR27285</p>  |  <p><b>Water Pump Repair Kit</b><br/>› See Chart</p>  |  <p><b>Water Pump</b><br/>› TRE41157<br/>› TRE16666</p>   |  <p>1) <b>Seal, Injector</b><br/>› TR60746<br/>› TR48000</p> <p>2) <b>Injector, Pencil</b><br/>› TRE38087</p> <p>3) <b>KIT, GROMMET</b><br/>› TMX506</p> <p>4) <b>Glow Plug</b><br/>› TRE502079</p>  |

(1): Helicoidal Gears.







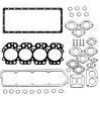
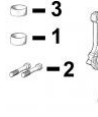
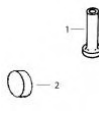





(3): Crankshaft (m) R104523.

(5): When used on connecting rods marked R56187, torque bolts to 95 ft.lbs. Only.

(2): Threaded Type.

(4): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(6): Check application for proper usage.

|  |  |  |  |   |   |
|--|--|--|--|---|---|
| <p><b>Engine Series:</b><br/>400</p> <p><b>Engine Model:</b><br/>4.270</p> <p><b>Engine Data:</b><br/>To ESN<br/>280,000</p> <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.25 in /<br/>108 mm Pin Ø:<br/>1.50 in / 38<br/>mm</p> <p><b>Block (M):</b><br/>R46350,<br/>R46430,<br/>R40910</p> <p><b>Con Rod (M):</b><br/>R26047,<br/>R58880,<br/>R66923</p> <p><b>Farm Tractors</b><br/>3020</p> <p><b>Backhoe Loaders</b><br/>500<br/>500A</p> |  <p><b>1) Engine O/H Kit</b><br/>‣ TRG17898</p> <p><b>2) Engine I/F Kit</b><br/>‣ TIK17898</p>   |  <p><b>Piston-Liner Kit</b><br/>‣ TRE23170</p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>‣ a) TRE23172</li> <li>‣ b) TAR55630</li> <li>‣ c) TR44161</li> <li>‣ d) TR40615</li> <li>‣ e) TAR65507</li> <li>‣ f) TH80753</li> </ul>                                      |  <p><b>Main Bearing</b><br/>‣ TAR74814 Std.<br/>‣ TAR74816 0.010<br/>‣ TAR74817 0.020<br/>‣ TAR74818 0.030</p> <p><b>Use 4</b></p>   |  <p><b>Thrust Bearing</b><br/>‣ TAR77748 Std.<br/>‣ TAR77750 0.010<br/>‣ TAR77751 0.020<br/>‣ TAR77752 0.030</p> <p><b>Use 1</b></p> <p><b>Thrust Washer</b><br/>‣ TAR77747 Std.<br/>‣ TAR77753 0.007</p> <p><b>Use 3, Order Qty: 1</b></p> |  <p><b>Con Rod Bearing</b><br/>‣ TAR45723 Std.<br/>‣ TAR46396 0.010<br/>‣ TAR46397 0.020<br/>‣ TAR46398 0.030</p> <p><b>Use 4</b></p> |
|  |  <p><b>1) Front Seal</b><br/>‣ TAR49025</p> <p><b>2) Rear Seal</b><br/>‣ TRE520036</p> <p><b>3) Crankshaft</b><br/>‣ TAR40485</p> <p><b>4) Crankshaft, Gear</b><br/>‣ TR26049</p> <p><b>5) Ring Gear</b><br/>‣ TR28811 (129T)</p> |  <p><b>1) O/H Gasket Set</b><br/>‣ TAR53033</p> <p><b>2) Head Gasket Set</b><br/>‣ TAR53032</p> <p><b>3) Head Gasket</b><br/>‣ TR45616</p> <p><b>4) Oil Pan Gasket</b><br/>‣ TR71917</p> <p><b>5) Rear Cover Gasket</b><br/>‣ TR26058</p> <p><b>6) Exhaust Manifold Gsk</b><br/>‣ TR83020</p> |  <p><b>1) Bush, Con Rod</b><br/>‣ TR30939 x4</p> <p><b>2) Bolt, Con Rod</b><br/>‣ TR66452 x8</p> <p><b>3) Bushing, Cam</b><br/>‣ TR46903 x3</p> <p><b>4) Con Rod</b><br/>‣ TAR70910</p> |  <p><b>1) Cam Follower</b><br/>‣ TR52773 x8</p> <p><b>2) Plug, Camshaft</b><br/>‣ TR26115</p>  |   |
|  | <p><b>Valve, Intake</b><br/>‣ TR26124 Std. <b>2</b><br/>‣ TR44174 Std. <b>3</b></p>  | <p><b>Valve, Exhaust</b><br/>‣ TR26123 Std. <b>2</b><br/>‣ TR44175 Std. <b>3</b></p>   | <p><b>1) Insert, Valve In</b><br/>‣ TR43680 Std.<br/><b>2) Insert, Valve Ex</b><br/>‣ TR43681 Std.</p>   | <p><b>1) Lock, Valve</b><br/>‣ TB367R x16</p>   | <p><b>1) Spring, Valve</b><br/>‣ TR26125<br/><b>2) Guide, Valve</b><br/>‣ TR28654<br/><b>3) O'ring, Valve</b><br/>‣ TR87627</p>   |
|  |  <p><b>Thermostat</b><br/>‣ TR36846 180° F</p>  |  <p><b>Fuel Transfer Pump</b><br/>‣ TAR53567</p>  |  <p><b>Water Pump Repair Kit</b><br/>‣ See Chart</p>  |  <p><b>1) Seal, Injector</b><br/>‣ TR60746<br/>‣ TR48000<br/><b>2) Injector, Pencil</b><br/>‣ TAR50781</p>   |  <p><b>Water Pump</b><br/>‣ TAR45332</p>   |

(1): New style crankshaft. To adapt to old style, the center hole in (2): To ESN 157,001. the flywheel needs to be enlarged to 2.835 in. (72.0009 mm).  
(3): ESN 157,002 – 280,000.

**Engine Series:**  
400

**Engine Model:**  
4.270

**Engine Data:**  
To ESN  
280,000

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.25 in /  
108 mm Pin Ø:  
1.50 in / 38  
mm



- 1) Engine O/H Kit**
- TRG17899
  - TRG17899HC
- 2) Engine I/F Kit**
- TIK17899
  - TIK17899HC



- Piston-Liner Kit**
- TRE23173
  - TRE23173HC
- Consists of:**
- a) TRE23172
  - TRE23172HC
  - b) TAR55630
  - TAR65502
  - c) TR44161
  - d) TR32050
  - e) TAR40155
  - f) TH80753



- Main Bearing**
- TAR49243 Std.
  - TAR49245 0.010
  - TAR49246 0.020
  - TAR49247 0.030

**Use 4**



- Thrust Bearing**
- TAR49242 Std.
  - TAR49238 0.010
  - TAR49239 0.020
  - TAR49240 0.030

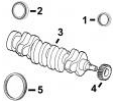
**Use 1**



- Con Rod Bearing**
- TAR45723 Std.
  - TAR46396 0.010
  - TAR46397 0.020
  - TAR46398 0.030

**Use 4**

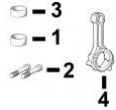
**Block (M):**  
R26160,  
R32020,  
R40850



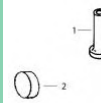
- 1) Front Seal**
- TAR49025
- 2) Rear Seal**
- TRE520036
- 3) Crankshaft**
- TAR40485
- 4) Crankshaft, Gear**
- TR26049 (23T)
- 5) Ring Gear**
- TR28811 (129T)



- 1) O/H Gasket Set**
- TAR53033
- 2) Head Gasket Set**
- TAR53032
- 3) Head Gasket**
- TR45616
- 4) Oil Pan Gasket**
- TR71917
- 5) Rear Cover Gasket**
- TR26058
- 6) Exhaust Manifold Gsk**
- TR83020



- 1) Bush, Con Rod**
- TR30939 x4
- 2) Bolt, Con Rod**
- TR66452 x8
- 3) Bushing, Cam**
- TR46903 x3
- 4) Con Rod**
- TAR70910



- 1) Cam Follower**
- TR26342 x8
- 2) Plug, Camshaft**
- TR26115

**Con Rod (M):**  
R26047,  
R58880,  
R66923

**Backhoe Loaders**

500  
500A  
500B  
500C  
510

**Farm Tractors**

3010  
3020

- Valve, Intake**
- TR26124 Std. To ESN  
157,001
  - TR44174 Std. ESN  
157,002-280,000



- Thermostat**
- TR36846 180° F

- Valve, Exhaust**
- TR26123 Std. To ESN  
157,001
  - TR44175 Std. ESN  
157,002-280,000



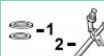
- 1) Fuel Transfer Pump**
- TRE42211
  - TAR53567
- 2) Fuel Pump Gasket**
- TR27285

- 1) Insert, Valve In**
- TR43680 Std.
- 2) Insert, Valve Ex**
- TR43681 Std.



- Water Pump Repair Kit**
- See Chart

- 1) Lock, Valve**
- TB367R x16



- 1) Seal, Injector**
- TR60746
  - TR48000
- 2) Injector, Pencil**
- TAR50781

- 1) Spring, Valve**
- TR26125
- 2) Guide, Valve**
- TR28654
- 3) O'ring, Valve**
- TR87627






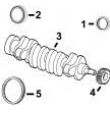
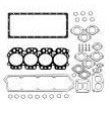
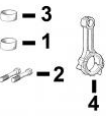








- Water Pump**
- TAR45332

(1): New style crankshaft. To adapt to old style, the center hole in the flywheel needs to be enlarged to 2.835 in. (72.0009 mm).  
(2): This piston uses ring set TAR65502.  
(3): Used with TRE23172HC piston.

|  |                               |  |   |   |
|--|-------------------------------|--|---|---|
| <b>Engine Series:</b><br>400   | <b>Engine Model:</b><br>4.270 | <b>Engine Desc:</b><br>Early Power Booster | <b>Engine Data:</b><br>To ESN 280,000       | <b>Engine Info:</b><br>4 Cyl                  |
| <b>Engine Dimensions:</b><br>Bore: 4.25 in / 108 mm Pin Ø: 1.50 in / 38 mm |                               |  | <b>Block (M):</b><br>R26160, R32020, R40850 | <b>Con Rod (M):</b><br>R26047, R58880, R66923 |

|                              |      |  |              |
|------------------------------|------|--|--------------|
| <b>Farm Tractors</b><br>3010 | 3020 | <b>Backhoe Loaders</b><br>500<br>500B<br>510 | 500A<br>500C |
|------------------------------|------|--|--------------|

|  |  |  |  |  |
|--|--|--|--|--|
|  <p><b>1) Engine O/H Kit</b><br/>         , TOK4163<br/> <b>2) Engine I/F Kit</b><br/>         , TIK4163</p>   |  <p><b>Piston-Liner Kit</b><br/>         , TPLK163<br/> <b>Consists of:</b><br/>         , a) TRE23163<br/>         , b) TAR65502<br/>         , c) TR44161<br/>         , d) TR32050<br/>         , e) TAR40155<br/>         , f) TH80753</p>  |  <p><b>Main Bearing</b><br/>         , TAR49243 Std.<br/>         , TAR49245 0.010<br/>         , TAR49246 0.020<br/>         , TAR49247 0.030<br/> <b>Use 4</b></p>  |  <p><b>Thrust Bearing</b><br/>         , TAR49242 Std.<br/>         , TAR49238 0.010<br/>         , TAR49239 0.020<br/>         , TAR49240 0.030<br/> <b>Use 1</b></p> |  <p><b>Con Rod Bearing</b><br/>         , TAR45723 Std.<br/>         , TAR46396 0.010<br/>         , TAR46397 0.020<br/>         , TAR46398 0.030<br/> <b>Use 4</b></p> |
|  <p><b>1) Front Seal</b><br/>         , TAR49025<br/> <b>2) Rear Seal</b><br/>         , TRE520036<br/> <b>3) Crankshaft</b><br/>         , TAR40485<br/> <b>4) Crankshaft, Gear</b><br/>         , TR26049 (23T)<br/> <b>5) Ring Gear</b><br/>         , TR28811 (129T)</p> |  <p><b>1) O/H Gasket Set</b><br/>         , TAR53033<br/> <b>2) Head Gasket Set</b><br/>         , TAR53032<br/> <b>3) Head Gasket</b><br/>         , TR45616<br/> <b>4) Oil Pan Gasket</b><br/>         , TR71917<br/> <b>5) Rear Cover Gasket</b><br/>         , TR26058<br/> <b>6) Exhaust Manifold Gsk</b><br/>         , TR83020</p> |  <p><b>1) Bush, Con Rod</b><br/>         , TR30939 x4<br/> <b>2) Bolt, Con Rod</b><br/>         , TR66452 x8<br/> <b>3) Bushing, Cam</b><br/>         , TR46903 x3<br/> <b>4) Con Rod</b><br/>         , TAR70910</p> |  <p><b>1) Cam Follower</b><br/>         , TR26342 x8<br/> <b>2) Plug, Camshaft</b><br/>         , TR26115<br/> <b>3) Head Bolt Kit</b><br/>         , TMX364</p>      |  |
| <p><b>Valve, Intake</b><br/>         , TR26124 Std. To ESN 157,001<br/>         , TR44174 Std. ESN 157,002-280,000</p>   | <p><b>Valve, Exhaust</b><br/>         , TR26123 Std. To ESN 157,001<br/>         , TR44175 Std. ESN 157,002-280,000</p>  | <p><b>1) Insert, Valve In</b><br/>         , TR43680 Std.<br/> <b>2) Insert, Valve Ex</b><br/>         , TR43681 Std.</p>  | <p><b>1) Lock, Valve</b><br/>         , TB367R x16</p>   | <p><b>1) Spring, Valve</b><br/>         , TR26125<br/> <b>2) Guide, Valve</b><br/>         , TR28654<br/> <b>3) O'ring, Valve</b><br/>         , TR87627</p>   |
|  <p><b>Thermostat</b><br/>         , TR36846 180° F</p>  |  <p><b>1) Fuel Transfer Pump</b><br/>         , TRE42211<br/>         , TAR53567<br/> <b>2) Fuel Pump Gasket</b><br/>         , TR27285</p>   |  <p><b>Water Pump Repair Kit</b><br/>         , See Chart</p>   |  <p><b>1) Seal, Injector</b><br/>         , TR60746<br/>         , TR48000<br/> <b>2) Injector, Pencil</b><br/>         , TAR50781</p>                               |  <p><b>Water Pump</b><br/>         , TAR45332</p>   |

(1): New style crankshaft. To adapt to old style, the center hole in the flywheel needs to be enlarged to 2.835 in. (72.009 mm). (2): TMX364 Consists of: TR88042 x4, TR88043 x3, TR88044 x6, TR88045 x5.



**Engine Series:**

400

**Engine Model:**

4.270

**Engine Data:**

From ESN  
280,001

**Engine Info:**

4 Cyl

**Engine**

**Dimensions:**

Bore: 4.25 in /  
108 mm Pin Ø:  
1.50 in / 38  
mm

**Block (M):**

R40700,  
R47520,  
R48430,  
R50610,  
R72127

**Con Rod (M):**

R26047,  
R58880,  
R66923

**Farm Tractors**

3020

**Backhoe  
Loaders**

500A  
500B  
500C  
510



**1) Engine O/H Kit**

- › TRG17900
- › TRG17900HC

**2) Engine I/F Kit**

- › TIK17900
- › TIK17900HC



**Piston-Liner Kit**

- › TRE23165
- › TRE23165HC

**Consists of:**

- › a) TRE23168
- › TRE23163HC
- › TAR55630
- › TAR65502
- › c) TR44161
- › d) TR40615
- › e) TAR65507
- › f) TH80753



**Main Bearing**

- › TAR74814 Std.
- › TAR74816 0.010
- › TAR74817 0.020
- › TAR74818 0.030

**Use 4**



**Thrust Bearing**

- › TAR77748 Std.
- › TAR77750 0.010
- › TAR77751 0.020
- › TAR77752 0.030

**Use 1**

**Thrust Washer**

- › TAR77747 Std.
- › TAR77753 0.007

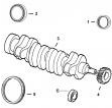
**Use 3, Order Qty: 1**



**Con Rod Bearing**

- › TAR45723 Std.
- › TAR46396 0.010
- › TAR46397 0.020
- › TAR46398 0.030

**Use 4**



**1) Front Seal**

- › TAR49025

**2) Rear Seal**

- › TRE520036

**3) Crankshaft**

- › TAR40485

**4) Crankshaft, Gear**

- › TR26049 (23T)

**5) Ring Gear**

- › TR28811 (129T)

**6) Rear Gear**

- › TR63326



**1) O/H Gasket Set**

- › TAR53035

**2) Head Gasket Set**

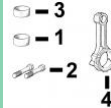
- › TAR53034

**3) Head Gasket**

- › TR48292

**4) Oil Pan Gasket**

- › TR71917



**1) Bush, Con Rod**

- › TR30939 x4

**2) Bolt, Con Rod**

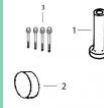
- › TR66452 x8

**3) Bushing, Cam**

- › TR46903 x3

**4) Con Rod**

- › TAR70910



**1) Cam Follower**

- › TR52773 x8

**2) Plug, Camshaft**

- › TR26115

**3) Head Bolt Kit**

- › TMX364

**Valve, Intake**

- › TR43883 Std.
- › TR45003 0.003
- › TR45004 0.015

**Valve, Exhaust**

- › TR43679 Std.
- › TR43787 0.003
- › TR43788 0.015

**1) Insert, Valve In**

- › TR43680 Std.

**2) Insert, Valve Ex**

- › TR43681 Std.

**1) Cap, Valve**

- › TT20129

**2) Lock, Valve**

- › TT20077

**1) Spring, Valve**

- › TR26125

**2) Rotator, Valve**

- › TRE11410

**3) O'ring, Valve**

- › TR87627



**Thermostat**

- › TR36846 180° F



**1) Fuel Transfer Pump**

- › TRE42211

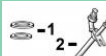
**2) Fuel Pump Gasket**

- › TR27285



**Water Pump Repair Kit**

- › See Chart



**1) Seal, Injector**

- › TR60746
- › TR48000

**2) Injector, Pencil**

- › TAR50781



**Water Pump**

- › TAR45332

(1): TMX364 Consists of: TR88042 x4, TR88043 x3, TR88044 x6, TR88045 x5.

(2): This piston uses Ring Set TAR65502.  
(3): Used with TRE23163HC piston.

**Engine Series:**  
400

**Engine Model:**  
6.404D

**Engine Data:**  
To ESN  
214,999

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 4.25 in /  
108 mm Pin Ø:  
1.50 in / 38 mm  
(1)

**Block (M):**

R26070,  
R33180,  
R34340,  
R40890,  
R40900

**Con Rod (M):**

R26047,  
R58880,  
R66923

**Farm Tractors**

4010  
4020



**1) Engine O/H Kit**

- › TRG17901
- › TRG17901HC

**2) Engine I/F Kit**

- › TIK17901
- › TIK17901HC



**Piston-Liner Kit**

- › TRE23173
- › TRE23173HC

**Consists of:**

- › a) TRE23172
- › TRE23172HC
- › b) TAR55630
- › TAR65502
- › c) TR44161
- › d) TR32050
- › e) TAR40155
- › f) TH80753



**Main Bearing**

- › TAR49243 Std.
- › TAR49245 0.010
- › TAR49246 0.020
- › TAR49247 0.030

**Use 6**



**Thrust Bearing**

- › TAR49242 Std.
- › TAR49238 0.010
- › TAR49239 0.020
- › TAR49240 0.030

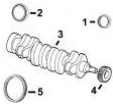
**Use 1**



**Con Rod Bearing**

- › TAR45723 Std.
- › TAR46396 0.010
- › TAR46397 0.020
- › TAR46398 0.030

**Use 6**



**1) Front Seal**

- › TAR49025

**2) Rear Seal**

- › TRE520036

**3) Crankshaft**

- › TRE53422

**4) Crankshaft, Gear**

- › TR26049 (23T)

**5) Ring Gear**

- › TR28811 (129T)



**1) O/H Gasket Set**

- › TAR53626

**2) Head Gasket Set**

- › TAR53625

**3) Head Gasket**

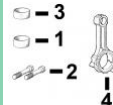
- › TR45615

**4) Oil Pan Gasket**

- › TR71918

**5) Gasket**

- › TR44853



**1) Bush, Con Rod**

- › TR30939 x6

**2) Bolt, Con Rod**

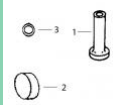
- › TR66452 x12

**3) Bushing, Cam**

- › TR46903 x4

**4) Con Rod**

- › TAR70910



**1) Cam Follower**

- › TR26342 x12

**2) Plug, Camshaft**

- › TR26115

**3) O'ring, Oil Cooler**

- › TR47153

**Valve, Intake**

- › TR26124 Std. To ESN

82,801

- › TR44174 Std. ESN 82,802-

214,999

**Valve, Exhaust**

- › TR26123 Std. To ESN

82,801

- › TR44175 Std. ESN 82,802-

214,999

**1) Insert, Valve In**

- › TR43680 Std.

**2) Insert, Valve Ex**

- › TR43681 Std.

**1) Lock, Valve**

- › TB367R x16

**1) Spring, Valve**

- › TR26125

**2) Guide, Valve**

- › TR28654

**3) O'ring, Valve**

- › TR87627



**Thermostat**

- › TR36846 180° F



**1) Fuel Transfer Pump**

- › TAR53567
- › TRE42211
- › TAR49771

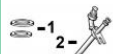
**2) Fuel Pump Gasket**

- › TR27285



**Water Pump Repair Kit**

- › See Chart



**1) Seal, Injector**

- › TR60746
- › TR48000

**2) Injector, Pencil**

- › TAR50781



**Pump, Oil, Quad Transmission**

- › TAR41949 For Tractors 4010, 4020



**Water Pump**

- › TAR45332

(1): Original Block.

(3): ESN 82,802-422,365.

(5): New style crankshaft. To adapt to old style, the center hole in the flywheel needs to be enlarged to 2.835 in. (72.009 mm). Extra bolt holes in the rear palm of the crankshaft need to be plugged with allen head screws and tread sealer / locker. TRE53422 will require front key TR116311 for the front damper.

(7): Used with TRE23172HC piston.

(2): To ESN 82,801.

(4): From ESN 422,366.

(6): This piston uses ring set TAR65502.

(8): In some blocks with casting R40620 the crank may hit the block near the oil pump mounting and requires grinding approximately 1/8" from the crank or block for clearance.

**Engine Series:**  
400

**Engine Model:**  
6.404D

**Engine Data:**  
To ESN  
214,999

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 4.25 in /  
108 mm Pin Ø:  
1.50 in / 38  
mm (1)

**Block (M):**  
R40930

**Con Rod (M):**  
R26047,  
R58880,  
R66923

**Farm Tractors**  
4010  
4020



- 1) Engine O/H Kit**  
 † TRG17902  
**2) Engine I/F Kit**  
 † TIK17902



- Piston-Liner Kit**  
 † TRE23170  
**Consists of:**  
 † a) TRE23172  
 † b) TAR55630  
 † c) TR44161  
 † d) TR40615  
 † e) TAR65507  
 † f) TH80753



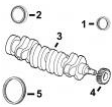
- Main Bearing**  
 † TAR74814 Std.  
 † TAR74816 0.010  
 † TAR74817 0.020  
 † TAR74818 0.030  
**Use 6**



- Thrust Bearing**  
 † TAR77748 Std.  
 † TAR77750 0.010  
 † TAR77751 0.020  
 † TAR77752 0.030  
**Use 1**  
**Thrust Washer**  
 † TAR77747 Std.  
 † TAR77753 0.007  
**Use 3, Order Qty: 1**



- Con Rod Bearing**  
 † TAR45723 Std.  
 † TAR46396 0.010  
 † TAR46397 0.020  
 † TAR46398 0.030  
**Use 6**

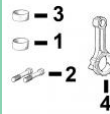


- 1) Front Seal**  
 † TAR49025  
**2) Rear Seal**  
 † TRE520036  
**3) Crankshaft**  
 † TRE53422  
**4) Crankshaft, Gear**  
 † TR26049 (23T)  
**5) Ring Gear**  
 † TR28811 (129T)

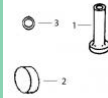
**6** **5**



- 1) O/H Gasket Set**  
 † TAR53626  
**2) Head Gasket Set**  
 † TAR53625  
**3) Head Gasket**  
 † TR45615  
**4) Oil Pan Gasket**  
 † TR71918  
**5) Gasket**  
 † TR44853



- 1) Bush, Con Rod**  
 † TR30939 x6  
**2) Bolt, Con Rod**  
 † TR66452 x12  
**3) Bushing, Cam**  
 † TR46903 x4  
**4) Con Rod**  
 † TAR70910



- 1) Cam Follower**  
 † TR52773 x12  
**2) Plug, Camshaft**  
 † TR26115  
**3) O'ring, Oil Cooler**  
 † TR47153

- Valve, Intake**  
 † TR26124 Std. To ESN  
 157,001  
 † TR44174 Std. ESN  
 157,002-280,000

- Valve, Exhaust**  
 † TR26123 Std. To ESN  
 82,801  
 † TR44175 Std. ESN 82,802-  
 214,999

- 1) Insert, Valve In**  
 † TR43680 Std.  
**2) Insert, Valve Ex**  
 † TR43681 Std.

- 1) Lock, Valve**  
 † TB367R x24

- 1) Spring, Valve**  
 † TR26125  
**2) Guide, Valve**  
 † TR28654  
**3) O'ring, Valve**  
 † TR87627



- Thermostat**  
 † TR36846 180° F



- 1) Fuel Transfer Pump**  
 † TAR53567  
 † TRE42211  
 † TAR49771  
**2) Fuel Pump Gasket**  
 † TR27285



- Water Pump Repair Kit**  
 † See Chart



- 1) Seal, Injector**  
 † TR60746  
 † TR48000  
**2) Injector, Pencil**  
 † TAR50781



- Pump, Oil, Quad Transmission**  
 † TAR41949 For  
 Tractors 4010, 4020



- Water Pump**  
 † TAR45332

(1): Original Block.

(3): ESN 82,802 – 422,365.

(5): New style crankshaft. To adapt to old style, the center hole in the flywheel needs to be enlarged to 2.835 in. (72.0009 mm). Extra bolt holes in the rear palm of the crankshaft need to be plugged with allen head screws and tread sealer / locker. TRE53422 will require front key TR116311 for the front damper.

(2): To ESN 82,801.

(4): From ESN 422,366.

(6): In some blocks with casting R40620 the crank may hit the block near the oil pump mounting and requires grinding approximately 1/8" from the crank or block for clearance.

**Engine Series:**  
400

**Engine Model:**  
6.404D

**Engine Desc:**  
Early Power  
Booster

**Engine Data:**  
To ESN  
214,999

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 4.25 in /  
108 mm Pin Ø:  
1.50 in / 38  
mm

**Block (M):**  
R26070,  
R33180,  
R34340,  
R40890,  
R40900

**Con Rod (M):**  
R26047,  
R58880,  
R66923

**Farm Tractors**  
4010  
4020



- 1) **Engine O/H Kit**  
‣ TOK6163
- 2) **Engine I/F Kit**  
‣ TIK6163



- Piston-Liner Kit**  
‣ TPLK163
- Consists of:**
  - a) TRE23163
  - b) TAR65502
  - c) TR44161
  - d) TR32050
  - e) TAR40155
  - f) TH80753



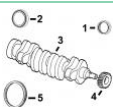
- Main Bearing**
  - TAR49243 Std.
  - TAR49245 0.010
  - TAR49246 0.020
  - TAR49247 0.030
- Use 6**



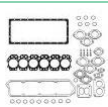
- Thrust Bearing**
  - TAR49242 Std.
  - TAR49238 0.010
  - TAR49239 0.020
  - TAR49240 0.030
- Use 1**



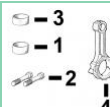
- Con Rod Bearing**
  - TAR45723 Std.
  - TAR46396 0.010
  - TAR46397 0.020
  - TAR46398 0.030
- Use 6**



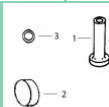
- 1) **Front Seal**  
‣ TAR49025
- 2) **Rear Seal**  
‣ TRE520036
- 3) **Crankshaft**  
‣ TRE53422
- 4) **Crankshaft, Gear**  
‣ TR26049 (23T)
- 5) **Ring Gear**  
‣ TR28811 (129T)



- 1) **O/H Gasket Set**  
‣ TAR53626
- 2) **Head Gasket Set**  
‣ TAR53625
- 3) **Head Gasket**  
‣ TR45615
- 4) **Oil Pan Gasket**  
‣ TR71918
- 5) **Gasket**  
‣ TR44853



- 1) **Bush, Con Rod**  
‣ TR30939 x6
- 2) **Bolt, Con Rod**  
‣ TR66452 x12
- 3) **Bushing, Cam**  
‣ TR46903 x4
- 4) **Con Rod**  
‣ TAR70910



- 1) **Cam Follower**  
‣ TR26342 x12
- 2) **Plug, Camshaft**  
‣ TR26115
- 3) **O'ring, Oil Cooler**  
‣ TR47153

- Valve, Intake**  
‣ TR26124 Std. To ESN  
82,801
- TR44174 Std. ESN 82,802-  
214,999

- Valve, Exhaust**  
‣ TR26123 Std. To ESN  
82,801
- TR44175 Std. ESN 82,802-  
214,999

- 1) **Insert, Valve In**  
‣ TR43680 Std.
- 2) **Insert, Valve Ex**  
‣ TR43681 Std.

- 1) **Lock, Valve**  
‣ TB367R x24

- 1) **Spring, Valve**  
‣ TR26125
- 2) **Guide, Valve**  
‣ TR28654
- 3) **O'ring, Valve**  
‣ TR87627



- Thermostat**  
‣ TR36846 180° F



- 1) **Fuel Transfer Pump**
  - TAR53567
  - TRE42211
  - TAR49771
- 2) **Fuel Pump Gasket**  
‣ TR27285



- Water Pump Repair Kit**  
‣ See Chart



- 1) **Seal, Injector**  
‣ TR60746  
‣ TR48000
- 2) **Injector, Pencil**  
‣ TAR50781



- Pump, Oil, Quad Transmission**  
‣ TAR41949 For  
Tractors 4010, 4020



- Water Pump**  
‣ TAR45332






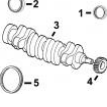










(1): To ESN 82,801.

(3): From ESN 422,366.

(2): ESN 82,802 – 422,365.






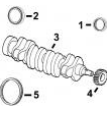

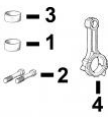





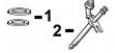


(4): New style crankshaft. To adapt to old style, the center hole in the flywheel needs to be enlarged to 2.835 in. (72.0009 mm). Extra bolt holes in the rear palm of the crankshaft need to be plugged with allen head screws and tread sealer / locker. TRE53422 will require front key TR116311 for the front damper.

(5): In some blocks with casting R40620 the crank may hit the block near the oil pump mounting and requires grinding approximately 1/8" from the crank or block for clearance.

|  |   |   |   |   |   |
|--|---|---|---|---|---|
| <p><b>Engine Series:</b><br/>400</p> <p><b>Engine Model:</b><br/>6.404D</p> <p><b>Engine Data:</b><br/>215,000 – 335,845</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.25 in / 108 mm<br/>Pin Ø: 1.50 in / 38 mm</p> <p><b>Block (M):</b><br/>R40610, R40620, R45950, R47170, R48440</p> <p><b>Con Rod (M):</b><br/>R26047, R58880, R66923</p> <p><b>Piston (M):</b><br/>AR48743</p> |  <p><b>1) Engine O/H Kit</b><br/>                 † TRG17903<br/>                 † TRG17903HC</p> <p><b>2) Engine I/F Kit</b><br/>                 † TIK17903<br/>                 † TIK17903HC</p>  |  <p><b>Piston-Liner Kit</b><br/>                 † TRE23165<br/>                 † TRE23165HC</p> <p><b>Consists of:</b></p> <p>a) TRE23168<br/>                 † TRE23163HC <b>6</b><br/>                 b) TAR55630<br/>                 † TAR65502 <b>7</b><br/>                 c) TR44161<br/>                 d) TR40615<br/>                 e) TAR65507<br/>                 f) TH80753</p> |  <p><b>Main Bearing</b><br/>                 † TAR74814 Std.<br/>                 † TAR74816 0.010<br/>                 † TAR74817 0.020<br/>                 † TAR74818 0.030</p> <p><b>Use 6</b></p>  |  <p><b>Thrust Bearing</b><br/>                 † TAR77748 Std.<br/>                 † TAR77750 0.010<br/>                 † TAR77751 0.020<br/>                 † TAR77752 0.030</p> <p><b>Use 1</b></p> <p><b>Thrust Washer</b><br/>                 † TAR77747 Std.<br/>                 † TAR77753 0.007</p> |  <p><b>Con Rod Bearing</b><br/>                 † TAR45723 Std.<br/>                 † TAR46396 0.010<br/>                 † TAR46397 0.020<br/>                 † TAR46398 0.030</p> <p><b>Use 6</b></p> |
| <p><b>Cotton Pickers</b><br/>699</p> <p><b>Farm Tractors</b><br/>4000<br/>4010<br/>4020</p> <p><b>Backhoe Loaders</b><br/>600</p>  |  <p><b>1) Front Seal</b><br/>                 † TAR49025</p> <p><b>2) Rear Seal</b><br/>                 † TRE520036</p> <p><b>3) Crankshaft</b><br/>                 † TRE53422 <b>8</b> <b>5</b></p> <p><b>4) Crankshaft, Gear</b><br/>                 † TR26049 (23T)</p> <p><b>5) Ring Gear</b><br/>                 † TR28811 (129T)</p> |  <p><b>1) O/H Gasket Set</b><br/>                 † TAR53631</p> <p><b>2) Head Gasket Set</b><br/>                 † TAR53630</p> <p><b>3) Head Gasket</b><br/>                 † TR48291</p> <p><b>4) Oil Pan Gasket</b><br/>                 † TR71918</p> <p><b>5) Rocker Cover Gsk</b><br/>                 † TR49866</p>  |  <p><b>1) Bush, Con Rod</b><br/>                 † TR30939 x6</p> <p><b>2) Bolt, Con Rod</b><br/>                 † TR66452 x12</p> <p><b>3) Bushing, Cam</b><br/>                 † TR46903 x4</p> <p><b>4) Con Rod</b><br/>                 † TAR70910</p> |  <p><b>1) Cam Follower</b><br/>                 † TR52773 x12</p> <p><b>2) Plug, Camshaft</b><br/>                 † TR26115</p> <p><b>3) O'ring, Oil Cooler</b><br/>                 † TR47153</p> <p><b>4) Camshaft Kit</b><br/>                 † TAR100386</p>   |  <p><b>Head Bolt Kit</b><br/>                 † TMX365 <b>1</b></p>  |
| <p><b>Valve, Intake</b><br/>                 † TR43883 Std.<br/>                 † TR45003 0.003<br/>                 † TR45004 0.015</p>  | <p><b>Valve, Exhaust</b><br/>                 † TR43679 Std.<br/>                 † TR43787 0.003<br/>                 † TR43788 0.015</p>  | <p><b>1) Insert, Valve In</b><br/>                 † TR43680 Std.</p> <p><b>2) Insert, Valve Ex</b><br/>                 † TR43681 Std.</p>   | <p><b>1) Cap, Valve</b><br/>                 † TT20129</p> <p><b>2) Lock, Valve</b><br/>                 † TT20077</p>  | <p><b>1) Spring, Valve</b><br/>                 † TR26125</p> <p><b>2) Guide, Valve</b><br/>                 † TRE11410</p> <p><b>3) O'ring, Valve</b><br/>                 † TR87627</p>   |   |
|  <p><b>Thermostat</b><br/>                 † TR36846 180° F</p>   |  <p><b>1) Fuel Transfer Pump</b><br/>                 † TAR53567 <b>2</b><br/>                 † TRE42211 <b>3</b><br/>                 † TAR49771 <b>4</b></p> <p><b>2) Fuel Pump Gasket</b><br/>                 † TR27285</p>   |  <p><b>Water Pump Repair Kit</b><br/>                 † See Chart</p>  |  <p><b>1) Seal, Injector</b><br/>                 † TR60746<br/>                 † TR48000</p> <p><b>2) Injector, Pencil</b><br/>                 † TAR50781</p>  |  <p><b>Pump, Oil, Quad Transmission</b><br/>                 † TAR41949 For Tractors 4000, 4020</p>  |  <p><b>Water Pump</b><br/>                 † TAR45332</p>  |

(1): TMX365 Consists of: TR88042 x6, TR88043 x5, TR88044 x8, TR88045 x7.  
 (3): ESN 82,802-422,365.  
 (5): TRE53422 will require front key TR116311 for the front damper.  
 (7): Used with TRE23163HC piston.

(2): To ESN 82,801.  
 (4): From ESN 422,366.  
 (6): This piston uses Ring Set TAR65502.  
 (8): In some blocks with casting R40620 the crank may hit the block near the oil pump mounting and requires grinding approximately 1/8" from the crank or block for clearance.

|   |   |  |   |   |   |  |
|---|---|--|---|---|---|--|
| <p><b>Engine Series:</b><br/>400</p> <p><b>Engine Model:</b><br/>6.404D</p> <p><b>Engine Data:</b><br/>From ESN<br/>335,846</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.25 in /<br/>108 mm Pin Ø:<br/>1.50 in / 38<br/>mm</p> <p><b>Block (M):</b><br/>R49470,<br/>R49650,<br/>R59850,<br/>R72128,<br/>R87558</p> <p><b>Con Rod (M):</b><br/>R26047,<br/>R58880,<br/>R66923</p> <p><b>Cotton Pickers</b><br/>699</p> <p><b>Farm Tractors</b><br/>4040<br/>4230</p> <p><b>Combines</b><br/>6600<br/>7700</p> |  <p><b>1) Engine O/H Kit</b><br/>                     † TRG17897<br/>                     † TRG17897HC</p> <p><b>2) Engine I/F Kit</b><br/>                     † TIK17897<br/>                     † TIK17897HC</p>  |  <p><b>Piston-Liner Kit</b><br/>                     † TRE23160<br/>                     † TRE23160HC</p> <p><b>Consists of:</b><br/>                     † a) TRE23163<br/>                     † TRE23163HC<br/>                     † b) TAR65502<br/>                     † c) TR44161<br/>                     † d) TR40615<br/>                     † e) TAR65507<br/>                     † f) TH80753</p>  |  <p><b>Main Bearing</b><br/>                     † TAR74814 Std.<br/>                     † TAR74816 0.010<br/>                     † TAR74817 0.020<br/>                     † TAR74818 0.030</p> <p><b>Use 6</b></p>  |  <p><b>Thrust Bearing</b><br/>                     † TAR77748 Std.<br/>                     † TAR77750 0.010<br/>                     † TAR77751 0.020<br/>                     † TAR77752 0.030</p> <p><b>Use 1</b><br/> <b>Thrust Washer</b><br/>                     † TAR77747 Std.<br/>                     † TAR77753 0.007</p>               |  <p><b>Con Rod Bearing</b><br/>                     † TAR45723 Std.<br/>                     † TAR46396 0.010<br/>                     † TAR46397 0.020<br/>                     † TAR46398 0.030</p> <p><b>Use 6</b></p> |  |
|   |  <p><b>1) Front Seal</b><br/>                     † TAR49025</p> <p><b>2) Rear Seal</b><br/>                     † TRE520036</p> <p><b>3) Crankshaft</b><br/>                     † TRE53422 <span style="background-color: #008000; color: white; padding: 2px;">6</span> <span style="background-color: #008000; color: white; padding: 2px;">5</span></p> <p><b>4) Crankshaft, Gear</b><br/>                     † TR26049 (23T)</p> <p><b>5) Ring Gear</b><br/>                     † TR28811 (129T)</p> |  <p><b>1) O/H Gasket Set</b><br/>                     † TAR63938</p> <p><b>2) Head Gasket Set</b><br/>                     † TAR63940</p> <p><b>3) Head Gasket</b><br/>                     † TR48291</p> <p><b>4) Oil Pan Gasket</b><br/>                     † TR71918</p> <p><b>5) Rocker Cover Gsk</b><br/>                     † TR49866</p>   |  <p><b>1) Bush, Con Rod</b><br/>                     † TR30939 x6</p> <p><b>2) Bolt, Con Rod</b><br/>                     † TR66452 x12</p> <p><b>3) Bushing, Cam</b><br/>                     † TR46903 x4</p> <p><b>4) Con Rod</b><br/>                     † TAR70910</p> |  <p><b>1) Cam Follower</b><br/>                     † TR52773 x12</p> <p><b>2) Oil Cooler</b><br/>                     † TAR55394</p> <p><b>3) Camshaft Kit</b><br/>                     † TAR100386</p> <p><b>4) Plug, Camshaft</b><br/>                     † TR26115</p> <p><b>5) O'ring, Oil Cooler</b><br/>                     † TR47153</p> |  <p><b>Head Bolt Kit</b><br/>                     † TMX365 <span style="background-color: #008000; color: white; padding: 2px;">1</span></p>   |  |
|   | <p><b>Valve, Intake</b><br/>                     † TR43883 Std.<br/>                     † TR45003 0.003<br/>                     † TR45004 0.015</p>   | <p><b>Valve, Exhaust</b><br/>                     † TR43679 Std.<br/>                     † TR43787 0.003<br/>                     † TR43788 0.015</p>   | <p><b>1) Insert, Valve In</b><br/>                     † TR43680 Std.</p> <p><b>2) Insert, Valve Ex</b><br/>                     † TR43681 Std.</p>   | <p><b>1) Cap, Valve</b><br/>                     † TT20129</p> <p><b>2) Lock, Valve</b><br/>                     † TT20077</p>  | <p><b>1) Spring, Valve</b><br/>                     † TR26125</p> <p><b>2) Guide, Valve</b><br/>                     † TRE11410</p> <p><b>3) O'ring, Valve</b><br/>                     † TR87627</p>   |  |
|   |  <p><b>Thermostat</b><br/>                     † TR36846 180° F</p> <p><b>Thermostat Cover</b><br/>                     † TAR77411<br/>                     † TRE33705</p>   |  <p><b>1) Fuel Transfer Pump</b><br/>                     † TAR53567 <span style="background-color: #008000; color: white; padding: 2px;">2</span><br/>                     † TRE42211 <span style="background-color: #008000; color: white; padding: 2px;">3</span><br/>                     † TAR49771 <span style="background-color: #008000; color: white; padding: 2px;">4</span><br/>                     † TAR57264</p> <p><b>2) Fuel Pump Gasket</b><br/>                     † TR27285</p> |  <p><b>Water Pump Repair Kit</b><br/>                     † See Chart</p>  |  <p><b>1) Seal, Injector</b><br/>                     † TR60746<br/>                     † TR48000</p> <p><b>2) Injector, Pencil</b><br/>                     † TAR50781</p>  |  <p><b>Pump, Oil, Quad Transmission</b><br/>                     † TRE20918 For<br/>                     Tractor 4040</p>  |  <p><b>Water Pump</b><br/>                     † TAR45332</p> |

(1): TMX365 Consists of: TR88042 x6, TR88043 x5, TR88044 x8, TR88045 x7.






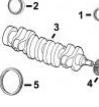

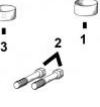





(3): ESN 82,802-422,365.






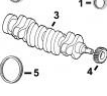
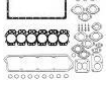
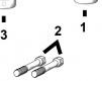
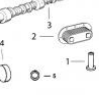




(5): TRE53422 will require front key TR116311 for the front damper.

(2): To ESN 82,801.






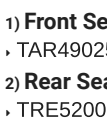
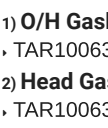


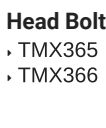




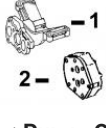
(4): From ESN 422,366.

(6): In some blocks with casting R40620 the crank may hit the block near the oil pump mounting and requires grinding approximately 1/8" from the crank or block for clearance.

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|---|---|--|--|---|--|
| <b>Engine Series:</b><br>400<br><br><b>Engine Model:</b><br>6.404T/A<br><br><b>Engine Data:</b><br>To ESN<br>335,845<br><br><b>Engine Info:</b><br>6 Cyl<br><br><b>Engine Dimensions:</b><br>Bore: 4.25 in /<br>108 mm Pin Ø:<br>1.61 in / 41<br>mm<br><br><b>Block (M):</b><br>R43310,<br>R45980,<br>R47020,<br>R47110<br><br><b>Combines</b><br>4320<br><br><b>Farm Tractors</b><br>4520<br>4620<br>5440<br><br><b>Wheel Loaders</b><br>644<br>644A<br><br><b>Excavators</b><br>690<br>690A<br><br><b>Compactors</b><br>646<br>646B |  <p><b>1) Engine O/H Kit</b><br/>                 , TRG21340<br/><br/> <b>2) Engine I/F Kit</b><br/>                 , TIK21340</p>   |  <p><b>Piston-Liner Kit</b><br/>                 , TAR51798<br/><br/> <b>Consists of:</b><br/>                 , a) TAR50624<br/>                 , b) TAR51741<br/>                 , c) TR41425<br/>                 , d) TR40615<br/>                 , e) TAR65507<br/>                 , f) TR54114</p>   |  <p><b>Main Bearing</b><br/>                 , TAR74814 Std.<br/>                 , TAR74816 0.010<br/>                 , TAR74817 0.020<br/>                 , TAR74818 0.030<br/><br/> <b>Use 6</b></p>  |  <p><b>Thrust Bearing</b><br/>                 , TAR77748 Std.<br/>                 , TAR77750 0.010<br/>                 , TAR77751 0.020<br/>                 , TAR77752 0.030<br/><br/> <b>Use 1</b><br/> <b>Thrust Washer</b><br/>                 , TAR77747 Std.<br/>                 , TAR77753 0.007</p>            |  <p><b>Con Rod Bearing</b><br/>                 , TAR45723 Std.<br/>                 , TAR46396 0.010<br/>                 , TAR46397 0.020<br/>                 , TAR46398 0.030<br/><br/> <b>Use 6</b></p> |
|   |  <p><b>1) Front Seal</b><br/>                 , TAR49025<br/><br/> <b>2) Rear Seal</b><br/>                 , TRE520036<br/><br/> <b>3) Crankshaft</b><br/>                 , TRE53422 <b>7</b> <b>3</b><br/><br/> <b>4) Crankshaft, Gear</b><br/>                 , TR26049 (23T)<br/><br/> <b>5) Ring Gear</b><br/>                 , TR28811 (129T)</p> |  <p><b>1) O/H Gasket Set</b><br/>                 , TAR53094<br/><br/> <b>2) Head Gasket Set</b><br/>                 , TAR63270<br/><br/> <b>3) Head Gasket</b><br/>                 , TR48291<br/><br/> <b>4) Oil Pan Gasket</b><br/>                 , TR71918<br/><br/> <b>5) Rocker Cover Gsk</b><br/>                 , TR49866<br/><br/> <b>6) Gasket Intake Manifold</b><br/>                 , TR50397</p> |  <p><b>1) Bush, Con Rod</b><br/>                 , TR42173 x6<br/><br/> <b>2) Bolt, Con Rod</b><br/>                 , TR66452 x12<br/><br/> <b>3) Bushing, Cam</b><br/>                 , TR46903 x4</p> |  <p><b>1) Cam Follower</b><br/>                 , TR52773 x12<br/><br/> <b>2) Oil Cooler</b><br/>                 , TAR55394 <b>4</b><br/>                 , TAT25038 <b>5</b><br/><br/> <b>3) Plug, Camshaft</b><br/>                 , TR26115<br/><br/> <b>4) O'ring, Oil Cooler</b><br/>                 , TR47153</p> |  <p><b>Head Bolt Kit</b><br/>                 , TMX365 <b>1</b></p>   |
| <p><b>Valve, Intake</b><br/>                 , TR43883 Std. <b>2</b><br/>                 , TR45003 0.003<br/>                 , TR45004 0.015</p>  | <p><b>Valve, Exhaust</b><br/>                 , TR43679 Std.<br/>                 , TR43787 0.003<br/>                 , TR43788 0.015</p>  | <p><b>1) Insert, Valve In</b><br/>                 , TR43680 Std.<br/><br/> <b>2) Insert, Valve Ex</b><br/>                 , TR43681 Std.</p>   | <p><b>1) Cap, Valve</b><br/>                 , TT20129<br/><br/> <b>2) Lock, Valve</b><br/>                 , TT20077</p>  | <p><b>1) Spring, Valve</b><br/>                 , TR26125<br/><br/> <b>2) Guide, Valve</b><br/>                 , TRE11410<br/><br/> <b>3) O'ring, Valve</b><br/>                 , TR87627</p>   |  |
|  <p><b>Thermostat</b><br/>                 , TR36846 180° F<br/>                 , TAR48675 x2 180° F<br/>                 , TAR77411 x1 195° F</p>  |  <p><b>Fuel Transfer Pump</b><br/>                 , TAR49771 <b>6</b> <b>6</b></p>  |  <p><b>Water Pump Repair Kit</b><br/>                 , See Chart</p>   |  |   |  |
| <p><b>(1):</b> TMX365 Consists of: TR88042 x6, TR88043 x5, TR88044 x8, TR88045 x7.<br/> <b>(3):</b> TRE53422 will require front key TR116311 for the front damper.<br/> <b>(5):</b> For A Engines.<br/> <b>(7):</b> In some blocks with casting R40620 the crank may hit the block near the oil pump mounting and requires grinding approximately 1/8" from the crank or block for clearance.</p>   |   |  |  |   |  |
| <p><b>(2):</b> Use TR43914 Std (30 Degree Angle) on ESN 245,547 – 335,845.<br/> <b>(4):</b> For T Engines.<br/> <b>(6):</b> Check for proper application.</p>   |   |  |  |   |  |

|   |  |   |   |  |  |
|---|--|---|---|--|--|
| <p><b>Engine Series:</b><br/>400</p> <p><b>Engine Model:</b><br/>6.404T/A</p> <p><b>Engine Data:</b><br/>From ESN<br/>335,846</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.25 in /<br/>108 mm Pin Ø:<br/>1.61 in / 41<br/>mm</p> <p><b>Block (M):</b><br/>R49470,<br/>R49650,<br/>R59850,<br/>R72128,<br/>R87558</p>   |  <p><b>1) Engine O/H Kit</b><br/> <ul style="list-style-type: none"> <li>TRG17892</li> <li>TRG17892HC</li> </ul> </p> <p><b>2) Engine I/F Kit</b><br/> <ul style="list-style-type: none"> <li>TIK17892</li> <li>TIK17892HC</li> </ul> </p>   |  <p><b>Piston-Liner Kit</b><br/> <ul style="list-style-type: none"> <li>TAR63272</li> <li>TAR63272HC</li> </ul> </p> <p><b>Consists of:</b><br/> <ul style="list-style-type: none"> <li>a) TAR54552</li> <li>TAR54552HC</li> <li>b) TAR51741</li> <li>c) TR41425</li> <li>d) TR40615</li> <li>e) TAR65507</li> <li>f) TR54114</li> </ul> </p>   |  <p><b>Main Bearing</b><br/> <ul style="list-style-type: none"> <li>TAR74814 Std.</li> <li>TAR74816 0.010</li> <li>TAR74817 0.020</li> <li>TAR74818 0.030</li> </ul> </p> <p><b>Use 6</b></p>   |  <p><b>Thrust Bearing</b><br/> <ul style="list-style-type: none"> <li>TAR77748 Std.</li> <li>TAR77750 0.010</li> <li>TAR77751 0.020</li> <li>TAR77752 0.030</li> </ul> </p> <p><b>Use 1</b></p> <p><b>Thrust Washer</b><br/> <ul style="list-style-type: none"> <li>TAR77747 Std.</li> <li>TAR77753 0.007</li> </ul> </p>  |  <p><b>Con Rod Bearing</b><br/> <ul style="list-style-type: none"> <li>TAR45723 Std.</li> <li>TAR46396 0.010</li> <li>TAR46397 0.020</li> <li>TAR46398 0.030</li> </ul> </p> <p><b>Use 6</b></p> |
| <p><b>Combines</b><br/>4320<br/>6600<br/>7700</p> <p><b>Farm Tractors</b><br/>4430<br/>4630<br/>5440</p> <p><b>Excavators</b><br/>690B</p> <p><b>Feller Bunchers</b><br/><b>Log Loaders</b><br/>693C</p> <p><b>Skidders</b><br/>740</p>   |  <p><b>1) Front Seal</b><br/> <ul style="list-style-type: none"> <li>TAR49025</li> </ul> </p> <p><b>2) Rear Seal</b><br/> <ul style="list-style-type: none"> <li>TRE520036</li> </ul> </p> <p><b>3) Crankshaft</b><br/> <ul style="list-style-type: none"> <li>TRE53422 <b>5</b> <b>2</b></li> </ul> </p> <p><b>4) Crankshaft, Gear</b><br/> <ul style="list-style-type: none"> <li>TR26049 (23T)</li> </ul> </p> <p><b>5) Ring Gear</b><br/> <ul style="list-style-type: none"> <li>TR28811 (129T)</li> </ul> </p> |  <p><b>1) O/H Gasket Set</b><br/> <ul style="list-style-type: none"> <li>TAR63269</li> </ul> </p> <p><b>2) Head Gasket Set</b><br/> <ul style="list-style-type: none"> <li>TAR63270</li> </ul> </p> <p><b>3) Head Gasket</b><br/> <ul style="list-style-type: none"> <li>TR48291</li> </ul> </p> <p><b>4) Oil Pan Gasket</b><br/> <ul style="list-style-type: none"> <li>TR71918</li> </ul> </p> <p><b>5) Rocker Cover Gsk</b><br/> <ul style="list-style-type: none"> <li>TR49866</li> </ul> </p> <p><b>6) Gasket Intake Manifold</b><br/> <ul style="list-style-type: none"> <li>TR50397</li> </ul> </p> |  <p><b>1) Bush, Con Rod</b><br/> <ul style="list-style-type: none"> <li>TR42173 x6</li> </ul> </p> <p><b>2) Bolt, Con Rod</b><br/> <ul style="list-style-type: none"> <li>TR66452 x12</li> </ul> </p> <p><b>3) Bushing, Cam</b><br/> <ul style="list-style-type: none"> <li>TR46903 x4</li> </ul> </p> |  <p><b>1) Cam Follower</b><br/> <ul style="list-style-type: none"> <li>TR52773 x12</li> </ul> </p> <p><b>2) Oil Cooler</b><br/> <ul style="list-style-type: none"> <li>TAR55394 <b>3</b></li> <li>TAT25038 <b>4</b></li> </ul> </p> <p><b>3) Plug, Camshaft</b><br/> <ul style="list-style-type: none"> <li>TR26115</li> </ul> </p> <p><b>4) O'ring, Oil Cooler</b><br/> <ul style="list-style-type: none"> <li>TR47153</li> </ul> </p> |  <p><b>Head Bolt Kit</b><br/> <ul style="list-style-type: none"> <li>TMX365 <b>1</b></li> </ul> </p>  |
| <p><b>Valve, Intake</b><br/> <ul style="list-style-type: none"> <li>TR50358 Std.</li> <li>TR55055 0.003</li> <li>TR55057 0.015</li> </ul> </p>  | <p><b>Valve, Exhaust</b><br/> <ul style="list-style-type: none"> <li>TR50357 Std.</li> <li>TR55056 0.003</li> <li>TR55058 0.015</li> </ul> </p>  | <p><b>1) Insert, Valve In</b><br/> <ul style="list-style-type: none"> <li>TR78702 Std.</li> <li>TR82508 0.010</li> </ul> </p> <p><b>2) Insert, Valve Ex</b><br/> <ul style="list-style-type: none"> <li>TR50356 Std.</li> </ul> </p>  | <p><b>1) Cap, Valve</b><br/> <ul style="list-style-type: none"> <li>TT20129</li> </ul> </p> <p><b>2) Lock, Valve</b><br/> <ul style="list-style-type: none"> <li>TT20077</li> </ul> </p>  | <p><b>1) Spring, Valve</b><br/> <ul style="list-style-type: none"> <li>TR26125</li> </ul> </p> <p><b>2) Guide, Valve</b><br/> <ul style="list-style-type: none"> <li>TRE11410</li> </ul> </p> <p><b>3) O'ring, Valve</b><br/> <ul style="list-style-type: none"> <li>TR87627</li> </ul> </p>   |  |
|  <p><b>Thermostat</b><br/> <ul style="list-style-type: none"> <li>TAR48675 180° F</li> </ul> </p>  |  <p><b>Fuel Transfer Pump</b><br/> <ul style="list-style-type: none"> <li>TAR57264</li> </ul> </p>  |  <p><b>Water Pump Repair Kit</b><br/> <ul style="list-style-type: none"> <li>See Chart</li> </ul> </p>   |   |  |  |
| <p><b>(1):</b> TMX365 Consists of: TR88042 x6, TR88043 x5, TR88044 x8, TR88045 x7.</p> <p><b>(3):</b> For T Engines.</p> <p><b>(5):</b> In some blocks with casting R40620 the crank may hit the block near the oil pump mounting and requires grinding approximately 1/8" from the crank or block for clearance.</p> <p><b>(2):</b> TRE53422 will require front key TR116311 for the front damper.</p> <p><b>(4):</b> For A Engines.</p> |  |   |   |  |  |



|   |   |   |   |   |  |
|---|---|---|---|---|--|
| <p><b>Engine Series:</b><br/>400</p> <p><b>Engine Model:</b><br/>6.466D</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.56 in / 116 mm Pin Ø: 1.61 in / 41 mm</p> <p><b>Con Rod (M):</b><br/>R66922, R58882, R41423</p> |  <p><b>1) Engine O/H Kit</b><br/>› TRG18846</p> <p><b>2) Engine I/F Kit</b><br/>› TIK18846</p>  |  <p><b>Piston-Liner Kit</b><br/>› TAR83610</p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>› a) TAR100442</li> <li>› b) TAR87753</li> <li>› c) TR41425</li> <li>› d) TAR63060</li> <li>› e) TAR98850</li> <li>› f) TR54114</li> </ul> |  <p><b>Main Bearing</b></p> <ul style="list-style-type: none"> <li>› TAR74814 Std.</li> <li>› TAR74816 0.010</li> <li>› TAR74817 0.020</li> <li>› TAR74818 0.030</li> </ul> <p><b>Use 6</b></p> |  <p><b>Thrust Bearing</b></p> <ul style="list-style-type: none"> <li>› TAR77748 Std.</li> <li>› TAR77750 0.010</li> <li>› TAR77751 0.020</li> <li>› TAR77752 0.030</li> </ul> <p><b>Use 1</b></p> <p><b>Thrust Washer</b></p> <ul style="list-style-type: none"> <li>› TAR77747 Std.</li> <li>› TAR77753 0.007</li> </ul> |  <p><b>Con Rod Bearing</b></p> <ul style="list-style-type: none"> <li>› TAR45723 Std.</li> <li>› TAR46396 0.010</li> <li>› TAR46397 0.020</li> <li>› TAR46398 0.030</li> </ul> <p><b>Use 6</b></p>   |
| <p><b>Farm Tractors</b><br/>4050<br/>4240</p> <p><b>Combines</b><br/>6620</p>   |  <p><b>1) Front Seal</b><br/>› TAR49025</p> <p><b>2) Rear Seal</b><br/>› TRE520036</p> <p><b>3) Crankshaft</b><br/>› TRE53422 <span style="background-color: #90EE90; padding: 2px;">6</span> <span style="background-color: #90EE90; padding: 2px;">4</span></p> <p><b>4) Crankshaft, Gear</b><br/>› TR26049 (23T)</p> <p><b>5) Ring Gear</b><br/>› TR28811 (129T)</p> <p><b>6) Rear Gear</b><br/>› TR63326</p> |  <p><b>1) O/H Gasket Set</b><br/>› TAR100638</p> <p><b>2) Head Gasket Set</b><br/>› TAR100632</p> <p><b>3) Head Gasket</b><br/>› TRE47336</p> <p><b>4) Oil Pan Gasket</b><br/>› TR71918</p>  |  <p><b>1) Bush, Con Rod</b><br/>› TR42173 x6</p> <p><b>2) Bolt, Con Rod</b><br/>› TR66452 x12</p> <p><b>3) Bushing, Cam</b><br/>› TR46903 x4</p>   |  <p><b>1) Cam Follower</b><br/>› TR52773 x12</p> <p><b>2) Oil Cooler</b><br/>› TAR55394</p> <p><b>3) Plug, Camshaft</b><br/>› TR26115</p> <p><b>4) O'ring, Oil Cooler</b><br/>› TR47153</p>  |  <p><b>Head Bolt Kit</b></p> <ul style="list-style-type: none"> <li>› TMX365 <span style="background-color: #90EE90; padding: 2px;">2</span></li> <li>› TMX366 <span style="background-color: #90EE90; padding: 2px;">3</span></li> </ul> |
|   | <p><b>Valve, Intake</b></p> <ul style="list-style-type: none"> <li>› TR43883 Std.</li> <li>› TR45003 0.003</li> <li>› TR45004 0.015</li> </ul>  | <p><b>Valve, Exhaust</b></p> <ul style="list-style-type: none"> <li>› TR43679 Std.</li> <li>› TR43787 0.003</li> <li>› TR43788 0.015</li> </ul>   | <p><b>1) Insert, Valve In</b><br/>› TR43680 Std.</p> <p><b>2) Insert, Valve Ex</b><br/>› TR43681 Std.</p>   | <p><b>1) Cap, Valve</b><br/>› TT20129</p> <p><b>2) Lock, Valve</b><br/>› TT20077</p>  | <p><b>1) Spring, Valve</b><br/>› TR26125</p> <p><b>2) Guide, Valve</b><br/>› TRE11410</p> <p><b>3) O'ring, Valve</b><br/>› TR87627</p>   |
|  <p><b>Thermostat</b><br/>› TAR48675 180° F</p>  |  <p><b>Fuel Transfer Pump</b><br/>› TRE38009<br/>› TAR57264</p>  |  <p><b>Water Pump Repair Kit</b><br/>› See Chart</p>   |  <p><b>Water Pump</b><br/>› TRE55985 <span style="background-color: #90EE90; padding: 2px;">5</span><br/>› TRE55986 <span style="background-color: #90EE90; padding: 2px;">5</span></p>    |  <p><b>1) Pump, Oil</b><br/>› TRE60622 <span style="background-color: #90EE90; padding: 2px;">7</span></p> <p><b>2) Pump, Oil, Quad Transmission</b><br/>› TRE20918 For Tractors 4240, 4050</p>  |  |

(1): Shape, Conrod Bushing.

(3): TMX366 Consists of: TR88043 x11, TR88044 x8, TR88045 x7. \*\* With From ESN 318404.






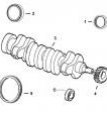
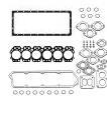
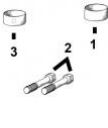
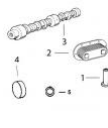





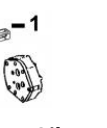
(5): Must check proper application. (m) R71224, (m) R83561.

(7): Late style, crank driven pump, uses a 1 piece elbow and screen that bolts to pump. Early pumps have a pickup screen that bolts directly to the pump (elbow is part of the pump).When replacing the early pump, you will need the dealer items RE42653 intake tube & R100569 gasket.

(2): TMX365 Consists of: TR88042 x6, TR88043 x5, TR88044 x8, TR88045 x7. \* With To ESN 318403.

(4): TRE53422 will require front key TR116311 for the front damper.

(6): In some blocks with casting R40620 the crank may hit the block near the oil pump mounting and requires grinding approximately 1/8" from the crank or block for clearance.

|   |   |   |  |   |  |
|---|---|---|--|---|--|
| <p><b>Engine Series:</b><br/>400</p> <p><b>Engine Model:</b><br/>6.466T</p> <p><b>Engine Data:</b><br/>To ESN<br/>253,372</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.56 in /<br/>116 mm Pin Ø:<br/>1.85 in / 47 mm</p>   |  <p><b>1) Engine O/H Kit</b><br/>                 † TRG18845<br/>                 † TRG18845HC</p> <p><b>2) Engine I/F Kit</b><br/>                 † TIK18845<br/>                 † TIK18845HC</p>  |  <p><b>Piston-Liner Kit</b><br/>                 † TAR72079<br/>                 † TAR72079HC</p> <p><b>Consists of:</b><br/>                 a) TAR93629<br/>                 † TAR93629HC<br/>                 b) TRE48380<br/>                 c) TR57771<br/>                 d) TAR63060<br/>                 e) TAR98850<br/>                 f) TE1343FN</p> |  <p><b>Main Bearing</b><br/>                 † TAR74814 <i>Std.</i><br/>                 † TAR74816 0.010<br/>                 † TAR74817 0.020<br/>                 † TAR74818 0.030</p> <p><b>Use 6</b></p>  |  <p><b>Thrust Bearing</b><br/>                 † TAR77748 <i>Std.</i><br/>                 † TAR77750 0.010<br/>                 † TAR77751 0.020<br/>                 † TAR77752 0.030</p> <p><b>Use 1</b></p> <p><b>Thrust Washer</b><br/>                 † TAR77747 <i>Std.</i><br/>                 † TAR77753 0.007</p>   |  <p><b>Con Rod Bearing</b><br/>                 † TAR73277 <i>Std.</i><br/>                 † TAR73279 0.010<br/>                 † TAR73280 0.020<br/>                 † TAR73281 0.030</p> <p><b>Use 6</b></p> |
| <p><b>Con Rod (M):</b><br/>R57303,<br/>R67320</p> <p><b>Farm Tractors</b><br/>4440<br/>4640<br/>4840<br/>6622<br/>8430<br/>8440<br/>8450</p> <p><b>Forage Cane Harvesters</b><br/>5720</p> <p><b>Combines</b><br/>6620<br/>7720<br/>8820</p> <p><b>Cotton Pickers</b><br/>9940</p> <p><b>Compactors</b><br/>646C</p> <p><b>Skidders</b><br/>740A</p> <p><b>Wheel Loaders</b><br/>644D</p> <p><b>Scrapers</b><br/>762A</p> |  <p><b>1) Front Seal</b><br/>                 † TAR49025</p> <p><b>2) Rear Seal</b><br/>                 † TRE520036</p> <p><b>3) Crankshaft</b><br/>                 † TRE53422 <span style="background-color: #90EE90; padding: 2px;">8</span> <span style="background-color: #90EE90; padding: 2px;">4</span></p> <p><b>4) Crankshaft, Gear</b><br/>                 † TR26049 (23T)</p> <p><b>5) Ring Gear</b><br/>                 † TR28811 (129T)</p> <p><b>6) Rear Gear</b><br/>                 † TR63326</p> |  <p><b>1) O/H Gasket Set</b><br/>                 † TAR98845</p> <p><b>2) Head Gasket Set</b><br/>                 † TAR98851</p> <p><b>3) Head Gasket</b><br/>                 † TRE47336</p> <p><b>4) Oil Pan Gasket</b><br/>                 † TR71918</p> <p><b>5) Gasket Intake Manifold</b><br/>                 † TR50397</p>                               |  <p><b>1) Bush, Con Rod</b><br/>                 † TR60724 x6</p> <p><b>2) Bolt, Con Rod</b><br/>                 † TR66452 x12</p> <p><b>3) Bushing, Cam</b><br/>                 † TR46903 x4</p>   |  <p><b>1) Cam Follower</b><br/>                 † TR52773 x12</p> <p><b>2) Oil Cooler</b><br/>                 † TAT25038 <span style="background-color: #90EE90; padding: 2px;">3</span></p> <p><b>3) Camshaft Kit</b><br/>                 † TAR100385</p> <p><b>4) Plug, Camshaft</b><br/>                 † TR26115</p> <p><b>5) O'ring, Oil Cooler</b><br/>                 † TR47153</p> |  <p><b>Head Bolt Kit</b><br/>                 † TMX365 <span style="background-color: #90EE90; padding: 2px;">2</span></p>  |
| <p><b>Valve, Intake</b><br/>                 † TR50358 <i>Std.</i><br/>                 † TR55055 0.003<br/>                 † TR55057 0.015</p>  | <p><b>Valve, Exhaust</b><br/>                 † TR50357 <i>Std.</i><br/>                 † TR55056 0.003<br/>                 † TR55058 0.015</p>   | <p><b>1) Insert, Valve In</b><br/>                 † TR78702 <i>Std.</i><br/>                 † TR82508 0.010</p> <p><b>2) Insert, Valve Ex</b><br/>                 † TR50356 <i>Std.</i></p>  | <p><b>1) Cap, Valve</b><br/>                 † TT20129</p> <p><b>2) Lock, Valve</b><br/>                 † TT20077</p>   | <p><b>1) Spring, Valve</b><br/>                 † TR26125</p> <p><b>2) Rotator, Valve</b><br/>                 † TRE11410</p> <p><b>3) O'ring, Valve</b><br/>                 † TR87627</p>   |  |
|  <p><b>1) Thermostat</b><br/>                 † TAR48675 180° F</p> <p><b>2) Oil Pressure Sensor</b><br/>                 † TRE167207 <span style="background-color: #90EE90; padding: 2px;">7</span></p>  |  <p><b>Water Pump Repair Kit</b><br/>                 † See Chart 180° F <span style="background-color: #90EE90; padding: 2px;">7</span></p>   |  <p><b>Water Pump</b><br/>                 † TRE55985<br/>                 † TRE55986<br/>                 † TRE20022</p> <p><b>Water Pump Gasket</b><br/>                 † TR61437<br/>                 † TR42406</p>  |  <p><b>1) Pump, Oil</b><br/>                 † TRE60622 <span style="background-color: #90EE90; padding: 2px;">5</span></p> <p><b>2) Pump, Oil, Quad Transmission</b><br/>                 † TRE20918 <i>For Tractor 4440</i> <span style="background-color: #90EE90; padding: 2px;">5</span> <span style="background-color: #90EE90; padding: 2px;">6</span></p> |  <p><b>1) Pump, Oil, Quad Transmission</b><br/>                 † TRE20918 <i>For Tractor 4440</i> <span style="background-color: #90EE90; padding: 2px;">9</span></p>   |  |

(1): Shape, Conrod Bushing.

(3): Some applications use TAR55394.

(5): Must check proper application. (m) R71224, (m) R83561.

(7): Check for proper application.

(9): Late style, crank driven pump, uses a 1 piece elbow and screen that bolts to pump. Early pumps have a pickup screen that bolts directly to the pump (elbow is part of the pump). When replacing the early pump, you will need the dealer items RE42653 intake tube & R100569 gasket.

(2): TMX365 Consists of: TR88042 x6, TR88043 x5, TR88044 x8, TR88045 x7. \* With To ESN 318403.

(4): TRE53422 will require front key TR116311 for the front damper.

(6): OEM From ESN 067685.

(8): In some blocks with casting R40620 the crank may hit the block near the oil pump mounting and requires grinding approximately 1/8" from the crank or block for clearance.

**Engine Series:**  
400

**Engine Model:**  
6.466T

**Engine Data:**  
From ESN  
253,373

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 4.56 in /  
116 mm Pin Ø:  
1.8742 in / (+/-  
.0002) = 47 mm

**Con Rod (M):**  
R71074, (P/N  
AR93341)

**Piston (M):**  
AR100616,  
AR98838

Please see page 388 for a complete list of equipment models.



- 1) Engine O/H Kit**  
 › TRG18847  
 › TRG18847HC  
**2) Engine I/F Kit**  
 › TIK18847  
 › TIK18847HC



- Piston-Liner Kit**  
 › TAR100646  
 › TAR100646HC  
**Consists of:**  
 a) TAR100616  
 › TAR100616HC  
 b) TRE48380  
 c) TR57771  
 d) TAR63060  
 e) TAR98850  
 f) TE1343FN



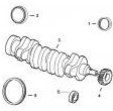
- Main Bearing**  
 › TAR74814 Std.  
 › TAR74816 0.010  
 › TAR74817 0.020  
 › TAR74818 0.030  
**Use 6**



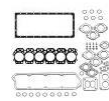
- Thrust Bearing**  
 › TAR77748 Std.  
 › TAR77750 0.010  
 › TAR77751 0.020  
 › TAR77752 0.030  
**Use 1**  
**Thrust Washer**  
 › TAR77747 Std.  
 › TAR77753 0.007



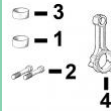
- Con Rod Bearing**  
 › TAR73277 Std.  
 › TAR73279 0.010  
 › TAR73280 0.020  
 › TAR73281 0.030  
**Use 6**



- 1) Front Seal**  
 › TAR49025  
**2) Rear Seal**  
 › TRE520036  
**3) Crankshaft**  
 › TRE53422 9 5  
**4) Crankshaft, Gear**  
 › TR26049 (23T)  
**5) Ring Gear**  
 › TR28811 (129T)  
**6) Rear Gear**  
 › TR63326



- 1) O/H Gasket Set**  
 › TAR98845  
**2) Head Gasket Set**  
 › TAR98851  
**3) Head Gasket**  
 › TRE47336  
**4) Oil Pan Gasket**  
 › TR71918  
**5) Gasket Intake Manifold**  
 › TR50397



- 1) Bush, Con Rod**  
 › TR74008 x6  
**2) Bolt, Con Rod**  
 › TR66452 x12  
**3) Bushing, Cam**  
 › TR46903 x4  
**4) Con Rod**  
 › TAR93341 x1



- 1) Cam Follower**  
 › TR52773 x12  
**2) Oil Cooler**  
 › TAT25038 4  
**3) Camshaft Kit**  
 › TAR100385  
**4) Plug, Camshaft**  
 › TR26115  
**5) O'ring, Oil Cooler**  
 › TR47153  
**6) Head Bolt Kit**  
 › TMX365 2  
 › TMX366 3



- Pump, Oil**  
 › TRE60622 10

- Valve, Intake**  
 › TR50358 Std.  
 › TR55055 0.003  
 › TR55057 0.015

- Valve, Exhaust**  
 › TR50357 Std.  
 › TR55056 0.003  
 › TR55058 0.015

- 1) Insert, Valve In**  
 › TR78702 Std.  
 › TR82508 0.010  
**2) Insert, Valve Ex**  
 › TR50356 Std.

- 1) Cap, Valve**  
 › TT20129  
**2) Lock, Valve**  
 › TT20077

- 1) Spring, Valve**  
 › TR26125  
**2) Rotator, Valve**  
 › TRE11410  
**3) O'ring, Valve**  
 › TR87627



- 1) Thermostat**  
 › TAR48675 180° F  
**2) Oil Pressure Sensor**  
 › TRE167207 8  
**3) Crankshaft Sensor**  
 › TRE519144 8



- Water Pump Repair Kit**  
 › See Chart 180° F



- Water Pump**  
 › TRE55985 6  
 › TRE55986 6  
 › TRE20022 7  
**Water Pump Gasket**  
 › TR61437  
 › TR42406



- Pump, Oil, Quad Transmission**  
 › TRE20918 For Tractors 4250, 4040, 4450

(1): Shape, Conrod Bushing.

(4): Some applications use TAR55394.

(6): Must check proper application. (m) R71224, (m) R83561.

(8): Check for proper application.






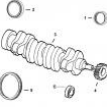

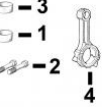
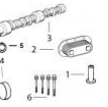




(3): TMX366 Consists of: TR88043 x11, TR88044 x8, TR88045 x9. \*\* With From ESN 317677.

(5): TRE53422 will require front key TR116311 for the front damper.

(7): OEM From ESN 067685.

(9): In some blocks with casting R40620 the crank may hit the block near the oil pump mounting and requires grinding approximately 1/8" from the crank or block for clearance.

(10): Late style, crank driven pump, uses a 1 piece elbow and screen that bolts to pump. Early pumps have a pickup screen that bolts directly to the pump (elbow is part of the pump).When replacing the early pump, you will need the dealer items RE42653 intake tube & R100569 gasket.

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| <p><b>Engine Series:</b><br/>400</p> <p><b>Engine Model:</b><br/>6.466A</p> <p><b>Engine Data:</b><br/>ESN 233,593 – 317,858</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.56 in / 116 mm Pin Ø: 1.8742 in / (+/- .0002) = 47 mm</p> <p><b>Block (M):</b><br/>R71688, R71685, R80481</p> <p><b>Con Rod (M):</b><br/>R71074, (P/N AR93341)</p> <p><b>Piston (M):</b><br/>RE60284</p>                                     |  <p><b>1) Engine O/H Kit</b><br/>› TRG20142</p> <p><b>2) Engine I/F Kit</b><br/>› TIK20142</p>  |  <p><b>Piston-Liner Kit</b><br/>› TAR100960</p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>› a) TAR100673</li> <li>› b) TRE48380</li> <li>› c) TR57771</li> <li>› d) TAR63060</li> <li>› e) TAR98850</li> <li>› f) TE1343FN</li> </ul> |  <p><b>Main Bearing</b><br/>› TAR74814 Std.<br/>› TAR74816 0.010<br/>› TAR74817 0.020<br/>› TAR74818 0.030</p> <p><b>Use 6</b></p>  |  <p><b>Thrust Bearing</b><br/>› TAR77748 Std.<br/>› TAR77750 0.010<br/>› TAR77751 0.020<br/>› TAR77752 0.030</p> <p><b>Use 1</b></p> <p><b>Thrust Washer</b><br/>› TAR77747 Std.<br/>› TAR77753 0.007</p>   |  <p><b>Con Rod Bearing</b><br/>› TAR73277 Std.<br/>› TAR73279 0.010<br/>› TAR73280 0.020<br/>› TAR73281 0.030</p> <p><b>Use 6</b></p> |
| <p><b>Forage Cane Harvesters</b><br/>5720<br/>5730</p> <p><b>Crawler Dozers</b><br/>850B</p> <p><b>Excavators</b><br/>690C<br/>892D</p> <p><b>Motor Graders</b><br/>770A<br/>770B</p> <p><b>Scrapers</b><br/>762A<br/>762B</p> <p><b>Skidders</b><br/>740A</p> <p><b>Wheel Loaders</b><br/>644C</p> <p><b>Farm Tractors</b><br/>4840<br/>4850<br/>8430<br/>8440<br/>8450</p> <p><b>Combines</b><br/>8820</p> <p><b>Cotton Pickers</b><br/>9940<br/>9950</p> |  <p><b>1) Front Seal</b><br/>› TAR49025</p> <p><b>2) Rear Seal</b><br/>› TRE520036</p> <p><b>3) Crankshaft</b><br/>› TRE53422 <span style="background-color: #90EE90; padding: 2px;">9</span> <span style="background-color: #90EE90; padding: 2px;">5</span></p> <p><b>4) Crankshaft, Gear</b><br/>› TR26049 (23T)</p> <p><b>5) Ring Gear</b><br/>› TR28811 (129T)</p> <p><b>6) Rear Gear</b><br/>› TR63326</p>   |  <p><b>1) O/H Gasket Set</b><br/>› TAR98845</p> <p><b>2) Head Gasket Set</b><br/>› TAR98851</p> <p><b>3) Head Gasket</b><br/>› TRE47336</p> <p><b>4) Oil Pan Gasket</b><br/>› TR71918</p> <p><b>5) Gasket Intake Manifold</b><br/>› TR50397</p>              |  <p><b>1) Bush, Con Rod</b><br/>› TR74008 x6</p> <p><b>2) Bolt, Con Rod</b><br/>› TR66452 x12</p> <p><b>3) Bushing, Cam</b><br/>› TR46903 x4</p> <p><b>4) Con Rod</b><br/>› TAR93341 x1</p>  |  <p><b>1) Cam Follower</b><br/>› TR52773 x12</p> <p><b>2) Oil Cooler</b><br/>› TAT25038 <span style="background-color: #90EE90; padding: 2px;">4</span></p> <p><b>3) Camshaft Kit</b><br/>› TAR100385</p> <p><b>4) Plug, Camshaft</b><br/>› TR26115</p> <p><b>5) O'ring, Oil Cooler</b><br/>› TR47153</p> <p><b>6) Head Bolt Kit</b><br/>› TMX365 <span style="background-color: #90EE90; padding: 2px;">2</span><br/>› TMX366 <span style="background-color: #90EE90; padding: 2px;">3</span></p> |  <p><b>1) Pump, Oil</b><br/>› TRE60622 <span style="background-color: #90EE90; padding: 2px;">10</span></p>                          |
| <p><b>Motor Graders</b><br/>770A<br/>770B</p> <p><b>Scrapers</b><br/>762A<br/>762B</p> <p><b>Skidders</b><br/>740A</p> <p><b>Wheel Loaders</b><br/>644C</p> <p><b>Farm Tractors</b><br/>4840<br/>4850<br/>8430<br/>8440<br/>8450</p> <p><b>Combines</b><br/>8820</p> <p><b>Cotton Pickers</b><br/>9940<br/>9950</p>   | <p><b>Valve, Intake</b><br/>› TR50358 Std.<br/>› TR55055 0.003<br/>› TR55057 0.015</p>  | <p><b>Valve, Exhaust</b><br/>› TR50357 Std.<br/>› TR55056 0.003<br/>› TR55058 0.015</p>   | <p><b>1) Insert, Valve In</b><br/>› TR78702 Std.<br/>› TR82508 0.010</p> <p><b>2) Insert, Valve Ex</b><br/>› TR50356 Std.</p>   | <p><b>1) Cap, Valve</b><br/>› TT20129</p> <p><b>2) Lock, Valve</b><br/>› TT20077</p>  | <p><b>1) Spring, Valve</b><br/>› TR26125</p> <p><b>2) Rotator, Valve</b><br/>› TRE11410</p> <p><b>3) O'ring, Valve</b><br/>› TR87627</p>  |
|   |  <p><b>1) Thermostat</b><br/>› TAR48675 180° F</p> <p><b>2) Oil Pressure Sensor</b><br/>› TRE167207 <span style="background-color: #90EE90; padding: 2px;">8</span></p> <p><b>3) Crankshaft Sensor</b><br/>› TRE519144 <span style="background-color: #90EE90; padding: 2px;">8</span></p>   |  <p><b>Water Pump Repair Kit</b><br/>› See Chart 180° F</p>  |  <p><b>Water Pump</b><br/>› TRE55985 <span style="background-color: #90EE90; padding: 2px;">6</span><br/>› TRE55986 <span style="background-color: #90EE90; padding: 2px;">6</span><br/>› TRE20022 <span style="background-color: #90EE90; padding: 2px;">7</span></p> <p><b>Water Pump Gasket</b><br/>› TR61437<br/>› TR42406</p> |   |   |
|   | <p><b>(1):</b> Shape, Conrod Bushing.</p> <p><b>(4):</b> Some applications use TAR55394.</p> <p><b>(6):</b> Must check proper application. (m) R71224, (m) R83561.</p> <p><b>(8):</b> Check for proper application.</p> <p><b>(3):</b> TMX366 Consists of: TR88043 x11, TR88044 x8, TR88045 x7. ** With From ESN 317677.</p> <p><b>(5):</b> TRE53422 will require front key TR116311 for the front damper.</p> <p><b>(7):</b> OEM From ESN 067685.</p> <p><b>(9):</b> In some blocks with casting R40620 the crank may hit the block near the oil pump mounting and requires grinding approximately 1/8" from the crank or block for clearance.</p> |   |   |   |   |

**Engine Series:**  
400

**Engine Model:**  
6076

**Engine Desc:**  
Low Ring  
Piston

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 4.56 in /  
116 mm Pin Ø:  
1.8742 in / (+/-  
.0002) = 47 mm

**Con Rod (M):**  
R71074, (P/N  
AR93341)

**Piston (M):**  
RE48739

**Farm Tractors**

4955  
4960  
8560  
8570

**Excavators**

892E



- 1) **Engine O/H Kit**  
‣ TRE60299
- 2) **Engine I/F Kit**  
‣ TIK60299



- Piston-Liner Kit**  
‣ TRE60297
- Consists of:**
- a) TRE57731
- b) TRE48380
- c) TR57771
- d) TAR63060
- e) TAR98850
- f) TE1343FN



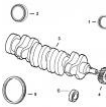
- Main Bearing**  
‣ TAR74814 *Std.*  
‣ TAR74816 0.010  
‣ TAR74817 0.020  
‣ TAR74818 0.030
- Use 6**



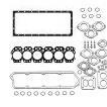
- Thrust Bearing**  
‣ TAR77748 *Std.*  
‣ TAR77750 0.010  
‣ TAR77751 0.020  
‣ TAR77752 0.030
- Use 1**
- Thrust Washer**  
‣ TAR77747 *Std.*  
‣ TAR77753 0.007



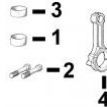
- Con Rod Bearing**  
‣ TAR73277 *Std.*  
‣ TAR73279 0.010  
‣ TAR73280 0.020  
‣ TAR73281 0.030
- Use 6**



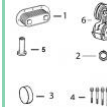
- 1) **Front Seal**  
‣ TAR49025
- 2) **Rear Seal**  
‣ TRE520036



- 1) **O/H Gasket Set**  
‣ TRE35647
- 2) **Head Gasket Set**  
‣ TRE29859



- 1) **Bush, Con Rod**  
‣ TR74008 x6
- 2) **Bolt, Con Rod**  
‣ TR66452 x12
- 3) **Bushing, Cam**  
‣ TR87561 x4
- 4) **Con Rod**  
‣ TAR93341 x1



- 1) **Oil Cooler**  
‣ TAR55394
- 2) **O'Ring, Oil Cooler**  
‣ TR47153



- Pump, Oil**  
‣ TRE60622  
‣ TRE507074

- 3) **Crankshaft**  
‣ TRE53422
- TRE53201

5 12  
5 2

- 3) **Head Gasket**  
‣ TRE47336
- 4) **Oil Pan Gasket**  
‣ TR71918  
‣ TR520844

12

- 3) **Plug, Camshaft**  
‣ TR82007
- 4) **Head Bolt Kit**  
‣ TMX366  
‣ TRG24026

6  
11

- 5) **Ring Gear**  
‣ TR28811 (129T)
- 6) **Rear Gear**  
‣ TR63326

- 5) **Front Cover Gasket**  
‣ TR104623  
‣ TR99464
- 6) **Oil Cooler Gasket**  
‣ TR128557  
‣ TR128558

- 5) **Tappet**  
‣ TR110126 x12
- 6) **Belt Tensioner**  
‣ TRE57498  
‣ TRE68715

8  
9  
9

- Valve, Intake**  
‣ TR84618 *Std.*  
‣ TR93308 0.003  
‣ TR93312 0.015

- Valve, Exhaust**  
‣ TR84619 *Std.*  
‣ TR93311 0.003  
‣ TR93313 0.015

- 1) **Insert, Valve In**  
‣ TR84977 *Std.*
- 2) **Insert, Valve Ex**  
‣ TR84976 *Std.*

- 1) **Cap, Valve**  
‣ TT20129
- 2) **Lock, Valve**  
‣ TT20077
- 3) **Shield, Valve**  
‣ TR102882

- 1) **Spring, Valve**  
‣ TR91822
- 2) **Rotator, Valve**  
‣ TRE11410



- 1) **Thermostat**  
‣ TAR48675 180° F
- 2) **Water Temp Sensor**  
‣ TRE52722
- 3) **Crankshaft Sensor**  
‣ TRE519144

9

9



- Water Pump Repair Kit**  
‣ See Chart 180° F



- Water Pump**  
‣ TRE55985 (m) R71224, (m) R83561  
‣ TRE55986 (m) R71224, (m) R83561  
‣ TRE68230 (High flow)

9  
9

(1): Low Ring Piston.

(3): Short snout (3in) C/S (m) RE53203, R63451, R104855.

(5): Require front key TR116311 for the front damper.

(7): To ESN 100664 Use: TAT25038. Not for use with From ESN 500,000.

(9): Check application for proper usage.

(11): For engines with ESN 500,000 and above. Use only with blocks marked R122738 & above.

(2): Long snout (3.4in.) C/S (m) R87544, RE53201.







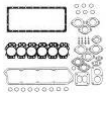

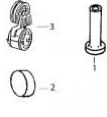




(4): TRE53422 Use Helicoidal front gear.

(6): Use with blocks marked R109806 and below.

(8): From ESN 192401.

(10): For engines with ESN 500 000 and above, and housing is marked (m) R124746 or R504071.

(12): In some blocks with casting R40620 the crank may hit the block near the oil pump mounting and requires grinding approximately 1/8" from the crank or block for clearance.

|  |  |   |  |   |   |
|--|--|---|--|---|---|
| <p><b>Engine Series:</b><br/>400</p> <p><b>Engine Model:</b><br/>6076</p> <p><b>Engine Desc:</b><br/>High Ring<br/>Piston</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.56 in /<br/>116 mm Pin Ø:<br/>1.8742 in / (+/-<br/>.0002) = 47 mm</p> <p><b>Block (M):</b><br/>R122729</p> <p><b>Con Rod (M):</b><br/>R71074 , (P/N<br/>AR93341)</p> <p><b>Piston (M):</b><br/>RE60294</p> |  <p><b>1) Engine O/H Kit</b><br/>‣ TRE64212</p> <p><b>2) Engine I/F Kit</b><br/>‣ TIK64212</p>   |  <p><b>Piston-Liner Kit</b><br/>‣ TRE60294</p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>‣ a) TRE57512</li> <li>‣ b) TRE57517</li> <li>‣ c) TR57771</li> <li>‣ d) TAR63060</li> <li>‣ e) TAR98850</li> <li>‣ f) TE1343FN</li> </ul>   |  <p><b>Main Bearing</b></p> <ul style="list-style-type: none"> <li>‣ TAR74814 <i>Std.</i></li> <li>‣ TAR74816 0.010</li> <li>‣ TAR74817 0.020</li> <li>‣ TAR74818 0.030</li> </ul> <p><b>Use 6</b></p> |  <p><b>Thrust Bearing</b></p> <ul style="list-style-type: none"> <li>‣ TAR77748 <i>Std.</i></li> <li>‣ TAR77750 0.010</li> <li>‣ TAR77751 0.020</li> <li>‣ TAR77752 0.030</li> </ul> <p><b>Use 1</b></p> <p><b>Thrust Washer</b></p> <ul style="list-style-type: none"> <li>‣ TAR77747 <i>Std.</i></li> <li>‣ TAR77753 0.007</li> </ul> |  <p><b>Con Rod Bearing</b></p> <ul style="list-style-type: none"> <li>‣ TAR73277 <i>Std.</i></li> <li>‣ TAR73279 0.010</li> <li>‣ TAR73280 0.020</li> <li>‣ TAR73281 0.030</li> </ul> <p><b>Use 6</b></p> |
| <p>Please see page <b>389</b> for a complete list of equipment models.</p>   |  <p><b>1) Front Seal</b><br/>‣ TAR49025</p> <p><b>2) Rear Seal</b><br/>‣ TRE520036</p> <p><b>3) Crankshaft</b><br/>‣ TRG23551<br/>‣ TRE53422</p> <p><b>4) Crankshaft, Gear</b><br/>‣ TR104587</p> <p><b>5) Ring Gear</b><br/>‣ TR28811 <sup>129T</sup></p> <p><b>6) Rear Gear</b><br/>‣ TR63326</p> |  <p><b>1) O/H Gasket Set</b><br/>‣ TRE35647</p> <p><b>2) Head Gasket Set</b><br/>‣ TRE29859</p> <p><b>3) Head Gasket</b><br/>‣ TRE47336</p> <p><b>4) Oil Pan Gasket</b><br/>‣ TR71918<br/>‣ TR520844</p> <p><b>5) Front Cover Gasket</b><br/>‣ TR104623<br/>‣ TR99464</p> <p><b>6) Oil Cooler Gasket</b><br/>‣ TR128557<br/>‣ TR128558</p> |  <p><b>1) Bush, Con Rod</b><br/>‣ TR74008 x6</p> <p><b>2) Bolt, Con Rod</b><br/>‣ TR66452 x12</p> <p><b>3) Bushing, Cam</b><br/>‣ TR87561 x4</p> <p><b>4) Con Rod</b><br/>‣ TAR93341 x1</p>           |  <p><b>1) Tappet</b><br/>‣ TR110126 x12</p> <p><b>2) Plug, Camshaft</b><br/>‣ TR82007</p> <p><b>3) Tensioner, Belt</b><br/>‣ TRE57498<br/>‣ TRE68715</p> <p><b>4) Head Bolt Kit</b><br/>‣ TRG24026</p>   |  <p><b>Pump, Oil</b><br/>‣ TRE60622<br/>‣ TRE507074</p>  |
| <p><b>Valve, Intake</b></p> <ul style="list-style-type: none"> <li>‣ TR84618 <i>Std.</i></li> <li>‣ TR93308 0.003</li> <li>‣ TR93312 0.015</li> </ul>  | <p><b>Valve, Exhaust</b></p> <ul style="list-style-type: none"> <li>‣ TR84619 <i>Std.</i></li> <li>‣ TR93311 0.003</li> <li>‣ TR93313 0.015</li> </ul>   | <p><b>1) Insert, Valve In</b><br/>‣ TR84977 <i>Std.</i></p> <p><b>2) Insert, Valve Ex</b><br/>‣ TR84976 <i>Std.</i></p>   | <p><b>1) Cap, Valve</b><br/>‣ TT20129</p> <p><b>2) Lock, Valve</b><br/>‣ TT20077</p> <p><b>3) Shield, Valve</b><br/>‣ TR102882</p>   | <p><b>1) Spring, Valve</b><br/>‣ TR91822</p> <p><b>2) Rotator, Valve</b><br/>‣ TRE11410</p>   |   |
|  <p><b>1) Thermostat</b><br/>‣ TAR48675 180° F</p> <p><b>2) Oil Pressure Sensor</b><br/>‣ TRE167207</p> <p><b>3) Water Temp Sensor</b><br/>‣ TRE52722</p> <p><b>4) Crankshaft Sensor</b><br/>‣ TRE519144</p>  |  |  <p><b>Water Pump Repair Kit</b><br/>‣ See Chart 180° F</p>  |  <p><b>Water Pump</b></p> <ul style="list-style-type: none"> <li>‣ TRE55985 (m) R71224, (m) R83561</li> <li>‣ TRE55986 (m) R71224, (m) R83561</li> <li>‣ TRE68230 (High flow)</li> </ul>          |   |   |

(1): C/S (m) RE53199, with straight front gear TR104587. Helical gear should be discarded. TRG23551 will require front key TR116311 for the front damper.

(3): Check application for proper usage.

(5): ) For engines with ESN 500,000 and above. Use only with blocks marked R122738 & above.

(7): Short snout (3in) C/S (m) RE53203, R63451, R104855. Require front key TR116311 for the front damper.

(2): For engines with ESN 500 000 and above, and housing is marked (m) R124746 or R504071.

(4): ) For engines with ESN 500,000 and above. Camshaft marked R120872.

(6): The TR520844 is the metal/rubber oil pan gasket, that is used on the applications where the oil pan is part of the frame. It is not included in the full gasket or the overhaul kits.

**Engine Series:**  
500

**Engine Model:**  
6.531D

**Engine Data:**  
(Do Not Use this Kit for  
Early Engines with Block  
Casting No: R35130.)

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 4.75 in / 121 mm  
Pin Ø: 1.75 in / 44.4 mm

**Block (M):**  
R40270, R42370,  
R45300, R47510

**Con Rod (M):**  
R35048, R58881,  
R40238, R66927,  
R53286

**Farm Tractors**

5020

6030

**Backhoe Loaders**

700

700A

**Scrapers**

760

760A



- 1) **Engine O/H Kit**  
• TOK6549
- 2) **Engine I/F Kit**  
• TIK6549



- Piston-Liner Kit**  
• TPLK549
- Consists of:**
  - a) TRE16548
  - b) TAR41295
  - c) TR35053
  - d) TR42366
  - e) TAR55951
  - f) TD2824R



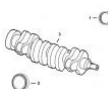
- Main Bearing**
  - TAR101266 *Std.*
  - TAR104568 *0.010*
  - TAR104569 *0.020*
  - TAR104570 *0.030*
- Use 6**



- Thrust Bearing**
  - TAR101267 *Std.*
  - TAR104564 *0.010*
  - TAR104565 *0.020*
  - TAR104566 *0.030*
- Use 1**
- Thrust Washer**  
• TAR89622 *Std.*



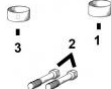
- Con Rod Bearing**
  - TAR53020 *Std.*
  - TAR57208 *0.010*
  - TAR57209 *0.020*
  - TAR57210 *0.030*
- Use 6**



- 1) **Front Seal**  
• TAR49025
- 2) **Rear Seal**  
• TRE13310
- 3) **Crankshaft**  
• TAR92533



- 1) **O/H Gasket Set**  
• TAR53614
- 2) **Head Gasket Set**  
• TAR53613
- 3) **Head Gasket**  
• TR78513
- 4) **Oil Pan Gasket**  
• TR71919



- 1) **Bush, Con Rod**  
• TR36328 *x6*
- 2) **Bolt, Con Rod**  
• TR66453 *x12*
- 3) **Bushing, Cam**  
• TR46903 *x4*



- Thermostat**  
• TR36846 *180° F*



- 1) **Injector, Pencil**  
• TAR50782
- 2) **Seal**  
• TR60746  
• TR48000

- Valve, Intake**  
• TR42182

- Valve, Exhaust**  
• TR45823

- 1) **Insert, Valve In**  
• TR41868
- 2) **Insert, Valve Ex**  
• TR41869

- 1) **Guide, Valve**  
• TR53192
- 2) **Lock, Valve**  
• TR35431
- 3) **Cap, Valve**  
• TR40366

**Engine Series:**  
500

**Engine Model:**  
6.531T

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 4.75 in / 121 mm  
Pin Ø: 1.875 in / 47.6 mm

**Block (M):**  
R48260, R72129,  
R80401

**Con Rod (M):**  
R48315, R53287,  
R58883, R66926

**Compactors**  
646B

**Motor Graders**  
770                      770A  
772A

**Wheel Loaders**  
644B



- 1) **Engine O/H Kit**  
• TOK6512
- 2) **Engine I/F Kit**  
• TIK6512



- Piston-Liner Kit**  
• TPLK512
- Consists of:**
  - a) TAR67512
  - b) TAR53226
  - c) TR49418
  - d) TR48350
  - e) TR49423
  - f) TE1343FN



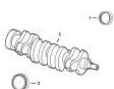
- Main Bearing**
  - TAR101266 *Std.*
  - TAR104568 *0.010*
  - TAR104569 *0.020*
  - TAR104570 *0.030*
- Use 6**



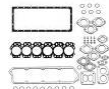
- Thrust Bearing**
  - TAR101267 *Std.*
  - TAR104564 *0.010*
  - TAR104565 *0.020*
  - TAR104566 *0.030*
- Use 1**
- Thrust Washer**  
• TAR89622 *Std.*



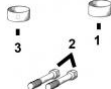
- Con Rod Bearing**
  - TAR53020 *Std.*
  - TAR57208 *0.010*
  - TAR57209 *0.020*
  - TAR57210 *0.030*
- Use 6**



- 1) **Front Seal**  
• TAR49025
- 2) **Rear Seal**  
• TRE13310
- 3) **Crankshaft**  
• TAR92533



- 1) **O/H Gasket Set**  
• TRE17050
- 2) **Head Gasket Set**  
• TAR67510
- 3) **Head Gasket**  
• TR78513
- 4) **Oil Pan Gasket**  
• TR71919
- 5) **Gasket, Turbo Mount**  
• TR89879



- 1) **Bush, Con Rod**  
• TR76783 *x6*
- 2) **Bolt, Con Rod**  
• TR66453 *x12*
- 3) **Bushing, Cam**  
• TR46903 *x4*



- Oil, Pump**  
• TRE60622



- 1) **Injector, Pencil**  
• TAR50782
- 2) **Seal**  
• TR60746  
• TR48000
- 3) **Thermostat**  
• TAR48675 *180° F*

**Valve, Intake**  
• TR90602

**Valve, Exhaust**  
• TR90601

- 1) **Insert, Valve**  
• TR41868
- 2) **Insert, Valve Ex**  
• TR41869

- 1) **Guide, Valve**  
• TR53192
- 2) **Lock, Valve**  
• TR35431
- 3) **Cap, Valve**  
• TR40366

- 1) **Spring Valve Outer**  
• TR49571
- 2) **Spring Valve Inner**  
• TR49569
- 3) **Rotator, Valve**  
• TR81086

(1): Crank Driven Pump.



**Engine Series:**  
500

**Engine Model:**  
6.531A

**Engine Info:**  
6 Cyl






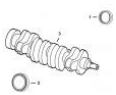
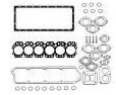
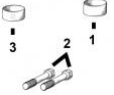


**Engine Dimensions:**  
Bore: 4.75 in / 121 mm  
Pin Ø: 1.875 in / 47.6 mm

**Block (M):**  
R48260, R72129,  
R80401

**Con Rod (M):**  
R48315, R53287,  
R58883, R66926

**Farm Tractors**  
6030

7520

|  |   |   |  |  |
|--|---|---|--|--|
|  <p><b>1) Engine O/H Kit</b><br/>• TOK6225</p> <p><b>2) Engine I/F Kit</b><br/>• TIK6225</p>                                      |  <p><b>Piston-Liner Kit</b><br/>• TPLK225</p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>• a) TAR53227</li> <li>• b) TAR53226</li> <li>• c) TR49418</li> <li>• d) TR48350</li> <li>• e) TR49423</li> <li>• f) TE1343FN</li> </ul> |  <p><b>Main Bearing</b><br/>• TAR101266 <i>Std.</i><br/>• TAR104568 <i>0.010</i><br/>• TAR104569 <i>0.020</i><br/>• TAR104570 <i>0.030</i></p> <p><b>Use 6</b></p>     |  <p><b>Thrust Bearing</b><br/>• TAR101267 <i>Std.</i><br/>• TAR104564 <i>0.010</i><br/>• TAR104565 <i>0.020</i><br/>• TAR104566 <i>0.030</i></p> <p><b>Use 1</b><br/><b>Thrust Washer</b><br/>• TAR89622 <i>Std.</i></p> |  <p><b>Con Rod Bearing</b><br/>• TAR53020 <i>Std.</i><br/>• TAR57208 <i>0.010</i><br/>• TAR57209 <i>0.020</i><br/>• TAR57210 <i>0.030</i></p> <p><b>Use 6</b></p> |
|  <p><b>1) Front Seal</b><br/>• TAR49025</p> <p><b>2) Rear Seal</b><br/>• TRE13310</p> <p><b>3) Crankshaft</b><br/>• TAR92533</p> |  <p><b>1) O/H Gasket Set</b><br/>• TRE17046</p> <p><b>2) Head Gasket Set</b><br/>• TAR56154</p> <p><b>3) Head Gasket</b><br/>• TR78513</p> <p><b>4) Oil Pan Gasket</b><br/>• TR71919</p> <p><b>5) Intake Manifold Gsk</b><br/>• TR53081</p>             |  <p><b>1) Bush, Con Rod</b><br/>• TR76783 <i>x6</i></p> <p><b>2) Bolt, Con Rod</b><br/>• TR66453 <i>x12</i></p> <p><b>3) Bushing, Cam</b><br/>• TR46903 <i>x4</i></p> |  <p><b>Oil, Pump</b><br/>• TRE60622</p>  |  <p><b>Thermostat</b><br/>• TAR48675 <i>180° F</i></p>  |
| <p><b>Valve, Intake</b><br/>• TR90602 <i>Std.</i></p>  | <p><b>Valve, Exhaust</b><br/>• TR90601 <i>Std.</i></p>  | <p><b>1) Guide, Valve</b><br/>• TR53192</p> <p><b>2) Lock, Valve</b><br/>• TR35431</p> <p><b>3) Cap, Valve</b><br/>• TR40366</p>  | <p><b>1) Spring, Valve Outer</b><br/>• TR49571</p> <p><b>2) Spring, Valve Inner</b><br/>• TR49569</p> <p><b>3) Rotator, Valve</b><br/>• TR81086</p>  |  |

(1): Crank Driven Pump.

**Engine Series:**

500

**Engine Model:**

6.619A/T

**Engine Desc:**

Early

**Engine Data:**

To ESN 033814

**Engine Info:**

6 Cyl

**Engine Dimensions:**

Bore: 5.125 in / 130 mm Pin Ø: 2.00 in / 50.8 mm

**Block (M):**






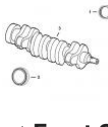

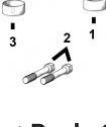


R57424, R65628

**Con Rod (M):**

R66925, R57484

**Farm Tractors**






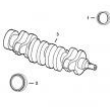

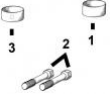


8630

|  |   |   |  |  |
|--|---|---|--|--|
|  <p><b>1) Engine O/H Kit</b><br/>                     , TOK84089</p> <p><b>2) Engine I/F Kit</b><br/>                     , TIK84089</p>  |  <p><b>Piston-Liner Kit</b><br/>                     , TAR84089</p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>, a) TAR69038</li> <li>, b) TAR82355</li> <li>, c) TR64451</li> <li>, d) TR65629</li> <li>, e) TAR72351</li> <li>, f) TN51168</li> </ul> |  <p><b>Main Bearing</b><br/>                     , TAR101268 <i>Std.</i><br/>                     , TAR104122 <i>0.010</i><br/>                     , TAR104123 <i>0.020</i><br/>                     , TAR104124 <i>0.030</i></p> <p><b>Use 6</b></p> |  <p><b>Thrust Bearing</b><br/>                     , TAR101269 <i>Std.</i><br/>                     , TAR104126 <i>0.010</i><br/>                     , TAR104127 <i>0.020</i><br/>                     , TAR104128 <i>0.030</i></p> <p><b>Use 1</b><br/> <b>Thrust Washer</b><br/>                     , TAR89622 <i>Std.</i></p> |  <p><b>Con Rod Bearing</b><br/>                     , TAR101271 <i>Std.</i><br/>                     , TAR104130 <i>0.010</i><br/>                     , TAR104131 <i>0.020</i><br/>                     , TAR104132 <i>0.030</i></p> <p><b>Use 6</b></p> |
|  <p><b>1) Front Seal</b><br/>                     , TAR49025</p> <p><b>2) Rear Seal</b><br/>                     , TRE13310</p> <p><b>3) Crankshaft</b><br/>                     , TAR92533</p> |  <p><b>1) O/H Gasket Set</b><br/>                     , TRE37416</p> <p><b>2) Head Gasket Set</b><br/>                     , TRE37417</p> <p><b>3) Head Gasket</b><br/>                     , TRE34009</p> <p><b>4) Oil Pan Gasket</b><br/>                     , TR71919</p>  |  <p><b>1) Bush, Con Rod</b><br/>                     , TR60197 <i>x6</i></p> <p><b>2) Bolt, Con Rod</b><br/>                     , TR66453 <i>x12</i></p> <p><b>3) Bushing, Cam</b><br/>                     , TR46903 <i>x4</i></p>                   |  <p><b>Oil, Pump</b><br/>                     , TRE60622</p> <p><b>1</b></p>   |  <p><b>Thermostat</b><br/>                     , TAR48675 <i>180° F</i></p>   |
| <p><b>Valve, Intake</b><br/>                     , TR75690</p>   | <p><b>Valve, Exhaust</b><br/>                     , TR63982</p>   | <p><b>1) Insert, Valve</b><br/>                     , TR59894 <i>Std.</i></p> <p><b>2) Insert, Valve Ex</b><br/>                     , TR60537 <i>Std.</i></p>  | <p><b>1) Guide, Valve</b><br/>                     , TR53192</p> <p><b>2) Lock, Valve</b><br/>                     , TR35431</p> <p><b>3) Cap, Valve</b><br/>                     , TR40366</p>  | <p><b>1) Spring, Valve Outer</b><br/>                     , TR49571</p> <p><b>2) Spring, Valve Inner</b><br/>                     , TR49569</p> <p><b>3) Rotator, Valve</b><br/>                     , TR81086</p>   |

(1): Crank Driven Pump.

|   |                                  |                            |   |                               |
|---|----------------------------------|----------------------------|---|-------------------------------|
| <b>Engine Series:</b><br>500  | <b>Engine Model:</b><br>6.619A/T | <b>Engine Desc:</b><br>Mid | <b>Engine Data:</b><br>033815 – 049059                  | <b>Engine Info:</b><br>6 Cyl  |
| <b>Engine Dimensions:</b><br>Bore: 5.125 in / 130 mm Pin Ø: 2.00 in / 50.8 mm |                                  |                            | <b>Block (M):</b><br>R63199, R639121,<br>R72130, R74123 | <b>Con Rod (M):</b><br>R63959 |

|                       |     |                   |      |                 |      |                      |      |
|-----------------------|-----|-------------------|------|-----------------|------|----------------------|------|
| <b>Crawler Dozers</b> |     | <b>Excavators</b> |      | <b>Scrapers</b> |      | <b>Farm Tractors</b> |      |
| 850                   | 855 | 890               | 890A | 762<br>862      | 860B | 8630<br>8650         | 8640 |

|   |  |   |   |  |
|---|--|---|---|--|
|  <p><b>1) Engine O/H Kit</b><br/>         , TOK20291<br/> <b>2) Engine I/F Kit</b><br/>         , TIK20291</p>  |  <p><b>Piston-Liner Kit</b><br/>         , TRE20291<br/> <b>Consists of:</b><br/>         , a) TRE20275<br/>         , b) TAR82355<br/>         , c) TR64451<br/>         , d) TR65629<br/>         , e) TAR72351<br/>         , f) TN51168</p> |  <p><b>Main Bearing</b><br/>         , TAR101268 Std.<br/>         , TAR104122 0.010<br/>         , TAR104123 0.020<br/>         , TAR104124 0.030<br/> <b>Use 6</b></p> |  <p><b>Thrust Bearing</b><br/>         , TAR101269 Std.<br/>         , TAR104126 0.010<br/>         , TAR104127 0.020<br/>         , TAR104128 0.030<br/> <b>Use 1</b><br/> <b>Thrust Washer</b><br/>         , TAR89622 Std.</p> |  <p><b>Con Rod Bearing</b><br/>         , TAR101271 Std.<br/>         , TAR104130 0.010<br/>         , TAR104131 0.020<br/>         , TAR104132 0.030<br/> <b>Use 6</b></p> |
|  <p><b>1) Front Seal</b><br/>         , TAR49025<br/> <b>2) Rear Seal</b><br/>         , TRE13310<br/> <b>3) Crankshaft</b><br/>         , TAR92533</p> |  <p><b>1) O/H Gasket Set</b><br/>         , TRE37416<br/> <b>2) Head Gasket Set</b><br/>         , TRE37417<br/> <b>3) Head Gasket</b><br/>         , TRE34009<br/> <b>4) Oil Pan Gasket</b><br/>         , TR71919</p>                         |  <p><b>1) Bush, Con Rod</b><br/>         , TR69045 x6<br/> <b>2) Bolt, Con Rod</b><br/>         , TR66453 x12<br/> <b>3) Bushing, Cam</b><br/>         , TR46903 x4</p>  |  <p><b>Oil, Pump</b><br/>         , TRE60622</p>  |  <p><b>1) Thermostat</b><br/>         , TAR48675 180° F<br/> <b>2) Oil Pressure Sensor</b><br/>         , TRE167207</p>   |
| <p><b>Valve, Intake</b><br/>         , TR75690 Std.</p>   | <p><b>Valve, Exhaust</b><br/>         , TR63982 Std.</p>   | <p><b>1) Insert, Valve</b><br/>         , TR59894 Std.<br/> <b>2) Insert, Valve Ex</b><br/>         , TR60537 Std.</p>  | <p><b>1) Guide, Valve</b><br/>         , TR53192<br/> <b>2) Lock, Valve</b><br/>         , TR35431<br/> <b>3) Cap, Valve</b><br/>         , TR40366</p>   | <p><b>1) Spring, Valve Outer</b><br/>         , TR49571<br/> <b>2) Spring, Valve Inner</b><br/>         , TR49569<br/> <b>3) Rotator, Valve</b><br/>         , TR81086</p>   |

(1): Crank Driven Pump.

(2): Check for proper application.

**Engine Series:**

500

**Engine Model:**

6.619A/T

**Engine Desc:**

Late

**Engine Data:**

From ESN 049060

**Engine Info:**

6 Cyl

**Engine Dimensions:**

Bore: 5.125 in / 130 mm Pin Ø: 2.00 in / 50.8 mm

**Block (M):**

R75934, R87552,  
R88217, R98554,  
R105739

**Con Rod (M):**

R63959

**Crawler Dozers**

850 855

**Excavators**

890 890A  
992D 992E

**Scrapers**

762 860B  
862

**Wheel Loaders**

744E

**Farm Tractors**

8630 8640  
8650



**1) Engine O/H Kit**

• TOK40476

**2) Engine I/F Kit**

• TIK40476



**Piston-Liner Kit**

• TRE40476

**Consists of:**

- a) TRE20275
- b) TAR82355
- c) TR64451
- d) TR77640
- e) TAR72351
- f) TN51168



**Main Bearing**

- TAR101268 Std.
- TAR104122 0.010
- TAR104123 0.020
- TAR104124 0.030

**Use 6**



**Thrust Bearing**

- TAR101269 Std.
- TAR104126 0.010
- TAR104127 0.020
- TAR104128 0.030

**Use 1**

**Thrust Washer**

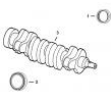
• TAR89622 Std.



**Con Rod Bearing**

- TAR101271 Std.
- TAR104130 0.010
- TAR104131 0.020
- TAR104132 0.030

**Use 6**



**1) Front Seal**

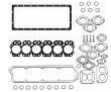
• TAR49025

**2) Rear Seal**

• TRE13310

**3) Crankshaft**

• TAR92533



**1) O/H Gasket Set**

• TRE37416

**2) Head Gasket Set**

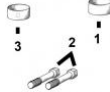
• TRE37417

**3) Head Gasket**

• TRE34009

**4) Oil Pan Gasket**

• TR71919



**1) Bush, Con Rod**

• TR69045 x6

**2) Bolt, Con Rod**

• TR66453 x12

**3) Bushing, Cam**

• TR46903 x4



**Oil, Pump**

• TRE60622



**1) Thermostat**

• TAR48675 180° F

**2) Oil Pressure Sensor**

• TRE167207

**Valve, Intake**

• TR75690 Std.

**Valve, Exhaust**

• TR63982 Std.

**1) Insert, Valve**

• TR59894 Std.

**2) Insert, Valve Ex**

• TR60537 Std.

**1) Guide, Valve**

• TR53192

**2) Lock, Valve**

• TR35431

**3) Cap, Valve**

• TR40366

**1) Spring, Valve Outer**

• TR49571

**2) Spring, Valve Inner**

• TR49569

**3) Rotator, Valve**

• TR81086

(1): Crank Driven Pump.

**Engine Series:**  
500

**Engine Model:**  
6.101A/T

**Engine Data:**  
To ESN 499,999






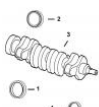

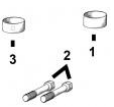


**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 5.125 in / 130 mm  
Pin Ø: 2.00 in / 50.8 mm

**Block (M):**  
R75934, R87552,  
R88217, R98554,  
R105739

**Combines**  
8760

**Farm Tractors**  
8870

|   |  |   |  |  |
|---|--|---|--|--|
|  <p><b>1) Engine O/H Kit</b><br/>• TOK40476L</p> <p><b>2) Engine I/F Kit</b><br/>• TIK40476L</p>   |  <p><b>Piston-Liner Kit</b><br/>• TRE40476</p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>• a) TRE20275</li> <li>• b) TAR82355</li> <li>• c) TR64451</li> <li>• d) TR77640</li> <li>• e) TAR72351</li> <li>• f) TN51168</li> </ul> |  <p><b>Main Bearing</b><br/>• TAR101268 <i>Std.</i><br/>• TAR104122 <i>0.010</i><br/>• TAR104123 <i>0.020</i><br/>• TAR104124 <i>0.030</i></p> <p><b>Use 6</b></p>   |  <p><b>Thrust Bearing</b><br/>• TAR101269 <i>Std.</i><br/>• TAR104126 <i>0.010</i><br/>• TAR104127 <i>0.020</i><br/>• TAR104128 <i>0.030</i></p> <p><b>Use 1</b><br/><b>Thrust Washer</b><br/>• TAR89622 <i>Std.</i></p> |  <p><b>Con Rod Bearing</b><br/>• TAR101271 <i>Std.</i><br/>• TAR104130 <i>0.010</i><br/>• TAR104131 <i>0.020</i><br/>• TAR104132 <i>0.030</i></p> <p><b>Use 6</b></p> |
|  <p><b>1) Front Seal</b><br/>• TAR49025</p> <p><b>2) Rear Seal</b><br/>• TRE13310</p> <p><b>3) Crankshaft</b><br/>• TAR92533</p> <p><b>4) Rear Gear</b><br/>• TR63326</p> |  <p><b>1) O/H Gasket Set</b><br/>• TRE37416</p> <p><b>2) Head Gasket Set</b><br/>• TRE37417</p> <p><b>3) Head Gasket</b><br/>• TRE34009</p> <p><b>4) Oil Pan Gasket</b><br/>• TR71919</p>  |  <p><b>1) Bush, Con Rod</b><br/>• TR69045 <i>x6</i></p> <p><b>2) Bolt, Con Rod</b><br/>• TR66453 <i>x12</i></p> <p><b>3) Bushing, Cam</b><br/>• TR46903 <i>x4</i> <span style="background-color: #008000; color: white; padding: 2px;">2</span></p> |  <p><b>Oil, Pump</b><br/>• TRE60622 <span style="background-color: #008000; color: white; padding: 2px;">1</span></p>  |  <p><b>Thermostat</b><br/>• TAR48675 <i>180° F</i></p>  |
| <p><b>Valve, Intake</b><br/>• TR101304 <i>Std.</i></p>  | <p><b>Valve, Exhaust</b><br/>• TR101305 <i>Std.</i></p>  | <p><b>1) Lock, Valve</b><br/>• TT20077</p> <p><b>2) Shield, Valve</b><br/>• TR102882 <i>x6</i></p>  | <p><b>1) Spring, Valve</b><br/>• TR91822</p> <p><b>2) Rotator, Valve</b><br/>• TRE11410</p> <p><b>3) Cap, Valve</b><br/>• TT20129</p>  |  |

(1): Crank Driven Pump.

(2): For Blocks after R105739 use TR87561 bushing, order separately.

**Engine Model:**  
3TNE84

**Engine Data:**  
JOHN DEERE ENGINE  
MODEL:  
3015

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 3.30 in / 84.00 mm Stroke: 3.54 in / 90.00 mm

**Utility Tractors**

790 4300  
4310

**Mowers**

3225B 3235  
3235A 3235B

**Skid Steers**

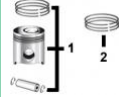
4475

**Engine Model**

3015



**1) Engine O/H Kit**  
• TOK3015D  
• TOK3015D/10



**1) Piston & Ring Kit**  
• TAM878606 Std.  
• TAM878598 0.010  
**Use 3**  
**2) Ring Set**  
• TAM878555 Std.  
• TAM878599 0.010  
**See note (1) below**



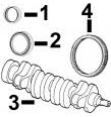
**Main Bearing**  
• TMIA880554 Std.  
• TMIA880550 0.010  
**Use 4**



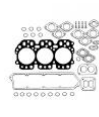
**Con Rod Bearing**  
• TMIA880563 Std.  
• TMIA880568 0.010  
**Use 3**



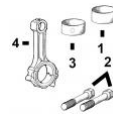
**Thrust Washers**  
• TMIA880555  
**Set of 4**



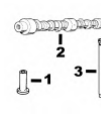
**1) Front Seal**  
• TM800988  
**2) Rear Seal**  
• TM805278  
**3) Crankshaft**  
• TAM880894  
**4) Flywheel Ring Gear**  
• TCH10466 127T



**1) O/H Gasket Set**  
• TMGS3015  
**2) Head Gasket**  
• TM806440  
**3) Liquid Gasket**  
• TM64850  
**4) Rocker Cover Gasket**  
• TM801741



**1) Bush, Con Rod**  
• TM801256 x3  
**2) Bolt, Con Rod**  
• TCH15483 x6  
**3) Bushing, Cam**  
• TMIU800573 x1  
**4) Connecting Rod**  
• TAM875391



**1) Tappet**  
• TM801046 x6  
**2) Camshaft**  
• TAM876430  
**3) Push Rod**  
• TM801238 x6

**Valve, Intake**  
• TM801220

**Valve, Exhaust**  
• TMIU800494

**1) Guide, Valve In**  
• TM801227  
**2) Guide, Valve Ex**  
• TM801228 x3

**1) Lock, Valve**  
• TAM878862  
**2) Stem, Seal Int**  
• TCH10450 x3  
**3) Stem, Seal Exh**  
• TT110650 x3

**1) Spring, Valve**  
• TM801222  
**2) Cap, Valve**  
• TM801224



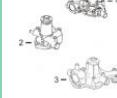
**1) Thermostat**  
• TM811034  
**2) Injector**  
• TAT110293



**Oil, Pump**  
• TAM878778



**Lift Pump**  
• TAM882462



**Water Pump**  
• 1) TMIA880621  
• 2) TAM880905  
• 3) TAM881943  
• 4) TMIA880356



**Repair Sleeve**  
• 84RS

(1): Check your application for proper usage.

(3): Gear not included. Suitable for 3TNE84/88 and 3TNV84/88.

(2): Like TMIA880621, with Inject Pump cooling connections.

(4): Gear not included. To be used in engines without crank driven balancer unit

**Engine Model:**  
4TNE84

**Engine Data:**  
JOHN DEERE ENGINE  
MODEL:  
4020D

**Engine Dimensions:**  
Bore: 3.30 in / 84.00 mm Stroke: 3.54 in / 90.00 mm

**Utility Tractors**

990      4500  
4510      4600  
4610

**Skid Steers**

6675

**Backhoe Loaders**

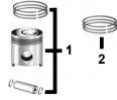
110

**Engine Model**

4020



**1) Engine O/H Kit**  
 , TOK4020D  
 , TOK4020D/10



**1) Piston & Ring Kit**  
 , TAM878606 Std.  
 , TAM878598 0.010  
**Use 4**  
**2) Ring Set**  
 , TAM878555 Std.  
 , TAM878599 0.010  
**See note (1) below**



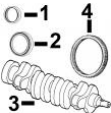
**Main Bearing**  
 , TMIA880554 Std.  
 , TMIA880550 0.010  
**Use 5**



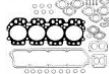
**Con Rod Bearing**  
 , TMIA880563 Std.  
 , TMIA880568 0.010  
**Use 4**



**Thrust Washers**  
 , TMIA880555  
**Set of 4**



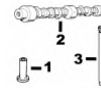
**1) Front Seal**  
 , TM800988  
**2) Rear Seal**  
 , TM805278  
**3) Crankshaft**  
 , TAM878619  
**4) Flywheel Ring Gear**  
 , TCH10466 127T



**1) O/H Gasket Set**  
 , TMGS4020  
**2) Head Gasket**  
 , TM806505  
**3) Liquid Gasket**  
 , TM64850  
**4) Rocker Cover Gasket**  
 , TM801230



**1) Bush, Con Rod**  
 , TM801256 x4  
**2) Bolt, Con Rod**  
 , TCH15483 x8  
**3) Bushing, Cam**  
 , TMIU800573 x1  
**4) Connecting Rod**  
 , TAM875391



**1) Tappet**  
 , TM801046 x8  
**2) Camshaft**  
 , TAM875386  
**3) Push Rod**  
 , TM801238 x8

**Valve, Intake**  
 , TM801220 x4

**Valve, Exhaust**  
 , TMIU800494 x4

**1) Guide, Valve In**  
 , TM801227 x4  
**2) Guide, Valve Ex**  
 , TM801228 x4

**1) Lock, Valve**  
 , TAM878862 x16  
**2) Stem, Seal Int**  
 , TCH10450 x4  
**3) Stem, Seal Exh**  
 , TT110650 x4

**1) Spring, Valve**  
 , TM801222 x8  
**2) Cap, Valve**  
 , TM801224



**1) Thermostat**  
 , TM811034  
**2) Injector**  
 , TAT110293  
**3) Water Temp Sensor**  
 , TRE51774



**Oil, Pump**  
 , TAM878778



**Lift Pump**  
 , TAM882462



**Water Pump**  
 , 1) TMIA880621  
 , 2) TAM880905  
 , 3) TAM881943  
 , 4) TMIA880356



**Repair Sleeve**  
 , 84RS

(1): Check your application for proper usage.

(2): Like TMIA880621, with Inject Pump cooling connections.

(3): Gear not included. Suitable for 4TNE84/88 and 4TNV84/88.  
 Do not use in applications that require a crankshaft driven balancer unit.

**Engine Model:**  
4TNE84T

**Engine Data:**  
JOHN DEERE ENGINE  
MODEL:  
4020T

**Engine Dimensions:**  
Bore: 3.30 in / 84.00 mm Stroke: 3.54 in / 90.00 mm

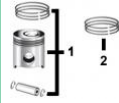
**Skid Steers**  
6675

**Mowers**  
1600

**Engine Model**  
4020T



**1) Engine O/H Kit**  
• TOK4020T  
• TOK4020T/10



**1) Piston & Ring Kit**  
• TAM878575 Std.  
• TAM878598 0.010  
**Use 4**  
**2) Ring Set**  
• TAM878555 Std.  
• TAM878599 0.010



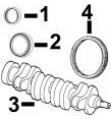
**Main Bearing**  
• TAM875371 Std.  
• TMIA880550 .010  
**Use 5**



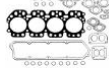
**Con Rod Bearing**  
• TMIA880563 Std.  
• TMIA880568 .010  
**Use 4**



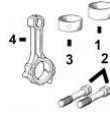
**Thrust Washers**  
• TMIA880555  
**Set of 4**



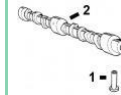
**1) Front Seal**  
• TM800988  
**2) Rear Seal**  
• TM805278  
**3) Crankshaft**  
• TAM878619  
**4) Flywheel Ring Gear**  
• TCH10466 127T



**1) O/H Gasket Set**  
• TMGS4020  
**2) Head Gasket**  
• TM806505  
**3) Liquid Gasket**  
• TM64850  
**4) Rocker Cover Gasket**  
• TM801230



**1) Bush, Con Rod**  
• TM801256 x4  
**2) Bolt, Con Rod**  
• TCH15483 x8  
**3) Bushing, Cam**  
• TMIU800573 x1



**1) Tappet**  
• TM801046 x8  
**2) Camshaft**  
• TAM875386

**Valve, Intake**  
• TM801220 x4

**Valve, Exhaust**  
• TMIU800494 x4

**1) Guide, Valve In**  
• TM801227 x4  
**2) Guide, Valve Ex**  
• TM801228 x4

**1) Lock, Valve**  
• TAM878862 x16  
**2) Stem, Seal Int**  
• TCH10450 x4  
**3) Stem, Seal Exh**  
• TT110650 x4

**1) Spring, Valve**  
• TM801222 x8  
**2) Cap, Valve**  
• TM801224



**1) Thermostat**  
• TM811034  
**2) Injector**  
• TAT110293



**Oil, Pump**  
• TAM878778



**Lift Pump**  
• TAM882462



**Water Pump**  
• 1) TMIA880621  
• 2) TAM880905  
• 3) TAM881943  
• 4) TMIA880356



**Repair Sleeve**  
• 84RS

(1): Check your application for proper usage.  
(3): Gear not included. Suitable for 4TNE84/88 and 4TNV84/88.  
Do not use in applications that require a crankshaft driven balancer unit.

(2): Like TMIA880621, with Inject Pump cooling connections.



**Engine Model:**  
3TNE88

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 3.46 in / 88.00 mm

**Mowers**

1565 F1565

**Utility Tractors**

4400 4410

**Skid Steers**

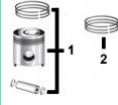
5575

**Farm Tractors**

JD1200



**1) Engine O/H Kit**  
 , TOK3TNE88  
 , TOK3TNE88/10



**1) Piston & Ring Kit**  
 , TAM879953 Std.  
 , TAM878641 0.010  
**Use 3**  
**2) Ring Set**  
 , TAM879901 Std.  
 , TAM878642 0.010



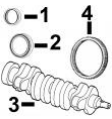
**Main Bearing**  
 , TMIA880554 Std.  
 , TMIA880550 0.010  
**Use 4**



**Con Rod Bearing**  
 , TMIA880563 Std.  
 , TMIA880568 0.010  
**Use 3**



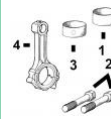
**Thrust Washers**  
 , TMIA880555  
**Set of 4**



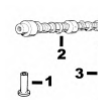
**1) Front Seal**  
 , TM800988  
**2) Rear Seal**  
 , TM805278  
**3) Crankshaft**  
 , TAM880894  
**4) Flywheel Ring Gear**  
 , TCH10466 127T



**1) O/H Gasket Set**  
**1) TMGS3TNE88**  
**2) Head Gasket**  
 , TM806811  
**3) Liquid Gasket**  
 , TM64850  
**4) Rocker Cover Gasket**  
 , TM801741



**1) Bush, Con Rod**  
 , TM801256 x3  
**2) Bolt, Con Rod**  
 , TCH15483 x6  
**3) Bushing, Cam**  
 , TMIU800573 x1  
**4) Connecting Rod**  
 , TAM875391



**1) Tappet**  
 , TM801046 x6  
**2) Camshaft**  
 , TAM876430  
**3) Push Rod**  
 , TM801238 x6

**Valve, Intake**  
 , TM801220 x3

**Valve, Exhaust**  
 , TMIU800494 x3

**1) Guide, Valve In**  
 , TM801227 x3  
**2) Guide, Valve Ex**  
 , TM801228 x3

**1) Stem, Seal Int**  
 , TCH10450 x3  
**2) Stem, Seal Exh**  
 , TT110650 x3

**1) Spring, Valve**  
 , TM801222 x6  
**2) Cap, Valve**  
 , TM801224



**1) Thermostat**  
 , TM811034  
**2) Injector**  
 , TAT110293



**Oil, Pump**  
 , TAM878778



**Lift Pump**  
 , TAM882462



**Water Pump**  
 , 1) TMIA880621  
 , 2) TAM880905  
 , 3) TAM881943  
 , 4) TMIA880356



**Repair Sleeve**  
 , 88RS

(1): Check your application for proper usage.

(2): Like TMIA880621, with Inject Pump cooling connections.

(3): Gear not included. Suitable for 3TNE84/88 and 3TNV84/88.

(4): Gear not included.

**Engine Model:**  
4TNE88

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.46 in / 88.00 mm

**Mowers**  
1600 1620

**Utility Tractors**  
4700 4710

**Skid Steers**  
7775

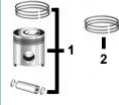
**Farm Tractors**  
JD1400

**Backhoe**  
110TLB

**Engine Model**  
4022



**1) Engine O/H Kit**  
 , TOK4TNE88  
 , TOK4TNE88/10



**1) Piston & Ring Kit**  
 , TAM879953 Std.  
 , TAM878641 0.010  
**Use 4**  
**2) Ring Set**  
 , TAM879901 Std.  
 , TAM878642 0.010



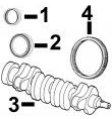
**Main Bearing**  
 , TMIA880554 Std.  
 , TMIA880550 0.010  
**Use 5**



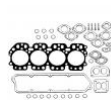
**Con Rod Bearing**  
 , TMIA880563 Std.  
 , TMIA880568 0.010  
**Use 4**



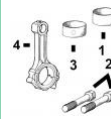
**Thrust Washers**  
 , TMIA880555  
**Set of 4**



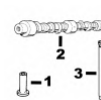
**1) Front Seal**  
 , TM800988  
**2) Rear Seal**  
 , TM805278  
**3) Crankshaft**  
 , TAM878619  
**4) Flywheel Ring Gear**  
 , TCH10466 127T



**1) O/H Gasket Set**  
**1) TMGS4TNE88**  
**2) Head Gasket**  
 , TM806518  
**3) Liquid Gasket**  
 , TM64850  
**4) Rocker Cover Gasket**  
 , TM801230



**1) Bush, Con Rod**  
 , TM801256 x4  
**2) Bolt, Con Rod**  
 , TCH15483 x8  
**3) Bushing, Cam**  
 , TMIU800573 x1  
**4) Connecting Rod**  
 , TAM875391



**1) Tappet**  
 , TM801046 x8  
**2) Camshaft**  
 , TAM875386  
**3) Push Rod**  
 , TM801238 x8

**Valve, Intake**  
 , TM801220 x4

**Valve, Exhaust**  
 , TMIU800494 x4

**1) Guide, Valve In**  
 , TM801227 x4  
**2) Guide, Valve Ex**  
 , TM801228 x4

**1) Stem, Seal Int**  
 , TCH10450 x4  
**2) Stem, Seal Exh**  
 , TT110650 x4

**1) Spring, Valve**  
 , TM801222 x8  
**2) Cap, Valve**  
 , TM801224



**1) Thermostat**  
 , TM811034  
**2) Injector**  
 , TAT110293



**Oil, Pump**  
 , TAM878778



**Lift Pump**  
 , TAM882462



**Water Pump**  
 , 1) TMIA880621  
 , 2) TAM880905  
 , 3) TAM881943  
 , 4) TMIA880356



**Repair Sleeve**  
 , 88RS

(1): Check your application for proper usage.

(2): Like TMIA880621, with Inject Pump cooling connections.


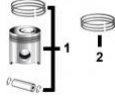



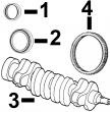




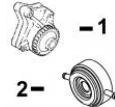



(3): Gear not included. Suitable for 4TNE84/88 and 4TNV84/88.  
 Do not use in applications that require a crankshaft driven balancer unit.

**Engine Model:**  
3TNV84

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 3.30 in / 84.00 mm

Please see page 390 for a complete list of equipment models.

|   |   |   |  |   |
|---|---|---|--|---|
|  <p><b>1) Engine O/H Kit</b><br/>                 , TOK3TNV84<br/>                 , TOK3TNV84/10</p>   |  <p><b>1) Piston &amp; Ring Kit</b><br/>                 , TAM881978 Std.<br/>                 , TAM881939 0.010<br/> <b>Use 3</b><br/> <b>2) Ring Set</b><br/>                 , TAM881938 Std.<br/>                 , TAM881940 0.010</p>                |  <p><b>Main Bearing</b><br/>                 , TMIA880554 Std.<br/>                 , TMIA880550 0.010<br/> <b>Use 4</b></p>   |  <p><b>Con Rod Bearing</b><br/>                 , TMIA880563 Std.<br/>                 , TMIA880568 0.010<br/> <b>Use 3</b></p>  |  <p><b>Thrust Washers</b><br/>                 , TMIA880555<br/> <b>Set of 4</b></p> |
|  <p><b>1) Front Seal</b><br/>                 , TM800988<br/> <b>2) Rear Seal</b><br/>                 , TM805278<br/> <b>3) Crankshaft</b><br/>                 , TAM880894<br/> <b>4) Flywheel Ring Gear</b><br/>                 , TCH10466 127T</p> |  <p><b>1) O/H Gasket Set</b><br/>                 , TMGS3015<br/> <b>2) Head Gasket</b><br/>                 , TM806440<br/> <b>3) Liquid Gasket</b><br/>                 , TM64850<br/> <b>4) Rocker Cover Gasket</b><br/>                 , TM811429</p> |  <p><b>1) Bush, Con Rod</b><br/>                 , TM801256 x3<br/> <b>2) Bolt, Con Rod</b><br/>                 , TCH15483 x6<br/> <b>3) Bushing, Cam</b><br/>                 , TMIU800573 x1<br/> <b>4) Connecting Rod</b><br/>                 , TAM875391</p> |  <p><b>1) Tappet</b><br/>                 , TM801046 x6<br/> <b>2) Camshaft</b><br/>                 , TAM876430<br/> <b>3) Push Rod</b><br/>                 , TM801238 x6</p> |   |
| <p><b>Valve, Intake</b><br/>                 , TMIU800446 x3</p>  | <p><b>Valve, Exhaust</b><br/>                 , TMIU800494 x3</p>   | <p><b>1) Guide, Valve In</b><br/>                 , TM801227 x3<br/> <b>2) Guide, Valve Ex</b><br/>                 , TM801228 x3</p>   | <p><b>1) Stem, Seal Int</b><br/>                 , TCH10450 x3<br/> <b>2) Stem, Seal Exh</b><br/>                 , TT110650 x3</p>  | <p><b>1) Spring, Valve</b><br/>                 , TM801222 x6<br/> <b>2) Cap, Valve</b><br/>                 , TM801224</p>   |
|  <p><b>1) Thermostat</b><br/>                 , TM811034<br/> <b>2) Injector</b><br/>                 , TAM881953</p>   |  <p><b>1) Oil Pump</b><br/>                 , TAM878778<br/>                 , TM811058SET<br/> <b>2) Oil Cooler</b><br/>                 , TMIA884109</p>   |  <p><b>Electric Fuel Pump</b><br/>                 , TAM876266<br/>                 , TAT318139</p>  |  <p><b>Water Pump</b><br/>                 , 1) TMIA880621<br/>                 , 2) TAM880905<br/>                 , 3) TAM881943<br/>                 , 4) TMIA880356</p>    |  <p><b>Repair Sleeve</b><br/>                 , 84RS</p>                           |

(1): Check your application for proper usage.

(2): Like TMIA880621, with Inject Pump cooling connections.


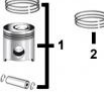



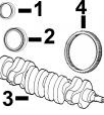
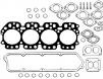
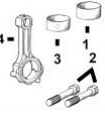
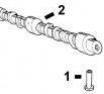





(3): Gear not included. Suitable for 3TNE84/88 and 3TNV84/88.

(4): Gear not included.

**Engine Model:**  
4TNV84

**Engine Dimensions:**  
Bore: 3.30 in / 84.00 mm

**Utility Tractors**  
990

|  |   |   |   |   |
|--|---|---|---|---|
|  <p><b>1) Engine O/H Kit</b><br/>                 , TOK4TNV84<br/>                 , TOK4TNV84/10</p>   |  <p><b>1) Piston &amp; Ring Kit</b><br/>                 , TAM881978 Std.<br/>                 , TAM881939 0.010<br/> <b>Use 4</b><br/> <b>2) Ring Set</b><br/>                 , TAM881938 Std.<br/>                 , TAM881940 0.010</p>                |  <p><b>Main Bearing</b><br/>                 , TMIA880554 Std.<br/>                 , TMIA880550 0.010<br/> <b>Use 5</b></p>   |  <p><b>Con Rod Bearing</b><br/>                 , TMIA880563 Std.<br/>                 , TMIA880568 0.010<br/> <b>Use 4</b></p>   |  <p><b>Thrust Washers</b><br/>                 , TMIA880555<br/> <b>Set of 4</b></p> |
|  <p><b>1) Front Seal</b><br/>                 , TM800988<br/> <b>2) Rear Seal</b><br/>                 , TM805278<br/> <b>3) Crankshaft</b><br/>                 , TAM878619<br/> <b>4) Flywheel Ring Gear</b><br/>                 , TCH10466 127T</p> |  <p><b>1) O/H Gasket Set</b><br/>                 , TMGS4020<br/> <b>2) Head Gasket</b><br/>                 , TM806505<br/> <b>3) Liquid Gasket</b><br/>                 , TM64850<br/> <b>4) Rocker Cover Gasket</b><br/>                 , TM811123</p> |  <p><b>1) Bush, Con Rod</b><br/>                 , TM801256 x4<br/> <b>2) Bolt, Con Rod</b><br/>                 , TCH15483 x8<br/> <b>3) Bushing, Cam</b><br/>                 , TMIU800573 x1<br/> <b>4) Connecting Rod</b><br/>                 , TAM875391</p> |  <p><b>1) Tappet</b><br/>                 , TM801046 x8<br/> <b>2) Camshaft</b><br/>                 , TAM875386</p>   |   |
| <p><b>Valve, Intake</b><br/>                 , TMIU800446 x4</p>   | <p><b>Valve, Exhaust</b><br/>                 , TMIU800494 x4</p>   | <p><b>1) Guide, Valve In</b><br/>                 , TM801227 x4<br/> <b>2) Guide, Valve Ex</b><br/>                 , TM801228 x4</p>   | <p><b>1) Stem, Seal Int</b><br/>                 , TCH10450 x4<br/> <b>2) Stem, Seal Exh</b><br/>                 , TT110650 x4</p>   | <p><b>1) Spring, Valve</b><br/>                 , TM801222 x8<br/> <b>2) Cap, Valve</b><br/>                 , TM801224</p>   |
|  <p><b>1) Thermostat</b><br/>                 , TM811034<br/> <b>2) Injector</b><br/>                 , TAM881953</p>   |  <p><b>1) Oil Pump</b><br/>                 , TAM878778<br/>                 , TM811058SET<br/> <b>2) Oil Cooler</b><br/>                 , TMIA884109</p>   |  <p><b>Electric Fuel Pump</b><br/>                 , TAM876266<br/>                 , TAT318139</p>  |  <p><b>Water Pump</b><br/>                 , 1) TMIA880621<br/>                 , 2) TAM880905<br/>                 , 3) TAM881943<br/>                 , 4) TMIA880356</p> |  <p><b>Repair Sleeve</b><br/>                 , 84RS</p>                           |

(1): Check your application for proper usage.

(2): Like TMIA880621, with Inject Pump cooling connections.

(3): Gear not included. Suitable for 4TNE84/88 and 4TNV84/88.  
 Do not use in applications that require a crankshaft driven balancer unit.

**Engine Model:**  
4TNV84T

**Engine Dimensions:**  
Bore: 3.30 in / 84.00 mm

**Mowers**

1600

**Utility Tractor**

4044R 4049M  
4049R 8700A  
8800A

**Hi Power Genset**

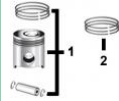
HRYW25T6 HRYW20T5  
HYW25M6 HYW25T6  
HYW25M5

**Skid Steer**

314G



**1) Engine O/H Kit**  
• TOK4TNV84T  
• TOK4TNV84T/10



**1) Piston & Ring Kit**  
• TMIA880354 Std.  
• TMIA880355 0.010  
**Use 4**  
**2) Ring Set**  
• TAM881938 Std.  
• TAM881940 0.010



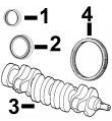
**Main Bearing**  
• TMIA880554 Std.  
• TMIA880550 0.010  
**Use 5**



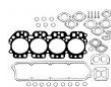
**Con Rod Bearing**  
• TMIA880563 Std.  
• TMIA880568 0.010  
**Use 4**



**Thrust Washers**  
• TMIA880555  
**Set of 4**



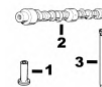
**1) Front Seal**  
• TM800988  
**2) Rear Seal**  
• TM805278  
**3) Crankshaft**  
• TAM878619  
**4) Flywheel Ring Gear**  
• TCH10466 127T



**1) O/H Gasket Set**  
• TMGS4TNV84T  
**2) Head Gasket**  
• TMIU800384  
**3) Liquid Gasket**  
• TM64850  
**4) Rocker Cover Gasket**  
• TMIU800399



**1) Bush, Con Rod**  
• TM801256 x4  
**2) Bolt, Con Rod**  
• TCH15483 x8  
**3) Bushing, Cam**  
• TMIU800573 x1  
**4) Connecting Rod**  
• TAM875391



**1) Tappet**  
• TM801046 x8  
**2) Camshaft**  
• TAM875386  
**3) Push Rod**  
• TM801238 x8

**Valve, Intake**

• TMIU800391 x8

**Valve, Exhaust**

• TMIU800392 x8

**Guide, Valve**

• TM811855 x16

**1) Stem, Seal Int**

• TM811850 x8

**2) Stem, Seal Exh**

• TM811851 x8

**1) Spring, Valve**

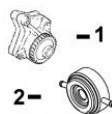
• TMIU800393 x16

**2) Cap, Valve**

• TM801224



**Thermostat**  
• TM811034



**1) Oil Pump**  
• TAM878778  
• TM811058SET  
**2) Oil Cooler**  
• TMIA884109



**Electric Fuel Pump**  
• TAM876266  
• TAT318139



**Water Pump**  
• 1) TMIA880621  
• 2) TAM880905  
• 3) TAM881943  
• 4) TMIA880356



**Repair Sleeve**  
• 84RS

(1): Check your application for proper usage.

(2): Like TMIA880621, with Inject Pump cooling connections.

(3): Gear not included. Suitable for 4TNE84/88 and 4TNV84/88.

Do not use in applications that require a crankshaft driven balancer unit.

**Engine Model:**  
3TNV88

**Engine Data:**  
JOHN DEERE ENGINE  
MODEL:  
3016

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 3.46 in / 88.00 mm

**Mowers**

1565 F1565

**Utility Tractors**

2720 3032E  
3320 3033R

**Compact Excavators**

27D 27D ZTS  
35D 35D EXC  
35G

**Hi Power Genset**

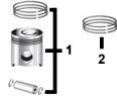
HYW13M5 HYW13T5  
HYW14M6 HYW14T6  
HYW14M6

**Engine Model**

3016



**1) Engine O/H Kit**  
• TOK3TNV88  
• TOK3TNV88/10



**1) Piston & Ring Kit**  
• TAM881814 Std.  
• TAM881811 0.010  
**Use 3**  
**2) Ring Set**  
• TAM881812 Std.  
• TAM881810 0.010



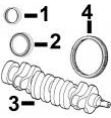
**Main Bearing**  
• TMIA880554 Std.  
• TMIA880550 0.010  
**Use 4**



**Con Rod Bearing**  
• TMIA880563 Std.  
• TMIA880568 0.010  
**Use 3**



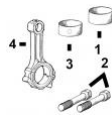
**Thrust Washers**  
• TMIA880555  
**Set of 4**



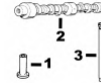
**1) Front Seal**  
• TM800988  
**2) Rear Seal**  
• TM805278  
**3) Crankshaft**  
• TAM880894  
**4) Flywheel Ring Gear**  
• TCH10466 127T



**1) O/H Gasket Set**  
• TMGS3TNE88  
**2) Head Gasket**  
• TM806811  
**3) Liquid Gasket**  
• TM64850  
**4) Rocker Cover Gasket**  
• TM811429



**1) Bush, Con Rod**  
• TM801256 x3  
**2) Bolt, Con Rod**  
• TCH15483 x6  
**3) Bushing, Cam**  
• TMIU800573 x1  
**4) Connecting Rod**  
• TAM875391



**1) Tappet**  
• TM801046 x6  
**2) Camshaft**  
• TAM876430  
**3) Push Rod**  
• TM801238 x6

**Valve, Intake**  
• TM811557 x3

**Valve, Exhaust**  
• TMIU800494 x3

**1) Guide, Valve In**  
• TM801227 x3  
**2) Guide, Valve Ex**  
• TM801228 x3

**1) Stem, Seal Int**  
• TCH10450 x3  
**2) Stem, Seal Exh**  
• TT110650 x3

**1) Spring, Valve**  
• TM801222 x6  
**2) Cap, Valve**  
• TM801224



**1) Thermostat**  
• TM811034  
**2) Injector**  
• TAM881953



**Oil Pump**  
• TAM878778  
• TM811058SET



**Electric Fuel Pump**  
• TAM876266



**Water Pump**  
• 1) TMIA880621  
• 2) TAM880905  
• 3) TAM881943  
• 4) TMIA880356



**Repair Sleeve**  
• 88RS



**Glow Plug**  
• TMIU800816

(1): Check your application for proper usage.

(2): Like TMIA880621, with Inject Pump cooling connections.

(3): Gear not included. Suitable for 3TNE84/88 and 3TNV84/88.

(4): Gear not included.

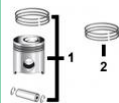
**Engine Model:**  
4TNV88

**Engine Dimensions:**  
Bore: 3.46 in / 88.00 mm

| Excavators | Backhoe Loaders | Mowers            | Utility Tractors  | Hi Power Genset                               | Farm Tractors |
|------------|-----------------|-------------------|-------------------|---|---------------|
| 50D        | 110             | 1505 1515<br>1905 | 2720 4405<br>4005 | HRYW107H5<br>HYW17T5HYW20M5<br>HYW20M6HYW20T6 | JD1220        |



**1) Engine O/H Kit**  
 , TOK4TNV88  
 , TOK4TNV88/10



**1) Piston & Ring Kit**  
 , TAM881814 Std.  
 , TAM881811 0.010  
**Use 4**  
**2) Ring Set**  
 , TAM881812 Std.  
 , TAM881810 0.010



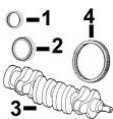
**Main Bearing**  
 , TMIA880554 Std.  
 , TMIA880550 0.010  
**Use 5**



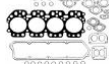
**Con Rod Bearing**  
 , TMIA880563 Std.  
 , TMIA880568 0.010  
**Use 4**



**Thrust Washers**  
 , TMIA880555  
**Set of 4**



**1) Front Seal**  
 , TM800988  
**2) Rear Seal**  
 , TM805278  
**3) Crankshaft**  
 , TAM878619  
**4) Flywheel Ring Gear**  
 , TCH10466 127T



**1) O/H Gasket Set**  
 , TMGS4TNE88  
**2) Head Gasket**  
 , TM806518  
**3) Liquid Gasket**  
 , TM64850  
**4) Rocker Cover Gasket**  
 , TM811123



**1) Bush, Con Rod**  
 , TM801256 x4  
**2) Bolt, Con Rod**  
 , TCH15483 x8  
**3) Bushing, Cam**  
 , TMIU800573 x1  
**4) Connecting Rod**  
 , TAM875391



**1) Tappet**  
 , TM801046 x8  
**2) Camshaft**  
 , TAM875386  
**3) Push Rod**  
 , TM801238 x8

**Valve, Intake**  
 , TM811557 x4

**Valve, Exhaust**  
 , TMIU800494 x4

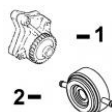
**1) Guide, Valve In**  
 , TM801227 x4  
**2) Guide, Valve Ex**  
 , TM801228 x4

**1) Stem, Seal Int**  
 , TCH10450 x4  
**2) Stem, Seal Exh**  
 , TT110650 x4

**1) Spring, Valve**  
 , TM801222 x8  
**2) Cap, Valve**  
 , TM801224



**1) Thermostat**  
 , TM811034  
**2) Injector**  
 , TAM881953



**1) Oil Pump**  
 , TAM878778  
 , TM811058SET  
**2) Oil Cooler**  
 , TMIA884109



**Electric Fuel Pump**  
 , TAM876266  
 , TAT318139



**Water Pump**  
 , 1) TMIA880621  
 , 2) TAM880905  
 , 3) TAM881943  
 , 4) TMIA880356



**Repair Sleeve**  
 , 88RS



**Glow Plug**  
 , TMIU800816

(1): Check your application for proper usage.  
 (3): Gear not included. Suitable for 4TNE84/88 and 4TNV84/88.  
 Do not use in applications that require a crankshaft driven balancer unit.

(2): Like TMIA880621, with Inject Pump cooling connections.

**Engine Model:**  
4TNV98

**Engine Desc:**  
DIRECT INJECTION

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.86 in / 98.00 mm Stroke: 4.331 in / 110 mm

**Loaders**

204K

304K

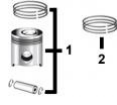
**Engine Model**

4TNV98-ZSLW

4TNV98-ZPLW



**1) Engine O/H Kit**  
 , TOK4TNV98D  
 , TOK4TNV98D/25



**1) Piston & Ring Kit**  
 , TMIA883345 Std.  
 , TMIA883345A 0.25  
**Use 4**  
**2) Ring Set**  
 , TMIA881112 Std.  
 , TMIA881112A .25



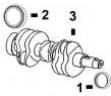
**Main Bearing Set**  
 , TMIA880548 Std.  
 , TMIA880547 0.25  
**Set of 5 Pairs**



**Con Rod Bearing**  
 , TMIA880564 Std.  
 , TMIA880569 0.25  
**Set of 4 Pairs**



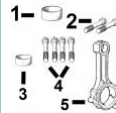
**Thrust Washers**  
 , TMIA880556  
**Set of 4**



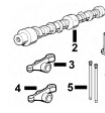
**1) Front Seal**  
 , TMIU801096  
**2) Rear Seal**  
 , TMIU801095  
**3) Crankshaft**  
 , TAT211731



**1) O/H Gasket Set**  
**1) TMGS4TNV98**  
**2) Head Gasket**  
 , TMIU801057  
**3) Liquid Gasket**  
 , TM64850  
**4) Rocker Cover Gasket**  
 , TMIU801150



**1) Bush, Con Rod**  
 , TMIU801252 x4  
**2) Bolt, Con Rod**  
 , TAT211751 x8  
**3) Bushing, Cam**  
 , TAT211656 x1  
**4) Bolt, Cyl Head**  
 , TAT211658 x18  
**5) Connecting Rod**  
 , TMIA881093



**1) Tappet**  
 , TM801046 x8  
**2) Camshaft**  
 , TMIA881102  
**5) Push Rod**  
 , TMIU801081 x8

**Valve, Intake**  
 , TMIU801066

**Valve, Exhaust**  
 , TMIU801067

**1) Guide, Valve**  
 , TMIU801251  
**2) Lock, Valve**  
 , TAM100828 x32

**1) Stem, Seal Int**  
 , TMIU800853  
**2) Stem, Seal Exh**  
 , TCH10346 x8

**1) Spring, Valve**  
 , TMIU801068



**Thermostat**  
 , TAT211781  
 , TCH16879

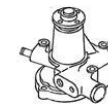
1  
1



**Oil, Pump**  
 , TAT212086



**Electric Fuel Pump**  
 , TAT318139



**Water Pump**  
 , TMIA883817

1



**Repair Sleeve**  
 , 98RS


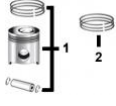



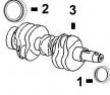
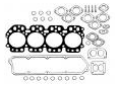

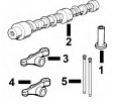





(1): Check your application for proper usage.

(2): Head gasket is MLS material. Please check application for proper usage.



|                                 |   |                              |   |
|---------------------------------|---|------------------------------|---|
| <b>Engine Model:</b><br>4TNV98T | <b>Engine Desc:</b><br>DIRECT INJECTION | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.86 in / 98.00 mm Stroke: 4.331 in / 110 mm |
|---------------------------------|---|------------------------------|---|

| Skid Steers | Engine Model |
|-------------|--------------|
| 318E        | 4TNV98T      |
| 320E        |              |
| 323E        |              |
| 324G        |              |
| 326E        |              |

|   |   |   |   |   |
|---|---|---|---|---|
|  <p><b>1) Engine O/H Kit</b><br/>                 , TOK4TNV98T<br/>                 , TOK4TNV98T/25</p>   |  <p><b>1) Piston &amp; Ring Kit</b><br/>                 , TMIA883163 Std.<br/>                 , TMIA883163A 0.25</p> <p><b>Use 4</b></p> <p><b>2) Ring Set</b><br/>                 , TMIA881112 Std.<br/>                 , TMIA881112A .25</p>               |  <p><b>Main Bearing Set</b><br/>                 , TMIA880548 Std.<br/>                 , TMIA880547 0.25</p> <p><b>Set of 5 Pairs</b></p>   |  <p><b>Con Rod Bearing</b><br/>                 , TMIA880564 Std.<br/>                 , TMIA880569 0.25</p> <p><b>Set of 4 Pairs</b></p>   |  <p><b>Thrust Washers</b><br/>                 , TMIA880556</p> <p><b>Set of 4</b></p> |
|  <p><b>1) Front Seal</b><br/>                 , TMIU801096</p> <p><b>2) Rear Seal</b><br/>                 , TMIU801095</p> <p><b>3) Crankshaft</b><br/>                 , TMIA883156</p> |  <p><b>1) O/H Gasket Set</b></p> <p><b>1) TMGS4TNV98</b></p> <p><b>2) Head Gasket</b><br/>                 , TMIU801057</p> <p><b>3) Liquid Gasket</b><br/>                 , TM64850</p> <p><b>4) Rocker Cover Gasket</b><br/>                 , TMIU801150</p> |  <p><b>1) Bush, Con Rod</b><br/>                 , TMIU801252 x4</p> <p><b>2) Bolt, Con Rod</b><br/>                 , TAT211751 x8</p> <p><b>3) Bushing, Cam</b><br/>                 , TAT211656 x1</p> <p><b>4) Bolt, Cyl Head</b><br/>                 , TAT211658 x18</p> <p><b>5) Connecting Rod</b><br/>                 , TMIA881093</p> |  <p><b>1) Tappet</b><br/>                 , TM801046 x8</p> <p><b>2) Camshaft</b><br/>                 , TMIA881102</p> <p><b>5) Push Rod</b><br/>                 , TMIU801081 x8</p> |   |
| <p><b>Valve, Intake</b><br/>                 , TMIU801066</p>   | <p><b>Valve, Exhaust</b><br/>                 , TMIU801067</p>  | <p><b>1) Guide, Valve</b><br/>                 , TMIU801251</p> <p><b>2) Lock, Valve</b><br/>                 , TAM100828 x32</p>   | <p><b>1) Stem, Seal Int</b><br/>                 , TMIU800853</p> <p><b>2) Stem, Seal Exh</b><br/>                 , TCH10346 x8</p>  | <p><b>1) Spring, Valve</b><br/>                 , TMIU801068</p>  |
|  <p><b>Thermostat</b><br/>                 , TAT211781<br/>                 , TCH16879</p>  |  <p><b>Oil, Pump</b><br/>                 , TMIA882626</p>   |  <p><b>Electric Fuel Pump</b><br/>                 , TAT318139</p>   |  <p><b>Water Pump</b><br/>                 , TMIA883817</p>   |  <p><b>Repair Sleeve</b><br/>                 , 98RS</p>                             |

(1): Check your application for proper usage.

(2): Head gasket is MLS material. Please check application for proper usage.

**Engine Series:**

PowerTech

**Engine Model:**

3029

**Engine Desc:**

2.9D

**Engine Data:**

From ESN  
252,768  
CODE 4809  
CODE 4813

**Engine Info:**

3 Cyl

**Engine Dimensions:**

Bore: 4.19 in /  
106.5 mm Pin  
Ø: 1.3 in / 32  
mm


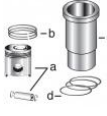




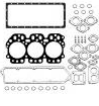

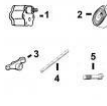





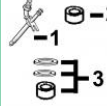
**Con Rod (M):**






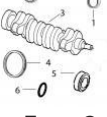
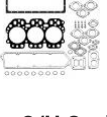

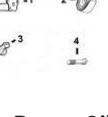
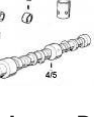



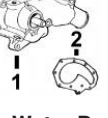

R121092,  
R501072

**Piston (M):**

RE61467

Please see page 391 for a complete list of equipment models.

|  |  |   |  |  |
|--|--|---|--|--|
|  <p>1) <b>Engine O/H Kit</b><br/>                 † TOK2.9D9<br/>                 † TOK2.9D9A</p> <p>2) <b>Engine I/F Kit</b><br/>                 † TIK2.9D9<br/>                 † TIK2.9D9A</p>   |  <p><b>Piston-Liner Kit</b><br/>                 † TRE66968</p> <p><b>Consists of:</b></p> <p>a) TRE61467<br/>                 b) TRE66271<br/>                 c) TR116281<br/>                 d) TAR65507</p>   |  <p><b>Main Bearing</b><br/>                 † TRE27352 Std.<br/>                 † TRE27353 0.010<br/>                 † TRE27360 0.020<br/>                 † TRE27368 0.030</p> <p><b>Use 3</b></p>                            |  <p><b>Thrust Bearing</b><br/>                 † TAT21139 Std.<br/>                 † TAT21132 0.010<br/>                 † TAT21134 0.020<br/>                 † TAT21136 0.030</p> <p><b>Use 1</b></p>   |  <p><b>Con Rod Bearing</b><br/>                 † TRE27348 Std.<br/>                 † TRE27349 0.010<br/>                 † TRE27358 0.020<br/>                 † TRE27364 0.030</p> <p><b>Use 3</b></p>  |
|  <p>1) <b>Front Seal</b><br/>                 † TAR67942</p> <p>2) <b>Rear Seal</b><br/>                 † TRE44574</p> <p>3) <b>Crankshaft</b><br/>                 † TRE521348</p> <p>4) <b>Crankshaft, Gear</b><br/>                 † TT20094</p> <p>5) <b>Ring Gear</b><br/>                 † TR114282 (142T)<br/>                 † TR28811 (129T)</p> <p>6) <b>Sleeve, Front</b><br/>                 † TR81989</p> <p>7) <b>Packing, Sleeve</b><br/>                 † TH35244</p> |  <p>1) <b>O/H Gasket Set</b><br/>                 † TRE501578</p> <p>2) <b>Head Gasket Set</b><br/>                 † TRE38850</p> <p>3) <b>Head Gasket</b><br/>                 † TR97356</p> <p>4) <b>Oil Pan Gasket</b><br/>                 † TR97341</p> <p>5) <b>Rocker Cover Gsk</b><br/>                 † TR106796</p> |  <p>1) <b>Bush, Con Rod</b><br/>                 † TR504300 x3</p> <p>2) <b>Bolt, Con Rod</b><br/>                 † TR80033 x6<br/>                 † TR501124 x6</p> <p>3) <b>Con Rod</b><br/>                 † TRE501674</p> |  <p>1) <b>Pump, Oil</b><br/>                 † TRE55343</p> <p>2) <b>Oil Cooler</b><br/>                 † TRE61767</p> <p>3) <b>Rocker Arm</b><br/>                 † TRE31973</p> <p>4) <b>Rocker Arm Shaft</b><br/>                 † TR54985</p> <p>5) <b>Cyl Hd Cap Screw</b><br/>                 † TR85363 x14</p> <p>6) <b>Oil Pump O'Ring</b><br/>                 † TR61871</p> |  <p>1) <b>Lower Gear</b><br/>                 † TAT24252</p> <p>2) <b>Lower Bushing</b><br/>                 † TT26321</p> <p>3) <b>Upper Gear</b><br/>                 † TAT18009</p> <p>4) <b>Upper Bushing</b><br/>                 † TT20034</p> <p>5) <b>Cam. Follower</b><br/>                 † TT20073 x6</p> <p>6) <b>Cam. Gear</b><br/>                 † TT20070</p> <p>7) <b>Camshaft Kit</b><br/>                 † TRE55900</p> <p>8) <b>Camshaft</b><br/>                 † TR106957</p> |
| <p><b>Valve, Intake</b><br/>                 † TR98062 Std.<br/>                 † TR97490 0.015</p>   | <p><b>Valve, Exhaust</b><br/>                 † TR90692 Std.<br/>                 † TR97492 0.015</p>  | <p>1) <b>Insert, Valve In</b><br/>                 † TR106831</p> <p>2) <b>Insert, Valve Ex</b><br/>                 † TR106829</p>   | <p>1) <b>Seal, Valve</b><br/>                 † TRE31617</p> <p>2) <b>Lock, Valve</b><br/>                 † TR91889</p>   | <p>1) <b>Spring, Valve</b><br/>                 † TR26125</p> <p>2) <b>Rotator, Valve</b><br/>                 † TRE60005</p>  |
|  <p>1) <b>Thermostat</b><br/>                 † TRE64354 180° F</p> <p>2) <b>Water Temp Sensor</b><br/>                 † TRE51774</p> <p>3) <b>Water Temp Sensor</b><br/>                 † TRE52722</p> <p>4) <b>Crankshaft Sensor</b><br/>                 † TRE519144</p>   |  <p><b>Fuel Transfer Pump</b><br/>                 † TRE38009</p>   |  <p><b>Water Pump Repair Kit</b><br/>                 † See Chart</p>  |  <p><b>Water Pump</b><br/>                 † TAR97708U<br/>                 † TRE60489<br/>                 † TRE67185</p>   |  <p>1) <b>Injector, Pencil</b><br/>                 † TRE36936<br/>                 † TRE50833</p> <p>2) <b>Inj Grommet Kit</b><br/>                 † TMX504</p> <p>3) <b>Seal Kit</b><br/>                 † TRE65201</p>   |
| <p>(1): Helicoidal Gears.</p> <p>(3): Kit contains TT20094 helical gear to convert to a TRE50979 Crankshaft.</p> <p>(5): (m) R73604.</p> <p>(7): For used with Fractured split connecting rod.</p> <p>(9): Camshaft has a 40 mm wide front bearing journal and made for a rear press in tachometer drive, it will replace early camshafts with narrower front bearing journal without any issue. Replaces camshafts marked T20015, T20016, R79643, R106957 and RE522311.</p>   |  |   | <p>(2): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.</p> <p>(4): With Machine Split Con Rod use TR80033 and With Fractured Con Rod use TR501124.</p> <p>(6): (m) R100812, (m) R127337, (m) R127918, (m) R55164.</p> <p>(8): Check your application for proper usage.</p>   | <p>(1): Helicoidal Gears.</p> <p>(11): 11V</p> <p>(12): 12V</p> <p>(9): Fractured Split Rod.</p>   |

|   |  |   |   |   |   |
|---|--|---|---|---|---|
| <p><b>Engine Series:</b><br/>PowerTech</p> <p><b>Engine Model:</b><br/>3029D/T</p> <p><b>Engine Desc:</b><br/>2.9D, 2.9T</p> <p><b>Engine Data:</b><br/>CODE 4831</p> <p><b>Engine Info:</b><br/>3 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.19 in / 106.5 mm Pin Ø: 1.3 in / 32 mm</p> <p><b>Piston (M):</b><br/>RE520573</p>                 |  <p><b>1) Engine O/H Kit</b><br/>› TOK2.9D/T</p> <p><b>2) Engine I/F Kit</b><br/>› TIK2.9D/T</p>   |  <p><b>Piston-Liner Kit</b><br/>› TRE520768</p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>› a) TRE520573</li> <li>› b) TRE66271</li> <li>› c) TR116281</li> <li>› d) TAR65507</li> </ul>                            |  <p><b>Main Bearing</b></p> <ul style="list-style-type: none"> <li>› TRE27352 Std.</li> <li>› TRE27353 0.010</li> <li>› TRE27360 0.020</li> <li>› TRE27368 0.030</li> </ul> <p><b>Use 3</b></p> |  <p><b>Thrust Bearing</b></p> <ul style="list-style-type: none"> <li>› TAT21139 Std.</li> <li>› TAT21132 0.010</li> <li>› TAT21134 0.020</li> <li>› TAT21136 0.030</li> </ul> <p><b>Use 1</b></p>   |  <p><b>Con Rod Bearing</b></p> <ul style="list-style-type: none"> <li>› TRE27348 Std.</li> <li>› TRE27349 0.010</li> <li>› TRE27358 0.020</li> <li>› TRE27364 0.030</li> </ul> <p><b>Use 3</b></p>                                |
| <p>Please see page 392 for a complete list of equipment models.</p>   |  <p><b>1) Front Seal</b><br/>› TAR67942</p> <p><b>2) Rear Seal</b><br/>› TRE44574</p> <p><b>3) Crankshaft</b><br/>› TRE521348</p> <p><b>4) Ring Gear</b><br/>› TR114282 (142T)<br/>› TR28811 (129T)</p> <p><b>5) Sleeve, Front</b><br/>› TR81989</p> <p><b>6) Packing, Sleeve</b><br/>› TH35244</p> |  <p><b>1) O/H Gasket Set</b><br/>› TRE501578</p> <p><b>2) Head Gasket Set</b><br/>› TRE38850</p> <p><b>3) Head Gasket</b><br/>› TR97356</p> <p><b>4) Oil Pan Gasket</b><br/>› TR97341</p> <p><b>5) Rocker Cover Gsk</b><br/>› TR106796</p> |  <p><b>1) Bush, Con Rod</b><br/>› TR504300 x3</p> <p><b>2) Bolt, Con Rod</b><br/>› TR80033 x6</p> <p><b>3) Con Rod</b><br/>› TRE507799</p>   |  <p><b>1) Pump, Oil</b><br/>› TRE55343</p> <p><b>2) Oil Cooler</b><br/>› TRE61767</p> <p><b>3) Rocker Arm</b><br/>› TRE31973</p> <p><b>4) Cyl Hd Cap Screw</b><br/>› TR502511 x14<br/>› TR85363 x14</p> <p><b>5) Oil Pump O'Ring</b><br/>› TR61871</p> |  <p><b>1) Lower Bushing</b><br/>› TT26321</p> <p><b>2) Upper Bushing</b><br/>› TT20034</p> <p><b>3) Cam. Follower</b><br/>› TT20073 x6</p> <p><b>4) Camshaft Kit</b><br/>› TRE55900</p> <p><b>5) Camshaft</b><br/>› TR106957</p> |
| <p><b>Valve, Intake</b></p> <ul style="list-style-type: none"> <li>› TR98062 Std.</li> <li>› TR97490 0.015</li> </ul>   | <p><b>Valve, Exhaust</b></p> <ul style="list-style-type: none"> <li>› TR90692 Std.</li> <li>› TR97492 0.015</li> </ul>   | <p><b>1) Insert, Valve In</b><br/>› TR106831<br/>› TR98335</p> <p><b>2) Insert, Valve Ex</b><br/>› TR106829</p>   | <p><b>1) Seal, Valve</b><br/>› TRE31617</p> <p><b>2) Lock, Valve</b><br/>› TR91889</p>  | <p><b>1) Spring, Valve</b><br/>› TR26125</p> <p><b>2) Rotator, Valve</b><br/>› TRE60005</p>   |   |
|  <p><b>1) Thermostat</b><br/>› TRE64354 180° F</p> <p><b>2) Injector</b><br/>› TRE50833<br/>› TRE509896</p> <p><b>3) Water Temp Sensor</b><br/>› TRE51774</p> <p><b>4) Water Temp Sensor</b><br/>› TRE52722</p> <p><b>5) Crankshaft Sensor</b><br/>› TRE519144</p> |  <p><b>1) Fuel Transfer Pump</b><br/>› TRE38009</p> <p><b>2) Fuel Pump Electric</b><br/>› TAL155607</p>   |  <p><b>Water Pump Repair Kit</b></p> <ul style="list-style-type: none"> <li>› Without Impeller<br/>› TRE19507</li> <li>› With Impeller<br/>› TRE62658</li> </ul>   |  <p><b>1) Water Pump</b><br/>› TAR97708U</p> <p><b>2) Water Pump Gasket</b><br/>› TT20242<br/>› TT20268</p>  |  <p><b>Glow Plug</b></p> <ul style="list-style-type: none"> <li>› 1) TRE502079 (11 V)</li> <li>› 2) TRE504580 x3 (10 V)</li> </ul> <p><b>3) Air Heater</b><br/>› TRE502668 (12 V)</p>  |   |

(1): Check application for proper capscrew

(3): Check for proper application.

(5): Camshaft has a 40 mm wide front bearing journal and made for a rear press in tachometer drive, it will replace early camshafts with narrower front bearing journal without any issue. Replaces camshafts marked T20015, T20016, R79643, R106957 and RE522311.

(2): Piston includes Pin and Retainers.

(4): Machine Split Rod. Can substitute fractured split rod TRE501674 if replaced in complete sets.

(6): See the Water Pump Identification Chart to make sure these part numbers are correct. You will need the water pump casting number and will need to know if you have a stamped steel pulley or a cast iron pulley.

**Engine Series:**  
PowerTech

**Engine Model:**  
3029

**Engine Desc:**  
2.9T

**Engine Data:**  
From ESN  
258,847  
CODE 4808

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 4.19 in /  
106.5 mm Pin  
Ø: 1.62 in / 41  
mm

**Con Rod (M):**  
R105011,  
R501073

**Piston (M):**  
RE61270

**Farm Tractors**

5400  
5400N

**Skidders**  
8875

**Engine Model**  
2.9L



- 1) **Engine O/H Kit**
  - › TOK2.9T
  - › TOK2.9TA
- 2) **Engine I/F Kit**
  - › TIK2.9T
  - › TIK2.9TA

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- Piston-Liner Kit**
  - › TRE67426
- Consists of:**
  - a) TRE61270
  - b) TRE66271
  - c) TMX3915
  - d) TR116281
  - e) TAR65507
  - f) TR54114



- Main Bearing**
  - › TRE27352 Std.
  - › TRE27353 0.010
  - › TRE27360 0.020
  - › TRE27368 0.030
- Use 3**



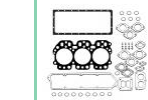
- Thrust Bearing**
  - › TAT21139 Std.
  - › TAT21132 0.010
  - › TAT21134 0.020
  - › TAT21136 0.030
- Use 1**



- Con Rod Bearing**
  - › TRE27348 Std.
  - › TRE27349 0.010
  - › TRE27358 0.020
  - › TRE27364 0.030
- Use 3**



- 1) **Front Seal**
  - › TAR67942
- 2) **Rear Seal**
  - › TRE44574
- 3) **Crankshaft**
  - › TRE521348
- 4) **Crankshaft, Gear**
  - › TT20094
- 5) **Ring Gear**
  - › TR114282 (142T)
  - › TR28811 (129T)
- 6) **Sleeve, Front**
  - › TR81989
- 7) **Packing, Sleeve**
  - › TH35244



- 1) **O/H Gasket Set**
  - › TRE501578
- 2) **Head Gasket Set**
  - › TRE38850
- 3) **Head Gasket**
  - › TR97356
- 4) **Oil Pan Gasket**
  - › TR97341
- 5) **Rocker Cover Gsk**
  - › TR106796

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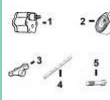


- 1) **Bush, Con Rod**
  - › TR57451 x3
- 2) **Bolt, Con Rod**
  - › TR80033 x6
  - › TR501124 x6

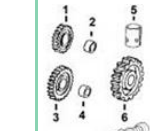
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- 1) **Pump, Oil**
  - › TRE55343
- 2) **Oil Cooler**
  - › TRE61767
- 3) **Rocker Arm**
  - › TRE31973
- 4) **Rocker Arm Shaft**
  - › TR54985
- 5) **Cyl Hd Cap Screw**
  - › TR85363 x14
- 6) **Oil Pump O'Ring**
  - › TR61871



- 1) **Lower Gear**
  - › TAT24252
- 2) **Lower Bushing**
  - › TT26321
- 3) **Upper Gear**
  - › TAT18009
- 4) **Upper Bushing**
  - › TT20034
- 5) **Cam. Follower**
  - › TT20073 x6
- 6) **Cam. Gear**
  - › TT20070
- 7) **Camshaft Kit**
  - › TRE55900
- 8) **Camshaft**
  - › TR106957

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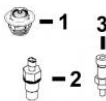
- Valve, Intake**
  - › TR98062 Std.
  - › TR97490 0.015

- Valve, Exhaust**
  - › TR90692 Std.
  - › TR97492 0.015

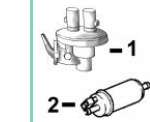
- 1) **Insert, Valve In**
  - › TR106831
  - › TR98335
- 2) **Insert, Valve Ex**
  - › TR106829

- 1) **Seal, Valve**
  - › TRE31617
- 2) **Lock, Valve**
  - › TR91889

- 1) **Spring, Valve**
  - › TR26125
- 2) **Rotator, Valve**
  - › TRE60005



- 1) **Thermostat**
  - › TRE64354 180° F
- 2) **Water Temp Sensor**
  - › TRE52722
- 3) **Crankshaft Sensor**
  - › TRE519144



- 1) **Fuel Transfer Pump**
  - › TRE38009
- 2) **Fuel Pump Electric**
  - › TAL155607



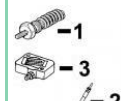
- Water Pump Repair Kit**
  - › See Chart



- Water Pump**
  - › TAR97708U
  - › TRE60489
  - › TRE67185



- 1) **Injector, Pencil**
  - › TRE38087
- 2) **KIT, GROMMET**
  - › TMX504
- 3) **Seal Kit**
  - › TRE64292



- Glow Plug**
  - › 1) TRE502079 (11 V)
  - › 2) TRE504580 x3 (10 V)
  - › 3) **Air Heater**
    - › TRE502668 (12 V)

(1): Helicoidal Gears.

(3): After bushing installation, machine bushing to fit the shape of connecting rod before fitting piston pin.

(5): With Machine Split Con Rod use TR80033 and With Fractured Con Rod use TR501124.

(7): (m) R100812, (m) R127337, (m) R127918, (m) R55164.

(9): Check your application for proper usage.

(2): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(4): Kit contains TT20094 helical gear to convert to a TRE50979 Crankshaft.

(6): (m) R73604.

(8): For used with Fractured split connecting rod.

(10): Camshaft has a 40 mm wide front bearing journal and made for a rear press in tachometer drive, it will replace early camshafts with narrower front bearing journal without any issue. Replaces camshafts marked T20015, T20016, R79643, R106957 and RE522311.

**Engine Series:**

PowerTech

**Engine Model:**

3029

**Engine Desc:**

Engine Numbers:  
3029TF120,  
3029TF270 (Up to ESN 140913)

**Engine Data:**

From ESN 258,847 CODE 4808

**Engine Info:**

3 Cyl

**Engine Dimensions:**

Bore: 4.19 in / 106.5 mm Pin Ø: 1.6250 in / (+/- .0002)= 41 mm

**Con Rod (M):**

R105011, R501073

**Piston (M):**

RE500211

Please see page 393 for a complete list of equipment models.



- 1) **Engine O/H Kit**
  - › TOK2.9T2
  - › TOK2.9T2A
- 2) **Engine I/F Kit**
  - › TIK2.9T2
  - › TIK2.9T2A

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- Piston-Liner Kit**
  - › TRE500673
- Consists of:**
  - a) TRE500211
  - b) TRE66271
  - c) TMX3915
  - d) TR116281
  - e) TAR65507
  - f) TR54114



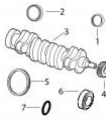
- Main Bearing**
  - › TRE27352 Std.
  - › TRE27353 0.010
  - › TRE27360 0.020
  - › TRE27368 0.030
- Use 3**



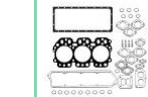
- Thrust Bearing**
  - › TAT21139 Std.
  - › TAT21132 0.010
  - › TAT21134 0.020
  - › TAT21136 0.030
- Use 1**



- Con Rod Bearing**
  - › TRE27348 Std.
  - › TRE27349 0.010
  - › TRE27358 0.020
  - › TRE27364 0.030
- Use 3**



- 1) **Front Seal**
  - › TAR67942
- 2) **Rear Seal**
  - › TRE44574
- 3) **Crankshaft**
  - › TRE521348
- 4) **Crankshaft, Gear**
  - › TT20094
- 5) **Ring Gear**
  - › TR114282 (142T)
  - › TR28811 (129T)
- 6) **Sleeve, Front**
  - › TR81989
- 7) **Packing, Sleeve**
  - › TH35244



- 1) **O/H Gasket Set**
  - › TRE501578
- 2) **Head Gasket Set**
  - › TRE38850
- 3) **Head Gasket**
  - › TR97356
- 4) **Oil Pan Gasket**
  - › TR97341
- 5) **Rocker Cover Gsk**
  - › TR106796

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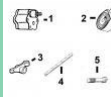


- 1) **Bush, Con Rod**
  - › TR57451 x3
- 2) **Bolt, Con Rod**
  - › TR80033 x6
  - › TR501124 x6

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- 1) **Pump, Oil**
  - › TRE55343
- 2) **Oil Cooler**
  - › TRE61767
- 3) **Rocker Arm**
  - › TRE31973
- 4) **Rocker Arm Shaft**
  - › TR54985
- 5) **Cyl Hd Cap Screw**
  - › TR85363 x14
- 6) **Oil Pump O'Ring**
  - › TR61871

2



- 1) **Lower Gear**
  - › TAT24252
- 2) **Lower Bushing**
  - › TT26321
- 3) **Upper Gear**
  - › TAT18009
- 4) **Upper Bushing**
  - › TT20034
- 5) **Cam. Follower**
  - › TT20073 x6
- 6) **Cam. Gear**
  - › TT20070
- 7) **Camshaft Kit**
  - › TRE55900
- 8) **Camshaft**
  - › TR106957

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**Valve, Intake**

- › TR98062 Std.
- › TR97490 0.015

**Valve, Exhaust**

- › TR90692 Std.
- › TR97492 0.015

**1) Insert, Valve In**

- › TR106831
  - › TR98335
- 2) Insert, Valve Ex**
- › TR106829

**1) Seal, Valve**

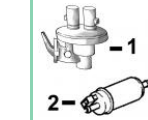
- › TRE31617
- 2) Lock, Valve**
- › TR91889

**1) Spring, Valve**

- › TR26125
- 2) Rotator, Valve**
- › TRE60005



- 1) **Thermostat**
  - › TRE64354 180° F
- 2) **Water Temp Sensor**
  - › TRE52722
- 3) **Crankshaft Sensor**
  - › TRE519144



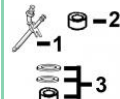
- 1) **Fuel Transfer Pump**
  - › TRE38009
- 2) **Fuel Pump Electric**
  - › TAL155607



- Water Pump Repair Kit**
  - › See Chart



- Water Pump**
  - › TAR97708U
  - › TRE60489
  - › TRE67185



- 1) **Injector, Pencil**
  - › TRE38087
  - › TRE50833
- 2) **Inj Grommet Kit**
  - › TMX504
  - › TRE64292
- 3) **Seal Kit**
  - › TRE64292



- Glow Plug**
  - › 1) TRE502079 (11 V)
  - › 2) TRE504580 x3 (10 V)
- Air Heater**
  - › 3) TRE502668 (12 V)

(1): Helicoidal Gears.

(3): After bushing installation, machine bushing to fit the shape of connecting rod before fitting piston pin.

(5): With Machine Split Con Rod use TR80033 and With Fractured Con Rod use TR501124.

(7): (m) R100812, (m) R127337, (m) R127918, (m) R55164.

(9): Check your application for proper usage.

(2): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(4): Kit contains TT20094 helical gear to convert to a TRE50979 Crankshaft.

(6): (m) R73604.

(8): For used with Fractured split connecting rod.

(10): Camshaft has a 40 mm wide front bearing journal and made for a rear press in tachometer drive, it will replace early camshafts with narrower front bearing journal without any issue. Replaces camshafts marked T20015, T20016, R79643, R106957 and RE522311.

**Engine Series:**  
PowerTech

**Engine Model:**  
4045D

**Engine Desc:**  
4.5D

**Engine Data:**  
CODE  
4801  
4833

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.19 in /  
106.5 mm Pin Ø:  
1.3750 in / (+/-  
.0002) 35 mm

**Con Rod (M):**  
R123959  
(Machined) (15)  
/ R500000  
(Fractured) (15)

**Piston (M):**  
RE59279,  
RE505101

Please see page 394 for a complete list of equipment models.



- 1) Engine O/H Kit**  
 † TRE66092  
 † TRE66092A
- 2) Engine I/F Kit**  
 † TIK66092  
 † TIK66092A  
 † Spec Sheet - TRE66092

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- Piston-Liner Kit**  
 † TRE65966 (RE505110)
- Consists of:**
- † a) TRE59279
  - † b) TRE66271
  - † c) TR123178
  - † d) TR116383
  - † e) TAR65507
  - † f) TM41029



- Main Bearing**  
 † TRE65165 Std.  
 † TRE65911 0.010  
 † TRE65165B 0.020
- Use 4**

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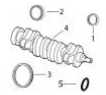
- Thrust Bearing**  
 † TRE65168 Std.  
 † TRE65912 0.010  
 † TRE65168B 0.020
- Use 1**

8



- Con Rod Bearing**  
 † TRE65908 Std.  
 † TRE65909 0.010  
 † TRE65908B 0.020
- Use 4**

8



- 1) Front Seal**  
 † TRE505515
- 2) Rear Seal**  
 † TRE44574
- 3) Ring Gear**  
 † TR114282 (142T)  
 † TR28811 (129T)
- 4) Crankshaft**  
 † TRE504638  
 † TRE506195
- 5) Seal**  
 † TH35244
- 6) Crank Gear**  
 † TR120631 30T

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- 1) O/H Gasket Set**  
 † TRE501455
- 2) Head Gasket Set**  
 † TRE66082
- 3) Head Gasket**  
 † TR116515
- 4) Oil Pan Gasket**  
 † TR97342  
 † TR123352
- 5) Rocker Cov Gsk**  
 † TR123542
- 6) Timing Cover Gsk**  
 † TR123421  
 † TR123425
- 7) Turbo Gasket**  
 † TR123570

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3

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- 1) Bush, Con Rod**  
 † TR123960 x4
- 2) Bolt, Con Rod**  
 † TR114083 x8  
 † TR501124 x8
- 3) Bush, Bal. Shaft**  
 † TR115299 x6
- 4) Bush, Camshaft**  
 † TR119874 x1
- 5) Camshaft**  
 † TRE56375
- 6) Bal. Shaft R/H**  
 † TRE500448
- 7) Bal. Shaft L/H**  
 † TRE500449
- 8) Cam Follower**  
 † TR123565 x8
- 9) Balancer Shaft Gear**  
 † TR120637 R/H  
 † TR120639 L/H

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- 1) Cyl Hd Cap Screw**  
 † TR85363 x18
- 2) Tensioner, Belt**  
 † TRE518097  
 † TRE68715
- 3) Con Rod**  
 † TRE500002
- 4) Oil Cooler**  
 † TRE59296 (5 Plates)  
 † TRE56690 (7 Plates)  
 † TRE59298 (9 Plates)

4

9

9



- 1) Water Pump**  
 † TRE500734  
 † TRE500734P  
 † TRE504911
- 2) Water Pump Cov**  
 † TRE508566
- 3) Water Pump Gsk**  
 † TR123417
- 4) Pump, Oil**  
 † TRE504914
- 5) Water Pump Housing**  
 † TR121634
- 6) Oil Pump Gear**  
 † TR120638 30T

17

17

9

- Valve, Intake**  
 † TR98062 Std.  
 † TR97490 0.015

- Valve, Exhaust**  
 † TR90692 Std.  
 † TR97492 0.015

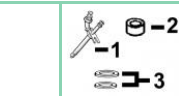
- 1) Insert, Valve In**  
 † TR98063 Std.  
 † TR98335 O/S
- 2) Insert, Valve Ex**  
 † TR85687 Std.  
 † TR93910 O/S

- 1) Seal, Valve**  
 † TRE31617
- 2) Lock, Valve**  
 † TR91889

- 1) Spring, Valve**  
 † TR26125
- 2) Rotator, Valve**  
 † TRE60005

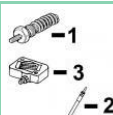


- 1) Thermostat**  
 † TRE522076 180° F  
 † TRE528652 180° F  
 † TRE540550 180° F  
 † TRE64354 180° F
- 2) Thermostat Cover**  
 † TR501130
- 3) Water Temp Sensor**  
 † TRE51774
- 4) Water Temp Sensor**  
 † TRE52722
- 5) Oil Pressure Sensor**  
 † TRE167207
- 6) Crankshaft Sensor**  
 † TRE519144

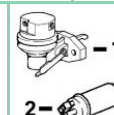


- 1) Injector, Pencil**  
 † TRE60062 (Non Turbo)  
 † TRE48786 (Turbo)
- 2) Inj Grommet Kit**  
 † TMX504
- 3) Seal**  
 † TR92352  
 † TR48000

10



- Glow Plug**  
 † 1) TRE502079 (11 V)  
 † 2) TRE504580 x4 (10 V)
- 3) Air Heater**  
 † TRE502668 (12 V)



- 1) Fuel Transfer Pump**  
 † TRE66153  
 † TRE68345  
 † TRE502513
- 2) Fuel Pump Electric**  
 † TAL155607
- 3) Injection Pump Gear**  
 † TR132267 60T
- 4) Idler Gear, Lower**  
 † TRE56369 43T
- 5) Idler Gear, Upper**  
 † TRE508932 49T

6

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14

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9

(1): Use TR114083 Rod Bolts with Machine Split Connecting Rods, and use TR501124 Rod Bolts with Fractured Split Connecting Rods.  
 (3): Use with Oil Pan code 1904 & 1905, for Aluminum Oil Pan.

(5): (m) R135439, R132324, R134213.

(7): 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.

(9): Check application for proper usage.

(11): Taper Nose.

(13): Line connections are one hose barb & one threaded.

(15): Machine split and fractured split connecting rods may both be used in the same engine, but the correct con rod bolts must be used for each connecting rod.

(17): TRE500734 supplied with a cast iron impeller; TRE500734P supplied with a resin impeller.

(2): Use with Oil Pan code 1901, 1902 & 1903, for Steel Oil Pan.

(4): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(6): Line Connections are both threaded.

(8): Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.






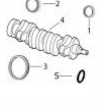

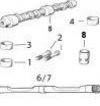







(10): Use with Stanadyne DE10 Injection Pump.

(12): Straight Nose.

(14): Line connections are two hose barbs.

(16): Our gasket sets do not include the front and rear crankshaft seals

(18): Use TR114083 Rod Bolts with Machine Split Connecting Rods, and use TR501124 Rod Bolts with Fractured Split Connecting Rods.

|  |  |   |   |  |   |
|--|--|---|---|--|---|
| <p><b>Engine Series:</b><br/>PowerTech</p> <p><b>Engine Model:</b><br/>4045T</p> <p><b>Engine Desc:</b><br/>4.5T</p> <p><b>Engine Data:</b><br/>CODE 4803,<br/>4823</p> <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.19 in /<br/>106.5 mm Pin Ø:<br/>1.3750 in / (+/-<br/>.0002) = 35mm</p> <p><b>Con Rod (M):</b><br/>R123959<br/>(Machined) (16),<br/>R500000<br/>(Fractured) (16),</p> <p><b>Piston (M):</b><br/>RE59277,<br/>RE505100 (1)</p>   |  <p><b>1) Engine O/H Kit</b><br/>                 † TRE66093<br/>                 † TRE66093A <span style="float:right">19</span></p> <p><b>2) Engine I/F Kit</b><br/>                 † TIK66093<br/>                 † TIK66093A <span style="float:right">19</span><br/>                 † Spec Sheet - TRE66093<br/>                 TRE66094</p>  |  <p><b>Piston-Liner Kit</b><br/>                 † TRE507920 (RE515372)</p> <p><b>Consists of:</b><br/>                 † a) TRE515372<br/>                 † b) TRE66820<br/>                 † c) TR123178<br/>                 † d) TR116383<br/>                 † e) TAR65507<br/>                 † f) TM41029</p>  |  <p><b>Main Bearing</b><br/>                 † TRE65165 Std.<br/>                 † TRE65911 0.010<br/>                 † TRE65165B 0.020 <span style="float:right">8</span></p> <p><b>Use 4</b></p>  |  <p><b>Thrust Bearing</b><br/>                 † TRE65168 Std.<br/>                 † TRE65912 0.010<br/>                 † TRE65168B 0.020 <span style="float:right">8</span></p> <p><b>Use 1</b></p>   |  <p><b>Con Rod Bearing</b><br/>                 † TRE65908 Std.<br/>                 † TRE65909 0.010<br/>                 † TRE65908B 0.020 <span style="float:right">8</span></p> <p><b>Use 4</b></p>   |
| <p>Please see page 395 for a complete list of equipment models.</p>  |  <p><b>1) Front Seal</b><br/>                 † TRE505515 <span style="float:right">9</span></p> <p><b>2) Rear Seal</b><br/>                 † TRE44574</p> <p><b>3) Ring Gear</b><br/>                 † TR114282 (142T)<br/>                 † TR28811 (129T)</p> <p><b>4) Crankshaft</b><br/>                 † TRE504638 <span style="float:right">13</span><br/>                 † TRE506195 <span style="float:right">12</span></p> <p><b>5) Seal</b><br/>                 † TH35244</p> <p><b>6) Crankshaft Gear</b><br/>                 † TR120631 30T</p> |  <p><b>1) O/H Gasket Set</b><br/>                 † TRE501455 <span style="float:right">17</span></p> <p><b>2) Head Gasket Set</b><br/>                 † TRE66082</p> <p><b>3) Head Gasket</b><br/>                 † TR116515 <span style="float:right">4</span></p> <p><b>4) Oil Pan Gasket</b><br/>                 † TR97342 <span style="float:right">3</span></p> <p><b>5) Rocker Cover Gsk</b><br/>                 † TR123542</p> <p><b>6) Timing Cover Gsk</b><br/>                 † TR123421<br/>                 † TR123425</p> <p><b>7) Turbo Gasket</b><br/>                 † TR123570</p> |  <p><b>1) Bush, Con Rod</b><br/>                 † TR123960 x4</p> <p><b>2) Bolt, Con Rod</b><br/>                 † TR114083 x8 <span style="float:right">2</span><br/>                 † TR501124 x8 <span style="float:right">2</span></p> <p><b>3) Bush, Bal. Shaft</b><br/>                 † TR115299 x6</p> <p><b>4) Bush, Camshaft</b><br/>                 † TR119874 x1</p> <p><b>5) Camshaft</b><br/>                 † TRE56375 <span style="float:right">6</span></p> <p><b>6) Bal. Shaft R/H</b><br/>                 † TRE500448</p> <p><b>7) Bal. Shaft L/H</b><br/>                 † TRE500449</p> <p><b>8) Cam Follower</b><br/>                 † TR123565 x8</p> <p><b>9) Balancer Shaft Gear</b><br/>                 † TR120637 R/H<br/>                 † TR120639 L/H</p> |  <p><b>1) Cyl Hd Cap Screw</b><br/>                 † TR85363 x18 <span style="float:right">5</span></p> <p><b>2) Tensioner, Belt</b><br/>                 † TRE518097 <span style="float:right">10</span><br/>                 † TRE68715 <span style="float:right">10</span></p> <p><b>3) Con Rod</b><br/>                 † TRE500002</p> <p><b>4) Oil Cooler</b><br/>                 † TRE59296 (5 Plates)<br/>                 † TRE56690 (7 Plates)<br/>                 † TRE59298 (9 Plates)</p> |  <p><b>1) Water Pump</b><br/>                 † TRE500734 <span style="float:right">18</span><br/>                 † TRE500734P <span style="float:right">18</span><br/>                 † TRE504911 <span style="float:right">10</span></p> <p><b>2) Water Pump Cov</b><br/>                 † TRE508566</p> <p><b>3) Water Pump Gsk</b><br/>                 † TR123417</p> <p><b>4) Pump, Oil</b><br/>                 † TRE504914</p> <p><b>5) Water Pump Housing</b><br/>                 † TR121634</p> <p><b>6) Oil Pump Gear</b><br/>                 † TR120638 30T</p> |
| <p><b>Valve, Intake</b><br/>                 † TR98062 Std.<br/>                 † TR97490 0.015</p>   | <p><b>Valve, Exhaust</b><br/>                 † TR90692 Std.<br/>                 † TR97492 0.015</p>  | <p><b>1) Insert, Valve In</b><br/>                 † TR98063 Std.<br/>                 † TR98335 O/S</p> <p><b>2) Insert, Valve Ex</b><br/>                 † TR85687 Std.<br/>                 † TR93910 O/S</p>   | <p><b>1) Seal, Valve</b><br/>                 † TRE31617</p> <p><b>2) Lock, Valve</b><br/>                 † TR91889</p>  | <p><b>1) Spring, Valve</b><br/>                 † TR26125</p> <p><b>2) Rotator, Valve</b><br/>                 † TRE60005</p>  |   |
|  <p><b>1) Thermostat</b><br/>                 † TRE522076 180° F <span style="float:right">10</span><br/>                 † TRE528652 180° F <span style="float:right">10</span><br/>                 † TRE540550 180° F <span style="float:right">10</span><br/>                 † TRE64354 180° F</p> <p><b>2) Thermostat Cover</b><br/>                 † TR501130 <span style="float:right">10</span></p> <p><b>3) Water Temp Sensor</b><br/>                 † TRE51774 <span style="float:right">10</span></p> <p><b>4) Water Temp Sensor</b><br/>                 † TRE52722 <span style="float:right">10</span></p> <p><b>5) Oil Pressure Sensor</b><br/>                 † TRE167207 <span style="float:right">10</span></p> <p><b>6) Crankshaft Sensor</b><br/>                 † TRE519144 <span style="float:right">10</span></p> |  <p><b>1) Injector, Pencil</b><br/>                 † TRE60062 (Non Turbo)<br/>                 † TRE48786 (Turbo)<br/>                 † TRE531436 <span style="float:right">11</span></p> <p><b>2) Inj Grommet Kit</b><br/>                 † TMX504</p> <p><b>3) Seal</b><br/>                 † TR92352<br/>                 † TR48000</p>  |  <p><b>Glow Plug</b><br/>                 † 1) TRE502079 (11 V)<br/>                 † 2) TRE504580 x4 (10 V)</p> <p><b>Air Heater</b><br/>                 † 3) TRE502668 (12 V)</p>  |  <p><b>1) Fuel Transfer Pump</b><br/>                 † TRE66153 <span style="float:right">7</span><br/>                 † TRE68345 <span style="float:right">14</span><br/>                 † TRE502513 <span style="float:right">15</span></p> <p><b>2) Fuel Pump Electric</b><br/>                 † TAL155607 <span style="float:right">10</span></p> <p><b>3) Injection Pump Gear</b><br/>                 † TR132267 60T <span style="float:right">10</span></p> <p><b>4) Idler Gear, Lower</b><br/>                 † TRE56369 43T <span style="float:right">10</span></p> <p><b>5) Idler Gear, Upper</b><br/>                 † TRE508932 49T <span style="float:right">10</span></p>  |  <p><b>Turbocharger</b><br/>                 † TRE505047 <span style="float:right">10</span><br/>                 † TRE508657 <span style="float:right">10</span></p>   |   |

(1): These marking numbers RE59277, RE505100 require to use Ring Set TRE66271. Have been discontinued by John Deere

(2): Use TR114083 with Machine Split Con Rods, and use TR501124 with Fractured Split Con Rods.

(3): Use with Oil Pan code 1901, 1902 & 1903, for Steel Oil Pan.

(4): Use with Oil Pan code 1904 & 1905, for Aluminum Oil Pan.

(5): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(6): (m) R135439, R132324, R134213.

(7): Line Connections are both threaded.

(8): Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.

(9): 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.

(10): Check application for proper usage.

(11): Use with Stanadyne DE10 Injection Pump.

(12): Taper Nose.

(13): Straight Nose.

(14): Line connections are one hose barb & one threaded.

(15): Line connections are two hose barbs.

(16): Machine split and fractured split connecting rods may both be used in the same engine, but the correct con rod bolts must be used for each connecting rod.

(17): Our gasket sets do not include the front and rear crankshaft seals

(18): TRE500734 supplied with a cast iron impeller; TRE500734P supplied with a resin impeller.

(19): w/c. Rod R500000. These marking numbers RE59277, RE505100 require to use Ring Set TRE66271. Have been discontinued by John Deere.

**Engine Series:**  
PowerTech

**Engine Model:**  
4045T/H

**Engine Desc:**  
4.5T/H

**Engine Data:**  
CODE 4809,  
4822
















**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.19 in /  
106.5 mm Pin Ø:  
1.6250 in /(+/-  
.0002) = 41 mm

**Con Rod (M):**  
R114081  
(Machined) (15),  
R500335  
(Fractured) (15)

**Piston (M):**  
RE55512,  
RE505102

Please see page 396 for a complete list of equipment models.

|  |   |  |  |   |
|--|---|--|--|---|
|  <p><b>1) Engine O/H Kit</b><br/>                     † TRE66094<br/>                     † TRE66094A</p> <p><b>2) Engine I/F Kit</b><br/>                     † TIK66094<br/>                     † TIK66094A<br/>                     † Spec Sheet - TRE66093<br/>                     TRE66094</p>  |  <p><b>Piston-Liner Kit</b><br/>                     † TRE507850 (RE505112)</p> <p><b>Consists of:</b><br/>                     † a) TRE55512<br/>                     † b) TRE66820<br/>                     † c) TR123177<br/>                     † d) TR116383<br/>                     † e) TAR65507<br/>                     † f) TR54114</p>   |  <p><b>Main Bearing</b><br/>                     † TRE65165 Std.<br/>                     † TRE65911 0.010<br/>                     † TRE65165B 0.020</p> <p><b>Use 4</b></p>  |  <p><b>Thrust Bearing</b><br/>                     † TRE65168 Std.<br/>                     † TRE65912 0.010<br/>                     † TRE65168B 0.020</p> <p><b>Use 1</b></p>  |  <p><b>Con Rod Bearing</b><br/>                     † TRE65908 Std.<br/>                     † TRE65909 0.010<br/>                     † TRE65908B 0.020</p> <p><b>Use 4</b></p>  |
|  <p><b>1) Front Seal</b><br/>                     † TRE505515</p> <p><b>2) Rear Seal</b><br/>                     † TRE44574</p> <p><b>3) Ring Gear</b><br/>                     † TR114282 (142T)<br/>                     † TR28811 (129T)</p> <p><b>4) Crankshaft</b><br/>                     † TRE504638<br/>                     † TRE506195</p> <p><b>5) Seal</b><br/>                     † TH35244</p> <p><b>6) Crankshaft Gear</b><br/>                     † TR120631 30T</p>  |  <p><b>1) O/H Gasket Set</b><br/>                     † TRE501455</p> <p><b>2) Head Gasket Set</b><br/>                     † TRE66082</p> <p><b>3) Head Gasket</b><br/>                     † TR116515</p> <p><b>4) Oil Pan Gasket</b><br/>                     † TR97342<br/>                     † TR123352</p> <p><b>5) Rocker Cov Gsk</b><br/>                     † TR123542</p> <p><b>6) Timing Cover Gsk</b><br/>                     † TR123421<br/>                     † TR123425</p> <p><b>7) Turbo Gasket</b><br/>                     † TR123570</p> |  <p><b>1) Bush, Con Rod</b><br/>                     † TR114082 x4</p> <p><b>2) Bolt, Con Rod</b><br/>                     † TR114083 x8<br/>                     † TR501124 x8</p> <p><b>3) Bush, Bal. Shaft</b><br/>                     † TR115299 x6</p> <p><b>4) Bush, Camshaft</b><br/>                     † TR119874 x1</p> <p><b>5) Camshaft</b><br/>                     † TRE56375</p> <p><b>6) Bal. Shaft R/H</b><br/>                     † TRE500448</p> <p><b>7) Bal. Shaft L/H</b><br/>                     † TRE500449</p> <p><b>8) Cam Follower</b><br/>                     † TR123565 x8</p> <p><b>9) Balancer Shaft Gear</b><br/>                     † TR120637 R/H<br/>                     † TR120639 L/H</p> |  <p><b>1) Cyl Hd Cap Screw</b><br/>                     † TR85363 x18</p> <p><b>2) Tensioner, Belt</b><br/>                     † TRE518097<br/>                     † TRE68715</p> <p><b>3) Con Rod</b><br/>                     † TRE500608</p> <p><b>4) Oil Cooler</b><br/>                     † TRE59296 (5 Plates)<br/>                     † TRE56690 (7 Plates)<br/>                     † TRE59298 (9 Plates)</p>  |  <p><b>1) Water Pump</b><br/>                     † TRE500734<br/>                     † TRE500734P<br/>                     † TRE504911</p> <p><b>2) Water Pump Cov</b><br/>                     † TRE508566</p> <p><b>3) Water Pump Gsk</b><br/>                     † TR123417</p> <p><b>4) Pump, Oil</b><br/>                     † TRE504914</p> <p><b>5) Water Pump Housing</b><br/>                     † TR121634</p> <p><b>6) Oil Pump Gear</b><br/>                     † TR120638 30T</p> |
| <p><b>Valve, Intake</b><br/>                     † TR98062 Std.<br/>                     † TR97490 0.015</p>   | <p><b>Valve, Exhaust</b><br/>                     † TR90692 Std.<br/>                     † TR97492 0.015</p>   | <p><b>1) Insert, Valve In</b><br/>                     † TR98063 Std.<br/>                     † TR98335 O/S</p> <p><b>2) Insert, Valve Ex</b><br/>                     † TR85687 Std.<br/>                     † TR93910 O/S</p>  | <p><b>1) Seal, Valve</b><br/>                     † TRE31617</p> <p><b>2) Lock, Valve</b><br/>                     † TR91889</p>   | <p><b>1) Spring, Valve</b><br/>                     † TR26125</p> <p><b>2) Rotator, Valve</b><br/>                     † TRE60005</p>   |
|  <p><b>1) Thermostat</b><br/>                     † TRE522076 180° F<br/>                     † TRE528652 180° F<br/>                     † TRE540550 180° F<br/>                     † TRE64354 180° F</p> <p><b>2) Thermostat Cover</b><br/>                     † TR501130</p> <p><b>3) Water Temp Sensor</b><br/>                     † TRE51774</p> <p><b>4) Water Temp Sensor</b><br/>                     † TRE52722</p> <p><b>5) Oil Pressure Sensor</b><br/>                     † TRE167207</p> <p><b>6) Crankshaft Sensor</b><br/>                     † TRE519144</p> |  <p><b>1) Injector, Pencil</b><br/>                     † TRE60062 (Non Turbo)<br/>                     † TRE48786 (Turbo)<br/>                     † TRE531436</p> <p><b>2) Inj Grommet Kit</b><br/>                     † TMX504</p> <p><b>3) Seal</b><br/>                     † TR92352<br/>                     † TR48000</p>   |  <p><b>Glow Plug</b><br/>                     † 1) TRE502079 (11 V)<br/>                     † 2) TRE504580 x4 (10 V)</p> <p><b>Air Heater</b><br/>                     † 3) TRE502668 (12 V)</p>   |  <p><b>1) Fuel Transfer Pump</b><br/>                     † TRE66153<br/>                     † TRE68345<br/>                     † TRE502513</p> <p><b>2) Fuel Pump Electric</b><br/>                     † TAL155607</p> <p><b>3) Fuel Pump Electric</b><br/>                     † TRE509530</p> <p><b>4) Fuel Pump Kit</b><br/>                     † TRE505825</p> <p><b>5) Injection Pump Gear</b><br/>                     † TR132267 60T</p> <p><b>6) Idler Gear, Lower</b><br/>                     † TRE56369 43T</p> <p><b>7) Idler Gear, Upper</b><br/>                     † TRE508932 49T</p> |  <p><b>Turbocharger</b><br/>                     † TRE505047<br/>                     † TRE508657</p>  |

(1): Use TR114083 with Machine Split Con Rods, and use TR501124 with Fractured Split Con Rods.

(3): Use with Oil Pan code 1904 & 1905, for Aluminum Oil Pan.

(5): (m) R135439, R132324, R134213.

(7): 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.

(9): Check application for proper usage.

(11): Taper Nose.

(13): Line connections are one hose barb & one threaded.

(15): Machine split and fractured split connecting rods may both be used in the same engine, but the correct con rod bolts must be used for each connecting rod.

(17): Our gasket sets do not include the front and rear crankshaft seals

(19): w/C. Rod R500000. Use TR114083 with Machine Split Con Rods, and use TR501124 with Fractured Split Con Rods.

(2): Use with Oil Pan code 1901, 1902 & 1903, for Steel Oil Pan.

(4): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(6): Line Connections are both threaded.

(8): Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.

(10): Use with Stanadyne DE10 Injection Pump.

(12): Straight Nose.

(14): Line connections are two hose barbs.

(16): Not to be used with pistons marked RE509540.

(18): TRE500734 supplied with a cast iron impeller; TRE500734P supplied with a resin impeller.



**Engine Series:**

PowerTech

**Engine Model:**

4045T/H

**Engine Desc:**

For Tier 2 & Tier 3 Applications

**Engine Data:**

2 Valve per Cylinder  
CODE 4838

**Engine Info:**

4 Cyl

**Engine Dimensions:**

Bore: 4.19 in / 106.5 mm Pin  
Ø: 1.6250 in / (+/- .0002) = 41mm






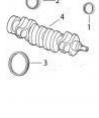
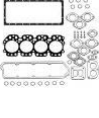


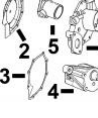




**Con Rod (M):**

R500335 (Fractured) (9)

**Piston (M):**

RE527039

Please see page 397 for a complete list of equipment models.

|   |  |   |   |  |
|---|--|---|---|--|
|  <p>1) <b>Engine O/H Kit</b><br/>                 † TRE532715<br/>                 2) <b>Engine I/F Kit</b><br/>                 † TIK532715<br/>                 † Spec Sheet - TRE532715</p>  |  <p><b>Piston-Liner Kit</b><br/>                 † TRE536083<br/> <b>Consists of:</b><br/>                 a) TRE527039<br/>                 b) TRE527844<br/>                 c) TR502755<br/>                 d) TR116397<br/>                 e) TAR65507<br/>                 f) TR54114</p>   |  <p><b>Main Bearing</b><br/>                 † TRE65165 Std.<br/>                 † TRE65911 0.010<br/>                 † TRE65165B 0.020<br/> <b>Use 4</b></p>   |  <p><b>Thrust Bearing</b><br/>                 † TRE65168 Std.<br/>                 † TRE65912 0.010<br/>                 † TRE65168B 0.020<br/> <b>Use 1</b></p>   |  <p><b>Con Rod Bearing</b><br/>                 † TRE65908 Std.<br/>                 † TRE65909 0.010<br/>                 † TRE65908B 0.020<br/> <b>Use 4</b></p>   |
|  <p>1) <b>Front Seal</b><br/>                 † TRE505515<br/>                 2) <b>Rear Seal</b><br/>                 † TRE44574<br/>                 3) <b>Ring Gear</b><br/>                 † TR114282 (142T)<br/>                 † TR28811 (129T)<br/>                 4) <b>Crankshaft</b><br/>                 † TRE504638<br/>                 † TRE506195<br/>                 5) <b>Crankshaft Gear</b><br/>                 † TR120631 30T</p>  |  <p>1) <b>O/H Gasket Set</b><br/>                 † TRE532713<br/>                 2) <b>Head Gasket Set</b><br/>                 † TRE532842<br/>                 3) <b>Head Gasket</b><br/>                 † TR116515<br/>                 4) <b>Oil Pan Gasket</b><br/>                 † TR97342<br/>                 † TR521493<br/>                 5) <b>Rocker Cov Gsk</b><br/>                 † TR123542<br/>                 † TR524468<br/>                 6) <b>Turbo Gasket</b><br/>                 † TR123570</p> |  <p>1) <b>Bush, Con Rod</b><br/>                 † TR114082 x4<br/>                 2) <b>Bolt, Con Rod</b><br/>                 † TR501124 x8<br/>                 3) <b>Bush, Bal. Shaft</b><br/>                 † TR115299 x6<br/>                 4) <b>Bush, Camshaft</b><br/>                 † TR119874 x1<br/>                 5) <b>Bal. Shaft R/H</b><br/>                 † TRE500448<br/>                 6) <b>Bal. Shaft L/H</b><br/>                 † TRE500449<br/>                 7) <b>Cam Follower</b><br/>                 † TR123565 x8<br/>                 8) <b>Balancer Shaft Gear</b><br/>                 † TR120637 R/H<br/>                 † TR120639 L/H</p> |  <p>1) <b>Cyl Hd Cap Screw</b><br/>                 † TR85363 x18<br/>                 † TR502511 x18<br/>                 2) <b>Tensioner, Belt</b><br/>                 † TRE518097<br/>                 † TRE68715<br/>                 3) <b>Con Rod</b><br/>                 † TRE500608<br/>                 4) <b>Oil Cooler</b><br/>                 † TRE59296 (5 Plates)<br/>                 † TRE56690 (7 Plates)<br/>                 † TRE59298 (9 Plates)</p> |  <p>1) <b>Water Pump</b><br/>                 † TRE500734<br/>                 † TRE500734P<br/>                 2) <b>Water Pump Cov</b><br/>                 † TRE508566<br/>                 3) <b>Water Pump Gsk</b><br/>                 † TR123417<br/>                 4) <b>Pump, Oil</b><br/>                 † TRE504914<br/>                 5) <b>Water Pump Housing</b><br/>                 † TR121634<br/>                 6) <b>Oil Pump Gear</b><br/>                 † TR120638 30T</p> |
| <p><b>Valve, Intake</b><br/>                 † TR98062 Std.<br/>                 † TR97490 0.015</p>  | <p><b>Valve, Exhaust</b><br/>                 † TR90692 Std.<br/>                 † TR97492 0.015</p>  | <p>1) <b>Insert, Valve In</b><br/>                 † TR106831 Std.<br/>                 2) <b>Insert, Valve Ex</b><br/>                 † TR106829 Std.</p>   | <p>1) <b>Seal, Valve</b><br/>                 † TRE31617<br/>                 2) <b>Lock, Valve</b><br/>                 † TR91889</p>  | <p>1) <b>Spring, Valve</b><br/>                 † TR26125<br/>                 2) <b>Rotator, Valve</b><br/>                 † TRE60005</p>  |
|  <p>1) <b>Thermostat</b><br/>                 † TRE522076 180° F<br/>                 † TRE528652 180° F<br/>                 † TRE540550 180° F<br/>                 † TRE64354 180° F<br/>                 2) <b>Thermostat Cover</b><br/>                 † TR501130<br/>                 3) <b>Water Temp Sensor</b><br/>                 † TRE51774<br/>                 4) <b>Water Temp Sensor</b><br/>                 † TRE52722<br/>                 5) <b>Oil Pressure Sensor</b><br/>                 † TR167207<br/>                 6) <b>Crankshaft Sensor</b><br/>                 † TRE519144<br/>                 7) <b>Fuel Pressure Sensor</b><br/>                 † TRE522794<br/>                 8) <b>Temperature Sensor</b><br/>                 † TRE522823</p> |  <p>1) <b>Fuel Transfer Pump</b><br/>                 † TRE66153<br/>                 † TRE68345<br/>                 † TRE502513<br/>                 2) <b>Injector</b><br/>                 † TDZ100211<br/>                 † TDZ100212<br/>                 † TDZ100217<br/>                 † TRE516540<br/>                 3) <b>Injection Pump Gear</b><br/>                 † TR502541 30T<br/>                 4) <b>Idler Gear, Lower</b><br/>                 † TRE56369 43T</p>                                     |  <p><b>Glow Plug</b><br/>                 † 1) TRE502079 (11 V)<br/>                 † 2) TRE504580 x4 (10 V)<br/>                 3) <b>Air Heater</b><br/>                 † TRE502668 (12 V)</p>  |  <p><b>Turbocharger</b><br/>                 † TRE508657</p>   |  |

(1): 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.

(3): Taper Nose.

(5): Check application for proper usage.

(7): Line Connections are one hose barb & one threaded.

(9): Machine split and fractured split connecting rods may both be used in the same engine, but the correct con rod bolts must be used for each connecting rod.

(11): TRE500734 supplied with a cast iron impeller; TRE500734P supplied with a resin impeller.

(2): Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.

(4): Straight Nose.

(6): Line Connections are both threaded.

(8): Line Connections are two hose barbs.

(10): Our gasket sets do not include the front and rear crankshaft seals

**Engine Series:**

PowerTech

**Engine Model:**

4045T/H

**Engine Desc:**

For Tier 2 & Tier 3 Applications

**Engine Data:**

4 Valve per Cylinder  
CODE 4835

**Engine Info:**

4 Cyl

**Engine Dimensions:**

Bore: 4.19 in / 106.5 mm Pin Ø: 1.6250 in / (+/- .0002) = 41mm






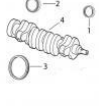

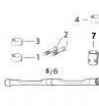





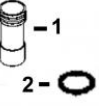

**Con Rod (M):**

R500335 (Fractured) (9)

**Piston (M):**

RE521616

Please see page 398 for a complete list of equipment models.

|  |   |   |  |  |
|--|---|---|--|--|
|  <p><b>1) Engine O/H Kit</b><br/>                 † TRE536969<br/> <b>2) Engine I/F Kit</b><br/>                 † TIK536969<br/>                 † Spec Sheet - 4045T 16 Valve</p>  |  <p><b>Piston-Liner Kit</b><br/>                 † TRE524450<br/> <b>Consists of:</b><br/>                 † a) TRE521616<br/>                 † b) TRE524453<br/>                 † c) TR502755<br/>                 † d) TR116397<br/>                 † e) TAR65507<br/>                 † f) TR54114</p>  |  <p><b>Main Bearing</b><br/>                 † TRE65165 Std.<br/>                 † TRE65911 0.010<br/>                 † TRE65165B 0.020<br/> <b>Use 4</b></p>   |  <p><b>Thrust Bearing</b><br/>                 † TRE65168 Std.<br/>                 † TRE65912 0.010<br/>                 † TRE65168B 0.020<br/> <b>Use 1</b></p>  |  <p><b>Con Rod Bearing</b><br/>                 † TRE65908 Std.<br/>                 † TRE65909 0.010<br/>                 † TRE65908B 0.020<br/> <b>Use 4</b></p>   |
|  <p><b>1) Front Seal</b><br/>                 † TRE505515<br/> <b>2) Rear Seal</b><br/>                 † TRE44574<br/> <b>3) Ring Gear</b><br/>                 † TR114282 (142T)<br/>                 † TR28811 (129T)<br/> <b>4) Crankshaft</b><br/>                 † TRE504638<br/>                 † TRE506195<br/> <b>5) Crankshaft Gear</b><br/>                 † TR120631 30T</p>   |  <p><b>1) O/H Gasket Set</b><br/>                 † TRE536962<br/> <b>2) Head Gasket Set</b><br/>                 † TRE536967<br/> <b>3) Head Gasket</b><br/>                 † TR116515<br/> <b>4) Oil Pan Gasket</b><br/>                 † TR97342<br/>                 † TR521493<br/> <b>5) Rocker Cov Gsk</b><br/>                 † TR524498<br/>                 † TR524499<br/> <b>6) Turbo Gasket</b><br/>                 † TR123570</p>                              |  <p><b>1) Bush, Con Rod</b><br/>                 † TR114082 x4<br/> <b>2) Bolt, Con Rod</b><br/>                 † TR501124 x8<br/> <b>3) Bush, Bal. Shaft</b><br/>                 † TR115299 x6<br/> <b>4) Bush, Camshaft</b><br/>                 † TR119874 x1<br/> <b>5) Bal. Shaft R/H</b><br/>                 † TRE500448<br/> <b>6) Bal. Shaft L/H</b><br/>                 † TRE500449<br/> <b>7) Cam Follower</b><br/>                 † TR123565 x8<br/> <b>8) Balancer Shaft Gear</b><br/>                 † TR120637 R/H<br/>                 † TR120639 L/H</p> |  <p><b>1) Cyl Hd Cap Screw</b><br/>                 † TR502511 x18<br/> <b>2) Tensioner, Belt</b><br/>                 † TRE518097<br/> <b>3) Con Rod</b><br/>                 † TRE500608<br/> <b>4) Oil Cooler</b><br/>                 † TRE59296 (5 Plates)<br/>                 † TRE56690 (7 Plates)<br/>                 † TRE59298 (9 Plates)</p> |  <p><b>1) Water Pump</b><br/>                 † TRE500734<br/>                 † TRE500734P<br/>                 † TRE546918<br/> <b>2) Water Pump Cov</b><br/>                 † TRE508566<br/> <b>3) Water Pump Gsk</b><br/>                 † TR123417<br/> <b>4) Pump, Oil</b><br/>                 † TRE504914<br/>                 † TRE521756<br/> <b>5) Water Pump Housing</b><br/>                 † TR121634<br/> <b>6) Oil Pump Gear</b><br/>                 † TR120638 30T</p> |
| <p><b>Valve, Intake</b><br/>                 † TRE531221 Std.<br/>                 † TRE518080 Std.</p>  | <p><b>Valve, Exhaust</b><br/>                 † TRE518081 Std.</p>  | <p><b>1) Insert, Valve In</b><br/>                 † TRE518082 Std.<br/> <b>2) Insert, Valve Ex</b><br/>                 † TRE518083 Std.</p>   | <p><b>1) Seal, Valve</b><br/>                 † TRE526519 x16<br/>                 † TRE519115 x16<br/> <b>2) Lock, Valve</b><br/>                 † TR502371 x32</p>  | <p><b>1) Spring, Valve</b><br/>                 † TR518872 x16<br/>                 † TRE516486 x16</p>  |
|  <p><b>1) Thermostat</b><br/>                 † TRE522076 180° F<br/>                 † TRE538289 180° F<br/>                 † TRE64354 180° F<br/> <b>2) Thermostat Cover</b><br/>                 † TR501130<br/> <b>3) Water Temp Sensor</b><br/>                 † TRE51774<br/> <b>4) Water Temp Sensor</b><br/>                 † TRE52722<br/> <b>5) Oil Pressure Sensor</b><br/>                 † TRE167207<br/> <b>6) Crankshaft Sensor</b><br/>                 † TRE519144<br/> <b>7) Fuel Pressure Sensor</b><br/>                 † TRE522794<br/> <b>8) Temperature Sensor</b><br/>                 † TRE522823</p> |  <p><b>1) Fuel Transfer Pump</b><br/>                 † TRE66153<br/>                 † TRE68345<br/>                 † TRE502513<br/>                 † TRE517230<br/> <b>2) Injector</b><br/>                 † TDZ100211<br/>                 † TDZ100212<br/>                 † TDZ100217<br/>                 † TRE516540<br/> <b>3) Injection Pump Gear</b><br/>                 † TR502541 30T<br/> <b>4) Idler Gear, Lower</b><br/>                 † TRE56369 43T</p> |  <p><b>Glow Plug</b><br/>                 † 1) TRE502079 (11 V)<br/>                 † 2) TRE504580 x4 (10 V)<br/> <b>3) Air Heater</b><br/>                 † TRE502668 (12 V)</p>  |  <p><b>1) Injector Tube</b><br/>                 † TRE543935 x4<br/> <b>2) Injector O-Ring</b><br/>                 † TRE528349<br/>                 † TRE530609</p>  |  <p><b>Turbocharger</b><br/>                 † TRE508657</p>  |

(1): 1 Piece Unitized Seal and Wearleeve; Replaces TRE59810, RE538097.

(3): Taper Nose.

(5): Check application for proper usage.

(7): Line Connections are one hose barb & one threaded.

(9): Machine split and fractured split connecting rods may both be used in the same engine, but the correct con rod bolts must be used for each connecting rod.  
 (11): TRE500734 supplied with a cast iron impeller; TRE500734P supplied with a resin impeller.

(2): Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.

(4): Straight Nose.

(6): Line Connections are both threaded.

(8): Line Connections are two hose barbs.

(10): Our gasket sets do not include the front and rear crankshaft seals

JOHN DEERE 4045 4.5T/H PISTON (M) RE515037 TIER 2 & TIER 3

**Engine Series:**

PowerTech

**Engine Model:**

4045T/H

**Engine Desc:**

For Tier 2 & Tier 3 Applications

**Engine Data:**

4 Valve per Cylinder

**Engine Info:**

4 Cyl

**Engine Dimensions:**

Bore: 4.19 in / 106.5 mm Pin Ø: 1.6250 in / (+/- .0002) = 41 mm














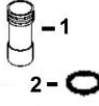

**Con Rod (M):**

R500335 (Fractured) (9)

**Piston (M):**

RE515037

Please see page 399 for a complete list of equipment models.

|  |   |   |  |  |
|--|---|---|--|--|
|  <p><b>1) Engine O/H Kit</b><br/>                     † TRE526972<br/> <b>2) Engine I/F Kit</b><br/>                     † TIK526972<br/>                     † Spec Sheet - 4045T 16 Valve</p>  |  <p><b>Piston-Liner Kit</b><br/>                     † TRE516227<br/> <b>Consists of:</b><br/>                     † a) TRE515037<br/>                     † b) TRE66820<br/>                     † c) TR502755<br/>                     † d) TR116383<br/>                     † e) TAR65507<br/>                     † f) TR54114</p>   |  <p><b>Main Bearing</b><br/>                     † TRE65165 Std.<br/>                     † TRE65911 0.010<br/>                     † TRE65165B 0.020<br/> <b>Use 4</b></p>   |  <p><b>Thrust Bearing</b><br/>                     † TRE65168 Std.<br/>                     † TRE65912 0.010<br/>                     † TRE65168B 0.020<br/> <b>Use 1</b></p>  |  <p><b>Con Rod Bearing</b><br/>                     † TRE65908 Std.<br/>                     † TRE65909 0.010<br/>                     † TRE65908B 0.020<br/> <b>Use 4</b></p>   |
|  <p><b>1) Front Seal</b><br/>                     † TRE505515<br/> <b>2) Rear Seal</b><br/>                     † TRE44574<br/> <b>3) Ring Gear</b><br/>                     † TR114282 (142T)<br/>                     † TR28811 (129T)<br/> <b>4) Crankshaft</b><br/>                     † TRE504638<br/>                     † TRE506195<br/> <b>5) Crankshaft Gear</b><br/>                     † TR120631 30T</p>   |  <p><b>1) O/H Gasket Set</b><br/>                     † TRE536962<br/> <b>2) Head Gasket Set</b><br/>                     † TRE536967<br/> <b>3) Head Gasket</b><br/>                     † TR116515<br/> <b>4) Oil Pan Gasket</b><br/>                     † TR97342<br/>                     † TR521493<br/> <b>5) Rocker Cov Gsk</b><br/>                     † TR524498<br/>                     † TR524499<br/> <b>6) Turbo Gasket</b><br/>                     † TR123570</p>                                      |  <p><b>1) Bush, Con Rod</b><br/>                     † TR114082 x4<br/> <b>2) Bolt, Con Rod</b><br/>                     † TR501124 x8<br/> <b>3) Bush, Bal. Shaft</b><br/>                     † TR115299 x6<br/> <b>4) Bush, Camshaft</b><br/>                     † TR119874 x1<br/> <b>5) Bal. Shaft R/H</b><br/>                     † TRE500448<br/> <b>6) Bal. Shaft L/H</b><br/>                     † TRE500449<br/> <b>7) Cam Follower</b><br/>                     † TR123565 x8<br/> <b>8) Balancer Shaft Gear</b><br/>                     † TR120637 R/H<br/>                     † TR120639 L/H</p> |  <p><b>1) Cyl Hd Cap Screw</b><br/>                     † TR502511 x18<br/> <b>2) Tensioner, Belt</b><br/>                     † TRE518097<br/> <b>3) Con Rod</b><br/>                     † TRE500608<br/> <b>4) Oil Cooler</b><br/>                     † TRE59296 (5 Plates)<br/>                     † TRE56690 (7 Plates)<br/>                     † TRE59298 (9 Plates)</p> |  <p><b>1) Water Pump</b><br/>                     † TRE500734<br/>                     † TRE500734P<br/>                     † TRE546918<br/> <b>2) Water Pump Cov</b><br/>                     † TRE508566<br/> <b>3) Water Pump Housing</b><br/>                     † TR123417<br/> <b>4) Pump, Oil</b><br/>                     † TRE504914<br/>                     † TRE521756<br/> <b>5) Water Pump Housing</b><br/>                     † TR121634<br/> <b>6) Oil Pump Gear</b><br/>                     † TR120638 30T</p> |
| <p><b>Valve, Intake</b><br/>                     † TRE531221 Std.<br/>                     † TRE518080 Std.</p>  | <p><b>Valve, Exhaust</b><br/>                     † TRE518081 Std.</p>  | <p><b>1) Insert, Valve In</b><br/>                     † TRE518082 Std.<br/> <b>2) Insert, Valve Ex</b><br/>                     † TRE518083 Std.</p>   | <p><b>1) Seal, Valve</b><br/>                     † TRE526519 x16<br/>                     † TRE519115 x16<br/> <b>2) Lock, Valve</b><br/>                     † TR502371 x32</p>  | <p><b>1) Spring, Valve</b><br/>                     † TR518872 x16<br/>                     † TRE516486 x16</p>  |
|  <p><b>1) Thermostat</b><br/>                     † TRE522076 180° F<br/>                     † TRE538289 180° F<br/>                     † TRE64354 180° F<br/> <b>2) Thermostat Cover</b><br/>                     † TR501130<br/> <b>3) Water Temp Sensor</b><br/>                     † TRE51774<br/> <b>4) Water Temp Sensor</b><br/>                     † TRE52722<br/> <b>5) Oil Pressure Sensor</b><br/>                     † TRE167207<br/> <b>6) Crankshaft Sensor</b><br/>                     † TRE519144<br/> <b>7) Fuel Pressure Sensor</b><br/>                     † TRE522794<br/> <b>8) Temperature Sensor</b><br/>                     † TRE522823</p> |  <p><b>1) Fuel Transfer Pump</b><br/>                     † TRE66153<br/>                     † TRE68345<br/>                     † TRE502513<br/>                     † TRE517230<br/> <b>2) Injector</b><br/>                     † TDZ100211<br/>                     † TDZ100212<br/>                     † TDZ100217<br/>                     † TRE516540<br/> <b>3) Injection Pump Gear</b><br/>                     † TR502541 30T<br/> <b>4) Idler Gear, Lower</b><br/>                     † TRE56369 43T</p> |  <p><b>Glow Plug</b><br/>                     † 1) TRE502079 (11 V)<br/>                     † 2) TRE504580 x4 (10 V)<br/> <b>3) Air Heater</b><br/>                     † TRE502668 (12 V)</p>  |  <p><b>1) Injector Tube</b><br/>                     † TRE543935 x4<br/> <b>2) Injector O-Ring</b><br/>                     † TRE528349<br/>                     † TRE530609</p>  |  <p><b>Turbocharger</b><br/>                     † TRE508657</p>  |

(1): 1 Piece Unitized Seal and Wearleeve; Replaces TRE59810, RE538097.

(3): Taper Nose.

(5): Check application for proper usage.

(7): Line Connections are one hose barb & one threaded.

(9): Machine split and fractured split connecting rods may both be used in the same engine, but the correct con rod bolts must be used for each connecting rod.  
 (11): TRE500734 supplied with a cast iron impeller; TRE500734P supplied with a resin impeller.

(2): Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.

(4): Straight Nose.

(6): Line Connections are both threaded.

(8): Line Connections are two hose barbs.

(10): Our gasket sets do not include the front and rear crankshaft seals

**Engine Series:**  
PowerTech

**Engine Model:**  
4045T/H

**Engine Desc:**  
For Tier 2 & Tier 3 Applications

**Engine Data:**  
4 Valve per Cylinder  
CODE 4825

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.19 in / 106.5 mm Pin Ø: 1.6250 in / (+/- .0002) = 41mm

**Con Rod (M):**  
R500335 (Fractured) (9)

**Piston (M):**  
RE507758

**Farm Tractors**  
6430  
6534  
7130

**Loader Backhoes**  
120

**Forwarders**  
1010D  
1010E  
810D  
810E

**Wheel Loaders**  
444HCL  
TC444H

**Crawler Dozers**  
450G  
455G  
550G  
550H  
555G  
650G

**Skid Steers**  
280  
280 Series II

**Engine Model**  
4045HF475



- 1) Engine O/H Kit**  
 › TRE526973  
**2) Engine I/F Kit**  
 › TIK526973  
 › Spec Sheet - 4045T 16 Valve



- Piston-Liner Kit**  
 › TRE516228  
**Consists of:**  
 › a) TRE507758  
 › b) TRE516268  
 › c) TR502755  
 › d) TR116397  
 › e) TAR65507  
 › f) TR54114



- Main Bearing**  
 › TRE65165 Std.  
 › TRE65911 0.010  
 › TRE65165B 0.020  
**Use 4**



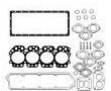
- Thrust Bearing**  
 › TRE65168 Std.  
 › TRE65912 0.010  
 › TRE65168B 0.020  
**Use 1**



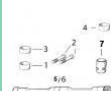
- Con Rod Bearing**  
 › TRE65908 Std.  
 › TRE65909 0.010  
 › TRE65908B 0.020  
**Use 4**



- 1) Front Seal**  
 › TRE505515  
**2) Rear Seal**  
 › TRE44574  
**3) Ring Gear**  
 › TR114282 (142T)  
 › TR28811 (129T)  
**4) Crankshaft**  
 › TRE504638  
 › TRE506195  
**5) Crankshaft Gear**  
 › TR120631 30T



- 1) O/H Gasket Set**  
 › TRE536962  
**2) Head Gasket Set**  
 › TRE536967  
**3) Head Gasket**  
 › TR116515  
**4) Oil Pan Gasket**  
 › TR97342  
 › TR521493  
**5) Rocker Cov Gsk**  
 › TR524498  
 › TR524499  
**6) Turbo Gasket**  
 › TR123570



- 1) Bush, Con Rod**  
 › TR114082 x4  
**2) Bolt, Con Rod**  
 › TR501124 x8  
**3) Bush, Bal. Shaft**  
 › TR115299 x6  
**4) Bush, Camshaft**  
 › TR119874 x1  
**5) Bal. Shaft R/H**  
 › TRE500448  
**6) Bal. Shaft L/H**  
 › TRE500449  
**7) Cam Follower**  
 › TR123565 x8  
**8) Balancer Shaft Gear**  
 › TR120637 R/H  
 › TR120639 L/H



- 1) Cyl Hd Cap Screw**  
 › TR502511 x18  
**2) Tensioner, Belt**  
 › TRE518097  
**3) Con Rod**  
 › TRE500608  
**4) Oil Cooler**  
 › TRE59296 (5 Plates)  
 › TRE56690 (7 Plates)  
 › TRE59298 (9 Plates)



- 1) Water Pump**  
 › TRE500734  
 › TRE500734P  
 › TRE546918  
**2) Water Pump Cov**  
 › TRE508566  
**3) Water Pump Gsk**  
 › TR123417  
**4) Pump, Oil**  
 › TRE504914  
 › TRE521756  
**5) Water Pump Housing**  
 › TR121634  
**6) Oil Pump Gear**  
 › TR120638 30T

- Valve, Intake**  
 › TRE531221 Std.  
 › TRE518080 Std.

- Valve, Exhaust**  
 › TRE518081 Std.

- 1) Insert, Valve In**  
 › TRE518082 Std.  
**2) Insert, Valve Ex**  
 › TRE518083 Std.

- 1) Seal, Valve**  
 › TRE526519 x16  
 › TRE519115 x16  
**2) Lock, Valve**  
 › TR502371 x32

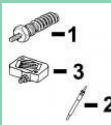
- 1) Spring, Valve**  
 › TR518872 x16  
 › TRE516486 x16



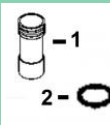
- 1) Thermostat**  
 › TRE522076 180° F  
 › TRE538289 180° F  
 › TRE64354 180° F  
**2) Thermostat Cover**  
 › TR501130  
**3) Water Temp Sensor**  
 › TRE51774  
**4) Water Temp Sensor**  
 › TRE52722  
**5) Oil Pressure Sensor**  
 › TRE167207  
**6) Crankshaft Sensor**  
 › TRE519144  
**7) Fuel Pressure Sensor**  
 › TRE522794  
**8) Temperature Sensor**  
 › TRE522823



- 1) Fuel Transfer Pump**  
 › TRE66153  
 › TRE68345  
 › TRE502513  
 › TRE517230  
**2) Injector**  
 › TDZ100211  
 › TDZ100212  
 › TDZ100217  
 › TRE516540  
**3) Injection Pump Gear**  
 › TR502541 30T  
**4) Idler Gear, Lower**  
 › TRE56369 43T



- Glow Plug**  
 › 1) TRE502079 (11 V)  
 › 2) TRE504580 x4 (10 V)  
**3) Air Heater**  
 › TRE502668 (12 V)



- 1) Injector Tube**  
 › TRE543935 x4  
**2) Injector O-Ring**  
 › TRE528349  
 › TRE530609



- Turbocharger**  
 › TRE508657

(1): 1 Piece Unitized Seal and Wearleeve; Replaces TRE59810, RE538097.

(3): Taper Nose.

(5): Check application for proper usage.

(7): Line Connections are one hose barb & one threaded.

(2): Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.

(4): Straight Nose.

(6): Line Connections are both threaded.

(8): Line Connections are two hose barbs.

(9): Machine split and fractured split connecting rods may both be used in the same engine, but the correct con rod bolts must be used for each connecting rod.

(11): TRE500734 supplied with a cast iron impeller; TRE500734P supplied with a resin impeller.

**Engine Series:**  
PowerTech  
**Engine Model:**  
4045T/H

**Engine Desc:**  
For Tier 2 & Tier 3 Applications

**Engine Data:**  
4 Valve per Cylinder  
CODE 4837

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.19 in / 106.5 mm Pin Ø: 1.6250 in / (+/- .0002) = 41 mm

**Con Rod (M):**  
R500335 (Fractured) (9)

**Piston (M):**  
RE515037

Please see page 400 for a complete list of equipment models.



- 1) **Engine O/H Kit**  
‣ TRE546978
- 2) **Engine I/F Kit**  
‣ TIK546978  
‣ Spec Sheet - 4045T 16 Valve



- Piston-Liner Kit**  
‣ TRE530616
- Consists of:**
  - a) TRE515037
  - b) TRE530613
  - c) TR502755
  - d) TR116397
  - e) TAR65507
  - f) TR54114



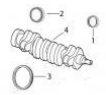
- Main Bearing**
  - TRE65165 Std.
  - TRE65911 0.010
  - TRE65165B 0.020
- Use 4**



- Thrust Bearing**
  - TRE65168 Std.
  - TRE65912 0.010
  - TRE65168B 0.020
- Use 1**



- Con Rod Bearing**
  - TRE65908 Std.
  - TRE65909 0.010
  - TRE65908B 0.020
- Use 4**



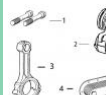
- 1) **Front Seal**  
‣ TRE505515
- 2) **Rear Seal**  
‣ TRE44574
- 3) **Ring Gear**  
‣ TR114282 (142T)  
‣ TR28811 (129T)
- 4) **Crankshaft**  
‣ TRE504638  
‣ TRE506195
- 5) **Crankshaft Gear**  
‣ TR120631 30T



- 1) **O/H Gasket Set**  
‣ TRE536962
- 2) **Head Gasket Set**  
‣ TRE536967
- 3) **Head Gasket**  
‣ TR116515
- 4) **Oil Pan Gasket**  
‣ TR97342  
‣ TR521493
- 5) **Rocker Cov Gsk**  
‣ TR524498  
‣ TR524499
- 6) **Turbo Gasket**  
‣ TR123570



- 1) **Bush, Con Rod**  
‣ TR114082 x4
- 2) **Bolt, Con Rod**  
‣ TR501124 x8
- 3) **Bush, Bal. Shaft**  
‣ TR115299 x6
- 4) **Bush, Camshaft**  
‣ TR119874 x1
- 5) **Bal. Shaft R/H**  
‣ TRE500448
- 6) **Bal. Shaft L/H**  
‣ TRE500449
- 7) **Cam Follower**  
‣ TR123565 x8
- 8) **Balancer Shaft Gear**  
‣ TR120637 R/H  
‣ TR120639 L/H



- 1) **Cyl Hd Cap Screw**  
‣ TR502511 x18
- 2) **Tensioner, Belt**  
‣ TRE518097
- 3) **Con Rod**  
‣ TRE500608
- 4) **Oil Cooler**  
‣ TRE59296 (5 Plates)  
‣ TRE56690 (7 Plates)  
‣ TRE59298 (9 Plates)



- 1) **Water Pump**  
‣ TRE500734  
‣ TRE500734P  
‣ TRE546918
- 2) **Water Pump Cov**  
‣ TRE508566
- 3) **Water Pump Gsk**  
‣ TR123417
- 4) **Pump, Oil**  
‣ TRE504914  
‣ TRE521756
- 5) **Water Pump Housing**  
‣ TR121634
- 6) **Oil Pump Gear**  
‣ TR120638 30T

- Valve, Intake**  
‣ TRE531221 Std.  
‣ TRE518080 Std.

- Valve, Exhaust**  
‣ TRE518081 Std.

- 1) **Insert, Valve In**  
‣ TRE518082 Std.
- 2) **Insert, Valve Ex**  
‣ TRE518083 Std.

- 1) **Seal, Valve**  
‣ TRE526519 x16  
‣ TRE519115 x16
- 2) **Lock, Valve**  
‣ TR502371 x32

- 1) **Spring, Valve**  
‣ TR518872 x16  
‣ TRE516486 x16



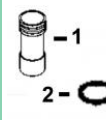
- 1) **Thermostat**  
‣ TRE522076 180° F  
‣ TRE538289 180° F  
‣ TRE64354 180° F
- 2) **Thermostat Cover**  
‣ TR501130
- 3) **Water Temp Sensor**  
‣ TRE51774
- 4) **Water Temp Sensor**  
‣ TRE52722
- 5) **Oil Pressure Sensor**  
‣ TRE167207
- 6) **Crankshaft Sensor**  
‣ TRE519144
- 7) **Fuel Pressure Sensor**  
‣ TRE522794
- 8) **Temperature Sensor**  
‣ TRE522823



- 1) **Fuel Transfer Pump**  
‣ TRE66153  
‣ TRE68345  
‣ TRE502513  
‣ TRE517230
- 2) **Injector**  
‣ TDZ100211  
‣ TDZ100212  
‣ TDZ100217  
‣ TRE516540
- 3) **Injection Pump Gear**  
‣ TR502541 30T
- 4) **Idler Gear, Lower**  
‣ TRE56369 43T



- Glow Plug**  
‣ 1) TRE502079 (11 V)  
‣ 2) TRE504580 x4 (10 V)
- 3) **Air Heater**  
‣ TRE502668 (12 V)



- 1) **Injector Tube**  
‣ TRE543935 x4
- 2) **Injector O-Ring**  
‣ TRE528349  
‣ TRE530609



- Turbocharger**  
‣ TRE508657

(1): 1 Piece Unitized Seal and Wearleeve; Replaces TRE59810, RE538097.

(3): Taper Nose.

(5): Check application for proper usage.

(7): Line Connections are one hose barb & one threaded.

(9): Machine split and fractured split connecting rods may both be used in the same engine, but the correct con rod bolts must be used for each connecting rod.  
(11): TRE500734 supplied with a cast iron impeller; TRE500734P supplied with a resin impeller.

(2): Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.  
(4): Straight Nose.

(6): Line Connections are both threaded.

(8): Line Connections are two hose barbs.

(10): Our gasket sets do not include the front and rear crankshaft seals

**Engine Series:**

PowerTech

**Engine Model:**

6068D

**Engine Desc:**

6.8D

**Engine Data:**

CODE 4805

**Engine Info:**

6 Cyl

**Engine Dimensions:**

Bore: 4.19 in / 106.5 mm  
Pin Ø: 1.3750 in / (+/- .0002) = 35mm

**Con Rod (M):**

R123959 (Machined) (13), R500000 (Fractured) (13)

**Piston (M):**

RE59279, RE505101

**Farm Tractors**

6205  
6505  
6510  
SE6510  
6515  
6520  
SE6520

**Engine Model**

6.8L  
6068TF150  
6068DF150

**Genmac**

GAMMA  
G125JO  
GAMMA  
G150JO  
STAR G180JO  
QUEEN  
G125JS\*  
QUEEN  
G150JS\*  
ROYAL  
G180JS



**Engine O/H Kit**

- TRE66095
- TRE66095A

12

**Engine I/F Kit**

- TIK66095
- TIK66095A
- Spec Sheet - TRE66095

12



**Piston-Liner Kit**

- TRE65966 (RE505110)

**Consists of:**

- a) TRE59279
- b) TRE66271
- c) TR123178
- d) TR116383
- e) TAR65507
- f) TM41029



**Main Bearing**

- TRE65165 Std.
- TRE65911 0.010
- TRE65165B 0.020

8

**Use 6**



**Thrust Bearing**

- TRE65168 Std.
- TRE65912 0.010
- TRE65168B 0.020

8

**Use 1**

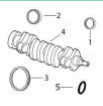


**Con Rod Bearing**

- TRE65908 Std.
- TRE65909 0.010
- TRE65908B 0.020
- TAR97655

8

**Use 6**



**1) Front Seal**

- TRE505515

5

**2) Rear Seal**

- TRE44574

**3) Ring Gear**

- TR114282 (142T)
- TR28811 (129T)

**4) Crankshaft**

- TRE515785
- TRE505921

3

4

**5) Seal**

- TH35244

**6) Crankshaft Gear**

- TR120631 30T



**1) O/H Gasket Set**

- TRE501456

14

**2) Head Gasket Set**

- TRE66085

**3) Head Gasket**

- TR116516

**4) Oil Pan Gasket**

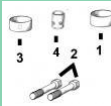
- TR123354

**5) Rocker Cov Gsk**

- TR123543

**6) Timing Cover Gsk**

- TR123421
- TR123425



**1) Bush, Con Rod**

- TR123960 x6

**2) Bolt, Con Rod**

- TR114083 x12
- TR501124 x12

1

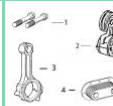
1

**3) Bush, Camshaft**

- TR119874 x1

**4) Cam Follower**

- TR123565 x12



**1) Cyl Hd Cap Screw**

- TR85363 x26

**2) Tensioner, Belt**

- TRE518097
- TRE68715

2

7

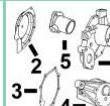
7

**3) Con Rod**

- TRE500002

**4) Oil Cooler**

- TRE59296 (5 Plates)
- TRE56690 (7 Plates)
- TRE59298 (9 Plates)



**1) Water Pump**

- TRE500734
- TRE500734P
- TRE504911

15

15

7

**2) Water Pump Cov**

- TRE508566

**3) Water Pump Gsk**

- TR123417

**4) Pump, Oil**

- TRE504914

7

**5) Water Pump Housing**

- TR121634

**6) Oil Pump Gear**

- TR120638 30T

**Valve, Intake**

- TR98062 Std.
- TR97490 0.015

**Valve, Exhaust**

- TR90692 Std.
- TR97492 0.015

**1) Insert, Valve In**

- TR98063 Std.
- TR98335 O/S

**2) Insert, Valve Ex**

- TR85687 Std.
- TR93910 O/S

**1) Seal, Valve**

- TRE31617

**2) Lock, Valve**

- TR91889

**1) Spring, Valve**

- TR26125

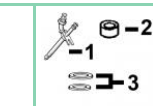
**2) Rotator, Valve**

- TRE60005



**1) Thermostat**

- TRE522076 180° F
- TRE528652 180° F
- TRE540550 180° F
- TRE64354 180° F



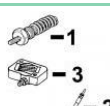
**1) Injector, Pencil**

- TRE60062 (Non Turbo)
- TRE48786 (Turbo)
- TRE531436

6

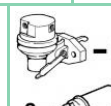
**2) Inj Grommet Kit**

- TMX506
- TR92352
- TR48000



**Glow Plug**

- 1) TRE502079 (11 V)
- 2) TRE504580 x6 (10 V)
- 3) Air Heater
- TRE502668 (12 V)



**1) Fuel Transfer Pump**

- TRE66153
- TRE68345
- TRE502513

9

10

11

**2) Fuel Pump Electric**

- TAL155607

**3) Injection Pump Gear**

- TR132267 60T

**4) Idler Gear, Lower**

- TRE56369 43T

7

7

7

**5) Idler Gear, Upper**

- TRE508932 49T

7

(1): Use TR114083 Rod Bolts with Machine Split Connecting Rods, and use TR501124 Rod Bolts with Fractured Split Connecting Rods.

(3): Crankshaft (m) R116076, Straight Nose.

(5): 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.

(7): Check application for proper usage.

(9): Line Connections are both threaded.

(11): Line Connections are two hose barbs.

(13): Machine split and fractured split connecting rods may both be used in the same engine, but the correct con rod bolts must be used for each connecting rod.

(15): TRE500734 supplied with a cast iron impeller; TRE500734P supplied with a resin impeller.

(2): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(4): Crankshaft (m) R503470, Tapered Nose.

(6): Use with Stanadyne DE10 Injection Pump.

(8): Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.

(10): Line Connections are one hose barb & one threaded.

(12): with Connecting Rod R500000.

(14): Our gasket sets do not include the front and rear crankshaft seals

**Engine Series:**

PowerTech

**Engine Model:**

6068T

**Engine Desc:**

6.8T

**Engine Data:**

CODE 4807, 4828

**Engine Info:**

6 Cyl

**Engine Dimensions:**

Bore: 4.19 in / 106.5 mm Pin Ø: 1.3750 in / (+/- .0002) = 35mm

**Con Rod (M):**

R123959 (Machined) (14), R500000 (Fractured) (14)

**Piston (M):**

RE59277, RE505100 (9)

**Farm Tractors**

6603

**Cotton Pickers**

7455

7460

**Motor Graders**

670C

670CH

672CH

**Crawler Dozers**

700H

700J

**Engine Model**

6068TF150

6068TP053

6068TF151

6068TP053

6068TF158

6068TP054

6068TF275

6068TT056

6068TN051

6068TT060

6068TN054



**Engine O/H Kit**

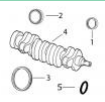
- TRE66096
- TRE66096A

13

**Engine I/F Kit**

- TIK66096
- TIK66096A
- Spec Sheet - TRE66096

13



**1) Front Seal**

- TRE505515

5

**2) Rear Seal**

- TRE44574

**3) Ring Gear**

- TR114282 (142T)
- TR28811 (129T)

**4) Crankshaft**

- TRE515785
- TRE505921

3

**5) Seal**

- TH35244

4

**6) Crankshaft Gear**

- TR120631 <sup>30T</sup>

**Valve, Intake**

- TR98062 Std.
- TR97490 0.015

**Valve, Exhaust**

- TR90692 Std.
- TR97492 0.015



**1) Thermostat**

- TRE522076 180° F
- TRE528652 180° F
- TRE540550 180° F
- TRE64354 180° F

7

7

7

7

**2) Thermostat Cover**

- TR501130

7

**3) Water Temp Sensor**

- TRE51774

7

**4) Water Temp Sensor**

- TRE52722

7

**5) Oil Pressure Sensor**

- TRE167207

7

**6) Crankshaft Sensor**

- TRE519144

7



**Piston-Liner Kit**

- TRE507920 (RE515372)

**Consists of:**

- a) TRE515372
- b) TRE66820
- c) TR123178
- d) TR116383
- e) TAR65507
- f) TM41029



**1) O/H Gasket Set**

- TRE501456

15

**2) Head Gasket Set**

- TRE66085

**3) Head Gasket**

- TR116516

**4) Oil Pan Gasket**

- TR123354

**5) Rocker Cover Gsk**

- TR123543

**6) Timing Cover Gsk**

- TR123421
- TR123425



**Main Bearing**

- TRE65165 Std.
- TRE65911 0.010
- TRE65165B 0.020

8

**Use 6**



**Thrust Bearing**

- TRE65168 Std.
- TRE65912 0.010
- TRE65168B 0.020

8

**Use 1**

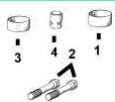


**Con Rod Bearing**

- TRE65908 Std.
- TRE65909 0.010
- TRE65908B 0.020

8

**Use 6**



**1) Bush, Con Rod**

- TR123960 x6

1

**2) Bolt, Con Rod**

- TR114083 x12
- TR501124 x12

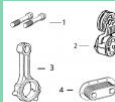
1

**3) Bush, Camshaft**

- TR119874 x1

**4) Cam Follower**

- TR123565 x12



**1) Cyl Hd Cap Screw**

- TR85363 x26

2

**2) Tensioner, Belt**

- TRE518097
- TRE68715

7

**3) Con Rod**

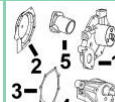
- TRE500002

**4) Oil Cooler**

- TRE59296 (5 Plates)
- TRE56690 (7 Plates)
- TRE59298 (9 Plates)

7

7



**1) Water Pump**

- TRE500734
- TRE500734P
- TRE504911

16

16

7

**2) Water Pump Cov**

- TRE508566

**3) Water Pump Gsk**

- TR123417

**4) Pump, Oil**

- TRE504914

**5) Water Pump Housing**

- TR121634

**6) Oil Pump Gear**

- TR120638 <sup>30T</sup>

**1) Insert, Valve In**

- TR98063 Std.
- TR98335 O/S

**2) Insert, Valve Ex**

- TR85687 Std.
- TR93910 O/S

**1) Seal, Valve**

- TRE31617

**2) Lock, Valve**

- TR91889

**1) Spring, Valve**

- TR26125

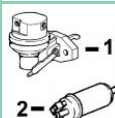
**2) Rotator, Valve**

- TRE60005



**Glow Plug**

- 1) TRE502079 (11 V)
- 2) TRE504580 x6 (10 V)
- 3) Air Heater
- TRE502668 (12 V)



**1) Fuel Transfer Pump**

- TRE66153
- TRE68345
- TRE502513

10

11

12

**2) Fuel Pump Electric**

- TAL155607

7

**3) Injection Pump Gear**

- TR132267 <sup>60T</sup>

7

**4) Idler Gear, Lower**

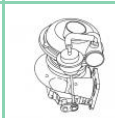
- TRE56369 <sup>43T</sup>

7

**5) Idler Gear, Upper**

- TRE508932 <sup>49T</sup>

7



**Turbocharger**

- TRE508657

7

(1): Use TR114083 Rod Bolts with Machine Split Connecting Rods, and use TR501124 Rod Bolts with Fractured Split Connecting Rods.

(3): Crankshaft (m) R116076, Straight Nose.

(5): 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.

(7): Check application for proper usage.

(9): These marking numbers RE59277, RE505100 require to use Ring Set TRE66271. Have been discontinued by John Deere

(11): Line Connections are one hose barb & one threaded.

(13): With Con Rod R500000.

(15): Our gasket sets do not include the front and rear crankshaft seals

(2): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(4): Crankshaft (m) R503470, Tapered Nose.






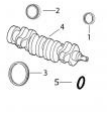

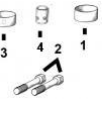
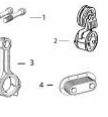






(6): Use with Stanadyne DE10 Injection Pump.

(8): Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.

(10): Line Connections are both threaded.

(12): Line Connections are two hose barbs.

(14): Machine split and fractured split connecting rods may both be used in the same engine, but the correct con rod bolts must be used for each connecting rod.

|   |  |  |   |   |  |
|---|--|--|---|---|--|
| <p><b>Engine Series:</b><br/>PowerTech</p> <p><b>Engine Model:</b><br/>6068T/H</p> <p><b>Engine Desc:</b><br/>6.8T/H</p> <p><b>Engine Data:</b><br/>4810, 4820,<br/>4824</p> <p><b>Engine Info:</b><br/>6 Cyl</p> |  <p><b>Engine O/H Kit</b></p> <ul style="list-style-type: none"> <li>TRE66097</li> <li>TRE66097A</li> </ul> <p><b>Engine I/F Kit</b></p> <ul style="list-style-type: none"> <li>TIK66097</li> <li>TIK66097A</li> <li>Spec Sheet - TRE66097</li> </ul>  |  <p><b>Piston-Liner Kit</b></p> <ul style="list-style-type: none"> <li>TRE507850 (RE505112)</li> </ul> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>a) TRE55512</li> <li>b) TRE66820</li> <li>c) TR123177</li> <li>d) TR116383</li> <li>e) TAR65507</li> <li>f) TR54114</li> </ul>                            |  <p><b>Main Bearing</b></p> <ul style="list-style-type: none"> <li>TRE65165 Std.</li> <li>TRE65911 0.010</li> <li>TRE65165B 0.020</li> </ul> <p><b>Use 6</b></p>  |  <p><b>Thrust Bearing</b></p> <ul style="list-style-type: none"> <li>TRE65168 Std.</li> <li>TRE65912 0.010</li> <li>TRE65168B 0.020</li> </ul> <p><b>Use 1</b></p>  |  <p><b>Con Rod Bearing</b></p> <ul style="list-style-type: none"> <li>TRE65908 Std.</li> <li>TRE65909 0.010</li> <li>TRE65908B 0.020</li> </ul> <p><b>Use 6</b></p>  |
| <p><b>Engine Dimensions:</b><br/>Bore: 4.19 in / 106.5 mm<br/>Pin Ø: 1.6250 in / (+/- .0002) = 41mm</p> <p><b>Con Rod (M):</b><br/>R114081,<br/>R500335</p> <p><b>Piston (M):</b><br/>RE55512,<br/>RE505102</p>   |  <ol style="list-style-type: none"> <li><b>Front Seal</b><br/>TRE505515</li> <li><b>Rear Seal</b><br/>TRE44574</li> <li><b>Ring Gear</b><br/>TR114282 (142T)<br/>TR28811 (129T)</li> <li><b>Crankshaft</b><br/>TRE515785<br/>TRE505921</li> <li><b>Seal</b><br/>TH35244</li> <li><b>Crankshaft Gear</b><br/>TR120631 30T</li> </ol>   |  <ol style="list-style-type: none"> <li><b>O/H Gasket Set</b><br/>TRE501456</li> <li><b>Head Gasket Set</b><br/>TRE66085</li> <li><b>Head Gasket</b><br/>TR116516</li> <li><b>Oil Pan Gasket</b><br/>TR123354</li> <li><b>Rocker Cover Gsk</b><br/>TR123543</li> <li><b>Timing Cover Gsk</b><br/>TR123421<br/>TR123425</li> </ol> |  <ol style="list-style-type: none"> <li><b>Bush, Con Rod</b><br/>TR114082 x6</li> <li><b>Bolt, Con Rod</b><br/>TR114083 x12<br/>TR501124 x12</li> <li><b>Bush, Camshaft</b><br/>TR119874 x1</li> <li><b>Cam Follower</b><br/>TR123565 x12</li> </ol> |  <ol style="list-style-type: none"> <li><b>Cyl Hd Cap Screw</b><br/>TR85363 x26</li> <li><b>Tensioner, Belt</b><br/>TRE518097<br/>TRE68715</li> <li><b>Con Rod</b><br/>TRE500608</li> <li><b>Oil Cooler</b><br/>TRE59296 (5 Plates)<br/>TRE56690 (7 Plates)<br/>TRE59298 (9 Plates)</li> </ol>   |  <ol style="list-style-type: none"> <li><b>Water Pump</b><br/>TRE500734<br/>TRE500734P<br/>TRE504911</li> <li><b>Water Pump Cov</b><br/>TRE508566</li> <li><b>Water Pump Gsk</b><br/>TR123417</li> <li><b>Pump, Oil</b><br/>TRE504914</li> <li><b>Water Pump Housing</b><br/>TR121634</li> <li><b>Oil Pump Gear</b><br/>TR120638 30T</li> </ol> |
| <p>Please see page 401 for a complete list of equipment models.</p>   | <p><b>Valve, Intake</b></p> <ul style="list-style-type: none"> <li>TR98062 Std.</li> <li>TR97490 0.015</li> </ul>  | <p><b>Valve, Exhaust</b></p> <ul style="list-style-type: none"> <li>TR90692 Std.</li> <li>TR97492 0.015</li> </ul>   | <ol style="list-style-type: none"> <li><b>Insert, Valve In</b><br/>TR98063 Std.<br/>TR98335 O/S</li> <li><b>Insert, Valve Ex</b><br/>TR85687 Std.<br/>TR93910 O/S</li> </ol>  | <ol style="list-style-type: none"> <li><b>Seal, Valve</b><br/>TRE31617</li> <li><b>Lock, Valve</b><br/>TR91889</li> </ol>   | <ol style="list-style-type: none"> <li><b>Spring, Valve</b><br/>TR26125</li> <li><b>Rotator, Valve</b><br/>TRE60005</li> </ol>   |
|   |  <ol style="list-style-type: none"> <li><b>Thermostat</b><br/>TRE522076 180° F<br/>TRE528652 180° F<br/>TRE540550 180° F<br/>TRE64354 180° F</li> <li><b>Thermostat Cover</b><br/>TR501130</li> <li><b>Water Temp Sensor</b><br/>TRE51774</li> <li><b>Water Temp Sensor</b><br/>TRE52722</li> <li><b>Oil Pressure Sensor</b><br/>TRE167207</li> <li><b>Crankshaft Sensor</b><br/>TRE519144</li> </ol> |  <ol style="list-style-type: none"> <li><b>Injector, Pencil</b><br/>TRE60062 (Non Turbo)<br/>TRE48786 (Turbo)<br/>TRE531436</li> <li><b>Inj Grommet Kit</b><br/>TMX506</li> <li><b>Seal</b><br/>TR92352<br/>TR48000</li> </ol>  |  <p><b>Glow Plug</b></p> <ol style="list-style-type: none"> <li>TRE502079 (11 V)</li> <li>TRE504580 x6 (10 V)</li> </ol> <ol style="list-style-type: none"> <li><b>Air Heater</b><br/>TRE502668 (12 V)</li> </ol>                                  |  <ol style="list-style-type: none"> <li><b>Fuel Transfer Pump</b><br/>TRE66153<br/>TRE68345<br/>TRE502513</li> <li><b>Fuel Pump Electric</b><br/>TAL155607</li> <li><b>Fuel Pump Electric</b><br/>TRE509530</li> <li><b>Fuel Pump Kit</b><br/>TRE505825</li> <li><b>Injection Pump Gear</b><br/>TR132267 60T</li> <li><b>Idler Gear, Lower</b><br/>TRE56369 43T</li> <li><b>Idler Gear, Upper</b><br/>TRE508932 49T</li> </ol> |  <p><b>Turbocharger</b></p> <ul style="list-style-type: none"> <li>TRE508657</li> </ul>   |

(1): Use TR114083 Rod Bolts with Machine Split Connecting Rods, and use TR501124 Rod Bolts with Fractured Split Connecting Rods.

(2): Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(3): Crankshaft (m) R116076, Straight Nose.

(4): Crankshaft (m) R503470, Tapered Nose.

(5): 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.

(6): Use with Stanadyne DE10 Injection Pump.

(7): Check application for proper usage.

(8): Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.

(9): Line Connections are both threaded.

(10): Line Connections are one hose barb & one threaded.

(11): Line Connections are two hose barbs.

(12): With Con Rod R500335.

(13): Machine split and fractured split connecting rods may both be used in the same engine, but the correct con rod bolts must be used for each connecting rod.

(14): Not to be used with pistons marked RE509540.

(15): Our gasket sets do not include the front and rear crankshaft seals

(16): TRE500734 supplied with a cast iron impeller; TRE500734P supplied with a resin impeller.



**Engine Series:**

PowerTech

**Engine Model:**

6068T/H

**Engine Desc:**

For Tier 2 & Tier 3 Applications

**Engine Data:**

4 Valve per Cylinder  
CODE 4834

**Engine Info:**

6 Cyl

**Engine Dimensions:**

Bore: 4.19 in / 106.5 mm Pin  
Ø: 1.6250 in / (+/- .0002) = 41mm






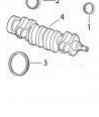
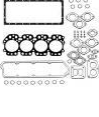
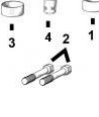

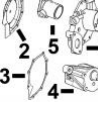



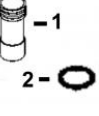

**Con Rod (M):**

R500335 (Fractured) (9)






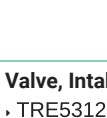
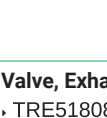

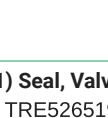
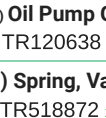
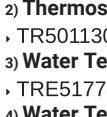
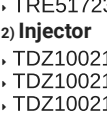

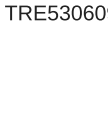

**Piston (M):**

RE521616






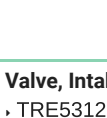
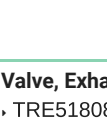

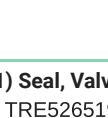
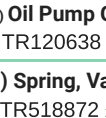



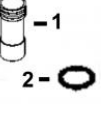

Please see page 402 for a complete list of equipment models.

|   |   |   |  |  |
|---|---|---|--|--|
|  <p>1) <b>Engine O/H Kit</b><br/>                     † TRE527834<br/>                     2) <b>Engine I/F Kit</b><br/>                     † TIK527834<br/>                     † Spec Sheet - 6068T 24 Valve</p>   |  <p><b>Piston-Liner Kit</b><br/>                     † TRE524450<br/> <b>Consists of:</b><br/>                     † a) TRE521616<br/>                     † b) TRE524453<br/>                     † c) TR502755<br/>                     † d) TR116397<br/>                     † e) TAR65507<br/>                     † f) TR54114</p>  |  <p><b>Main Bearing</b><br/>                     † TRE65165 Std.<br/>                     † TRE65911 0.010<br/>                     † TRE65165B 0.020<br/> <b>Use 6</b></p>   |  <p><b>Thrust Bearing</b><br/>                     † TRE65168 Std.<br/>                     † TRE65912 0.010<br/>                     † TRE65168B 0.020<br/> <b>Use 1</b></p>  |  <p><b>Con Rod Bearing</b><br/>                     † TRE65908 Std.<br/>                     † TRE65909 0.010<br/>                     † TRE65908B 0.020<br/> <b>Use 6</b></p>   |
|  <p>1) <b>Front Seal</b><br/>                     † TRE505515<br/>                     2) <b>Rear Seal</b><br/>                     † TRE44574<br/>                     3) <b>Ring Gear</b><br/>                     † TR114282<br/>                     † TR28811<br/>                     4) <b>Crankshaft</b><br/>                     † TRE515785<br/>                     † TRE505921<br/>                     5) <b>Crankshaft Gear</b><br/>                     † TR120631 30T</p>  |  <p>1) <b>O/H Gasket Set</b><br/>                     † TRE527833<br/>                     2) <b>Head Gasket Set</b><br/>                     † TRE527832<br/>                     3) <b>Head Gasket</b><br/>                     † TR116516<br/>                     4) <b>Oil Pan Gasket</b><br/>                     † TR521498<br/>                     † TR123354<br/>                     5) <b>Rocker Cover Gsk</b><br/>                     † TR524496<br/>                     † TR524497</p>   |  <p>1) <b>Bush, Con Rod</b><br/>                     † TR114082 x6<br/>                     2) <b>Bolt, Con Rod</b><br/>                     † TR501124 x12<br/>                     3) <b>Bush, Camshaft</b><br/>                     † TR119874 x1<br/>                     4) <b>Cam Follower</b><br/>                     † TR123565 x12</p> |  <p>1) <b>Cyl Hd Cap Screw</b><br/>                     † TR502511 x26<br/>                     2) <b>Tensioner, Belt</b><br/>                     † TRE518097<br/>                     3) <b>Con Rod</b><br/>                     † TRE500608<br/>                     4) <b>Oil Cooler</b><br/>                     † TRE59296 (5 Plates)<br/>                     † TRE56690 (7 Plates)<br/>                     † TRE59298 (9 Plates)</p> |  <p>1) <b>Water Pump</b><br/>                     † TRE500734<br/>                     † TRE500734P<br/>                     † TRE546918<br/>                     2) <b>Water Pump Cov</b><br/>                     † TRE508566<br/>                     3) <b>Water Pump Gsk</b><br/>                     † TR123417<br/>                     4) <b>Pump, Oil</b><br/>                     † TRE504914<br/>                     † TRE521756<br/>                     5) <b>Water Pump Housing</b><br/>                     † TR121634<br/>                     6) <b>Oil Pump Gear</b><br/>                     † TR120638 30T</p> |
| <p><b>Valve, Intake</b><br/>                     † TRE531221 Std.<br/>                     † TRE518080 Std.</p>   | <p><b>Valve, Exhaust</b><br/>                     † TRE518081 Std.</p>  | <p>1) <b>Insert, Valve In</b><br/>                     † TRE518082 Std.<br/>                     2) <b>Insert, Valve Ex</b><br/>                     † TRE518083 Std.</p>   | <p>1) <b>Seal, Valve</b><br/>                     † TRE526519 x24<br/>                     † TRE519115 x24<br/>                     2) <b>Lock, Valve</b><br/>                     † TR502371 x48</p>  | <p>1) <b>Spring, Valve</b><br/>                     † TR518872 x24<br/>                     † TRE516486 x24</p>  |
|  <p>1) <b>Thermostat</b><br/>                     † TRE522076 180° F<br/>                     † TRE538289 180° F<br/>                     † TRE64354 180° F<br/>                     2) <b>Thermostat Cover</b><br/>                     † TR501130<br/>                     3) <b>Water Temp Sensor</b><br/>                     † TRE51774<br/>                     4) <b>Water Temp Sensor</b><br/>                     † TRE52722<br/>                     5) <b>Oil Pressure Sensor</b><br/>                     † TR167207<br/>                     6) <b>Crankshaft Sensor</b><br/>                     † TRE519144<br/>                     7) <b>Fuel Pressure Sensor</b><br/>                     † TRE522794<br/>                     8) <b>Temperature Sensor</b><br/>                     † TRE522823</p> |  <p>1) <b>Fuel Transfer Pump</b><br/>                     † TRE66153<br/>                     † TRE68345<br/>                     † TRE502513<br/>                     † TRE517230<br/>                     2) <b>Injector</b><br/>                     † TDZ100211<br/>                     † TDZ100212<br/>                     † TDZ100217<br/>                     † TRE516540<br/>                     3) <b>Injection Pump Gear</b><br/>                     † TR502541 30T<br/>                     4) <b>Idler Gear, Lower</b><br/>                     † TRE56369 43T</p> |  <p><b>Glow Plug</b><br/>                     † 1) TRE502079 (11 V)<br/>                     † 2) TRE504580 x6 (10 V)<br/>                     3) <b>Air Heater</b><br/>                     † TRE502668 (12 V)</p>  |  <p>1) <b>Injector Tube</b><br/>                     † TRE543935 x6<br/>                     2) <b>Injector O-Ring</b><br/>                     † TRE528349<br/>                     † TRE530609</p>  |  <p><b>Turbocharger</b><br/>                     † TRE508657</p>  |

- (1): 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097. (2): Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.
- (3): Crankshaft (m) R116076, Straight Nose. (4): Crankshaft (m) R503470, Taper Nose.
- (5): Check application for proper usage. (6): Line Connections are both threaded.
- (7): Line Connections are one hose barb & one threaded. (8): Line Connections are two hose barbs.
- (9): Machine split and fractured split connecting rods may both be used in the same engine, but the correct con rod bolts must be used for each connecting rod. (10): Our gasket sets do not include the front and rear crankshaft seals
- (11): TRE500734 supplied with a cast iron impeller; TRE500734P supplied with a resin impeller.

|  |   |  |  |   |   |
|--|---|--|--|---|---|
| <p><b>Engine Series:</b><br/>PowerTech</p> <p><b>Engine Model:</b><br/>6068T/H</p> <p><b>Engine Desc:</b><br/>For Tier 2 &amp; Tier 3 Applications</p> <p><b>Engine Data:</b><br/>4 Valve per Cylinder<br/>CODE 4826</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.19 in / 106.5 mm Pin Ø: 1.6250 in / (+/- .0002) = 41mm</p> <p><b>Con Rod (M):</b><br/>R500335 (Fractured) (9)</p> <p><b>Piston (M):</b><br/>RE515037</p>  |  <p><b>1) Engine O/H Kit</b><br/>                 † TRE526974<br/> <b>2) Engine I/F Kit</b><br/>                 † TIK526974<br/>                 † Spec Sheet - 6068T 24 Valve</p>   |  <p><b>Piston-Liner Kit</b><br/>                 † TRE516227<br/> <b>Consists of:</b><br/>                 † a) TRE515037<br/>                 † b) TRE66820<br/>                 † c) TR502755<br/>                 † d) TR116383<br/>                 † e) TAR65507<br/>                 † f) TR54114</p>  |  <p><b>Main Bearing</b><br/>                 † TRE65165 Std.<br/>                 † TRE65911 0.010<br/>                 † TRE65165B 0.020<br/> <b>Use 6</b></p>  |  <p><b>Thrust Bearing</b><br/>                 † TRE65168 Std.<br/>                 † TRE65912 0.010<br/>                 † TRE65168B 0.020<br/> <b>Use 1</b></p>   |  <p><b>Con Rod Bearing</b><br/>                 † TRE65908 Std.<br/>                 † TRE65909 0.010<br/>                 † TRE65908B 0.020<br/> <b>Use 6</b></p>  |
| <p>Please see page 403 for a complete list of equipment models.</p>  |  <p><b>1) Front Seal</b><br/>                 † TRE505515<br/> <b>2) Rear Seal</b><br/>                 † TRE44574<br/> <b>3) Ring Gear</b><br/>                 † TR114282<br/>                 † TR28811<br/> <b>4) Crankshaft</b><br/>                 † TRE515785<br/>                 † TRE505921<br/> <b>5) Crankshaft Gear</b><br/>                 † TR120631 30T</p>   |  <p><b>1) O/H Gasket Set</b><br/>                 † TRE527833<br/> <b>2) Head Gasket Set</b><br/>                 † TRE527832<br/> <b>3) Head Gasket</b><br/>                 † TR116516<br/> <b>4) Oil Pan Gasket</b><br/>                 † TR521498<br/>                 † TR123354<br/> <b>5) Rocker Cover Gsk</b><br/>                 † TR524496<br/>                 † TR524497</p> |  <p><b>1) Bush, Con Rod</b><br/>                 † TR114082 x6<br/> <b>2) Bolt, Con Rod</b><br/>                 † TR501124 x12<br/> <b>3) Bush, Camshaft</b><br/>                 † TR119874 x1<br/> <b>4) Cam Follower</b><br/>                 † TR123565 x12</p> |  <p><b>1) Cyl Hd Cap Screw</b><br/>                 † TR502511 x26<br/> <b>2) Tensioner, Belt</b><br/>                 † TRE518097<br/> <b>3) Con Rod</b><br/>                 † TRE500608<br/> <b>4) Oil Cooler</b><br/>                 † TRE59296 (5 Plates)<br/>                 † TRE56690 (7 Plates)<br/>                 † TRE59298 (9 Plates)</p> |  <p><b>1) Water Pump</b><br/>                 † TRE500734<br/>                 † TRE500734P<br/>                 † TRE546918<br/> <b>2) Water Pump Cov</b><br/>                 † TRE508566<br/> <b>3) Water Pump Gsk</b><br/>                 † TR123417<br/> <b>4) Pump, Oil</b><br/>                 † TRE504914<br/>                 † TRE521756<br/> <b>5) Water Pump Housing</b><br/>                 † TR121634<br/> <b>6) Oil Pump Gear</b><br/>                 † TR120638 30T</p> |
| <p><b>Valve, Intake</b><br/>                 † TRE531221 Std.<br/>                 † TRE518080 Std.</p>  | <p><b>Valve, Exhaust</b><br/>                 † TRE518081 Std.</p>  | <p><b>1) Insert, Valve In</b><br/>                 † TRE518082 Std.<br/> <b>2) Insert, Valve Ex</b><br/>                 † TRE518083 Std.</p>  | <p><b>1) Seal, Valve</b><br/>                 † TRE526519 x24<br/>                 † TRE519115 x24<br/> <b>2) Lock, Valve</b><br/>                 † TR502371 x48</p>  | <p><b>1) Spring, Valve</b><br/>                 † TR518872 x24<br/>                 † TRE516486 x24</p>   |   |
|  <p><b>1) Thermostat</b><br/>                 † TRE522076 180° F<br/>                 † TRE538289 180° F<br/>                 † TRE64354 180° F<br/> <b>2) Thermostat Cover</b><br/>                 † TR501130<br/> <b>3) Water Temp Sensor</b><br/>                 † TRE51774<br/> <b>4) Water Temp Sensor</b><br/>                 † TRE52722<br/> <b>5) Oil Pressure Sensor</b><br/>                 † TRE167207<br/> <b>6) Crankshaft Sensor</b><br/>                 † TRE519144<br/> <b>7) Fuel Pressure Sensor</b><br/>                 † TRE522794<br/> <b>8) Temperature Sensor</b><br/>                 † TRE522823</p> |  <p><b>1) Fuel Transfer Pump</b><br/>                 † TRE66153<br/>                 † TRE68345<br/>                 † TRE502513<br/>                 † TRE517230<br/> <b>2) Injector</b><br/>                 † TDZ100211<br/>                 † TDZ100212<br/>                 † TDZ100217<br/>                 † TRE516540<br/> <b>3) Injection Pump Gear</b><br/>                 † TR502541 30T<br/> <b>4) Idler Gear, Lower</b><br/>                 † TRE56369 43T</p> |  <p><b>Glow Plug</b><br/>                 † 1) TRE502079 (11 V)<br/>                 † 2) TRE504580 x6 (10 V)<br/> <b>3) Air Heater</b><br/>                 † TRE502668 (12 V)</p>   |  <p><b>1) Injector Tube</b><br/>                 † TRE543935 x6<br/> <b>2) Injector O-Ring</b><br/>                 † TRE528349<br/>                 † TRE530609</p>  |  <p><b>Turbocharger</b><br/>                 † TRE508657</p>   |   |

(1): 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097. (2): Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.  
 (3): Crankshaft (m) R116076, Straight Nose. (4): Crankshaft (m) R503470, Taper Nose.  
 (5): Check application for proper usage. (6): Line Connections are both threaded.  
 (7): Line Connections are one hose barb & one threaded. (8): Line Connections are two hose barbs.  
 (9): Machine split and fractured split connecting rods may both be used in the same engine, but the correct con rod bolts must be used for each connecting rod. (10): Our gasket sets do not include the front and rear crankshaft seals  
 (11): TRE500734 supplied with a cast iron impeller; TRE500734P supplied with a resin impeller.

|   |  |   |  |   |   |
|---|--|---|--|---|---|
| <p><b>Engine Series:</b><br/>PowerTech</p> <p><b>Engine Model:</b><br/>6068T/H</p> <p><b>Engine Desc:</b><br/>For Tier 2 &amp; Tier 3 Applications</p> <p><b>Engine Data:</b><br/>4 Valve per Cylinder<br/>CODE 4817</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.19 in / 106.5 mm Pin Ø: 1.6250 in / (+/- .0002) = 41mm</p> <p><b>Con Rod (M):</b><br/>R500335 (Fractured)</p> <p><b>Piston (M):</b><br/>RE507758</p>   |  <p><b>1) Engine O/H Kit</b><br/>                 † TRE526975<br/> <b>2) Engine I/F Kit</b><br/>                 † TIK526975<br/>                 † Spec Sheet - 6068T 24 Valve</p>  |  <p><b>Piston-Liner Kit</b><br/>                 † TRE516228<br/> <b>Consists of:</b><br/>                 † a) TRE507758<br/>                 † b) TRE516268<br/>                 † c) TR502755<br/>                 † d) TR116397<br/>                 † e) TAR65507<br/>                 † f) TR54114</p>  |  <p><b>Main Bearing</b><br/>                 † TRE65165 Std.<br/>                 † TRE65911 0.010<br/>                 † TRE65165B 0.020<br/> <b>Use 6</b></p>  |  <p><b>Thrust Bearing</b><br/>                 † TRE65168 Std.<br/>                 † TRE65912 0.010<br/>                 † TRE65168B 0.020<br/> <b>Use 1</b></p>   |  <p><b>Con Rod Bearing</b><br/>                 † TRE65908 Std.<br/>                 † TRE65909 0.010<br/>                 † TRE65908B 0.020<br/> <b>Use 6</b></p>  |
| <p>Please see page 404 for a complete list of equipment models.</p>   |  <p><b>1) Front Seal</b><br/>                 † TRE505515 <b>1</b></p> <p><b>2) Rear Seal</b><br/>                 † TRE44574</p> <p><b>3) Ring Gear</b><br/>                 † TR114282 <b>5</b><br/>                 † TR28811 <b>5</b></p> <p><b>4) Crankshaft</b><br/>                 † TRE515785 <b>3</b><br/>                 † TRE505921 <b>4</b></p> <p><b>5) Crankshaft Gear</b><br/>                 † TR120631 30T</p>   |  <p><b>1) O/H Gasket Set</b><br/>                 † TRE527833 <b>10</b></p> <p><b>2) Head Gasket Set</b><br/>                 † TRE527832</p> <p><b>3) Head Gasket</b><br/>                 † TR116516 <b>5</b></p> <p><b>4) Oil Pan Gasket</b><br/>                 † TR521498 <b>5</b><br/>                 † TR123354 <b>5</b></p> <p><b>5) Rocker Cover Gsk</b><br/>                 † TR524496<br/>                 † TR524497</p> |  <p><b>1) Bush, Con Rod</b><br/>                 † TR114082 x6</p> <p><b>2) Bolt, Con Rod</b><br/>                 † TR501124 x12</p> <p><b>3) Bush, Camshaft</b><br/>                 † TR119874 x1</p> <p><b>4) Cam Follower</b><br/>                 † TR123565 x12</p> |  <p><b>1) Cyl Hd Cap Screw</b><br/>                 † TR502511 x26</p> <p><b>2) Tensioner, Belt</b><br/>                 † TRE518097</p> <p><b>3) Con Rod</b><br/>                 † TRE500608</p> <p><b>4) Oil Cooler</b><br/>                 † TRE59296 (5 Plates)<br/>                 † TRE56690 (7 Plates)<br/>                 † TRE59298 (9 Plates)</p> |  <p><b>1) Water Pump</b><br/>                 † TRE500734 <b>11</b><br/>                 † TRE500734P <b>11</b><br/>                 † TRE546918 <b>5</b></p> <p><b>2) Water Pump Cov</b><br/>                 † TRE508566</p> <p><b>3) Water Pump Gsk</b><br/>                 † TR123417 <b>5</b></p> <p><b>4) Pump, Oil</b><br/>                 † TRE504914 <b>5</b><br/>                 † TRE521756 <b>5</b></p> <p><b>5) Water Pump Housing</b><br/>                 † TR121634</p> <p><b>6) Oil Pump Gear</b><br/>                 † TR120638 30T</p> |
| <p><b>Valve, Intake</b><br/>                 † TRE531221 Std. <b>5</b><br/>                 † TRE518080 Std. <b>5</b></p>   | <p><b>Valve, Exhaust</b><br/>                 † TRE518081 Std.</p>   | <p><b>1) Insert, Valve In</b><br/>                 † TRE518082 Std.</p> <p><b>2) Insert, Valve Ex</b><br/>                 † TRE518083 Std.</p>   | <p><b>1) Seal, Valve</b><br/>                 † TRE526519 x24 <b>5</b><br/>                 † TRE519115 x24 <b>5</b></p> <p><b>2) Lock, Valve</b><br/>                 † TR502371 x48 <b>5</b></p>   | <p><b>1) Spring, Valve</b><br/>                 † TR518872 x24 <b>5</b><br/>                 † TRE516486 x24 <b>5</b></p>   |   |
|  <p><b>1) Thermostat</b><br/>                 † TRE522076 180° F <b>5</b><br/>                 † TRE538289 180° F <b>5</b><br/>                 † TRE64354 180° F <b>5</b></p> <p><b>2) Thermostat Cover</b><br/>                 † TR501130 <b>5</b></p> <p><b>3) Water Temp Sensor</b><br/>                 † TRE51774 <b>5</b></p> <p><b>4) Water Temp Sensor</b><br/>                 † TRE52722 <b>5</b></p> <p><b>5) Oil Pressure Sensor</b><br/>                 † TR167207 <b>5</b></p> <p><b>6) Crankshaft Sensor</b><br/>                 † TRE519144 <b>5</b></p> <p><b>7) Fuel Pressure Sensor</b><br/>                 † TRE522794 <b>5</b></p> <p><b>8) Temperature Sensor</b><br/>                 † TRE522823 <b>5</b></p> |  <p><b>1) Fuel Transfer Pump</b><br/>                 † TRE66153 <b>6</b><br/>                 † TRE68345 <b>7</b><br/>                 † TRE502513 <b>8</b> <b>5</b><br/>                 † TRE517230 <b>5</b></p> <p><b>2) Injector</b><br/>                 † TDZ100211 <b>5</b><br/>                 † TDZ100212 <b>5</b><br/>                 † TDZ100217 <b>5</b><br/>                 † TRE516540 <b>5</b></p> <p><b>3) Injection Pump Gear</b><br/>                 † TR502541 30T <b>5</b></p> <p><b>4) Idler Gear, Lower</b><br/>                 † TRE56369 43T <b>5</b></p> |  <p><b>Glow Plug</b><br/>                 † 1) TRE502079 (11 V)<br/>                 † 2) TRE504580 x6 (10 V)</p> <p><b>3) Air Heater</b><br/>                 † TRE502668 (12 V)</p>  |  <p><b>1) Injector Tube</b><br/>                 † TRE543935 x6</p> <p><b>2) Injector O-Ring</b><br/>                 † TRE528349<br/>                 † TRE530609</p>  |  <p><b>Turbocharger</b><br/>                 † TRE508657 <b>5</b></p>  |   |

- (1): 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097. (2): Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.
- (3): Crankshaft (m) R116076, Straight Nose. (4): Crankshaft (m) R503470, Taper Nose.
- (5): Check application for proper usage. (6): Line Connections are both threaded.
- (7): Line Connections are one hose barb & one threaded. (8): Line Connections are two hose barbs.
- (10): Our gasket sets do not include the front and rear crankshaft seals. (11): TRE500734 supplied with a cast iron impeller; TRE500734P supplied with a resin impeller.

**Engine Series:**

PowerTech

**Engine Model:**

6068T/H

**Engine Desc:**

For Tier 2 & Tier 3 Applications

**Engine Data:**

4 Valve per Cylinder  
CODE 4839

**Engine Info:**

6 Cyl

**Engine Dimensions:**

Bore: 4.19 in / 106.5 mm  
Pin Ø: 1.6250 in / (+/- .0002) = 41mm














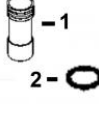

**Con Rod (M):**

R500335 (Fractured)






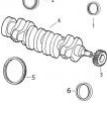
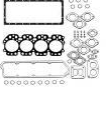
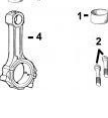
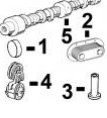
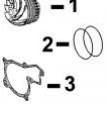
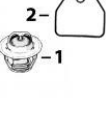
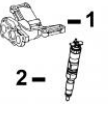


**Piston (M):**








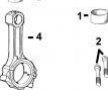
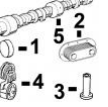
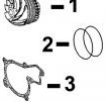




RE527039

Please see page 405 for a complete list of equipment models.

|   |   |   |  |  |
|---|---|---|--|--|
|  <p>1) <b>Engine O/H Kit</b><br/>                 › TRE540226<br/>                 2) <b>Engine I/F Kit</b><br/>                 › TIK540226<br/>                 › Spec Sheet - 6068T 24 Valve</p>   |  <p><b>Piston-Liner Kit</b><br/>                 › TRE536083<br/> <b>Consists of:</b><br/>                 › a) TRE527039<br/>                 › b) TRE527844<br/>                 › c) TR502755<br/>                 › d) TR116397<br/>                 › e) TAR65507<br/>                 › f) TR54114</p>  |  <p><b>Main Bearing</b><br/>                 › TRE65165 Std.<br/>                 › TRE65911 0.010<br/>                 › TRE65165B 0.020<br/> <b>Use 6</b></p>   |  <p><b>Thrust Bearing</b><br/>                 › TRE65168 Std.<br/>                 › TRE65912 0.010<br/>                 › TRE65168B 0.020<br/> <b>Use 1</b></p>  |  <p><b>Con Rod Bearing</b><br/>                 › TRE65908 Std.<br/>                 › TRE65909 0.010<br/>                 › TRE65908B 0.020<br/> <b>Use 6</b></p>   |
|  <p>1) <b>Front Seal</b><br/>                 › TRE505515<br/>                 2) <b>Rear Seal</b><br/>                 › TRE44574<br/>                 3) <b>Ring Gear</b><br/>                 › TR114282<br/>                 › TR28811<br/>                 4) <b>Crankshaft</b><br/>                 › TRE515785<br/>                 › TRE505921<br/>                 5) <b>Crankshaft Gear</b><br/>                 › TR120631 30T</p>  |  <p>1) <b>O/H Gasket Set</b><br/>                 › TRE527833<br/>                 2) <b>Head Gasket Set</b><br/>                 › TRE527832<br/>                 3) <b>Head Gasket</b><br/>                 › TR116516<br/>                 4) <b>Oil Pan Gasket</b><br/>                 › TR521498<br/>                 › TR123354<br/>                 5) <b>Rocker Cover Gsk</b><br/>                 › TR524496<br/>                 › TR524497</p>   |  <p>1) <b>Bush, Con Rod</b><br/>                 › TR114082 x6<br/>                 2) <b>Bolt, Con Rod</b><br/>                 › TR501124 x12<br/>                 3) <b>Bush, Camshaft</b><br/>                 › TR119874 x1<br/>                 4) <b>Cam Follower</b><br/>                 › TR123565 x12</p> |  <p>1) <b>Cyl Hd Cap Screw</b><br/>                 › TR85363<br/>                 › TR502511<br/>                 2) <b>Belt Tensioner</b><br/>                 › TRE518097<br/>                 3) <b>Con Rod</b><br/>                 › TRE500608<br/>                 4) <b>Oil Cooler</b><br/>                 › TRE59296 (5 Plates)<br/>                 › TRE56690 (7 Plates)<br/>                 › TRE59298 (9 Plates)</p> |  <p>1) <b>Water Pump</b><br/>                 › TRE500734<br/>                 › TRE500734P<br/>                 › TRE546918<br/>                 2) <b>Water Pump Cov</b><br/>                 › TRE508566<br/>                 3) <b>Water Pump Gsk</b><br/>                 › TR123417<br/>                 4) <b>Pump, Oil</b><br/>                 › TRE504914<br/>                 › TRE521756<br/>                 5) <b>Water Pump Housing</b><br/>                 › TR121634<br/>                 6) <b>Oil Pump Gear</b><br/>                 › TR120638 30T</p> |
| <p><b>Valve, Intake</b><br/>                 › TRE531221 Std.<br/>                 › TRE518080 Std.</p>   | <p><b>Valve, Exhaust</b><br/>                 › TRE518081 Std.</p>  | <p>1) <b>Insert, Valve In</b><br/>                 › TRE518082 Std.<br/>                 2) <b>Insert, Valve Ex</b><br/>                 › TRE518083 Std.</p>   | <p>1) <b>Seal, Valve</b><br/>                 › TRE526519 x24<br/>                 › TRE519115 x24<br/>                 2) <b>Lock, Valve</b><br/>                 › TR502371 x48</p>  | <p>1) <b>Spring, Valve</b><br/>                 › TR518872 x24<br/>                 › TRE516486 x24</p>  |
|  <p>1) <b>Thermostat</b><br/>                 › TRE522076 180° F<br/>                 › TRE538289 180° F<br/>                 › TRE64354 180° F<br/>                 2) <b>Thermostat Cover</b><br/>                 › TR501130<br/>                 3) <b>Water Temp Sensor</b><br/>                 › TRE51774<br/>                 4) <b>Water Temp Sensor</b><br/>                 › TRE52722<br/>                 5) <b>Oil Pressure Sensor</b><br/>                 › TR167207<br/>                 6) <b>Crankshaft Sensor</b><br/>                 › TRE519144<br/>                 7) <b>Fuel Pressure Sensor</b><br/>                 › TRE522794<br/>                 8) <b>Temperature Sensor</b><br/>                 › TRE522823</p> |  <p>1) <b>Fuel Transfer Pump</b><br/>                 › TRE66153<br/>                 › TRE68345<br/>                 › TRE502513<br/>                 › TRE517230<br/>                 2) <b>Injector</b><br/>                 › TDZ100211<br/>                 › TDZ100212<br/>                 › TDZ100217<br/>                 › TRE516540<br/>                 3) <b>Injection Pump Gear</b><br/>                 › TR502541 30T<br/>                 4) <b>Idler Gear, Lower</b><br/>                 › TRE56369 43T</p> |  <p><b>Glow Plug</b><br/>                 › 1) TRE502079 (11 V)<br/>                 › 2) TRE504580 x6 (10 V)<br/>                 3) <b>Air Heater</b><br/>                 › TRE502668 (12 V)</p>  |  <p>1) <b>Injector Tube</b><br/>                 › TRE543935 x6<br/>                 2) <b>Injector O-Ring</b><br/>                 › TRE528349<br/>                 › TRE530609</p>  |  <p><b>Turbocharger</b><br/>                 › TRE508657</p>  |

(1): 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097. (2): Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.  
 (3): Crankshaft (m) R116076, Straight Nose. (4): Crankshaft (m) R503470, Taper Nose.  
 (5): Check application for proper usage. (6): Line Connections are both threaded.  
 (7): Line Connections are one hose barb & one threaded. (8): Line Connections are two hose barbs.  
 (10): Our gasket sets do not include the front and rear crankshaft seals. (11): TRE500734 supplied with a cast iron impeller; TRE500734P supplied with a resin impeller.

|  |   |  |  |   |  |
|--|---|--|--|---|--|
| <p><b>Engine Series:</b><br/>PowerTech</p> <p><b>Engine Model:</b><br/>6081</p> <p><b>Engine Desc:</b><br/>Up to ESN 199,999</p> <p><b>Engine Data:</b><br/>8.1L Tier 1</p> <p><b>Engine Info:</b><br/>4801, 4803</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.56 in / 116 mm<br/>Pin Ø: 1.8742 in / (+/- .0002) = 47 mm</p> <p><b>Con Rod (M):</b><br/>R116340 (To ESN 86,536), R501034 (From ESN 86,537)</p> <p><b>Piston (M):</b><br/>RE70688, RE64509</p>  |  <p><b>Engine O/H Kit</b><br/>         † TOK504201<br/>         † TOK504201A</p> <p><b>Engine I/F Kit</b><br/>         † TIK504201<br/>         † TIK504201A<br/>         † Spec Sheet-TOK504201<br/>         † TOK504202</p>   |  <p><b>Piston-Liner Kit</b><br/>         † TRE64509</p> <p><b>Consists of:</b><br/>         a) TRE70688<br/>         b) TRE503528<br/>         c) TR57771<br/>         d) TR116236<br/>         e) TAR98850<br/>         f) TE1343FN</p>   |  <p><b>Main Bearing</b><br/>         † TRE529319 Std.<br/>         † TRE534181 0.0115</p> <p><b>Use 6</b></p>  |  <p><b>Thrust Bearing</b><br/>         † TRE529320 Std.<br/>         † TRE534183 0.0115</p> <p><b>Use 1</b></p>   |  <p><b>Con Rod Bearing</b><br/>         † TR116081 Std.<br/>         † TRE57167 0.0115</p> <p><b>Use 6</b></p>   |
| <p>Please see page 406 for a complete list of equipment models.</p>  |  <p>1) <b>Front Seal</b><br/>         † TAR49025</p> <p>2) <b>Rear Seal</b><br/>         † TRE520036</p> <p>3) <b>Crankshaft, Gear</b><br/>         † TR104587</p> <p>4) <b>Crankshaft</b><br/>         † TRE535300<br/>         † TRE534314</p> <p>5) <b>Ring Gear</b><br/>         † TR28811</p> <p>6) <b>Rear Gear</b><br/>         † TR63326</p> |  <p>1) <b>O/H Gasket Set</b><br/>         † TRE506220</p> <p>2) <b>Head Gasket Set</b><br/>         † TRE506222</p> <p>3) <b>Head Gasket</b><br/>         † TRE55475</p> <p>4) <b>Oil Pan Gasket</b><br/>         † TR71918<br/>         † TR520844</p>   |  <p>1) <b>Bush, Con Rod</b><br/>         † TR74008 x6</p> <p>2) <b>Bolt, Con Rod</b><br/>         † TR66452 x12<br/>         † TR501035 x12</p> <p>3) <b>Bushing, Cam</b><br/>         † TR87561 x4</p> <p>4) <b>Con Rod</b><br/>         † TRE53154<br/>         † TRE535555</p> |  <p>1) <b>Plug, Camshaft</b><br/>         † TR82007</p> <p>2) <b>Oil Cooler</b><br/>         † TAR55394</p> <p>3) <b>Tappet</b><br/>         † TR110126 x12</p> <p>4) <b>Tensioner, Belt</b><br/>         † TRE518097<br/>         † TRE68715<br/>         † TRE57498</p> <p>5) <b>Head Bolt Kit</b><br/>         † TRG24026</p> |  <p>1) <b>Pump, Water</b><br/>         † TRE521502<br/>         † TRE521503</p> <p>2) <b>O'ring Mount Kit</b><br/>         † TRE509463</p> <p>3) <b>Water Pump Cover Gasket</b><br/>         † TR119383</p> |
| <p><b>Valve, Intake</b><br/>         † TR84618 Std.<br/>         † TR93308 0.003<br/>         † TR93312 0.015</p>  | <p><b>Valve, Exhaust</b><br/>         † TR84619 Std.<br/>         † TR93311 0.003<br/>         † TR93313 0.015</p>  | <p>1) <b>Insert, Valve In</b><br/>         † TR121193 Std.</p> <p>2) <b>Insert, Valve Ex</b><br/>         † TR119132 Std.</p>  | <p>1) <b>Cap, Valve</b><br/>         † TT20129</p> <p>2) <b>Lock, Valve</b><br/>         † TT20077</p> <p>3) <b>Shield, Valve</b><br/>         † TR102882 x6<br/>         † TR501640 x6</p>  | <p>1) <b>Spring, Valve</b><br/>         † TR91822</p>   |  |
|  <p>1) <b>Thermostat</b><br/>         † TAR48675 180° F</p> <p>2) <b>Thermostat Housing Seal</b><br/>         † TR136063</p>  |  <p>1) <b>Oil Pump</b><br/>         † TRE60622</p> <p>2) <b>Injector</b><br/>         † TRE57152<br/>         † TRE61593<br/>         † TRE63073<br/>         † TRE64391</p> <p>3) <b>Injector Washer</b><br/>         † TR84472</p>   |  <p>1) <b>Oil Pressure Sensor</b><br/>         † TRE167207</p> <p>2) <b>Water Temp Sensor</b><br/>         † TRE52722</p> <p>3) <b>Crankshaft Sensor</b><br/>         † TRE519144</p>  |  <p><b>Turbocharger</b><br/>         † TRE534396</p>  |   |  |
| <p>(1): With helical oil pump drive gear. Do not use with HPCR fuel system.</p> <p>(3): With Aluminum Oil Pan use TR49377 (RE504822).</p> <p>(5): For engine ESN 199,999 and below. For Exhaust Valves only.</p> <p>(7): Check application for proper usage.</p> <p>(9): Fractured split connecting rod. Uses Rod Bolt TR501035.</p> <p>(11): For used with Fractured split connecting rod.</p> <p>(13): Our gasket sets do not include the front and rear crankshaft seals</p> <p>(15): (RE53000)</p> |   | <p>(2): With straight oil pump drive gear.</p> <p>(4): Use TR66452 Rod Bolts with Machine Split Connecting Rods, and use TR501035 Rod Bolts with Fractured Split Connecting Rods.</p> <p>(6): For engine ESN 200,000 and above. For Exhaust Valves only.</p> <p>(8): Machine split connecting rod. Uses Rod Bolt TR66452.</p> <p>(10): High Flow.</p> <p>(12): Camshaft marked R120872.</p> <p>(14): The TR520844 is the metal/rubber oil pan gasket, that is used on the applications where the oil pan is part of the frame. It is not included in the full gasket or the overhaul kits.</p> |  |   |  |

|   |   |  |  |   |   |
|---|---|--|--|---|---|
| <p><b>Engine Series:</b><br/>PowerTech</p> <p><b>Engine Model:</b><br/>6081</p> <p><b>Engine Desc:</b><br/>Up to ESN 199,999</p> <p><b>Engine Data:</b><br/>8.1L Tier1</p> <p><b>Engine Info:</b><br/>4802, 4806</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.56 in / 116 mm<br/>Pin Ø: 1.8742 in / (+/- .0002) = 47 mm</p> <p><b>Con Rod (M):</b><br/>R116340 (To ESN 86,536), R501034 (From ESN 86,537)</p> <p><b>Piston (M):</b><br/>RE70689</p>   |  <p><b>Engine O/H Kit</b><br/>         † TOK504202<br/>         † TOK504202A</p> <p><b>Engine I/F Kit</b><br/>         † TIK504202<br/>         † TIK504202A<br/>         † Spec Sheet-TOK504201<br/>         TOK504202</p>   |  <p><b>Piston-Liner Kit</b><br/>         † TRE508156</p> <p><b>Consists of:</b><br/>         a) TRE70689<br/>         b) TRE503528<br/>         c) TR57771<br/>         d) TR116236<br/>         e) TAR98850<br/>         f) TE1343FN</p>                |  <p><b>Main Bearing</b><br/>         † TRE529319 Std.<br/>         † TRE534181 0.0115</p> <p><b>Use 6</b></p>  |  <p><b>Thrust Bearing</b><br/>         † TRE529320 Std.<br/>         † TRE534183 0.0115</p> <p><b>Use 1</b></p>   |  <p><b>Con Rod Bearing</b><br/>         † TR116081 Std.<br/>         † TRE57167 0.0115</p> <p><b>Use 6</b></p>  |
| <p>Please see page 407 for a complete list of equipment models.</p>   |  <p>1) <b>Front Seal</b><br/>         † TAR49025</p> <p>2) <b>Rear Seal</b><br/>         † TRE520036</p> <p>3) <b>Crankshaft, Gear</b><br/>         † TR104587</p> <p>4) <b>Crankshaft</b><br/>         † TRE535300<br/>         † TRE534314</p> <p>5) <b>Ring Gear</b><br/>         † TR28811</p> <p>6) <b>Rear Gear</b><br/>         † TR63326</p> |  <p>1) <b>O/H Gasket Set</b><br/>         † TRE506220</p> <p>2) <b>Head Gasket Set</b><br/>         † TRE506222</p> <p>3) <b>Head Gasket</b><br/>         † TRE55475</p> <p>4) <b>Oil Pan Gasket</b><br/>         † TR71918<br/>         † TR520844</p> |  <p>1) <b>Bush, Con Rod</b><br/>         † TR74008 x6</p> <p>2) <b>Bolt, Con Rod</b><br/>         † TR66452 x12<br/>         † TR501035 x12</p> <p>3) <b>Bush, Camshaft</b><br/>         † TR87561 x4</p> <p>4) <b>Con Rod</b><br/>         † TRE53154<br/>         † TRE535555</p> |  <p>1) <b>Plug, Camshaft</b><br/>         † TR82007</p> <p>2) <b>Oil Cooler</b><br/>         † TAR55394</p> <p>3) <b>Tappet</b><br/>         † TR110126 x12</p> <p>4) <b>Tensioner, Belt</b><br/>         † TRE518097<br/>         † TRE68715<br/>         † TRE57498</p> <p>5) <b>Head Bolt Kit</b><br/>         † TRG24026</p> |  <p>1) <b>Pump, Water</b><br/>         † TRE521502<br/>         † TRE521503</p> <p>2) <b>O'ring, Mount Kit</b><br/>         † TRE509463</p> <p>3) <b>Water Pump Cover Gasket</b><br/>         † TR119383</p> |
| <p><b>Valve, Intake</b><br/>         † TR84618 Std.<br/>         † TR93308 0.003<br/>         † TR93312 0.015</p>   | <p><b>Valve, Exhaust</b><br/>         † TR84619 Std.<br/>         † TR93311 0.003<br/>         † TR93313 0.015</p>  | <p>1) <b>Insert, Valve In</b><br/>         † TR121193 Std.</p> <p>2) <b>Insert, Valve Ex</b><br/>         † TR119132 Std.</p>  | <p>1) <b>Cap, Valve</b><br/>         † TT20129</p> <p>2) <b>Lock, Valve</b><br/>         † TT20077</p> <p>3) <b>Shield, Valve</b><br/>         † TR102882 x6<br/>         † TR501640 x6</p>  | <p>1) <b>Spring, Valve</b><br/>         † TR91822</p>   |   |
|  <p>1) <b>Thermostat</b><br/>         † TAR48675 180° F</p> <p>2) <b>Thermostat Housing Seal</b><br/>         † TR136063</p>   |  <p>1) <b>Oil Pump</b><br/>         † TRE60622</p> <p>2) <b>Injector</b><br/>         † TRE57152<br/>         † TRE61593<br/>         † TRE63073<br/>         † TRE64391</p> <p>3) <b>Injector Washer</b><br/>         † TR84472</p>   |  <p>1) <b>Oil Pressure Sensor</b><br/>         † TRE167207</p> <p>2) <b>Water Temp Sensor</b><br/>         † TRE52722</p> <p>3) <b>Crankshaft Sensor</b><br/>         † TRE519144</p>  |  <p><b>Turbocharger</b><br/>         † TRE534396</p>  |   |   |
| <p>(1): With helical oil pump drive gear. Do not use with HPCR fuel system.</p> <p>(3): With Aluminum Oil Pan use TR49377 (RE504822).</p> <p>(5): For engine ESN 199,999 and below. For Exhaust Valves only.</p> <p>(7): Check application for proper usage.</p> <p>(9): Fractured split connecting rod. Uses Rod Bolt TR501035.</p> <p>(11): For used with Fractured split connecting rod.</p> <p>(13): Our gasket sets do not include the front and rear crankshaft seals</p> <p>(2): With straight oil pump drive gear.</p> <p>(4): Use TR66452 Rod Bolts with Machine Split Connecting Rods, and use TR501035 Rod Bolts with Fractured Split Connecting Rods.</p> <p>(6): For engine ESN 200,000 and above. For Exhaust Valves only.</p> <p>(8): Machine split connecting rod. Uses Rod Bolt TR66452.</p> <p>(10): High Flow.</p> <p>(12): Camshaft marked R120872.</p> <p>(14): The TR520844 is the metal/rubber oil pan gasket, that is used on the applications were the oil pan is part of the frame. It is not included in the full gasket or the overhaul kits.</p> |   |  |  |   |   |

**Engine Series:**

PowerTech

**Engine Model:**

6081

**Engine Desc:**

8.1L Tier 2 & Tier 3 from ESN 200,000

**Engine Info:**

6 Cyl

**Engine**

**Dimensions:**

Bore: 4.56 in / 116 mm Pin Ø: 1.8742 in / (+/- .0002) = 47 mm

**Con Rod (M):**

RE535555

**Piston (M):**

DZ114299

Please see page 408 for a complete list of equipment models.



**Engine O/H Kit**  
 † TDZ114647  
**Engine I/F Kit**



**Piston-Liner Kit**  
 † TDZ114645  
**Consists of:**  
 † a) TDZ114299  
 † b) TRE503528  
 † c) TR57771  
 † d) TR116236  
 † e) TAR98850  
 † f) TE1343FN



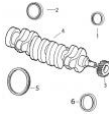
**Main Bearing**  
 † TRE529319 Std.  
 † TRE534181 0.0115  
**Use 6**



**Thrust Bearing**  
 † TRE529320 Std.  
 † TRE534183 0.0115  
**Use 1**



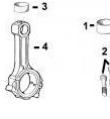
**Con Rod Bearing**  
 † TR116081 Std.  
 † TRE57167 0.0115  
**Use 6**



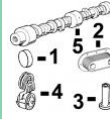
1) **Front Seal**  
 † TAR49025  
 † TRE543639  
 2) **Rear Seal**  
 † TRE520036  
 3) **Crankshaft, Gear**  
 † TR104587  
 4) **Crankshaft**  
 † TRE535300  
 † TRE534314  
 5) **Ring Gear**  
 † TR28811  
 6) **Rear Gear**  
 † TR63326



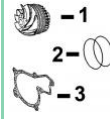
1) **O/H Gasket Set**  
 † TRE527551  
 2) **Head Gasket Set**  
 † TRE527552  
 3) **Head Gasket**  
 † TRE55475  
 4) **Oil Pan Gasket**  
 † TR532464  
 † TR520844  
 5) **Rocker Cover Seal**  
 † TR502598  
 † TR502719



1) **Bush, Con Rod**  
 † TR74008 x6  
 2) **Bolt, Con Rod**  
 † TR501035 x12  
 3) **Bushing, Cam**  
 † TR87561 x4  
 4) **Con Rod**  
 † TRE535555



1) **Plug, Camshaft**  
 † TR82007  
 2) **Oil Cooler**  
 † TAR55394  
 3) **Tappet**  
 † TR110126 x12  
 4) **Tensioner, Belt**  
 † TRE518097  
 † TRE68715  
 † TRE57498  
 5) **Head Bolt Kit**  
 † TRE506501



1) **Pump, Water**  
 † TRE521502  
 2) **O'ring Mount Kit**  
 † TRE509463  
 3) **Water Pump Cover Gasket**  
 † TR119383

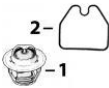
**Valve, Intake**  
 † TR84618 Std.  
 † TR93308 0.003  
 † TR93312 0.015

**Valve, Exhaust**  
 † TR84619 Std.  
 † TR93311 0.003  
 † TR93313 0.015

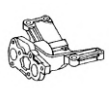
1) **Insert, Valve In**  
 † TR121193 Std.  
 2) **Insert, Valve Ex**  
 † TR119132 Std.

1) **Cap, Valve**  
 † TT20129  
 2) **Lock, Valve**  
 † TT20077  
 3) **Shield, Valve**  
 † TR501640 x6

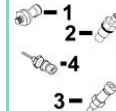
**Spring, Valve**  
 † TR502187



1) **Thermostat**  
 † TAR48675 180° F  
 2) **Thermostat Housing Seal**  
 † TR136063



1) **Oil Pump**  
 † TRE60622









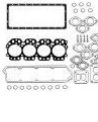
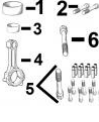
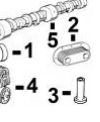
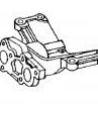



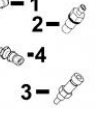

1) **Oil Pressure Sensor**  
 † TRE167207  
 2) **Water Temp Sensor**  
 † TRE52722  
 3) **Crankshaft Sensor**  
 † TRE519144  
 4) **Temperature Sensor**  
 † TRE522823

(1): With helical oil pump drive gear. Do not use with HPCR fuel system.  
 (3): Paper Gasket.

(2): With straight oil pump drive gear.

(5): Both Front Seal are included in the Kit.  
 (7): Camshaft marked R120872.  
 (9): Check application for proper usage

(4): The TR520844 is the metal/rubber oil pan gasket, that is used on the applications where the oil pan is part of the frame. It is not included in the full gasket or the overhaul kits.  
 (6): Check application for proper usage.  
 (8): Our gasket sets do not include the front and rear crankshaft seals

|  |  |   |   |  |   |
|--|--|---|---|--|---|
| <p><b>Engine Series:</b><br/>PowerTech</p> <p><b>Engine Model:</b><br/>6090</p> <p><b>Engine Desc:</b><br/>9.0L Tier 2 &amp; Tier 3</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.664 in / 118.35 mm<br/>Stroke: 5.400 in / 136 mm</p> |  <p><b>Engine O/H Kit</b><br/>                 † TDZ10599<br/> <b>Engine I/F Kit</b><br/>                 † TIK10599<br/>                 † SPEC SHEET - TDZ10599</p>  |  <p><b>Piston-Liner-Kit</b><br/>                 † TDZ10211<br/> <b>Consists of:</b><br/>                 † a) TRE529264<br/>                 † b) TRE539642<br/>                 † c) TR517073<br/>                 † d) TR530609<br/>                 † e) TAR98850<br/>                 † f) TR519640</p>  |  <p><b>Main Bearing</b><br/>                 † TRE529319 Std.<br/>                 † TRE534181 0.0115<br/> <b>Use 6</b></p>   |  <p><b>Thrust Bearing</b><br/>                 † TRE529320 Std.<br/>                 † TRE534183 0.0115<br/> <b>Use 1</b></p>  |  <p><b>Con Rod Bearing</b><br/>                 † TRE529318 Std.<br/>                 † TRE529318A 0.0115<br/> <b>Use 6</b></p> |
| <p>Please see page 409 for a complete list of equipment models.</p>  |  <p>1) <b>Front Seal</b><br/>                 † TRE543639<br/>                 2) <b>Rear Seal</b><br/>                 † TRE520036<br/>                 † TRE530121<br/>                 3) <b>Crankshaft</b><br/>                 † TRE540429<br/>                 4) <b>Crankshaft, Gear</b><br/>                 † TR104587<br/>                 5) <b>Ring Gear</b><br/>                 † TR28811</p> |  <p>1) <b>O/H Gasket Set</b><br/>                 † TRE528400<br/>                 2) <b>Head Gasket Set</b><br/>                 † TRE528402<br/>                 3) <b>Head Gasket</b><br/>                 † TR525541<br/>                 4) <b>Oil Pan Gasket</b><br/>                 † TR532464<br/>                 † TR520844<br/>                 5) <b>Valve Cover</b><br/>                 † TR527884<br/>                 † TR526607<br/>                 6) <b>Intake Manifold Gsk</b><br/>                 † TR518260<br/>                 7) <b>Exhaust Manifold Gsk</b><br/>                 † TR519361</p> |  <p>1) <b>Bush, Con Rod</b><br/>                 † TR74008 x6<br/>                 2) <b>Bolt, Con Rod</b><br/>                 † TR501035 x12<br/>                 3) <b>Bushing, Cam</b><br/>                 † TR527877 x6<br/>                 4) <b>Conrod</b><br/>                 † TRE535554<br/>                 5) <b>Kit, Ex Manifold Bolts</b><br/>                 † TMX6090E<br/>                 6) <b>Bolt, Cyl Head</b><br/>                 † TDZ100946 x26<br/>                 † TRE528399 (Kit)</p> |  <p>1) <b>Plug, Camshaft</b><br/>                 † TR82007<br/>                 2) <b>Oil Cooler</b><br/>                 † TAR55394<br/>                 3) <b>Tappet</b><br/>                 † TRE540586 x12<br/>                 4) <b>Tensioner, Belt</b><br/>                 † TRE518097<br/>                 † TRE57498<br/>                 † TRE68715<br/>                 † TRE243154<br/>                 5) <b>Camshaft</b><br/>                 † TR522884</p> |  <p><b>Pump, Oil</b><br/>                 † TRE543187</p>  |
| <p><b>Valve, Intake</b><br/>                 † TR520223 Std.</p>   | <p><b>Valve, Intake</b><br/>                 † TR520223 Std.</p>   | <p><b>Valve, Exhaust</b><br/>                 † TR520224 Std.</p>   | <p><b>Insert, Valve</b><br/>                 † TR527285 Std.</p>  | <p>1) <b>Guide, Valve</b><br/>                 † TR527286<br/>                 2) <b>Lock, Valve</b><br/>                 † TR520798</p>   | <p>1) <b>Spring, Valve</b><br/>                 † TR504235<br/>                 2) <b>Seal, Valve Stm</b><br/>                 † TRE529187</p>  |
|  <p><b>Thermostat</b><br/>                 † TRE528652 180° F<br/>                 † TRE540550 180° F</p>   |  <p><b>Water Pump</b><br/>                 † TRE530194</p>  |  <p>1) <b>Injector Tube</b><br/>                 † TRE543935 x6<br/>                 2) <b>Injector Tube O-Ring</b><br/>                 † TRE528349<br/>                 † TRE530609<br/>                 3) <b>Injector</b><br/>                 † TDZ100221<br/>                 † TDZ100223</p>  |  <p>1) <b>Oil Pressure Sensor</b><br/>                 † TRE167207<br/>                 2) <b>Water Temp Sensor</b><br/>                 † TRE52722<br/>                 3) <b>Crankshaft Sensor</b><br/>                 † TRE519144<br/>                 4) <b>Fuel Pressure Sensor</b><br/>                 † TRE522794<br/>                 5) <b>Temperature Sensor</b><br/>                 † TRE522823</p>  |  <p><b>Turbocharger</b><br/>                 † TRE531288</p>  |   |

(1): Paper Gasket.

(3): Check application for proper usage.

(5): Use with RE536705 Valve Cover.

(7): Check for proper application.

(9): Our gasket sets do not include the front and rear crankshaft seals

(2): Metal / Rubber Gasket.

(4): Use with RE529972 Valve Cover.

(6): Flanged Seal.

(8): Crankshaft rear palm has 6 bolt holes for attaching flywheel and is made for wide rods and rod bearings.

(10): With Shim.



**Engine Series:**  
100

**Engine Model:**  
104-22 (KR,  
KRC, KRG)

**Engine Desc:**  
NATURALLY  
ASPIRATED

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.3 in /  
84.00 mm  
Stroke: 3.9 in /  
100.00 mm  
Displacement:  
135 in3 / 2.216  
Lt  
Compression  
Ratio: 22:1

Please see  
page **410** for a  
complete list of  
equipment  
models.

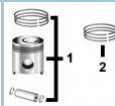


**1) Engine O/H Kit**

- › POK404 Std.
- › POK405 0.50

**2) Basic Engine Kit**

- › PBK404 Std.
- › PBK405 0.50
- › Spec Sheet - 400C Series



**1) Piston & Ring Kit**

- › P115017491 Std.
- › P115017491B 0.50

**4 Per Engine**

**2) Ring Set**

- › P115107970 Std.
- › P115107970B 0.50



**Main Bearing Set**

- › P198586140 Std.
- › P198586150 0.010
- › P198586160 0.020

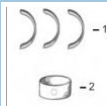
**Set of 4 Pairs**



**Con Rod Bearing Set**

- › PU5ME0011 Std.
- › PU5ME0011A 0.010
- › PU5ME0011B 0.020

**Set of 4 Pairs**



**1) Thrust Washer**

- › P199266200/10

**Set of 3 Pcs**

- 2) Crank Bushing**
- › P198517222 Std.
- › P198517226 0.010
- › P198517229 0.020



**1) Front Seal**

- › P198636160

**2) Rear Seal**

- › P050209083

**3) Crankshaft**

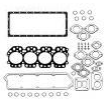
- › P115256990

**4) Crankshaft Gear**

- › PU15276270

**5) Key, Crank Gear**

- › P030509020



**1) O/H Gasket Set**

- › PU5LC0017

**2) Cyl Head Gsk**

- › P111147741

**3) Seal Rocker Box**

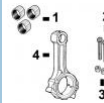
- › P120996130

**4) Seal, Cyl HD Cov**

- › P111996401

**5) Oil Pan Gasket**

- › P110996920



**1) Bush, Con Rod**

- › P198517265 x4

**2) Bolt, Con Rod**

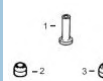
- › P115176140 x8

**3) Nut, Con Rod**

- › P020109120 x8

**4) Con Rod**

- › P115026330



**1) Tappet**

- › P120116160

**2) Seal, Intk Valve**

- › P120406070 x4

**3) Seal, Exh Valve**

- › P120406050 x4

**Valve Train Kit**

- › PVTK440

**1) Valve, Intake**

- › P120166350 x4

**2) Valve, Exhaust**

- › P120176360 x4

**3) Spring, Valve**

- › P198216700 x8

**4) Retainer, Valve Spring**

- › P120186080 x8

**5) Lock, Valve**

- › P120226070 x16

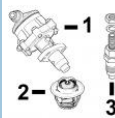


**1) Oil Pump**

- › PU5MK8266

**2) Oil Cooler**

- › P2486A218



**1) Lift Pump**

- › P130506351

**2) Thermostat**

- › P145206182

**3) Atomiser**

- › P131406490

**4) Pre-Fuel Filter Assy**

- › P130306380



**1) Water Pump**

- › P145017951

**2) Gasket, W Pump**

- › P145996921

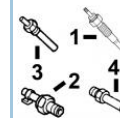


**1) Repair Sleeve**

- › 84RS

**2) Cylinder Head**

- › P111017420UF



**1) Glowplug**

- › P185366190

**2) Oil Pressure Switch**

- › P185246060

**3) Temp Sensor**

- › P385720101

**4) Water Temp Sensor**

- › P385720230

**(1):** Does not include Crankshaft Oil Seals.

**(2):** "KR" build ONLY.

**(3):** Do not use in applications that require a Crankshaft Driven Balancer Unit. The new style front gear is P/N U15276270, (.887" or 22.5mm Wide) and the keyway P/N P030509020, must be used.

**(4):** Check for proper application.

**(5):** Not included in valve train kit.

**Engine Series:**

400

**Engine Model:**

403C-15  
(HL,HLC,HLG)

**Engine Desc:**

NATURALLY  
ASPIRATED

**Engine Info:**

3 Cyl

**Engine**

**Dimensions:**

Bore: 3.3 in /  
84.00 mm  
Stroke: 3.5 in /  
90.00 mm  
Displacement:  
91 in3 / 1.496  
Lt  
Compression  
Ratio: 22.5:1

Please see  
page 411 for a  
complete list of  
equipment  
models.

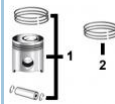


**1) Engine O/H Kit**

- POK316 Std. 5
- POK317 0.50 5

**2) Basic Engine Kit**

- PBK316 Std.
- PBK317 0.50
- Spec Sheet - 400C Series



**1) Piston & Ring Kit**

- P115017541 Std.
- P115017541B 0.50

**3 Per Engine**

**2) Ring Set**

- P115107970 Std.
- P115107970B 0.50



**Main Bearing Set**

- P198586050 Std.
- P198586054 0.010
- P198586057 0.020

**Set of 3 Pairs**



**Con Rod Bearing Set**

- P198586080 Std.
- P198586084 0.010
- P198586087 0.020

**Set of 3 Pairs**



**1) Thrust Washer**

- P199266200 x2
- 2) Crank Bushing**
- P198517222 Std.
- P198517226 0.010
- P198517229 0.020



**1) Front Seal**

- P198636160

**2) Rear Seal**

- P198636170

**3) Crankshaft**

- P115256950

**4) Crankshaft Gear**

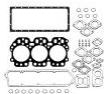
- PU15276270

**5) Key, Crank Gear**

- P030509020

**6) Flywheel Ring Gear**

- P115376040 109T
- PU15376160 126T



**1) O/H Gasket Set**

- PU5LC0018

**2) Cyl Head Gsk**

- P111147501

**3) Seal Rocker Box**

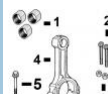
- P120996140

**4) Seal, Cyl HD Cov**

- P111996410

**5) Oil Pan Gasket**

- P110996910



**1) Bush, Con Rod**

- P198517265 x3

**2) Bolt, Con Rod**

- P115176140 x6

**3) Nut, Con Rod**

- P020109120 x6

**4) Connecting Rod**

- P115026251

**5) Head Bolt**

- P111136480 x11
- P111136490 x3



**1) Tappet**

- P120116160

**2) Seal, Intk Valve**

- P120406070 x3

**3) Seal, Exh Valve**

- P120406050 x3

**Valve Train Kit**

- PVTK308

**1) Valve, Intake**

- P120166350 x3

**2) Valve, Exhaust**

- P120176360 x3

**3) Spring, Valve**

- P198217470 x6

**4) Retainer, Valve Spring**

- P120186080 x6 4

**5) Lock, Valve**

- P120226070 x12

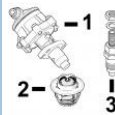


**1) Oil Pump**

- PU5MK8266

**2) Oil Cooler**

- P2486A218



**1) Lift Pump**

- P130506351

**2) Thermostat**

- P145206182

**3) Atomiser**

- P131406490 1

**4) Pre-Fuel Filter Assy**

- P130306380

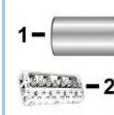


**1) Water Pump**

- P145017951 3

**2) Gasket, W Pump**

- P145996921

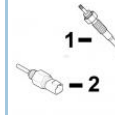


**1) Repair Sleeve**

- 84RS

**2) Cylinder Head**

- P111018050UF



**1) Glowplug**

- P185366190 2

**2) Water Temp Sensor**

- PW85720580 3

(1): Use with HL and HLC Builds.

(3): Check for proper application.

(5): If 2 bolt auxiliary drive timing cover gasket is needed, also sell P165996630, with the gasket set PU5LC0018.

(2): Use with HL Build.

(4): Not included in valve train kit.

(6): Not compatible with engines that have a crank driven balancer unit.

|                              |   |  |                              |   |
|------------------------------|---|--|------------------------------|---|
| <b>Engine Series:</b><br>400 | <b>Engine Model:</b><br>403C-17 (HM) 403D-17 (GS) | <b>Engine Data:</b><br>NATURALLY ASPIRATED | <b>Engine Info:</b><br>3 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.3 in / 84.00 mm<br>Stroke: 3.9 in / 100.00 mm<br>Displacement: 101.4 in <sup>3</sup> / 1.662 Lt<br>Compression Ratio: 22.5:1 |
|------------------------------|---|--|------------------------------|---|

**Case-IH-Farm Tractors**

D35  
DX35

DX34

**New Holland-Farm Tractors**

BOOMER 2035  
T2220  
TC35  
TC35D

T1520  
TC34DA  
TC35A  
TC35DA

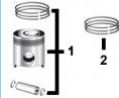


**1) Engine O/H Kit**

- POK318 Std.
- POK319 0.50

**2) Basic Engine Kit**

- PBK318 Std.
- PBK319 0.50
- Spec Sheet - 400C Series



**1) Piston & Ring Kit**

- P115017491 Std.
- P115017491B 0.50

**3 Per Engine**

**2) Ring Set**

- P115107970 Std.
- P115107970B 0.50



**Main Bearing Set**

- P198586050 Std.
- P198586054 0.010
- P198586057 0.020

**Set of 3 Pairs**



**Con Rod Bearing Set**

- P198586080 Std.
- P198586084 0.010
- P198586087 0.020

**Set of 3 Pairs**



**1) Thrust Washer**

- P199266200 x2

**2) Crank Bushing**

- P198517222 Std.
- P198517226 0.010
- P198517229 0.020



**1) Front Seal**

- P198636160

**2) Rear Seal**

- P050209083

**3) Crankshaft Gear**

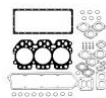
- PU15276270

**4) Key, Crank Gear**

- P030509020

**5) Flywheel Ring Gear**

- P115376040 109T
- PU15376160 126T



**1) O/H Gasket Set**

- PU5LC0018

**2) Cyl Head Gsk**

- P111147501

**3) Seal Rocker Box**

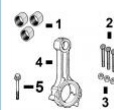
- P120996140

**4) Seal, Cyl HD Cov**

- P111996410

**5) Oil Pan Gasket**

- P110996910



**1) Bush, Con Rod**

- P198517265 x3

**2) Bolt, Con Rod**

- P115176140 x6

**3) Nut, Con Rod**

- P020109120 x6

**4) Connecting Rod**

- P115026330

**5) Head Bolt**

- P111136480 x11
- P111136490 x3



**1) Tappet**

- P120116160

**2) Seal, Intk Valve**

- P120406070 x3

**3) Seal, Exh Valve**

- P120406050 x3

**Valve Train Kit**

- PVTK309

**1) Valve, Intake**

- P120166350 x3

**2) Valve, Exhaust**

- P120176360 x3

**3) Spring, Valve**

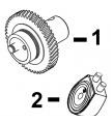
- P198216700 x6

**4) Retainer, Valve Spring**

- P120186080 x6

**4) Lock, Valve**

- P120226070 x12



**1) Oil Pump**

- PU5MK8266
- PU5MK8267

**2) Oil Cooler**

- P2486A218



**1) Lift Pump**

- P130506351

**2) Thermostat**

- P145206182
- P145206230

**3) Atomiser**

- P131406490



**1) Water Pump**

- P145017951
- PU45010062

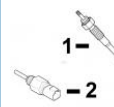
**2) Gasket, W Pump**

- P145996921



**Repair Sleeve**

- 84RS



**1) Glowplug**

- P185366190

**2) Water Temp Sensor**

- PW85720580

(1): Use with GS Build, 403D-17 Engine.

(2): Check for proper application.

(3): Depending on the serial number or production date, the TC35, TC35D, D35 & DX35 may require additional manifold gaskets not offered in PU5LC0018.

(4): If 2 bolt auxiliary drive timing cover gasket is needed, also sell P165996630, with the gasket set PU5LC0018.

**Engine Series:**

400

**Engine Model:**

403A-15 (GU)  
403D-15 (GK)

**Engine Data:**

NATURALLY  
ASPIRATED

**Engine Info:**

3 Cyl

**Engine**

**Dimensions:**

Bore: 3.3 in /  
84.00 mm  
Stroke: 3.54 in  
/ 90.00 mm  
Displacement:  
91.5 in<sup>3</sup> /1.5 Lt  
Compression  
Ratio: 22.5:1

Please see  
page 412 for a  
complete list of  
equipment  
models.



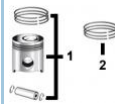
**1) Engine O/H Kit**

- › POK349 Std.
- › POK350 0.50

4  
4

**2) Basic Engine Kit**

- › PBK349 Std.
- › PBK350 0.50
- › Spec Sheet - 400D Series



**1) Piston & Ring Kit**

- › P115017541 Std.
- › P115017541B 0.50

**3 Per Engine**

**2) Ring Set**

- › P115107970 Std.
- › P115107970B 0.50



**Main Bearing Set**

- › P198586050 Std.
- › P198586054 0.010
- › P198586057 0.020

**Set of 3 Pairs**



**Con Rod Bearing Set**

- › P198586080 Std.
- › P198586084 0.010
- › P198586087 0.020

**Set of 3 Pairs**



**1) Thrust Washer**

- › P199266200 x2
- 2) Crank Bushing**
- › P198517222 Std.
- › P198517226 0.010
- › P198517229 0.020



**1) Front Seal**

- › P198636160

**2) Rear Seal**

- › P198636170

**3) Crankshaft**

- › P115256950

**4) Crankshaft Gear**

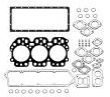
- › PU15276270

**5) Key, Crank Gear**

- › P030509020

**6) Flywheel Ring Gear**

- › P115376040 109T
- › PU15376160 126T



**1) O/H Gasket Set**

- › PU5LC0018

3

**2) Cyl Head Gsk**

- › P111147501

**3) Seal Rocker Box**

4

- › P120996140

**4) Seal, Cyl HD Cov**

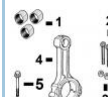
- › P111996410

**5) Timing Cover Gsk**

- › P165996630

**6) Oil Pan Gasket**

- › P110996910



**1) Bush, Con Rod**

- › P198517265 x3

**2) Bolt, Con Rod**

- › P115176140 x6

**3) Nut, Con Rod**

- › P020109120 x6

**4) Connecting Rod**

- › P115026251

**5) Head Bolt**

- › P111136480 x11
- › P111136490 x3



**1) Tappet**

- › P120116160

**2) Seal, Intk Valve**

- › P120406070 x3

**3) Seal, Exh Valve**

- › P120406050 x3

**Valve Train Kit**

- › PVTK309

**1) Valve, Intake**

- › P120166350 x3

**2) Valve, Exhaust**

- › P120176360 x3

**3) Spring, Valve**

- › P198216700 x6

**4) Retainer, Valve Spring**

- › P120186080 x6

**5) Lock, Valve**

- › P120226070 x12

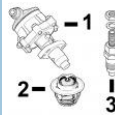


**1) Oil Pump**

- › PU5MK8267

**2) Oil Cooler**

- › P2486A218



**1) Lift Pump**

- › P130506351

**2) Thermostat**

- › P145206230

**3) Injector**

- › P131406490

1

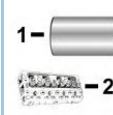
**4) Pre-Fuel Filter Assy**

- › P130306380



**Water Pump**

- › PU45010062

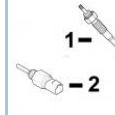


**1) Repair Sleeve**

- › 84RS

**2) Cylinder Head**

- › P111011050UF



**1) Glowplug**

- › P185366190

**2) Water Temp Sensor**

- › PW85720580

2

(1): Use with GK Build, 403D-15 Engine.


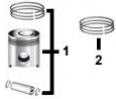





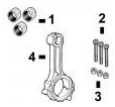
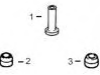



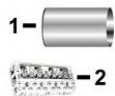

(2): Check for proper application.

(3): If 2 bolt auxiliary drive timing cover gasket is needed, also sell (4): Not compatible with engines that have a crank driven balancer unit.

|                              |                                       |                                     |                              |  |
|------------------------------|---------------------------------------|-------------------------------------|------------------------------|--|
| <b>Engine Series:</b><br>400 | <b>Engine Model:</b><br>403D-15T (GL) | <b>Engine Desc:</b><br>TURBOCHARGED | <b>Engine Info:</b><br>3 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.3 in / 84.00 mm<br>Stroke: 3.54 in / 90.00 mm<br>Displacement: 91.5 in <sup>3</sup> / 1.5 Lt<br>Compression Ratio: 22.5:1 |
|------------------------------|---------------------------------------|-------------------------------------|------------------------------|--|

**Takeuchi**

TW40 - Comp Wheel Loader

|   |   |   |  |   |
|---|---|---|--|---|
|  <p><b>1) Engine O/H Kit</b><br/>                 , POK351 Std.<br/>                 , POK352 0.50<br/> <b>2) Basic Engine Kit</b><br/>                 , PBK351 Std.<br/>                 , PBK352 0.50<br/>                 , Spec Sheet - 400D Series</p>  |  <p><b>1) Piston &amp; Ring Kit</b><br/>                 , P115017581 Std.<br/>                 , P115017581B 0.50<br/> <b>3 Per Engine</b><br/> <b>2) Ring Set</b><br/>                 , P115104021 Std.<br/>                 , P115104021B 0.50</p>   |  <p><b>Main Bearing Set</b><br/>                 , P198586050 Std.<br/>                 , P198586054 0.010<br/>                 , P198586057 0.020<br/> <b>Set of 3 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b><br/>                 , P198586080 Std.<br/>                 , P198586084 0.010<br/>                 , P198586087 0.020<br/> <b>Set of 3 Pairs</b></p>                 |  <p><b>1) Thrust Washer</b><br/>                 , P199266200 x2<br/> <b>2) Crank Bushing</b><br/>                 , P198517222 Std.<br/>                 , P198517226 0.010<br/>                 , P198517229 0.020</p> |
|  <p><b>1) Front Seal</b><br/>                 , P198636160<br/> <b>2) Rear Seal</b><br/>                 , P198636170<br/> <b>3) Crankshaft</b><br/>                 , P115256950<br/> <b>4) Crankshaft Gear</b><br/>                 , PU15276270<br/> <b>5) Key, Crank Gear</b><br/>                 , P030509020</p> |  <p><b>1) O/H Gasket Set</b><br/>                 , PU5LC0018<br/> <b>2) Cyl Head Gsk</b><br/>                 , P111147501<br/> <b>3) Seal Rocker Box</b><br/>                 , P120996140<br/> <b>4) Seal, Cyl HD Cov</b><br/>                 , P111996410<br/> <b>5) Timing Cover Gsk</b><br/>                 , P165996630<br/> <b>6) Oil Pan Gasket</b><br/>                 , P110996910</p> |  <p><b>1) Bush, Con Rod</b><br/>                 , P198517265 x3<br/> <b>2) Bolt, Con Rod</b><br/>                 , P115176140 x6<br/> <b>3) Nut, Con Rod</b><br/>                 , P020109120 x6<br/> <b>4) Con Rod</b><br/>                 , P115026251</p> |  <p><b>1) Tappet</b><br/>                 , P120116160<br/> <b>2) Seal, Intk Valve</b><br/>                 , P120406070 x3<br/> <b>3) Seal, Exh Valve</b><br/>                 , P120406050 x3</p> |   |
| <p><b>Valve Train Kit</b><br/>                 , PVTK309</p>  | <p><b>1) Valve, Intake</b><br/>                 , P120166350 x3<br/> <b>2) Valve, Exhaust</b><br/>                 , P120176360 x3</p>  | <p><b>3) Spring, Valve</b><br/>                 , P198216700 x6<br/> <b>4) Retainer, Valve Spring</b><br/>                 , P120186080 x6</p>  | <p><b>5) Lock, Valve</b><br/>                 , P120226070 x12</p>   |   |
|  <p><b>1) Oil Pump</b><br/>                 , PU5MK8267<br/> <b>2) Oil Cooler</b><br/>                 , P2486A218</p>  |  <p><b>1) Lift Pump</b><br/>                 , P130506351<br/> <b>2) Thermostat</b><br/>                 , P145206230<br/> <b>3) Atomiser</b><br/>                 , P131406490</p>  |  <p><b>Water Pump</b><br/>                 , PU45010062</p>  |  <p><b>1) Repair Sleeve</b><br/>                 , 84RS<br/> <b>2) Cylinder Head</b><br/>                 , P111011050UF</p>   |  <p><b>1) Glowplug</b><br/>                 , P185366190<br/> <b>2) Water Temp Sensor</b><br/>                 , PW85720580</p>  |

(1): Check for proper application.

(2): Not compatible with engines that have a crank driven balancer unit.

**Engine Series:**  
400

**Engine Model:**  
404C-22  
(HP,HPC,HPG)

**Engine Desc:**  
NATURALLY  
ASPIRATED

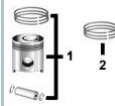
**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.3 in /  
84.00 mm  
Stroke: 3.9 in /  
100.00 mm  
Displacement:  
135 in3 / 2.216  
Lt  
Compression  
Ratio: 23.3:1

Please see  
page **413** for a  
complete list of  
equipment  
models.



- 1) Engine O/H Kit**  
 , POK404 Std.  
 , POK405 0.50
- 2) Basic Engine Kit**  
 , PBK404 Std.  
 , PBK405 0.50  
 , Spec Sheet - 400C Series



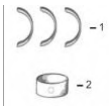
- 1) Piston & Ring Kit**  
 , P115017491 Std.  
 , P115017491B 0.50
- 4 Per Engine**
- 2) Ring Set**  
 , P115107970 Std.  
 , P115107970B 0.50



- Main Bearing Set**  
 , P198586140 Std.  
 , P198586150 0.010  
 , P198586160 0.020
- Set of 4 Pairs**



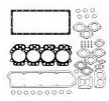
- Con Rod Bearing Set**  
 , PU5ME0011 Std.  
 , PU5ME0011A 0.010  
 , PU5ME0011B 0.020
- Set of 4 Pairs**



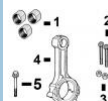
- 1) Thrust Washer**  
 , P199266200/10
- Set of 3 Pcs**
- 2) Crank Bushing**  
 , P198517222 Std.  
 , P198517226 0.010  
 , P198517229 0.020



- 1) Front Seal**  
 , P198636160
- 2) Rear Seal**  
 , P050209083
- 3) Crankshaft**  
 , P115256990
- 4) Crankshaft Gear**  
 , PU15276270
- 5) Key, Crank Gear**  
 , P030509020
- 6) Flywheel Ring Gear**  
 , P115376040 109T  
 , PU15376160 126T



- 1) O/H Gasket Set**  
 , PU5LC0017
- 2) Cyl Head Gsk**  
 , P111147741
- 3) Seal Rocker Box**  
 , P120996130
- 4) Seal, Cyl HD Cov**  
 , P111996401
- 5) Oil Pan Gasket**  
 , P110996920



- 1) Bush, Con Rod**  
 , P198517265 x4
- 2) Bolt, Con Rod**  
 , P115176140 x8
- 3) Nut, Con Rod**  
 , P020109120 x8
- 4) Connecting Rod**  
 , P115026330
- 5) Head Bolt**  
 , P111136480 x14  
 , P111136490 x4



- 1) Tappet**  
 , P120116160
- 2) Seal, Intk Valve**  
 , P120406070 x4
- 3) Seal, Exh Valve**  
 , P120406050 x4

- Valve Train Kit**  
 , PVTK440

- 1) Valve, Intake**  
 , P120166350 x4
- 2) Valve, Exhaust**  
 , P120176360 x4
- 3) Spring, Valve**  
 , P198216700 x8
- 4) Retainer, Valve Spring**  
 , P120186080 x8

- 5) Lock, Valve**  
 , P120226070 x16



- 1) Oil Pump**  
 , PU5MK8266
- 2) Oil Cooler**  
 , P2486A218



- 1) Lift Pump**  
 , P130506351
- 2) Thermostat**  
 , P145206182
- 3) Atomiser**  
 , P131406490
- 4) Pre-Fuel Filter Assy**  
 , P130306380



- 1) Water Pump**  
 , P145017951
- 2) Gasket, W Pump**  
 , P145996921



- Repair Sleeve**  
 , 84RS



- 1) Glowplug**  
 , P185366190
- 2) Oil Pressure Switch**  
 , P185246280
- 3) Water Temp Sensor**  
 , PW85720580
- 4) Cylinder Head**  
 , P111017930UF



- Fuel Lines**
- , 1) P131507700
  - , 2) P131507710
  - , 3) P131507720
  - , 4) P131507730

(1): Does not include Crankshaft Oil Seals.

(3): Do not use in applications that require a Crankshaft Driven Balancer Unit. The new style front gear is P/N U15276270, (.887" or 22.5mm Wide) and the keyway P/N P030509020, must be used.

(5): Check for proper application.

(2): Use with HP Builds.

(4): Use with HP and HPC Builds.

(6): Bare head. Check application for proper usage.

**Engine Series:**  
400

**Engine Model:**  
404C-22T  
(HR, HRC)

**Engine Desc:**  
TURBOCHARGE

**Engine Info:**  
4 Cyl

**Engine Dimensions:**

Bore: 3.3 in / 84.00 mm  
Stroke: 3.9 in / 100.00 mm  
Displacement: 135 in3 / 2.216 Lt  
Compression Ratio: 23.3:1

Please see page 414 for a complete list of equipment models.

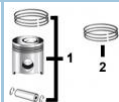


**1) Engine O/H Kit**

- POK406 Std.
- POK407 0.50

**2) Basic Engine Kit**

- PBK406 Std.
- PBK407 0.50
- Spec Sheet - 400C Series



**1) Piston & Ring Kit**

- P115017581 Std.
- P115017581B 0.50

**4 Per Engine**

**2) Ring Set**

- P115104021 Std.
- P115104021B 0.50



**Main Bearing Set**

- P198586140 Std.
- P198586150 0.010
- P198586160 0.020

**Set of 4 Pairs**



**Con Rod Bearing Set**

- PU5ME0011 Std.
- PU5ME0011A 0.010
- PU5ME0011B 0.020

**Set of 4 Pairs**



**1) Thrust Washer**

- P199266200/10

**Set of 3 Pcs**

**2) Crank Bushing**

- P198517222 Std.
- P198517226 0.010
- P198517229 0.020



**1) Front Seal**

- P198636160

**2) Rear Seal**

- P050209083

**3) Crankshaft**

- P115256990

**4) Crankshaft Gear**

- PU15276270

**5) Key, Crank Gear**

- P030509020

**6) Flywheel Ring Gear**

- P115376040 109T
- PU15376160 126T



**1) O/H Gasket Set**

- P404TOG

**2) Cyl Head Gsk**

- P111147741

**3) Seal Rocker Box**

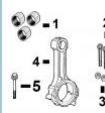
- P120996130

**4) Seal, Cyl HD Cov**

- P111996401

**5) Oil Pan Gasket**

- P110996920



**1) Bush, Con Rod**

- P198517265 x4

**2) Bolt, Con Rod**

- P115176140 x8

**3) Nut, Con Rod**

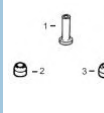
- P020109120 x8

**4) Connecting Rod**

- P115026330

**5) Head Bolt**

- P111136480 x14
- P111136490 x4



**1) Tappet**

- P120116160

**2) Seal, Intk Valve**

- P120406070 x4

**3) Seal, Exh Valve**

- P120406050 x4

**Valve Train Kit**

- PVTK440

**1) Valve, Intake**

- P120166350 x4

**2) Valve, Exhaust**

- P120176360 x4

**3) Spring, Valve**

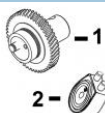
- P198216700 x8

**4) Retainer, Valve Spring**

- P120186080 x8

**5) Lock, Valve**

- P120226070 x16



**1) Oil Pump**

- PU5MK8266

**2) Oil Cooler**

- P2486A218



**1) Lift Pump**

- P130506351

**2) Thermostat**

- P145206182

**3) Atomiser**

- P131406490

**4) Pre-Fuel Filter Assy**

- P130306380



**1) Water Pump**

- P145017951

**2) Gasket, W Pump**

- P145996921



**1) Repair Sleeve**

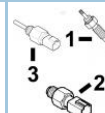
- 84RS

**2) Turbocharger**

- P135756180

**3) Cylinder Head**

- PTPN488UF



**1) Glowplug**

- P185366190

**2) Oil Pressure Switch**

- P185246280

**3) Water Temp Sensor**

- PW85720580



**Fuel Lines**

- 1) P131507700
- 2) P131507710
- 3) P131507720
- 4) P131507730

(1): Does not include Crankshaft Oil Seals.

(2): Use with HR Build.

(3): Do not use in applications that require a Crankshaft Driven Balancer Unit. The new style front gear is P/N U15276270, (.887" or 22.5mm Wide) and the key way P/N P030509020, must be used.

(4): Check for proper application.

(5): Not included in valve train kit.

**Engine Series:**  
400

**Engine Model:**  
404A-22 (GV)  
404D-22 (GN)

**Engine Desc:**

**Engine Data:**  
NATURALLY  
ASPIRATED

**Engine Info:**  
4 Cyl

**Engine Dimensions:**

Bore: 3.3 in / 84.00 mm  
Stroke: 3.9 in / 100.00 mm  
Displacement: 134.25 in<sup>3</sup> / 2.2 Lt  
Compression Ratio: 23.3:1

Please see page 415 for a complete list of equipment models.

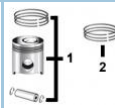


**1) Engine O/H Kit**

- POK464 Std.
- POK465 0.50

**2) Basic Engine Kit**

- PBK464 Std.
- PBK465 0.50
- Spec Sheet - 400D Series



**1) Piston & Ring Kit**

- P115017491 Std.
- P115017491B 0.50

**4 Per Engine**

**2) Ring Set**

- P115107970 Std.
- P115107970B 0.50



**Main Bearing Set**

- P198586140 Std.
- P198586150 0.010
- P198586160 0.020

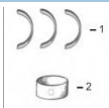
**Set of 4 Pairs**



**Con Rod Bearing Set**

- PU5ME0011 Std.
- PU5ME0011A 0.010
- PU5ME0011B 0.020

**Set of 4 Pairs**



**1) Thrust Washer**

- P199266200/10

**Set of 3 Pcs**

**2) Crank Bushing**

- P198517222 Std.
- P198517226 0.010
- P198517229 0.020



**1) Front Seal**

- P198636160

**2) Rear Seal**

- P050209083

**3) Crankshaft**

- P115256990

**4) Crankshaft Gear**

- PU15276270

**5) Key, Crank Gear**

- P030509020

**6) Flywheel Ring Gear**

- P115376040 109T
- PU15376160 126T



**1) O/H Gasket Set**

- P404D TOG

**2) Cyl Head Gsk**

- P111147771

**3) Seal Rocker Box**

- P120996130

**4) Seal, Cyl HD Cov**

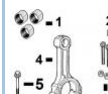
- P111996401

**5) Timing Cover Gsk**

- P165996630

**6) Oil Pan Gasket**

- P110996920



**1) Bush, Con Rod**

- P198517265 x4

**2) Bolt, Con Rod**

- P115176140 x8

**3) Nut, Con Rod**

- P020109120 x8

**4) Connecting Rod**

- P115026330

**5) Head Bolt**

- P111136480 x14
- P111136490 x4



**1) Tappet**

- P120116160

**2) Seal, Intake Valve**

- P120406070 x4

**3) Seal, Exhaust Valve**

- P120406050 x4

**Valve Train Kit**

- PVTK440

**1) Valve, Intake**

- P120166350 x4

**2) Valve, Exhaust**

- P120176360 x4

**3) Spring, Valve**

- P198216700 x8

**4) Retainer, Valve Spring**

- P120186080 x8

**5) Lock, Valve**

- P120226070 x16



**1) Oil Pump**

- PU5MK8267

**2) Oil Cooler**

- P2486A218



**1) Lift Pump**

- P130506351

**2) Thermostat**

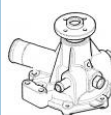
- P145206230

**3) Atomiser**

- P131406490

**4) Pre-Fuel Filter Assy**

- P130306380



**Water Pump**

- PU45010062

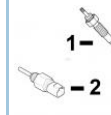


**1) Repair Sleeve**

- 84RS

**2) Cylinder Head**

- P111011030UF



**1) Glowplug**

- P185366190

**2) Water Temp Sensor**

- PW85720580



**Fuel Lines**

- 1) P131507700
- 2) P131507710
- 3) P131507720
- 4) P131507730

(1): Does not include Crankshaft Oil Seals.

(2): Do not use in applications that require a Crankshaft Driven Balancer Unit. The new style front gear is P/N U15276270, (.887" or 22.5mm Wide) and the key way P/N P030509020, must be used.

(3): Use with GN Build, 404D-22 Engine.

(4): Check for proper application.

(5): Not included in valve train kit.



PERKINS 404D-22T (GP)

**Engine Series:**

400

**Engine Model:**

404D-22T  
(GP)

**Engine Desc:**

TURBOCHARGE

**Engine Info:**

4 Cyl

**Engine**

**Dimensions:**

Bore: 3.3 in /  
84.00 mm  
Stroke: 3.9 in  
/ 100.00 mm  
Displacement:  
134.25 in3 / 2.2  
Lt  
Compression  
Ratio: 23.3:1

Please see  
page **416** for a  
complete list of  
equipment  
models.

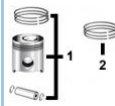


**1) Engine O/H Kit**

- POK466 Std.
- POK467 0.50

**2) Basic Engine Kit**

- PBK466 Std.
- PBK467 0.50
- Spec Sheet - 400D Series



**1) Piston & Ring Kit**

- P115017581 Std.
- P115017581B 0.50

**4 Per Engine**

**2) Ring Set**

- P115104021 Std.
- P115104021B 0.50



**Main Bearing Set**

- P198586140 Std.
- P198586150 0.010
- P198586160 0.020

**Set of 4 Pairs**



**Con Rod Bearing Set**

- PU5ME0011 Std.
- PU5ME0011A 0.010
- PU5ME0011B 0.020

**Set of 4 Pairs**



**1) Thrust Washer**

- P199266200/10

**Set of 3 Pcs**

- 2) Crank Bushing**
- P198517222 Std.
- P198517226 0.010
- P198517229 0.020



**1) Front Seal**

- P198636160

**2) Rear Seal**

- P050209083

**3) Crankshaft**

- P115256990

**4) Crankshaft Gear**

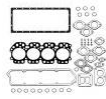
- PU15276270

**5) Key, Crank Gear**

- P030509020

**6) Flywheel Ring Gear**

- P115376040 109T
- PU15376160 126T



**1) O/H Gasket Set**

- P404D TOG

**2) Cyl Head Gsk**

- P111147771

**3) Seal Rocker Box**

- P120996130

**4) Seal, Cyl HD Cov**

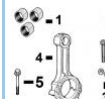
- P111996401

**5) Timing Cover Gsk**

- P165996630

**6) Oil Pan Gasket**

- P110996920



**1) Bush, Con Rod**

- P198517265 x4

**2) Bolt, Con Rod**

- P115176140 x8

**3) Nut, Con Rod**

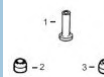
- P020109120 x8

**4) Connecting Rod**

- P115026330

**5) Head Bolt**

- P111136480 x14
- P111136490 x4



**1) Tappet**

- P120116160

**2) Seal, Intk Valve**

- P120406070 x4

**3) Seal, Exh Valve**

- P120406050 x4

**Valve Train Kit**

- PVTK440

**1) Valve, Intake**

- P120166350

**2) Valve, Exhaust**

- P120176360 x4

**3) Spring, Valve**

- P198216700 x8

**4) Retainer, Valve Spring**

- P120186080 x8

**5) Lock, Valve**

- P120226070 x16

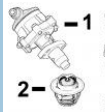


**1) Oil Pump**

- PU5MK8267

**2) Oil Cooler**

- P2486A218



**1) Lift Pump**

- P130506351

**2) Thermostat**

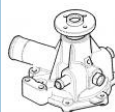
- P145206230

**3) Atomiser**

- P131406490

**4) Pre-Fuel Filter Assy**

- P130306380



**Water Pump**

- PU45010062



**Repair Sleeve**

- 84RS



**1) Glowplug**

- P185366190

**2) Water Temp Sensor**

- PW85720580

**3) Cylinder Head**

- P111011090UF



**Turbocharger**

- P135756180

(1): Does not include Crankshaft Oil Seals.

(2): Do not use in applications that require a Crankshaft Driven Balancer Unit. The new style front gear is P/N U15276270, (.887" or 22.5mm Wide) and the key way P/N P030509020, must be used.

(3): Check for proper application.

(4): Not included in valve train kit.

**Engine Series:**

400

**Engine Model:**

404D-22TA  
(GR)

**Engine Desc:**

TURBOCHARGED  
AFTERCOOLED

**Engine Info:**

4 Cyl

**Engine**

**Dimensions:**

Bore: 3.3 in /  
84.00 mm  
Stroke: 3.9 in  
/ 100.00 mm  
Displacement:  
134.25 in<sup>3</sup> /  
2.2 Lt  
Compression  
Ratio: 23.3:1

Please see  
page **417** for a  
complete list of  
equipment  
models.

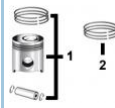


**1) Engine O/H Kit**

- POK468 Std.
- POK469 0.50

**2) Basic Engine Kit**

- PBK468 Std.
- PBK469 0.50
- Spec Sheet - 400D Series



**1) Piston & Ring Kit**

- P115017581 Std.
- P115017581B 0.50

**4 Per Engine**

**2) Ring Set**

- P115104021 Std.
- P115104021B 0.50



**Main Bearing Set**

- P198586140 Std.
- P198586150 0.010
- P198586160 0.020

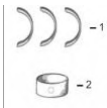
**Set of 4 Pairs**



**Con Rod Bearing Set**

- PU5ME0011 Std.
- PU5ME0011A 0.010
- PU5ME0011B 0.020

**Set of 4 Pairs**



**1) Thrust Washer**

- P199266200/10

**Set of 3 Pcs**

- 2) Crank Bushing**
- P198517222 Std.
- P198517226 0.010
- P198517229 0.020



**1) Front Seal**

- P198636160

**2) Rear Seal**

- P050209083

**3) Crankshaft**

- P115256990

**4) Crankshaft Gear**

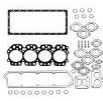
- PU15276270

**5) Key, Crank Gear**

- P030509020

**6) Flywheel Ring Gear**

- P115376040 109T
- PU15376160 126T



**1) O/H Gasket Set**

- P404D TOG

**2) Cyl Head Gsk**

- P111147771

**3) Seal Rocker Box**

- P120996130

**4) Seal, Cyl HD Cov**

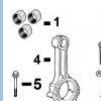
- P111996401

**5) Timing Cover Gsk**

- P165996630

**6) Oil Pan Gasket**

- P110996920



**1) Bush, Con Rod**

- P198517265 x4

**2) Bolt, Con Rod**

- P115176140 x8

**3) Nut, Con Rod**

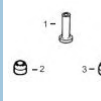
- P020109120 x8

**4) Connecting Rod**

- P115026330

**5) Head Bolt**

- P111136480 x14
- P111136490 x4



**1) Tappet**

- P120116160

**2) Seal, Intk Valve**

- P120406070 x4

**3) Seal, Exh Valve**

- P120406050 x4

**Valve Train Kit**

- PVTK440

**1) Valve, Intake**

- P120166350 x4

**2) Valve, Exhaust**

- P120176360 x4

**3) Spring, Valve**

- P198216700 x8

**4) Retainer, Valve Spring**

- P120186080 x8

**5) Lock, Valve**

- P120226070 x16

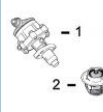


**1) Oil Pump**

- PU5MK8267

**2) Oil Cooler**

- P2486A218



**1) Lift Pump**

- P130506351

**2) Thermostat**

- P145206230

**3) Pre-Fuel Filter Assy**

- P130306380



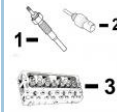
**Water Pump**

- PU45010062



**Repair Sleeve**

- 84RS



**1) Glowplug**

- P185366190

**2) Water Temp Sensor**

- PW85720580

**3) Cylinder Head**

- P111011090UF



**Fuel Lines**

- 1) P131507700
- 2) P131507710
- 3) P131507720
- 4) P131507730

(1): Does not include Crankshaft Oil Seals.

(2): Do not use in applications that require a Crankshaft Driven Balancer Unit. The new style front gear is P/N U15276270, (.887" or 22.5mm Wide) and the key way P/N P030509020, must be used.

(3): Check for proper application.

(4): Not included in valve train kit.

**Engine Series:**  
400

**Engine Model:**  
404F-22 (EN)

**Engine Desc:**  
Naturally Aspirated

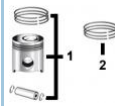
**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.3 in / 84mm  
Stroke: 3.9 in / 100mm  
Displacement: in3 / 2.2 Lt  
Compression Ratio: 23.3:1

Please see page 418 for a complete list of equipment models.



- 1) Engine O/H Kit**  
 › POK520 Std.  
 › POK521 0.50
- 2) Basic Engine Kit**  
 › PBK520 Std.  
 › PBK521 0.50



- 1) Piston & Ring Kit**  
 › P115017790 Std.  
 › P115017790B 0.50
- 4 Per Engine**



- Main Bearing Set**  
 › P198586140 Std.  
 › P198586150 0.010  
 › P198586160 0.020
- Set of 4 Pairs**



- Con Rod Bearing Set**  
 › PU5ME0011 Std.  
 › PU5ME0011A 0.010  
 › PU5ME0011B 0.020
- Set of 4 Pairs**



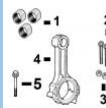
- 1) Thrust Washer**  
 › P199266200/10
- Set of 3 Pcs**
- 2) Crank Bushing**  
 › P198517222 Std.  
 › P198517226 0.010  
 › P198517229 0.020



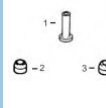
- 1) Front Seal**  
 › P198636160
- 2) Rear Seal**  
 › P050209083
- 3) Crankshaft**  
 › P115256990
- 4) Crankshaft Gear**  
 › PU15276270
- 5) Key, Crank Gear**  
 › P030509020



- 1) O/H Gasket Set**  
 › P404DTOG
- 2) Cyl Head Gsk**  
 › P111147771
- 3) Seal Rocker Box**  
 › P120996130
- 4) Seal, Cyl HD Cov**  
 › P111996401
- 5) Timing Cover Gsk**  
 › P165996630
- 6) Oil Pan Gasket**  
 › P110996920



- 1) Bush, Con Rod**  
 › P198517265 x4
- 2) Bolt, Con Rod**  
 › P115176140 x8
- 3) Nut, Con Rod**  
 › P020109120 x8
- 4) Con Rod**  
 › P115026330



- 1) Tappet**  
 › P120116160
- 2) Seal, Intk Valve**  
 › P120406070 x4
- 3) Seal, Exh Valve**  
 › P120406050 x4

**Valve Train Kit**  
 › PVTK440

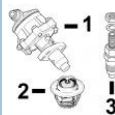
- 1) Valve, Intake**  
 › P120166350 x4
- 2) Valve, Exhaust**  
 › P120176360 x4

- 3) Spring, Valve**  
 › P198216700 x8
- 4) Retainer, Valve Spring**  
 › P120186080 x8

**5) Lock, Valve**  
 › P120226070 x16



- 1) Oil Pump**  
 › PU5MK8267
- 2) Oil Cooler**  
 › P2486A218



- 1) Lift Pump**  
 ›
- 2) Thermostat**  
 › P145206230
- 3) Atomiser**  
 › P131406490
- 4) Pre-Fuel Filter Assy**  
 › P130306380



**Water Pump**  
 › PU45010062



**Repair Sleeve**  
 › 84RS



- 1) Glowplug**  
 › P185366190
- 2) Water Temp Sensor**  
 › PW85720580

**(1):** Crankshaft oil seals and after-treatment component (EGR) gaskets are not included in the gasket set

**(3):** Check application for proper usage.

**(2):** Do not use in applications that use a crankshaft driven balancer unit. This crank requires new style front gear PU15276270 (22.5mm wide) and crank key P030509020.

**(4):** Under development, not included in Valve Train Kit.

PERKINS 404F-22T (EP)

**Engine Series:**

400

**Engine Model:**

404F-22T  
(EP)

**Engine Desc:**

Turbocharged

**Engine Info:**

4 Cyl

**Engine**

**Dimensions:**

Bore: 3.3in /  
84mm Stroke:  
3.9in / 100mm  
Displacement:  
in3 / 2.2 Lt  
Compression  
Ratio: 23.5:1

Please see  
page 419 for a  
complete list of  
equipment  
models.

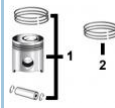


**1) Engine O/H Kit**

- POK522 Std.
- POK523 0.50

**2) Basic Engine Kit**

- PBK522 Std.
- PBK523 0.50



**1) Piston & Ring Kit**

- P115017800 Std.
- P115017800B 0.50

**4 Per Engine**



**Main Bearing Set**

- P198586140 Std.
- P198586150 0.010
- P198586160 0.020

**Set of 4 Pairs**



**Con Rod Bearing Set**

- PU5ME0011 Std.
- PU5ME0011A 0.010
- PU5ME0011B 0.020

**Set of 4 Pairs**



**1) Thrust Washer**

- P199266200/10

**Set of 3 Pcs**

- 2) Crank Bushing**
- P198517222 Std.
  - P198517226 0.010
  - P198517229 0.020



**1) Front Seal**

- P198636160

**2) Rear Seal**

- P050209083

**3) Crankshaft**

- P115256990

**4) Crankshaft Gear**

- PU15276270

**5) Key, Crank Gear**

- P030509020



**1) O/H Gasket Set**

- P404DTOG

**2) Cyl Head Gsk**

- P111147771

**3) Seal Rocker Box**

- P120996130

**4) Seal, Cyl HD Cov**

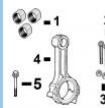
- P111996401

**5) Timing Cover Gsk**

- P165996630

**6) Oil Pan Gasket**

- P110996920



**1) Bush, Con Rod**

- P198517265 x4

**2) Bolt, Con Rod**

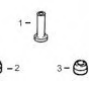
- P115176140 x8

**3) Nut, Con Rod**

- P020109120 x8

**4) Con Rod**

- P115026330



**1) Tappet**

- P120116160

**2) Seal, Intk Valve**

- P120406070 x4

**3) Seal, Exh Valve**

- P120406050 x4

**Valve Train Kit**

- PVTK440

**1) Valve, Intake**

- P120166350 x4

**2) Valve, Exhaust**

- P120176360 x4

**3) Spring, Valve**

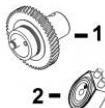
- P198216700 x8

**4) Retainer, Valve Spring**

- P120186080 x8

**5) Lock, Valve**

- P120226070 x16



**1) Oil Pump**

- PU5MK8267

**2) Oil Cooler**

- P2486A218



**1) Lift Pump**

- 

**1) Thermostat**

- P145206230

**3) Atomiser**

- P131406490

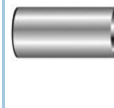
**4) Pre-Fuel Filter Assy**

- P130306380



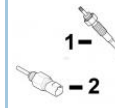
**Water Pump**

- PU45010062



**Repair Sleeve**

- 84RS



**1) Glowplug**

- P185366190

**2) Water Temp Sensor**

- PW85720580

**(1):** Crankshaft oil seals and after-treatment component (EGR) gaskets are not included in the gasket set

**(3):** Check application for proper usage.

**(2):** Do not use in applications that use a crankshaft driven balancer unit. This crank requires new style front gear PU15276270 (22.5mm wide) and crank key P030509020.

**(4):** Under development, not included in Valve Train Kit.

**Engine Series:**  
700






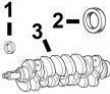
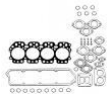
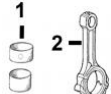

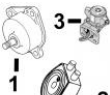


**Engine Model:**  
704-30 (UA)

**Engine Data:**  
Naturally Aspirated  
Direct Injection

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 97.00 mm Stroke:  
100.00 mm

Please see page 420 for a complete list of equipment models.

|   |   |  |  |   |
|---|---|--|--|---|
|  <p><b>Basic Engine Kit</b><br/>         , PBK527 Std.<br/>         , PBK528 0.50</p>   |  <p><b>Piston &amp; Ring Kit</b><br/>         , PU5LL0046 Std.<br/>         , PU5LL0046B 0.50<br/> <b>4 Per Engine</b><br/> <b>Piston Ring Set</b><br/>         , P4181A101 Std<br/>         , P4181A102 .50</p>               |  <p><b>Main Bearing Set</b><br/>         , PU5MB0015 Std.<br/>         , PU5MB0015A 0.25<br/>         , PU5MB0015B 0.50<br/>         , PU5MB0015C 0.75<br/> <b>Set of 5 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b><br/>         , PU5ME0012 Std.<br/>         , PU5ME0012A 0.25<br/>         , PU5ME0012B 0.50<br/>         , PU5ME0012C 0.75<br/> <b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer</b><br/>         , P3112T001<br/> <b>Set of 2 Pcs</b></p> |
|  <p><b>1) Front Seal</b><br/>         , P2418F546<br/> <b>2) Rear Seal</b><br/>         , P2418F547<br/> <b>3) Crankshaft</b><br/>         , ZZ90197</p>            |  <p><b>1) Head Gasket Set</b><br/>         , PU5LT0342<br/> <b>2) Lower Gasket Set</b><br/>         , PU5LB0369<br/> <b>3) Head Gasket</b><br/>         , P3681E029<br/> <b>4) Oil Pan Gasket</b><br/>         , P3684N023</p> |  <p><b>1) Bush, Con Rod</b><br/>         , P3112E025 x4<br/> <b>2) Connecting Rod</b><br/>         , PZZ90208<br/> <b>3) Rod Capscrew</b><br/>         , P3275A004</p>                |  <p><b>1) Tappet</b><br/>         , P3142U022 x8<br/> <b>2) Push Rod</b><br/>         , P3142V004 x8</p>  |   |
| <p><b>Valve Train</b></p>   | <p><b>1) Valve, Intake</b><br/>         , P3142H011 x4<br/> <b>2) Valve, Exhaust</b><br/>         , P3142A101 x4</p>  | <p><b>3) Guide, Valve</b><br/>         , P3318A702 x8<br/> <b>4) Spring, Valve</b><br/>         , P3174P408 x8</p>   | <p><b>5) Lock, Valve</b><br/>         , P3142W003 x16<br/> <b>6) Seal, Valve</b><br/>         , P2418M508 x8</p>   |   |
|  <p><b>1) Oil Pump</b><br/>         , P4132F065<br/> <b>2) Oil Cooler</b><br/>         , P2486A218<br/> <b>3) Fuel Transfer Pump</b><br/>         , PULPK0031</p> |  <p><b>1) Water Pump</b><br/>         , PU5MW0173<br/> <b>2) Thermostat</b><br/>         , P2485C047</p>   |  <p><b>Glowplug</b><br/>         , P2666A014 x4</p>   |  |   |






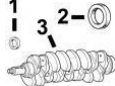
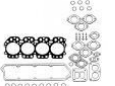





(1): Check your build for proper usage.

(2): Fractured style rod cap

|                              |                                      |   |                              |  |
|------------------------------|--------------------------------------|---|------------------------------|--|
| <b>Engine Series:</b><br>700 | <b>Engine Model:</b><br>704-30T (UC) | <b>Engine Data:</b><br>Turbocharged<br>Direct Injection | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 97.00 mm Stroke:<br>100.00 mm |
|------------------------------|--------------------------------------|---|------------------------------|--|

**Build List**

|         |         |
|---------|---------|
| UC50769 | UC50732 |
| UC81203 | UC70484 |
| UC81214 | UC81204 |
| UC81238 | UC81227 |
| UC81310 | UC81267 |
| UC81326 | UC81322 |
| UC81359 | UC81342 |

|   |   |  |  |   |
|---|---|--|--|---|
|  <p><b>Basic Engine Kit</b><br/>                 , PBK529 Std.<br/>                 , PBK530 0.50</p>   |  <p><b>Piston &amp; Ring Kit</b><br/>                 , PU5LL0034 Std.<br/>                 , PU5LL0034B 0.50<br/> <b>4 Per Engine</b><br/> <b>Piston Ring Set</b><br/>                 , P4181A101 Std<br/>                 , P4181A102 .50</p>               |  <p><b>Main Bearing Set</b><br/>                 , PU5MB0015 Std.<br/>                 , PU5MB0015A 0.25<br/>                 , PU5MB0015B 0.50<br/>                 , PU5MB0015C 0.75<br/> <b>Set of 5 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b><br/>                 , PU5ME0012 Std.<br/>                 , PU5ME0012A 0.25<br/>                 , PU5ME0012B 0.50<br/>                 , PU5ME0012C 0.75<br/> <b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer</b><br/>                 , P3112T001<br/> <b>Set of 2 Pcs</b></p> |
|  <p><b>1) Front Seal</b><br/>                 , P2418F546<br/> <b>2) Rear Seal</b><br/>                 , P2418F547<br/> <b>3) Crankshaft</b><br/>                 , ZZ90197</p>            |  <p><b>1) Head Gasket Set</b><br/>                 , PU5LT0343<br/> <b>2) Lower Gasket Set</b><br/>                 , PU5LB0369<br/> <b>3) Head Gasket</b><br/>                 , P3681E029<br/> <b>4) Oil Pan Gasket</b><br/>                 , P3684N023</p> |  <p><b>1) Bush, Con Rod</b><br/>                 , P3112E025 x4<br/> <b>2) Connecting Rod</b><br/>                 , PZZ90208</p>   |  <p><b>1) Tappet</b><br/>                 , P3142U022 x8<br/> <b>2) Push Rod</b><br/>                 , P3142V004 x8</p>  |   |
| <p><b>Valve Train</b></p>   | <p><b>1) Valve, Intake</b><br/>                 , P3142H011 x4<br/> <b>2) Valve, Exhaust</b><br/>                 , P3142A101 x4</p>  | <p><b>3) Guide, Valve</b><br/>                 , P3318A702 x8<br/> <b>4) Spring, Valve</b><br/>                 , P3174P408 x8</p>   | <p><b>5) Lock, Valve</b><br/>                 , P3142W003 x16<br/> <b>6) Seal, Valve</b><br/>                 , P2418M508 x8</p>   |   |
|  <p><b>1) Oil Pump</b><br/>                 , P4132F065<br/> <b>2) Oil Cooler</b><br/>                 , P2486A218<br/> <b>3) Fuel Transfer Pump</b><br/>                 , PULPK0031</p> |  <p><b>1) Water Pump</b><br/>                 , PU5MW0175<br/> <b>2) Thermostat</b><br/>                 , P2485613</p>  |  <p><b>Glowplug</b><br/>                 , P2666A014 x4</p>   |  |   |

(1): Check your build for proper usage.

(2): Fractured style rod cap

|                              |   |  |                              |  |
|------------------------------|---|--|------------------------------|--|
| <b>Engine Series:</b><br>800 | <b>Engine Model:</b><br>804C-33 (UE) 804D-33 (UK) | <b>Engine Data:</b><br>NATURALLY ASPIRATED<br>INDIRECT INJECTION | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.7 in / 94.00 mm<br>Stroke: 4.72 in / 120.00 mm<br>Piston<br>Compression Height:<br>2.165 in / 55 mm |
|------------------------------|---|--|------------------------------|--|

|                               |  |   |                              |
|-------------------------------|--|---|------------------------------|
| <b>Compressors</b>            | <b>Industrial</b>  | <b>Telehandlers</b>                                 | <b>Genie-Boom Lifts</b>      |
| UK35219    UK35220<br>UK82294 | UE35138    UE35139<br>UE35140    UE35141<br>UE35243    UE35247 | UK35221    UK35264<br>UK35242    UK71055<br>UK71147 | S80X    S80<br>S85    Z80/60 |



**Basic Engine Kit**  
 , PBK851 Std.  
 , PBK852 0.50  
 , Spec Sheet - 800C/D Series



**Piston & Ring Kit**  
 , PMPPK0001 Std.  
 , PMPPK0001B  
**4 Per Engine**



**Main Bearing Set**  
 , PMPMB0001 Std.  
 , PMPMB0001A  
 , PMPMB0001B  
 , PMPMB0001C  
**Set of 5 Pairs**



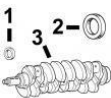
**Con Rod Bearing Set**  
 , PMPBE0002 Std.  
 , PMPBE0002A  
 , PMPBE0002B  
 , PMPBE0002C  
**Set of 4 Pairs**



**Thrust Washer**  
 , PMPTW0001 Std.  
**Set of 3 Pcs**

**Piston Kit:**

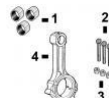
- 1) 1 x [PMP10275](#) Piston Kit Std,      1 x [PMPRK0001](#) Ring Set Std.  
 2) 1 x [PMP10277](#) Piston Kit 0.50 mm,      1 x [PMPRK0001B](#) Ring Set 0.50 mm.



- 1) **Front Seal**  
 , PMP10072  
 2) **Rear Seal**  
 , PMP10085  
 3) **Crankshaft**  
 , PMP10529



- 1) **O/H Gasket Set**  
 , P804OG  
 2) **Cyl Head Gasket**  
 , PMP10550  
 3) **Valve Cover Gasket**  
 , PMP10037  
 4) **Oil Pan Gasket**  
 , P21826051  
 , P804OPG



- 1) **Bush, Con Rod**  
 , PMP10279 x4  
 2) **Bolt, Con Rod**  
 , PMP10100 x8  
 3) **Nut, Con Rod**  
 , PMP10099 x8  
 4) **Con Rod Kit**  
 , PMP10278



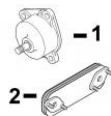
- 1) **Tappet**  
 , PMP10044 x8  
 2) **Push Rod**  
 , PMP10043 x8

**Valve Train**

- 1) **Valve, Intake**  
 , PMP10426 x4  
 2) **Valve, Exhaust**  
 , PMP10423 x4

- 3) **Guide, Valve**  
 , PMP10526 x8  
 4) **Spring, Valve**  
 , PMP10029 x8

- 5) **Lock, Valve**  
 , PMP10032 x16  
 6) **Seal, Valve**  
 , PMP10030 x8



- 1) **Oil Pump**  
 , PMP20040  
 2) **Oil Cooler**  
 , PMP10311



- 1) **Water Pump**  
 , PMP10187  
 , PMP10552  
 2) **Thermostat**  
 , PMP10198



- Glowplug**  
 , PMP10574 x4








- Fuel Pump**  
 , PMP10325

(1): Check your build for proper usage.

(2): For gaskets made of silicone, use P21826051. For gaskets made of paper gasket material, use P804OPG.

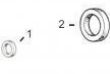
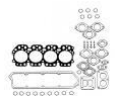
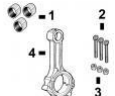

|                              |                                       |   |                              |   |
|------------------------------|---------------------------------------|---|------------------------------|---|
| <b>Engine Series:</b><br>800 | <b>Engine Model:</b><br>804C-33T (UF) | <b>Engine Data:</b><br>TURBOCHARGED<br>DIRECT INJECTION | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.7 in / 94.00 mm<br>Stroke: 4.72 in / 120.00 mm |
|------------------------------|---------------------------------------|---|------------------------------|---|

Please see page 421 for a complete list of equipment models.

|  |   |  |  |   |
|--|---|--|--|---|
|  <p><b>Basic Engine Kit</b></p> <ul style="list-style-type: none"> <li>• PBK854 Std.</li> <li>• PBK855 0.50</li> <li>• Spec Sheet - 800C/D Series</li> </ul> |  <p><b>Piston &amp; Ring Kit</b></p> <ul style="list-style-type: none"> <li>• PMPPK0002 Std.</li> <li>• PMPPK0002B</li> </ul> <p><b>4 Per Engine</b></p> |  <p><b>Main Bearing Set</b></p> <ul style="list-style-type: none"> <li>• PMPMB0001 Std.</li> <li>• PMPMB0001A</li> <li>• PMPMB0001B</li> <li>• PMPMB0001C</li> </ul> <p><b>Set of 5 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b></p> <ul style="list-style-type: none"> <li>• PMPBE0002 Std.</li> <li>• PMPBE0002A</li> <li>• PMPBE0002B</li> <li>• PMPBE0002C</li> </ul> <p><b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer</b></p> <ul style="list-style-type: none"> <li>• PMPTW0001 Std.</li> </ul> <p><b>Set of 3 Pcs</b></p> |
|--|---|--|--|---|

**Piston Kit:**

- 1) 1 x [PMP10095](#) Piston Std, 1 x [PMPRK0001](#) Ring Set Std.
- 2) 1 x [PMP10251](#) Piston 0.50 mm, 1 x [PMPRK0001B](#) Ring Set 0.50 mm.

|   |  |   |   |
|---|--|---|---|
|  <p><b>1) Front Seal</b><br/>• PMP10072</p> <p><b>2) Rear Seal</b><br/>• PMP10085</p> |  <p><b>1) O/H Gasket Set</b><br/>• P804TOG</p> <p><b>2) Cyl Head Gasket</b><br/>• PMP10575</p> <p><b>3) Valve Cover Gasket</b><br/>• PMP10037</p> <p><b>4) Oil Pan Gasket</b><br/>• P21826051<br/>• P804OPG</p> |  <p><b>1) Bush, Con Rod</b><br/>• PMP10279 x4</p> <p><b>2) Bolt, Con Rod</b><br/>• PMP10100 x8</p> <p><b>3) Nut, Con Rod</b><br/>• PMP10099 x8</p> <p><b>4) Con Rod Kit</b><br/>• PMP10278</p> |  <p><b>1) Tappet</b><br/>• PMP10044 x8</p> <p><b>2) Push Rod</b><br/>• PMP10043 x8</p> |
|---|--|---|---|

|                    |  |  |  |
|--------------------|--|--|--|
| <b>Valve Train</b> | <p><b>1) Valve, Intake</b><br/>• PMP10426 x4</p> <p><b>2) Valve, Exhaust</b><br/>• PMP10423 x4</p> | <p><b>3) Guide, Valve</b><br/>• PMP10526 x8</p> <p><b>4) Spring, Valve</b><br/>• PMP10029 x8</p> | <p><b>5) Lock, Valve</b><br/>• PMP10032 x16</p> <p><b>6) Seal, Valve</b><br/>• PMP10030 x8</p> |
|--------------------|--|--|--|

|  |  |  |  |  |
|--|--|--|--|--|
|  <p><b>1) Oil Pump</b><br/>• PMP20040</p> <p><b>2) Oil Cooler</b><br/>• PMP10164</p> |  <p><b>1) Water Pump</b><br/>• PMP10187<br/>• PMP10552</p> <p><b>2) Thermostat</b><br/>• PMP10198</p> |  <p><b>Glowplug</b><br/>• PMP10238 x4</p> |  <p><b>Fuel Lines</b></p> <ul style="list-style-type: none"> <li>• 1) PMP10218</li> <li>• 2) PMP10219</li> <li>• 3) PMP10220</li> <li>• 4) PMP10353</li> </ul> |  <p><b>Fuel Pump</b><br/>• PMP10325</p> |
|--|--|--|--|--|






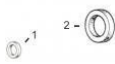

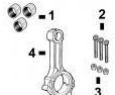

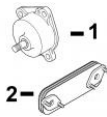




(1): Check application for proper use.

(2): For gaskets made of silicone, use P21826051. For gaskets made of paper gasket material, use P804OPG.




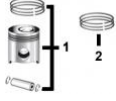



|                              |                                       |   |                              |   |
|------------------------------|---------------------------------------|---|------------------------------|---|
| <b>Engine Series:</b><br>800 | <b>Engine Model:</b><br>804D-33T (UL) | <b>Engine Data:</b><br>TURBOCHARGED<br>DIRECT INJECTION | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.7 in / 94.00 mm<br>Stroke: 4.72 in / 120.00 mm |
|------------------------------|---------------------------------------|---|------------------------------|---|

Please see page 422 for a complete list of equipment models.


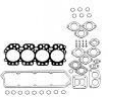

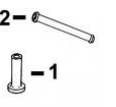
|  |   |   |  |   |
|--|---|---|--|---|
|  <p><b>Basic Engine Kit</b></p> <ul style="list-style-type: none"> <li>• PBK857 Std.</li> <li>• PBK858 0.50</li> <li>• Spec Sheet - 800C/D Series</li> </ul>                       |  <p><b>Piston &amp; Ring Kit</b></p> <ul style="list-style-type: none"> <li>• PMPPK0003 Std.</li> <li>• PMPPK0003B</li> </ul> <p><b>4 Per Engine</b></p>   |  <p><b>Main Bearing Set</b></p> <ul style="list-style-type: none"> <li>• PMPMB0001 Std.</li> <li>• PMPMB0001A</li> <li>• PMPMB0001B</li> <li>• PMPMB0001C</li> </ul> <p><b>Set of 5 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b></p> <ul style="list-style-type: none"> <li>• PMPBE0002 Std.</li> <li>• PMPBE0002A</li> <li>• PMPBE0002B</li> <li>• PMPBE0002C</li> </ul> <p><b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer</b></p> <ul style="list-style-type: none"> <li>• PMPTW0001 Std.</li> </ul> <p><b>Set of 3 Pcs</b></p> |
| <p><b>Piston Kit:</b></p> <p>1) 1 x <u>PMP20015</u> Piston Std,      1 x <u>PMPRK0002</u> Ring Set Std.</p> <p>2) 1 x <u>PMP20017</u> Piston 0.50 mm,      1 x <u>PMPRK0002B</u> Ring Set 0.50 mm.</p>   |   |   |  |   |
|  <p><b>1) Front Seal</b></p> <ul style="list-style-type: none"> <li>• PMP10072</li> </ul> <p><b>2) Rear Seal</b></p> <ul style="list-style-type: none"> <li>• PMP10085</li> </ul>  |  <p><b>1) O/H Gasket Set</b></p> <ul style="list-style-type: none"> <li>• P804TOG</li> </ul> <p><b>2) Cyl Head Gasket</b></p> <ul style="list-style-type: none"> <li>• PMP10575</li> </ul> <p><b>3) Valve Cover Gasket</b></p> <ul style="list-style-type: none"> <li>• PMP10037</li> </ul> <p><b>4) Oil Pan Gasket</b></p> <ul style="list-style-type: none"> <li>• P21826051</li> <li>• P804OPG</li> </ul> |  <p><b>1) Bush, Con Rod</b></p> <ul style="list-style-type: none"> <li>• PMP10279 x4</li> </ul> <p><b>2) Bolt, Con Rod</b></p> <ul style="list-style-type: none"> <li>• PMP10100 x8</li> </ul> <p><b>3) Nut, Con Rod</b></p> <ul style="list-style-type: none"> <li>• PMP10099 x8</li> </ul> <p><b>4) Con Rod Kit</b></p> <ul style="list-style-type: none"> <li>• PMP10278</li> </ul> |  <p><b>1) Tappet</b></p> <ul style="list-style-type: none"> <li>• PMP10044 x8</li> </ul> <p><b>2) Push Rod</b></p> <ul style="list-style-type: none"> <li>• PMP10043 x8</li> </ul>                  |   |
| <p><b>Valve Train</b></p>  | <p><b>1) Valve, Intake</b></p> <ul style="list-style-type: none"> <li>• PMP10426 x4</li> </ul> <p><b>2) Valve, Exhaust</b></p> <ul style="list-style-type: none"> <li>• PMP10423 x4</li> </ul>  | <p><b>3) Guide, Valve</b></p> <ul style="list-style-type: none"> <li>• PMP10526 x8</li> </ul> <p><b>4) Spring, Valve</b></p> <ul style="list-style-type: none"> <li>• PMP10029 x8</li> </ul>  | <p><b>5) Lock, Valve</b></p> <ul style="list-style-type: none"> <li>• PMP10032 x16</li> </ul> <p><b>6) Seal, Valve</b></p> <ul style="list-style-type: none"> <li>• PMP10030 x8</li> </ul>   |   |
|  <p><b>1) Oil Pump</b></p> <ul style="list-style-type: none"> <li>• PMP20040</li> </ul> <p><b>2) Oil Cooler</b></p> <ul style="list-style-type: none"> <li>• PMP10164</li> </ul> |  <p><b>1) Water Pump</b></p> <ul style="list-style-type: none"> <li>• PMP10187</li> <li>• PMP10552</li> </ul> <p><b>2) Thermostat</b></p> <ul style="list-style-type: none"> <li>• PMP10198</li> </ul>   |  <p><b>Glowplug</b></p> <ul style="list-style-type: none"> <li>• PMP10238 x4</li> </ul>  |  <p><b>Fuel Lines</b></p> <ul style="list-style-type: none"> <li>• 1) PMP10218</li> <li>• 2) PMP10219</li> <li>• 3) PMP10220</li> <li>• 4) PMP10353</li> </ul>                                     |  <p><b>Fuel Pump</b></p> <ul style="list-style-type: none"> <li>• PMP10325</li> </ul>                                    |
| <p><b>(1):</b> Check application for proper use.</p> <p><b>(2):</b> For gaskets made of silicone, use P21826051. For gaskets made of paper gasket material, use P804OPG.</p>   |   |   |  |   |

|                              |                                       |   |                              |   |
|------------------------------|---------------------------------------|---|------------------------------|---|
| <b>Engine Series:</b><br>800 | <b>Engine Model:</b><br>804D-33T (UL) | <b>Engine Data:</b><br>TURBOCHARGED<br>DIRECT INJECTION | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.7 in / 94.00 mm<br>Stroke: 4.72 in / 120.00 mm |
|------------------------------|---------------------------------------|---|------------------------------|---|

|                              |   |         |   |                    |
|------------------------------|---|---------|---|--------------------|
| <b>Build List</b><br>UL70854 | <b>Skid Steer</b><br>UL35238<br>UL70854 | UL71102 | <b>Wheel Loaders</b><br>UL35226<br>UL35227<br>UL71309 | UL35228<br>UL35265 |
|------------------------------|---|---------|---|--------------------|

|   |   |   |   |  |
|---|---|---|---|--|
|  <p><b>Basic Engine Kit</b><br/>                 , PBK860 Std.<br/>                 , PBK861 0.50<br/>                 , Spec Sheet - 800C/D Series</p> |  <p><b>Piston &amp; Ring Kit</b><br/>                 , PMPPK2001 Std.<br/>                 , PMPPK2001B 0.50<br/> <b>4 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>                 , PMPMB0001 Std.<br/>                 , PMPMB0001A<br/>                 , PMPMB0001B<br/>                 , PMPMB0001C<br/> <b>Set of 5 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b><br/>                 , PMPBE0002 Std.<br/>                 , PMPBE0002A<br/>                 , PMPBE0002B<br/>                 , PMPBE0002C<br/> <b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer</b><br/>                 , PMPTW0001 Std.<br/> <b>Set of 3 Pcs</b></p> |
|---|---|---|---|--|

**Piston Kit:**  
 1) 1 x PMP20012 Piston Std, 1 x PMPRK0002 Ring Set Std.  
 2) 1 x PMP20014 Piston 0.50 mm, 1 x PMPRK0002B Ring Set 0.50 mm.

|   |   |   |   |
|---|---|---|---|
|  <p><b>1) Front Seal</b><br/>                 , PMP10072<br/> <b>2) Rear Seal</b><br/>                 , PMP10085</p> |  <p><b>1) O/H Gasket Set</b><br/>                 , P804TOG<br/> <b>2) Cyl Head Gasket</b><br/>                 , PMP10575<br/> <b>3) Valve Cover Gasket</b><br/>                 , PMP10037<br/> <b>4) Oil Pan Gasket</b><br/>                 , P21826051<br/>                 , P804OPG</p> |  <p><b>1) Bush, Con Rod</b><br/>                 , PMP10279 x4<br/> <b>2) Bolt, Con Rod</b><br/>                 , PMP10100 x8<br/> <b>3) Nut, Con Rod</b><br/>                 , PMP10099 x8<br/> <b>4) Con Rod Kit</b><br/>                 , PMP10278</p> |  <p><b>1) Tappet</b><br/>                 , PMP10044 x8<br/> <b>2) Push Rod</b><br/>                 , PMP10043 x8</p> |
|---|---|---|---|

|                    |  |  |  |
|--------------------|--|--|--|
| <b>Valve Train</b> | <p><b>1) Valve, Intake</b><br/>                 , PMP10426 x4<br/> <b>2) Valve, Exhaust</b><br/>                 , PMP10423 x4</p> | <p><b>3) Guide, Valve</b><br/>                 , PMP10526 x8<br/> <b>4) Spring, Valve</b><br/>                 , PMP10029 x8</p> | <p><b>5) Lock, Valve</b><br/>                 , PMP10032 x16<br/> <b>6) Seal, Valve</b><br/>                 , PMP10030 x8</p> |
|--------------------|--|--|--|


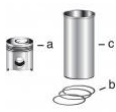





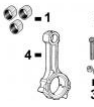
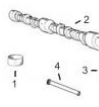

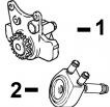

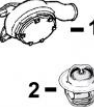


|  |   |   |   |   |
|--|---|---|---|---|
|  <p><b>1) Oil Pump</b><br/>                 , PMP20040<br/> <b>2) Oil Cooler</b><br/>                 , PMP10164</p> |  <p><b>1) Water Pump</b><br/>                 , PMP10187<br/>                 , PMP10552<br/> <b>2) Thermostat</b><br/>                 , PMP10198</p> |  <p><b>Glowplug</b><br/>                 , PMP10238 x4</p> |  <p><b>Fuel Lines</b><br/>                 , 1) PMP10218<br/>                 , 2) PMP10219<br/>                 , 3) PMP10220<br/>                 , 4) PMP10353</p> |  <p><b>Fuel Pump</b><br/>                 , PMP10325</p> |
|--|---|---|---|---|

(1): Check application for proper use. (2): For gaskets made of silicone, use P21826051. For gaskets made of paper gasket material, use P804OPG.

**Engine Series:** 1000      **Engine Model:** 1004.40 (AA)      **Engine Desc:** NATURALLY ASPIRATED      **Engine Data:** Lip Seal      **Engine Info:** 4 Cyl

**Engine Dimensions:**  
Bore: 3.937 in / 100.00 mm

Please see page 423 for a complete list of equipment models.

|  |   |   |   |   |
|--|---|---|---|---|
|  <p><b>1) Engine O/H Kit</b><br/>• POK470</p> <p><b>2) Basic Engine Kit</b><br/>• PBK470</p>   |  <p><b>Piston-Liner Kit</b><br/>• PCK142</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>• a) PMXF0015</li> <li>• b) P4181A019</li> <li>• c) P3135X042</li> </ul> <p><b>4 Per Engine</b></p>                          |  <p><b>Main Bearing Set</b><br/>• P81558 Std.</p> <ul style="list-style-type: none"> <li>• P81558A 0.010</li> <li>• P81558B 0.020</li> <li>• P81558C 0.030</li> </ul> <p><b>Set of 5 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b><br/>• P85042 Std.</p> <ul style="list-style-type: none"> <li>• P85042A 0.010</li> <li>• P85042B 0.020</li> <li>• P85042C 0.030</li> </ul> <p><b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer Set</b><br/>• P31137551/61 Std.</p> <ul style="list-style-type: none"> <li>• P31137312/22 0.007</li> </ul> <p><b>Set of 2 Pairs</b></p>                     |
|  <p><b>1) Front Seal</b><br/>• P2418F436</p> <p><b>2) Rear Seal</b><br/>• P2418F475<br/>• P2418F701</p> <p><b>3) Crankshaft Kit</b><br/>• PZZ90202</p> <p><b>4) Ring Gear</b><br/>• P0410236 115T<br/>• P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT0178</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0151</p> <p><b>3) Valve Cover Gsk</b><br/>• P3681A021</p> <p><b>4) Head Gasket</b><br/>• P3681E025</p> <p><b>5) Oil Pan Set</b><br/>• PU5MK0600</p> |  <p><b>1) Bush, Con Rod</b><br/>• P31134123 x4</p> <p><b>2) Bolt, Con Rod</b><br/>• P32762144 x8</p> <p><b>3) Nut, Con Rod</b><br/>• P33221328 x8</p> <p><b>4) Con Rod</b><br/>• PZZ90009</p>      |  <p><b>1) Bushing, Cam</b><br/>• P31134132 x1</p> <p><b>2) Camshaft</b><br/>• P31415361</p> <p><b>3) Tappet</b><br/>• P31434163</p> <p><b>4) Pushrod</b><br/>• P31434307</p>                          |  <p><b>1) Camshaft Gear</b><br/>• P31171353</p>  |
| <p><b>Valve Train Kit</b><br/>• PVTK415</p>  | <p><b>1) Valve, Intake</b><br/>• P3142L051 x4</p> <p><b>2) Valve, Exhaust</b><br/>• P3142A051 x4</p>  | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b></p> <ul style="list-style-type: none"> <li>• 3a) P3343F002 x4</li> <li>• 3b) P3343J002 x4</li> </ul>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b></p> <ul style="list-style-type: none"> <li>• 4a) P31744133 x8</li> <li>• 4b) P31745122 x8</li> </ul>  | <p><b>5) Lock, Valve</b><br/>• P33173108 x16</p> <p><b>6) Seal, Valve</b><br/>• P33817117 x8</p>  |
|  <p><b>1) Oil Pump</b><br/>• P4132F051</p> <p><b>2) Oil Cooler</b><br/>• P2486A218<br/>• P2486A222<br/>• P2486A241<br/>• P2486A991</p>   |  <p><b>Lift Pump</b><br/>• P2641A067</p>   |  <p><b>1) Water Pump</b><br/>• P4131E012<br/>• PU5MW0159</p> <p><b>2) Thermostat</b><br/>• P2485613</p> <p><b>3) Water Pump Gasket</b><br/>• P3687Y016</p>                                       |  <p><b>1) Rocker Shaft</b><br/>• PZZ90032</p> <p><b>2) Rocker Arm LH</b><br/>• P41151483</p> <p><b>3) Rocker Arm RH</b><br/>• P41151484</p> <p><b>4) Piston Cooling Nozzle</b><br/>• P3861A027</p>  |  <p><b>1) Cylinder Head</b><br/>• PZZ80221</p> <p><b>2) Heater Plug</b><br/>• P2666108</p> <p><b>(Bayonet Fitting)</b></p> <p><b>3) Oil Pressure Switch</b><br/>• P2848062</p> |

(1): Flanged, Semi Finished Liner available, P3135X041

(3): To ESN U176356H.

(5): Applies to AA50608 Only.


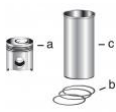





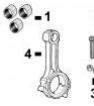


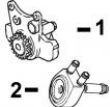

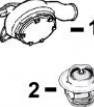


(2): Use Single Spring, Valve P3174P405 for low speed applications (Not included in Kit).

(4): From ESN U176357H.

(6): Check application for proper usage

**Engine Series:** 1000  
**Engine Model:** 1004.40 (AA)  
**Engine Desc:** NATURALLY ASPIRATED  
**Engine Data:** Lip Seal  
**Engine Info:** 4 Cyl  
**Engine Dimensions:**  
 Bore: 3.937 in / 100.00 mm

Please see page 424 for a complete list of equipment models.

|  |  |  |  |   |
|--|--|--|--|---|
|  <p>1) <b>Engine O/H Kit</b><br/>                     , POK478<br/>                     2) <b>Basic Engine Kit</b><br/>                     , PBK478</p>   |  <p><b>Piston-Liner Kit</b><br/>                     , PCK1562<br/> <b>Consist of:</b><br/>                     , a) PMXF0015<br/>                     , b) P4181A019<br/>                     , c) P3135X062<br/> <b>4 Per Engine</b></p>  |  <p><b>Main Bearing Set</b><br/>                     , P81558 Std.<br/>                     , P81558A 0.010<br/>                     , P81558B 0.020<br/>                     , P81558C 0.030<br/> <b>1 Set of 5 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b><br/>                     , P85042 Std.<br/>                     , P85042A 0.010<br/>                     , P85042B 0.020<br/>                     , P85042C 0.030<br/> <b>Set of 4 Pairs</b></p>  |  <p><b>Thrust Washer Set</b><br/>                     , P31137551/61 Std.<br/>                     , P31137312/22 0.007<br/> <b>Set of 2 Pairs</b></p>   |
|  <p>1) <b>Front Seal</b><br/>                     , P2418F436<br/>                     2) <b>Rear Seal</b><br/>                     , P2418F475<br/>                     , P2418F701<br/>                     3) <b>Crankshaft Kit</b><br/>                     , PZZ90202<br/>                     4) <b>Ring Gear</b><br/>                     , P0410236 115T<br/>                     , P31162121 126T</p> |  <p>1) <b>Top Gasket Set</b><br/>                     , PU5LT0178<br/>                     2) <b>Bottom Gasket</b><br/>                     , PU5LB0151<br/>                     3) <b>Valve Cover Gsk</b><br/>                     , P3681A021<br/>                     4) <b>Head Gasket</b><br/>                     , P3681E025<br/>                     5) <b>Oil Pan Set</b><br/>                     , PU5MK0600</p> |  <p>1) <b>Bush, Con Rod</b><br/>                     , P31134123 x4<br/>                     2) <b>Bolt, Con Rod</b><br/>                     , P32762144 x8<br/>                     3) <b>Nut, Con Rod</b><br/>                     , P33221328 x8<br/>                     4) <b>Con Rod</b><br/>                     , PZZ90009</p> |  <p>1) <b>Bushing, Cam</b><br/>                     , P31134132 x1<br/>                     2) <b>Camshaft</b><br/>                     , P31415361<br/>                     3) <b>Tappet</b><br/>                     , P31434163<br/>                     4) <b>Pushrod</b><br/>                     , P31434307</p> |  <p>1) <b>Camshaft Gear</b><br/>                     , P31171353</p>   |
| <p><b>Valve Train Kit</b><br/>                     , PVTK415</p>   | <p>1) <b>Valve, Intake</b><br/>                     , P3142L051 x4<br/>                     2) <b>Valve, Exhaust</b><br/>                     , P3142A051 x4</p>   | <p>3) <b>Guide, Valve</b><br/>                     a) Intake b) Exhaust<br/>                     , 3a) P3343F002 x4<br/>                     , 3b) P3343J002 x4</p>  | <p>4) <b>Spring, Valve</b><br/>                     a) Inner b) Outer<br/>                     , 4a) P31744133 x8<br/>                     , 4b) P31745122 x8</p>  | <p>5) <b>Lock, Valve</b><br/>                     , P33173108 x16<br/>                     6) <b>Seal, Valve</b><br/>                     , P33817117 x8</p>  |
|  <p>1) <b>Oil Pump</b><br/>                     , P4132F051<br/>                     2) <b>Oil Cooler</b><br/>                     , P2486A218<br/>                     , P2486A222<br/>                     , P2486A241<br/>                     , P2486A991</p>  |  <p><b>Lift Pump</b><br/>                     , P2641A067</p>   |  <p>1) <b>Water Pump</b><br/>                     , P4131E012<br/>                     , PU5MW0159<br/>                     2) <b>Thermostat</b><br/>                     , P2485613<br/>                     3) <b>Water Pump Gasket</b><br/>                     , P3687Y016</p>  |  <p>1) <b>Rocker Shaft</b><br/>                     , PZZ90032<br/>                     2) <b>Rocker Arm LH</b><br/>                     , P41151483<br/>                     3) <b>Rocker Arm RH</b><br/>                     , P41151484</p>   |  <p>1) <b>Cylinder Head</b><br/>                     , PZZ80221<br/>                     2) <b>Heater Plug</b><br/>                     , P2666108<br/>                     (Bayonet Fitting)<br/>                     3) <b>Oil Pressure Switch</b><br/>                     , P2848062</p> |

(1): Flanged, Semi Finished Liner available, P3135X063






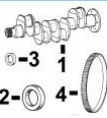
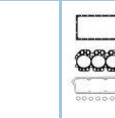





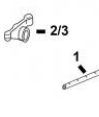

(2): Use Single Spring, Valve P3174P405 for low speed applications (Not included in Kit).

(3): To ESN U176356H.

(4): From ESN U176357H.

(5): Check application for proper usage

PERKINS 1004.40T TO ESN U608300W (1992)

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| <p><b>Engine Series:</b><br/>1000</p> <p><b>Engine Model:</b><br/>1004.40T<br/>(AB), (AH)</p> <p><b>Engine Desc:</b><br/>TURBOCHARGE</p> <p><b>Engine Data:</b><br/>Lip Seal<br/>To ESN<br/>u608300W<br/>(1992)</p> |  <p><b>1) Engine O/H Kit</b><br/>, POK471</p> <p><b>2) Basic Engine Kit</b><br/>, PBK471</p>  |  <p><b>Piston-Liner Kit</b><br/>, PCK275</p> <p><b>Consist of:</b><br/>, a) PMXF0014<br/>, b) P4181A026<br/>, c) P3135X042</p> <p><b>4 Per Engine</b></p>   |  <p><b>Main Bearing Set</b><br/>, P81558 Std.<br/>, P81558A 0.010<br/>, P81558B 0.020<br/>, P81558C 0.030</p> <p><b>Set of 5 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b><br/>, PU5ME0006 Std.<br/>, PU5ME0006A 0.010<br/>, PU5ME0006B 0.020<br/>, PU5ME0006C 0.030</p> <p><b>Set of 4 Pairs</b></p>   |  <p><b>Thrust Washer Set</b><br/>, P31137551/61 Std.<br/>, P31137312/22 0.007</p> <p><b>Set of 2 Pairs</b></p>  |
| <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.937 in / 100.00 mm</p> <p><b>Jcb</b><br/>3CX Backhoe - (AB50609)<br/>3CX Backhoe - (AB50279)<br/>415 Loader - (AB50253)</p>           |  <p><b>1) Front Seal</b><br/>, P2418F436</p> <p><b>2) Rear Seal</b><br/>, P2418F475</p> <p><b>3) Crankshaft Kit</b><br/>, PZZ90212</p> <p><b>4) Ring Gear</b><br/>, P0410236 115T<br/>, P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>, PU5LT0178</p> <p><b>2) Bottom Gasket</b><br/>, PU5LB0152</p> <p><b>3) Valve Cover Gsk</b><br/>, P3681A021</p> <p><b>4) Head Gasket</b><br/>, P3681E025</p> <p><b>5) Oil Pan Set</b><br/>, PU5MK0600</p> |  <p><b>1) Bush, Con Rod</b><br/>, P31134131 x4</p> <p><b>2) Bolt, Con Rod</b><br/>, P32762144 x8</p> <p><b>3) Nut, Con Rod</b><br/>, P33221328 x8</p> <p><b>4) Con Rod</b><br/>, PZZ90058<br/>, PZZ90013</p> |  <p><b>1) Bushing, Cam</b><br/>, P31134132 x1</p> <p><b>2) Camshaft</b><br/>, P31415361</p> <p><b>3) Tappet</b><br/>, P31434163</p> <p><b>4) Pushrod</b><br/>, P31434307</p>                         |   |
| <p><b>Tovel</b><br/>TL20-22-25 - Telehandler<br/>TL6-44-36 - Telehandler</p>  | <p><b>Valve Train Kit</b><br/>, PVTK416</p>   | <p><b>1) Valve, Intake</b><br/>, P3142L071 x4</p> <p><b>2) Valve, Exhaust</b><br/>, P3142A051 x4</p>  | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b><br/>, 3a) P3343F002 x4<br/>, 3b) P3343J002 x4</p>   | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>, 4a) P31744133 x8<br/>, 4b) P31745122 x8</p>   | <p><b>5) Lock, Valve</b><br/>, P33173108 x16</p> <p><b>6) Seal, Valve</b><br/>, P33817117 x8</p>  |
| <p><b>Bobcat</b><br/>963 - Skid Steer</p>   |  <p><b>1) Oil Pump</b><br/>, P4132F056</p> <p><b>2) Oil Cooler</b><br/>, P2486A218<br/>, P2486A219<br/>, P2486A222<br/>, P2486A241<br/>, P2486A991</p>   |  <p><b>Lift Pump</b><br/>, P2641A067</p>   |  <p><b>1) Water Pump</b><br/>, P4131E012<br/>, PU5MW0159<br/>, PU5MW0195</p> <p><b>2) Thermostat</b><br/>, P2485613</p>  |  <p><b>1) Rocker Shaft</b><br/>, PZZ90032</p> <p><b>2) Rocker Arm LH</b><br/>, P41151483</p> <p><b>3) Rocker Arm RH</b><br/>, P41151484</p> <p><b>4) Piston Cooling Nozzle</b><br/>, P3861A027</p> |  <p><b>1) Cylinder Head</b><br/>, PZZ80221</p> <p><b>2) Heater Plug</b><br/>(Bayonet Fitting)<br/>, P2666108</p> <p><b>3) Oil Pressure Switch</b><br/>, P2848062</p> |

(1): Flanged, Semi Finished Liner available, P3135X041

(2): Use single spring, valve 3174P405 for low speed applications (Not available from Maxiforce).

(3): Check application for proper usage.

(4): Fracture Split Type.


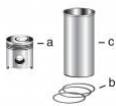




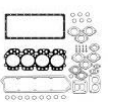
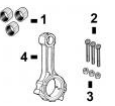

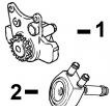


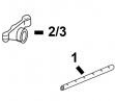

(5): Applies to AB50609 Only.

(6): On applications using Con Rod 4115C321, order bushing P3112A006, order separately.

(7): Use for AB builds only. check your application for proper use.

|   |   |                                     |  |                              |
|---|---|-------------------------------------|--|------------------------------|
| <b>Engine Series:</b><br>1000                           | <b>Engine Model:</b><br>1004.40T (AB, AH) | <b>Engine Desc:</b><br>TURBOCHARGED | <b>Engine Data:</b><br>Lip Seal<br>From ESN U608301W<br>(1992) | <b>Engine Info:</b><br>4 Cyl |
| <b>Engine Dimensions:</b><br>Bore: 3.937 in / 100.00 mm |   |                                     |  |                              |

Please see page 425 for a complete list of equipment models.

|  |   |  |   |   |
|--|---|--|---|---|
|  <p><b>1) Engine O/H Kit</b><br/>, POK472</p> <p><b>2) Basic Engine Kit</b><br/>, PBK472</p>   |  <p><b>Piston-Liner Kit</b><br/>, PCK275</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>, a) PMXF0014</li> <li>, b) P4181A026</li> <li>, c) P3135X042</li> </ul> <p><b>4 Per Engine</b></p>                          |  <p><b>Main Bearing Set</b><br/>, P81558 Std.<br/>, P81558A 0.010<br/>, P81558B 0.020<br/>, P81558C 0.030</p> <p><b>Set of 5 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b><br/>, PU5ME0006 Std.<br/>, PU5ME0006A 0.010<br/>, PU5ME0006B 0.020<br/>, PU5ME0006C 0.030</p> <p><b>Set of 4 Pairs</b></p>                     |  <p><b>Thrust Washer Set</b><br/>, P31137551/61 Std.<br/>, P31137312/22 0.007</p> <p><b>Set of 2 Pairs</b></p>   |
|  <p><b>1) Front Seal</b><br/>, P2418F436</p> <p><b>2) Rear Seal</b><br/>, P2418F475<br/>, P2418F701</p> <p><b>3) Crankshaft Kit</b><br/>, PZZ90212</p> <p><b>4) Ring Gear</b><br/>, P0410236 115T<br/>, P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>, PU5LT0178</p> <p><b>2) Bottom Gasket</b><br/>, PU5LB0152</p> <p><b>3) Valve Cover Gsk</b><br/>, P3681A021</p> <p><b>4) Head Gasket</b><br/>, P3681E025</p> <p><b>5) Oil Pan Set</b><br/>, PU5MK0600</p> |  <p><b>1) Bush, Con Rod</b><br/>, P31134131 x4</p> <p><b>2) Bolt, Con Rod</b><br/>, P32762144 x8</p> <p><b>3) Nut, Con Rod</b><br/>, P33221328 x8</p> <p><b>4) Con Rod</b><br/>, PZZ90013</p> |  <p><b>1) Bushing, Cam</b><br/>, P31134132 x1</p> <p><b>2) Camshaft</b><br/>, P31415361</p> <p><b>3) Tappet</b><br/>, P31434163</p> <p><b>4) Pushrod</b><br/>, P31434307</p> |   |
| <p><b>Valve Train Kit</b><br/>, PVTK417</p>  | <p><b>1) Valve, Intake</b><br/>, P3142L072 x4</p> <p><b>2) Valve, Exhaust</b><br/>, P3142A051 x4</p>  | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b><br/>, 3a) P3343F002 x4<br/>, 3b) P3343J002 x4</p>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>, 4a) P31744133 x8<br/>, 4b) P31745122 x8</p>   | <p><b>5) Lock, Valve</b><br/>, P33173108 x16</p> <p><b>6) Seal, Valve</b><br/>, P33817117 x8</p>  |
|  <p><b>1) Oil Pump</b><br/>, P4132F056</p> <p><b>2) Oil Cooler</b><br/>, P2486A218<br/>, P2486A219<br/>, P2486A222<br/>, P2486A241<br/>, P2486A991</p>   |  <p><b>Lift Pump</b><br/>, P2641A067</p>   |  <p><b>1) Water Pump</b><br/>, P4131E012<br/>, PU5MW0159<br/>, PU5MW0195</p> <p><b>2) Thermostat</b><br/>, P2485613</p>   |  <p><b>1) Rocker Shaft</b><br/>, PZZ90032</p> <p><b>2) Rocker Arm LH</b><br/>, P41151483</p> <p><b>3) Rocker Arm RH</b><br/>, P41151484</p>                                 |  <p><b>1) Cylinder Head</b><br/>, PZZ80221</p> <p><b>2) Heater Plug</b><br/>, P2666108</p> <p><b>(Bayonet Fitting)</b></p> <p><b>3) Oil Pressure Switch</b><br/>, P2848062</p> |

(1): Flanged, Semi Finished Liner available, P3135X041

(2): Use single spring, valve 3174P405 for low speed applications (Not available from Maxiforce).

(3): Check application for proper usage

(4): To ESN U176356H.

(5): From ESN U176357H.

(6): Applies to AB50609 Only.


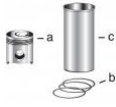



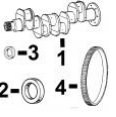



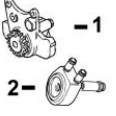


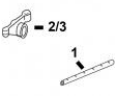

(7): On applications using Con Rod 4115C321, order bushing P3112A006, order separately.

(8): Use for AB builds only. check your application for proper use.

|                               |                                       |                                  |   |                              |
|-------------------------------|---------------------------------------|----------------------------------|---|------------------------------|
| <b>Engine Series:</b><br>1000 | <b>Engine Model:</b><br>1004.40T (AB) | <b>Engine Desc:</b><br>GRADE "L" | <b>Engine Data:</b><br>TURBOCHARGED/<br>INTERCOOLED<br>Lip Seal | <b>Engine Info:</b><br>4 Cyl |
|-------------------------------|---------------------------------------|----------------------------------|---|------------------------------|

**Engine Dimensions:**  
Bore: 3.937 in / 100.00 mm Stroke: 5.00 in / 127.00 mm Piston height: 2.767 in / 70.161 mm

|  |  |                  |
|--|--|------------------|
| <b>Tovel</b><br>TL20-22-25 - Telehandler | <b>Bobcat</b><br>TL6-44-36 - Telehandler | 963 - Skid Steer |
|--|--|------------------|

|  |   |   |   |   |
|--|---|---|---|---|
|  <p><b>1) Engine O/H Kit</b><br/>, POK496</p> <p><b>2) Basic Engine Kit</b><br/>, PBK496</p>   |  <p><b>Piston-Liner Kit</b><br/>, PCK624</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>, a) PU5LF0024</li> <li>, b) P4181A026</li> <li>, c) P3135X062</li> </ul> <p><b>4 Per Engine</b></p>                         |  <p><b>Main Bearing Set</b><br/>, P81558 Std.</p> <ul style="list-style-type: none"> <li>, P81558A 0.010</li> <li>, P81558B 0.020</li> <li>, P81558C 0.030</li> </ul> <p><b>Set of 5 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b><br/>, PU5ME0006 Std.</p> <ul style="list-style-type: none"> <li>, PU5ME0006A 0.010</li> <li>, PU5ME0006B 0.020</li> <li>, PU5ME0006C 0.030</li> </ul> <p><b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer Set</b><br/>, P31137551/61 Std.</p> <ul style="list-style-type: none"> <li>, P31137312/22 0.007</li> </ul> <p><b>Set of 2 Pairs</b></p> |
|  <p><b>1) Front Seal</b><br/>, P2418F436</p> <p><b>2) Rear Seal</b><br/>, P2418F475</p> <p><b>3) Crankshaft Kit</b><br/>, PZZ90212</p> <p><b>4) Ring Gear</b><br/>, P0410236 115T<br/>, P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>, PU5LT0178</p> <p><b>2) Bottom Gasket</b><br/>, PU5LB0152</p> <p><b>3) Valve Cover Gsk</b><br/>, P3681A021</p> <p><b>4) Head Gasket</b><br/>, P3681E025</p> <p><b>5) Oil Pan Set</b><br/>, PU5MK0600</p> |  <p><b>1) Bush, Con Rod</b><br/>, P3112E005 x4</p> <p><b>2) Bolt, Con Rod</b><br/>, P32186142 x8</p> <p><b>3) Nut, Con Rod</b><br/>, P3246A001 x8</p> <p><b>4) Con Rod</b><br/>, PZZ90146</p>      |  <p><b>1) Bushing, Cam</b><br/>, P31134132 x1</p> <p><b>2) Camshaft</b><br/>, P31415361</p> <p><b>3) Tappet</b><br/>, P31434163</p> <p><b>4) Pushrod</b><br/>, P31434307</p>                                     |   |
| <p><b>Valve Train Kit</b><br/>, PVTK417</p>  | <p><b>1) Valve, Intake</b><br/>, P3142L072 x4</p> <p><b>2) Valve, Exhaust</b><br/>, P3142A051 x4</p>  | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b></p> <ul style="list-style-type: none"> <li>, 3a) P3343F002 x4</li> <li>, 3b) P3343J002 x4</li> </ul>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b></p> <ul style="list-style-type: none"> <li>, 4a) P31744133 x8</li> <li>, 4b) P31745122 x8</li> </ul>  | <p><b>5) Lock, Valve</b><br/>, P33173108 x16</p> <p><b>6) Seal, Valve</b><br/>, P33817117 x8</p>  |
|  <p><b>1) Oil Pump</b><br/>, P4132F056</p> <p><b>2) Oil Cooler</b><br/>, P2486A218<br/>, P2486A219<br/>, P2486A222<br/>, P2486A241<br/>, P2486A991</p>   |  <p><b>Lift Pump</b><br/>, P2641A067</p>   |  <p><b>1) Water Pump</b><br/>, P4131E012<br/>, PU5MW0159</p> <p><b>2) Thermostat</b><br/>, P2485613</p>  |  <p><b>1) Rocker Shaft</b><br/>, PZZ90032</p> <p><b>2) Rocker Arm LH</b><br/>, P41151483</p> <p><b>3) Rocker Arm RH</b><br/>, P41151484</p> <p><b>4) Piston Cooling Nozzle</b><br/>, P3861A027</p>              |  <p><b>1) Heater Plug</b><br/>, P2666108</p> <p><b>(Bayonet Fitting)</b></p> <p><b>2) Oil Pressure Switch</b><br/>, P2848062</p>                           |

(1): Flanged, Semi Finished Liner available, P3135X063  
(3): Check application for proper usage

(2): Use with Con Rod PZZ90146  
(4): Use for AB builds only. check your application for proper use.

**Engine Series:**  
1000

**Engine Model:**  
1004.40/40T  
(AJ, AK, AM,  
AP, AQ)

**Engine Data:**  
TURBOCHARGE  
or  
NATURALLY  
ASPIRATED  
Lip Seal

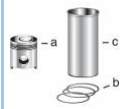
**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.937 in /  
100.00 mm

Please see  
page **426** for a  
complete list of  
equipment  
models.



- 1) **Engine O/H Kit**
  - › POK473/45
  - › POK473/30
- 2) **Basic Engine Kit**
  - › PBK473



- 1) **Piston-Liner Kit**
  - › PCK5762
- Consist of:**
  - › a) PU5LP0057
  - › b) P4181A033
  - › c) P3135X062
- 4 Per Engine**



- 1) **Main Bearing Set**
  - › P81558 Std.
  - › P81558A 0.010
  - › P81558B 0.020
  - › P81558C 0.030
- Set of 5 Pairs**



- 1) **Con Rod Bearing Set**
  - › PU5ME0006 Std.
  - › PU5ME0006A 0.010
  - › PU5ME0006B 0.020
  - › PU5ME0006C 0.030
- Set of 4 Pairs**



- 1) **Thrust Washer Set**
  - › P31137551/61 Std.
  - › P31137312/22 0.007
- Set of 2 Pairs**



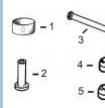
- 1) **Front Seal**
  - › P2418F436
- 2) **Rear Seal**
  - › P2418F475
  - › P2418F701
- 3) **Crankshaft Kit**
  - › PZZ90212
- 4) **Ring Gear**
  - › P0410236 115T
  - › P31162121 126T



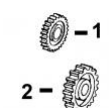
- 1) **Top Gasket Set**
  - › PU5LT0202
- 2) **Bottom Gasket**
  - › PU5LB1171
- 3) **Valve Cover Gsk**
  - › P3681A049
- 4) **Head Gasket**
  - › P3681E025
- 5) **Gasket, Manifold**
  - › P3688C042



- 1) **Bush, Con Rod**
  - › P3112E011 x4
- 2) **Bolt, Con Rod**
  - › P32762144 x8
- 3) **Nut, Con Rod**
  - › P33221328 x8



- 1) **Bushing, Cam**
  - › P31134132 x1
- 2) **Tappet**
  - › P31434163
- 3) **Pushrod**
  - › P31434307
- 4) **Seal, Exh Valve**
  - › P2418M505 x4
- 5) **Seal, Intk Valve**
  - › P2418M506 x4



- 1) **Camshaft Gear**
  - › P3117L023

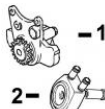
- 1) **Valve Train Kit**
  - › a) 45 b) 30
  - › a) PVTK423
  - › b) PVTK424

- 1) **Valve, Intake**
  - › a) 45 b) 30 x4
  - › 1a) P3142D041 x4
  - › 1b) P3142L081 x4
- 2) **Valve, Exhaust**
  - › 2a) P3142D031 x4
  - › 2b) P3142D051 x4

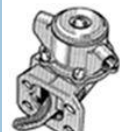
- 3) **Guide, Valve**
  - a) **Intake** b) **Exhaust**
    - › 3a) P3313A012 x4
    - › 3b) P3318A705 x4

- 4) **Spring, Valve**
  - › P3174P409 x8

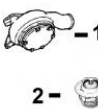
- 5) **Lock, Valve**
  - › P3142W004 x16



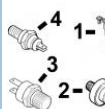
- 1) **Oil Pump**
  - › P4132F056
  - › P4132F041
- 2) **Oil Cooler**
  - › P2486A218
  - › P2486A219
  - › P2486A222
  - › P2486A241
  - › P2486A991



- 1) **Lift Pump**
  - › P2641A067



- 1) **Water Pump**
  - › PU5MW0192
  - › PU5MW0195
- 2) **Thermostat**
  - › P2485C036
- 3) **Water Pump Gasket**
  - › P3687Y016



- 1) **Heater Plug**
  - › P2666108
- 2) **Oil Pressure Switch (Bayonet Fitting)**
  - › P2848062
- 3) **Temp Sensor**
  - › P2848A121
- 4) **Water Temp Sensor**
  - › P2848A123



- 1) **Piston Cooling Nozzle**
  - › P3861A027

(1): Flanged, Semi Finished Liner available, P3135X063

(3): To ESN U176356H.

(5): To ESN U284277J.

(7): Used on builds AK and AP Only.

(9): Use for AJ, AK, and AM builds only. check your application for proper use.

(2): Use in engines with Balancer Units.







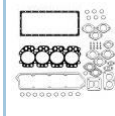
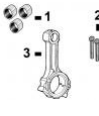


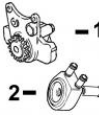
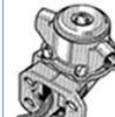



(4): From ESN U176357H.

(6): May use Bottom Gasket Set PU5LB1310

(8): Check application for proper usage.



PERKINS 1004.40/40T FRACTURED SPLIT ROD

|   |   |  |   |  |   |
|---|---|--|---|--|---|
| <p><b>Engine Series:</b><br/>1000</p> <p><b>Engine Model:</b><br/>1004.40/40T<br/>(AJ, AK, AM,<br/>AP, AQ)</p> <p><b>Engine Data:</b><br/>TURBOCHARGE<br/>or<br/>NATURALLY<br/>ASPIRATED<br/>Lip Seal</p> <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.937 in<br/>/ 100.00 mm</p> <p><b>Job</b><br/>Backhoe -<br/>(AK50628)<br/>Shovel Loader -<br/>(AK50610)</p> <p><b>Tovel</b><br/>TL20-22-25 -<br/>Telehandler<br/>TL6-44-36 -<br/>Telehandler</p> <p><b>Bobcat</b><br/>963 - Skid Steer</p> <p><b>MF Agricultural</b><br/>Tractor -<br/>(AK31299)</p> <p><b>Manitou</b><br/>MRT1432M -<br/>Telescopic<br/>Handler</p> |  <p><b>1) Engine O/H Kit</b><br/> <ul style="list-style-type: none"> <li>POK497/45</li> <li>POK497/30</li> </ul> </p> <p><b>2) Basic Engine Kit</b><br/> <ul style="list-style-type: none"> <li>PBK497</li> </ul> </p>  |  <p><b>Piston-Liner Kit</b><br/> <ul style="list-style-type: none"> <li>PCK5762</li> </ul> </p> <p><b>Consist of:</b><br/> <ul style="list-style-type: none"> <li>a) PU5LP0057</li> <li>b) P4181A033</li> <li>c) P3135X062</li> </ul> </p> <p><b>4 Per Engine</b></p>  |  <p><b>Main Bearing Set</b><br/> <ul style="list-style-type: none"> <li>P81558 Std.</li> <li>P81558A 0.010</li> <li>P81558B 0.020</li> <li>P81558C 0.030</li> </ul> </p> <p><b>Set of 5 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/> <ul style="list-style-type: none"> <li>PU5ME0013 Std.</li> <li>PU5ME0013A 0.010</li> <li>PU5ME0013B 0.020</li> <li>PU5ME0013C 0.030</li> </ul> </p> <p><b>Set of 4 Pairs</b></p>   |  <p><b>Thrust Washer Set</b><br/> <ul style="list-style-type: none"> <li>P31137551/61 Std.</li> <li>P31137312/22 0.007</li> </ul> </p> <p><b>Set of 2 Pairs</b></p> |
|   |  <p><b>1) Front Seal</b><br/> <ul style="list-style-type: none"> <li>P2418F436</li> </ul> </p> <p><b>2) Rear Seal</b><br/> <ul style="list-style-type: none"> <li>P2418F475</li> <li>P2418F701</li> </ul> </p> <p><b>3) Crankshaft Kit</b><br/> <ul style="list-style-type: none"> <li>PZZ90226</li> </ul> </p> <p><b>4) Ring Gear</b><br/> <ul style="list-style-type: none"> <li>P0410236 115T</li> <li>P31162121 126T</li> </ul> </p> |  <p><b>1) Top Gasket Set</b><br/> <ul style="list-style-type: none"> <li>PU5LT0202</li> </ul> </p> <p><b>2) Bottom Gasket</b><br/> <ul style="list-style-type: none"> <li>PU5LB1171</li> </ul> </p> <p><b>3) Valve Cover Gsk</b><br/> <ul style="list-style-type: none"> <li>P3681A049</li> </ul> </p> <p><b>4) Head Gasket</b><br/> <ul style="list-style-type: none"> <li>P3681E025</li> </ul> </p> <p><b>5) Gasket, Manifold</b><br/> <ul style="list-style-type: none"> <li>P3688C042</li> </ul> </p> |  <p><b>1) Bush, Con Rod</b><br/> <ul style="list-style-type: none"> <li>P3112A005 x4</li> </ul> </p> <p><b>2) Bolt, Con Rod</b><br/> <ul style="list-style-type: none"> <li>P3212V003 x8</li> </ul> </p> <p><b>3) Con Rod</b><br/> <ul style="list-style-type: none"> <li>P4115C314</li> </ul> </p>                    |  <p><b>1) Bushing, Cam</b><br/> <ul style="list-style-type: none"> <li>P31134132 x1</li> </ul> </p> <p><b>2) Tappet</b><br/> <ul style="list-style-type: none"> <li>P31434163</li> </ul> </p> <p><b>3) Pushrod</b><br/> <ul style="list-style-type: none"> <li>P31434307</li> </ul> </p> <p><b>4) Seal, Exh Valve</b><br/> <ul style="list-style-type: none"> <li>P2418M505 x4</li> </ul> </p> <p><b>5) Seal, Intk Valve</b><br/> <ul style="list-style-type: none"> <li>P2418M506 x4</li> </ul> </p> |  <p><b>1) Camshaft Gear</b><br/> <ul style="list-style-type: none"> <li>P3117L023</li> </ul> </p>  |
|   | <p><b>Valve Train Kit</b><br/> <ul style="list-style-type: none"> <li>a) 45 b) 30</li> <li>a) PVTK423</li> <li>b) PVTK424</li> </ul> </p>   | <p><b>1) Valve, Intake</b><br/> <ul style="list-style-type: none"> <li>a) 45 b) 30 x4</li> <li>1a) P3142D041 x4</li> <li>1b) P3142L081 x4</li> </ul> </p> <p><b>2) Valve, Exhaust</b><br/> <ul style="list-style-type: none"> <li>2a) P3142D031 x4</li> <li>2b) P3142D051 x4</li> </ul> </p>   | <p><b>3) Guide, Valve</b><br/> <b>a) Intake b) Exhaust</b><br/> <ul style="list-style-type: none"> <li>3a) P3313A012 x4</li> <li>3b) P3318A705 x4</li> </ul> </p>   | <p><b>4) Spring, Valve</b><br/> <ul style="list-style-type: none"> <li>P3174P409 x8</li> </ul> </p>  | <p><b>5) Lock, Valve</b><br/> <ul style="list-style-type: none"> <li>P3142W004 x16</li> </ul> </p>  |
|   |  <p><b>1) Oil Pump</b><br/> <ul style="list-style-type: none"> <li>P4132F056</li> <li>P4132F041</li> </ul> </p> <p><b>2) Oil Cooler</b><br/> <ul style="list-style-type: none"> <li>P2486A218</li> <li>P2486A219</li> <li>P2486A222</li> <li>P2486A241</li> <li>P2486A991</li> </ul> </p>  |  <p><b>Lift Pump</b><br/> <ul style="list-style-type: none"> <li>P2641A067</li> </ul> </p>  |  <p><b>1) Water Pump</b><br/> <ul style="list-style-type: none"> <li>PU5MW0192</li> <li>PU5MW0195</li> </ul> </p> <p><b>2) Thermostat</b><br/> <ul style="list-style-type: none"> <li>P2485C036</li> </ul> </p> <p><b>3) Water Pump Gasket</b><br/> <ul style="list-style-type: none"> <li>P3687Y016</li> </ul> </p> |  <p><b>1) Heater Plug</b><br/> <ul style="list-style-type: none"> <li>P2666108</li> </ul> </p> <p><b>(Bayonet Fitting)</b></p> <p><b>2) Oil Pressure Switch</b><br/> <ul style="list-style-type: none"> <li>P2848062</li> </ul> </p> <p><b>3) Temp Sensor</b><br/> <ul style="list-style-type: none"> <li>P2848A121</li> </ul> </p> <p><b>4) Water Temp Sensor</b><br/> <ul style="list-style-type: none"> <li>P2848A123</li> </ul> </p>  |  <p><b>Piston Cooling Nozzle</b><br/> <ul style="list-style-type: none"> <li>P3861A027</li> </ul> </p>   |

(1): Flanged, Semi Finished Liner available, P3135X063

(3): To ESN U176356H.

(5): PZZ90226 From ESN U284278J.

(7): Used on builds AK and AP Only.

(9): Grade J, Color Coded Green.


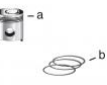






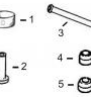

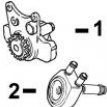




(2): Use in engines with Balancer Units.

(4): From ESN U176357H.

(6): May use Bottom Gasket Set PU5LB1310

(8): Check application for proper usage.

(10): Use for AJ, AK, and AM builds only. check your application for proper use.

|  |  |   |  |   |  |
|--|--|---|--|---|--|
| <p><b>Engine Series:</b><br/>1000</p> <p><b>Engine Model:</b><br/>1004.42 (AR, AS)</p> <p><b>Engine Desc:</b><br/>NATURALLY ASPIRATED</p> <p><b>Engine Data:</b><br/>Lip Seal<br/>Sleeveless Engines</p>                                 |  <p><b>1) Engine O/H Kit</b><br/>                 › POK474 Std.<br/>                 › POK475 0.50<br/>                 › POK476 1.00</p> <p><b>2) Basic Engine Kit</b><br/>                 › PBK474 Std.<br/>                 › PBK475 0.50<br/>                 › PBK476 1.00</p>             |  <p><b>a) Piston</b><br/>                 › PU5LP0058 Std.<br/>                 › PU5LP0058B 0.50<br/>                 › PU5LP0058D 1.00</p> <p><b>4 Per Engine</b></p> <p><b>b) Ring Set</b><br/>                 › P4181A045 Std.<br/>                 › P4181A046 0.50<br/>                 › P4181A047 1.00</p>                   |  <p><b>Main Bearing Set</b><br/>                 › P81558 Std.<br/>                 › P81558A 0.010<br/>                 › P81558B 0.020<br/>                 › P81558C 0.030</p> <p><b>Set of 5 Pairs</b></p>                     |  <p><b>Con Rod Bearing Set</b><br/>                 › P85042 Std.<br/>                 › P85042A 0.010<br/>                 › P85042B 0.020<br/>                 › P85042C 0.030</p> <p><b>Set of 4 Pairs</b></p>   |  <p><b>Thrust Washer Set</b><br/>                 › P31137551/61 Std.<br/>                 › P31137312/22 0.007</p> <p><b>Set of 2 Pairs</b></p>                             |
| <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.055 in / 103.00 mm</p>   |  <p><b>1) Front Seal</b><br/>                 › P2418F436</p> <p><b>2) Rear Seal</b><br/>                 › P2418F475<br/>                 › P2418F701</p>  |  <p><b>1) Top Gasket Set</b><br/>                 › PU5LT0317</p> <p><b>2) Bottom Gasket</b><br/>                 › PU5LB1171</p> <p><b>3) Valve Cover Gsk</b><br/>                 › P3681A049</p> <p><b>4) Head Gasket</b><br/>                 › P3681E042</p> <p><b>5) Gasket, Manifold</b><br/>                 › P3688C042</p> |  <p><b>1) Bush, Con Rod</b><br/>                 › P3112E011 x4</p> <p><b>2) Bolt, Con Rod</b><br/>                 › P32762144 x8</p> <p><b>3) Nut, Con Rod</b><br/>                 › P33221328 x8</p>                          |  <p><b>1) Bushing, Cam</b><br/>                 › P31134132 x1</p> <p><b>2) Tappet</b><br/>                 › P31434163</p> <p><b>3) Pushrod</b><br/>                 › P31434307</p> <p><b>4) Seal, Exh Valve</b><br/>                 › P2418M505 x4</p> <p><b>5) Seal, Intk Valve</b><br/>                 › P2418M506 x4</p> |  <p><b>1) Crankshaft Gear</b><br/>                 › P31171681</p> <p><b>2) Camshaft Gear</b><br/>                 › P3117L023</p>  |
| <p><b>Hyster</b><br/>S80-155XL - (AR70414)<br/>H80-155XL - (AR70417)<br/>H80-155XM - (AR70417)<br/>S80-155XM - (AR70414)</p>   | <p><b>3) Crankshaft Kit</b><br/>                 › PZZ90202</p> <p><b>4) Ring Gear</b><br/>                 › P0410236 115T<br/>                 › P31162121 126T</p>  | <p><b>4) Head Gasket</b><br/>                 › P3681E042</p> <p><b>5) Gasket, Manifold</b><br/>                 › P3688C042</p>  | <p><b>3) Nut, Con Rod</b><br/>                 › P33221328 x8</p>  | <p><b>5) Seal, Intk Valve</b><br/>                 › P2418M506 x4</p>   |  |
| <p><b>Tovel</b><br/>TS6-44<br/>TS8-44</p> <p><b>Jcb</b><br/>JCB - (AR50690)</p> <p><b>Bobcat</b><br/>1800 - Scat Trak-low emission (AR70419)</p> <p><b>Case IH</b><br/>C70 - Tractor</p> <p><b>MF Agricultural</b><br/>3340<br/>4233</p> | <p><b>Valve Train Kit</b><br/>                 › PVTK422</p>   | <p><b>1) Valve, Intake</b><br/>                 › P3142H041 x4</p> <p><b>2) Valve, Exhaust</b><br/>                 › P3142D061 x4</p>  | <p><b>3) Guide, Valve</b><br/> <b>a) Intake b) Exhaust</b><br/>                 › 3a) P3313A012 x4<br/>                 › 3b) P3318A705 x4</p>   | <p><b>4) Spring, Valve</b><br/>                 › P3174P412 x8</p>  | <p><b>5) Lock, Valve</b><br/>                 › P3142W004 x16</p>  |
|  |  <p><b>1) Oil Pump</b><br/>                 › P4132F051<br/>                 › P4132F041</p> <p><b>2) Oil Cooler</b><br/>                 › P2486A218<br/>                 › P2486A219<br/>                 › P2486A222<br/>                 › P2486A241<br/>                 › P2486A991</p> |  <p><b>1) Lift Pump</b><br/>                 › P2641A067</p> <p><b>2) Piston Cooling Nozzle</b><br/>                 › P3861A027</p>   |  <p><b>1) Water Pump</b><br/>                 › PU5MW0192<br/>                 › PU5MW0195</p> <p><b>2) Thermostat</b><br/>                 › P2485C036</p> <p><b>3) Water Pump Gasket</b><br/>                 › P3687Y016</p> |  <p><b>1) Heater Plug</b><br/>                 › P2666108</p> <p><b>(Bayonet Fitting)</b></p> <p><b>2) Oil Pressure Switch</b><br/>                 › P2848062</p> <p><b>3) Temp Sensor</b><br/>                 › P2848A121</p> <p><b>4) Water Temp Sensor</b><br/>                 › P2848A123</p>                           |  <p><b>Fuel Lines</b><br/>                 › 1) P3525A101<br/>                 › 2) P3525A102<br/>                 › 3) P3525A103<br/>                 › 4) P3525A104</p> |

(1): To ESN U176356H.

(3): PZZ90202 To ESN U284277J.

(5): Check application for proper usage.

(7): Use on engines without a Balancer Unit.






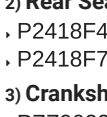

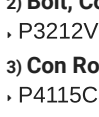
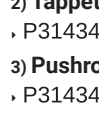
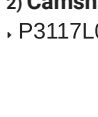
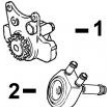


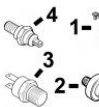

(2): From ESN U176357H.

(4): May use Bottom Gasket Set PU5LB1310.

(6): Use for AR builds only. check your application for proper use.

(8): Use on engines with a Balancer Unit.

PERKINS 1004.42 FRACTURED SPLIT ROD

|   |   |  |   |  |   |
|---|---|--|---|--|---|
| <p><b>Engine Series:</b><br/>1000</p> <p><b>Engine Model:</b><br/>1004.42 (AR, AS)</p> <p><b>Engine Desc:</b><br/>NATURALLY ASPIRATED</p> <p><b>Engine Data:</b><br/>Lip Seal<br/>Sleeveless Engines</p> <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.055 in / 103.00 mm</p> |  <p><b>1) Engine O/H Kit</b></p> <ul style="list-style-type: none"> <li>POK524 Std.</li> <li>POK525 0.50</li> <li>POK526 1.00</li> </ul> <p><b>2) Basic Engine Kit</b></p> <ul style="list-style-type: none"> <li>PBK524 Std.</li> <li>PBK525 0.50</li> <li>PBK526 1.00</li> </ul>  |  <p><b>a) Piston</b></p> <ul style="list-style-type: none"> <li>PU5LP0058 Std.</li> <li>PU5LP0058B 0.50</li> <li>PU5LP0058D 1.00</li> </ul> <p><b>4 Per Engine</b></p> <p><b>b) Ring Set</b></p> <ul style="list-style-type: none"> <li>P4181A045 Std.</li> <li>P4181A046 0.50</li> <li>P4181A047 1.00</li> </ul>  |  <p><b>Main Bearing Set</b></p> <ul style="list-style-type: none"> <li>P81558 Std.</li> <li>P81558A 0.010</li> <li>P81558B 0.020</li> <li>P81558C 0.030</li> </ul> <p><b>Set of 5 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b></p> <ul style="list-style-type: none"> <li>PU5ME0013 Std.</li> <li>PU5ME0013A 0.010</li> <li>PU5ME0013B 0.020</li> <li>PU5ME0013C 0.030</li> </ul> <p><b>Set of 4 Pairs</b></p>   |  <p><b>Thrust Washer Set</b></p> <ul style="list-style-type: none"> <li>P31137551/61 Std.</li> <li>P31137312/22 0.007</li> </ul> <p><b>Set of 2 Pairs</b></p>                             |
| <p><b>Tovel</b></p> <p>TS6-44<br/>TS8-44</p> <p><b>Hyster</b></p> <p>S80-155XL/XM - (AR70414)<br/>h80-155XL/XM - (AR70417)</p>  |  <p><b>1) Front Seal</b></p> <ul style="list-style-type: none"> <li>P2418F436</li> </ul> <p><b>2) Rear Seal</b></p> <ul style="list-style-type: none"> <li>P2418F475</li> <li>P2418F701</li> </ul> <p><b>3) Crankshaft Kit</b></p> <ul style="list-style-type: none"> <li>PZZ90226</li> </ul> <p><b>4) Ring Gear</b></p> <ul style="list-style-type: none"> <li>P0410236 115T</li> <li>P31162121 126T</li> </ul> |  <p><b>1) Top Gasket Set</b></p> <ul style="list-style-type: none"> <li>PU5LT0317</li> </ul> <p><b>2) Bottom Gasket</b></p> <ul style="list-style-type: none"> <li>PU5LB1171</li> </ul> <p><b>3) Valve Cover Gsk</b></p> <ul style="list-style-type: none"> <li>P3681A049</li> </ul> <p><b>4) Head Gasket</b></p> <ul style="list-style-type: none"> <li>P3681E042</li> </ul> <p><b>5) Gasket, Manifold</b></p> <ul style="list-style-type: none"> <li>P3688C042</li> </ul> |  <p><b>1) Bush, Con Rod</b></p> <ul style="list-style-type: none"> <li>P3112A005 x4</li> </ul> <p><b>2) Bolt, Con Rod</b></p> <ul style="list-style-type: none"> <li>P3212V003 x8</li> </ul> <p><b>3) Con Rod</b></p> <ul style="list-style-type: none"> <li>P4115C314</li> </ul>                    |  <p><b>1) Bushing, Cam</b></p> <ul style="list-style-type: none"> <li>P31134132 x1</li> </ul> <p><b>2) Tappet</b></p> <ul style="list-style-type: none"> <li>P31434163</li> </ul> <p><b>3) Pushrod</b></p> <ul style="list-style-type: none"> <li>P31434307</li> </ul> <p><b>4) Seal, Exh Valve</b></p> <ul style="list-style-type: none"> <li>P2418M505 x4</li> </ul> <p><b>5) Seal, Intk Valve</b></p> <ul style="list-style-type: none"> <li>P2418M506 x4</li> </ul> |  <p><b>1) Crankshaft Gear</b></p> <ul style="list-style-type: none"> <li>P31171681</li> </ul> <p><b>2) Camshaft Gear</b></p> <ul style="list-style-type: none"> <li>P3117L023</li> </ul> |
| <p><b>Jcb</b></p> <p>(AR50690)</p> <p><b>Bobcat</b></p> <p>1800 - Scat Trak-low emission (AR70419)</p>  | <p><b>Valve Train Kit</b></p> <ul style="list-style-type: none"> <li>PVTK422</li> </ul>   | <p><b>1) Valve, Intake</b></p> <ul style="list-style-type: none"> <li>P3142H041 x4</li> </ul> <p><b>2) Valve, Exhaust</b></p> <ul style="list-style-type: none"> <li>P3142D061 x4</li> </ul>   | <p><b>3) Guide, Valve</b></p> <p><b>a) Intake b) Exhaust</b></p> <ul style="list-style-type: none"> <li>3a) P3313A012 x4</li> <li>3b) P3318A705 x4</li> </ul>   | <p><b>4) Spring, Valve</b></p> <ul style="list-style-type: none"> <li>P3174P412 x8</li> </ul>  | <p><b>5) Lock, Valve</b></p> <ul style="list-style-type: none"> <li>P3142W004 x16</li> </ul>  |
| <p><b>Landini</b></p> <p>GLOBUS 75 - Tractor</p>  |  <p><b>1) Oil Pump</b></p> <ul style="list-style-type: none"> <li>P4132F051</li> </ul> <p><b>2) Oil Cooler</b></p> <ul style="list-style-type: none"> <li>P2486A218</li> <li>P2486A219</li> <li>P2486A222</li> <li>P2486A241</li> <li>P2486A991</li> </ul>   |  <p><b>Lift Pump</b></p> <ul style="list-style-type: none"> <li>P2641A067</li> </ul>  |  <p><b>1) Water Pump</b></p> <ul style="list-style-type: none"> <li>PU5MW0192</li> <li>PU5MW0195</li> </ul> <p><b>2) Thermostat</b></p> <ul style="list-style-type: none"> <li>P2485C036</li> </ul> <p><b>3) Water Pump Gasket</b></p> <ul style="list-style-type: none"> <li>P3687Y016</li> </ul> |  <p><b>1) Heater Plug</b></p> <ul style="list-style-type: none"> <li>P2666108</li> </ul> <p><b>(Bayonet Fitting)</b></p> <p><b>2) Oil Pressure Switch</b></p> <ul style="list-style-type: none"> <li>P2848062</li> </ul> <p><b>3) Temp Sensor</b></p> <ul style="list-style-type: none"> <li>P2848A121</li> </ul> <p><b>4) Water Temp Sensor</b></p> <ul style="list-style-type: none"> <li>P2848A123</li> </ul>  |  <p><b>Piston Cooling Nozzle</b></p> <ul style="list-style-type: none"> <li>P3861A027</li> </ul>   |

(1): To ESN U176356H.

(3): PZZ90226 From ESN U284278J.

(5): Check application for proper usage.

(7): Use on engines without a Balancer Unit.







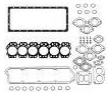

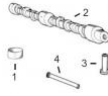
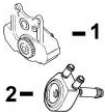
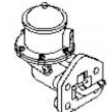



(2): From ESN U176357H.

(4): May use Bottom Gasket Set PU5LB1310.

(6): Use for AR builds only. check your application for proper use.

|                               |                                      |                                 |                              |   |
|-------------------------------|--------------------------------------|---------------------------------|------------------------------|---|
| <b>Engine Series:</b><br>1000 | <b>Engine Model:</b><br>1006.60 (YA) | <b>Engine Data:</b><br>Lip Seal | <b>Engine Info:</b><br>6 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.937 in / 100.00 mm |
|-------------------------------|--------------------------------------|---------------------------------|------------------------------|---|

|   |                               |  |                               |   |                                |  |                               |
|---|-------------------------------|--|-------------------------------|---|--------------------------------|--|-------------------------------|
| <b>Hyster-Forklifts</b><br>H165-280 - (YA70217) | <b>H165-360XL - (YA70337)</b> | <b>Jcb</b><br>(YA50214) - Wheel Loader | <b>(YA50339) - Industrial</b> | <b>Mf Agricultural</b><br>396 - (YA31257)<br>3095<br>5320 | <b>399 - (YA31240)</b><br>4260 | <b>CLAAS</b><br>Dominator 58 - Combine<br>Dominator 78 - Combine | <b>Dominator 68 - Combine</b> |
|---|-------------------------------|--|-------------------------------|---|--------------------------------|--|-------------------------------|

|  |  |  |  |  |
|--|--|--|--|--|
|  <p><b>1) Engine O/H Kit</b><br/>• POK690</p> <p><b>2) Basic Engine Kit</b><br/>• PBK690</p>   |  <p><b>Piston-Liner Kit</b><br/>• PCK142</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>• a) PMXF0015</li> <li>• b) P4181A019</li> <li>• c) P3135X042</li> </ul> <p><b>6 Per Engine</b></p> |  <p><b>Main Bearing Set</b></p> <ul style="list-style-type: none"> <li>• PU5MB0030 Std.</li> <li>• PU5MB0030A 0.010</li> <li>• PU5MB0030B 0.020</li> <li>• PU5MB0030C 0.030</li> </ul> <p><b>Set of 7 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b></p> <ul style="list-style-type: none"> <li>• P85043 Std.</li> <li>• P85043A 0.010</li> <li>• P85043B 0.020</li> <li>• P85043C 0.030</li> </ul> <p><b>Set of 6 Pairs</b></p> |  <p><b>Thrust Washer Set</b></p> <ul style="list-style-type: none"> <li>• P31137551/61 Std.</li> <li>• P31137312/22 0.007</li> </ul> <p><b>Set of 2 Pairs</b></p> |
|  <p><b>1) Front Seal</b><br/>• P2418F436</p> <p><b>2) Rear Seal</b><br/>• P2418F475<br/>• P2418F701</p> <p><b>3) Crankshaft Kit</b><br/>• PZZ90087</p> <p><b>4) Ring Gear</b><br/>• P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT1179</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0153</p> <p><b>3) Head Gasket</b><br/>• P3681H205</p>  |  <p><b>1) Bush, Con Rod</b><br/>• P31134123 x6</p> <p><b>2) Bolt, Con Rod</b><br/>• P32762144 x12</p> <p><b>3) Nut, Con Rod</b><br/>• P33221328 x12</p> <p><b>4) Con Rod</b><br/>• PZZ90009</p>                     |  <p><b>1) Bushing, Cam</b><br/>• P31134132 x1</p> <p><b>2) Camshaft</b><br/>• P31416307</p> <p><b>3) Tappet</b><br/>• P31434163</p> <p><b>4) Pushrod</b><br/>• P31434307</p>                              |  |
| <p><b>Valve Train Kit</b><br/>• PVTK612</p>  | <p><b>1) Valve, Intake</b><br/>• P3142L051 x6</p> <p><b>2) Valve, Exhaust</b><br/>• P3142A051 x6</p>   | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b></p> <ul style="list-style-type: none"> <li>• 3a) P3343F002 x6</li> <li>• 3b) P3343J002 x6</li> </ul>   | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b></p> <ul style="list-style-type: none"> <li>• 4a) P31744133 x12</li> <li>• 4b) P31745122 x12</li> </ul>   | <p><b>5) Lock, Valve</b><br/>• P33173108 x24</p> <p><b>6) Seal, Valve</b><br/>• P33817117 x12</p>  |
|  <p><b>1) Oil Pump</b><br/>• P4132F043</p> <p><b>2) Oil Cooler Donut</b><br/>• P2486A219<br/>• P2486A241</p>   |  <p><b>Lift Pump</b><br/>• P2641729</p>   |  <p><b>1) Water Pump</b><br/>• PU5MW0092<br/>• PU5MW0159</p> <p><b>2) Thermostat</b><br/>• P2485613 x2</p> <p><b>3) Water Pump Gasket</b><br/>• P3687Y016</p>   |  <p><b>1) Rocker Arm LH</b><br/>• P41151483</p> <p><b>2) Rocker Arm RH</b><br/>• P41151484</p> <p><b>3) Cylinder Head</b><br/>• PZZ80299</p> <p><b>4) Piston Cooling Nozzle</b><br/>• P3861A027</p>      |  <p><b>1) Heater Plug</b><br/>• P2666108</p> <p><b>2) Oil Pressure Switch (Bayonet Fitting)</b><br/>• P2848062</p> <p><b>3) Temp Sensor</b><br/>• P2848A121</p> |

(1): Flanged, Semi Finished Liner available, P3135X041

(2): Use Single Valve Spring, 3174P405 for low speed applications, not available from Maxiforce.

(3): To ESN U764751H.

(4): From ESN U764752H.

(5): Check build list for proper application.

|   |                                       |                                     |   |                              |
|---|---------------------------------------|-------------------------------------|---|------------------------------|
| <b>Engine Series:</b><br>1000                           | <b>Engine Model:</b><br>1006.60T (YB) | <b>Engine Desc:</b><br>TURBOCHARGED | <b>Engine Data:</b><br>Lip Seal<br>To ESN 557976X | <b>Engine Info:</b><br>6 Cyl |
| <b>Engine Dimensions:</b><br>Bore: 3.937 in / 100.00 mm |                                       |                                     |   |                              |

| Build List | MF Agricultural              | Perkins                    | Dingxin-Gensets        | Jcb                                | Tovel       | CLAAS                                      |
|------------|------------------------------|----------------------------|------------------------|------------------------------------|-------------|--|
| YD35099    | 3625 - 3645<br>(YB31245) 555 | (YB30127) (YB30650)        | DP88S DP120S<br>DP132S | 435 -<br>Front<br>Loader (YB50292) | TS18-<br>44 | Dominat<br>88 - 98 -<br>Combine<br>Combine |
|            | 399 6190<br>640 660<br>680   | Power Units<br>Power Units |                        |                                    |             |  |



- 1) Engine O/H Kit  
• POK691
- 2) Basic Engine Kit  
• PBK691



- Piston-Liner Kit  
• PCK275
- Consist of:  
• a) PMXF0014  
• b) P4181A026  
• c) P3135X042



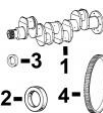
- Main Bearing Set  
• PU5MB0030 Std.  
• PU5MB0030A 0.010  
• PU5MB0030B 0.020  
• PU5MB0030C 0.030



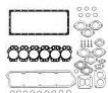
- Con Rod Bearing Set  
• PU5ME0003 Std.  
• PU5ME0003A 0.010  
• PU5ME0003B 0.020  
• PU5ME0003C 0.030



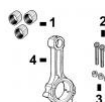
- Thrust Washer Set  
• P31137551/61 Std.  
• P31137312/22 0.007



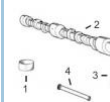
- 1) Front Seal  
• P2418F436
- 2) Rear Seal  
• P2418F475
- 3) Crankshaft Kit  
• PZZ90085
- 4) Ring Gear  
• P31162121 126T



- 1) Top Gasket Set  
• PU5LT1179
- 2) Bottom Gasket  
• PU5LB0153
- 3) Head Gasket  
• P3681H205



- 1) Bush, Con Rod  
• P31134131 x6
- 2) Bolt, Con Rod  
• P32762144 x12
- 3) Nut, Con Rod  
• P33221328 x12
- 4) Con Rod  
• PZZ90013



- 1) Bushing, Cam  
• P31134132 x1
- 2) Camshaft  
• P31416307
- 3) Tappet  
• P31434163
- 4) Pushrod  
• P31434307

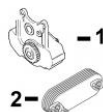
- Valve Train Kit  
• PVTK613

- 1) Valve, Intake  
• P3142L071 x6
- 2) Valve, Exhaust  
• P3142A051 x6

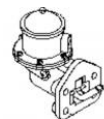
- 3) Guide, Valve  
a) Intake b) Exhaust  
• 3a) P3343F002 x6  
• 3b) P3343J002 x6

- 4) Spring, Valve  
a) Inner b) Outer  
• 4a) P31744133 x12  
• 4b) P31745122 x12

- 5) Lock, Valve  
• P33173108 x24
- 6) Seal, Valve  
• P33817117 x12



- 1) Oil Pump  
• P4132F057
- 2) Oil Cooler  
• P2486A992  
• P2486A993



- Lift Pump  
• P2641729



- 1) Water Pump  
• PU5MW0092  
• PU5MW0159
- 2) Thermostat  
• P2485613 x2
- 3) Water Pump Gasket  
• P3687Y016



- 1) Rocker Arm LH  
• P41151483
- 2) Rocker Arm RH  
• P41151484
- 3) Cylinder Head  
• PZZ80299
- 4) Piston Cooling Nozzle  
• P3861A027



- 1) Heater Plug  
• P2666108
- 2) Oil Pressure Switch  
• P2848062
- 3) Temp Sensor  
• P2848A121
- 4) Water Temp Sensor  
• P2848A123

(1): Check with Build List.

(3): Flanged, Semi Finished Liner available, P3135X041

(5): Check build list for proper application.

(2): 45 Degree Angle.







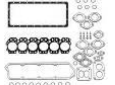
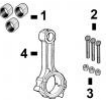
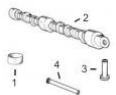

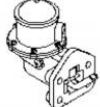

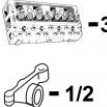

(4): Applies to YB31245 Only.

(6): On applications using Con Rod 4115C321, order bushing P3112A006, order separately.

|                               |                                       |                                     |   |                              |
|-------------------------------|---------------------------------------|-------------------------------------|---|------------------------------|
| <b>Engine Series:</b><br>1000 | <b>Engine Model:</b><br>1006.60T (YB) | <b>Engine Desc:</b><br>TURBOCHARGED | <b>Engine Data:</b><br>Lip Seal<br>From ESN 557977X | <b>Engine Info:</b><br>6 Cyl |
|-------------------------------|---------------------------------------|-------------------------------------|---|------------------------------|

**Engine Dimensions:**  
Bore: 3.937 in / 100.00 mm

Please see page 427 for a complete list of equipment models.

|  |  |  |   |   |
|--|--|--|---|---|
|  <p><b>1) Engine O/H Kit</b><br/>• POK692</p> <p><b>2) Basic Engine Kit</b><br/>• PBK692</p>   |  <p><b>Piston-Liner Kit</b><br/>• PCK275</p> <p><b>Consist of:</b><br/>• a) PMXF0014<br/>• b) P4181A026<br/>• c) P3135X042</p> <p><b>6 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>• PU5MB0030 Std.<br/>• PU5MB0030A 0.010<br/>• PU5MB0030B 0.020<br/>• PU5MB0030C 0.030</p> <p><b>Set of 7 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b><br/>• PU5ME0003 Std.<br/>• PU5ME0003A 0.010<br/>• PU5ME0003B 0.020<br/>• PU5ME0003C 0.030</p> <p><b>Set of 6 Pairs</b></p>                     |  <p><b>Thrust Washer Set</b><br/>• P31137551/61 Std.<br/>• P31137312/22 0.007</p> <p><b>Set of 2 Pairs</b></p>   |
|  <p><b>1) Front Seal</b><br/>• P2418F436</p> <p><b>2) Rear Seal</b><br/>• P2418F475<br/>• P2418F701</p> <p><b>3) Crankshaft Kit</b><br/>• PZZ90085</p> <p><b>4) Ring Gear</b><br/>• P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT1179</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0153</p> <p><b>3) Head Gasket</b><br/>• P3681H205</p>              |  <p><b>1) Bush, Con Rod</b><br/>• P31134131 x6</p> <p><b>2) Bolt, Con Rod</b><br/>• P32762144 x12</p> <p><b>3) Nut, Con Rod</b><br/>• P33221328 x12</p> <p><b>4) Con Rod</b><br/>• PZZ90013</p> |  <p><b>1) Bushing, Cam</b><br/>• P31134132 x1</p> <p><b>2) Camshaft</b><br/>• P31416307</p> <p><b>3) Tappet</b><br/>• P31434163</p> <p><b>4) Pushrod</b><br/>• P31434307</p> |   |
| <p><b>Valve Train Kit</b><br/>• PVTK614</p>  | <p><b>1) Valve, Intake</b><br/>• P3142L072 x6</p> <p><b>2) Valve, Exhaust</b><br/>• P3142A051 x6</p>   | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b><br/>• 3a) P3343F002 x6<br/>• 3b) P3343J002 x6</p>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>• 4a) P31744133 x12<br/>• 4b) P31745122 x12</p>   | <p><b>5) Lock, Valve</b><br/>• P33173108 x24</p> <p><b>6) Seal, Valve</b><br/>• P33817117 x12</p>   |
|  <p><b>1) Oil Pump</b><br/>• P4132F057</p> <p><b>2) Oil Cooler</b><br/>• P2486A992<br/>• P2486A993</p>   |  <p><b>Lift Pump</b><br/>• P2641729</p>   |  <p><b>1) Water Pump</b><br/>• PU5MW0092<br/>• PU5MW0159</p> <p><b>2) Thermostat</b><br/>• P2485613 x2</p> <p><b>3) Water Pump Gasket</b><br/>• P3687Y016</p>                                 |  <p><b>1) Rocker Arm LH</b><br/>• P41151483</p> <p><b>2) Rocker Arm RH</b><br/>• P41151484</p> <p><b>3) Cylinder Head</b><br/>• PZZ80299</p>                                |  <p><b>1) Heater Plug</b><br/>• P2666108</p> <p><b>(Bayonet Fitting)</b></p> <p><b>2) Oil Pressure Switch</b><br/>• P2848062</p> <p><b>3) Temp Sensor</b><br/>• P2848A121</p> <p><b>4) Water Temp Sensor</b><br/>• P2848A123</p> |

(1): Check with Build List.

(3): Flanged, Semi Finished Liner available, P3135X041

(5): From ESN U764752H.

(7): Check build list for proper application.

(2): 30 Degree Angle.

(4): To ESN U764751H.

(6): Applies to YB31245 Only.

(8): On applications using Con Rod 4115C321, order bushing P3112A006, order separately.

|                               |   |                                |   |                              |
|-------------------------------|---|--------------------------------|---|------------------------------|
| <b>Engine Series:</b><br>1000 | <b>Engine Model:</b><br>1006.60T (YE, YD) | <b>Engine Desc:</b><br>Grade L | <b>Engine Data:</b><br>TURBOCHARGED/<br>INTERCOOLED<br>Lip Seal | <b>Engine Info:</b><br>6 Cyl |
|-------------------------------|---|--------------------------------|---|------------------------------|

**Engine Dimensions:**

Bore: 3.937 in / 100.00 mm Stroke: 5.00 in / 127.00 mm Piston height: 2.762 in / 127.00 mm

**Build List**

YB50604

**Fg Wilson**

P96SP1  
P150E  
P165-1  
P165E1  
XP110E  
XP150E

P150-1  
P150P1  
P165-2  
P188E1  
XP135  
XP150P1

**Tovel**

TS18-44



- 1) **Engine O/H Kit**  
• POK696
- 2) **Basic Engine Kit**  
• PBK696



- Piston-Liner Kit**  
• PCK624
- Consist of:**
  - a) PU5LF0024
  - b) P4181A026
  - c) P3135X062
- 6 Per Engine**



- Main Bearing Set**
  - PU5MB0030 Std.
  - PU5MB0030A 0.010
  - PU5MB0030B 0.020
  - PU5MB0030C 0.030
- Set of 7 Pairs**



- Con Rod Bearing Set**
  - PU5ME0003 Std.
  - PU5ME0003A 0.010
  - PU5ME0003B 0.020
  - PU5ME0003C 0.030
- Set of 6 Pairs**



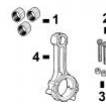
- Thrust Washer Set**
  - P31137551/61 Std.
  - P31137312/22 0.007
- Set of 2 Pairs**



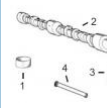
- 1) **Front Seal**  
• P2418F436
- 2) **Rear Seal**  
• P2418F475  
• P2418F701
- 3) **Crankshaft Kit**  
• PZZ90085
- 4) **Ring Gear**  
• P31162121 126T



- 1) **Top Gasket Set**  
• PU5LT1179
- 2) **Bottom Gasket**  
• PU5LB0153
- 3) **Head Gasket**  
• P3681H205



- 1) **Bush, Con Rod**  
• P3112E005 x6
- 2) **Bolt, Con Rod**  
• P32186142 x12
- 3) **Nut, Con Rod**  
• P3246A001 x12
- 4) **Con Rod**  
• PZZ90146



- 1) **Bushing, Cam**  
• P31134132 x1
- 2) **Camshaft**  
• P31416307
- 3) **Tappet**  
• P31434163
- 4) **Pushrod**  
• P31434307

- Valve Train Kit**  
• PVTK614

- 1) **Valve, Intake**  
• P3142L072 x6
- 2) **Valve, Exhaust**  
• P3142A051 x6

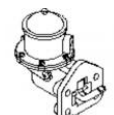
- 3) **Guide, Valve**
  - a) Intake b) Exhaust
  - 3a) P3343F002 x6
  - 3b) P3343J002 x6

- 4) **Spring, Valve**
  - a) Inner b) Outer
  - 4a) P31744133 x12
  - 4b) P31745122 x12

- 5) **Lock, Valve**  
• P33173108 x24
- 6) **Seal, Valve**  
• P33817117 x12



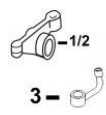
- 1) **Oil Pump**  
• P4132F057
- 2) **Oil Cooler**  
• P2486A993



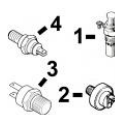
- Lift Pump**  
• P2641729



- 1) **Water Pump**  
• PU5MW0092  
• PU5MW0159
- 2) **Thermostat**  
• P2485613 x2



- 1) **Rocker Arm LH**  
• P41151483
- 2) **Rocker Arm RH**  
• P41151484
- 3) **Piston Cooling Nozzle**  
• P3861A027



- 1) **Heater Plug**  
• P2666108
- (Bayonet Fitting)
- 2) **Oil Pressure Switch**  
• P2848062
- 3) **Temp Sensor**  
• P2848A121
- 4) **Water Temp Sensor**  
• P2848A123

(1): Use with Con Rod ZZ90146.

(3): Flanged, Semi Finished Liner available, P3135X063

(5): From ESN U764752H.

(7): Check build number for proper application.

(2): 30 Degree Angle.

(4): To ESN U764751H.

(6): On applications using Con Rod 4115C321, order bushing P3112A006, order separately.

(8): Use on YD builds only. Check build number for proper application.

**PERKINS 1006.60T GRADE L FRACTURED SPLIT ROD**

|                               |   |                                |   |                              |
|-------------------------------|---|--------------------------------|---|------------------------------|
| <b>Engine Series:</b><br>1000 | <b>Engine Model:</b><br>1006.60T (YE, YD) | <b>Engine Desc:</b><br>Grade L | <b>Engine Data:</b><br>TURBOCHARGED/<br>INTERCOOLED<br>Lip Seal | <b>Engine Info:</b><br>6 Cyl |
|-------------------------------|---|--------------------------------|---|------------------------------|

**Engine Dimensions:**

Bore: 3.937 in / 100.00 mm    Stroke: 5.00 in / 127.00 mm    Piston height: 2.762 in / 127.00 mm

**Build List**







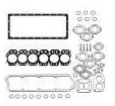
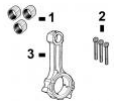


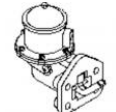



YB50604

**Fg Wilson**

XP110E  
P150-1  
P150P1  
XP150E  
P165-1  
P165E1

**Tovel**

TS18-44

|   |   |   |   |   |
|---|---|---|---|---|
|  <p><b>1) Engine O/H Kit</b><br/>• POK698</p> <p><b>2) Basic Engine Kit</b><br/>• PBK698</p>  |  <p><b>Piston-Liner Kit</b><br/>• PCK624</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>• a) PU5LF0024</li> <li>• b) P4181A026</li> <li>• c) P3135X062</li> </ul> <p><b>6 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>• PU5MB0030 <small>Std.</small><br/>• PU5MB0030A <small>0.010</small><br/>• PU5MB0030B <small>0.020</small><br/>• PU5MB0030C <small>0.030</small></p> <p><b>Set of 7 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b><br/>• PU5ME0025 <small>Std.</small><br/>• PU5ME0025A <small>0.010</small><br/>• PU5ME0025B <small>0.020</small><br/>• PU5ME0025C <small>0.030</small></p> <p><b>Set of 6 Pairs</b></p> |  <p><b>Thrust Washer Set</b><br/>• P31137551/61 <small>Std.</small><br/>• P31137312/22 <small>0.007</small></p> <p><b>Set of 2 Pairs</b></p>   |
|  <p><b>1) Front Seal</b><br/>• P2418F436</p> <p><b>2) Rear Seal</b><br/>• P2418F475<br/>• P2418F701</p> <p><b>3) Crankshaft Kit</b><br/>• PZZ90229</p> <p><b>4) Ring Gear</b><br/>• P31162121 <small>126T</small></p> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT1179</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0153</p> <p><b>3) Head Gasket</b><br/>• P3681H205</p>   |  <p><b>1) Bush, Con Rod</b><br/>• P3112A005 <small>x6</small></p> <p><b>2) Bolt, Con Rod</b><br/>• P3212V003 <small>x12</small></p> <p><b>3) Con Rod</b><br/>• P4115C314</p>                                       |  <p><b>1) Bushing, Cam</b><br/>• P31134132 <small>x1</small></p> <p><b>2) Camshaft</b><br/>• P31416307</p> <p><b>3) Tappet</b><br/>• P31434163</p> <p><b>4) Pushrod</b><br/>• P31434307</p>                          |   |
| <p><b>Valve Train Kit</b><br/>• PVTK614</p>   | <p><b>1) Valve, Intake</b><br/>• P3142L072 <small>x6</small></p> <p><b>2) Valve, Exhaust</b><br/>• P3142A051 <small>x6</small></p>  | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b><br/>• 3a) P3343F002 <small>x6</small><br/>• 3b) P3343J002 <small>x6</small></p>   | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>• 4a) P31744133 <small>x12</small><br/>• 4b) P31745122 <small>x12</small></p>   | <p><b>5) Lock, Valve</b><br/>• P33173108 <small>x24</small></p> <p><b>6) Seal, Valve</b><br/>• P33817117 <small>x12</small></p>   |
|  <p><b>1) Oil Pump</b><br/>• P4132F057</p> <p><b>2) Oil Cooler</b><br/>• P2486A993</p>  |  <p><b>Lift Pump</b><br/>• P2641729</p>  |  <p><b>1) Water Pump</b><br/>• PU5MW0092<br/>• PU5MW0159</p> <p><b>2) Thermostat</b><br/>• P2485613 <small>x2</small></p>  |  <p><b>1) Rocker Arm LH</b><br/>• P41151483</p> <p><b>2) Rocker Arm RH</b><br/>• P41151484</p>  |  <p><b>1) Heater Plug</b><br/>• P2666108</p> <p><b>(Bayonet Fitting)</b></p> <p><b>2) Oil Pressure Switch</b><br/>• P2848062</p> <p><b>3) Temp Sensor</b><br/>• P2848A121</p> <p><b>4) Water Temp Sensor</b><br/>• P2848A123</p> |

(1): Use with Con Rod ZZ90146.

(2): 30 Degree Angle.

(3): Flanged, Semi Finished Liner available, P3135X063

(4): To ESN U764751H.








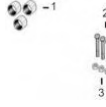


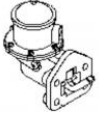



(5): From ESN U764752H.

(6): Check build number for proper application.

(7): On applications using Con Rod 4115C321, order bushing P3112A006, order separately.

(8): Grade J, Color Coded Green.



|  |  |  |   |   |   |
|--|--|--|---|---|---|
| <p><b>Engine Series:</b><br/>1000</p> <p><b>Engine Model:</b><br/>1006.60T<br/>(YG, YH, YJ, YK)</p> <p><b>Engine Data:</b><br/>TURBOCHARGED<br/>or<br/>NATURALLY ASPIRATED<br/>Lip Seal</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.937 in / 100.00 mm</p> |  <p><b>1) Engine O/H Kit</b><br/> <ul style="list-style-type: none"> <li>POK693/45</li> <li>POK693/30</li> </ul> </p> <p><b>2) Basic Engine Kit</b><br/> <ul style="list-style-type: none"> <li>PBK693</li> </ul> </p>   |  <p><b>Piston-Liner Kit</b><br/> <ul style="list-style-type: none"> <li>PCK5762</li> </ul> </p> <p><b>Consist of:</b><br/> <ul style="list-style-type: none"> <li>a) PU5LP0057</li> <li>b) P4181A033</li> <li>c) P3135X062</li> </ul> </p> <p><b>6 Per Engine</b></p>  |  <p><b>Main Bearing Set</b><br/> <ul style="list-style-type: none"> <li>PU5MB0030 Std.</li> <li>PU5MB0030A 0.010</li> <li>PU5MB0030B 0.020</li> <li>PU5MB0030C 0.030</li> </ul> </p> <p><b>Set of 7 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/> <ul style="list-style-type: none"> <li>PU5ME0003 Std. <b>5</b></li> <li>PU5ME0003A 0.010</li> <li>PU5ME0003B 0.020</li> <li>PU5ME0003C 0.030</li> </ul> </p> <p><b>Set of 6 Pairs</b></p>   |  <p><b>Thrust Washer Set</b><br/> <ul style="list-style-type: none"> <li>P31137551/61 Std.</li> <li>P31137312/22 0.007</li> </ul> </p> <p><b>Set of 2 Pairs</b></p> |
| <p>Please see page 428 for a complete list of equipment models.</p>  |  <p><b>1) Front Seal</b><br/> <ul style="list-style-type: none"> <li>P2418F436</li> </ul> </p> <p><b>2) Rear Seal</b><br/> <ul style="list-style-type: none"> <li>P2418F475</li> <li>P2418F701</li> </ul> </p> <p><b>3) Crankshaft Kit</b><br/> <ul style="list-style-type: none"> <li>PZZ90085</li> </ul> </p> <p><b>4) Ring Gear</b><br/> <ul style="list-style-type: none"> <li>P31162121 126T</li> </ul> </p> |  <p><b>1) Top Gasket Set</b><br/> <ul style="list-style-type: none"> <li>PU5LT1300</li> </ul> </p> <p><b>2) Bottom Gasket</b><br/> <ul style="list-style-type: none"> <li>PU5LB1301</li> </ul> </p> <p><b>3) Head Gasket</b><br/> <ul style="list-style-type: none"> <li>P3681H205</li> </ul> </p> <p><b>4) Rocker Cover Gasket</b><br/> <ul style="list-style-type: none"> <li>P3681A051</li> </ul> </p> <p><b>5) Gasket, Manifold</b><br/> <ul style="list-style-type: none"> <li>P3688C042</li> </ul> </p> |  <p><b>1) Bush, Con Rod</b><br/> <ul style="list-style-type: none"> <li>P3112E011 x6</li> </ul> </p> <p><b>2) Bolt, Con Rod</b><br/> <ul style="list-style-type: none"> <li>P32762144 x12</li> </ul> </p> <p><b>3) Nut, Con Rod</b><br/> <ul style="list-style-type: none"> <li>P33221328 x12</li> </ul> </p> |  <p><b>1) Bushing, Cam</b><br/> <ul style="list-style-type: none"> <li>P31134132 x1</li> </ul> </p> <p><b>2) Tappet</b><br/> <ul style="list-style-type: none"> <li>P31434163</li> </ul> </p> <p><b>3) Push Rod</b><br/> <ul style="list-style-type: none"> <li>P31434307</li> </ul> </p> <p><b>4) Seal, Exh Valve</b><br/> <ul style="list-style-type: none"> <li>P2418M505 x6</li> </ul> </p> <p><b>5) Seal, Intk Valve</b><br/> <ul style="list-style-type: none"> <li>P2418M506 x6</li> </ul> </p> |   |
| <p><b>Valve Train Kit</b><br/> <ul style="list-style-type: none"> <li>a) 45 b) 30</li> <li>a) PVTK618</li> <li>b) PVTK619</li> </ul> </p>  | <p><b>1) Valve, Intake</b><br/> <ul style="list-style-type: none"> <li>a) 45 b) 30</li> <li>1a) P3142D041 x6</li> <li>1b) P3142L081 x6</li> </ul> </p> <p><b>2) Valve, Exhaust</b><br/> <ul style="list-style-type: none"> <li>2a) P3142D031 x6</li> <li>2b) P3142D051 x6</li> </ul> </p>  | <p><b>3) Guide, Valve</b><br/> <b>a) Intake b) Exhaust</b><br/> <ul style="list-style-type: none"> <li>3a) P3313A012 x6</li> <li>3b) P3318A705 x6</li> </ul> </p>  | <p><b>4) Spring, Valve</b><br/> <ul style="list-style-type: none"> <li>P3174P409 x12</li> </ul> </p>  | <p><b>5) Lock, Valve</b><br/> <ul style="list-style-type: none"> <li>P3142W004 x24</li> </ul> </p>  |   |
|  <p><b>1) Oil Pump</b><br/> <ul style="list-style-type: none"> <li>P4132F057</li> </ul> </p> <p><b>2) Oil Cooler</b><br/> <ul style="list-style-type: none"> <li>P2486A992</li> <li>P2486A993</li> </ul> </p> |  <p><b>Lift Pump</b><br/> <ul style="list-style-type: none"> <li>P2641729</li> </ul> </p>   |  <p><b>1) Water Pump</b><br/> <ul style="list-style-type: none"> <li>PU5MW0192</li> <li>PU5MW0156</li> </ul> </p> <p><b>2) Thermostat</b><br/> <ul style="list-style-type: none"> <li>P2485C036</li> </ul> </p> <p><b>3) Water Pump Gasket</b><br/> <ul style="list-style-type: none"> <li>P3687Y016</li> </ul> </p>  |  <p><b>1) Oil Pressure Switch</b><br/> <ul style="list-style-type: none"> <li>P2848062</li> </ul> </p> <p><b>2) Temp Sensor</b><br/> <ul style="list-style-type: none"> <li>P2848A121</li> </ul> </p>  |  <p><b>Piston Cooling Nozzle</b><br/> <ul style="list-style-type: none"> <li>P3861A027</li> </ul> </p>   |   |

(1): Flanged, Semi Finished Liner available, P3135X063


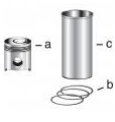




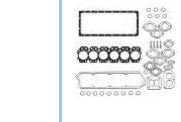



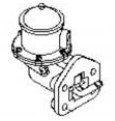



(3): From ESN U764752H.

(5): Use for YG, and YH builds only. check your application for proper use.

(2): To ESN U764751H.

(4): Check build number for proper application.

PERKINS 1006.60T YG, YH, YK, YJ BUILDS FRACTURED SPLIT ROD

|  |  |  |   |   |   |
|--|--|--|---|---|---|
| <p><b>Engine Series:</b><br/>1000</p> <p><b>Engine Model:</b><br/>1006.60T<br/>(YG, YH, YJ, YK)</p> <p><b>Engine Data:</b><br/>TURBOCHARGED<br/>or<br/>NATURALLY<br/>ASPIRATED<br/>Lip Seal</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.937 in /<br/>100.00 mm</p> |  <p><b>1) Engine O/H Kit</b><br/> <ul style="list-style-type: none"> <li>POK600/45</li> <li>POK600/30</li> </ul> <b>2) Basic Engine Kit</b><br/> <ul style="list-style-type: none"> <li>PBK600</li> </ul> </p>   |  <p><b>Piston-Liner Kit</b><br/> <ul style="list-style-type: none"> <li>PCK5762</li> </ul> <b>Consist of:</b><br/> <ul style="list-style-type: none"> <li>a) PU5LP0057</li> <li>b) P4181A033</li> <li>c) P3135X062</li> </ul> <b>6 Per Engine</b></p>  |  <p><b>Main Bearing Set</b><br/> <ul style="list-style-type: none"> <li>PU5MB0030 Std.</li> <li>PU5MB0030A 0.010</li> <li>PU5MB0030B 0.020</li> <li>PU5MB0030C 0.030</li> </ul> <b>Set of 7 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/> <ul style="list-style-type: none"> <li>PU5ME0025 Std.</li> <li>PU5ME0025A 0.010</li> <li>PU5ME0025B 0.020</li> <li>PU5ME0025C 0.030</li> </ul> <b>Set of 6 Pairs</b></p>  |  <p><b>Thrust Washer Set</b><br/> <ul style="list-style-type: none"> <li>P31137551/61 Std.</li> <li>P31137312/22 0.007</li> </ul> <b>Set of 2 Pairs</b></p> |
| <p><b>Hyster</b><br/>H165-360XL -<br/>(YG70403)<br/>H165-360XL -<br/>(YH70393)</p> <p><b>Mc Cormick-<br/>Tractors</b><br/>MTX110 -<br/>(YH50918)<br/>MTX125 -<br/>(YH50919)<br/>MTX140 -<br/>(YH50920)<br/>MTX155 -<br/>(YK50921)<br/>MTX170 -<br/>(YJ51192)</p>   |  <p><b>1) Front Seal</b><br/> <ul style="list-style-type: none"> <li>P2418F436</li> </ul> <b>2) Rear Seal</b><br/> <ul style="list-style-type: none"> <li>P2418F475</li> <li>P2418F701</li> </ul> <b>3) Crankshaft Kit</b><br/> <ul style="list-style-type: none"> <li>PZZ90229</li> </ul> <b>4) Ring Gear</b><br/> <ul style="list-style-type: none"> <li>P31162121 126T</li> </ul> </p> |  <p><b>1) Top Gasket Set</b><br/> <ul style="list-style-type: none"> <li>PU5LT1300</li> </ul> <b>2) Bottom Gasket</b><br/> <ul style="list-style-type: none"> <li>PU5LB1301</li> </ul> <b>3) Head Gasket</b><br/> <ul style="list-style-type: none"> <li>P3681H205</li> </ul> <b>4) Rocker Cover Gasket</b><br/> <ul style="list-style-type: none"> <li>P3681A051</li> </ul> <b>5) Gasket, Manifold</b><br/> <ul style="list-style-type: none"> <li>P3688C042</li> </ul> </p> |  <p><b>1) Bush, Con Rod</b><br/> <ul style="list-style-type: none"> <li>P3112A005 x6</li> </ul> <b>2) Bolt, Con Rod</b><br/> <ul style="list-style-type: none"> <li>P3212V003 x12</li> </ul> <b>3) Con Rod</b><br/> <ul style="list-style-type: none"> <li>P4115C314</li> </ul> </p>                   |  <p><b>1) Bushing, Cam</b><br/> <ul style="list-style-type: none"> <li>P31134132 x1</li> </ul> <b>2) Tappet</b><br/> <ul style="list-style-type: none"> <li>P31434163</li> </ul> <b>3) Push Rod</b><br/> <ul style="list-style-type: none"> <li>P31434307</li> </ul> <b>4) Seal, Exh Valve</b><br/> <ul style="list-style-type: none"> <li>P2418M505 x6</li> </ul> <b>5) Seal, Intk Valve</b><br/> <ul style="list-style-type: none"> <li>P2418M506 x6</li> </ul> </p> |   |
| <p><b>Tovel</b><br/>TS18-44</p> <p><b>MF Agricultural</b><br/>6180 -<br/>(YH31310)</p>   | <p><b>Valve Train Kit</b><br/> <ul style="list-style-type: none"> <li>a) 45 b) 30</li> <li>a) PVTK618</li> <li>b) PVTK619</li> </ul> </p>  | <p><b>1) Valve, Intake</b><br/> <ul style="list-style-type: none"> <li>a) 45 b) 30</li> <li>1a) P3142D041 x6</li> <li>1b) P3142L081 x6</li> </ul> <b>2) Valve, Exhaust</b><br/> <ul style="list-style-type: none"> <li>2a) P3142D031 x6</li> <li>2b) P3142D051 x6</li> </ul> </p>  | <p><b>3) Guide, Valve</b><br/> <b>a) Intake b) Exhaust</b><br/> <ul style="list-style-type: none"> <li>3a) P3313A012 x6</li> <li>3b) P3318A705 x6</li> </ul> </p>   | <p><b>4) Spring, Valve</b><br/> <ul style="list-style-type: none"> <li>P3174P409 x12</li> </ul> </p>  | <p><b>5) Lock, Valve</b><br/> <ul style="list-style-type: none"> <li>P3142W004 x24</li> </ul> </p>  |
|  |  <p><b>1) Oil Pump</b><br/> <ul style="list-style-type: none"> <li>P4132F057</li> </ul> <b>2) Oil Cooler</b><br/> <ul style="list-style-type: none"> <li>P2486A992</li> <li>P2486A993</li> </ul> <b>3) Oil Cooler Donut</b><br/> <ul style="list-style-type: none"> <li>P2486A241</li> </ul> </p>   |  <p><b>Lift Pump</b><br/> <ul style="list-style-type: none"> <li>P2641729</li> </ul> </p>   |  <p><b>1) Water Pump</b><br/> <ul style="list-style-type: none"> <li>PU5MW0192</li> <li>PU5MW0156</li> </ul> <b>2) Thermostat</b><br/> <ul style="list-style-type: none"> <li>P2485C036</li> </ul> <b>3) Water Pump Gasket</b><br/> <ul style="list-style-type: none"> <li>P3687Y016</li> </ul> </p> |  <p><b>1) Oil Pressure Switch</b><br/> <ul style="list-style-type: none"> <li>P2848062</li> </ul> <b>2) Temp Sensor</b><br/> <ul style="list-style-type: none"> <li>P2848A121</li> </ul> </p>  |  <p><b>Piston Cooling Nozzle</b><br/> <ul style="list-style-type: none"> <li>P3861A027</li> </ul> </p>   |

(1): Flanged, Semi Finished Liner available, P3135X063  
(3): From ESN U764752H.  
(5): Grade J, Color Coded Green

(2): To ESN U764751H.  
(4): Check build number for proper application.  
(6): Use for YG, and YH builds only. check your application for proper use.

PERKINS 1103C (DC) (DF) (DJ) (XK) BUILDS

**Engine Series:**  
1100

**Engine Model:**  
1103C-33 (DC)  
/ 1103B-33  
(DF) / 1103A-  
33 (DJ) /  
1103D - 33  
(XK)

**Engine Desc:**  
Tier 2

**Engine Data:**  
NATURALLY  
ASPIRATED

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 4.133 in /  
105.00 mm  
Stroke: 5.00 in /  
127.00 mm  
Displacement:  
201 in3 / 3.3 Lt

Please see  
page 429 for a  
complete list of  
equipment  
models.



**1) Engine O/H Kit**

- › POK320 Std.
- › POK321 0.50
- › POK322 1.00

**2) Basic Engine Kit**

- › PBK320 Std.
- › PBK321 0.50
- › PBK322 1.00



**Piston & Ring Kit**

- › P4115P011 Std.
- › P4115P012 0.50
- › P4115P013 1.00

**3 Per Engine**



**Main Bearing Set**

- › PU5MB0019 Std.
- › PU5MB0019A 0.010
- › PU5MB0019B 0.020
- › PU5MB0019C 0.030

**Set of 4 Pairs**



**Con Rod Bearing Set**

- › PU5ME0018 Std.
- › PU5ME0018A 0.010
- › PU5ME0018B 0.020
- › PU5ME0018C 0.030

**Set of 3 Pairs**



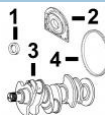
**Thrust Washer Set**

- › P31137551/61 Std.
- › P31137312/22 0.007

**Set of 2 Pairs**

**Piston Kit:**

- 1) 1 x P3135M105 Piston Std, 1 x PUPRK0003 Ring Set Std.
- 2) 1 x P3135M106 Piston 0.50 mm, 1 x PUPRK0003B Ring Set 0.50 mm.
- 3) 1 x P3135M107 Piston 1.00 mm, 1 x PUPRK0003D Ring Set 1.00 mm.



**1) Front Seal**

- › P2418F436

**2) Rear Seal**

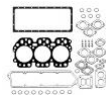
- › P2418F704

**3) Crankshaft Kit**

- › P4181V017

**4) Ring Gear**

- › P0410236 115T
- › P31162121 126T



**1) Top Gasket Set**

- › PU5LT0355

**2) Bottom Gasket**

- › PU5LB0379

**3) Head Gasket**

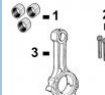
- › P3681E049

**4) Valve Cover Gsk**

- › P3681A057

**5) Oil Pan Gasket**

- › P3681K038



**1) Bush, Con Rod**

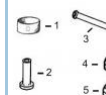
- › P3112A005 x3

**2) Bolt, Con Rod**

- › P3212V003 x6

**3) Con Rod Kit**

- › P4115C314



**1) Bushing, Cam**

- › P3112D071 x1

**2) Tappet**

- › P31434163

**3) Push Rod**

- › P31434307

**4) Seal, Exh Valve**

- › P2418M517 x3

**5) Seal, Intk Valve**

- › P2418M519 x3

**Valve Train Kit**

- › PVTK307

**1) Valve, Intake**

- › P3142H071 x3

**2) Valve, Exhaust**

- › P3142A151 x3

**3) Guide, Valve  
(Intake & Exhaust)**

- › P3313A012 x6

**4) Spring, Valve**

- › P3174A016 x6

**5) Lock, Valve**

- › P3142W004 x12



**Oil Pump**

- › P4132F071 (3) (1)
- › P413F072 (3) (1)



**1) Lift Pump**

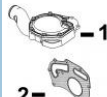
- › P2641A203 (4)

**2) Injector**

- › P2645K016 (3)

**3) Pre-Fuel Filter Assy**

- › P130306380



**1) Water Pump**

- › PU5MW0197 (3)

**2) Water Pump Gasket**

- › P3682A011 (3)

**3) Thermostat**

- › P4133L503 (3)
- › P4133L507 (3)
- › P4133L508 (3)

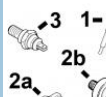


**Repair Sleeve**

- › 105RS

**2) Head Bolts**

- › P3218A011 x5
- › P3218A012 x3



**1) Glowplug**

- › P2666A016 x3

**2) Oil Pressure Switch**

- › 2a) P2848A071 (3)
- › 2b) P2848062 (3)

**3) Water Temp Sensor**

- › P2848A123 (3)
- › P2848A126 (3)
- › P2848A129 (3)

(1): Not to be used on engines with balancer units.

(2): Grade J, Color Coded Green.

(3): Check application for proper usage.

(4): Do Not Used with Build DF.

PERKINS 1103C (DC) (XK) BUILDS

**Engine Series:**  
1100

**Engine Model:**  
1103C - 33  
(DC) / 1103D -  
33 (XK)

**Engine Desc:**  
Tier 2

**Engine Data:**  
NATURALLY  
ASPIRATED

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 4.133 in  
/ 105.00 mm  
Stroke: 5.00 in  
/ 127.00 mm  
Displacement:  
201 in3 / 3.3 Lt

Please see  
page 430 for a  
complete list of  
equipment  
models.



- 1) Engine O/H Kit**  
 › POK331 Std.  
 › POK332 0.50  
 › POK333 1.00

- 2) Basic Engine Kit**  
 › PBK331 Std.  
 › PBK332 0.50  
 › PBK333 1.00



- Piston & Ring Kit**  
 › P4115P011 Std.  
 › P4115P012 0.50  
 › P4115P013 1.00  
**3 Per Engine**



- Main Bearing Set**  
 › PU5MB0019 Std.  
 › PU5MB0019A 0.010  
 › PU5MB0019B 0.020  
 › PU5MB0019C 0.030  
**Set of 4 Pairs**



- Con Rod Bearing Set**  
 › PU5ME0018 Std.  
 › PU5ME0018A 0.010  
 › PU5ME0018B 0.020  
 › PU5ME0018C 0.030  
**Set of 3 Pairs**



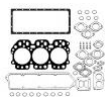
- Thrust Washer Set**  
 › P31137551/61 Std.  
 › P31137312/22 0.007  
**Set of 2 Pairs**

**Piston Kit:**

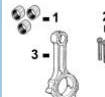
- 1) 1 x P3135M105 Piston Std, 1 x PUPRK0003 Ring Set Std.  
 2) 1 x P3135M106 Piston 0.50 mm, 1 x PUPRK0003B Ring Set 0.50 mm.  
 3) 1 x P3135M107 Piston 1.00 mm, 1 x PUPRK0003D Ring Set 1.00 mm.



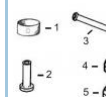
- 1) Front Seal**  
 › P2418F436  
**2) Rear Seal**  
 › P2418F704  
**3) Crankshaft Kit**  
 › P4181V017  
**4) Ring Gear**  
 › P0410236 115T  
 › P31162121 126T



- 1) Top Gasket Set**  
 › PU5LT0355  
**2) Bottom Gasket**  
 › PU5LB0380  
**3) Head Gasket**  
 › P3681E049  
**4) Valve Cover Gsk**  
 › P3681A057  
**5) Oil Pan Gasket**  
 › P3681K038



- 1) Bush, Con Rod**  
 › P3112A005 x3  
**2) Bolt, Con Rod**  
 › P3212V003 x6  
**3) Con Rod Kit**  
 › P4115C314



- 1) Bushing, Cam**  
 › P3112D071 x1  
**2) Tappet**  
 › P31434163  
**3) Push Rod**  
 › P31434307  
**4) Seal, Exh Valve**  
 › P2418M517 x3  
**5) Seal, Intk Valve**  
 › P2418M519 x3

- Valve Train Kit**  
 › PVTK307

- 1) Valve, Intake**  
 › P3142H071 x3  
**2) Valve, Exhaust**  
 › P3142A151 x3

- 3) Guide, Valve (Intake & Exhaust)**  
 › P3313A012 x6

- 4) Spring, Valve**  
 › P3174A016 x6

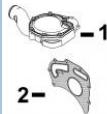
- 5) Lock, Valve**  
 › P3142W004 x12



- Oil Pump**  
 › P4132F071 (3) (1)  
 › P4132F072 (3) (1)



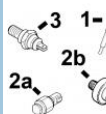
- 1) Lift Pump**  
 › P2641A203  
**2) Injector**  
 › P2645K016 (3)  
**3) Pre-Fuel Filter Assy**  
 › P130306380



- 1) Water Pump**  
 › PU5MW0197  
**2) Water Pump Gasket**  
 › P3682A011  
**3) Thermostat**  
 › P4133L503 (3)  
 › P4133L507 (3)  
 › P4133L508 (3)



- Repair Sleeve**  
 › 105RS  
**2) Head Bolts**  
 › P3218A011 x5  
 › P3218A012 x3



- 1) Glow Plug**  
 › P2666A016 x3  
**2) Oil Pressure Switch**  
 › 2a) P2848A071 (3)  
 › 2b) P2848062 (3)  
**3) Water Temp Sensor**  
 › P2848A123 (3)  
 › P2848A126 (3)  
 › P2848A129 (3)

(1): Not to be used on engines with balancer units.

(2): Grade J, Color Coded Green.

(3): Check with Build List.

**Engine Series:**  
1100

**Engine Model:**  
1103C - 33T (DD) / 1103C - 33TA (DE) / 1103B - 33T (DG) / 1103A - 33T (DK)

**Engine Desc:**  
Tier 2

**Engine Data:**  
TURBOCHARGED

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 4.133 in / 105.00 mm  
Stroke: 5.00 in / 127.00 mm  
Displacement: 201 in3 / 3.3 Lt

**Kz-Power**  
KZP-G50  
KZP-G66

**Mf Agricultural**  
420 - (DD38078)  
430 - (DD38311)  
3425S - (DD37992)  
3425F - (DD37992)  
3425GE - (DD37992)  
3425GEV - (DD37992)

**Godlike**  
GDP45\*S - Genset  
GDP60\*S - Genset



**1) Engine O/H Kit**

- › POK325 Std.
- › POK326 0.50
- › POK327 1.00

**2) Basic Engine Kit**

- › PBK325 Std.
- › PBK326 0.50
- › PBK327 1.00



**Piston & Ring Kit**

- › P4115P015 Std.
- › P4115P016 0.50
- › P4115P017 1.00

**3 Per Engine**



**Main Bearing Set**

- › PU5MB0019 Std.
- › PU5MB0019A 0.010
- › PU5MB0019B 0.020
- › PU5MB0019C 0.030

**Set of 4 Pairs**



**Con Rod Bearing Set**

- › PU5ME0018 Std.
- › PU5ME0018A 0.010
- › PU5ME0018B 0.020
- › PU5ME0018C 0.030

**Set of 3 Pairs**



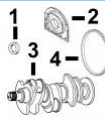
**Thrust Washer Set**

- › P31137551/61 Std.
- › P31137312/22 0.007

**Set of 2 Pairs**

**Piston Kit:**

- 1) 1 x P3135M111 Piston Std, 1 x PUPRK0002 Ring Set Std.
- 2) 1 x P3135M116 Piston 0.50 mm, 1 x PUPRK0002B Ring Set 0.50 mm.
- 3) 1 x P3135M117 Piston 1.00 mm, 1 x PUPRK0002D Ring Set 1.00 mm.



**1) Front Seal**

- › P2418F436

**2) Rear Seal**

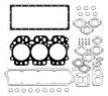
- › P2418F704

**3) Crankshaft Kit**

- › P4181V017

**4) Ring Gear**

- › P0410236 115T
- › P31162121 126T



**1) Top Gasket Set**

- › PU5LT0355

**2) Bottom Gasket**

- › PU5LB0379

**3) Head Gasket**

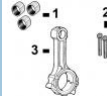
- › P3681E049

**4) Valve Cover Gsk**

- › P3681A057

**5) Oil Pan Gasket**

- › P3681K038



**1) Bush, Con Rod**

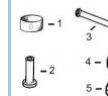
- › P3112A005 x3

**2) Bolt, Con Rod**

- › P3212V003 x6

**3) Con Rod Kit**

- › P4115C314



**1) Bushing, Cam**

- › P3112D071 x1

**2) Tappet**

- › P31434163

**3) Push Rod**

- › P31434307

**4) Seal, Exh Valve**

- › P2418M517 x3

**5) Seal, Intk Valve**

- › P2418M519 x3

**Valve Train Kit**

- › PVTK307

**1) Valve, Intake**

- › P3142H071 x3

**2) Valve, Exhaust**

- › P3142A151 x3

**3) Guide, Valve (Intake & Exhaust)**

- › P3313A012 x6

**4) Spring, Valve**

- › P3174A016 x6

**5) Lock, Valve**

- › P3142W004 x12



**Oil Pump**

- › P4132F071 3 1
- › P4132F072 3 1



**Lift Pump**

- › P2641A203 3



**1) Water Pump**

- › PU5MW0197

**2) Water Pump Gasket**

- › P3682A011

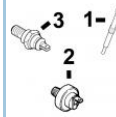


**Repair Sleeve**

- › 105RS

**2) Head Bolts**

- › P3218A011 x5
- › P3218A012 x3



**1) Glow Plug**

- › P2666A016 x3

**2) Oil Pressure Switch**

- › P2848062 4

**3) Water Temp Sensor**

- › P2848A123 4
- › P2848A126 4
- › P2848A129 4

(1): Not to be used on engines with balancer units.

(3): Do Not Used with Builds DE or DG.

(2): Grade J, Color Coded Green.

(4): Check for proper application.

PERKINS 1103C-33T (DD)

**Engine Series:**  
1100

**Engine Model:**  
1103C - 33T  
(DD)

**Engine Desc:**  
TURBOCHARGE

**Engine Data:**  
Tier 2

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 4.133 in / 105.00 mm  
Stroke: 5.00 in / 127.00 mm  
Displacement: 201 in3 / 3.3 Lt

**Godlike**  
GDP45\*S - Genset



- 1) Engine O/H Kit**
- › POK334 Std.
  - › POK335 0.50
  - › POK336 1.00

- 2) Basic Engine Kit**
- › PBK334 Std.
  - › PBK335 0.50
  - › PBK336 1.00



- Piston & Ring Kit**
- › P4115P015 Std.
  - › P4115P016 0.50
  - › P4115P017 1.00
- 3 Per Engine**



- Main Bearing Set**
- › PU5MB0019 Std.
  - › PU5MB0019A 0.010
  - › PU5MB0019B 0.020
  - › PU5MB0019C 0.030
- Set of 4 Pairs**



- Con Rod Bearing Set**
- › PU5ME0018 Std.
  - › PU5ME0018A 0.010
  - › PU5ME0018B 0.020
  - › PU5ME0018C 0.030
- Set of 3 Pairs**



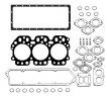
- Thrust Washer Set**
- › P31137551/61 Std.
  - › P31137312/22 0.007
- Set of 2 Pairs**

**Piston Kit:**

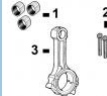
- 1) 1 x P3135M111 Piston Std, 1 x PUPRK0002 Ring Set Std.
- 2) 1 x P3135M116 Piston 0.50 mm, 1 x PUPRK0002B Ring Set 0.50 mm.
- 3) 1 x P3135M117 Piston 1.00 mm, 1 x PUPRK0002D Ring Set 1.00 mm.



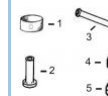
- 1) Front Seal**
- › P2418F436
- 2) Rear Seal**
- › P2418F704
- 3) Crankshaft Kit**
- › P4181V017
- 4) Ring Gear**
- › P0410236 115T
  - › P31162121 126T



- 1) Top Gasket Set**
- › PU5LT0355
- 2) Bottom Gasket**
- › PU5LB0380
- 3) Head Gasket**
- › P3681E049
- 4) Valve Cover Gsk**
- › P3681A057
- 5) Oil Pan Gasket**
- › P3681K038



- 1) Bush, Con Rod**
- › P3112A005 x3
- 2) Bolt, Con Rod**
- › P3212V003 x6
- 3) Con Rod Kit**
- › P4115C314



- 1) Bushing, Cam**
- › P3112D071 x1
- 2) Tappet**
- › P31434163
- 3) Push Rod**
- › P31434307
- 4) Seal, Exh Valve**
- › P2418M517 x3
- 5) Seal, Intk Valve**
- › P2418M519 x3

- Valve Train Kit**
- › PVTK307

- 1) Valve, Intake**
- › P3142H071 x3
- 2) Valve, Exhaust**
- › P3142A151 x3

- 3) Guide, Valve (Intake & Exhaust)**
- › P3313A012 x6

- 4) Spring, Valve**
- › P3174A016 x6

- 5) Lock, Valve**
- › P3142W004 x12



- Oil Pump**
- › P4132F071 (3) (1)
  - › P4132F072 (3) (1)



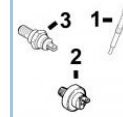
- 1) Lift Pump**
- › P2641A203
- 2) Pre-Fuel Filter Assy**
- › P130306380



- 1) Water Pump**
- › PU5MW0197
- 2) Water Pump Gasket**
- › P3682A011
- 3) Thermostat**
- › P4133L503 (3)
  - › P4133L507 (3)
  - › P4133L508 (3)



- Repair Sleeve**
- › 105RS
- 2) Head Bolts**
- › P3218A011 x5
  - › P3218A012 x3



- 1) Glow Plug**
- › P2666A016 x3
- 2) Oil Pressure Switch**
- › P2848062 (3)
- 3) Water Temp Sensor**
- › P2848A123 (3)
  - › P2848A126 (3)
  - › P2848A129 (3)

(1): Not to be used on engines with balancer units.  
(3): Check for proper application.

(2): Grade J, Color Coded Green.

**Engine Series:**  
1100

**Engine Model:**  
1103C - 33T  
(DD) / 1103A  
- 33T (DK)

**Engine Data:**  
TURBOCHARGED  
Tier 2

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 4.133 in /  
105.00 mm  
Stroke: 5.00 in  
/ 127.00 mm  
Displacement:  
201 in3/ 3.3 Lt

Please see  
page 431 for a  
complete list of  
equipment  
models.



**1) Engine O/H Kit**

- POK340 Std.
- POK341 0.50
- POK342 1.00

**2) Basic Engine Kit**

- PBK340 Std.
- PBK341 0.50
- PBK342 1.00



**Piston & Ring Kit**

- P4115P025 Std.
- P4115P026 0.50
- P4115P027 1.00

**3 Per Engine**



**Main Bearing Set**

- PU5MB0019 Std.
- PU5MB0019A 0.010
- PU5MB0019B 0.020
- PU5MB0019C 0.030

**Set of 4 Pairs**



**Con Rod Bearing Set**

- PU5ME0018 Std.
- PU5ME0018A 0.010
- PU5ME0018B 0.020
- PU5ME0018C 0.030

**Set of 3 Pairs**



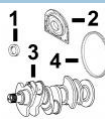
**Thrust Washer Set**

- P31137551/61 Std.
- P31137312/22 0.007

**Set of 2 Pairs**

**Piston Kit:**

- 1) 1 x P3135M121 Piston Std, 1 x PUPRK0002 Ring Set Std.
- 2) 1 x P3135M122 Piston 0.50 mm, 1 x PUPRK0002B Ring Set 0.50 mm.
- 3) 1 x P3135M123 Piston 1.00 mm, 1 x PUPRK0002D Ring Set 1.00 mm.



**1) Front Seal**

- P2418F436

**2) Rear Seal**

- P2418F704

**3) Crankshaft Kit**

- P4181V017

**4) Ring Gear**

- P0410236 115T
- P31162121 126T



**1) Top Gasket Set**

- PU5LT0355

**2) Bottom Gasket**

- PU5LB0379

**3) Head Gasket**

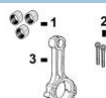
- P3681E049

**4) Valve Cover Gsk**

- P3681A057

**5) Oil Pan Gasket**

- P3681K038



**1) Bush, Con Rod**

- P3112A005 x3

**2) Bolt, Con Rod**

- P3212V003 x6

**3) Con Rod Kit**

- P4115C314



**1) Bushing, Cam**

- P3112D071 x1

**2) Tappet**

- P31434163

**3) Push Rod**

- P31434307

**4) Seal, Exh Valve**

- P2418M517 x3

**5) Seal, Intk Valve**

- P2418M519 x3

**Valve Train Kit**

- PVTK307

**1) Valve, Intake**

- P3142H071 x3

**2) Valve, Exhaust**

- P3142A151 x3

**3) Guide, Valve  
(Intake & Exhaust)**

- P3313A012 x6

**4) Spring, Valve**

- P3174A016 x6

**5) Lock, Valve**

- P3142W004 x12



**Oil Pump**

- P4132F071 (3) (1)
- P4132F072 (3) (1)

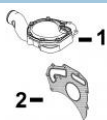


**1) Lift Pump**

- P2641A203

**2) Pre-Fuel Filter Assy**

- P130306380



**1) Water Pump**

- PU5MW0197

**2) Water Pump Gasket**

- P3682A011

**3) Thermostat**

- P4133L503 (3)
- P4133L507 (3)
- P4133L508 (3)

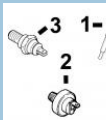


**Repair Sleeve**

- 105RS

**2) Head Bolts**

- P3218A011 x5
- P3218A012 x3



**1) Glow Plug**

- P2666A016 x3

**2) Oil Pressure Switch**

- P2848062 (3)

**3) Water Temp Sensor**

- P2848A123 (3)
- P2848A126 (3)
- P2848A129 (3)

(1): Not to be used on engines with balancer units.

(2): Grade J, Color Coded Green.

(3): Check for proper application.

**Engine Series:**

1100D

**Engine Model:**

1103D-33T (XL) / 1103D-33TA (XM)

**Engine Data:**

TURBOCHARGED Tier 3

**Engine Info:**

3 Cyl

**Engine Dimensions:**

Bore: 4.133 in / 105.00 mm  
Stroke: 5.00 in / 127.00 mm  
Displacement: 201 in<sup>3</sup> / 3.3 Lt



**1) Engine O/H Kit**

- POK343 Std.
- POK344 0.50
- POK345 1.00

**2) Basic Engine Kit**

- PBK343 Std.
- PBK344 0.50
- PBK345 1.00



**Piston & Ring Kit**

- PU5PR0064 Std.
- PU5PR0064B 0.50
- PU5PR0064D 1.00

**3 Per Engine**



**Main Bearing Set**

- PU5MB0019 Std.
- PU5MB0019A 0.010
- PU5MB0019B 0.020
- PU5MB0019C 0.030

**Set of 4 Pairs**



**Con Rod Bearing Set**

- PU5ME0018 Std.
- PU5ME0018A 0.010
- PU5ME0018B 0.020
- PU5ME0018C 0.030

**Set of 3 Pairs**



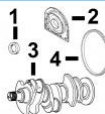
**Thrust Washer Set**

- P31137551/61 Std.
- P31137312/22 0.007

**Set of 2 Pairs**

**Piston Kit:**

- 1) 1 x P3135M171 Piston Std, 1 x PUPRK0005 Ring Set Std.
- 2) 1 x P3135M172 Piston 0.50 mm, 1 x PUPRK0005B Ring Set 0.50 mm.
- 3) 1 x P3135M173 Piston 1.00 mm, 1 x PUPRK0005D Ring Set 1.00 mm.



**1) Front Seal**

- P2418F436

**2) Rear Seal**

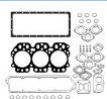
- P2418F704

**3) Crankshaft Kit**

- P4181V017

**4) Ring Gear**

- P0410236 115T



**1) Top Gasket Set**

- PU5LT0355

**2) Bottom Gasket**

- PU5LB0379

**3) Head Gasket**

- P3681E049

**4) Valve Cover Gsk**

- P3681A057

**5) Oil Pan Gasket**

- P3681K038



**1) Bush, Con Rod**

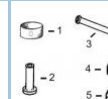
- P3112A005 x3

**2) Bolt, Con Rod**

- P3212V003 x6

**3) Con Rod Kit**

- P4115C314



**1) Bushing, Cam**

- P3112D071 x1

**2) Tappet**

- P3142U061

**3) Push Rod**

- P3142V011

**4) Seal, Exh Valve**

- P2418M517 x3

**5) Seal, Intk Valve**

- P2418M519 x3

**Valve Train Kit**

- PVTK310

**1) Valve, Intake**

- P3142H111 x3

**2) Valve, Exhaust**

- P3142A171 x3

**3) Guide, Valve (Intake & Exhaust)**

- P3313A012 x6

**4) Spring, Valve**

- P3174A031 x6

**5) Lock, Valve**

- P2714A002 x12



**Oil Pump**

- P4132F071
- P4132F072

3

1

3

1



**1) Water Pump**

- PU5MW0208

**2) Water Pump Gasket**

- P3682A011

**3) Thermostat**

- P4133L503

- P4133L507

- P4133L508



**Repair Sleeve**

- 105RS

**2) Head Bolts**

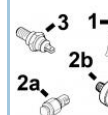
- P3218A011 x5

- P3218A012 x3

3

3

3



**1) Glow Plug**

- P2666A016 x3

**2) Oil Pressure Switch**

- 2a) P2848A071

- 2b) P2848062

**3) Water Temp Sensor**

- P2848A123

- P2848A126

3

3

3

3

3

(1): Not to be used on engines with balancer units.

(2): Grade J, Color Coded Green.

(3): Check for proper application.



**Engine Series:**  
1100D

**Engine Model:**  
1103D-33T (XL) / 1103D-33TA (XM)

**Engine Data:**  
TURBOCHARGED  
Tier 3

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 4.133 in / 105.00 mm  
Stroke: 5.00 in / 127.00 mm  
Displacement: 201 in<sup>3</sup> / 3.3 Lt



**1) Engine O/H Kit**

- POK346 Std.
- POK347 0.50
- POK348 1.00

**2) Basic Engine Kit**

- PBK346 Std.
- PBK347 0.50
- PBK348 1.00



**Piston & Ring Kit**

- PU5PR0064 Std.
- PU5PR0064B 0.50
- PU5PR0064D 1.00

**3 Per Engine**



**Main Bearing Set**

- PU5MB0019 Std.
- PU5MB0019A 0.010
- PU5MB0019B 0.020
- PU5MB0019C 0.030

**Set of 4 Pairs**



**Con Rod Bearing Set**

- PU5ME0018 Std.
- PU5ME0018A 0.010
- PU5ME0018B 0.020
- PU5ME0018C 0.030

**Set of 3 Pairs**



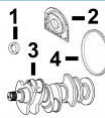
**Thrust Washer Set**

- P31137551/61 Std.
- P31137312/22 0.007

**Set of 2 Pairs**

**Piston Kit:**

- 1) 1 x P3135M171 Piston Std, 1 x PUPRK0005 Ring Set Std.
- 2) 1 x P3135M172 Piston 0.50 mm, 1 x PUPRK0005B Ring Set 0.50 mm.
- 3) 1 x P3135M173 Piston 1.00 mm, 1 x PUPRK0005D Ring Set 1.00 mm.



**1) Front Seal**

- P2418F436

**2) Rear Seal**

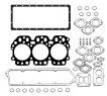
- P2418F704

**3) Crankshaft Kit**

- P4181V017

**4) Ring Gear**

- P0410236 115T



**1) Top Gasket Set**

- PU5LT0355

**2) Bottom Gasket**

- PU5LB0380

**3) Head Gasket**

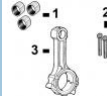
- P3681E049

**4) Valve Cover Gsk**

- P3681A057

**5) Oil Pan Gasket**

- P3681K038



**1) Bush, Con Rod**

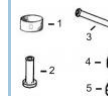
- P3112A005 x3

**2) Bolt, Con Rod**

- P3212V003 x6

**3) Con Rod Kit**

- P4115C314



**1) Bushing, Cam**

- P3112D071 x1

**2) Tappet**

- P3142U061

**3) Push Rod**

- P3142V011

**4) Seal, Exh Valve**

- P2418M517 x3

**5) Seal, Intk Valve**

- P2418M519 x3

**Valve Train Kit**

- PVTK310

**1) Valve, Intake**

- P3142H111 x3

**2) Valve, Exhaust**

- P3142A171 x3

**3) Guide, Valve (Intake & Exhaust)**

- P3313A012 x6

**4) Spring, Valve**

- P3174A031 x6

**5) Lock, Valve**

- P2714A002 x12



**Oil Pump**

- P4132F071
- P4132F072

3

1

3

1



**1) Water Pump**

- PU5MW0208

**2) Water Pump Gasket**

- P3682A011

**3) Thermostat**

- P4133L503

- P4133L507

- P4133L508



**Repair Sleeve**

- 105RS

**2) Head Bolts**

- P3218A011 x5

- P3218A012 x3

3

3

3



**1) Glow Plug**

- P2666A016 x3

**2) Oil Pressure Switch**

- 2a) P2848A071

- 2b) P2848062

**3) Water Temp Sensor**

- P2848A123

- P2848A126

3

3

3

3

(1): Not to be used on engines with balancer units.

(2): Grade J, Color Coded Green.

(3): Check for proper application.

**Engine Series:**  
1100

**Engine Model:**  
1104C-44 (RE)  
/ 1104C-E44 (RF) / 1104A-44 (RR)

**Engine Desc:**  
Tier 2

**Engine Data:**  
NATURALLY  
ASPIRATED

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.133 in /  
105.00 mm  
Stroke: 5.00 in /  
127.00 mm  
Displacement:  
269 in3 / 4.4 Lt

Industrial  
Backhoe  
Loader -  
(RE38238)  
Genset -  
(RE51215)

**Gehl**  
7610 - Skid  
Steer  
7710 - Skid  
Steer

**Noble (Liftking)**  
RC60 - Forklift  
RT50 - Forklift  
RT60 - Forklift  
RT80 - Forklift

**Asv-Posi-Track**  
RC-85 Comp  
Track Loader

**Hyster**  
H80-155 TIER  
2

**Marine-Power-  
Systems**  
4.4GM



**1) Engine O/H Kit**

- › POK412 Std.
- › POK413 0.50
- › POK414 1.00

**2) Basic Engine Kit**

- › PBK412 Std.
- › PBK413 0.50
- › PBK414 1.00



**Piston & Ring Kit**

- › P4115P011 Std.
- › P4115P012 0.50
- › P4115P013 1.00

**4 Per Engine**



**Main Bearing Set**

- › PU5MB0018 Std.
- › PU5MB0018A 0.010
- › PU5MB0018B 0.020
- › PU5MB0018C 0.030

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › PU5ME0013 Std. **5**
- › PU5ME0013A 0.010 **5**
- › PU5ME0013B 0.020 **5**
- › PU5ME0013C 0.030 **5**

**Set of 4 Pairs**



**Thrust Washer Set**

- › P31137551/61 Std.
- › P31137312/22 0.007

**Set of 2 Pairs**

**Piston Kit:**

- 1) 1 x P3135M105 Piston Std, 1 x PUPRK0003 Ring Set Std.
- 2) 1 x P3135M106 Piston 0.50 mm, 1 x PUPRK0003B Ring Set 0.50 mm.
- 3) 1 x P3135M107 Piston 1.00 mm, 1 x PUPRK0003D Ring Set 1.00 mm.



**1) Front Seal**

- › P2418F436

**2) Rear Seal**

- › P2418F704

**3) Crankshaft Kit**

- › PZZ90239
- › PZZ90237

**4) Ring Gear**

- › P0410236 **115T**
- › P31162121 **126T**



**1) Top Gasket Set**

- › PU5LT0357

**2) Bottom Gasket**

- › PU5LB0382

**3) Head Gasket**

- › P3681E051

**4) Valve Cover Gsk**

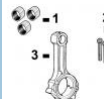
- › P3681A055

**5) Timing Cover Gsk**

- › P3681P046

**6) Oil Pan Gasket**

- › P3681K037



**1) Bush, Con Rod**

- › P3112A005 x4

**2) Bolt, Con Rod**

- › P3212V003 x8

**3) Con Rod Kit**

- › P4115C314



**1) Bushing, Cam**

- › P3112D071 x1

**2) Camshaft**

- › P3141D211

**3) Tappet**

- › P31434163

**4) Pushrod**

- › P31434307

**5) Seal, Exh Valve**

- › P2418M517 x4

**6) Seal, Intk Valve**

- › P2418M519 x4

**Valve Train Kit**

- › PVTK425

**1) Valve, Intake**

- › P3142H071 x4

**2) Valve, Exhaust**

- › P3142A151 x4

**3) Guide, Valve (Intake & Exhaust)**

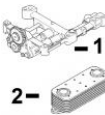
- › P3313A012 x8

**4) Spring, Valve**

- › P3174A016 x8

**5) Lock, Valve**

- › P3142W004 x16



**1) Oil Pump**

- › P4132F071

**2) Oil Cooler**

- › P2486A215 5 plate



**1) Lift Pump**

- › P2641A203
- › PULPK0041

**2) Injector**

- › P2645K016

**3) Pre-Fuel Filter Assy**

- › P130306380

**4) Piston Cooling Nozzle**

- › P2113A003



**1) Water Pump**

- › PU5MW0206

**2) Water Pump Gasket**

- › P3682A011

**3) Thermostat**

- › P4133L503

- › P4133L507

- › P4133L508



**Repair Sleeve**

- › 105RS

**2) Head Bolts**

- › P3218A011 x7

- › P3218A012 x3



**1) Glowplug**

- › P2666A016 x4
- › P2666A017 x4

**2) Oil Pressure Sensor**

- › P2874A007

**3) Oil Pressure Switch**

- › 3a) P2848A071

- › 3b) P2848062

**4) Temp Sensor**

- › P2874A018

**5) Water Temp Sensor**

- › P2848A123

- › P2848A126

- › P2848A129

(1): Not to be used on engines with balancer units.

(3): Do Not Used with Build RF.

(5): Check your connecting rod journal outside diameter for the proper connecting rod bearings.

(7): Check for proper application.

(9): 68mm rod journal, non-splined nose

(2): Grade J, Color Coded Green. To ESN U491476T.

(4): Bottom gasket contains: P3681P046 Timing Cover Gasket and P3681K037 Oil Pan Gasket.

(6): RE Build Only.

(8): 63.5mm rod journal, splined nose

**Engine Series:**  
1100

**Engine Model:**  
1104C-44 (RE)  
/ 1104C-E44 (RF) / 1104A-44 (RR)

**Engine Data:**  
NATURALLY  
ASPIRATED  
Tier 2

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.133  
in / 105.00  
mm Stroke:  
5.00 in /  
127.00 mm  
Displacement:  
269 in3/ 4.4 Lt

(RE38396) -  
Tractors  
(RE38082) -  
Industrial  
(RE38108) -  
Industrial  
**Noble (Liftking)**  
RC60 - Forklift  
RT50 - Forklift  
RT60 - Forklift  
RT80 - Forklift

**Gehl**  
7610 - Skid  
Steer  
7710 - Skid  
Steer

**Asv Posi-Track**  
RC-85 - Comp  
Track Loader

**Marine-Power-  
Systems**  
4.4GM



- 1) Engine O/H Kit**
- › POK415 Std.
  - › POK416 0.50
  - › POK417 1.00
- 2) Basic Engine Kit**
- › PBK415 Std.
  - › PBK416 0.50
  - › PBK417 1.00



- Piston & Ring Kit**
- › P4115P011 Std.
  - › P4115P012 0.50
  - › P4115P013 1.00
- 4 Per Engine**



- Main Bearing Set**
- › PU5MB0018 Std.
  - › PU5MB0018A 0.010
  - › PU5MB0018B 0.020
  - › PU5MB0018C 0.030
- Set of 5 Pairs**



- Con Rod Bearing Set**
- › PU5ME0013 Std. **5**
  - › PU5ME0013A 0.010 **5**
  - › PU5ME0013B 0.020 **5**
  - › PU5ME0013C 0.030 **5**
- Set of 4 Pairs**



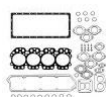
- Thrust Washer Set**
- › P31137551/61 Std.
  - › P31137312/22 0.007
- Set of 2 Pairs**

**Piston Kit:**

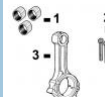
- 1) 1 x P3135M105 Piston Std, 1 x PUPRK0003 Ring Set Std.
- 2) 1 x P3135M106 Piston 0.50 mm, 1 x PUPRK0003B Ring Set 0.50 mm.
- 3) 1 x P3135M107 Piston 1.00 mm, 1 x PUPRK0003D Ring Set 1.00 mm.



- 1) Front Seal**
- › P2418F436
- 2) Rear Seal**
- › P2418F704
- 3) Crankshaft Kit**
- › PZZ90239
  - › PZZ90237
- 4) Ring Gear**
- › P0410236 <sup>115T</sup>
  - › P31162121 <sup>126T</sup>



- 1) Top Gasket Set**
- › PU5LT0357
- 2) Bottom Gasket**
- › PU5LB0384
- 3) Head Gasket**
- › P3681E051
- 4) Valve Cover Gsk**
- › P3681A055
- 5) Timing Cover Gsk**
- › P3681P047
- 6) Oil Pan Gasket**
- › P3681K036



- 1) Bush, Con Rod**
- › P3112A005 x4
- 2) Bolt, Con Rod**
- › P3212V003 x8
- 3) Con Rod Kit**
- › P4115C314



- 1) Bushing, Cam**
- › P3112D071 x1
- 2) Camshaft**
- › P3141D211
- 3) Tappet**
- › P31434163
- 4) Pushrod**
- › P31434307
- 5) Seal, Exh Valve**
- › P2418M517 x4
- 6) Seal, Intk Valve**
- › P2418M519 x4

**Valve Train Kit**

- › PVTK425

**1) Valve, Intake**

- › P3142H071 x4
- 2) Valve, Exhaust**
- › P3142A151 x4

**3) Guide, Valve (Intake & Exhaust)**

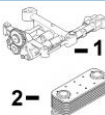
- › P3313A012 x8

**4) Spring, Valve**

- › P3174A016 x8

**5) Lock, Valve**

- › P3142W004 x16



- 1) Oil Pump**
- › P4132F071
- 2) Oil Cooler**
- › P2486A215 <sup>5 plate</sup>



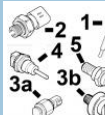
- 1) Lift Pump**
- › P2641A203
- 2) Lift Pump**
- › PULPK0041
- 3) Injector**
- › P2645K016
- 4) Piston Cooling Nozzle**
- › P2113A003
- 5) Pre-Fuel Filter Assy**
- › P130306380



- 1) Water Pump**
- › PU5MW0206
- 2) Water Pump Gasket**
- › P3682A011
- 3) Thermostat**
- › P4133L503
  - › P4133L507
  - › P4133L508



- Repair Sleeve**
- › 105RS
- 2) Head Bolts**
- › P3218A011 x7
  - › P3218A012 x3



- 1) Glowplug**
- › P2666A016 x4
  - › P2666A017 x4
- 2) Oil Pressure Sensor**
- › P2874A007
- 3) Oil Pressure Switch**
- › 3a) P2848A071
  - › 3b) P2848062
- 4) Temp Sensor**
- › P2874A018
- 5) Water Temp Sensor**
- › P2848A123
  - › P2848A126
  - › P2848A129

(1): Not to be used on engines with balancer units.

(3): Do Not Used with Builds RF.

(5): Check your connecting rod journal outside diameter for the proper connecting rod bearings.

(7): 63.5mm rod journal, splined nose

(2): Grade J, Color Coded Green.

(4): Bottom gasket contains: P3681P047 Timing Cover Gasket and P3681K036 Oil Pan Gasket.

(6): Check for proper application.

(8): 68mm rod journal, non-splined nose

**Engine Series:**  
1100

**Engine Model:**  
1104C-44 (RE)  
/ 1104C-E44  
(RF) / 1104A-  
44 (RR)

**Engine Data:**  
NATURALLY  
ASPIRATED  
Tier 2

**Engine Info:**  
4 Cyl

**Engine  
Dimensions:**

Bore: 4.133  
in / 105.00  
mm Stroke:  
5.00 in /  
127.00 mm  
Displacement:  
269 in3/ 4.4 Lt

Please see  
page 432 for a  
complete list of  
equipment  
models.



**1) Engine O/H Kit**

- › POK480 Std.
- › POK481 0.50
- › POK482 1.00

**2) Basic Engine Kit**

- › PBK480 Std.
- › PBK481 0.50
- › PBK482 1.00



**Piston & Ring Kit**

- › P4115P011 Std.
- › P4115P012 0.50
- › P4115P013 1.00

**4 Per Engine**



**Main Bearing Set**

- › PU5MB0018 Std.
- › PU5MB0018A 0.010
- › PU5MB0018B 0.020
- › PU5MB0018C 0.030

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › PU5ME0013 Std. **5**
- › PU5ME0013A 0.010 **5**
- › PU5ME0013B 0.020 **5**
- › PU5ME0013C 0.030 **5**

**Set of 4 Pairs**



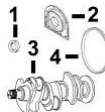
**Thrust Washer Set**

- › P31137551/61 Std.
- › P31137312/22 0.007

**Set of 2 Pairs**

**Piston Kit:**

- 1) 1 x P3135M105 Piston Std, 1 x PUPRK0003 Ring Set Std.
- 2) 1 x P3135M106 Piston 0.50 mm, 1 x PUPRK0003B Ring Set 0.50 mm.
- 3) 1 x P3135M107 Piston 1.00 mm, 1 x PUPRK0003D Ring Set 1.00 mm.



**1) Front Seal**

- › P2418F436

**2) Rear Seal**

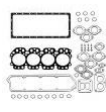
- › P2418F704

**3) Crankshaft Kit**

- › PZZ90239
- › PZZ90237

**4) Ring Gear**

- › P0410236 115T
- › P31162121 126T



**1) Top Gasket Set**

- › PU5LT0357

**2) Bottom Gasket**

- › PU5LB0383

**3) Head Gasket**

- › P3681E051

**4) Valve Cover Gsk**

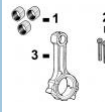
- › P3681A055

**5) Timing Cover Gsk**

- › P3681P046

**6) Oil Pan Gasket**

- › P3681K036



**1) Bush, Con Rod**

- › P3112A005 x4

**2) Bolt, Con Rod**

- › P3212V003 x8

**3) Con Rod Kit**

- › P4115C314



**1) Bushing, Cam**

- › P3112D071 x1

**2) Camshaft**

- › P3141D211

**3) Tappet**

- › P31434163

**4) Pushrod**

- › P31434307

**5) Seal, Exh Valve**

- › P2418M517 x4

**6) Seal, Intk Valve**

- › P2418M519 x4

**Valve Train Kit**

- › PVTK425

**1) Valve, Intake**

- › P3142H071 x4

**2) Valve, Exhaust**

- › P3142A151 x4

**3) Guide, Valve  
(Intake & Exhaust)**

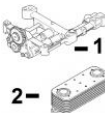
- › P3313A012 x8

**4) Spring, Valve**

- › P3174A016 x8

**5) Lock, Valve**

- › P3142W004 x16



**1) Oil Pump**

- › P4132F071

**2) Oil Cooler**

- › P2486A215 5 plate



**1) Lift Pump**

- › P2641A203

**2) Lift Pump**

- › PULPK0041

**3) Injector**

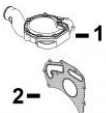
- › P2645K016

**4) Piston Cooling Nozzle**

- › P2113A003

**5) Pre-Fuel Filter Assy**

- › P130306380



**1) Water Pump**

- › PU5MW0206

**2) Water Pump Gasket**

- › P3682A011

**3) Thermostat**

- › P4133L503

- › P4133L507

- › P4133L508



**Repair Sleeve**

- › 105RS

**2) Head Bolts**

- › P3218A011 x7

- › P3218A012 x3



**1) Glowplug**

- › P2666A016 x4

**2) Oil Pressure Sensor**

- › P2666A017 x4

**3) Oil Pressure Switch**

- › P2874A007

**3a) P2848A071**

- › P2848A071

**3b) P2848062**

- › P2848062

**4) Temp Sensor**

- › P2874A018

**5) Water Temp Sensor**

- › P2848A123

- › P2848A126

- › P2848A129

(1): Not to be used on engines with balancer units.

(3): Do Not Used with Builds RF.

(5): Check your connecting rod journal outside diameter for the proper connecting rod bearings.

(7): Check for proper application.

(9): 68mm rod journal, non-splined nose

(2): Grade J, Color Coded Green.

(4): Bottom gasket contains: P3681P046 Timing Cover Gasket and P3681K036 Oil Pan Gasket.

(6): RE Build Only.

(8): 63.5mm rod journal, splined nose

**Engine Series:**  
1100

**Engine Model:**  
1104C-44 (RE)  
/ 1104C-E44 (RF) / 1104A-44 (RR)

**Engine Desc:**  
Build Number  
RE38172

**Engine Data:**  
NATURALLY  
ASPIRATED  
Tier 2

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.133 in / 105.00 mm  
Stroke: 5.00 in / 127.00 mm  
Displacement: 269 in3 / 4.4 Lt

**Gehl Mfg**  
(RE37911) - Skid Steer Loader  
7610 - Skid Steer  
7710 - Skid Steer

**Hyster-Forklifts**  
(RE38037)  
(RE38038)

**Noble (Liftking)**  
RC60 LoPro - Forklift  
RT50 - Forklift  
RT60 - Forklift  
RT80 - Forklift

**Asv-Posi-Track**  
RC-85 - Comp Track Loader

**Marine-Power-Systems**  
4.4GM



- 1) Engine O/H Kit**
- POK483 Std.
  - POK484 0.50
  - POK485 1.00
- 2) Basic Engine Kit**
- PBK483 Std.
  - PBK484 0.50
  - PBK485 1.00



- Piston & Ring Kit**
- P4115P011 Std.
  - P4115P012 0.50
  - P4115P013 1.00
- 4 Per Engine**



- Main Bearing Set**
- PU5MB0018 Std.
  - PU5MB0018A 0.010
  - PU5MB0018B 0.020
  - PU5MB0018C 0.030
- Set of 5 Pairs**



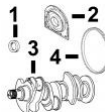
- Con Rod Bearing Set**
- PU5ME0013 Std. **5**
  - PU5ME0013A 0.010 **5**
  - PU5ME0013B 0.020 **5**
  - PU5ME0013C 0.030 **5**
- Set of 4 Pairs**



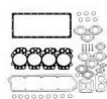
- Thrust Washer Set**
- P31137551/61 Std.
  - P31137312/22 0.007
- Set of 2 Pairs**

**Piston Kit:**

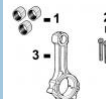
- 1) 1 x P3135M105 Piston Std, 1 x PUPRK0003 Ring Set Std.
- 2) 1 x P3135M106 Piston 0.50 mm, 1 x PUPRK0003B Ring Set 0.50 mm.
- 3) 1 x P3135M107 Piston 1.00 mm, 1 x PUPRK0003D Ring Set 1.00 mm.



- 1) Front Seal**
- P2418F436
- 2) Rear Seal**
- P2418F704
- 3) Crankshaft Kit**
- PZZ90239
  - PZZ90237
- 4) Ring Gear**
- P0410236 115T
  - P31162121 126T



- 1) Top Gasket Set**
- PU5LT0357
- 2) Bottom Gasket**
- PU5LB0381
- 3) Head Gasket**
- P3681E051
- 4) Valve Cover Gsk**
- P3681A055
- 5) Timing Cover Gsk**
- P3681P047
- 6) Oil Pan Gasket**
- P3681K037



- 1) Bush, Con Rod**
- P3112A005 x4
- 2) Bolt, Con Rod**
- P3212V003 x8
- 3) Con Rod Kit**
- P4115C314



- 1) Bushing, Cam**
- P3112D071 x1
- 2) Camshaft**
- P3141D211
- 3) Tappet**
- P31434163
- 4) Pushrod**
- P31434307
- 5) Seal, Exh Valve**
- P2418M517 x4
- 6) Seal, Intk Valve**
- P2418M519 x4

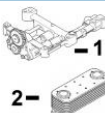
- Valve Train Kit**
- PVTK425

- 1) Valve, Intake**
- P3142H071 x4
- 2) Valve, Exhaust**
- P3142A151 x4

- 3) Guide, Valve (Intake & Exhaust)**
- 3) P3313A012 x8

- 4) Spring, Valve**
- P3174A016 x8

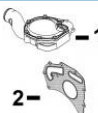
- 5) Lock, Valve**
- P3142W004 x16



- 1) Oil Pump**
- P4132F071
- 2) Oil Cooler**
- P2486A215 5 plate



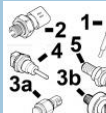
- 1) Lift Pump**
- P2641A203
- 2) Lift Pump**
- PULPK0041
- 3) Injector**
- P2645K016
- 4) Piston Cooling Nozzle**
- P2113A003
- 5) Pre-Fuel Filter Assy**
- P130306380



- 1) Water Pump**
- PU5MW0206
- 2) Water Pump Gasket**
- P3682A011
- 3) Thermostat**
- P4133L503
  - P4133L507
  - P4133L508



- Repair Sleeve**
- 105RS
- 2) Head Bolts**
- P3218A011 x7
  - P3218A012 x3



- 1) Glowplug**
- P2666A016 x4
  - P2666A017 x4
- 2) Oil Pressure Sensor**
- P2874A007
- 3) Oil Pressure Switch**
- 3a) P2848A071
  - 3b) P2848062
- 4) Temp Sensor**
- P2874A018
- 5) Water Temp Sensor**
- P2848A123
  - P2848A126
  - P2848A129

(1): Not to be used on engines with balancer units.

(3): Do Not Used with Builds RF.

(5): Check your connecting rod journal outside diameter for the proper connecting rod bearings.

(7): Check for proper application.

(9): 68mm rod journal, non-splined nose

(2): Grade J, Color Coded Green.

(4): Bottom gasket contains: P3681P047 Timing Cover Gasket and P3681K037 Oil Pan Gasket.

(6): RE Build Only.

(8): 63.5mm rod journal, splined nose

PERKINS 1104C-44T (RG), (RH), (RK), (RS), (RT) BUILDS

**Engine Series:**  
1100

**Engine Model:**  
1104C-44T (RG) / 1104C-E44T (RH) / 1104C-E44TA (RK) / 1104A-44T (RS) / 1104A-44TA (RT)

**Engine Desc:**  
Tier 2

**Engine Data:**  
TURBOCHARGED

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.133 in / 105.00 mm  
Stroke: 5.00 in / 127.00 mm  
Displacement: 269 in3 / 4.4 Lt

Please see page 433 for a complete list of equipment models.



- 1) **Engine O/H Kit**
- POK418 Std.
  - POK419 0.50
  - POK420 1.00
- 2) **Basic Engine Kit**
- PBK418 Std.
  - PBK419 0.50
  - PBK420 1.00



- Piston & Ring Kit**
- P4115P015 Std.
  - P4115P016 0.50
  - P4115P017 1.00
- 4 Per Engine**



- Main Bearing Set**
- PU5MB0018 Std.
  - PU5MB0018A 0.010
  - PU5MB0018B 0.020
  - PU5MB0018C 0.030
- Set of 5 Pairs**



- Con Rod Bearing Set**
- PU5ME0013 Std. **5**
  - PU5ME0013A 0.010 **5**
  - PU5ME0013B 0.020 **5**
  - PU5ME0013C 0.030 **5**
- Set of 4 Pairs**



- Thrust Washer Set**
- P31137551/61 Std.
  - P31137312/22 0.007
- Set of 2 Pairs**

**Piston Kit:**

- 1) 1 x P3135M111 Piston Std, 1 x PUPRK0002 Ring Set Std.  
2) 1 x P3135M116 Piston 0.50 mm, 1 x PUPRK0002B Ring Set 0.50 mm.  
3) 1 x P3135M117 Piston 1.00 mm, 1 x PUPRK0002D Ring Set 1.00 mm.



- 1) **Front Seal**
- P2418F436
- 2) **Rear Seal**
- P2418F704
- 3) **Crankshaft Kit**
- PZZ90239
  - PZZ90237
- 4) **Ring Gear**
- P0410236 115T
  - P31162121 126T



- 1) **Top Gasket Set**
- PU5LT0357
- 2) **Bottom Gasket**
- PU5LB0382
- 3) **Head Gasket**
- P3681E051
- 4) **Valve Cover Gsk**
- P3681A055
- 5) **Timing Cover Gsk**
- P3681P046
- 6) **Oil Pan Gasket**
- P3681K037



- 1) **Bush, Con Rod**
- P3112A005 x4
- 2) **Bolt, Con Rod**
- PU5LB0382
- 3) **Con Rod Kit**
- P4115C314



- 1) **Bushing, Cam**
- P3112D071 x1
- 2) **Camshaft**
- P3141D211
- 3) **Tappet**
- P31434163
- 4) **Pushrod**
- P31434307
- 5) **Seal, Exh Valve**
- P2418M517 x4
- 6) **Seal, Intk Valve**
- P2418M519 x4

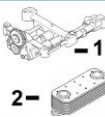
- Valve Train Kit**
- PVTK425

- 1) **Valve, Intake**
- P3142H071 x4
- 2) **Valve, Exhaust**
- P3142A151 x4

- 3) **Guide, Valve (Intake & Exhaust)**
- P3313A012 x8

- 4) **Spring, Valve**
- P3174A016 x8

- 5) **Lock, Valve**
- P3142W004 x16



- 1) **Oil Pump**
- P4132F071
- 2) **Oil Cooler**
- P2486A217



- 1) **Lift Pump**
- P2641A203
- 2) **Lift Pump**
- PULPK0041
- 3) **Injector**
- P2645K011
  - P2645K012
- 4) **Piston Cooling Nozzle**
- P3861A027
- 5) **Pre-Fuel Filter Assy**
- P130306380



- 1) **Water Pump**
- PU5MW0206
- 2) **Water Pump Gasket**
- P3682A011
- 3) **Thermostat**
- P4133L503
  - P4133L507
  - P4133L508



- 1) **Repair Sleeve**
- 105RS
- 2) **Turbocharger**
- P2674A200
  - P2674A201
  - P2674A226
- 3) **Cylinder Head**
- PZZ80267UF
- 4) **Head Bolts**
- P3218A011 x7
  - P3218A012 x3



- 1) **Glowplug**
- P2666A016 x4
  - P2666A017 x4
- 2) **Oil Pressure Sensor**
- P2874A007
- 3) **Oil Pressure Switch**
- 3a) P2848A071
  - 3b) P2848062
- 4) **Temp Sensor**
- P2874A018
- 5) **Water Temp Sensor**
- P2848A123
  - P2848A126
  - P2848A129

(1): Not to be used on engines with balancer units.

(3): Do Not Used with Builds RH or RK or RT.

(5): Check your connecting rod journal outside diameter for the proper connecting rod bearings.

(7): 63.5mm rod journal, splined nose

(2): Grade J, Color Coded Green.

(4): Bottom gasket contains: P3681P046 Timing Cover Gasket and P3681K037 Oil Pan Gasket.

(6): Check for proper application.

(8): 68mm rod journal, non-splined nose

**Engine Series:**  
1100

**Engine Model:**  
1104C-44T (RG) / 1104C-44TA (RJ) / 1104C-E44TA (RK)

**Engine Desc:**  
Tier 2

**Engine Data:**  
TURBOCHARGED

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.133 in / 105.00 mm  
Stroke: 5.00 in / 127.00 mm  
Displacement: 269 in3 / 4.4 Lt

Please see page 434 for a complete list of equipment models.



- 1) **Engine O/H Kit**
- › POK421 Std.
  - › POK422 0.50
  - › POK423 1.00
- 2) **Basic Engine Kit**
- › PBK421 Std.
  - › PBK422 0.50
  - › PBK423 1.00



- Piston & Ring Kit**
- › P4115P015 Std.
  - › P4115P016 0.50
  - › P4115P017 1.00
- 4 Per Engine**



- Main Bearing Set**
- › PU5MB0018 Std.
  - › PU5MB0018A 0.010
  - › PU5MB0018B 0.020
  - › PU5MB0018C 0.030
- Set of 5 Pairs**



- Con Rod Bearing Set**
- › PU5ME0013 Std. 5
  - › PU5ME0013A 0.010 5
  - › PU5ME0013B 0.020 5
  - › PU5ME0013C 0.030 5
- Set of 4 Pairs**



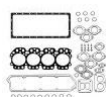
- Thrust Washer Set**
- › P31137551/61 Std.
  - › P31137312/22 0.007
- Set of 2 Pairs**

**Piston Kit:**

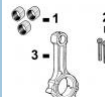
- 1) 1 x P3135M111 Piston Std, 1 x PUPRK0002 Ring Set Std.
- 2) 1 x P3135M116 Piston 0.50 mm, 1 x PUPRK0002B Ring Set 0.50 mm.
- 3) 1 x P3135M117 Piston 1.00 mm, 1 x PUPRK0002D Ring Set 1.00 mm.



- 1) **Front Seal**
- › P2418F436
- 2) **Rear Seal**
- › P2418F704
- 3) **Crankshaft Kit**
- › PZZ90239
  - › PZZ90237
- 4) **Ring Gear**
- › P0410236 115T
  - › P31162121 126T



- 1) **Top Gasket Set**
- › PU5LT0357
- 2) **Bottom Gasket**
- › PU5LB0384
- 3) **Head Gasket**
- › P3681E051
- 4) **Valve Cover Gsk**
- › P3681A055
- 5) **Timing Cover Gsk**
- › P3681P047
- 6) **Oil Pan Gasket**
- › P3681K036

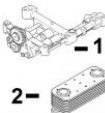


- 1) **Bush, Con Rod**
- › P3112A005 x4
- 2) **Bolt, Con Rod**
- › P3212V003 x8
- 3) **Con Rod Kit**
- › P4115C314



- 1) **Bushing, Cam**
- › P3112D071 x1
- 2) **Camshaft**
- › P3141D211
- 3) **Tappet**
- › P31434163
- 4) **Pushrod**
- › P31434307
- 5) **Seal, Exh Valve**
- › P2418M517 x4
- 6) **Seal, Intk Valve**
- › P2418M519 x4

- Valve Train Kit**
- › PVTK425



- 1) **Oil Pump**
- › P4132F071
- 2) **Oil Cooler Plate**
- › P2486A217

- 1) **Valve, Intake**
- › P3142H071 x4
- 2) **Valve, Exhaust**
- › P3142A151 x4



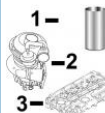
- 1) **Lift Pump**
- › P2641A203
- 2) **Lift Pump**
- › PULPK0041
- 3) **Injector**
- › P2645K011
  - › P2645K012
- 4) **Piston Cooling Nozzle**
- › P3861A027
- 5) **Pre-Fuel Filter Assy**
- › P130306380

- 3) **Guide, Valve (Intake & Exhaust)**
- › P3313A012 x8



- 1) **Water Pump**
- › PU5MW0206
- 2) **Water Pump Gasket**
- › P3682A011
- 3) **Thermostat**
- › P4133L503
  - › P4133L507
  - › P4133L508

- 4) **Spring, Valve**
- › P3174A016 x8



- 1) **Repair Sleeve**
- › 105RS
- 2) **Turbocharger**
- › P2674A200
  - › P2674A201
  - › P2674A202
  - › P2674A226
- 3) **Cylinder Head**
- › PZZ80267UF
- 4) **Head Bolts**
- › P3218A011 x7
  - › P3218A012 x3

- 5) **Lock, Valve**
- › P3142W004 x16



- 1) **Glowplug**
- › P2666A016 x4
  - › P2666A017 x4
- 2) **Oil Pressure Switch**
- › 2a) P2848A071
  - › 2b) P2848062
- 3) **Temp Sensor**
- › P2874A018
- 4) **Water Temp Sensor**
- › P2848A123
  - › P2848A126
  - › P2848A129

(1): Not to be used on engines with balancer units.

(3): Do Not Used with Builds RK.

(5): Check your connecting rod journal outside diameter for the proper connecting rod bearings.

(7): 63.5mm rod journal, splined nose

(2): Grade J, Color Coded Green.

(4): Bottom gasket contains: P3681P047 Timing Cover Gasket and P3681K036 Oil Pan Gasket.

(6): Check for proper application.

(8): 68mm rod journal, non-splined nose

**Engine Series:**  
1100

**Engine Model:**  
1104C-44T  
(RG) / 1104C-  
E44T (RH)

**Engine Data:**  
TURBOCHARGED  
Tier 2

**Engine Info:**  
4 Cyl

**Engine Dimensions:**

Bore: 4.133  
in / 105.00  
mm Stroke:  
5.00 in /  
127.00 mm  
Displacement:  
269 in<sup>3</sup>/ 4.4 Lt

Please see  
page 435 for a  
complete list of  
equipment  
models.



- 1) **Engine O/H Kit**  
 › POK486 Std.  
 › POK487 0.50  
 › POK488 1.00  
 2) **Basic Engine Kit**  
 › PBK486 Std.  
 › PBK487 0.50  
 › PBK488 1.00



- Piston & Ring Kit**  
 › P4115P015 Std.  
 › P4115P016 0.50  
 › P4115P017 1.00  
**4 Per Engine**



- Main Bearing Set**  
 › PU5MB0018 Std.  
 › PU5MB0018A 0.010  
 › PU5MB0018B 0.020  
 › PU5MB0018C 0.030  
**Set of 5 Pairs**



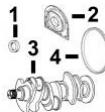
- Con Rod Bearing Set**  
 › PU5ME0013 Std. **5**  
 › PU5ME0013A 0.010 **5**  
 › PU5ME0013B 0.020 **5**  
 › PU5ME0013C 0.030 **5**  
**Set of 4 Pairs**



- Thrust Washer Set**  
 › P31137551/61 Std.  
 › P31137312/22 0.007  
**Set of 2 Pairs**

**Piston Kit:**

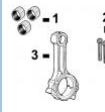
- 1) 1 x P3135M111 Piston Std, 1 x PUPRK0002 Ring Set Std.  
 2) 1 x P3135M116 Piston 0.50 mm, 1 x PUPRK0002B Ring Set 0.50 mm.  
 3) 1 x P3135M117 Piston 1.00 mm, 1 x PUPRK0002D Ring Set 1.00 mm.



- 1) **Front Seal**  
 › P2418F436  
 2) **Rear Seal**  
 › P2418F704  
 3) **Crankshaft Kit**  
 › PZZ90239  
 › PZZ90237  
 4) **Ring Gear**  
 › P0410236 115T  
 › P31162121 126T



- 1) **Top Gasket Set**  
 › PU5LT0357  
 2) **Bottom Gasket**  
 › PU5LB0383  
 3) **Head Gasket**  
 › P3681E051  
 4) **Valve Cover Gsk**  
 › P3681A055  
 5) **Timing Cover Gsk**  
 › P3681P046  
 6) **Oil Pan Gasket**  
 › P3681K036



- 1) **Bush, Con Rod**  
 › P3112A005 x4  
 2) **Bolt, Con Rod**  
 › P3212V003 x8  
 › PT400001 x8  
 3) **Connecting Rod**  
 › P4115C314  
 › P4115C364



- 1) **Bushing, Cam**  
 › P3112D071 x1  
 2) **Camshaft**  
 › P3141D211  
 3) **Tappet**  
 › P31434163  
 4) **Pushrod**  
 › P31434307  
 5) **Seal, Exh Valve**  
 › P2418M517 x4  
 6) **Seal, Intk Valve**  
 › P2418M519 x4

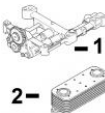
- Valve Train Kit**  
 › PVTK425

- 1) **Valve, Intake**  
 › P3142H071 x4  
 2) **Valve, Exhaust**  
 › P3142A151 x4

- 3) **Guide, Valve (Intake & Exhaust)**  
 › P3313A012 x8

- 4) **Spring, Valve**  
 › P3174A016 x8

- 5) **Lock, Valve**  
 › P3142W004 x16



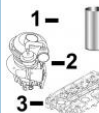
- 1) **Oil Pump**  
 › P4132F071  
 2) **Oil Cooler Plate**  
 › P2486A217



- 1) **Lift Pump**  
 › P2641A203  
 2) **Lift Pump**  
 › PULPK0041  
 3) **Injector**  
 › P2645K011  
 4) **Piston Cooling Nozzle**  
 › P2113A003  
 5) **Pre-Fuel Filter Assy**  
 › P130306380



- 1) **Water Pump**  
 › PU5MW0206  
 2) **Water Pump Gasket**  
 › P3682A011  
 3) **Thermostat**  
 › P4133L503  
 › P4133L507  
 › P4133L508



- 1) **Repair Sleeve**  
 › 105RS  
 2) **Turbocharger**  
 › P2674A200  
 › P2674A226  
 3) **Cylinder Head**  
 › PZZ80267UF  
 4) **Head Bolts**  
 › P3218A011 x7  
 › P3218A012 x3



- 1) **Glowplug**  
 › P2666A016 x4  
 › P2666A017 x4  
 2) **Oil Pressure Sensor**  
 › P2874A007  
 3) **Oil Pressure Switch**  
 › 3a) P2848A071  
 › 3b) P2848062  
 4) **Temp Sensor**  
 › P2874A018  
 5) **Water Temp Sensor**  
 › P2848A123  
 › P2848A126  
 › P2848A129

(1): Not to be used on engines with balancer units.

(3): Do Not Used with Builds RH.

(5): Check your connecting rod journal outside diameter for the proper connecting rod bearings.

(7): 63.5mm rod journal, splined nose.







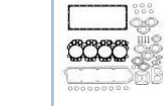







(2): Grade J, Color Coded Green.

(4): Bottom gasket contains: P3681P046 Timing Cover Gasket and P3681K036 Oil Pan Gasket.

(6): Check for proper application.

(8): 68mm rod journal, non-splined nose



|  |  |   |  |   |   |
|--|--|---|--|---|---|
| <p><b>Engine Series:</b><br/>1100</p> <p><b>Engine Model:</b><br/>1104C-44T (RG) / 1104C-E44T (RH)</p> <p><b>Engine Data:</b><br/>TURBOCHARGED<br/>Tier 2</p> <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.133 in / 105.00 mm<br/>Stroke: 5.00 in / 127.00 mm<br/>Displacement: 269 in<sup>3</sup> / 4.4 Lt</p> |  <p>1) <b>Engine O/H Kit</b><br/>                 › POK491 Std.<br/>                 › POK492 0.50<br/>                 › POK493 1.00</p> <p>2) <b>Basic Engine Kit</b><br/>                 › PBK491 Std.<br/>                 › PBK492 0.50<br/>                 › PBK493 1.00</p> |  <p><b>Piston &amp; Ring Kit</b><br/>                 4 Per Engine</p> <p>› P4115P015 Std.<br/>                 › P4115P016 0.50<br/>                 › P4115P017 1.00</p>  |  <p><b>Main Bearing Set</b><br/>                 Set of 5 Pairs</p> <p>› PU5MB0018 Std.<br/>                 › PU5MB0018A 0.010<br/>                 › PU5MB0018B 0.020<br/>                 › PU5MB0018C 0.030</p>  |  <p><b>Con Rod Bearing Set</b><br/>                 Set of 4 Pairs</p> <p>› PU5ME0013 Std. <b>5</b><br/>                 › PU5ME0013A 0.010 <b>5</b><br/>                 › PU5ME0013B 0.020 <b>5</b><br/>                 › PU5ME0013C 0.030 <b>5</b></p>  |  <p><b>Thrust Washer Set</b><br/>                 Set of 2 Pairs</p> <p>› P31137551/61 Std. <b>5</b><br/>                 › P31137312/22 0.007 <b>5</b></p>   |
| <p><b>Piston Kit:</b></p> <p>1) 1 x P3135M111 Piston Std, 1 x <u>PUPRK0002</u> Ring Set Std.<br/>                 2) 1 x P3135M116 Piston 0.50 mm, 1 x <u>PUPRK0002B</u> Ring Set 0.50 mm.<br/>                 3) 1 x P3135M117 Piston 1.00 mm, 1 x <u>PUPRK0002D</u> Ring Set 1.00 mm.</p>   |  |   |  |   |   |
| <p><b>OEM</b><br/>RK38158</p> <p><b>Asv Posi-Track</b><br/>RC-100 - Comp Track Loader<br/>PT-100 - Comp Track Loader</p> <p><b>Genmac</b><br/>GAMMA G100PO*<br/>QUEEN G100PS*</p>  |  <p>1) <b>Front Seal</b><br/>› P2418F436</p> <p>2) <b>Rear Seal</b><br/>› P2418F704</p> <p>3) <b>Crankshaft Kit</b><br/>› PZZ90239<br/>› PZZ90237</p> <p>4) <b>Ring Gear</b><br/>› P0410236 <b>115T</b><br/>› P31162121 <b>126T</b></p>   |  <p>1) <b>Top Gasket Set</b><br/>› PU5LT0357</p> <p>2) <b>Bottom Gasket</b><br/>› PU5LB0381 <b>4</b></p> <p>3) <b>Head Gasket</b><br/>› P3681E051 <b>7</b></p> <p>4) <b>Valve Cover Gsk</b><br/>› P3681A055 <b>8</b></p> <p>5) <b>Timing Cover Gsk</b><br/>› P3681P047</p> <p>6) <b>Oil Pan Gasket</b><br/>› P3681K037</p>   |  <p>1) <b>Bush, Con Rod</b><br/>› P3112A005 x4</p> <p>2) <b>Bolt, Con Rod</b><br/>› P3212V003 x8 <b>6</b><br/>› PT400001 x8 <b>6</b></p> <p>3) <b>Connecting Rod</b><br/>› P4115C314 <b>6</b><br/>› P4115C364 <b>6</b></p>  |  <p>1) <b>Bushing, Cam</b><br/>› P3112D071 x1</p> <p>2) <b>Camshaft</b><br/>› P3141D211</p> <p>3) <b>Tappet</b><br/>› P31434163</p> <p>4) <b>Pushrod</b><br/>› P31434307</p> <p>5) <b>Seal, Exh Valve</b><br/>› P2418M517 x4</p> <p>6) <b>Seal, Intk Valve</b><br/>› P2418M519 x4</p>  |   |
| <p><b>Perkins-Sabre</b><br/>4.4TGM - (RG30881)</p> <p><b>Gehl-Mfg</b><br/>7810 - Skid Steer</p> <p><b>Terex</b><br/>PT-100G - Comp Track Loader</p> <p><b>Godlike</b><br/>GDP60*S - Genset</p>   | <p><b>Valve Train Kit</b><br/>› PVTK425</p>  <p>1) <b>Oil Pump</b><br/>› P4132F071 <b>1</b></p> <p>2) <b>Oil Cooler Plate</b><br/>› P2486A217 <b>6</b></p>  | <p>1) <b>Valve, Intake</b><br/>› P3142H071 x4 <b>3</b></p> <p>2) <b>Valve, Exhaust</b><br/>› P3142A151 x4 <b>6</b></p>  <p>1) <b>Lift Pump</b><br/>› P2641A203 <b>3</b></p> <p>2) <b>Lift Pump</b><br/>› PULPK0041 <b>6</b></p> <p>3) <b>Injector</b><br/>› P2645K011 <b>6</b></p> <p>4) <b>Piston Cooling Nozzle</b><br/>› P2113A003 <b>6</b></p> <p>5) <b>Pre-Fuel Filter Assy</b><br/>› P130306380 <b>6</b></p> | <p>3) <b>Guide, Valve (Intake &amp; Exhaust)</b><br/>› P3313A012 x8 <b>6</b></p>  <p>1) <b>Water Pump</b><br/>› PU5MW0206 <b>6</b></p> <p>2) <b>Water Pump Gasket</b><br/>› P3682A011 <b>6</b></p> <p>3) <b>Thermostat</b><br/>› P4133L503 <b>6</b><br/>› P4133L507 <b>6</b><br/>› P4133L508 <b>6</b></p> | <p>4) <b>Spring, Valve</b><br/>› P3174A016 x8 <b>6</b></p>  <p>1) <b>Repair Sleeve</b><br/>› 105RS <b>6</b></p> <p>2) <b>Turbocharger</b><br/>› P2674A200 <b>6</b><br/>› P2674A226 <b>6</b></p> <p>3) <b>Cylinder Head</b><br/>› PZZ80267UF <b>6</b></p> <p>4) <b>Head Bolts</b><br/>› P3218A011 x7 <b>6</b><br/>› P3218A012 x3 <b>6</b></p> | <p>5) <b>Lock, Valve</b><br/>› P3142W004 x16 <b>6</b></p>  <p>1) <b>Glowplug</b><br/>› P2666A016 x4 <b>6</b><br/>› P2666A017 x4 <b>6</b></p> <p>2) <b>Oil Pressure Sensor</b><br/>› P2874A007 <b>6</b></p> <p>3) <b>Oil Pressure Switch</b><br/>› 3a) P2848a071 <b>6</b><br/>› 3b) p2848062 <b>6</b></p> <p>4) <b>Temp Sensor</b><br/>› P2874A018 <b>6</b></p> <p>5) <b>Water Temp Sensor</b><br/>› P2848A123 <b>6</b><br/>› P2848A126 <b>6</b><br/>› P2848A129 <b>6</b></p> |

(1): Not to be used on engines with balancer units.

(3): Do Not Used with Builds RH.

(5): Check your connecting rod journal outside diameter for the proper connecting rod bearings.

(7): 63.5mm rod journal, splined nose

(2): Grade J, Color Coded Green.

(4): Bottom gasket contains: P3681P047 Timing Cover Gasket and P3681K037 Oil Pan Gasket.

(6): Check for proper application.

(8): 68mm rod journal, non-splined nose

**Engine Series:**

1100

**Engine Model:**

1104A-44T  
(RS)

**Engine Data:**

TURBOCHARGED  
Tier 2

**Engine Info:**

4 Cyl

**Engine Dimensions:**

Bore: 4.133  
in / 105.00  
mm Stroke:  
5.00 in / 127.00  
mm  
Displacement:  
269 in<sup>3</sup>/ 4.4 Lt

**Build List**

RS60172B -  
Tractor  
Wheeled



**1) Engine O/H Kit**

- › POK534 Std.
- › POK535 0.50
- › POK536 1.00

**2) Basic Engine Kit**

- › PBK534 Std.
- › PBK535 0.50
- › PBK536 1.00



**Piston & Ring Kit**

- › PT426384 Std.
- › PT426389 0.50
- › PT426388 1.00

**4 Per Engine**



**Main Bearing Set**

- › PU5MB0033 Std.
- › PU5MB0033A 0.010
- › PU5MB0033B 0.020
- › PU5MB0033C 0.030

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › PT410927 Std.
- › PT420155 0.010
- › PT240154 0.020
- › PT420153 0.030

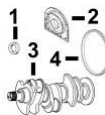
**Set of 4 Pairs**



**Thrust Washer Set**

- › P31137551/61 Std.
- › P31137312/22 0.007

**Set of 2 Pairs**



**1) Front Seal**

- › P2418F436

**2) Rear Seal**

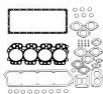
- › P2418F704

**3) Crankshaft Kit**

- › PZZ90239
- › PZZ90237

**4) Ring Gear**

- › P0410236 115T
- › P31162121 126T



**1) Top Gasket Set**

- › PU5LT0357

**2) Bottom Gasket**

- › PU5LB0383

**3) Head Gasket**

- › P3681E051

**4) Valve Cover Gsk**

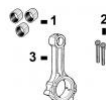
- › P3681A055

**5) Timing Cover Gsk**

- › P3681P046

**6) Oil Pan Gasket**

- › P3681K036



**1) Bush, Con Rod**

- › P3112A005 x4

**2) Bolt, Con Rod**

- › P3212V003 x8
- › PT400001 x8

**3) Connecting Rod**

- › P4115C314
- › P4115C364



**1) Bushing, Cam**

- › P3112D071 x1

**2) Camshaft**

- › PT424469

**3) Tappet**

- › P31434163

**4) Pushrod**

- › P31434307

**5) Seal, Exh Valve**

- › P2418M517 x4

**6) Seal, Intk Valve**

- › P2418M519 x4

**Valve Train Kit**

- › PVTK425

**1) Valve, Intake**

- › P3142H071 x4

**2) Valve, Exhaust**

- › P3142A151 x4

**3) Guide, Valve  
(Intake & Exhaust)**

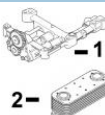
- › P3313A012 x8

**4) Spring, Valve**

- › P3174A016 x8

**5) Lock, Valve**

- › P3142W004 x16



**1) Balancer Unit Incl.  
Oil Pump**

- › P4111K073

**2) Oil Cooler Plate**

- › P2486A217



**1) Lift Pump**

- › P2641A203

**2) Lift Pump**

- › PULPK0041

**3) Injector**

- › P2645K011
- › P2645K012

**4) Piston Cooling  
Nozzle**

- › P2113A003

**5) Pre-Fuel Filter**

- › P130306380



**1) Water Pump**

- › PU5MW0206

**2) Water Pump Gasket**

- › P3682A011

**3) Thermostat**

- › P4133L503
- › P4133L507
- › P4133L508



**1) Repair Sleeve**

- › 105RS

**2) Turbocharger**

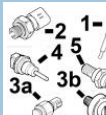
- › P2674A200
- › P2674A226

**3) Cylinder Head**

- › PZZ80267UF

**4) Head Bolts**

- › P3218A011 x7
- › P3218A012 x3



**1) Glowplug**

- › P2666A016 x4

**2) Oil Pressure Sensor**

- › P2874A007

**3) Oil Pressure Switch**

- › P2848A071
- › P2848062

**4) Temp Sensor**

- › P2848A216
- › P2874A018

**5) Water Temp Sensor**

- › P2848A123
- › P2848A126
- › P2848A129

(1): Bottom gasket contains: P3681P046 Timing Cover Gasket and P3681K036 Oil Pan Gasket.

(3): Check for proper application.

(5): 68mm rod journal, non-splined nose

(2): Check your connecting rod journal outside diameter for the proper connecting rod bearings.

(4): 63.5mm rod journal, splined nose.

**PERKINS 1104A-44T (RS) 2**

**Engine Series:**

1100

**Engine Model:**

1104A-44T  
(RS)

**Engine Desc:**

Tier 2

**Engine Data:**

TURBOCHARGED

**Engine Info:**

4 Cyl

**Engine**

**Dimensions:**

Bore: 4.133 in /  
105.00 mm  
Stroke: 5.00  
in / 127.00  
mm

Displacement:  
269 in<sup>3</sup> / 4.4 Lt

Please see  
page **436** for a  
complete list of  
equipment  
models.



**1) Engine O/H Kit**

- › POK427 Std.
- › POK428 0.50
- › POK429 1.00

**2) Basic Engine Kit**

- › PBK427 Std.
- › PBK428 0.50
- › PBK429 1.00



**Piston & Ring Kit**

- › P4115P025 Std.
- › P4115P026 0.50
- › P4115P027 1.00

**4 Per Engine**



**Main Bearing Set**

- › PU5MB0018 Std.
- › PU5MB0018A 0.010
- › PU5MB0018B 0.020
- › PU5MB0018C 0.030

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › PU5ME0013 Std.
- › PU5ME0013A 0.010
- › PU5ME0013B 0.020
- › PU5ME0013C 0.030

**Set of 4 Pairs**



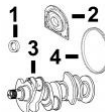
**Thrust Washer Set**

- › P31137551/61 Std.
- › P31137312/22 0.007

**Set of 2 Pairs**

**Piston Kit:**

- 1) 1 x P3135M121 Piston Std, 1 x PUPRK0002 Ring Set Std.
- 2) 1 x P3135M122 Piston 0.50 mm, 1 x PUPRK0002B Ring Set 0.50 mm.
- 3) 1 x P3135M123 Piston 1.00 mm, 1 x PUPRK0002D Ring Set 1.00 mm.



**1) Front Seal**

- › P2418F436

**2) Rear Seal**

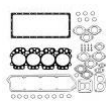
- › P2418F704

**3) Crankshaft Kit**

- › PZZ90239
- › PZZ90237

**4) Ring Gear**

- › P31162121 126T



**1) Top Gasket Set**

- › PU5LT0357

**2) Bottom Gasket**

- › PU5LB0382

**3) Head Gasket**

- › P3681E051

**4) Valve Cover Gsk**

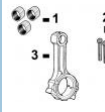
- › P3681A055

**5) Timing Cover Gsk**

- › P3681P046

**6) Oil Pan Gasket**

- › P3681K037



**1) Bush, Con Rod**

- › P3112A005 x4

**2) Bolt, Con Rod**

- › P3212V003 x8
- › PT400001 x8

**3) Connecting Rod**

- › P4115C314
- › P4115C364



**1) Bushing, Cam**

- › P3112D071 x1

**2) Camshaft**

- › P3141D211

**3) Tappet**

- › P31434163

**4) Pushrod**

- › P31434307

**5) Seal, Exh Valve**

- › P2418M517 x4

**6) Seal, Intk Valve**

- › P2418M519 x4

**Valve Train Kit**

- › PVTK425

**1) Valve, Intake**

- › P3142H071 x4

**2) Valve, Exhaust**

- › P3142A151 x4

**3) Guide, Valve  
(Intake & Exhaust)**

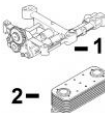
- › P3313A012 x8

**4) Spring, Valve**

- › P3174A016 x8

**5) Lock, Valve**

- › P3142W004 x16



**1) Oil Pump**

- › P4132F071

**2) Oil Cooler**

- › P2486A217



**1) Lift Pump**

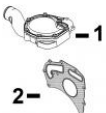
- › P2641A203

**2) Lift Pump**

- › PULPK0041

**3) Injector**

- › P2645K011
- › P2645K012



**1) Water Pump**

- › PU5MW0206

**2) Water Pump Gasket**

- › P3682A011

**3) Thermostat**

- › P4133L503
- › P4133L507
- › P4133L508



**1) Repair Sleeve**

- › 105RS

**2) Turbocharger**

- › P2674A200
- › P2674A226

**3) Cylinder Head**

- › PZZ80267UF

**4) Head Bolts**

- › P3218A011 x7
- › P3218A012 x3



**Glowplug**

- › P2666A016 x4

(1): Not to be used on engines with balancer units.

(3): Bottom gasket contains: P3681P046 Timing Cover Gasket and P3681K037 Oil Pan Gasket.

(5): 63.5mm rod journal, splined nose

(7): Check application for proper usage

(2): Grade J, Color Coded Green.

(4): Check your connecting rod journal outside diameter for the proper connecting rod bearings

(6): 68mm rod journal, non-splined nose

PERKINS 1104A-44T (RS)

**Engine Series:**

1100

**Engine Model:**

1104A-44T (RS) / 1104A-44TA (RT)

**Engine Data:**

TURBOCHARGED Tier 2

**Engine Info:**

4 Cyl

**Engine Dimensions:**

Bore: 4.133 in / 105.00 mm  
Stroke: 5.00 in / 127.00 mm  
Displacement: 269 in3 / 4.4 Lt

Please see page 437 for a complete list of equipment models.



1) **Engine O/H Kit**

- › POK424 Std.
- › POK425 0.50
- › POK426 1.00

2) **Basic Engine Kit**

- › PBK424 Std.
- › PBK425 0.50
- › PBK426 1.00



**Piston & Ring Kit**

- › P4115P025 Std.
- › P4115P026 0.50
- › P4115P027 1.00

**4 Per Engine**



**Main Bearing Set**

- › PU5MB0018 Std.
- › PU5MB0018A 0.010
- › PU5MB0018B 0.020
- › PU5MB0018C 0.030

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › PU5ME0013 Std. 4
- › PU5ME0013A 0.010 4
- › PU5ME0013B 0.020 4
- › PU5ME0013C 0.030 4

**Set of 4 Pairs**



**Thrust Washer Set**

- › P31137551/61 Std.
- › P31137312/22 0.007

**Set of 2 Pairs**

**Piston Kit:**

- 1) 1 x P3135M121 Piston Std, 1 x PUPRK0002 Ring Set Std.
- 2) 1 x P3135M122 Piston 0.50 mm, 1 x PUPRK0002B Ring Set 0.50 mm.
- 3) 1 x P3135M123 Piston 1.00 mm, 1 x PUPRK0002D Ring Set 1.00 mm.



1) **Front Seal**

- › P2418F436

2) **Rear Seal**

- › P2418F704

3) **Crankshaft Kit**

- › PZZ90239
- › PZZ90237

4) **Ring Gear**

- › P31162121 126T



1) **Top Gasket Set**

- › PU5LT0357

2) **Bottom Gasket**

- › PU5LB0381 3

3) **Head Gasket**

- › P3681E051 5

4) **Valve Cover Gsk**

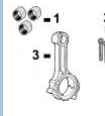
- › P3681A055 6

5) **Timing Cover Gsk**

- › P3681P047

6) **Oil Pan Gasket**

- › P3681K037



1) **Bush, Con Rod**

- › P3112A005 x4

2) **Bolt, Con Rod**

- › P3212V003 x8 7
- › PT400001 x8 7

3) **Connecting Rod**

- › P4115C314 7
- › P4115C364 7



1) **Bushing, Cam**

- › P3112D071 x1

2) **Camshaft**

- › P3141D211

3) **Tappet**

- › P31434163

4) **Pushrod**

- › P31434307

5) **Seal, Exh Valve**

- › P2418M517 x4

6) **Seal, Intk Valve**

- › P2418M519 x4

**Valve Train Kit**

- › PVTK425

1) **Valve, Intake**

- › P3142H071 x4

2) **Valve, Exhaust**

- › P3142A151 x4

3) **Guide, Valve (Intake & Exhaust)**

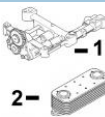
- › P3313A012 x8

4) **Spring, Valve**

- › P3174A016 x8

5) **Lock, Valve**

- › P3142W004 x16

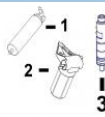


1) **Oil Pump**

- › P4132F071

2) **Oil Cooler**

- › P2486A217



1) **Lift Pump**

- › P2641A203 1

2) **Lift Pump**

- › PULPK0041

3) **Injector**

- › P2645K011 7
- › P2645K012 7



1) **Water Pump**

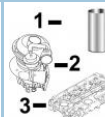
- › PU5MW0206

2) **Water Pump Gasket**

- › P3682A011

3) **Thermostat**

- › P4133L503 7
- › P4133L507 7
- › P4133L508 7



1) **Repair Sleeve**

- › 105RS

2) **Turbocharger**

- › P2674A200 7
- › P2674A226 7

3) **Cylinder Head**

- › PZZ80267UF

4) **Head Bolts**

- › P3218A011 x7 7
- › P3218A012 x3 7



**Glowplug**

- › P2666A016 x4

(1): Not to be used on engines with balancer units.

(3): Bottom gasket contains: P3681P047 Timing Cover Gasket and P3681K037 Oil Pan Gasket.

(5): 63.5mm rod journal, splined nose

(7): Check application for proper usage

(2): Grade J, Color Coded Green.

(4): Check your connecting rod journal outside diameter for the proper connecting rod bearings

(6): 68mm rod journal, non-splined nose

**Engine Series:**  
1100D

**Engine Model:**  
1104D-44 (NK)

**Engine Desc:**  
NATURALLY  
ASPIRATED

**Engine Data:**  
Tier 3

**Engine Info:**  
4 Cyl

**Engine Dimensions:**

Bore: 4.133 in /  
105.00 mm  
Stroke: 5.00 in  
/ 127.00 mm  
Displacement:  
269 in3/ 4.4 Lt



- 1) **Basic Kit**  
1) (Rod Brg OD 63.5 mm)  
 › PBK500  
 › PBK501 0.50  
 › PBK502 1.00  
 2) **Basic Kit**  
 (Rod Brg OD 68 mm)  
 › PBK500S  
 › PBK501S 0.50  
 › PBK502S 1.00



- Piston & Ring Kit**  
 › PU5PR0063 Std.  
 › PU5PR0063B 0.50  
 › PU5PR0063D 1.00  
**4 Per Engine**



- Main Bearing Set**  
 › PU5MB0033 Std.  
 › PU5MB0033A 0.25  
 › PU5MB0033B 0.50  
 › PU5MB0033C 0.75  
**Set of 5 Pairs**



- Con Rod Bearing Set**  
 › PU5ME0034 Std. 4  
 › PU5ME0034A 0.25 4  
 › PU5ME0034B 0.50 4  
 › PU5ME0034C 0.75 4  
 › PT410927 Std. 5  
 › PT420155 0.25 5  
 › PT420154 0.50 5  
 › PT420153 0.75 5  
**Set of 4 Pairs**

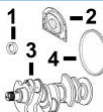


- Thrust Washer Set**  
 › P31137551/61 Std.  
 › P31137312/22 0.007  
**Set of 2 Pairs**

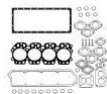
**Piston Kit:**

- 1) 1 x P3135M165 Piston Std, 1 x PUPRK0003 Ring Set Std.  
 2) 1 x P3135M166 Piston 0.50 mm, 1 x PUPRK0003B Ring Set 0.50 mm.  
 3) 1 x P3135M167 Piston 1.00 mm, 1 x PUPRK0003D Ring Set 1.00 mm.

**Jlg**  
G5-18A



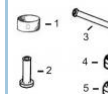
- 1) **Front Seal**  
 › P2418F436  
 2) **Rear Seal**  
 › P2418F704  
 3) **Crankshaft Kit**  
 › PZZ90239  
 › PZZ90237  
 4) **Ring Gear**  
 › P31162121 126T



- 1) **Top Gasket Set**  
 › PU5LT0357  
 2) **Bottom Gasket**  
 › PU5LB1104D  
 3) **Head Gasket**  
 › P3681E051  
 4) **Valve Cover Gsk**  
 › P3681A055  
 5) **Timing Cover Gsk**  
 › P3681P046  
 › P3681P047  
 6) **Oil Pan Gasket**  
 › P3681K036  
 › P3681K037



- 1) **Bush, Con Rod**  
 › P3112A005 x4  
 2) **Bolt, Con Rod**  
 › P3212V003 x8  
 › PT400001 x8  
 3) **Connecting Rod**  
 › P4115C314  
 › P4115C364



- 1) **Bushing, Cam**  
 › P3112D071 x1  
**Camshaft**  
 › P4112K074  
 2) **Tappet**  
 › P3142U061  
 3) **Pushrod**  
 › P4132V011  
 4) **Seal, Valve Exhaust**  
 › P2418M517 x4  
 5) **Seal, Valve Intake**  
 › P2418M519 x4

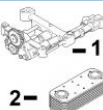
**Valve Train**

- 1) **Valve, Intake**  
 › P3142H101 x4  
 2) **Valve, Exhaust**  
 › P3142A171 x4

- 3) **Guide, Valve (Intake & Exhaust)**  
 › P3313A012 x8

- 4) **Spring, Valve**  
 › P3174A031 x8

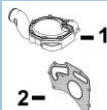
- 5) **Lock, Valve**  
 › P2714A002 x16



- 1) **Oil Pump**  
 › P4132F073  
 2) **Oil Cooler**  
 › P2486A215 5 plate  
 › P2486A217 9 plate



- Lift Pump**  
 › PULPK0041



- 1) **Water Pump**  
 › PU5MW0208  
 2) **Water Pump Gasket**  
 › P3682A011  
 3) **Thermostat**  
 › P4133L503  
 › P4133L507  
 › P4133L508



- Repair Sleeve**  
 › 105RS  
 2) **Head Bolts**  
 › P3218A011 x7  
 › P3218A012 x3



- 1) **Glowplug**  
 › P2666A016 x4  
 › P2666A017 x4  
 2) **Oil Pressure Switch**  
 › P2848A071  
 3) **Water Temp Sensor**  
 › P2848A123  
 › P2848A126  
 › P2848A129

(1): Not to be used on engines with balancer units.

(2): Grade J, Color Coded Green.

(3): Bottom Gasket Set does not contains the Timing Cover Gasket or the Oil Pan Gasket. Order separately.

(4): Connecting rod journal outside diameter is 63.48 mm / 2.4991 in.

(5): Connecting rod journal outside diameter is 67.99 mm / 2.6768 in.

(6): Check build list for proper application.

(7): For use with Con Rod P4115C314.

**Engine Series:**

1100D

**Engine Model:**

1104D-44T (NL) / 1104D-44TA (NM)

**Engine Data:**

TURBOCHARGED Tier 3

**Engine Info:**

4 Cyl

**Engine Dimensions:**

Bore: 4.133 in / 105.00 mm  
Stroke: 5.00 in / 127.00 mm  
Displacement: 269 in3 / 4.4 Lt



- 1) **Basic Kit**  
1) (Rod Brg OD 63.5 mm)

- › PBK503 Std.
- › PBK504 0.50
- › PBK505 1.00

- 2) **Basic Kit**  
(Rod Brg OD 68 mm)

- › PBK503S Std.
- › PBK504S 0.50
- › PBK505S 1.00



**Piston & Ring Kit**

- › PU5PR0062 Std.
- › PU5PR0062B 0.50
- › PU5PR0062D 1.00

**4 Per Engine**



**Main Bearing Set**

- › PU5MB0033 Std.
- › PU5MB0033A 0.25
- › PU5MB0033B 0.50
- › PU5MB0033C 0.35

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › PU5ME0034 Std. 4
- › PU5ME0034A 0.25 4
- › PU5ME0034B 0.50 4
- › PU5ME0034C 0.75 4
- › PT410927 Std. 5
- › PT420155 0.25 5
- › PT420154 0.50 5
- › PT420153 0.75 5

**Set of 4 Pairs**



**Thrust Washer Set**

- › P31137551/61 Std.
- › P31137312/22 0.007

**Set of 2 Pairs**

**Piston Kit:**

- |                  |                 |                       |                   |
|------------------|-----------------|-----------------------|-------------------|
| 1) 1 x P3135M161 | Piston Std,     | 1 x <u>PUPRK0005</u>  | Ring Set Std.     |
| 2) 1 x P3135M162 | Piston 0.50 mm, | 1 x <u>PUPRK0005B</u> | Ring Set 0.50 mm. |
| 3) 1 x P3135M163 | Piston 1.00 mm, | 1 x <u>PUPRK0005D</u> | Ring Set 1.00 mm. |

Please see page 438 for a complete list of equipment models.



- 1) **Front Seal**  
› P2418F436
- 2) **Rear Seal**  
› P2418F704
- 3) **Crankshaft Kit**  
› PZZ90239  
› PZZ90237
- 4) **Ring Gear**  
› P0410236 115T  
› P31162121 126T



- 1) **Top Gasket Set**  
› PU5LT0357
- 2) **Bottom Gasket**  
› PU5LB1104D 3
- 3) **Head Gasket**  
› P3681E051 4
- 4) **Valve Cover Gsk**  
› P3681A055 5
- 5) **Timing Cover Gsk**  
› P3681P046 7  
› P3681P047 7
- 6) **Oil Pan Gasket**  
› P3681K036 7  
› P3681K037 7



- 1) **Bush, Con Rod**  
› P3112A005 x4 6
- 2) **Bolt, Con Rod**  
› P3212V003 7  
› PT400001 x8 7
- 3) **Connecting Rod**  
› P4115C314 4  
› P4115C364 5



- 1) **Bushing, Cam**  
› P3112D071 x1 6
- 2) **Tappet**  
› P3142U061 7
- 3) **Pushrod**  
› P3142V011 7
- 4) **Seal, Exh Valve**  
› P2418M517 x4 4
- 5) **Seal, Intk Valve**  
› P2418M519 x4 5

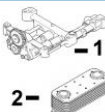
**Valve Train Kit**

- 1) **Valve, Intake**  
› P3142H101 x4
- 2) **Valve, Exhaust**  
› P3142A171 x4

- 3) **Guide, Valve (Intake & Exhaust)**  
› P3313A012 x8

- 4) **Spring, Valve**  
› P3174A031 x8

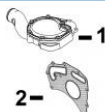
- 5) **Lock, Valve**  
› P2714A002 x16



- 1) **Oil Pump**  
› P4132F071 1
- 2) **Oil Cooler Plate**  
› P2486A217



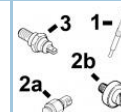
- 1) **Lift Pump**  
› P2641A203 7  
› PULPK0041 7
- 2) **Injector**  
› P2645K025 7



- 1) **Water Pump**  
› PU5MW0208 7
- 2) **Water Pump Gasket**  
› P3682A011 7
- 3) **Thermostat**  
› P4133L503 7  
› P4133L507 7  
› P4133L508 7



- Repair Sleeve**  
› 1) 105RS
- 2) **Cylinder Head**  
› PZZ80280UF
- 3) **Head Bolts**  
› P3218A011 x7 7  
› P3218A012 x3 7



- 1) **Glowplug**  
› P2666A016 x4 7  
› P2666A017 x4 7
- 2) **Oil Pressure Switch**  
› 2a) P2848A071 7  
› 2b) P2848062 7
- 3) **Water Temp Sensor**  
› P2848A123 7  
› P2848A126 7  
› P2848A129 7

(1): Not to be used on engines with balancer units.

(2): Grade J, Color Coded Green.

(3): Bottom Gasket Set does not contains the Timing Cover Gasket or the Oil Pan Gasket. Order separately.

(4): Connecting rod journal outside diameter is 63.48 mm / 2.4991 in.

(5): Connecting rod journal outside diameter is 67.99 mm / 2.6768 in.

(6): To ESN U056074T.

(7): Check build list for proper application.

(8): For use with Con Rod P4115C314.

**Engine Series:**

1100D

**Engine Model:**

1104D-E44T (NH) / 1104D-E44TA (NJ)

**Engine Data:**

TURBOCHARGED Tier 3

**Engine Info:**

4 Cyl

**Engine Dimensions:**

Bore: 4.133 in / 105.00 mm Stroke: 5.00 in / 127.00 mm Displacement: 269 in3 / 4.4 Lt

**Asphalt Pavers**

Vogele Super 1600-2  
Vogele Super 1603-2



- 1) **Basic Kit**  
1) (Rod Brg OD 63.5 mm)

- › PBK506 Std.
- › PBK507 0.50
- › PBK508 1.00

- 2) **Basic Kit**  
(Rod Brg OD 68 mm)

- › PBK506S Std.
- › PBK507S 0.50
- › PBK508S 1.00



**Piston & Ring Kit**

- › PU5PR0058 Std.
- › PU5PR0058B 0.50
- › PU5PR0058D 1.00

**4 Per Engine**



**Main Bearing Set**

- › PU5MB0033 Std.
- › PU5MB0033A 0.25
- › PU5MB0033B 0.50
- › PU5MB0033C 0.75

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › PU5ME0034 Std. 4
- › PU5ME0034A 0.25 4
- › PU5ME0034B 0.50 4
- › PU5ME0034C 0.75 4
- › PT410927 Std. 5
- › PT420155 0.25 5
- › PT420154 0.50 5
- › PT420153 0.75 5

**Set of 4 Pairs**



**Thrust Washer Set**

- › P31137551/61 Std.
- › P31137312/22 0.007

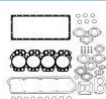
**Set of 2 Pairs**

**Piston Kit:**

- |                  |                 |                       |                   |
|------------------|-----------------|-----------------------|-------------------|
| 1) 1 x P3135M141 | Piston Std,     | 1 x <u>PUPRK0005</u>  | Ring Set Std.     |
| 2) 1 x P3135M142 | Piston 0.50 mm, | 1 x <u>PUPRK0005B</u> | Ring Set 0.50 mm. |
| 3) 1 x P3135M143 | Piston 1.00 mm, | 1 x <u>PUPRK0005D</u> | Ring Set 1.00 mm. |



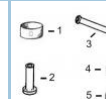
- 1) **Front Seal**  
› P2418F436
- 2) **Rear Seal**  
› P2418F704
- 3) **Crankshaft Kit**  
› PZZ90239  
› PZZ90237
- 4) **Ring Gear**  
› P0410236 115T  
› P31162121 126T



- 1) **Top Gasket Set**  
› PU5LT1104D
- 2) **Bottom Gasket**  
› PU5LB1104D 3
- 3) **Head Gasket**  
› P3681E074 4
- 4) **Valve Cover Gsk**  
› P3681A067 5
- 5) **Timing Cover Gsk**  
› P3681P046 6  
› P3681P047 6
- 6) **Oil Pan Gasket**  
› P3681K036 6  
› P3681K037 6



- 1) **Bush, Con Rod**  
› P3112A005 x4
- 2) **Bolt, Con Rod**  
› P3212V003 x8  
› PT400001 x8
- 3) **Connecting Rod**  
› P4115C314 6  
› P4115C364 6



- 1) **Bushing, Cam**  
› P3112D071 x1
- 2) **Tappet**  
› P3142U061 6
- 3) **Pushrod**  
› P3142V011 6
- 4) **Seal, Valve Stem**  
› P2418M522 x16 4

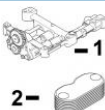
**Valve Train Kit**

- 1) **Valve, Intake**  
› P3142H091 x8
- 2) **Valve, Exhaust**  
› P3142A181 x8

- 3) **Guide, Valve (Intake & Exhaust)**  
› P3313A035 x16

- 4) **Valve, Insert In**  
› P3314A251 x8
- 5) **Valve, Insert Ex**  
› P3314A261 x8

- 6) **Spring, Valve**  
› P3174A028 x16
- 7) **Lock, Valve**  
› P3142W005 x32



- 1) **Oil Pump**  
› P4132F071
- 2) **Oil Cooler**  
› P2486A015



- 1) **Water Pump**  
› PU5MW0204 1
- 2) **Water Pump Gasket**  
› P3682A011
- 3) **Thermostat**  
› PT413847
- 4) **Thermostat Housing Gasket**  
› P3682A022



- Repair Sleeve**  
› 105RS
- 2) **Head Bolts**  
› P3218A011 x10



- 1) **Glow Plug**  
› P2666A023 x4 6  
› P2666A024 x4 6
- 2) **Air Temp Sensor**  
› PU5MK1089 6
- 3) **Injector**  
› P2645A746 8  
› P2645A747 8  
› P2645A738 8

(1): Not to be used on engines with balancer units.

(2): Grade J, Color Coded Green.

(3): Bottom Gasket Set does not contains the Timing Cover Gasket or the Oil Pan Gasket. Order separately.

(4): Connecting rod journal outside diameter is 63.48 mm / 2.4991 in.

(5): Connecting rod journal outside diameter is 67.99 mm / 2.6768 in.

(6): Check build list for proper application.

(7): For use with Con Rod P4115C314.

**Engine Series:**

1100D

**Engine Model:**

1104D-E44T  
(NJ)

**Engine Desc:**

Tier 3

**Engine Data:**

TURBOCHARGED

**Engine Info:**

4 Cyl

**Engine Dimensions:**

Bore: 4.133 in / 105.00 mm  
Stroke: 5.00 in / 127.00 mm  
Displacement: 269 in<sup>3</sup> / 4.4 Lt



- 1) **Basic Kit**  
1) (Rod Brg OD 63.5 mm)

- › PBK512 Std.
- › PBK513 0.50
- › PBK514 1.00

- 2) **Basic Kit**  
(Rod Brg OD 68 mm)

- › PBK512S Std.
- › PBK513S 0.50
- › PBK514S 1.00



**Piston & Ring Kit**

- › PU5PR0059 Std.
- › PU5PR0059B 0.50
- › PU5PR0059D 1.00

**4 Per Engine**



**Main Bearing Set**

- › PU5MB0033 Std.
- › PU5MB0033A 0.25
- › PU5MB0033B 0.50
- › PU5MB0033C 0.75

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › PU5ME0034 Std. 4
- › PU5ME0034A 0.25 4
- › PU5ME0034B 0.50 4
- › PU5ME0034C 0.75 4
- › PT410927 Std. 5
- › PT420155 0.25 5
- › PT420154 0.50 5
- › PT420153 0.75 5



**Thrust Washer Set**

- › P31137551/61 Std.
- › P31137312/22 0.007

**Set of 2 Pairs**

**Piston Kit:**

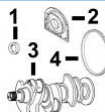
- |                  |                 |                       |                   |
|------------------|-----------------|-----------------------|-------------------|
| 1) 1 x P3135M135 | Piston Std,     | 1 x <u>PUPRK0005</u>  | Ring Set Std.     |
| 2) 1 x P3135M136 | Piston 0.50 mm, | 1 x <u>PUPRK0005B</u> | Ring Set 0.50 mm. |
| 3) 1 x P3135M137 | Piston 1.00 mm, | 1 x <u>PUPRK0005D</u> | Ring Set 1.00 mm. |

**Aksa - Gensets**

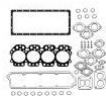
APD-AT56 - Generator

**Grandwatt**

G50XHD - Genset



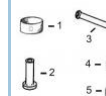
- 1) **Front Seal**  
› P2418F436
- 2) **Rear Seal**  
› P2418F704
- 3) **Crankshaft Kit**  
› PZZ90239  
› PZZ90237
- 4) **Ring Gear**  
› P0410236 115T  
› P31162121 126T



- 1) **Top Gasket Set**  
› PU5LT1104D
- 2) **Bottom Gasket**  
› PU5LB1104D
- 3) **Head Gasket**  
› P3681E074
- 4) **Valve Cover Gsk**  
› P3681A067
- 5) **Timing Cover Gsk**  
› P3681P046  
› P3681P047
- 6) **Oil Pan Gasket**  
› P3681K036  
› P3681K037



- 1) **Bush, Con Rod**  
› P3112A005 x4
- 2) **Bolt, Con Rod**  
› P3212V003 x8  
› PT400001 x8
- 3) **Connecting Rod**  
› P4115C314  
› P4115C364



- 1) **Bushing, Cam**  
› P3112D071 x1
- 2) **Tappet**  
› P3142U061
- 3) **Pushrod**  
› P3142V011
- 4) **Seal, Valve Stem**  
› P2418M522 x16

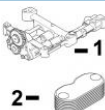
**Valve Train**

- 1) **Valve, Intake**  
› P3142H091 x8
- 2) **Valve, Exhaust**  
› P3142A181 x8

- 3) **Guide, Valve (Intake & Exhaust)**  
› P3313A035 x16

- 4) **Valve, Insert In**  
› P3314A251 x8
- 5) **Valve, Insert Ex**  
› P3314A261 x8

- 6) **Spring, Valve**  
› P3174A028 x16
- 7) **Lock, Valve**  
› P3142W005 x32



- 1) **Oil Pump**  
› P4132F071
- 2) **Oil Cooler**  
› P2486A015



- 1) **Water Pump**  
› PU5MW0204
- 2) **Water Pump Gasket**  
› P3682A011
- 3) **Thermostat**  
› PT413847
- 4) **Thermostat Housing Gasket**  
› P3682A022



- Repair Sleeve**  
› 105RS
- 2) **Head Bolts**  
› P3218A011 x10



- 1) **Glow Plug**  
› P2666A023 x4  
› P2666A024 x4
- 2) **Air Temp Sensor**  
› PU5MK1089
- 3) **Injector**  
› P2645A747

(1): Not to be used on engines with balancer units.

(2): Grade J, Color Coded Green.

(3): Bottom Gasket Set does not contains the Timing Cover Gasket or the Oil Pan Gasket. Order separately.

(4): Connecting rod journal outside diameter is 63.48 mm / 2.4991 in.

(5): Connecting rod journal outside diameter is 67.99 mm / 2.6768 in.

(6): Check build list for proper application.

(7): For use with Con Rod P4115C314.



**Engine Series:**  
1100D

**Engine Model:**  
1104D-E44T (NH) / 1104D-E44TA (NJ)

**Engine Data:**  
TURBOCHARGED  
Tier 3

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.133 in / 105.00 mm  
Stroke: 5.00 in / 127.00 mm  
Displacement: 269 in3 / 4.4 Lt



1) **Basic Kit**  
1) (Rod Brg OD 63.5 mm)

- › PBK509 Std.
- › PBK510 0.50
- › PBK511 1.00

2) **Basic Kit**  
(Rod Brg OD 68 mm)

- › PBK509S Std.
- › PBK510S 0.50
- › PBK511S 1.00



**Piston & Ring Kit**

- › PU5PR0060 Std.
- › PU5PR0060B 0.50
- › PU5PR0060D 1.00

**4 Per Engine**



**Main Bearing Set**

- › PU5MB0033 Std.
- › PU5MB0033A 0.25
- › PU5MB0033B 0.50
- › PU5MB0033C 0.75

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › PU5ME0034 Std. 4
- › PU5ME0034A 0.25 4
- › PU5ME0034B 0.50 4
- › PU5ME0034C 0.75 4
- › PT410927 Std. 5
- › PT420155 0.25 5
- › PT420154 0.50 5
- › PT420153 0.75 5



**Thrust Washer Set**

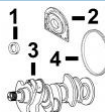
- › P31137551/61 Std.
- › P31137312/22 0.007

**Set of 2 Pairs**

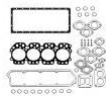
**Piston Kit:**

- |                  |                 |                       |                   |
|------------------|-----------------|-----------------------|-------------------|
| 1) 1 x P3135M151 | Piston Std,     | 1 x <u>PUPRK0005</u>  | Ring Set Std.     |
| 2) 1 x P3135M152 | Piston 0.50 mm, | 1 x <u>PUPRK0005B</u> | Ring Set 0.50 mm. |
| 3) 1 x P3135M153 | Piston 1.00 mm, | 1 x <u>PUPRK0005D</u> | Ring Set 1.00 mm. |

Please see page 439 for a complete list of equipment models.



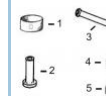
- 1) **Front Seal**  
› P2418F436
- 2) **Rear Seal**  
› P2418F704
- 3) **Crankshaft Kit**  
› PZZ90239  
› PZZ90237
- 4) **Ring Gear**  
› P0410236 115T  
› P31162121 126T



- 1) **Top Gasket Set**  
› PU5LT1104D
- 2) **Bottom Gasket**  
› PU5LB1104D
- 3) **Head Gasket**  
› P3681E074
- 4) **Valve Cover Gsk**  
› P3681A067
- 5) **Timing Cover Gsk**  
› P3681P046  
› P3681P047
- 6) **Oil Pan Gasket**  
› P3681K036  
› P3681K037



- 1) **Bush, Con Rod**  
› P3112A005 x4
- 2) **Bolt, Con Rod**  
› P3212V003 x8  
› PT40001 x8
- 3) **Connecting Rod**  
› P4115C314  
› P4115C364



- 1) **Bushing, Cam**  
› P3112D071 x1
- 2) **Tappet**  
› P3142U061
- 3) **Pushrod**  
› P3142V011
- 4) **Seal, Valve Stem**  
› P2418M522 x16

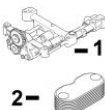
**Valve Train Kit**

- 1) **Valve, Intake**  
› P3142H091 x8
- 2) **Valve, Exhaust**  
› P3142A181 x8

- 3) **Guide, Valve (Intake & Exhaust)**  
› P3313A035 x16

- 4) **Valve, Insert In**  
› P3314A251 x8
- 5) **Valve, Insert Ex**  
› P3314A261 x8

- 6) **Spring, Valve**  
› P3174A028 x16
- 7) **Lock, Valve**  
› P3142W005 x32



- 1) **Oil Pump**  
› P4132F071
- 2) **Oil Cooler**  
› P2486A015



- 1) **Water Pump**  
› PU5MW0204
- 2) **Water Pump Gasket**  
› P3682A011
- 3) **Thermostat**  
› PT413847
- 4) **Thermostat Housing Gasket**  
› P3682A022



- Repair Sleeve**  
› 105RS
- 2) **Head Bolts**  
› P3218A011 x10



- 1) **Glow Plug**  
› P2666A023 x4  
› P2666A024 x4
- 2) **Air Temp Sensor**  
› PU5MK1089
- 3) **Injector**  
› P2645A746  
› P2645A747  
› P2645A738
- 4) **Piston Cooling Nozzle**  
› P2113A003



- Fuel Lines**
- › 1) P3525A211
  - › 2) P3525A212
  - › 3) P3525A222
  - › 4) P3525A223

(1): Not to be used on engines with balancer units.

(2): Grade J, Color Coded Green.

(3): Bottom Gasket Set does not contains the Timing Cover Gasket or the Oil Pan Gasket. Order separately.

(4): Connecting rod journal outside diameter is 63.48 mm / 2.4991 in.

(5): Connecting rod journal outside diameter is 67.99 mm / 2.6768 in.

(6): Check build list for proper application.

(7): For use with Con Rod P4115C314.

(8): Check application for proper usage.

**Engine Series:**  
1100D

**Engine Model:**  
1104D-E44TA  
(NJ)

**Engine Desc:**  
Tier 3

**Engine Data:**  
TURBOCHARGED

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.133 in /  
105.00 mm  
Stroke: 5.00 in  
/ 127.00 mm  
Displacement:  
269 in3 / 4.4 Lt



- 1) **Basic Kit**  
1) (Rod Brg OD 63.5 mm)  
 › PBK515 Std.  
 › PBK516 0.50  
 › PBK517 1.00

- 2) **Basic Kit**  
(Rod Brg OD 68 mm)  
 › PBK515S Std.  
 › PBK516S 0.50  
 › PBK517S 1.00



- Piston & Ring Kit**  
 › PU5PR0061 Std.  
 › PU5PR0061B 0.50  
 › PU5PR0061D 1.00  
**4 Per Engine**



- Main Bearing Set**  
 › PU5MB0033 Std.  
 › PU5MB0033A 0.25  
 › PU5MB0033B 0.50  
 › PU5MB0033C 0.75  
**Set of 5 Pairs**



- Con Rod Bearing Set**  
 › PU5ME0034 Std. **4**  
 › PU5ME0034A 0.25 **4**  
 › PU5ME0034B 0.50 **4**  
 › PU5ME0034C 0.75 **4**  
 › PT410927 Std. **5**  
 › PT420155 0.25 **5**  
 › PT420154 0.50 **5**  
 › PT420153 0.75 **5**



- Thrust Washer Set**  
 › P31137551/61 Std.  
 › P31137312/22 0.007  
**Set of 2 Pairs**

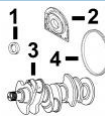
**Piston Kit:**

- 1) 1 x P3135M145 Piston Std, 1 x PUPRK0005 Ring Set Std.  
 2) 1 x P3135M146 Piston 0.50 mm, 1 x PUPRK0005B Ring Set 0.50 mm.  
 3) 1 x P3135M147 Piston 1.00 mm, 1 x PUPRK0005D Ring Set 1.00 mm.

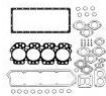
**Asphalt Pavers**

Vogele Super  
1600-2  
Vogele Super  
1603-2

Atlas Copco  
Generator  
QAS100



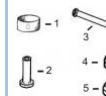
- 1) **Front Seal**  
 › P2418F436  
 2) **Rear Seal**  
 › P2418F704  
 3) **Crankshaft Kit**  
 › PZZ90239  
 › PZZ90237  
 4) **Ring Gear**  
 › P0410236 115T  
 › P31162121 126T



- 1) **Top Gasket Set**  
 › PU5LT1104D  
 2) **Bottom Gasket**  
 › PU5LB1104D  
 3) **Head Gasket**  
 › P3681E074  
 4) **Valve Cover Gsk**  
 › P3681A067  
 5) **Timing Cover Gsk**  
 › P3681P046  
 › P3681P047  
 6) **Oil Pan Gasket**  
 › P3681K036  
 › P3681K037

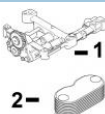


- 1) **Bush, Con Rod**  
 › P3112A005 x4  
 2) **Bolt, Con Rod**  
 › P3212V003 x8  
 › PT400001 x8  
 3) **Connecting Rod**  
 › P4115C314  
 › P4115C364



- 1) **Bushing, Cam**  
 › P3112D071 x1  
 2) **Tappet**  
 › P3142U061  
 3) **Pushrod**  
 › P3142V011  
 4) **Seal, Valve Stem**  
 › P2418M522 x16

**Valve Train**



- 1) **Oil Pump**  
 › P4132F071  
 2) **Oil Cooler**  
 › P2486A015



- 1) **Water Pump**  
 › PU5MW0204  
 2) **Water Pump Gasket**  
 › P3682A011  
 3) **Thermostat**  
 › PT413847  
 4) **Thermostat Housing Gasket**  
 › P3682A022



- Repair Sleeve**  
 › 105RS



- 1) **Glow Plug**  
 › P2666A023 x4  
 › P2666A024 x4  
 2) **Air Temp Sensor**  
 › PU5MK1089  
 3) **Injector**  
 › P2645A747  
 4) **Piston Cooling Nozzle**  
 › P2113A003



- Fuel Lines**  
 › 1) P3525A211  
 › 2) P3525A212  
 › 3) P3525A222  
 › 4) P3525A223

(1): Not to be used on engines with balancer units.

(2): Grade J, Color Coded Green.

(3): Bottom Gasket Set does not contains the Timing Cover Gasket or the Oil Pan Gasket. Order separately.

(4): Connecting rod journal outside diameter is 63.48 mm / 2.4991 in.

(5): Connecting rod journal outside diameter is 67.99 mm / 2.6768 in.

(6): Check build list for proper application.

(7): For use with Con Rod P4115C314.







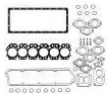
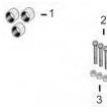

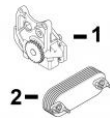
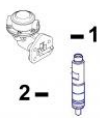
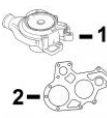


**Engine Series:**  
1100

**Engine Model:**  
1106-E60TA (VK)

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 3.9370 in / 100.00 mm

Please see page 440 for a complete list of equipment models.

|  |  |   |  |   |
|--|--|---|--|---|
|  <p><b>1) Engine O/H Kit</b><br/>• POK649</p> <p><b>2) Basic Engine Kit</b><br/>• PBK649</p>   |  <p><b>Piston &amp; Ring Kit</b><br/>• PCK0162</p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>• a) P4115P001</li> <li>• b) PUPRK0001</li> <li>• c) P3135X062</li> </ul> <p><b>6 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>• PU5MB0030 Std.</p> <ul style="list-style-type: none"> <li>• PU5MB0030A 0.010</li> <li>• PU5MB0030B 0.020</li> <li>• PU5MB0030C 0.030</li> </ul> <p><b>Set of 5 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b><br/>• PU5ME0003 Std.</p> <ul style="list-style-type: none"> <li>• PU5ME0003A 0.010</li> <li>• PU5ME0003B 0.020</li> <li>• PU5ME0003C 0.030</li> </ul> <p><b>Set of 4 Pairs</b></p>                            |  <p><b>Thrust Washer Set</b><br/>• P31137551/61 Std.</p> <ul style="list-style-type: none"> <li>• P31137312/22 0.007</li> </ul> <p><b>Set of 2 Pairs</b></p> |
|  <p><b>1) Front Seal</b><br/>• P2418F436</p> <p><b>2) Rear Seal</b><br/>• P2418F701</p> <p><b>3) Crankshaft Kit</b><br/>• PZZ90228</p> <p><b>4) Ring Gear</b><br/>• P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT0349</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0374</p> <p><b>3) Head Gasket</b><br/>• P3681E043</p> <p><b>4) Oil Pan Gasket</b><br/>• P3681M007</p>                              |  <p><b>1) Bush, Con Rod</b><br/>• P3112E011 x6</p> <p><b>2) Bolt, Con Rod</b><br/>• P32762144 x12</p> <p><b>3) Nut, Con Rod</b><br/>• P33221328 x12</p>  |  <p><b>1) Bushing, Cam</b><br/>• P31134132 x1</p> <p><b>2) Tappet</b><br/>• P31434163</p> <p><b>3) Pushrod</b><br/>• P31434307</p> <p><b>4) Seal, Exh Valve</b><br/>• P2418M505 x6</p> <p><b>5) Seal, Intk Valve</b><br/>• P2418M506 x6</p> |   |
| <p><b>Valve Train Kit</b><br/>• PVTK620</p>  | <p><b>1) Valve, Intake</b><br/>• P3142L081 x6</p> <p><b>2) Valve, Exhaust</b><br/>• P3142D031 x6</p>   | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b></p> <ul style="list-style-type: none"> <li>• 3a) P3313A012 x6</li> <li>• 3b) P3318A705 x6</li> </ul>  | <p><b>4) Spring, Valve</b><br/>• P3174P409 x12</p>   | <p><b>5) Lock, Valve</b><br/>• P3142W004 x24</p>  |
|  <p><b>1) Oil Pump</b><br/>• P4132F067</p> <p><b>2) Oil Cooler</b><br/>• P2486A993</p>   |  <p><b>1) Lift Pump</b><br/>• PULPK0036</p> <p><b>2) Injector</b><br/>• P2645F027</p>   |  <p><b>1) Water Pump</b><br/>• PU5MW0196</p> <p><b>2) Water Pump Gasket</b><br/>• P3687Y016</p>  |  <p><b>1) Temp Sensor</b><br/>• P2874A018</p> <p><b>2) Oil Pressure Sensor</b><br/>• P2874A007</p>   |  <p><b>Piston Cooling Nozzle</b><br/>• P3861A027</p>   |

(1): To ESN U090153J.

(3): Flanged, Semi Finished Liner available, P3135X063

(2): For Builds (VK37779 to VK37787) use U5LB0370.

(4): Check for proper application.







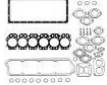
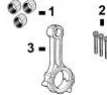
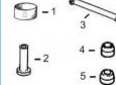
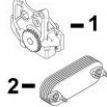


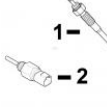

**Engine Series:**  
1100

**Engine Model:**  
1106-E60TA (VK)

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 3.9370 in / 100.00 mm

Please see page 441 for a complete list of equipment models.

|  |   |   |  |   |
|--|---|---|--|---|
|  <p><b>1) Engine O/H Kit</b><br/>• POK694</p> <p><b>2) Basic Engine Kit</b><br/>• PBK694</p>   |  <p><b>Piston &amp; Ring Kit</b><br/>• PCK0162</p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>• a) P4115P001</li> <li>• b) PUPRK0001</li> <li>• c) P3135X062</li> </ul> <p><b>4</b></p> <p><b>Set of 5 Pairs</b></p> <p><b>6 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>• PU5MB0030 Std.</p> <ul style="list-style-type: none"> <li>• PU5MB0030A 0.010</li> <li>• PU5MB0030B 0.020</li> <li>• PU5MB0030C 0.030</li> </ul> <p><b>4</b></p> <p><b>Set of 5 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b><br/>• PU5ME0025 Std.</p> <ul style="list-style-type: none"> <li>• PU5ME0025A 0.010</li> <li>• PU5ME0025B 0.020</li> <li>• PU5ME0025C 0.030</li> </ul> <p><b>3</b></p> <p><b>Set of 4 Pairs</b></p>            |  <p><b>Thrust Washer Set</b><br/>• P31137551/61 Std.</p> <ul style="list-style-type: none"> <li>• P31137312/22 0.007</li> </ul> <p><b>Set of 2 Pairs</b></p> |
|  <p><b>1) Front Seal</b><br/>• P2418F436</p> <p><b>2) Rear Seal</b><br/>• P2418F701</p> <p><b>3) Crankshaft Kit</b><br/>• PZZ90228</p> <p><b>4) Ring Gear</b><br/>• P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT0349</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0374</p> <p><b>2</b></p> <p><b>3) Head Gasket</b><br/>• P3681E043</p> <p><b>4) Oil Pan Gasket</b><br/>• P3681M007</p>   |  <p><b>1) Bush, Con Rod</b><br/>• P3112A005 x6</p> <p><b>2) Bolt, Con Rod</b><br/>• P3212V003 x12</p> <p><b>3) Con Rod Kit</b><br/>• P4115C314</p> <p><b>3</b></p>   |  <p><b>1) Bushing, Cam</b><br/>• P31134132 x1</p> <p><b>2) Tappet</b><br/>• P31434163</p> <p><b>3) Pushrod</b><br/>• P31434307</p> <p><b>4) Seal, Exh Valve</b><br/>• P2418M505 x6</p> <p><b>5) Seal, Intk Valve</b><br/>• P2418M506 x6</p> |   |
| <p><b>Valve Train Kit</b><br/>• PVTK620</p>  | <p><b>1) Valve, Intake</b><br/>• P3142L081 x6</p> <p><b>2) Valve, Exhaust</b><br/>• P3142D031 x6</p>  | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b><br/>• 3a) P3313A012 x6<br/>• 3b) P3318A705 x6</p>   | <p><b>4) Spring, Valve</b><br/>• P3174P409 x12</p>   | <p><b>5) Lock, Valve</b><br/>• P3142W004 x24</p>  |
|  <p><b>1) Oil Pump</b><br/>• P4132F067</p> <p><b>2) Oil Cooler</b><br/>• P2486A993</p>   |  <p><b>1) Lift Pump</b><br/>• PULPK0036</p> <p><b>2) Injector</b><br/>• P2645F027</p> <p><b>5</b></p>  |  <p><b>1) Water Pump</b><br/>• PU5MW0196</p> <p><b>2) Water Pump Gasket</b><br/>• P3687Y016</p> <p><b>5</b></p>  |  <p><b>1) Temp Sensor</b><br/>• P2874A018</p> <p><b>2) Oil Pressure Sensor</b><br/>• P2874A007</p> <p><b>5</b></p>   |  <p><b>Piston Cooling Nozzle</b><br/>• P3861A027</p>   |

(1): From ESN U090154J.

(3): Grade J, Color Coded Green.

(5): Check for proper application.

(2): For Builds (VK37779 to VK37787) use U5LB0370.

(4): Flanged, Semi Finished Liner available, P3135X063

**Engine Series:**  
1106D

**Engine Model:**  
1106C - E66TA (PK) / 1106D - E66TA (PJ)

**Engine Data:**  
TURBOCHARGED  
Tier 3

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 4.133 in / 105.00 mm  
Stroke: 5.00 in / 127.00 mm  
Displacement: 402.76 in3 / 6.6 Lt

**Aksa**  
APD-EPAP150  
APD-EPAP150S  
APD-EPAP178  
APD-ULP150  
AT150

**Asphalt Pavers**  
Vogele Super 1800-2  
Vogele Super 1803-2

**Godlike**  
GDP135\*S - Genset  
GDP150\*S - Genset  
GDP180\*S - Genset



**Basic Kit**  
(Rod Brg OD 63.5 mm)  
 › PBK700  
 › PBK701 0.50  
 › PBK702 1.00



**Piston & Ring Kit**  
 › PU5PR0058 Std.  
 › PU5PR0058B 0.50  
 › PU5PR0058D 1.00  
**6 Per Engine**



**Main Bearing Set**  
 › PT409189 Std.  
 › PT418680 0.010  
 › PT418696 0.020  
 › PT418697 0.030  
**Set of 7 Pairs**



**Con Rod Bearing Set**  
 › PT409188 Std.  
 › PT400524 0.010  
 › PT400525 0.020  
 › PT400526 0.030  
**Set of 6 Pairs**



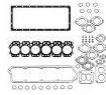
**Thrust Washer Set**  
 › PT409186 Std.  
 › PT418971 0.007  
**Set of 2 Pcs**

**Piston Kit:**

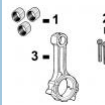
- 1) 1 x P3135M141 Piston Std, 1 x PUPRK0005 Ring Set Std.
- 2) 1 x P3135M142 Piston 0.50 mm, 1 x PUPRK0005B Ring Set 0.50 mm.
- 3) 1 x P3135M143 Piston 1.00 mm, 1 x PUPRK0005D Ring Set 1.00 mm.



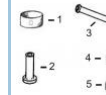
- 1) **Front Seal**  
 › P2418F436
- 2) **Rear Seal**  
 › P2418F705
- 3) **Crankshaft Kit**  
 › PZZ90242  
 › P4181V019
- 4) **Ring Gear**  
 › P31162121 126T



- 1) **Top Gasket Set**  
 › PU5LT1106D
- 2) **Bottom Gasket**  
 › PU5LB1106D
- 3) **Head Gasket**  
 › P3681E052
- 4) **Valve Cover Gsk**  
 › P3681A068
- 5) **Timing Cover Gsk**  
 › P3681P046  
 › P3681P047
- 6) **Oil Pan Gasket**  
 › P3681K041  
 › P3681K044
- 7) **Gasket Exh Manifold**  
 › P3681V015
- 8) **Gasket Intake Manifold**  
 › P3681V016
- 9) **Rocker Cover Gasket**  
 › P3681A059  
 › P3681A065



- 1) **Bush, Con Rod**  
 › P3112E031 x6
- 2) **Bolt, Con Rod**  
 › PT400001 x12
- 3) **Con Rod Kit**  
 › PT405440



- 1) **Bushing, Cam**  
 › PT410164 x1
- 2) **Tappet**  
 › P3142U051 x12
- 3) **Pushrod**  
 › P3142V011 x12
- 4) **Seal, Valve Stem**  
 › P2418M522 x24

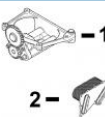
**Valve Train**

- 1) **Valve, Intake**  
 › P3142H091 x12
- 2) **Valve, Exhaust**  
 › P3142A181 x12

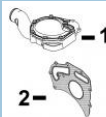
- 3) **Guide, Valve (Intake & Exhaust)**  
 › P3313A035 x24

- 4) **Valve, Insert In**  
 › P3314A251 x12
- 5) **Valve, Insert Ex**  
 › P3314A261 x12

- 6) **Spring, Valve**  
 › P3174A025 x24
- 7) **Lock, Valve**  
 › P3142W005 x48



- 1) **Oil Pump**  
 › PT410626
- 2) **Oil Cooler**  
 › P2486A002  
 › P2486A231



- 1) **Water Pump**  
 › PU5MW0204  
 › PU5MW0205
- 2) **Water Pump Gasket**  
 › P3682A011
- 3) **Thermostat**  
 › PT413847
- 4) **Thermostat Housing Gasket**  
 › P3682A022



- Repair Sleeve**  
 › 105RS
- 2) **Head Bolts**  
 › P3218A017 x14



- 1) **Glow Plug**  
 › P2666A016 x6  
 › P2666A017 x6  
 › P2666A023 x6  
 › P2666A024 x6
- 2) **Air Temp Sensor**  
 › PU5MK1089
- 3) **Injector**  
 › P2645A751  
 › P2645A746  
 › P2645A747  
 › P2645A749  
 › P2645A753  
 › P2645A738  
 › P2645A745
- 4) **Piston Cooling Nozzle**  
 › P2113A003



- Fuel Lines**  
 › 1) P3525A201  
 › 2) P3525A202  
 › 3) P3525A203  
 › 4) P3525A204  
 › 5) P3525A205  
 › 6) P3525A206

(1): Bottom Gasket Set does not contains the Timming Cover Gasket or the Oil Pan Gasket. Order separately.

(3): Grade J, Color Coded Green.

(5): Use with Cylinder Head casting number 3712L09A & 3712L10A.

(7): Check application for proper usage.

(2): Check build list for proper application.

(4): Use with Cylinder Head casting number 3712L08A.

(6): PJ Build only.

**Engine Series:**  
1106D

**Engine Model:**  
1106C - E66TA (PK) / 1106D - E66TA (PJ)

**Engine Data:**  
TURBOCHARGED  
Tier 3

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 4.133 in / 105.00 mm  
Stroke: 5.00 in / 127.00 mm  
Displacement: 402.76 in3 / 6.6 Lt

**Aksa**  
APD-EPAP150  
APD-EPAP150S  
APD-EPAP178  
APD-ULP150  
AT150

**Asphalt Pavers**  
Vogele Super 1800-2  
Vogele Super 1803-2

**Godlike**  
GDP135\*S - Genset  
GDP150\*S - Genset  
GDP180\*S - Genset



**Basic Kit**  
(Rod Brg OD 63.5 mm)  
 › PBK703 Std.  
 › PBK704 0.50  
 › PBK705 1.00



**Piston & Ring Kit**  
 › PU5PR0059 Std.  
 › PU5PR0059B 0.50  
 › PU5PR0059D 1.00  
**6 Per Engine**



**Main Bearing Set**  
 › PT409189 Std.  
 › PT418680 0.010  
 › PT418696 0.020  
 › PT418697 0.030  
**Set of 7 Pairs**



**Con Rod Bearing Set**  
 › PT409188 Std.  
 › PT400524 0.010  
 › PT400525 0.020  
 › PT400526 0.030  
**Set of 6 Pairs**



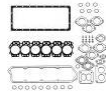
**Thrust Washer Set**  
 › PT409186 Std.  
 › PT418971 0.007  
**Set of 2 Pcs**

**Piston Kit:**

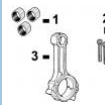
- 1) 1 x P3135M135 Piston Std, 1 x PUPRK0005 Ring Set Std.
- 2) 1 x P3135M136 Piston 0.50 mm, 1 x PUPRK0005B Ring Set 0.50 mm.
- 3) 1 x P3135M137 Piston 1.00 mm, 1 x PUPRK0005D Ring Set 1.00 mm.



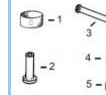
- 1) **Front Seal**  
 › P2418F436
- 2) **Rear Seal**  
 › P2418F705
- 3) **Crankshaft Kit**  
 › PZZ90242  
 › P4181V019
- 4) **Ring Gear**  
 › P31162121 126T



- 1) **Top Gasket Set**  
 › PU5LT1106D
- 2) **Bottom Gasket**  
 › PU5LB1106D
- 3) **Head Gasket**  
 › P3681E052
- 4) **Valve Cover Gsk**  
 › P3681A068
- 5) **Timing Cover Gsk**  
 › P3681P046  
 › P3681P047
- 6) **Oil Pan Gasket**  
 › P3681K041  
 › P3681K044
- 7) **Gasket Exh Manifold**  
 › P3681V015
- 8) **Gasket Intake Manifold**  
 › P3681V016
- 9) **Rocker Cover Gasket**  
 › P3681A059  
 › P3681A065



- 1) **Bush, Con Rod**  
 › P3112E031 x6
- 2) **Bolt, Con Rod**  
 › PT400001 x12
- 3) **Con Rod Kit**  
 › PT405440



- 1) **Bushing, Cam**  
 › PT410164 x1
- 2) **Tappet**  
 › P3142U051 x12
- 3) **Pushrod**  
 › P3142V011 x12
- 4) **Seal, Valve Stem**  
 › P2418M522 x24

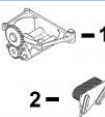
**Valve Train**

- 1) **Valve, Intake**  
 › P3142H091 x12
- 2) **Valve, Exhaust**  
 › P3142A181 x12

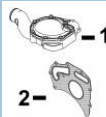
- 3) **Guide, Valve (Intake & Exhaust)**  
 › P3313A035 x24

- 4) **Valve, Insert In**  
 › P3314A251 x12
- 5) **Valve, Insert Ex**  
 › P3314A261 x12

- 6) **Spring, Valve**  
 › P3174A025 x24
- 7) **Lock, Valve**  
 › P3142W005 x48



- 1) **Oil Pump**  
 › PT410626
- 2) **Oil Cooler**  
 › P2486A002  
 › P2486A231



- 1) **Water Pump**  
 › PU5MW0204  
 › PU5MW0205
- 2) **Water Pump Gasket**  
 › P3682A011
- 3) **Thermostat**  
 › PT413847
- 4) **Thermostat Housing Gasket**  
 › P3682A022



- Repair Sleeve**  
 › 105RS
- 2) **Head Bolts**  
 › P3218A017 x14



- 1) **Glow Plug**  
 › P2666A016 x6  
 › P2666A017 x6  
 › P2666A023 x6  
 › P2666A024 x6
- 2) **Air Temp Sensor**  
 › PU5MK1089
- 3) **Injector**  
 › P2645A751  
 › P2645A746  
 › P2645A747  
 › P2645A749  
 › P2645A753  
 › P2645A738  
 › P2645A745
- 4) **Piston Cooling Nozzle**  
 › P2113A003



- Fuel Lines**  
 › 1) P3525A201  
 › 2) P3525A202  
 › 3) P3525A203  
 › 4) P3525A204  
 › 5) P3525A205  
 › 6) P3525A206

(1): Bottom Gasket Set does not contains the Timming Cover Gasket or the Oil Pan Gasket. Order separately.

(3): Grade J, Color Coded Green.

(5): Use with Cylinder Head casting number 3712L09A & 3712L10A.

(7): Check application for proper usage.






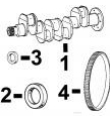

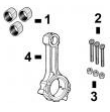
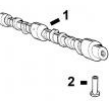
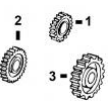


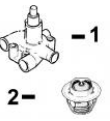
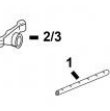

(2): Check build list for proper application.

(4): Use with Cylinder Head casting number 3712L08A.

(6): PJ Build only.

|   |                                    |   |  |                              |
|---|------------------------------------|---|--|------------------------------|
| <b>Engine Series:</b><br>3.152                          | <b>Engine Model:</b><br>3.152 (CD) | <b>Engine Desc:</b><br>INDIRECT INJECTION | <b>Engine Data:</b><br>Rope Seal<br>from ESN 1935854 | <b>Engine Info:</b><br>3 Cyl |
| <b>Engine Dimensions:</b><br>Bore: 3.6020 in / 91.491mm |                                    |   |  |                              |

|                              |   |                             |
|------------------------------|---|-----------------------------|
| <b>Mf Agricultural</b><br>35 | <b>Mf Industrial</b><br>35 Utility<br>205 | <b>Mf Industrial</b><br>203 |
|------------------------------|---|-----------------------------|

|  |  |   |  |  |
|--|--|---|--|--|
|  <p><b>1) Engine O/H Kit</b><br/>, POK302</p> <p><b>2) Basic Engine Kit</b><br/>, PBK302</p>   |  <p><b>Piston-Liner Kit</b><br/>, PU5MK0033</p> <p><b>Consist of:</b></p> <p>a) P81512 <b>1</b></p> <p>b) P41158057 <b>2</b></p> <p>c) P31358345</p> <p><b>3 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>, P68084 Std.</p> <p>, P68084A 0.010</p> <p>, P68084B 0.020</p> <p>, P68084C 0.030</p> <p><b>Set of 4 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b><br/>, P85036 Std.</p> <p>, P85036A 0.010</p> <p>, P85036B 0.020</p> <p>, P85036C 0.030</p> <p><b>Set of 3 Pairs</b></p> |  <p><b>Thrust Washer Set</b><br/>, P31137211/21</p> <p><b>Set of 2 Pairs</b></p>  |
|  <p><b>1) Front Seal</b><br/>, P2415344</p> <p><b>2) Rear Seal</b><br/>, P36883106 x2</p> <p><b>3) Crankshaft Kit</b><br/>, PZZ90116</p> <p><b>4) Ring Gear</b><br/>, P0410236 115T <b>3</b><br/>, P31162121 126T <b>3</b></p> |  <p><b>1) Top Gasket Set</b><br/>, PU5LT0012</p> <p><b>2) Bottom Gasket</b><br/>, PU5LB0012</p> <p><b>3) Head Gasket</b><br/>, P36812136</p>                                    |  <p><b>1) Bush, Con Rod</b><br/>, P31134151 x3</p> <p><b>2) Bolt, Con Rod</b><br/>, P0095250 x6</p> <p><b>3) Nut, Con Rod</b><br/>, P33221327 x6</p> <p><b>4) Con Rod</b><br/>, PZZ90011</p> |  <p><b>1) Camshaft</b><br/>, P31415261</p> <p><b>2) Tappet</b><br/>, P0860012</p>  |  <p><b>1) Crankshaft, Gear</b><br/>, P0410132</p> <p><b>2) Camshaft Gear</b><br/>, P0410241</p> <p><b>3) Idler Gear</b><br/>, P31164362</p>   |
| <p><b>Valve Train Kit</b><br/>, PVTK301</p>  | <p><b>1) Valve, Intake</b><br/>, P31431261 x3</p> <p><b>2) Valve, Exhaust</b><br/>, P0910002 x3</p>  | <p><b>3) Guide, Valve (Intake &amp; Exhaust)</b><br/>, P33261723 x6</p>   | <p><b>4) Spring, Valve a) Outer</b><br/>, 4a) P0780006 x6</p>  | <p><b>5) Lock, Valve</b><br/>, P0230001 x12</p>  |
|  <p><b>1) Oil Pump</b><br/>, P41314078</p> <p><b>2) Oil Pump Drive Gear</b><br/>, P41115025</p> <p><b>3) Bushing, Drive Gear</b><br/>, P0050265</p>  |  <p><b>Lift Pump</b><br/>, P2641408</p>   |  <p><b>1) Water Pump w/o Pulley</b><br/>, PU5MW0023</p> <p><b>1) Water Pump with Pulley</b><br/>, P41312784</p> <p><b>2) Thermostat</b><br/>, P2485666</p>                                 |  <p><b>1) Rocker Shaft</b><br/>, PZZ90047</p> <p><b>2) Rocker Arm LH</b><br/>, P3737A101</p> <p><b>3) Rocker Arm RH</b><br/>, P3737A091</p>          |  <p><b>1) Cylinder HD with Valves</b><br/>, PZZ80048</p> <p><b>2) Heater Plug</b><br/>, P2666103</p> <p><b>(Screw Fitting)</b><br/>, P2666108</p> <p><b>(Bayonet Fitting)</b></p> |

(1): Flat Head Piston.(2) Semi Finished Liner, P31358323, and Finished Liner in .010" P31358384, are also available.  
 (3): Check Build List for proper application use

(2): Semi Finished Liner, P31358323, and Finished Liner in .010" P31358384, are also available.

|                                |                                    |   |  |                              |
|--------------------------------|------------------------------------|---|--|------------------------------|
| <b>Engine Series:</b><br>3.152 | <b>Engine Model:</b><br>3.152 (CD) | <b>Engine Desc:</b><br>INDIRECT INJECTION | <b>Engine Data:</b><br>Rope Seal<br>to ESN 1935853 | <b>Engine Info:</b><br>3 Cyl |
|--------------------------------|------------------------------------|---|--|------------------------------|

**Engine Dimensions:**  
Bore: 3.6020 in / 91.491mm

**Mf Agricultural**

35

50

**Mf Industrial**

35 Utility  
205

203



- 1) **Engine O/H Kit**  
‣ POK301
- 2) **Basic Engine Kit**  
‣ PBK301



- Piston-Liner Kit**  
‣ PCK152
- Consist of:**
- a) P81512
- b) P41158057
- c) P31358308
- 3 Per Engine**



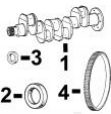
- Main Bearing Set**  
‣ P68084 Std.
- P68084A 0.010
- P68084B 0.020
- P68084C 0.030
- Set of 4 Pairs**



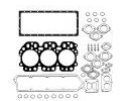
- Con Rod Bearing Set**  
‣ P85036 Std.
- P85036A 0.010
- P85036B 0.020
- P85036C 0.030
- Set of 3 Pairs**



- Thrust Washer Set**  
‣ P31137211/21
- Set of 2 Pairs**



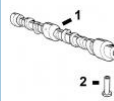
- 1) **Front Seal**  
‣ P2415344
- 2) **Rear Seal**  
‣ P36883106 x2
- 3) **Crankshaft Kit**  
‣ PZZ90116
- 4) **Ring Gear**  
‣ P0410236 115T
- P31162121 126T



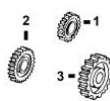
- 1) **Top Gasket Set**  
‣ PU5LT0012
- 2) **Bottom Gasket**  
‣ PU5LB0012
- 3) **Head Gasket**  
‣ P36812136



- 1) **Bush, Con Rod**  
‣ P31134151 x3
- 2) **Bolt, Con Rod**  
‣ P0095250 x6
- 3) **Nut, Con Rod**  
‣ P33221327 x6
- 4) **Con Rod**  
‣ PZZ90011



- 1) **Camshaft**  
‣ P31415261
- 2) **Tappet**  
‣ P0860012



- 1) **Crankshaft, Gear**  
‣ P0410132
- 2) **Camshaft Gear**  
‣ P0410241
- 3) **Idler Gear**  
‣ P31164362

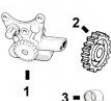
- Valve Train Kit**  
‣ PVTK301

- 1) **Valve, Intake**  
‣ P31431261 x3
- 2) **Valve, Exhaust**  
‣ P0910002 x3

- 3) **Guide, Valve (Intake & Exhaust)**  
‣ P33261723 x6

- 4) **Spring, Valve a) Outer**  
‣ 4a) P0780006 x6

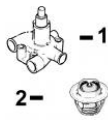
- 5) **Lock, Valve**  
‣ P0230001 x12



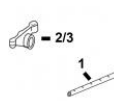
- 1) **Oil Pump**  
‣ P41314078
- 2) **Oil Pump Drive Gear**  
‣ P41115025
- 3) **Bushing, Drive Gear**  
‣ P0050265



- 1) **Lift Pump**  
‣ P2641408



- 1) **Water Pump w/o Pulley**  
‣ PU5MW0023
- 1) **Water Pump with Pulley**  
‣ P41312784
- 2) **Thermostat**  
‣ P2485666




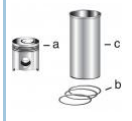



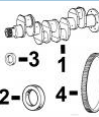
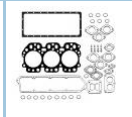
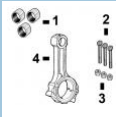
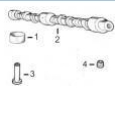
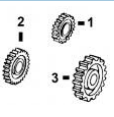
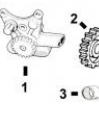

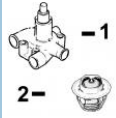
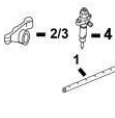

- 1) **Rocker Shaft**  
‣ PZZ90047
- 2) **Rocker Arm LH**  
‣ P3737A101
- 3) **Rocker Arm RH**  
‣ P3737A091



- 1) **Cylinder HD with Valves**  
‣ PZZ80048
- 2) **Heater Plug (Screw Fitting)**  
‣ P2666103
- P2666108
- (Bayonet Fitting)**

(1): Flat Head Piston.(2) Cast sleeve replaces OEM Chrome Liner with Flange thickness 0.040". (2): Cast sleeve replaces OEM Chrome Liner with Flange thickness 0.040".  
(3): Check Build List for Proper Application Use



|   |  |   |  |  |  |
|---|--|---|--|--|--|
| <p><b>Engine Series:</b><br/>3.152</p> <p><b>Engine Model:</b><br/>D3.152 (CE)</p> <p><b>Engine Desc:</b><br/>DIRECT INJECTION</p> <p><b>Engine Data:</b><br/>Rope Seal ESN ending with D to UA391044D</p> <p><b>Engine Info:</b><br/>3 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.6020 in / 91.491mm</p> <p><b>Mf Agricultural</b><br/>135<br/>150<br/>230<br/>235</p> <p><b>Mf Industrial</b><br/>20<br/>40<br/>200 - Crawler<br/>203<br/>205<br/>2135<br/>2200 - Forklift &amp; Treever<br/>2244 - Crawler<br/>2500 - Forklift</p> |  <p><b>1) Engine O/H Kit</b><br/>• POK303</p> <p><b>2) Basic Engine Kit</b><br/>• PBK303</p> |  <p><b>Piston-Liner Kit</b><br/>• PU5MK0034</p> <p><b>Consist of:</b><br/>• a) P68332<br/>• b) P41158057<br/>• c) P31358345</p> <p><b>3 Per Engine</b></p>                  |  <p><b>Main Bearing Set</b><br/>• P68084 Std.<br/>• P68084A 0.010<br/>• P68084B 0.020<br/>• P68084C 0.030</p> <p><b>Set of 4 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>• P85036 Std.<br/>• P85036A 0.010<br/>• P85036B 0.020<br/>• P85036C 0.030</p> <p><b>Set of 3 Pairs</b></p>  |  <p><b>Thrust Washer Set</b><br/>• P31137211/21</p> <p><b>Set of 2 Pairs</b></p>                 |
|   |  <p><b>1) Front Seal</b><br/>• P2415344</p> <p><b>2) Rear Seal</b><br/>• P36883106 x2</p>   |  <p><b>1) Top Gasket Set</b><br/>• PU5LT0038</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0012</p>  |  <p><b>1) Bush, Con Rod</b><br/>• P31134151 x3</p> <p><b>2) Bolt, Con Rod</b><br/>• P0095250 x6</p>   |  <p><b>1) Bushing, Cam</b><br/>• P31134128 x1</p> <p><b>2) Camshaft</b><br/>• P31415261</p>   |  <p><b>1) Crankshaft, Gear</b><br/>• P0410132</p> <p><b>2) Camshaft Gear</b><br/>• P0410241</p> |
|   | <p><b>3) Crankshaft Kit</b><br/>• PZZ90116</p> <p><b>4) Ring Gear</b><br/>• P0410236 115T<br/>• P0410264 122T<br/>• P31162121 126T</p>                                       | <p><b>3) Head Gasket</b><br/>• P3681E006</p>  | <p><b>3) Nut, Con Rod</b><br/>• P33221327 x6</p> <p><b>4) Con Rod</b><br/>• PZZ90010</p>   | <p><b>3) Tappet</b><br/>• P0860012</p> <p><b>4) Seal, Valve</b><br/>• P2415258<br/>• (Set of 3)</p>  | <p><b>3) Idler Gear</b><br/>• P31164362</p>  |
|   | <p><b>Valve Train Kit</b><br/>• PVTK302</p>  | <p><b>1) Valve, Intake</b><br/>• P31431281 x3</p> <p><b>2) Valve, Exhaust</b><br/>• P31431591 x3</p>  | <p><b>3) Guide, Valve (Intake &amp; Exhaust)</b><br/>• P33261723 x6</p>  | <p><b>4) Spring, Valve a) Outer</b><br/>• 4a) P0780006 x6</p>  | <p><b>5) Lock, Valve</b><br/>• P0230001 x12</p>  |
|  <p><b>1) Oil Pump</b><br/>• P41314078</p> <p><b>2) Oil Pump Drive Gear</b><br/>• P41115025</p> <p><b>3) Bushing, Drive Gear</b><br/>• P0050265</p>   |  <p><b>Lift Pump</b><br/>• P2641408<br/>• P2641A063</p>                                    |  <p><b>1) Water Pump w/o Pulley</b><br/>• PU5MW0023</p> <p><b>1) Water Pump with Pulley</b><br/>• P41312874</p> <p><b>2) Thermostat</b><br/>• P2485666<br/>• P2485659</p> |  <p><b>1) Rocker Shaft</b><br/>• PZZ90047</p> <p><b>2) Rocker Arm LH</b><br/>• P3737A101</p> <p><b>3) Rocker Arm RH</b><br/>• P3737A091</p> <p><b>4) Injector</b><br/>• P2645680</p> |  <p><b>1) Cylinder HD with Valves</b><br/>• PZZ80082</p> <p><b>2) Heater Plug (Screw Fitting)</b><br/>• P2666103<br/>• P2666108</p> <p><b>4) Insert, Valve Seat</b><br/>• P33124428 x3</p> |  |






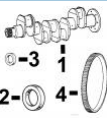

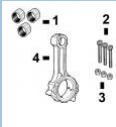
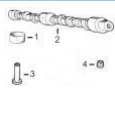



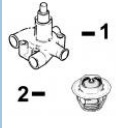
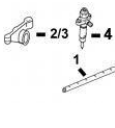

(1): To Engine No: UA38571D.

(2): From Engine No: UA38572D.

(3): Semi Finished Liner, P31358323, and Finished Liner in .010" P31358384, are also available.

(4): Check your perkins parts catalog.

(5): Check build list for proper application use

|  |  |  |   |   |   |
|--|--|--|---|---|---|
| <p><b>Engine Series:</b><br/>3.152</p> <p><b>Engine Model:</b><br/>D3.152 (CE)</p> <p><b>Engine Desc:</b><br/>DIRECT INJECTION</p> <p><b>Engine Data:</b><br/>Lip Seal<br/>ESN ending with DL from UA391045DL</p> <p><b>Engine Info:</b><br/>3 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.6020 in / 91.491mm</p> |  <p><b>1) Engine O/H Kit</b><br/>, POK304</p> <p><b>2) Basic Engine Kit</b><br/>, PBK304</p>   |  <p><b>Piston-Liner Kit</b><br/>, PU5MK0034</p> <p><b>Consist of:</b><br/>, a) P68332<br/>, b) P41158057<br/>, c) P31358345</p> <p><b>3 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>, P68084 Std. <b>4</b><br/>, P68084A 0.010<br/>, P68084B 0.020<br/>, P68084C 0.030</p> <p><b>Set of 4 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>, P85036 Std.<br/>, P85036A 0.010<br/>, P85036B 0.020<br/>, P85036C 0.030</p> <p><b>Set of 3 Pairs</b></p>   |  <p><b>Thrust Washer Set</b><br/>, P31137211/21</p> <p><b>Set of 2 Pairs</b></p>  |
| <p><b>Build List</b><br/>CE31244</p> <p><b>Landini Tractors</b><br/>4500<br/>4830</p>  |  <p><b>1) Front Seal</b><br/>, P2415344</p> <p><b>2) Rear Seal</b><br/>, P2418F475</p> <p><b>3) Crankshaft Kit</b><br/>, PZZ90078</p> <p><b>4) Ring Gear</b><br/>, P0410236 <b>115T</b> <b>7</b><br/>, P0410264 <b>122T</b> <b>7</b><br/>, P31162121 <b>126T</b> <b>7</b></p> |  <p><b>1) Top Gasket Set</b><br/>, PU5LT0038</p> <p><b>2) Bottom Gasket</b><br/>, PU5LB0011</p> <p><b>3) Head Gasket</b><br/>, P3681E006</p>              |  <p><b>1) Bush, Con Rod</b><br/>, P31134151 x3</p> <p><b>2) Bolt, Con Rod</b><br/>, P0095250 x6</p> <p><b>3) Nut, Con Rod</b><br/>, P33221327 x6</p> <p><b>4) Con Rod</b><br/>, PZZ90010</p> |  <p><b>1) Bushing, Cam</b><br/>, P31134128 x1</p> <p><b>2) Camshaft</b><br/>, P31415261</p> <p><b>3) Tappet</b><br/>, P0860012</p> <p><b>4) Seal, Valve</b><br/>, P2415258<br/>, (Set of 3)</p>                        |  <p><b>1) Crankshaft, Gear</b><br/>, P0410132</p> <p><b>2) Camshaft Gear</b><br/>, P0410241</p> <p><b>3) Idler Gear</b><br/>, P31164362</p>  |
| <p><b>Mf Agricultural</b><br/>135<br/>230<br/>235</p>  | <p><b>Valve Train Kit</b><br/>, PVTK303</p>  | <p><b>1) Valve, Intake</b><br/>, P31431681 x3</p> <p><b>2) Valve, Exhaust</b><br/>, P31431011 x3</p>   | <p><b>3) Guide, Valve (Intake &amp; Exhaust)</b><br/>, P33261723 x6</p>   | <p><b>4) Spring, Valve a) Outer</b><br/>, 4a) P0780006 x6</p>   | <p><b>5) Lock, Valve</b><br/>, P0230001 x12</p>   |
| <p><b>Mf Industrial</b><br/>20<br/>40</p>  |  <p><b>1) Oil Pump</b><br/>, P41314078</p> <p><b>2) Oil Pump Drive Gear</b><br/>, P41115025</p> <p><b>3) Bushing, Drive Gear</b><br/>, P0050265</p>  |  <p><b>Lift Pump</b><br/>, P2641808<br/>, P2641A063</p>  |  <p><b>1) Water Pump w/o Pulley</b><br/>, PU5MW0023 <b>2</b></p> <p><b>1) Water Pump with Pulley</b><br/>, P41312874 <b>1</b></p> <p><b>2) Thermostat</b><br/>, P2485666</p>                |  <p><b>1) Rocker Shaft</b><br/>, PZZ90047</p> <p><b>2) Rocker Arm LH</b><br/>, P3737A101</p> <p><b>3) Rocker Arm RH</b><br/>, P3737A091</p> <p><b>4) Injector</b><br/>, P2645680 <b>5</b><br/>, P2645732 <b>6</b></p> |  <p><b>1) Cylinder HD with Valves</b><br/>, PZZ80082</p> <p><b>2) Heater Plug (Screw Fitting)</b><br/>, P2666103</p> <p><b>(Bayonet Fitting)</b><br/>, P2666108</p> <p><b>3) Oil Pressure Switch</b><br/>, P2848062 <b>7</b></p> <p><b>4) Insert, Valve Seat</b><br/>, P33124428 x3</p> |

(1): To Engine No: U635848G (2 Hole).

(3): Semi Finished Liner, P31358323, and Finished Liner in .010" P31358384, are also available.






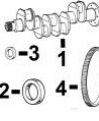
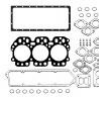

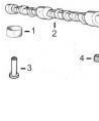
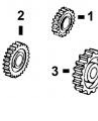
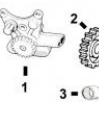

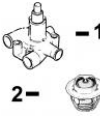
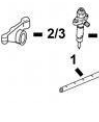

(5): Check your Perkins Parts Catalog..

(7): Check build list for proper application use

(2): From Engine No: U635849G (4 Hole)

(4): Use Main Bearing Set, PU5MB0014, from ESN U983574C. For engine kit with these bearings, order POK304NB and nominate the bearings.

(6): Used on Build list CE31075 only.

|  |   |  |   |  |   |
|--|---|--|---|--|---|
| <p><b>Engine Series:</b><br/>3.152</p> <p><b>Engine Model:</b><br/>D3.152 (CE)</p> <p><b>Engine Desc:</b><br/>DIRECT INJECTION</p> <p><b>Engine Data:</b><br/>Rope Seal To ESN UA391044DS</p> <p><b>Engine Info:</b><br/>3 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.6020 in / 91.491mm</p> <p><b>Mf Agricultural</b><br/>235<br/>245</p> <p><b>Mf Industrial</b><br/>20C<br/>30B</p> |  <p><b>1) Engine O/H Kit</b><br/>, POK305</p> <p><b>2) Basic Engine Kit</b><br/>, PBK305</p>  |  <p><b>Piston-Liner Kit</b><br/>, PU5MK0117</p> <p><b>Consist of:</b><br/>, a) P89214<br/>, b) P41158065<br/>, c) P31358345</p> <p><b>3 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>, P68084 Std.<br/>, P68084A 0.010<br/>, P68084B 0.020<br/>, P68084C 0.030</p> <p><b>Set of 4 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b><br/>, P85036 Std.<br/>, P85036A 0.010<br/>, P85036B 0.020<br/>, P85036C 0.030</p> <p><b>Set of 3 Pairs</b></p>  |  <p><b>Thrust Washer Set</b><br/>, P31137211/21</p> <p><b>Set of 2 Pairs</b></p>  |
|  |  <p><b>1) Front Seal</b><br/>, P2415344</p> <p><b>2) Rear Seal</b><br/>, P36883106 x2</p> <p><b>3) Crankshaft Kit</b><br/>, PZZ90116</p> <p><b>4) Ring Gear</b><br/>, P0410236 115T<br/>, P0410264 122T<br/>, P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>, PU5LT0038</p> <p><b>2) Bottom Gasket</b><br/>, PU5LB0012</p> <p><b>3) Head Gasket</b><br/>, P3681E006</p>              |  <p><b>1) Bush, Con Rod</b><br/>, P31134151 x3</p> <p><b>2) Bolt, Con Rod</b><br/>, P0095250 x6</p> <p><b>3) Nut, Con Rod</b><br/>, P33221327 x6</p> <p><b>4) Con Rod</b><br/>, PZZ90010</p> |  <p><b>1) Bushing, Cam</b><br/>, P31134128 x1</p> <p><b>2) Camshaft</b><br/>, P31415261</p> <p><b>3) Tappet</b><br/>, P0860012</p> <p><b>4) Seal, Valve</b><br/>, P2415258<br/>, (Set of 3)</p> |  <p><b>1) Crankshaft, Gear</b><br/>, P0410132</p> <p><b>2) Camshaft Gear</b><br/>, P0410241</p> <p><b>3) Idler Gear</b><br/>, P31164362</p>  |
|  | <p><b>Valve Train Kit</b><br/>, PVTK303</p>   | <p><b>1) Valve, Intake</b><br/>, P31431681 x3</p> <p><b>2) Valve, Exhaust</b><br/>, P31431011 x3</p>   | <p><b>3) Guide, Valve (Intake &amp; Exhaust)</b><br/>, 3) P33261723 x6</p>  | <p><b>4) Spring, Valve a) Outer</b><br/>, 4a) P0780006 x6</p>  | <p><b>5) Lock, Valve</b><br/>, P0230001 x12</p>   |
|  |  <p><b>1) Oil Pump</b><br/>, P41314078</p> <p><b>2) Oil Pump Drive Gear</b><br/>, P41115025</p> <p><b>3) Bushing, Drive Gear</b><br/>, P0050265</p>   |  <p><b>Lift Pump</b><br/>, P2641A063<br/>, P2641808</p>  |  <p><b>1) Water Pump w/o Pulley</b><br/>, PU5MW0023</p> <p><b>1) Water Pump with Pulley</b><br/>, P41312874</p> <p><b>2) Thermostat</b><br/>, P2485666</p>                                  |  <p><b>1) Rocker Shaft</b><br/>, PZZ90047</p> <p><b>2) Rocker Arm LH</b><br/>, P3737A101</p> <p><b>3) Rocker Arm RH</b><br/>, P3737A091</p> <p><b>4) Injector</b><br/>, P2645680</p>           |  <p><b>1) Cylinder HD with Valves</b><br/>, PZZ80082</p> <p><b>2) Heater Plug (Screw Fitting)</b><br/>, P2666103<br/>, P2666108</p> <p><b>4) (Bayonet Fitting)</b></p> <p><b>3) Oil Pressure Switch</b><br/>, P2848062</p> <p><b>4) Insert, Valve Seat</b><br/>, P33124428 x3</p> |

(1): To Engine No: U635848G (2 Hole).

(2): From Engine No: U635849G (4 Hole).

(3): Semi Finished Liner, P31358323, and Finished Liner in .010" P31358384, are also available.

(4): Check your Perkins Parts Catalog.

(5): Check build list for proper application use

PERKINS D3.152 DIRECT INJECTION 1

**Engine Series:**  
3.152

**Engine Model:**  
D3.152 (CE)

**Engine Desc:**  
DIRECT  
INJECTION

**Engine Data:**  
Lip Seal

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 3.6020  
in /  
91.491mm

**Ingersoll Rand Compressors**

Model 85 -  
(CE21575)  
DRP 85S 85  
CM -  
(CE22236)

**Lincoln-Electric**

Welder -  
(CE95231)



- 1) **Engine O/H Kit**  
‣ POK309
- 2) **Basic Engine Kit**  
‣ PBK309



**Piston-Liner Kit**  
‣ PU5MK0034

- Consist of:**
- a) P68332
  - b) P41158057
  - c) P31358345

**3 Per Engine**



**Main Bearing Set**

- P68084 Std.
- P68084A 0.010
- P68084B 0.020
- P68084C 0.030

**Set of 4 Pairs**



**Con Rod Bearing Set**

- P85036 Std.
- P85036A 0.010
- P85036B 0.020
- P85036C 0.030

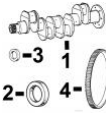
**Set of 3 Pairs**



**Thrust Washer Set**

- P31137211/21

**Set of 2 Pairs**

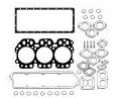


1) **Front Seal**  
‣ P2415344

2) **Rear Seal**  
‣ P2418F475

3) **Crankshaft Kit**  
‣ PZZ90078

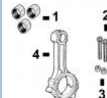
- 4) **Ring Gear**
- P0410236 115T
  - P0410264 122T
  - P31162121 126T



1) **Top Gasket Set**  
‣ PU5LT0038

2) **Bottom Gasket**  
‣ PU5LB0010

3) **Head Gasket**  
‣ P3681E006

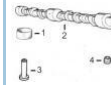


1) **Bush, Con Rod**  
‣ P31134151 x3

2) **Bolt, Con Rod**  
‣ P0095250 x6

3) **Nut, Con Rod**  
‣ P33221327 x6

4) **Con Rod**  
‣ PZZ90010

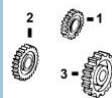


1) **Bushing, Cam**  
‣ P31134128 x1

2) **Camshaft**  
‣ P31415261

3) **Tappet**  
‣ P0860012

4) **Seal, Valve**  
‣ P2415258  
‣ (Set of 3)



1) **Crankshaft, Gear**  
‣ P0410132

2) **Camshaft Gear**  
‣ P0410241

3) **Idler Gear**  
‣ P31164362

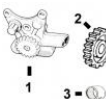
**Valve Train Kit**  
‣ PVTK303

- 1) **Valve, Intake**  
‣ P31431681 x3
- 2) **Valve, Exhaust**  
‣ P31431011 x3

3) **Guide, Valve (Intake & Exhaust)**  
‣ P33261723 x6

4) **Spring, Valve**  
a) **Outer**  
‣ 4a) P0780006 x6

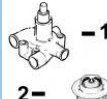
5) **Lock, Valve**  
‣ P0230001 x12



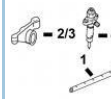
- 1) **Oil Pump**  
‣ P41314078
- 2) **Oil Pump Drive Gear**  
‣ P41115025
- 3) **Bushing, Drive Gear**  
‣ P0050265



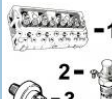
**Lift Pump**  
‣ P2641408  
‣ P2641808



- 1) **Water Pump w/o Pulley**  
‣ PU5MW0023
- 1) **Water Pump with Pulley**  
‣ P41312874
- 2) **Thermostat**  
‣ P2485666



- 1) **Rocker Shaft**  
‣ PZZ90047
- 2) **Rocker Arm LH**  
‣ P3737A101
- 3) **Rocker Arm RH**  
‣ P3737A091
- 4) **Injector**  
‣ P2645680



- 1) **Cylinder HD with Valves**  
‣ PZZ80082
- 2) **Glowplug**  
‣ P2666103
- (Screw Fitting)
- 3) **Oil Pressure Switch**  
‣ P2848062
- 4) **Insert, Valve Seat**  
‣ P33124428 x3

(1): Semi Finished Liner, P31358323, and Finished Liner in .010" P31358384, are also available.

(3): Build CE95231 Uses PZZ90011.

(5): From Engine No: U635849G (4 Hole).

(7): Check your Perkins Parts Catalog..

(2): Use Main Bearing Set, PU5MB0014, from ESN U983574C. For engine kit with these bearings, order POK309NB and nominate the bearings.

(4): To Engine No: U635848G (2 Hole).

(6): Not used on Build No: CE95231.

(8): Check build list for proper application use

PERKINS D3.152 DIRECT INJECTION 2

**Engine Series:**  
3.152

**Engine Model:**  
D3.152 (CE)






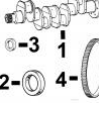
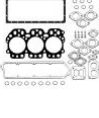
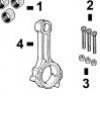
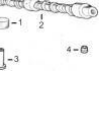



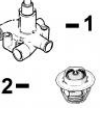
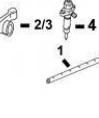

**Engine Desc:**  
DIRECT  
INJECTION

**Engine Data:**  
Lip Seal

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 3.6020 in  
/ 91.491mm

**MF Agricultural**  
135  
250 -  
(CE22488)  
150

|  |  |   |   |   |
|--|--|---|---|---|
|  <p>1) <b>Engine O/H Kit</b><br/>                     › POK307/45<br/>                     › POK307/35</p> <p>2) <b>Basic Engine Kit</b><br/>                     › PBK307</p>   |  <p><b>Piston-Liner Kit</b><br/>                     › PU5MK0034</p> <p><b>Consist of:</b><br/>                     › a) P68332<br/>                     › b) P41158057<br/>                     › c) P31358345</p> <p><b>3 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>                     › P68084 Std.<br/>                     › P68084A 0.010<br/>                     › P68084B 0.020<br/>                     › P68084C 0.030</p> <p><b>Set of 4 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b><br/>                     › P85036 Std.<br/>                     › P85036A 0.010<br/>                     › P85036B 0.020<br/>                     › P85036C 0.030</p> <p><b>Set of 3 Pairs</b></p>   |  <p><b>Thrust Washer Set</b><br/>                     › P31137211/21</p> <p><b>Set of 2 Pairs</b></p>   |
|  <p>1) <b>Front Seal</b><br/>                     › P2415344</p> <p>2) <b>Rear Seal</b><br/>                     › P2418F475</p> <p>3) <b>Crankshaft Kit</b><br/>                     › PZZ90078</p> <p>4) <b>Ring Gear</b><br/>                     › P0410236 115T<br/>                     › P0410264 122T<br/>                     › P31162121 126T</p> |  <p>1) <b>Top Gasket Set</b><br/>                     › PU5LT0038</p> <p>2) <b>Bottom Gasket</b><br/>                     › PU5LB0011</p> <p>3) <b>Head Gasket</b><br/>                     › P3681E006</p>                                   |  <p>1) <b>Bush, Con Rod</b><br/>                     › P31134151 x3</p> <p>2) <b>Bolt, Con Rod</b><br/>                     › P0095250 x6</p> <p>3) <b>Nut, Con Rod</b><br/>                     › P33221327 x6</p> <p>4) <b>Con Rod</b><br/>                     › PZZ90010</p> |  <p>1) <b>Bushing, Cam</b><br/>                     › P31134128 x1</p> <p>2) <b>Camshaft</b><br/>                     › P31415261</p> <p>3) <b>Tappet</b><br/>                     › P0860012</p> <p>4) <b>Seal, Valve</b><br/>                     › P2415258<br/>                     › (Set of 3)</p>       |  <p>1) <b>Crankshaft, Gear</b><br/>                     › P0410132</p> <p>2) <b>Camshaft Gear</b><br/>                     › P0410241</p> <p>3) <b>Idler Gear</b><br/>                     › P31164362</p>   |
| <p><b>Valve Train Kit</b><br/> <b>a) 45 b) 35</b><br/>                     › PVTK302<br/>                     › PVTK303</p>  | <p>1) <b>Valve, Intake</b><br/>                     2) <b>Valve, Exhaust</b><br/> <b>a) 45 b) 35</b><br/>                     › 1a) P31431281 x3<br/>                     › 1b) P31431681 x3<br/>                     › 2a) P31431591 x3<br/>                     › 2b) P31431011 x3</p>                                       | <p>3) <b>Guide, Valve (Intake &amp; Exhaust)</b><br/>                     › P33261723 x6</p>  | <p>4) <b>Spring, Valve a) Outer</b><br/>                     › 4a) P0780006 x6</p>  | <p>5) <b>Lock, Valve</b><br/>                     › P0230001 x12</p>  |
|  <p>1) <b>Oil Pump</b><br/>                     › P41314078</p> <p>2) <b>Oil Pump Drive Gear</b><br/>                     › P41115025</p> <p>3) <b>Bushing, Drive Gear</b><br/>                     › P0050265</p>  |  <p><b>Lift Pump</b><br/>                     › P2641A063<br/>                     › P2641808</p>   |  <p>1) <b>Water Pump w/o Pulley</b><br/>                     › PU5MW0023</p> <p>1) <b>Water Pump with Pulley</b><br/>                     › P41312874</p> <p>2) <b>Thermostat</b><br/>                     › P2485666</p>  |  <p>1) <b>Rocker Shaft</b><br/>                     › PZZ90047</p> <p>2) <b>Rocker Arm LH</b><br/>                     › P3737A101</p> <p>3) <b>Rocker Arm RH</b><br/>                     › P3737A091</p> <p>4) <b>Injector</b><br/>                     › P2645680<br/>                     › P2645732</p> |  <p>1) <b>Cylinder HD with Valves</b><br/>                     › PZZ80082</p> <p>2) <b>Heater Plug</b><br/>                     › P2666108</p> <p>(Bayonet Fitting)</p> <p>3) <b>Oil Pressure Switch</b><br/>                     › P2848062</p> <p>4) <b>Insert, Valve Seat</b><br/>                     › P33124428 x3</p> |

(1): Use with Cylinder Head PZZ80082.

(3): To Engine No: U635848G (2 Hole).

(5): Semi Finished Liner, P31358323, and Finished Liner in .010" P31358384, are also available.

(7): Check your Perkins Parts Catalog.






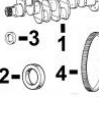

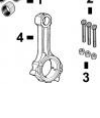

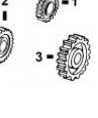
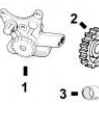

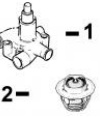
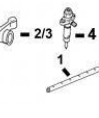

(9): Check build list for proper application use

(2): Use with Cylinder Head 68128.

(4): From Engine No: U635849G (4 Hole).

(6): Use Main Bearing Set, PU5MB0014, from ESN U983574C. For engine kit with these bearings, order POK307NB and nominate the bearings.

(8): Used on Build list CE31075 only.

|   |  |   |   |   |   |
|---|--|---|---|---|---|
| <p><b>Engine Series:</b><br/>3.152</p> <p><b>Engine Model:</b><br/>D3.152 (CE)</p> <p><b>Engine Desc:</b><br/>DIRECT INJECTION</p> <p><b>Engine Data:</b><br/>Lip Seal<br/>From ESN UA391045DSL</p> |  <p><b>1) Engine O/H Kit</b><br/>• POK306</p> <p><b>2) Basic Engine Kit</b><br/>• PBK306</p>   |  <p><b>Piston-Liner Kit</b><br/>• PU5MK0117</p> <p><b>Consist of:</b><br/>• a) P89214<br/>• b) P41158065<br/>• c) P31358345</p> <p><b>3 Per Engine</b></p>  |  <p><b>Main Bearing Set</b><br/>• P68084 Std. <span style="border: 1px solid blue; padding: 0 2px;">4</span><br/>• P68084A 0.010<br/>• P68084B 0.020<br/>• P68084C 0.030</p> <p><b>Set of 4 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>• P85036 Std. <span style="border: 1px solid blue; padding: 0 2px;">4</span><br/>• P85036A 0.010<br/>• P85036B 0.020<br/>• P85036C 0.030</p> <p><b>Set of 3 Pairs</b></p>  |  <p><b>Thrust Washer Set</b><br/>• P31137211/21</p> <p><b>Set of 2 Pairs</b></p>  |
| <p><b>Engine Info:</b><br/>3 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.6020 in / 91.491mm</p>  |  <p><b>1) Crankshaft Kit</b><br/>• PZZ90078</p> <p><b>2) Front Seal</b><br/>• P2415344</p> <p><b>3) Rear Seal</b><br/>• P2418F475</p> <p><b>4) Ring Gear</b><br/>• P0410236 <span style="border: 1px solid blue; padding: 0 2px;">6</span><br/>• P0410264 <span style="border: 1px solid blue; padding: 0 2px;">6</span><br/>• P31162121 <span style="border: 1px solid blue; padding: 0 2px;">6</span></p> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT0038</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0011</p> <p><b>3) Head Gasket</b><br/>• P3681E006</p>   |  <p><b>1) Bush, Con Rod</b><br/>• P31134151 <span style="border: 1px solid green; padding: 0 2px;">x3</span></p> <p><b>2) Bolt, Con Rod</b><br/>• P0095250 <span style="border: 1px solid green; padding: 0 2px;">x6</span></p> <p><b>3) Nut, Con Rod</b><br/>• P33221327 <span style="border: 1px solid green; padding: 0 2px;">x6</span></p> <p><b>4) Con Rod</b><br/>• PZZ90010</p> |  <p><b>1) Bushing, Cam</b><br/>• P31134128 <span style="border: 1px solid blue; padding: 0 2px;">x1</span></p> <p><b>2) Camshaft</b><br/>• P31415261</p> <p><b>3) Tappet</b><br/>• P0860012</p> <p><b>4) Seal, Valve</b><br/>• P2415258<br/>• (Set of 3)</p> |  <p><b>1) Crankshaft, Gear</b><br/>• P0410132</p> <p><b>2) Camshaft Gear</b><br/>• P0410241</p> <p><b>3) Idler Gear</b><br/>• P31164362</p>  |
| <p><b>Landini Tractors</b></p> <p>5500<br/>5530<br/>5530F<br/>5830<br/>5840</p>   | <p><b>Valve Train Kit</b><br/>• PVTK303</p>    | <p><b>1) Valve, Intake</b><br/>• P31431681 <span style="border: 1px solid green; padding: 0 2px;">x3</span></p> <p><b>2) Valve, Exhaust</b><br/>• P31431011 <span style="border: 1px solid green; padding: 0 2px;">x3</span></p>  | <p><b>3) Guide, Valve (Intake &amp; Exhaust)</b><br/>• P33261723 <span style="border: 1px solid green; padding: 0 2px;">x6</span></p>   | <p><b>4) Spring, Valve a) Outer</b><br/>• 4a) P0780006 <span style="border: 1px solid green; padding: 0 2px;">x6</span></p>   | <p><b>5) Lock, Valve</b><br/>• P0230001 <span style="border: 1px solid green; padding: 0 2px;">x12</span></p>   |
| <p><b>Mf Agricultural</b></p> <p>235 - (CE22309)<br/>235 - (CE22310)<br/>235 - (CE22311)<br/>245<br/>250 - (CE31089)</p>  | <p><b>1) Oil Pump</b><br/>• P41314078</p> <p><b>2) Oil Pump Drive Gear</b><br/>• P41115025</p> <p><b>3) Bushing, Drive Gear</b><br/>• P0050265</p>   | <p><b>Lift Pump</b><br/>• P2641A063<br/>• P2641808</p>  | <p><b>1) Water Pump w/o Pulley</b><br/><span style="border: 1px solid blue; padding: 0 2px;">1</span><br/><span style="border: 1px solid blue; padding: 0 2px;">2</span><br/>• PU5MW0023</p> <p><b>1) Water Pump with Pulley</b><br/>• P41312874</p> <p><b>2) Thermostat</b><br/>• P2485666</p>   | <p><b>1) Rocker Shaft</b><br/>• PZZ90047</p> <p><b>2) Rocker Arm LH</b><br/>• P3737A101</p> <p><b>3) Rocker Arm RH</b><br/>• P3737A091</p> <p><b>4) Injector</b><br/>• P2645680</p>   | <p><b>1) Cylinder HD with Valves</b><br/>• PZZ80082</p> <p><b>2) Heater Plug (Screw Fitting)</b><br/>• P2666103<br/>• P2666108</p> <p><b>5) (Bayonet Fitting)</b><br/><span style="border: 1px solid blue; padding: 0 2px;">5</span></p> <p><b>3) Oil Pressure Switch</b><br/>• P2848062 <span style="border: 1px solid blue; padding: 0 2px;">6</span></p> <p><b>4) Insert, Valve Seat</b><br/>• P33124428 <span style="border: 1px solid blue; padding: 0 2px;">x3</span></p> |

(1): To Engine No: U635848G (2 Hole).

(3): Semi Finished Liner, P31358323, and Finished Liner in .010" P31358384, are also available.

(5): Check your Perkins Parts Catalog.

(2): From Engine No: U635849G (4 Hole).






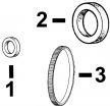

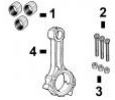
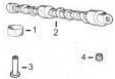
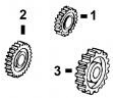


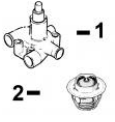
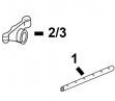

(4): Use Main Bearing Set, PU5MB0014, from ESN U983574C. For engine kit with these bearings, order POK306NB and nominate the bearings.

(6): Check build list for proper application use

|                                |                                      |                                 |                              |  |
|--------------------------------|--------------------------------------|---------------------------------|------------------------------|--|
| <b>Engine Series:</b><br>3.152 | <b>Engine Model:</b><br>3.152.4 (CM) | <b>Engine Data:</b><br>Lip Seal | <b>Engine Info:</b><br>3 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.6020 in /<br>91.491mm |
|--------------------------------|--------------------------------------|---------------------------------|------------------------------|--|

**Perkins**  
General Genset - (CM50184)

**Fg-Wilson**  
Generator Set - (CM33513)

|  |  |   |   |  |
|--|--|---|---|--|
|  <p><b>1) Engine O/H Kit</b><br/>• POK310</p> <p><b>2) Basic Engine Kit</b><br/>• PBK310</p>   |  <p><b>Piston-Liner Kit</b><br/>• PCK1524</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>• a) PU5LP0017</li> <li>• b) P41158144</li> <li>• c) P31358345</li> </ul> <p><b>3 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>• P68084 Std. <span style="border: 1px solid black; padding: 0 2px;">2</span></p> <ul style="list-style-type: none"> <li>• P68084A 0.010</li> <li>• P68084B 0.020</li> <li>• P68084C 0.030</li> </ul> <p><b>Set of 4 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b><br/>• P85036 Std. <span style="border: 1px solid black; padding: 0 2px;">2</span></p> <ul style="list-style-type: none"> <li>• P85036A 0.010</li> <li>• P85036B 0.020</li> <li>• P85036C 0.030</li> </ul> <p><b>Set of 3 Pairs</b></p> |  <p><b>Thrust Washer Set</b><br/>• P31137211/21</p> <p><b>Set of 2 Pairs</b></p>  |
|  <p><b>1) Front Seal</b><br/>• P2415344</p> <p><b>2) Rear Seal</b><br/>• P2418F475</p> <p><b>3) Ring Gear</b><br/>• P0410236 115T <span style="border: 1px solid black; padding: 0 2px;">3</span><br/>• P31162121 126T <span style="border: 1px solid black; padding: 0 2px;">3</span></p> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT0038</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0010</p> <p><b>3) Head Gasket</b><br/>• P3681E006 <span style="border: 1px solid black; padding: 0 2px;">3</span></p>        |  <p><b>1) Bush, Con Rod</b><br/>• P31134151 x3</p> <p><b>2) Bolt, Con Rod</b><br/>• P0095250 x6</p> <p><b>3) Nut, Con Rod</b><br/>• P33221327 x6</p> <p><b>4) Con Rod</b><br/>• PZZ90010</p>   |  <p><b>1) Bushing, Cam</b><br/>• P31134128 x1</p> <p><b>2) Camshaft</b><br/>• P31415264</p> <p><b>3) Tappet</b><br/>• P0860012</p> <p><b>4) Seal, Valve</b><br/>• P2415258<br/>• (Set of 3)</p>   |  <p><b>1) Crankshaft, Gear</b><br/>• P0410132</p> <p><b>2) Camshaft Gear</b><br/>• P0410241</p> <p><b>3) Idler Gear</b><br/>• P31164362</p>   |
| <p><b>Valve Train Kit</b><br/>• PVTK305</p>  | <p><b>1) Valve, Intake</b><br/>• P31431981 x3</p> <p><b>2) Valve, Exhaust</b><br/>• P31431011 x3</p>   | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b><br/>• 3a) P33261727 x3<br/>• 3b) P33261723 x3</p>   | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>• 4a) P0780007 x6<br/>• 4b) P0780006 x6</p>   | <p><b>5) Lock, Valve</b><br/>• P0230001 x12</p>  |
|  <p><b>1) Oil Pump</b><br/>• P41314078</p> <p><b>2) Oil Pump Drive Gear</b><br/>• P41115025</p> <p><b>3) Bushing, Drive Gear</b><br/>• P0050265</p>  |  <p><b>Lift Pump</b><br/>• P2641808</p>   |  <p><b>1) Water Pump w/o Pulley</b><br/>• PU5MW0023</p> <p><b>1) Water Pump with Pulley</b><br/>• P41312874</p> <p><b>2) Thermostat</b><br/>• P2485666</p>   |  <p><b>1) Rocker Shaft</b><br/>• PZZ90047</p> <p><b>2) Rocker Arm LH</b><br/>• P3737A101</p> <p><b>3) Rocker Arm RH</b><br/>• P3737A091</p>   |  <p><b>1) Heater Plug</b><br/>• P2666108</p> <p><b>2) Oil Pressure Switch (Bayonet Fitting)</b><br/>• P2848062 <span style="border: 1px solid black; padding: 0 2px;">3</span></p> <p><b>3) Insert, Valve Seat</b><br/>• P33124428 x3</p> |

(1): Semi Finished Liner, P31358323, and Finished Liner in .010" P31358384, are also available.

(2): Use Main Bearing Set, PU5MB0014, from ESN U983574C. For engine kit with these bearings, order POK310NB and nominate the bearings.






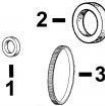
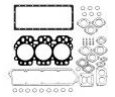
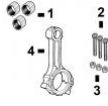




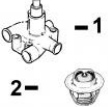
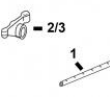

(3): Check build list for proper application use

|                                |                                       |                                 |                              |  |
|--------------------------------|---------------------------------------|---------------------------------|------------------------------|--|
| <b>Engine Series:</b><br>3.152 | <b>Engine Model:</b><br>T3.152.4 (CN) | <b>Engine Data:</b><br>Lip Seal | <b>Engine Info:</b><br>3 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.6020 in /<br>91.491mm |
|--------------------------------|---------------------------------------|---------------------------------|------------------------------|--|

**Mf Agricultural**

253 - (CN31219)  
355 - (CN31187)

264 - (CN31214)

|  |  |  |  |  |
|--|--|--|--|--|
|  <p><b>1) Engine O/H Kit</b><br/>• POK311</p> <p><b>2) Basic Engine Kit</b><br/>• PBK311</p>   |  <p><b>Piston-Liner Kit</b><br/>• PCK1524</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>• a) PU5LP0017</li> <li>• b) P41158144</li> <li>• c) P31358345</li> </ul> <p><b>3 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>• P68084 Std. <b>2</b></p> <ul style="list-style-type: none"> <li>• P68084A 0.010</li> <li>• P68084B 0.020</li> <li>• P68084C 0.030</li> </ul> <p><b>Set of 4 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b><br/>• P85036 Std. <b>2</b></p> <ul style="list-style-type: none"> <li>• P85036A 0.010</li> <li>• P85036B 0.020</li> <li>• P85036C 0.030</li> </ul> <p><b>Set of 3 Pairs</b></p> |  <p><b>Thrust Washer Set</b><br/>• P31137211/21</p> <p><b>Set of 2 Pairs</b></p>  |
|  <p><b>1) Front Seal</b><br/>• P2415344</p> <p><b>2) Rear Seal</b><br/>• P2418F475</p> <p><b>3) Ring Gear</b><br/>• P0410236 115T <b>3</b><br/>• P31162121 126T <b>3</b></p> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT0080</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0011</p> <p><b>3) Head Gasket</b><br/>• P3681E006</p>  |  <p><b>1) Bush, Con Rod</b><br/>• P31134151 x3</p> <p><b>2) Bolt, Con Rod</b><br/>• P0095250 x6</p> <p><b>3) Nut, Con Rod</b><br/>• P33221327 x6</p> <p><b>4) Con Rod</b><br/>• PZZ90010</p>                |  <p><b>1) Bushing, Cam</b><br/>• P31134128 x1</p> <p><b>2) Camshaft</b><br/>• P31415261</p> <p><b>3) Tappet</b><br/>• P0860012</p>   |  <p><b>1) Camshaft Gear</b><br/>• P0410241</p> <p><b>2) Idler Gear</b><br/>• P31164362</p>  |
| <p><b>Valve Train Kit</b><br/>• PVTK306</p>  | <p><b>1) Valve, Intake</b><br/>• P31431741 x3</p> <p><b>2) Valve, Exhaust</b><br/>• P31431731 x3</p>   | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b><br/>• 3a) P33261727 x3<br/>• 3b) P33261723 x3</p>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>• 4a) P0780007 x6<br/>• 4b) P0780006 x6</p>  | <p><b>5) Lock, Valve</b><br/>• P0230001 x12</p>  |
|  <p><b>1) Oil Pump</b><br/>• P41314078</p> <p><b>2) Oil Pump Drive Gear</b><br/>• P41115025</p> <p><b>3) Bushing, Drive Gear</b><br/>• P0050265</p>                        |  <p><b>Lift Pump</b><br/>• P2641808</p>   |  <p><b>1) Water Pump w/o Pulley</b><br/>• PU5MW0023</p> <p><b>1) Water Pump with Pulley</b><br/>• P41312874</p> <p><b>2) Thermostat</b><br/>• P2485666</p>  |  <p><b>1) Rocker Shaft</b><br/>• PZZ90047</p> <p><b>2) Rocker Arm LH</b><br/>• P3737A101</p> <p><b>3) Rocker Arm RH</b><br/>• P3737A091</p>  |  <p><b>1) Heater Plug</b><br/>• P2666108</p> <p><b>(Bayonet Fitting)</b></p> <p><b>2) Insert, Valve Seat</b><br/>• P33124428 x3</p> |

(1): Semi Finished Liner, P31358323, and Finished Liner in .010" P31358384, are also available.

(2): Use Main Bearing Set, PU5MB0014, from ESN U983574C. For engine kit with these bearings, order POK311NB and nominate the bearings.



**Engine Series:** 3.152      **Engine Model:** G3.152 (CF)      **Engine Desc:** GASOLINE ENGINE      **Engine Data:** Rope Seal      **Engine Info:** 3 Cyl

**Engine Dimensions:**  
Bore: 3.6020 in / 91.491mm






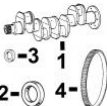
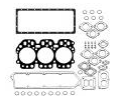
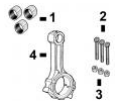
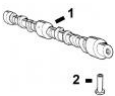
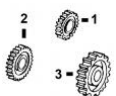

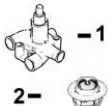
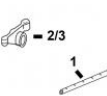
**Mf Agricultural**

135

**Mf Industrial**

20  
2500 - Forklift

40

|  |  |   |   |  |
|--|--|---|---|--|
|  <p><b>1) Engine O/H Kit</b><br/>• POK308</p> <p><b>2) Basic Engine Kit</b><br/>• PBK308</p>   |  <p><b>Piston-Liner Kit</b><br/>• PCK154</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>• a) P86723</li> <li>• b) P41158012</li> <li>• c) P31358345</li> </ul> <p><b>3 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>• P68084 Std.</p> <ul style="list-style-type: none"> <li>• P68084A 0.010</li> <li>• P68084B 0.020</li> <li>• P68084C 0.030</li> </ul> <p><b>1 Set of 4 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b><br/>• P85036 Std.</p> <ul style="list-style-type: none"> <li>• P85036A 0.010</li> <li>• P85036B 0.020</li> <li>• P85036C 0.030</li> </ul> <p><b>Set of 3 Pairs</b></p> |  <p><b>Thrust Washer Set</b><br/>• P31137211/21</p> <p><b>Set of 2 Pairs</b></p>  |
|  <p><b>1) Front Seal</b><br/>• P2415344</p> <p><b>2) Rear Seal</b><br/>• P36883106 x2</p> <p><b>3) Crankshaft Kit</b><br/>• PZZ90116</p> <p><b>4) Ring Gear</b><br/>• P0410236 115T<br/>• P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT0037</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0012</p> <p><b>3) Head Gasket</b><br/>• P3681E006</p>  |  <p><b>1) Bush, Con Rod</b><br/>• P31134151 x3</p> <p><b>2) Bolt, Con Rod</b><br/>• P0095250 x6</p> <p><b>3) Nut, Con Rod</b><br/>• P33221327 x6</p> <p><b>4) Con Rod</b><br/>• PZZ90011</p>         |  <p><b>1) Camshaft</b><br/>• P31415261</p> <p><b>2) Tappet</b><br/>• P0860012</p>   |  <p><b>1) Crankshaft, Gear</b><br/>• P0410132</p> <p><b>2) Camshaft Gear</b><br/>• P0410241</p> <p><b>3) Idler Gear</b><br/>• P31164362</p> |
| <p><b>Valve Train Kit</b><br/>• PVTK304</p>  | <p><b>1) Valve, Intake</b><br/>• P31431741 x3</p> <p><b>2) Valve, Exhaust</b><br/>• P31431731 x3</p>   | <p><b>3) Guide, Valve (Intake &amp; Exhaust)</b><br/>• P3313E011 x6</p>   | <p><b>4) Spring, Valve a) Outer</b><br/>• 4a) P0780006 x6</p>   | <p><b>5) Lock, Valve</b><br/>• P0230001 x12</p>  |
|  <p><b>1) Oil Pump</b><br/>• P41314078</p> <p><b>2) Oil Pump Drive Gear</b><br/>• P41115025</p> <p><b>3) Bushing, Drive Gear</b><br/>• P0050265</p>  |  <p><b>1) Water Pump w/o Pulley</b><br/>• PU5MW0023</p> <p><b>1) Water Pump with Pulley</b><br/>• P41312784</p> <p><b>2) Thermostat</b><br/>• P2485666</p>  |  <p><b>1) Rocker Shaft</b><br/>• PZZ90047</p> <p><b>2) Rocker Arm LH</b><br/>• P3737A101</p> <p><b>3) Rocker Arm RH</b><br/>• P3737A091</p>  |   |  |

(1): Semi Finished Liner, P31358323, and Finished Liner in .010" (2): Check build list for proper application use  
P31358384, are also available.

PERKINS 4.108 INDUSTRIAL

**Engine Series:**  
4.108

**Engine Model:**  
4.108 (ED)

**Engine Desc:**  
INDUSTRIAL

**Engine Data:**  
Rope Seal

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.1250 in  
/ 79.375 mm

**Mustang**

445 - Skid Steer

**Clark Equipment**

800 - Skid Steer  
825 - Skid Steer

**Owattona-Mfg**

445 - Skid Loader (ED70035)

**Gehl**

4600 - Skid Steer  
4625 - Skid Steer  
SL4615 - Skid Steer  
SL4610 - Skid Steer

**Melroe**

E146 - Loader (ED70075)

**Vermeer-Mfg**

M434-4 - Trencher (ED70077)

**Sperry-New-Holland**

L555 - Skid Loader (ED70077)

**New-Holland**

L555 - Skid Steer

**Bobcat**

825 - Skid Steer



- 1) **Engine O/H Kit**  
‣ POK410
- 2) **Basic Engine Kit**  
‣ PBK410



- Piston-Liner Kit**  
‣ PU5MK0118
- Consist of:**
- a) P69491
- b) P41158008
- c) P31358117
- 4 Per Engine**



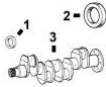
- Main Bearing Set**  
‣ P84992 Std.
- P84992A 0.010
- P84992B 0.020
- P84992C 0.030
- Set of 3 Pairs**



- Con Rod Bearing Set**  
‣ P85037 Std.
- P85037A 0.010
- P85037B 0.020
- P85037C 0.030
- Set of 4 Pairs**



- Thrust Washer Set**  
‣ P0921120/118
- Set of 3 Pcs**



- 1) **Front Seal**  
‣ P2415338
- 2) **Rear Seal**  
‣ P36883107 x2
- 3) **Crankshaft Kit**  
‣ PZZ90160



- 1) **Top Gasket Set**  
‣ P92425
- 2) **Bottom Gasket**  
‣ PU5LB0013
- 3) **Head Gasket**  
‣ P36812134



- Bush, Con Rod**  
‣ P31134145 x4



- Tappet**  
‣ P31434152

**Valve Train Kit**

- 1) **Valve, Intake**  
‣ P0910060 x4
- 2) **Valve, Exhaust**  
‣ P0910061 x4

- 3) **Guide, Valve**
- a) **Intake b) Exhaust**
- 3a) P3313E001 x4
- 3b) P33261723 x4

- 4) **Spring, Valve**
- a) **Inner b) Outer**
- 4a) P0780143 x8
- 4b) P0780144 x8

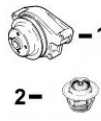
- 5) **Lock, Valve**  
‣ P0230001 x16
- 6) **Seal, Valve**  
‣ P33817403 x8



- Oil Pump**  
‣ P41314089



- Lift Pump**  
‣ P2641A058



- 1) **Water Pump**  
‣ PU5MW0054
- 2) **Thermostat**  
‣ P2485666



- Rocker Shaft Bush**  
‣ P0050132



- Oil Pressure Switch**  
‣ P2848062

(1): Set of 4 Rings.

(2): Check Against Build Number.






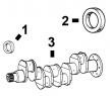








**Engine Series:** 4.108      **Engine Model:** 4.108 (ED)      **Engine Desc:** MARINE      **Engine Data:** Rope Seal      **Engine Info:** 4 Cyl

**Engine Dimensions:**  
Bore: 3.1250 in / 79.375 mm

**Marine**

Commercial Craft - (ED70058)  
Pleasure Craft - (ED33210)  
Pleasure Craft - (ED70058)

Perkins USA - (ED22195)  
Pleasure Craft - (ED50033)

|   |   |   |   |  |
|---|---|---|---|--|
|  <p><b>1) Engine O/H Kit</b><br/>, POK411</p> <p><b>2) Basic Engine Kit</b><br/>, PBK411</p>  |  <p><b>Piston-Liner Kit</b><br/>, PU5MK0061</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>, a) P68383</li> <li>, b) P41158087</li> <li>, c) P31358117</li> </ul> <p><b>4 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>, P84992 <i>Std.</i></p> <ul style="list-style-type: none"> <li>, P84992A <i>0.010</i></li> <li>, P84992B <i>0.020</i></li> <li>, P84992C <i>0.030</i></li> </ul> <p><b>Set of 3 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b><br/>, P85037 <i>Std.</i></p> <ul style="list-style-type: none"> <li>, P85037A <i>0.010</i></li> <li>, P85037B <i>0.020</i></li> <li>, P85037C <i>0.030</i></li> </ul> <p><b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer Set</b><br/>, P0921120/118</p> <p><b>Set of 3 Pcs</b></p>  |
|  <p><b>1) Front Seal</b><br/>, P0730098</p> <p><b>2) Rear Seal</b><br/>, P36883107 <i>x2</i></p> <p><b>3) Crankshaft Kit</b><br/>, PZZ90160</p> |  <p><b>1) Top Gasket Set</b><br/>, P85786</p> <p><b>2) Bottom Gasket</b><br/>, PU5LB0013</p> <p><b>3) Head Gasket</b><br/>, P36812134</p>  |  <p><b>Bush, Con Rod</b><br/>, P31134145 <i>x4</i></p>   |  <p><b>Tappet</b><br/>, P31434152</p>  |  |
| <p><b>Valve Train Kit</b><br/>, PVTK400</p>   | <p><b>1) Valve, Intake</b><br/>, P0910060 <i>x4</i></p> <p><b>2) Valve, Exhaust</b><br/>, P0910061 <i>x4</i></p>  | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b></p> <ul style="list-style-type: none"> <li>, 3a) P3313E001 <i>x4</i></li> <li>, 3b) P33261723 <i>x4</i></li> </ul>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b></p> <ul style="list-style-type: none"> <li>, 4a) P0780143 <i>x8</i></li> <li>, 4b) P0780144 <i>x8</i></li> </ul>  | <p><b>5) Lock, Valve</b><br/>, P0230001 <i>x16</i></p> <p><b>6) Seal, Valve</b><br/>, P33817403 <i>x8</i></p>  |
|  <p><b>Oil Pump</b><br/>, P41314089</p>  |  <p><b>Lift Pump</b><br/>, P2641A058</p>   |  <p><b>1) Water Pump</b><br/>, PU5MW0054</p> <p><b>2) Thermostat</b><br/>, P2485608</p>  |  <p><b>Rocker Shaft Bush</b><br/>, P0050132</p>   |  <p><b>1) Heater Plug</b><br/>, P2666108<br/><b>(Bayonet Fitting)</b></p> <p><b>2) Oil Pressure Switch</b><br/>, P2848062</p> |

(1): Set of 5 Rings.  
(3): Semi-Finished Liner


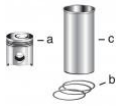



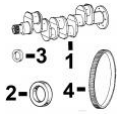

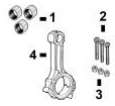



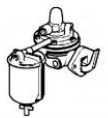

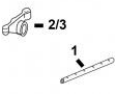

(2): Check Against Build Number.

|                                |                                    |   |  |                              |
|--------------------------------|------------------------------------|---|--|------------------------------|
| <b>Engine Series:</b><br>4.203 | <b>Engine Model:</b><br>4.203 (JD) | <b>Engine Desc:</b><br>INDIRECT INJECTION | <b>Engine Data:</b><br>Rope Seal<br>To ESN 2820092 | <b>Engine Info:</b><br>4 Cyl |
|--------------------------------|------------------------------------|---|--|------------------------------|

**Engine Dimensions:**  
Bore: 3.6020 in / 91.491mm

**MF Agricultural**  
65

**MF Industrial**  
356 - Tractor Shovel

|   |  |  |  |  |
|---|--|--|--|--|
|  <p><b>1) Engine O/H Kit</b><br/>• POK430</p> <p><b>2) Basic Engine Kit</b><br/>• PBK430</p>  |  <p><b>Piston-Liner Kit</b><br/>• PCK152</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>• a) P81512</li> <li>• b) P41158057</li> <li>• c) P31358308</li> </ul> <p><b>4 Per Engine</b></p> |  <p><b>Main Bearing Set</b></p> <ul style="list-style-type: none"> <li>• P68082 <i>Std.</i></li> <li>• P68082A <i>0.010</i></li> <li>• P68082B <i>0.020</i></li> <li>• P68082C <i>0.030</i></li> </ul> <p><b>Set of 5 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b></p> <ul style="list-style-type: none"> <li>• P85035 <i>Std.</i></li> <li>• P85035A <i>0.010</i></li> <li>• P85035B <i>0.020</i></li> <li>• P85035C <i>0.030</i></li> </ul> <p><b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer Set</b><br/>• P31137211/21</p> <p><b>Set of 2 Pairs</b></p>  |
|  <p><b>1) Front Seal</b><br/>• P2415344</p> <p><b>2) Rear Seal</b><br/>• P36883106 <i>x2</i></p> <p><b>3) Crankshaft Kit</b><br/>• PZZ90121</p> <p><b>4) Ring Gear</b><br/>• P0410264 <i>122T</i><br/>• P31162121 <i>126T</i></p> |  <p><b>1) Top Gasket Set</b><br/>• P69036</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0500</p> <p><b>3) Head Gasket</b><br/>• P36812125</p>   |  <p><b>1) Bush, Con Rod</b><br/>• P31134151 <i>x4</i></p> <p><b>2) Bolt, Con Rod</b><br/>• P0095250 <i>x8</i></p> <p><b>3) Nut, Con Rod</b><br/>• P33221327 <i>x8</i></p> <p><b>4) Con Rod</b><br/>• PZZ90011</p>                   |  <p><b>1) Bushing, Cam</b><br/>• P31134119 <i>x1</i></p> <p><b>2) Tappet</b><br/>• P0860012</p>  |  <p><b>1) Idler Gear, Lower</b><br/>• P41115004</p> <p><b>2) Idler Gear, Upper</b><br/>• P41115005</p>  |
| <p><b>Valve Train Kit</b><br/>• PVTK404</p>   | <p><b>1) Valve, Intake</b><br/>• P31431261 <i>x4</i></p> <p><b>2) Valve, Exhaust</b><br/>• P0910002 <i>x4</i></p>  | <p><b>3) Guide, Valve (Intake &amp; Exhaust)</b><br/>• P33261723 <i>x8</i></p>   | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b></p> <ul style="list-style-type: none"> <li>• 4a) P0780007 <i>x8</i></li> <li>• 4b) P0780006 <i>x8</i></li> </ul>   | <p><b>5) Lock, Valve</b><br/>• P0230001 <i>x16</i></p>   |
|  <p><b>Oil Pump</b><br/>• P41314164</p>   |  <p><b>Lift Pump</b><br/>• P2641A065</p>  |  <p><b>1) Water Pump w/o Pulley</b><br/>• PU5MW0061</p> <p><b>1) Water Pump with Pulley</b><br/>• P41312892</p> <p><b>2) Thermostat</b><br/>• P2485666</p>  |  <p><b>1) Rocker Shaft</b><br/>• PZZ90139</p> <p><b>2) Rocker Arm LH</b><br/>• P3737A101</p> <p><b>3) Rocker Arm RH</b><br/>• P3737A091</p>  |  <p><b>1) Cylinder HD with Valves</b></p> <ul style="list-style-type: none"> <li>• <b>2) Heater Plug</b><br/>• P2666103</li> <li>• <b>(Screw Fitting)</b><br/>• P2666108</li> <li>• <b>(Bayonet Fitting)</b></li> <li><b>3) Oil Pressure Switch</b><br/>• P2848062</li> </ul> |

(1): Flat Head Piston.

(2): Cast sleeve replaces OEM Chrome Liner with Flange thickness 0.040".


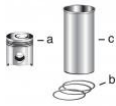



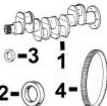

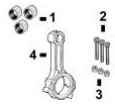



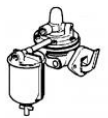

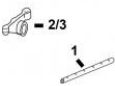

(3): Check for proper application.

|                                |                                    |   |  |                              |
|--------------------------------|------------------------------------|---|--|------------------------------|
| <b>Engine Series:</b><br>4.203 | <b>Engine Model:</b><br>4.203 (JD) | <b>Engine Desc:</b><br>INDIRECT INJECTION | <b>Engine Data:</b><br>Rope Seal<br>From ESN 2820093 | <b>Engine Info:</b><br>4 Cyl |
|--------------------------------|------------------------------------|---|--|------------------------------|

**Engine Dimensions:**  
Bore: 3.6020 in / 91.491mm

**MF Agricultural**  
65

**MF Industrial**  
356 - Tractor Shovel

|   |   |   |   |  |
|---|---|---|---|--|
|  <p><b>1) Engine O/H Kit</b><br/>• POK431</p> <p><b>2) Basic Engine Kit</b><br/>• PBK431</p>  |  <p><b>Piston-Liner Kit</b><br/>• PU5MK0033</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>a) P81512</li> <li>b) P41158057</li> <li>c) P31358345</li> </ul> <p><b>4 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>• P68082 <i>Std.</i></p> <ul style="list-style-type: none"> <li>• P68082A <i>0.010</i></li> <li>• P68082B <i>0.020</i></li> <li>• P68082C <i>0.030</i></li> </ul> <p><b>Set of 5 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b><br/>• P85035 <i>Std.</i></p> <ul style="list-style-type: none"> <li>• P85035A <i>0.010</i></li> <li>• P85035B <i>0.020</i></li> <li>• P85035C <i>0.030</i></li> </ul> <p><b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer Set</b><br/>• P31137211/21</p> <p><b>Set of 2 Pairs</b></p>  |
|  <p><b>1) Front Seal</b><br/>• P2415344</p> <p><b>2) Rear Seal</b><br/>• P36883106 <i>x2</i></p> <p><b>3) Crankshaft Kit</b><br/>• PZZ90121</p> <p><b>4) Ring Gear</b><br/>• P0410264 <i>122T</i><br/>• P31162121 <i>126T</i></p> |  <p><b>1) Top Gasket Set</b><br/>• P69036</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0500</p> <p><b>3) Head Gasket</b><br/>• P36812125</p>  |  <p><b>1) Bush, Con Rod</b><br/>• P31134151 <i>x4</i></p> <p><b>2) Bolt, Con Rod</b><br/>• P0095250 <i>x8</i></p> <p><b>3) Nut, Con Rod</b><br/>• P33221327 <i>x8</i></p> <p><b>4) Con Rod</b><br/>• PZZ90011</p>              |  <p><b>1) Bushing, Cam</b><br/>• P31134119 <i>x1</i></p> <p><b>2) Tappet</b><br/>• P0860012</p>   |  <p><b>1) Idler Gear, Lower</b><br/>• P41115004</p> <p><b>2) Idler Gear, Upper</b><br/>• P41115005</p>  |
| <p><b>Valve Train Kit</b><br/>• PVTK404</p>   | <p><b>1) Valve, Intake</b><br/>• P31431261 <i>x4</i></p> <p><b>2) Valve, Exhaust</b><br/>• P0910002 <i>x4</i></p>   | <p><b>3) Guide, Valve (Intake &amp; Exhaust)</b><br/>• P33261723 <i>x8</i></p>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b></p> <ul style="list-style-type: none"> <li>• 4a) P0780007 <i>x8</i></li> <li>• 4b) P0780006 <i>x8</i></li> </ul>  | <p><b>5) Lock, Valve</b><br/>• P0230001 <i>x16</i></p>   |
|  <p><b>Oil Pump</b><br/>• P41314164</p>   |  <p><b>Lift Pump</b><br/>• P2641A065</p>   |  <p><b>1) Water Pump w/o Pulley</b><br/>• PU5MW0061</p> <p><b>1) Water Pump with Pulley</b><br/>• P41312892</p> <p><b>2) Thermostat</b><br/>• P2485666</p>   |  <p><b>1) Rocker Shaft</b><br/>• PZZ90139</p> <p><b>2) Rocker Arm LH</b><br/>• P3737A101</p> <p><b>3) Rocker Arm RH</b><br/>• P3737A091</p>   |  <p><b>1) Cylinder HD with Valves</b></p> <ul style="list-style-type: none"> <li>• <b>2) Heater Plug</b><br/>• P2666103<br/><b>(Screw Fitting)</b><br/>• P2666108<br/><b>(Bayonet Fitting)</b></li> <li>• <b>3) Oil Pressure Switch</b><br/>• P2848062</li> </ul> |

(1): Flat Head Piston.

(2): Semi Finished Liner, P31358323, and Finished Liner in .010" P31358384, are also available.

(3): Check for proper application.

PERKINS 4.203 ROPE & LIP SEAL

**Engine Series:**

4.203

**Engine Model:**

4.203 (JD)

**Engine Desc:**

INDIRECT INJECTION

**Engine Data:**

Rope & Lip Seal  
(Both types included in kit)

**Engine Info:**

4 Cyl

**Engine Dimensions:**

Bore: 3.6020 in / 91.491mm






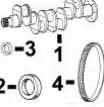
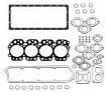








**Clark Equipment**

C60-70-80 - (JD21383)  
CY40-60 - (JD22117)

**Hyster**

H40F - (JD20074)  
S60B-H60C - (JD20680)

H40H - (JD21708)

|  |  |   |   |  |
|--|--|---|---|--|
|  <p><b>1) Engine O/H Kit</b><br/>• POK438</p> <p><b>2) Basic Engine Kit</b><br/>• PBK438</p>  |  <p><b>Piston-Liner Kit</b><br/>• PCK152</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>• a) P81512</li> <li>• b) P41158057</li> <li>• c) P31358308</li> </ul> <p><b>4 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>• P68082 Std.<br/>• P68082A 0.010<br/>• P68082B 0.020<br/>• P68082C 0.030</p> <p><b>Set of 5 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>• P85035 Std.<br/>• P85035A 0.010<br/>• P85035B 0.020<br/>• P85035C 0.030</p> <p><b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer Set</b><br/>• P31137211/21</p> <p><b>Set of 2 Pairs</b></p>  |
|  <p><b>1) Front Seal</b><br/>• P2415344</p> <p><b>2) Rear Seal</b><br/>• P36883106 x2<br/>• P2418F475</p> <p><b>3) Crankshaft Kit</b></p> <p><b>4) Ring Gear</b><br/>• P0410264 122T<br/>• P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>• P69036</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0015</p> <p><b>3) Head Gasket</b><br/>• P36812125</p>   |  <p><b>1) Bush, Con Rod</b><br/>• P31134151 x4</p> <p><b>2) Bolt, Con Rod</b><br/>• P0095250 x8</p> <p><b>3) Nut, Con Rod</b><br/>• P33221327 x8</p> <p><b>4) Con Rod</b><br/>• PZZ90011</p> |  <p><b>1) Bushing, Cam</b><br/>• P31134119 x1</p> <p><b>2) Tappet</b><br/>• P0860012</p>  |  <p><b>1) Idler Gear, Lower</b><br/>• P41115004</p> <p><b>2) Idler Gear, Upper</b><br/>• P41115005</p>  |
| <p><b>Valve Train Kit</b><br/>• PVTK404</p>  | <p><b>1) Valve, Intake</b><br/>• P31431261 x4</p> <p><b>2) Valve, Exhaust</b><br/>• P0910002 x4</p>  | <p><b>3) Guide, Valve (Intake &amp; Exhaust)</b><br/>• P33261723 x8</p>   | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>• 4a) P0780007 x8<br/>• 4b) P0780006 x8</p>   | <p><b>5) Lock, Valve</b><br/>• P0230001 x16</p>  |
|  <p><b>Oil Pump</b><br/>• P41314164</p>   |  <p><b>Lift Pump</b><br/>• P2641336</p>   |  <p><b>1) Water Pump</b><br/>• PU5MW0088</p> <p><b>2) Thermostat</b><br/>• P2485666</p>  |  <p><b>1) Rocker Shaft</b><br/>• PZZ90139</p> <p><b>2) Rocker Arm LH</b><br/>• P3737A101</p> <p><b>3) Rocker Arm RH</b><br/>• P3737A091</p> |  <p><b>1) Cylinder HD with Valves</b></p> <p><b>2) Heater Plug</b><br/>• P2666108</p> <p><b>(Bayonet Fitting)</b></p> <p><b>3) Oil Pressure Switch</b><br/>• P2848062</p> |

(1): Flat Head Piston.

(3): Lip Seal Crankshaft from ESN U74103CL.

(2): Cast sleeve replaces OEM Chrome Liner with Flange thickness 0.040".

(4): Check for proper application.


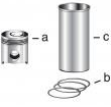



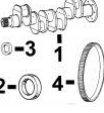

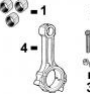







**Engine Series:** 4.203      **Engine Model:** 4.203 (JD)      **Engine Desc:** INDIRECT INJECTION      **Engine Data:** Lip Seal      **Engine Info:** 4 Cyl

**Engine Dimensions:**  
Bore: 3.6020 in / 91.491mm

**Allis Chalmers**

40 - Forklift (JD22458)  
700 - Forklift (JD22028)  
ACP50D - (JD22533)

50 - Forklift (JD22458)  
ACP40 - (JD22533)

|   |  |   |  |   |
|---|--|---|--|---|
|  <p><b>1) Engine O/H Kit</b><br/>• POK439</p> <p><b>2) Basic Engine Kit</b><br/>• PBK439</p>   |  <p><b>Piston-Liner Kit</b><br/>• PU5MK0033</p> <p><b>Consist of:</b></p> <p>a) P81512      <b>3</b></p> <p>b) P41158057      <b>4</b></p> <p>c) P31358345</p> <p><b>4 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>• P68082 Std.</p> <p>• P68082A 0.010</p> <p>• P68082B 0.020</p> <p>• P68082C 0.030</p> <p><b>Set of 5 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b><br/>• P85035 Std.</p> <p>• P85035A 0.010</p> <p>• P85035B 0.020</p> <p>• P85035C 0.030</p> <p><b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer Set</b><br/>• P31137211/21</p> <p><b>Set of 2 Pairs</b></p>   |
|  <p><b>1) Front Seal</b><br/>• P2415344</p> <p><b>2) Rear Seal</b><br/>• P2418F475</p> <p><b>3) Crankshaft Kit</b></p> <p><b>4) Ring Gear</b><br/>• P0410264 122T<br/>• P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>• P69036</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0015</p> <p><b>3) Head Gasket</b><br/>• P36812125</p>   |  <p><b>1) Bush, Con Rod</b><br/>• P31134151 x4</p> <p><b>2) Bolt, Con Rod</b><br/>• P0095250 x8</p> <p><b>3) Nut, Con Rod</b><br/>• P33221327 x8</p> <p><b>4) Con Rod</b><br/>• PZZ90011</p> |  <p><b>1) Bushing, Cam</b><br/>• P31134119 x1</p> <p><b>2) Tappet</b><br/>• P0860012</p>   |  <p><b>1) Idler Gear, Lower</b><br/>• P41115004</p> <p><b>2) Idler Gear, Upper</b><br/>• P41115005</p>   |
| <p><b>Valve Train Kit</b><br/>• PVTK404</p>   | <p><b>1) Valve, Intake</b><br/>• P31431261 x4</p> <p><b>2) Valve, Exhaust</b><br/>• P0910002 x4</p>  | <p><b>3) Guide, Valve (Intake &amp; Exhaust)</b><br/>• P33261723 x8</p>   | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>• 4a) P0780007 x8<br/>• 4b) P0780006 x8</p>  | <p><b>5) Lock, Valve</b><br/>• P0230001 x16</p>   |
|  <p><b>Oil Pump</b><br/>• P41314164</p>  |  <p><b>Lift Pump</b><br/>• P2641A065      <b>1</b><br/>• P2641336      <b>2</b></p>   |  <p><b>1) Water Pump</b><br/>• PU5MW0088</p> <p><b>2) Thermostat</b><br/>• P2485666</p>  |  <p><b>1) Rocker Shaft</b><br/>• PZZ90139</p> <p><b>2) Rocker Arm LH</b><br/>• P3737A101</p> <p><b>3) Rocker Arm RH</b><br/>• P3737A091</p>          |  <p><b>1) Cylinder HD with Valves</b></p> <p><b>2) Heater Plug</b><br/>• P2666103<br/><b>(Screw Fitting)</b><br/>• P2666108<br/><b>(Bayonet Fitting)</b></p> <p><b>3) Oil Pressure Switch</b><br/>• P2848062      <b>5</b></p> |






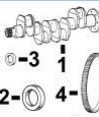

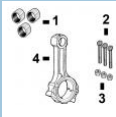


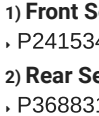



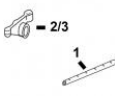

(1): Use on Build No: JD22028.

(3): Flat Head Piston.

(5): Check for proper application.






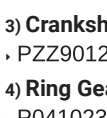
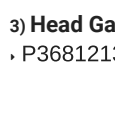
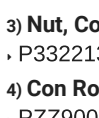




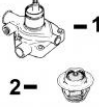
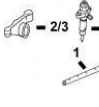

(2): Use on Build No: JD22458/JD22533.

(4): Semi Finished Liner, P31358323, and Finished Liner in .010" P31358384, are also available.

|   |  |  |   |  |  |   |
|---|--|--|---|--|--|---|
| <p><b>Engine Series:</b><br/>4.203</p> <p><b>Engine Model:</b><br/>D4.203 (JE)</p> <p><b>Engine Desc:</b><br/>DIRECT INJECTION</p> <p><b>Engine Data:</b><br/>Rope Seal<br/>ESN 2939036-29C1084</p> <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.6020 in / 91.491mm</p> <p><b>Mf Agricultural</b><br/>65<br/>165<br/>255<br/>300 - Combine</p> <p><b>Mf Industrial</b><br/>302<br/>304<br/>356<br/>3165 - Tractor Shovel</p> |  <p><b>1) Engine O/H Kit</b><br/>, POK433</p> <p><b>2) Basic Engine Kit</b><br/>, PBK433</p>                         |  <p><b>Piston-Liner Kit</b><br/>, PU5MK0034</p> <p><b>Consist of:</b><br/>, a) P68332<br/>, b) P41158057<br/>, c) P31358345</p> <p><b>4 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>, P68082 Std.<br/>, P68082A 0.010<br/>, P68082B 0.020<br/>, P68082C 0.030</p> <p><b>Set of 5 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b><br/>, P85035 Std.<br/>, P85035A 0.010<br/>, P85035B 0.020<br/>, P85035C 0.030</p> <p><b>Set of 4 Pairs</b></p>  |  <p><b>Thrust Washer Set</b><br/>, P31137211/21</p> <p><b>Set of 2 Pairs</b></p>   |   |
|   |  <p><b>1) Front Seal</b><br/>, P2415344</p> <p><b>2) Rear Seal</b><br/>, P36883106 x2</p>                           |  <p><b>1) Top Gasket Set</b><br/>, PU5LT0069</p> <p><b>2) Bottom Gasket</b><br/>, P82908</p> <p><b>3) Head Gasket</b><br/>, P36812138</p>                 |  <p><b>1) Bush, Con Rod</b><br/>, P31134151 x4</p> <p><b>2) Bolt, Con Rod</b><br/>, P0095250 x8</p> <p><b>3) Nut, Con Rod</b><br/>, P33221327 x8</p> <p><b>4) Con Rod</b><br/>, PZZ90010</p> |  <p><b>1) Bushing, Cam</b><br/>, P31134119 x1</p> <p><b>2) Tappet</b><br/>, P0860012</p>  |  <p><b>1) Idler Gear, Lower</b><br/>, P41115004</p> <p><b>2) Idler Gear, Upper</b><br/>, P41115005</p>  |   |
|   |  <p><b>3) Crankshaft Kit</b><br/>, PZZ90121</p> <p><b>4) Ring Gear</b><br/>, P0410236 115T<br/>, P31162121 126T</p> | <p><b>1) Valve Train Kit</b><br/>, PVTK405</p>   | <p><b>1) Valve, Intake</b><br/>, P31431281 x4</p> <p><b>2) Valve, Exhaust</b><br/>, P31431591 x4</p>  | <p><b>3) Guide, Valve (Intake &amp; Exhaust)</b><br/>, 3) P33261723 x8</p>   | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>, 4a) P0780007 x8<br/>, 4b) P0780006 x8</p>  | <p><b>5) Lock, Valve</b><br/>, P0230001 x16</p> |
|   |  <p><b>Oil Pump</b><br/>, P41314164</p>  |  <p><b>Lift Pump</b><br/>, P2641A065</p>   |  <p><b>1) Water Pump w/o Pulley</b><br/>, PU5MW0061</p> <p><b>1) Water Pump with Pulley</b><br/>, P41312892</p> <p><b>2) Thermostat</b><br/>, P2485666</p>                                  |  <p><b>1) Rocker Shaft</b><br/>, PZZ90139</p> <p><b>2) Rocker Arm LH</b><br/>, P3737A101</p> <p><b>3) Rocker Arm RH</b><br/>, P3737A091</p> <p><b>4) Injector</b><br/>, P2645680</p> |  <p><b>1) Cylinder HD with Valves</b><br/>, PZZ80078</p> <p><b>2) Heater Plug (Screw Fitting)</b><br/>, P2666108</p> <p><b>2) (Bayonet Fitting)</b></p> <p><b>3) Oil Pressure Switch</b><br/>, P2848062</p> <p><b>4) Insert, Valve Seat</b><br/>, P33124428 x4</p> |   |
|   |  |  |   |  |  |   |

(1): Semi Finished Liner, P31358323, and Finished Liner in .010" (2): Check your Perkins Parts Catalog. P31358384, are also available.  
 (3): Check for proper application.


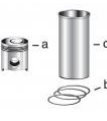




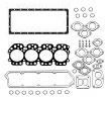
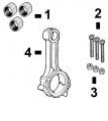




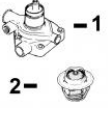




|   |   |  |   |   |   |
|---|---|--|---|---|---|
| <p><b>Engine Series:</b><br/>4.203</p> <p><b>Engine Model:</b><br/>D4.203 (JE)</p> <p><b>Engine Desc:</b><br/>DIRECT INJECTION</p> <p><b>Engine Data:</b><br/>Rope Seal To ESN 2939035</p> <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.6020 in / 91.491mm</p> |  <p><b>1) Engine O/H Kit</b><br/>, POK432</p> <p><b>2) Basic Engine Kit</b><br/>, PBK432</p>  |  <p><b>Piston-Liner Kit</b><br/>, PCK153</p> <p><b>Consist of:</b><br/>, a) P68332<br/>, b) P41158057<br/>, c) P31358308</p> <p><b>4 Per Engine</b></p>      |  <p><b>Main Bearing Set</b><br/>, P68082 Std.<br/>, P68082A 0.010<br/>, P68082B 0.020<br/>, P68082C 0.030</p> <p><b>Set of 5 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b><br/>, P85035 Std.<br/>, P85035A 0.010<br/>, P85035B 0.020<br/>, P85035C 0.030</p> <p><b>Set of 4 Pairs</b></p>   |  <p><b>Thrust Washer Set</b><br/>, P31137211/21</p> <p><b>Set of 2 Pairs</b></p>                        |
| <p><b>MF Agricultural</b><br/>65</p> <p><b>MF Industrial</b><br/>365 - Tractor Shovel</p>   |  <p><b>1) Front Seal</b><br/>, P2415344</p> <p><b>2) Rear Seal</b><br/>, P36883106 x2</p> <p><b>3) Crankshaft Kit</b><br/>, PZZ90121</p> <p><b>4) Ring Gear</b><br/>, P0410236 115T<br/>, P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>, PU5LT0069</p> <p><b>2) Bottom Gasket</b><br/>, P82908</p> <p><b>3) Head Gasket</b><br/>, P36812138</p>                   |  <p><b>1) Bush, Con Rod</b><br/>, P31134151 x4</p> <p><b>2) Bolt, Con Rod</b><br/>, P0095250 x8</p> <p><b>3) Nut, Con Rod</b><br/>, P33221327 x8</p> <p><b>4) Con Rod</b><br/>, PZZ90010</p> |  <p><b>1) Bushing, Cam</b><br/>, P31134119 x1</p> <p><b>2) Tappet</b><br/>, P0860012</p>   |  <p><b>1) Idler Gear, Lower</b><br/>, P41115004</p> <p><b>2) Idler Gear, Upper</b><br/>, P41115005</p> |
| <p><b>Valve Train Kit</b><br/>, PVTK405</p>   | <p><b>1) Valve, Intake</b><br/>, P31431281 x4</p> <p><b>2) Valve, Exhaust</b><br/>, P31431591 x4</p>  | <p><b>3) Guide, Valve (Intake &amp; Exhaust)</b><br/>, P33261723 x8</p>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>, 4a) P0780007 x8<br/>, 4b) P0780006 x8</p>   | <p><b>5) Lock, Valve</b><br/>, P0230001 x16</p>   |   |
|  <p><b>Oil Pump</b><br/>, P41314164</p>   |  <p><b>Lift Pump</b><br/>, P2641A065</p>  |  <p><b>1) Water Pump w/o Pulley</b><br/>, PU5MW0061</p> <p><b>1) Water Pump with Pulley</b><br/>, P41312892</p> <p><b>2) Thermostat</b><br/>, P2485666</p> |  <p><b>1) Rocker Shaft</b><br/>, PZZ90139</p> <p><b>2) Rocker Arm LH</b><br/>, P3737A101</p> <p><b>3) Rocker Arm RH</b><br/>, P3737A091</p> <p><b>4) Injector</b><br/>, P2645680</p>      |  <p><b>1) Cylinder HD with Valves</b><br/>, PZZ80078</p> <p><b>2) Heater Plug (Screw Fitting)</b><br/>, P2666108</p> <p><b>(Bayonet Fitting)</b></p> <p><b>3) Oil Pressure Switch</b><br/>, P2848062</p> <p><b>4) Insert, Valve Seat</b><br/>, P33124428 x4</p> |   |

(1): Cast sleeve replaces OEM Chrome Liner with Flange thickness 0.040".

(2): Check your Perkins Parts Catalog.

(3): Check for proper application.

|  |  |  |   |   |  |
|--|--|--|---|---|--|
| <p><b>Engine Series:</b><br/>4.203</p> <p><b>Engine Model:</b><br/>D4.203 (JE)</p> <p><b>Engine Desc:</b><br/>DIRECT INJECTION</p> <p><b>Engine Data:</b><br/>Rope &amp; Lip Seal<br/>(Both types included in kit)<br/>From ESN 29C1085</p> <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.6020 in / 91.491mm</p> |  <p><b>1) Engine O/H Kit</b><br/>, POK434</p> <p><b>2) Basic Engine Kit</b><br/>, PBK434</p>   |  <p><b>Piston-Liner Kit</b><br/>, PU5MK0034</p> <p><b>Consist of:</b><br/>, a) P68332<br/>, b) P41158057<br/>, c) P31358345</p> <p><b>4 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>, P68082 Std.<br/>, P68082A 0.010<br/>, P68082B 0.020<br/>, P68082C 0.030</p> <p><b>Set of 5 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b><br/>, P85035 Std.<br/>, P85035A 0.010<br/>, P85035B 0.020<br/>, P85035C 0.030</p> <p><b>Set of 4 Pairs</b></p>   |  <p><b>Thrust Washer Set</b><br/>, P31137211/21</p> <p><b>Set of 2 Pairs</b></p>   |
| <p><b>Mf Agricultural</b><br/>65<br/>165<br/>255<br/>300 - Combine</p>   |  <p><b>1) Front Seal</b><br/>, P2415344</p> <p><b>2) Rear Seal</b><br/>, P36883106 x2<br/>, P2418F475</p> <p><b>3) Crankshaft Kit</b><br/>, PZZ90121<br/>, PZZ90111</p> <p><b>4) Ring Gear</b><br/>, P0410236 115T<br/>, P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>, PU5LT0069</p> <p><b>2) Bottom Gasket</b><br/>, P82908</p> <p><b>3) Head Gasket</b><br/>, P36812138</p>                 |  <p><b>1) Bush, Con Rod</b><br/>, P31134151 x4</p> <p><b>2) Bolt, Con Rod</b><br/>, P0095250 x8</p> <p><b>3) Nut, Con Rod</b><br/>, P33221327 x8</p> <p><b>4) Con Rod</b><br/>, PZZ90010</p> |  <p><b>1) Bushing, Cam</b><br/>, P31134119 x1</p> <p><b>2) Tappet</b><br/>, P0860012</p>   |  <p><b>1) Idler Gear, Lower</b><br/>, P41115004</p> <p><b>2) Idler Gear, Upper</b><br/>, P41115005</p>  |
| <p><b>Mf Industrial</b><br/>30<br/>40B<br/>50<br/>302<br/>356<br/>3165 - Tractor Shovel</p>  | <p><b>Valve Train Kit</b><br/>, PVTK405</p>  | <p><b>1) Valve, Intake</b><br/>, P31431281 x4</p> <p><b>2) Valve, Exhaust</b><br/>, P31431591 x4</p>   | <p><b>3) Guide, Valve (Intake &amp; Exhaust)</b><br/>, P33261723 x8</p>   | <p><b>4) Spring, Valve a) Inner b) Outer</b><br/>, 4a) P0780007 x8<br/>, 4b) P0780006 x8</p>  | <p><b>5) Lock, Valve</b><br/>, P0230001 x16</p>  |
|  |  <p><b>Oil Pump</b><br/>, P41314164</p>   |  <p><b>Lift Pump</b><br/>, P2641A065</p>  |  <p><b>1) Water Pump w/o Pulley</b><br/>, PU5MW0061</p> <p><b>1) Water Pump with Pulley</b><br/>, P41312892</p> <p><b>2) Thermostat</b><br/>, P2485666</p>                                 |  <p><b>1) Rocker Shaft</b><br/>, PZZ90139</p> <p><b>2) Rocker Arm LH</b><br/>, P3737A101</p> <p><b>3) Rocker Arm RH</b><br/>, P3737A091</p> <p><b>4) Injector</b><br/>, P2645680</p> |  <p><b>1) Cylinder HD with Valves</b><br/>, PZZ80078</p> <p><b>2) Heater Plug (Screw Fitting)</b><br/>, P2666103</p> <p><b>2) Heater Plug (Bayonet Fitting)</b><br/>, P2666108</p> <p><b>3) Oil Pressure Switch</b><br/>, P2848062</p> <p><b>4) Insert, Valve Seat</b><br/>, P33124428 x4</p> |

(1): Rope Seal.

(2): Lip Seal.

(3): Semi Finished Liner, P31358323, and Finished Liner in .010" P31358384, are also available.

(4): Check your Perkins Parts Catalog.

**Engine Series:**  
4.203

**Engine Model:**  
D4.203 (JE)

**Engine Desc:**  
DIRECT INJECTION






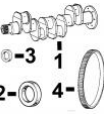







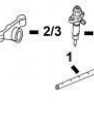
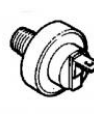
**Engine Data:**  
Lip Seal  
To ESN U589378L

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.6020 in / 91.491mm

**Sullair Corp**  
Compressor - (JE70033)

**Perkins**  
General Industrial - (JE33174)

|   |   |   |   |   |
|---|---|---|---|---|
|  <p><b>1) Engine O/H Kit</b><br/>• POK436</p> <p><b>2) Basic Engine Kit</b><br/>• PBK436</p>   |  <p><b>Piston-Liner Kit</b><br/>• PU5MK0034</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>• a) P68332</li> <li>• b) P41158057</li> <li>• c) P31358345</li> </ul> <p><b>4 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>• P68082 <i>Std.</i></p> <ul style="list-style-type: none"> <li>• P68082A <i>0.010</i></li> <li>• P68082B <i>0.020</i></li> <li>• P68082C <i>0.030</i></li> </ul> <p><b>1 Set of 5 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b><br/>• P85035 <i>Std.</i></p> <ul style="list-style-type: none"> <li>• P85035A <i>0.010</i></li> <li>• P85035B <i>0.020</i></li> <li>• P85035C <i>0.030</i></li> </ul> <p><b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer Set</b><br/>• P31137211/21</p> <p><b>Set of 2 Pairs</b></p>                               |
|  <p><b>1) Front Seal</b><br/>• P2415344</p> <p><b>2) Rear Seal</b><br/>• P2418F475</p> <p><b>3) Crankshaft Kit</b></p> <p><b>4) Ring Gear</b><br/>• P0410236 <i>115T</i><br/>• P31162121 <i>126T</i></p> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT0084</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0015</p> <p><b>3) Head Gasket</b><br/>• P36812138</p>   |  <p><b>1) Bush, Con Rod</b><br/>• P31134151 <i>x4</i></p> <p><b>2) Bolt, Con Rod</b><br/>• P0095250 <i>x8</i></p> <p><b>3) Nut, Con Rod</b><br/>• P33221327 <i>x8</i></p> <p><b>4) Con Rod</b><br/>• PZZ90010</p>                |  <p><b>1) Bushing, Cam</b><br/>• P31134119 <i>x1</i></p> <p><b>2) Tappet</b><br/>• P0860012</p>   |  <p><b>1) Idler Gear, Lower</b><br/>• P41115004</p> <p><b>2) Idler Gear, Upper</b><br/>• P41115005</p>         |
| <p><b>Valve Train Kit</b><br/>• PVTK420</p>   | <p><b>1) Valve, Intake</b><br/>• P31431681 <i>x4</i></p> <p><b>2) Valve, Exhaust</b><br/>• P31431991 <i>x4</i></p>  | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b></p> <ul style="list-style-type: none"> <li>• 3a) P33261727 <i>x4</i></li> <li>• 3b) P33261723 <i>x4</i></li> </ul>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b></p> <ul style="list-style-type: none"> <li>• 4a) P0780007 <i>x8</i></li> <li>• 4b) P0780006 <i>x8</i></li> </ul>  | <p><b>5) Lock, Valve</b><br/>• P0230001 <i>x16</i></p>  |
|  <p><b>Oil Pump</b><br/>• P41314164</p>  |  <p><b>Lift Pump</b><br/>• P2641A054</p>   |  <p><b>1) Water Pump</b><br/>• PU5MW0088</p> <p><b>2) Thermostat</b><br/>• P2485666</p>  |  <p><b>1) Rocker Shaft</b><br/>• PZZ90139</p> <p><b>2) Rocker Arm LH</b><br/>• P3737A101</p> <p><b>3) Rocker Arm RH</b><br/>• P3737A091</p> <p><b>4) Injector</b><br/>• P2645680</p>  |  <p><b>Oil Pressure Switch</b><br/>• P2848062</p> <p><b>Insert, Valve Seat</b><br/>• P33124428 <i>x4</i></p> |


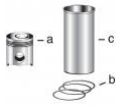



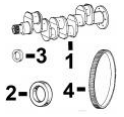

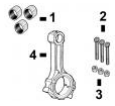





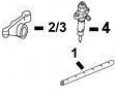

(1): Semi Finished Liner, P31358323, and Finished Liner in .010" P31358384, are also available. (2): Check your Perkins Parts Catalog.

|                                |                                     |   |  |                              |
|--------------------------------|-------------------------------------|---|--|------------------------------|
| <b>Engine Series:</b><br>4.203 | <b>Engine Model:</b><br>D4.203 (JE) | <b>Engine Desc:</b><br>DIRECT INJECTION | <b>Engine Data:</b><br>Lip Seal<br>From ESN U589379L | <b>Engine Info:</b><br>4 Cyl |
|--------------------------------|-------------------------------------|---|--|------------------------------|

**Engine Dimensions:**  
Bore: 3.6020 in / 91.491mm

**Sullair-Corp**  
Compressor - (JE33174)

**Perkins**  
Compressor - (JE70033)

|  |   |  |   |   |
|--|---|--|---|---|
|  <p><b>1) Engine O/H Kit</b><br/>• POK437</p> <p><b>2) Basic Engine Kit</b><br/>• PBK437</p>   |  <p><b>Piston-Liner Kit</b><br/>• PU5MK0117</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>• a) P89214</li> <li>• b) P41158065</li> <li>• c) P31358345</li> </ul> <p><b>4 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>• P68082 <i>Std.</i></p> <ul style="list-style-type: none"> <li>• P68082A <i>0.010</i></li> <li>• P68082B <i>0.020</i></li> <li>• P68082C <i>0.030</i></li> </ul> <p><b>1</b> <b>Set of 5 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b><br/>• P85035 <i>Std.</i></p> <ul style="list-style-type: none"> <li>• P85035A <i>0.010</i></li> <li>• P85035B <i>0.020</i></li> <li>• P85035C <i>0.030</i></li> </ul> <p><b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer Set</b><br/>• P31137211/21</p> <p><b>Set of 2 Pairs</b></p>                               |
|  <p><b>1) Front Seal</b><br/>• P2415344</p> <p><b>2) Rear Seal</b><br/>• P2418F475</p> <p><b>3) Crankshaft Kit</b></p> <p><b>4) Ring Gear</b><br/>• P0410236 <i>115T</i><br/>• P31162121 <i>126T</i></p> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT0084</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0015</p> <p><b>3) Head Gasket</b><br/>• P36812138</p>   |  <p><b>1) Bush, Con Rod</b><br/>• P31134151 <i>x4</i></p> <p><b>2) Bolt, Con Rod</b><br/>• P0095250 <i>x8</i></p> <p><b>3) Nut, Con Rod</b><br/>• P33221327 <i>x8</i></p> <p><b>4) Con Rod</b><br/>• PZZ90010</p>                       |  <p><b>1) Bushing, Cam</b><br/>• P31134119 <i>x1</i></p> <p><b>2) Tappet</b><br/>• P0860012</p>   |  <p><b>1) Idler Gear, Lower</b><br/>• P41115004</p> <p><b>2) Idler Gear, Upper</b><br/>• P41115005</p>         |
| <p><b>Valve Train Kit</b><br/>• PVTK420</p>  | <p><b>1) Valve, Intake</b><br/>• P31431681 <i>x4</i></p> <p><b>2) Valve, Exhaust</b><br/>• P31431991 <i>x4</i></p>  | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b></p> <ul style="list-style-type: none"> <li>• 3a) P33261727 <i>x4</i></li> <li>• 3b) P33261723 <i>x4</i></li> </ul>   | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b></p> <ul style="list-style-type: none"> <li>• 4a) P0780007 <i>x8</i></li> <li>• 4b) P0780006 <i>x8</i></li> </ul>  | <p><b>5) Lock, Valve</b><br/>• P0230001 <i>x16</i></p>  |
|  <p><b>Oil Pump</b><br/>• P41314164</p>  |  <p><b>Lift Pump</b><br/>• P2641A054</p>   |  <p><b>1) Water Pump</b><br/>• PU5MW0088</p> <p><b>2) Thermostat</b><br/>• P2485666</p>   |  <p><b>1) Rocker Shaft</b><br/>• PZZ90139</p> <p><b>2) Rocker Arm LH</b><br/>• P3737A101</p> <p><b>3) Rocker Arm RH</b><br/>• P3737A091</p> <p><b>4) Injector</b><br/>• P2645680</p>  |  <p><b>Oil Pressure Switch</b><br/>• P2848062</p> <p><b>Insert, Valve Seat</b><br/>• P33124428 <i>x4</i></p> |

(1): Semi Finished Liner, P31358323, and Finished Liner in .010" P31358384, are also available. (2): Check your Perkins Parts Catalog.

|                                |                                      |                                 |                              |  |
|--------------------------------|--------------------------------------|---------------------------------|------------------------------|--|
| <b>Engine Series:</b><br>4.203 | <b>Engine Model:</b><br>4.203.2 (JG) | <b>Engine Data:</b><br>Lip Seal | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.6020 in /<br>91.491mm |
|--------------------------------|--------------------------------------|---------------------------------|------------------------------|--|

|   |   |  |   |   |
|---|---|--|---|---|
| <b>Clark-Equipment</b><br>C500 (H) C500Y-40-<br>60-70-80D 560 -<br>- (JG70100)<br>(JG70099) C500Y-40-<br>560 -<br>(JG70143) | <b>Hyster</b><br>H60-80C - H60-80E -<br>(JG70040) (JG70113) | <b>Allis-Chalmers</b><br>JCP 40-50<br>-<br>Forklift(JG80031) | <b>Caterpillar</b><br>V40-60C - V/T40C -<br>Forklift Forklift<br>(JG70020) (JG70092)<br>T40C - VT40C -<br>Forklift Forklift(JG70092)<br>(JG70092) | <b>Sperry-New-Holland</b><br>L779 - Skid L779 - Skid<br>Steer Steer<br>Loader Loader<br>(JG70043) (JG70156) |
|---|---|--|---|---|



**1) Engine O/H Kit**  
• POK435  
**2) Basic Engine Kit**  
• PBK435



**Piston-Liner Kit**  
• PU5MK0122  
**Consist of:**  
• a) P68801  
• b) P41158007  
• c) P31358345  
**4 Per Engine**



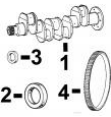
**Main Bearing Set**  
• P68082 Std.  
• P68082A 0.010  
• P68082B 0.020  
• P68082C 0.030  
**1** **Set of 5 Pairs**



**Con Rod Bearing Set**  
• P85035 Std.  
• P85035A 0.010  
• P85035B 0.020  
• P85035C 0.030  
**Set of 4 Pairs**



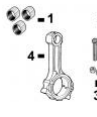
**Thrust Washer Set**  
• P31137211/21  
**Set of 2 Pairs**



**1) Front Seal**  
• P2415344  
**2) Rear Seal**  
• P2418F475  
**3) Crankshaft Kit**  
**4) Ring Gear**  
• P0410264 122T  
• P31162121 126T



**1) Top Gasket Set**  
• PU5LT0084  
**2) Bottom Gasket**  
• PU5LB0015  
**3) Head Gasket**  
• P36812138



**1) Bush, Con Rod**  
• P31134151 x4  
**2) Bolt, Con Rod**  
• P0095250 x8  
**3) Nut, Con Rod**  
• P33221327 x8  
**4) Con Rod**  
• PZZ90010



**1) Bushing, Cam**  
• P31134119 x1  
**2) Tappet**  
• P0860012



**1) Idler Gear, Lower**  
• P41115004  
**2) Idler Gear, Upper**  
• P41115005

**Valve Train Kit**  
• PVTK418

**1) Valve, Intake**  
• P31431981 x4  
**2) Valve, Exhaust**  
• P31431991 x4

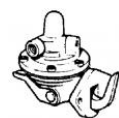
**3) Guide, Valve**  
**a) Intake b) Exhaust**  
• 3a) P33261727 x4  
• 3b) P33261723 x4

**4) Spring, Valve**  
**a) Inner b) Outer**  
• 4a) P0780007 x8  
• 4b) P0780006 x8

**5) Lock, Valve**  
• P0230001 x16



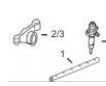
**Oil Pump**  
• P41314164



**Lift Pump**  
• P2641A054



**1) Water Pump**  
• PU5MW0088  
**2) Thermostat**  
• P2485666



**1) Rocker Shaft**  
• PZZ90139  
**2) Rocker Arm LH**  
• P3737A101  
**3) Rocker Arm RH**  
• P3737A091  
**4) Heater Plug**  
• P2666108  
**(Bayonet Fitting)**






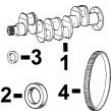
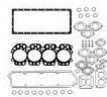
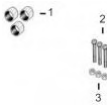




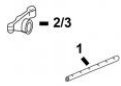



**Oil Pressure Switch**  
• P2848062 **2**

**(1):** Semi Finished Liner, P31358323, and Finished Liner in .010" P31358384, are also available. **(2):** Check for proper application.

|                                |                                     |                                 |                              |  |
|--------------------------------|-------------------------------------|---------------------------------|------------------------------|--|
| <b>Engine Series:</b><br>4.203 | <b>Engine Model:</b><br>G4.203 (JF) | <b>Engine Data:</b><br>Lip Seal | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.6020 in /<br>91.491mm |
|--------------------------------|-------------------------------------|---------------------------------|------------------------------|--|






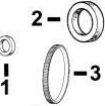

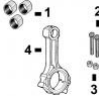
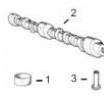
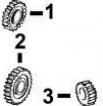


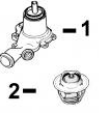
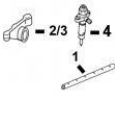


**Eaton-Corp**  
Forklift - (JF22668)

|  |  |   |   |   |
|--|--|---|---|---|
|  <p><b>1) Engine O/H Kit</b><br/>, POK442</p> <p><b>2) Basic Engine Kit</b><br/>, PBK442</p>   |  <p><b>Piston-Liner Kit</b><br/>, PCK154</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>, a) P86723</li> <li>, b) P41158012</li> <li>, c) P31358345</li> </ul> <p><b>4 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>, P68082 Std.</p> <ul style="list-style-type: none"> <li>, P68082A 0.010</li> <li>, P68082B 0.020</li> <li>, P68082C 0.030</li> </ul> <p><b>Set of 5 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b><br/>, P85035 Std.</p> <ul style="list-style-type: none"> <li>, P85035A 0.010</li> <li>, P85035B 0.020</li> <li>, P85035C 0.030</li> </ul> <p><b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer Set</b><br/>, P31137211/21</p> <p><b>Set of 2 Pairs</b></p>                       |
|  <p><b>1) Front Seal</b><br/>, P2415344</p> <p><b>2) Rear Seal</b><br/>, P2418F475</p> <p><b>3) Crankshaft Kit</b></p> <p><b>4) Ring Gear</b><br/>, P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>, PU5LT0084</p> <p><b>2) Bottom Gasket</b><br/>, PU5LB0015</p> <p><b>3) Head Gasket</b><br/>, P36812138</p>  |  <p><b>1) Bush, Con Rod</b><br/>, P31134151 x4</p> <p><b>2) Bolt, Con Rod</b><br/>, P0095250 x8</p> <p><b>3) Nut, Con Rod</b><br/>, P33221327 x8</p>   |  <p><b>1) Bushing, Cam</b><br/>, P31134119 x1</p> <p><b>2) Tappet</b><br/>, P0860012</p>  |  <p><b>1) Idler Gear, Lower</b><br/>, P41115004</p> <p><b>2) Idler Gear, Upper</b><br/>, P41115005</p> |
| <p><b>Valve Train Kit</b><br/>, PVTK421</p>  | <p><b>1) Valve, Intake</b><br/>, P31431741 x4</p> <p><b>2) Valve, Exhaust</b><br/>, P31431731 x4</p>   | <p><b>3) Guide, Valve (Intake &amp; Exhaust)</b><br/>, P3313E011 x8</p>   | <p><b>4) Spring, Valve a) Inner b) Outer</b><br/>, 4a) P0780007 x8<br/>, 4b) P0780006 x8</p>  | <p><b>5) Lock, Valve</b><br/>, P0230001 x16</p>   |
|  <p><b>Oil Pump</b><br/>, P41314164</p>  |  <p><b>Thermostat</b><br/>, P2485666</p>  |  <p><b>1) Rocker Shaft</b><br/>, PZZ90139</p> <p><b>2) Rocker Arm LH</b><br/>, P3737A101</p> <p><b>3) Rocker Arm RH</b><br/>, P3737A091</p>  |  <p><b>Oil Pressure Switch</b><br/>, P2848062</p>  |   |

(1): Semi Finished Liner, P31358323, and Finished Liner in .010" P31358384, are also available. (2): Check for proper application.

|                                |                                    |  |                              |   |
|--------------------------------|------------------------------------|--|------------------------------|---|
| <b>Engine Series:</b><br>4.236 | <b>Engine Model:</b><br>4.212 (LA) | <b>Engine Data:</b><br>Rope & Lip Seal<br>(Both types included in kit)<br>To ESN UA187117L | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.8770 in /<br>98.476 mm |
|--------------------------------|------------------------------------|--|------------------------------|---|

|  |     |   |                                      |
|--|-----|---|--------------------------------------|
| <b>Mf Industrial</b><br>50 - (LA21243) | 50B | <b>Landini-Tractors</b><br>TL120C - (LA21912) | <b>Mf Agricultural</b><br>165 - (LA) |
|--|-----|---|--------------------------------------|

|   |   |  |  |  |  |
|---|---|--|--|--|--|
|  <p><b>1) Engine O/H Kit</b><br/>• POK440</p> <p><b>2) Basic Engine Kit</b><br/>• PBK440</p>  |  <p><b>Piston-Liner Kit</b><br/>• PU5MK0066</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>• a) P86721</li> <li>• b) P41158044</li> <li>• c) P31358394</li> </ul> <p><b>4 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>• P81558 Std.<br/>• P81558A 0.010<br/>• P81558B 0.020<br/>• P81558C 0.030</p> <p><b>Set of 5 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b><br/>• P85042 Std.<br/>• P85042A 0.010<br/>• P85042B 0.020<br/>• P85042C 0.030</p> <p><b>Set of 4 Pairs</b></p>  |  <p><b>Thrust Washer Set</b><br/>• P31137551/61 Std.<br/>• P31137312/22 0.007</p> <p><b>Set of 2 Pairs</b></p>  |  |
|  <p><b>1) Front Seal</b><br/>• P2418F436</p> <p><b>2) Rear Seal</b><br/>• P36883108 x2<br/>• P2418F475</p> <p><b>3) Ring Gear</b><br/>• P0410236 115T</p> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT0015</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0045</p> <p><b>3) Head Gasket</b><br/>• P36812349</p> <p><b>4) Oil Pan Set</b><br/>• PU5MK0600</p>                          |  <p><b>1) Bush, Con Rod</b><br/>• P31134123 x4</p> <p><b>2) Bolt, Con Rod</b><br/>• P32762144 x8</p> <p><b>3) Nut, Con Rod</b><br/>• P33221328 x8</p> <p><b>4) Con Rod</b><br/>• PZZ90009</p> |  <p><b>1) Bushing, Cam</b><br/>• P31134132 x1</p> <p><b>2) Camshaft</b><br/>• P31415321<br/>• P31415374</p> <p><b>3) Tappet</b><br/>• P31434163</p> <p><b>4) Pushrod</b><br/>• P31434307</p>         |  <p><b>1) Crankshaft Gear</b><br/>• P31171681</p> <p><b>2) Camshaft Gear</b><br/>• P31171353</p> <p><b>3) Idler Gear</b><br/>• P41115023</p>          |  |
| <p><b>Valve Train Kit</b><br/>• PVTK406</p>   | <p><b>1) Valve, Intake</b><br/>• P31431641 x4</p> <p><b>2) Valve, Exhaust</b><br/>• P31431881 x4</p>  | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b><br/>• 3a) P3343F002 x4<br/>• 3b) P3343J002 x4</p>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>• 4a) P31744131 x8<br/>• 4b) P31745121 x8</p>  | <p><b>5) Lock, Valve</b><br/>• P33173108 x16</p> <p><b>6) Seal, Valve</b><br/>• P33817117 x8</p>   |  |
|  <p><b>Oil Pump</b><br/>• P41314182</p>   |  <p><b>Lift Pump</b><br/>• P2641728</p>  |  <p><b>1) Water Pump</b><br/>• P4131A013</p> <p><b>2) Thermostat</b><br/>• P2485659</p>   |  <p><b>1) Rocker Shaft</b><br/>• PZZ90032</p> <p><b>2) Rocker Arm LH</b><br/>• P41151483</p> <p><b>3) Rocker Arm RH</b><br/>• P41151484</p> <p><b>4) Injector</b><br/>• P2645600<br/>• P2646689</p> |  <p><b>1) Cylinder Head</b><br/>• PZZ80175</p> <p><b>2) Heater Plug</b><br/>• P2666103<br/>(Screw Fitting)<br/>• P2666108<br/>(Bayonet Fitting)</p> |  <p><b>1) Balancer Unit</b><br/>• P41733082</p> |

(1): To ESN U106654N.

(3): Used on Build No: LA21194/LA21243.

(5): Also available: P31358324 Parallel Semi-Finished Liner; P31358393 Flanged, Semi Finished Liner; and P31358398 Finished Liner in 0.010" Oversize.

(2): From ESN U106655N.

(4): Used on Build No: LA21912.

(6): Check your Perkins Parts Catalog.

**Engine Series:**  
4.236






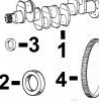




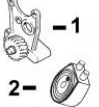


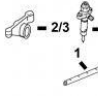
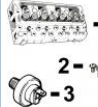

**Engine Model:**  
4.236 (LD)

**Engine Data:**  
Rope & Lip Seal  
To ESN  
U106654N

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.8770 in  
/ 98.476 mm

Please see page 442 for a complete list of equipment models.

|   |  |  |  |  |  |
|---|--|--|--|--|--|
|  <p><b>1) Engine O/H Kit</b><br/>› POK446</p> <p><b>2) Basic Engine Kit</b><br/>› PBK446</p>  |  <p><b>Piston-Liner Kit</b><br/>› PU5MK0123</p> <p><b>Consist of:</b><br/>› a) P68301<br/>› b) P41158041<br/>› c) P31358394</p> <p><b>4 Per Engine</b></p>   |  <p><b>Main Bearing Set</b><br/>› P81558 Std.<br/>› P81558A 0.010<br/>› P81558B 0.020<br/>› P81558C 0.030</p> <p><b>Set of 5 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>› P85042 Std.<br/>› P85042A 0.010<br/>› P85042B 0.020<br/>› P85042C 0.030</p> <p><b>Set of 4 Pairs</b></p>  |  <p><b>Thrust Washer Set</b><br/>› P31137551/61 Std.<br/>› P31137312/22 0.007</p> <p><b>Set of 2 Pairs</b></p>   |  |
|  <p><b>1) Front Seal</b><br/>› P2418F436</p> <p><b>2) Rear Seal</b><br/>› P36883108 x2<br/>› P2418F475</p> <p><b>3) Crankshaft Kit</b><br/>› PZZ90093<br/>› PZZ90082</p> <p><b>4) Ring Gear</b><br/>› P0410236 115T<br/>› P0410264 122T<br/>› P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>› PU5LT0015</p> <p><b>2) Bottom Gasket</b><br/>› PU5LB0045</p> <p><b>3) Head Gasket</b><br/>› P36812349</p> <p><b>4) Valve Cover Gsk</b><br/>› P3681A027</p> <p><b>5) Timing Cover Gsk</b><br/>› P3681P045</p> <p><b>6) Oil Pan Gasket</b><br/>› PU5MK0600</p> |  <p><b>1) Bush, Con Rod</b><br/>› P31134123 x4</p> <p><b>2) Bolt, Con Rod</b><br/>› P32762144 x8</p> <p><b>3) Nut, Con Rod</b><br/>› P33221328 x8</p> <p><b>4) Con Rod</b><br/>› PZZ90009</p> |  <p><b>1) Bushing, Cam</b><br/>› P31134132 x1</p> <p><b>2) Camshaft</b><br/>› P31415321</p> <p><b>3) Tappet</b><br/>› P31434163</p> <p><b>4) Pushrod</b><br/>› P31434307</p>                        |  <p><b>1) Crankshaft Gear</b><br/>› P31171681</p> <p><b>2) Camshaft Gear</b><br/>› P31171353</p> <p><b>3) Idler Gear</b><br/>› P41115023</p>  |  |
| <p><b>Valve Train Kit</b><br/>› PVTK406</p>   | <p><b>1) Valve, Intake</b><br/>› P31431641 x4</p> <p><b>2) Valve, Exhaust</b><br/>› P31431881 x4</p>   | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b><br/>› 3a) P3343F002 x4<br/>› 3b) P3343J002 x4</p>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>› 4a) P31744131 x8<br/>› 4b) P31745121 x8</p>  | <p><b>5) Lock, Valve</b><br/>› P33173108 x16</p> <p><b>6) Seal, Valve</b><br/>› P33817117 x8</p>   |  |
|  <p><b>1) Oil Pump</b><br/>› P41314182</p> <p><b>2) Oil Cooler</b><br/>› P2486A218<br/>› P2486A219</p>   |  <p><b>Lift Pump</b><br/>› P2641338<br/>› P2641728</p>  |  <p><b>1) Water Pump</b><br/>› P4131A013</p> <p><b>2) Thermostat</b><br/>› P2485659<br/>› P2485666<br/><b>(Use on JCB)</b></p>  |  <p><b>1) Rocker Shaft</b><br/>› PZZ90032</p> <p><b>2) Rocker Arm LH</b><br/>› P41151483</p> <p><b>3) Rocker Arm RH</b><br/>› P41151484</p> <p><b>4) Injector</b><br/>› P2645664<br/>› P2646689</p> |  <p><b>1) Cylinder Head</b><br/>› PZZ80175</p> <p><b>2) Heater Plug</b><br/>› P2666103<br/><b>(Screw Fitting)</b><br/>› P2666108<br/><b>(Bayonet Fitting)</b></p> <p><b>3) Oil Pressure Switch</b><br/>› P2848062</p> |  <p><b>1) Balancer Unit</b><br/>› P41733082</p> |

(1): For Non Agricultural Uses.

(3): Also available: P31358324 Parallel Semi-Finished Liner; P31358393 Flanged, Semi Finished Liner; and P31358398 Finished Liner in 0.010" Oversize.

(5): Lip seal crank used From ESN 136319L.

(7): From Engine No: 236UA57135.

(9): Check build number for proper application.

(2): For Agricultural Uses.

(4): Rope seal crank used To ESN 136318L.

(6): To Engine No: 236UA57134.

(8): Check your Perkins Parts Catalog.



**Engine Series:**  
4.236






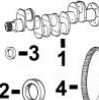
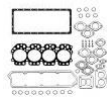
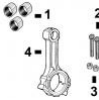
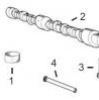

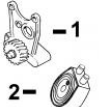


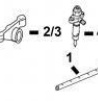


**Engine Model:**  
4.236 (LD)

**Engine Data:**  
Lip Seal  
From ESN  
U106655N

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.8770  
in / 98.476  
mm

Please see page 443 for a complete list of equipment models.

|   |  |  |  |  |  |
|---|--|--|--|--|--|
|  <p><b>1) Engine O/H Kit</b><br/>• POK449</p> <p><b>2) Basic Engine Kit</b><br/>• PBK449</p>  |  <p><b>Piston-Liner Kit</b><br/>• PCK301</p> <p><b>Consist of:</b><br/>• a) P68301<br/>• b) P41158041<br/>• c) P3135X032 <span style="border: 1px solid black; padding: 0 2px;">3</span></p> <p><b>4 Per Engine</b></p>  |  <p><b>Main Bearing Set</b><br/>• P81558 Std.<br/>• P81558A 0.010<br/>• P81558B 0.020<br/>• P81558C 0.030</p> <p><b>Set of 5 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>• P85042 Std.<br/>• P85042A 0.010<br/>• P85042B 0.020<br/>• P85042C 0.030</p> <p><b>Set of 4 Pairs</b></p>  |  <p><b>Thrust Washer Set</b><br/>• P31137551/61 Std.<br/>• P31137312/22 0.007</p> <p><b>Set of 2 Pairs</b></p>   |  |
|  <p><b>1) Front Seal</b><br/>• P2418F436</p> <p><b>2) Rear Seal</b><br/>• P2418F475</p> <p><b>3) Crankshaft Kit</b><br/>• PZZ90082</p> <p><b>4) Ring Gear</b><br/>• P0410236 <span style="border: 1px solid black; padding: 0 2px;">115T</span><br/>• P0410264 <span style="border: 1px solid black; padding: 0 2px;">122T</span><br/>• P31162121 <span style="border: 1px solid black; padding: 0 2px;">126T</span></p> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT0065</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0045</p> <p><b>3) Head Gasket</b><br/>• P3681E036</p> <p><b>4) Valve Cover Gsk</b><br/>• P3681A027</p> <p><b>5) Timing Cover Gsk</b><br/>• P3681P045</p> <p><b>6) Oil Pan Gasket</b><br/>• PU5MK0600</p> |  <p><b>1) Bush, Con Rod</b><br/>• P31134123 <span style="border: 1px solid black; padding: 0 2px;">x4</span></p> <p><b>2) Bolt, Con Rod</b><br/>• P32762144 <span style="border: 1px solid black; padding: 0 2px;">x8</span></p> <p><b>3) Nut, Con Rod</b><br/>• P33221328 <span style="border: 1px solid black; padding: 0 2px;">x8</span></p> <p><b>4) Con Rod</b><br/>• PZZ90009</p> |  <p><b>1) Bushing, Cam</b><br/>• P31134132 <span style="border: 1px solid black; padding: 0 2px;">x1</span></p> <p><b>2) Camshaft</b><br/>• P31415374</p> <p><b>3) Tappet</b><br/>• P31434163</p> <p><b>4) Pushrod</b><br/>• P31434307</p>            |  <p><b>1) Crankshaft Gear</b><br/>• P31171681</p> <p><b>2) Camshaft Gear</b><br/>• P31171353 <span style="border: 1px solid black; padding: 0 2px;">1</span></p> <p><b>3) Idler Gear</b><br/>• P41115023</p>  |  |
| <p><b>Valve Train Kit</b><br/>• PVTK406</p>   | <p><b>1) Valve, Intake</b><br/>• P31431641 <span style="border: 1px solid black; padding: 0 2px;">x4</span></p> <p><b>2) Valve, Exhaust</b><br/>• P31431881 <span style="border: 1px solid black; padding: 0 2px;">x4</span></p>   | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b><br/>• 3a) P3343F002 <span style="border: 1px solid black; padding: 0 2px;">x4</span><br/>• 3b) P3343J002 <span style="border: 1px solid black; padding: 0 2px;">x4</span></p>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>• 4a) P31744131 <span style="border: 1px solid black; padding: 0 2px;">x8</span><br/>• 4b) P31745121 <span style="border: 1px solid black; padding: 0 2px;">x8</span></p>  | <p><b>5) Lock, Valve</b><br/>• P33173108 <span style="border: 1px solid black; padding: 0 2px;">x16</span></p> <p><b>6) Seal, Valve</b><br/>• P33817117 <span style="border: 1px solid black; padding: 0 2px;">x8</span></p>   |  |
|  <p><b>1) Oil Pump</b><br/>• P41314182 <span style="border: 1px solid black; padding: 0 2px;">1</span></p> <p><b>2) Oil Cooler</b><br/>• P2486A218 <span style="border: 1px solid black; padding: 0 2px;">5</span><br/>• P2486A219 <span style="border: 1px solid black; padding: 0 2px;">5</span></p>   |  <p><b>Lift Pump</b><br/>• P2641728</p>   |  <p><b>1) Water Pump</b><br/>• P4131A013</p> <p><b>2) Thermostat</b><br/>• P2485659<br/>• P2485666</p> <p><b>(Use on JCB)</b></p>   |  <p><b>1) Rocker Shaft</b><br/>• PZZ90032</p> <p><b>2) Rocker Arm LH</b><br/>• P41151483</p> <p><b>3) Rocker Arm RH</b><br/>• P41151484</p> <p><b>4) Injector</b><br/>• P2645664 <span style="border: 1px solid black; padding: 0 2px;">4</span></p> |  <p><b>1) Cylinder Head</b><br/>• PZZ80175</p> <p><b>2) Heater Plug (Screw Fitting)</b><br/>• P2666103<br/>• P2666108</p> <p><b>3) Oil Pressure Switch (Bayonet Fitting)</b><br/>• P2848062 <span style="border: 1px solid black; padding: 0 2px;">6</span></p> |  <p><b>1) Balancer Unit</b><br/>• P41733082 <span style="border: 1px solid black; padding: 0 2px;">2</span></p> |

(1): For Non Agricultural Uses.

(3): Flanged, Semi Finished Liner available, P3135X031

(5): Check build number for proper application.

(2): For Agricultural Uses.

(4): Check your Perkins Parts Catalog.

**Engine Series:**  
4.236









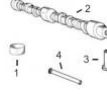

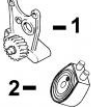
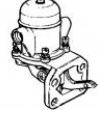



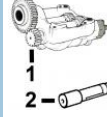
**Engine Model:**  
4.236 (LD)

**Engine Data:**  
Rope & Lip Seal  
(Both types included in the kit)  
To ESN U106654N

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.8770 in / 98.476 mm

Please see page 444 for a complete list of equipment models.

|   |  |  |  |  |  |
|---|--|--|--|--|--|
|  <p>1) <b>Engine O/H Kit</b><br/>› POK450</p> <p>2) <b>Basic Engine Kit</b><br/>› PBK450</p>  |  <p><b>Piston-Liner Kit</b><br/>› PU5MK0123</p> <p><b>Consist of:</b><br/>› a) P68301<br/>› b) P41158041<br/>› c) P31358394</p> <p><b>4 Per Engine</b></p>   |  <p><b>Main Bearing Set</b><br/>› P81558 Std.<br/>› P81558A 0.010<br/>› P81558B 0.020<br/>› P81558C 0.030</p> <p><b>Set of 5 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>› P85042 Std.<br/>› P85042A 0.010<br/>› P85042B 0.020<br/>› P85042C 0.030</p> <p><b>Set of 4 Pairs</b></p>  |  <p><b>Thrust Washer Set</b><br/>› P31137551/61 Std.<br/>› P31137312/22 0.007</p> <p><b>Set of 2 Pairs</b></p>   |  |
|  <p>1) <b>Front Seal</b><br/>› P2418F436</p> <p>2) <b>Rear Seal</b><br/>› P2418F475<br/>› P36883108 x2</p> <p>3) <b>Crankshaft Kit</b><br/>› PZZ90093<br/>› PZZ90082</p> <p>4) <b>Ring Gear</b><br/>› P0410236 115T<br/>› P0410264 122T<br/>› P31162121 126T</p> |  <p>1) <b>Top Gasket Set</b><br/>› PU5LT0015</p> <p>2) <b>Bottom Gasket</b><br/>› PU5LB0046</p> <p>3) <b>Head Gasket</b><br/>› P36812349</p> <p>4) <b>Valve Cover Gsk</b><br/>› P3681A027</p> <p>5) <b>Timing Cover Gsk</b><br/>› P3681P045</p> <p>6) <b>Oil Pan Gasket</b><br/>› PU5MK0600</p> |  <p>1) <b>Bush, Con Rod</b><br/>› P31134123 x4</p> <p>2) <b>Bolt, Con Rod</b><br/>› P32762144 x8</p> <p>3) <b>Nut, Con Rod</b><br/>› P33221328 x8</p> <p>4) <b>Con Rod</b><br/>› PZZ90009</p> |  <p>1) <b>Bushing, Cam</b><br/>› P31134132 x1</p> <p>2) <b>Camshaft</b><br/>› P31415292<br/>› P31415321</p> <p>3) <b>Tappet</b><br/>› P31434163</p> <p>4) <b>Pushrod</b><br/>› P31434307</p>        |  <p>1) <b>Crankshaft Gear</b><br/>› P31171681</p> <p>2) <b>Camshaft Gear</b><br/>› P31171353</p> <p>3) <b>Idler Gear</b><br/>› P41115023</p>  |  |
| <p><b>Valve Train Kit</b><br/>› PVTK413</p>   | <p>1) <b>Valve, Intake</b><br/>› P31431315 x4</p> <p>2) <b>Valve, Exhaust</b><br/>› P3142A052 x4</p>   | <p>3) <b>Guide, Valve</b><br/>a) Intake b) Exhaust<br/>› 3a) P3343F002 x4<br/>› 3b) P3343J002 x4</p>   | <p>4) <b>Spring, Valve</b><br/>a) Inner b) Outer<br/>› 4a) P31744131 x8<br/>› 4b) P31745121 x8</p>   | <p>5) <b>Lock, Valve</b><br/>› P33173108 x16</p> <p>6) <b>Seal, Valve</b><br/>› P33817117 x8</p>   |  |
|  <p>1) <b>Oil Pump</b><br/>› P41314182</p> <p>2) <b>Oil Cooler</b><br/>› P2486A218<br/>› P2486A219</p>   |  <p><b>Lift Pump</b><br/>› P2641728</p>   |  <p>1) <b>Water Pump</b><br/>› P4131A013</p> <p>2) <b>Thermostat</b><br/>› P2485666</p>   |  <p>1) <b>Rocker Shaft</b><br/>› PZZ90032</p> <p>2) <b>Rocker Arm LH</b><br/>› P41151483</p> <p>3) <b>Rocker Arm RH</b><br/>› P41151484</p> <p>4) <b>Injector</b><br/>› P2645664<br/>› P2645666</p> |  <p>1) <b>Cylinder Head</b><br/>› PZZ80175</p> <p>2) <b>Heater Plug (Screw Fitting)</b><br/>› P2666103<br/>› P2666108</p> <p>3) <b>Oil Pressure Switch (Bayonet Fitting)</b><br/>› P2848062</p> |  <p>1) <b>Balancer Unit</b><br/>› P41733082</p> |

(1): Check with Build List.

(3): Lip Seal Crank Used From ESN U136319L

(5): Used on Build No: LD22682

(7): Use P2485609 on Build LD21386

(9): Check build number for proper application.

(2): Rope Seal Crank Used To ESN U136318L

(4): Used on Build No: LD21386

(6): Also available: P31358324 Parallel Semi-Finished Liner; P31358393 Flanged, Semi Finished Liner; and P31358398 Finished Liner in 0.010" Oversize.

(8): Check your Perkins Parts Catalog.

**Engine Series:**  
4.236






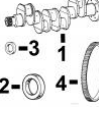
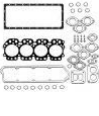
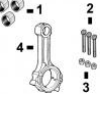



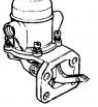

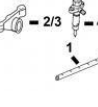


**Engine Model:**  
4.236 (LD)

**Engine Data:**  
Lip Seal  
From ESN  
U106655N

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.8770  
in / 98.476  
mm

Please see page 445 for a complete list of equipment models.

|   |  |  |   |  |  |
|---|--|--|---|--|--|
|  <p><b>1) Engine O/H Kit</b><br/>, POK448</p> <p><b>2) Basic Engine Kit</b><br/>, PBK448</p>  |  <p><b>Piston-Liner Kit</b><br/>, PCK301</p> <p><b>Consist of:</b><br/>, a) P68301<br/>, b) P41158041<br/>, c) P3135X032</p> <p><b>4 Per Engine</b></p>  |  <p><b>Main Bearing Set</b><br/>, P81558 Std.<br/>, P81558A 0.010<br/>, P81558B 0.020<br/>, P81558C 0.030</p> <p><b>Set of 5 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>, P85042 Std.<br/>, P85042A 0.010<br/>, P85042B 0.020<br/>, P85042C 0.030</p> <p><b>Set of 4 Pairs</b></p>   |  <p><b>Thrust Washer Set</b><br/>, P31137551/61 Std.<br/>, P31137312/22 0.007</p> <p><b>Set of 2 Pairs</b></p>   |  |
|  <p><b>1) Front Seal</b><br/>, P2418F436</p> <p><b>2) Rear Seal</b><br/>, P2418F475</p> <p><b>3) Crankshaft Kit</b><br/>, PZZ90082</p> <p><b>4) Ring Gear</b><br/>, P0410236 115T<br/>, P0410264 122T<br/>, P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>, PU5LT0065</p> <p><b>2) Bottom Gasket</b><br/>, PU5LB0046</p> <p><b>3) Head Gasket</b><br/>, P3681E036</p> <p><b>4) Valve Cover Gsk</b><br/>, P3681A027</p> <p><b>5) Timing Cover Gsk</b><br/>, P3681P045</p> <p><b>6) Oil Pan Gasket</b><br/>, PU5MK0600</p> |  <p><b>1) Bush, Con Rod</b><br/>, P31134123 x4</p> <p><b>2) Bolt, Con Rod</b><br/>, P32762144 x8</p> <p><b>3) Nut, Con Rod</b><br/>, P33221328 x8</p> <p><b>4) Con Rod</b><br/>, PZZ90009</p> |  <p><b>1) Bushing, Cam</b><br/>, P31134132 x1</p> <p><b>2) Camshaft</b><br/>, P31415381<br/>, P31415374</p> <p><b>3) Tappet</b><br/>, P31434163</p> <p><b>4) Pushrod</b><br/>, P31434307</p>         |  <p><b>1) Crankshaft Gear</b><br/>, P31171681</p> <p><b>2) Camshaft Gear</b><br/>, P31171353<br/>, P31171931</p> <p><b>3) Idler Gear</b><br/>, P41115023</p>                                      |  |
| <p><b>Valve Train Kit</b><br/>, PVTK413</p>   | <p><b>1) Valve, Intake</b><br/>, P31431315 x4</p> <p><b>2) Valve, Exhaust</b><br/>, P3142A052 x4</p>   | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b><br/>, 3a) P3343F002 x4<br/>, 3b) P3343J002 x4</p>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>, 4a) P31744131 x8<br/>, 4b) P31745121 x8</p>   | <p><b>5) Lock, Valve</b><br/>, P33173108 x16</p> <p><b>6) Seal, Valve</b><br/>, P33817117 x8</p>   |  |
|  <p><b>1) Oil Pump</b><br/>, P41314182</p> <p><b>2) Oil Cooler</b><br/>, P2486A218<br/>, P2486A219</p>   |  <p><b>Lift Pump</b><br/>, P2641728</p>   |  <p><b>1) Water Pump</b><br/>, P4131A013</p> <p><b>2) Thermostat</b><br/>, P2485666<br/>, P2485609</p>  |  <p><b>1) Rocker Shaft</b><br/>, PZZ90032</p> <p><b>2) Rocker Arm LH</b><br/>, P41151483</p> <p><b>3) Rocker Arm RH</b><br/>, P41151484</p> <p><b>4) Injector</b><br/>, P2645664<br/>, P2645666</p> |  <p><b>1) Cylinder Head</b><br/>, PZZ80175</p> <p><b>2) Heater Plug (Screw Fitting)</b><br/>, P2666103<br/>, P2666108</p> <p><b>3) Oil Pressure Switch (Bayonet Fitting)</b><br/>, P2848062</p> |  <p><b>1) Balancer Unit</b><br/>, P41733082</p> |

(1): Used on Build No: LD22682.






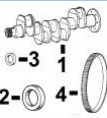

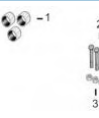
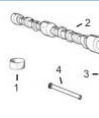
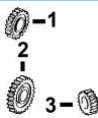


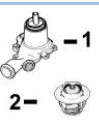
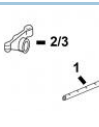

(2): Used on Build No: LD21386. Front mount balancer application.

(3): Flanged, Semi Finished Liner P3135X031 and Parallel liner P31358324 are also available.

(4): Check your Perkins Parts Catalog.






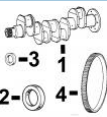

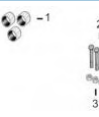
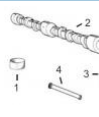
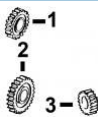


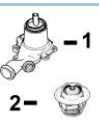
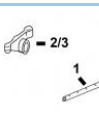
(5): Check build number for proper application.

(6): Non-balancer unit engines.

|  |   |   |  |   |   |
|--|---|---|--|---|---|
| <p><b>Engine Series:</b><br/>4.236</p> <p><b>Engine Model:</b><br/>G4.236 (LE)</p> <p><b>Engine Desc:</b><br/>GASOLINE ENGINE</p> <p><b>Engine Data:</b><br/>Lip Seal<br/>To ESN<br/>U106654N</p>  |  <p><b>1) Engine O/H Kit</b><br/>, POK457</p> <p><b>2) Basic Engine Kit</b><br/>, PBK457</p>  |  <p><b>Piston-Liner Kit</b><br/>, PCK394</p> <p><b>Consist of:</b><br/>, a) PU5LP0047<br/>, b) P41158142<br/>, c) P31358394</p> <p><b>4 Per Engine</b></p>  |  <p><b>Main Bearing Set</b><br/>, P81558 Std.<br/>, P81558A 0.010<br/>, P81558B 0.020<br/>, P81558C 0.030</p> <p><b>Set of 5 Pairs</b></p>             |  <p><b>Con Rod Bearing Set</b><br/>, P85042 Std.<br/>, P85042A 0.010<br/>, P85042B 0.020<br/>, P85042C 0.030</p> <p><b>Set of 4 Pairs</b></p>                                 |  <p><b>Thrust Washer Set</b><br/>, P31137551/61 Std.<br/>, P31137312/22 0.007</p> <p><b>Set of 2 Pairs</b></p>  |
| <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.8770 in / 98.476 mm</p> <p><b>Caterpillar</b><br/>RT - (LE70110)<br/>T500-1500 - (LE70148)<br/>V100-140 - (LE70089)<br/>V80D - (LE70094)</p> <p><b>Clark Equipment</b><br/>C500-Y60 - (LE80173)<br/>C500-Y60 - (LE22376)<br/>C500H 60-80 - (LE70157)<br/>C500 60-S100 CR - (LE70175)<br/>C500-100 - (LE70185)<br/>C500-135 - (LE70185)</p> |  <p><b>1) Front Seal</b><br/>, P2418F436</p> <p><b>2) Rear Seal</b><br/>, P2418F475</p> <p><b>3) Crankshaft Kit</b><br/>, PZZ90082</p> <p><b>4) Ring Gear</b><br/>, P0410264 122T<br/>, P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>, PU5LT0176</p> <p><b>2) Bottom Gasket</b><br/>, PU5LB0046</p> <p><b>3) Valve Cover Gsk</b><br/>, P3681A027</p> <p><b>4) Head Gasket</b><br/>, P3681E036</p> <p><b>5) Timing Cover Gsk</b><br/>, P3681P045</p> <p><b>6) Oil Pan Set</b><br/>, PU5MK0600</p> |  <p><b>1) Bush, Con Rod</b><br/>, P31134144 x4</p> <p><b>2) Bolt, Con Rod</b><br/>, P32762144 x8</p> <p><b>3) Nut, Con Rod</b><br/>, P33221328 x8</p> |  <p><b>1) Bushing, Cam</b><br/>, P31134132 x1</p> <p><b>2) Camshaft</b><br/>, P31415292</p> <p><b>3) Tappet</b><br/>, P31434163</p> <p><b>4) Pushrod</b><br/>, P31434307</p> |  <p><b>1) Crankshaft Gear</b><br/>, P31171681</p> <p><b>2) Camshaft Gear</b><br/>, P31171353<br/>, P31171931</p> <p><b>3) Idler Gear</b><br/>, P31171951</p> |
| <p><b>Jacobsen Mfg Co</b><br/>HR-15 - Turf Tractor (LE70054)<br/>F10 - Turf Tractor (LE70054)</p> <p><b>Eaton-Corp</b><br/>Forklift - (LE80177)</p>  | <p><b>Valve Train Kit</b><br/>, PVTK412</p>   | <p><b>1) Valve, Intake</b><br/>, P31431871 x4</p> <p><b>2) Valve, Exhaust</b><br/>, P31431701 x4</p>  | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b><br/>, 3a) P3343F002 x4<br/>, 3b) P3343J002 x4</p>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>, 4a) P31744131 x8<br/>, 4b) P31745121 x8</p>   | <p><b>5) Lock, Valve</b><br/>, P33173108 x16</p> <p><b>6) Seal, Valve</b><br/>, P33817117 x8</p>  |
|  |  <p><b>Oil Pump</b><br/>, P41314182</p>  |  <p><b>Lift Pump</b><br/>, P2641728</p>  |  <p><b>1) Water Pump</b><br/>, P4131A013</p> <p><b>2) Thermostat</b><br/>, P2485666</p>   |  <p><b>1) Rocker Shaft</b><br/>, PZZ90032</p> <p><b>2) Rocker Arm LH</b><br/>, P41151483</p> <p><b>3) Rocker Arm RH</b><br/>, P41151484</p>                                |  <p><b>1) Balancer Unit</b><br/>, P41733082</p> <p><b>3) Oil Pressure Switch</b><br/>, P2848062</p>  |

(1): Do not Use on Build No: LE70089 or LE22376 or LE80173  
 (3): Order with Kit for Build No: LE70089 or LE70094  
 (5): Also available: P31358324 Parallel Semi-Finished Liner; P31358393 Flanged, Semi Finished Liner; and P31358398 Finished Liner in 0.010" Oversize.  
 (7): Check for proper application.

(2): Use on Build No: LE22376 or LE80173  
 (4): Use on Build Nos: LE70089 or LE80173 or LE22376  
 (6): Use P2485613 on Build LE70148 and P2485609 on Build LE80173.

|  |   |  |   |  |   |
|--|---|--|---|--|---|
| <p><b>Engine Series:</b><br/>4.236</p> <p><b>Engine Model:</b><br/>G4.236 (LE)</p> <p><b>Engine Desc:</b><br/>GASOLINE<br/>ENGINE</p> <p><b>Engine Data:</b><br/>Lip Seal<br/>From ESN<br/>U106655N</p>  |  <p><b>1) Engine O/H Kit</b><br/>• POK447</p> <p><b>2) Basic Engine Kit</b><br/>• PBK447</p>  |  <p><b>Piston-Liner Kit</b><br/>• PCK236G</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>• a) PU5LP0047</li> <li>• b) P41158142</li> <li>• c) P3135X032</li> </ul> <p><b>4 Per Engine</b></p>  |  <p><b>Main Bearing Set</b></p> <ul style="list-style-type: none"> <li>• P81558 Std.</li> <li>• P81558A 0.010</li> <li>• P81558B 0.020</li> <li>• P81558C 0.030</li> </ul> <p><b>Set of 5 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b></p> <ul style="list-style-type: none"> <li>• P85042 Std.</li> <li>• P85042A 0.010</li> <li>• P85042B 0.020</li> <li>• P85042C 0.030</li> </ul> <p><b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer Set</b></p> <ul style="list-style-type: none"> <li>• P31137551/61 Std.</li> <li>• P31137312/22 0.007</li> </ul> <p><b>Set of 2 Pairs</b></p> |
| <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.8770 in<br/>/ 98.476 mm</p> <p><b>Caterpillar</b><br/>RT - (LE70110)<br/>T500-1500 -<br/>(LE70148)<br/>V100-140 -<br/>(LE70089)<br/>V80D -<br/>(LE70094)</p> <p><b>Clark Equipment</b><br/>C500-Y60 -<br/>(LE80173)<br/>C500-Y60 -<br/>(LE22376)<br/>C500H 60-80 -<br/>(LE70157)</p> |  <p><b>1) Front Seal</b><br/>• P2418F436</p> <p><b>2) Rear Seal</b><br/>• P2418F475</p> <p><b>3) Crankshaft Kit</b><br/>• PZZ90082</p> <p><b>4) Ring Gear</b><br/>• P0410264 122T<br/>• P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT0176</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0046</p> <p><b>3) Valve Cover Gsk</b><br/>• P3681A027</p> <p><b>4) Head Gasket</b><br/>• P3681E036</p> <p><b>5) Timing Cover Gsk</b><br/>• P3681P045</p> <p><b>6) Oil Pan Gasket</b><br/>• PU5MK0600</p> |  <p><b>1) Bush, Con Rod</b><br/>• P31134144 x4</p> <p><b>2) Bolt, Con Rod</b><br/>• P32762144 x8</p> <p><b>3) Nut, Con Rod</b><br/>• P33221328 x8</p>  |  <p><b>1) Bushing, Cam</b><br/>• P31134132 x1</p> <p><b>2) Camshaft</b><br/>• P31415381</p> <p><b>3) Tappet</b><br/>• P31434163</p> <p><b>4) Pushrod</b><br/>• P31434307</p>                              |  <p><b>1) Crankshaft Gear</b><br/>• P31171681</p> <p><b>2) Camshaft Gear</b><br/>• P31171353<br/>• P31171931</p> <p><b>3) Idler Gear</b><br/>• P31171951</p>     |
| <p><b>Eaton-Corp</b><br/>Forklift -<br/>(LE80177)</p> <p><b>Jacobsen-Mfg-Co</b><br/>HR-15 Turf<br/>Tractor<br/>H-10 Turf<br/>Tractor</p>   | <p><b>Valve Train Kit</b><br/>• PVTK412</p>   | <p><b>1) Valve, Intake</b><br/>• P31431871 x4</p> <p><b>2) Valve, Exhaust</b><br/>• P31431701 x4</p>   | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b></p> <ul style="list-style-type: none"> <li>• 3a) P3343F002 x4</li> <li>• 3b) P3343J002 x4</li> </ul>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b></p> <ul style="list-style-type: none"> <li>• 4a) P31744131 x8</li> <li>• 4b) P31745121 x8</li> </ul>   | <p><b>5) Lock, Valve</b><br/>• P33173108 x16</p> <p><b>6) Seal, Valve</b><br/>• P33817117 x8</p>  |
| <p><b>Oil Pump</b><br/>• P41314182</p>   |  <p><b>Lift Pump</b><br/>• P2641728</p>  |  <p><b>1) Water Pump</b><br/>• P4131A013</p> <p><b>2) Thermostat</b><br/>• P2485666</p>   |  <p><b>1) Rocker Shaft</b><br/>• PZZ90032</p> <p><b>2) Rocker Arm LH</b><br/>• P41151483</p> <p><b>3) Rocker Arm RH</b><br/>• P41151484</p>  |  <p><b>1) Balancer Unit</b><br/>• P41733082</p> <p><b>3) Oil Pressure Switch</b><br/>• P2848062</p>   |   |


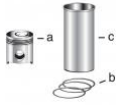



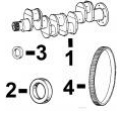

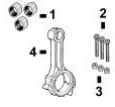
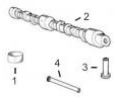
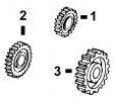
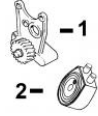


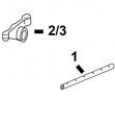

(1): Do not Use on Build No: LE70089,LE22376, and LE80173.  
 (3): Order with Kit for Build No: LE70089,LE70094.  
 (5): Use on Build Nos: LE70089/LE80173/LE22376.  
 (7): Use P2485613 on Build LE70148 and P2485609 on Build LE80173.

(2): Use on Build No: LE22376,LE80173.  
 (4): Flanged, Semi Finished Liner P3135X031 are also available.  
 (6): Check with Build List.

|                                |                                     |                                    |  |                              |
|--------------------------------|-------------------------------------|------------------------------------|--|------------------------------|
| <b>Engine Series:</b><br>4.236 | <b>Engine Model:</b><br>C4.236 (LH) | <b>Engine Desc:</b><br>COMPENSATED | <b>Engine Data:</b><br>Lip Seal<br>To ESN U106654N | <b>Engine Info:</b><br>4 Cyl |
|--------------------------------|-------------------------------------|------------------------------------|--|------------------------------|

**Engine Dimensions:**  
Bore: 3.8770 in / 98.476 mm

**Jcb**  
3CX - Backhoe (LH50133) 200 - Loader (LH50205)  
200 - Loader (LH50226)

|  |   |   |   |   |
|--|---|---|---|---|
|  <p><b>1) Engine O/H Kit</b><br/>• POK452<br/><b>2) Basic Engine Kit</b><br/>• PBK452</p>  |  <p><b>Piston-Liner Kit</b><br/>• PCK114<br/><b>Consist of:</b><br/>• a) PU5LP0011<br/>• b) P41158147<br/>• c) P31358394<br/><b>4 Per Engine</b></p>   |  <p><b>Main Bearing Set</b><br/>• P81558 Std.<br/>• P81558A 0.010<br/>• P81558B 0.020<br/>• P81558C 0.030<br/><b>Set of 5 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b><br/>• P85042 Std.<br/>• P85042A 0.010<br/>• P85042B 0.020<br/>• P85042C 0.030<br/><b>Set of 4 Pairs</b></p>                          |  <p><b>Thrust Washer Set</b><br/>• P31137551/61 Std.<br/>• P31137312/22 0.007<br/><b>Set of 2 Pairs</b></p>  |
|  <p><b>1) Front Seal</b><br/>• P2418F436<br/><b>2) Rear Seal</b><br/>• P2418F475<br/><b>3) Crankshaft Kit</b><br/>• PZZ90082<br/><b>4) Ring Gear</b><br/>• P0410236 115T</p> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT0176<br/><b>2) Bottom Gasket</b><br/>• PU5LB0045<br/><b>3) Valve Cover Gsk</b><br/>• P3681A027<br/><b>4) Head Gasket</b><br/>• P3681E016<br/><b>5) Timing Cover Gsk</b><br/>• P3681P045<br/><b>6) Oil Pan Gasket</b><br/>• PU5MK0600</p> |  <p><b>1) Bush, Con Rod</b><br/>• P31134123 x4<br/><b>2) Bolt, Con Rod</b><br/>• P32762144 x8<br/><b>3) Nut, Con Rod</b><br/>• P33221328 x8<br/><b>4) Con Rod</b><br/>• PZZ90009</p> |  <p><b>1) Bushing, Cam</b><br/>• P31134132 x1<br/><b>2) Camshaft</b><br/>• P31415374<br/><b>3) Tappet</b><br/>• P31434163<br/><b>4) Pushrod</b><br/>• P31434307</p> |  <p><b>1) Crankshaft Gear</b><br/>• P31171681<br/><b>2) Camshaft Gear</b><br/>• P31171353<br/>• P31171931<br/><b>3) Idler Gear</b><br/>• P41115023</p> |
| <p><b>Valve Train Kit</b><br/>• PVTK413</p>  | <p><b>1) Valve, Intake</b><br/>• P31431315 x4<br/><b>2) Valve, Exhaust</b><br/>• P3142A052 x4</p>   | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b><br/>• 3a) P3343F002 x4<br/>• 3b) P3343J002 x4</p>   | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>• 4a) P31744131 x8<br/>• 4b) P31745121 x8</p>   | <p><b>5) Lock, Valve</b><br/>• P33173108 x16<br/><b>6) Seal, Valve</b><br/>• P33817117 x8</p>   |
|  <p><b>1) Oil Pump</b><br/>• P41314182<br/><b>2) Oil Cooler</b><br/>• P2486A218<br/>• P2486A219</p>  |  <p><b>Lift Pump</b><br/>• P2641728</p>  |  <p><b>1) Water Pump</b><br/>• PU5MW0108<br/><b>2) Thermostat</b><br/>• P2485613</p>   |  <p><b>1) Rocker Shaft</b><br/>• PZZ90032<br/><b>2) Rocker Arm LH</b><br/>• P41151483<br/><b>3) Rocker Arm RH</b><br/>• P41151484</p>                             |  <p><b>1) Cylinder HD with Valves</b><br/>• PZZ80175<br/><b>2) Heater Plug</b><br/>• P2666108<br/><b>3) Oil Pressure Switch</b><br/>• P2848062</p>   |






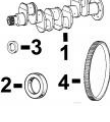
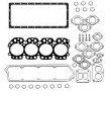
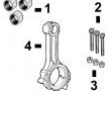

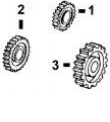
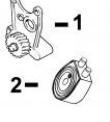

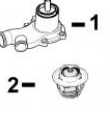
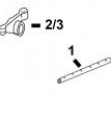

(1): Also available: P31358324 Parallel Semi-Finished Liner; P31358393 Flanged, Semi Finished Liner; and P31358398 Finished Liner in 0.010" Oversize.

(2): Use on Build No: LH50133/LH50205.

(3): Check build number for proper application.

|  |                                     |                                    |  |                              |
|--|-------------------------------------|------------------------------------|--|------------------------------|
| <b>Engine Series:</b><br>4.236                           | <b>Engine Model:</b><br>C4.236 (LH) | <b>Engine Desc:</b><br>COMPENSATED | <b>Engine Data:</b><br>Lip Seal<br>From ESN U106655N | <b>Engine Info:</b><br>4 Cyl |
| <b>Engine Dimensions:</b><br>Bore: 3.8770 in / 98.476 mm |                                     |                                    |  |                              |






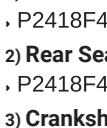
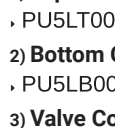
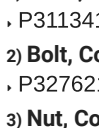
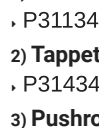
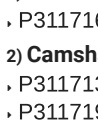

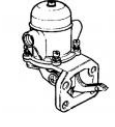
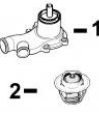
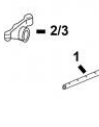

|   |  |   |  |
|---|--|---|--|
| <b>Jcb</b><br>3CX - Backhoe (LH50133)<br>200 - Loader (LH50226) | <b>Caterpillar</b><br>200 - Loader (LH50205) | 416 - Backhoe (LD70178)<br>426 - Backhoe (LD70179)<br>805 - Excavator (LD80249) | 418 - Backhoe (LD70200)<br>428 - Backhoe (LD70201) |
|---|--|---|--|

|   |  |  |  |   |
|---|--|--|--|---|
|  <p><b>1) Engine O/H Kit</b><br/>• POK455</p> <p><b>2) Basic Engine Kit</b><br/>• PBK455</p>  |  <p><b>Piston-Liner Kit</b><br/>• PCK416</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>• a) PU5LP0011</li> <li>• b) P41158147</li> <li>• c) P3135X032</li> </ul> <p><b>4 Per Engine</b></p>  |  <p><b>Main Bearing Set</b><br/>• P81558 Std.<br/>• P81558A 0.010<br/>• P81558B 0.020<br/>• P81558C 0.030</p> <p><b>Set of 5 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b><br/>• P85042 Std.<br/>• P85042A 0.010<br/>• P85042B 0.020<br/>• P85042C 0.030</p> <p><b>Set of 4 Pairs</b></p>                                |  <p><b>Thrust Washer Set</b><br/>• P31137551/61 Std.<br/>• P31137312/22 0.007</p> <p><b>Set of 2 Pairs</b></p>   |
|  <p><b>1) Front Seal</b><br/>• P2418F436</p> <p><b>2) Rear Seal</b><br/>• P2418F475</p> <p><b>3) Crankshaft Kit</b><br/>• PZZ90082</p> <p><b>4) Ring Gear</b><br/>• P0410236 115T</p> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT0046</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0045</p> <p><b>3) Valve Cover Gsk</b><br/>• P3681A027</p> <p><b>4) Head Gasket</b><br/>• P3681E016</p> <p><b>5) Timing Cover Gsk</b><br/>• P3681P045</p> <p><b>6) Oil Pan Gasket</b><br/>• PU5MK0600</p> |  <p><b>1) Bush, Con Rod</b><br/>• P31134123 x4</p> <p><b>2) Bolt, Con Rod</b><br/>• P32762144 x8</p> <p><b>3) Nut, Con Rod</b><br/>• P33221328 x8</p> <p><b>4) Con Rod</b><br/>• PZZ90009</p> |  <p><b>1) Bushing, Cam</b><br/>• P31134132 x1</p> <p><b>2) Camshaft</b><br/>• P31415374</p> <p><b>3) Tappet</b><br/>• P31434163</p> <p><b>4) Pushrod</b><br/>• P31434307</p> |  <p><b>1) Crankshaft Gear</b><br/>• P31171681</p> <p><b>2) Camshaft Gear</b><br/>• P31171353<br/>• P31171931</p> <p><b>3) Idler Gear</b><br/>• P41115023</p>                             |
| <p><b>Valve Train Kit</b><br/>• PVTK413</p>   | <p><b>1) Valve, Intake</b><br/>• P31431315 x4</p> <p><b>2) Valve, Exhaust</b><br/>• P3142A052 x4</p>   | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b><br/>• 3a) P3343F002 x4<br/>• 3b) P3343J002 x4</p>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>• 4a) P31744131 x8<br/>• 4b) P31745121 x8</p>  | <p><b>5) Lock, Valve</b><br/>• P33173108 x16</p> <p><b>6) Seal, Valve</b><br/>• P33817117 x8</p>  |
|  <p><b>1) Oil Pump</b><br/>• P41314182</p> <p><b>2) Oil Cooler</b><br/>• P2486A218<br/>• P2486A219</p>  |  <p><b>Lift Pump</b><br/>• P2641728</p>   |  <p><b>1) Water Pump</b><br/>• PU5MW0108</p> <p><b>2) Thermostat</b><br/>• P2485613</p>   |  <p><b>1) Rocker Shaft</b><br/>• PZZ90032</p> <p><b>2) Rocker Arm LH</b><br/>• P41151483</p> <p><b>3) Rocker Arm RH</b><br/>• P41151484</p>                                |  <p><b>1) Cylinder HD with Valves</b><br/>• PZZ80175</p> <p><b>2) Heater Plug</b><br/>• P2666108</p> <p><b>Bayonet Fitting</b></p> <p><b>3) Oil Pressure Switch</b><br/>• P2848062</p> |

(1): Parallel, Semi Finished Liner P3135X031 is also available.

(2): Use on Build No: LH50133/LH50205.

(3): Check build number for proper application.

|   |   |  |  |  |  |
|---|---|--|--|--|--|
| <p><b>Engine Series:</b><br/>4.236</p> <p><b>Engine Model:</b><br/>T4.236 (LJ)</p> <p><b>Engine Desc:</b><br/>TURBOCHARGE</p> <p><b>Engine Data:</b><br/>Lip Seal</p> <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.8770 in / 98.476 mm</p> |  <p><b>1) Engine O/H Kit</b><br/>, POK451</p> <p><b>2) Basic Engine Kit</b><br/>, PBK451</p>  |  <p><b>Piston-Liner Kit</b><br/>, PCK236T</p> <p><b>Consist of:</b><br/>, a) PU5LP0022<br/>, b) P41158145<br/>, c) P3135X032</p> <p><b>4 Per Engine</b></p>  |  <p><b>Main Bearing Set</b><br/>, P81558 Std.<br/>, P81558A 0.010<br/>, P81558B 0.020<br/>, P81558C 0.030</p> <p><b>Set of 5 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>, P85042 Std.<br/>, P85042A 0.010<br/>, P85042B 0.020<br/>, P85042C 0.030</p> <p><b>Set of 4 Pairs</b></p>  |  <p><b>Thrust Washer Set</b><br/>, P31137551/61 Std.<br/>, P31137312/22 0.007</p> <p><b>Set of 2 Pairs</b></p>   |
| <p><b>Asphalt Pavers</b><br/>AP800B</p> <p><b>Jcb</b><br/>4CX - Backhoe (LJ50117)<br/>410M - Forklift (LJ50201)<br/>415 - Loader (LJ50224)<br/>520S - Loadall (LJ50183)</p> <p><b>Mf Agricultural</b><br/>698 - (LJ31131)<br/>3065 - (LJ31217)<br/>3370 - (LJ31153)</p>     |  <p><b>1) Front Seal</b><br/>, P2418F436</p> <p><b>2) Rear Seal</b><br/>, P2418F475</p> <p><b>3) Crankshaft Kit</b><br/>, PZZ90082</p> <p><b>4) Ring Gear</b><br/>, P0410264 122T<br/>, P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>, PU5LT0046</p> <p><b>2) Bottom Gasket</b><br/>, PU5LB0045</p> <p><b>3) Valve Cover Gsk</b><br/>, P3681A027</p> <p><b>4) Head Gasket</b><br/>, P3681E016</p> <p><b>5) Timing Cover Gsk</b><br/>, P3681P045</p> <p><b>6) Oil Pan Gasket</b><br/>, PU5MK0600</p> |  <p><b>1) Bush, Con Rod</b><br/>, P31134131 x4</p> <p><b>2) Bolt, Con Rod</b><br/>, P32762144 x8</p> <p><b>3) Nut, Con Rod</b><br/>, P33221328 x8</p> <p><b>4) Con Rod</b><br/>, PZZ90013</p> |  <p><b>1) Bushing, Cam</b><br/>, P31134132 x1</p> <p><b>2) Tappet</b><br/>, P31434163</p> <p><b>3) Pushrod</b><br/>, P31434307</p>            |  <p><b>1) Crankshaft Gear</b><br/>, P31171681</p> <p><b>2) Camshaft Gear</b><br/>, P31171353<br/>, P31171931</p>  |
|   | <p><b>Valve Train Kit</b><br/>, PVTK414</p>   | <p><b>1) Valve, Intake</b><br/>, P3142H002 x4</p> <p><b>2) Valve, Exhaust</b><br/>, P3142A052 x4</p>   | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b><br/>, 3a) P3343F002 x4<br/>, 3b) P3343J002 x4</p>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>, 4a) P31744131 x8<br/>, 4b) P31745121 x8</p>  | <p><b>5) Lock, Valve</b><br/>, P33173108 x16</p> <p><b>6) Seal, Valve</b><br/>, P33817117 x8</p>   |
|   |  <p><b>1) Oil Pump</b><br/>, P4132F012<br/>, P4132F041</p> <p><b>2) Oil Cooler</b><br/>, P2486A218<br/>, P2486A219</p>   |  <p><b>Lift Pump</b><br/>, P2641728</p>   |  <p><b>1) Water Pump</b><br/>, PU5MW0108</p> <p><b>2) Thermostat</b><br/>, P2485613</p>   |  <p><b>1) Rocker Shaft</b><br/>, PZZ90032</p> <p><b>2) Rocker Arm LH</b><br/>, P41151483</p> <p><b>3) Rocker Arm RH</b><br/>, P41151484</p> |  <p><b>1) Balancer Unit</b><br/>, P4111K051</p> <p><b>2) Heater Plug</b><br/>, P2666108</p> <p><b>Bayonet Fitting</b></p> <p><b>3) Oil Pressure Switch</b><br/>, P2848062</p> |

(1): For Use on Agricultural Applications.






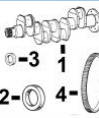
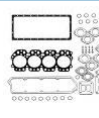

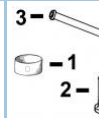



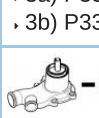
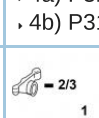
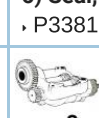
(3): Use on Build No: LJ50201.

(5): On applications using Con Rod 4115C321, order bushing P3112A006, order separately.

(2): Parallel, Semi Finished Liner P3135X031 is also available.

(4): Check build number for proper application.



|   |   |  |  |  |   |
|---|---|--|--|--|---|
| <p><b>Engine Series:</b><br/>4.236</p> <p><b>Engine Model:</b><br/>T4.236 (LJ)</p> <p><b>Engine Desc:</b><br/>TURBOCHARGE</p> <p><b>Engine Data:</b><br/>Lip Seal<br/>To ESN<br/>U106654N</p>     |  <p><b>1) Engine O/H Kit</b><br/>PCK458</p> <p><b>2) Basic Engine Kit</b><br/>PBK458</p>  |  <p><b>Piston-Liner Kit</b><br/>PCK022</p> <p><b>Consist of:</b><br/>a) PU5LP0022<br/>b) P41158145<br/>c) P31358394</p> <p><b>4 Per Engine</b></p>   |  <p><b>Main Bearing Set</b><br/>P81558 Std.<br/>P81558A 0.010<br/>P81558B 0.020<br/>P81558C 0.030</p> <p><b>Set of 5 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>P85042 Std.<br/>P85042A 0.010<br/>P85042B 0.020<br/>P85042C 0.030</p> <p><b>Set of 4 Pairs</b></p>                                      |  <p><b>Thrust Washer Set</b><br/>P31137551/61 Std.<br/>P31137312/22 0.007</p> <p><b>Set of 2 Pairs</b></p>  |
| <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.8770 in / 98.476 mm</p>   |  <p><b>1) Front Seal</b><br/>P2418F436</p> <p><b>2) Rear Seal</b><br/>P2418F475</p> <p><b>3) Crankshaft Kit</b><br/>PZZ90082</p> <p><b>4) Ring Gear</b><br/>P0410236 115T<br/>P0410264 122T<br/>P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>PU5LT0176</p> <p><b>2) Bottom Gasket</b><br/>PU5LB0046</p> <p><b>3) Valve Cover Gsk</b><br/>P3681A027</p> <p><b>4) Head Gasket</b><br/>P36812349</p> <p><b>5) Timing Cover Gsk</b><br/>P3681P045</p> <p><b>6) Oil Pan Gasket</b><br/>PU5MK0600</p> |  <p><b>1) Bush, Con Rod</b><br/>P31134131 x4</p> <p><b>2) Bolt, Con Rod</b><br/>P32762144 x8</p> <p><b>3) Nut, Con Rod</b><br/>P33221328 x8</p> <p><b>4) Con Rod</b><br/>PZZ90013</p> |  <p><b>1) Bushing, Cam</b><br/>P31134132 x1</p> <p><b>2) Tappet</b><br/>P31434163</p> <p><b>3) Pushrod</b><br/>P31434307</p>  |  <p><b>1) Crankshaft Gear</b><br/>P31171681</p> <p><b>2) Camshaft Gear</b><br/>P31171353<br/>P31171931</p> |
| <p><b>Asphalt Pavers</b><br/>AP800B</p> <p><b>Perkins</b><br/>General Industrial - (LJ70128)<br/>Genset - (LJ70130)<br/>Genset - (LJ70151)</p> <p><b>Sullair-Corp</b><br/>Genset - (LJ70155)</p>  | <p><b>Valve Train Kit</b><br/>PVTK414</p>   | <p><b>1) Valve, Intake</b><br/>P3142H002 x4</p> <p><b>2) Valve, Exhaust</b><br/>P3142A052 x4</p>   | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b><br/>3a) P3343F002 x4<br/>3b) P3343J002 x4</p>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>4a) P31744131 x8<br/>4b) P31745121 x8</p>  | <p><b>5) Lock, Valve</b><br/>P33173108 x16</p> <p><b>6) Seal, Valve</b><br/>P33817117 x8</p>  |
|  <p><b>1) Oil Pump</b><br/>P4132F012<br/>P4132F041</p> <p><b>2) Oil Cooler</b><br/>P2486A218<br/>P2486A219</p> |  <p><b>Lift Pump</b><br/>P2641728</p>  |  <p><b>1) Water Pump</b><br/>PU5MW0108<br/>PU5MW0106</p> <p><b>2) Thermostat</b><br/>P2485613</p>   |  <p><b>1) Rocker Shaft</b><br/>PZZ90032</p> <p><b>2) Rocker Arm LH</b><br/>P41151483</p> <p><b>3) Rocker Arm RH</b><br/>P41151484</p>   |  <p><b>1) Balancer Unit</b><br/>P4111K051</p> <p><b>2) Heater Plug</b><br/>P2666108</p> <p><b>Bayonet Fitting</b></p> <p><b>3) Oil Pressure Switch</b><br/>P2848062</p> |   |






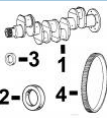


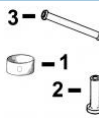

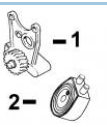


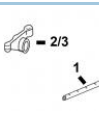

(1): Use on Build No: LJ70128.

(2): Use on Build No: LJ70155.

(3): Also available: P31358324 Parallel Semi-Finished Liner; P31358393 Flanged, Semi Finished Liner; and P31358398 Finished Liner in 0.010" Oversize.

(4): Check build number for proper application.

(5): On applications using Con Rod 4115C321, order bushing P3112A006 order separately.

|  |   |  |  |  |  |
|--|---|--|--|--|--|
| <p><b>Engine Series:</b><br/>4.236</p> <p><b>Engine Model:</b><br/>T4.236 (LJ)</p> <p><b>Engine Desc:</b><br/>TURBOCHARGE</p> <p><b>Engine Data:</b><br/>Lip Seal<br/>From ESN<br/>U106655N</p> <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.8770 in<br/>/ 98.476 mm</p> <p><b>Asphalt Pavers</b><br/>AP800B</p> <p><b>Perkins</b><br/>General Industrial -<br/>(LJ70128)<br/>Genset -<br/>(LJ70130)<br/>Genset -<br/>(LJ70151)</p> <p><b>Sullair-Corp</b><br/>Genset -<br/>(LJ70155)</p> |  <p><b>1) Engine O/H Kit</b><br/>, POK456</p> <p><b>2) Basic Engine Kit</b><br/>, PBK456</p>  |  <p><b>Piston-Liner Kit</b><br/>, PCK236T</p> <p><b>Consist of:</b><br/>, a) PU5LP0022<br/>, b) P41158145<br/>, c) P3135X032</p> <p><b>4 Per Engine</b></p>  |  <p><b>Main Bearing Set</b><br/>, P81558 Std.<br/>, P81558A 0.010<br/>, P81558B 0.020<br/>, P81558C 0.030</p> <p><b>Set of 5 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>, P85042 Std.<br/>, P85042A 0.010<br/>, P85042B 0.020<br/>, P85042C 0.030</p> <p><b>Set of 4 Pairs</b></p>  |  <p><b>Thrust Washer Set</b><br/>, P31137551/61 Std.<br/>, P31137312/22 0.007</p> <p><b>Set of 2 Pairs</b></p>   |
|  |  <p><b>1) Front Seal</b><br/>, P2418F436</p> <p><b>2) Rear Seal</b><br/>, P2418F475</p> <p><b>3) Crankshaft Kit</b><br/>, PZZ90082</p> <p><b>4) Ring Gear</b><br/>, P0410236 115T<br/>, P0410264 122T<br/>, P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>, PU5LT0046</p> <p><b>2) Bottom Gasket</b><br/>, PU5LB0046</p> <p><b>3) Valve Cover Gsk</b><br/>, P3681A027</p> <p><b>4) Head Gasket</b><br/>, P3681E016</p> <p><b>5) Timing Cover Gsk</b><br/>, P3681P045</p> <p><b>6) Oil Pan Gasket</b><br/>, PU5MK0600</p> |  <p><b>1) Bush, Con Rod</b><br/>, P31134131 x4</p> <p><b>2) Bolt, Con Rod</b><br/>, P32762144 x8</p> <p><b>3) Nut, Con Rod</b><br/>, P33221328 x8</p> <p><b>4) Con Rod</b><br/>, PZZ90013</p> |  <p><b>1) Bushing, Cam</b><br/>, P31134132 x1</p> <p><b>2) Tappet</b><br/>, P31434163</p> <p><b>3) Pushrod</b><br/>, P31434307</p>            |  <p><b>1) Crankshaft Gear</b><br/>, P31171681</p> <p><b>2) Camshaft Gear</b><br/>, P31171353<br/>, P31171931</p>  |
|  | <p><b>Valve Train Kit</b><br/>, PVTK414</p>   | <p><b>1) Valve, Intake</b><br/>, P3142H002 x4</p> <p><b>2) Valve, Exhaust</b><br/>, P3142A052 x4</p>   | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b><br/>, 3a) P3343F002 x4<br/>, 3b) P3343J002 x4</p>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>, 4a) P31744131 x8<br/>, 4b) P31745121 x8</p>  | <p><b>5) Lock, Valve</b><br/>, P33173108 x16</p> <p><b>6) Seal, Valve</b><br/>, P33817117 x8</p>   |
|  |  <p><b>1) Oil Pump</b><br/>, P4132F012<br/>, P4132F041</p> <p><b>2) Oil Cooler</b><br/>, P2486A218<br/>, P2486A219</p>   |  <p><b>Lift Pump</b><br/>, P2641728</p>   |  <p><b>1) Water Pump</b><br/>, PU5MW0108<br/>, PU5MW0106</p> <p><b>2) Thermostat</b><br/>, P2485613</p>   |  <p><b>1) Rocker Shaft</b><br/>, PZZ90032</p> <p><b>2) Rocker Arm LH</b><br/>, P41151483</p> <p><b>3) Rocker Arm RH</b><br/>, P41151484</p> |  <p><b>1) Balancer Unit</b><br/>, P4111K051</p> <p><b>2) Heater Plug</b><br/>, P2666108</p> <p><b>Bayonet Fitting</b></p> <p><b>3) Oil Pressure Switch</b><br/>, P2848062</p> |

(1): Use on Build No: LJ70128.

(2): Use on Build No: LJ70155.

(3): Flanged, Semi Finished Liner, P3135X031 is also available.

(4): Check build number for proper application.

(5): On applications using Con Rod 4115C321, order bushing P3112A006, order separately.

**Engine Series:**  
4.236

**Engine Model:**  
T4.236 (LJ)


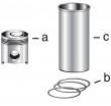



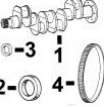
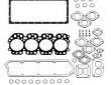


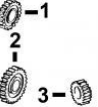



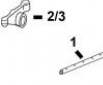

**Engine Desc:**  
TURBOCHARGED

**Engine Data:**  
Lip Seal  
To ESN U390301U

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.8770 in / 98.476 mm

**Asphalt Pavers**  
AP800B

|  |  |   |   |   |
|--|--|---|---|---|
|  <p><b>1) Engine O/H Kit</b><br/>• POK453</p> <p><b>2) Basic Engine Kit</b><br/>• PBK453</p>  |  <p><b>Piston-Liner Kit</b><br/>• PCK236T</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>• a) PU5LP0022</li> <li>• b) P41158145</li> <li>• c) P3135X032</li> </ul> <p><b>4 Per Engine</b></p>   |  <p><b>Main Bearing Set</b><br/>• P81558 <i>Std.</i><br/>• P81558A <i>0.010</i><br/>• P81558B <i>0.020</i><br/>• P81558C <i>0.030</i></p> <p><b>1</b> <b>Set of 5 Pairs</b></p>                                    |  <p><b>Con Rod Bearing Set</b><br/>• P85042 <i>Std.</i><br/>• P85042A <i>0.010</i><br/>• P85042B <i>0.020</i><br/>• P85042C <i>0.030</i></p> <p><b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer Set</b><br/>• P31137551/61 <i>Std.</i><br/>• P31137312/22 <i>0.007</i></p> <p><b>Set of 2 Pairs</b></p>                 |
|  <p><b>1) Front Seal</b><br/>• P2418F436</p> <p><b>2) Rear Seal</b><br/>• P2418F475</p> <p><b>3) Crankshaft Kit</b><br/>• PZZ90082</p> <p><b>4) Ring Gear</b><br/>• P0410236 <i>115T</i><br/>• P0410264 <i>122T</i><br/>• P31162121 <i>126T</i></p> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT0176</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0045</p> <p><b>3) Valve Cover Gsk</b><br/>• P3681A027</p> <p><b>4) Head Gasket</b><br/>• P3681E036</p> <p><b>5) Timing Cover Gsk</b><br/>• P3681P045</p> <p><b>6) Oil Pan Gasket</b><br/>• PU5MK0600</p> |  <p><b>1) Bush, Con Rod</b><br/>• P31134131 <i>x4</i></p> <p><b>2) Bolt, Con Rod</b><br/>• P32762144 <i>x8</i></p> <p><b>3) Nut, Con Rod</b><br/>• P33221328 <i>x8</i></p> <p><b>4) Con Rod</b><br/>• PZZ90013</p> |  <p><b>1) Bushing, Cam</b><br/>• P31134132 <i>x1</i></p> <p><b>2) Tappet</b><br/>• P31434163</p> <p><b>3) Pushrod</b><br/>• P31434307</p>                                 |  <p><b>1) Crankshaft Gear</b><br/>• P31171681</p> <p><b>2) Camshaft Gear</b><br/>• P31171353</p> <p><b>3) Idler Gear</b><br/>• P41115023</p> |
| <p><b>Valve Train Kit</b><br/>• PVTK413</p>  | <p><b>1) Valve, Intake</b><br/>• P31431315 <i>x4</i></p> <p><b>2) Valve, Exhaust</b><br/>• P3142A052 <i>x4</i></p>   | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b><br/>• 3a) P3343F002 <i>x4</i><br/>• 3b) P3343J002 <i>x4</i></p>   | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>• 4a) P31744131 <i>x8</i><br/>• 4b) P31745121 <i>x8</i></p>   | <p><b>5) Lock, Valve</b><br/>• P33173108 <i>x16</i></p> <p><b>6) Seal, Valve</b><br/>• P33817117 <i>x8</i></p>  |
|  <p><b>Oil Pump</b><br/>• P41314182</p>   |  <p><b>Lift Pump</b><br/>• P2641728</p>   |  <p><b>1) Water Pump</b><br/>• PU5MW0108</p> <p><b>2) Thermostat</b><br/>• P2485613</p>  |  <p><b>1) Rocker Shaft</b><br/>• PZZ90032</p> <p><b>2) Rocker Arm LH</b><br/>• P41151483</p> <p><b>3) Rocker Arm RH</b><br/>• P41151484</p>                             |  <p><b>Oil Pressure Switch</b><br/>• P2848062</p>  |

(1): Flanged, Semi Finished Liner, P3135X031 is also available.

(2): Check for proper application.

**Engine Series:**  
4.236

**Engine Model:**  
T4.236 (LJ)

**Engine Desc:**  
TURBOCHARGED


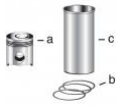



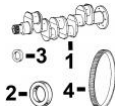

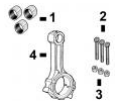
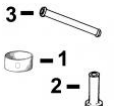
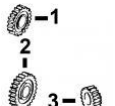

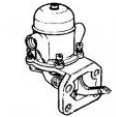

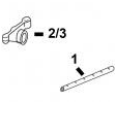

**Engine Data:**  
Lip Seal  
From ESN U390302U

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.8770 in / 98.476 mm






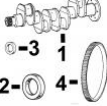


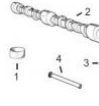

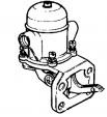




**Build List**  
LH70202

**Asphalt Pavers**  
AP800B

|   |  |   |  |   |
|---|--|---|--|---|
|  <p><b>1) Engine O/H Kit</b><br/>• POK454</p> <p><b>2) Basic Engine Kit</b><br/>• PBK454</p>  |  <p><b>Piston-Liner Kit</b><br/>• PCK236T</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>• a) PU5LP0022</li> <li>• b) P41158145</li> <li>• c) P3135X032</li> </ul> <p><b>4 Per Engine</b></p>   |  <p><b>Main Bearing Set</b></p> <ul style="list-style-type: none"> <li>• P81558 <i>Std.</i></li> <li>• P81558A <i>0.010</i></li> <li>• P81558B <i>0.020</i></li> <li>• P81558C <i>0.030</i></li> </ul> <p><b>1</b> <b>Set of 5 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b></p> <ul style="list-style-type: none"> <li>• P85042 <i>Std.</i></li> <li>• P85042A <i>0.010</i></li> <li>• P85042B <i>0.020</i></li> <li>• P85042C <i>0.030</i></li> </ul> <p><b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer Set</b><br/>• P31137551/61 <i>Std.</i><br/>• P31137312/22 <i>0.007</i></p> <p><b>Set of 2 Pairs</b></p>                 |
|  <p><b>1) Front Seal</b><br/>• P2418F436</p> <p><b>2) Rear Seal</b><br/>• P2418F475</p> <p><b>3) Crankshaft Kit</b><br/>• PZZ90082</p> <p><b>4) Ring Gear</b><br/>• P0410236 <i>115T</i><br/>• P0410264 <i>122T</i><br/>• P31162121 <i>126T</i></p> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT0046</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0045</p> <p><b>3) Valve Cover Gsk</b><br/>• P3681A027</p> <p><b>4) Head Gasket</b><br/>• P3681E016</p> <p><b>5) Timing Cover Gsk</b><br/>• P3681P045</p> <p><b>6) Oil Pan Gasket</b><br/>• PU5MK0600</p> |  <p><b>1) Bush, Con Rod</b><br/>• P31134131 <i>x4</i></p> <p><b>2) Bolt, Con Rod</b><br/>• P32762144 <i>x8</i></p> <p><b>3) Nut, Con Rod</b><br/>• P33221328 <i>x8</i></p> <p><b>4) Con Rod</b><br/>• PZZ90013</p>                           |  <p><b>1) Bushing, Cam</b><br/>• P31134132 <i>x1</i></p> <p><b>2) Tappet</b><br/>• P31434163</p> <p><b>3) Pushrod</b><br/>• P31434307</p>  |  <p><b>1) Crankshaft Gear</b><br/>• P31171681</p> <p><b>2) Camshaft Gear</b><br/>• P31171353</p> <p><b>3) Idler Gear</b><br/>• P41115023</p> |
| <p><b>Valve Train Kit</b><br/>• PVTK413</p>   | <p><b>1) Valve, Intake</b><br/>• P31431315 <i>x4</i></p> <p><b>2) Valve, Exhaust</b><br/>• P3142A052 <i>x4</i></p>   | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b></p> <ul style="list-style-type: none"> <li>• 3a) P3343F002 <i>x4</i></li> <li>• 3b) P3343J002 <i>x4</i></li> </ul>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b></p> <ul style="list-style-type: none"> <li>• 4a) P31744131 <i>x8</i></li> <li>• 4b) P31745121 <i>x8</i></li> </ul>   | <p><b>5) Lock, Valve</b><br/>• P33173108 <i>x16</i></p> <p><b>6) Seal, Valve</b><br/>• P33817117 <i>x8</i></p>  |
|  <p><b>Oil Pump</b><br/>• P41314182</p>   |  <p><b>Lift Pump</b><br/>• P2641728</p>   |  <p><b>1) Water Pump</b><br/>• PU5MW0108</p> <p><b>2) Thermostat</b><br/>• P2485613</p>  |  <p><b>1) Rocker Shaft</b><br/>• PZZ90032</p> <p><b>2) Rocker Arm LH</b><br/>• P41151483</p> <p><b>3) Rocker Arm RH</b><br/>• P41151484</p>  |  <p><b>Oil Pressure Switch</b><br/>• P2848062</p>  |

(1): Flanged, Semi Finished Liner, P3135X031 is also available.

(2): Check for proper application.






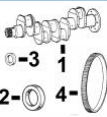

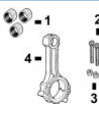
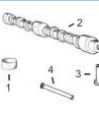

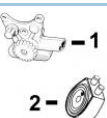

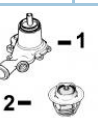
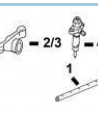

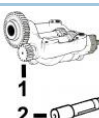
|   |   |  |  |  |   |
|---|---|--|--|--|---|
| <p><b>Engine Series:</b><br/>4.236</p> <p><b>Engine Model:</b><br/>4.248 (LF)</p> <p><b>Engine Desc:</b><br/>To ESN<br/>UA123423L</p> <p><b>Engine Data:</b><br/>Lip &amp; Rope<br/>Seal<br/>(Both rear<br/>seal types in<br/>kit)</p> <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine<br/>Dimensions:</b><br/>Bore: 3.9785 in<br/>/ 101.054 mm</p> |  <p>1) <b>Engine O/H Kit</b><br/>, POK460</p> <p>2) <b>Basic Engine Kit</b><br/>, PBK460</p>  |  <p><b>Piston-Liner Kit</b><br/>, PU5MK0067</p> <p><b>Consist of:</b><br/>, a) P89207<br/>, b) P4181A009<br/>, c) P31358352</p> <p><b>4 Per Engine</b></p>   |  <p><b>Main Bearing Set</b><br/>, P81558 Std.<br/>, P81558A 0.010<br/>, P81558B 0.020<br/>, P81558C 0.030</p> <p><b>Set of 5 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>, P85042 Std.<br/>, P85042A 0.010<br/>, P85042B 0.020<br/>, P85042C 0.030</p> <p><b>Set of 4 Pairs</b></p>                                  |  <p><b>Thrust Washer Set</b><br/>, P31137551/61 Std.<br/>, P31137312/22 0.007</p> <p><b>Set of 2 Pairs</b></p>                                |
| <p><b>Mf Agricultural</b><br/>MF275 -<br/>Tractor<br/>MF283 -<br/>Tractor<br/>MF285 -<br/>Tractor<br/>MF290 -<br/>Tractor</p>   |  <p>1) <b>Front Seal</b><br/>, P2418F436</p> <p>2) <b>Rear Seal</b><br/>, P36883108 x2<br/>, P2418F475</p> <p>3) <b>Crankshaft Kit</b><br/>, PZZ90093<br/>, PZZ90082</p> <p>4) <b>Ring Gear</b><br/>, P0410236 115T<br/>, P0410264 122T<br/>, P31162121 126T</p> |  <p>1) <b>Top Gasket Set</b><br/>, PU5LT0015</p> <p>2) <b>Bottom Gasket</b><br/>, PU5LB0045</p> <p>3) <b>Valve Cover Gsk</b><br/>, P3681A027</p> <p>4) <b>Head Gasket</b><br/>, P36812349</p> <p>5) <b>Timing Cover Gsk</b><br/>, P3681P045</p> <p>6) <b>Oil Pan Gasket</b><br/>, PU5MK0600</p> |  <p>1) <b>Bush, Con Rod</b><br/>, P31134123 x4</p> <p>2) <b>Bolt, Con Rod</b><br/>, P32762144 x8</p> <p>3) <b>Nut, Con Rod</b><br/>, P33221328 x8</p> <p>4) <b>Con Rod</b><br/>, PZZ90009</p>                         |  <p>1) <b>Bushing, Cam</b><br/>, P31134132 x1</p> <p>2) <b>Camshaft</b><br/>, P31415321</p> <p>3) <b>Tappet</b><br/>, P31434163</p> <p>4) <b>Push Rod</b><br/>, P31434307</p> |  <p>1) <b>Crankshaft Gear</b><br/>, P31171681</p> <p>2) <b>Camshaft Gear</b><br/>, P31171353</p> <p>3) <b>Idler Gear</b><br/>, P41115023</p> |
| <p><b>Valve Train Kit</b><br/>, PVTK406</p>   | <p>1) <b>Valve, Intake</b><br/>, P31431641 x4</p> <p>2) <b>Valve, Exhaust</b><br/>, P31431881 x4</p>  | <p>3) <b>Guide, Valve</b><br/>a) Intake b) Exhaust<br/>, 3a) P3343F002 x4<br/>, 3b) P3343J002 x4</p>   | <p>4) <b>Spring, Valve</b><br/>a) Inner b) Outer<br/>, 4a) P31744131 x8<br/>, 4b) P31745121 x8</p>   | <p>5) <b>Lock, Valve</b><br/>, P33173108 x16</p> <p>6) <b>Seal, Valve</b><br/>, P33817117 x8</p>   |   |
|  <p><b>Lift Pump</b><br/>, P2641728</p>  |  <p>1) <b>Water Pump</b><br/>, P4131A013</p> <p>2) <b>Thermostat</b><br/>, P2485659</p>  |  <p>1) <b>Rocker Shaft</b><br/>, PZZ90032</p> <p>2) <b>Rocker Arm LH</b><br/>, P41151483</p> <p>3) <b>Rocker Arm RH</b><br/>, P41151484</p> <p>4) <b>Oil Cooler</b><br/>, P2486A218<br/>, P2486A219</p>   |  <p>1) <b>Cylinder HD with Valves</b><br/>, PZZ80175</p> <p>2) <b>Heater Plug</b><br/>, P2666103<br/>(Screw Fitting)<br/>, P2666108<br/>(Bayonet Fitting)</p> <p>3) <b>Oil Pressure Switch</b><br/>, P2848062</p> |  <p>1) <b>Balancer Unit</b><br/>, P41733082</p>   |   |

(1): Parallel, Finished Liner P31358343 (4.065" OD), amd Flanged, (2): Rope Seal.

Semi Finished Liner, P31358346, are also available.

(3): Lip Seal.

(4): Check build number for proper application.

|  |   |  |  |  |   |
|--|---|--|--|--|---|
| <p><b>Engine Series:</b><br/>4.236</p> <p><b>Engine Model:</b><br/>4.248 (LF)</p> <p><b>Engine Desc:</b><br/>From ESN UA123424L</p> <p><b>Engine Data:</b><br/>Lip Seal</p> <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.9785 in / 101.054 mm</p> |  <p><b>1) Engine O/H Kit</b><br/>• POK461</p> <p><b>2) Basic Engine Kit</b><br/>• PBK461</p>  |  <p><b>Piston-Liner Kit</b><br/>• PCK2481</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>• a) PU5LP0009</li> <li>• b) P41158022</li> <li>• c) P3135X034</li> </ul> <p><b>4 Per Engine</b></p>  |  <p><b>Main Bearing Set</b></p> <ul style="list-style-type: none"> <li>• P81558 Std.</li> <li>• P81558A 0.010</li> <li>• P81558B 0.020</li> <li>• P81558C 0.030</li> </ul> <p><b>Set of 5 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b></p> <ul style="list-style-type: none"> <li>• P85042 Std.</li> <li>• P85042A 0.010</li> <li>• P85042B 0.020</li> <li>• P85042C 0.030</li> </ul> <p><b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer Set</b></p> <ul style="list-style-type: none"> <li>• P31137551/61 Std.</li> <li>• P31137312/22 0.007</li> </ul> <p><b>Set of 2 Pairs</b></p> |
| <p>Please see page 446 for a complete list of equipment models.</p>  |  <p><b>1) Front Seal</b><br/>• P2418F436</p> <p><b>2) Rear Seal</b><br/>• P2418F475</p> <p><b>3) Crankshaft Kit</b><br/>• PZZ90082</p> <p><b>4) Ring Gear</b></p> <ul style="list-style-type: none"> <li>• P0410236 115T</li> <li>• P0410264 122T</li> <li>• P31162121 126T</li> </ul> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT0065</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0045</p> <p><b>3) Valve Cover Gsk</b><br/>• P3681A027</p> <p><b>4) Head Gasket</b><br/>• P3681E036</p> <p><b>5) Timing Cover Gsk</b><br/>• P3681P045</p> <p><b>6) Oil Pan Gasket</b><br/>• PU5MK0600</p> |  <p><b>1) Bush, Con Rod</b><br/>• P31134123 x4</p> <p><b>2) Bolt, Con Rod</b><br/>• P32762144 x8</p> <p><b>3) Nut, Con Rod</b><br/>• P33221328 x8</p> <p><b>4) Con Rod</b><br/>• PZZ90009</p>   |  <p><b>1) Bushing, Cam</b><br/>• P31134132 x1</p> <p><b>2) Camshaft</b><br/>• P31415321</p> <p>• P31415374</p> <p><b>3) Tappet</b><br/>• P31434163</p> <p><b>4) Push Rod</b><br/>• P31434307</p>          |  <p><b>1) Crankshaft Gear</b><br/>• P31171681</p> <p><b>2) Camshaft Gear</b><br/>• P31171353</p> <p><b>3) Idler Gear</b><br/>• P41115023</p>                     |
| <p><b>Valve Train Kit</b><br/>• PVTK406</p>  | <p><b>1) Valve, Intake</b><br/>• P31431641 x4</p> <p><b>2) Valve, Exhaust</b><br/>• P31431881 x4</p>  | <p><b>3) Guide, Valve</b></p> <p><b>a) Intake b) Exhaust</b></p> <ul style="list-style-type: none"> <li>• 3a) P3343F002 x4</li> <li>• 3b) P3343J002 x4</li> </ul>  | <p><b>4) Spring, Valve</b></p> <p><b>a) Inner b) Outer</b></p> <ul style="list-style-type: none"> <li>• 4a) P31744131 x8</li> <li>• 4b) P31745121 x8</li> </ul>  | <p><b>5) Lock, Valve</b><br/>• P33173108 x16</p> <p><b>6) Seal, Valve</b><br/>• P33817117 x8</p>   |   |
|  <p><b>1) Oil Pump</b><br/>• P4132F041</p> <p><b>2) Oil Cooler</b></p> <ul style="list-style-type: none"> <li>• P2486A218</li> <li>• P2486A219</li> </ul>                                       |  <p><b>Lift Pump</b><br/>• P2641728</p>  |  <p><b>1) Water Pump</b><br/>• P4131A013</p> <p><b>2) Thermostat</b><br/>• P2485659</p>   |  <p><b>1) Rocker Shaft</b><br/>• PZZ90032</p> <p><b>2) Rocker Arm LH</b><br/>• P41151483</p> <p><b>3) Rocker Arm RH</b><br/>• P41151484</p> <p><b>4) Injector</b></p> <ul style="list-style-type: none"> <li>• P2645601</li> <li>• P2645664</li> </ul> |  <p><b>1) Cylinder HD with Valves</b><br/>• PZZ80175</p> <p><b>2) Heater Plug</b><br/>• P2666108</p> <p><b>(Bayonet Fitting)</b></p> <p><b>3) Oil Pressure Switch</b><br/>• P2848062</p>                |  <p><b>1) Balancer Unit</b></p> <ul style="list-style-type: none"> <li>• P41733082</li> <li>• P4111K051</li> </ul>   |

(1): To ESN U108196N.

(3): To ESN U076241N.

(5): Flanged, Semi Finished Liner, P3135X033, is also available.

(7): Check your Perkins Parts Catalog.

(2): From ESN U108197N.

(4): From ESN U076242N

(6): Used with Balancer Unit P4111K051.

(8): Check build number for proper application.

PERKINS 4.248 ROPE & LIP SEAL

**Engine Series:**  
4.236






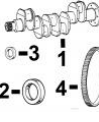





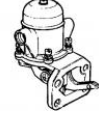
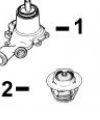
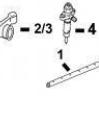

**Engine Model:**  
4.248 (LF)

**Engine Data:**  
Rope & Lip Seal

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.9785 in / 101.054 mm

**Allis Chalmers**  
840 - Loader (LF21617)  
D175 - Tractor (LF21274)

|   |  |  |  |   |
|---|--|--|--|---|
|  <p><b>1) Engine O/H Kit</b><br/>• POK463</p> <p><b>2) Basic Engine Kit</b><br/>• PBK463</p>  |  <p><b>Piston-Liner Kit</b><br/>• PCK2481</p> <p><b>Consist of:</b><br/>• a) PU5LP0009<br/>• b) P41158022<br/>• c) P3135X034</p> <p><b>4 Per Engine</b></p>  |  <p><b>Main Bearing Set</b><br/>• P81558 Std.<br/>• P81558A 0.010<br/>• P81558B 0.020<br/>• P81558C 0.030</p> <p><b>Set of 5 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>• P85042 Std.<br/>• P85042A 0.010<br/>• P85042B 0.020<br/>• P85042C 0.030</p> <p><b>Set of 4 Pairs</b></p>  |  <p><b>Thrust Washer Set</b><br/>• P31137551/61 Std.<br/>• P31137312/22 0.007</p> <p><b>Set of 2 Pairs</b></p>                                |
|  <p><b>1) Front Seal</b><br/>• P2418F436</p> <p><b>2) Rear Seal</b><br/>• P2418F475<br/>• P36883108 x2</p> <p><b>3) Crankshaft Kit</b><br/>• PZZ90093<br/>• PZZ90082</p> <p><b>4) Ring Gear</b><br/>• P0410236 115T<br/>• P0410264 122T<br/>• P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT0065</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0046</p> <p><b>3) Valve Cover Gsk</b><br/>• P3681A027</p> <p><b>4) Head Gasket</b><br/>• P3681E036</p> <p><b>5) Timing Cover Gsk</b><br/>• P3681P045</p> <p><b>6) Oil Pan Gasket</b><br/>• PU5MK0600</p> |  <p><b>1) Bush, Con Rod</b><br/>• P31134123 x4</p> <p><b>2) Bolt, Con Rod</b><br/>• P32762144 x8</p> <p><b>3) Nut, Con Rod</b><br/>• P33221328 x8</p> <p><b>4) Con Rod</b><br/>• PZZ90009</p> |  <p><b>1) Bushing, Cam</b><br/>• P31134132 x1</p> <p><b>2) Camshaft</b><br/>• P31415321 3 1<br/>• P31415371 3 2</p> <p><b>3) Tappet</b><br/>• P31434163</p> <p><b>4) Push Rod</b><br/>• P31434307</p>     |  <p><b>1) Crankshaft Gear</b><br/>• P31171681</p> <p><b>2) Camshaft Gear</b><br/>• P31171353</p> <p><b>3) Idler Gear</b><br/>• P41115023</p> |
| <p><b>Valve Train Kit</b><br/>• PVTK413</p>   | <p><b>1) Valve, Intake</b><br/>• P31431315 x4</p> <p><b>2) Valve, Exhaust</b><br/>• P3142A052 x4</p>   | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b><br/>• 3a) P3343F002 x4<br/>• 3b) P3343J002 x4</p>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>• 4a) P31744131 x8<br/>• 4b) P31745121 x8</p>  | <p><b>5) Lock, Valve</b><br/>• P33173108 x16</p> <p><b>6) Seal, Valve</b><br/>• P33817117 x8</p>  |
|  <p><b>1) Oil Pump</b><br/>• P41314182</p> <p><b>2) Oil Cooler</b><br/>• P2486A218<br/>• P2486A219</p>   |  <p><b>Lift Pump</b><br/>• P2641728</p>   |  <p><b>1) Water Pump</b><br/>• P4131A013</p> <p><b>2) Thermostat</b><br/>• P2485666</p>   |  <p><b>1) Rocker Shaft</b><br/>• PZZ90032</p> <p><b>2) Rocker Arm LH</b><br/>• P41151483</p> <p><b>3) Rocker Arm RH</b><br/>• P41151484</p> <p><b>4) Injector</b><br/>• P2645601 7<br/>• P2645664 7</p> |  <p><b>1) Cylinder HD with Valves</b><br/>• PZZ80175</p> <p><b>2) Oil Pressure Switch</b><br/>• P2848062 3</p>                             |

(1): To ESN U108196N.

(3): Check with Build List.

(5): From ESN U17857L.

(7): Check your Perkins Parts Catalog.

(2): From ESN U108197N.

(4): To ESN U17856L.

(6): Flanged, Semi Finished Liner, P3135X033, is also available.

PERKINS 4.248.2 LIP SEAL

**Engine Series:**  
4.236

**Engine Model:**  
4.248.2 (LG)

**Engine Data:**  
Lip Seal

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.9785 in / 101.054 mm

**Caterpillar**

B80D - (LG70067)  
B80D - (LG70090)  
T80D - (LG70149)  
T50-150D - (LG70109)  
V60C - (LG70069)  
V60C - (LG70091)

**Clark Equipment**

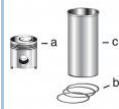
CTD20-50 - (LG70097)  
CTD20-50 - (LG70106)  
C500 (H) 60-80 - (LG70159)  
C500Y-C60-100 - (LG70188)  
C500Y C60-S100 - (LG70103)  
C500Y-100-150 - (LG70104)  
C500Y 110-155 - (LG70107)

**Hyster**

H60-80E - (LG70063)  
H60-110E - (LG70127)  
H60-110XL - (LG70184)



- 1) **Engine O/H Kit**  
‣ POK462
- 2) **Basic Engine Kit**  
‣ PBK462



- 1) **Piston-Liner Kit**  
‣ PCK2482
  - Consist of:**
  - a) P68814
  - b) P41158022
  - c) P3135X034
- 4 Per Engine**



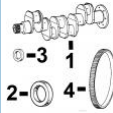
- 1) **Main Bearing Set**  
‣ P81558 Std.
  - P81558A 0.010
  - P81558B 0.020
  - P81558C 0.030
- Set of 5 Pairs**



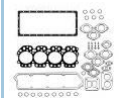
- 1) **Con Rod Bearing Set**  
‣ P85042 Std.
  - P85042A 0.010
  - P85042B 0.020
  - P85042C 0.030
- Set of 4 Pairs**



- 1) **Thrust Washer Set**  
‣ P31137551/61 Std.
  - P31137312/22 0.007
- Set of 2 Pairs**



- 1) **Front Seal**  
‣ P2418F436
- 2) **Rear Seal**  
‣ P2418F475
- 3) **Crankshaft Kit**  
‣ PZZ90082
- 4) **Ring Gear**  
‣ P0410264 122T
- P31162121 126T



- 1) **Top Gasket Set**  
‣ PU5LT0176
- 2) **Bottom Gasket**  
‣ PU5LB0046
- 3) **Valve Cover Gsk**  
‣ P3681A027
- 4) **Head Gasket**  
‣ P3681E036
- 5) **Timing Cover Gsk**  
‣ P3681P045
- 6) **Oil Pan Gasket**  
‣ PU5MK0600



- 1) **Bush, Con Rod**  
‣ P31134123 x4
- 2) **Bolt, Con Rod**  
‣ P32762144 x8
- 3) **Nut, Con Rod**  
‣ P33221328 x8
- 4) **Con Rod**  
‣ PZZ90009



- 1) **Bushing, Cam**  
‣ P31134132 x1
- 2) **Camshaft**  
‣ P31415292
- P31415381
- 3) **Tappet**  
‣ P31434163
- 4) **Push Rod**  
‣ P31434307



- 1) **Crankshaft Gear**  
‣ P31171681
- 2) **Camshaft Gear**  
‣ P31171353
- P31171931
- 3) **Idler Gear**  
‣ P31171951

- 1) **Valve Train Kit**  
‣ PVTK413

- 1) **Valve, Intake**  
‣ P31431315 x4
- 2) **Valve, Exhaust**  
‣ P3142A052 x4

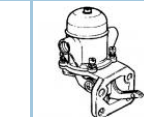
- 3) **Guide, Valve**
- a) **Intake** b) **Exhaust**
- 3a) P3343F002 x4
- 3b) P3343J002 x4

- 4) **Spring, Valve**
- a) **Inner** b) **Outer**
- 4a) P31744131 x8
- 4b) P31745121 x8

- 5) **Lock, Valve**  
‣ P33173108 x16
- 6) **Seal, Valve**  
‣ P33817117 x8



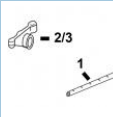
- 1) **Oil Pump**  
‣ P41314182
- P4132F041



- 1) **Lift Pump**  
‣ P2641728



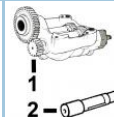
- 1) **Water Pump**  
‣ P4131A013
- 2) **Thermostat**  
‣ P2485666



- 1) **Rocker Shaft**  
‣ PZZ90032
- 2) **Rocker Arm LH**  
‣ P41151483
- 3) **Rocker Arm RH**  
‣ P41151484



- 1) **Cylinder Head**  
‣ PZZ80175
- 2) **Heater Plug**  
‣ P2666103
- (Screw Fitting)  
‣ P2666108
- (Bayonet Fitting)
- 3) **Oil Pressure Switch**  
‣ P2848062



- 1) **Balancer Unit**  
‣ P41733082
- P4111K051

- (1): Check with Build List.
- (3): From ESN U108197N.
- (5): Use on Build No: LG70159.
- (7): Flanged, Semi Finished Liner, P3135X033, is also available.

- (2): To ESN U108196N.
- (4): Use on Build No: LG70104.
- (6): Use on Build Nos: LG70067/LG70090.
- (8): Build LG70149 use P2485613, and Build LG70159, LG70104 use P2485609.




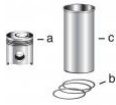



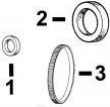




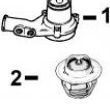
PERKINS 4.318 ROPE & LIP SEAL

|                                |                                    |   |                              |  |
|--------------------------------|------------------------------------|---|------------------------------|--|
| <b>Engine Series:</b><br>4.318 | <b>Engine Model:</b><br>4.318 (NC) | <b>Engine Data:</b><br>Rope & Lip Seal<br>(Both Rear Seal Types<br>included in Kit) | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 4.5005 in<br>/ 114.313 mm |
|--------------------------------|------------------------------------|---|------------------------------|--|

**Mf Agricultural**

285 - (NC22089)  
1085 - (NC21725)






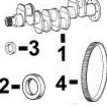






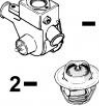
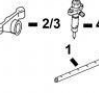

540 - Combine (NC22699)  
1080 - Tractor

|  |  |  |  |  |
|--|--|--|--|--|
|  <p><b>1) Engine O/H Kit</b><br/>, POK490</p> <p><b>2) Basic Engine Kit</b><br/>, PBK490</p>   |  <p><b>Piston-Liner Kit</b><br/>, PCK318</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>, a) P86716</li> <li>, b) P41158118</li> <li>, c) P31358534</li> </ul> <p><b>4 Per Engine</b></p> |  <p><b>Main Bearing Set</b></p> <ul style="list-style-type: none"> <li>, P68085 <i>Std.</i></li> <li>, P68085A <i>0.010</i></li> <li>, P68085B <i>0.020</i></li> <li>, P68085C <i>0.030</i></li> </ul> <p><b>Set of 5 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b></p> <ul style="list-style-type: none"> <li>, P85041 <i>Std.</i></li> <li>, P85041A <i>0.010</i></li> <li>, P85041B <i>0.020</i></li> <li>, P85041C <i>0.030</i></li> </ul> <p><b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer Set</b></p> <ul style="list-style-type: none"> <li>, P31137551/61 <i>Std.</i></li> <li>, P31137312/22 <i>0.007</i></li> </ul> <p><b>Set of 2 Pairs</b></p> |
|  <p><b>1) Front Seal</b><br/>, P2415346</p> <p><b>2) Rear Seal</b><br/>, P2418F475<br/>, P36883108 <i>x2</i></p> <p><b>3) Ring Gear</b><br/>, P0410264 <i>122T</i></p> |  <p><b>1) Top Gasket Set</b><br/>, P69048</p> <p><b>2) Bottom Gasket</b><br/>, P68211</p> <p><b>3) Head Gasket</b><br/>, P36812348</p>  |  <p><b>Bush, Con Rod</b><br/>, P0050128 <i>x4</i></p>   |  |  |
| <p><b>Valve Train Kit</b><br/>, PVTK408</p>  | <p><b>1) Valve, Intake</b><br/>, P31431154 <i>x4</i></p> <p><b>2) Valve, Exhaust</b><br/>, P31431671 <i>x4</i></p>   | <p><b>3) Guide, Valve (Intake &amp; Exhaust)</b><br/>, 3) P33432532 <i>x8</i></p>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b></p> <ul style="list-style-type: none"> <li>, 4a) P31744131 <i>x8</i></li> <li>, 4b) P31745121 <i>x8</i></li> </ul>   | <p><b>5) Lock, Valve</b><br/>, P33173108 <i>x16</i></p>  |
|  <p><b>Oil Pump</b><br/>, P41314113</p>  |  <p><b>Lift Pump</b><br/>, P2641336</p>   |  <p><b>1) Water Pump</b><br/>, PU5MW0009<br/>, PU5MW0014</p> <p><b>2) Thermostat</b><br/>, P2485666</p>   |  |  |

(1): Used on Build No: NC22089/NC22699.

(2): Used on Build No: NC21725.

PERKINS 6.354 ROPE & LIP SEAL

|  |  |  |  |   |  |
|--|--|--|--|---|--|
| <p><b>Engine Series:</b><br/>6.354</p> <p><b>Engine Model:</b><br/>6.354 (TC)</p> <p><b>Engine Data:</b><br/>Rope &amp; Lip Seal<br/>(Both Rear Seal Types Include in Kit)</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.8770 in / 98.476 mm</p> <p><b>MF Industrial</b><br/>45B - Shovel (TC22460)</p> <p><b>MF Agricultural</b><br/>1100</p> <p><b>Clark-Equipment</b><br/>C500-CY-160-300 - (TC22266)</p> <p><b>Hyster</b><br/>H150-250 - (TC20102)</p> |  <p><b>1) Engine O/H Kit</b><br/>• POK650</p> <p><b>2) Basic Engine Kit</b><br/>• PBK650</p>   |  <p><b>Piston-Liner Kit</b><br/>• PU5MK0127</p> <p><b>Consist of:</b><br/>• a) P86740<br/>• b) P41158041<br/>• c) P31358394</p> <p><b>6 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>• P85010 Std.<br/>• P85010A 0.010<br/>• P85010B 0.020<br/>• P85010C 0.030</p> <p><b>Set of 7 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>• P85043 Std.<br/>• P85043A 0.010<br/>• P85043B 0.020<br/>• P85043C 0.030</p> <p><b>Set of 6 Pairs</b></p>   |  <p><b>Thrust Washer Set</b><br/>• PW2105L<br/>• P31137551/61 Std.<br/>• P31137312/22 0.007</p> <p><b>Set of 2 Pairs</b></p>   |
|  |  <p><b>1) Front Seal</b><br/>• P2418F436</p> <p><b>2) Rear Seal</b><br/>• P2418F475<br/>• P36883108 x2</p> <p><b>3) Crankshaft Kit</b><br/>• PZZ90090</p> <p><b>4) Ring Gear</b><br/>• P0410264 122T<br/>• P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>• PU5LT0021</p> <p><b>2) Bottom Gasket</b><br/>• PU5LB0056</p> <p><b>3) Head Gasket</b><br/>• P36812548</p>              |  <p><b>1) Bush, Con Rod</b><br/>• P31134123 x6</p> <p><b>2) Bolt, Con Rod</b><br/>• P32762144 x12</p> <p><b>3) Nut, Con Rod</b><br/>• P33221328 x12</p> <p><b>4) Con Rod</b><br/>• PZZ90009</p> |  <p><b>1) Tappet</b><br/>• P31434163</p> <p><b>2) Push Rod</b><br/>• P31434307</p> <p><b>3) Camshaft Gear</b><br/>• P31171353</p> <p><b>4) Crankshaft Gear</b><br/>• P31171682</p> <p><b>5) Idler Gear</b><br/>• P41115007</p> |  <p><b>1) Aux. Drive Shaft</b><br/>• P31173422</p> <p><b>2) Gear &amp; Shaft</b><br/>• P41115367</p> <p><b>3) Gear</b><br/>• P31171731</p> <p><b>4) Front Bush</b><br/>• P31134129</p> <p><b>5) Rear Bush</b><br/>• P2511447</p> <p><b>6) Seal</b><br/>• P2418F432</p> <p><b>7) Idler Gear Bush</b><br/>• P31134121</p> |
|  | <p><b>Valve Train Kit</b><br/>• PVTK610</p>  | <p><b>1) Valve, Intake</b><br/>• P31431315 x6</p> <p><b>2) Valve, Exhaust</b><br/>• P3142A052 x6</p>   | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b><br/>• 3a) P3343F002 x6<br/>• 3b) P3343J002 x6</p>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>• 4a) P31744131 x12<br/>• 4b) P31745121 x12</p>   | <p><b>5) Lock, Valve</b><br/>• P33173108 x24</p> <p><b>6) Seal, Valve</b><br/>• P33817117 x12</p>  |
|  <p><b>Oil Pump</b><br/>• P41314067<br/>• P41314131</p>   |  <p><b>Lift Pump</b><br/>• P2641A064</p>  |  <p><b>1) Water Pump</b><br/>• PU5MW0112</p> <p><b>2) Thermostat</b><br/>• P2485609</p>   |  <p><b>1) Rocker Shaft</b><br/>• P41151483</p> <p><b>2) Rocker Arm LH</b><br/>• P41151483</p> <p><b>3) Rocker Arm RH</b><br/>• P41151484</p> <p><b>4) Injector</b><br/>• P2645595</p>       |  <p><b>1) Heater Plug</b><br/>• P2666103<br/><b>(Screw Fitting)</b><br/>• P2666108<br/><b>(Bayonet Fitting)</b></p> <p><b>2) Oil Pressure Switch</b><br/>• P2848062</p>  |  |

(1): For ESN's Prior to 8504189 use Thrust Washer Set PW2105L (2): From ESN U327089L.  
 (3): Check with Build List. (4): To ESN 354UA10361.  
 (5): Also available: P31358324 Parallel Semi-Finished Liner; P31358393 Flanged, Semi Finished Liner; and P31358398 Finished Liner in 0.010" Oversize. (6): Used on Build TC21192 only.  
 (7): Check build list for proper application use

**Engine Series:**  
6.354






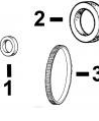
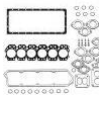
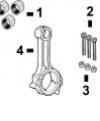




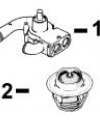
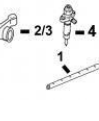

**Engine Model:**  
6.354 (TC)

**Engine Data:**  
Rope Seal

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 3.8770 in / 98.476 mm

**MF Agricultural**  
1100

|  |  |   |  |  |
|--|--|---|--|--|
|  <p>1) <b>Engine O/H Kit</b><br/>‣ POK652</p> <p>2) <b>Basic Engine Kit</b><br/>‣ PBK652</p>   |  <p><b>Piston-Liner Kit</b><br/>‣ PU5MK0127</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>‣ a) P86740</li> <li>‣ b) P41158041</li> <li>‣ c) P31358394</li> </ul> <p><b>6 Per Engine</b></p>                                   |  <p><b>Main Bearing Set</b><br/>‣ P85010 <i>Std.</i><br/>‣ P85010A <i>0.010</i><br/>‣ P85010B <i>0.020</i><br/>‣ P85010C <i>0.030</i></p> <p><b>Set of 7 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b><br/>‣ P85043 <i>Std.</i><br/>‣ P85043A <i>0.010</i><br/>‣ P85043B <i>0.020</i><br/>‣ P85043C <i>0.030</i></p> <p><b>Set of 6 Pairs</b></p>      |  <p><b>Thrust Washer Set</b><br/>‣ P31137551/61 <i>Std.</i><br/>‣ P31137312/22 <i>0.007</i></p> <p><b>Set of 2 Pairs</b></p>   |
|  <p>1) <b>Front Seal</b><br/>‣ P2418F436</p> <p>2) <b>Rear Seal</b><br/>‣ P36883108 <i>x2</i></p> <p>3) <b>Ring Gear</b><br/>‣ P0410264 <i>122T</i><br/>‣ P31162121 <i>126T</i></p> |  <p>1) <b>Top Gasket Set</b><br/>‣ PU5LT0026</p> <p>2) <b>Bottom Gasket</b><br/>‣ PU5LB0056</p> <p>3) <b>Head Gasket</b><br/>‣ P36812547</p> <p>4) <b>Valve Cover Gasket</b><br/>‣ P36811429</p> <p>5) <b>Rocker Box Gasket</b><br/>‣ P36811451</p> |  <p>1) <b>Bush, Con Rod</b><br/>‣ P31134123 <i>x6</i></p> <p>2) <b>Bolt, Con Rod</b><br/>‣ P32762144 <i>x12</i></p> <p>3) <b>Nut, Con Rod</b><br/>‣ P33221328 <i>x12</i></p> <p>4) <b>Con Rod</b><br/>‣ PZZ90009</p> |  <p>1) <b>Tappet</b><br/>‣ P31434163</p> <p>2) <b>Push Rod</b><br/>‣ P31434307</p> <p>3) <b>Camshaft Gear</b><br/>‣ P31171353</p> <p>4) <b>Idler Gear</b><br/>‣ P41115007</p> |  <p>1) <b>Aux. Drive Shaft</b><br/>‣ P31173422</p> <p>2) <b>Gear &amp; Shaft</b><br/>‣ P41115367</p> <p>3) <b>Gear</b><br/>‣ P31171731</p> <p>4) <b>Front Bush</b><br/>‣ P31134129</p> <p>5) <b>Rear Bush</b><br/>‣ P2511447</p> <p>6) <b>Seal</b><br/>‣ P2418F432</p> <p>7) <b>Idler Gear Bush</b><br/>‣ P31134121</p> |
| <p><b>Valve Train Kit</b><br/>‣ PVTK610</p>  | <p>1) <b>Valve, Intake</b><br/>‣ P31431315 <i>x6</i></p> <p>2) <b>Valve, Exhaust</b><br/>‣ P3142A052 <i>x6</i></p>   | <p>3) <b>Guide, Valve</b><br/>a) Intake b) Exhaust</p> <ul style="list-style-type: none"> <li>‣ 3a) P3343F002 <i>x6</i></li> <li>‣ 3b) P3343J002 <i>x6</i></li> </ul>   | <p>4) <b>Spring, Valve</b><br/>a) Inner b) Outer</p> <ul style="list-style-type: none"> <li>‣ 4a) P31744131 <i>x12</i></li> <li>‣ 4b) P31745121 <i>x12</i></li> </ul>  | <p>5) <b>Lock, Valve</b><br/>‣ P33173108 <i>x24</i></p> <p>6) <b>Seal, Valve</b><br/>‣ P33817117 <i>x12</i></p>  |
|  <p><b>Oil Pump</b><br/>‣ P41314067</p>   |  <p><b>Lift Pump</b><br/>‣ P2641A064</p>  |  <p>1) <b>Water Pump</b><br/>‣ PU5MW0016</p> <p>2) <b>Thermostat</b><br/>‣ P2485666<br/>‣ P2485613</p>   |  <p>1) <b>Rocker Shaft</b><br/>‣</p> <p>2) <b>Rocker Arm LH</b><br/>‣ P41151483</p> <p>3) <b>Rocker Arm RH</b><br/>‣ P41151484</p> <p>4) <b>Injector</b><br/>‣ P2645595</p> |  <p>1) <b>Heater Plug</b><br/>‣ P2666103</p> <p>(Screw Fitting)<br/>‣ P2666108</p> <p>(Bayonet Fitting)<br/>2) <b>Oil Pressure Switch</b><br/>‣ P2848062</p>  |

(1): From ESN 354UA10362.

(2): Also available: P31358324 Parallel Semi-Finished Liner; P31358393 Flanged, Semi Finished Liner; and P31358398 Finished Liner in 0.010" Oversize.

(3): Used on Build TC21192 only.

(4): Check build list for proper application use

**Engine Series:**  
6.354

**Engine Model:**  
T6.354 (TE)






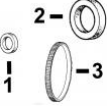


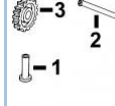
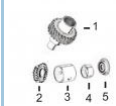



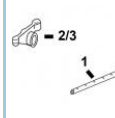

**Engine Desc:**  
TURBOCHARGE

**Engine Data:**  
Rope Seal

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 3.8770 in / 98.476 mm






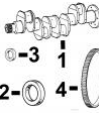
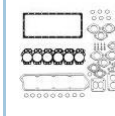
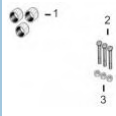



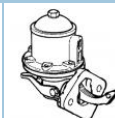
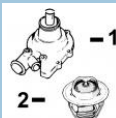


**MF Agricultural**  
1130

|  |   |   |   |  |
|--|---|---|---|--|
|  <p>1) <b>Engine O/H Kit</b><br/>‣ POK660<br/>2) <b>Basic Engine Kit</b><br/>‣ PBK660</p>  |  <p><b>Piston-Liner Kit</b><br/>‣ PCK354<br/><b>Consist of:</b><br/>‣ a) P86726<br/>‣ b) P41158031<br/>‣ c) P31358394<br/><b>6 Per Engine</b></p>   |  <p><b>Main Bearing Set</b><br/>‣ PU5MB0011 <i>Std.</i><br/>‣ PU5MB0011A 0.010<br/>‣ PU5MB0011B 0.020<br/>‣ PU5MB0011C 0.030<br/><b>Set of 7 Pairs</b></p>              |  <p><b>Con Rod Bearing Set</b><br/>‣ PU5ME0007 <i>Std.</i><br/>‣ PU5ME0007A 0.010<br/>‣ PU5ME0007B 0.020<br/>‣ PU5ME0007C 0.030<br/><b>Set of 6 Pairs</b></p> |  <p><b>Thrust Washer Set</b><br/>‣ P31137551/61 <i>Std.</i><br/>‣ P31137312/22 0.007<br/><b>Set of 2 Pairs</b></p>   |
|  <p>1) <b>Front Seal</b><br/>‣ P2418F436<br/>2) <b>Rear Seal</b><br/>‣ P36883108 <i>x2</i><br/>3) <b>Ring Gear</b><br/>‣ P0410264 <i>122T</i><br/>‣ P31162121 <i>126T</i></p> |  <p>1) <b>Top Gasket Set</b><br/>‣ PU5LT0021<br/>2) <b>Bottom Gasket</b><br/>‣ PU5LB0056<br/>3) <b>Head Gasket</b><br/>‣ P36812548<br/>4) <b>Rocker Cover Gasket</b><br/>‣ P36811428</p> |  <p>1) <b>Bush, Con Rod</b><br/>‣ P31134134 <i>x6</i><br/>2) <b>Bolt, Con Rod</b><br/>‣ P32762144 <i>x12</i><br/>3) <b>Nut, Con Rod</b><br/>‣ P33221328 <i>x12</i></p> |  <p>1) <b>Tappet</b><br/>‣ P31434163<br/>2) <b>Push Rod</b><br/>‣ P31434307<br/>3) <b>Idler Gear</b><br/>‣ P41115007</p>                                     |  <p>1) <b>Gear &amp; Shaft</b><br/>‣ P41115367<br/>2) <b>Gear</b><br/>‣ P31171731<br/>3) <b>Front Bush</b><br/>‣ P31134129<br/>4) <b>Rear Bush</b><br/>‣ P2511447<br/>5) <b>Seal</b><br/>‣ P2418F432<br/>6) <b>Insert Valve Exhaust</b><br/>‣ P33152154 <i>x6</i><br/>7) <b>Insert Valve Intake</b><br/>‣ P33152155 <i>x6</i><br/>8) <b>Idler Gear Bush</b><br/>‣ P31134121</p> |
| <p><b>Valve Train Kit</b><br/>‣ PVTK610</p>  | <p>1) <b>Valve, Intake</b><br/>‣ P31431315 <i>x6</i><br/>2) <b>Valve, Exhaust</b><br/>‣ P3142A052 <i>x6</i></p>   | <p>3) <b>Guide, Valve</b><br/>a) <b>Intake</b> b) <b>Exhaust</b><br/>‣ 3a) P3343F002 <i>x6</i><br/>‣ 3b) P3343J002 <i>x6</i></p>  | <p>4) <b>Spring, Valve</b><br/>a) <b>Inner</b> b) <b>Outer</b><br/>‣ 4a) P31744131 <i>x12</i><br/>‣ 4b) P31745121 <i>x12</i></p>  | <p>5) <b>Lock, Valve</b><br/>‣ P33173108 <i>x24</i><br/>6) <b>Seal, Valve</b><br/>‣ P33817117 <i>x12</i></p>   |
|  <p><b>Oil Pump</b><br/>‣ P41314067</p>   |  <p><b>Lift Pump</b><br/>‣ P2641A064</p>   |  <p>1) <b>Water Pump</b><br/>‣ PU5MW0016<br/>2) <b>Thermostat</b><br/>‣ P2485666<br/>‣ P2485613</p>  |  <p>1) <b>Rocker Shaft</b><br/>‣<br/>2) <b>Rocker Arm LH</b><br/>‣ P41151483<br/>3) <b>Rocker Arm RH</b><br/>‣ P41151484</p>                               |  <p><b>Heater Plug</b><br/>‣ P2666108<br/><b>(Bayonet Fitting)</b></p>  |

(1): To ESN 354UA3355T.

(2): Also available: P31358324 Parallel Semi-Finished Liner; P31358393 Flanged, Semi Finished Liner; and P31358398 Finished Liner in 0.010" Oversize.

(3): Check build list for proper application use

|   |   |  |  |  |   |
|---|---|--|--|--|---|
| <p><b>Engine Series:</b><br/>6.354</p> <p><b>Engine Model:</b><br/>T6.354.1 (TH)<br/>/ TC6.354.1 (TT)</p> <p><b>Engine Data:</b><br/>TURBOCHARGED<br/>Lip Seal</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.8770 in<br/>/98.476 mm</p> <p><b>Mf Agricultural</b><br/>750<br/>760 - (1)<br/>1105 -<br/>(TT21724)<br/>1130 - (4)<br/>1135 -<br/>(TH22431)<br/>1135 -<br/>(TH21722)</p> <p><b>White-Farm</b><br/>2-105 -<br/>(TH22282)</p> <p><b>New-Idea</b><br/>Combine -<br/>(TH22481)</p> |  <p><b>1) Engine O/H Kit</b><br/>‣ POK661</p> <p><b>2) Basic Engine Kit</b><br/>‣ PBK661</p>  |  <p><b>Piston-Liner Kit</b><br/>‣ PCK354</p> <p><b>Consist of:</b><br/>‣ a) P86726<br/>‣ b) P41158031<br/>‣ c) P31358394</p> <p><b>6 Per Engine</b></p>  |  <p><b>Main Bearing Set</b><br/>‣ PU5MB0011 Std.<br/>‣ PU5MB0011A 0.010<br/>‣ PU5MB0011B 0.020<br/>‣ PU5MB0011C 0.030</p> <p><b>Set of 7 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>‣ PU5ME0007 Std.<br/>‣ PU5ME0007A 0.010<br/>‣ PU5ME0007B 0.020<br/>‣ PU5ME0007C 0.030</p> <p><b>Set of 6 Pairs</b></p>                      |  <p><b>Thrust Washer Set</b><br/>‣ P31137551/61 Std.<br/>‣ P31137312/22 0.007</p> <p><b>Set of 2 Pairs</b></p>  |
|   |  <p><b>1) Front Seal</b><br/>‣ P2418F436</p> <p><b>2) Rear Seal</b><br/>‣ P2418F475</p> <p><b>3) Crankshaft Kit</b><br/>‣ PZZ90091</p> <p><b>4) Ring Gear</b><br/>‣ P0410264 122T<br/>‣ P31162121 126T</p> |  <p><b>1) Top Gasket Set</b><br/>‣ PU5LT0026</p> <p><b>2) Bottom Gasket</b><br/>‣ PU5LB0056</p> <p><b>3) Head Gasket</b><br/>‣ P36812547</p> <p><b>4) Valve Cover Gasket</b><br/>‣ P36811429</p> <p><b>5) Rocker Box Gasket</b><br/>‣ P36811451</p> |  <p><b>1) Bush, Con Rod</b><br/>‣ P31134134 x6</p> <p><b>2) Bolt, Con Rod</b><br/>‣ P32762144 x12</p> <p><b>3) Nut, Con Rod</b><br/>‣ P33221328 x12</p> |  <p><b>1) Tappet</b><br/>‣ P31434163</p> <p><b>2) Push Rod</b><br/>‣ P31434307</p> <p><b>3) Camshaft Gear</b><br/>‣ P31171931</p> <p><b>5) Idler Gear</b><br/>‣ P41115007</p> |  <p><b>1) Aux. Drive Shaft</b><br/>‣ P31173422</p> <p><b>2) Gear &amp; Shaft</b><br/>‣ P41115367<br/>‣ 3) Gear<br/>‣ P31171731</p> <p><b>4) Front Bush</b><br/>‣ P31134129</p> <p><b>5) Rear Bush</b><br/>‣ P2511447</p> <p><b>6) Seal</b><br/>‣ P2418F432</p> <p><b>7) Insert Valve Exhaust</b><br/>‣ P33152154 x6</p> <p><b>8) Insert Valve Intake</b><br/>‣ P33152155 x6</p> <p><b>9) Idler Gear Bush</b><br/>‣ P31134121</p> |
|   | <p><b>Valve Train Kit</b><br/>‣ PVTK610</p>   | <p><b>1) Valve, Intake</b><br/>‣ P31431315 x6</p> <p><b>2) Valve, Exhaust</b><br/>‣ P3142A052 x6</p>   | <p><b>3) Guide, Valve</b><br/><b>a) Intake b) Exhaust</b><br/>‣ 3a) P3343F002 x6<br/>‣ 3b) P3343J002 x6</p>  | <p><b>4) Spring, Valve</b><br/><b>a) Inner b) Outer</b><br/>‣ 4a) P31744131 x12<br/>‣ 4b) P31745121 x12</p>  | <p><b>5) Lock, Valve</b><br/>‣ P33173108 x24</p> <p><b>6) Seal, Valve</b><br/>‣ P33817117 x12</p>   |
|  <p><b>Oil Pump</b><br/>‣ P41314067</p>  |  <p><b>Lift Pump</b><br/>‣ P2641A064</p>   |  <p><b>1) Water Pump</b><br/>‣ PU5MW0016</p> <p><b>2) Thermostat</b><br/>‣ P2485666<br/>‣ P2485613</p>  |  <p><b>1) Rocker Shaft</b><br/>‣</p> <p><b>2) Rocker Arm LH</b><br/>‣ P41151483</p> <p><b>3) Rocker Arm RH</b><br/>‣ P41151484</p>                  |  <p><b>Heater Plug</b><br/>‣ P2666108<br/><b>(Bayonet Fitting)</b></p>  |   |

(1): From ESN UA48970L.

(3): Use on Build No: TH22481.

(5): Also available: P31358324 Parallel Semi-Finished Liner; P31358393 Flanged, Semi Finished Liner; and P31358398 Finished Liner in 0.010" Oversize.

(7): Do not use on Build numbers TH22431 and TH22282.

(2): Do Not Use on Build No: TH21794.

(4): From ESN 354UA3356T.

(6): Check with Build List.

(8): Check build list for proper application use

PERKINS 6.354.1 LIP SEAL

**Engine Series:**  
6.354

**Engine Model:**  
6.354.1 (TG)

**Engine Desc:**  
TURBOCHARGE

**Engine Data:**  
Lip Seal

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 3.8770 in / 98.476 mm

**White-Farm**  
2-85 - Tractor (TG22453)



- 1) **Engine O/H Kit**  
‣ POK667
- 2) **Basic Engine Kit**  
‣ PBK667



- Piston-Liner Kit**  
‣ PU5MK0125
- Consist of:**
  - a) P86745
  - b) P41158032
  - c) P31358394
- 6 Per Engine**



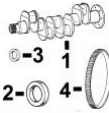
- Main Bearing Set**
  - PU5MB0011 *Std.*
  - PU5MB0011A 0.010
  - PU5MB0011B 0.020
  - PU5MB0011C 0.030
- Set of 7 Pairs**



- Con Rod Bearing Set**
  - PU5ME0003 *Std.*
  - PU5ME0003A 0.010
  - PU5ME0003B 0.020
  - PU5ME0003C 0.030
- Set of 6 Pairs**



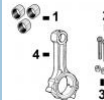
- Thrust Washer Set**
  - P31137551/61 *Std.*
  - P31137312/22 0.007
- Set of 2 Pairs**



- 1) **Front Seal**  
‣ P2418F436
- 2) **Rear Seal**  
‣ P2418F475
- 3) **Crankshaft Kit**  
‣ PZZ90092
- 4) **Ring Gear**
  - P0410264 122T
  - P31162121 126T



- 1) **Top Gasket Set**  
‣ PU5LT0026
- 2) **Bottom Gasket**  
‣ PU5LB0056
- 3) **Head Gasket**  
‣ P36812547
- 5) **Valve Cover Gasket**  
‣ P36811429
- 6) **Rocker Box Gasket**  
‣ P36811451



- 1) **Bush, Con Rod**  
‣ P31134123 x6
- 2) **Bolt, Con Rod**  
‣ P32762144 x12
- 3) **Nut, Con Rod**  
‣ P33221328 x12
- 4) **Con Rod**  
‣ PZZ90009



- 1) **Tappet**  
‣ P31434163
- 2) **Push Rod**  
‣ P31434307
- 3) **Camshaft Gear**  
‣ P31171931
- 4) **Idler Gear**  
‣ P41115007



- 1) **Gear & Shaft**  
‣ P41115367
- 2) **Gear**  
‣ P31171731
- 3) **Front Bush**  
‣ P31134129
- 4) **Rear Bush**  
‣ P2511447
- 5) **Seal**  
‣ P2418F432
- 6) **Insert Valve Exhaust**  
‣ P33152154 x6
- 7) **Insert Valve Intake**  
‣ P33152155 x6
- 8) **Idler Gear Bush**  
‣ P31134121

- Valve Train Kit**  
‣ PVTK616

- 1) **Valve, Intake**  
‣ P31431315 x6
- 2) **Valve, Exhaust**  
‣ P31431931 x6
- 3) **Guide, Valve**
  - a) Intake b) Exhaust
  - 3a) P3343F002 x6
  - 3b) P3343J002 x6

- 4) **Spring, Valve**
  - a) Inner b) Outer
  - 4a) P31744131 x12
  - 4b) P31745121 x12

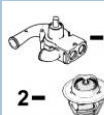
- 5) **Lock, Valve**  
‣ P33173108 x24
- 6) **Seal, Valve**  
‣ P33817117 x12



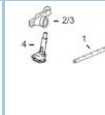
- Oil Pump**  
‣ P41314067



- Lift Pump**  
‣ P2641A064



- 1) **Water Pump**  
‣ PU5MW0016
- 2) **Thermostat**
  - P2485666
  - P2485613




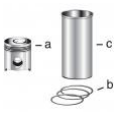





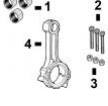






- 1) **Rocker Shaft**  
‣
- 2) **Rocker Arm LH**  
‣ P41151483
- 3) **Rocker Arm RH**  
‣ P41151484



- 1) **Heater Plug**  
‣ P2666108
- (Bayonet Fitting)**
- 2) **Oil Pressure Switch**

(1): Also available: P31358324 Parallel Semi-Finished Liner; P31358393 Flanged, Semi Finished Liner; and P31358398 Finished Liner in 0.010" Oversize.

(2): Check build list for proper application use

|   |   |  |   |  |   |
|---|---|--|---|--|---|
| <p><b>Engine Series:</b><br/>6.354</p> <p><b>Engine Model:</b><br/>6.354.2 (TJ)</p> <p><b>Engine Desc:</b><br/>TURBOCHARGE</p> <p><b>Engine Data:</b><br/>Rope &amp; Lip Seal<br/>Kits include both rear seals</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.8770 in / 98.476 mm</p> <p><b>White Cockshutt</b><br/>7600 Combine - (TJ22189)</p> |  <p>1) <b>Engine O/H Kit</b><br/>‣ POK668</p> <p>2) <b>Basic Engine Kit</b><br/>‣ PBK668</p>  |  <p><b>Piston-Liner Kit</b><br/>‣ PU5MK0125</p> <p><b>Consist of:</b></p> <p>‣ a) P86745</p> <p>‣ b) P41158032</p> <p>‣ c) P31358394</p> <p><b>6 Per Engine</b></p>                              |  <p><b>Main Bearing Set</b><br/>‣ P85010 Std.</p> <p>‣ P85010A 0.010</p> <p>‣ P85010B 0.020</p> <p>‣ P85010C 0.030</p> <p><b>Set of 7 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>‣ P85043 Std.</p> <p>‣ P85043A 0.010</p> <p>‣ P85043B 0.020</p> <p>‣ P85043C 0.030</p> <p><b>Set of 6 Pairs</b></p>   |  <p><b>Thrust Washer Set</b><br/>‣ P31137551/61 Std.</p> <p>‣ P31137312/22 0.007</p> <p><b>Set of 2 Pairs</b></p> |
|  <p>1) <b>Front Seal</b><br/>‣ P2418F436</p> <p>2) <b>Rear Seal</b><br/>‣ P2418F475</p> <p>‣ P36883108 x2</p> <p>3) <b>Crankshaft Kit</b><br/>‣ PZZ90090</p> <p>4) <b>Ring Gear</b><br/>‣ P0410264 122T</p> <p>‣ P31162121 126T</p>  |  <p>1) <b>Top Gasket Set</b><br/>‣ PU5LT0028</p> <p>2) <b>Bottom Gasket</b><br/>‣ PU5LB0056</p> <p>3) <b>Head Gasket</b><br/>‣ P36812545</p> <p>4) <b>Valve Cover Gasket</b><br/>‣ P36811451</p> |  <p>1) <b>Bush, Con Rod</b><br/>‣ P31134123 x6</p> <p>2) <b>Bolt, Con Rod</b><br/>‣ P32762144 x12</p> <p>3) <b>Nut, Con Rod</b><br/>‣ P33221328 x12</p> <p>4) <b>Con Rod</b><br/>‣ PZZ90009</p> |  <p>1) <b>Tappet</b><br/>‣ P31434163</p> <p>2) <b>Push Rod</b><br/>‣ P31434307</p> <p>3) <b>Camshaft Gear</b><br/>‣ P31171353</p> <p>4) <b>Crankshaft Gear</b><br/>‣ P31171682</p> <p>5) <b>Idler Gear</b><br/>‣ P41115007</p> |  <p>1) <b>Aux. Drive Shaft</b><br/>‣ P31173422</p> <p>2) <b>Gear &amp; Shaft</b><br/>‣ P41115367</p> <p>‣ 3) Gear<br/>‣ P31171731</p> <p>4) <b>Front Bush</b><br/>‣ P31134129</p> <p>5) <b>Rear Bush</b><br/>‣ P2511447</p> <p>6) <b>Seal</b><br/>‣ P2418F432</p> <p>7) <b>Insert Valve Exhaust</b><br/>‣ P33152154 x6</p> <p>8) <b>Insert Valve Intake</b><br/>‣ P33152155 x6</p> <p>9) <b>Idler Gear Bush</b><br/>‣ P31134121</p> |   |
| <p><b>Valve Train Kit</b><br/>‣ PVTK610</p>   | <p>1) <b>Valve, Intake</b><br/>‣ P31431315 x6</p> <p>2) <b>Valve, Exhaust</b><br/>‣ P3142A052 x6</p>  | <p>3) <b>Guide, Valve</b></p> <p>a) <b>Intake</b> b) <b>Exhaust</b></p> <p>‣ 3a) P3343F002 x6</p> <p>‣ 3b) P3343J002 x6</p>  | <p>4) <b>Spring, Valve</b></p> <p>a) <b>Inner</b> b) <b>Outer</b></p> <p>‣ 4a) P31744131 x12</p> <p>‣ 4b) P31745121 x12</p>   | <p>5) <b>Lock, Valve</b><br/>‣ P33173108 x24</p> <p>6) <b>Seal, Valve</b><br/>‣ P33817117 x12</p>  |   |
|  <p><b>Oil Pump</b><br/>‣ P41314067</p>  |  <p><b>Lift Pump</b><br/>‣ P2641A064</p>   |  <p>1) <b>Water Pump</b><br/>‣</p> <p>2) <b>Thermostat</b><br/>‣ P2485604 x2</p>  |  <p>1) <b>Rocker Shaft</b><br/>‣</p> <p>2) <b>Rocker Arm LH</b><br/>‣ P41151483</p> <p>3) <b>Rocker Arm RH</b><br/>‣ P41151484</p> <p>4) <b>Relief Valve</b><br/>‣ P41371158</p>   |  |   |

(1): From ESN U12129L.

(2): Also available: P31358324 Parallel Semi-Finished Liner; P31358393 Flanged, Semi Finished Liner; and P31358398 Finished Liner in 0.010" Oversize.

(3): Check build list for proper application use

PERKINS 6.354.4 LIP SEAL

**Engine Series:**  
6.354

**Engine Model:**  
6.354.4 (TW)

**Engine Data:**  
Lip Seal

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 3.8770 in / 98.476 mm

**Clark Equipment**

16000-30000 - (TW70007)  
C500-160-300D - (TW70142)

**Mf Agricultural**

1014 - (TW31087)  
TX550 - Combine (TW31015)

**White-Farm**

8600 - Combine (TW70114)

**Perkins**

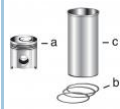
General Industrial - (TW33425)

**Hyster**

H150-275-300D - (TW70005)



- 1) **Engine O/H Kit**  
‣ POK671
- 2) **Basic Engine Kit**  
‣ PBK671



- 1) **Piston-Liner Kit**  
‣ PU5MK0127
- Consist of:**
- a) P86740
- b) P41158041
- c) P31358394



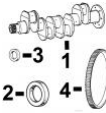
- 1) **Main Bearing Set**  
‣ PU5MB0030 Std.
- PU5MB0030A 0.010
- PU5MB0030B 0.020
- PU5MB0030C 0.030



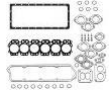
- 1) **Con Rod Bearing Set**  
‣ P85043 Std.
- P85043A 0.010
- P85043B 0.020
- P85043C 0.030



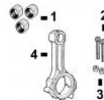
- 1) **Thrust Washer Set**  
‣ P31137551/61 Std.
- P31137312/22 0.007



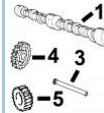
- 1) **Front Seal**  
‣ P2418F436
- 2) **Rear Seal**  
‣ P2418F475
- 3) **Crankshaft Kit**  
‣ PZZ90086
- 4) **Ring Gear**  
‣ P0410264 122T
- P31162121 126T



- 1) **Top Gasket Set**  
‣ PU5LT0017
- 2) **Bottom Gasket**  
‣ PU5LB0056
- 3) **Head Gasket**  
‣ P3681H202



- 1) **Bush, Con Rod**  
‣ P31134123 x6
- 2) **Bolt, Con Rod**  
‣ P32762144 x12
- 3) **Nut, Con Rod**  
‣ P33221328 x12
- 4) **Con Rod**  
‣ PZZ90009



- 1) **Camshaft**  
‣ P31416303
- 2) **Tappet**  
‣ P31434163
- 3) **Push Rod**  
‣ P31434307
- 4) **Camshaft Gear**  
‣ P31171353
- P31171931
- 5) **Crankshaft Gear**  
‣ P31171682



- 1) **Aux. Drive Shaft**  
‣ P31173423
- 2) **Gear & Shaft**  
‣ P41115367
- 3) **Gear**  
‣ P31171733
- 4) **Front Bush**  
‣ P31134129
- 5) **Rear Bush**  
‣ P2511447
- 6) **Seal**  
‣ P2418F432
- 7) **Insert Valve Exhaust**  
‣ P33152154 x6
- 8) **Insert Valve Intake**  
‣ P33152155 x6

- 1) **Valve Train Kit**  
‣ PVTK611

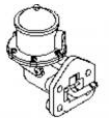
- 1) **Valve, Intake**  
‣ P31431315 x6
- 2) **Valve, Exhaust**  
‣ P3142A051 x6
- 3) **Guide, Valve**
- a) **Intake** b) **Exhaust**
- 3a) P3343F002 x6
- 3b) P3343J002 x6

- 4) **Spring, Valve**
- a) **Inner** b) **Outer**
- 4a) P31744131 x12
- 4b) P31745121 x12

- 5) **Lock, Valve**  
‣ P33173108 x24
- 6) **Seal, Valve**  
‣ P33817117 x12



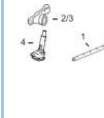
- 1) **Oil Pump**  
‣ P4132F015



- 1) **Lift Pump**  
‣ P2641729



- 1) **Water Pump**  
‣ P41313027
- PU5MW0129
- 2) **Thermostat**  
‣ P2485613 x2



- 1) **Rocker Shaft**  
‣
- 2) **Rocker Arm LH**  
‣ P41151483
- 3) **Rocker Arm RH**  
‣ P41151484
- 4) **Relief Valve**  
‣ P41371193



- 1) **Cylinder Head**  
‣ PZZ80024
- 2) **Heater Plug**  
‣ P2666108
- (Bayonet Fitting)
- 3) **Oil Pressure Switch**  
‣ P2848062

(1): Use Only on Build Now: TW70014.

(3): Also available: P31358324 Parallel Semi-Finished Liner; P31358393 Flanged, Semi Finished Liner; and P31358398 Finished Liner in 0.010" Oversize.

(2): Check with Build List.

(4): Check build list for proper application use



PERKINS 6.354.4 LIP SEAL 2

**Engine Series:**  
6.354

**Engine Model:**  
6.354.4 (TW)

**Engine Data:**  
Lip Seal

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 3.8770 in / 98.476 mm

**Clark-Equipment**

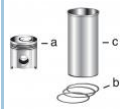
45C - Shovel (TW70016)

**White-Farm**  
8600 - Combine (TW70003)

**New-Holland**  
Stack Cruiser - (TW70031)



- 1) **Engine O/H Kit**  
‣ POK672
- 2) **Basic Engine Kit**  
‣ PBK672



- Piston-Liner Kit**  
‣ PCK619
  - Consist of:**
  - a) PU5LP0019
  - b) P41158017
  - c) P31358394
- 6 Per Engine**



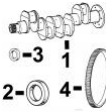
- Main Bearing Set**  
‣ PU5MB0030 Std.
  - PU5MB0030A 0.010
  - PU5MB0030B 0.020
  - PU5MB0030C 0.030
- Set of 7 Pairs**



- Con Rod Bearing Set**  
‣ P85043 Std.
  - P85043A 0.010
  - P85043B 0.020
  - P85043C 0.030
- Set of 6 Pairs**



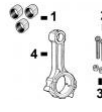
- Thrust Washer Set**  
‣ P31137551/61 Std.
  - P31137312/22 0.007
- Set of 2 Pairs**



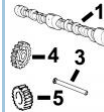
- 1) **Front Seal**  
‣ P2418F436
- 2) **Rear Seal**  
‣ P2418F475
- 3) **Crankshaft Kit**  
‣ PZZ90086
- 4) **Ring Gear**  
‣ P0410264 122T
- P31162121 126T



- 1) **Top Gasket Set**  
‣ PU5LT0017
- 2) **Bottom Gasket**  
‣ PU5LB0056
- 3) **Head Gasket**  
‣ P3681H202



- 1) **Bush, Con Rod**  
‣ P31134123 x6
- 2) **Bolt, Con Rod**  
‣ P32762144 x12
- 3) **Nut, Con Rod**  
‣ P33221328 x12
- 4) **Con Rod**  
‣ PZZ90009



- 1) **Camshaft**  
‣ P31416303
- 2) **Tappet**  
‣ P31434163
- 3) **Push Rod**  
‣ P31434307
- 4) **Camshaft Gear**  
‣ P31171353
- P31171931
- 5) **Crankshaft Gear**  
‣ P31171682



- 1) **Aux. Drive Shaft**  
‣ P31173423
- 2) **Gear & Shaft**  
‣ P41115367
- 3) Gear  
‣ P31171733
- 4) **Front Bush**  
‣ P31134129
- 5) **Rear Bush**  
‣ P2511447
- 6) **Seal**  
‣ P2418F432
- 7) **Insert Valve Exhaust**  
‣ P33152154 x6
- 8) **Insert Valve Intake**  
‣ P33152155 x6

- Valve Train Kit**  
‣ PVTK611

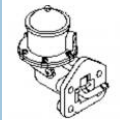
- 1) **Valve, Intake**  
‣ P31431315 x6
- 2) **Valve, Exhaust**  
‣ P3142A051 x6
- 3) **Guide, Valve**  
a) Intake b) Exhaust
- 3a) P3343F002 x6
- 3b) P3343J002 x6

- 4) **Spring, Valve**  
a) Inner b) Outer
- 4a) P31744131 x12
- 4b) P31745121 x12

- 5) **Lock, Valve**  
‣ P33173108 x24
- 6) **Seal, Valve**  
‣ P33817117 x12



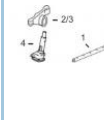
- Oil Pump**  
‣ P4132F015



- Lift Pump**  
‣ P2641729



- 1) **Water Pump**  
‣ P41313027
- PU5MW0129
- 2) **Thermostat**  
‣ P2485613 x2



- 1) **Rocker Shaft**  
‣ P41151483
- 2) **Rocker Arm LH**  
‣ P41151484
- 3) **Rocker Arm RH**  
‣ P41151484
- 4) **Relief Valve**  
‣ P41371193



- 1) **Cylinder Head**  
‣ PZZ80024
- 2) **Heater Plug**  
‣ P2666108
- (Bayonet Fitting)
- 3) **Oil Pressure Switch**  
‣ P2848062

(1): Use on Build No: TW70016.

(2): Use on Build No: TW70031 or TW70003.

(3): Also available: P31358324 Parallel Semi-Finished Liner; P31358393 Flanged, Semi Finished Liner; and P31358398 Finished Liner in 0.010" Oversize.

(4): Use on Build No: TW70003.

(5): Check build list for proper application use

PERKINS 6.354.4 LIP SEAL 3

**Engine Series:**  
6.354

**Engine Model:**  
6.354.4 (TW)

**Engine Data:**  
Lip Seal

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 3.8770 in / 98.476 mm

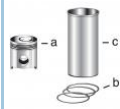
**Mf Agricultural**

699 - (TW31125)  
2675 - (TW31008)  
3090 - (TW31159)

**White-Farm**  
2-85 Tractor - (TW70008)



- 1) **Engine O/H Kit**  
‣ POK673
- 2) **Basic Engine Kit**  
‣ PBK673



- Piston-Liner Kit**  
‣ PCK619
  - Consist of:**
  - a) PU5LP0019
  - b) P41158017
  - c) P31358394
- 6 Per Engine**



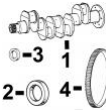
- Main Bearing Set**
  - PU5MB0030 Std.
  - PU5MB0030A 0.010
  - PU5MB0030B 0.020
  - PU5MB0030C 0.030
- Set of 7 Pairs**



- Con Rod Bearing Set**
  - P85043 Std.
  - P85043A 0.010
  - P85043B 0.020
  - P85043C 0.030
- Set of 6 Pairs**



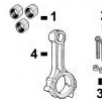
- Thrust Washer Set**
  - P31137551/61 Std.
  - P31137312/22 0.007
- Set of 2 Pairs**



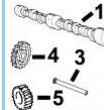
- 1) **Front Seal**  
‣ P2418F436
- 2) **Rear Seal**  
‣ P2418F475
- 3) **Crankshaft Kit**  
‣ PZZ90086
- 4) **Ring Gear**  
‣ P0410264 122T
- P31162121 126T



- 1) **Top Gasket Set**  
‣ PU5LT0033
- 2) **Bottom Gasket**  
‣ PU5LB0056
- 3) **Head Gasket**  
‣ P3681H202



- 1) **Bush, Con Rod**  
‣ P31134123 x6
- 2) **Bolt, Con Rod**  
‣ P32762144 x12
- 3) **Nut, Con Rod**  
‣ P33221328 x12
- 4) **Con Rod**  
‣ PZZ90009



- 1) **Camshaft**  
‣ P31416303
- 2) **Tappet**  
‣ P31434163
- 3) **Push Rod**  
‣ P31434307
- 4) **Camshaft Gear**  
‣ P31171353
- P31171931
- 5) **Crankshaft Gear**  
‣ P31171682



- 1) **Aux. Drive Shaft**  
‣ P31173423
- 2) **Gear & Shaft**  
‣ P41115367
- 3) Gear
- P31171733
- 4) **Front Bush**  
‣ P31134129
- 5) **Rear Bush**  
‣ P2511447
- 6) **Seal**  
‣ P2418F432
- 7) **Insert Valve Exhaust**  
‣ P33152154 x6
- 8) **Insert Valve Intake**  
‣ P33152155 x6

- Valve Train Kit**  
‣ PVTK611

- 1) **Valve, Intake**  
‣ P31431315 x6
- 2) **Valve, Exhaust**  
‣ P3142A051 x6

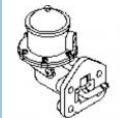
- 3) **Guide, Valve**
- a) **Intake** b) **Exhaust**
- 3a) P3343F002 x6
- 3b) P3343J002 x6

- 4) **Spring, Valve**
- a) **Inner** b) **Outer**
- 4a) P31744131 x12
- 4b) P31745121 x12

- 5) **Lock, Valve**  
‣ P33173108 x24
- 6) **Seal, Valve**  
‣ P33817117 x12



- Oil Pump**  
‣ P4132F015



- Lift Pump**  
‣ P2641729



- 1) **Water Pump**  
‣ P41313027
- 2) **Thermostat**  
‣ P2485613 x2



- 1) **Rocker Shaft**
- 
- 2) **Rocker Arm LH**  
‣ P41151483
- 3) **Rocker Arm RH**  
‣ P41151484
- 4) **Relief Valve**  
‣ P41371193



- 1) **Cylinder Head**  
‣ PZZ80024
- 2) **Heater Plug**  
‣ P2666108
- (Bayonet Fitting)
- 3) **Oil Pressure Switch**  
‣ P2848062

(1): Use Only with Build No: TW31008.

(2): Do Not Use on Build No: TW70008.

(3): Also available: P31358324 Parallel Semi-Finished Liner; P31358393 Flanged, Semi Finished Liner; and P31358398 Finished Liner in 0.010" Oversize.

(4): Do not use on Build TW70008.

(5): Check build list for proper application use

PERKINS 6.354.4 LIP SEAL 4

**Engine Series:**  
6.354

**Engine Model:**  
6.354.4 (TW)

**Engine Data:**  
Lip Seal

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 3.8770 in / 98.476 mm

**Marine**

Pleasure Craft - (TW33196)  
Pleasure Craft - (TW33197)  
Commercial Craft - (TW70087)  
Pleasure Craft - (TW70087)



- 1) **Engine O/H Kit**  
‣ POK675
- 2) **Basic Engine Kit**  
‣ PBK675



- 1) **Piston-Liner Kit**  
‣ PU5MK0127
- Consist of:**
  - a) P86740
  - b) P41158041
  - c) P31358394



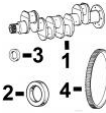
- 1) **Main Bearing Set**  
‣ PU5MB0030 *Std.*  
‣ PU5MB0030A 0.010  
‣ PU5MB0030B 0.020  
‣ PU5MB0030C 0.030



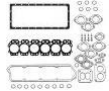
- 1) **Con Rod Bearing Set**  
‣ P85043 *Std.*  
‣ P85043A 0.010  
‣ P85043B 0.020  
‣ P85043C 0.030



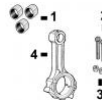
- 1) **Thrust Washer Set**  
‣ P31137551/61 *Std.*  
‣ P31137312/22 0.007



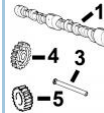
- 1) **Front Seal**  
‣ P2418F436
- 2) **Rear Seal**  
‣ P2418F475
- 3) **Crankshaft Kit**  
‣ PZZ90086
- 4) **Ring Gear**  
‣ P0410264 122T  
‣ P31162121 126T



- 1) **Top Gasket Set**  
‣ P68243
- 2) **Bottom Gasket**  
‣ PU5LB0056
- 3) **Head Gasket**  
‣ P3681H202



- 1) **Bush, Con Rod**  
‣ P31134123 x6
- 2) **Bolt, Con Rod**  
‣ P32762144 x12
- 3) **Nut, Con Rod**  
‣ P33221328 x12
- 4) **Con Rod**  
‣ PZZ90009



- 1) **Camshaft**  
‣ P31416303
- 2) **Tappet**  
‣ P31434163
- 3) **Push Rod**  
‣ P31434307
- 4) **Camshaft Gear**  
‣ P31171353  
‣ P31171931
- 5) **Crankshaft Gear**  
‣ P31171682



- 1) **Aux. Drive Shaft**  
‣ P31173423
- 2) **Gear & Shaft**  
‣ P41115367
- 3) **Gear**  
‣ P31171733
- 4) **Front Bush**  
‣ P31134129
- 5) **Rear Bush**  
‣ P2511447
- 6) **Seal**  
‣ P2418F432
- 7) **Insert Valve Exhaust**  
‣ P33152154 x6
- 8) **Insert Valve Intake**  
‣ P33152155 x6

- 1) **Valve Train Kit**  
‣ PVTK617

- 1) **Valve, Intake**  
‣ P31431315 x6
- 2) **Valve, Exhaust**  
‣ P3142A051 x6

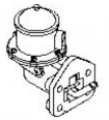
- 3) **Guide, Valve**
  - a) **Intake**  
‣ 3a) P3343F002 x6

- 4) **Guide, Valve**
  - a) **Exhaust**  
‣ 4a) P3343J002 x6

- 5) **Lock, Valve**  
‣ P33173108 x24
- 6) **Seal, Valve**  
‣ P33817117 x12



- 1) **Oil Pump**  
‣ P4132F015



- 1) **Lift Pump**  
‣ P2641729



- 1) **Thermostat**  
‣ P2485604 x2



- 1) **Rocker Shaft**  
‣
- 2) **Rocker Arm LH**  
‣ P41151483
- 3) **Rocker Arm RH**  
‣ P41151484
- 4) **Relief Valve**  
‣ P41371193



- 1) **Cylinder Head**  
‣
- 2) **Heater Plug**  
‣ P2666108
- 3) **Oil Pressure Switch**  
‣ P2848062

(1): Also available: P31358324 Parallel Semi-Finished Liner; P31358393 Flanged, Semi Finished Liner; and P31358398 Finished Liner in 0.010" Oversize.  
(3): Valve springs not available.

(2): Check build list for proper application use.

PERKINS T6.354.4 LIP SEAL

**Engine Series:**  
6.354

**Engine Model:**  
T6.354.4 (TU)

**Engine Desc:**  
TURBOCHARGE

**Engine Data:**  
Lip Seal

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 3.8770 in / 98.476 mm

**Mf Agricultural**

560 - (TU31074)  
560 - (TU31126)  
660 - (TU31076)  
TX750 - (TU31006)  
TX850 - (TU31006)

**White-Farm**

8800 - Combine (TU70001)



- 1) **Engine O/H Kit**  
‣ POK680
- 2) **Basic Engine Kit**  
‣ PBK680



- Piston-Liner Kit**  
‣ PU5MK0071
  - Consist of:**
    - a) P68803
    - b) P41158005
    - c) P31358394
- 6 Per Engine**



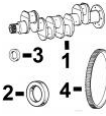
- Main Bearing Set**  
‣ PU5MB0030 *Std.*  
‣ PU5MB0030A 0.010  
‣ PU5MB0030B 0.020  
‣ PU5MB0030C 0.030
- Set of 7 Pairs**



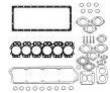
- Con Rod Bearing Set**  
‣ PU5ME0003 *Std.*  
‣ PU5ME0003A 0.010  
‣ PU5ME0003B 0.020  
‣ PU5ME0003C 0.030
- Set of 6 Pairs**



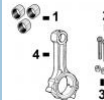
- Thrust Washer Set**  
‣ P31137551/61 *Std.*  
‣ P31137312/22 0.007
- Set of 2 Pairs**



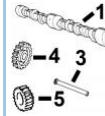
- 1) **Front Seal**  
‣ P2418F436
- 2) **Rear Seal**  
‣ P2418F475
- 3) **Crankshaft Kit**  
‣ PZZ90105
- 4) **Ring Gear**  
‣ P0410264 122T  
‣ P31162121 126T



- 1) **Top Gasket Set**  
‣ PU5LT0018
- 2) **Bottom Gasket**  
‣ PU5LB0056
- 3) **Head Gasket**  
‣ P3681H202



- 1) **Bush, Con Rod**  
‣ P31134131 x6
- 2) **Bolt, Con Rod**  
‣ P32762144 x12
- 3) **Nut, Con Rod**  
‣ P33221328 x12
- 4) **Con Rod**  
‣ PZZ90013



- 1) **Camshaft**  
‣ P31416303
- 2) **Tappet**  
‣ P31434163
- 3) **Push Rod**  
‣ P31434307
- 4) **Camshaft Gear**  
‣ P31171931
- 5) **Crankshaft Gear**  
‣ P31171682



- 1) **Aux. Drive Shaft**  
‣ P31173423
- 2) **Gear & Shaft**  
‣ P41115367
- 3) **Gear**  
‣ P31171733
- 4) **Front Bush**  
‣ P31134129
- 5) **Rear Bush**  
‣ P2511447
- 6) **Seal**  
‣ P2418F432
- 7) **Insert Valve Exhaust**  
‣ P33152154 x6
- 8) **Insert Valve Intake**  
‣ P33152155 x6

- Valve Train Kit**  
‣ PVTK611

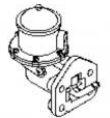
- 1) **Valve, Intake**  
‣ P31431315 x6
- 2) **Valve, Exhaust**  
‣ P3142A051 x6
- 3) **Guide, Valve**
  - a) Intake b) Exhaust
  - 3a) P3343F002 x6
  - 3b) P3343J002 x6

- 4) **Spring, Valve**
  - a) Inner b) Outer
  - 4a) P31744131 x12
  - 4b) P31745121

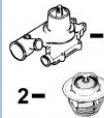
- 5) **Lock, Valve**  
‣ P33173108 x24
- 6) **Seal, Valve**  
‣ P33817117 x12



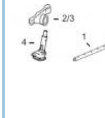
- Oil Pump**  
‣ P4132F016



- Lift Pump**  
‣ P2641729



- 1) **Water Pump**  
‣ PU5MW0132
- 2) **Thermostat**  
‣ P2485613 x2



- 1) **Rocker Shaft**  
‣
- 2) **Rocker Arm LH**  
‣ P41151483
- 3) **Rocker Arm RH**  
‣ P41151484
- 4) **Relief Valve**  
‣ P41371194


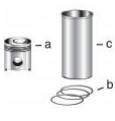



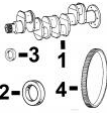

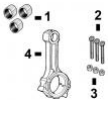
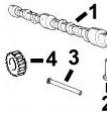


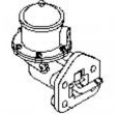





- 1) **Cylinder Head**  
‣ PZZ80024
- 2) **Heater Plug**  
‣ P2666108
- (Bayonet Fitting)
- 3) **Oil Pressure Switch**  
‣ P2848062

(1): Also available: P31358324 Parallel Semi-Finished Liner; P31358393 Flanged, Semi Finished Liner; and P31358398 Finished Liner in 0.010" Oversize.

(2): Check build list for proper application use

PERKINS T6.354.4 LIP SEAL 2

|   |   |   |  |  |   |
|---|---|---|--|--|---|
| <p><b>Engine Series:</b><br/>6.354</p> <p><b>Engine Model:</b><br/>T6.354.4 (TU)</p> <p><b>Engine Desc:</b><br/>TURBOCHARGE</p> <p><b>Engine Data:</b><br/>Lip Seal</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.8770 in / 98.476 mm</p> |  <p>1) <b>Engine O/H Kit</b><br/>‣ POK681</p> <p>2) <b>Basic Engine Kit</b><br/>‣ PBK681</p>  |  <p><b>Piston-Liner Kit</b><br/>‣ PU5MK0071</p> <p><b>Consist of:</b></p> <p>‣ a) P68803<br/>‣ b) P41158005<br/>‣ c) P31358394</p> <p><b>6 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>‣ PU5MB0030 Std.<br/>‣ PU5MB0030A 0.010<br/>‣ PU5MB0030B 0.020<br/>‣ PU5MB0030C 0.030</p> <p><b>Set of 7 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>‣ PU5ME0003 Std.<br/>‣ PU5ME0003A 0.010<br/>‣ PU5ME0003B 0.020<br/>‣ PU5ME0003C 0.030</p> <p><b>Set of 6 Pairs</b></p>                      |  <p><b>Thrust Washer Set</b><br/>‣ P31137551/61 Std.<br/>‣ P31137312/22 0.007</p> <p><b>Set of 2 Pairs</b></p>  |
| <p><b>JCB</b><br/>418 - Wheel Loader</p> <p><b>Mf Agricultural</b><br/>2680 - (TU31045)<br/>2680 - (TU31046)<br/>2685 - (TU31045)<br/>2685 - (TU31046)<br/>3530 - (TU31143)<br/>RX95 - (TU31010)</p> <p><b>White-Farm</b><br/>2-105 - (TU70018)</p>                           |  <p>1) <b>Front Seal</b><br/>‣ P2418F436</p> <p>2) <b>Rear Seal</b><br/>‣ P2418F475</p> <p>3) <b>Crankshaft Kit</b><br/>‣ PZZ90105</p> <p>4) <b>Ring Gear</b><br/>‣ P0410264 122T<br/>‣ P31162121 126T</p> |  <p>1) <b>Top Gasket Set</b><br/>‣ PU5LT0033</p> <p>2) <b>Bottom Gasket</b><br/>‣ PU5LB0056</p> <p>3) <b>Head Gasket</b><br/>‣ P3681H202</p>                 |  <p>1) <b>Bush, Con Rod</b><br/>‣ P31134131 x6</p> <p>2) <b>Bolt, Con Rod</b><br/>‣ P32762144 x12</p> <p>3) <b>Nut, Con Rod</b><br/>‣ P33221328 x12</p> <p>4) <b>Con Rod</b><br/>‣ PZZ90013</p> |  <p>1) <b>Camshaft</b><br/>‣ P31416303</p> <p>2) <b>Tappet</b><br/>‣ P31434163</p> <p>3) <b>Push Rod</b><br/>‣ P31434307</p> <p>4) <b>Crankshaft Gear</b><br/>‣ P31171682</p> |  <p>1) <b>Aux. Drive Shaft</b><br/>‣ P31173423</p> <p>2) <b>Gear &amp; Shaft</b><br/>‣ P41115367</p> <p>‣ 3) Gear<br/>‣ P31171733</p> <p>4) <b>Front Bush</b><br/>‣ P31134129</p> <p>5) <b>Rear Bush</b><br/>‣ P2511447</p> <p>6) <b>Seal</b><br/>‣ P2418F432</p> <p>7) <b>Insert Valve Exhaust</b><br/>‣ P33152154 x6</p> <p>8) <b>Insert Valve Intake</b><br/>‣ P33152155 x6</p> |
| <p><b>Valve Train Kit</b><br/>‣ PVTK611</p>   | <p>1) <b>Valve, Intake</b><br/>‣ P31431315 x6</p> <p>2) <b>Valve, Exhaust</b><br/>‣ P3142A051 x6</p>  | <p>3) <b>Guide, Valve</b><br/>a) Intake b) Exhaust<br/>‣ 3a) P3343F002 x6<br/>‣ 3b) P3343J002 x6</p>  | <p>4) <b>Spring, Valve</b><br/>a) Inner b) Outer<br/>‣ 4a) P31744131 x12<br/>‣ 4b) P31745121</p>   | <p>5) <b>Lock, Valve</b><br/>‣ P33173108 x24</p> <p>6) <b>Seal, Valve</b><br/>‣ P33817117 x12</p>  |   |
|  <p><b>Oil Pump</b><br/>‣ P4132F016</p>  |  <p><b>Lift Pump</b><br/>‣ P2641729</p>  |  <p>1) <b>Water Pump</b><br/>‣ P41313027</p> <p>2) <b>Thermostat</b><br/>‣ P2485613 x2</p>   |  <p>1) <b>Rocker Shaft</b><br/>‣ P41151483</p> <p>2) <b>Rocker Arm LH</b><br/>‣ P41151483</p> <p>3) <b>Rocker Arm RH</b><br/>‣ P41151484</p> <p>4) <b>Relief Valve</b><br/>‣ P41371194</p>  |  <p>1) <b>Cylinder Head</b><br/>‣ PZZ80024</p> <p>2) <b>Heater Plug</b><br/>‣ P2666108</p> <p>(Bayonet Fitting)</p> <p>3) <b>Oil Pressure Switch</b><br/>‣ P2848062</p>     |   |

(1): Use Only on Build No: TU31143 or TU70018.(2) Also available: P31358324 Parallel Semi-Finished Liner; P31358393 Flanged, Semi Finished Liner; and P31358398 Finished Liner in 0.010" Oversize.(3) Check build list for proper application use.

(3): Check build list for proper application use.

(2): Also available: P31358324 Parallel Semi-Finished Liner; P31358393 Flanged, Semi Finished Liner; and P31358398 Finished Liner in 0.010" Oversize.(3) Check build list for proper application use.

**Engine Series:**  
6.354

**Engine Model:**  
T6.354.4 (TU)

**Engine Desc:**  
TURBOCHARGE

**Engine Data:**  
Lip Seal

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 3.8770 in / 98.476 mm

**Marine**

Pleasure Craft - (TU33203)  
Pleasure Craft - (TU70025)  
Pleasure Craft - (TU70027)



- 1) **Engine O/H Kit**  
‣ POK682
- 2) **Basic Engine Kit**  
‣ PBK682



- 1) **Piston-Liner Kit**  
‣ PU5MK0071
- Consist of:**
- a) P68803
- b) P41158005
- c) P31358394
- 6 Per Engine**



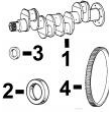
- 1) **Main Bearing Set**  
‣ PU5MB0030 *Std.*
- PU5MB0030A *0.010*
- PU5MB0030B *0.020*
- PU5MB0030C *0.030*
- Set of 7 Pairs**



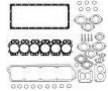
- 1) **Con Rod Bearing Set**  
‣ PU5ME0003 *Std.*
- PU5ME0003A *0.010*
- PU5ME0003B *0.020*
- PU5ME0003C *0.030*
- Set of 6 Pairs**



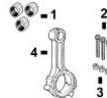
- 1) **Thrust Washer Set**  
‣ P31137551/61 *Std.*
- P31137312/22 *0.007*
- Set of 2 Pairs**



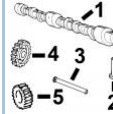
- 1) **Front Seal**  
‣ P2418F436
- 2) **Rear Seal**  
‣ P2418F475
- 3) **Crankshaft Kit**  
‣ PZZ90105
- 4) **Ring Gear**  
‣ P0410264 *122T*
- P31162121 *126T*



- 1) **Top Gasket Set**  
‣ P68243
- 2) **Bottom Gasket**  
‣ PU5LB0056
- 3) **Head Gasket**  
‣ P3681H202



- 1) **Bush, Con Rod**  
‣ P31134131 *x6*
- 2) **Bolt, Con Rod**  
‣ P32762144 *x12*
- 3) **Nut, Con Rod**  
‣ P33221328 *x12*
- 4) **Con Rod**  
‣ PZZ90013



- 1) **Camshaft**  
‣ P31416303
- 2) **Tappet**  
‣ P31434163
- 3) **Push Rod**  
‣ P31434307
- 4) **Camshaft Gear**  
‣ P31171931
- 5) **Crankshaft Gear**  
‣ P31171682



- 1) **Aux. Drive Shaft**  
‣ P31173423
- 2) **Gear & Shaft**  
‣ P41115367
- 3) **Gear**  
‣ P31171733
- 4) **Front Bush**  
‣ P31134129
- 5) **Rear Bush**  
‣ P2511447
- 6) **Seal**  
‣ P2418F432
- 7) **Insert Valve Exhaust**  
‣ P33152154 *x6*
- 8) **Insert Valve Intake**  
‣ P33152155 *x6*

- 1) **Valve Train Kit**  
‣ PVTK617

- 1) **Valve, Intake**  
‣ P31431315 *x6*
- 2) **Valve, Exhaust**  
‣ P3142A051 *x6*

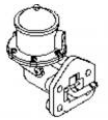
- 3) **Guide, Valve**
- a) **Intake**  
‣ 3a) P3343F002 *x6*

- 4) **Spring, Valve**
- a) **Exhaust**  
‣ 4a) P3343J002 *x6*

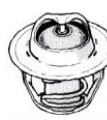
- 5) **Lock, Valve**  
‣ P33173108 *x24*
- 6) **Seal, Valve**  
‣ P33817117 *x12*



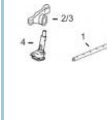
- 1) **Oil Pump**  
‣ P4132F016



- 1) **Lift Pump**  
‣ P2641729



- 1) **Thermostat**  
‣ P2485604 *x2*



- 1) **Rocker Shaft**  
‣
- 2) **Rocker Arm LH**  
‣ P41151483
- 3) **Rocker Arm RH**  
‣ P41151484
- 4) **Relief Valve**  
‣ P41371194



- 1) **Heater Plug**  
‣ P2666108
- (Bayonet Fitting)**
- 2) **Oil Pressure Switch**

(1): Also available: P31358324 Parallel Semi-Finished Liner; P31358393 Flanged, Semi Finished Liner; and P31358398 Finished Liner in 0.010" Oversize. (2) Check build list for proper application use. (3) Valve springs not

**Engine Series:**

1100D

**Engine Model:**

1104D-E44T (NP) / 1104D-E44TA (NR)

**Engine Data:**

TURBOCHARGED Tier 3

**Engine Info:**

4 Cyl

**Engine Dimensions:**

Bore: 4.133 in / 105.00 mm  
Stroke: 5.00 in / 127.00 mm  
Displacement: 269 in3 / 4.4 Lt



- 1) Basic Kit**  
 › PBK531 Std.  
 › PBK532 0.50  
 › PBK533 1.00



- Piston & Ring Kit**  
 › PT417728 Std.  
 › PT417955 0.50  
 › PT418001 1.00  
**4 Per Engine**



- Main Bearing Set**  
 › PU5MB0033 Std.  
 › PU5MB0033A 0.25  
 › PU5MB0033B 0.50  
 › PU5MB0033C 0.75  
**Set of 5 Pairs**



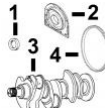
- Con Rod Bearing Set**  
 › PT410927 Std.  
 › PT420155 0.25  
 › PT420154 0.50  
 › PT420153 0.75



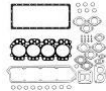
- Thrust Washer Set**  
 › PU5TW0002 Std.  
 › PU5TW0002B O/S  
**Set of 2 Pairs**

**Piston Kit:**

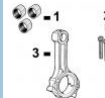
- 1) 1 x P3135M151 Piston Std, 1 x PUPRK0005 Ring Set Std.  
 2) 1 x P3135M152 Piston 0.50 mm, 1 x PUPRK0005B Ring Set 0.50 mm.  
 3) 1 x P3135M153 Piston 1.00 mm, 1 x PUPRK0005D Ring Set 1.00 mm.



- 1) Front Seal**  
 › P2418F554  
**2) Rear Seal**  
 › P2418F704  
**3) Crankshaft Kit**  
 › PT415205  
**4) Ring Gear**  
 › P0410236 115T  
 › P31162121 126T



- 1) Top Gasket Set**  
 › PU5LT1104D  
**2) Bottom Gasket**  
 › PU5LB1104D  
**3) Head Gasket**  
 › P3681E074  
**4) Valve Cover Gsk**  
 › PT414788  
**5) Timing Cover Gsk**  
 › P3681P046  
 › P3681P047  
**6) Oil Pan Gasket**  
 › P3681K036  
 › P3681K037



- 1) Bush, Con Rod**  
 › P3112A005 x4  
**2) Bolt, Con Rod**  
 › PT400001 x8  
**3) Connecting Rod**  
 › P4115C364



- 1) Bushing, Cam**  
 › P3112D071 x1  
**2) Tappet**  
 › P3142U061  
**3) Pushrod**  
 › P3142V011  
**4) Seal, Valve Stem**  
 › P2418M522 x16

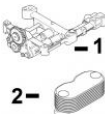
**Valve Train Kit**

- 1) Valve, Intake**  
 › P3142H091 x8  
**2) Valve, Exhaust**  
 › P3142A181 x8

- 3) Guide, Valve (Intake & Exhaust)**  
 › P3313A035 x16

- 4) Valve, Insert In**  
**5) Valve, Insert Ex**  
 › 4) P3314A251 x8  
 › 5) P3314A261 x8

- 6) Spring, Valve**  
 › P3174A028 x16  
**7) Lock, Valve**  
 › P3142W005 x32



- 1) Oil Pump**  
 › P4132F071  
**2) Oil Cooler**  
 › P2486A015



- 1) Water Pump**  
 › PU5MW0204  
**2) Water Pump Gasket**  
 › P3682A011  
**3) Thermostat**  
 › PT413847  
**4) Thermostat Housing Gasket**  
 › P3682A022



- 1) Repair Sleeve**  
 › 105RS  
**2) Head Bolts**  
 › P3218A011 x10



- 1) Glow Plug**  
 › PT419164 x4  
**2) Air Temp Sensor**  
 › PU5MK1089

(1): Not to be used on engines with balancer units.

(3): Check application for proper usage.

(2): Bottom Gasket Set does not contains the Timing Cover Gasket or the Oil Pan Gasket. Order separately.

(4): Check build list for proper application

**Engine Model:**  
3013C (C1.5)

**Engine Desc:**  
NATURALLY  
ASPIRATED

**Engine Info:**  
3 Cyl

**Engine Dimensions:**

Bore: 3.3 in /  
84.00 mm  
Stroke: 3.5 in /  
90.00 mm  
Displacement:  
91 in3 / 1.496  
Lt

Please see  
page 446 for a  
complete list of  
equipment  
models.



**1) Engine O/H Kit**

- › BOK525 Std.
- › BOK526 0.50

**2) Basic Engine Kit**

- › BBK525 Std.
- › BBK526 0.50
- › Spec Sheet - 3024C



**1) Front Seal**

- › B154-1675

**2) Rear Seal**

- › B156-6973

**3) Crankshaft**

- › B235-6967

**4) Crankshaft Gear**

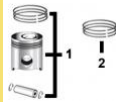
- › B308-1853

**5) Key, Crank Gear**

- › B153-5518

**6) Flywheel Ring Gear**

- › B156-6960 109T
- › B154-2405 126T



**1) Piston & Ring Kit**

- › B293-5884 Std.
- › B293-5884B 0.50

**3 Per Engine**

**2) Ring Set**

- › B154-0943 Std.
- › B154-0943B 0.50



**1) O/H Gasket Set**

- › B155-8078

**2) Cylinder HD Gsk**

- › B218-8537

**3) Oil Pan Gasket**

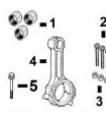
- › B215-2604



**Main Bearing Set**

- › B156-6977 Std.
- › B161-2628 0.010
- › B161-2629 0.020

**Set of 3 Pairs**



**1) Bush, Con Rod**

- › B154-0869 x3

**2) Bolt, Con Rod**

- › B154-0870 x6

**3) Nut, Con Rod**

- › B154-0871 x6

**4) Connecting Rod**

- › B156-6980

**5) Head Bolt**

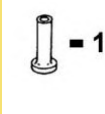
- › B156-6988 x11
- › B156-6989 x3



**Con Rod Bearing Set**

- › B156-6978 Std.
- › B161-2630 0.010
- › B161-2631 0.020

**Set of 3 Pairs**



**1) Tappet**

- › B154-1249



**1) Thrust Washer**

- › B154-1231 Std.

**Set of 2 Pcs**

**2) Crank Bushing**

- › B294-4916 Std.
- › B302-4181 0.010
- › B302-4182 0.020



**1) Seal, Valve Intake**

- › B153-5559 x3

**2) Seal, Valve Ex**

- › B153-5554 x3

**Valve Train Kit**

- › BVTK559

**1) Valve, Intake**

- › B156-6985 x3

**2) Valve, Exhaust**

- › B156-6986 x3

**3) Spring, Valve**

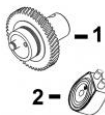
- › B190-3748 x6

**4) Retainer, Valve Spring**

- › B153-5557 x6

**5) Lock, Valve**

- › B153-5556 x12



**1) Oil Pump**

- › B297-3050
- › B339-3017

**2) Oil Cooler**

- › B245-1361



**1) Lift Pump**

- › B176-7712

**2) Thermostat**

- › B251-7660

**3) Atomiser**

- › B252-1446

**4) Fuel Water Separator**

- › B276-1804

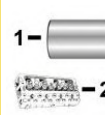


**1) Water Pump**

- › B311-0053

**2) Gasket, W Pump**

- › B303-0307



**1) Repair Sleeve**

- › 84RS

**2) Cylinder Head**

- › B431-5040UF
- › B540-0594UF



**Glowplug**

- › B172-4585 x3

(1): 1.4mm Thickness.

(3): Use with engines that are turbocharged and/or have an oil cooler

(2): If ordering for tier 3 engine that has a 2 bolt auxiliary drive front cover, also orde

(4): Use with engines that are non-turbo




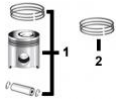


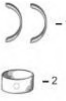
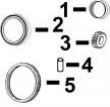
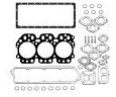
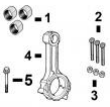







**Engine Model:**  
3013C (C1.7)

**Engine Desc:**  
NATURALLY ASPIRATED

**Engine Data:**  
C1.7

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 3.3 in / 84.00 mm  
Stroke: 3.9 in / 100.00 mm  
Displacement:  
101.4 in3 / 1.662 Lt

|   |   |  |   |  |
|---|---|--|---|--|
|  <p><b>1) Engine O/H Kit</b><br/>                     , BOK540 Std.<br/>                     , BOK541 0.50<br/> <b>2) Basic Engine Kit</b><br/>                     , BBK540 Std.<br/>                     , BBK541 0.50<br/>                     , Spec Sheet - 3024C</p>  |  <p><b>1) Piston &amp; Ring Kit</b><br/>                     , B297-3080 Std.<br/>                     , B297-3080B 0.50<br/> <b>3 Per Engine</b><br/> <b>2) Ring Set</b><br/>                     , B154-0943 Std.<br/>                     , B154-0943B 0.50</p> |  <p><b>Main Bearing Set</b><br/>                     , B156-6977 Std.<br/>                     , B161-2628 0.010<br/>                     , B161-2629 0.020<br/> <b>Set of 3 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b><br/>                     , B156-6978 Std.<br/>                     , B161-2630 0.010<br/>                     , B161-2631 0.020<br/> <b>Set of 3 Pairs</b></p> |  <p><b>1) Thrust Washer</b><br/>                     , B154-1231 Std.<br/> <b>Set of 2 Pcs</b><br/> <b>2) Crank Bushing</b><br/>                     , B294-4916 Std.<br/>                     , B302-4181 0.010<br/>                     , B302-4182 0.020</p> |
|  <p><b>1) Front Seal</b><br/>                     , B154-1675<br/> <b>2) Rear Seal</b><br/>                     , B154-0178<br/> <b>3) Crankshaft Gear</b><br/>                     , B308-1853<br/> <b>4) Key, Crank Gear</b><br/>                     , B153-5518<br/> <b>5) Flywheel Ring Gear</b><br/>                     , B156-6960 109T<br/>                     , B154-2405 126T</p> |  <p><b>1) O/H Gasket Set</b><br/>                     , B155-8078 <b>3</b><br/> <b>2) Cylinder HD Gsk</b><br/>                     , B218-8537 <b>1</b><br/> <b>3) Oil Pan Gasket</b><br/>                     , B215-2604</p>                                     |  <p><b>1) Bush, Con Rod</b><br/>                     , B154-0869 x3<br/> <b>2) Bolt, Con Rod</b><br/>                     , B154-0870 x6<br/> <b>3) Nut, Con Rod</b><br/>                     , B154-0871 x6<br/> <b>4) Connecting Rod</b><br/>                     , B154-0867<br/> <b>5) Head Bolt</b><br/>                     , B156-6988 x11<br/>                     , B156-6989 x3</p> |  <p><b>1) Tappet</b><br/>                     , B154-1249</p>   |  <p><b>1) Seal, Valve Intake</b><br/>                     , B153-5559 x3<br/> <b>2) Seal, Valve Ex</b><br/>                     , B153-5554 x3</p>  |
| <p><b>Valve Train Kit</b><br/>                     , BVTK560</p>  |   | <p><b>1) Valve, Intake</b><br/>                     , B156-6985 x3<br/> <b>2) Valve, Exhaust</b><br/>                     , B156-6986 x3</p>   | <p><b>3) Spring, Valve</b><br/>                     , B153-5558 x6<br/> <b>4) Retainer, Valve Spring</b><br/>                     , B153-5557 x6</p>  | <p><b>5) Lock, Valve</b><br/>                     , B153-5556 x12</p>  |
|  <p><b>1) Oil Pump</b><br/>                     , B297-3050<br/>                     , B339-3017<br/> <b>2) Oil Cooler</b><br/>                     , B245-1361</p>   |  <p><b>1) Lift Pump</b><br/>                     , B176-7712<br/> <b>2) Thermostat</b><br/>                     , B251-7660<br/> <b>3) Atomiser</b><br/>                     , B252-1446</p>   |  <p><b>1) Water Pump</b><br/>                     , B311-0053 <b>2</b><br/>                     , B439-4992 <b>2</b><br/> <b>2) Gasket, W Pump</b><br/>                     , B303-0307</p>   |  <p><b>Repair Sleeve</b><br/>                     , 84RS</p>  |  <p><b>Glowplug</b><br/>                     , B172-4585 x3</p>   |


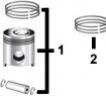













(1): 1.4mm Thickness.

(2): Check Application for proper use.

(3): If ordering for tier 3 engine that has a

|                              |  |                              |   |
|------------------------------|--|------------------------------|---|
| <b>Engine Model:</b><br>3014 | <b>Engine Desc:</b><br>NATURALLY ASPIRATED | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.3 in / 84.00 mm Stroke: 3.54 in / 90.00 mm<br>Displacement: 122 in3 / 1.995 Lt |
|------------------------------|--|------------------------------|---|

|                                       |          |  |         |
|---------------------------------------|----------|--|---------|
| <b>Engine Arrangement</b><br>140-3556 | 196-0205 | <b>Vibratory Compactors</b><br>CB-334D | CB-335D |
|---------------------------------------|----------|--|---------|

|  |   |   |   |   |
|--|---|---|---|---|
|  <p><b>Basic Engine Kit</b><br/>         , BBK3014 Std<br/>         , BBK3015 0.50<br/>         , Spec Sheet - 3024C</p> |  <p>1) <b>Piston &amp; Ring Kit</b><br/>         , B293-5884 Std.<br/>         , B293-5884B 0.50<br/> <b>4 Per Engine</b><br/>         2) <b>Ring Set</b><br/>         , B154-0943 Std. (1)<br/>         , B154-0943B 0.50 (1)</p> |  <p><b>Main Bearing Set</b><br/>         , B154-1203 Std.<br/>         , B161-7163 0.010<br/>         , B161-7164 0.020<br/> <b>Set of 4 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>         , B146-7808 Std.<br/>         , B307-9855 0.010<br/>         , B307-9856 0.020<br/> <b>Set of 4 Pairs</b></p> |  <p>1) <b>Thrust Washer</b><br/>         , B154-1230/31 Std.<br/> <b>Set of 3 Pcs</b><br/>         2) <b>Crank Bushing</b><br/>         , B294-4916 Std.<br/>         , B302-4181 0.010<br/>         , B302-4182 0.020</p> |
|  <p>1) <b>Front Seal</b><br/>         , B154-1675<br/>         2) <b>Rear Seal</b><br/>         , B156-6973</p>          |  <p>1) <b>O/H Gasket Set</b><br/>         , B3014OG<br/>         2) <b>Head Gasket</b><br/>         , B160-3532<br/>         3) <b>Oil Pan Gasket</b><br/>         , B215-2605</p>   |  <p>1) <b>Bush, Con Rod</b><br/>         , B154-0869 x4<br/>         2) <b>Bolt, Con Rod</b><br/>         , B154-0870 x8<br/>         3) <b>Nut, Con Rod</b><br/>         , B154-0871 x8<br/>         4) <b>Con Rod</b><br/>         , B156-6980</p> |  <p>1) <b>Tappet</b><br/>         , B154-1249</p>   |  <p>1) <b>Seal, Valve Intake</b><br/>         , B153-5559 x4<br/>         2) <b>Seal, Valve Ex</b><br/>         , B153-5554 x4</p>   |
| <p><b>Valve Train Kit</b></p>  |   | <p>1) <b>Valve, Intake</b><br/>         2) <b>Valve, Exhaust</b></p>  | <p>3) <b>Spring, Valve</b><br/>         , B153-5558 x8<br/>         4) <b>Retainer, Valve Spring</b></p>  | <p>5) <b>Lock, Valve</b><br/>         , B153-5556 x16</p>   |
|  <p>1) <b>Oil Pump</b><br/>         , B297-3050<br/>         2) <b>Oil Cooler</b><br/>         , B245-1361</p>         |  <p>1) <b>Lift Pump</b><br/>         , B176-7712<br/>         2) <b>Thermostat</b><br/>         , B251-7660<br/>         3) <b>Atomiser</b><br/>         , B252-1446</p>   |  <p>1) <b>Water Pump</b><br/>         , B311-0053<br/>         2) <b>Gasket, W Pump</b><br/>         , B303-0307</p>   |  <p><b>Repair Sleeve</b><br/>         , 84RS</p>  |  <p>1) <b>Glowplug</b><br/>         , B172-4585 x4<br/>         2) <b>Oil Pressure Switch</b><br/>         , B153-6617<br/>         3) <b>Water Temp Sensor</b><br/>         , B176-7705</p>                             |

(1): Contains 3MM wide oil control ring  
 (3): Not included in Valve Train Kit.

(2): Under development, not included in Valve Train Kit.

**Engine Model:**  
3024/C

**Engine Desc:**  
NATURALLY  
ASPIRATED

**Engine Info:**  
4 Cyl

**Engine Dimensions:**

Bore: 3.3 in /  
84.00 mm  
Stroke: 3.9 in /  
100.00 mm  
Displacement:  
134 in3 /2.216  
Lt

Please see  
page 447 for a  
complete list of  
equipment  
models.



**1) Engine O/H Kit**

- › BOK536 Std.
- › BOK537 0.50

**2) Basic Engine Kit**

- › BBK536 Std.
- › BBK537 0.50
- › Spec Sheet - 3024C



**1) Front Seal**

- › B154-1675

**2) Rear Seal**

- › B154-0178

**3) Crankshaft**

- › B308-1852

**4) Crankshaft Gear**

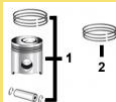
- › B308-1853

**5) Key, Crank Gear**

- › B153-5518

**6) Flywheel Ring Gear**

- › B154-2405 126T



**1) Piston & Ring Kit**

- › B297-3080 Std.
- › B297-3080B 0.50

**4 Per Engine**

**2) Ring Set**

- › B154-0943 Std.
- › B154-0943B 0.50



**1) O/H Gasket Set**

- › B164-8900

**2) Cylinder HD Gsk**

- › B311-1685

**3) Seal Rocker**

- › B217-2752

**4) Seal, Cyl HD Cov**

- › B233-0695

**5) Oil Pan Gasket**

- › B215-2605



**Main Bearing Set**

- › B154-1203 Std.
- › B161-7163 0.010
- › B161-7164 0.020

**Set of 4 Pairs**



**1) Bush, Con Rod**

- › B154-0869 x4

**2) Bolt, Con Rod**

- › B154-0870 x8

**3) Nut, Con Rod**

- › B154-0871 x8

**4) Connecting Rod**

- › B154-0867

**5) Head Bolt**

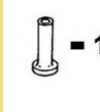
- › B156-6988 x14
- › B156-6989 x4



**Con Rod Bearing Set**

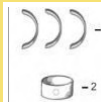
- › B146-7808 Std.
- › B307-9855 0.010
- › B307-9856 0.020

**Set of 4 Pairs**



**1) Tappet**

- › B154-1249



**1) Thrust Washer**

- › B154-1230/31 Std.

**Set of 3 Pcs**

**2) Crank Bushing**

- › B294-4916 Std.
- › B302-4181 0.010
- › B302-4182 0.020

**Valve Train Kit**

- › BVTK558

**1) Valve, Intake**

- › B154-0888 x4

**2) Valve, Exhaust**

- › B154-0889 x4

**3) Spring, Valve**

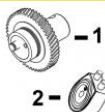
- › B153-5558 x8

**4) Retainer, Valve Spring**

- › B153-5557 x8

**5) Lock, Valve**

- › B153-5556 x16



**1) Oil Pump**

- › B297-3050

**2) Oil Cooler**

- › B245-1361



**1) Lift Pump**

- › B176-7712

**2) Thermostat**

- › B251-7660

**3) Atomiser**

- › B252-1446

**4) Fuel Water Separator**

- › B276-1804



**1) Water Pump**

- › B311-0053

**2) Gasket, W Pump**

- › B303-0307



**1) Glow Plug**

- › B172-4585 x4

**2) Cylinder Head**

- › B217-1481UF

**3) Repair Sleeve**

- › 84RS



**Fuel Lines**

- › 1) B217-2760
- › 2) B217-2761
- › 3) B217-2762
- › 4) B217-2763

**(1):** Do not use in applications that require a Crankshaft Driven Balancer Unit. The new style front gear is P/N B308-1853,(.887" or 22.5mm Wide) and the key way P/N B153-5518, must be used.  
**(2):** Does not include Crankshaft Oil Seals  
**(3):** Bare head. Check application for proper usage.

**Engine Model:**

3024C/T

**Engine Desc:**

TURBOCHARGE

**Engine Info:**

4 Cyl

**Engine**

**Dimensions:**

Bore: 3.3 in / 84.00 mm  
Stroke: 3.9 in / 100.00 mm  
Displacement: 134 in3/ 2.216 Lt

Please see page 448 for a complete list of equipment models.



**1) Engine O/H Kit**

- › BOK538 Std.
- › BOK539 0.50

**2) Basic Engine Kit**

- › BBK538 Std.
- › BBK539 0.50
- › Spec Sheet - 3024C



**1) Front Seal**

- › B154-1675

**2) Rear Seal**

- › B154-0178

**3) Crankshaft**

- › B308-1852

**4) Crankshaft Gear**

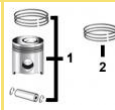
- › B308-1853

**5) Key, Crank Gear**

- › B153-5518

**6) Flywheel Ring Gear**

- › B154-2405 126T



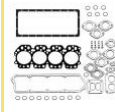
**1) Piston & Ring Kit**

- › B270-6968 Std.
- › B270-6968B 0.50

**4 Per Engine**

**2) Ring Set**

- › B270-6970 Std.
- › B270-6970B 0.50



**1) O/H Gasket Set**

- › B3024TOG

**2) Cylinder HD Gsk**

- › B311-1685

**3) Seal Rocker**

- › B217-2752

**4) Seal, Cyl HD Cov**

- › B233-0695

**5) Oil Pan Gasket**

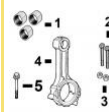
- › B215-2605



**Main Bearing Set**

- › B154-1203 Std.
- › B161-7163 0.010
- › B161-7164 0.020

**Set of 4 Pairs**



**1) Bush, Con Rod**

- › B154-0869 x4

**2) Bolt, Con Rod**

- › B154-0870 x8

**3) Nut, Con Rod**

- › B154-0871 x8

**4) Connecting Rod**

- › B154-0867

**5) Head Bolt**

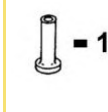
- › B156-6988 x14
- › B156-6989 x4



**Con Rod Bearing Set**

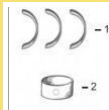
- › B146-7808 Std.
- › B307-9855 0.010
- › B307-9856 0.020

**Set of 4 Pairs**



**1) Tappet**

- › B154-1249



**1) Thrust Washer**

- › B154-1230/31 Std.

**Set of 3 Pcs**

**2) Crank Bushing**

- › B294-4916 Std.
- › B302-4181 0.010
- › B302-4182 0.020

**Valve Train Kit**

- › BVTK558

**1) Valve, Intake**

- › B154-0888 x4

**2) Valve, Exhaust**

- › B154-0889 x4

**3) Spring, Valve**

- › B153-5558 x8

**4) Retainer, Valve Spring**

- › B153-5557 x8

**5) Lock, Valve**

- › B153-5556 x16

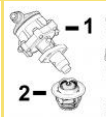


**1) Oil Pump**

- › B297-3050

**2) Oil Cooler**

- › B245-1361



**1) Lift Pump**

- › B176-7712

**2) Thermostat**

- › B251-7660

**3) Atomiser**

- › B252-1446

**4) Fuel Water Separator**

- › B276-1804



**1) Water Pump**

- › B311-0053

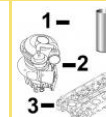
**2) Gasket, W Pump**

- › B303-0307



**1) Glowplug**

- › B172-4585 x4



**Repair Sleeve**

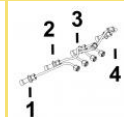
- › 1) 84RS

**2) Turbocharger**

- › B238-9349

**3) Cylinder Head**

- › B236-5127UF



**Fuel Lines**

- › 1) B217-2760
- › 2) B217-2761
- › 3) B217-2762
- › 4) B217-2763

**(1):** Do not use in applications that require a Crankshaft Driven Balancer Unit. The new style front gear is P/N B308-1853,(.887" or 22.5mm Wide) and the key way P/N B153-5518, must be used.  
**(3):** Check application for proper usage.

**(2):** Not included in valve train kit.

**(4):** Does not include Crankshaft Oil Seals


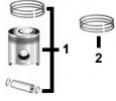



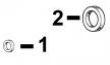
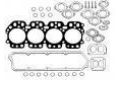





**Engine Model:**  
3034C

**Engine Data:**  
NATURALLY ASPIRATED  
DIRECT INJECTION

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 97.00 mm Stroke: 100.00 mm

Please see page 449 for a complete list of equipment models.

|   |  |  |  |   |
|---|--|--|--|---|
|  <p><b>Basic Engine Kit</b><br/>         , BBK3034 Std.<br/>         , BBK3035 0.50</p>   |  <p><b>1) Piston &amp; Ring Kit</b><br/>         , B212-3677 Std.<br/>         , B212-3678 0.50<br/> <b>4 Per Engine</b><br/> <b>2) Ring Set</b><br/>         , B153-1029 Std.<br/>         , B171-4662 0.50</p>                        |  <p><b>Main Bearing Set</b><br/>         , B152-6791 Std.<br/>         , B152-6792 .25<br/>         , B152-6793 .50<br/>         , B152-6794 .75<br/> <b>Set of 5 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b><br/>         , B173-1272 Std.<br/>         , B173-1273 .25<br/>         , B173-1274 .50<br/>         , B173-1275 .75<br/> <b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer</b><br/>         , B152-6799<br/> <b>Set of 2 Pcs</b></p> |
|  <p><b>1) Front Seal</b><br/>         , B152-6739<br/> <b>2) Rear Seal</b><br/>         , B152-6556</p>   |  <p><b>1) Head Gasket Set</b><br/>         , B153-1217<br/> <b>2) Lower Gasket Set</b><br/>         , B173-1339<br/> <b>3) Cylinder Head Gasket</b><br/>         , B152-9864<br/> <b>4) Oil Pan Gasket</b><br/>         , B202-0920</p> |  <p><b>1) Bush, Con Rod</b><br/>         , B188-8543 x4<br/> <b>2) Connecting Rod</b><br/>         , B201-9885 (2)<br/> <b>3) Rod Capscrew</b><br/>         , B201-9887 (2)</p> |  <p><b>1) Tappet</b><br/>         , B176-0633 x8</p>  |   |
| <p><b>Valve Train</b></p>   | <p><b>1) Valve, Intake</b><br/>         , B188-8640 x4<br/> <b>2) Valve, Exhaust</b><br/>         , B152-9857 x4</p>   | <p><b>3) Guide, Valve</b><br/>         , B188-8633 x8<br/> <b>4) Spring, Valve</b><br/>         , B152-9858 x8</p>   | <p><b>5) Lock, Valve</b><br/>         , B152-9860 x16<br/> <b>6) Seal, Valve</b><br/>         , B192-6335 x8</p>   |   |
|  <p><b>1) Oil Pump</b><br/>         , B173-0141<br/> <b>2) Oil Cooler</b><br/>         , B245-1361<br/> <b>3) Fuel Transfer Pump</b><br/>         , B153-0488</p> |  <p><b>1) Water Pump</b><br/>         , B153-0164<br/> <b>2) Thermostat</b><br/>         , B251-9336</p>  |  <p><b>Glowplug</b><br/>         , B177-7559 x4</p>   |  |   |

(1): Check application for proper use

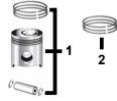
(2): Fractured style rod cap

|                               |                                     |   |                              |  |
|-------------------------------|-------------------------------------|---|------------------------------|--|
| <b>Engine Model:</b><br>3034T | <b>Engine Desc:</b><br>Turbocharged | <b>Engine Data:</b><br>TURBOCHARGED<br>DIRECT INJECTION | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 97.00 mm Stroke:<br>100.00 mm |
|-------------------------------|-------------------------------------|---|------------------------------|--|

|                           |          |                             |     |                   |     |
|---------------------------|----------|-----------------------------|-----|-------------------|-----|
| <b>Engine Arrangement</b> |          | <b>Multi Terrain Loader</b> |     | <b>Skid Steer</b> |     |
| 147-1234                  | 159-9214 | 267                         | 277 | 236               | 252 |
|                           |          | 287                         |     | 246               | 262 |
|                           |          |                             |     | 248               |     |



**Basic Engine Kit**  
 , BBK3036 Std.  
 , BBK3037 0.50



**1) Piston & Ring Kit**  
 , B173-1263 Std.  
 , B173-1263B 0.50  
**4 Per Engine**  
**2) Ring Set**  
 , B153-1029 Std.  
 , B171-4662 0.50



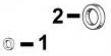
**Main Bearing Set**  
 , B152-6791 Std.  
 , B152-6792 .25  
 , B152-6793 .50  
 , B152-6794 .75  
**Set of 5 Pairs**



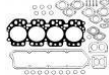
**Con Rod Bearing Set**  
 , B173-1272 Std.  
 , B173-1273 .25  
 , B173-1274 .50  
 , B173-1275 .75  
**Set of 4 Pairs**



**Thrust Washer**  
 , B152-6799  
**Set of 2 Pcs**



**1) Front Seal**  
 , B152-6739  
**2) Rear Seal**  
 , B152-6556



**1) Head Gasket Set**  
 , B173-1340  
**2) Lower Gasket Set**  
 , B173-1339  
**3) Cylinder Head Gasket**  
 , B152-9864  
**4) Oil Pan Gasket**  
 , B202-0920



**1) Bush, Con Rod**  
 , B188-8543 x4  
**2) Connecting Rod**  
 , B201-9885 (2)  
**3) Rod Capscrew**  
 , B201-9887 (2)



**1) Tappet**  
 , B176-0633 x8

**Valve Train**

**1) Valve, Intake**  
 , B188-8640 x4  
**2) Valve, Exhaust**  
 , B152-9857 x4

**3) Guide, Valve**  
 , B188-8633 x8  
**4) Spring, Valve**  
 , B152-9858 x8

**5) Lock, Valve**  
 , B152-9860 x16  
**6) Seal, Valve**  
 , B192-6335 x8



**1) Oil Pump**  
 , B173-0141  
**2) Oil Cooler**  
 , B245-1361  
**3) Fuel Transfer Pump**  
 , B153-0488



**1) Water Pump**  
 , B173-1282  
**2) Thermostat**  
 , B4W-8063



**Glowplug**  
 , B177-7559 x4

(1): Check application for proper use

(2): Fractured style rod cap

|                               |                             |   |                              |  |
|-------------------------------|-----------------------------|---|------------------------------|--|
| <b>Engine Model:</b><br>3044C | <b>Engine Desc:</b><br>C3.4 | <b>Engine Data:</b><br>INDUSTRIAL ENGINE<br>NATURALLY ASPIRATED<br>INDIRECT INJECTION | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.7 in / 94.00 mm<br>Stroke: 4.72 in / 120.00 mm<br>Piston<br>Compression Height:<br>2.165 in / 55 mm |
|-------------------------------|-----------------------------|---|------------------------------|--|

**3044C Engine Arrangement**

234-2179  
234-2180

234-2181  
235-3964

**C3.4 Engine Arrangement**

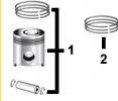
294-4451  
294-4452  
294-4470

455-3146  
459-8929



**Basic Engine Kit**

- › BBK3044 Std.
- › BBK3045 0.50
- › Spec Sheet - 3044C/T



**1) Piston & Ring Kit**

- › B239-8506 Std.
- › B239-8508 0.50

**4 Per Engine**

**2) Ring Set**

- › B226-8204 Std.
- › B238-8281 0.50



**Main Bearing Set**

- › B233-5486 Std.
- › B294-4890 0.010
- › B294-4891 0.020
- › B294-4892 0.030

**Set of 5 Pairs**



**Con Rod Bearing Set**

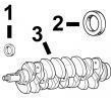
- › B238-8282 Std.
- › B238-8283 0.010
- › B238-8284 0.020
- › B238-8285 0.030

**Set of 4 Pairs**



**Thrust Washer**

- › B103-9288 Std
- Set of 3 Pairs**



**1) Front Seal**

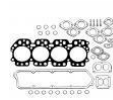
- › B239-8429

**2) Rear Seal**

- › B117-5015

**3) Crankshaft**

- › B234-4794



**1) O/H Gasket Set**

- › B3044COG

**2) Cyl Head Gasket**

- › B330-4867

**3) Valve Cover Gasket**

- › B233-5483

**4) Oil Pan Gasket**

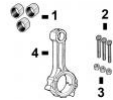
- › B393-4171
- › B3044OPG

1

1

2

2



**1) Bush, Con Rod**

- › B128-2958 x4

**2) Bolt, Con Rod**

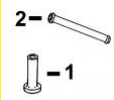
- › B128-2955 x8

**3) Nut, Con Rod**

- › B128-2956 x8

**4) Con Rod Kit**

- › B103-9680



**1) Tappet**

- › B103-9272 x8

**2) Push Rod**

- › B103-9273 x8

**Valve Train**

**1) Valve, Intake**

- › B233-5469 x4

**2) Valve, Exhaust**

- › B233-5470 x4

**3) Guide, Valve**

- › B103-9247 x8

**4) Spring, Valve**

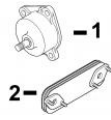
- › B103-2782 x8

**5) Lock, Valve**

- › B51-7719 x16

**6) Seal, Valve**

- › B103-9260 x8



**1) Oil Pump**

- › B315-4678

**2) Oil Cooler**

- › B239-8512



**1) Water Pump**

- ›

**2) Thermostat**

- › B235-4960



**Glowplug**

- › B371-6702 x4



**Fuel Pump**

- › B232-5877

1

(1): Check application for proper use.

(2): For gaskets made of silicone, use B393-4171. For gaskets made of paper gasket material, use B3044OPG.

**Engine Model:**  
3044CT


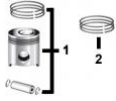



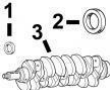
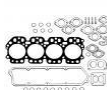
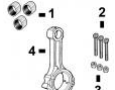
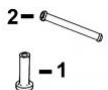
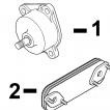




**Engine Desc:**  
INDUSTRIAL ENGINE

**Engine Data:**  
TURBOCHARGED  
DIRECT INJECTION

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.7 in / 94.00 mm  
Stroke: 4.72 in / 120.00 mm

Please see page 450 for a complete list of equipment models.

|   |  |   |   |  |
|---|--|---|---|--|
|  <p><b>Basic Engine Kit</b></p> <ul style="list-style-type: none"> <li>› BBK3047 Std.</li> <li>› BBK3048 0.50</li> <li>› Spec Sheet - 3044C/T</li> </ul>  |  <p><b>1) Piston &amp; Ring Kit</b></p> <ul style="list-style-type: none"> <li>› B234-4814 Std.</li> <li>› B234-4816 0.50</li> </ul> <p><b>4 Per Engine</b></p> <p><b>2) Ring Set</b></p> <ul style="list-style-type: none"> <li>› B226-8204 Std.</li> <li>› B238-8281 0.50</li> </ul>  |  <p><b>Main Bearing Set</b></p> <ul style="list-style-type: none"> <li>› B233-5486 Std.</li> <li>› B294-4890 0.010</li> <li>› B294-4891 0.020</li> <li>› B294-4892 0.030</li> </ul> <p><b>Set of 5 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b></p> <ul style="list-style-type: none"> <li>› B238-8282 Std.</li> <li>› B238-8283 0.010</li> <li>› B238-8284 0.020</li> <li>› B238-8285 0.030</li> </ul> <p><b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer</b></p> <ul style="list-style-type: none"> <li>› B103-9288</li> </ul> <p><b>Set of 3 Pcs</b></p> |
|  <p><b>1) Front Seal</b></p> <ul style="list-style-type: none"> <li>› B239-8429</li> </ul> <p><b>2) Rear Seal</b></p> <ul style="list-style-type: none"> <li>› B117-5015</li> </ul> <p><b>3) Crankshaft</b></p> <ul style="list-style-type: none"> <li>› B234-4794</li> </ul> |  <p><b>1) O/H Gasket Set</b></p> <ul style="list-style-type: none"> <li>› B341-3561</li> </ul> <p><b>2) Cyl Head Gasket</b></p> <ul style="list-style-type: none"> <li>› B382-4468</li> </ul> <p><b>3) Valve Cover Gasket</b></p> <ul style="list-style-type: none"> <li>› B233-5483</li> </ul> <p><b>4) Oil Pan Gasket</b></p> <ul style="list-style-type: none"> <li>› B393-4171</li> <li>› B3044OPG</li> </ul> |  <p><b>1) Bush, Con Rod</b></p> <ul style="list-style-type: none"> <li>› B128-2958 x4</li> </ul> <p><b>2) Bolt, Con Rod</b></p> <ul style="list-style-type: none"> <li>› B128-2955 x8</li> </ul> <p><b>3) Nut, Con Rod</b></p> <ul style="list-style-type: none"> <li>› B128-2956 x8</li> </ul> <p><b>4) Con Rod Kit</b></p> <ul style="list-style-type: none"> <li>› B103-9680</li> </ul> |  <p><b>1) Tappet</b></p> <ul style="list-style-type: none"> <li>› B103-9272 x8</li> </ul> <p><b>2) Push Rod</b></p> <ul style="list-style-type: none"> <li>› B103-9273 x8</li> </ul>                               |  |
| <p><b>Valve Train</b></p>   | <p><b>1) Valve, Intake</b></p> <ul style="list-style-type: none"> <li>› B233-5469 x4</li> </ul> <p><b>2) Valve, Exhaust</b></p> <ul style="list-style-type: none"> <li>› B233-5470 x4</li> </ul>   | <p><b>3) Guide, Valve</b></p> <ul style="list-style-type: none"> <li>› B103-9247 x8</li> </ul> <p><b>4) Spring, Valve</b></p> <ul style="list-style-type: none"> <li>› B103-2782 x8</li> </ul>  | <p><b>5) Lock, Valve</b></p> <ul style="list-style-type: none"> <li>› B51-7719 x16</li> </ul> <p><b>6) Seal, Valve</b></p> <ul style="list-style-type: none"> <li>› B103-9260 x8</li> </ul>   |  |
|  <p><b>1) Oil Pump</b></p> <ul style="list-style-type: none"> <li>› B315-4678</li> </ul> <p><b>2) Oil Cooler</b></p> <ul style="list-style-type: none"> <li>› B234-4803</li> </ul>  |  <p><b>1) Water Pump</b></p> <ul style="list-style-type: none"> <li>› B235-4952</li> <li>› B335-9117</li> </ul> <p><b>2) Thermostat</b></p> <ul style="list-style-type: none"> <li>› B235-4960</li> </ul>   |  <p><b>Glowplug</b></p> <ul style="list-style-type: none"> <li>› B107-3659 x4</li> </ul>   |  <p><b>Fuel Lines</b></p> <ul style="list-style-type: none"> <li>› 1) B239-0719</li> <li>› 2) B239-0720</li> <li>› 3) B239-0721</li> <li>› 4) B239-0722</li> </ul>  |  <p><b>Fuel Pumps</b></p> <ul style="list-style-type: none"> <li>› B232-5877</li> </ul>                             |

(1): Check application for proper use.

(2): Crankshaft seals not included in gasket set. Order separately.

(3): For gaskets made of silicone, use B393-4171. For gaskets made of paper gasket material, use B3044OPG.



**Engine Model:**  
3044C/T


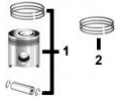



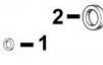
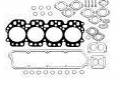


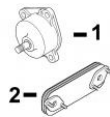




**Engine Desc:**  
C3.4

**Engine Data:**  
INDUSTRIAL ENGINE  
TURBOCHARGED  
DIRECT INJECTION

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.7 in / 94.00 mm  
Stroke: 4.72 in / 120.00 mm

Please see page 451 for a complete list of equipment models.

|   |   |   |  |   |
|---|---|---|--|---|
|  <p><b>Basic Engine Kit</b><br/>                 • BBK3050 Std.<br/>                 • BBK3051 0.50<br/>                 • Spec Sheet - 3044C/T</p> |  <p><b>1) Piston &amp; Ring Kit</b><br/>                 • B314-9959 Std.<br/>                 • B314-9961 0.50<br/> <b>4 Per Engine</b><br/> <b>2) Ring Set</b><br/>                 • B314-9962 Std.<br/>                 • B314-9963 0.50</p>   |  <p><b>Main Bearing Set</b><br/>                 • B233-5486 Std.<br/>                 • B294-4890 0.010<br/>                 • B294-4891 0.020<br/>                 • B294-4892 0.030<br/> <b>Set of 5 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b><br/>                 • B238-8282 Std.<br/>                 • B238-8283 0.010<br/>                 • B238-8284 0.020<br/>                 • B238-8285 0.030<br/> <b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer</b><br/>                 • B103-9288<br/> <b>Set of 3 Pcs</b></p> |
|  <p><b>1) Front Seal</b><br/>                 • B239-8429<br/> <b>2) Rear Seal</b><br/>                 • B117-5015</p>                             |  <p><b>1) O/H Gasket Set</b><br/>                 • B341-3561 <b>2</b><br/> <b>2) Cyl Head Gasket</b><br/>                 • B382-4468<br/> <b>3) Valve Cover Gasket</b><br/>                 • B233-5483<br/> <b>4) Oil Pan Gasket</b><br/>                 • B393-4171 <b>3</b><br/>                 • B3044OPG <b>3</b></p> |  <p><b>1) Bush, Con Rod</b><br/>                 • B128-2958 x4<br/> <b>2) Bolt, Con Rod</b><br/>                 • B128-2955 x8<br/> <b>3) Nut, Con Rod</b><br/>                 • B128-2956 x8<br/> <b>4) Con Rod Kit</b><br/>                 • B103-9680</p> |  <p><b>1) Tappet</b><br/>                 • B103-9272 x8<br/> <b>2) Push Rod</b><br/>                 • B103-9273 x8</p>  |   |
| <p><b>Valve Train</b></p>   | <p><b>1) Valve, Intake</b><br/>                 • B233-5469 x4<br/> <b>2) Valve, Exhaust</b><br/>                 • B233-5470 x4</p>  | <p><b>3) Guide, Valve</b><br/>                 • B103-9247 x8<br/> <b>4) Spring, Valve</b><br/>                 • B103-2782 x8</p>  | <p><b>5) Lock, Valve</b><br/>                 • B51-7719 x16<br/> <b>6) Seal, Valve</b><br/>                 • B103-9260 x8</p>  |   |
|  <p><b>1) Oil Pump</b><br/>                 • B315-4678<br/> <b>2) Oil Cooler</b><br/>                 • B234-4803</p>                            |  <p><b>1) Water Pump</b><br/>                 • B335-9117 <b>1</b><br/> <b>2) Thermostat</b><br/>                 • B235-4960</p>  |  <p><b>Glowplug</b><br/>                 • B107-3659 x4</p>  |  <p><b>Fuel Lines</b><br/>                 • 1) B239-0719<br/>                 • 2) B239-0720<br/>                 • 3) B239-0721<br/>                 • 4) B239-0722</p>  |  <p><b>Fuel Pump</b><br/>                 • B232-5877 <b>1</b></p>                   |

(1): Check application for proper use

(2): Crankshaft seals not included in gasket set. Order separately.

(3): For gaskets made of silicone, use B393-4171. For gaskets made of paper gasket material, use B3044OPG.

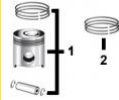
|                                 |                             |  |                              |   |
|---------------------------------|-----------------------------|--|------------------------------|---|
| <b>Engine Model:</b><br>3044C/T | <b>Engine Desc:</b><br>C3.4 | <b>Engine Data:</b><br>INDUSTRIAL ENGINE<br>TURBOCHARGED<br>DIRECT INJECTION | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.7 in / 94.00 mm<br>Stroke: 4.72 in / 120.00 mm |
|---------------------------------|-----------------------------|--|------------------------------|---|

|                       |   |  |  |                                   |
|-----------------------|---|--|--|-----------------------------------|
| <b>ESN</b><br>CYM1-UP | <b>Engine Arrangement</b><br>287-8073 332-8660<br>300-6603 342-1219<br>305-2571 | <b>Compact Track Loaders</b><br>259B3 279C2<br>289C2 | <b>Skid Steer</b><br>236B2 246C<br>236B3 252B<br>242B3 252B2 | <b>Wheel Loaders</b><br>906H 907H |
|-----------------------|---|--|--|-----------------------------------|



**Basic Engine Kit**

- BBK3069 Std.
- BBK3071 0.50
- Spec Sheet - 3044C/T



**1) Piston & Ring Kit**

- B315-4669 Std.
- B315-4671 0.50

**4 Per Engine**

**2) Ring Set**

- B314-9962 Std.
- B314-9963 0.50



**Main Bearing Set**

- B233-5486 Std.
- B294-4890 0.010
- B294-4891 0.020
- B294-4892 0.030

**Set of 5 Pairs**



**Con Rod Bearing Set**

- B238-8282 Std.
- B238-8283 0.010
- B238-8284 0.020
- B238-8285 0.030

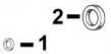
**Set of 4 Pairs**



**Thrust Washer**

- B103-9288

**Set of 3 Pcs**

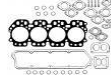


**1) Front Seal**

- B239-8429

**2) Rear Seal**

- B117-5015



**1) O/H Gasket Set**

- B341-3561

**2) Cyl Head Gasket**

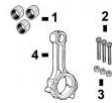
- B382-4468

**3) Valve Cover Gasket**

- B233-5483

**4) Oil Pan Gasket**

- B393-4171
- B3044OPG



**1) Bush, Con Rod**

- B128-2958 x4

**2) Bolt, Con Rod**

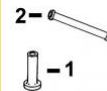
- B128-2955 x8

**3) Nut, Con Rod**

- B128-2956 x8

**4) Con Rod Kit**

- B103-9680



**1) Tappet**

- B103-9272 x8

**2) Push Rod**

- B103-9273 x8

**Valve Train**

**1) Valve, Intake**

- B233-5469 x4

**2) Valve, Exhaust**

- B233-5470 x4

**3) Guide, Valve**

- B103-9247 x8

**4) Spring, Valve**

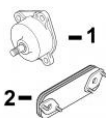
- B103-2782 x8

**5) Lock, Valve**

- B51-7719 x16

**6) Seal, Valve**

- B103-9260 x8

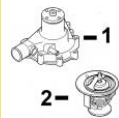


**1) Oil Pump**

- B315-4678

**2) Oil Cooler**

- B234-4803



**1) Thermostat**

- B335-9117

**2) Thermostat**

- B235-4960



**Glowplug**

- B107-3659 x4



**Fuel Lines**

- 1) B239-0719
- 2) B239-0720
- 3) B239-0721
- 4) B239-0722



**Fuel Pump**

- B232-5877

(1): Check application for proper use  
 (3): For gaskets made of silicone, use B393-4171. For gaskets made of paper gasket material, use B3044OPG.

(2): Crankshaft seals not included in gasket set. Order separately.

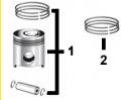
|                                 |                             |  |                              |   |
|---------------------------------|-----------------------------|--|------------------------------|---|
| <b>Engine Model:</b><br>3044C/T | <b>Engine Desc:</b><br>C3.4 | <b>Engine Data:</b><br>INDUSTRIAL ENGINE<br>TURBOCHARGED<br>DIRECT INJECTION | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.7 in / 94.00 mm<br>Stroke: 4.72 in / 120.00 mm |
|---------------------------------|-----------------------------|--|------------------------------|---|

|                                  |   |                                      |                           |                              |
|----------------------------------|---|--------------------------------------|---------------------------|------------------------------|
| <b>ESN</b><br>CJS1-UP    CYM1-UP | <b>Engine Arrangement</b><br>287-8075    319-6807 | <b>Compact Track Loaders</b><br>299C | <b>Skid Steer</b><br>272C | <b>Wheel Loaders</b><br>297C |
|----------------------------------|---|--------------------------------------|---------------------------|------------------------------|



**Basic Engine Kit**

- BBK2335 Std.
- BBK2339 0.50
- Spec Sheet - 3044C/T



**1) Piston & Ring Kit**

- B315-2335 Std.
- B315-2339 0.50

**4 Per Engine**

**2) Ring Set**

- B314-9962 Std.
- B314-9963 0.50



**Main Bearing Set**

- B233-5486 Std.
- B294-4890 0.010
- B294-4891 0.020
- B294-4892 0.030

**Set of 5 Pairs**



**Con Rod Bearing Set**

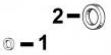
- B238-8282 Std.
- B238-8283 0.010
- B238-8284 0.020
- B238-8285 0.030

**Set of 4 Pairs**



**Thrust Washer**

- B103-9288
- Set of 3 Pcs**

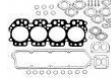


**1) Front Seal**

- B239-8429

**2) Rear Seal**

- B117-5015



**1) O/H Gasket Set**

- B341-3561

**2) Cyl Head Gasket**

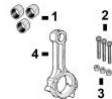
- B382-4468

**3) Valve Cover Gasket**

- B233-5483

**4) Oil Pan Gasket**

- B393-4171
- B3044OPG



**1) Bush, Con Rod**

- B128-2958 x4

**2) Bolt, Con Rod**

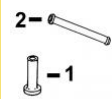
- B128-2955 x8

**3) Nut, Con Rod**

- B128-2956 x8

**4) Con Rod Kit**

- B103-9680



**1) Tappet**

- B103-9272 x8

**2) Push Rod**

- B103-9273 x8

**Valve Train**

**1) Valve, Intake**

- B233-5469 x4

**2) Valve, Exhaust**

- B233-5470 x4

**3) Guide, Valve**

- B103-9247 x8

**4) Spring, Valve**

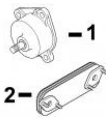
- B103-2782 x8

**5) Lock, Valve**

- B51-7719 x16

**6) Seal, Valve**

- B103-9260 x8



**1) Oil Pump**

- B315-4678

**2) Oil Cooler**

- B234-4803



**1) Water Pump**

- B335-9117

**2) Thermostat**

- B235-4960



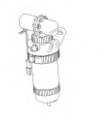
**Glowplug**

- B107-3659 x4



**Fuel Lines**

- 1) B239-0719
- 2) B239-0720
- 3) B239-0721
- 4) B239-0722



**Fuel Pump**

- B232-5877

(1): Check application for proper use

(2): Crankshaft seals not included in gasket set. Order separately.

(3): For gaskets made of silicone, use B393-4171. For gaskets made of paper gasket material, use B3044OPG.

**Engine Model:**  
3046


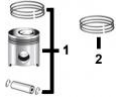



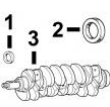

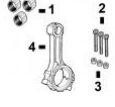
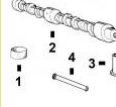


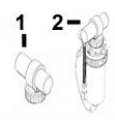


**Engine Desc:**  
NATURALLY ASPIRATED

**Engine Data:**  
DIRECT INJECTION

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 3.7 in / 94.00 mm  
Stroke: 4.72 in / 120.00 mm

Please see page 452 for a complete list of equipment models.

|   |   |  |   |  |
|---|---|--|---|--|
|  <p><b>Basic Engine Kit</b></p> <ul style="list-style-type: none"> <li>› BBK3053 Std.</li> <li>› BBK3054 0.50</li> </ul>  |  <p><b>1) Piston &amp; Ring Kit</b></p> <ul style="list-style-type: none"> <li>› B107-8366 Std.</li> <li>› B107-8256 0.50</li> </ul> <p><b>6 Per Engine</b></p> <p><b>2) Ring Set</b></p> <ul style="list-style-type: none"> <li>› B103-2857 Std.</li> <li>› B103-2859 0.50</li> </ul>   |  <p><b>Main Bearing Set</b></p> <ul style="list-style-type: none"> <li>› B107-0991 Std.</li> <li>› B114-5609 0.010</li> <li>› B114-5610 0.020</li> <li>› B114-5611 0.030</li> </ul> <p><b>Set of 7 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b></p> <ul style="list-style-type: none"> <li>› B103-9683 Std.</li> <li>› B103-9684 0.010</li> <li>› B103-9685 0.020</li> <li>› B103-9686 0.030</li> </ul> <p><b>Set of 6 Pairs</b></p>   |  <p><b>Thrust Washer</b></p> <ul style="list-style-type: none"> <li>› B103-9288 Std</li> </ul> <p><b>Set of 3 Pairs</b></p> |
|  <p><b>1) Front Seal</b></p> <ul style="list-style-type: none"> <li>› B239-8429</li> </ul> <p><b>2) Rear Seal</b></p> <ul style="list-style-type: none"> <li>› B117-5015</li> <li>› B103-2835</li> </ul> <p><b>3) Crankshaft</b></p> <ul style="list-style-type: none"> <li>› B107-0992F</li> </ul> |  <p><b>1) O/H Gasket Set</b></p> <ul style="list-style-type: none"> <li>› B107-3732</li> </ul> <p><b>2) Cylinder Head Gasket</b></p> <ul style="list-style-type: none"> <li>› B107-0979</li> </ul> <p><b>3) Valve Cover Gasket</b></p> <ul style="list-style-type: none"> <li>› B107-0969</li> </ul> <p><b>4) Oil Pan Gasket</b></p> <ul style="list-style-type: none"> <li>› B200-7937</li> </ul> |  <p><b>1) Bushing, Con Rod</b></p> <ul style="list-style-type: none"> <li>› B128-2958 x6</li> </ul> <p><b>2) Bolt, Con Rod</b></p> <ul style="list-style-type: none"> <li>› B128-2955 x12</li> </ul> <p><b>3) Nut, Con Rod</b></p> <ul style="list-style-type: none"> <li>› B128-2956 x12</li> </ul> <p><b>4) Con Rod Kit</b></p> <ul style="list-style-type: none"> <li>› B103-9680</li> </ul> |  <p><b>1) Bushing, Cam</b></p> <ul style="list-style-type: none"> <li>› B51-8009 x1</li> <li>› B51-7528 x2</li> <li>› B51-7529 x1</li> </ul> <p><b>2) Camshaft</b></p> <ul style="list-style-type: none"> <li>› B107-8369</li> </ul> <p><b>3) Tappet</b></p> <ul style="list-style-type: none"> <li>› B103-9272 x12</li> </ul> <p><b>4) Push Rod</b></p> <ul style="list-style-type: none"> <li>› B103-9273 x12</li> </ul> |  |
| <p><b>Valve Train</b></p>   | <p><b>1) Valve, Intake</b></p> <ul style="list-style-type: none"> <li>› B233-5469 x6</li> </ul> <p><b>2) Valve, Exhaust</b></p> <ul style="list-style-type: none"> <li>› B233-5470 x6</li> </ul>  | <p><b>3) Guide, Valve</b></p> <ul style="list-style-type: none"> <li>› B103-9247 x12</li> </ul> <p><b>4) Spring, Valve</b></p> <ul style="list-style-type: none"> <li>› B103-2782 x12</li> </ul>   | <p><b>5) Lock, Valve</b></p> <ul style="list-style-type: none"> <li>› B51-7719 x24</li> </ul> <p><b>6) Seal, Valve</b></p> <ul style="list-style-type: none"> <li>› B103-9260 x12</li> </ul>  |  |
|  <p><b>1) Oil Pump</b></p> <ul style="list-style-type: none"> <li>› B315-4678</li> </ul> <p><b>2) Oil Cooler</b></p> <ul style="list-style-type: none"> <li>› B107-2167</li> </ul>   |  <p><b>1) Water Pump</b></p> <ul style="list-style-type: none"> <li>› B117-5033</li> </ul> <p><b>2) Thermostat</b></p> <ul style="list-style-type: none"> <li>› B124-4835</li> </ul>   |  <p><b>Fuel Pump</b></p> <ul style="list-style-type: none"> <li>› 1) B228-9129 (2 Pin)</li> <li>› 2) B349-1063 (3 Pin)</li> </ul>   |  <p><b>Repair Sleeve</b></p> <ul style="list-style-type: none"> <li>› B122-7311</li> </ul>  |  <p><b>Glowplug</b></p> <ul style="list-style-type: none"> <li>› B107-3659 x6</li> </ul>                                  |

(1): Oil Pan Gasket not included in O/H Gasket Set; use approved Sealant Gasket or order Oil Pan Gasket B200-7937 separately.

(2): Check application for proper use.

(3): Use on ESN: 5XK1-UP. Not included in Basic Engine Kit. Order separately.

**Engine Model:**  
3046


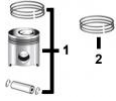



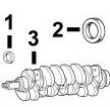

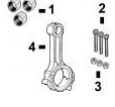
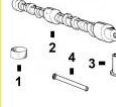


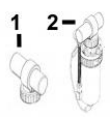


**Engine Desc:**  
NATURALLY ASPIRATED

**Engine Data:**  
DIRECT INJECTION

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore:3.7 in/94.00 mm  
Stroke:4.72 in/120.00 mm

Please see page 453 for a complete list of equipment models.

|   |   |  |   |  |
|---|---|--|---|--|
|  <p><b>Basic Engine Kit</b></p> <ul style="list-style-type: none"> <li>• BBK3056 Std.</li> <li>• BBK3057 0.50</li> </ul>  |  <p><b>1) Piston &amp; Ring Kit</b></p> <ul style="list-style-type: none"> <li>• B128-2952 Std.</li> <li>• B128-2952B 0.50</li> </ul> <p><b>6 Per Engine</b></p> <p><b>2) Ring Set</b></p> <ul style="list-style-type: none"> <li>• B103-2857 Std.</li> <li>• B103-2859 0.50</li> </ul>  |  <p><b>Main Bearing Set</b></p> <ul style="list-style-type: none"> <li>• B107-0991 Std.</li> <li>• B114-5609 0.010</li> <li>• B114-5610 0.020</li> <li>• B114-5611 0.030</li> </ul> <p><b>Set of 7 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b></p> <ul style="list-style-type: none"> <li>• B103-9683 Std.</li> <li>• B103-9684 0.010</li> <li>• B103-9685 0.020</li> <li>• B103-9686 0.030</li> </ul> <p><b>Set of 6 Pairs</b></p>   |  <p><b>Thrust Washer</b></p> <ul style="list-style-type: none"> <li>• B103-9288 Std</li> </ul> <p><b>Set of 3 Pairs</b></p> |
|  <p><b>1) Front Seal</b></p> <ul style="list-style-type: none"> <li>• B239-8429</li> </ul> <p><b>2) Rear Seal</b></p> <ul style="list-style-type: none"> <li>• B117-5015</li> <li>• B103-2835</li> </ul> <p><b>3) Crankshaft</b></p> <ul style="list-style-type: none"> <li>• B107-0992F</li> </ul> |  <p><b>1) O/H Gasket Set</b></p> <ul style="list-style-type: none"> <li>• B107-3732</li> </ul> <p><b>2) Cylinder Head Gasket</b></p> <ul style="list-style-type: none"> <li>• B107-0979</li> </ul> <p><b>3) Valve Cover Gasket</b></p> <ul style="list-style-type: none"> <li>• B107-0969</li> </ul> <p><b>4) Oil Pan Gasket</b></p> <ul style="list-style-type: none"> <li>• B200-7937</li> </ul> |  <p><b>1) Bushing, Con Rod</b></p> <ul style="list-style-type: none"> <li>• B128-2958 x6</li> </ul> <p><b>2) Bolt, Con Rod</b></p> <ul style="list-style-type: none"> <li>• B128-2955 x12</li> </ul> <p><b>3) Nut, Con Rod</b></p> <ul style="list-style-type: none"> <li>• B128-2956 x12</li> </ul> <p><b>4) Con Rod Kit</b></p> <ul style="list-style-type: none"> <li>• B103-9680</li> </ul> |  <p><b>1) Bushing, Cam</b></p> <ul style="list-style-type: none"> <li>• B51-8009 x1</li> <li>• B51-7528 x2</li> <li>• B51-7529 x1</li> </ul> <p><b>2) Camshaft</b></p> <ul style="list-style-type: none"> <li>• B107-8369</li> </ul> <p><b>3) Tappet</b></p> <ul style="list-style-type: none"> <li>• B103-9272 x12</li> </ul> <p><b>4) Push Rod</b></p> <ul style="list-style-type: none"> <li>• B103-9273 x12</li> </ul> |  |
| <p><b>Valve Train</b></p>   | <p><b>1) Valve, Intake</b></p> <ul style="list-style-type: none"> <li>• B233-5469 x6</li> </ul> <p><b>2) Valve, Exhaust</b></p> <ul style="list-style-type: none"> <li>• B233-5470 x6</li> </ul>  | <p><b>3) Guide, Valve</b></p> <ul style="list-style-type: none"> <li>• B103-9247 x12</li> </ul> <p><b>4) Spring, Valve</b></p> <ul style="list-style-type: none"> <li>• B103-2782 x12</li> </ul>   | <p><b>5) Lock, Valve</b></p> <ul style="list-style-type: none"> <li>• B51-7719 x24</li> </ul> <p><b>6) Seal, Valve</b></p> <ul style="list-style-type: none"> <li>• B103-9260 x12</li> </ul>  |  |
|  <p><b>1) Oil Pump</b></p> <ul style="list-style-type: none"> <li>• B315-4678</li> </ul> <p><b>2) Oil Cooler</b></p> <ul style="list-style-type: none"> <li>• B107-2167</li> </ul>   |  <p><b>1) Water Pump</b></p> <ul style="list-style-type: none"> <li>• B117-5033</li> </ul> <p><b>2) Thermostat</b></p> <ul style="list-style-type: none"> <li>• B124-4835</li> </ul>   |  <p><b>Fuel Pump</b></p> <ul style="list-style-type: none"> <li>• 1) B228-9129 (2 Pin)</li> <li>• 2) B349-1063 (3 Pin)</li> </ul>   |  <p><b>Repair Sleeve</b></p> <ul style="list-style-type: none"> <li>• B122-7311</li> </ul>  |  <p><b>Glowplug</b></p> <ul style="list-style-type: none"> <li>• B107-3659 x6</li> </ul>                                  |

(1): Oil Pan Gasket not included in O/H Gasket Set; use approved Sealant Gasket or order Oil Pan Gasket B200-7937 separately. (2): Check application for proper use.  
 (3): Use on ESN: 5XK1-UP. Not included in Basic Engine Kit. Order separately.

**Engine Model:**  
3046


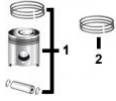



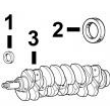

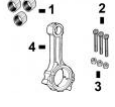
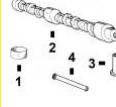


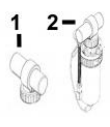
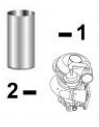

**Engine Desc:**  
TURBOCHARGED

**Engine Data:**  
DIRECT INJECTION

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 3.7 in / 94.00 mm  
Stroke: 4.72 in / 120.00 mm

Please see page 454 for a complete list of equipment models.

|   |   |  |   |  |
|---|---|--|---|--|
|  <p><b>Basic Engine Kit</b></p> <ul style="list-style-type: none"> <li>• BBK3059 Std.</li> <li>• BBK3060 0.50</li> </ul>  |  <p><b>1) Piston &amp; Ring Kit</b></p> <ul style="list-style-type: none"> <li>• B107-0984 Std.</li> <li>• B107-0984B 0.50</li> </ul> <p><b>6 Per Engine</b></p> <p><b>2) Ring Set</b></p> <ul style="list-style-type: none"> <li>• B103-2857 Std.</li> <li>• B103-2859 0.50</li> </ul>  |  <p><b>Main Bearing Set</b></p> <ul style="list-style-type: none"> <li>• B107-0991 Std.</li> <li>• B114-5609 0.010</li> <li>• B114-5610 0.020</li> <li>• B114-5611 0.030</li> </ul> <p><b>Set of 7 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b></p> <ul style="list-style-type: none"> <li>• B103-9683 Std.</li> <li>• B103-9684 0.010</li> <li>• B103-9685 0.020</li> <li>• B103-9686 0.030</li> </ul> <p><b>Set of 6 Pairs</b></p>   |  <p><b>Thrust Washer</b></p> <ul style="list-style-type: none"> <li>• B103-9288 Std</li> </ul> <p><b>Set of 3 Pairs</b></p> |
|  <p><b>1) Front Seal</b></p> <ul style="list-style-type: none"> <li>• B239-8429</li> </ul> <p><b>2) Rear Seal</b></p> <ul style="list-style-type: none"> <li>• B117-5015</li> <li>• B103-2835</li> </ul> <p><b>3) Crankshaft</b></p> <ul style="list-style-type: none"> <li>• B107-0992F</li> </ul> |  <p><b>1) O/H Gasket Set</b></p> <ul style="list-style-type: none"> <li>• B107-3732</li> </ul> <p><b>2) Cylinder Head Gasket</b></p> <ul style="list-style-type: none"> <li>• B107-0979</li> </ul> <p><b>3) Valve Cover Gasket</b></p> <ul style="list-style-type: none"> <li>• B107-0969</li> </ul> <p><b>4) Oil Pan Gasket</b></p> <ul style="list-style-type: none"> <li>• B200-7937</li> </ul> |  <p><b>1) Bushing, Con Rod</b></p> <ul style="list-style-type: none"> <li>• B128-2958 x6</li> </ul> <p><b>2) Bolt, Con Rod</b></p> <ul style="list-style-type: none"> <li>• B128-2955 x12</li> </ul> <p><b>3) Nut, Con Rod</b></p> <ul style="list-style-type: none"> <li>• B128-2956 x12</li> </ul> <p><b>4) Con Rod Kit</b></p> <ul style="list-style-type: none"> <li>• B103-9680</li> </ul> |  <p><b>1) Bushing, Cam</b></p> <ul style="list-style-type: none"> <li>• B51-8009 x1</li> <li>• B51-7528 x2</li> <li>• B51-7529 x1</li> </ul> <p><b>2) Camshaft</b></p> <ul style="list-style-type: none"> <li>• B107-8369</li> </ul> <p><b>3) Tappet</b></p> <ul style="list-style-type: none"> <li>• B103-9272 x12</li> </ul> <p><b>4) Push Rod</b></p> <ul style="list-style-type: none"> <li>• B103-9273 x12</li> </ul> |  |
| <p><b>Valve Train</b></p>   | <p><b>1) Valve, Intake</b></p> <ul style="list-style-type: none"> <li>• B233-5469 x6</li> </ul> <p><b>2) Valve, Exhaust</b></p> <ul style="list-style-type: none"> <li>• B233-5470 x6</li> </ul>  | <p><b>3) Guide, Valve</b></p> <ul style="list-style-type: none"> <li>• B103-9247 x12</li> </ul> <p><b>4) Spring, Valve</b></p> <ul style="list-style-type: none"> <li>• B103-2782 x12</li> </ul>   | <p><b>5) Lock, Valve</b></p> <ul style="list-style-type: none"> <li>• B51-7719 x24</li> </ul> <p><b>6) Seal, Valve</b></p> <ul style="list-style-type: none"> <li>• B103-9260 x12</li> </ul>  |  |
|  <p><b>1) Oil Pump</b></p> <ul style="list-style-type: none"> <li>• B315-4678</li> </ul> <p><b>2) Oil Cooler</b></p> <ul style="list-style-type: none"> <li>• B107-2167</li> </ul>   |  <p><b>1) Water Pump</b></p> <ul style="list-style-type: none"> <li>• B117-5033</li> </ul> <p><b>2) Thermostat</b></p> <ul style="list-style-type: none"> <li>• B124-4835</li> </ul>   |  <p><b>Fuel Pump</b></p> <ul style="list-style-type: none"> <li>• 1) B228-9129 (2 Pin) 2</li> <li>• 2) B349-1063 (3 P 4) 2</li> </ul>   |  <p><b>1) Repair Sleeve</b></p> <ul style="list-style-type: none"> <li>• B122-7311</li> </ul> <p><b>2) Turbocharger</b></p> <ul style="list-style-type: none"> <li>• B117-7867</li> </ul>   |  <p><b>Glowplug</b></p> <ul style="list-style-type: none"> <li>• B107-3659 x6</li> </ul>                                  |

(1): Oil Pan Gasket not included in O/H Gasket Set; use approved Sealant Gasket or order Oil Pan Gasket B200-7937 separately. (2): Check application for proper use.  
 (3): Use on ESN: 5XK1-UP. Not included in Basic Engine Kit. Order separately.

**Engine Model:**  
3046


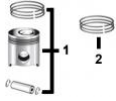



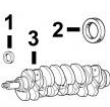

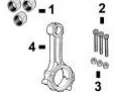
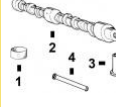


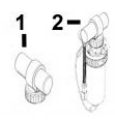
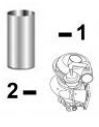

**Engine Desc:**  
TURBOCHARGED

**Engine Data:**  
DIRECT INJECTION

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 3.7 in / 94.00 mm  
Stroke: 4.72 in / 120.00 mm

Please see page 455 for a complete list of equipment models.

|   |   |  |   |  |
|---|---|--|---|--|
|  <p><b>Basic Engine Kit</b></p> <ul style="list-style-type: none"> <li>› BBK3062 Std.</li> <li>› BBK3063 0.50</li> </ul>  |  <p><b>1) Piston &amp; Ring Kit</b></p> <ul style="list-style-type: none"> <li>› B128-3295 Std.</li> <li>› B128-3295B 0.50</li> </ul> <p><b>6 Per Engine</b></p> <p><b>2) Ring Set</b></p> <ul style="list-style-type: none"> <li>› B103-2857 Std.</li> <li>› B103-2859 0.50</li> </ul>  |  <p><b>Main Bearing Set</b></p> <ul style="list-style-type: none"> <li>› B107-0991 Std.</li> <li>› B114-5609 0.010</li> <li>› B114-5610 0.020</li> <li>› B114-5611 0.030</li> </ul> <p><b>Set of 7 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b></p> <ul style="list-style-type: none"> <li>› B103-9683 Std.</li> <li>› B103-9684 0.010</li> <li>› B103-9685 0.020</li> <li>› B103-9686 0.030</li> </ul> <p><b>Set of 6 Pairs</b></p>   |  <p><b>Thrust Washer</b></p> <ul style="list-style-type: none"> <li>› B103-9288 Std</li> </ul> <p><b>Set of 3 Pairs</b></p> |
|  <p><b>1) Front Seal</b></p> <ul style="list-style-type: none"> <li>› B239-8429</li> </ul> <p><b>2) Rear Seal</b></p> <ul style="list-style-type: none"> <li>› B117-5015</li> <li>› B103-2835</li> </ul> <p><b>3) Crankshaft</b></p> <ul style="list-style-type: none"> <li>› B107-0992F</li> </ul> |  <p><b>1) O/H Gasket Set</b></p> <ul style="list-style-type: none"> <li>› B107-3732</li> </ul> <p><b>2) Cylinder Head Gasket</b></p> <ul style="list-style-type: none"> <li>› B107-0979</li> </ul> <p><b>3) Valve Cover Gasket</b></p> <ul style="list-style-type: none"> <li>› B107-0969</li> </ul> <p><b>4) Oil Pan Gasket</b></p> <ul style="list-style-type: none"> <li>› B200-7937</li> </ul> |  <p><b>1) Bushing, Con Rod</b></p> <ul style="list-style-type: none"> <li>› B128-2958 x6</li> </ul> <p><b>2) Bolt, Con Rod</b></p> <ul style="list-style-type: none"> <li>› B128-2955 x12</li> </ul> <p><b>3) Nut, Con Rod</b></p> <ul style="list-style-type: none"> <li>› B128-2956 x12</li> </ul> <p><b>4) Con Rod Kit</b></p> <ul style="list-style-type: none"> <li>› B103-9680</li> </ul> |  <p><b>1) Bushing, Cam</b></p> <ul style="list-style-type: none"> <li>› B51-8009 x1</li> <li>› B51-7528 x2</li> <li>› B51-7529 x1</li> </ul> <p><b>2) Camshaft</b></p> <ul style="list-style-type: none"> <li>› B107-8369</li> </ul> <p><b>3) Tappet</b></p> <ul style="list-style-type: none"> <li>› B103-9272 x12</li> </ul> <p><b>4) Push Rod</b></p> <ul style="list-style-type: none"> <li>› B103-9273 x12</li> </ul> |  |
| <p><b>Valve Train</b></p>   | <p><b>1) Valve, Intake</b></p> <ul style="list-style-type: none"> <li>› B233-5469 x6</li> </ul> <p><b>2) Valve, Exhaust</b></p> <ul style="list-style-type: none"> <li>› B233-5470 x6</li> </ul>  | <p><b>3) Guide, Valve</b></p> <ul style="list-style-type: none"> <li>› B103-9247 x12</li> </ul> <p><b>4) Spring, Valve</b></p> <ul style="list-style-type: none"> <li>› B103-2782 x12</li> </ul>   | <p><b>5) Lock, Valve</b></p> <ul style="list-style-type: none"> <li>› B51-7719 x24</li> </ul> <p><b>6) Seal, Valve</b></p> <ul style="list-style-type: none"> <li>› B103-9260 x12</li> </ul>  |  |
|  <p><b>1) Oil Pump</b></p> <ul style="list-style-type: none"> <li>› B315-4678</li> </ul> <p><b>2) Oil Cooler</b></p> <ul style="list-style-type: none"> <li>› B107-2167</li> </ul>   |  <p><b>1) Water Pump</b></p> <ul style="list-style-type: none"> <li>› B117-5033</li> </ul> <p><b>2) Thermostat</b></p> <ul style="list-style-type: none"> <li>› B124-4835</li> </ul>   |  <p><b>Fuel Pump</b></p> <ul style="list-style-type: none"> <li>› 1) B228-9129 (2 Pin) 2</li> <li>› 2) B349-1063 (3 P 4) 2</li> </ul>   |  <p><b>1) Repair Sleeve</b></p> <ul style="list-style-type: none"> <li>› B122-7311</li> </ul> <p><b>2) Turbocharger</b></p> <ul style="list-style-type: none"> <li>› B117-7867</li> </ul>   |  <p><b>Glowplug</b></p> <ul style="list-style-type: none"> <li>› B107-3659 x6</li> </ul>                                  |

(1): Oil Pan Gasket not included in O/H Gasket Set; use approved Sealant Gasket or order Oil Pan Gasket B200-7937 separately.  
 (2): Check application for proper use.  
 (3): Use on ESN: 5XK15489-UP. Not included in Basic Engine Kit. Order separately.

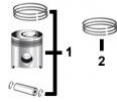
|                              |                                     |   |                              |   |
|------------------------------|-------------------------------------|---|------------------------------|---|
| <b>Engine Model:</b><br>3046 | <b>Engine Desc:</b><br>TURBOCHARGED | <b>Engine Data:</b><br>DIRECT INJECTION | <b>Engine Info:</b><br>6 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.7 in / 94.00 mm<br>Stroke: 4.72 in / 120.00 mm |
|------------------------------|-------------------------------------|---|------------------------------|---|

|                         |             |   |  |  |  |
|-------------------------|-------------|---|--|--|--|
| <b>ESN</b><br>5XK484-UP | 5XK24000-UP | <b>Engine Arrangement</b><br>156-4372 176-1067<br>176-1066 176-7085 |  | <b>Caterpillar</b><br>317B L - Excavators 317B LN - Excavators<br>318B L - Excavators 318B LN - Excavators |  |
|-------------------------|-------------|---|--|--|--|



**Basic Engine Kit**

- BBK3065 Std.
- BBK3066 0.50



**1) Piston & Ring Kit**

- B160-6600 Std.
- B160-6600B 0.50

**6 Per Engine**

**2) Ring Set**

- B103-2857 Std.
- B103-2859 0.50



**Main Bearing Set**

- B107-0991 Std.
- B114-5609 0.010
- B114-5610 0.020
- B114-5611 0.030

**Set of 7 Pairs**



**Con Rod Bearing Set**

- B103-9683 Std.
- B103-9684 0.010
- B103-9685 0.020
- B103-9686 0.030

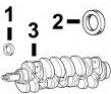
**Set of 6 Pairs**



**Thrust Washer**

- B103-9288 Std

**Set of 3 Pairs**



**1) Front Seal**

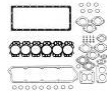
- B239-8429

**2) Rear Seal**

- B117-5015

**3) Crankshaft**

- B107-0992F



**1) O/H Gasket Set**

- B107-3732

**2) Cylinder Head Gasket**

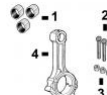
- B107-0979

**3) Valve Cover Gasket**

- B107-0969

**4) Oil Pan Gasket**

- B200-7937



**1) Bushing, Con Rod**

- B128-2958 x6

**2) Bolt, Con Rod**

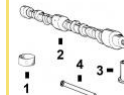
- B128-2955 x12

**3) Nut, Con Rod**

- B128-2956 x12

**4) Con Rod Kit**

- B103-9680



**1) Bushing, Cam**

- B51-8009 x1
- B51-7528 x2
- B51-7529 x1

**2) Camshaft**

- B107-8369

**3) Tappet**

- B103-9272 x12

**4) Push Rod**

- B103-9273 x12

**Valve Train**

**1) Valve, Intake**

- B233-5469 x6

**2) Valve, Exhaust**

- B233-5470 x6

**3) Guide, Valve**

- B103-9247 x12

**4) Spring, Valve**

- B103-2782 x12

**5) Lock, Valve**

- B51-7719 x24

**6) Seal, Valve**

- B103-9260 x12



**1) Oil Pump**

- B315-4678

**2) Oil Cooler**

- B107-2167

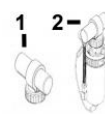


**1) Water Pump**

- B117-5033

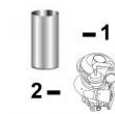
**2) Thermostat**

- B124-4835



**Fuel Pump**

- 1) B228-9129 (2 Pin)
- 2) B349-1063 (3 Pin)



**1) Repair Sleeve**

- B122-7311

**2) Turbocharger**

- B117-7867



**Glowplug**

- B107-3659 x6

(1): Oil Pan Gasket not included in O/H Gasket Set; use approved Sealant Gasket or order Oil Pan Gasket B200-7937 separately. (2): Check application for proper use.



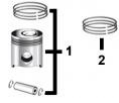
|                              |                                     |   |                              |   |
|------------------------------|-------------------------------------|---|------------------------------|---|
| <b>Engine Model:</b><br>3046 | <b>Engine Desc:</b><br>TURBOCHARGED | <b>Engine Data:</b><br>DIRECT INJECTION | <b>Engine Info:</b><br>6 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.7 in / 94.00 mm<br>Stroke: 4.72 in / 120.00 mm |
|------------------------------|-------------------------------------|---|------------------------------|---|

| Engine Arrangement |          | Tractors |         | Excavators |        |
|--------------------|----------|----------|---------|------------|--------|
| 198-1442           | 211-3012 | D5G XL   | D5G LGP | 315C       | 315C L |
| 213-8544           | 213-8555 | D3G XL   | D3G LGP |            |        |
| 280-6708           | 280-6715 | D4G XL   | D4G LGP |            |        |
| 280-6718           |          |          |         |            |        |



**Basic Engine Kit**

- BBK4284 Std.
- BBK4284B 0.50



**1) Piston & Ring Kit**

- B225-4284 Std.
- B225-4284B 0.50

**6 Per Engine**

**2) Ring Set**

- B226-8204 Std.
- B238-8281 0.50



**Main Bearing Set**

- B107-0991 Std.
- B114-5609 0.010
- B114-5610 0.020
- B114-5611 0.030

**Set of 7 Pairs**



**Con Rod Bearing Set**

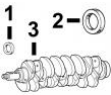
- B103-9683 Std.
- B103-9684 0.010
- B103-9685 0.020
- B103-9686 0.030

**Set of 6 Pairs**



**Thrust Washer**

- B103-9288 Std
- Set of 3 Pairs**



**1) Front Seal**

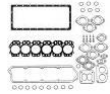
- B239-8429

**2) Rear Seal**

- B117-5015
- B103-2835

**3) Crankshaft**

- B107-0992F



**1) O/H Gasket Set**

- B107-3732

**2) Cylinder Head Gasket**

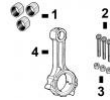
- B107-0979

**3) Valve Cover Gasket**

- B107-0969

**4) Oil Pan Gasket**

- B200-7937



**1) Bushing, Con Rod**

- B128-2958 x6

**2) Bolt, Con Rod**

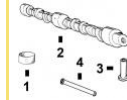
- B128-2955 x12

**3) Nut, Con Rod**

- B128-2956 x12

**4) Con Rod Kit**

- B103-9680



**1) Bushing, Cam**

- B51-8009 x1
- B51-7528 x2
- B51-7529 x1

**2) Camshaft**

- B107-8369

**3) Tappet**

- B103-9272 x12

**4) Push Rod**

- B103-9273 x12

**Valve Train**

**1) Valve, Intake**

- B233-5469 x6

**2) Valve, Exhaust**

- B233-5470 x6

**3) Guide, Valve**

- B103-9247 x12

**4) Spring, Valve**

- B103-2782 x12

**5) Lock, Valve**

- B51-7719 x24

**6) Seal, Valve**

- B103-9260 x12



**1) Oil Pump**

- B315-4678

**2) Oil Cooler**

- B107-2167

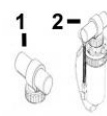


**1) Water Pump**

- B117-5033

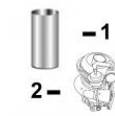
**2) Thermostat**

- B124-4835



**Fuel Pump**

- 1) B228-9129 (2 Pin) 2
- 2) B349-1063 (3 P. 4) 2



**1) Repair Sleeve**

- B122-7311

**2) Turbocharger**






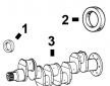


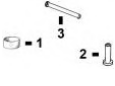
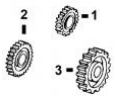
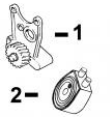
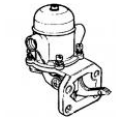

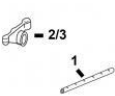

- B117-7867



**Glowplug**

- B107-3659 x6

(1): Oil Pan Gasket not included in O/H Gasket Set; use approved Sealant Gasket or order Oil Pan Gasket B200-7937 separately.  
 (2): Check application for proper use.  
 (3): Use on ESN: 5XK15489-UP. Not included in Basic Engine Kit. Order separately.

| Engine Model:  | Engine Desc:   | Engine Data:  | Engine Info:  | Engine Dimensions:   |
|--|--|---|---|--|
| 3054   | NATURALLY ASPIRATED  | 416 BACKHOES<br>426 BACKHOES  | 4 Cyl   | Bore: 3.877 in / 98.476 mm   |
| Model 416  | Model 426  | Backhoe Loaders   | Caterpillar   | Engine Arrangement   |
| ESN -<br>5PC1-UP   | ESN -<br>7BC1-UP   | 416      426<br>416C  | 554 -<br>Forwarder  | 2W-9777    2W-9778<br>7C-6074  |
|  <p><b>1) Engine O/H Kit</b><br/>• BOK500</p> <p><b>2) Basic Engine Kit</b><br/>• BBK500</p>   |  <p><b>Piston-Liner Kit</b><br/>• BCK819</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>• a) B4W-5819</li> <li>• b) B7W-7732</li> <li>• c) B7C-3182</li> </ul> <p><b>4 Per Engine</b></p>                               |  <p><b>Main Bearing Set</b></p> <ul style="list-style-type: none"> <li>• B067-6869 <i>Std.</i></li> <li>• B033-2379 <i>0.010</i></li> <li>• B033-2380 <i>0.020</i></li> <li>• B033-2381 <i>0.030</i></li> </ul> <p><b>Set of 5 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b></p> <ul style="list-style-type: none"> <li>• B4P-9944 <i>Std.</i></li> <li>• B4P-9945 <i>0.010</i></li> <li>• B4P-9946 <i>0.020</i></li> <li>• B4P-9947 <i>0.030</i></li> </ul> <p><b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer Set</b></p> <ul style="list-style-type: none"> <li>• B032-9090/91 <i>Std.</i></li> <li>• B067-6873/74 <i>0.007</i></li> </ul> <p><b>Set of 2 Pairs</b></p> |
|  <p><b>1) Front Seal</b><br/>• B4W-5359</p> <p><b>2) Rear Seal</b><br/>• B4W-5360</p> <p><b>3) Crankshaft Kit</b><br/>• B7C-8214</p> |  <p><b>1) Top Gasket Set</b><br/>• B4P-7577</p> <p><b>2) Bottom Gasket Set</b><br/>• B7C-3801</p> <p><b>3) Valve Cover Gsk</b><br/>• B4P-3676</p> <p><b>4) Head Gasket</b><br/>• B7C-3803</p> <p><b>5) Oil Pan Gasket</b><br/>• B032-9946</p> |  <p><b>1) Bush, Con Rod</b><br/>• B067-6158 <i>x4</i></p> <p><b>2) Bolt, Con Rod</b><br/>• B067-6883 <i>x8</i></p> <p><b>3) Nut, Con Rod</b><br/>• B7W-2505 <i>x8</i></p> <p><b>4) Con Rod</b><br/>• B067-6879</p>                           |  <p><b>1) Bushing, Cam</b><br/>• B036-5802 <i>x1</i></p> <p><b>2) Tappet</b><br/>• B138-2053</p> <p><b>3) Pushrod</b><br/>• B067-6095</p>   |  <p><b>1) Crankshaft Gear</b><br/>• B067-9579</p> <p><b>2) Camshaft Gear</b><br/>• B7C-3187</p> <p><b>3) Idler Gear</b><br/>• B2W-1529</p>                                      |
| <p><b>Valve Train Kit</b><br/>• BVTK550</p>  | <p><b>1) Valve, Intake</b><br/>• B2W-6988 <i>x4</i></p> <p><b>2) Valve, Exhaust</b><br/>• B7W-2522 <i>x4</i></p>   | <p><b>3) Guide, Valve</b></p> <p><b>a) Intake</b></p> <p><b>b) Exhaust</b></p> <ul style="list-style-type: none"> <li>• 3a) B160-5436 <i>x4</i></li> <li>• 3b) B160-5438 <i>x4</i></li> </ul>   | <p><b>4) Spring, Valve</b></p> <p><b>a) Inner</b></p> <p><b>b) Outer</b></p> <ul style="list-style-type: none"> <li>• 4a) B067-6053 <i>x8</i></li> <li>• 4b) B067-6052 <i>x8</i></li> </ul>   | <p><b>5) Lock, Valve</b><br/>• B067-6834 <i>x16</i></p> <p><b>6) Seal, Valve</b><br/>• B1W-5849 <i>x8</i></p>  |
|  <p><b>1) Oil Pump</b><br/>• B067-6925</p> <p><b>2) Oil Cooler</b><br/>• B7E-5584<br/>• B245-1361</p>                              |  <p><b>Lift Pump</b><br/>• B7C-2798</p>   |  <p><b>1) Water Pump</b><br/>• B7E-9195</p> <p><b>2) Thermostat</b><br/>• B4W-8063</p>   |  <p><b>1) Rocker Shaft</b><br/>• B032-9007</p> <p><b>2) Rocker Arm LH</b><br/>• B150-1217</p> <p><b>3) Rocker Arm RH</b><br/>• B150-1218</p>  |  <p><b>1) Cylinder Head</b><br/>• B7C-3188</p> <p><b>2) Heater Plug</b><br/>• B035-8059</p>   |

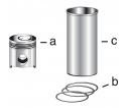
(1): Flanged Fully Finished Liner. Semi Finished Liner available B7C-3182UF.

|                               |                                     |   |                              |   |
|-------------------------------|-------------------------------------|---|------------------------------|---|
| <b>Engine Model:</b><br>3054T | <b>Engine Desc:</b><br>TURBOCHARGED | <b>Engine Data:</b><br>416 BACKHOES<br>426 BACKHOES | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.877 in / 98.476 mm |
|-------------------------------|-------------------------------------|---|------------------------------|---|

|                                   |                                   |   |  |
|-----------------------------------|-----------------------------------|---|--|
| <b>Model 416</b><br>ESN - 5PC1-UP | <b>Model 426</b><br>ESN - 7BC1-UP | <b>Engine Arrangement</b><br>7W-8998    7C-6076 | <b>Backhoe Loaders</b><br>416    426<br>426C    436C |
|-----------------------------------|-----------------------------------|---|--|



- 1) **Engine O/H Kit**  
• BOK501
- 2) **Basic Engine Kit**  
• BBK501



- Piston-Liner Kit**  
• BCK107
- Consist of:**
  - a) B116-6107
  - b) B7W-2513
  - c) B7C-3182
- 4 Per Engine**



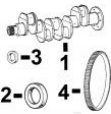
- Main Bearing Set**
  - B067-6869 *Std.*
  - B033-2379 *0.010*
  - B033-2380 *0.020*
  - B033-2381 *0.030*
- Set of 5 Pairs**



- Con Rod Bearing Set**
  - B4P-9944 *Std.*
  - B4P-9945 *0.010*
  - B4P-9946 *0.020*
  - B4P-9947 *0.030*
- Set of 4 Pairs**



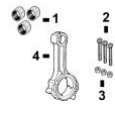
- Thrust Washer Set**
  - B032-9090/91 *Std.*
  - B067-6873/74 *0.007*
- Set of 2 Pairs**



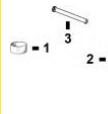
- 1) **Front Seal**  
• B4W-5359
- 2) **Rear Seal**  
• B4W-5360
- 3) **Crankshaft Kit**  
• B7C-8214
- 4) **Ring Gear**  
• B186-2374 *122T*



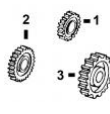
- 1) **Top Gasket Set**  
• BTG-0236
- 2) **Bottom Gasket Set**  
• B7C-3801
- 3) **Valve Cover Gsk**  
• B4P-3676
- 4) **Head Gasket**  
• BCH-0236
- 5) **Oil Pan Gasket**  
• B032-9946



- 1) **Bush, Con Rod**  
• B7W-2510 *x4*
- 2) **Bolt, Con Rod**  
• B067-6883 *x8*
- 3) **Nut, Con Rod**  
• B7W-2505 *x8*
- 4) **Con Rod**  
• B7W-2514



- 1) **Bushing, Cam**  
• B036-5802 *x1*
- 2) **Tappet**  
• B138-2053
- 3) **Pushrod**  
• B067-6095



- 1) **Crankshaft Gear**  
• B067-9579
- 2) **Camshaft Gear**  
• B7C-3187
- 3) **Idler Gear**  
• B2W-1529

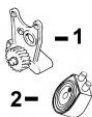
- Valve Train Kit**  
• BVTK550

- 1) **Valve, Intake**  
• B2W-6988 *x4*
- 2) **Valve, Exhaust**  
• B7W-2522 *x4*

- 3) **Guide, Valve**
  - a) **Intake**
  - b) **Exhaust**
- 3a) B160-5436 *x4*
- 3b) B160-5438 *x4*

- 4) **Spring, Valve**
  - a) **Inner**
  - b) **Outer**
- 4a) B067-6053 *x8*
- 4b) B067-6052 *x8*

- 5) **Lock, Valve**  
• B067-6834 *x16*
- 6) **Seal, Valve**  
• B1W-5849 *x8*



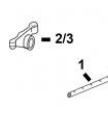
- 1) **Oil Pump**  
• B067-6925
- 2) **Oil Cooler**  
• B7E-5584



- Lift Pump**  
• B7C-2798



- 1) **Water Pump**  
• B7E-9195
- 2) **Thermostat**  
• B4W-8063



- 1) **Rocker Shaft**  
• B032-9007
- 2) **Rocker Arm LH**  
• B150-1217
- 3) **Rocker Arm RH**  
• B150-1218






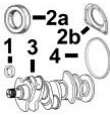


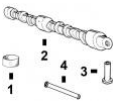
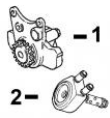


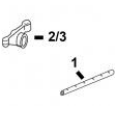



- 1) **Cylinder Head**  
• B7C-3188
- 2) **Heater Plug**  
• B035-8059

(1): Flanged Fully Finished Liner. Semi Finished Liner available B7C-3182UF.

|                              |  |  |                              |   |
|------------------------------|--|--|------------------------------|---|
| <b>Engine Model:</b><br>3054 | <b>Engine Desc:</b><br>NATURALLY ASPIRATED | <b>Engine Data:</b><br>INDUSTRIAL ENGINE | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.937 in / 100.00 mm |
|------------------------------|--|--|------------------------------|---|

Please see page 456 for a complete list of equipment models.

|   |   |  |   |   |
|---|---|--|---|---|
|  <p><b>1) Engine O/H Kit</b><br/>         , BOK502</p> <p><b>2) Basic Engine Kit</b><br/>         , BBK502</p>  |  <p><b>Piston-Liner Kit</b><br/>         , BCK264</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>, a) B135-0264</li> <li>, b) B146-1780</li> <li>, c) B6I-0164</li> </ul> <p><b>4 Per Engine</b></p>   |  <p><b>Main Bearing Set</b><br/>         , B067-6869 Std.<br/>         , B033-2379 0.010<br/>         , B033-2380 0.020<br/>         , B033-2381 0.030</p> <p><b>Set of 5 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>         , B4P-9944 Std.<br/>         , B4P-9945 0.010<br/>         , B4P-9946 0.020<br/>         , B4P-9947 0.030</p> <p><b>Set of 4 Pairs</b></p>                            |  <p><b>Thrust Washer Set</b><br/>         , B032-9090/91 Std.<br/>         , B067-6873/74 0.007</p> <p><b>Set of 2 Pairs</b></p> |
|  <p><b>1) Front Seal</b><br/>         , B4W-5359</p> <p><b>2a) Rear Seal</b><br/>         , B4W-5360</p> <p><b>2b) Rear Seal</b><br/>         , B209-9218</p> <p><b>3) Crankshaft Kit</b><br/>         , B7C-8214</p> <p><b>4) Ring Gear</b><br/>         , B7W-6247 115T<br/>         , B033-7687 126T</p> |  <p><b>1) Top Gasket Set</b><br/>         , B177-3310</p> <p><b>2) Bottom Gasket Set</b><br/>         , B173-9716</p> <p><b>3) Valve Cover Gsk</b><br/>         , B126-6671</p> <p><b>4) Head Gasket</b><br/>         , B160-0161</p> <p><b>5) Oil Pan Gasket</b><br/>         , B032-9946</p> |  <p><b>1) Bush, Con Rod</b><br/>         , B067-6158 x4</p> <p><b>2) Bolt, Con Rod</b><br/>         , B067-6883 x8</p> <p><b>3) Nut, Con Rod</b><br/>         , B7W-2505 x8</p> <p><b>4) Con Rod</b><br/>         , B067-6879</p> |  <p><b>1) Bushing, Cam</b><br/>         , B036-5802 x1</p> <p><b>2) Camshaft</b><br/>         , B132-3930</p> <p><b>3) Tappet</b><br/>         , B138-2053</p> <p><b>4) Pushrod</b><br/>         , B067-6095</p> |   |
| <p><b>Valve Train Kit</b><br/>         , BVTK551</p>  | <p><b>1) Valve, Intake</b><br/>         , B6I-0282 x4</p> <p><b>2) Valve, Exhaust</b><br/>         , B7W-4602 x4</p>  | <p><b>3) Guide, Valve</b></p> <p><b>a) Intake</b></p> <p><b>b) Exhaust</b><br/>         , 3a) B160-5436 x4<br/>         , 3b) B160-5438 x4</p>   | <p><b>4) Spring, Valve</b></p> <p><b>a) Inner</b></p> <p><b>b) Outer</b><br/>         , 4a) B6I-0284 x8<br/>         , 4b) B6I-0283 x8</p>  | <p><b>5) Lock, Valve</b><br/>         , B067-6834 x16</p> <p><b>6) Seal, Valve</b><br/>         , B1W-5849 x8</p>   |
|  <p><b>1) Oil Pump</b><br/>         , B6I-0253</p> <p><b>2) Oil Cooler</b><br/>         , B245-1372<br/>         , B247-6318</p>  |  <p><b>Lift Pump</b><br/>         , B201-0877</p>  |  <p><b>1) Water Pump</b><br/>         , B151-4825</p> <p><b>2) Thermostat</b><br/>         , B4W-8063</p>   |  <p><b>1) Rocker Shaft</b><br/>         , B032-9007</p> <p><b>2) Rocker Arm LH</b><br/>         , B150-1217</p> <p><b>3) Rocker Arm RH</b><br/>         , B150-1218</p>   |  <p><b>Piston Cooling Nozzle</b><br/>         , B148-3026</p>  |


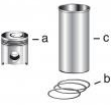




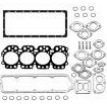
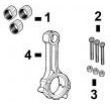
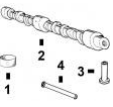
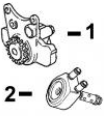


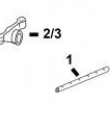

(1): Flanged Fully Finished Liner. Semi Finished Liner available B6I- (2): To ESN: 6FK10030 0164UF

(3): From ESN: 6FK10031

(4): Check application for proper usage

|                               |                                     |  |                              |   |
|-------------------------------|-------------------------------------|--|------------------------------|---|
| <b>Engine Model:</b><br>3054T | <b>Engine Desc:</b><br>TURBOCHARGED | <b>Engine Data:</b><br>INDUSTRIAL ENGINE | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.937 in / 100.00 mm |
|-------------------------------|-------------------------------------|--|------------------------------|---|

Please see page 457 for a complete list of equipment models.

|  |   |  |   |   |
|--|---|--|---|---|
|  <p><b>1) Engine O/H Kit</b><br/>                 , BOK503/45<br/>                 , BOK503/30<br/> <b>2) Basic Engine Kit</b><br/>                 , BBK503</p>  |  <p><b>Piston-Liner Kit</b><br/>                 , BCK553<br/> <b>Consist of:</b><br/>                 , a) B107-2553<br/>                 , b) B112-7020<br/>                 , c) B61-0164<br/> <b>4 Per Engine</b></p>  |  <p><b>Main Bearing Set</b><br/>                 , B067-6869 Std.<br/>                 , B033-2379 0.010<br/>                 , B033-2380 0.020<br/>                 , B033-2381 0.030<br/> <b>Set of 5 Pairs</b></p>                                     |  <p><b>Con Rod Bearing Set</b><br/>                 , B4P-9944 Std.<br/>                 , B4P-9945 0.010<br/>                 , B4P-9946 0.020<br/>                 , B4P-9947 0.030<br/> <b>Set of 4 Pairs</b></p>                        |  <p><b>Thrust Washer Set</b><br/>                 , B032-9090/91 Std.<br/>                 , B067-6873/74 0.007<br/> <b>Set of 2 Pairs</b></p> |
|  <p><b>1) Front Seal</b><br/>                 , B4W-5359<br/> <b>2a) Rear Seal</b><br/>                 , B4W-5360<br/> <b>2b) Rear Seal</b><br/>                 , B209-9218<br/> <b>3) Crankshaft Kit</b><br/>                 , B4P-9948<br/> <b>4) Ring Gear</b><br/>                 , B7W-6247 115T<br/>                 , B033-7687 126T</p> |  <p><b>1) Top Gasket Set</b><br/>                 , B177-3310<br/> <b>2) Bottom Gasket Set</b><br/>                 , B173-9716<br/> <b>3) Valve Cover Gsk</b><br/>                 , B126-6671<br/> <b>4) Head Gasket</b><br/>                 , B160-0161<br/> <b>5) Oil Pan Gasket</b><br/>                 , B032-9946</p> |  <p><b>1) Bush, Con Rod</b><br/>                 , B7W-2510 x4<br/> <b>2) Bolt, Con Rod</b><br/>                 , B067-6883 x8<br/> <b>3) Nut, Con Rod</b><br/>                 , B7W-2505 x8<br/> <b>4) Con Rod</b><br/>                 , B7W-2514</p> |  <p><b>1) Bushing, Cam</b><br/>                 , B036-5802 x1<br/> <b>2) Camshaft</b><br/>                 , B132-3930<br/> <b>3) Tappet</b><br/>                 , B138-2053<br/> <b>4) Pushrod</b><br/>                 , B067-6095</p> |   |
| <p><b>Valve Train Kit</b><br/>                 , a) 45 b) 30<br/>                 , a) BVTK552<br/>                 , b) BVTK556</p>   | <p><b>1) Valve, Intake</b><br/>                 , a) 45 b) 30<br/> <b>2) Valve, Exhaust</b><br/>                 , 1a) B61-1196 x4<br/>                 , 1b) B100-4626 x4<br/>                 , 2) B7W-4602 x4</p>  | <p><b>3) Guide, Valve</b><br/> <b>a) Intake</b><br/> <b>b) Exhaust</b><br/>                 , 3a) B160-5436 x4<br/>                 , 3b) B160-5438 x4</p>   | <p><b>4) Spring, Valve</b><br/> <b>a) Inner</b><br/> <b>b) Outer</b><br/>                 , 4a) B61-0284 x8<br/>                 , 4b) B61-0283 x8</p>  | <p><b>5) Lock, Valve</b><br/>                 , B067-6834 x16<br/> <b>6) Seal, Valve</b><br/>                 , B1W-5849 x8</p>   |
|  <p><b>1) Oil Pump</b><br/>                 , B61-0912<br/> <b>2) Oil Cooler</b><br/>                 , B245-1372<br/>                 , B247-6318</p>  |  <p><b>Lift Pump</b><br/>                 , B201-0877</p>  |  <p><b>1) Water Pump</b><br/>                 , B151-4825<br/> <b>2) Thermostat</b><br/>                 , B4W-8063</p>   |  <p><b>1) Rocker Shaft</b><br/>                 , B032-9007<br/> <b>2) Rocker Arm LH</b><br/>                 , B150-1217<br/> <b>3) Rocker Arm RH</b><br/>                 , B150-1218</p>   |  <p><b>Piston Cooling Nozzle</b><br/>                 , B148-3026</p>  |

(1): Flanged Fully Finished Liner. Semi Finished Liner available B61- (2): To ESN: 6FK10030 0164UF.

(3): From ESN: 6FK10031

(4): For low speed, single valve spring applications, use # 61-0271 (Not available from Maxiforce).

(5): Check application for proper usage

|                               |                                     |   |                              |  |
|-------------------------------|-------------------------------------|---|------------------------------|--|
| <b>Engine Model:</b><br>3054T | <b>Engine Desc:</b><br>TURBOCHARGED | <b>Engine Data:</b><br>Used in CAT Wheel Loader Model 914G / IT4G | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.937 in / 100.00 mm<br>Stroke: 5.00 in / 127.00 mm<br>Displacement: 365 in3 / 6 Lt |
|-------------------------------|-------------------------------------|---|------------------------------|--|

**Piston (M):**  
GRADE L (m) 3135J186

|                       |   |                                  |                                     |  |
|-----------------------|---|----------------------------------|-------------------------------------|--|
| <b>ESN</b><br>6FK1-UP | <b>Caterpillar</b><br>PS200B - Pneumatic Roller | <b>PS360B - Pneumatic Roller</b> | <b>Hydraulic Excavators</b><br>M315 | <b>Engine Arrangement</b><br>107-4860 107-9665<br>165-7604 |
|-----------------------|---|----------------------------------|-------------------------------------|--|



- 1) **Engine O/H Kit**  
• BOK529
- 2) **Basic Engine Kit**  
• BBK529



- 1) **Piston-Liner Kit**  
• BCK529
- Consist of:**
  - a) B124-3529
  - b) B112-7020
  - c) B111-1815
- 4 Per Engine**



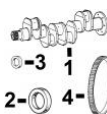
- 1) **Main Bearing Set**
  - B067-6869 *Std.*
  - B033-2379 *0.010*
  - B033-2380 *0.020*
  - B033-2381 *0.030*
- Set of 5 Pairs**



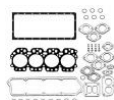
- 1) **Con Rod Bearing Set**
  - B4P-9944 *Std.*
  - B4P-9945 *0.010*
  - B4P-9946 *0.020*
  - B4P-9947 *0.030*
- Set of 4 Pairs**



- 1) **Thrust Washer Set**
  - B032-9090/91 *Std.*
  - B067-6873/74 *0.007*
- Set of 2 Pairs**



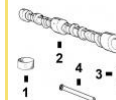
- 1) **Front Seal**  
• B4W-5359
- 2) **Rear Seal**  
• B4W-5360
- 3) **Crankshaft Kit**  
• B139-7018
- 4) **Ring Gear**  
• B7W-6247 *115T*  
• B033-7687 *126T*



- 1) **Top Gasket Set**  
• B177-3310
- 2) **Bottom Gasket Set**  
• B173-9716
- 3) **Valve Cover Gsk**  
• B126-6671
- 4) **Head Gasket**  
• B160-0161
- 5) **Oil Pan Gasket**  
• B032-9946



- 1) **Bush, Con Rod**  
• B124-3531 *x4*
- 2) **Bolt, Con Rod**  
• B124-3532 *x8*
- 3) **Nut, Con Rod**  
• B124-3533 *x8*
- 4) **Con Rod**  
• B124-3530



- 1) **Bushing, Cam**  
• B036-5802 *x1*
- 2) **Camshaft**  
• B132-3930
- 3) **Tappet**  
• B138-2053
- 4) **Pushrod**  
• B067-6095

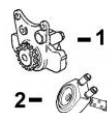
- 1) **Valve Train Kit**  
• BVTK556

- 1) **Valve, Intake**  
• B100-4626 *x4*
- 2) **Valve, Exhaust**  
• B7W-4602 *x4*

- 3) **Guide, Valve**
  - a) **Intake**
  - b) **Exhaust**
    - 3a) B160-5436 *x4*
    - 3b) B160-5438 *x4*

- 4) **Spring, Valve**
  - a) **Inner**
  - b) **Outer**
    - 4a) B6I-0284 *x8*
    - 4b) B6I-0283 *x8*

- 5) **Lock, Valve**  
• B067-6834 *x16*
- 6) **Seal, Valve**  
• B1W-5849 *x8*



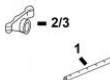
- 1) **Oil Pump**  
• B6I-0912
- 2) **Oil Cooler**  
• B245-1372



- 1) **Lift Pump**  
• B201-0877



- 1) **Water Pump**  
• B151-4825



- 1) **Rocker Shaft**  
• B032-9007
- 2) **Rocker Arm LH**  
• B150-1217
- 3) **Rocker Arm RH**  
• B150-1218



- 1) **Piston Cooling Nozzle**  
• B148-3026

(1): Flanged Fully Finished Liner. Semi Finished Liner available B111

|                               |                                     |   |                              |  |
|-------------------------------|-------------------------------------|---|------------------------------|--|
| <b>Engine Model:</b><br>3054T | <b>Engine Desc:</b><br>TURBOCHARGED | <b>Engine Data:</b><br>Used in CAT Wheel Loader Model 914G / IT4G | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.937 in / 100.00 mm<br>Stroke: 5.00 in / 127.00 mm<br>Displacement: 365 in3 / 6 Lt |
|-------------------------------|-------------------------------------|---|------------------------------|--|

**Piston (M):**  
GRADE K (m) 3135J185

|                       |  |  |                                    |   |
|-----------------------|--|--|------------------------------------|---|
| <b>ESN</b><br>7BJ1-UP | <b>Caterpillar</b><br>PS200B - Pneumatic Roller<br>PS360B - Pneumatic Roller | <b>Hydraulic Excavators</b><br>M312 M315 | <b>Wheel Loaders</b><br>914G IT14G | <b>Engine Arrangement</b><br>107-4860 203-0762<br>107-9665 356-9742<br>165-7604 |
|-----------------------|--|--|------------------------------------|---|



- 1) **Engine O/H Kit**  
• BOK528
- 2) **Basic Engine Kit**  
• BBK528



- Piston-Liner Kit**  
• BCK528
- Consist of:**
  - a) B124-3528
  - b) B112-7020
  - c) B111-1815
- 4 Per Engine**



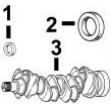
- Main Bearing Set**
  - B067-6869 *Std.*
  - B033-2379 *0.010*
  - B033-2380 *0.020*
  - B033-2381 *0.030*
- Set of 5 Pairs**



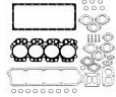
- Con Rod Bearing Set**
  - B4P-9944 *Std.*
  - B4P-9945 *0.010*
  - B4P-9946 *0.020*
  - B4P-9947 *0.030*
- Set of 4 Pairs**



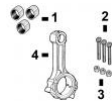
- Thrust Washer Set**
  - B032-9090/91 *Std.*
  - B067-6873/74 *0.007*
- Set of 2 Pairs**



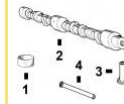
- 1) **Front Seal**  
• B4W-5359
- 2) **Rear Seal**  
• B4W-5360
- 3) **Crankshaft Kit**  
• B139-7018



- 1) **Top Gasket Set**  
• B177-3310
- 2) **Bottom Gasket Set**  
• B173-9716
- 3) **Valve Cover Gsk**  
• B126-6671
- 4) **Head Gasket**  
• B160-0161
- 5) **Oil Pan Gasket**  
• B032-9946



- 1) **Bush, Con Rod**  
• B124-3531 *x4*
- 2) **Bolt, Con Rod**  
• B124-3532 *x8*
- 3) **Nut, Con Rod**  
• B124-3533 *x8*
- 4) **Con Rod**  
• B124-3530



- 1) **Bushing, Cam**  
• B036-5802 *x1*
- 2) **Camshaft**  
• B132-3930
- 3) **Tappet**  
• B138-2053
- 4) **Pushrod**  
• B067-6095

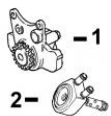
- Valve Train Kit**  
• BVTK556

- 1) **Valve, Intake**  
• B100-4626 *x4*
- 2) **Valve, Exhaust**  
• B7W-4602 *x4*

- 3) **Guide, Valve**
  - a) **Intake**
  - b) **Exhaust**
  - 3a) B160-5436 *x4*
  - 3b) B160-5438 *x4*

- 4) **Spring, Valve**
  - a) **Inner**
  - b) **Outer**
  - 4a) B6I-0284 *x8*
  - 4b) B6I-0283 *x8*

- 5) **Lock, Valve**  
• B067-6834 *x16*
- 6) **Seal, Valve**  
• B1W-5849 *x8*



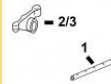
- 1) **Oil Pump**  
• B6I-0912
- 2) **Oil Cooler**  
• B245-1372



- Lift Pump**  
• B201-0877



- Water Pump**  
• B151-4825



- 1) **Rocker Shaft**  
• B032-9007
- 2) **Rocker Arm LH**  
• B150-1217
- 3) **Rocker Arm RH**  
• B150-1218



- Piston Cooling Nozzle**  
• B148-3026

(1): Flanged Fully Finished Liner. Semi Finished Liner available B111

**Engine Model:**

3054

**Engine Desc:**

TURBOCHARGE  
or  
NATURALLY  
ASPIRATED

**Engine Data:**

INDUSTRIAL  
ENGINE

**Engine Info:**

4 Cyl

**Engine**

**Dimensions:**

Bore: 3.937 in /  
100.00 mm

Please see  
page **458** for a  
complete list of  
equipment  
models.



**1) Engine O/H Kit**

- › BOK504/45
- › BOK504/30

**2) Basic Engine Kit**

- › BBK504



**Piston-Liner Kit**

- › BCK390

**Consist of:**

- › a) B152-1390
- › b) B138-2073
- › c) B111-1815

**1**

**4 Per Engine**



**Main Bearing Set**

- › B067-6869 *Std.*
- › B033-2379 *0.010*
- › B033-2380 *0.020*
- › B033-2381 *0.030*

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › B4P-9944 *Std.*
- › B4P-9945 *0.010*
- › B4P-9946 *0.020*
- › B4P-9947 *0.030*

**Set of 4 Pairs**



**Thrust Washer Set**

- › B032-9090/91 *Std.*
- › B067-6873/74 *0.007*

**Set of 2 Pairs**



**1) Front Seal**

- › B4W-5359

**2a) Rear Seal**

- › B4W-5360

**2b) Rear Seal**

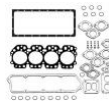
- › B209-9218

**3) Crankshaft Kit**

- › B4P-9948

**4) Ring Gear**

- › B7W-6247 *115T*
- › B033-7687 *126T*



**1) Top Gasket Set**

- › B175-1321

**2) Bottom Gasket Set**

**2**

- › B187-4968

**3) Valve Cover Gsk**

**3**

- › B200-6374

**4) Head Gasket**

- › B160-0161

**5) Oil Pan Gasket**

- › B032-9946



**1) Bush, Con Rod**

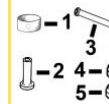
- › B138-2048 *x4*

**2) Bolt, Con Rod**

- › B067-6883 *x8*

**3) Nut, Con Rod**

- › B7W-2505 *x8*



**1) Bushing, Cam**

- › B036-5802 *x1*

**2) Tappet**

- › B138-2053

**3) Pushrod**

- › B067-6095

**4) Seal, Valve Intake**

- › B145-6856 *x4*

**5) Seal, Valve Exhaust**

- › B145-6858 *x4*

**Valve Train Kit**

- › a) 45 b) 30
- › a) BVTK553
- › b) BVTK554

**1) Valve, Intake**

- › a) 45 b) 30
- › 1a) B138-2052 *x4*
- › 1b) B145-6855 *x4*

**2) Valve, Exhaust**

- › 2a) B138-2050 *x4*
- › 2b) B145-6857 *x4*

**3) Guide, Valve**

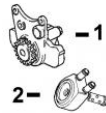
- a) Intake**
- › 3a) B185-0882 *x4*
- › 3b) B163-9256 *x4*

**4) Spring, Valve**

- › B206-4127 *x8*

**5) Lock, Valve**

- › B147-1979 *x16*



**1) Oil Pump**

- › B6I-0912
- › B7C-3134

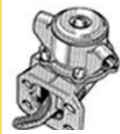
**2) Oil Cooler**

- › B245-1372
- › B247-6318

**5**

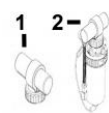
**4**

**4**



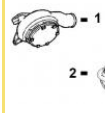
**Lift Pump**

- › B201-0877



**Fuel Pump**

- › 1) B228-9129 (2 Pin) **4**
- › 2) B349-1063 (3 Pin) **4**



**1) Water Pump**

- › B239-6142

**2) Thermostat**

- › B220-2748



**Piston Cooling Nozzle**

- › B148-3026

**(1):** Flanged Fully Finished Liner. Semi Finished Liner available  
B111-1815UF

**(3):** From ESN: 5YS11022.

**(5):** Use for engines that have a crank driven balancer unit

**(2):** To ESN: 5YS11021.

**(4):** Check application for proper use.



**Engine Model:**

3054

**Engine Desc:**

TURBOCHARGE  
or  
NATURALLY  
ASPIRATED

**Engine Data:**

INDUSTRIAL  
ENGINE

**Engine Info:**

4 Cyl

**Engine**

**Dimensions:**

Bore: 3.937 in /  
100.00 mm

Please see  
page 459 for a  
complete list of  
equipment  
models.



**1) Engine O/H Kit**

- BOK505/45
- BOK505/30

**2) Basic Engine Kit**

- BBK505



**Piston-Liner Kit**

- BCK390

**Consist of:**

- a) B152-1390
- b) B138-2073
- c) B111-1815

**1**

**4 Per Engine**



**Main Bearing Set**

- B067-6869 *Std.*
- B033-2379 *0.010*
- B033-2380 *0.020*
- B033-2381 *0.030*

**Set of 5 Pairs**



**Con Rod Bearing Set**

- B225-7781 *Std.*
- B233-3788 *0.010*
- B233-3789 *0.020*
- B233-3790 *0.030*

**Set of 4 Pairs**



**Thrust Washer Set**

- B032-9090/91 *Std.*
- B067-6873/74 *0.007*

**Set of 2 Pairs**



**1) Front Seal**

- B4W-5359

**2a) Rear Seal**

- B4W-5360

**2b) Rear Seal**

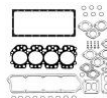
- B209-9218

**3) Crankshaft Kit**

- B254-0252

**4) Ring Gear**

- B7W-6247 *115T*
- B033-7687 *126T*



**1) Top Gasket Set**

- B175-1321

**2) Bottom Gasket Set**

- B187-4968

**3) Valve Cover Gsk**

- B200-6374

**4) Head Gasket**

- B160-0161

**5) Oil Pan Gasket**

- B032-9946

**2**

**3**



**1) Bush, Con Rod**

- B225-5438 *x4*

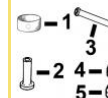
**2) Bolt, Con Rod**

- B225-5439 *x8*

**3) Con Rod**

- B225-5453

**4**



**1) Bushing, Cam**

- B036-5802 *x1*

**2) Tappet**

- B138-2053

**3) Pushrod**

- B067-6095

**4) Seal, Valve Intake**

- B145-6856 *x4*

**5) Seal, Valve Exhaust**

- B145-6858 *x4*

**Valve Train Kit**

- a) 45 b) 30
- a) BVTK553
- b) BVTK554

**1) Valve, Intake**

- a) 45 b) 30
- 1a) B138-2052 *x4*
- 1b) B145-6855 *x4*

**2) Valve, Exhaust**

- 2a) B138-2050 *x4*
- 2b) B145-6857 *x4*

**3) Guide, Valve**

**a) Intake**

- 3a) B185-0882 *x4*

**b) Exhaust**

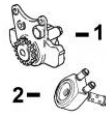
- 3b) B163-9256 *x4*

**4) Spring, Valve**

- B206-4127 *x8*

**5) Lock, Valve**

- B147-1979 *x16*



**1) Oil Pump**

- B6I-0912
- B7C-3134

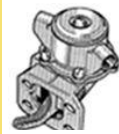
**2) Oil Cooler**

- B245-1372
- B247-6318

**8**

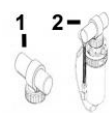
**7**

**7**



**Lift Pump**

- B201-0877

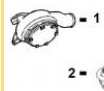


**Fuel Pump**

- 1) B228-9129 *(2 Pin)*
- 2) B349-1063 *(3 Pin)*

**7**

**7**



**1) Water Pump**

- B239-6142

**2) Thermostat**

- B220-2748



**Piston Cooling Nozzle**

- B148-3026

**(1):** Flanged Fully Finished Liner. Semi Finished Liner available B111-1815UF

**(3):** From ESN: 5YS11022

**(5):** For machine split rods use Con Rod Bearing B4P-9944

**(7):** Check application for proper use.

**(2):** To ESN: 5YS11021







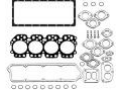
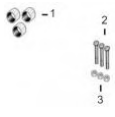
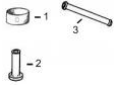

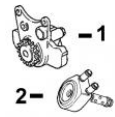

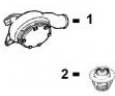


**(4):** Fracture Split Type.

**(6):** Check your connecting rod journal outside diameter for the proper connecting rod bearings.

**(8):** Use for engines that have a crank driven balancer unit

|                               |  |  |                              |  |
|-------------------------------|--|--|------------------------------|--|
| <b>Engine Model:</b><br>3054B | <b>Engine Desc:</b><br>NATURALLY ASPIRATED | <b>Engine Data:</b><br>INDUSTRIAL ENGINE | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 4.055 in / 103.00 mm<br>Stroke: 5.00 in / 127.00 mm |
|-------------------------------|--|--|------------------------------|--|

|                           |                           |          |  |
|---------------------------|---------------------------|----------|--|
| <b>ESN</b><br>5YS13499-UP | <b>Engine Arrangement</b> |          |  |
|                           | 185-0462                  | 185-4093 |  |
|                           | 185-1651                  | 185-4388 |  |
|                           | 185-3173                  | 185-4624 |  |
|                           | 185-3197                  | 185-4788 |  |
|                           | 185-3969                  | 185-5465 |  |
|                           | 185-3972                  | 191-5836 |  |
|                           | 185-4092                  | 187-8016 |  |

|  |  |  |  |  |
|--|--|--|--|--|
|  <p><b>1) Engine O/H Kit</b><br/>         › BOK506 Std.<br/>         › BOK508 0.50<br/>         › BOK509 1.00</p> <p><b>2) Basic Engine Kit</b><br/>         › BBK506 Std.<br/>         › BBK508 0.50<br/>         › BBK509 1.00</p>   |  <p><b>a) Piston</b><br/>         › B185-0104 Std.<br/>         › B185-0106 0.50<br/>         › B185-0107 1.00</p> <p><b>b) Ring Set</b><br/>         › B185-0109 Std.<br/>         › B185-0110 0.50<br/>         › B185-0111 1.00</p> <p><b>4 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>         › B067-6869 Std.<br/>         › B033-2379 0.010<br/>         › B033-2380 0.020<br/>         › B033-2381 0.030</p> <p><b>Set of 4 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b><br/>         › B4P-9944 Std.<br/>         › B4P-9945 0.010<br/>         › B4P-9946 0.020<br/>         › B4P-9947 0.030</p> <p><b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer</b><br/>         › B032-9090/91 Std.<br/>         › B067-6873/74 0.007</p> <p><b>Set of 2 Pairs</b></p>  |
|  <p><b>1) Front Seal</b><br/>         › B4W-5359</p> <p><b>2a) Rear Seal</b><br/>         › B4W-5360</p> <p><b>2b) Rear Seal</b><br/>         › B209-9218</p> <p><b>3) Crankshaft Kit</b><br/>         › B4P-9948</p> <p><b>4) Ring Gear</b><br/>         › B7W-6247 115T<br/>         › B033-7687 126T</p> |  <p><b>1) Top Gasket Set</b><br/>         › B187-1290</p> <p><b>2) Bottom Gasket Set</b><br/>         › B187-4968</p> <p><b>3) Valve Cover Gsk</b><br/>         › B200-6374</p> <p><b>4) Head Gasket</b><br/>         › B185-0885</p>                            |  <p><b>1) Bush, Con Rod</b><br/>         › B138-2048 x4</p> <p><b>2) Bolt, Con Rod</b><br/>         › B067-6883 x8</p> <p><b>3) Nut, Con Rod</b><br/>         › B7W-2505 x8</p>        |  <p><b>1) Bushing, Cam</b><br/>         › B036-5802 x1</p> <p><b>2) Tappet</b><br/>         › B138-2053</p> <p><b>3) Pushrod</b><br/>         › B067-6095</p>                         |  <p><b>1) Seal, Valve Intake</b><br/>         › B154-6856 x4</p> <p><b>2) Seal, Valve Ex</b><br/>         › B154-6858 x4</p> |
| <p><b>Valve Train Kit</b><br/>         › BVTK555</p>   | <p><b>1) Valve, Intake</b><br/>         › B176-3134 x4</p> <p><b>2) Valve, Exhaust</b><br/>         › B176-3137 x4</p>   | <p><b>3) Guide, Valve</b><br/> <b>a) Intake</b><br/> <b>b) Exhaust</b><br/>         › 3a) B185-0882 x4<br/>         › 3b) B163-9256 x4</p>   | <p><b>4) Spring, Valve</b><br/>         › B176-3139 x8</p>   | <p><b>5) Lock, Valve</b><br/>         › B147-1979 x16</p>  |
|  <p><b>1) Oil Pump</b><br/>         › B61-0253</p> <p><b>2) Oil Cooler</b><br/>         › B245-1372<br/>         › B247-6318</p>   |  <p><b>Lift Pump</b><br/>         › B201-0877</p>   |  <p><b>1) Water Pump</b><br/>         › B239-6142</p> <p><b>2) Thermostat</b><br/>         › B220-2748</p>  |  <p><b>Fuel Lines</b><br/>         › 1) B230-8995<br/>         › 2) B230-8996<br/>         › 3) B230-8997<br/>         › 4) B230-8998</p>  |  <p><b>Piston Cooling Nozzle</b><br/>         › B148-3026</p>   |







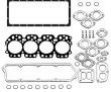
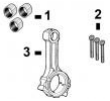


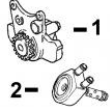



(1): To ESN: 5MF1183.

(2): From ESN: 5MF1184.

(3): Check application for proper usage

|                               |  |  |                              |  |
|-------------------------------|--|--|------------------------------|--|
| <b>Engine Model:</b><br>3054B | <b>Engine Desc:</b><br>NATURALLY ASPIRATED | <b>Engine Data:</b><br>INDUSTRIAL ENGINE | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 4.055 in / 103.00 mm<br>Stroke: 5.00 in / 127.00 mm |
|-------------------------------|--|--|------------------------------|--|

|                           |                                       |
|---------------------------|---------------------------------------|
| <b>ESN</b><br>5MF10870-UP | <b>Arrangement Number</b><br>187-8016 |
|---------------------------|---------------------------------------|

|  |  |  |  |   |
|--|--|--|--|---|
|  <p><b>1) Engine O/H Kit</b><br/>                 , BOK507 Std.<br/>                 , BOK510 0.50<br/>                 , BOK511 1.00</p> <p><b>2) Basic Engine Kit</b><br/>                 , BBK507 Std.<br/>                 , BBK510 0.50<br/>                 , BBK511 1.00</p>   |  <p><b>a) Piston</b><br/>                 , B185-0104 Std.<br/>                 , B185-0106 0.50<br/>                 , B185-0107 1.00</p> <p><b>b) Ring Set</b><br/>                 , B185-0109 Std.<br/>                 , B185-0110 0.50<br/>                 , B185-0111 1.00</p> <p><b>4 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>                 , B067-6869 Std.<br/>                 , B033-2379 0.010<br/>                 , B033-2380 0.020<br/>                 , B033-2381 0.030</p> <p><b>Set of 4 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b><br/>                 , B225-7781 Std. <b>4</b><br/>                 , B233-3788 0.010 <b>4</b><br/>                 , B233-3789 0.020 <b>4</b><br/>                 , B233-3790 0.030 <b>4</b></p> <p><b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer</b><br/>                 , B032-9090/91 Std.<br/>                 , B067-6873/74 0.007</p> <p><b>Set of 2 Pairs</b></p> |
|  <p><b>1) Front Seal</b><br/>                 , B4W-5359</p> <p><b>2a) Rear Seal</b><br/>                 , B4W-5360</p> <p><b>2b) Rear Seal</b><br/>                 , B209-9218</p> <p><b>3) Crankshaft Kit</b><br/>                 , B254-0252</p> <p><b>4) Ring Gear</b><br/>                 , B7W-6247 115T<br/>                 , B033-7687 126T</p> |  <p><b>1) Top Gasket Set</b><br/>                 , B187-1290</p> <p><b>2) Bottom Gasket Set</b><br/>                 , B187-4968 <b>1</b></p> <p><b>3) Valve Cover Gsk</b><br/>                 , B200-6374 <b>2</b></p> <p><b>4) Head Gasket</b><br/>                 , B185-0885</p>                           |  <p><b>1) Bush, Con Rod</b><br/>                 , B225-5438 x4</p> <p><b>2) Bolt, Con Rod</b><br/>                 , B225-5439 x8</p> <p><b>3) Con Rod</b><br/>                 , B225-5453 <b>3</b></p>               |  <p><b>1) Bushing, Cam</b><br/>                 , B036-5802 x1</p> <p><b>2) Tappet</b><br/>                 , B138-2053</p> <p><b>3) Pushrod</b><br/>                 , B067-6095</p>  |  <p><b>1) Seal, Valve Intake</b><br/>                 , B154-6856 x4</p> <p><b>2) Seal, Valve Ex</b><br/>                 , B154-6858 x4</p> |
| <p><b>Valve Train Kit</b><br/>                 , BVTK555</p>   | <p><b>1) Valve, Intake</b><br/>                 , B176-3134 x4</p> <p><b>2) Valve, Exhaust</b><br/>                 , B176-3137 x4</p>   | <p><b>3) Guide, Valve</b><br/> <b>a) Intake</b><br/> <b>b) Exhaust</b><br/>                 , 3a) B185-0882 x4<br/>                 , 3b) B163-9256 x4</p>   | <p><b>4) Spring, Valve</b><br/>                 , B176-3139 x8</p>   | <p><b>5) Lock, Valve</b><br/>                 , B147-1979 x16</p>   |
|  <p><b>1) Oil Pump</b><br/>                 , B6I-0253</p> <p><b>2) Oil Cooler</b><br/>                 , B245-1372</p>  |  <p><b>Lift Pump</b><br/>                 , B201-0877</p>   |  <p><b>1) Water Pump</b><br/>                 , B239-6142</p> <p><b>2) Thermostat</b><br/>                 , B220-2748</p>  |  <p><b>Piston Cooling Nozzle</b><br/>                 , B148-3026</p>   |   |

(1): To ESN: 5MF1183.  
 (3): Fracture Split Type: Grade J.

(2): From ESN: 5MF1184.  
 (4): Check your connecting rod journal outside diameter for the proper connecting rod bearings

**Engine Model:**  
3054C/E

**Engine Desc:**  
NATURALLY  
ASPIRATED

**Engine Data:**  
INDUSTRIAL  
ENGINE

**Engine Info:**  
4 Cyl

**Engine  
Dimensions:**

Bore: 4.133 in /  
105.00 mm  
Stroke: 5.00 in /  
127.00 mm  
Displacement:  
269 in3 / 4.4 Lt

Please see  
page **460** for a  
complete list of  
equipment  
models.

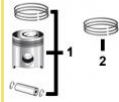


**1) Engine O/H Kit**

- › BOK512 Std.
- › BOK513 0.50
- › BOK514 1.00

**2) Basic Engine Kit**

- › BBK512 Std.
- › BBK513 0.50
- › BBK514 1.00



**1) Piston Kit**

- › B233-7232 Std.
- › B288-9942 0.50
- › B288-9943 1.00

**2) Ring Set**

- › B233-7231 Std.
- › B334-1996 0.50
- › B334-1997 1.00

**4 Per Engine**



**Main Bearing Set**

- › B225-7772 Std.
- › B233-3784 0.010
- › B233-3785 0.020
- › B233-3786 0.030

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › B225-7781 Std. **4**
- › B233-3788 0.010 **4**
- › B233-3789 0.020 **4**
- › B233-3790 0.030 **4**

**Set of 4 Pairs**



**Thrust Washer**

- › B032-9090/91 Std.
- › B067-6873/74 0.007

**Set of 2 Pairs**



**1) Front Seal**

- › B4W-5359

**2) Rear Seal**

- › B232-7449

**3) Crankshaft Kit**

- › B232-7400 **6**
- › B359-0715 **7**

**4) Ring Gear**

- › B7W-6247 115T
- › B033-7687 126T



**1) Top Gasket Set**

- › B276-3420

**2) Bottom Gasket Set**

- › B233-0333 **3**

**3) Head Gasket**

- › B240-7194 **6**

**4) Valve Cover Gsk**

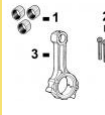
- › B225-6451 **7**

**5) Timing Cover Gsk**

- › B226-8766

**6) Oil Pan Gasket**

- › B225-6005



**1) Bush, Con Rod**

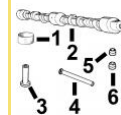
- › B225-5438 x4

**2) Bolt, Con Rod**

- › B225-5439 x8 **3**

**3) Con Rod**

- › B225-5453 **2**



**1) Bushing, Cam**

- › B232-7440 x1

**2) Camshaft**

- › B225-5967

**3) Tappet**

- › B138-2053

**4) Pushrod**

- › B067-6095

**5) Seal, Valve Ex**

- › B252-6438 x4

**6) Seal, Intake Valve**

- › B254-3954 x4

**Valve Train Kit**

- › BVTK557

**1) Valve, Intake**

- › B225-5495 x4

**2) Valve, Exhaust**

- › B225-5499 x4

**3) Guide, Valve  
(Intake & Exhaust)**

- › 3) B185-0882 x8

**4) Spring, Valve**

- › B225-5496 x8

**5) Lock, Valve**

- › B147-1979 x16



**Oil Pump**

- › B225-8329 **1**



**1) Lift Pump**

- › B350-4315 **1**

**2) Lift Pump**

- › B232-7808 **5**

**3) Fuel Pump**

- › B228-9129 (2 Pin) **5**



**1) Water Pump**

- › B225-8016

**2) Thermostat**

- › B254-2267 **5**

- › B254-2268 **5**

- › B254-2269 **5**



**Water Pump  
Gasket**

- › B225-8019



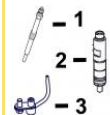
**Repair Sleeve**

- › 105RS

**2) Head Bolts**

- › B225-5501 x7

- › B225-5502 x3



**1) Glowplug**

- › B453-3510 x4

**2) Injector**

- › B276-5605

**3) Piston Cooling  
Nozzle**

- › B276-5605

**(1):** Not to be used on Engines with Balancer Units.

**(2):** Grade J.

**(3):** Bottom gasket contains: B226-8766 Timing Cover Gasket and **(4):** Use for rod journals measuring 63.48MM. B225-6005 Oil Pan Gasket.

**(5):** Check application for proper use.

**(6):** 63.5mm rod journal, splined nose

**(7):** 68mm rod journal, non-splined nose

**Engine Model:**

3054C/E

**Engine Desc:**

NATURALLY ASPIRATED

**Engine Data:**

INDUSTRIAL ENGINE

**Engine Info:**

4 Cyl

**Engine Dimensions:**

Bore: 4.133 in / 105.00 mm  
Stroke: 5.00 in / 127.00 mm  
Displacement: 269 in3 / 4.4 Lt

**ESN**

3341-UP

**Compact Track Loaders**

RC-85

**Eco Log**

554B - Forwarder

**Engine Arrangement**

207-1101  
207-1102

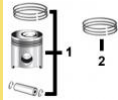


**1) Engine O/H Kit**

- › BOK515 Std.
- › BOK516 0.50
- › BOK517 1.00

**2) Basic Engine Kit**

- › BBK515 Std.
- › BBK516 0.50
- › BBK517 1.00



**1) Piston Kit**

- › B233-7232 Std.
- › B288-9942 0.50
- › B288-9943 1.00

**2) Ring Set**

- › B233-7231 Std.
- › B334-1996 0.50
- › B334-1997 1.00

**4 Per Engine**



**Main Bearing Set**

- › B225-7772 Std.
- › B233-3784 0.010
- › B233-3785 0.020
- › B233-3786 0.030

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › B225-7781 Std. **4**
- › B233-3788 0.010 **4**
- › B233-3789 0.020 **4**
- › B233-3790 0.030 **4**

**Set of 4 Pairs**



**Thrust Washer**

- › B032-9090/91 Std.
- › B067-6873/74 0.007

**Set of 2 Pairs**



**1) Front Seal**

- › B4W-5359

**2) Rear Seal**

- › B232-7449

**3) Crankshaft Kit**

- › B232-7400 **6**
- › B359-0715 **7**

**4) Ring Gear**

- › B7W-6247 115T
- › B033-7687 126T



**1) Top Gasket Set**

- › B276-3420

**2) Bottom Gasket Set**

- › B237-5942 **3**

**3) Head Gasket**

- › B240-7194

**4) Valve Cover Gsk**

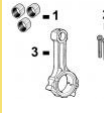
- › B225-6451

**5) Timing Cover Gsk**

- › B225-8287

**6) Oil Pan Gasket**

- › B237-5932



**1) Bush, Con Rod**

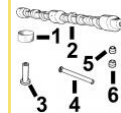
- › B225-5438 x4

**2) Bolt, Con Rod**

- › B225-5439 x8 **5**
- › B323-9312 x8 **5**

**3) Con Rod**

- › B225-5453 **5**
- › B359-0722 **5**



**1) Bushing, Cam**

- › B232-7440 x1

**2) Camshaft**

- › B225-5967

**3) Tappet**

- › B138-2053

**4) Pushrod**

- › B067-6095

**5) Seal, Exhaust Valve**

- › B252-6438 x4

**6) Seal, Intake Valve**

- › B254-3954 x4

**Valve Train Kit**

- › BVTK557

**1) Valve, Intake**

- › B225-5495 x4

**2) Valve, Exhaust**

- › B225-5499 x4

**3) Guide, Valve (Intake & Exhaust)**

- › 3) B185-0882 x8

**4) Spring, Valve**

- › B225-5496 x8

**5) Lock, Valve**

- › B147-1979 x16



**Oil Pump**

- › B225-8329 **1**



**1) Lift Pump**

- › B350-4315

**2) Lift Pump**

- › B232-7808 **5**

**3) Fuel Pump**

- › B228-9129 (2 Pin) **5**



**1) Water Pump**

- › B225-8016

**2) Thermostat**

- › B254-2267 **5**

- › B254-2268 **5**

- › B254-2269 **5**



**Water Pump Gasket**

- › B225-8019



**Repair Sleeve**

- › 105RS

**2) Head Bolts**

- › B225-5501 x7

- › B225-5502 x3



**1) Glowplug**

- › B453-3510 x4

**2) Injector**

- › B276-5605

**3) Piston Cooling Nozzle**

- › B276-5605

(1): Not to be used on Engines with Balancer Units.

(2): Grade J.

(3): Bottom gasket contains: B225-8287 Timing Cover Gasket and B237-5932 Oil Pan Gasket. (4): Check your connecting rod journal outside diameter for the proper connecting rod bearings.

(5): Check application for proper use.

(6): 63.5mm rod journal, splined nose

(7): 68mm rod journal, non-splined nose

**Engine Model:**  
3054C/E

**Engine Desc:**  
NATURALLY  
ASPIRATED

**Engine Data:**  
INDUSTRIAL  
ENGINE

**Engine Info:**  
4 Cyl

**Engine Dimensions:**

Bore: 4.133 in /  
105.00 mm  
Stroke: 5.00 in /  
127.00 mm  
Displacement:  
269 in3 / 4.4 Lt

Please see  
page 461 for a  
complete list of  
equipment  
models.

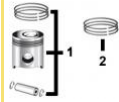


**1) Engine O/H Kit**

- › BOK530 Std.
- › BOK531 0.50
- › BOK532 1.00

**2) Basic Engine Kit**

- › BBK530 Std.
- › BBK531 0.50
- › BBK532 1.00



**1) Piston Kit**

- › B233-7232 Std.
- › B288-9942 0.50
- › B288-9943 1.00

**2) Ring Set**

- › B233-7231 Std.
- › B334-1996 0.50
- › B334-1997 1.00

**4 Per Engine**



**Main Bearing Set**

- › B225-7772 Std.
- › B233-3784 0.010
- › B233-3785 0.020
- › B233-3786 0.030

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › B225-7781 Std. **4**
- › B233-3788 0.010 **4**
- › B233-3789 0.020 **4**
- › B233-3790 0.030 **4**

**Set of 4 Pairs**



**Thrust Washer**

- › B032-9090/91 Std.
- › B067-6873/74 0.007

**Set of 2 Pairs**



**1) Front Seal**

- › B4W-5359

**2) Rear Seal**

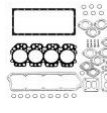
- › B232-7449

**3) Crankshaft Kit**

- › B232-7400 **6**
- › B359-0715 **7**

**4) Ring Gear**

- › B7W-6247 115T
- › B033-7687 126T



**1) Top Gasket Set**

- › B276-3420

**2) Bottom Gasket Set**

- › B272-2232 **3**

**3) Head Gasket**

- › B240-7194 **6**

**4) Valve Cover Gsk**

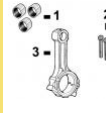
- › B225-6451 **7**

**5) Timing Cover Gsk**

- › B225-8287

**6) Oil Pan Gasket**

- › B225-6005



**1) Bush, Con Rod**

- › B225-5438 x4

**2) Bolt, Con Rod**

- › B225-5439 x8 **5**
- › B323-9312 x8 **5**

**3) Con Rod**

- › B225-5453 **5**
- › B359-0722 **5**



**1) Bushing, Cam**

- › B232-7440 x1

**2) Camshaft**

- › B225-5967

**3) Tappet**

- › B138-2053

**4) Pushrod**

- › B067-6095

**5) Seal, Exhaust Valve**

- › B252-6438 x4

**6) Seal, Intake Valve**

- › B254-3954 x4

**Valve Train Kit**

- › BVTK557

**1) Valve, Intake**

- › B225-5495 x4

**2) Valve, Exhaust**

- › B225-5499 x4

**3) Guide, Valve  
(Intake & Exhaust)**

- › 3) B185-0882 x8

**4) Spring, Valve**

- › B225-5496 x8

**5) Lock, Valve**

- › B147-1979 x16



**Oil Pump**

- › B225-8329 **1**



**1) Lift Pump**

- › B350-4315 **1**

**2) Lift Pump**

- › B232-7808 **5**

**3) Fuel Pump**

- › B228-9129 (2 Pin) **5**

**4) Fuel Pump**

- › B349-1063 (8 Pin) **5**



**1) Water Pump**

- › B225-8016

**2) Thermostat**

- › B254-2267 **5**

- › B254-2268 **5**

- › B254-2269 **5**



**Water Pump  
Gasket**

- › B225-8019



**Repair Sleeve**

- › 105RS

**2) Head Bolts**

- › B225-5501 x7

- › B225-5502 x3



**1) Glowplug**

- › B453-3510 x4

**2) Injector**

**3) Piston Cooling  
Nozzle**

- › B276-5605

(1): Not to be used on Engines with Balancer Units.

(2): Grade J.

(3): Bottom gasket contains: B225-8287 Timing Cover Gasket and B225-6005 Oil Pan Gasket. (4): Check your connecting rod journal outside diameter for the proper connecting rod bearings.

(5): Check application for proper use.

(6): 63.5mm rod journal, splined nose

(7): 68mm rod journal, non-splined nose

CATERPILLAR 3054C/E NATURALLY ASPIRATED

**Engine Model:**  
3054C/E

**Engine Desc:**  
NATURALLY  
ASPIRATED

**Engine Data:**  
INDUSTRIAL  
ENGINE

**Engine Info:**  
4 Cyl

**Engine  
Dimensions:**

Bore: 4.133 in /  
105.00 mm  
Stroke: 5.00 in /  
127.00 mm  
Displacement:  
269 in3 / 4.4 Lt

**Eco Log**

554B -  
Forwarder

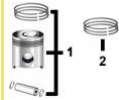


**1) Engine O/H Kit**

- › BOK560 Std.
- › BOK561 0.50
- › BOK562 1.00

**2) Basic Engine Kit**

- › BBK560 Std.
- › BBK561 0.50
- › BBK562 1.00



**1) Piston Kit**

- › B233-7232 Std.
- › B288-9942 0.50
- › B288-9943 1.00

**2) Ring Set**

- › B233-7231 Std.
- › B334-1996 0.50
- › B334-1997 1.00

**4 Per Engine**



**Main Bearing Set**

- › B225-7772 Std.
- › B233-3784 0.010
- › B233-3785 0.020
- › B233-3786 0.030

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › B225-7781 Std. **4**
- › B233-3788 0.010 **4**
- › B233-3789 0.020 **4**
- › B233-3790 0.030 **4**

**Set of 4 Pairs**



**Thrust Washer**

- › B032-9090/91 Std.
- › B067-6873/74 0.007

**Set of 2 Pairs**



**1) Front Seal**

- › B4W-5359

**2) Rear Seal**

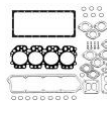
- › B232-7449

**3) Crankshaft Kit**

- › B232-7400 **6**
- › B359-0715 **7**

**4) Ring Gear**

- › B7W-6247 115T
- › B033-7687 126T



**1) Top Gasket Set**

- › B276-3420

**2) Bottom Gasket Set**

- › B290-2495 **3**

**3) Head Gasket**

- › B240-7194

**4) Valve Cover Gsk**

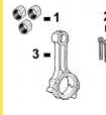
- › B225-6451

**5) Timing Cover Gsk**

- › B226-8766

**6) Oil Pan Gasket**

- › B237-5932



**1) Bush, Con Rod**

- › B225-5438 x4

**2) Bolt, Con Rod**

- › B225-5439 x8

**3) Con Rod**

- › B225-5453 **2**



**1) Bushing, Cam**

- › B232-7440 x1

**2) Camshaft**

- › B225-5967

**3) Tappet**

- › B138-2053

**4) Pushrod**

- › B067-6095

**5) Seal, Exhaust Valve**

- › B252-6438 x4

**6) Seal, Intake Valve**

- › B254-3954 x4

**Valve Train Kit**

- › BVTK557

**1) Valve, Intake**

- › B225-5495 x4

**2) Valve, Exhaust**

- › B225-5499 x4

**3) Guide, Valve  
(Intake & Exhaust)**

- › 3) B185-0882 x8

**4) Spring, Valve**

- › B225-5496 x8

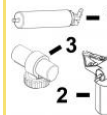
**5) Lock, Valve**

- › B147-1979 x16



**Oil Pump**

- › B225-8329 **1**



**1) Lift Pump**

- › B350-4315

**2) Lift Pump**

- › B232-7808 **5**

**3) Fuel Pump**

- › B228-9129 (2 Pin) **5**



**1) Water Pump**

- › B225-8016

**2) Thermostat**

- › B254-2267 **5**

- › B254-2268 **5**

- › B254-2269 **5**



**Water Pump  
Gasket**

- › B225-8019



**Repair Sleeve**

- › 105RS

**2) Head Bolts**

- › B225-5501 x7

- › B225-5502 x3



**1) Glowplug**

- › B453-3510 x4

**2) Piston Cooling  
Nozzle**

- › B148-3026

**(1):** Not to be used on Engines with Balancer Units.

**(2):** Grade J.

**(3):** Bottom gasket contains: B226-8766 Timing Cover Gasket and B237-5932 Oil Pan Gasket. **(4):** Check your connecting rod journal outside diameter for the proper connecting rod bearings.

**(5):** Check application for proper use.

**(6):** 63.5mm rod journal, splined nose

**(7):** 68mm rod journal, non-splined nose

**Engine Model:**

3054C/E

**Engine Desc:**

TURBOCHARGE

**Engine Data:**

INDUSTRIAL ENGINE

**Engine Info:**

4 Cyl

**Engine Dimensions:**

Bore: 4.133 in / 105.00 mm  
Stroke: 5.00 in / 127.00 mm  
Displacement: 269 in<sup>3</sup> / 4.4 Lt

Please see page 462 for a complete list of equipment models.

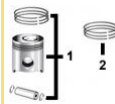


**1) Engine O/H Kit**

- › BOK518 Std.
- › BOK519 0.50
- › BOK520 1.00

**2) Basic Engine Kit**

- › BBK518 Std.
- › BBK519 0.50
- › BBK520 1.00



**1) Piston Kit**

- › B225-5437 Std.
- › B288-1394 0.50
- › B288-1395 1.00

**2) Ring Set**

- › B225-5436 Std.
- › B334-2319 0.50
- › B334-2318 1.00

**4 Per Engine**



**Main Bearing Set**

- › B225-7772 Std.
- › B233-3784 0.010
- › B233-3785 0.020
- › B233-3786 0.030

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › B225-7781 Std. **4**
- › B233-3788 0.010 **4**
- › B233-3789 0.020 **4**
- › B233-3790 0.030 **4**

**Set of 4 Pairs**



**Thrust Washer**

- › B032-9090/91 Std.
- › B067-6873/74 0.007

**Set of 2 Pairs**



**1) Front Seal**

- › B4W-5359

**2) Rear Seal**

- › B232-7449

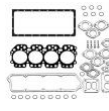
**3) Crankshaft Kit**

- › B232-7400

- › B359-0715

**4) Ring Gear**

- › B7W-6247 115T
- › B033-7687 126T



**1) Top Gasket Set**

- › B276-3420

**2) Bottom Gasket Set**

- › B233-0333 **3**

**3) Head Gasket**

- › B240-7194 **6**

**4) Valve Cover Gsk**

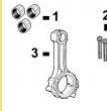
- › B225-6451 **7**

**5) Timing Cover Gsk**

- › B226-8766

**6) Oil Pan Gasket**

- › B225-6005 **3**



**1) Bush, Con Rod**

- › B225-5438 x4

**2) Bolt, Con Rod**

- › B225-5439 x8 **5**
- › B323-9312 x8 **5**

**3) Con Rod**

- › B225-5453 **5**
- › B359-0722 **5**



**1) Bushing, Cam**

- › B232-7440 x1

**2) Camshaft**

- › B225-5967

**3) Tappet**

- › B138-2053

**4) Pushrod**

- › B067-6095

**5) Seal, Exhaust Valve**

- › B252-6438 x4

**6) Seal, Intake Valve**

- › B254-3954 x4

**Valve Train Kit**

- › BVTK557

**1) Valve, Intake**

- › B225-5495 x4

**2) Valve, Exhaust**

- › B225-5499 x4

**3) Guide, Valve (Intake & Exhaust)**

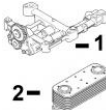
- › 3) B185-0882 x8

**4) Spring, Valve**

- › B225-5496 x8

**5) Lock, Valve**

- › B147-1979 x16



**1) Oil Pump**

- › B225-8329 **1**

**2) Oil Cooler**

- › B225-6817



**1) Lift Pump**

- › B350-4315 **1**

**2) Lift Pump**

- › B232-7808 **5**

**3) Fuel Pump**

- › B228-9129 (2 Pin) **5**

**4) Fuel Pump**

- › B349-1063 (8 Pin) **5**



**1) Water Pump**

- › B225-8016

**2) Thermostat**

- › B254-2267 **5**

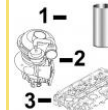
- › B254-2268 **5**

- › B254-2269 **5**



**Water Pump Gasket**

- › B225-8019 **5**



**1) Repair Sleeve**

- › 105RS

**2) Turbocharger**

- › B234-2988 **5**

- › B237-3786 **5**

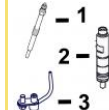
**3) Cylinder Head**

- › B232-7519UF

**4) Head Bolts**

- › B225-5501 x7

- › B225-5502 x3



**1) Glowplug**

- › B453-3510 x4

**2) Injector**

- › B230-8999 **5**

**3) Piston Cooling Nozzle**

- › B276-5605

(1): Not to be used on Engines with Balancer Units.

(2): Grade J.

(3): Industrial Application. Bottom gasket contains: B226-8766 Timing Cover Gasket and B225-6005 Oil Pan Gasket.

(5): Check application for proper use.

(4): Check your connecting rod journal outside diameter for the proper connecting rod bearings.

(6): 63.5mm rod journal, splined nose

(7): 68mm rod journal, non-splined nose



**Engine Model:**

3054C/E

**Engine Desc:**

TURBOCHARGE

**Engine Info:**

4 Cyl

**Engine Dimensions:**

Bore: 4.133 in / 105.00 mm  
Stroke: 5.00 in / 127.00 mm  
Displacement: 269 in3 / 4.4 Lt

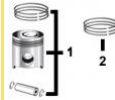


**1) Engine O/H Kit**

- › BOK521 Std.
- › BOK522 0.50
- › BOK523 1.00

**2) Basic Engine Kit**

- › BBK521 Std.
- › BBK522 0.50
- › BBK523 1.00



**1) Piston Kit**

- › B225-5437 Std.
- › B288-1394 0.50
- › B288-1395 1.00

**2) Ring Set**

- › B225-5436 Std.
- › B334-2319 0.50
- › B334-2318 1.00

**4 Per Engine**



**Main Bearing Set**

- › B225-7772 Std.
- › B233-3784 0.010
- › B233-3785 0.020
- › B233-3786 0.030

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › B225-7781 Std. **4**
- › B233-3788 0.010 **4**
- › B233-3789 0.020 **4**
- › B233-3790 0.030 **4**

**Set of 4 Pairs**



**Thrust Washer**

- › B032-9090/91 Std.
- › B067-6873/74 0.007

**Set of 2 Pairs**

Please see page 463 for a complete list of equipment models.



**1) Front Seal**

- › B4W-5359

**2) Rear Seal**

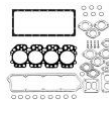
- › B232-7449

**3) Crankshaft Kit**

- › B232-7400
- › B359-0715

**4) Ring Gear**

- › B7W-6247 115T
- › B033-7687 126T



**1) Top Gasket Set**

- › B276-3420

**2) Bottom Gasket Set**

- › B237-5942

**3) Head Gasket**

- › B240-7194

**4) Valve Cover Gsk**

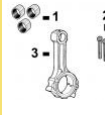
- › B225-6451

**5) Timing Cover Gsk**

- › B225-8287

**6) Oil Pan Gasket**

- › B237-5932



**1) Bush, Con Rod**

- › B225-5438 x4

**2) Bolt, Con Rod**

- › B225-5439 x8
- › B323-9312 x8

**3) Con Rod**

- › B225-5453
- › B359-0722



**1) Bushing, Cam**

- › B232-7440 x1

**2) Camshaft**

- › B225-5967

**3) Tappet**

- › B138-2053

**4) Pushrod**

- › B067-6095

**5) Seal, Exhaust Valve**

- › B252-6438 x4

**6) Seal, Intake Valve**

- › B254-3954 x4

**Valve Train Kit**

- › BVTK557

**1) Valve, Intake**

- › B225-5495 x4

**2) Valve, Exhaust**

- › B225-5499 x4

**3) Guide, Valve (Intake & Exhaust)**

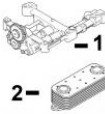
- › 3) B185-0882 x8

**4) Spring, Valve**

- › B225-5496 x8

**5) Lock, Valve**

- › B147-1979 x16

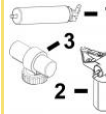


**1) Oil Pump**

- › B225-8329

**2) Oil Cooler**

- › B225-6817



**1) Lift Pump**

- › B350-4315

**2) Fuel Pump**

- › B232-7808

**3) Fuel Pump**

- › B228-9129 (2 Pin)



**1) Water Pump**

- › B225-8016

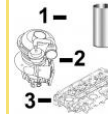
**2) Thermostat**

- › B254-2267
- › B254-2268
- › B254-2269



**Water Pump Gasket**

- › B225-8019



**1) Repair Sleeve**

- › 105RS

**2) Turbocharger**

- › B234-2988
- › B237-3786

**3) Cylinder Head**

- › B232-7519UF

**4) Head Bolts**

- › B225-5501 x7
- › B225-5502 x3



**1) Glowplug**

- › B453-3510 x4

**2) Injector**

- › B230-8999

**3) Piston Cooling Nozzle**

- › B276-5605

(1): Not to be used on Engines with Balancer Units.

(3): Non Industrial Application. Bottom gasket contains: B225-8287 Timing Cover Gasket and B237-5932 Oil Pan Gasket.

(5): Check application for proper use.

(7): 68mm rod journal, non-splined nose

(2): Grade J.

(4): Check your connecting rod journal outside diameter for the proper connecting rod bearings.

(6): 63.5mm rod journal, splined nose

**Engine Model:**

3054C/E

**Engine Desc:**

TURBOCHARGE

**Engine Data:**

INDUSTRIAL ENGINE

**Engine Info:**

4 Cyl

**Engine Dimensions:**

Bore: 4.133 in / 105.00 mm  
Stroke: 5.00 in / 127.00 mm  
Displacement: 269 in<sup>3</sup> / 4.4 Lt

Please see page 464 for a complete list of equipment models.

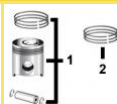


**1) Engine O/H Kit**

- › BOK533 Std.
- › BOK534 0.50
- › BOK535 1.00

**2) Basic Engine Kit**

- › BBK533 Std.
- › BBK534 0.50
- › BBK535 1.00



**1) Piston Kit**

- › B225-5437 Std.
- › B288-1394 0.50
- › B288-1395 1.00

**2) Ring Set**

- › B225-5436 Std.
- › B334-2319 0.50
- › B334-2318 1.00

**4 Per Engine**



**Main Bearing Set**

- › B225-7772 Std.
- › B233-3784 0.010
- › B233-3785 0.020
- › B233-3786 0.030

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › B225-7781 Std. **4**
- › B233-3788 0.010 **4**
- › B233-3789 0.020 **4**
- › B233-3790 0.030 **4**

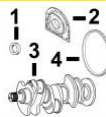
**Set of 4 Pairs**



**Thrust Washer**

- › B032-9090/91 Std.
- › B067-6873/74 0.007

**Set of 2 Pairs**



**1) Front Seal**

- › B4W-5359

**2) Rear Seal**

- › B232-7449

**3) Crankshaft Kit**

- › B232-7400
- › B359-0715

**4) Ring Gear**

- › B7W-6247 115T
- › B033-7687 126T



**1) Top Gasket Set**

- › B276-3420

**2) Bottom Gasket Set**

- › B272-2232 **3**

**3) Head Gasket**

- › B240-7194 **6**

**4) Valve Cover Gsk**

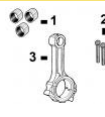
- › B225-6451 **7**

**5) Timing Cover Gsk**

- › B225-8287

**6) Oil Pan Gasket**

- › B225-6005



**1) Bush, Con Rod**

- › B225-5438 x4

**2) Bolt, Con Rod**

- › B225-5439 x8 **5**
- › B323-9312 x8 **5**

**3) Con Rod**

- › B225-5453 **5**
- › B359-0722 **5**



**1) Bushing, Cam**

- › B232-7440 x1

**2) Camshaft**

- › B225-5967

**3) Tappet**

- › B138-2053

**4) Pushrod**

- › B067-6095

**5) Seal, Exhaust Valve**

- › B252-6438 x4

**6) Seal, Intake Valve**

- › B254-3954 x4

**Valve Train Kit**

- › BVTK557

**1) Valve, Intake**

- › B225-5495 x4

**2) Valve, Exhaust**

- › B225-5499 x4

**3) Guide, Valve (Intake & Exhaust)**

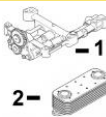
- › 3) B185-0882 x8

**4) Spring, Valve**

- › B225-5496 x8

**5) Lock, Valve**

- › B147-1979 x16



**1) Oil Pump**

- › B225-8329 **1**

**2) Oil Cooler**

- › B225-6817



**1) Lift Pump**

- › B350-4315 **1**

**2) Lift Pump**

- › B232-7808 **5**

**3) Fuel Pump**

- › B228-9129 (2 Pin) **5**

**4) Fuel Pump**

- › B349-1063 (8 Pin) **5**



**1) Water Pump**

- › B225-8016

**2) Thermostat**

- › B254-2267 **5**
- › B254-2268 **5**
- › B254-2269 **5**



**Water Pump Gasket**

- › B225-8019 **5**



**1) Repair Sleeve**

- › 105RS

**2) Turbocharger**

- › B234-2988 **5**
- › B237-3786 **5**

**3) Cylinder Head**

- › B232-7519UF

**4) Head Bolts**

- › B225-5501 x7
- › B225-5502 x3



**1) Glowplug**

- › B453-3510 x4

**2) Injector**

- › B230-8999 **5**
- › B236-1674 **5**

**3) Piston Cooling Nozzle**

- › B148-3026

(1): Not to be used on Engines with Balancer Units.

(3): Bottom gasket contains: B225-8287 Timing Cover Gasket and B225-6005 Oil Pan Gasket.

(5): Check application for proper use.

(7): 68mm rod journal, non-splined nose

(2): Grade J.

(4): Check your connecting rod journal outside diameter for the proper connecting rod bearings.

(6): 63.5mm rod journal, splined nose

**Engine Model:**

3054C/E

**Engine Desc:**

TURBOCHARGED

**Engine Data:**

INDUSTRIAL ENGINE

**Engine Info:**

4 Cyl

**Engine Dimensions:**

Bore: 4.133 in / 105.00 mm  
Stroke: 5.00 in / 127.00 mm  
Displacement: 269 in3 / 4.4 Lt

**ESN**

BLN  
CRX107-UP  
CRS  
FDP  
E4M  
G4D  
J1Z  
304

**Caterpillar**

PS150C - Pneumatic Roller  
PS300C - Pneumatic Roller  
PS360C - Pneumatic Roller

**Eco Log**

554B - Forwarder

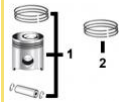


**1) Engine O/H Kit**

- › BOK563 Std.
- › BOK564 0.50
- › BOK565 1.00

**2) Basic Engine Kit**

- › BBK563 Std.
- › BBK564 0.50
- › BBK565 1.00



**1) Piston Kit**

- › B225-5437 Std.
- › B288-1394 0.50
- › B288-1395 1.00

**2) Ring Set**

- › B225-5436 Std.
- › B334-2319 0.50
- › B334-2318 1.00

**4 Per Engine**



**Main Bearing Set**

- › B225-7772 Std.
- › B233-3784 0.010
- › B233-3785 0.020
- › B233-3786 0.030

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › B225-7781 Std. **4**
- › B233-3788 0.010 **4**
- › B233-3789 0.020 **4**
- › B233-3790 0.030 **4**

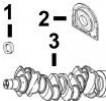
**Set of 4 Pairs**



**Thrust Washer**

- › B032-9090/91 Std.
- › B067-6873/74 0.007

**Set of 2 Pairs**



**1) Front Seal**

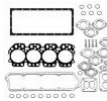
- › B4W-5359

**2) Rear Seal**

- › B232-7449

**3) Crankshaft Kit**

- › B232-7400
- › B359-0715



**1) Top Gasket Set**

- › B276-3420

**2) Bottom Gasket Set**

- › B290-2495 **3**

**3) Head Gasket**

- › B240-7194 **6**

**4) Valve Cover Gsk**

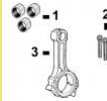
- › B225-6451 **7**

**5) Timing Cover Gsk**

- › B226-8766

**6) Oil Pan Gasket**

- › B237-5932



**1) Bush, Con Rod**

- › B225-5438 x4

**2) Bolt, Con Rod**

- › B225-5439 x8

**3) Con Rod**

- › B225-5453 **2**



**1) Bushing, Cam**

- › B232-7440 x1

**2) Camshaft**

- › B225-5967

**3) Tappet**

- › B138-2053

**4) Pushrod**

- › B067-6095

**5) Seal, Exhaust Valve**

- › B252-6438 x4

**6) Seal, Intake Valve**

- › B254-3954 x4

**Valve Train Kit**

- › BVTK557

**1) Valve, Intake**

- › B225-5495 x4

**2) Valve, Exhaust**

- › B225-5499 x4

**3) Guide, Valve (Intake & Exhaust)**

- › 3) B185-0882 x8

**4) Spring, Valve**

- › B225-5496 x8

**5) Lock, Valve**

- › B147-1979 x16



**1) Oil Pump**

- › B225-8329

**2) Oil Cooler**

- › B225-6817



**1) Lift Pump**

- › B350-4315 **1**

**2) Fuel Pump**

- › B228-9129 (2 Pin) **5**

**3) Fuel Pump**

- › B349-1063 (8 Pin) **5**



**1) Water Pump**

- › B225-8016

**2) Thermostat**

- › B254-2267 **5**

- › B254-2268 **5**

- › B254-2269 **5**



**Water Pump Gasket**

- › B225-8019



**1) Repair Sleeve**

- › 105RS

**2) Turbocharger**

- › B232-7519UF

**3) Cylinder Head**

- › B232-7519UF

**4) Head Bolts**

- › B225-5501 x7
- › B225-5502 x3



**1) Glowplug**

- › B453-3510 x4

**2) Piston Cooling Nozzle**

- › B148-3026

(1): Not to be used on Engines with Balancer Units.

(2): Grade J.

(3): Bottom gasket contains: B226-8766 Timing Cover Gasket and B237-5932 Oil Pan Gasket.

(4): Check your connecting rod journal outside diameter for the proper connecting rod bearings.

(5): Check application for proper use.

(6): 63.5mm rod journal, splined nose

(7): 68mm rod journal, non-splined nose

**Engine Model:**

3054C/E

**Engine Desc:**

TURBOCHARGE

**Engine Data:**

Tier 3

**Engine Info:**

4 Cyl

**Engine**

**Dimensions:**

Bore: 4.133in / 105.00mm  
Stroke: 5.00in / 127.00mm  
Displacement: 269in3/ 4.4Lt

Please see page 465 for a complete list of equipment models.



**1) Engine O/H Kit**

- › BOK1898
- › BOK1902 0.50
- › BOK1906 1.00

**2) Basic Engine Kit**

- › BBK1898
- › BBK1902 0.50
- › BBK1906 1.00



**Piston & Ring Kit**

- › B508-1898 Std.
- › B508-1902 0.50
- › B508-1906 1.00



**Main Bearing Set**

- › B353-7423 Std.
- › B353-7424 0.010
- › B353-7425 0.020
- › B353-7426 0.030

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › B360-3986 Std.
- › B468-7762 0.010
- › B468-7769 0.020
- › B468-7770 0.030

**Set of 4 Pairs**



**Thrust Washer Set**

- › B032-9090/91 Std. **1**
- › B067-6873/74 0.007 **1**

**Set of 2 Pairs**



**1) Front Seal**

- › B4W-5359

**2) Rear Seal**

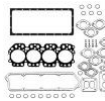
- › B232-7449

**3) Crankshaft Kit**

- › B359-0715

**4) Ring Gear**

- › B7W-6247 115T
- › B033-7687 126T



**1) Top Gasket Set**

- › B276-3420

**2) Bottom Gasket Set**

- › B272-2232

**3) Head Gasket**

- › B240-7194 **3**

**4) Valve Cover Gasket**

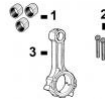
- › B225-6451

**5) Timing Cover Gsk**

- › B225-8287

**6) Oil Pan Gasket**

- › B225-6005



**1) Bush, Con Rod**

- › B276-7478 x4

**2) Bolt, Con Rod**

- › B323-9312 x8

**3) Con Rod Kit**

- › B331-0290 x4



**1) Bushing, Cam**

- › B232-7440 x1

**2) Camshaft**

- › B350-2374

**3) Tappet**

- › B138-2053 x8

**4) Pushrod**

- › B067-6095 x8

**5) Seal, Valve Exhaust**

- › B254-3954 x4

**6) Seal, Valve Intake**

- › B252-6438 x4

**Valve Train**

- › BVTK557

**1) Valve, Intake**

- › B225-5495 x4

**2) Valve, Exhaust**

- › B225-5499 x4

**3) Guide, Valve (Intake & Exhaust)**

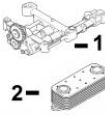
- › 3) B185-0882 x8

**4) Spring, Valve**

- › B225-5496 x8

**5) Lock, Valve**

- › B147-1979 x16



**1) Oil Pump**

- › B225-8329

**2) Balancer Unit Incl. Oil Pump**

- › B234-0615

**3) Oil Cooler**

- › B225-6817



**1) Lift Pump**

- › B350-4315 **2**

**2) Lift Pump**

- › B232-7808 **2**

**3) Fuel Pump**

- › B228-9129 (2pin) **2**

**4) Fuel Pump**

- › B349-1063 (3 Pin) **2**



**1) Water Pump**

- › B225-8016

**2) Thermostat**

- › B254-2267

**3) Water Pump Gasket**

- › B225-8019



**Repair Sleeve**

- › 1) 105RS

**2) Turbocharger**

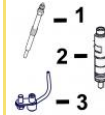
- › B237-3786 **2**
- › B234-2988 **2**

**3) Cylinder Head**

- › B232-7519UF

**4) Head Bolts**

- › B225-5501 x7
- › B225-5502 x3



**1) Glowplug**

- › B453-3510

**2) Injector**

- › B236-1674 **2**

**3) Pistle Cooling Nozzle**

- › B276-5605



**Fuel Lines**

- › 1) B230-8995
- › 2) B230-8996
- › 3) B230-8997
- › 4) B230-8998






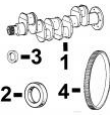
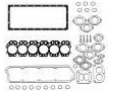

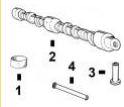

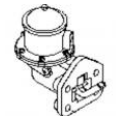



(1): Connecting rod journal outside diameter is 67.99 mm / 2.6768 in.

(3): 68mm rod journal, non-splined nose


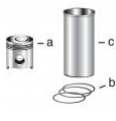






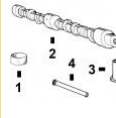

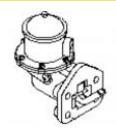
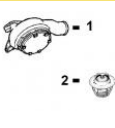


(2): Check application for proper use.

|                              |  |  |                              |   |
|------------------------------|--|--|------------------------------|---|
| <b>Engine Model:</b><br>3056 | <b>Engine Desc:</b><br>NATURALLY ASPIRATED | <b>Engine Data:</b><br>INDUSTRIAL ENGINE | <b>Engine Info:</b><br>6 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.937 in / 100.00 mm |
|------------------------------|--|--|------------------------------|---|

|                       |  |         |
|-----------------------|--|---------|
| <b>ESN</b><br>1ML1-UP | <b>Engine Arrangement</b><br>6I-2217<br>108-0497 | 6I-2222 |
|-----------------------|--|---------|

|   |  |  |  |   |
|---|--|--|--|---|
|  <p><b>1) Engine O/H Kit</b><br/>• BOK700</p> <p><b>2) Basic Engine Kit</b><br/>• BBK700</p>  |  <p><b>Piston-Liner Kit</b><br/>• BCK264</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>• a) B135-0264</li> <li>• b) B146-1780</li> <li>• c) B6I-0164</li> </ul> <p><b>6 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>• B7W-4589 Std.<br/>• B7W-4590 0.010<br/>• B7W-4591 0.020<br/>• B7W-4592 0.030</p> <p><b>Set of 7 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>• B7W-4816 Std.<br/>• B7W-4817 0.010<br/>• B7W-4818 0.020<br/>• B7W-4819 0.030</p> <p><b>Set of 6 Pairs</b></p>                           |  <p><b>Thrust Washer Set</b><br/>• B032-9090/91 Std.<br/>• B067-6873/74 0.007</p> <p><b>Set of 2 Pairs</b></p> |
|  <p><b>1) Front Seal</b><br/>• B4W-5359</p> <p><b>2) Rear Seal</b><br/>• B4W-5360</p> <p><b>3) Crankshaft Kit</b><br/>• B193-0159</p> <p><b>4) Ring Gear</b><br/>• B033-7687 126T</p> |  <p><b>1) Top Gasket Set</b><br/>• B103-0081</p> <p><b>2) Bottom Gasket Set</b><br/>• B103-0080</p> <p><b>3) Head Gasket</b><br/>• B6I-3875</p>   |  <p><b>1) Bush, Con Rod</b><br/>• B067-6158 x6</p> <p><b>2) Bolt, Con Rod</b><br/>• B067-6883 x12</p> <p><b>3) Nut, Con Rod</b><br/>• B7W-2505 x12</p> <p><b>4) Con Rod</b><br/>• B067-6879</p> |  <p><b>1) Bushing, Cam</b><br/>• B036-5802 x1</p> <p><b>2) Camshaft</b><br/>• B6I-4353</p> <p><b>3) Tappet</b><br/>• B138-2053</p> <p><b>4) Pushrod</b><br/>• B067-6095</p> |   |
| <p><b>Valve Train Kit</b><br/>• BVTK750</p>   | <p><b>1) Valve, Intake</b><br/>• B6I-0282 x6</p> <p><b>2) Valve, Exhaust</b><br/>• B7W-4602 x6</p>   | <p><b>3) Guide, Valve</b></p> <p><b>a) Intake</b></p> <p><b>b) Exhaust</b><br/>• 3a) B160-5436 x6<br/>• 3b) B160-5438 x6</p>   | <p><b>4) Spring, Valve</b></p> <p><b>a) Inner</b></p> <p><b>b) Outer</b><br/>• 4a) B6I-0284 x12<br/>• 4b) B6I-0283 x12</p>   | <p><b>5) Lock, Valve</b><br/>• B067-6834 x24</p> <p><b>6) Seal, Valve</b><br/>• B1W-5849 x12</p>  |
|  <p><b>Oil Pump</b><br/>• B100-3717</p>   |  <p><b>Lift Pump</b><br/>• B132-9447</p>  |  <p><b>1) Water Pump</b><br/>• B149-0539</p> <p><b>2) Thermostat</b><br/>• B4W-8063</p>   |  <p><b>1) Heater Plug</b><br/>• B035-8059</p> <p><b>2) Rocker Arm LH</b><br/>• B150-1217</p> <p><b>3) Rocker Arm RH</b><br/>• B150-1218</p>                                |  <p><b>Piston Cooling Nozzle</b><br/>• B148-3026</p>   |

(1): Flanged Fully Finished Liner. Semi Finished Liner available B6I-

|  |  |  |  |   |
|--|--|--|--|---|
| <b>Engine Model:</b><br>3056T  | <b>Engine Desc:</b><br>TURBOCHARGED  | <b>Engine Data:</b><br>INDUSTRIAL ENGINE   | <b>Engine Info:</b><br>6 Cyl   | <b>Engine Dimensions:</b><br>Bore: 3.937 in / 100.00 mm   |
| <b>ESN</b><br>1ML1-UP  | <b>Olympian</b><br>GEP88SP1      GEP110  |  | <b>Engine Arrangement</b><br>6I-2218      6I-2219<br>6I-2223      6I-2224<br>103-8804  |   |
|  <p><b>1) Engine O/H Kit</b><br/>                     , BOK701/45<br/>                     , BOK701/30</p> <p><b>2) Basic Engine Kit</b><br/>                     , BBK701</p>                       |  <p><b>Piston-Liner Kit</b><br/>                     , BCK553</p> <p><b>Consist of:</b><br/>                     , a) B107-2553<br/>                     , b) B112-7020<br/>                     , c) B6I-0164</p> <p><b>6 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>                     , B7W-4589 Std.<br/>                     , B7W-4590 0.010<br/>                     , B7W-4591 0.020<br/>                     , B7W-4592 0.030</p> <p><b>Set of 7 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>                     , B7W-4816 Std.<br/>                     , B7W-4817 0.010<br/>                     , B7W-4818 0.020<br/>                     , B7W-4819 0.030</p> <p><b>Set of 6 Pairs</b></p>                           |  <p><b>Thrust Washer Set</b><br/>                     , B032-9090/91 Std.<br/>                     , B067-6873/74 0.007</p> <p><b>Set of 2 Pairs</b></p> |
|  <p><b>1) Front Seal</b><br/>                     , B4W-5359</p> <p><b>2) Rear Seal</b><br/>                     , B4W-5360</p> <p><b>3) Crankshaft Kit</b><br/>                     , B193-0159</p> |  <p><b>1) Top Gasket Set</b><br/>                     , B103-0081</p> <p><b>2) Bottom Gasket Set</b><br/>                     , B103-0080</p> <p><b>3) Head Gasket</b><br/>                     , B6I-3875</p>                                |  <p><b>1) Bush, Con Rod</b><br/>                     , B7W-2510 x6</p> <p><b>2) Bolt, Con Rod</b><br/>                     , B067-6883 x12</p> <p><b>3) Nut, Con Rod</b><br/>                     , B7W-2505 x12</p> <p><b>4) Con Rod</b><br/>                     , B7W-2514</p> |  <p><b>1) Bushing, Cam</b><br/>                     , B036-5802 x1</p> <p><b>2) Camshaft</b><br/>                     , B6I-4353</p> <p><b>3) Tappet</b><br/>                     , B138-2053</p> <p><b>4) Pushrod</b><br/>                     , B067-6095</p> |   |
| <p><b>Valve Train Kit</b><br/>                     , a) 45 b) 30<br/>                     , a) BVTK751<br/>                     , b) BVTK754</p>   | <p><b>1) Valve, Intake</b><br/>                     , a) 45 b) 30<br/>                     , 1a) B6I-1196 x6<br/>                     , 1b) B100-4626</p> <p><b>2) Valve, Exhaust</b><br/>                     , B7W-4602 x6</p>   | <p><b>3) Guide, Valve</b><br/> <b>a) Intake</b><br/> <b>b) Exhaust</b><br/>                     , 3a) B160-5436 x6<br/>                     , 3b) B160-5438 x6</p>   | <p><b>4) Spring, Valve</b><br/> <b>a) Inner</b><br/> <b>b) Outer</b><br/>                     , 4a) B6I-0284 x12<br/>                     , 4b) B6I-0283 x12</p>   | <p><b>5) Lock, Valve</b><br/>                     , B067-6834 x24</p> <p><b>6) Seal, Valve</b><br/>                     , B1W-5849 x12</p>  |
|  <p><b>Oil Pump</b><br/>                     , B100-3717</p>   |  <p><b>Lift Pump</b><br/>                     , B132-9447</p>   |  <p><b>1) Water Pump</b><br/>                     , B149-0539</p> <p><b>2) Thermostat</b><br/>                     , B4W-8063</p>   |  <p><b>1) Heater Plug</b><br/>                     , B035-8059</p> <p><b>2) Rocker Arm LH</b><br/>                     , B150-1217</p> <p><b>3) Rocker Arm RH</b><br/>                     , B150-1218</p>   |  <p><b>Piston Cooling Nozzle</b><br/>                     , B148-3026</p>  |






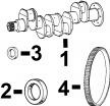


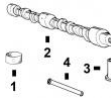

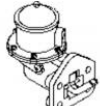
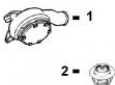


(1): Flanged Fully Finished Liner. Semi Finished Liner available B6I-

|                               |                                     |  |                              |   |
|-------------------------------|-------------------------------------|--|------------------------------|---|
| <b>Engine Model:</b><br>3056T | <b>Engine Desc:</b><br>TURBOCHARGED | <b>Engine Data:</b><br>INDUSTRIAL ENGINE | <b>Engine Info:</b><br>6 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.937 in / 100.00 mm |
|-------------------------------|-------------------------------------|--|------------------------------|---|

**Olympian**

GEP105SP1  
GEP150  
GEP150-1






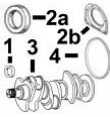
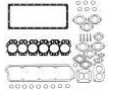
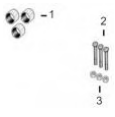
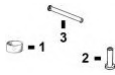

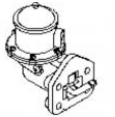
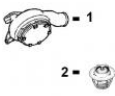

GEP165  
GEP165-1  
GEP188-1

|   |   |   |  |   |
|---|---|---|--|---|
|  <p><b>1) Engine O/H Kit</b><br/>• BOK706</p> <p><b>2) Basic Engine Kit</b><br/>• BBK706</p>  |  <p><b>Piston-Liner Kit</b><br/>• BCK529</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>• a) B124-3529</li> <li>• b) B112-7020</li> <li>• c) B111-1815</li> </ul> <p><b>6 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>• B7W-4589 Std.<br/>• B7W-4590 0.010<br/>• B7W-4591 0.020<br/>• B7W-4592 0.030</p> <p><b>Set of 7 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b><br/>• B7W-4816 Std.<br/>• B7W-4817 0.010<br/>• B7W-4818 0.020<br/>• B7W-4819 0.030</p> <p><b>Set of 6 Pairs</b></p>                           |  <p><b>Thrust Washer Set</b><br/>• B032-9090/91 Std.<br/>• B067-6873/74 0.007</p> <p><b>Set of 2 Pairs</b></p> |
|  <p><b>1) Front Seal</b><br/>• B4W-5359</p> <p><b>2) Rear Seal</b><br/>• B4W-5360</p> <p><b>3) Crankshaft Kit</b><br/>• B193-0159</p> <p><b>4) Ring Gear</b><br/>• B033-7687 126T</p> |  <p><b>1) Top Gasket Set</b><br/>• B103-0081</p> <p><b>2) Bottom Gasket Set</b><br/>• B103-0080</p> <p><b>3) Head Gasket</b><br/>• B61-3875</p>  |  <p><b>1) Bush, Con Rod</b><br/>• B124-3531 x6</p> <p><b>2) Bolt, Con Rod</b><br/>• B124-3532 x12</p> <p><b>3) Dowel, Con Rod</b><br/>• B124-3533 x12</p> <p><b>4) Con Rod</b><br/>• B124-3530</p> |  <p><b>1) Bushing, Cam</b><br/>• B036-5802 x1</p> <p><b>2) Camshaft</b><br/>• B61-4353</p> <p><b>3) Tappet</b><br/>• B138-2053</p> <p><b>4) Pushrod</b><br/>• B067-6095</p> |   |
| <p><b>Valve Train Kit</b><br/>• BVTK754</p>   | <p><b>1) Valve, Intake</b><br/>• B100-4626 x6</p> <p><b>2) Valve, Exhaust</b><br/>• B7W-4602 x6</p>   | <p><b>3) Guide, Valve</b></p> <p><b>a) Intake</b><br/><b>b) Exhaust</b></p> <ul style="list-style-type: none"> <li>• 3a) B160-5436 x6</li> <li>• 3b) B160-5438 x6</li> </ul>  | <p><b>4) Spring, Valve</b></p> <p><b>a) Inner</b><br/><b>b) Outer</b></p> <ul style="list-style-type: none"> <li>• 4a) B61-0284 x12</li> <li>• 4b) B61-0283 x12</li> </ul>   | <p><b>5) Lock, Valve</b><br/>• B067-6834 x24</p> <p><b>6) Seal, Valve</b><br/>• B1W-5849 x12</p>  |
|  <p><b>Oil Pump</b><br/>• B100-3717</p>   |  <p><b>Lift Pump</b><br/>• B132-9447</p>   |  <p><b>1) Water Pump</b><br/>• B149-0539</p> <p><b>2) Thermostat</b><br/>• B4W-8063</p>  |  <p><b>1) Heater Plug</b><br/>• B035-8059</p> <p><b>2) Rocker Arm LH</b><br/>• B150-1217</p> <p><b>3) Rocker Arm RH</b><br/>• B150-1218</p>                                |  <p><b>Piston Cooling Nozzle</b><br/>• B148-3026</p>   |

(1): Flanged Fully Finished Liner. Semi Finished Liner available B61-0164UF.(2) 30 de

|                              |   |  |                              |   |
|------------------------------|---|--|------------------------------|---|
| <b>Engine Model:</b><br>3056 | <b>Engine Desc:</b><br>TURBOCHARGED or<br>NATURALLY ASPIRATED | <b>Engine Data:</b><br>INDUSTRIAL ENGINE | <b>Engine Info:</b><br>6 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.937 in / 100.00 mm |
|------------------------------|---|--|------------------------------|---|

Please see page 466 for a complete list of equipment models.






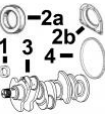
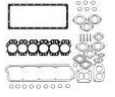

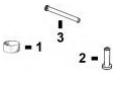

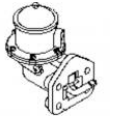
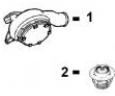

|   |  |  |   |   |
|---|--|--|---|---|
|  <p><b>1) Engine O/H Kit</b><br/>         , BOK702/45<br/>         , BOK702/30<br/> <b>2) Basic Engine Kit</b><br/>         , BBK702</p>  |  <p><b>Piston-Liner Kit</b><br/>         , BCK390<br/> <b>Consist of:</b><br/>         , a) B152-1390<br/>         , b) B138-2073<br/>         , c) B111-1815 <b>1</b><br/> <b>6 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>         , B7W-4589 Std.<br/>         , B7W-4590 0.010<br/>         , B7W-4591 0.020<br/>         , B7W-4592 0.030<br/> <b>Set of 7 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b><br/>         , B7W-4816 Std.<br/>         , B7W-4817 0.010<br/>         , B7W-4818 0.020<br/>         , B7W-4819 0.030<br/> <b>Set of 6 Pairs</b></p>  |  <p><b>Thrust Washer Set</b><br/>         , B032-9090/91 Std.<br/>         , B067-6873/74 0.007<br/> <b>Set of 2 Pairs</b></p> |
|  <p><b>1) Front Seal</b><br/>         , B4W-5359<br/> <b>2a) Rear Seal</b><br/>         , B4W-5360<br/> <b>2b) Rear Seal</b><br/>         , B209-9218<br/> <b>3) Crankshaft Kit</b><br/>         , B193-0159<br/> <b>4) Ring Gear</b><br/>         , B033-7687 126T</p> |  <p><b>1) Top Gasket Set</b><br/>         , B187-1963<br/> <b>2) Bottom Gasket Set</b> <b>2</b><br/>         , B232-3073<br/> <b>3) Head Gasket</b> <b>3</b><br/>         , B61-3875</p>            |  <p><b>1) Bush, Con Rod</b><br/>         , B138-2048 x6<br/> <b>2) Bolt, Con Rod</b><br/>         , B067-6883 x12<br/> <b>3) Nut, Con Rod</b><br/>         , B7W-2505 x12</p>     |  <p><b>1) Bushing, Cam</b><br/>         , B036-5802 x1<br/> <b>2) Tappet</b><br/>         , B138-2053<br/> <b>3) Pushrod</b><br/>         , B067-6095<br/> <b>4) Seal, Valve Intake</b><br/>         , B145-6856 x6<br/> <b>5) Seal, Valve Exhaust</b><br/>         , B145-6858 x6</p> |   |
| <p><b>Valve Train Kit</b><br/>         , a) 45 b) 30<br/>         , a) BVTK752<br/>         , b) BVTK753</p>  | <p><b>1) Valve, Intake</b><br/>         , a) 45 b) 30<br/>         , 1a) B138-2052 x6<br/>         , 1b) B145-6855 x6<br/> <b>2) Valve Exhaust</b><br/>         , 2a) B138-2050 x6<br/>         , 2b) B145-6857 x6</p>   | <p><b>3) Guide, Valve</b><br/> <b>a) Intake</b><br/> <b>b) Exhaust</b><br/>         , 3a) B185-0882 x6<br/>         , 3b) B163-9256 x6</p>   | <p><b>4) Spring, Valve</b><br/>         , B206-4127 x12</p>   | <p><b>5) Lock, Valve</b><br/>         , B147-1979 x24</p>   |
|  <p><b>Oil Pump</b><br/>         , B100-3717</p>  |  <p><b>Lift Pump</b><br/>         , B132-9447</p>   |  <p><b>1) Water Pump</b><br/>         , B239-6142<br/> <b>2) Thermostat</b><br/>         , B4W-8063<br/>         , B220-2748</p>  |  <p><b>Piston Cooling Nozzle</b><br/>         , B148-3026</p>  |   |

(1): Flanged Fully Finished Liner. Semi Finished Liner available  
 B111-1815UF(2) To ESN: 7MS1285.(3) From E



|                              |   |  |                              |  |
|------------------------------|---|--|------------------------------|--|
| <b>Engine Model:</b><br>3056 | <b>Engine Desc:</b><br>TURBOCHARGED or<br>NATURALLY ASPIRATED | <b>Engine Data:</b><br>INDUSTRIAL ENGINE | <b>Engine Info:</b><br>6 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.937 in / 100.00<br>mm |
|------------------------------|---|--|------------------------------|--|


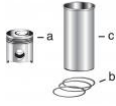



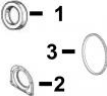


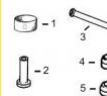
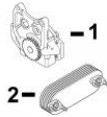
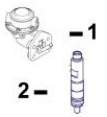
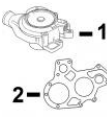

Please see page 467 for a complete list of equipment models.

|  |  |  |  |   |
|--|--|--|--|---|
|  <p><b>1) Engine O/H Kit</b><br/>         , BOK703/45<br/>         , BOK703/30<br/> <b>2) Basic Engine Kit</b><br/>         , BBK703</p>   |  <p><b>Piston-Liner Kit</b><br/>         , BCK390<br/> <b>Consist of:</b><br/>         , a) B152-1390<br/>         , b) B138-2073<br/>         , c) B111-1815 <b>1</b><br/> <b>6 Per Engine</b></p> |  <p><b>Main Bearing Set</b><br/>         , B7W-4589 <i>Std.</i><br/>         , B7W-4590 <i>0.010</i><br/>         , B7W-4591 <i>0.020</i><br/>         , B7W-4592 <i>0.030</i><br/> <b>Set of 7 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b><br/>         , B236-4397 <i>Std.</i><br/>         , B236-4397A <i>0.010</i><br/>         , B236-4397B <i>0.020</i><br/>         , B236-4397C <i>0.030</i><br/> <b>Set of 6 Pairs</b></p>  |  <p><b>Thrust Washer Set</b><br/>         , B032-9090/91 <i>Std.</i><br/>         , B067-6873/74 <i>0.007</i><br/> <b>Set of 2 Pairs</b></p> |
|  <p><b>1) Front Seal</b><br/>         , B4W-5359<br/> <b>2a) Rear Seal</b><br/>         , B4W-5360<br/> <b>2b) Rear Seal</b><br/>         , B209-9218<br/> <b>3) Crankshaft Kit</b><br/>         , B193-0159<br/> <b>4) Ring Gear</b><br/>         , B033-7687 <i>126T</i></p> |  <p><b>1) Top Gasket Set</b><br/>         , B187-1963<br/> <b>2) Bottom Gasket Set</b> <b>2</b><br/>         , B232-3073<br/> <b>3) Head Gasket</b> <b>3</b><br/>         , B6I-3875</p>            |  <p><b>1) Bush, Con Rod</b><br/>         , B225-5438 <i>x6</i><br/> <b>2) Bolt, Con Rod</b><br/>         , B225-5439 <i>x12</i><br/> <b>3) Con Rod</b><br/>         , B225-5453</p>                           |  <p><b>1) Bushing, Cam</b><br/>         , B036-5802 <i>x1</i><br/> <b>2) Tappet</b><br/>         , B138-2053<br/> <b>3) Pushrod</b><br/>         , B067-6095<br/> <b>4) Seal, Valve Intake</b><br/>         , B145-6856 <i>x6</i><br/> <b>5) Seal, Valve Exhaust</b><br/>         , B145-6858 <i>x6</i></p> |   |
| <p><b>Valve Train Kit</b><br/>         , a) 45 b) 30<br/>         , a) BVTK752<br/>         , b) BVTK753</p>   | <p><b>1) Valve, Intake</b><br/>         , a) 45 b) 30<br/>         , 1a) B138-2052 <i>x6</i><br/>         , 1b) B145-6855 <i>x6</i><br/> <b>2) Valve, Exhaust</b><br/>         , 2a) B138-2050 <i>x6</i><br/>         , 2b) B145-6857 <i>x6</i></p>                                  | <p><b>3) Guide, Valve</b><br/> <b>a) Intake</b><br/> <b>b) Exhaust</b><br/>         , 3a) B185-0882 <i>x6</i><br/>         , 3b) B163-9256 <i>x6</i></p>   | <p><b>4) Spring, Valve</b><br/>         , B206-4127 <i>x12</i></p>   | <p><b>5) Lock, Valve</b><br/>         , B147-1979 <i>x24</i></p>  |
|  <p><b>Oil Pump</b><br/>         , B100-3717</p>   |  <p><b>Lift Pump</b><br/>         , B132-9447</p>   |  <p><b>1) Water Pump</b><br/>         , B239-6142<br/> <b>2) Thermostat</b><br/>         , B4W-8063<br/>         , B220-2748</p>  |  <p><b>Piston Cooling Nozzle</b><br/>         , B148-3026</p>   |   |

(1): Flanged Fully Finished Liner. Semi Finished Liner available B111-1815UF(2) To ESN: 7MS1285.(3) From ESN: 7M1286.(4) Grage J; Fracture Split Type ESN

|                               |                                     |  |                              |   |
|-------------------------------|-------------------------------------|--|------------------------------|---|
| <b>Engine Model:</b><br>3056E | <b>Engine Desc:</b><br>TURBOCHARGED | <b>Engine Data:</b><br>INDUSTRIAL ENGINE | <b>Engine Info:</b><br>6 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.937 in / 100.00 mm<br>Stroke: 5.00 in / 127.00 mm<br>Compression Ratio:17.25:1 |
|-------------------------------|-------------------------------------|--|------------------------------|---|

Please see page 468 for a complete list of equipment models.

|   |  |   |   |  |
|---|--|---|---|--|
|  <p><b>1) Engine O/H Kit</b><br/>· BOK704</p> <p><b>2) Basic Engine Kit</b><br/>· BBK704</p>  |  <p><b>Piston-Liner Kit</b><br/>· BCK323</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>· a) B216-8323</li> <li>· b) B217-1573</li> <li>· c) B111-1815</li> </ul> <p><b>6 Per Engine</b></p>                                  |  <p><b>Main Bearing Set</b></p> <ul style="list-style-type: none"> <li>· B7W-4589 <small>Std.</small></li> <li>· B7W-4590 <small>0.010</small></li> <li>· B7W-4591 <small>0.020</small></li> <li>· B7W-4592 <small>0.030</small></li> </ul> <p><b>Set of 7 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b></p> <ul style="list-style-type: none"> <li>· B7W-4816 <small>Std.</small></li> <li>· B7W-4817 <small>0.010</small></li> <li>· B7W-4818 <small>0.020</small></li> <li>· B7W-4819 <small>0.030</small></li> </ul> <p><b>Set of 6 Pairs</b></p>                     |  <p><b>Thrust Washer Set</b></p> <ul style="list-style-type: none"> <li>· B032-9090/91 <small>Std.</small></li> <li>· B067-6873/74 <small>0.007</small></li> </ul> <p><b>Set of 2 Pairs</b></p> |
|  <p><b>1) Front Seal</b><br/>· B4W-5359</p> <p><b>2) Rear Seal</b><br/>· B209-9218</p> <p><b>3) Ring Gear</b><br/>· B033-7687 <small>126T</small></p> |  <p><b>1) Top Gasket Set</b><br/>· B216-9612</p> <p><b>2) Bottom Gasket Set</b><br/>· B236-6930</p> <p><b>3) Head Gasket</b><br/>· B240-0205</p> <p><b>4) Valve Cover Gasket</b><br/>· B216-9604</p> <p><b>5) Oil Pan Gasket</b><br/>· B6I-4710</p> |  <p><b>1) Bush, Con Rod</b><br/>· B138-2048 <small>x6</small></p> <p><b>2) Bolt, Con Rod</b><br/>· B067-6883 <small>x12</small></p> <p><b>3) Nut, Con Rod</b><br/>· B7W-2505 <small>x12</small></p>  |  <p><b>1) Bushing, Cam</b><br/>· B036-5802 <small>x1</small></p> <p><b>2) Tappet</b><br/>· B138-2053</p> <p><b>3) Pushrod</b><br/>· B067-6095</p> <p><b>4) Seal, Valve Intake</b><br/>· B145-6856 <small>x6</small></p> <p><b>5) Seal, Valve Exhaust</b><br/>· B145-6858 <small>x6</small></p> |  |
| <p><b>Valve Train Kit</b><br/>· BVTK755</p>   | <p><b>1) Valve, Intake</b><br/>· B145-6855 <small>x6</small></p> <p><b>2) Valve, Exhaust</b><br/>· B138-2050 <small>x6</small></p>   | <p><b>3) Guide, Valve</b></p> <p><b>a) Intake</b><br/>· 3a) B185-0882 <small>x6</small><br/>· 3b) B163-9256 <small>x6</small></p>   | <p><b>4) Spring, Valve</b><br/>· B206-4127 <small>x12</small></p>   | <p><b>5) Lock, Valve</b><br/>· B147-1979 <small>x24</small></p>  |
|  <p><b>1) Oil Pump</b><br/>· B216-8625</p> <p><b>2) Oil Cooler</b><br/>· B175-3915</p>  |  <p><b>1) Lift Pump</b><br/>· B216-9043</p> <p><b>2) Injector</b><br/>· B216-9786</p>   |  <p><b>1) Water Pump</b><br/>· B234-6110</p> <p><b>2) Water Pump Gasket</b><br/>· B201-8745</p>  |  <p><b>Piston Cooling Nozzle</b><br/>· B148-3026</p>   |  |

(1): Flanged Fully Finished Liner. Semi Finished Liner available  
B111-1815UF(2) Check application for prope

**Engine Model:**  
3056E


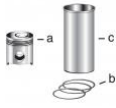



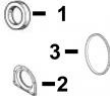

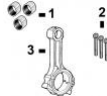
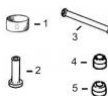
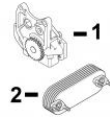
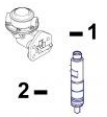
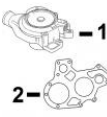

**Engine Desc:**  
TURBOCHARGED

**Engine Data:**  
INDUSTRIAL ENGINE

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 3.937 in / 100.00 mm  
Stroke: 5.00 in / 127.00 mm  
Compression Ratio:17.25:1


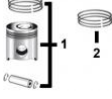




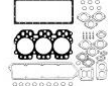

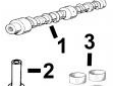






Please see page 469 for a complete list of equipment models.

|   |  |   |   |  |
|---|--|---|---|--|
|  <p><b>1) Engine O/H Kit</b><br/>· BOK705</p> <p><b>2) Basic Engine Kit</b><br/>· BBK705</p>  |  <p><b>Piston-Liner Kit</b><br/>· BCK323</p> <p><b>Consist of:</b></p> <ul style="list-style-type: none"> <li>· a) B216-8323</li> <li>· b) B217-1573</li> <li>· c) B111-1815</li> </ul> <p><b>6 Per Engine</b></p>                                  |  <p><b>Main Bearing Set</b></p> <ul style="list-style-type: none"> <li>· B7W-4589 <i>Std.</i></li> <li>· B7W-4590 <i>0.010</i></li> <li>· B7W-4591 <i>0.020</i></li> <li>· B7W-4592 <i>0.030</i></li> </ul> <p><b>Set of 7 Pairs</b></p> |  <p><b>Con Rod Bearing Set</b></p> <ul style="list-style-type: none"> <li>· B236-4397 <i>Std.</i></li> <li>· B236-4397A <i>0.010</i></li> <li>· B236-4397B <i>0.020</i></li> <li>· B236-4397C <i>0.030</i></li> </ul> <p><b>Set of 6 Pairs</b></p>                      |  <p><b>Thrust Washer Set</b></p> <ul style="list-style-type: none"> <li>· B032-9090/91 <i>Std.</i></li> <li>· B067-6873/74 <i>0.007</i></li> </ul> <p><b>Set of 2 Pairs</b></p> |
|  <p><b>1) Front Seal</b><br/>· B4W-5359</p> <p><b>2) Rear Seal</b><br/>· B209-9218</p> <p><b>3) Ring Gear</b><br/>· B033-7687 <i>126T</i></p> |  <p><b>1) Top Gasket Set</b><br/>· B216-9612</p> <p><b>2) Bottom Gasket Set</b><br/>· B236-6930</p> <p><b>3) Head Gasket</b><br/>· B240-0205</p> <p><b>4) Valve Cover Gasket</b><br/>· B216-9604</p> <p><b>5) Oil Pan Gasket</b><br/>· B6I-4710</p> |  <p><b>1) Bush, Con Rod</b><br/>· B225-5438 <i>x6</i></p> <p><b>2) Bolt, Con Rod</b><br/>· B225-5439 <i>x12</i></p> <p><b>3) Con Rod</b><br/>· B225-5453</p>   |  <p><b>1) Bushing, Cam</b><br/>· B036-5802 <i>x1</i></p> <p><b>2) Tappet</b><br/>· B138-2053</p> <p><b>3) Pushrod</b><br/>· B067-6095</p> <p><b>4) Seal, Valve Intake</b><br/>· B145-6856 <i>x6</i></p> <p><b>5) Seal, Valve Exhaust</b><br/>· B145-6858 <i>x6</i></p> |  |
| <p><b>Valve Train Kit</b><br/>· BVTK755</p>   | <p><b>1) Valve, Intake</b><br/>· B145-6855 <i>x6</i></p> <p><b>2) Valve, Exhaust</b><br/>· B138-2050 <i>x6</i></p>   | <p><b>3) Guide, Valve</b></p> <p><b>a) Intake</b></p> <p><b>b) Exhaust</b></p> <ul style="list-style-type: none"> <li>· 3a) B185-0882 <i>x6</i></li> <li>· 3b) B163-9256 <i>x6</i></li> </ul>   | <p><b>4) Spring, Valve</b><br/>· B206-4127 <i>x12</i></p>   | <p><b>5) Lock, Valve</b><br/>· B147-1979 <i>x24</i></p>  |
|  <p><b>1) Oil Pump</b><br/>· B216-8625</p> <p><b>2) Oil Cooler</b><br/>· B175-3915</p>  |  <p><b>1) Lift Pump</b><br/>· B216-9043</p> <p><b>2) Injector</b><br/>· B216-9786</p>   |  <p><b>1) Water Pump</b><br/>· B234-6110</p> <p><b>2) Water Pump Gasket</b><br/>· B201-8745</p>  |  <p><b>Piston Cooling Nozzle</b><br/>· B148-3026</p>   |  |

(1): Flanged Fully Finished Liner. Semi Finished Liner available B111-1815UF(2) Fracture Split Type; Grade J.(3) Check application for p

|                              |                              |                                  |                              |   |
|------------------------------|------------------------------|----------------------------------|------------------------------|---|
| <b>Engine Model:</b><br>3064 | <b>Engine Desc:</b><br>TURBO | <b>Engine Data:</b><br>AR2013861 | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 102.00 mm<br>Stroke: 130.00 mm . |
|------------------------------|------------------------------|----------------------------------|------------------------------|---|

| ESN     | Applications |      | Engine Arrangement |          |
|---------|--------------|------|--------------------|----------|
| 6LK1-Up | 311          | 311C | 201-3861           | 266-6188 |
|         | 312C         | 314C | 205-6714           | 205-6715 |
|         |              |      | 266-6194           | 266-6186 |

|  |   |  |  |   |
|--|---|--|--|---|
|  <p><b>1) Engine O/H Kit</b><br/>                     , BBK748</p>   |  <p><b>1) Piston &amp; Ring Kit</b><br/>                     , B297-7750 Std.</p> <p><b>2) Ring Set</b><br/>                     , B178-6543 Std</p>   |  <p><b>Main Bearings</b><br/>                     , B51-7588-4 Std.<br/>                     , B51-7784-4 0.25<br/>                     , B51-7785-4 0.50<br/>                     , B51-7786-4 0.75</p> <p><b>Set of 5 Pairs</b></p>                                   |  <p><b>Con Rod Bearings</b><br/>                     , B51-7637-4 Std.<br/>                     , B51-7794-4 0.25<br/>                     , B51-7795-4 0.50<br/>                     , B51-7796-4 0.75</p> <p><b>Set of 4 Pairs</b></p>                         |  <p><b>1) Thrust Washer</b><br/>                     , B51-7654 Std.</p> |
|  <p><b>1) Front Seal</b><br/>                     , B51-7656</p> <p><b>2) Rear Seal</b><br/>                     , B51-7660</p> <p><b>3) Crankshaft</b><br/>                     , B135-2419</p>   |  <p><b>1) O/H Gasket Set</b><br/>                     , B141-4370</p> <p><b>2) Head Gasket</b><br/>                     , B222-8330</p> <p><b>3) Rocker Cover Gasket</b><br/>                     , B51-7905</p> |  <p><b>1) Bush, Con Rod</b><br/>                     , B51-7539</p> <p><b>2) Bolt, Con Rod</b><br/>                     , B094-7154</p> <p><b>3) Nut, Con Rod</b><br/>                     , B094-7516</p> <p><b>4) Con Rod</b><br/>                     , B51-7668</p> |  <p><b>1) Camshaft</b><br/>                     , B196-7999</p> <p><b>2) Tappet</b><br/>                     , B324-4060</p> <p><b>3) Cam Bushing Kit</b><br/>                     , B3064CBS <span style="background-color: yellow; padding: 2px;">1</span></p> |  <p><b>Oil Pressure Switch</b><br/>                     , B266-6210</p>  |
| <p><b>Intake Valve</b><br/>                     , B212-8477 x4</p> <p><b>Insert Valve</b><br/>                     , B212-8474</p>   | <p><b>Exhaust Valve</b><br/>                     , B51-7739 x4</p> <p><b>Insert Valve</b><br/>                     , B51-8012</p>   | <p><b>Intake Valve Guide</b><br/>                     , B183-8172</p> <p><b>Exhaust Valve Guide</b><br/>                     , B183-8173</p>   | <p><b>Valve Spring</b><br/>                     , B51-7740</p> <p><b>Valve Seals</b><br/>                     , B51-7624</p>   |   |
|  <p><b>1) Oil Pump Ring Gear</b><br/>                     , B51-8125 9 Teeth<br/>                     , B51-7858 9 Teeth</p> <p><b>2) Oil Pump Gasket</b><br/>                     , B178-6537</p> <p><b>3) Oil Cooler</b><br/>                     , B135-2403</p> <p><b>4) Oil Cooler Gasket</b><br/>                     , B51-7862</p> |  <p><b>1) Fuel Lift Pump</b><br/>                     , B255-2969</p> <p><b>2) Injector</b></p>  |  <p><b>1) Water Pump</b><br/>                     , B178-6633</p> <p><b>2) Gasket, W Pump</b><br/>                     , B096-9528</p>  |  <p><b>1) Repair Sleeve</b><br/>                     , B51-7523</p>   |  <p><b>Thermostat</b><br/>                     , B51-8010</p>          |

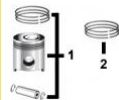
(1): Contains [1]B51-8009, [1]B51-7528, & [1]B51-7529

**Engine Model:** 3064T      **Engine Desc:** TURBO      **Engine Info:** 4 Cyl      **Engine Dimensions:** Bore: 102.00 mm Stroke: 130.00 mm

**ESN** 6LK1-Up      **Applications** 311 312      311B 312B      **Arrangement Number** 118-9886



**1) Engine O/H Kit**  
 , BBK749



**1) Piston & Ring Kit**  
 , B297-7752 Std.  
**2) Ring Set**  
 , B5I-7538 Std



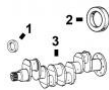
**Main Bearings**  
 , B5I-7588-4 Std.  
 , B5I-7784-4 0.25  
 , B5I-7785-4 0.50  
 , B5I-7786-4 0.75  
**Set of 5 Parts**



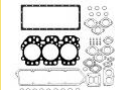
**Con Rod Bearings**  
 , B5I-7637-4 Std.  
 , B5I-7794-4 0.25  
 , B5I-7795-4 0.50  
 , B5I-7796-4 0.75  
**Set of 4 Parts**



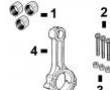
**1) Thrust Washer**  
 , B5I-7654 Std.



**1) Front Seal**  
 , B5I-7656  
**2) Rear Seal**  
 , B5I-7660  
**3) Crankshaft**  
 , B135-2419



**1) O/H Gasket Set**  
 , B141-4370  
**2) Head Gasket**  
 , B222-8330  
**3) Rocker Cover Gasket**  
 , B5I-7905



**1) Bush, Con Rod**  
 , B5I-7539  
**2) Bolt, Con Rod**  
 , B094-7154  
**3) Nut, Con Rod**  
 , B094-7516  
**4) Con Rod**  
 , B5I-7668



**1) Camshaft**  
 , B5I-7837  
**2) Tappet**  
 , B324-4060  
**3) Cam Bushing Kit**  
 , B3064CBS



**Oil Pressure Switch**  
 , B266-6210

**Intake Valve**  
 , B5I-7738 x4  
**Insert Valve**  
 , B5I-8011

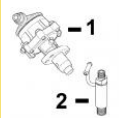
**Exhaust Valve**  
 , B5I-7739 x4  
**Insert Valve**  
 , B5I-8012

**Intake Valve Guide**  
 , B183-8172  
**Exhaust Valve Guide**  
 , B183-8173

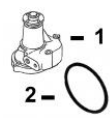
**Valve Spring**  
 , B5I-7740  
**Valve Seals**  
 , B5I-7624



**1) Oil Pump Ring Gear**  
 , B5I-8125 9 Teeth  
 , B5I-7858 9 Teeth  
**2) Oil Pump Gasket**  
 , B5I-7684  
**3) Oil Cooler**  
 , B135-2403  
**4) Oil Cooler Gasket**  
 , B5I-7862



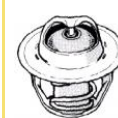
**1) Fuel Lift Pump**  
 , B5I-8145  
**2) Injector**  
 , B236-4700



**1) Water Pump**  
 , B125-2989  
**2) Gasket, W Pump**  
 , B096-9528



**Repair Sleeve**  
 , B5I-7523


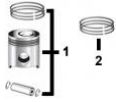



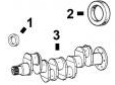
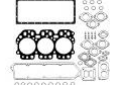
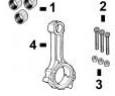









**Thermostat**  
 , B5I-8010

(1): Contains [1]B5I-8009, [1]B5I-7528, & [1]B5I-7529

|                              |                              |                              |  |
|------------------------------|------------------------------|------------------------------|--|
| <b>Engine Model:</b><br>3066 | <b>Engine Desc:</b><br>TURBO | <b>Engine Info:</b><br>6 Cyl | <b>Engine Dimensions:</b><br>Bore: 102.00 mm / 4.016 in Stroke: 130.00 mm / 5.118 in |
|------------------------------|------------------------------|------------------------------|--|

| ESN            |                | Arrangement Number |          | Machine Models    |                  |
|----------------|----------------|--------------------|----------|-------------------|------------------|
| 1XM - UP       | 5BR - UP       | 109-9513           | 214-4457 | 320 - Excavator   | 320L - Excavator |
| 6CR1 - UP      | 7JK01661-04480 | 131-9017           | 176-5032 | 320N - Excavator  | 320B - Excavator |
| 7JK08058-19537 |                | 109-9514           | 71-758   | 320BL - Excavator | 322B - Excavator |
|                |                | 71-674             |          |                   |                  |

|  |   |  |  |   |
|--|---|--|--|---|
|  <p><b>1) Engine O/H Kit</b><br/>                     , BBK752 Std.</p>  |  <p><b>1) Piston &amp; Ring Kit</b><br/>                     , B297-7752 Std.</p> <p><b>2) Ring Set</b><br/>                     , B5I-7538 Std</p>  |  <p><b>Main Bearings</b><br/>                     , B5I-7588 Std.<br/>                     , B5I-7784 0.25<br/>                     , B5I-7785 0.50<br/>                     , B5I-7786 0.75</p> <p><b>Set of 7 Pairs</b></p>   |  <p><b>Con Rod Bearings</b><br/>                     , B5I-7637 Std.<br/>                     , B5I-7794 0.25<br/>                     , B5I-7795 0.50<br/>                     , B5I-7796 0.75</p> <p><b>Set of 6 Pairs</b></p> |  <p><b>1) Thrust Washer</b><br/>                     , B5I-7654 Std.</p> |
|  <p><b>1) Front Seal</b><br/>                     , B5I-7656</p> <p><b>2) Rear Seal</b><br/>                     , B185-9110</p> <p><b>3) Crankshaft</b><br/>                     , B125-3005</p>  |  <p><b>1) O/H Gasket Set</b><br/>                     , B135-2371</p> <p><b>2) Head Gasket</b><br/>                     , B222-8331</p> <p><b>3) Rocker Cover Gasket</b><br/>                     , B5I-8002<br/>                     , B5I-7733</p> |  <p><b>1) Bush, Con Rod</b><br/>                     , B5I-7539</p> <p><b>2) Bolt, Con Rod</b><br/>                     , B094-7154</p> <p><b>3) Nut, Con Rod</b><br/>                     , B094-7516</p> <p><b>4) Con Rod</b><br/>                     , B5I-7668</p> |  <p><b>1) Camshaft</b><br/>                     , B5I-8068</p> <p><b>2) Tappet</b><br/>                     , B324-4060</p> <p><b>3) Cam Bushing Kit</b><br/>                     , B3066CBS</p>                                 |  <p><b>Oil Pressure Switch</b><br/>                     , B266-6210</p>  |
| <p><b>Intake Valve</b><br/>                     , B5I-7738 x6</p> <p><b>Valve Insert</b><br/>                     , B5I-8011</p>   | <p><b>Exhaust Valve</b><br/>                     , B5I-7739 x6</p> <p><b>Valve Insert</b><br/>                     , B5I-8012</p>   | <p><b>Intake Valve Guide</b><br/>                     , B183-8172</p> <p><b>Exhaust Valve Guide</b><br/>                     , B183-8173</p>   | <p><b>Valve Spring</b><br/>                     , B5I-7740</p> <p><b>Valve Seals</b><br/>                     , B5I-7624</p>   |   |
|  <p><b>1) Oil Pump Ring Gear</b><br/>                     , B125-2950 9 Teeth<br/>                     , B5I-7558 9 Teeth</p> <p><b>2) Oil Pump Gasket</b><br/>                     , B5I-7684</p> <p><b>3) Oil Cooler</b><br/>                     , B125-2970</p> <p><b>4) Oil Filter Gasket</b><br/>                     , B125-2979</p> <p><b>5) Oil Cooler Gasket</b><br/>                     , B5I-7690</p> |  <p><b>1) Fuel Lift Pump</b><br/>                     , B255-2969</p> <p><b>2) Injector</b></p>  |  <p><b>1) Water Pump</b><br/>                     , B125-2989</p> <p><b>2) Gasket, W Pump</b><br/>                     , B096-9528</p>  |  <p><b>1) Repair Sleeve</b><br/>                     , B5I-7523</p> <p><b>2) Turbocharger</b><br/>                     , B5I-8018</p>  |  <p><b>Thermostat</b><br/>                     , B5I-8010</p>          |

(1): Forged crankshaft includes front timing gear, dowels, & keyway

(2): Contains [1]B5I-8009, [2]B5I-7528, & [1]B5I-7529

**Engine Model:**  
3066

**Engine Desc:**  
TURBO

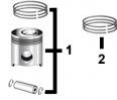
**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 102.00 mm / 4.016 in Stroke: 130.00 mm / 5.118 in

| ESN       |           | Arrangement Number |          | Machine Models     |                   |
|-----------|-----------|--------------------|----------|--------------------|-------------------|
| 7JK1 - UP | BBL1 - UP | 162-6351           | 162-6187 | 320C - Excavator   | 320CL - Excavator |
| BDE1 - UP | BEA1 - UP | 162-6190           | 162-6206 | 320CLN - Excavator | 320CS - Excavator |
| BCN1 - UP |           | 162-6351           | 222-8376 |                    |                   |



**1) Engine O/H Kit**  
 , BBK753 Std.



**1) Piston & Ring Kit**  
 , B297-7753 Std.  
**2) Ring Set**  
 , B178-6543 Std



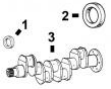
**Main Bearings**  
 , B5I-7588 Std.  
 , B5I-7784 0.25  
 , B5I-7785 0.50  
 , B5I-7786 0.75  
**Set of 7 Pairs**



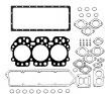
**Con Rod Bearings**  
 , B5I-7637 Std.  
 , B5I-7794 0.25  
 , B5I-7795 0.50  
 , B5I-7796 0.75  
**Set of 6 Pairs**



**1) Thrust Washer**  
 , B5I-7654 Std.

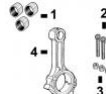


**1) Front Seal**  
 , B324-4223  
**2) Rear Seal**  
 , B185-9110  
**3) Crankshaft**  
 , B125-3005



**1) O/H Gasket Set**  
 , B135-2371  
**2) Head Gasket**  
 , B222-8331  
**3) Rocker Cover Gasket**  
 , B255-2993

1



**1) Bush, Con Rod**  
 , B5I-7539  
**2) Bolt, Con Rod**  
 , B094-7154  
**3) Nut, Con Rod**  
 , B094-7516  
**4) Con Rod**  
 , B5I-7668



**1) Camshaft**  
 , B178-6535  
**2) Tappet**  
 , B324-4060  
**3) Cam Bushing Kit**  
 , B3066CBS  
**4) Push Rod**  
 , B5I-7723

2



**Oil Pressure Switch**  
 , B266-6210

**Intake Valve**  
 , B5I-7738 x6  
**Valve Insert**  
 , B5I-8011

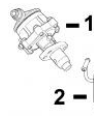
**Exhaust Valve**  
 , B5I-7739 x6  
**Valve Insert**  
 , B5I-8012

**Intake Valve Guide**  
 , B183-8172  
**Exhaust Valve Guide**  
 , B183-8173

**Valve Spring**  
 , B5I-7740  
**Valve Seals**  
 , B5I-7624



**1) Oil Pump Ring Gear**  
 , B125-2950 9 Teeth  
 , B5I-7558 9 Teeth  
**2) Oil Pump Gasket**  
 , B178-6537  
**3) Oil Cooler**  
 , B125-2970  
**4) Oil Filter Gasket**  
 , B5I-7690  
**5) Oil Cooler Gasket**  
 , B125-2979



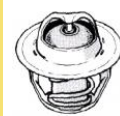
**1) Fuel Lift Pump**  
 , B255-2969  
**2) Injector**



**1) Water Pump**  
 , B178-6633  
**2) Gasket, W Pump**  
 , B096-9528



**1) Repair Sleeve**  
 , B5I-7523  
**2) Turbocharger**  
 , B5I-8018



**Thermostat**  
 , B5I-8010

(1): Forged crankshaft includes front timing gear, dowels, & keyway

(2): Contains [1]B5I-8009, [2]B5I-7528, & [1]B5I-7529


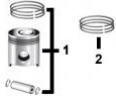



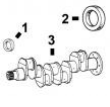
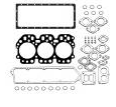

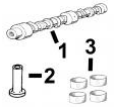






**Engine Model:**  
3066

**Engine Desc:**  
TURBO

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 102.00 mm / 4.016 in Stroke: 130.00 mm / 5.118 in

Please see page 470 for a complete list of equipment models.

|   |  |  |   |   |
|---|--|--|---|---|
|  <p><b>1) Engine O/H Kit</b><br/>                 , BBK750 Std.</p>   |  <p><b>1) Piston &amp; Ring Kit</b><br/>                 , B297-7750 Std.</p> <p><b>2) Ring Set</b><br/>                 , B178-6543 Std</p>  |  <p><b>Main Bearings</b><br/>                 , B51-7588 Std.<br/>                 , B51-7784 0.25<br/>                 , B51-7785 0.50<br/>                 , B51-7786 0.75</p> <p><b>Set of 7 Pairs</b></p>   |  <p><b>Con Rod Bearings</b><br/>                 , B51-7637 Std.<br/>                 , B51-7794 0.25<br/>                 , B51-7795 0.50<br/>                 , B51-7796 0.75</p> <p><b>Set of 6 Pairs</b></p>                                |  <p><b>1) Thrust Washer</b><br/>                 , B51-7654 Std.</p> |
|  <p><b>1) Front Seal</b><br/>                 , B324-4223</p> <p><b>2) Rear Seal</b><br/>                 , B51-7660</p> <p><b>3) Crankshaft</b><br/>                 , B125-3005</p>   |  <p><b>1) O/H Gasket Set</b><br/>                 , B135-2372</p> <p><b>2) Head Gasket</b><br/>                 , B222-8331</p> <p><b>3) Rocker Cover Gasket</b><br/>                 , B255-2993</p> |  <p><b>1) Bush, Con Rod</b><br/>                 , B51-7539</p> <p><b>2) Bolt, Con Rod</b><br/>                 , B094-7154</p> <p><b>3) Nut, Con Rod</b><br/>                 , B094-7516</p> <p><b>4) Con Rod</b><br/>                 , B51-7668</p> |  <p><b>1) Camshaft</b><br/>                 , B178-6535</p> <p><b>2) Tappet</b><br/>                 , B324-4060</p> <p><b>3) Cam Bushing Kit</b><br/>                 , B3066CBS</p> <p><b>4) Push Rod</b><br/>                 , B51-7723</p> |  <p><b>Oil Pressure Switch</b><br/>                 , B266-6210</p>  |
| <p><b>Intake Valve</b><br/>                 , B212-8477 x6</p> <p><b>Valve Insert</b><br/>                 , B212-8474</p>  | <p><b>Exhaust Valve</b><br/>                 , B51-7739 x6</p> <p><b>Valve Insert</b><br/>                 , B51-8012</p>  | <p><b>Intake Valve Guide</b><br/>                 , B183-8172</p> <p><b>Exhaust Valve Guide</b><br/>                 , B183-8173</p>   | <p><b>Valve Spring</b><br/>                 , B51-7740</p> <p><b>Valve Seals</b><br/>                 , B51-7624</p>  |   |
|  <p><b>1) Oil Pump Ring Gear</b><br/>                 , B125-2950 9 Teeth<br/>                 , B51-7558 9 Teeth</p> <p><b>2) Oil Pump Gasket</b><br/>                 , B178-6537</p> <p><b>3) Oil Cooler</b><br/>                 , B125-2970</p> <p><b>4) Oil Filter Gasket</b><br/>                 , B125-2979</p> <p><b>5) Oil Cooler Gasket</b><br/>                 , B51-7690</p> |  <p><b>1) Fuel Lift Pump</b><br/>                 , B255-2969</p> <p><b>2) Injector</b></p>   |  <p><b>1) Water Pump</b><br/>                 , B178-6633</p> <p><b>2) Gasket, W Pump</b><br/>                 , B096-9528</p>  |  <p><b>1) Repair Sleeve</b><br/>                 , B51-7523</p> <p><b>2) Turbocharger</b><br/>                 , B51-8018</p>   |  <p><b>Thermostat</b><br/>                 , B51-8010</p>          |

(1): Forged crankshaft includes front timing gear, dowels, & keyway

(2): Contains [1]B51-8009, [2]B51-7528, & [1]B51-7529




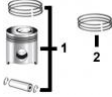




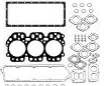
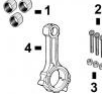
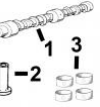






**Engine Model:**  
3066

**Engine Desc:**  
TURBO

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 102.00 mm / 4.016 in Stroke: 130.00 mm / 5.118 in

Please see page 471 for a complete list of equipment models.


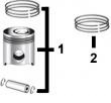





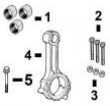


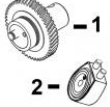

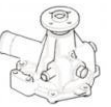



|  |  |  |   |   |
|--|--|--|---|---|
|  <p><b>1) Engine O/H Kit</b><br/>                 , BBK751 Std.</p>   |  <p><b>1) Piston &amp; Ring Kit</b><br/>                 , B297-7751 Std.</p> <p><b>2) Ring Set</b><br/>                 , B178-6543 Std.</p>   |  <p><b>Main Bearings</b><br/>                 , B51-7588 Std.<br/>                 , B51-7784 0.25<br/>                 , B51-7785 0.50<br/>                 , B51-7786 0.75</p> <p><b>Set of 7 Pairs</b></p>   |  <p><b>Con Rod Bearings</b><br/>                 , B51-7637 Std.<br/>                 , B51-7794 0.25<br/>                 , B51-7795 0.50<br/>                 , B51-7796 0.75</p> <p><b>Set of 6 Pairs</b></p>                                |  <p><b>1) Thrust Washer</b><br/>                 , B51-7654 Std.</p> |
|  <p><b>1) Front Seal</b><br/>                 , B324-4223</p> <p><b>2) Rear Seal</b><br/>                 , B51-7660</p> <p><b>3) Crankshaft</b><br/>                 , B125-3005</p>   |  <p><b>1) O/H Gasket Set</b><br/>                 , B233-1135</p> <p><b>2) Head Gasket</b><br/>                 , B222-8331</p> <p><b>3) Rocker Cover Gasket</b><br/>                 , B255-2993</p> |  <p><b>1) Bush, Con Rod</b><br/>                 , B51-7539</p> <p><b>2) Bolt, Con Rod</b><br/>                 , B094-7154</p> <p><b>3) Nut, Con Rod</b><br/>                 , B094-7516</p> <p><b>4) Con Rod</b><br/>                 , B51-7668</p> |  <p><b>1) Camshaft</b><br/>                 , B178-6535</p> <p><b>2) Tappet</b><br/>                 , B324-4060</p> <p><b>3) Cam Bushing Kit</b><br/>                 , B3066CBS</p> <p><b>4) Push Rod</b><br/>                 , B51-7723</p> |  <p><b>Oil Pressure Switch</b><br/>                 , B266-6210</p>  |
| <p><b>Intake Valve</b><br/>                 , B212-8477 x6</p> <p><b>Valve Insert</b><br/>                 , B212-8474</p>   | <p><b>Exhaust Valve</b><br/>                 , B51-7739 x6</p> <p><b>Valve Insert</b><br/>                 , B51-8012</p>  | <p><b>Intake Valve Guide</b><br/>                 , B183-8172</p> <p><b>Exhaust Valve Guide</b><br/>                 , B183-8173</p>   | <p><b>Valve Spring</b><br/>                 , B51-7740</p> <p><b>Valve Seals</b><br/>                 , B51-7624</p>  |   |
|  <p><b>1) Oil Pump Ring Gear</b><br/>                 , B125-2950 9 Teeth<br/>                 , B51-7558 9 Teeth</p> <p><b>2) Oil Pump Gasket</b><br/>                 , B178-6537</p> <p><b>3) Oil Cooler</b><br/>                 , B125-2970</p> <p><b>4) Oil Filter Gasket</b><br/>                 , B125-2979</p> <p><b>5) Oil Cooler Gasket</b><br/>                 , B51-7690</p> |  <p><b>1) Fuel Lift Pump</b><br/>                 , B255-2969</p> <p><b>2) Injector</b></p>   |  <p><b>1) Water Pump</b><br/>                 , B178-6633</p> <p><b>2) Gasket, W Pump</b><br/>                 , B096-9528</p>  |  <p><b>1) Repair Sleeve</b><br/>                 , B51-7523</p> <p><b>2) Turbocharger</b><br/>                 , B279-7860</p>  |  <p><b>Thermostat</b><br/>                 , B51-8010</p>          |

(1): Forged crankshaft includes front timing gear, dowels, & keyway

(2): Contains [1]B51-8009, [2]B51-7528, & [1]B51-7529

|                              |  |                               |                              |   |
|------------------------------|--|-------------------------------|------------------------------|---|
| <b>Engine Model:</b><br>C2.2 | <b>Engine Desc:</b><br>NATURALLY ASPIRATED | <b>Engine Data:</b><br>Tier 3 | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.3 in / 84.00 mm<br>Stroke: 3.9 in / 100.00 mm<br>Displacement: 134.25 in3 / 2.2 Lt |
|------------------------------|--|-------------------------------|------------------------------|---|

Please see page 472 for a complete list of equipment models.


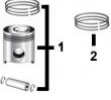




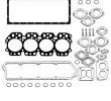
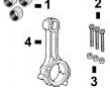


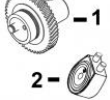


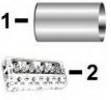


|  |   |   |   |   |  |
|--|---|---|---|---|--|
|  <p><b>1) Engine O/H Kit</b><br/>         › BOK554 Std.<br/>         › BOK555 0.50</p> <p><b>2) Basic Engine Kit</b><br/>         › BBK554 Std.<br/>         › BBK555 0.50</p> <p><b>Spec Sheet - C2.2</b></p>   |  <p><b>1) Piston &amp; Ring Kit</b><br/>         › B297-3080 Std.<br/>         › B297-3080B 0.50</p> <p><b>4 Per Engine</b></p> <p><b>2) Ring Set</b><br/>         › B154-0943 Std.<br/>         › B154-0943B 0.50</p>   |  <p><b>Main Bearing Set</b><br/>         › B154-1203 Std.<br/>         › B161-7163 0.010<br/>         › B161-7164 0.020</p> <p><b>Set of 4 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>         › B146-7808 Std.<br/>         › B307-9855 0.010<br/>         › B307-9856 0.020</p> <p><b>Set of 4 Pairs</b></p> |  <p><b>1) Thrust Washer</b><br/>         › B154-1230/31 Std.</p> <p><b>Set of 3 Pcs</b></p> <p><b>2) Crank Bushing</b><br/>         › B294-4916 Std.<br/>         › B302-4181 0.010<br/>         › B302-4182 0.020</p> |  |
|  <p><b>1) Front Seal</b><br/>         › B154-1675</p> <p><b>2) Rear Seal</b><br/>         › B154-0178</p> <p><b>3) Crankshaft</b><br/>         › B308-1852</p> <p><b>4) Crankshaft Gear</b><br/>         › B308-1853</p> <p><b>5) Key, Crank Gear</b><br/>         › B153-5518</p> <p><b>6) Flywheel Ring Gear</b><br/>         › B154-2405 126T</p> |  <p><b>1) O/H Gasket Set</b><br/>         › BC22TOG</p> <p><b>2) Seal Rocker</b><br/>         › B217-2752</p> <p><b>3) Seal, Cyl HD Cov</b><br/>         › B233-0695</p> <p><b>4) Oil Pan Gasket</b><br/>         › B215-2605</p> <p><b>5) Cylinder Head Gasket</b><br/>         › B322-7486</p> |  <p><b>1) Bush, Con Rod</b><br/>         › B154-0869 x4</p> <p><b>2) Bolt, Con Rod</b><br/>         › B154-0870 x8</p> <p><b>3) Nut, Con Rod</b><br/>         › B154-0871 x8</p> <p><b>4) Con Rod</b><br/>         › B154-0867</p> <p><b>5) Head Bolt</b><br/>         › B156-6988 x14<br/>         › B156-6989 x4</p> |  <p><b>1) Tappet</b><br/>         › B154-1249</p>   |  <p><b>1) Seal, Valve Intake</b><br/>         › B153-5559 x4</p> <p><b>2) Seal, Valve Ex</b><br/>         › B153-5554 x4</p>   |  |
| <p><b>Valve Train Kit</b><br/>         › BVTK558</p>   |   | <p><b>1) Valve, Intake</b><br/>         › B154-0888 x4</p> <p><b>2) Valve, Exhaust</b><br/>         › B154-0889 x4</p>  | <p><b>3) Spring, Valve</b><br/>         › B153-5558 x8</p> <p><b>4) Retainer, Valve Spring</b><br/>         › B153-5557 x8</p>  | <p><b>5) Lock, Valve</b><br/>         › B153-5556 x16</p>   |  |
|  <p><b>1) Oil Pump</b><br/>         › B339-3017</p> <p><b>2) Oil Cooler</b><br/>         › B245-1361</p>   |  <p><b>1) Lift Pump</b><br/>         › B176-7712</p> <p><b>2) Thermostat</b><br/>         › B249-5541</p> <p><b>3) Atomiser</b><br/>         › B252-1446</p> <p><b>4) Fuel Water Separator</b><br/>         › B276-1804</p>  |  <p><b>Water Pump</b><br/>         › B439-4992</p>   |  <p><b>Repair Sleeve</b><br/>         › 1) 84RS</p> <p><b>2) Cylinder Head</b><br/>         › B321-4061UF</p>  |  <p><b>1) Glowplug</b><br/>         › B172-4585 x4</p>   |  <p><b>Fuel Lines</b><br/>         › 1) B217-2760<br/>         › 2) B217-2761<br/>         › 3) B217-2762<br/>         › 4) B217-2763</p> |

(1): Do not use in applications that require a Crankshaft Driven Balancer Unit. The new style front gear is P/N B308-1853, (.887" or 22.5mm Wide) and the key way P/N B153-5518, must be used.

(2): Not included in Valve Train Kit.


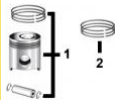




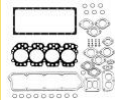
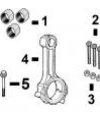



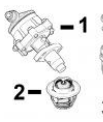




**CATERPILLAR C2.2 TURBOCHARGED**

|                              |                                     |                               |                              |   |
|------------------------------|-------------------------------------|-------------------------------|------------------------------|---|
| <b>Engine Model:</b><br>C2.2 | <b>Engine Desc:</b><br>TURBOCHARGED | <b>Engine Data:</b><br>Tier 3 | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.3 in / 84.00 mm<br>Stroke: 3.9 in / 100.00 mm<br>Displacement: 134.25 in3 / 2.2 Lt |
|------------------------------|-------------------------------------|-------------------------------|------------------------------|---|

|  |   |   |   |   |   |
|--|---|---|---|---|---|
|  <p><b>1) Engine O/H Kit</b><br/>         › BOK556 Std.<br/>         › BOK557 0.50</p> <p><b>2) Basic Engine Kit</b><br/>         › BBK556 Std.<br/>         › BBK557 0.50</p> <p><b>Spec Sheet - C2.2</b></p>   |  <p><b>1) Piston &amp; Ring Kit</b><br/>         › B270-6968 Std.<br/>         › B270-6968B 0.50</p> <p><b>4 Per Engine</b></p> <p><b>2) Ring Set</b><br/>         › B270-6970 Std.<br/>         › B270-6970B 0.50</p>   |  <p><b>Main Bearing Set</b><br/>         › B154-1203 Std.<br/>         › B161-7163 0.010<br/>         › B161-7164 0.020</p> <p><b>Set of 4 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>         › B146-7808 Std.<br/>         › B307-9855 0.010<br/>         › B307-9856 0.020</p> <p><b>Set of 4 Pairs</b></p> |  <p><b>1) Thrust Washer</b><br/>         › B154-1230/31 Std.</p> <p><b>Set of 3 Pcs</b></p> <p><b>2) Crank Bushing</b><br/>         › B294-4916 Std.<br/>         › B302-4181 0.010<br/>         › B302-4182 0.020</p> |   |
|  <p><b>1) Front Seal</b><br/>         › B154-1675</p> <p><b>2) Rear Seal</b><br/>         › B154-0178</p> <p><b>3) Crankshaft</b><br/>         › B308-1852</p> <p><b>4) Crankshaft Gear</b><br/>         › B308-1853</p> <p><b>5) Key, Crank Gear</b><br/>         › B153-5518</p> |  <p><b>1) O/H Gasket Set</b><br/>         › BC22TOG</p> <p><b>2) Seal Rocker</b><br/>         › B217-2752</p> <p><b>3) Seal, Cyl HD Cov</b><br/>         › B233-0695</p> <p><b>4) Oil Pan Gasket</b><br/>         › B215-2605</p> <p><b>5) Cylinder Head Gasket</b><br/>         › B322-7486</p> |  <p><b>1) Bush, Con Rod</b><br/>         › B154-0869 x4</p> <p><b>2) Bolt, Con Rod</b><br/>         › B154-0870 x8</p> <p><b>3) Nut, Con Rod</b><br/>         › B154-0871 x8</p> <p><b>4) Con Rod</b><br/>         › B154-0867</p> |  <p><b>1) Tappet</b><br/>         › B154-1249</p>   |  <p><b>1) Seal, Valve Intake</b><br/>         › B153-5559 x4</p> <p><b>2) Seal, Valve Ex</b><br/>         › B153-5554 x4</p>   |   |
| <p><b>Valve Train Kit</b><br/>         › BVTK558</p>   | <p><b>1) Valve, Intake</b><br/>         › B154-0888 x4</p> <p><b>2) Valve, Exhaust</b><br/>         › B154-0889 x4</p>  | <p><b>3) Spring, Valve</b><br/>         › B153-5558 x8</p> <p><b>4) Retainer, Valve Spring</b><br/>         › B153-5557 x8</p>  | <p><b>5) Lock, Valve</b><br/>         › B153-5556 x16</p>   |   |   |
|  <p><b>1) Oil Pump</b><br/>         › B339-3017</p> <p><b>2) Oil Cooler</b><br/>         › B245-1361</p>   |  <p><b>1) Lift Pump</b><br/>         › B176-7712</p> <p><b>2) Thermostat</b><br/>         › B249-5541</p> <p><b>3) Injector</b><br/>         › B252-1446</p> <p><b>4) Fuel Water Separator</b><br/>         › B276-1804</p>  |  <p><b>Water Pump</b><br/>         › B439-4992</p>   |  <p><b>1) Repair Sleeve</b><br/>         › 1) 84RS</p> <p><b>2) Cylinder Head</b><br/>         › B308-1859UF</p>   |  <p><b>Glowplug</b><br/>         › B172-4585 x4</p>  |  <p><b>Turbocharger</b><br/>         › B238-9349</p> |

(1): Do not use in applications that require a Crankshaft Driven Balancer Unit. The new style front gear is P/N B308-1853, (.887" or 22.5mm Wide) and the keyway P/N B153-5518, must be used.  
 (2): Under development, not included in Valve Train Kit.  
 (3): Check application for proper usage.

CATERPILLAR C2.2 TURBOCHARGED-AFTERCOOLED

|  |   |  |   |  |  |  |
|--|---|--|---|--|--|--|
| <p><b>Engine Model:</b><br/>C2.2</p> <p><b>Engine Desc:</b><br/>TURBOCHARGED<br/>AFTERCOOLED</p> <p><b>Engine Data:</b><br/>Tier 3</p> <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.3 in / 84.00 mm<br/>Stroke: 3.9 in / 100.00 mm<br/>Displacement: 134.25 in3/ 2.2 Lt</p> <p>Please see page 473 for a complete list of equipment models.</p> |  <p><b>1) Engine O/H Kit</b></p> <ul style="list-style-type: none"> <li>› BOK558 Std.</li> <li>› BOK559 0.50</li> </ul> <p><b>2) Basic Engine Kit</b></p> <ul style="list-style-type: none"> <li>› BBK558 Std.</li> <li>› BBK559 0.50</li> </ul> <p><b>Spec Sheet - C2.2</b></p>  |  <p><b>1) Piston &amp; Ring Kit</b></p> <ul style="list-style-type: none"> <li>› B270-6968 Std.</li> <li>› B270-6968B 0.50</li> </ul> <p><b>4 Per Engine</b></p> <p><b>2) Ring Set</b></p> <ul style="list-style-type: none"> <li>› B270-6970 Std.</li> <li>› B270-6970B 0.50</li> </ul>   |  <p><b>Main Bearing Set</b></p> <ul style="list-style-type: none"> <li>› B154-1203 Std.</li> <li>› B161-7163 0.010</li> <li>› B161-7164 0.020</li> </ul> <p><b>Set of 4 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b></p> <ul style="list-style-type: none"> <li>› B146-7808 Std.</li> <li>› B307-9855 0.010</li> <li>› B307-9856 0.020</li> </ul> <p><b>Set of 4 Pairs</b></p> |  <p><b>1) Thrust Washer</b></p> <ul style="list-style-type: none"> <li>› B154-1230/31 Std.</li> </ul> <p><b>Set of 3 Pcs</b></p> <p><b>2) Crank Bushing</b></p> <ul style="list-style-type: none"> <li>› B294-4916 Std.</li> <li>› B302-4181 0.010</li> <li>› B302-4182 0.020</li> </ul> |  |
|  |  <p><b>1) Front Seal</b></p> <ul style="list-style-type: none"> <li>› B154-1675</li> </ul> <p><b>2) Rear Seal</b></p> <ul style="list-style-type: none"> <li>› B154-0178</li> </ul> <p><b>3) Crankshaft</b></p> <ul style="list-style-type: none"> <li>› B308-1852</li> </ul> <p><b>4) Crankshaft Gear</b></p> <ul style="list-style-type: none"> <li>› B308-1853</li> </ul> <p><b>5) Key, Crank Gear</b></p> <ul style="list-style-type: none"> <li>› B153-5518</li> </ul> <p><b>6) Flywheel Ring Gear</b></p> <ul style="list-style-type: none"> <li>› B154-2405 126T</li> </ul> |  <p><b>1) O/H Gasket Set</b></p> <ul style="list-style-type: none"> <li>› BC22TOG</li> </ul> <p><b>2) Seal Rocker</b></p> <ul style="list-style-type: none"> <li>› B217-2752</li> </ul> <p><b>3) Seal, Cyl HD Cov</b></p> <ul style="list-style-type: none"> <li>› B233-0695</li> </ul> <p><b>4) Oil Pan Gasket</b></p> <ul style="list-style-type: none"> <li>› B215-2605</li> </ul> <p><b>5) Cylinder Head Gasket</b></p> <ul style="list-style-type: none"> <li>› B322-7486</li> </ul> |  <p><b>1) Bush, Con Rod</b></p> <ul style="list-style-type: none"> <li>› B154-0869 x4</li> </ul> <p><b>2) Bolt, Con Rod</b></p> <ul style="list-style-type: none"> <li>› B154-0870 x8</li> </ul> <p><b>3) Nut, Con Rod</b></p> <ul style="list-style-type: none"> <li>› B154-0871 x8</li> </ul> <p><b>4) Connecting Rod</b></p> <ul style="list-style-type: none"> <li>› B154-0867</li> </ul> <p><b>5) Head Bolt</b></p> <ul style="list-style-type: none"> <li>› B156-6988 x14</li> <li>› B156-6989 x4</li> </ul> |  <p><b>1) Tappet</b></p> <ul style="list-style-type: none"> <li>› B154-1249</li> </ul>  |  <p><b>1) Seal, Valve Intake</b></p> <ul style="list-style-type: none"> <li>› B153-5559 x4</li> </ul> <p><b>2) Seal, Valve Ex</b></p> <ul style="list-style-type: none"> <li>› B153-5554 x4</li> </ul>  |  |
| <p><b>Valve Train Kit</b></p> <ul style="list-style-type: none"> <li>› BVTK568</li> </ul>  |   | <p><b>1) Valve, Intake</b></p> <ul style="list-style-type: none"> <li>› B154-0888 x4</li> </ul> <p><b>2) Valve, Exhaust</b></p> <ul style="list-style-type: none"> <li>› B344-1624 x4</li> </ul>   |   | <p><b>3) Spring, Valve</b></p> <ul style="list-style-type: none"> <li>› B153-5558 x8</li> </ul> <p><b>4) Retainer, Valve Spring</b></p> <ul style="list-style-type: none"> <li>› B153-5557 x8</li> </ul>   |  | <p><b>4) Lock, Valve</b></p> <ul style="list-style-type: none"> <li>› B153-5556 x16</li> </ul> |
|  <p><b>1) Oil Pump</b></p> <ul style="list-style-type: none"> <li>› B339-3017</li> </ul> <p><b>2) Oil Cooler</b></p> <ul style="list-style-type: none"> <li>› B245-1361</li> </ul>  |  <p><b>1) Lift Pump</b></p> <ul style="list-style-type: none"> <li>› B176-7712</li> </ul> <p><b>2) Thermostat</b></p> <ul style="list-style-type: none"> <li>› B249-5541</li> </ul> <p><b>3) Atomiser</b></p> <ul style="list-style-type: none"> <li>› B252-1446</li> </ul> <p><b>4) Fuel Water Separator</b></p> <ul style="list-style-type: none"> <li>› B276-1804</li> </ul>  |  <p><b>Water Pump</b></p> <ul style="list-style-type: none"> <li>› B439-4992</li> </ul>   |  <p><b>1) Glowplug</b></p> <ul style="list-style-type: none"> <li>› B172-4585 x4</li> </ul> <p><b>2) Cylinder Head</b></p> <ul style="list-style-type: none"> <li>› B308-1859UF</li> </ul> <p><b>3) Repair Sleeve</b></p> <ul style="list-style-type: none"> <li>› 84RS</li> </ul>  |  <p><b>Turbocharger</b></p> <ul style="list-style-type: none"> <li>› B238-9349</li> </ul>   |  <p><b>Fuel Lines</b></p> <ul style="list-style-type: none"> <li>› 1) B217-2760</li> <li>› 2) B217-2761</li> <li>› 3) B217-2762</li> <li>› 4) B217-2763</li> </ul>  |  |

(1): Do not use in applications that require a Crankshaft Driven Balancer Unit. The new style front gear is P/N B308-1853(.887" or 22.5mm Wide) and the key way P/N B153-5518, must be used.  
 (2): Not included in valve train kit.  
 (3): Check application for proper usage.

**Engine Model:**  
C3.3

**Engine Desc:**  
NATURALLY ASPIRATED

**Engine Data:**  
Tier 3

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 4.133 in / 105.00 mm  
Stroke: 5.0 in / 127.00 mm  
Displacement: 201 in3 / 3.3 Lt

**Olympian**

GEP26SP1  
GEP26SP2  
GEP26SP3  
GEP26SP4  
GEP30-1  
GEP30-2

GEP33-1  
GEP33-2  
GEP33-3  
GEP33-4  
GEP35SP-7  
GEP35SP11

**Engine Arrangement**

266-4536  
266-4537

291-0356  
292-7767

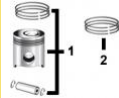


**1) Engine O/H Kit**

- BOK542 Std.
- BOK543 0.50
- BOK544 1.00

**2) Basic Engine Kit**

- BBK542 Std.
- BBK543 0.50
- BBK544 1.00



**1) Piston Kit**

- B233-7232 Std.
- B288-9942 0.50
- B288-9943 1.00

**3 Per Engine**

**2) Ring Set**

- B233-7231 Std.
- B334-1996 0.50
- B334-1997 1.00



**Main Bearing Set**

- B261-6963 Std.
- B275-0880 0.010
- B275-0881 0.020
- B275-0882 0.030

**Set of 4 Pairs**



**Con Rod Bearing Set**

- B273-9299 Std.
- B273-9306 0.010
- B273-9307 0.020
- B273-9308 0.030

**Set of 3 Pairs**



**Thrust Washer**

- B032-9090/91 Std.
- B067-6873/74 0.007

**Set of 2 Pairs**



**1) Front Seal**

- B4W-5359

**2) Rear Seal**

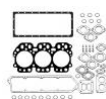
- B232-7449

**3) Crankshaft Kit**

- B273-9297

**4) Ring Gear**

- B7W-6247 115T
- B033-7687 126T



**1) Top Gasket Set**

- B291-8885

**2) Bottom Gasket Set**

- B275-0885

**3) Timing Cover Gsk**

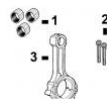
- B225-8287

**4) Head Gasket**

- B273-9375

**5) Oil Pan Gasket**

- B274-4695



**1) Bush, Con Rod**

- B225-5438 x3

**2) Bolt, Con Rod**

- B225-5439 x6

**3) Con Rod**

- B225-5453

**4) Head Bolts**

- B225-5501 x5
- B225-5502 x3



**1) Bushing, Cam**

- B232-7440 x1

**2) Tappet**

- B138-2053

**3) Pushrod**

- B067-6095

**4) Seal, Valve Intake**

- B252-6438 x3

**5) Seal, Valve Exhaust**

- B254-3954 x3

**Valve Train Kit**

- BVTK561

**1) Valve, Intake**

- B225-5495

**2) Valve, Exhaust**

- B225-5499 x3

**3) Guide, Valve (Intake & Exhaust)**

- B185-0882 x6

**4) Spring, Valve**

- B225-5496

**5) Lock, Valve**

- B147-1979



**Oil Pump**

- B225-8329
- B231-0141

**3** **1**  
**3**



**Lift Pump**

- B350-4315



**1) Water Pump**

- B225-8016

**2) Thermostat**

- B254-2267
- B254-2268
- B254-2269

**3**  
**3**  
**3**



**Water Pump Gasket**

- B225-8019



**Glowplug**

- B453-3510 x3

(1): Not to be used on Engines with Balancer Units.  
(3): Check application for proper usage.

(2): Grade J.

**Engine Model:**  
C3.3

**Engine Desc:**  
NATURALLY ASPIRATED

**Engine Data:**  
Tier 3  
INDUSTRIAL

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 4.133 in / 105.00 mm  
Stroke: 5.0 in / 127.00 mm  
Displacement: 201 in3 / 3.3 Lt

**ESN**  
E3J1-UP

**Olympian**

|          |           |
|----------|-----------|
| GEP26SP1 | GEP33-1   |
| GEP26SP2 | GEP33-2   |
| GEP26SP3 | GEP33-3   |
| GEP26SP4 | GEP33-4   |
| GEP30-1  | GEP35SP-7 |
| GEP30-2  | GEP35SP11 |

**Engine Arrangement**

284-5162

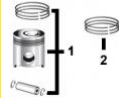


**1) Engine O/H Kit**

- BOK545 Std.
- BOK546 0.50
- BOK547 1.00

**2) Basic Engine Kit**

- BBK545 Std.
- BBK546 0.50
- BBK547 1.00



**1) Piston Kit**

- B233-7232 Std.
- B288-9942 0.50
- B288-9943 1.00

**3 Per Engine**

**2) Ring Set**

- B233-7231 Std.
- B334-1996 0.50
- B334-1997 1.00



**Main Bearing Set**

- B261-6963 Std.
- B275-0880 0.010
- B275-0881 0.020
- B275-0882 0.030

**Set of 4 Pairs**



**Con Rod Bearing Set**

- B273-9299 Std.
- B273-9306 0.010
- B273-9307 0.020
- B273-9308 0.030

**Set of 3 Pairs**



**Thrust Washer**

- B032-9090/91 Std.
- B067-6873/74 0.007

**Set of 2 Pairs**



**1) Front Seal**

- B4W-5359

**2) Rear Seal**

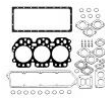
- B232-7449

**3) Crankshaft Kit**

- B273-9297

**4) Ring Gear**

- B7W-6247 115T
- B033-7687 126T



**1) Top Gasket Set**

- B291-8885

**2) Bottom Gasket Set**

- B275-0885/2

**3) Timing Cover Gsk**

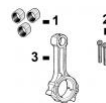
- B226-8766

**4) Head Gasket**

- B273-9375

**5) Oil Pan Gasket**

- B274-4695



**1) Bush, Con Rod**

- B225-5438 x3

**2) Bolt, Con Rod**

- B225-5439 x6

**3) Con Rod**

- B225-5453

**4) Head Bolts**

- B225-5501 x5
- B225-5502 x3



**1) Bushing, Cam**

- B232-7440 x1

**2) Tappet**

- B138-2053

**3) Pushrod**

- B067-6095

**4) Seal, Valve Intake**

- B252-6438 x3

**5) Seal, Valve Exhaust**

- B254-3954 x3

**Valve Train Kit**

- BVTK561

**1) Valve, Intake**

- B225-5495 x3

**2) Valve, Exhaust**

- B225-5499 x3

**3) Guide, Valve (Intake & Exhaust)**

- B185-0882 x6

**4) Spring, Valve**

- B225-5496 x6

**5) Lock, Valve**

- B147-1979 x12



**Oil Pump**

- B225-8329
- B231-0141

**3** **1**  
**3**



**Lift Pump**

- B350-4315

**3**



**1) Water Pump**

- B225-8016

**2) Thermostat**

- B254-2267
- B254-2268
- B254-2269

**3**  
**3**  
**3**



**Water Pump Gasket**

- B225-8019



**Glowplug**

- B453-3510 x3

(1): Not to be used on Engines with Balancer Units.  
(3): Check application for proper usage.

(2): Grade J.

**Engine Model:**  
C3.3T

**Engine Desc:**  
TURBOCHARGED

**Engine Data:**  
Tier 3  
INDUSTRIAL

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 4.133 in / 105.00 mm  
Stroke: 5.0 in / 127.00 mm  
Displacement: 201 in<sup>3</sup> / 3.3 Lt

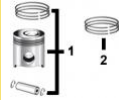


**1) Engine O/H Kit**

- BOK548 Std.
- BOK549 0.50
- BOK550 1.00

**2) Basic Engine Kit**

- BBK548 Std.
- BBK549 0.50
- BBK550 1.00



**1) Piston Kit**

- B225-5437 Std.
- B288-1394 0.50
- B288-1395 1.00

**3 Per Engine**

**2) Ring Set**

- B225-5436 Std.
- B334-2319 0.50
- B334-2318 1.00



**Main Bearing Set**

- B261-6963 Std.
- B275-0880 0.010
- B275-0881 0.020
- B275-0882 0.030

**Set of 4 Pairs**



**Con Rod Bearing Set**

- B273-9299 Std.
- B273-9306 0.010
- B273-9307 0.020
- B273-9308 0.030

**Set of 3 Pairs**



**Thrust Washer**

- B032-9090/91 Std.
- B067-6873/74 0.007

**Set of 2 Pairs**



**1) Front Seal**

- B4W-5359

**2) Rear Seal**

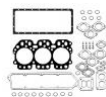
- B232-7449

**3) Crankshaft Kit**

- B273-9297

**4) Ring Gear**

- B7W-6247 115T
- B033-7687 126T



**1) Top Gasket Set**

- B291-8885

**2) Bottom Gasket Set**

- B275-0885

**3) Timing Cover Gsk**

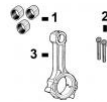
- B225-8287

**4) Head Gasket**

- B273-9375

**5) Oil Pan Gasket**

- B274-4695



**1) Bush, Con Rod**

- B225-5438 x3

**2) Bolt, Con Rod**

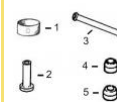
- B225-5439 x6

**3) Con Rod**

- B225-5453

**4) Head Bolts**

- B225-5501 x5
- B225-5502 x3



**1) Bushing, Cam**

- B232-7440 x1

**2) Tappet**

- B138-2053

**3) Pushrod**

- B067-6095

**4) Seal, Valve Intake**

- B252-6438 x3

**5) Seal, Valve Exhaust**

- B254-3954 x3

**Valve Train Kit**

- BVTK561

**1) Valve, Intake**

- B225-5495 x3

**2) Valve, Exhaust**

- B225-5499 x3

**3) Guide, Valve (Intake & Exhaust)**

- B185-0882 x6

**4) Spring, Valve**

- B225-5496 x6

**5) Lock, Valve**

- B147-1979 x12



**Oil Pump**

- B225-8329



**Lift Pump**

- B350-4315



**1) Water Pump**

- B225-8016

**2) Thermostat**

- B254-2267
- B254-2268
- B254-2269



**Water Pump Gasket**

- B225-8019



**Glowplug**

- B453-3510 x3

(1): Not to be used on Engines with Balancer Units.

(2): Grade J.

(3): Check application for proper usage.

**Engine Model:**  
C3.3T

**Engine Desc:**  
TURBOCHARGED

**Engine Data:**  
Tier 3  
INDUSTRIAL

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 4.133 in / 105.00 mm  
Stroke: 5.0 in / 127.00 mm  
Displacement: 201 in<sup>3</sup> / 3.3 Lt

Please see page 474 for a complete list of equipment models.

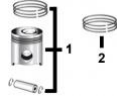


**1) Engine O/H Kit**

- BOK551 Std.
- BOK552 0.50
- BOK553 1.00

**2) Basic Engine Kit**

- BBK551 Std.
- BBK552 0.50
- BBK553 1.00



**1) Piston Kit**

- B225-5437 Std.
- B288-1394 0.50
- B288-1395 1.00

**3 Per Engine**

**2) Ring Set**

- B225-5436 Std.
- B334-2319 0.50
- B334-2318 1.00



**Main Bearing Set**

- B261-6963 Std.
- B275-0880 0.010
- B275-0881 0.020
- B275-0882 0.030

**Set of 4 Pairs**



**Con Rod Bearing Set**

- B273-9299 Std.
- B273-9306 0.010
- B273-9307 0.020
- B273-9308 0.030

**Set of 3 Pairs**



**Thrust Washer**

- B032-9090/91 Std.
- B067-6873/74 0.007

**Set of 2 Pairs**



**1) Front Seal**

- B4W-5359

**2) Rear Seal**

- B232-7449

**3) Crankshaft Kit**

- B273-9297

**4) Ring Gear**

- B7W-6247 115T
- B033-7687 126T



**1) Top Gasket Set**

- B291-8885

**2) Bottom Gasket Set**

- B275-0885/2

**3) Timing Cover Gsk**

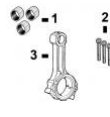
- B226-8766

**4) Head Gasket**

- B273-9375

**5) Oil Pan Gasket**

- B274-4695



**1) Bush, Con Rod**

- B225-5438 x3

**2) Bolt, Con Rod**

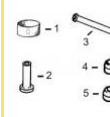
- B225-5439 x6

**3) Con Rod**

- B225-5453

**4) Head Bolts**

- B225-5501 x5
- B225-5502 x3



**1) Bushing, Cam**

- B232-7440 x1

**2) Tappet**

- B138-2053

**3) Pushrod**

- B067-6095

**4) Seal, Valve Intake**

- B252-6438 x3

**5) Seal, Valve Exhaust**

- B254-3954 x3

**Valve Train Kit**

- BVTK561

**1) Valve, Intake**

- B225-5495 x3

**2) Valve, Exhaust**

- B225-5499 x3

**3) Guide, Valve (Intake & Exhaust)**

- B185-0882 x6

**4) Spring, Valve**

- B225-5496 x6

**5) Lock, Valve**

- B147-1979 x12



**Oil Pump**

- B225-8329



**Lift Pump**

- B350-4315



**1) Water Pump**

- B225-8016

**2) Thermostat**

- B254-2267
- B254-2268
- B254-2269



**Water Pump Gasket**

- B225-8019



**Glowplug**

- B453-3510 x3

(1): Not to be used on Engines with Balancer Units.

(2): Grade J.

(3): Check application for proper usage.



**Engine Model:**  
C3.3T

**Engine Desc:**  
TURBOCHARGED

**Engine Data:**  
Tier 3  
INDUSTRIAL

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 4.133 in / 105.00 mm  
Stroke: 5.0 in / 127.00 mm  
Displacement: 201 in<sup>3</sup> / 3.3 Lt

**ESN**

E3S1-UP

E3G1-UP

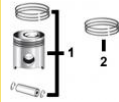


**1) Engine O/H Kit**

- BOK610 Std.
- BOK611 0.50
- BOK612 1.00

**2) Basic Engine Kit**

- BBK610 Std.
- BBK611 0.50
- BBK612 1.00



**1) Piston Kit**

- B277-6275 Std.
- B277-6275B 0.50
- B277-6275D 1.00

**3 Per Engine**

**2) Ring Set**

- B225-5436 Std.
- B334-2319 0.50
- B334-2318 1.00



**Main Bearing Set**

- B261-6963 Std.
- B275-0880 0.010
- B275-0881 0.020
- B275-0882 0.030

**Set of 4 Pairs**



**Con Rod Bearing Set**

- B273-9299 Std.
- B273-9306 0.010
- B273-9307 0.020
- B273-9308 0.030

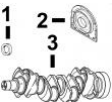
**Set of 3 Pairs**



**Thrust Washer**

- B032-9090/91 Std.
- B067-6873/74 0.007

**Set of 2 Pairs**



**1) Front Seal**

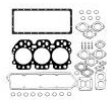
- B4W-5359

**2) Rear Seal**

- B232-7449

**3) Crankshaft Kit**

- B273-9297



**1) Top Gasket Set**

- B291-8885

**2) Bottom Gasket Set**

- B275-0885

**3) Timing Cover Gsk**

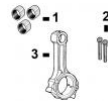
- B225-8287

**4) Head Gasket**

- B273-9375

**5) Oil Pan Gasket**

- B274-4695



**1) Bush, Con Rod**

- B225-5438 x3

**2) Bolt, Con Rod**

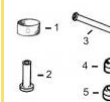
- B225-5439 x6

**3) Con Rod**

- B225-5453

**4) Head Bolts**

- B225-5501 x5
- B225-5502 x3



**1) Bushing, Cam**

- B232-7440 x1

**2) Tappet**

- B138-2053

**3) Pushrod**

- B067-6095

**4) Seal, Valve Intake**

- B252-6438 x3

**5) Seal, Valve Exhaust**

- B254-3954 x3

**Valve Train Kit**

- BVTK561

**1) Valve, Intake**

- B225-5495 x3

**2) Valve, Exhaust**

- B225-5499 x3

**3) Guide, Valve (Intake & Exhaust)**

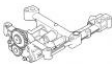
- B185-0882 x6

**4) Spring, Valve**

- B225-5496 x6

**5) Lock, Valve**

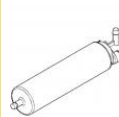
- B147-1979 x12



**Oil Pump**

- B225-8329

1



**Lift Pump**

- B350-4315



**1) Water Pump**

- B225-8016

**2) Thermostat**

- B254-2267
- B254-2268
- B254-2269

3

3

3



**Water Pump Gasket**

- B225-8019



**Glowplug**

- B453-3510 x3

(1): Not to be used on Engines with Balancer Units.  
(3): Check application for proper usage.

(2): Grade J.

**Engine Model:**

C4.4T/TA

**Engine Desc:**

TURBOCHARGE

**Engine Data:**

Tier 3

**Engine Info:**

4 Cyl

**Engine**

**Dimensions:**

Bore: 4.133in / 105.00mm  
Stroke: 5.00in / 127.00mm  
Displacement: 269in<sup>3</sup> / 4.4Lt

Please see page 475 for a complete list of equipment models.



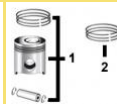
**1) Basic Kit**

**1) (Rod Brg OD 63.5 mm)**

- › BBK600 3
- › BBK601 0.50 3
- › BBK602 1.00 3

**2) Basic Kit (Rod Brg OD 68 mm)**

- › BBK600S
- › BBK601S 0.50 3
- › BBK602S 1.00 3



**1) Piston & Ring Kit**

- › B315-3395 Std.
- › B396-4592 0.50
- › B315-3395D 1.00

**2) Ring Set**

- › B276-7476 Std.
- › B380-2065 0.50
- › B466-4849 1.00

**4 Per Engine**



**Main Bearing Set**

- › B353-7423 Std.
- › B353-7424 0.010
- › B353-7425 0.020
- › B353-7426 0.030

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › B225-7781 Std. 1
- › B233-3788 0.010 1
- › B233-3789 0.020 1
- › B233-3790 0.030 1
- › B360-3986 Std. 2
- › B468-7762 0.010 2
- › B468-7769 0.020 2
- › B468-7770 0.030 2

**Set of 4 Pairs**



**Thrust Washer Set**

- › B032-9090/91 Std. 1
- › B067-6873/74 0.007 1

**Set of 2 Pairs**



**1) Front Seal**

- › B4W-5359

**2) Rear Seal**

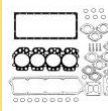
- › B232-7449

**3) Crankshaft Kit**

- › B232-7400 5
- › B359-0715 6

**4) Ring Gear**

- › B7W-6247 115T
- › B033-7687 126T



**1) Top Gasket Set**

- › B276-3420

**2) Bottom Gasket Set**

- › BC44TBOG 3

**3) Head Gasket**

- › B240-7194 5

**4) Valve Cover Gasket**

- › B225-6451 4

**5) Timing Cover Gsk**

- › B225-8287 4
- › B226-8766 4

**6) Oil Pan Gasket**

- › B225-6005 4
- › B237-5932 4



**1) Bush, Con Rod**

- › B225-5438 x4

**2) Bolt, Con Rod**

- › B225-5439 x8 1
- › B323-9312 x8 2

**3) Connecting Rod**

- › B225-5453 1
- › B359-0722 2



**1) Bushing, Cam**

- › B232-7440 x1

**2) Camshaft**

- › B380-2601

**3) Tappet**

- › B315-3384 x8

**4) Pushrod**

- › B278-5126 x8

**5) Seal, Valve Exhaust**

- › B254-3954 x4

**6) Seal, Valve Intake**

- › B252-6438 x4

**Valve Train**

**1) Valve, Intake**

- › B315-3390 x4

**2) Valve, Exhaust**

- › B315-3394 x4

**3) Guide, Valve (Intake & Exhaust)**

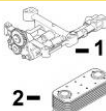
- › 3) B185-0882 x8

**4) Spring, Valve**

- › B436-0522 x8

**5) Lock, Valve**

- › B315-3393 x16

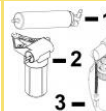


**1) Oil Pump**

- › B225-8329

**2) Oil Cooler**

- › B225-6817



**1) Lift Pump**

- › B350-4315

**2) Lift Pump**

- › B232-7808 4

**3) Fuel Pump**

- › B349-1063 7 Pin 4



**1) Water Pump**

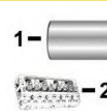
- › B225-8016 4

**2) Thermostat**

- › B254-2267

**3) Water Pump Gasket**

- › B225-8019



**Repair Sleeve**

- › 1) 105RS

**2) Cylinder Head**

- › B315-3389UF

**3) Head Bolts**

- › B225-5501 x7
- › B225-5502 x3



**1) Glowplug**

- › B453-3510 x4

**2) Injector**

- › B315-3381 4

**3) Piston Cooling Nozzle**

- › B276-5605



**Fuel Lines**

- › 1) B230-8995
- › 2) B230-8996
- › 3) B230-8997
- › 4) B230-8998

(1): Use for rods that have a 63.5mm rod journal

(3): Lower gasket set does not contain the timing cover gasket or the oil pan gasket. Please order separately.

(5): 63.5mm rod journal, splined nose

():

(2): Use for rods that have a 68mm rod journal

(4): Check application for proper use.

(6): 68mm rod journal, non-splined nose

**Engine Model:**

C4.4T/TA

**Engine Desc:**

TURBOCHARGE

**Engine Data:**

Tier 3

**Engine Info:**

4 Cyl

**Engine Dimensions:**

Bore: 4.133in / 105.00mm  
Stroke: 5.00in / 127.00mm  
Displacement: 269in<sup>3</sup> / 4.4Lt



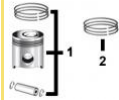
**1) Basic Kit**

**1) (Rod Brg OD 63.5 mm)**

- › BBK603 Std. 3
- › BBK604 0.50 3
- › BBK605 1.00 3

**2) Basic Kit (Rod Brg OD 68 mm)**

- › BBK603S Std. 3
- › BBK604S 0.50 3
- › BBK605S 1.00 3



**1) Piston & Ring Kit**

- › B310-9269 Std.
- › B396-4482 0.50
- › B310-9269D 1.00

**2) Ring Set**

- › B276-7476 Std.
- › B380-2065 0.50
- › B466-4849 1.00

**4 Per Engine**



**Main Bearing Set**

- › B353-7423 Std.
- › B353-7424 0.010
- › B353-7425 0.020
- › B353-7426 0.030

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › B225-7781 Std. 1
- › B233-3788 0.010 1
- › B233-3789 0.020 1
- › B233-3790 0.030 1
- › B360-3986 Std. 2
- › B468-7762 0.010 2
- › B468-7769 0.020 2
- › B468-7770 0.030 2

**Set of 4 Pairs**



**Thrust Washer Set**

- › B032-9090/91 Std. 1
- › B067-6873/74 0.007 1

**Set of 2 Pairs**

Please see page 476 for a complete list of equipment models.



**1) Front Seal**

- › B4W-5359

**2) Rear Seal**

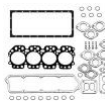
- › B232-7449

**3) Crankshaft Kit**

- › B232-7400
- › B359-0715

**4) Ring Gear**

- › B7W-6247 115T
- › B033-7687 126T



**1) Top Gasket Set**

- › BC44TTOG

**2) Bottom Gasket Set**

- › BC44TBOG 3

**3) Head Gasket**

- › B310-8520 5

**4) Valve Cover Gasket**

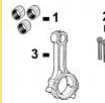
- › B298-4546 6

**5) Timing Cover Gsk**

- › B225-8287
- › B226-8766

**6) Oil Pan Gasket**

- › B225-6005
- › B237-5932



**1) Bush, Con Rod**

- › B225-5438 x4

**2) Bolt, Con Rod**

- › B225-5439 x8 1
- › B323-9312 x8 2

**3) Connecting Rod**

- › B225-5453 1
- › B359-0722 2



**1) Bushing, Cam**

- › B232-7440 x1

**2) Camshaft**

- › B315-3384 x8

**3) Tappet**

- › B315-3384 x8

**4) Pushrod**

- › B278-5126 x8

**5) Seal, Valve Stem**

- › B299-5511 x16

**Valve Train**

**1) Valve, Intake  
2) Valve, Exhaust**

- › 1) B309-6678 x8
- › 2) B339-9637 x8

**3) Guide, Valve (Intake & Exhaust)**

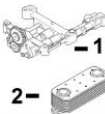
- › 3) B380-2073 x16

**4) Valve, Insert In  
5) Valve, Insert Ex**

- › 4) B377-0399 x8
- › 5) B377-0400 x8

**6) Spring, Valve  
7) Lock, Valve**

- › 6) B436-0524 x16
- › 7) B276-8123 x32

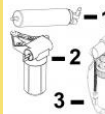


**1) Oil Pump**

- › B225-8329

**2) Oil Cooler**

- › B298-4558



**1) Lift Pump**

- › B350-4315

**2) Lift Pump**

- › B232-7808 4

**3) Fuel Pump**

- › B349-1063 7 Pin 4



**1) Water Pump**

- › B354-4754 4

**2) Water Pump Gasket**

- › B225-8019

**3) Thermostat**

- › B417-7782 4

**4) Thermostat Housing Gasket**

- › B281-8744

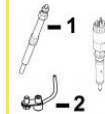


**Repair Sleeve**

- › 105RS

**2) Head Bolts**

- › B225-5501 x10



**1) Glowplug**

- › B226-8770 4
- › B452-3112 4

**2) Piston Cooling Nozzle**

- › B276-5605

**3) Injector**

- › B320-0677 4
- › B320-0680 4



**Fuel Lines**

- › 1) B322-3745
- › 2) B322-3746
- › 3) B333-4732
- › 4) B333-4733

(1): Use for rods with 63.5mm rod journal

(3): Lower gasket set does not contain the timing cover gasket or the oil pan gasket. Please order separately.

(5): 63.5mm rod journal, splined nose

(2): Use for rods with 68mm rod journal

(4): Check application for proper use.

(6): 68mm rod journal, non-splined nose

**Engine Model:**

C4.4T/TA

**Engine Desc:**

TURBOCHARGE

**Engine Data:**

Tier 3

**Engine Info:**

4 Cyl

**Engine Dimensions:**

Bore: 4.133in / 105.00mm  
Stroke: 5.00in / 127.00mm  
Displacement: 269in<sup>3</sup> / 4.4Lt

Please see page 477 for a complete list of equipment models.

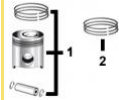


**Basic Kit  
(Rod Brg OD 63.5 mm)**

- › BBK606 Std. **3**
- › BBK607 0.50 **3**
- › BBK608 1.00 **3**

**2) Basic Kit  
(Rod Brg OD 68 mm)**

- › BBK606S Std. **3**
- › BBK607S 0.50 **3**
- › BBK608S 1.00 **3**



**1) Piston & Ring Kit**

- › B310-9905 Std.
- › B396-4516 0.50
- › B310-9905D 1.00

**2) Ring Set**

- › B276-7476 Std.
- › B380-2065 0.50
- › B466-4849 1.00

**4 Per Engine**



**Main Bearing Set**

- › B353-7423 Std.
- › B353-7424 0.010
- › B353-7425 0.020
- › B353-7426 0.030

**Set of 5 Pairs**



**Con Rod Bearing Set**

- › B225-7781 Std. **1**
- › B233-3788 0.010 **1**
- › B233-3789 0.020 **1**
- › B233-3790 0.030 **1**
- › B360-3986 Std. **2**
- › B468-7762 0.010 **2**
- › B468-7769 0.020 **2**
- › B468-7770 0.030 **2**

**Set of 4 Pairs**



**Thrust Washer Set**

- › B032-9090/91 Std. **1**
- › B067-6873/74 0.007 **1**

**Set of 2 Pairs**



**1) Front Seal**

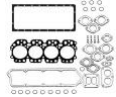
- › B4W-5359

**2) Rear Seal**

- › B232-7449

**3) Crankshaft Kit**

- › B232-7400 **5**
- › B359-0715 **6**
- 4) Ring Gear**
- › B7W-6247 115T
- › B033-7687 126T



**1) Top Gasket Set**

- › BC44TTOG

**2) Bottom Gasket Set**

- › BC44TBOG **3**

**3) Head Gasket**

- › B310-8520 **5**

**4) Valve Cover Gasket**

- › B298-4546 **6**

**5) Timing Cover Gsk**

- › B225-8287
- › B226-8766

**6) Oil Pan Gasket**

- › B225-6005
- › B237-5932



**1) Bush, Con Rod**

- › B225-5438 x4

**2) Bolt, Con Rod**

- › B225-5439 x8 **1**
- › B323-9312 x8 **2**

**3) Connecting Rod**

- › B225-5453 **1**
- › B359-0722 **2**



**1) Bushing, Cam**

- › B232-7440 x1

**2) Camshaft**

- 3) Tappet**
- › B315-3384 x8

**4) Pushrod**

- › B278-5126 x8

**5) Seal, Valve Stem**

- › B299-5511 x16

**Valve Train**

**1) Valve, Intake**

- › B309-6678 x8

**2) Valve, Exhaust**

- › B339-9637 x8

**3) Guide, Valve  
(Intake & Exhaust)**

- › 3) B380-2073 x16

**4) Valve, Insert In**

- › B377-0399 x8

**5) Valve, Insert Ex**

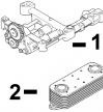
- › B377-0400 x8

**6) Spring, Valve**

- › B436-0524 x16

**7) Lock, Valve**

- › B276-8123 x32



**1) Oil Pump**

- › B225-8329

**2) Oil Cooler**

- › B298-4558



**1) Lift Pump**

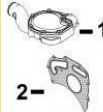
- › B350-4315

**2) Lift Pump**

- › B232-7808 **4**

**3) Fuel Pump**

- › B349-1063 **7** (Pin) **4**



**1) Water Pump**

- › B354-4754 **4**

**2) Water Pump Gasket**

- › B225-8019

**3) Thermostat**

- › B417-7782 **4**

**4) Thermostat Housing Gasket**

- › B281-8744



**Repair Sleeve**

- › 105RS

**2) Head Bolts**

- › B225-5501 x10



**1) Glowplug**

- › B226-8770 **4**
- › B452-3112 **4**

**2) Piston Cooling Nozzle**

- › B276-5605

**3) Injector**

- › B320-0677 **4**
- › B320-0680 **4**



**Fuel Lines**

- › 1) B322-3745

- › 2) B322-3746

- › 3) B333-4732

- › 4) B333-4733

(1): Use for rods that have a 63.5mm rod journal

(2): Use for rods that have a 68mm rod journal

(3): Lower gasket set does not contain the timing cover gasket or the oil pan gasket. Please order separately.

(4): Check application for proper use.

(5): 63.5mm rod journal, splined nose

(6): 68mm rod journal, non-splined nose

**Engine Model:**

C6.6

**Engine Desc:**

TURBOCHARGED

**Engine Data:**

Tier 3

**Engine Info:**

6 Cyl

**Engine**

**Dimensions:**

Bore: 4.133in /

105.00mm

Stroke: 5.00in /

127.00mm

Displacement:

402.76 in3 /6.6

Lt

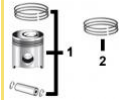
Please see

page **478** for a complete list of equipment models.



**Basic Kit**

- › BBK707 Std.
- › BBK708 0.50
- › BBK709 1.00



**1) Piston & Ring Kit**

- › B276-7475 Std.
- › B380-2062 0.50
- › B493-3305 1.00

**2) Ring Set**

- › B276-7476 Std.
- › B380-2065 0.50
- › B466-4849 1.00

**6 Per Engine**



**Main Bearing Set**

- › B360-1978 Std.
- › B454-3745 0.010
- › B454-3931 0.020
- › B454-3935 0.030

**Set of 7 Pairs**



**Con Rod Bearing Set**

- › B360-1564 Std.
- › B458-7918 0.010
- › B458-7939 0.020
- › B458-7940 0.030

**Set of 6 Pairs**



**Thrust Washer Set**

- › B364-5145 Std.
- › B448-4227 0.007

**Set of 2 Pcs**



**1) Front Seal**

- › B4W-5359

**2) Rear Seal**

- › B292-0886

**3) Crankshaft Kit**

- › B374-9163

**4) Ring Gear**

- › B033-7687 126T



**1) Top Gasket Set**

- › BC66TTOG

**2) Bottom Gasket Set**

- › BC66TBOG

**3) Head Gasket**

- › B176-3141

**4) Valve Cover Gasket**

- › B317-3064

**5) Timing Cover Gsk**

- › B225-8287
- › B226-8766

**6) Oil Pan Gasket**

- › B275-9884
- › B331-4400

**7) Gasket Exh Manifold**

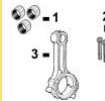
- › B279-9361

**8) Gasket intake Manifold**

- › B278-5128

**9) Rocker Cover Gasket**

- › B277-5063
- › B309-6664



**1) Bush, Con Rod**

- › B276-7478 x6

**2) Bolt, Con Rod**

- › B323-9312 x12

**3) Con Rod Kit**

- › B331-0290



**1) Bushing, Cam**

- › B276-5601 x1

**2) Camshaft**

**3) Tappet**

- › B278-5125 x12

**4) Pushrod**

- › B278-5126 x12

**5) Seal, Valve Stem**

- › B299-5511 x24

**Valve Train**

**1) Valve, Intake**

- › B309-6678 x12

**2) Valve, Exhaust**

- › B339-9637 x12

**3) Guide, Valve (Intake & Exhaust)**

- › B380-2073 x24

**4) Valve, Insert In**

- › B377-0399 x12

**5) Valve, Insert Ex**

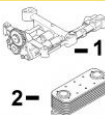
- › B377-0400 x12

**6) Spring, Valve**

- › B436-0521 x24

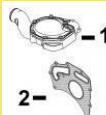
**7) Lock, Valve**

- › B276-8123 x48



**1) Oil Pump**

- › B420-0454
- 2) Oil Cooler**
- › B281-7039
- › B326-7401



**1) Water Pump**

- › 1) B354-4754
- 2) Water Pump Gasket**
- › B225-8019
- 3) Thermostat**
- › B417-7782
- 4) Thermostat Housing Gasket**
- › B281-8744



**Repair Sleeve**

- › 105RS
- 2) Head Bolts**
- › B276-8134 x14



**1) Glowplug**

- › B226-8770
- › B452-3112
- › B453-3510

**2) Piston Cooling Nozzle**

- › B276-5605

**3) Injector**

- › B320-0655
- › B320-0677
- › B320-0680
- › B320-0690
- › B321-3600



**Fuel Lines**

- › 1) B336-8174
- › 2) B336-8175
- › 3) B336-8176
- › 4) B336-8177
- › 5) B336-8178
- › 6) B336-8179

(1): Lower gasket set does not contain the timing cover gasket or the oil pan gasket. Please order separately.  
 (3): Check application for proper usage.

(2): Verify Application.

**Engine Model:**

C6.6

**Engine Desc:**

TURBOCHARGED

**Engine Data:**

Tier 3

**Engine Info:**

6 Cyl

**Engine**

**Dimensions:**

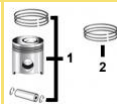
Bore: 4.133in / 105.00mm  
Stroke: 5.00in / 127.00mm  
Displacement: 402.76 in3 / 6.6 Lt

Please see page 479 for a complete list of equipment models.



**Basic Kit**

- › BBK710 Std.
- › BBK711 0.50
- › BBK712 1.00



**1) Piston & Ring Kit**

- › B282-2224 Std.
  - › B380-2063 0.50
  - › B282-2224D 1.00
- 2) Ring Set**
- › B276-7476 Std.
  - › B380-2065 0.50
  - › B466-4849 1.00

**6 Per Engine**



**Main Bearing Set**

- › B360-1978 Std.
- › B454-3745 0.010
- › B454-3931 0.020
- › B454-3935 0.030

**Set of 7 Pairs**



**Con Rod Bearing Set**

- › B360-1564 Std.
- › B458-7918 0.010
- › B458-7939 0.020
- › B458-7940 0.030

**Set of 6 Pairs**



**Thrust Washer Set**

- › B364-5145 Std.
- › B448-4227 0.007

**Set of 2 Pcs**



**1) Front Seal**

- › B4W-5359

**2) Rear Seal**

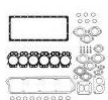
- › B292-0886

**3) Crankshaft Kit**

- › B374-9163

**4) Ring Gear**

- › B033-7687 126T



**1) Top Gasket Set**

- › BC66TTOG

**2) Bottom Gasket Set**

- › BC66TBOG

**3) Head Gasket**

- › B176-3141

**4) Valve Cover Gasket**

- › B317-3064

**5) Timing Cover Gsk**

- › B225-8287
- › B226-8766

**6) Oil Pan Gasket**

- › B275-9884
- › B331-4400

**7) Gasket Exh Manifold**

- › B279-9361

**8) Gasket Intake Manifold**

- › B278-5128

**9) Rocker Cover Gasket**

- › B277-5063
- › B309-6664



**1) Bush, Con Rod**

- › B276-7478 x6

**2) Bolt, Con Rod**

- › B323-9312 x12

**3) Con Rod Kit**

- › B331-0290



**1) Bushing, Cam**

- › B276-5601 x1

**2) Camshaft**

- › B278-5125 x12

**4) Pushrod**

- › B278-5126 x12

**5) Seal, Valve Stem**

- › B299-5511 x24

**Valve Train**

**1) Valve, Intake**

- › B309-6678 x12

**2) Valve, Exhaust**

- › B339-9637 x12

**3) Guide, Valve (Intake & Exhaust)**

- › 3) B380-2073 x24

**4) Valve, Insert In**

- › B377-0399 x12

**5) Valve, Insert Ex**

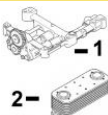
- › B377-0400 x12

**6) Spring, Valve**

- › B436-0521 x24

**7) Lock, Valve**

- › B276-8123 x48



**1) Oil Pump**

- › B420-0454

**2) Oil Cooler**

- › B281-7039
- › B326-7401



**1) Water Pump**

- › B354-4754

**2) Thermostat**

- › B417-7782

**3) Thermostat Housing Gasket**

- › B281-8744



**Water Pump Gasket**

- › B225-8019

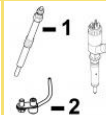


**Repair Sleeve**

- › 105RS

**2) Head Bolts**

- › B276-8134 x14



**1) Glowplug**

- › B226-8770
- › B452-3112
- › B453-3510

**2) Piston Cooling Nozzle**

- › B276-5605

**3) Injector**

- › B320-0655
- › B320-0677
- › B320-0680
- › B320-0690
- › B321-3600



**Fuel Lines**

- › 1) B336-8174
- › 2) B336-8175
- › 3) B336-8176
- › 4) B336-8177
- › 5) B336-8178
- › 6) B336-8179

(1): Lower gasket set does not contain the timing cover gasket or the oil pan gasket. Please order separately.  
(3): Check application for proper usage.

(2): Verify Application.


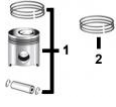



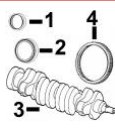


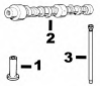



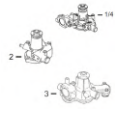

**Engine Model:**  
3TNE84 / 3TNE84T

**Engine Data:**  
G1 GH G1A

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 3.30 in / 84.00 mm Stroke: 3.54 in / 90.00 mm

Please see page 480 for a complete list of equipment models.

|  |  |   |  |  |
|--|--|---|--|--|
|  <p><b>Engine O/H Kit</b><br/>         , YOK3TNE84D<br/>         , YOK3TNE84D/25</p>   |  <p><b>1) Piston &amp; Ring Kit</b><br/>         , Y129002-22090 Std.<br/>         , Y129002-22910 0.25<br/> <b>Use 3</b><br/> <b>2) Ring Set</b><br/>         , Y129002-22510 Std.<br/>         , Y129002-22960 0.25</p>                 |  <p><b>Main Bearing</b><br/>         , Y129001-02931 Std.<br/>         , Y129150-02871 0.25<br/> <b>Use 4 Sold by Pairs</b></p>  |  <p><b>Con Rod Bearing</b><br/>         , Y129150-23601 Std.<br/>         , Y129150-23611 0.25<br/> <b>Use 3 Sold by Pairs</b></p>   |  <p><b>Thrust Washers</b><br/>         , Y129150-02931<br/> <b>Set of 4</b></p> |
|  <p><b>1) Front Seal</b><br/>         , Y129795-01800<br/> <b>2) Rear Seal</b><br/>         , Y129795-01780<br/> <b>3) Crankshaft</b><br/>         , Y129001-21100<br/> <b>4) Flywheel Ring Gear</b><br/>         , Y124550-21600 127T</p> |  <p><b>1) O/H Gasket Set</b><br/>         , YMGS3TNE84<br/> <b>2) Head Gasket</b><br/>         , Y129002-01331<br/> <b>3) Liquid Gasket</b><br/>         , Y977770-1207F<br/> <b>4) Rocker Cover Gsk</b><br/>         , Y129150-11310</p> |  <p><b>1) Bushing, Con Rod</b><br/>         , Y129100-23910 x3<br/> <b>2) Bolt, Con Rod</b><br/>         , Y121550-23200 x6<br/> <b>3) Bushing, Cam</b><br/>         , Y129795-02412 x1<br/> <b>4) Connecting Rod</b><br/>         , Y729402-23100<br/> <b>5) Bolt, Cylinder Head</b><br/>         , Y129150-01200</p> |  <p><b>1) Tappet</b><br/>         , Y129150-14200 x6<br/> <b>2) Camshaft</b><br/>         , Y129129-14580<br/> <b>3) Push Rod</b><br/>         , Y129150-14400 x6</p>   |  |
| <p><b>Valve, Intake</b><br/>         , Y129100-11100 x3</p>  | <p><b>Valve, Exhaust</b><br/>         , Y129100-11130 x3</p>   | <p><b>Guide, Valve</b><br/> <b>1) Intake</b><br/>         , Y120130-11860 x3<br/> <b>2) Exhaust</b><br/>         , Y129150-11810 x3</p>   | <p><b>1) Lock, Valve</b><br/>         , Y27310-080001 x12<br/> <b>2) Stem, Seal Intake</b><br/>         , Y124460-11340 x3<br/> <b>3) Stem, Seal Exhaust</b><br/>         , Y121400-11340 x3</p>   | <p><b>1) Spring, Valve</b><br/>         , Y129795-11120 x6<br/> <b>2) Cap, Valve</b><br/>         , Y129150-11370</p>  |
|  <p><b>1) Thermostat</b><br/>         , Y129155-49801<br/> <b>2) Injector</b><br/>         , Y729503-53100</p>  |  <p><b>Oil Pump</b><br/>         , Y129001-32001</p>  |  <p><b>Lift Pump</b><br/>         , Y129100-52101-Z</p>  |  <p><b>Water Pump</b><br/>         , 1) Y129001-42004<br/>         , 2) Y129100-42004<br/>         , 3) Y129263-42000<br/>         , 4) Y129508-42001<br/> <b>Water Pump Gasket</b><br/>         , Y129486-42021</p> |  <p><b>Repair Sleeve</b><br/>         , 84RS</p>                              |

(1): Check your application for proper usage.  
 (3): Gear not included.


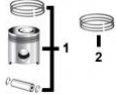



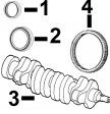
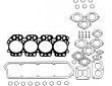

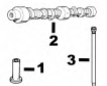



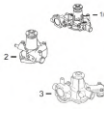

(2): Like Y129001-42004, with Inject Pump cooling connections.

**Engine Model:**  
4TNE84

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.30 in / 84.00 mm Stroke: 3.54 in / 90.00 mm

Please see page 481 for a complete list of equipment models.

|  |  |   |  |  |
|--|--|---|--|--|
|  <p><b>Engine O/H Kit</b><br/>         , YOK4TNE84D<br/>         , YOK4TNE84D/25</p>   |  <p><b>1) Piston &amp; Ring Kit</b><br/>         , Y129002-22090 Std.<br/>         , Y129002-22910 0.25<br/> <b>Use 4</b><br/> <b>2) Ring Set</b><br/>         , Y129002-22510 Std.<br/>         , Y129002-22960 0.25</p>                 |  <p><b>Main Bearing</b><br/>         , Y129001-02931 Std.<br/>         , Y129150-02871 0.25<br/> <b>Use 5 Sold by Pairs</b></p>  |  <p><b>Con Rod Bearing</b><br/>         , Y129150-23601 Std.<br/>         , Y129150-23611 0.25<br/> <b>Use 4 Sold by Pairs</b></p>   |  <p><b>Thrust Washers</b><br/>         , Y129150-02931<br/> <b>Set of 4</b></p> |
|  <p><b>1) Front Seal</b><br/>         , Y129795-01800<br/> <b>2) Rear Seal</b><br/>         , Y129795-01780<br/> <b>3) Crankshaft</b><br/>         , Y129407-21000<br/> <b>4) Flywheel Ring Gear</b><br/>         , Y124550-21600 127T</p> |  <p><b>1) O/H Gasket Set</b><br/>         , YMGS4TNE84<br/> <b>2) Head Gasket</b><br/>         , Y129408-01330<br/> <b>3) Liquid Gasket</b><br/>         , Y977770-1207F<br/> <b>4) Rocker Cover Gsk</b><br/>         , Y129550-11310</p> |  <p><b>1) Bushing, Con Rod</b><br/>         , Y129100-23910 x4<br/> <b>2) Bolt, Con Rod</b><br/>         , Y121550-23200 x8<br/> <b>3) Bushing, Cam</b><br/>         , Y129795-02412 x1<br/> <b>4) Connecting Rod</b><br/>         , Y729402-23100<br/> <b>5) Bolt, Cylinder Head</b><br/>         , Y129150-01200</p> |  <p><b>1) Tappet</b><br/>         , Y129150-14200 x8<br/> <b>2) Camshaft</b><br/>         , Y729402-14580<br/> <b>3) Push Rod</b><br/>         , Y129150-14400 x8</p>   |  |
| <p><b>Valve, Intake</b><br/>         , Y129100-11100 x4</p>  | <p><b>Valve, Exhaust</b><br/>         , Y129100-11130 x4</p>   | <p><b>Guide, Valve</b><br/> <b>1) Intake</b><br/>         , Y120130-11860 x4<br/> <b>2) Exhaust</b><br/>         , Y129150-11810 x4</p>   | <p><b>1) Lock, Valve</b><br/>         , Y27310-080001 x16<br/> <b>2) Stem, Seal Int</b><br/>         , Y124460-11340 x4<br/> <b>3) Stem, Seal Exh</b><br/>         , Y121400-11340 x4</p>  | <p><b>1) Spring, Valve</b><br/>         , Y129795-11120 x8<br/> <b>2) Cap, Valve</b><br/>         , Y129150-11370</p>  |
|  <p><b>1) Thermostat</b><br/>         , Y129155-49801<br/> <b>2) Injector</b><br/>         , Y729503-53100</p>  |  <p><b>Oil Pump</b><br/>         , Y129001-32001</p>  |  <p><b>Lift Pump</b><br/>         , Y129100-52101-Z</p>  |  <p><b>Water Pump</b><br/>         , 1) Y129001-42004<br/>         , 2) Y129100-42004<br/>         , 3) Y129263-42000<br/>         , 4) Y129508-42001<br/> <b>Water Pump Gasket</b><br/>         , Y129486-42021</p> |  <p><b>Repair Sleeve</b><br/>         , 84RS</p>                              |


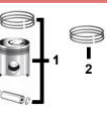



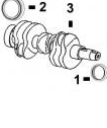
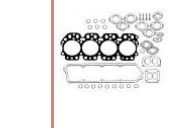






(1): Check your application for proper usage.

(2): Like Y129001-42004, with Inject Pump cooling connections.

(3): Gear not included. Suitable for 4TNE84/88 and 4TNV84/88.

Do not use in applications that require a crankshaft driven balancer unit.



|  |   |   |   |  |  |
|--|---|---|---|--|--|
| <p><b>Engine Model:</b><br/>TK486</p> <p><b>Engine Desc:</b><br/>Thermo King</p> <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.38 in / 86.00 mm<br/>Stroke: 3.54 in / 90.00 mm</p>   |  <p><b>Engine O/H Kit</b></p> <ul style="list-style-type: none"> <li>YOKTK486</li> <li>YOKTK486/25</li> <li>YOKTK486/50</li> </ul>  |  <p><b>1) Piston &amp; Ring Kit</b></p> <ul style="list-style-type: none"> <li>Y11-8948 Std.</li> <li>Y11-8955 0.25</li> <li>Y11-8958 0.50</li> </ul> <p><b>Use 4</b></p> <p><b>2) Ring Set</b></p> <ul style="list-style-type: none"> <li>Y13-355 Std.</li> <li>Y13-461 0.25</li> <li>Y13-455 0.50</li> </ul>  |  <p><b>Main Bearing</b></p> <ul style="list-style-type: none"> <li>Y129001-02931 Std.</li> <li>(13-920)</li> <li>Y129150-02871 0.25</li> <li>(13-921)</li> </ul> <p><b>Use 5 Sold by Pairs</b></p>  |  <p><b>Con Rod Bearing</b></p> <ul style="list-style-type: none"> <li>Y129150-23601 Std.</li> <li>(13-924)</li> <li>Y129150-23611 0.25</li> <li>(13-925)</li> </ul> <p><b>Use 4 Sold by Pairs</b></p>                        |  <p><b>Thrust Washers</b></p> <ul style="list-style-type: none"> <li>Y129150-02931</li> <li>(13-927)</li> </ul> <p><b>Set of 4</b></p> |
| <p><b>Thermo-King</b></p> <p>SB-110<br/>SB-190<br/>SB-200<br/>SB-210<br/>SB-300<br/>SB-310<br/>SB-430</p>  |  <p><b>1) Front Seal</b></p> <ul style="list-style-type: none"> <li>Y129795-01800</li> <li>(33-4088)</li> </ul> <p><b>2) Rear Seal</b></p> <ul style="list-style-type: none"> <li>Y129795-01780</li> <li>Y33-2974</li> </ul> <p><b>3) Crankshaft</b></p> <ul style="list-style-type: none"> <li>Y129407-21000</li> <li>(13-351)</li> </ul> |  <p><b>1) O/H Gasket Set</b></p> <ul style="list-style-type: none"> <li>YMGS4TNE88</li> </ul> <p><b>2) Head Gasket</b></p> <ul style="list-style-type: none"> <li>Y129407-01340</li> <li>(33-4122)</li> </ul> <p><b>3) Liquid Gasket</b></p> <ul style="list-style-type: none"> <li>Y977770-1207F</li> </ul> <p><b>4) Rocker Cover Gsk</b></p> <ul style="list-style-type: none"> <li>Y129160-11310</li> <li>(13-340)</li> </ul> |  <p><b>1) Bush, Con Rod</b></p> <ul style="list-style-type: none"> <li>Y129100-23910 x4</li> <li>(11-8953)</li> </ul> <p><b>2) Bolt, Con Rod</b></p> <ul style="list-style-type: none"> <li>Y121550-23200 x8</li> </ul> <p><b>3) Bushing, Cam</b></p> <ul style="list-style-type: none"> <li>Y129795-02412 x1</li> <li>(13-926)</li> </ul> |  <p><b>1) Tappet</b></p> <ul style="list-style-type: none"> <li>Y129150-14200 x8</li> <li>(11-6717)</li> </ul> <p><b>2) Camshaft</b></p> <ul style="list-style-type: none"> <li>Y729402-14580</li> <li>(11-9261)</li> </ul> |  |
| <p><b>Valve, Intake</b></p> <ul style="list-style-type: none"> <li>Y129100-11100 x4</li> <li>(11-8930)</li> </ul>  | <p><b>Valve, Exhaust</b></p> <ul style="list-style-type: none"> <li>Y129100-11130 x4</li> <li>(13-659)</li> </ul>   | <p><b>Guide, Valve</b></p> <p><b>1) Intake</b></p> <ul style="list-style-type: none"> <li>Y120130-11860 x4</li> <li>(11-8928)</li> </ul> <p><b>2) Exhaust</b></p> <ul style="list-style-type: none"> <li>Y129150-11810 x4</li> <li>(11-8929)</li> </ul>   | <p><b>1) Stem, Seal Int</b></p> <ul style="list-style-type: none"> <li>Y124460-11340 x4</li> <li>(11-8935)</li> </ul> <p><b>2) Stem, Seal Exh</b></p> <ul style="list-style-type: none"> <li>Y121400-11340 x4</li> <li>(11-8934)</li> </ul>   | <p><b>Spring, Valve</b></p> <ul style="list-style-type: none"> <li>Y129795-11120 x8</li> <li>(11-8932)</li> </ul>  |  |
|  <p><b>1) Thermostat</b></p> <ul style="list-style-type: none"> <li>Y129155-49801</li> <li>(13-385)</li> </ul> <p><b>2) Injector</b></p> <ul style="list-style-type: none"> <li>Y729503-53100</li> <li>(11-8715)</li> </ul> |  <p><b>1) Oil Pump</b></p> <ul style="list-style-type: none"> <li>Y129001-32001</li> <li>(11-9249)</li> </ul> <p><b>2) Oil Cooler</b></p> <ul style="list-style-type: none"> <li>Y129508-33030</li> </ul>  |  <p><b>Water Pump High Mount</b></p> <ul style="list-style-type: none"> <li>Y129263-42000</li> <li>(11-9451)</li> </ul>  |  <p><b>Water Pump Low Mount</b></p> <ul style="list-style-type: none"> <li>Y129001-42004</li> <li>(13-509)</li> </ul>  |  |  |

(1): For engines with serial before K00251.

(3): Gear not included. Suitable for 4TNE84/88 and 4TNV84/88. Do not use in applications that require a crankshaft driven balancer unit.

(5): Check application for proper usage.

(2): Engines with serial numbers K00251 and after.


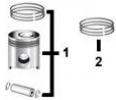



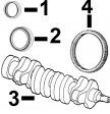


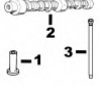





(4): O/H Gasket does not include Rear Seal Y33-2974. Please order separately.

**Engine Model:**  
3TNE88

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 3.46 in / 88.00 mm

Please see page 482 for a complete list of equipment models.

|  |  |  |  |  |
|--|--|--|--|--|
|  <p><b>Engine O/H Kit</b><br/>         , YOK3TNE88<br/>         , YOK3TNE88/25</p>   |  <p><b>1) Piston &amp; Ring Kit</b><br/>         , Y129001-22081 Std.<br/>         , Y129001-22901 0.25<br/> <b>Use 3</b><br/> <b>2) Ring Set</b><br/>         , Y129001-22500 Std.<br/>         , Y129001-22950 0.25</p>                 |  <p><b>Main Bearing</b><br/>         , Y129001-02931 Std.<br/>         , Y129150-02871 0.25<br/> <b>Use 4 Sold by Pairs</b></p>   |  <p><b>Con Rod Bearing</b><br/>         , Y129150-23601 Std.<br/>         , Y129150-23611 0.25<br/> <b>Use 3 Sold by Pairs</b></p>   |  <p><b>Thrust Washers</b><br/>         , Y129150-02931<br/> <b>Set of 4</b></p> |
|  <p><b>1) Front Seal</b><br/>         , Y129795-01800<br/> <b>2) Rear Seal</b><br/>         , Y129795-01780<br/> <b>3) Crankshaft</b><br/>         , Y129001-21100<br/> <b>4) Flywheel Ring Gear</b><br/>         , Y124550-21600 127T</p> |  <p><b>1) O/H Gasket Set</b><br/>         , YMGS3TNE88<br/> <b>2) Head Gasket</b><br/>         , Y129001-01340<br/> <b>3) Liquid Gasket</b><br/>         , Y977770-1207F<br/> <b>4) Rocker Cover Gsk</b><br/>         , Y129150-11310</p> |  <p><b>1) Bush, Con Rod</b><br/>         , Y129100-23910 x3<br/> <b>2) Bolt, Con Rod</b><br/>         , Y121550-23200 x6<br/> <b>3) Bushing, Cam</b><br/>         , Y129795-02412 x1<br/> <b>4) Connecting Rod</b><br/>         , Y729402-23100<br/> <b>5) Bolt, Cylinder Head</b><br/>         , Y129150-01200</p> |  <p><b>1) Tappet</b><br/>         , Y129150-14200 x6<br/> <b>2) Camshaft</b><br/>         , Y129129-14580<br/> <b>3) Push Rod</b><br/>         , Y129150-14400 x6</p>   |  |
| <p><b>Valve, Intake</b><br/>         , Y129100-11100 x3</p>  | <p><b>Valve, Exhaust</b><br/>         , Y129100-11130 x3</p>   | <p><b>Guide, Valve</b><br/> <b>1) Intake</b><br/>         , Y120130-11860 x3<br/> <b>2) Exhaust</b><br/>         , Y129150-11810 x3</p>  | <p><b>1) Stem, Seal Int</b><br/>         , Y124460-11340 x3<br/> <b>2) Stem, Seal Exh</b><br/>         , Y121400-11340 x3</p>  | <p><b>1) Spring, Valve</b><br/>         , Y129795-11120 x6<br/> <b>2) Cap, Valve</b><br/>         , Y129150-11370</p>  |
|  <p><b>1) Thermostat</b><br/>         , Y129155-49801<br/> <b>2) Injector</b><br/>         , Y729503-53100</p>  |  <p><b>Oil Pump</b><br/>         , Y129001-32001</p>  |  <p><b>Lift Pump</b><br/>         , Y129100-52101-Z</p>   |  <p><b>Water Pump</b><br/>         , 1) Y129001-42004<br/>         , 2) Y129100-42004<br/>         , 3) Y129263-42000<br/>         , 4) Y129508-42001<br/> <b>Water Pump Gasket</b><br/>         , Y129486-42021</p> |  <p><b>Repair Sleeve</b><br/>         , 88RS</p>                              |

(1): Gear not included.

(2): Check your application for proper usage.


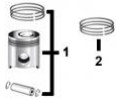



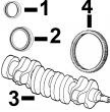
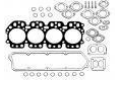

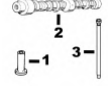





(3): Like Y129001-42004, with Inject Pump cooling connections.

**Engine Model:**  
4TNE88

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.46 in / 88.00 mm

Please see page 483 for a complete list of equipment models.

|  |  |  |  |  |
|--|--|--|--|--|
|  <p><b>Engine O/H Kit</b><br/>         , YOK4TNE88<br/>         , YOK4TNE88/25</p>   |  <p><b>1) Piston &amp; Ring Kit</b><br/>         , Y129001-22081 Std.<br/>         , Y129001-22901 0.25<br/> <b>Use 4</b><br/> <b>2) Ring Set</b><br/>         , Y129001-22500 Std.<br/>         , Y129001-22950 0.25</p>                 |  <p><b>Main Bearing</b><br/>         , Y129001-02931 Std.<br/>         , Y129150-02871 0.25<br/> <b>Use 5 Sold by Pairs</b></p>   |  <p><b>Con Rod Bearing</b><br/>         , Y129150-23601 Std.<br/>         , Y129150-23611 0.25<br/> <b>Use 4 Sold by Pairs</b></p>   |  <p><b>Thrust Washers</b><br/>         , Y129150-02931<br/> <b>Set of 4</b></p> |
|  <p><b>1) Front Seal</b><br/>         , Y129795-01800<br/> <b>2) Rear Seal</b><br/>         , Y129795-01780<br/> <b>3) Crankshaft</b><br/>         , Y129407-21000<br/> <b>4) Flywheel Ring Gear</b><br/>         , Y124550-21600 127T</p> |  <p><b>1) O/H Gasket Set</b><br/>         , YMGS4TNE88<br/> <b>2) Head Gasket</b><br/>         , Y129407-01340<br/> <b>3) Liquid Gasket</b><br/>         , Y977770-1207F<br/> <b>4) Rocker Cover Gsk</b><br/>         , Y129550-11310</p> |  <p><b>1) Bush, Con Rod</b><br/>         , Y129100-23910 x4<br/> <b>2) Bolt, Con Rod</b><br/>         , Y121550-23200 x8<br/> <b>3) Bushing, Cam</b><br/>         , Y129795-02412 x1<br/> <b>4) Connecting Rod</b><br/>         , Y729402-23100<br/> <b>5) Bolt, Cylinder Head</b><br/>         , Y129150-01200</p> |  <p><b>1) Tappet</b><br/>         , Y129150-14200 x8<br/> <b>2) Camshaft</b><br/>         , Y729402-14580<br/> <b>3) Push Rod</b><br/>         , Y129150-14400 x8</p>   |  |
| <p><b>Valve, Intake</b><br/>         , Y129100-11100 x4</p>  | <p><b>Valve, Exhaust</b><br/>         , Y129100-11130 x4</p>   | <p><b>Guide, Valve</b><br/> <b>1) Intake</b><br/>         , Y120130-11860 x4<br/> <b>2) Exhaust</b><br/>         , Y129150-11810 x4</p>  | <p><b>1) Stem, Seal Int</b><br/>         , Y124460-11340 x4<br/> <b>2) Stem, Seal Exh</b><br/>         , Y121400-11340 x4</p>  | <p><b>1) Spring, Valve</b><br/>         , Y129795-11120 x8<br/> <b>2) Cap, Valve</b><br/>         , Y129150-11370</p>  |
|  <p><b>1) Thermostat</b><br/>         , Y129155-49801<br/> <b>2) Injector</b><br/>         , Y729503-53100</p>  |  <p><b>Oil Pump</b><br/>         , Y129001-32001</p>  |  <p><b>Lift Pump</b><br/>         , Y129100-52101-Z</p>   |  <p><b>Water Pump</b><br/>         , 1) Y129001-42004<br/>         , 2) Y129100-42004<br/>         , 3) Y129263-42000<br/>         , 4) Y129508-42001<br/> <b>Water Pump Gasket</b><br/>         , Y129486-42021</p> |  <p><b>Repair Sleeve</b><br/>         , 88RS</p>                              |

(1): Gear not included. Suitable for 4TNE84/88 and 4TNV84/88. Do not use in applications that require a crankshaft driven balancer unit.  
 (2): Like Y129001-42004, with Inject Pump cooling connections.  
 (3): Check application for proper usage.

**Engine Model:**  
4TNE94

**Engine Data:**  
DIRECT INJECTION

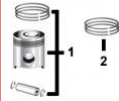
**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.70 in / 94.00 mm Stroke: 3.937 in / 100 mm

Please see page 484 for a complete list of equipment models.



**Engine O/H Kit**  
 , YOK4TNE94  
 , YOK4TNE94/25



**1) Piston & Ring Kit**  
 , Y129900-22080 Std.  
 , Y129900-22900 0.25  
**Use 4**  
**2) Ring Set**  
 , Y129901-22050 Std.  
 , Y129901-22950 0.25



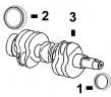
**Main Bearing**  
 , Y729900-02801 Std.  
 , Y129900-02341 0.25  
**Set of 5 Pairs**



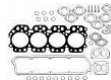
**Con Rod Bearing**  
 , Y129900-23601 Std.  
 , Y129900-23611 0.25  
**Set of 4 Pairs**



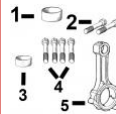
**Thrust Washers**  
 , Y129900-02931 Std.  
 , SET OF 4



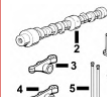
**1) Front Seal**  
 , Y129916-01800  
**2) Rear Seal**  
 , Y129916-01790  
**3) Crankshaft**  
 , Y129900-21000



**1) O/H Gasket Set**  
 , YMGS4TNE94  
**2) Head Gasket**  
 , Y129900-01331  
**3) Liquid Gasket**  
 , Y977770-1207F  
**4) Rocker Cover Gsk**  
 , Y129900-11310  
**5) Gasket, Manifold to Muffler**  
 , Y129400-13201  
**6) Gasket, Air Heater**  
 , Y121850-77021



**1) Bush, Con Rod**  
 , Y129900-23911  
**2) Bolt, Con Rod**  
 , Y129900-23200 x8  
**3) Bushing, Cam**  
 , Y129900-02410  
**4) Bolt, Cyl Head**  
 , Y129900-01200 x18  
**5) Connecting Rod**  
 , Y129900-23001



**1) Tappet**  
 , Y129150-14200 x8  
**2) Camshaft**  
 , Y129900-14580  
**3) Rocker Arm Intake**  
 , Y129900-11650  
**4) Rocker Arm Exhaust**  
 , Y129900-11660  
**5) Push Rod**

**Valve, Intake**  
 , Y129900-11100 x4

**Valve, Exhaust**  
 , Y129900-11110 x4

**Guide, Valve**  
 , Y129150-11810 x8

**1) Lock, Valve**  
 , Y27310-080001 x16  
**2) Stem, Seal Int**  
 , Y124460-11340 x4  
**3) Stem, Seal Exh**  
 , Y121400-11340 x4

**1) Spring, Valve**  
 , Y129900-11120 x8  
**2) Cap, Valve**  
 , Y129150-11370



**Thermostat**  
 , Y121850-49811  
 , Y121850-49801



**Oil Pump**  
 , Y129900-32001



**Electric Fuel Pump**  
 , Y129612-52100



**Water Pump**  
 , Y129900-42002  
 , Y129900-42055




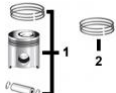



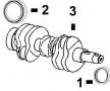
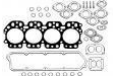

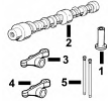





**Repair Sleeve**  
 , 94RS

(1): Check your application for proper usage.

(2): Forklift applications

|                                |   |                              |   |
|--------------------------------|---|------------------------------|---|
| <b>Engine Model:</b><br>4TNE98 | <b>Engine Desc:</b><br>DIRECT INJECTION | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.86 in / 98.00 mm Stroke: 4.331 in / 110 mm |
|--------------------------------|---|------------------------------|---|

Please see page 485 for a complete list of equipment models.

|  |   |   |   |  |
|--|---|---|---|--|
|  <p><b>Engine O/H Kit</b><br/>         , YOK4TNE98D<br/>         , YOK4TNE98D/25</p>   |  <p><b>1) Piston &amp; Ring Kit</b><br/>         , Y129902-22080 Std.<br/>         , Y129902-22900 0.25</p> <p><b>Use 4</b></p> <p><b>2) Ring Set</b><br/>         , Y129903-22050 Std.<br/>         , Y129903-22950 0.25</p>  |  <p><b>Main Bearing</b><br/>         , Y729900-02801 Std.<br/>         , Y129900-02341 0.25</p> <p><b>Set of 5 Pairs</b></p>   |  <p><b>Con Rod Bearing</b><br/>         , Y129900-23601 Std.<br/>         , Y129900-23611 0.25</p> <p><b>Set of 4 Pairs</b></p>   |  <p><b>Thrust Washers</b><br/>         , Y129900-02931 Std.<br/>         , SET OF 4</p> |
|  <p><b>1) Front Seal</b><br/>         , Y129916-01800</p> <p><b>2) Rear Seal</b><br/>         , Y129916-01790</p> <p><b>3) Crankshaft</b><br/>         , Y129902-21000</p> |  <p><b>1) O/H Gasket Set</b><br/>         , YMGS4TNE98</p> <p><b>2) Head Gasket</b><br/>         , Y129902-01331</p> <p><b>3) Liquid Gasket</b><br/>         , Y977770-1207F</p> <p><b>4) Rocker Cover Gsk</b><br/>         , Y129900-11310</p> <p><b>5) Gasket, Manifold to Muffler</b><br/>         , Y129400-13201</p> <p><b>6) Gasket, Air Heater</b><br/>         , Y121850-77021</p> |  <p><b>1) Bush, Con Rod</b><br/>         , Y129900-23911</p> <p><b>2) Bolt, Con Rod</b><br/>         , Y129900-23200 x8</p> <p><b>3) Bushing, Cam</b><br/>         , Y129900-02410</p> <p><b>4) Bolt, Cyl Head</b><br/>         , Y129900-01200 x18</p> <p><b>5) Connecting Rod</b><br/>         , Y129900-23001</p> |  <p><b>1) Tappet</b><br/>         , Y129150-14200 x8</p> <p><b>2) Camshaft</b><br/>         , Y129900-14580</p> <p><b>3) Rocker Arm Intake</b><br/>         , Y129900-11650</p> <p><b>4) Rocker Arm Exhaust</b><br/>         , Y129900-11660</p> <p><b>5) Push Rod</b></p> |  |
| <p><b>Valve, Intake</b><br/>         , Y129900-11100 x4</p>  | <p><b>Valve, Exhaust</b><br/>         , Y129900-11110 x4</p>  | <p><b>Guide, Valve</b><br/>         , Y129150-11810 x8</p>  | <p><b>1) Lock, Valve</b><br/>         , Y27310-080001 x16</p> <p><b>2) Stem, Seal Int</b><br/>         , Y124460-11340 x4</p> <p><b>3) Stem, Seal Exh</b><br/>         , Y121400-11340 x4</p>   | <p><b>1) Spring, Valve</b><br/>         , Y129900-11120 x8</p> <p><b>2) Cap, Valve</b><br/>         , Y129150-11370</p>  |
|  <p><b>Thermostat</b><br/>         , Y121850-49811<br/>         , Y121850-49801</p>   |  <p><b>Oil Pump</b><br/>         , Y129900-32001</p>   |  <p><b>Electric Fuel Pump</b><br/>         , Y129612-52100</p>   |  <p><b>Water Pump</b><br/>         , Y129900-42002</p>  |  <p><b>Repair Sleeve</b><br/>         , 98RS</p>                                      |

(1): Check your application for proper usage.

(2): Head gasket is MLS material. Please check application for proper usage.

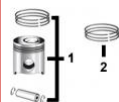
**Engine Model:** 4TNE98  
**Engine Desc:** INDIRECT INJECTION  
**Engine Info:** 4 Cyl  
**Engine Dimensions:** Bore: 3.86 in / 98.00 mm Stroke: 4.331 in / 110 mm

| Yanmar Engine Model | Komatsu Engine Model | Kohler       | Mustang       |
|---------------------|----------------------|--------------|---------------|
| 4TNE98-BQCKS        | 4TNE98-BQDFC         | 4D98E-1AGD-F | 4D98E-1G45-BM |
| 4TNE98-HAF          | 4TNE98-NMH           | 4D98E-1GD-F  | 32EOZ         |
| 4TNE98-BQCKM        |                      |              | MTL16         |



**Engine O/H Kit**

- YOK4TNE98-IND
- YOK4TNE98/25-IND



**1) Piston & Ring Kit**

- Y129903-22081 Std.
- Y129903-22901 0.25

**Use 4**

**2) Ring Set**

- Y129903-22050 Std.
- Y129903-22950 0.25



**Main Bearing**

- Y729900-02801 Std.
- Y129900-02341 0.25

**Set of 5 Pairs**



**Con Rod Bearing**

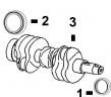
- Y129900-23601 Std.
- Y129900-23611 0.25

**Set of 4 Pairs**



**Thrust Washers**

- Y129900-02931 Std.
- SET OF 4



**1) Front Seal**

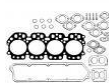
- Y129916-01800

**2) Rear Seal**

- Y129916-01790

**3) Crankshaft**

- Y129902-21000



**1) O/H Gasket Set**

- YMGS4TNE98-IND

**2) Head Gasket**

- Y729903-01350

**3) Liquid Gasket**

- Y977770-1207F

**4) Rocker Cover Gsk**

- Y129900-11310

**5) Gasket, Manifold to Muffler**

- Y129400-13201

**6) Gasket, Air Heater**

- Y121850-77021



**1) Bush, Con Rod**

- Y129900-23911

**2) Bolt, Con Rod**

- Y129900-23200 x8

**3) Bushing, Cam**

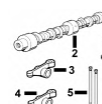
- Y129900-02410

**4) Bolt, Cyl Head**

- Y129900-01200 x18

**5) Connecting Rod**

- Y129900-23001



**1) Tappet**

- Y129150-14200 x8

**2) Camshaft**

- Y129900-14580

**3) Rocker Arm Intake**

- Y129900-11650

**4) Rocker Arm Exhaust**

- Y129900-11660

**5) Push Rod**

**Valve, Intake**

- Y129900-11100 x4

**Valve, Exhaust**

- Y129900-11110 x4

**Guide, Valve**

- Y129150-11810 x8

**1) Lock, Valve**

- Y27310-080001 x16

**2) Stem, Seal Int**

- Y124460-11340 x4

**3) Stem, Seal Exh**

- Y121400-11340 x4

**1) Spring, Valve**

- Y129900-11120 x8

**2) Cap, Valve**

- Y129150-11370



**Thermostat**

- Y121850-49811 (1)
- Y121850-49801 (1)



**Oil Pump**

- Y129900-32001



**Electric Fuel Pump**

- Y129612-52100



**Water Pump**

- Y129900-42002 (1)
- Y129900-42055 (1)



**Repair Sleeve**

- 98RS



**Glow Plug**

- Y129155-77800

(1): Check your application for proper usage.

(2): Head gasket is composite material. Please check application for proper usage.

**Engine Model:**  
4TNE106D

**Engine Desc:**  
TIER 1

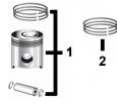
**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.17 in / 106.00 mm

Please see page 486 for a complete list of equipment models.



**Engine O/H Kit**  
 , YOK4TNE106  
 , YOK4TNE106/25



**1) Piston & Ring Kit**  
 , Y123900-22080 Std.  
 , Y123900-22900 0.25  
**Use 4**  
**2) Ring Set**  
 , Y123900-22050 Std.  
 , Y123900-22950 0.25



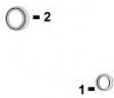
**Main Bearing**  
 , Y723900-02800 Std.  
 , Y123900-02340 0.25  
**Set of 5 Pairs**



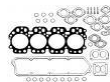
**Con Rod Bearing**  
 , Y123900-23600 Std.  
 , Y123900-23610 0.25  
**Set of 4 Pairs**



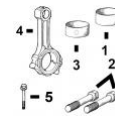
**Thrust Washers**  
 , Y123900-02930  
**Set of 4**



**1) Front Seal**  
 , Y123900-01780  
**2) Rear Seal**  
 , Y123672-01782



**1) O/H Gasket Set**  
 , Y723900-92630  
**2) Head Gasket**  
 , Y123900-01340  
**3) Rocker Cover Gasket**  
 , Y123900-11310



**1) Bush, Con Rod**  
 , Y123900-23910 x4  
**2) Bolt, Con Rod**  
 , Y123900-23200 x8  
**3) Bushing, Cam**  
 , Y123900-02410 x1  
**4) Connecting Rod**  
 , Y123900-23000  
**5) Bolt, Cylinder Head**  
 , Y119174-01200

**Valve, Intake**  
 , Y123900-11100 x4

**Valve, Exhaust**  
 , Y123900-11110 x4

**Guide, Valve**  
 , Y119000-11810 x8

**1) Lock, Valve**  
 , Y27310-090000 x16  
**2) Stem, Seal Int**  
 , Y121850-11150 x8

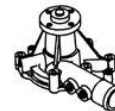
**Spring, Valve**  
 , Y123900-11120 x8



**Thermostat**  
 , Y124610-48620



**Oil Pump**  
 , Y123900-32001



**Water Pump**  
 , Y123900-42101

**Engine Model:**  
4TNE106T

**Engine Desc:**  
TIER 1

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.17 in / 106.00 mm

**Yanmar Engine Models**

4TNE106T-4TNE106T-  
G1A ML  
4TNE106T-4TNE106T-  
NS SA  
4TNE106T-  
TBL

**Komatsu Engine Models**

4D106T 4D106-1FA

**Komatsu**

PC110R-1 PW110R-1  
WB150PS- WB150WSC-  
2 2  
WB93R-2 WB97R-2  
WB97S-2 WB98A-2

**Gehl**

7800 - Skid SL7800 -  
Steer Skid Steer

**Takeuchi**

TL150



**Engine O/H Kit**

• YOK4TNE106T  
• YOK4TNE106T/25



**1) Piston & Ring Kit**

• Y123901-22080 Std.  
• Y123901-22900 0.25

**Use 4**

**2) Ring Set**

• Y123900-22050 Std.  
• Y123900-22950 0.25



**Main Bearing**

• Y723900-02800 Std.  
• Y123900-02340 0.25

**Set of 5 Pairs**



**Con Rod Bearing**

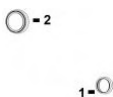
• Y123900-23600 Std.  
• Y123900-23610 0.25

**Set of 4 Pairs**



**Thrust Washers**

• Y123900-02930  
**Set of 4**

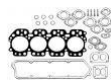


**1) Front Seal**

• Y123900-01780

**2) Rear Seal**

• Y123672-01782



**1) O/H Gasket Set**

• Y723900-92630

**2) Head Gasket**

• Y123900-01340

**3) Rocker Cover Gasket**

• Y123900-11310

**4) Turbo Mounting Gasket**

• Y123901-18090

**5) Turbo Exhaust Gasket**

• Y123901-18080



**1) Bush, Con Rod**

• Y123900-23910 x4

**2) Bolt, Con Rod**

• Y123900-23200 x8

**3) Bushing, Cam**

• Y123900-02410 x1

**4) Connecting Rod**

• Y123900-23000

**5) Bolt, Cylinder Head**

• Y119174-01200

**Valve, Intake**

• Y123900-11110 x4

**Valve, Exhaust**

• Y123900-11110 x4

**Guide, Valve**

• Y119000-11810 x8

**1) Lock, Valve**

• Y27310-090000 x16

**2) Stem, Seal Int**

• Y121850-11150 x8

**Spring, Valve**

• Y123900-11120 x8



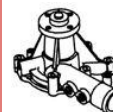
**Thermostat**

• Y124610-48620



**Oil Pump**

• Y123900-32001



**Water Pump**

• Y123900-42000  
• Y123900-42101


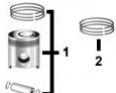



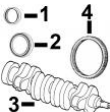


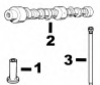

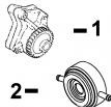

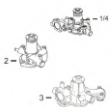



**Engine Model:**  
3TNV84

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 3.30 in / 84.00 mm

Please see page 487 for a complete list of equipment models.

|  |  |  |  |  |
|--|--|--|--|--|
|  <p><b>Engine O/H Kit</b><br/>         , YOK3TNV84<br/>         , YOK3TNV84/25</p>   |  <p><b>1) Piston &amp; Ring Kit</b><br/>         , Y129004-22080 Std.<br/>         , Y129004-22900 0.25<br/> <b>Use 3</b><br/> <b>2) Ring Set</b><br/>         , Y129004-22500 Std.<br/>         , Y129004-22950 0.25</p>                 |  <p><b>Main Bearing</b><br/>         , Y129001-02931 Std.<br/>         , Y129150-02871 0.25<br/> <b>Use 4 Sold by Pairs</b></p>   |  <p><b>Con Rod Bearing</b><br/>         , Y129150-23601 Std.<br/>         , Y129150-23611 0.25<br/> <b>Use 3 Sold by Pairs</b></p>                                     |  <p><b>Thrust Washers</b><br/>         , Y129150-02931<br/> <b>Set of 4</b></p> |
|  <p><b>1) Front Seal</b><br/>         , Y129795-01800<br/> <b>2) Rear Seal</b><br/>         , Y129795-01780<br/> <b>3) Crankshaft</b><br/>         , Y129001-21100<br/> <b>4) Flywheel Ring Gear</b><br/>         , Y124550-21600 127T</p> |  <p><b>1) O/H Gasket Set</b><br/>         , YMGS3TNE84<br/> <b>2) Head Gasket</b><br/>         , Y129002-01331<br/> <b>3) Liquid Gasket</b><br/>         , Y977770-1207F<br/> <b>4) Rocker Cover Gsk</b><br/>         , Y129004-11310</p> |  <p><b>1) Bush, Con Rod</b><br/>         , Y129100-23910 x3<br/> <b>2) Bolt, Con Rod</b><br/>         , Y121550-23200 x6<br/> <b>3) Bushing, Cam</b><br/>         , Y129795-02412 x1<br/> <b>4) Connecting Rod</b><br/>         , Y729402-23100<br/> <b>5) Bolt, Cylinder Head</b><br/>         , Y129150-01200</p> |  <p><b>1) Tappet</b><br/>         , Y129150-14200 x6<br/> <b>2) Camshaft</b><br/>         , Y129129-14580<br/> <b>3) Push Rod</b><br/>         , Y129150-14400 x6</p> |  |
| <p><b>Valve, Intake</b><br/>         , Y129004-11130 x3</p>  | <p><b>Valve, Exhaust</b><br/>         , Y129100-11130 x3</p>   | <p><b>Guide, Valve</b><br/> <b>1) Intake</b><br/>         , Y120130-11860 x3<br/> <b>2) Exhaust</b><br/>         , Y129150-11810 x3</p>  | <p><b>1) Stem, Seal Int</b><br/>         , Y124460-11340 x3<br/> <b>2) Stem, Seal Exh</b><br/>         , Y121400-11340 x3</p>  | <p><b>1) Spring, Valve</b><br/>         , Y129795-11120 x6<br/> <b>2) Cap, Valve</b><br/>         , Y129150-11370</p>  |
|  <p><b>1) Thermostat</b><br/>         , Y129155-49801<br/> <b>2) Injector</b><br/>         , Y729004-53101</p>   |  <p><b>1) Oil Pump</b><br/>         , Y129001-32001<br/>         , Y119802-32100SET<br/> <b>2) Oil Cooler</b><br/>         , Y129508-33030</p>  |  <p><b>Electric Fuel Pump</b><br/>         , Y119225-52102<br/>         , Y129612-52100</p>   |  <p><b>Water Pump</b><br/>         , 1) Y129001-42004<br/>         , 2) Y129100-42004<br/>         , 3) Y129263-42000<br/>         , 4) Y129508-42001</p>            |  <p><b>Repair Sleeve</b><br/>         , 84RS</p>                              |

(1): Gear not included.

(2): Check your application for proper usage.

(3): Like Y129001-42004, with Inject Pump cooling connections.

**Engine Model:**  
4TNV84

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.30 in / 84.00 mm

**Yanmar Engine Models**

4TNV84- DMW  
4TNV84- KLAN  
4TNV84- KWA  
4TNV84- GGE  
4TNV84- KVA  
4TNV84- LU2

**Hi-Power Genset Model**

HYW-25 M6

**New Holland**

T3020 - Tractor

**Landini**

MISTRAL 2-045 - Tractor

**Marine Pleasure**

4JH3 (\*)

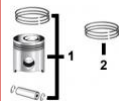
**Mustang**

2044 - Loader



**Engine O/H Kit**

- YOK4TNV84
- YOK4TNV84/25



**1) Piston & Ring Kit**

- Y129004-22080 Std.
- Y129004-22900 0.25

**Use 4**

**2) Ring Set**

- Y129004-22500 Std.
- Y129004-22950 0.25



**Main Bearing**

- Y129001-02931 Std.
- Y129150-02871 0.25

**Use 5 Sold by Pairs**



**Con Rod Bearing**

- Y129150-23601 Std.
- Y129150-23611 0.25

**Use 4 Sold by Pairs**



**Thrust Washers**

- Y129150-02931

**Set of 4**



**1) Front Seal**

- Y129795-01800

**2) Rear Seal**

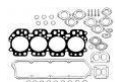
- Y129795-01780

**3) Crankshaft**

- Y129407-21000

**4) Flywheel Ring Gear**

- Y124550-21600 127T



**1) O/H Gasket Set**

- YMGS4TNE84

**2) Head Gasket**

- Y129408-01330

**3) Liquid Gasket**

**1**

- Y977770-1207F

**4) Rocker Cover Gsk**

**3**

- Y129601-11310



**1) Bush, Con Rod**

- Y129100-23910 x4

**2) Bolt, Con Rod**

- Y121550-23200 x8

**3) Bushing, Cam**

- Y129795-02412 x1

**4) Connecting Rod**

- Y729402-23100

**5) Bolt, Cylinder Head**

- Y129150-01200



**1) Tappet**

- Y129150-14200 x8

**2) Camshaft**

- Y729402-14580

**3) Push Rod**

- Y129150-14400

**Valve, Intake**

- Y129004-11130 x4

**Valve, Exhaust**

- Y129100-11130 x4

**Guide, Valve**

**1) Intake**

- Y120130-11860 x4

**2) Exhaust**

- Y129150-11810 x4

**1) Stem, Seal Int**

- Y124460-11340 x4

**2) Stem, Seal Exh**

- Y121400-11340 x4

**1) Spring, Valve**

- Y129795-11120 x8

**2) Cap, Valve**

- Y129150-11370

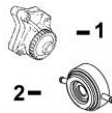


**1) Thermostat**

- Y129155-49801

**2) Injector**

- Y729004-53101



**1) Oil Pump**

- Y129001-32001 **3**

- Y119802-32100SET **3**

**2) Oil Cooler**

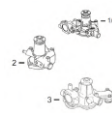
- Y129508-33030 **3**



**Electric Fuel Pump**

- Y119225-52102

- Y129612-52100



**Water Pump**

- 1) Y129001-42004 **3**

- 2) Y129100-42004 **3**

- 3) Y129263-42000 **3**

- 4) Y129508-42001 **2**



**Repair Sleeve**

- 84RS

**(1):** Gear not included. Suitable for 4TNE84/88 and 4TNV84/88. Do not use in applications that require a crankshaft driven balancer unit.

**(2):** Like Y129001-42004, with Inject Pump cooling connections.


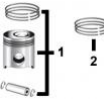



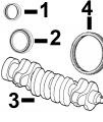
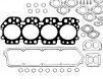

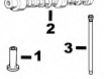



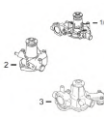

**(3):** Check application for proper usage.

**Engine Model:**  
4TNV84T

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.30 in / 84.00 mm

Please see page 488 for a complete list of equipment models.

|  |  |  |   |  |
|--|--|--|---|--|
|  <p><b>Engine O/H Kit</b><br/>         , YOK4TNV84T<br/>         , YOK4TNV84T/25</p>   |  <p><b>1) Piston &amp; Ring Kit</b><br/>         , Y129508-22080 Std.<br/>         , Y129508-22900 0.25<br/> <b>Use 4</b><br/> <b>2) Ring Set</b><br/>         , Y129004-22500 Std.<br/>         , Y129004-22950 0.25</p>   |  <p><b>Main Bearing</b><br/>         , Y129001-02931 Std.<br/>         , Y129150-02871 0.25<br/> <b>Use 5 Sold by Pairs</b></p>   |  <p><b>Con Rod Bearing</b><br/>         , Y129150-23601 Std.<br/>         , Y129150-23611 0.25<br/> <b>Use 4 Sold by Pairs</b></p>  |  <p><b>Thrust Washers</b><br/>         , Y129150-02931<br/> <b>Set of 4</b></p> |
|  <p><b>1) Front Seal</b><br/>         , Y129795-01800<br/> <b>2) Rear Seal</b><br/>         , Y129795-01780<br/> <b>3) Crankshaft</b><br/>         , Y129407-21000<br/> <b>4) Flywheel Ring Gear</b><br/>         , Y124550-21600 127T</p> |  <p><b>1) O/H Gasket Set</b><br/>         , YMGS4TNV84T<br/> <b>2) Head Gasket</b><br/>         , Y129508-01330<br/> <b>3) Liquid Gasket</b> <span style="background-color: red; color: white; padding: 2px;">1</span><br/>         , Y977770-1207F<br/> <b>4) Rocker Cover Gsk</b> <span style="background-color: red; color: white; padding: 2px;">3</span><br/>         , Y129508-11310<br/> <b>5) Intake Manifold Gasket</b><br/>         , Y129508-12110</p> |  <p><b>1) Bush, Con Rod</b><br/>         , Y129100-23910 x4<br/> <b>2) Bolt, Con Rod</b><br/>         , Y121550-23200 x8<br/> <b>3) Bushing, Cam</b><br/>         , Y129795-02412 x1<br/> <b>4) Connecting Rod</b><br/>         , Y729402-23100<br/> <b>5) Bolt, Cylinder Head</b><br/>         , Y129150-01200</p> |  <p><b>1) Tappet</b><br/>         , Y129150-14200 x8<br/> <b>2) Camshaft</b><br/>         , Y729402-14580<br/> <b>3) Push Rod</b><br/>         , Y129150-14400 x8</p>  |  |
| <p><b>Valve, Intake</b><br/>         , Y129508-11100 x8</p>  | <p><b>Valve, Exhaust</b><br/>         , Y129508-11110 x8</p>   | <p><b>Guide, Valve</b><br/>         , Y119717-11800 x16</p>  | <p><b>1) Stem, Seal Int</b><br/>         , Y119717-11340 x8<br/> <b>2) Stem, Seal Exh</b><br/>         , Y119717-11350 x8</p>   | <p><b>1) Spring, Valve</b><br/>         , Y129508-11130 x16<br/> <b>2) Cap, Valve</b><br/>         , Y129150-11370</p>   |
|  <p><b>Thermostat</b><br/>         , Y129155-49801</p>  |  <p><b>1) Oil Pump</b><br/>         , Y129001-32001 <span style="background-color: red; color: white; padding: 2px;">3</span><br/>         , Y119802-32100SET <span style="background-color: red; color: white; padding: 2px;">3</span><br/> <b>2) Oil Cooler</b><br/>         , Y129508-33030 <span style="background-color: red; color: white; padding: 2px;">3</span></p>  |  <p><b>Electric Fuel Pump</b><br/>         , Y119225-52102<br/>         , Y129612-52100</p>   |  <p><b>Water Pump</b><br/>         , 1) Y129001-42004 <span style="background-color: red; color: white; padding: 2px;">3</span><br/>         , 2) Y129100-42004 <span style="background-color: red; color: white; padding: 2px;">3</span><br/>         , 3) Y129263-42000 <span style="background-color: red; color: white; padding: 2px;">3</span><br/>         , 4) Y129508-42001 <span style="background-color: red; color: white; padding: 2px;">2</span></p> |  <p><b>Repair Sleeve</b><br/>         , 84RS</p>                              |

(1): Gear not included. Suitable for 4TNE84/88 and 4TNV84/88. (2): Like Y129001-42004, with Inject Pump cooling connections. Do not use in applications that require a crankshaft driven balancer unit.  
 (3): Check application for proper usage.

**Engine Model:**  
TK486V

**Engine Desc:**  
Thermo King

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.38 in / 86.00 mm Stroke: 3.54 in / 90.00 mm

**Thermo King**

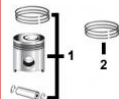
SB-130  
SB-210+  
SB-310+  
SB-400

SB-200TG  
SB-230  
SB-330



**Engine O/H Kit**

- YOKTK486V
- YOKTK486V/25
- YOKTK486V/50



**1) Piston & Ring Kit**

- Y13-1064 Std.
- Y13-1065 0.25
- Y13-1066 0.50

**Use 4**

**2) Ring Set**

- Y13-355 Std.
- Y13-461 0.25
- Y13-455 0.50



**Main Bearing**

- Y129001-02931 Std.
- (13-920)
- Y129150-02871 0.25
- (13-921)

**Use 5 Sold by Pairs**



**Con Rod Bearing**

- Y129150-23601 Std.
- (13-924)
- Y129150-23611 0.25
- (13-925)

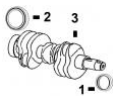
**Use 4 Sold by Pairs**



**Thrust Washers**

- Y129150-02931
- (13-927)

**Set of 4**



**1) Front Seal**

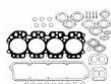
- Y129795-01800
- (33-4088)

**2) Rear Seal**

- Y33-2974
- (33-2974)

**3) Crankshaft**

- Y129407-21000
- (13-351)



**1) O/H Gasket Set**

- YMGS486V

**2) Head Gasket**

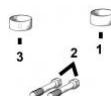
- Y33-5056

**3) Liquid Gasket**

- Y977770-1207F

**4) Rocker Cover Gsk**

- Y129160-11310
- (13-340)



**1) Bush, Con Rod**

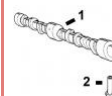
- Y129100-23910 x4
- (11-8953)

**2) Bolt, Con Rod**

- Y121550-23200 x8

**3) Bushing, Cam**

- Y129795-02412 x1
- (13-926)



**1) Tappet**

- Y129150-14200 x8
- (11-6717)

**2) Camshaft**

- Y729402-14580
- (11-9261)

**Valve, Intake**

- Y129004-11130 x4
- (13-932)

**Valve, Exhaust**

- Y129100-11130 x4
- (13-659)

**Guide, Valve**

**1) Intake**

- Y120130-11860 x4
- (11-8928)

**2) Exhaust**

- Y129150-11810 x4
- (11-8929)

**1) Stem, Seal Int**

- Y124460-11340 x4

**2) Stem, Seal Exh**

- Y121400-11340 x4
- (11-8934)

**Spring, Valve**

- Y129795-11120 x8
- (11-8932)

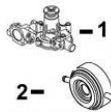


**1) Thermostat**

- Y129155-49801
- (13-385)

**2) Injector**

- Y729004-53101
- (13-370)



**1) Water Pump**

- Y129508-42001
- (13-509)

**2) Oil Cooler**

- Y129508-33030

**(1):** Gear not included. Suitable for 4TNE84/88 and 4TNV84/88. Do not use in applications that require a crankshaft driven balancer unit.

**(3):** With Cooling Pipes/Nipples.

**(2):** O/H Gasket does not include Rear Seal Y33-2974. Please order separately.

**Engine Model:**  
3TNV88

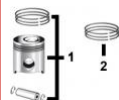
**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 3.46 in / 88.00 mm

Please see page 489 for a complete list of equipment models.



**Engine O/H Kit**  
 , YOK3TNV88  
 , YOK3TNV88/25



**1) Piston & Ring Kit**  
 , Y129005-22080 Std.  
 , Y129005-22900 0.25  
**Use 3**  
**2) Ring Set**  
 , Y129005-22500 Std.  
 , Y129005-22950 0.25



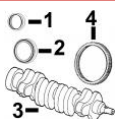
**Main Bearing**  
 , Y129001-02931 Std.  
 , Y129150-02871 0.25  
**Use 4 Sold by Pairs**



**Con Rod Bearing**  
 , Y129150-23601 Std.  
 , Y129150-23611 0.25  
**Use 3 Sold by Pairs**



**Thrust Washers**  
 , Y129150-02931  
**Set of 4**



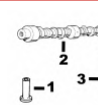
**1) Front Seal**  
 , Y129795-01800  
**2) Rear Seal**  
 , Y129795-01780  
**3) Crankshaft**  
 , Y129001-21100  
**4) Flywheel Ring Gear**  
 , Y124550-21600 127T



**1) O/H Gasket Set**  
 , YMGS3TNE88  
**2) Head Gasket**  
 , Y129001-01340  
**3) Liquid Gasket**  
 , Y977770-1207F  
**4) Rocker Cover Gsk**  
 , Y129004-11310



**1) Bush, Con Rod**  
 , Y129100-23910 x3  
**2) Bolt, Con Rod**  
 , Y121550-23200 x6  
**3) Bushing, Cam**  
 , Y129795-02412 x1  
**4) Connecting Rod**  
 , Y729402-23100  
**5) Bolt, Cylinder Head**  
 , Y129150-01200



**1) Tappet**  
 , Y129150-14200 x6  
**2) Camshaft**  
 , Y129129-14580  
**3) Push Rod**  
 , Y129150-14400 x6

**Valve, Intake**  
 , Y129005-11100 x3

**Valve, Exhaust**  
 , Y129100-11130 x3

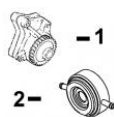
**Guide, Valve**  
**1) Intake**  
 , Y120130-11860 x3  
**2) Exhaust**  
 , Y129150-11810 x3

**1) Stem, Seal Int**  
 , Y124460-11340 x3  
**2) Stem, Seal Exh**  
 , Y121400-11340 x3

**1) Spring, Valve**  
 , Y129795-11120 x6  
**2) Cap, Valve**  
 , Y129150-11370



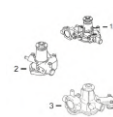
**1) Thermostat**  
 , Y129155-49801  
**2) Injector**  
 , Y729004-53101 2



**1) Oil Pump**  
 , Y129001-32001 2  
 , Y119802-32100SET 2  
**2) Oil Cooler**  
 , Y129508-33030 2



**Electric Fuel Pump**  
 , Y119225-52102  
 , Y129612-52100



**Water Pump**  
 , 1) Y129001-42004 2  
 , 2) Y129100-42004 2  
 , 3) Y129263-42000 2  
 , 4) Y129508-42001 3



**Repair Sleeve**  
 , 88RS



**Glow Plug**  
 , Y129008-77800

(1): Gear not included.

(3): Like Y129001-42004, with Inject Pump cooling connections.

(2): Check your application for proper usage.

(4): The intake manifold and EGR gaskets for 3TNV88F series engines are not included in this gasket set and must be purchased from an OE Yanmar dealer.

**Engine Model:**  
4TNV88

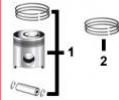
**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.46 in / 88.00 mm

Please see page 490 for a complete list of equipment models.



**Engine O/H Kit**  
 , YOK4TNV88  
 , YOK4TNV88/25  
 , Spec Sheet - YOK4TNV88



**1) Piston & Ring Kit**  
 , Y129005-22080 Std.  
 , Y129005-22900 0.25  
**Use 4**  
**2) Ring Set**  
 , Y129005-22500 Std.  
 , Y129005-22950 0.25



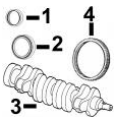
**Main Bearing**  
 , Y129001-02931 Std.  
 , Y129150-02871 0.25  
**Use 5 Sold by Pairs**



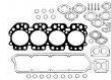
**Con Rod Bearing**  
 , Y129150-23601 Std.  
 , Y129150-23611 0.25  
**Use 4 Sold by Pairs**



**Thrust Washers**  
 , Y129150-02931  
**Set of 4**



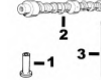
**1) Front Seal**  
 , Y129795-01800  
**2) Rear Seal**  
 , Y129795-01780  
**3) Crankshaft**  
 , Y129407-21000  
**4) Flywheel Ring Gear**  
 , Y124550-21600 127T



**1) O/H Gasket Set**  
 , YMGS4TNE88  
**2) Head Gasket**  
 , Y129407-01340  
**3) Liquid Gasket**  
 , Y977770-1207F  
**4) Rocker Cover Gsk**  
 , Y129601-11310



**1) Bush, Con Rod**  
 , Y129100-23910 x4  
**2) Bolt, Con Rod**  
 , Y121550-23200 x8  
**3) Bushing, Cam**  
 , Y129795-02412 x1  
**4) Connecting Rod**  
 , Y729402-23100  
**5) Bolt, Cylinder Head**  
 , Y129150-01200



**1) Tappet**  
 , Y129150-14200 x8  
**2) Camshaft**  
 , Y729402-14580  
**3) Push Rod**  
 , Y129150-14400 x8

**Valve, Intake**  
 , Y129005-11100 x4 With a  
 1.496 head diameter.  
 , Y129004-11130 x4 With a  
 1.417 head diameter.

**Valve, Exhaust**  
 , Y129100-11130 x4

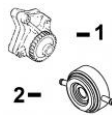
**Guide, Valve**  
**1) Intake**  
 , Y120130-11860 x4  
**2) Exhaust**  
 , Y129150-11810 x4

**1) Stem, Seal Int**  
 , Y124460-11340 x4  
**2) Stem, Seal Exh**  
 , Y121400-11340 x4

**1) Spring, Valve**  
 , Y129795-11120 x8  
**2) Cap, Valve**  
 , Y129150-11370



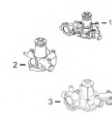
**1) Thermostat**  
 , Y129155-49801  
**2) Injector**  
 , Y729004-53101 3



**1) Oil Pump**  
 , Y129001-32001 3  
 , Y119802-32100SET 3  
**2) Oil Cooler**  
 , Y129508-33030 3



**Electric Fuel Pump**  
 , Y119225-52102  
 , Y129612-52100



**Water Pump**  
 , 1) Y129001-42004 3  
 , 2) Y129100-42004 3  
 , 3) Y129263-42000 3  
 , 4) Y129508-42001 2



**Repair Sleeve**  
 , 88RS



**Glow Plug**  
 , Y129008-77800

**(1):** Gear not included. Suitable for 4TNE84/88 and 4TNV84/88. Do not use in applications that require a crankshaft driven balancer unit.  
**(3):** Check application for proper usage.

**(2):** Like Y129001-42004, with Inject Pump cooling connections.

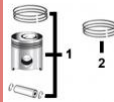
**Engine Model:**  
4TNV94L

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.70 in / 94.00 mm  
Stroke: 4.331 in / 110 mm



**Engine O/H Kit**  
 , YOK4TNV94  
 , YOK4TNV94/25



**1) Piston & Ring Kit**  
 , Y129906-22080 *Std.*  
 , Y729906-22900 *0.25*  
**Use 4**  
**2) Ring Set**  
 , Y129906-22050 *Std.*  
 , Y729906-22950 *0.25*



**Main Bearing**  
 , Y729900-02801 *Std.*  
 , Y129900-02341 *0.25*  
**Set of 5 Pairs**

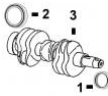


**Con Rod Bearing**  
 , Y129900-23601 *Std.*  
 , Y129900-23611 *0.25*  
**Set of 4 Pairs**

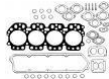


**Thrust Washers**  
 , Y129900-02931 *Std.*  
**Set of 4**

Please see page 491 for a complete list of equipment models.



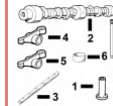
**1) Front Seal**  
 , Y129916-01800  
**2) Rear Seal**  
 , Y129916-01790  
**3) Crankshaft**  
 , Y129902-21000



**1) O/H Gasket Set**  
 , YMGS4TNV94/98  
**2) Head Gasket**  
 , Y129907-01331  
**3) Liquid Gasket**  
 , Y977770-1207F  
**4) Rocker Cover Gsk**  
 , Y129907-11310  
**5) Silencer Gasket**  
 , Y129930-13201



**1) Bush, Con Rod**  
 , Y129900-23911  
**2) Bolt, Con Rod**  
 , Y129900-23200 *x8*  
**3) Bushing, Cam**  
 , Y129900-02410  
**4) Bolt, Cyl Head**  
 , Y129900-01200 *x18*  
**5) Connecting Rod**  
 , Y129900-23001



**1) Tappet**  
 , Y129150-14200 *x8*  
**2) Camshaft**  
 , Y129908-14581  
**3) Rocker Arm Shaft**  
 , Y129907-11250  
**4) Rocker Arm Intake**  
 , Y129907-11650  
**5) Rocker Arm Exhaust**  
 , Y129907-11660  
**6) Protector, Nozzle**  
 , Y119802-11870  
**7) Push Rod**  
 , Y129907-14400 *x8*

**Valve, Intake**  
 , Y129907-11100 *x8*

**Valve, Exhaust**  
 , Y129907-11110 *x8*

**Guide, Valve**  
 , Y129907-11800 *x16*

**1) Lock, Valve**  
 , Y27310-070001 *x32*  
**2) Stem, Seal Int**  
 , Y124160-11340 *x8*  
**3) Stem, Seal Exh**  
 , Y124950-11340 *x8*

**1) Spring, Valve**  
 , Y129907-11120 *x16*  
**2) Cap, Valve**  
 , Y129150-11370



**Thermostat**  
 , Y121850-49811 *3*  
 , Y121850-49801 *3*



**Oil Pump**  
 , Y129900-32001



**Electric Fuel Pump**  
 , Y119225-52102  
 , Y129612-52100



**Water Pump**  
 , Y129907-42000  
 , Y129907-42051 *2*



**Water Pump Gasket**  
 , Y129900-42020



**Repair Sleeve**  
 , 94RS

**(1):** On engines using piston kit Y129906-22080, use Maxiforce Head Gasket Y129907-01331 (replaces head gasket # 129906-01340). Engines using piston kit 129906-22090 (no longer offered by Yanmar) can use Maxiforce head gasket Y129907-01331 or 129906-01350 head gasket (supplied by OE Yanmar only).  
**(3):** Check your application for proper usage.

**(2):** Forklift Applications.

**Engine Model:**  
4TNV98

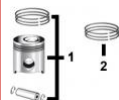
**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.86 in / 98.00 mm Stroke: 4.331 in / 110 mm

Please see page 492 for a complete list of equipment models.



**Engine O/H Kit**  
 , YOK4TNV98D  
 , YOK4TNV98D/25



**1) Piston & Ring Kit**  
 , Y129927-22080 Std.  
 , Y729927-22900 0.25  
**Use 4**  
**2) Ring Set**  
 , Y129927-22050 Std.  
 , Y729927-22950 0.25



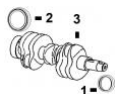
**Main Bearing**  
 , Y729900-02801 Std.  
 , Y129900-02341 0.25  
**Set of 5 Pairs**



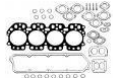
**Con Rod Bearing**  
 , Y129900-23601 Std.  
 , Y129900-23611 0.25  
**Set of 4 Pairs**



**Thrust Washers**  
 , Y129900-02931 Std.  
**Set of 4**



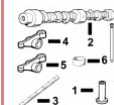
**1) Front Seal**  
 , Y129916-01800  
**2) Rear Seal**  
 , Y129916-01790  
**3) Crankshaft**  
 , Y129902-21000



**1) O/H Gasket Set**  
 , YMGS4TNV94/98  
**2) Head Gasket**  
 , Y129907-01331  
**3) Liquid Gasket**  
 , Y977770-1207F  
**4) Rocker Cover Gsk**  
 , Y129907-11310  
**5) Silencer Gasket**  
 , Y129930-13201



**1) Bush, Con Rod**  
 , Y129900-23911  
**2) Bolt, Con Rod**  
 , Y129900-23200 x8  
**3) Bushing, Cam**  
 , Y129900-02410  
**4) Bolt, Cyl Head**  
 , Y129900-01200 x18  
**5) Connecting Rod**  
 , Y129900-23001



**1) Tappet**  
 , Y129150-14200 x8  
**2) Camshaft**  
 , Y129908-14581  
**3) Rocker Arm Shaft**  
 , Y129907-11250  
**4) Rocker Arm Intake**  
 , Y129907-11650  
**5) Rocker Arm Exhaust**  
 , Y129907-11660  
**6) Protector, Nozzle**  
 , Y119802-11870  
**7) Push Rod**  
 , Y129907-14400 x8

**Valve, Intake**  
 , Y129907-11110 x8

**Valve, Exhaust**  
 , Y129907-11110 x8

**Guide, Valve**  
 , Y129907-11800 x16

**1) Lock, Valve**  
 , Y27310-070001 x32  
**2) Stem, Seal Int**  
 , Y124160-11340 x8  
**3) Stem, Seal Exh**  
 , Y124950-11340 x8

**1) Spring, Valve**  
 , Y129907-11120 x16  
**2) Cap, Valve**  
 , Y129150-11370



**Thermostat**  
 , Y121850-49811  
 , Y121850-49801



**Oil Pump**  
 , Y129900-32001



**Electric Fuel Pump**  
 , Y119225-52102  
 , Y129612-52100



**Water Pump**  
 , Y129907-42000



**Water Pump Gasket**  
 , Y129900-42020



**Repair Sleeve**  
 , 98RS

(1): Check application for proper usage.



**Engine Model:**  
4TNV98

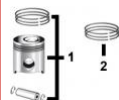
**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.86 in / 98.00 mm Stroke: 4.331 in / 110 mm

Please see page 493 for a complete list of equipment models.



**Engine O/H Kit**  
 , YOK4TNV98D2  
 , YOK4TNV98D2/25



**1) Piston & Ring Kit**  
 , Y129907-22090 Std.  
 , Y729907-22910 0.25  
**Use 4**  
**2) Ring Set**  
 , Y129907-22050 Std.  
 , Y729907-22950 0.25



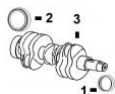
**Main Bearing**  
 , Y729900-02801 Std.  
 , Y129900-02341 0.25  
**Set of 5 Pairs**



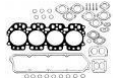
**Con Rod Bearing**  
 , Y129900-23601 Std.  
 , Y129900-23611 0.25  
**Set of 4 Pairs**



**Thrust Washers**  
 , Y129900-02931 Std.  
**Set of 4**



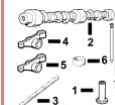
**1) Front Seal**  
 , Y129916-01800  
**2) Rear Seal**  
 , Y129916-01790  
**3) Crankshaft**  
 , Y129902-21000



**1) O/H Gasket Set**  
 , YMGS4TNV94/98  
**2) Head Gasket**  
 , Y129907-01331  
**3) Liquid Gasket**  
 , Y977770-1207F  
**4) Rocker Cover Gsk**  
 , Y129907-11310  
**5) Silencer Gasket**  
 , Y129930-13201



**1) Bush, Con Rod**  
 , Y129900-23911  
**2) Bolt, Con Rod**  
 , Y129900-23200 x8  
**3) Bushing, Cam**  
 , Y129900-02410  
**4) Bolt, Cyl Head**  
 , Y129900-01200 x18  
**5) Connecting Rod**  
 , Y129900-23001



**1) Tappet**  
 , Y129150-14200 x8  
**2) Camshaft**  
 , Y129908-14581  
**3) Rocker Arm Shaft**  
 , Y129907-11250  
**4) Rocker Arm Intake**  
 , Y129907-11650  
**5) Rocker Arm Exhaust**  
 , Y129907-11660  
**6) Protector, Nozzle**  
 , Y119802-11870  
**7) Push Rod**  
 , Y129907-14400 x8

**Valve, Intake**  
 , Y129907-11110 x8

**Valve, Exhaust**  
 , Y129907-11110 x8

**Guide, Valve**  
 , Y129907-11800 x16

**1) Lock, Valve**  
 , Y27310-070001 x32  
**2) Stem, Seal Int**  
 , Y124160-11340 x8  
**3) Stem, Seal Exh**  
 , Y124950-11340 x8

**1) Spring, Valve**  
 , Y129907-11120 x16  
**2) Cap, Valve**  
 , Y129150-11370



**Thermostat**  
 , Y121850-49811  
 , Y121850-49801



**Oil Pump**  
 , Y129900-32001



**Electric Fuel Pump**  
 , Y119225-52102  
 , Y129612-52100



**Water Pump**  
 , Y129907-42000



**Water Pump Gasket**  
 , Y129900-42020



**Repair Sleeve**  
 , 98RS

(1): Check application for proper usage.

**Engine Model:**  
4TNV98T

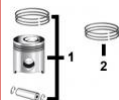
**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.86 in / 98.00 mm Stroke: 4.331 in / 110 mm

Please see page 494 for a complete list of equipment models.



**Engine O/H Kit**  
 , YOK4TNV98T  
 , YOK4TNV98T/25



**1) Piston & Ring Kit**  
 , Y129908-22080 Std.  
 , Y729908-22900 0.25  
**Use 4**  
**2) Ring Set**  
 , Y129907-22050 Std.  
 , Y729907-22950 0.25



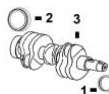
**Main Bearing**  
 , Y729900-02801 Std.  
 , Y129900-02341 0.25  
**Set of 5 Pairs**



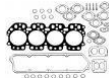
**Con Rod Bearing**  
 , Y129900-23601 Std.  
 , Y129900-23611 0.25  
**Set of 4 Pairs**



**Thrust Washers**  
 , Y129900-02931 Std.  
**Set of 4**



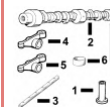
**1) Front Seal**  
 , Y129916-01800  
**2) Rear Seal**  
 , Y129916-01790  
**3) Crankshaft**  
 , Y129908-21000



**1) O/H Gasket Set**  
 , YMGS4TNV94/98  
**2) Head Gasket**  
 , Y129907-01331  
**3) Liquid Gasket**  
 , Y977770-1207F  
**4) Rocker Cover Gsk**  
 , Y129907-11310  
**5) Turbo Mounting Gasket**  
 , Y123901-18090  
**6) Turbo Exhaust Gasket**  
 , Y123901-18080



**1) Bush, Con Rod**  
 , Y129900-23911  
**2) Bolt, Con Rod**  
 , Y129900-23200 x8  
**3) Bushing, Cam**  
 , Y129900-02410  
**4) Bolt, Cyl Head**  
 , Y129900-01200 x18  
**5) Connecting Rod**  
 , Y129900-23001



**1) Tappet**  
 , Y129150-14200 x8  
**2) Camshaft**  
 , Y129908-14581  
**3) Rocker Arm Shaft**  
 , Y129907-11250  
**4) Rocker Arm Intake**  
 , Y129907-11650  
**5) Rocker Arm Exhaust**  
 , Y129907-11660  
**6) Protector, Nozzle**  
 , Y119802-11870  
**7) Push Rod**  
 , Y129907-14400 x8

**Valve, Intake**  
 , Y129907-11110 x8

**Valve, Exhaust**  
 , Y129907-11110 x8

**Guide, Valve**  
 , Y129907-11800 x16

**1) Lock, Valve**  
 , Y27310-070001 x32  
**2) Stem, Seal Int**  
 , Y124160-11340 x8  
**3) Stem, Seal Exh**  
 , Y124950-11340 x8

**1) Spring, Valve**  
 , Y129907-11120 x16  
**2) Cap, Valve**  
 , Y129150-11370



**Thermostat**  
 , Y121850-49811  
 , Y121850-49801



**Oil Pump**  
 , Y129908-32060



**Electric Fuel Pump**  
 , Y119225-52102  
 , Y129612-52100



**1) Water Pump**  
 , Y129907-42000  
**2) Water Pump Gasket**  
 , Y129900-42020



**Repair Sleeve**  
 , 98RS



**Turbocharger**  
 , Y129935-18010


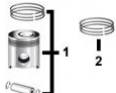



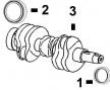
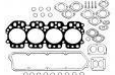

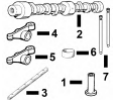






(1): Check application for proper usage.

**Engine Model:**  
4TNV98T

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.86 in / 98.00 mm Stroke: 4.331 in / 110 mm


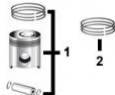



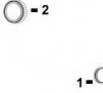
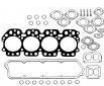





Please see page 495 for a complete list of equipment models.

|  |  |   |  |   |   |
|--|--|---|--|---|---|
|  <p><b>Engine O/H Kit</b><br/>         , YOK4TNV98T2<br/>         , YOK4TNV98T2/25</p>   |  <p><b>1) Piston &amp; Ring Kit</b><br/>         , Y129928-22080 Std.<br/>         , Y729928-22900 0.25<br/> <b>Use 4</b><br/> <b>2) Ring Set</b><br/>         , Y129927-22050 Std.<br/>         , Y729927-22950 0.25</p>   |  <p><b>Main Bearing</b><br/>         , Y729900-02801 Std.<br/>         , Y129900-02341 0.25<br/> <b>Set of 5 Pairs</b></p>   |  <p><b>Con Rod Bearing</b><br/>         , Y129900-23601 Std.<br/>         , Y129900-23611 0.25<br/> <b>Set of 4 Pairs</b></p>  |  <p><b>Thrust Washers</b><br/>         , Y129900-02931 Std.<br/> <b>Set of 4</b></p> |   |
|  <p><b>1) Front Seal</b><br/>         , Y129916-01800<br/> <b>2) Rear Seal</b><br/>         , Y129916-01790<br/> <b>3) Crankshaft</b><br/>         , Y129908-21000</p> |  <p><b>1) O/H Gasket Set</b><br/>         , YMGS4TNV94/98<br/> <b>2) Head Gasket</b><br/>         , Y129907-01331<br/> <b>3) Liquid Gasket</b><br/>         , Y977770-1207F<br/> <b>4) Rocker Cover Gsk</b><br/>         , Y129933-11310<br/> <b>5) Turbo Mounting Gasket</b><br/>         , Y123901-18090<br/> <b>6) Turbo Exhaust Gasket</b><br/>         , Y123901-18080</p> |  <p><b>1) Bush, Con Rod</b><br/>         , Y129900-23911<br/> <b>2) Bolt, Con Rod</b><br/>         , Y129900-23200 x8<br/> <b>3) Bushing, Cam</b><br/>         , Y129900-02410<br/> <b>4) Bolt, Cyl Head</b><br/>         , Y129900-01200 x18<br/> <b>5) Connecting Rod</b><br/>         , Y129900-23001</p> |  <p><b>1) Tappet</b><br/>         , Y129150-14200 x8<br/> <b>2) Camshaft</b><br/>         , Y129908-14581<br/> <b>3) Rocker Arm Shaft</b><br/>         , Y129907-11250<br/> <b>4) Rocker Arm Intake</b><br/>         , Y129907-11650<br/> <b>5) Rocker Arm Exhaust</b><br/>         , Y129907-11660<br/> <b>6) Protector, Nozzle</b><br/>         , Y119802-11870<br/> <b>7) Push Rod</b><br/>         , Y129907-14400 x8</p> |   |   |
| <p><b>Valve, Intake</b><br/>         , Y129907-11110 x8</p>  | <p><b>Valve, Exhaust</b><br/>         , Y129907-11110 x8</p>   | <p><b>Guide, Valve</b><br/>         , Y129907-11800 x16</p>   | <p><b>1) Lock, Valve</b><br/>         , Y27310-070001 x32<br/> <b>2) Stem, Seal Int</b><br/>         , Y124160-11340 x8<br/> <b>3) Stem, Seal Exh</b><br/>         , Y124950-11340 x8</p>  | <p><b>1) Spring, Valve</b><br/>         , Y129907-11120 x16<br/> <b>2) Cap, Valve</b><br/>         , Y129150-11370</p>  |   |
|  <p><b>Thermostat</b><br/>         , Y121850-49811<br/>         , Y121850-49801</p>   |  <p><b>Oil Pump</b><br/>         , Y129908-32060</p>  |  <p><b>Electric Fuel Pump</b><br/>         , Y119225-52102<br/>         , Y129612-52100</p>  |  <p><b>1) Water Pump</b><br/>         , Y129907-42000<br/> <b>2) Water Pump Gasket</b><br/>         , Y129900-42020</p>   |  <p><b>Repair Sleeve</b><br/>         , 98RS</p>                                   |  <p><b>Turbocharger</b><br/>         , Y129935-18010</p> |

(1): Check application for proper usage.

|  |  |                              |  |
|--|--|------------------------------|--|
| <b>Engine Model:</b><br>4TNV106 / 4TNV106T | <b>Engine Desc:</b><br>Tier 1 & Tier 2 | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 4.17 in / 106.00 mm |
|--|--|------------------------------|--|

Please see page 496 for a complete list of equipment models.

|   |   |  |   |  |
|---|---|--|---|--|
|  <p><b>Engine O/H Kit</b><br/>         , YOK4TNV106T<br/>         , YOK4TNV106T/25</p>                          |  <p><b>1) Piston &amp; Ring Kit</b><br/>         , Y123907-22081 Std.<br/>         , Y723907-22900 0.25<br/> <b>Use 4</b><br/> <b>2) Ring Set</b><br/>         , Y123907-22050 Std.<br/>         , Y723907-22950 0.25</p>                                |  <p><b>Main Bearing</b><br/>         , Y723900-02800 Std.<br/>         , Y123900-02340 0.25<br/> <b>Set of 5 Pairs</b></p>  |  <p><b>Con Rod Bearing</b><br/>         , Y123900-23600 Std.<br/>         , Y123900-23610 0.25<br/> <b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washers</b><br/>         , Y123900-02930<br/> <b>Set of 4</b></p> |
|  <p><b>1) Front Seal</b><br/>         , Y123900-01780<br/> <b>2) Rear Seal</b><br/>         , Y123672-01782</p> |  <p><b>1) O/H Gasket Set</b><br/>         , Y723907-92680<br/> <b>2) Head Gasket</b><br/>         , Y123907-01350<br/> <b>3) Turbo Mounting Gasket</b><br/>         , Y123901-18090<br/> <b>4) Turbo Exhaust Gasket</b><br/>         , Y123901-18080</p> |  <p><b>1) Bush, Con Rod</b><br/>         , Y123900-23910 x4<br/> <b>2) Bolt, Con Rod</b><br/>         , Y123900-23200 x8<br/> <b>3) Bushing, Cam</b><br/>         , Y123900-02410 x1<br/> <b>4) Connecting Rod</b><br/>         , Y123900-23000<br/> <b>5) Bolt, Cylinder Head</b><br/>         , Y119174-01200</p> |   |  |
| <p><b>Valve, Intake</b><br/>         , Y123907-11100 x8</p>   | <p><b>Valve, Exhaust</b><br/>         , Y123907-11110 x8</p>  | <p><b>Guide, Valve</b><br/> <b>1) Intake</b><br/>         , Y123907-11800 x8<br/> <b>2) Exhaust</b><br/>         , Y123907-11810 x8</p>  | <p><b>1) Lock, Valve</b><br/>         , Y27310-090000 x32<br/> <b>2) Stem, Seal Int</b><br/>         , Y124160-11340 x16</p>  | <p><b>Spring, Valve</b><br/>         , Y123907-11120 x16</p>   |
|  <p><b>Thermostat</b><br/>         , Y124610-48620</p>   |  <p><b>Oil Pump</b><br/>         , Y123900-32001</p>   |  <p><b>Water Pump</b><br/>         , Y123907-42000</p>  |  <p><b>Turbocharger</b><br/>         , Y123981-18021</p>   |  |

(1): 2 hose barb connections.

(2): Check application for proper usage.

**Engine Series:**  
B

**Engine Model:**  
4BT 3.9

**Engine Desc:**  
CDC 4.390

**Engine Data:**  
TURBOCHARGED  
NON –  
EMISSION

**Engine Info:**  
4 Cyl

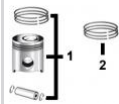
**Engine Dimensions:**  
239 Cubic Inch  
Bore: 4.02 in /  
102 mm Stroke:  
4.72 in / 119  
mm

**Piston (M):**  
7163

Please see page 497 for a complete list of equipment models.



- 1) **Engine O/H Kit**
  - › COK2160/4 Std
  - › COK2132/4 0.50 mm
  - › COK2134/4 1.00 mm
- 2) **O/H Kit Fractured Rod**
  - › COK2160F/4 Std 11
  - › COK2132F/4 0.50
  - › COK2134F/4 1.00
- 3) **Engine I/F Kit**
  - › CIK2160/4 Std
  - › CIK2132/4 0.50 mm
  - › CIK2134/4 1.00 mm



- 1) **Piston & Ring Kit**
    - › C3802160 Std
    - › C3802132 0.50 mm
    - › C3802134 1.00 mm
- Use 4**



- Main Bearing Set**
    - › C3802010 Std
    - › C3802011 0.25 mm
    - › C3802012 0.50 mm
    - › C3802013 0.75 mm
- Use 1**



- Con Rod Bearing**
    - › C3901170 Std
    - › C3901171 0.25 mm
    - › C3901172 0.50 mm
    - › C3901173 0.75 mm
- Rod bearings are priced and sold per shell**



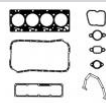
- Fractured Con Rod Bearing**
    - › C4893693 Std 11
    - › C4892795 0.25 mm
    - › C4892796 0.50 mm
    - › C4892797 0.75 mm
- Rod bearings are priced and sold per shell**

**Piston Kit:**

- 1) 1 C3907163 Piston Std, 1 C3802230 Ring Set Std, 1 C3901793 Piston Pin, 2 C3901706 Ret.
- 2) 1 C3908815 Piston 0.50 mm, 1 C3802232 Ring Set 0.50 mm, 1 C3901793 Piston Pin, 2 C3901706 Ret.
- 3) 1 C3908816 Piston 1.00 mm, 1 C3802234 Ring Set 1.00 mm, 1 C3901793 Piston Pin, 2 C3901706 Ret.



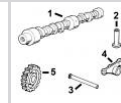
- 1) **Front Seal**
  - › C3904353
- 2) **Rear Seal**
  - › C3353978
- 3) **Crankshaft**
  - › C3907803
- 4) **Front Seal Sleeve**
  - › C3906080
- 5) **Rear Seal Sleeve**
  - › C3906081
- 6) **Rectangular Seal**
  - › C3912473
- 7) **Crankshaft, Gear**
  - › C3901258
- 8) **Ring Gear**
  - › C3903309 (173T)
  - › C3905427 (127T)
  - › C3901774 (159T)
  - › C3902127 (138T)



- 1) **Top Gasket Set**
  - › C3804896
- 2) **Bottom Gsk Set**
  - › C3802375
- 3) **Head Gasket**
  - › C3921393
- 4) **Oil Pan Gasket**
  - › C3931602
- 5) **Valve Cover Gsk**
  - › C3902666
- 6) **Gear Housing Gsk**
  - › C3916131
- 7) **Rear Cover Gsk**
  - › C3928493
- 8) **Gear Cover Gasket**
  - › C3918673



- 1) **Bushing, Piston**
  - › C4891178 x4
- 2) **Bushing, Cam**
  - › C3901306 x1
- 3) **Bolt, Con Rod**
  - › C3900919
- 4) **Con Rod**
  - › C3901569
  - › C4943979
- 5) **Bolt, Ex Manifold**
  - › C3944593



- 1) **Camshaft**
  - › C3925582
- 2) **Tappet**
  - › C3925031
- 3) **Push Rod**
  - › C3904679
- 4) **Rocker Arms**
  - › C3910811 x4
  - › C3910810 x4
- 5) **Camshaft Gear**
  - › C3907431

**Guide, Valve**

- › C3904408 Thick 60.50 mm IN
- › C3904409 Thick 51.75 mm EX
- › C3906206 Thin Wall

**1) Intake, Valve Kit**

- › C3802355 Kit
- Consists of:**
- › C3901117 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3906854 Use 4

**1) Exhaust, Valve Kit**

- › C3802356 Kit
- Consists of:**
- › C3901607 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3904105

**1) Spring, Valve**

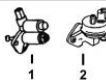
- › C3900276 x8
- 2) Seal, Valve**
- › C3921640 x8
  - › C3957912 x8
- 3) Retainer, Valve**
- › C3900299 x8



- 1) **Water Pump**
  - › C3286277
- 2) **Water Pump Seal**
  - › C3906698
- 3) **Thermostat**
  - › C3802273



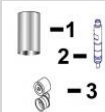
- Pump, Oil**
  - › C3926202



- 1) **Lift Pump**
  - › C3918000
- 2) **Lift Pump**
  - › C3904374



- 1) **Cylinder Head**
  - › C3920005
- 2) **Head Bolt Kit**
  - › C4B-HBK
- 3) **Block Exp Plug Kit**
  - › C6BEXPK



- 1) **Repair Sleeve**
  - › C3904166
- 2) **Injector**
  - › C3909476 9mm
  - › C3919331 7mm
  - › C3919343 7mm
- 3) **Belt Tensioner**
  - › C3914086

(1): Can be Used on both Intake and Exhaust.

(3): For Storm blocks use C3940059.

(5): For use on engines prior to April, 2003.

(7): Machine split connecting rod.

(9): Use ESN or application model to confirm correct camshaft.

(11): On Fracture Split Con Rods use: 4 of C3901170 (or O/S) and 4 of C4893693 (or O/S).

(2): Diaphragm Style.

(4): Do not use on Marine Engines.

(6): For use on engines from April, 2003, (Top Hat Style).

(8): Fracture split connecting rod.

(10): Check application for proper usage.

**Engine Series:**  
B

**Engine Model:**  
4BTA 3.9

**Engine Desc:**  
(CDC 4.390)

**Engine Data:**  
TURBOCHARGED  
AFTERCOOLED  
NON –  
EMISSION

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
239 Cubic Inch  
Bore: 4.02 in /  
102 mm Stroke:  
4.72 in / 119  
mm

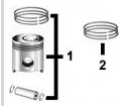
**Piston (M):**  
7156

Please see  
page **498** for a  
complete list of  
equipment  
models.



- 1) Engine O/H Kit**
- › COK2100/4 Std
  - › COK2102/4 0.50 mm
  - › COK2104/4 1.00 mm
- 2) O/H Kit fractured rod**
- › COK2100F/4 Std
  - › COK2102F/4 0.50mm
  - › COK2104F/4 1.00mm
- 3) Engine I/F Kit**
- › CIK2100/4 Std
  - › CIK2102/4 0.50 mm
  - › CIK2104/4 1.00 mm

11



- 1) Piston & Ring Kit**
- › C3802100 Std
  - › C3802102 0.50 mm
  - › C3802104 1.00 mm
- Use 4**



- Main Bearing Set**
- › C3802010 Std
  - › C3802011 0.25 mm
  - › C3802012 0.50 mm
  - › C3802013 0.75 mm
- Use 1**



- Con Rod Bearing**
- › C3901170 Std
  - › C3901171 0.25 mm
  - › C3901172 0.50 mm
  - › C3901173 0.75 mm

**Rod bearings are priced and sold per shell**



- Fractured Con Rod Bearing**
- › C4893693 Std
  - › C4892795 0.25 mm
  - › C4892796 0.50 mm
  - › C4892797 0.75 mm
- Rod bearings are priced and sold per shell**

11

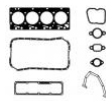
**Piston Kit:**

- 1) 1 [C3907156](#) Piston Std, 1 [C3802230](#) Ring Set Std, 1 [C3901793](#) Piston Pin, 2 [C3901706](#) Ret.
- 2) 1 [C3907157](#) Piston 0.50 mm, 1 [C3802232](#) Ring Set 0.50 mm, 1 [C3901793](#) Piston Pin, 2 [C3901706](#) Ret.
- 3) 1 [C3907158](#) Piston 1.00 mm, 1 [C3802234](#) Ring Set 1.00 mm, 1 [C3901793](#) Piston Pin, 2 [C3901706](#) Ret.



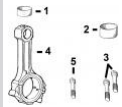
- 1) Front Seal**
- › C3904353
- 2) Rear Seal**
- › C3353978
- 3) Crankshaft**
- › C3907803
- 4) Front Seal Sleeve**
- › C3906080
- 5) Rear Seal Sleeve**
- › C3906081
- 6) Rectangular Seal**
- › C3912473
- 7) Crankshaft, Gear**
- › C3901258
- 8) Ring Gear**
- › C3903309 (173T)
  - › C3905427 (127T)
  - › C3901774 (159T)
  - › C3902127 (138T)

10  
10  
10  
10



- 1) Top Gasket Set**
- › C3804896
- 2) Bottom Gsk Set**
- › C3802375
- 3) Head Gasket**
- › C3921393
- 4) Oil Pan Gasket**
- › C3931602
- 5) Valve Cover Gsk**
- › C3902666
- 6) Gear Housing Gsk**
- › C3916131
- 7) Rear Cover Gskt**
- › C3928493
- 8) Gear Cover Gasket**
- › C3918673

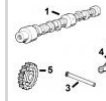
10



- 1) Bushing, Piston**
- › C4891178 x4
- 2) Bushing, Cam**
- › C3901306 x1
- 3) Bolt, Con Rod**
- › C3900919
- 4) Con Rod**
- › C3901569
  - › C4943979
- 5) Bolt, Ex Manifold**
- › C3944593

3

7  
8



- 1) Camshaft**
- › C3925582
- 2) Tappet**
- › C3925031
- 3) Push Rod**
- › C3904679
- 4) Rocker Arms**
- › C3910811 x4
  - › C3910810 x4
- 5) Camshaft Gear**
- › C3907431

9

- Guide, Valve**
- › C3904408 Thick 60.50 mm IN
  - › C3904409 Thick 51.75 mm EX
  - › C3906206 Thin Wall

1

- 1) Intake, Valve Kit**
- › C3802355 Kit
- Consists of:**
- › C3901117 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3906854 Use 4

- 1) Exhaust, Valve Kit**
- › C3802356 Kit
- Consists of:**
- › C3901607 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3904105

- 1) Spring, Valve**
- › C3900276 x8
- 2) Seal, Valve**
- › C3921640 x8
  - › C3957912 x8
- 3) Retainer, Valve**
- › C3900299 x8

5

6

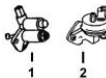
5



- 1) Water Pump**
- › C3286277
- 2) Water Pump Seal**
- › C3906698
- 3) Thermostat**
- › C3802273



- Pump, Oil**
- › C3926202

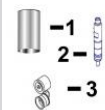


- 1) Lift Pump**
- › C3918000
- 2) Lift Pump**
- › C3904374



- 1) Cylinder Head**
- › C3920005
- 2) Head Bolt Kit**
- › C4B-HBK
- 3) Block Exp Plug Kit**
- › C6BEXPK

4



- 1) Repair Sleeve**
- › C3904166
- 2) Injector**
- › C3909476 9mm
  - › C3919343 7mm
- 3) Belt Tensioner**
- › C3914086

10

10

(1): Can be Used on both Intake and Exhaust.

(3): For Storm blocks use C3940059.

(5): For use on engines prior to April, 2003.

(7): Machine split connecting rod.

(9): Use ESN or application model to confirm correct camshaft.

(11): On Fracture Split Con Rods use: 4 of C3901170 (or O/S) and 4 of C4893693 (or O/S).

(2): Diaphragm Style.

(4): Do not use on Marine Engines.

(6): For use on engines from April, 2003, (Top Hat Style).

(8): Fracture split connecting rod.

(10): Check for proper application.

**Engine Series:**  
B

**Engine Model:**  
4B 3.9

**Engine Desc:**  
(CDC 4.390)

**Engine Data:**  
NATURALLY  
ASPIRATED  
NON –  
EMISSION

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
239 Cubic Inch  
Bore: 4.02 in /  
102 mm Stroke:  
4.72 in / 119  
mm

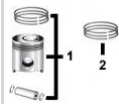
**Piston (M):**  
6223

Please see  
page 499 for a  
complete list of  
equipment  
models.



- 1) Engine O/H Kit**
- › COK2060/4 Std
  - › COK2062/4 0.50 mm
  - › COK2064/4 1.00 mm
- 2) O/H Kit fractured rod**
- › COK2060F/4 Std
  - › COK2062F/4 0.50
  - › COK2064F/4 1.00
- 3) Engine I/F Kit**
- › CIK2060/4 Std
  - › CIK2062/4 0.50 mm
  - › CIK2064/4 1.00 mm

11



- 1) Piston & Ring Kit**
- › C3802060 Std
  - › C3802062 0.50 mm
  - › C3802064 1.00 mm
- Use 4**



- Main Bearing Set**
- › C3802010 Std
  - › C3802011 0.25 mm
  - › C3802012 0.50 mm
  - › C3802013 0.75 mm
- Use 1**



- Con Rod Bearing**
- › C3901170 Std
  - › C3901171 0.25 mm
  - › C3901172 0.50 mm
  - › C3901173 0.75 mm
- Rod bearings are priced and sold per shell**



- Fractured Con Rod Bearing**
- › C4893693 Std
  - › C4892795 0.25 mm
  - › C4892796 0.50 mm
  - › C4892797 0.75 mm
- Rod bearings are priced and sold per shell**

11

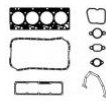
**Piston Kit:**

- 1) 1 [C3906223](#) Piston Std, 1 [C3802040](#) Ring Set Std, 1 [C3901793](#) Piston Pin, 2 [C3901706](#) Ret.
- 2) 1 [C3906209](#) Piston 0.50 mm, 1 [C3802042](#) Ring Set 0.50 mm, 1 [C3901793](#) Piston Pin, 2 [C3901706](#) Ret.
- 3) 1 [C3906208](#) Piston 1.00 mm, 1 [C3802044](#) Ring Set 1.00 mm, 1 [C3901793](#) Piston Pin, 2 [C3901706](#) Ret.



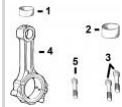
- 1) Front Seal**
- › C3904353
- 2) Rear Seal**
- › C3353978
- 3) Crankshaft**
- › C3907803
- 4) Front Seal Sleeve**
- › C3906080
- 5) Rear Seal Sleeve**
- › C3906081
- 6) Rectangular Seal**
- › C3912473
- 7) Crankshaft, Gear**
- › C3901258
- 8) Ring Gear**
- › C3903309 (173T)
  - › C3905427 (127T)
  - › C3901774 (159T)
  - › C3902127 (138T)

10  
10  
10  
10



- 1) Top Gasket Set**
- › C3804896
- 2) Bottom Gsk Set**
- › C3802375
- 3) Head Gasket**
- › C3921393
- 4) Oil Pan Gasket**
- › C3931602
- 5) Valve Cover Gsk**
- › C3902666
- 6) Gear Housing Gsk**
- › C3916131
- 7) Rear Cover Gskt**
- › C3928493
- 8) Gear Cover Gasket**
- › C3918673

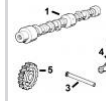
10



- 1) Bushing, Piston**
- › C4891178 x4
- 2) Bushing, Cam**
- › C3901306 x1
- 3) Bolt, Con Rod**
- › C3900919
- 4) Con Rod**
- › C3901569
  - › C4943979
- 5) Bolt, Ex Manifold**
- › C3944593

3

7  
8



- 1) Camshaft**
- › C3925582
- 2) Tappet**
- › C3925031
- 3) Push Rod**
- › C3904679
- 4) Rocker Arms**
- › C3910811 x4
  - › C3910810 x4
- 5) Camshaft Gear**
- › C3907431

9

- Guide, Valve**
- › C3904408 Thick 60.50 mm IN
  - › C3904409 Thick 51.75 mm EX
  - › C3906206 Thin Wall

1

- 1) Intake, Valve Kit**
- › C3802355 Kit
- Consists of:**
- › C3901117 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3906854 Use 4

- 1) Exhaust, Valve Kit**
- › C3802356 Kit
- Consists of:**
- › C3901607 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3904105

- 1) Spring, Valve**
- › C3900276 x8
- 2) Seal, Valve**
- › C3921640 x8
  - › C3957912 x8
- 3) Retainer, Valve**
- › C3900299 x8

5

6

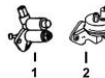
5



- 1) Water Pump**
- › C3286277
- 2) Water Pump Seal**
- › C3906698
- 3) Thermostat**
- › C3802273



- Pump, Oil**
- › C3926202

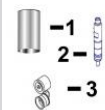


- 1) Lift Pump**
- › C3918000
- 2) Lift Pump**
- › C3904374



- 1) Cylinder Head**
- › C3920005
- 2) Head Bolt Kit**
- › C4B-HBK
- 3) Block Exp Plug Kit**
- › C6BEXPK

4



- 1) Repair Sleeve**
- › C3904166
- 2) Injector**
- › C3914474 9mm
  - › C3919304 7mm
- 3) Belt Tensioner**
- › C3914086

10

10

(1): Can be Used on both Intake and Exhaust.

(3): For Storm blocks use C3940059.

(5): For use on engines prior to April, 2003.

(7): Machine split connecting rod.

(9): Use ESN or application model to confirm correct camshaft.

(11): On Fracture Split Con Rods use: 4 of C3901170 (or O/S) and 4 of C4893693 (or O/S).

(2): Diaphragm Style.

(4): Do not use on Marine Engines.

(6): For use on engines from April, 2003, (Top Hat Style).

(8): Fracture split connecting rod.

(10): Check for proper application.

**CUMMINS 4BT 3.9 PISTON (M): 6632**

**Engine Series:**  
B

**Engine Model:**  
4BT 3.9

**Engine Desc:**  
AUTOMOTIVE

**Engine Data:**  
TURBOCHARGED  
EMISSION

**Engine Info:**  
4 Cyl

**Engine Dimensions:**

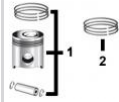
239 Cubic Inch  
Bore: 4.02 in /  
102 mm Stroke:  
4.72 in / 119  
mm

**Piston (M):**  
6632



- 1) Engine O/H Kit**
- › COK2562/4 Std
  - › COK2564/4 0.50 mm
  - › COK2565/4 1.00 mm
- 2) O/H Kit fractured rod**
- › COK2562F/4 Std
  - › COK2564F/4 0.50
  - › COK2565F/4 1.00
- 3) Engine I/F Kit**
- › CIK2562/4 Std
  - › CIK2564/4 0.50 mm
  - › CIK2565/4 1.00 mm

11



- 1) Piston & Ring Kit**
- › C3802562 Std
  - › C3802564 0.50 mm
  - › C3802565 1.00 mm
- Use 4**



- Main Bearing Set**
- › C3802010 Std
  - › C3802011 0.25 mm
  - › C3802012 0.50 mm
  - › C3802013 0.75 mm
- Use 1**



- Con Rod Bearing**
- › C3901170 Std
  - › C3901171 0.25 mm
  - › C3901172 0.50 mm
  - › C3901173 0.75 mm

**Rod bearings are priced and sold per shell**



- Fractured Con Rod Bearing**
- › C4893693 Std
  - › C4892795 0.25 mm
  - › C4892796 0.50 mm
  - › C4892797 0.75 mm

11

**Rod bearings are priced and sold per shell**

**Piston Kit:**

- 1) 1 [C3926632](#) Piston Std, 1 [C3802230](#) Ring Set Std, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.
- 2) 1 [C3926634](#) Piston 0.50 mm, 1 [C3802232](#) Ring Set 0.50 mm, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.
- 3) 1 [C3926635](#) Piston 1.00 mm, 1 [C3802234](#) Ring Set 1.00 mm, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.

**Cummins CPL's**

1839  
2001  
2195  
2304

**TIMBERJACK**

230 - Forwarder

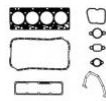
**YTO**

LRS1016 -  
Pneumatic  
Roller



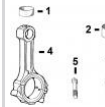
- 1) Front Seal**
- › C3904353
- 2) Rear Seal**
- › C3353978
- 3) Crankshaft**
- › C3907803
- 4) Front Seal Sleeve**
- › C3906080
- 5) Rear Seal Sleeve**
- › C3906081
- 6) Rectangular Seal**
- › C3912473
- 7) Crankshaft, Gear**
- › C3901258
- 8) Ring Gear**
- › C3903309 (173T)
  - › C3905427 (127T)
  - › C3901774 (159T)
  - › C3902127 (138T)

10  
10  
10  
10



- 1) Top Gasket Set**
- › C3804896
- 2) Bottom Gsk Set**
- › C3802375
- 3) Head Gasket**
- › C3921393
- 4) Oil Pan Gasket**
- › C3931602
- 5) Valve Cover Gsk**
- › C3902666
- 6) Gear Housing Gsk**
- › C3916131
- 7) Rear Cover Gskt**
- › C3928493
- 8) Gear Cover Gasket**
- › C3918673

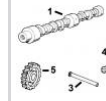
10



- 1) Bushing, Piston**
- › C4891178 x4
- 2) Bushing, Cam**
- › C3901306 x1
- 3) Bolt, Con Rod**
- › C3900919
- 4) Con Rod**
- › C3901569
  - › C4943979
- 5) Bolt, Ex Manifold**
- › C3944593

3

7  
8



- 1) Camshaft**
- › C3925582
- 2) Tappet**
- › C3925031
- 3) Push Rod**
- › C3904679
- 4) Rocker Arms**
- › C3910811 x4
  - › C3910810 x4
- 5) Camshaft Gear**
- › C3907431

9

**Guide, Valve**

- › C3904408 Thick 60.50 mm IN
- › C3904409 Thick 51.75 mm EX
- › C3906206 Thin Wall

1

**1) Intake, Valve Kit**

- › C3802355 Kit
- Consists of:**
- › C3901117 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3906854 Use 4

**1) Exhaust, Valve Kit**

- › C3802356 Kit
- Consists of:**
- › C3901607 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3904105

**1) Spring, Valve**

- › C3900276 x8
- 2) Seal, Valve**
- › C3921640 x8
  - › C3957912 x8
- 3) Retainer, Valve**
- › C3900299 x8

5

6

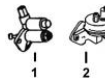
5



- 1) Water Pump**
- › C3286277
- 2) Water Pump Seal**
- › C3906698
- 3) Thermostat**
- › C3802273



- Pump, Oil**
- › C3926202

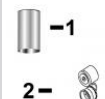


- 1) Lift Pump**
- › C3918000
- 2) Lift Pump**
- › C3904374



- 1) Cylinder Head**
- › C3920005
- 2) Head Bolt Kit**
- › C4B-HBK
- 3) Block Exp Plug Kit**
- › C6BEXPK

2



- 1) Repair Sleeve**
- › C3904166
- 2) Belt Tensioner**
- › C3914086

4

(1): Can be Used on both Intake and Exhaust.

(3): For Storm blocks use C3940059.

(5): For use on engines prior to April, 2003.

(7): Machine split connecting rod.

(9): Use ESN or application model to confirm correct camshaft.

(11): On Fracture Split Con Rods use: 4 of C3901170 (or O/S) and 4 of C4893693 (or O/S).

(2): Diaphragm Style.

(4): Do not use on Marine Engines.

(6): For use on engines from April, 2003, (Top Hat Style).

(8): Fracture split connecting rod.

(10): Check for proper application.



**CUMMINS 4BTA 3.9 PISTON (M): 9041**

**Engine Series:**  
B

**Engine Model:**  
4BTA 3.9

**Engine Data:**  
TURBOCHARGED  
AFTERCOOLED  
EMISSION

**Engine Info:**  
4 Cyl

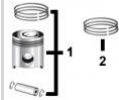
**Engine Dimensions:**  
239 Cubic Inch  
Bore: 4.02 in /  
102 mm Stroke:  
4.72 in / 119  
mm

**Piston (M):**  
9041



- 1) Engine O/H Kit**
- › COK2248/4 Std
  - › COK2249/4 0.50 mm
  - › COK2250/4 1.00 mm
- 2) O/H Kit fractured rod**
- › COK2248F/4 Std
  - › COK2249F/4 0.50
  - › COK2250F/4 1.00
- 3) Engine I/F Kit**
- › CIK2248/4 Std
  - › CIK2249/4 0.50 mm
  - › CIK2250/4 1.00 mm

11



- 1) Piston & Ring Kit**
- › C3802248 Std
  - › C3802249 0.50 mm
  - › C3802250 1.00 mm



- Main Bearing Set**
- › C3802010 Std
  - › C3802011 0.25 mm
  - › C3802012 0.50 mm
  - › C3802013 0.75 mm

Use 1



- Con Rod Bearing**
- › C3901170 Std
  - › C3901171 0.25 mm
  - › C3901172 0.50 mm
  - › C3901173 0.75 mm

Rod bearings are priced and sold per shell



- Fractured Con Rod Bearing**
- › C4893693 Std
  - › C4892795 0.25 mm
  - › C4892796 0.50 mm
  - › C4892797 0.75 mm

11

Rod bearings are priced and sold per shell

**Piston Kit:**

- 1) 1 C3919041 Piston Std, 1 C3802230 Ring Set Std, 1 C3934047 Piston Pin, 2 C3901706 Ret.
- 2) 1 C3919044 Piston 0.50 mm, 1 C3802232 Ring Set 0.50 mm, 1 C3934047 Piston Pin, 2 C3901706 Ret.
- 3) 1 C3919045 Piston 1.00 mm, 1 C3802234 Ring Set 1.00 mm, 1 C3934047 Piston Pin, 2 C3901706 Ret.

**Cummins CPLs**  
986  
1260

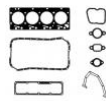
**Ingersoll Rand**  
PF161 -  
Asphalt Pavers

**Skidder**  
Ranger F65G



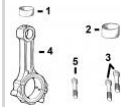
- 1) Front Seal**
- › C3904353
- 2) Rear Seal**
- › C3353978
- 3) Crankshaft**
- › C3907803
- 4) Front Seal Sleeve**
- › C3906080
- 5) Rear Seal Sleeve**
- › C3906081
- 6) Rectangular Seal**
- › C3912473
- 7) Crankshaft, Gear**
- › C3901258
- 8) Ring Gear**
- › C3903309 (173T)
  - › C3905427 (127T)
  - › C3901774 (159T)
  - › C3902127 (138T)

10  
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- 1) Top Gasket Set**
- › C3804896
- 2) Bottom Gsk Set**
- › C3802375
- 3) Head Gasket**
- › C3921393
- 4) Oil Pan Gasket**
- › C3931602
- 5) Valve Cover Gsk**
- › C3902666
- 6) Gear Housing Gsk**
- › C3916131
- 7) Rear Cover Gskt**
- › C3928493
- 8) Gear Cover Gasket**
- › C3918673

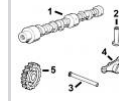
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- 1) Bushing, Piston**
- › C4891178 x4
- 2) Bushing, Cam**
- › C3901306 x1
- 3) Bolt, Con Rod**
- › C3900919
- 4) Con Rod**
- › C3901569
  - › C4943979
- 5) Bolt, Ex Manifold**
- › C3944593

3

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8



- 1) Camshaft**
- › C3925582
- 2) Tappet**
- › C3925031
- 3) Push Rod**
- › C3904679
- 4) Rocker Arms**
- › C3910811 x4
  - › C3910810 x4
- 5) Camshaft Gear**
- › C3907431

9

**Guide, Valve**

- › C3904408 Thick 60.50 mm IN
- › C3904409 Thick 51.75 mm EX
- › C3906206 Thin Wall

1

**1) Intake, Valve Kit**

- › C3802355 Kit
- Consists of:**
- › C3901117 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3906854 Use 4

**1) Exhaust, Valve Kit**

- › C3802356 Kit
- Consists of:**
- › C3901607 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3904105

**1) Spring, Valve**

- › C3900276 x8
- 2) Seal, Valve**
- › C3921640 x8
  - › C3957912 x8
- 3) Retainer, Valve**
- › C3900299 x8

5

6

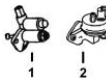
5



- 1) Water Pump**
- › C3286277
- 2) Water Pump Seal**
- › C3906698
- 3) Thermostat**
- › C3802273



- Pump, Oil**
- › C3926202



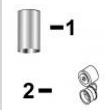
- 1) Lift Pump**
- › C3918000
- 2) Lift Pump**
- › C3904374



- 1) Cylinder Head**
- › C3920005
- 2) Head Bolt Kit**
- › C4B-HBK
- 3) Block Exp Plug Kit**
- › C6BEXPK
  - › C6BEXPKS

4

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- 1) Repair Sleeve**
- › C3904166
- 2) Belt Tensioner**
- › C3914086

(1): Can be Used on both Intake and Exhaust.

(3): For Storm blocks use C3940059.

(5): For use on engines prior to April, 2003.

(7): Machine split connecting rod.

(9): Use ESN or application model to confirm correct camshaft.

(11): On Fracture Split Con Rods use: 4 of C3901170 (or O/S) and 4 of C4893693 (or O/S).

(2): Diaphragm Style.

(4): Do not use on Marine Engines.

(6): For use on engines from April, 2003, (Top Hat Style).

(8): Fracture split connecting rod.

(10): Check for proper application.

**Engine Series:**  
B

**Engine Model:**  
4BTA 3.9

**Engine Data:**  
TURBOCHARGED  
AFTERCOOLED  
EMISSION

**Engine Info:**  
4 Cyl

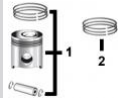
**Engine Dimensions:**  
239 Cubic Inch  
Bore: 4.02 in /  
102 mm Stroke:  
4.72 in / 119  
mm

**Piston (M):**  
8673



- 1) **Engine O/H Kit**
  - › COK2747/4 Std
  - › COK2764/4 0.50 mm
  - › COK2765/4 1.00 mm
- 2) **O/H Kit fractured rod**
  - › COK2747F/4 Std
  - › COK2764F/4 0.50
  - › COK2765F/4 1.00
- 3) **Engine I/F Kit**
  - › CIK2747/4 Std
  - › CIK2764/4 0.50 mm
  - › CIK2765/4 1.00 mm

11



- 1) **Piston & Ring Kit**
    - › C3802747 Std
    - › C3802764 0.50 mm
    - › C3802765 1.00 mm
- Use 4**



- Main Bearing Set**
    - › C3802010 Std
    - › C3802011 0.25 mm
    - › C3802012 0.50 mm
    - › C3802013 0.75 mm
- Use 1**



- Con Rod Bearing**
    - › C3901170 Std
    - › C3901171 0.25 mm
    - › C3901172 0.50 mm
    - › C3901173 0.75 mm
- Rod bearings are priced and sold per shell**



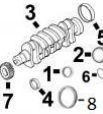
- Fractured Con Rod Bearing**
    - › C4893693 Std
    - › C4892795 0.25 mm
    - › C4892796 0.50 mm
    - › C4892797 0.75 mm
- Rod bearings are priced and sold per shell**

11

**Piston Kit:**

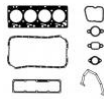
- 1) 1 [C3928673](#) Piston Std, 1 [C3802230](#) Ring Set Std, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.
- 2) 1 [C3928674](#) Piston 0.50 mm, 1 [C3802232](#) Ring Set 0.50 mm, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.
- 3) 1 [C3928675](#) Piston 1.00 mm, 1 [C3802234](#) Ring Set 1.00 mm, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.

Please see page 500 for a complete list of equipment models.



- 1) **Front Seal**
  - › C3904353
- 2) **Rear Seal**
  - › C3353978
- 3) **Crankshaft**
  - › C3907803
- 4) **Front Seal Sleeve**
  - › C3906080
- 5) **Rear Seal Sleeve**
  - › C3906081
- 6) **Rectangular Seal**
  - › C3912473
- 7) **Crankshaft, Gear**
  - › C3901258
- 8) **Ring Gear**
  - › C3903309 (173T)
  - › C3905427 (127T)
  - › C3901774 (159T)
  - › C3902127 (138T)

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- 1) **Top Gasket Set**
  - › C3804896
- 2) **Bottom Gsk Set**
  - › C3802375
- 3) **Head Gasket**
  - › C3921393
- 4) **Oil Pan Gasket**
  - › C3931602
- 5) **Valve Cover Gsk**
  - › C3902666
- 6) **Gear Housing Gsk**
  - › C3916131
- 7) **Rear Cover Gskt**
  - › C3928493
- 8) **Gear Cover Gasket**
  - › C3918673

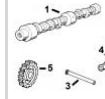
10



- 1) **Bushing, Piston**
  - › C4891178 x4
- 2) **Bushing, Cam**
  - › C3901306 x1
- 3) **Bolt, Con Rod**
  - › C3900919
- 4) **Con Rod**
  - › C3901569
  - › C4943979
- 5) **Bolt, Ex Manifold**
  - › C3944593

3

7  
8



- 1) **Camshaft**
  - › C3925582
- 2) **Tappet**
  - › C3925031
- 3) **Push Rod**
  - › C3904679
- 4) **Rocker Arms**
  - › C3910811 x4
  - › C3910810 x4
- 5) **Camshaft Gear**
  - › C3907431

9

**Guide, Valve**

- › C3904408 Thick 60.50 mm IN
- › C3904409 Thick 51.75 mm EX
- › C3906206 Thin Wall

1

**1) Intake, Valve Kit**

- › C3802355 Kit
- Consists of:**
- › C3901117 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3906854 Use 4

**1) Exhaust, Valve Kit**

- › C3802356 Kit
- Consists of:**
- › C3901607 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3904105

**1) Spring, Valve**

- › C3900276 x8
- 2) Seal, Valve**
- › C3921640 x8
  - › C3957912 x8
- 3) Retainer, Valve**
- › C3900299 x8

5

6

5



- 1) **Water Pump**
  - › C3286277
- 2) **Water Pump Seal**
  - › C3906698
- 3) **Thermostat**
  - › C3802273

**Pump, Oil**

- › C3926202



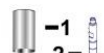
- 1) **Lift Pump**
  - › C3918000
- 2) **Lift Pump**
  - › C3904374



- 1) **Cylinder Head**
  - › C3920005
- 2) **Head Bolt Kit**
  - › C4B-HBK
- 3) **Block Exp Plug Kit**
  - › C6BEXPK
  - › C6BEXPKS

4

10  
10



- 1) **Repair Sleeve**
  - › C3904166
- 2) **Injector**
  - › C3929490
- 3) **Belt Tensioner**
  - › C3914086

10

(1): Can be Used on both Intake and Exhaust.

(3): For Storm blocks use C3940059.

(5): For use on engines prior to April, 2003.

(7): Machine split connecting rod.

(9): Use ESN or application model to confirm correct camshaft.

(11): On Fracture Split Con Rods use: 4 of C3901170 (or O/S) and 4 of C4893693 (or O/S).

(2): Diaphragm Style.

(4): Do not use on Marine Engines.

(6): For use on engines from April, 2003, (Top Hat Style).

(8): Fracture split connecting rod.

(10): Check for proper application.

**Engine Series:**

B

**Engine Model:**

4BT 3.9

**Engine Data:**

TURBOCHARGED  
EMISSION

**Engine Info:**

4 Cyl

**Engine Dimensions:**

239 Cubic Inch  
Bore: 4.02 in /  
102 mm Stroke:  
4.72 in / 119  
mm

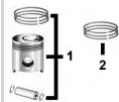
**Piston (M):**

0187



- 1) **Engine O/H Kit**
- › COK2757/4 Std
  - › COK2758/4 0.50 mm
  - › COK2759/4 1.00 mm
- 2) **O/H Kit fractured rod**
- › COK2757F/4 Std
  - › COK2758F/4 0.50
  - › COK2759F/4 1.00
- 3) **Engine I/F Kit**
- › CIK2757/4 Std
  - › CIK2758/4 0.50 mm
  - › CIK2759/4 1.00 mm

11



- 1) **Piston & Ring Kit**
- › C3802757 Std
  - › C3802758 0.50 mm
  - › C3802759 1.00 mm
- Use 4**



- Main Bearing Set**
- › C3802010 Std
  - › C3802011 0.25 mm
  - › C3802012 0.50 mm
  - › C3802013 0.75 mm
- Use 1**



- Con Rod Bearing**
- › C3901170 Std
  - › C3901171 0.25 mm
  - › C3901172 0.50 mm
  - › C3901173 0.75 mm

**Rod bearings are priced and sold per shell**



- Fractured Con Rod Bearing**
- › C4893693 Std
  - › C4892795 0.25 mm
  - › C4892796 0.50 mm
  - › C4892797 0.75 mm

11

**Rod bearings are priced and sold per shell**

**Piston Kit:**

- 1) 1 [C3930187](#) Piston Std, 1 [C3802750](#) Ring Set Std, 1 [C3934047](#) Piston Pin, 2 [C3920691](#) Ret.
- 2) 1 [C3930188](#) Piston 0.50 mm, 1 [C3802863](#) Ring Set 0.50 mm, 1 [C3934047](#) Piston Pin, 2 [C3920691](#) Ret.
- 3) 1 [C3930189](#) Piston 1.00 mm, 1 [C3802864](#) Ring Set 1.00 mm, 1 [C3934047](#) Piston Pin, 2 [C3920691](#) Ret.

**Cummins CPL's**

1963  
2264

**Timberjack**

230 - Forwarder

**YTO**

LRS1016 -  
Pneumatic  
Roller



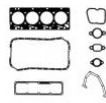
- 1) **Front Seal**
- › C3904353
- 2) **Rear Seal**
- › C3353978
- 3) **Crankshaft**
- › C3907803
- 4) **Front Seal Sleeve**
- › C3906080
- 5) **Rear Seal Sleeve**
- › C3906081
- 6) **Rectangular Seal**
- › C3912473
- 7) **Crankshaft, Gear**
- › C3901258
- 8) **Ring Gear**
- › C3903309 (173T)
  - › C3905427 (127T)
  - › C3901774 (159T)
  - › C3902127 (138T)

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- 1) **Top Gasket Set**
- › C3804896
- 2) **Bottom Gsk Set**
- › C3802375
- 3) **Head Gasket**
- › C3921393
- 4) **Oil Pan Gasket**
- › C3931602
- 5) **Valve Cover Gsk**
- › C3902666
- 6) **Gear Housing Gsk**
- › C3916131
- 7) **Rear Cover Gskt**
- › C3928493
- 8) **Gear Cover Gasket**
- › C3918673

10

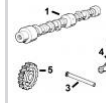


- 1) **Bushing, Piston**
- › C4891178 x4
- 2) **Bushing, Cam**
- › C3901306 x1
- 3) **Bolt, Con Rod**
- › C3900919
- 4) **Con Rod**
- › C3901569
  - › C4943979
- 5) **Bolt, Ex Manifold**
- › C3944593

3

7

8



- 1) **Camshaft**
- › C3925582
- 2) **Tappet**
- › C3925031
- 3) **Push Rod**
- › C3904679
- 4) **Rocker Arms**
- › C3910811 x4
  - › C3910810 x4
- 5) **Camshaft Gear**
- › C3907431

9

**Guide, Valve**

- › C3904408 Thick 60.50 mm IN
- › C3904409 Thick 51.75 mm EX
- › C3906206 Thin Wall

1

**1) Intake, Valve Kit**

- › C3802355 Kit
- Consists of:**
- › C3901117 x1 Valve
  - › C3900250 x2 Collet
- 2) **Insert, Valve**
- › C3906854 Use 4

**1) Exhaust, Valve Kit**

- › C3802356 Kit
- Consists of:**
- › C3901607 x1 Valve
  - › C3900250 x2 Collet
- 2) **Insert, Valve**
- › C3904105

**1) Spring, Valve**

- › C3900276 x8
- 2) **Seal, Valve**
- › C3921640 x8
  - › C3957912 x8
- 3) **Retainer, Valve**
- › C3900299 x8

5

6

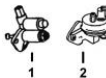
5



- 1) **Water Pump**
- › C3286277
- 2) **Water Pump Seal**
- › C3906698
- 3) **Thermostat**
- › C3802273

**Pump, Oil**

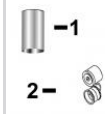
- › C3926202



- 1) **Lift Pump**
- › C3918000
- 2) **Lift Pump**
- › C3904374



- 1) **Cylinder Head**
- › C3920005
- 2) **Head Bolt Kit**
- › C4B-HBK
- 3) **Block Exp Plug Kit**
- › C6BEXPK
  - › C6BEXPKS



- 1) **Repair Sleeve**
- › C3904166
- 2) **Belt Tensioner**
- › C3914086

4

(1): Can be Used on both Intake and Exhaust.

(3): For Storm blocks use C3940059.

(5): For use on engines prior to April, 2003.

(7): Machine split connecting rod.

(9): Use ESN or application model to confirm correct camshaft.

(11): On Fracture Split Con Rods use: 4 of C3901170 (or O/S) and 4 of C4893693 (or O/S).

(2): Diaphragm Style.

(4): Do not use on Marine Engines.

(6): For use on engines from April, 2003, (Top Hat Style).

(8): Fracture split connecting rod.

(10): Check for proper application.

**CUMMINS 6BT 5.9 PISTON (M): 7163**

**Engine Series:**  
B

**Engine Model:**  
6BT 5.9

**Engine Desc:**  
(CDC 6.590)

**Engine Data:**  
TURBOCHARGED  
NON –  
EMISSION

**Engine Info:**  
6 Cyl

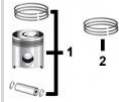
**Engine Dimensions:**  
359 Cubic Inch  
Bore: 4.02 in /  
102 mm Stroke:  
4.72 in / 119  
mm

**Piston (M):**  
7163

Please see page 501 for a complete list of equipment models.



- 1) Engine O/H Kit**
- › COK2160/6 Std
  - › COK2132/6 0.50 mm
  - › COK2134/6 1.00 mm
- 2) O/H Kit Fractured Rod**
- › COK2160F/6 Std 10
  - › COK2132F/6 0.50
  - › COK2134F/6 1.00
- 3) Engine I/F Kit**
- › CIK2160/6 Std
  - › CIK2132/6 0.50 mm
  - › CIK2134/6 1.00 mm



- 1) Piston & Ring Kit**
- › C3802160 Std
  - › C3802132 0.50 mm
  - › C3802134 1.00 mm
- Use 6**



- Main Bearing Set**
- › C3802070 Std
  - › C3802071 0.25 mm
  - › C3802072 0.50 mm
  - › C3802073 0.75 mm
- Use 1**



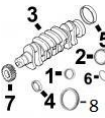
- Con Rod Bearing**
- › C3901170 Std
  - › C3901171 0.25 mm
  - › C3901172 0.50 mm
  - › C3901173 0.75 mm
- Rod bearings are priced and sold per shell**



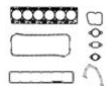
- Fractured Con Rod Bearing**
- › C4893693 Std 10
  - › C4892795 0.25 mm
  - › C4892796 0.50 mm
  - › C4892797 0.75 mm
- Rod bearings are priced and sold per shell**

**Piston Kit:**

- 1) 1 [C3907163](#) Piston Std, 1 [C3802230](#) Ring Set Std, 1 [C3901793](#) Piston Pin, 2 [C3901706](#) Ret.
- 2) 1 [C3908815](#) Piston 0.50 mm, 1 [C3802232](#) Ring Set 0.50 mm, 1 [C3901793](#) Piston Pin, 2 [C3901706](#) Ret.
- 3) 1 [C3908816](#) Piston 1.00 mm, 1 [C3802234](#) Ring Set 1.00 mm, 1 [C3901793](#) Piston Pin, 2 [C3901706](#) Ret.



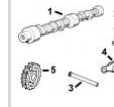
- 1) Front Seal**
- › C3904353
- 2) Rear Seal**
- › C3353978
- 3) Crankshaft**
- › C3907804
- 4) Front Seal Sleeve**
- › C3906080
- 5) Rear Seal Sleeve**
- › C3906081
- 6) Rectangular Seal**
- › C3912473
- 7) Crankshaft, Gear**
- › C3901258
- 8) Ring Gear**
- › C3903309 (173T)
  - › C3905427 (127T)
  - › C3901774 (159T)
  - › C3902127 (138T)



- 1) Top Gasket Set**
- › C3802363
- 2) Bottom Gsk Set**
- › C3802376
- 3) Head Gasket**
- › C3921394
- 4) Oil Pan Gasket**
- › C3931346
- 5) Valve Cover Gsk**
- › C3902666
- 6) Gear Housing Gsk**
- › C3916131
- 7) Rear Cover Gsk**
- › C3928493
- 8) Gear Cover Gasket**
- › C3918673



- 1) Bushing, Piston**
- › C4891178 x6
- 2) Bushing, Cam**
- › C3901306 x1
- 3) Bolt, Con Rod**
- › C3900919 x12
- 4) Con Rod**
- › C3901569
  - › C4943979
- 5) Bolt, Ex Manifold**
- › C3944593



- 1) Camshaft**
- › C3914639
- 2) Tappet**
- › C3925031
- 3) Push Rod**
- › C3904679
- 4) Rocker Arms**
- › C3910811 x6
  - › C3910810 x6
- 5) Camshaft Gear**
- › C3907431

**Guide, Valve**

- › C3904408 Thick 60.50 mm IN
- › C3904409 Thick 51.75 mm EX
- › C3906206 Thin Wall

- 1) Intake, Valve Kit**
- › C3802355 Kit
- Consists of:**
- › C3901117 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3906854
- Use 6**

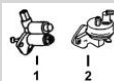
- 1) Exhaust, Valve Kit**
- › C3802356 Kit
- Consists of:**
- › C3901607 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3904105
- Use 6**

- 1) Spring, Valve**
- › C3900276 x12
- 2) Seal, Valve**
- › C3921640 x12
  - › C3957912 x12
- 3) Retainer, Valve**
- › C3900299 x12



- 1) Water Pump**
- › C3286277
- 2) Water Pump Seal**
- › C3906698
- 3) Thermostat**
- › C3802273

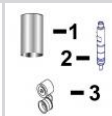
- Pump, Oil**
- › C3926203



- 1) Lift Pump**
- › C3918000
- 2) Lift Pump**
- › C3904374



- 1) Cylinder Head**
- › C3913381
- 2) Head Bolt Kit**
- › C6B-HBK
- 3) Block Exp Plug Kit**
- › C6BEXPK



- 1) Repair Sleeve**
- › C3904166
- 2) Injector**
- › C3909476 9mm
  - › C3919331 7mm
  - › C3919343 7mm
- 3) Belt Tensioner**
- › C3914086

(1): Can be Used on both Intake and Exhaust.

(3): For Storm blocks use C3940059.

(5): For use on engines prior to April, 2003.

(7): Applications with internally cast oil suction tube in Aluminum oil pan, must use 3938161 oil pan gasket.

(9): Check for proper application.

(2): Diaphragm Style.

(4): Do not use on Marine Engines.

(6): For use on engines from April, 2003, (Top Hat Style).

(8): C3901569 Machine Split Rod. C4943979 Fracture Split Rod.

(10): On Fracture Split Con Rods use: 6 of C3901170 (or O/S) and 6 of C4893693 (or O/S).

**Engine Series:**  
B

**Engine Model:**  
6BTA 5.9

**Engine Desc:**  
(CDC 6.590)

**Engine Data:**  
TURBOCHARGED  
AFTERCOOLED  
NON –  
EMISSION

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
359 Cubic Inch  
Bore: 4.02 in /  
102 mm Stroke:  
4.72 in / 119  
mm

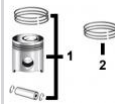
**Piston (M):**  
7156

Please see  
page 502 for a  
complete list of  
equipment  
models.



- 1) Engine O/H Kit**
- › COK2100/6 Std
  - › COK2102/6 0.50 mm
  - › COK2104/6 1.00 mm
- 2) O/H Kit Fractured Rod**
- › COK2100F/6 Std
  - › COK2102F/6 0.50
  - › COK2104F/6 1.00
- 3) Engine I/F Kit**
- › CIK2100/6 Std
  - › CIK2102/6 0.50 mm
  - › CIK2104/6 1.00 mm

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- 1) Piston & Ring Kit**
- › C3802100 Std
  - › C3802102 0.50 mm
  - › C3802104 1.00 mm
- Use 6**



- Main Bearing Set**
- › C3802070 Std
  - › C3802071 0.25 mm
  - › C3802072 0.50 mm
  - › C3802073 0.75 mm
- Use 1**



- Con Rod Bearing**
- › C3901170 Std
  - › C3901171 0.25 mm
  - › C3901172 0.50 mm
  - › C3901173 0.75 mm
- Rod bearings are priced and sold per shell**



- Fractured Con Rod Bearing**
- › C4893693 Std
  - › C4892795 0.25 mm
  - › C4892796 0.50 mm
  - › C4892797 0.75 mm
- Rod bearings are priced and sold per shell**

10

**Piston Kit:**

- 1) 1 C3907156 Piston Std, 1 C3802230 Ring Set Std, 1 C3901793 Piston Pin, 2 C3901706 Ret.
- 2) 1 C3907157 Piston 0.50 mm, 1 C3802232 Ring Set 0.50 mm, 1 C3901793 Piston Pin, 2 C3901706 Ret.
- 3) 1 C3907158 Piston 1.00 mm, 1 C3802234 Ring Set 1.00 mm, 1 C3901793 Piston Pin, 2 C3901706 Ret.

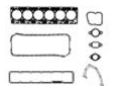


- 1) Front Seal**
- › C3904353
- 2) Rear Seal**
- › C3353978
- 3) Crankshaft**
- › C3907804
- 4) Front Seal Sleeve**
- › C3906080
- 5) Rear Seal Sleeve**
- › C3906081
- 6) Rectangular Seal**
- › C3912473
- 7) Crankshaft, Gear**
- › C3901258

**Ring Gear**

- › C3903309 (173T)
- › C3905427 (127T)
- › C3901774 (159T)
- › C3902127 (138T)

9  
9  
9  
9



- 1) Top Gasket Set**
- › C3802363
- 2) Bottom Gsk Set**
- › C3802376
- 3) Head Gasket**
- › C3921394
- 4) Oil Pan Gasket**
- › C3931346
- 5) Valve Cover Gsk**
- › C3902666
- 6) Gear Housing Gsk**
- › C3916131
- 7) Rear Cover Gsk**
- › C3928493
- 8) Gear Cover Gasket**
- › C3918673

7

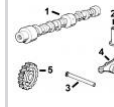
9



- 1) Bushing, Piston**
- › C4891178 x6
- 2) Bushing, Cam**
- › C3901306 x1
- 3) Bolt, Con Rod**
- › C3900919 x12
- 4) Con Rod**
- › C3901569
  - › C4943979
- 5) Bolt, Ex Manifold**
- › C3944593

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8



- 1) Camshaft**
- › C3914639
- 2) Tappet**
- › C3925031
- 3) Push Rod**
- › C3904679
- 4) Rocker Arms**
- › C3910811 x6
  - › C3910810 x6
- 5) Camshaft Gear**
- › C3907431

**Guide, Valve**

- › C3904408 Thick 60.50 mm IN
- › C3904409 Thick 51.75 mm EX
- › C3906206 Thin Wall

1

- 1) Intake, Valve Kit**
- › C3802355 Kit
- Consists of:**
- › C3901117 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3906854
- Use 6**

**1) Exhaust, Valve Kit**

- › C3802356 Kit
- Consists of:**
- › C3901607 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3904105
- Use 6**

**1) Spring, Valve C3900276**

- 2) Seal, Valve**
- › C3921640 x12
  - › C3957912 x12
- 3) Retainer, Valve**
- › C3900299 x12

5

6

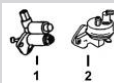
5



- 1) Water Pump**
- › C3286277
- 2) Water Pump Seal**
- › C3906698
- 3) Thermostat**
- › C3802273

**Pump, Oil**

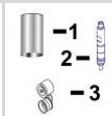
- › C3926203



- 1) Lift Pump**
- › C3918000
- 2) Lift Pump**
- › C3904374



- 1) Cylinder Head**
- › C3913381
- 2) Head Bolt Kit**
- › C6B-HBK
- 3) Block Exp Plug Kit**
- › C6BEXPK



- 1) Repair Sleeve**
- › C3904166
- 2) Injector**
- › C3909476 9mm
  - › C3919343 7mm
- 3) Belt Tensioner**
- › C3914086

4

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9

(1): Can be Used on both Intake and Exhaust.

(3): For Storm blocks use C3940059.

(5): For use on engines prior to April, 2003.

(7): Applications with internally cast oil suction tube in Aluminum oil pan, must use 3938161 oil pan gasket.

(9): Check for proper application.

(2): Diaphragm Style.

(4): Do not use on Marine Engines.

(6): For use on engines from April, 2003, (Top Hat Style).

(8): C3901569 Machine Split Rod. C4943979 Fracture Split Rod.

(10): On Fracture Split Con Rods use: 6 of C3901170 (or O/S) and 6 of C4893693 (or O/S).

CUMMINS 6B 5.9 PISTON (M): 6223

**Engine Series:**  
B

**Engine Model:**  
6B 5.9

**Engine Desc:**  
(CDC 6.590)

**Engine Data:**  
NATURALLY  
ASPIRATED  
NON –  
EMISSION

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
359 Cubic Inch  
Bore: 4.02 in /  
102 mm Stroke:  
4.72 in / 119  
mm

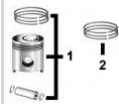
**Piston (M):**  
6223

Please see  
page 503 for a  
complete list of  
equipment  
models.



- 1) Engine O/H Kit**
- COK2060/6 Std
  - COK2062/6 0.50 mm
  - COK2064/6 1.00 mm
- 2) O/H Kit Fractured Rod**
- COK2060F/6 Std
  - COK2062F/6 0.50
  - COK2064F/6 1.00
- 3) Engine I/F Kit**
- CIK2060/6 Std
  - CIK2062/6 0.50 mm
  - CIK2064/6 1.00 mm

10



- 1) Piston & Ring Kit**
- C3802060 Std
  - C3802062 0.50 mm
  - C3802064 1.00 mm
- Use 6**



- Main Bearing Set**
- C3802070 Std
  - C3802071 0.25 mm
  - C3802072 0.50 mm
  - C3802073 0.75 mm
- Use 1**



- Con Rod Bearing**
- C3901170 Std
  - C3901171 0.25 mm
  - C3901172 0.50 mm
  - C3901173 0.75 mm
- Rod bearings are priced and sold per shell**



- Fractured Con Rod Bearing**
- C4893693 Std
  - C4892795 0.25 mm
  - C4892796 0.50 mm
  - C4892797 0.75 mm
- Rod bearings are priced and sold per shell**

10

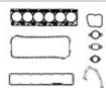
**Piston Kit:**

- 1) 1 [C3906223](#) Piston Std, 1 [C3802040](#) Ring Set Std, 1 [C3901793](#) Piston Pin, 2 [C3901706](#) Ret.
- 2) 1 [C3906209](#) Piston 0.50 mm, 1 [C3802042](#) Ring Set 0.50 mm, 1 [C3901793](#) Piston Pin, 2 [C3901706](#) Ret.
- 3) 1 [C3906208](#) Piston 1.00 mm, 1 [C3802044](#) Ring Set 1.00 mm, 1 [C3901793](#) Piston Pin, 2 [C3901706](#) Ret.



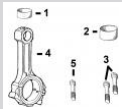
- 1) Front Seal**
- C3904353
- 2) Rear Seal**
- C3353978
- 3) Crankshaft**
- C3907804
- 4) Front Seal Sleeve**
- C3906080
- 5) Rear Seal Sleeve**
- C3906081
- 6) Rectangular Seal**
- C3912473
- 7) Crankshaft, Gear**
- C3901258
- 8) Ring Gear**
- C3903309 (173T)
  - C3905427 (127T)
  - C3901774 (159T)
  - C3902127 (138T)

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9



- 1) Top Gasket Set**
- C3802363
- 2) Bottom Gsk Set**
- C3802376
- 3) Head Gasket**
- C3921394
- 4) Oil Pan Gasket**
- C3931346
- 5) Valve Cover Gsk**
- C3902666
- 6) Gear Housing Gsk**
- C3916131
- 7) Rear Cover Gsk**
- C3928493
- 8) Gear Cover Gasket**
- C3918673

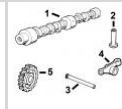
7



- 1) Bushing, Piston**
- C4891178 x6
- 2) Bushing, Cam**
- C3901306 x1
- 3) Bolt, Con Rod**
- C3900919 x12
- 4) Con Rod**
- C3901569
  - C4943979
- 5) Bolt, Ex Manifold**
- C3944593

3

8  
8



- 1) Camshaft**
- C3914639
- 2) Tappet**
- C3925031
- 3) Push Rod**
- C3904679
- 4) Rocker Arms**
- C3910811 x6
  - C3910810 x6
- 5) Camshaft Gear**
- C3907431

**Guide, Valve**

- C3904408 Thick 60.50 mm IN
- C3904409 Thick 51.75 mm EX
- C3906206 Thin Wall

1

- 1) Intake, Valve Kit**
- C3802355 Kit
- Consists of:**
- C3901117 x1 Valve
  - C3900250 x2 Collet
- 2) Insert, Valve**
- C3906854
- Use 6**

9

- 1) Exhaust, Valve Kit**
- C3802356 Kit
- Consists of:**
- C3901607 x1 Valve
  - C3900250 x2 Collet
- 2) Insert, Valve**
- C3904105
- Use 6**

- 1) Spring, Valve**
- C3900276 x12
- 2) Seal, Valve**
- C3921640 x12
  - C3957912 x12
- 3) Retainer, Valve**
- C3900299 x12

5

6

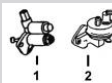
5



- 1) Water Pump**
- C3286277
- 2) Water Pump Seal**
- C3906698
- 3) Thermostat**
- C3802273

**Pump, Oil**

- C3926203



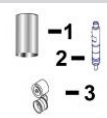
- 1) Lift Pump**
- C3918000
- 2) Lift Pump**
- C3904374

2



- 1) Cylinder Head**
- C3913381
- 2) Head Bolt Kit**
- C6B-HBK
- 3) Block Exp Plug Kit**
- C6BEXPK

4



- 1) Repair Sleeve**
- C3904166
- 2) Injector**
- C3914474 9mm
  - C3919304 7mm
- 3) Belt Tensioner**
- C3914086

9

9

(1): Can be Used on both Intake and Exhaust.

(3): For Storm blocks use C3940059.

(5): For use on engines prior to April, 2003.

(7): Applications with internally cast oil suction tube in Aluminum oil pan, must use 3938161 oil pan gasket.

(9): Check for proper application.

(2): Diaphragm Style.

(4): Do not use on Marine Engines.

(6): For use on engines from April, 2003, (Top Hat Style).

(8): C3901569 Machine Split Rod. C4943979 Fracture Split Rod.

(10): On Fracture Split Con Rods use: 6 of C3901170 (or O/S) and 6 of C4893693 (or O/S).

**CUMMINS 6BT 5.9 PISTON (M): 1400**

**Engine Series:**  
B

**Engine Model:**  
6BT 5.9

**Engine Desc:**  
(CDC 6.590)

**Engine Data:**  
TURBOCHARGED  
NON –  
EMISSION

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
359 Cubic Inch  
Bore: 4.02 in /  
102 mm Stroke:  
4.72 in / 119  
mm

**Piston (M):**  
1400

**Cummins CPLs**

953 - Marine Engines  
970 - Marine Engines  
1165  
1247 - Marine Engines  
1313  
1322 - Marine Engines  
1570 - Marine Engines  
1613 - Marine Engines  
1638  
1928 - Marine Engines

**Terex**

VDA 600 - Asphalt Paver  
VDA 621 - Asphalt Paver  
VDA 700 - Asphalt Paver  
VDA 721 - Asphalt Paver

**Stavostroj**

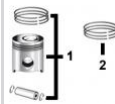
VV1400D - Vibratory Compactor  
VV900 - Vibratory Compactor  
VV900D - Vibratory Compactor

**YTO**

YL25 - Pneumatic Roller  
LGS1822B - Static Smooth Drum Roller



- 1) Engine O/H Kit**
- › COK1400/6 Std
  - › COK2049/6 0.50 mm
  - › COK2050/6 1.00 mm
- 2) O/H Kit Fractured Rod**
- › COK1400F/6 Std
  - › COK2049F/6 0.50
  - › COK2050F/6 1.00
- 3) Engine I/F Kit**
- › CIK1400/6 Std
  - › CIK2049/6 0.50 mm
  - › CIK2050/6 1.00 mm



- 1) Piston & Ring Kit**
- › C3802170 Std
  - › C3802172 0.50 mm
  - › C3802174 1.00 mm
- Use 6**



- Main Bearing Set**
- › C3802070 Std
  - › C3802071 0.25 mm
  - › C3802072 0.50 mm
  - › C3802073 0.75 mm
- Use 1**



- Con Rod Bearing**
- › C3901170 Std
  - › C3901171 0.25 mm
  - › C3901172 0.50 mm
  - › C3901173 0.75 mm



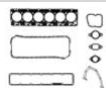
- Fractured Con Rod Bearing**
- › C4893693 Std
  - › C4892795 0.25 mm
  - › C4892796 0.50 mm
  - › C4892797 0.75 mm
- Rod bearings are priced and sold per shell**

**Piston Kit:**

- 1) 1 [C3911400](#) Piston Std, 1 [C3802230](#) Ring Set Std, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.
- 2) 1 [C3912049](#) Piston 0.50 mm, 1 [C3802232](#) Ring Set 0.50 mm, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.
- 3) 1 [C3912050](#) Piston 1.00 mm, 1 [C3802234](#) Ring Set 1.00 mm, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.



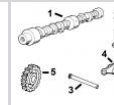
- 1) Front Seal**
- › C3904353
- 2) Rear Seal**
- › C3353978
- 3) Crankshaft**
- › C3907804
- 4) Front Seal Sleeve**
- › C3906080
- 5) Rear Seal Sleeve**
- › C3906081
- 6) Rectangular Seal**
- › C3912473
- 7) Crankshaft, Gear**
- › C3901258
- 8) Ring Gear**
- › C3903309 (173T)
  - › C3905427 (127T)
  - › C3901774 (159T)
  - › C3902127 (138T)



- 1) Top Gasket Set**
- › C3802363
- 2) Bottom Gsk Set**
- › C3802376
- 3) Head Gasket**
- › C3921394
- 4) Oil Pan Gasket**
- › C3931346
- 5) Valve Cover Gsk**
- › C3902666
- 6) Gear Housing Gsk**
- › C3916131
- 7) Rear Cover Gsk**
- › C3928493
- 8) Gear Cover Gasket**
- › C3918673



- 1) Bushing, Piston**
- › C4891178 x6
- 2) Bushing, Cam**
- › C3901306 x1
- 3) Bolt, Con Rod**
- › C3900919 x12
- 4) Con Rod**
- › C3901569
  - › C4943979
- 5) Bolt, Ex Manifold**
- › C3944593



- 1) Camshaft**
- › C3914639
- 2) Tappet**
- › C3925031
- 3) Push Rod**
- › C3904679
- 4) Rocker Arms**
- › C3910811 x6
  - › C3910810 x6
- 5) Camshaft Gear**
- › C3907431

**Guide, Valve**

- › C3904408 Thick 60.50 mm IN
- › C3904409 Thick 51.75 mm EX
- › C3906206 Thin Wall

**1) Intake, Valve Kit**

- › C3802355 Kit
- Consists of:**
- › C3901117 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3906854
- Use 6**

**1) Exhaust, Valve Kit**

- › C3802356 Kit
- Consists of:**
- › C3901607 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3904105
- Use 6**

**1) Spring, Valve**

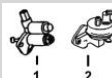
- › C3900276 x12
- 2) Seal, Valve**
- › C3921640 x12
  - › C3957912 x12
- 3) Retainer, Valve**
- › C3900299 x12



- 1) Water Pump**
- › C3286277
- 2) Water Pump Seal**
- › C3906698
- 3) Thermostat**
- › C3802273

**Pump, Oil**

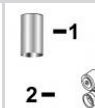
- › C3926203



- 1) Lift Pump**
- › C3918000
- 2) Lift Pump**
- › C3904374



- 1) Cylinder Head**
- › C3913381
- 2) Head Bolt Kit**
- › C6B-HBK
- 3) Block Exp Plug Kit**
- › C6BEXPK



- 1) Repair Sleeve**
- › C3904166
- 2) Belt Tensioner**
- › C3914086

(1): Can be Used on both Intake and Exhaust.

(3): For Storm blocks use C3940059.

(5): For use on engines prior to April, 2003.

(7): Applications with internally cast oil suction tube in Aluminum oil pan, must use 3938161 oil pan gasket.

(9): Check for proper application.

(2): Diaphragm Style.

(4): Do not use on Marine Engines.

(6): For use on engines from April, 2003, (Top Hat Style).

(8): C3901569 Machine Split Rod. C4943979 Fracture Split Rod.

(10): On Fracture Split Con Rods use: 6 of C3901170 (or O/S) and 6 of C4893693 (or O/S).

# CUMMINS 6BT 5.9 PISTON (M): 6632

**Engine Series:**

B

**Engine Model:**

6BT 5.9

**Engine Data:**

 TURBOCHARGED  
EMISSION

**Engine Info:**

6 Cyl

**Engine Dimensions:**

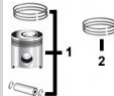
 359 Cubic Inch  
Bore: 4.02 in /  
102 mm Stroke:  
4.72 in / 119  
mm

**Piston (M):**

6632



- 1) **Engine O/H Kit**
  - › COK2562/6 Std
  - › COK2564/6 0.50 mm
  - › COK2565/6 1.00 mm
- 2) **O/H Kit Fractured Rod**
  - › COK2562F/6 Std 10
  - › COK2564F/6 0.50
  - › COK2565F/6 1.00
- 3) **Engine I/F Kit**
  - › CIK2562/6 Std
  - › CIK2564/6 0.50 mm
  - › CIK2565/6 1.00 mm



- 1) **Piston & Ring Kit**
    - › C3802562 Std
    - › C3802564 0.50 mm
    - › C3802565 1.00 mm
- Use 6**



- 1) **Main Bearing Set**
    - › C3802070 Std
    - › C3802071 0.25 mm
    - › C3802072 0.50 mm
    - › C3802073 0.75 mm
- Use 1**



- 1) **Con Rod Bearing**
    - › C3901170 Std
    - › C3901171 0.25 mm
    - › C3901172 0.50 mm
    - › C3901173 0.75 mm
- Rod bearings are priced and sold per shell**

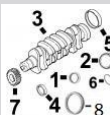


- 1) **Fractured Con Rod Bearing**
    - › C4893693 Std 10
    - › C4892795 0.25 mm
    - › C4892796 0.50 mm
    - › C4892797 0.75 mm
- Rod bearings are priced and sold per shell**

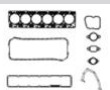
**Piston Kit:**

- 1) 1 [C3926632](#) Piston Std, 1 [C3802230](#) Ring Set Std, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.
- 2) 1 [C3926634](#) Piston 0.50 mm, 1 [C3802232](#) Ring Set 0.50 mm, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.
- 3) 1 [C3926635](#) Piston 1.00 mm, 1 [C3802234](#) Ring Set 1.00 mm, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.

Please see page **504** for a complete list of equipment models.



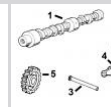
- 1) **Front Seal**
  - › C3904353
- 2) **Rear Seal**
  - › C3353978
- 3) **Crankshaft**
  - › C3907804
- 4) **Front Seal Sleeve**
  - › C3906080
- 5) **Rear Seal Sleeve**
  - › C3906081
- 6) **Rectangular Seal**
  - › C3912473
- 7) **Crankshaft, Gear**
  - › C3901258
- 8) **Ring Gear**
  - › C3903309 (173T)
  - › C3905427 (127T)
  - › C3901774 (159T)
  - › C3902127 (138T)



- 1) **Top Gasket Set**
  - › C3802363
- 2) **Bottom Gsk Set**
  - › C3802376
- 3) **Head Gasket**
  - › C3921394
- 4) **Oil Pan Gasket**
  - › C3931346
- 5) **Valve Cover Gsk**
  - › C3902666
- 6) **Gear Housing Gsk**
  - › C3916131
- 7) **Rear Cover Gsk**
  - › C3928493
- 8) **Gear Cover Gasket**
  - › C3918673



- 1) **Bushing, Piston**
  - › C4891178 x6
- 2) **Bushing, Cam**
  - › C3901306 x1
- 3) **Bolt, Con Rod**
  - › C3900919 x12
- 4) **Con Rod**
  - › C3901569
  - › C4943979
- 5) **Bolt, Ex Manifold**
  - › C3944593



- 1) **Camshaft**
  - › C3914639
- 2) **Tappet**
  - › C3925031
- 3) **Push Rod**
  - › C3904679
- 4) **Rocker Arms**
  - › C3910811 x6
  - › C3910810 x6
- 5) **Camshaft Gear**
  - › C3907431

**Guide, Valve**

- › C3904408 Thick 60.50 mm IN
- › C3904409 Thick 51.75 mm EX
- › C3906206 Thin Wall

**1) Intake, Valve Kit**

- › C3802355 Kit
- Consists of:**
- › C3901117 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3906854
- Use 6**

**1) Exhaust, Valve Kit**

- › C3802356 Kit
- Consists of:**
- › C3901607 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3904105
- Use 6**

**1) Spring, Valve**

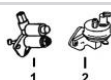
- › C3900276 x12
- 2) Seal, Valve**
- › C3921640 x12
  - › C3957912 x12
- 3) Retainer, Valve**
- › C3900299 x12



- 1) **Water Pump**
  - › C3286277
- 2) **Water Pump Seal**
  - › C3906698
- 3) **Thermostat**
  - › C3802273

**Pump, Oil**

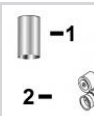
- › C3926203



- 1) **Lift Pump**
  - › C3918000
- 2) **Lift Pump**
  - › C3904374



- 1) **Cylinder Head**
  - › C3913381
- 2) **Head Bolt Kit**
  - › C6B-HBK
- 3) **Block Exp Plug Kit**
  - › C6BEXPK
  - › C6BEXPKS



- 1) **Repair Sleeve**
  - › C3904166
- 2) **Belt Tensioner**
  - › C3914086

(1): Can be Used on both Intake and Exhaust.

(3): For Storm blocks use C3940059.

(5): For use on engines prior to April, 2003.

(7): Applications with internally cast oil suction tube in Aluminum oil pan, must use 3938161 oil pan gasket.

(9): Check for proper application.

(2): Diaphragm Style.


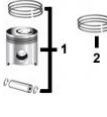



(4): Do not use on Marine Engines.

(6): For use on engines from April, 2003, (Top Hat Style).

(8): C3901569 Machine Split Rod. C4943979 Fracture Split Rod.

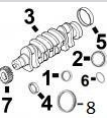
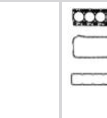


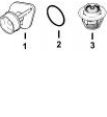
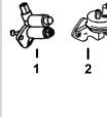

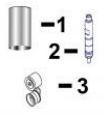
(10): On Fracture Split Con Rods use: 6 of C3901170 (or O/S) and 6 of C4893693 (or O/S).



|  |  |  |  |  |  |
|--|--|--|--|--|--|
| <p><b>Engine Series:</b><br/>B</p> <p><b>Engine Model:</b><br/>6BTA 5.9</p> <p><b>Engine Data:</b><br/>TURBOCHARGED<br/>AFTERCOOLED<br/>EMISSION</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>359 Cubic Inch<br/>Bore: 4.02 in /<br/>102 mm Stroke:<br/>4.72 in / 119<br/>mm</p> <p><b>Piston (M):</b><br/>2571</p> |  <p><b>1) Engine O/H Kit</b></p> <ul style="list-style-type: none"> <li>› COK2487/6 Std</li> <li>› COK2493/6 0.50 mm</li> <li>› COK2495/6 1.00 mm</li> </ul> <p><b>2) O/H Kit Fractured Rod</b></p> <ul style="list-style-type: none"> <li>› COK2487F/6 Std</li> <li>› COK2493F/6 0.50</li> <li>› COK2495F/6 1.00</li> </ul> <p><b>3) Engine I/F Kit</b></p> <ul style="list-style-type: none"> <li>› CIK2487/6 Std</li> <li>› CIK2493/6 0.50 mm</li> <li>› CIK2495/6 1.00 mm</li> </ul> |  <p><b>1) Piston &amp; Ring Kit</b></p> <ul style="list-style-type: none"> <li>› C3802487 Std</li> <li>› C3802493 0.50 mm</li> <li>› C3802495 1.00 mm</li> </ul> <p><b>Use 6</b></p> |  <p><b>Main Bearing Set</b></p> <ul style="list-style-type: none"> <li>› C3802070 Std</li> <li>› C3802071 0.25 mm</li> <li>› C3802072 0.50 mm</li> <li>› C3802073 0.75 mm</li> </ul> <p><b>Use 1</b></p> |  <p><b>Con Rod Bearing</b></p> <ul style="list-style-type: none"> <li>› C3901170 Std</li> <li>› C3901171 0.25 mm</li> <li>› C3901172 0.50 mm</li> <li>› C3901173 0.75 mm</li> </ul> <p><b>Rod bearings are priced and sold per shell</b></p> |  <p><b>Fractured Con Rod Bearing</b></p> <ul style="list-style-type: none"> <li>› C4893693 Std</li> <li>› C4892795 0.25 mm</li> <li>› C4892796 0.50 mm</li> <li>› C4892797 0.75 mm</li> </ul> <p><b>Rod bearings are priced and sold per shell</b></p> |
|--|--|--|--|--|--|

- Piston Kit:**
- 1) 1 [C3922571](#) Piston Std, 1 [C3802230](#) Ring Set Std, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.
- 2) 1 [C3922574](#) Piston 0.50 mm, 1 [C3802232](#) Ring Set 0.50 mm, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.
- 3) 1 [C3922575](#) Piston 1.00 mm, 1 [C3802234](#) Ring Set 1.00 mm, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.

Please see page 505 for a complete list of equipment models.

|  |  |  |  |   |
|--|--|--|--|---|
|  <p><b>1) Front Seal</b></p> <ul style="list-style-type: none"> <li>› C3904353</li> </ul> <p><b>2) Rear Seal</b></p> <ul style="list-style-type: none"> <li>› C3353978</li> </ul> <p><b>3) Crankshaft</b></p> <ul style="list-style-type: none"> <li>› C3907804</li> </ul> <p><b>4) Front Seal Sleeve</b></p> <ul style="list-style-type: none"> <li>› C3906080</li> </ul> <p><b>5) Rear Seal Sleeve</b></p> <ul style="list-style-type: none"> <li>› C3906081</li> </ul> <p><b>6) Rectangular Seal</b></p> <ul style="list-style-type: none"> <li>› C3912473</li> </ul> <p><b>7) Crankshaft, Gear</b></p> <ul style="list-style-type: none"> <li>› C3901258</li> </ul> <p><b>8) Ring Gear</b></p> <ul style="list-style-type: none"> <li>› C3903309 (173T)</li> <li>› C3905427 (127T)</li> <li>› C3901774 (159T)</li> <li>› C3902127 (138T)</li> </ul> |  <p><b>1) Top Gasket Set</b></p> <ul style="list-style-type: none"> <li>› C3802363</li> </ul> <p><b>2) Bottom Gsk Set</b></p> <ul style="list-style-type: none"> <li>› C3802376</li> </ul> <p><b>3) Head Gasket</b></p> <ul style="list-style-type: none"> <li>› C3921394</li> </ul> <p><b>4) Oil Pan Gasket</b></p> <ul style="list-style-type: none"> <li>› C3931346</li> </ul> <p><b>5) Valve Cover Gsk</b></p> <ul style="list-style-type: none"> <li>› C3902666</li> </ul> <p><b>6) Gear Housing Gsk</b></p> <ul style="list-style-type: none"> <li>› C3916131</li> </ul> <p><b>7) Rear Cover Gsk</b></p> <ul style="list-style-type: none"> <li>› C3928493</li> </ul> <p><b>8) Gear Cover Gasket</b></p> <ul style="list-style-type: none"> <li>› C3918673</li> </ul> |  <p><b>1) Bushing, Piston</b></p> <ul style="list-style-type: none"> <li>› C4891178 x6</li> </ul> <p><b>2) Bushing, Cam</b></p> <ul style="list-style-type: none"> <li>› C3901306 x1</li> </ul> <p><b>3) Bolt, Con Rod</b></p> <ul style="list-style-type: none"> <li>› C3900919 x12</li> </ul> <p><b>4) Con Rod</b></p> <ul style="list-style-type: none"> <li>› C3901569</li> <li>› C4943979</li> </ul> <p><b>5) Bolt, Ex Manifold</b></p> <ul style="list-style-type: none"> <li>› C3944593</li> </ul> |  <p><b>1) Camshaft</b></p> <ul style="list-style-type: none"> <li>› C3914639</li> </ul> <p><b>2) Tappet</b></p> <ul style="list-style-type: none"> <li>› C3925031</li> </ul> <p><b>3) Push Rod</b></p> <ul style="list-style-type: none"> <li>› C3904679</li> </ul> <p><b>4) Rocker Arms</b></p> <ul style="list-style-type: none"> <li>› C3910811 x6</li> <li>› C3910810 x6</li> </ul> <p><b>5) Camshaft Gear</b></p> <ul style="list-style-type: none"> <li>› C3907431</li> </ul> |   |
| <p><b>Guide, Valve</b></p> <ul style="list-style-type: none"> <li>› C3904408 Thick 60.50 mm IN</li> <li>› C3904409 Thick 51.75 mm EX</li> <li>› C3906206 Thin Wall</li> </ul>  | <p><b>1) Intake, Valve Kit</b></p> <ul style="list-style-type: none"> <li>› C3802355 Kit</li> </ul> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>› C3901117 x1 Valve</li> <li>› C3900250 x2 Collet</li> </ul> <p><b>2) Insert, Valve</b></p> <ul style="list-style-type: none"> <li>› C3906854</li> </ul> <p><b>Use 6</b></p>   | <p><b>1) Exhaust, Valve Kit</b></p> <ul style="list-style-type: none"> <li>› C3802356 Kit</li> </ul> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>› C3901607 x1 Valve</li> <li>› C3900250 x2 Collet</li> </ul> <p><b>2) Insert, Valve</b></p> <ul style="list-style-type: none"> <li>› C3904105</li> </ul> <p><b>Use 6</b></p>  | <p><b>1) Spring, Valve</b></p> <ul style="list-style-type: none"> <li>› C3900276 x12</li> </ul> <p><b>2) Seal, Valve</b></p> <ul style="list-style-type: none"> <li>› C3921640 x12</li> <li>› C3957912 x12</li> </ul> <p><b>3) Retainer, Valve</b></p> <ul style="list-style-type: none"> <li>› C3900299 x12</li> </ul>  |   |
|  <p><b>1) Water Pump</b></p> <ul style="list-style-type: none"> <li>› C3286277</li> </ul> <p><b>2) Water Pump Seal</b></p> <ul style="list-style-type: none"> <li>› C3906698</li> </ul> <p><b>3) Thermostat</b></p> <ul style="list-style-type: none"> <li>› C3802273</li> </ul>  | <p><b>Pump, Oil</b></p> <ul style="list-style-type: none"> <li>› C3926203</li> </ul>   |  <p><b>1) Lift Pump</b></p> <ul style="list-style-type: none"> <li>› C3918000</li> </ul> <p><b>2) Lift Pump</b></p> <ul style="list-style-type: none"> <li>› C3904374</li> </ul>  |  <p><b>1) Cylinder Head</b></p> <ul style="list-style-type: none"> <li>› C3913381</li> </ul> <p><b>2) Head Bolt Kit</b></p> <ul style="list-style-type: none"> <li>› C6B-HBK</li> </ul> <p><b>3) Block Exp Plug Kit</b></p> <ul style="list-style-type: none"> <li>› C6BEXPK</li> <li>› C6BEXPKS</li> </ul>   |  <p><b>1) Repair Sleeve</b></p> <ul style="list-style-type: none"> <li>› C3904166</li> </ul> <p><b>2) Injector</b></p> <ul style="list-style-type: none"> <li>› C3929490</li> </ul> <p><b>3) Belt Tensioner</b></p> <ul style="list-style-type: none"> <li>› C3914086</li> </ul> |

(1): Can be Used on both Intake and Exhaust.

(2): Diaphragm Style.

(3): For Storm blocks use C3940059.

(4): Do not use on Marine Engines.

(5): For use on engines prior to April, 2003.


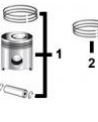



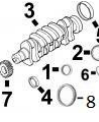
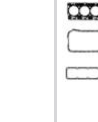








(6): For use on engines from April, 2003, (Top Hat Style).

(7): Applications with internally cast oil suction tube in Aluminum oil pan, must use 3938161 oil pan gasket.

(8): C3901569 Machine Split Rod. C4943979 Fracture Split Rod.

(9): Check for proper application.

(10): On Fracture Split Con Rods use: 6 of C3901170 (or O/S) and 6 of C4893693 (or O/S).

|  |  |  |   |  |  |
|--|--|--|---|--|--|
| <p><b>Engine Series:</b><br/>B</p> <p><b>Engine Model:</b><br/>6BTA 5.9</p> <p><b>Engine Data:</b><br/>TURBOCHARGED<br/>AFTERCOOLED<br/>EMISSION</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>359 Cubic Inch<br/>Bore: 4.02 in /<br/>102 mm Stroke:<br/>4.72 in / 119<br/>mm</p> <p><b>Piston (M):</b><br/>7619</p>   |  <p><b>1) Engine O/H Kit</b><br/> <ul style="list-style-type: none"> <li>• COK2251/6 Std</li> <li>• COK2252/6 0.50 mm</li> <li>• COK2253/6 1.00 mm</li> </ul> <b>2) O/H Kit Fractured Rod</b><br/> <ul style="list-style-type: none"> <li>• COK2251F/6 Std</li> <li>• COK2252F/6 0.50</li> <li>• COK2253F/6 1.00</li> </ul> <b>3) Engine I/F Kit</b><br/> <ul style="list-style-type: none"> <li>• CIK2251/6 Std</li> <li>• CIK2252/6 0.50 mm</li> <li>• CIK2253/6 1.00 mm</li> </ul> </p> |  <p><b>1) Piston &amp; Ring Kit</b><br/> <ul style="list-style-type: none"> <li>• C3802251 Std</li> <li>• C3802252 0.50 mm</li> <li>• C3802253 1.00 mm</li> </ul> <b>Use 6</b></p>   |  <p><b>Main Bearing Set</b><br/> <ul style="list-style-type: none"> <li>• C3802070 Std</li> <li>• C3802071 0.25 mm</li> <li>• C3802072 0.50 mm</li> <li>• C3802073 0.75 mm</li> </ul> <b>Use 1</b></p>  |  <p><b>Con Rod Bearing</b><br/> <ul style="list-style-type: none"> <li>• C3901170 Std</li> <li>• C3901171 0.25 mm</li> <li>• C3901172 0.50 mm</li> <li>• C3901173 0.75 mm</li> </ul> <b>Rod bearings are priced and sold per shell</b></p> |  <p><b>Fractured Con Rod Bearing</b><br/> <ul style="list-style-type: none"> <li>• C4893693 Std</li> <li>• C4892795 0.25 mm</li> <li>• C4892796 0.50 mm</li> <li>• C4892797 0.75 mm</li> </ul> <b>Rod bearings are priced and sold per shell</b></p> |
| <p><b>Piston Kit:</b><br/>                 1) 1 <a href="#">C3917619</a> Piston Std, 1 <a href="#">C3802230</a> Ring Set Std, 1 <a href="#">C3934047</a> Piston Pin, 2 <a href="#">C3901706</a> Ret.<br/>                 2) 1 <a href="#">C3919047</a> Piston 0.50 mm, 1 <a href="#">C3802232</a> Ring Set 0.50 mm, 1 <a href="#">C3934047</a> Piston Pin, 2 <a href="#">C3901706</a> Ret.<br/>                 3) 1 <a href="#">C3919048</a> Piston 1.00 mm, 1 <a href="#">C3802234</a> Ring Set 1.00 mm, 1 <a href="#">C3934047</a> Piston Pin, 2 <a href="#">C3901706</a> Ret.</p> |  |  |   |  |  |
| <p><b>Cummins CPLs</b><br/>987<br/>1261<br/>1422<br/>1527</p> <p><b>Skidder</b><br/>F66DS - Ranger<br/>F66G - Ranger<br/>F67 - Ranger<br/>F67G - Ranger<br/>G67G - Ranger<br/>F667 - Ranger</p> <p><b>YTO</b><br/>LRS2030 -<br/>Pneumatic<br/>Roller</p>   |  <p><b>1) Front Seal</b><br/>• C3904353</p> <p><b>2) Rear Seal</b><br/>• C3353978</p> <p><b>3) Crankshaft</b><br/>• C3907804</p> <p><b>4) Front Seal Sleeve</b><br/>• C3906080</p> <p><b>5) Rear Seal Sleeve</b><br/>• C3906081</p> <p><b>6) Rectangular Seal</b><br/>• C3912473</p> <p><b>7) Crankshaft, Gear</b><br/>• C3901258</p> <p><b>8) Ring Gear</b><br/>• C3903309 (173T)<br/>• C3905427 (127T)<br/>• C3901774 (159T)<br/>• C3902127 (138T)</p>                                  |  <p><b>1) Top Gasket Set</b><br/>• C3802363</p> <p><b>2) Bottom Gsk Set</b><br/>• C3802376</p> <p><b>3) Head Gasket</b><br/>• C3921394</p> <p><b>4) Oil Pan Gasket</b><br/>• C3931346</p> <p><b>5) Valve Cover Gsk</b><br/>• C3902666</p> <p><b>6) Gear Housing Gsk</b><br/>• C3916131</p> <p><b>7) Rear Cover Gsk</b><br/>• C3928493</p> <p><b>8) Gear Cover Gasket</b><br/>• C3918673</p> |  <p><b>1) Bushing, Piston</b><br/>• C4891178 x6</p> <p><b>2) Bushing, Cam</b><br/>• C3901306 x1</p> <p><b>3) Bolt, Con Rod</b><br/>• C3900919 x12</p> <p><b>4) Con Rod</b><br/>• C3901569<br/>• C4943979</p> <p><b>5) Bolt, Ex Manifold</b><br/>• C3944593</p> |  <p><b>1) Camshaft</b><br/>• C3914639</p> <p><b>2) Tappet</b><br/>• C3925031</p> <p><b>3) Push Rod</b><br/>• C3904679</p> <p><b>4) Rocker Arms</b><br/>• C3910811 x6<br/>• C3910810 x6</p> <p><b>5) Camshaft Gear</b><br/>• C3907431</p>  |  <p><b>1) Spring, Valve</b><br/>• C3900276 x12</p> <p><b>2) Seal, Valve</b><br/>• C3921640 x12<br/>• C3957912 x12</p> <p><b>3) Retainer, Valve</b><br/>• C3900299 x12</p>   |
| <p><b>Guide, Valve</b><br/>                 • C3904408 Thick 60.50 mm IN<br/>                 • C3904409 Thick 51.75 mm EX<br/>                 • C3906206 Thin Wall</p>   |  |  |   |  |  |
| <p><b>1) Intake, Valve Kit</b><br/>                 • C3802355 Kit<br/> <b>Consists of:</b><br/>                 • C3901117 x1 Valve<br/>                 • C3900250 x2 Collet<br/> <b>2) Insert, Valve</b><br/>                 • C3906854<br/> <b>Use 6</b></p>  |  |  |   |  |  |
| <p><b>1) Exhaust, Valve Kit</b><br/>                 • C3802356 Kit<br/> <b>Consists of:</b><br/>                 • C3901607 x1 Valve<br/>                 • C3900250 x2 Collet<br/> <b>2) Insert, Valve</b><br/>                 • C3904105<br/> <b>Use 6</b></p>   |  |  |   |  |  |
| <p><b>1) Spring, Valve</b><br/>                 • C3900276 x12</p> <p><b>2) Seal, Valve</b><br/>                 • C3921640 x12<br/>                 • C3957912 x12</p> <p><b>3) Retainer, Valve</b><br/>                 • C3900299 x12</p>   |  |  |   |  |  |
|  <p><b>1) Water Pump</b><br/>• C3286277</p> <p><b>2) Water Pump Seal</b><br/>• C3906698</p> <p><b>3) Thermostat</b><br/>• C3802273</p>   | <p><b>Pump, Oil</b><br/>• C3926203</p>   |  <p><b>1) Lift Pump</b><br/>• C3918000</p> <p><b>2) Lift Pump</b><br/>• C3904374</p>  |  <p><b>1) Cylinder Head</b><br/>• C3913381</p> <p><b>2) Head Bolt Kit</b><br/>• C6B-HBK</p> <p><b>3) Block Exp Plug Kit</b><br/>• C6BEXPK<br/>• C6BEXPKS</p>   |  <p><b>1) Repair Sleeve</b><br/>• C3904166</p> <p><b>2) Belt Tensioner</b><br/>• C3914086</p>   |   |

(1): Can be Used on both Intake and Exhaust.

(3): For Storm blocks use C3940059.

(5): For use on engines prior to April, 2003.

(7): Applications with internally cast oil suction tube in Aluminum oil pan, must use 3938161 oil pan gasket.

(9): Check for proper application.

(2): Diaphragm Style.

(4): Do not use on Marine Engines.

(6): For use on engines from April, 2003, (Top Hat Style).

(8): C3901569 Machine Split Rod. C4943979 Fracture Split Rod.

(10): On Fracture Split Con Rods use: 6 of <a href="http://sales.maxiforce.com/maxi/Services/winImages.aspx?type=p&id=C3901170">C3901170</a> (or O/S) and 6 of <a href="http://sales.maxiforce.com/maxi/Services/winImages.aspx?type=p&id=C4893693">C4893693</a> (or O/S).

**CUMMINS 6BTA 5.9 PISTON (M): 9041**

**Engine Series:**  
B

**Engine Model:**  
6BTA 5.9

**Engine Data:**  
TURBOCHARGED  
EMISSION

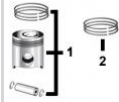
**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
359 Cubic Inch  
Bore: 4.02 in /  
102 mm Stroke:  
4.72 in / 119  
mm

**Piston (M):**  
9041



- 1) **Engine O/H Kit**
  - › COK2248/6 Std
  - › COK2249/6 0.50 mm
  - › COK2250/6 1.00 mm
- 2) **O/H Kit Fractured Rod**
  - › COK2248F/6 Std 10
  - › COK2249F/6 0.50
  - › COK2250F/6 1.00
- 3) **Engine I/F Kit**
  - › CIK2248/6 Std
  - › CIK2249/6 0.50 mm
  - › CIK2050/6 1.00 mm



- 1) **Piston & Ring Kit**
    - › C3802248 Std
    - › C3802249 0.50 mm
    - › C3802250 1.00 mm
- Use 6**



- 1) **Main Bearing Set**
    - › C3802070 Std
    - › C3802071 0.25 mm
    - › C3802072 0.50 mm
    - › C3802073 0.75 mm
- Use 1**



- 1) **Con Rod Bearing**
    - › C3901170 Std
    - › C3901171 0.25 mm
    - › C3901172 0.50 mm
    - › C3901173 0.75 mm
- Rod bearings are priced and sold per shell**



- 1) **Fractured Con Rod Bearing**
    - › C4893693 Std 10
    - › C4892795 0.25 mm
    - › C4892796 0.50 mm
    - › C4892797 0.75 mm
- Rod bearings are priced and sold per shell**

**Piston Kit:**

- 1) 1 [C3919041](#) Piston Std, 1 [C3802230](#) Ring Set Std, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.
- 2) 1 [C3919044](#) Piston 0.50 mm, 1 [C3802232](#) Ring Set 0.50 mm, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.
- 3) 1 [C3919045](#) Piston 1.00 mm, 1 [C3802234](#) Ring Set 1.00 mm, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.

**Cummins CPL's**

1351  
1579

**LiuGong**

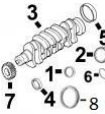
614H -  
Vibratory  
Compactor

**YTO**

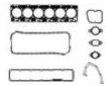
LRS2030 -  
Pneumatic  
Roller

**Skidder**

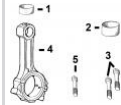
F66DS - Ranger  
F66G - Ranger  
F67 - Ranger  
F67G - Ranger  
G67G - Ranger  
F667 - Ranger



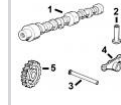
- 1) **Front Seal**
  - › C3904353
- 2) **Rear Seal**
  - › C3353978
- 3) **Crankshaft**
  - › C3907804
- 4) **Front Seal Sleeve**
  - › C3906080
- 5) **Rear Seal Sleeve**
  - › C3906081
- 6) **Rectangular Seal**
  - › C3912473
- 7) **Crankshaft, Gear**
  - › C3901258
- 8) **Ring Gear**
  - › C3903309 (173T)
  - › C3905427 (127T)
  - › C3901774 (159T)
  - › C3902127 (138T)



- 1) **Top Gasket Set**
  - › C3802363
- 2) **Bottom Gsk Set**
  - › C3802376
- 3) **Head Gasket**
  - › C3921394
- 4) **Oil Pan Gasket**
  - › C3931346
- 5) **Valve Cover Gsk**
  - › C3902666
- 6) **Gear Housing Gsk**
  - › C3916131
- 7) **Rear Cover Gsk**
  - › C3928493
- 8) **Gear Cover Gasket**
  - › C3918673



- 1) **Bushing, Piston**
  - › C4891178 x6
- 2) **Bushing, Cam**
  - › C3901306 x1
- 3) **Bolt, Con Rod**
  - › C3900919 x12
- 4) **Con Rod**
  - › C3901569
  - › C4943979
- 5) **Bolt, Ex Manifold**
  - › C3944593



- 1) **Camshaft**
  - › C3914639
- 2) **Tappet**
  - › C3925031
- 3) **Push Rod**
  - › C3904679
- 4) **Rocker Arms**
  - › C3910811 x6
  - › C3910810 x6
- 5) **Camshaft Gear**
  - › C3907431

**Guide, Valve**

- › C3904408 Thick 60.50 mm IN
- › C3904409 Thick 51.75 mm EX
- › C3906206 Thin Wall

**1) Intake, Valve Kit**

- › C3802355 Kit
- Consists of:**
- › C3901117 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3906854
- Use 6**

**1) Exhaust, Valve Kit**

- › C3802356 Kit
- Consists of:**
- › C3901607 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3904105
- Use 6**

**1) Spring, Valve**

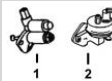
- › C3900276 x12
- 2) Seal, Valve**
- › C3921640 x12
  - › C3957912 x12
- 3) Retainer, Valve**
- › C3900299 x12



- 1) **Water Pump**
  - › C3286277
- 2) **Water Pump Seal**
  - › C3906698
- 3) **Thermostat**
  - › C3802273

**Pump, Oil**

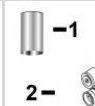
- › C3926203



- 1) **Lift Pump**
  - › C3918000
- 2) **Lift Pump**
  - › C3904374



- 1) **Cylinder Head**
  - › C3913381
- 2) **Head Bolt Kit**
  - › C6B-HBK
- 3) **Block Exp Plug Kit**
  - › C6BEXPK
  - › C6BEXPKS



- 1) **Repair Sleeve**
  - › C3904166
- 2) **Belt Tensioner**
  - › C3914086

(1): Can be Used on both Intake and Exhaust.

(3): For Storm blocks use C3940059.

(5): For use on engines prior to April, 2003.

(7): Applications with internally cast oil suction tube in Aluminum oil pan, must use 3938161 oil pan gasket.

(9): Check for proper application.

(2): Diaphragm Style.

(4): Do not use on Marine Engines.

(6): For use on engines from April, 2003, (Top Hat Style).

(8): C3901569 Machine Split Rod. C4943979 Fracture Split Rod.

(10): On Fracture Split Con Rods use: 6 of C3901170 (or O/S) and 6 of C4893693 (or O/S).

**Engine Series:**  
B

**Engine Model:**  
6BTA 5.9

**Engine Data:**  
TURBOCHARGED  
AFTERCOOLED  
EMISSION

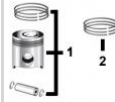
**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
359 Cubic Inch  
Bore: 4.02 in /  
102 mm Stroke:  
4.72 in / 119  
mm

**Piston (M):**  
8673



- 1) **Engine O/H Kit**
  - › COK2747/6 Std
  - › COK2764/6 0.50 mm
  - › COK2765/6 1.00 mm
- 2) **O/H Kit Fractured Rod**
  - › COK2747F/6 Std 10
  - › COK2764F/6 0.50
  - › COK2765F/6 1.00
- 3) **Engine I/F Kit**
  - › CIK2747/6 Std
  - › CIK2764/6 0.50 mm
  - › CIK2765/6 1.00 mm



- 1) **Piston & Ring Kit**
    - › C3802747 Std
    - › C3802764 0.50 mm
    - › C3802765 1.00 mm
- Use 6**



- 1) **Main Bearing Set**
    - › C3802070 Std
    - › C3802071 0.25 mm
    - › C3802072 0.50 mm
    - › C3802073 0.75 mm
- Use 1**



- 1) **Con Rod Bearing**
    - › C3901170 Std
    - › C3901171 0.25 mm
    - › C3901172 0.50 mm
    - › C3901173 0.75 mm
- Rod bearings are priced and sold per shell**



- 1) **Fractured Con Rod Bearing**
    - › C4893693 Std 10
    - › C4892795 0.25 mm
    - › C4892796 0.50 mm
    - › C4892797 0.75 mm
- Rod bearings are priced and sold per shell**

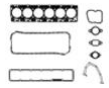
**Piston Kit:**

- 1) 1 [C3928673](#) Piston Std, 1 [C3802230](#) Ring Set Std, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.
- 2) 1 [C3928674](#) Piston 0.50 mm, 1 [C3802232](#) Ring Set 0.50 mm, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.
- 3) 1 [C3928675](#) Piston 1.00 mm, 1 [C3802234](#) Ring Set 1.00 mm, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.

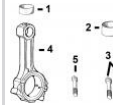
Please see page 506 for a complete list of equipment models.



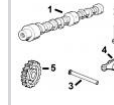
- 1) **Front Seal**
  - › C3904353
- 2) **Rear Seal**
  - › C3353978
- 3) **Crankshaft**
  - › C3907804
- 4) **Front Seal Sleeve**
  - › C3906080
- 5) **Rear Seal Sleeve**
  - › C3906081
- 6) **Rectangular Seal**
  - › C3912473
- 7) **Crankshaft, Gear**
  - › C3901258
- 8) **Ring Gear**
  - › C3903309 (173T)
  - › C3905427 (127T)
  - › C3901774 (159T)
  - › C3902127 (138T)



- 1) **Top Gasket Set**
  - › C3802363
- 2) **Bottom Gsk Set**
  - › C3802376
- 3) **Head Gasket**
  - › C3921394
- 4) **Oil Pan Gasket**
  - › C3931346
- 5) **Valve Cover Gsk**
  - › C3902666
- 6) **Gear Housing Gsk**
  - › C3916131
- 7) **Rear Cover Gsk**
  - › C3928493
- 8) **Gear Cover Gasket**
  - › C3918673



- 1) **Bushing, Piston**
  - › C4891178 x6
- 2) **Bushing, Cam**
  - › C3901306 x1
- 3) **Bolt, Con Rod**
  - › C3900919 x12
- 4) **Con Rod**
  - › C3901569
  - › C4943979
- 5) **Bolt, Ex Manifold**
  - › C3944593



- 1) **Camshaft**
  - › C3914639
- 2) **Tappet**
  - › C3925031
- 3) **Push Rod**
  - › C3904679
- 4) **Rocker Arms**
  - › C3910811 x6
  - › C3910810 x6
- 5) **Camshaft Gear**
  - › C3907431

**Guide, Valve**

- › C3904408 Thick 60.50 mm IN
- › C3904409 Thick 51.75 mm EX
- › C3906206 Thin Wall

**1) Intake, Valve Kit**

- › C3802355 Kit
- Consists of:**
- › C3901117 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3906854
- Use 6**

**1) Exhaust, Valve Kit**

- › C3802356 Kit
- Consists of:**
- › C3901607 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3904105
- Use 6**

**1) Spring, Valve**

- › C3900276 x12
- 2) Seal, Valve**
- › C3921640 x12
  - › C3957912 x12
- 3) Retainer, Valve**
- › C3900299 x12



- 1) **Water Pump**
  - › C3286277
- 2) **Water Pump Seal**
  - › C3906698
- 3) **Thermostat**
  - › C3802273

**Pump, Oil**

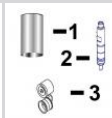
- › C3926203



- 1) **Lift Pump**
  - › C3918000
- 2) **Lift Pump**
  - › C3904374



- 1) **Cylinder Head**
  - › C3913381
- 2) **Head Bolt Kit**
  - › C6B-HBK
- 3) **Block Exp Plug Kit**
  - › C6BEXPK
  - › C6BEXPKS



- 1) **Repair Sleeve**
  - › C3904166
- 2) **Injector**
  - › C3929490
- 3) **Belt Tensioner**
  - › C3914086

(1): Can be Used on both Intake and Exhaust.

(3): For Storm blocks use C3940059.

(5): For use on engines prior to April, 2003.

(7): Applications with internally cast oil suction tube in Aluminum oil pan, must use 3938161 oil pan gasket.

(9): Check for proper application.

(2): Diaphragm Style.

(4): Do not use on Marine Engines.

(6): For use on engines from April, 2003, (Top Hat Style).

(8): C3901569 Machine Split Rod. C4943979 Fracture Split Rod.

(10): On Fracture Split Con Rods use: 4 of C3901170 (or O/S) and 4 of C4893693 (or O/S).

**Engine Series:**  
B

**Engine Model:**  
6BTA 5.9

**Engine Data:**  
TURBOCHARGED  
AFTERCOOLED

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 4.02 in /  
102 mm Stroke:  
4.72 in / 119  
mm

**Piston (M):**  
0187

**Cummins CPLs**

1889  
2063  
2479  
8085  
8108  
8208

**LiuGong**

614H -  
Vibratory  
Compactor

**YTO**

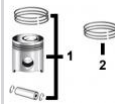
LRS2030 -  
Pneumatic  
Roller

**Skidder**

F66DS  
F66G  
F67  
F67G  
G67G  
F667



- 1) **Engine O/H Kit**
  - › COK2757/6 Std
  - › COK2758/6 0.50 mm
  - › COK2759/6 1.00 mm
- 2) **O/H Kit Fractured Rod**
  - › COK2757F/6 Std 10
  - › COK2758F/6 0.50
  - › COK2759F/6 1.00
- 3) **Engine I/F Kit**
  - › CIK2757/6 Std
  - › CIK2758/6 0.50 mm
  - › CIK2759/6 1.00 mm



- 1) **Piston & Ring Kit**
    - › C3802757 Std
    - › C3802758 0.50 mm
    - › C3802759 1.00 mm
- Use 6**



- Main Bearing Set**
    - › C3802070 Std
    - › C3802071 0.25 mm
    - › C3802072 0.50 mm
    - › C3802073 0.75 mm
- Use 1**



- Con Rod Bearing**
    - › C3901170 Std
    - › C3901171 0.25 mm
    - › C3901172 0.50 mm
    - › C3901173 0.75 mm
- Rod bearings are priced and sold per shell**



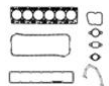
- Fractured Con Rod Bearing**
    - › C4893693 Std 10
    - › C4892795 0.25 mm
    - › C4892796 0.50 mm
    - › C4892797 0.75 mm
- Rod bearings are priced and sold per shell**

**Piston Kit:**

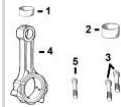
- 1) 1 C3930187 Piston Std, 1 C3802750 Ring Set Std, 1 C3934047 Piston Pin, 2 C3901706 Ret.
- 2) 1 C3930188 Piston 0.50 mm, 1 C3802863 Ring Set 0.50 mm, 1 C3934047 Piston Pin, 2 C3901706 Ret.
- 3) 1 C3930189 Piston 1.00 mm, 1 C3802864 Ring Set 1.00 mm, 1 C3934047 Piston Pin, 2 C3901706 Ret.



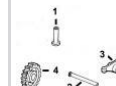
- 1) **Front Seal**
  - › C3904353
- 2) **Rear Seal**
  - › C3353978
- 3) **Crankshaft**
  - › C3907804
- 4) **Front Seal Sleeve**
  - › C3906080
- 5) **Rear Seal Sleeve**
  - › C3906081
- 6) **Rectangular Seal**
  - › C3912473
- 7) **Crankshaft, Gear**
  - › C3901258
- 8) **Ring Gear**
  - › C3903309 (173T)
  - › C3905427 (127T)
  - › C3901774 (159T)
  - › C3902127 (138T)



- 1) **Top Gasket Set**
  - › C3802363
- 2) **Bottom Gsk Set**
  - › C3802376
- 3) **Head Gasket**
  - › C3921394
- 4) **Oil Pan Gasket**
  - › C3931346
- 5) **Valve Cover Gsk**
  - › C3902666
- 6) **Gear Housing Gsk**
  - › C3916131
- 7) **Rear Cover Gsk**
  - › C3928493
- 8) **Gear Cover Gasket**
  - › C3918673



- 1) **Bushing, Piston**
  - › C4891178 x6
- 2) **Bushing, Cam**
  - › C3901306 x1
- 3) **Bolt, Con Rod**
  - › C3900919 x12
- 4) **Con Rod**
  - › C3901569
  - › C4943979
- 5) **Bolt, Ex Manifold**
  - › C3944593



- 1) **Tappet**
  - › C3925031
- 2) **Push Rod**
  - › C3904679
- 3) **Rocker Arms**
  - › C3910811 x6
  - › C3910810 x6
- 4) **Camshaft Gear**
  - › C3907431

**Guide, Valve**

- › C3904408 Thick 60.50 mm IN
- › C3904409 Thick 51.75 mm EX
- › C3906206 Thin Wall

**1) Intake, Valve Kit**

- › C3802355 Kit
- Consists of:**
- › C3901117 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3906854
- Use 6**

**1) Exhaust, Valve Kit**

- › C3802356 Kit
- Consists of:**
- › C3901607 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3904105
- Use 6**

**1) Spring, Valve**

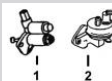
- › C3900276 x12
- 2) Seal, Valve**
- › C3921640 x12
  - › C3957912 x12
- 3) Retainer, Valve**
- › C3900299 x12



- 1) **Water Pump**
  - › C3286277
- 2) **Water Pump Seal**
  - › C3906698
- 3) **Thermostat**
  - › C3802273

**Pump, Oil**

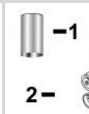
- › C3926203



- 1) **Lift Pump**
  - › C3918000
- 2) **Lift Pump**
  - › C3904374



- 1) **Cylinder Head**
  - › C3913381
- 2) **Lift Bolt Kit**
  - › C6B-HBK
- 3) **Block Exp Plug Kit**
  - › C6BEXPK
  - › C6BEXPKS



- 1) **Repair Sleeve**
  - › C3904166
- 2) **Belt Tensioner**
  - › C3914086

(1): Can be Used on both Intake and Exhaust.

(3): For Storm blocks use C3940059.

(5): For use on engines prior to April, 2003.

(7): Applications with internally cast oil suction tube in Aluminum oil pan, must use 3938161 oil pan gasket.

(9): Check for proper application.

(2): Diaphragm Style.

(4): Do not use on Marine Engines.

(6): For use on engines from April, 2003, (Top Hat Style).

(8): C3901569 Machine Split Rod. C4943979 Fracture Split Rod.

(10): On Fracture Split Con Rods use: 6 of C3901170 (or O/S) and 6 of C4893693 (or O/S).

**Engine Series:**  
ISB

**Engine Model:**  
6BTA 5.9 ISB

**Engine Data:**  
24 VALVE  
359 Cubic Inch

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 4.02 in /  
102.108 mm  
Stroke: 4.72 in /  
119.888 mm

**Piston (M):**  
6153

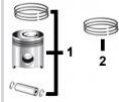
Please see page 507 for a complete list of equipment models.



- 1) **Engine O/H Kit**
- › COK0781/6 Std
  - › COK0784/6 0.50 mm
  - › COK0785/6 1.00 mm

- 2) **O/H Kit Fractured Rod**
- › COK0781F/6 Std
  - › COK0784F/6 0.50
  - › COK0785F/6 1.00

- 3) **Engine I/F Kit**
- › CIK0781/6 Std
  - › CIK0784/6 0.50 mm
  - › CIK0785/6 1.00 mm



- 1) **Piston & Ring Kit**
- › C3800781 Std
  - › C3800784 0.50 mm
  - › C3800785 1.00 mm
- Use 6**



- Main Bearing Set**
- › C3802070 Std
  - › C3802071 0.25 mm
  - › C3802072 0.50 mm
  - › C3802073 0.75 mm
- Use 1**



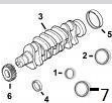
- Con Rod Bearing**
- › C3901170 Std
  - › C3901171 0.25 mm
  - › C3901172 0.50 mm
  - › C3901173 0.75 mm
- Rod bearings are priced and sold per shell**



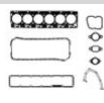
- Fractured Con Rod Bearing**
- › C4893693 Std
  - › C4892795 0.25 mm
  - › C4892796 0.50 mm
  - › C4892797 0.75 mm
- Rod bearings are priced and sold per shell**

**Piston Kit:**

- 1) 1 [C3946153](#) Piston Std, 1 [C3804990](#) Ring Set Std, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.  
 2) 1 [C3946156](#) Piston 0.50 mm, 1 [C3806201](#) Ring Set 0.50 mm, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.  
 3) 1 [C3946157](#) Piston 1.00 mm, 1 [C3806203](#) Ring Set 1.00 mm, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.



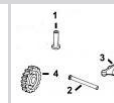
- 1) **Front Seal**
- › C3904353
- 2) **Rear Seal**
- › C3353978
- 3) **Crankshaft**
- › C3944243
- 4) **Front Seal Sleeve**
- › C3906080
- 5) **Rear Seal Sleeve**
- › C3926126
- 6) **Crankshaft, Gear**
- › C3929027
- 7) **Ring Gear**
- › C3903309 (173T)
  - › C3905427 (127T)
  - › C3901774 (159T)
  - › C3902127 (138T)



- 1) **Top Gasket Set**
- › C4090035
- 2) **Bottom Gsk Set**
- › C3800487
- 3) **Head Gasket**
- › C3977063
- 4) **Oil Pan Gasket**
- › C3931346
- 5) **Valve Cover Gsk**
- › C3935878
- 6) **Gear Housing Gsk**
- › C3940182
- 7) **Gear Cover Gasket**
- › C3918673



- 1) **Bushing, Piston**
- › C4891178 x6
- 2) **Bushing, Cam**
- › C3940059 x1
- 3) **Bolt, Con Rod**
- › C3900919 x12
- 4) **Con Rod**
- › C3901569
  - › C4943979



- 1) **Tappet**
- › C3942565
- 2) **Push Rod**
- › C3941253
- 3) **Rocker Arms**
- › C3941927 x6
  - › C3941928 x6
- 4) **Camshaft Gear**
- › C3942755

- 1) **Intake, Valve Kit**
- › C3802924 Kit
- Consists of:**
- › C3940735 x1 Valve
  - › C3940123 x2 Collet
- 2) **Insert, Valve**
- › C3927068
  - › Use 12

- 1) **Exhaust, Valve Kit**
- › C3802967 Kit
- Consists of:**
- › C3940734 x1 Valve
  - › C3940123 x2 Collet
- 2) **Insert, Valve**
- › C3940139
  - › Use 12

- 1) **Spring, Valve**
- › C3943161 x24
- 2) **Seal, Valve**
- › C3942989 x12
  - › C3945438 x12
- 3) **Retainer, Valve**
- › C3943198 x24



- 1) **Water Pump**
- › C3286278
- 2) **Water Pump Seal**
- › C3906698
- 3) **Thermostat**
- › C3967195

- Pump, Oil**
- › C4939587
  - › C3926203



- 1) **Lift Pump**
- › C3945812



- 1) **Head Bolts**
- › C3927063 x26
- 2) **Block Exp Plug Kit**
- › C6BEXPKS



- 1) **Repair Sleeve**
- › C3904166
- 2) **Belt Tensioner**
- › C3914086

(1): Include Crankshaft Gear C3929027.

(3): With Helical Gears.

(5): Machine split connecting rod.

(7): Check for proper application.

(2): With Hardened Pulley.

(4): Applications with internally cast oil suction tube in Aluminum oil pan, mus use 3938161 oil pan gasket.

(6): Fracture split connecting rod.

(8): On Fracture Split Con Rods use: 6 of C3901170 (or O/S) and 6 of C4893693 (or O/S).

**Engine Series:**  
ISB

**Engine Model:**  
6BTA 5.9 ISB

**Engine Data:**  
24 VALVE  
359 Cubic Inch

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 4.02 in / 102.108 mm  
Stroke: 4.72 in / 119.888 mm

**Piston (M):**  
6050

**Cummins CPLs**

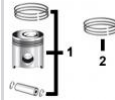
- 2415
- 2495
- 2906
- 2907
- 8034
- 8035



- 1) **Engine O/H Kit**
- › COK0838/6 Std
  - › COK0841/6 0.50 mm
  - › COK0842/6 1.00 mm

- 2) **O/H Kit Fractured Rod**
- › COK0838F/6 Std
  - › COK0841F/6 0.50
  - › COK0842F/6 1.00

- 3) **Engine I/F Kit**
- › CIK0838/6 Std
  - › CIK0841/6 0.50 mm
  - › CIK0842/6 1.00 mm



- 1) **Piston & Ring Kit**
- › C3800838 Std
  - › C3800841 0.50 mm
  - › C3800842 1.00 mm
- Use 6**



- Main Bearing Set**
- › C3802070 Std
  - › C3802071 0.25 mm
  - › C3802072 0.50 mm
  - › C3802073 0.75 mm
- Use 1**



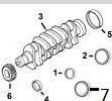
- Con Rod Bearing**
- › C3901170 Std
  - › C3901171 0.25 mm
  - › C3901172 0.50 mm
  - › C3901173 0.75 mm
- Rod bearings are priced and sold per shell**



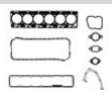
- Fractured Con Rod Bearing**
- › C4893693 Std
  - › C4892795 0.25 mm
  - › C4892796 0.50 mm
  - › C4892797 0.75 mm
- Rod bearings are priced and sold per shell**

**Piston Kit:**

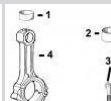
- 1) 1 [C3946050](#) Piston Std, 1 [C3804990](#) Ring Set Std, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.
- 2) 1 [C3946053](#) Piston 0.50 mm, 1 [C3806201](#) Ring Set 0.50 mm, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.
- 3) 1 [C3946054](#) Piston 1.00 mm, 1 [C3806203](#) Ring Set 1.00 mm, 1 [C3934047](#) Piston Pin, 2 [C3901706](#) Ret.



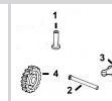
- 1) **Front Seal**
- › C3904353
- 2) **Rear Seal**
- › C3353978
- 3) **Crankshaft**
- › C3944243
- 4) **Front Seal Sleeve**
- › C3906080
- 5) **Rear Seal Sleeve**
- › C3926126
- 6) **Crankshaft, Gear**
- › C3929027
- 7) **Ring Gear**
- › C3903309 (173T)
  - › C3905427 (127T)
  - › C3901774 (159T)
  - › C3902127 (138T)



- 1) **Top Gasket Set**
- › C4090035
- 2) **Bottom Gsk Set**
- › C3800487
- 3) **Head Gasket**
- › C3977063
- 4) **Oil Pan Gasket**
- › C3931346
- 5) **Valve Cover Gsk**
- › C3935878
- 6) **Gear Housing Gsk**
- › C3940182
- 7) **Gear Cover Gasket**
- › C3918673



- 1) **Bushing, Piston**
- › C4891178 x6
- 2) **Bushing, Cam**
- › C3940059 x1
- 3) **Bolt, Con Rod**
- › C3900919 x12
- 4) **Con Rod**
- › C3901569
  - › C4943979



- 1) **Tappet**
- › C3942565
- 2) **Push Rod**
- › C3941253
- 3) **Rocker Arms**
- › C3941927 x6
  - › C3941928 x6
- 4) **Camshaft Gear**
- › C3942755

- 1) **Intake, Valve Kit**
- › C3802924 Kit
- Consists of:**
- › C3940735 x1 Valve
  - › C3940123 x2 Collet
- 2) **Insert, Valve**
- › C3927068
- Use 12**

- 1) **Exhaust, Valve Kit**
- › C3802967 Kit
- Consists of:**
- › C3940734 x1 Valve
  - › C3940123 x2 Collet
- 2) **Insert, Valve**
- › C3940139
- Use 12**

- 1) **Spring, Valve**
- C3943161**
- 2) **Seal, Valve**
- › C3942989 x12
  - › C3945438 x12
- 3) **Retainer, Valve**
- › C3943198 x24

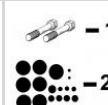


- 1) **Water Pump**
- › C3286278
- 2) **Water Pump Seal**
- › C3906698
- 3) **Thermostat**
- › C3967195

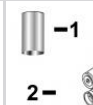
- Pump, Oil**
- › C4939587
  - › C3926203



- 1) **Lift Pump**
- › C3945812



- 1) **Head Bolts**
- › C3927063 x26
- 2) **Block Exp Plug Kit**
- › C6BEXPKS



- 1) **Repair Sleeve**
- › C3904166
- 2) **Belt Tensioner**
- › C3914086

(1): Include Crankshaft Gear C3929027.

(3): With Helical Gears.

(5): Machine split connecting rod.

(7): Check for proper application.

(2): With Hardened Pulley.

(4): Applications with internally cast oil suction tube in Aluminum oil pan, mus use 3938161 oil pan gasket.

(6): Fracture split connecting rod.

(8): On Fracture Split Con Rods use: 6 of C3901170 (or O/S) and 6 of C4893693 (or O/S).

CUMMINS 4BT 3.9 QSB PISTON (M): 7416

**Engine Series:**  
QSB

**Engine Model:**  
4BT 3.9 QSB

**Engine Data:**  
8 VALVE  
TURBOCHARGED

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.02 in /  
102.108 mm  
Stroke: 4.72 in /  
119.888 mm

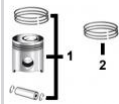
**Piston (M):**  
7416

**Cummins CPL's**

8039  
8239  
8240  
8334  
8335  
8507  
43850  
44247  
8238



- 1) **Engine O/H Kit**
  - › COK9461/4 Std
  - › COK9618/4 0.50 mm
  - › COK9619/4 1.00 mm
- 2) **O/H Kit Fractured Rod**
  - › COK9461F/4 Std
  - › COK9618F/4 0.50
  - › COK9619F/4 1.00
- 3) **Engine I/F Kit**
  - › CIK9461/4 Std
  - › CIK9618/4 0.50 mm
  - › CIK9619/4 1.00 mm



- 1) **Piston & Ring Kit**
    - › C4089461 Std
    - › C4089618 0.50 mm
    - › C4089619 1.00 mm
- Use 4**



- Main Bearing Set**
    - › C3802010 Std
    - › C3802011 0.25 mm
    - › C3802012 0.50 mm
    - › C3802013 0.75 mm
- Use 1**



- Con Rod Bearing**
    - › C3901170 Std
    - › C3901171 0.25 mm
    - › C3901172 0.50 mm
    - › C3901173 0.75 mm
- Rod bearings are priced and sold per shell**



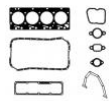
- Fractured Con Rod Bearing**
    - › C4893693 Std
    - › C4892795 0.25 mm
    - › C4892796 0.50 mm
    - › C4892797 0.75 mm
- Rod bearings are priced and sold per shell**

**Piston Kit:**

- 1) 1 [C3957416](#) Piston Std, 1 [C4089460](#) Ring Set Std, 1 [C3934047](#) Piston Pin, 2 [C3920691](#) Ret.
- 2) 1 [C3957417](#) Piston 0.50 mm, 1 [C4089614](#) Ring Set 0.50 mm, 1 [C3934047](#) Piston Pin, 2 [C3920691](#) Ret.
- 3) 1 [C3957418](#) Piston 1.00 mm, 1 [C4089615](#) Ring Set 1.00 mm, 1 [C3934047](#) Piston Pin, 2 [C3920691](#) Ret.



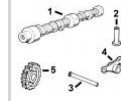
- 1) **Front Seal**
  - › C3904353
- 2) **Rear Seal**
  - › C3353978
- 3) **Crankshaft**
  - › C3907803
- 4) **Front Seal Sleeve**
  - › C3906080
- 5) **Rear Seal Sleeve**
  - › C3906081
- 6) **Rectangular Seal**
  - › C3912473
- 7) **Crankshaft, Gear**
  - › C3901258
- 8) **Ring Gear**
  - › C3903309 (173T)
  - › C3905427 (127T)
  - › C3901774 (159T)
  - › C3902127 (138T)



- 1) **Top Gasket Set**
  - › C4089648
- 2) **Bottom Gsk Set**
  - › C3802375
- 3) **Head Gasket**
  - › C3921393
- 4) **Oil Pan Gasket**
  - › C3931602
- 5) **Valve Cover Gsk**
  - › C3902666
- 6) **Gear Housing Gsk**
  - › C3916131
- 7) **Rear Cover Gsk**
  - › C3928493
- 8) **Gear Cover Gasket**
  - › C3918673



- 1) **Bushing, Piston**
  - › C4891178 x4
- 2) **Bushing, Cam**
  - › C3940059 x1
- 3) **Bolt, Con Rod**
  - › C4891179 x8
- 4) **Con Rod**
  - › C3901569
  - › C4943979
- 5) **Bolt, Ex Manifold**
  - › C3944593 x8



- 1) **Camshaft**
  - › C3925582
- 2) **Tappet**
  - › C3925031
- 3) **Push Rod**
  - › C3904679
- 4) **Rocker Arms**
  - › C3910811 x4
  - › C3910810 x4
- 5) **Camshaft Gear**
  - › C3907431

**Guide, Valve**

- › C3904408 Thick W. 60.50 mm IN
- › C3904409 Thick W. 51.75 mm EX
- › C3906206 Thin Wall

**1) Intake, Valve Kit**

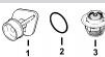
- › C3802355 Kit
- Consists of:**
- › C3901117 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3906854
- Use 4**

**1) Exhaust, Valve Kit**

- › C3802356 Kit
- Consists of:**
- › C3901607 x1 Valve
  - › C3900250 x2 Collet
- 2) Insert, Valve**
- › C3904105
- Use 4**

**1) Spring, Valve**

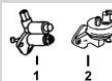
- › C3932453 x8
- 2) Seal, Valve**
- › C3921640 x8
  - › C3957912 x8
- 3) Retainer, Valve**
- › C3900299 x8



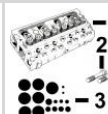
- 1) **Water Pump**
  - › C3286278
- 2) **Water Pump Seal**
  - › C3906698
- 3) **Thermostat**
  - › C3802273

**Pump, Oil**

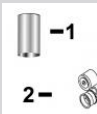
- › C3926203



- 1) **Lift Pump**
  - › C3918000
- 2) **Lift Pump**
  - › C3904374



- 1) **Cylinder Head**
  - › C3966448
- 2) **Head Bolt Kit**
  - › C4B-HBK



- 1) **Repair Sleeve**
  - › C3904166
- 2) **Belt Tensioner**
  - › C3914086

(1): On Fracture Split Con Rods use: C3901170 x4 (or O/S) and C4893693 x4 (or O/S).

(3): Diaphragm Style.

(5): For use on engines from April 2003, (Top Hat Style Valve Stem Seal).

(7): Fracture split connecting rod.

(9): Check for proper application.

(2): Can be Used on Both Intake and Exhaust.

(4): For use on engines from April 2003, (Top Hat Style Valve Stem Seal).

(6): Machine split connecting rod.

(8): Use ESN or application model to confirm correct Camshaft & Gear.



**Engine Series:**  
QSB

**Engine Model:**  
4BT 4.5 QSB

**Engine Data:**  
16 VALVE

**Engine Info:**  
4 Cyl

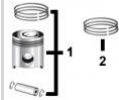
**Engine Dimensions:**  
CM850 Bore:  
4.21 in / 107 mm  
Stroke:  
4.88 in / 124 mm



- 1) **Engine O/H Kit**
- COK5160/4 Std
  - COK5481/4 0.50 mm
- 2) **O/H Kit Fractured Rod**
- COK5160F/4 Std
  - COK5481F/4 0.50

3

- 3) **Engine I/F Kit**
- CIK5160/4 Std
  - CIK5481/4 0.50 mm



- 1) **Piston & Ring Kit**
- C4955160 Std
  - C4955481 0.50 mm
- Use 4**



- Main Bearing Set**
- C3802010 Std
  - C3802011 0.25 mm
  - C3802012 0.50 mm
  - C3802013 0.75 mm
- Use 1**



- Con Rod Bearing**
- C3901170 Std
  - C3901171 0.25 mm
  - C3901172 0.50 mm
  - C3901173 0.75 mm

**Rod bearings are priced and sold per shell**



- Fractured Con Rod Bearing**
- C4893693 Std
  - C4892795 0.25 mm
  - C4892796 0.50 mm
  - C4892797 0.75 mm

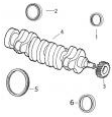
3

**Rod bearings are priced and sold per shell**

**Piston Kit:**

- 1) 1 C4934860 Piston Std, 1 C4955251 Ring Set Std, 1 C4931041 Piston Pin, 2 C3920691 Ret.  
2) 1 C4934816 Piston 0.50 mm, 1 C4955480 Ring Set 0.50 mm, 1 C4931041 Piston Pin, 2 C3920691 Ret.

Please see page 508 for a complete list of equipment models.



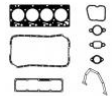
- 1) **Front Seal**
- C4890832
- 2) **Rear Seal**
- C4955372
- 3) **Crankshaft, Gear**
- C3955151
- 4) **Crankshaft**
- C3974539
- 5) **Ring Gear**
- C3903309 (173T)
  - C3905427 (127T)
  - C3901774 (159T)
  - C3902127 (138T)

1

1

1

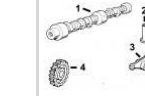
1



- 1) **Top Gasket Set**
- C4955356
- 2) **Bottom Gsk Set**
- C4955357
- 3) **Head Gasket**
- C4932209
- 4) **Oil Pan Gasket**
- C4939246
- 5) **Valve Cover Gsk**
- C4899228



- 1) **Bushing, Piston**
- C4891178 x4
- 2) **Bushing, Cam**
- C3940059 x1
- 3) **Bolt, Con Rod**
- C4891179 x8
- 4) **Con Rod**
- C4943979
- 5) **Bolt, Ex Manifold**
- C3944593



- 1) **Camshaft**
- C3977547
- 2) **Tappet**
- C3947759
- 3) **Rocker Arms**
- C3942734 x4
  - C3942735 x4
- 4) **Camshaft Gear**
- C3955152

2

- 1) **Intake, Valve Kit**
- C3802924 Kit
- Consists of:**
- C3940735 x1 Valve
  - C3940123 x2 Collet
- 2) **Insert, Valve**
- C3943449
- Use 8**



- 1) **Exhaust, Valve Kit**
- C3802967 Kit
- Consists of:**
- C3940734 x1 Valve
  - C3940123 x2 Collet
- 2) **Insert, Valve**
- C3943450
- Use 8**



- 1) **Spring, Valve**
- C4936080 x16
- 2) **Seal, Valve**
- C3955393 x16
- 3) **Retainer, Valve**
- C3943198 x16

- 1) **Water Pump**
- C3800984
- 2) **Water Pump Seal**
- C3906698
- 3) **Thermostat**
- C5292708

- 1) **Oil Pump**
- C4939586
- 2) **Fuel Injector**
- C3976372



- 1) **Cylinder Head**
- C4941496
- 2) **Head Bolt**
- C3927063 x18
- 3) **Expansion Plug Kit**
- C3914086

1

(1): Check application for proper usage.

(2): C3944593 is a flanged head cap screw. If a studded flange cap screw is needed, please order 3944655 from an OE Cummins dealer

(3): On Fracture Split Con Rods use: 4 of <a href="http://sales.maxiforce.com/maxi/Services/winImages.aspx?type=p&id=C3901170">C3901170</a> (or O/S) and 4 of <a href="http://sales.maxiforce.com/maxi/Services/winImages.aspx?type=p&id=C4893693">C4893693</a> (or O/S).

**CUMMINS 6BT 5.9 QSB PISTON (M): 7416**

**Engine Series:**

QSB

**Engine Model:**

6BT 5.9 QSB

**Engine Data:**

TURBOCHARGED

**Engine Info:**

6 Cyl


**Engine Dimensions:**

359 Cubic Inch  
Bore: 4.02 in /  
102.108 mm  
Stroke: 4.72 in /  
119.888 mm

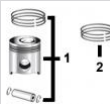
**Piston (M):**

7416


Please see page 509 for a complete list of equipment models.




**1) Engine O/H Kit**  
 › COK9461/6 Std  
 › COK9618/6 0.50 mm  
 › COK9619/6 1.00 mm  
**2) O/H Kit Fractured Rod**  
 › COK9461F/6 Std  
 › COK9618F/6 0.50  
 › COK9619F/6 1.00  
**3) Engine I/F Kit**  
 › CIK9461/6 Std  
 › CIK9618/6 0.50 mm  
 › CIK9619/6 1.00 mm




**1) Piston & Ring Kit**  
 › C4089461 Std  
 › C4089618 0.50 mm  
 › C4089619 1.00 mm  
**Use 6**



**Main Bearing Set**  
 › C3802070 Std  
 › C3802071 0.25 mm  
 › C3802072 0.50 mm  
 › C3802073 0.75 mm  
**Use 1**




**Con Rod Bearing**  
 › C3901170 Std  
 › C3901171 0.25 mm  
 › C3901172 0.50 mm  
 › C3901173 0.75 mm  
**Rod bearings are priced and sold per shell**



**Fractured Con Rod Bearing**  
 › C4893693 Std  
 › C4892795 0.25 mm  
 › C4892796 0.50 mm  
 › C4892797 0.75 mm  
**Rod bearings are priced and sold per shell**


**Piston Kit:**  
 1) 1 C3957416 Piston Std, 1 C4089460 Ring Set Std, 1 C3934047 Piston Pin, 2 C3920691 Ret.  
 2) 1 C3957417 Piston 0.50 mm, 1 C4089614 Ring Set 0.50 mm, 1 C3934047 Piston Pin, 2 C3920691 Ret.  
 3) 1 C3957418 Piston 1.00 mm, 1 C4089615 Ring Set 1.00 mm, 1 C3934047 Piston Pin, 2 C3920691 Ret.




**1) Front Seal**  
 › C3904353  
**2) Rear Seal**  
 › C3353978  
**3) Crankshaft**  
 › C3907804  
**4) Front Seal Sleeve**  
 › C3906080  
**5) Rear Seal Sleeve**  
 › C3906081  
**6) Rectangular Seal**  
 › C3912473  
**7) Crankshaft, Gear**  
 › C3901258  
**8) Ring Gear**  
 › C3903309 (173T)  
 › C3905427 (127T)  
 › C3901774 (159T)  
 › C3902127 (138T)



**1) Top Gasket Set**  
 › C4089649  
**2) Bottom Gsk Set**  
 › C3802376  
**3) Head Gasket**  
 › C3283335  
**4) Oil Pan Gasket**  
 › C3931346  
**5) Valve Cover Gsk**  
 › C3902666  
**6) Gear Housing Gsk**  
 › C3938156  
**7) Gear Cover Gasket**  
 › C3918673



**1) Bushing, Piston**  
 › C4891178 x6  
**2) Bushing, Cam**  
 › C3940059 x1  
**3) Bolt, Con Rod**  
 › C4891179 x12  
**4) Con Rod**  
 › C3901569  
 › C4943979  
**5) Bolt, Ex Manifold**  
 › C3944593 x12




**1) Camshaft**  
 › C3914639  
**2) Tappet**  
 › C3925031  
**3) Push Rod**  
 › C3904679  
**4) Rocker Arms**  
 › C3910811 x6  
 › C3910810 x6  
**5) Camshaft Gear**  
 › C3907431

**Guide, Valve**  
 › C3904408 Thick W. 60.50 mm IN  
 › C3904409 Thick W. 51.75 mm EX  
 › C3906206 Thin Wall

**1) Intake, Valve Kit**  
 › C3802355 Kit  
**Consists of:**  
 › C3901117 x1 Valve  
 › C3900250 x2 Collet  
**2) Insert, Valve**  
 › C3906854  
**Use 6**


**1) Exhaust, Valve Kit**  
 › C3802356 Kit  
**Consists of:**  
 › C3901607 x1 Valve  
 › C3900250 x2 Collet  
**2) Insert, Valve**  
 › C3904105  
**Use 6**

**1) Spring, Valve**  
 › C3932453 x12  
**2) Seal, Valve**  
 › C3921640 x12  
 › C3957912 x12  
**3) Retainer, Valve**  
 › C3900299 x12




**1) Water Pump**  
 › C3286278  
**2) Water Pump Seal**  
 › C3906698  
**3) Thermostat**  
 › C3802273

**Pump, Oil**  
 › C4939587



**Lift Pump**  
 › C3904374



**1) Cylinder Head**  
 › C3913381  
**2) Head Bolt Kit**  
 › C6B-HBK



**1) Repair Sleeve**  
 › C3904166  
**2) Belt Tensioner**  
 › C3914086

(1): On Fracture Split Con Rods use: C3901170 x6 (or O/S) and C4893693 x6 (or O/S).  
 (2): Can be Used on Both Intake and Exhaust.  
 (3): Diaphragm Style.  
 (4): For Storm blocks use C3940059.  
 (5): Do not use on Marine Engines.  
 (6): For use on engines prior to April, 2003.  
 (7): For use on engines from April 2003, (Top Hat Style Valve Stem Seal).  
 (8): Machine Split Connectin Rod.  
 (9): Franture Split Connectin Rod.  
 (10): Check for proper application.

**Engine Series:**  
QSB

**Engine Model:**  
6BT 6.7 QSB

**Engine Data:**  
24 VALVE  
CM850

**Engine Info:**  
6 Cyl

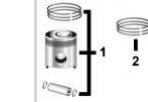
**Engine Dimensions:**  
Bore: 4.21 in / 107 mm  
Stroke: 4.88 in / 124 mm



- 1) **Engine O/H Kit**  
 › COK5160/6 Std  
 › COK5481/6 0.50 mm

- 2) **O/H Kit Fractured Rod**  
 › COK5160F/6 Std  
 › COK5481F/6 0.50

- 3) **Engine I/F Kit**  
 › CIK5160/6 Std  
 › CIK5481/6 0.50 mm



- 1) **Piston & Ring Kit**  
 › C4955160 Std  
 › C4955481 0.50 mm  
**Use 6**



- Main Bearing Set**  
 › C3802070 Std  
 › C3802071 0.25 mm  
 › C3802072 0.50 mm  
 › C3802073 0.75 mm  
**Use 1**



- Con Rod Bearing**  
 › C3901170 Std  
 › C3901171 0.25 mm  
 › C3901172 0.50 mm  
 › C3901173 0.75 mm

**Rod bearings are priced and sold per shell**



- Fractured Con Rod Bearing**  
 › C4893693 Std  
 › C4892795 0.25 mm  
 › C4892796 0.50 mm  
 › C4892797 0.75 mm

**Rod bearings are priced and sold per shell**

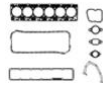
**Piston Kit:**

- 1) 1 C4934860 Piston Std, 1 C4955251 Ring Set Std, 1 C4931041 Piston Pin, 2 C3920691 Ret.  
 2) 1 C4934816 Piston 0.50 mm, 1 C4955480 Ring Set 0.50 mm, 1 C4931041 Piston Pin, 2 C3920691 Ret.

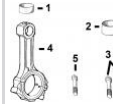
Please see page 510 for a complete list of equipment models.



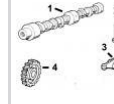
- 1) **Front Seal**  
 › C4890832  
 2) **Rear Seal**  
 › C4955372  
 3) **Crankshaft, Gear**  
 › C3955151  
 4) **Crankshaft**  
 › C4934862  
 5) **Ring Gear**  
 › C3903309 (173T)  
 › C3905427 (127T)  
 › C3901774 (159T)  
 › C3902127 (138T)



- 1) **Top Gasket Set**  
 › C4955229  
 2) **Bottom Gsk Set**  
 › C4955230  
 3) **Head Gasket**  
 › C4932210  
 4) **Oil Pan Gasket**  
 › C4934344  
 5) **Valve Cover Gsk**  
 › C4899226



- 1) **Bushing, Piston**  
 › C4891178 x6  
 2) **Bushing, Cam**  
 › C3940059 x1  
 3) **Bolt, Con Rod**  
 › C4891179 x12  
 4) **Con Rod**  
 › C4943979  
 5) **Bolt, Ex Manifold**  
 › C3944593



- 1) **Camshaft**  
 › C3979506  
 2) **Tappet**  
 › C3947759  
 3) **Rocker Arms**  
 › C3942734 x6  
 › C3942735 x6  
 4) **Camshaft Gear**  
 › C3955152

- 1) **Intake, Valve Kit**  
 › C3802924 Kit  
**Consists of:**  
 › C3940735 x1 Valve  
 › C3940123 x2 Collet  
 2) **Insert, Valve**  
 › C3943449  
**Use 12**

- 1) **Exhaust, Valve Kit**  
 › C3802967 Kit  
**Consists of:**  
 › C3940734 x1 Valve  
 › C3940123 x2 Collet  
 2) **Insert, Valve**  
 › C3943450  
**Use 12**

- 1) **Spring, Valve**  
 › C4936080 x24  
 2) **Seal, Valve**  
 › C3955393 x24  
 3) **Retainer, Valve**  
 › C3943198 x24



- 1) **Water Pump**  
 › C3800984  
 2) **Water Pump Seal**  
 › C3906698  
 3) **Thermostat**  
 › C5292708



- 1) **Oil Pump**  
 › C3971544  
 2) **Fuel Injector**  
 › C3976372



- 1) **Cylinder Head**  
 › C5282703  
 2) **Head Bolt**  
 › C3927063 x26  
 3) **Expansion Plug Kit**  
 4) **Belt Tensioner**  
 › C3914086

(1): Check application for proper usage.

(3): On Fracture Split Con Rods use: 6 of C3901170 (or O/S) and 6 of C4893693 (or O/S).

(2): C3944593 is a flanged head cap screw. If a studed flange cap screw is needed, please order 3944655 from an OE Cummins dealer

CUMMINS 6CT 8.3 PISTON (M): 3163

**Engine Series:**  
C

**Engine Model:**  
6CT 8.3

**Engine Desc:**  
(CDC 6.830)

**Engine Data:**  
TURBOCHARGED

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 4.49 in / 114 mm  
Stroke: 5.32 in / 135 mm

**Piston (M):**  
3163, 9564, 9928, 8749

Please see page 511 for a complete list of equipment models.



- 1) Engine O/H Kit
  - › COK2400
- Thin Wall
  - › COK2403
- Thick Wall Long
  - › COK2403S
- Thick Wall Short
  - 2) Engine I/F Kit
    - › CIK2400
    - › CIK2403
    - › CIK2403S



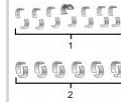
- Piston-Liner Kit Thin Wall**  
› C3802400
- Consist of:**
- › a) C3923163
  - › b) C3901597
  - › c) C3901996
  - › d) C3802258
  - › e) C3802370



- Piston-Liner Kit Thick Wall Long Liner**  
› C3802403
- Consist of:**
- › a) C3923163
  - › b) C3901597
  - › c) C3901996
  - › d) C3802258
  - › e) C3802407



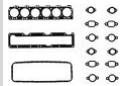
- Piston-Liner Kit Thick Wall Short Liner**  
› C3802403S
- Consist of:**
- › a) C3923163
  - › b) C3901597
  - › c) C3901996
  - › d) C3802258
  - › e) C3800328



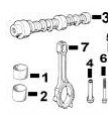
- 1) Main Bearing Set
    - › C3802210 Std
    - › C3802211 0.25 mm
    - › C3802212 0.50 mm
    - › C3802213 0.75 mm
  - Use 1
  - 2) Con Rod Bearing
    - › C3901430 Std
    - › C3901431 0.25 mm
    - › C3901432 0.50 mm
    - › C3901433 0.75 mm
    - › Use 12
- Rod bearings are priced and sold per shell



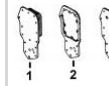
- 1) Front Seal
  - › C3353977
- 2) Rear Seal
  - › C3353978
- 3) Crankshaft
  - › C3918986
- 4) Front Wear Sleeve
  - › C3908277
- 5) Rear Wear Sleeve
  - › C3906081
- 6) Front Rect Seal
  - › C3903475
- 7) Rear Rect Seal
  - › C3912473
- 8) Ring Gear
  - › C3903309 (173T)
  - › C3905427 (127T)
  - › C3901774 (159T)
  - › C3902127 (138T)
- 9) Crankshaft Gear
  - › C3918776



- 1) Top Gasket Set
  - › C4025271
- 2) Bottom Gsk Set
  - › C3800348
- 3) Head Gasket
  - › C3938267
- 4) Oil Pan Gasket
  - › C3914017
- 5) Valve Cover Gsk
  - › C3905449
- 6) Front Gear Gasket
  - › C3929253
- 7) Front Cover Gsk
  - › C3917780



- 1) Bushing, Piston
  - › C3913990 x6
- 2) Bushing, Cam
  - › C3943199 x7
- 3) Camshaft
  - › C3924471
- 4) Tappet
  - › C3925031
- 5) Push Rod
  - › C3905194
- 6) Rod Bolt
  - › C3928870
- 7) Connecting Rod
  - › C3901383
- 8) Con Rod Nut
  - › C3901381
- 9) Camshaft Gear
  - › C3918777



- 1) Oil Cooler 12 Plates
  - › C3918175
- 2) Oil Cooler Gasket
  - › C3918174
- 3) Oil Cooler Gsk Filter Hd
  - › C3914308
- 4) Oil Pump
  - › C3930338

- 1) Intake, Valve Kit
  - › C3802463
- Consist of:
  - › C3924492 x1 Valve
  - › C3901177 x2 Collet
- 2) Insert, Valve
  - › C3924582
- Use 6



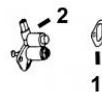
- 1) Water Pump
  - › C3800976
- 2) Water Pump Seal
  - › C3902089
- 3) Thermostat
  - › C3928639 x2

- 1) Exhaust, Valve Kit
  - › C3802085
- Consists of:
  - › C3921444 x1 Valve
  - › C3901177 x2 Collet
- 2) Insert, Valve
  - › C3924583
- Use 6



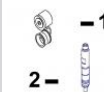
- 1) Cylinder Head
  - › C3973493
- 2) Head Bolt Kit
  - › C6C-HBK

- 1) Spring, Valve
  - › C3906412 x12
- 2) Seal, Valve
  - › C3915707 x12



- 1) Fuel Lift Pump
  - › C3917998
- 2) Fuel Pump Gasket
  - › C3914304

- 1) Guide, Valve
  - › C3923564 x12
- 2) Retainer, Valve Spring
  - › C3912976 x12



- 1) Tensioner, Belt
  - › C3976831
- 2) Injector
  - › C3908507
  - › C3908511

(1): Block 3802265 (Thin Wall) Flange ø 5.223".

(3): Block 3934906 (Thick Wall / Short Liner) Flange ø 5.152", (Length: 9.12" / 234 mm).

(5): To use C3924471 to replace 3917882 buy the following from Cummins: 3918777 Cam Gear, 3927155 Thrust and 3902332 Key. Use ESN or application model to confirm correct camshaft.

(7): Do not use with Crankshaft part number 3965006.

(9): Marine applications use C3800975

(11): Consist of C3919937 Liner + C3907177 Seal.

(13): Check for proper application.

(2): Block 3802408 (Thick Wall / Long Liner) Flange ø 5.152", (Length: 9.33" / 237 mm).

(4): Order in multiples of two.

(6): Only use on engines built from year 1991 onwards.

(8): Some applications use short nose pump C3806180

(10): Consist of C3907792 Liner + C3907177 Seal.

(12): Consist of C3948095 Liner + C3907177 Seal.

**Engine Series:**  
C

**Engine Model:**  
6CTA 8.3

**Engine Desc:**  
(CDC 6.830)

**Engine Data:**  
TURBOCHARGED  
AFTERCOOLED

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 4.49 in /  
114 mm Stroke:  
5.32 in / 135  
mm

**Piston (M):**  
3164, 9565,  
9930

Please see  
page 512 for a  
complete list of  
equipment  
models.



- 1) Engine O/H Kit
  - › COK2401
- Thin Wall
  - › COK2404
- Thick Wall Long
  - › COK2404S
- Thick Wall Short
  - 2) Engine I/F Kit
    - › CIK2401
    - › CIK2404
    - › CIK2404S



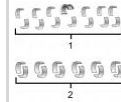
- Piston-Liner Kit  
Thin Wall**  
› C3802401
- Consist of:**
- › a) C3923164
  - › b) C3901597
  - › c) C3901996
  - › d) C3802258
  - › e) C3802370



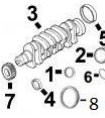
- Piston-Liner Kit Thick Wall  
Long Liner**  
› C3802404
- Consist of:**
- › a) C3923164
  - › b) C3901597
  - › c) C3901996
  - › d) C3802258
  - › e) C3802407



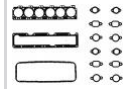
- Piston-Liner Kit Thick Wall  
Short Liner**  
› C3802404S
- Consist of:**
- › a) C3923164
  - › b) C3901597
  - › c) C3901996
  - › d) C3802258
  - › e) C3800328



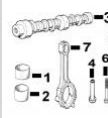
- 1) Main Bearing Set
    - › C3802210 Std
    - › C3802211 0.25 mm
    - › C3802212 0.50 mm
    - › C3802213 0.75 mm
  - Use 1
  - 2) Con Rod Bearing
    - › C3901430 Std
    - › C3901431 0.25 mm
    - › C3901432 0.50 mm
    - › C3901433 0.75 mm
    - › Use 12
- Rod bearings are priced  
and sold per shell



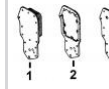
- 1) Front Seal
  - › C3353977
- 2) Rear Seal
  - › C3353978
- 3) Crankshaft
  - › C3918986
- 4) Front Wear Sleeve
  - › C3908277
- 5) Rear Wear Sleeve
  - › C3906081
- 6) Front Rect Seal
  - › C3903475
- 7) Rear Rect Seal
  - › C3912473
- 8) Ring Gear
  - › C3903309 (173T)
  - › C3905427 (127T)
  - › C3901774 (159T)
  - › C3902127 (138T)
- 9) Crankshaft Gear
  - › C3918776



- 1) Top Gasket Set
  - › C4025271
- 2) Bottom Gsk Set
  - › C3800348
- 3) Head Gasket
  - › C3938267
- 4) Oil Pan Gasket
  - › C3914017
- 5) Valve Cover Gsk
  - › C3905449
- 6) Front Gear Gasket
  - › C3929253
- 7) Front Cover Gsk
  - › C3917780



- 1) Bushing, Piston
  - › C3913990 x6
- 2) Bushing, Cam
  - › C3943199 x7
- 3) Camshaft
  - › C3924471
- 4) Tappet
  - › C3925031
- 5) Push Rod
  - › C3905194
- 6) Rod Bolt
  - › C3928870
- 7) Connecting Rod
  - › C3901383
- 8) Con Rod Nut
  - › C3901381
- 9) Camshaft Gear
  - › C3918777



- 1) Oil Cooler 12 Plates
  - › C3918175
- 2) Oil Cooler Gasket
  - › C3918174
- 3) Oil Cooler Gsk Filter Hd
  - › C3914308
- 4) Oil Pump
  - › C3930338

- 1) Intake, Valve Kit
  - › C3802463
- Consist of:
  - › C3924492 x1 Valve
  - › C3901177 x2 Collet
- 2) Insert, Valve
  - › C3924582
- Use 6



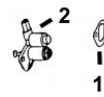
- 1) Water Pump
  - › C3800976
- 2) Water Pump Seal
  - › C3902089
- 3) Thermostat
  - › C3928639 x2

- 1) Exhaust, Valve Kit
  - › C3802085
- Consists of:
  - › C3921444 x1 Valve
  - › C3901177 x2 Collet
- 2) Insert, Valve
  - › C3924583
- Use 6



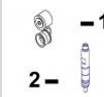
- 1) Cylinder Head
  - › C3973493
- 2) Head Bolt Kit
  - › C6C-HBK

- 1) Spring, Valve
  - › C3906412 x12
- 2) Seal, Valve
  - › C3915707 x12



- 1) Fuel Lift Pump
  - › C3917998
- 2) Fuel Pump Gasket
  - › C3914304

- 1) Guide, Valve
  - › C3923564 x12
- 2) Retainer, Valve Spring
  - › C3912976 x12



- 1) Tensioner, Belt
  - › C3976831
- 2) Injector
  - › C3908511
  - › C3919602
  - › C3926787

(1): Block 3802265 (Thin Wall) Flange ø 5.223".

(3): Block 3934906 (Thick Wall / Short Liner) Flange ø 5.152", (Length: 9.12" / 234 mm).

(5): To use C3924471 to replace 3917882 buy the following from Cummins: 3918777 Cam Gear, 3927155 Thrust and 3902332 Key. Use ESN or application model to confirm correct camshaft.

(7): Do not use with Crankshaft part number 3965006.

(9): Marine applications use C3800975

(11): Consist of C3919937 Liner + C3907177 Seal.

(13): Check for proper application.

(2): Block 3802408 (Thick Wall / Long Liner) Flange ø 5.152", (Length: 9.33" / 237 mm).

(4): Order in multiples of two.

(6): Only use on engines built from year 1991 onwards.

(8): Some applications use short nose pump C3806180

(10): Consist of C3907792 Liner + C3907177 Seal.

(12): Consist of C3948095 Liner + C3907177 Seal.

**Engine Series:**

C

**Engine Model:**

6CT 8.3

**Engine Data:**

TURBOCHARGED

**Engine Info:**

6 Cyl

**Engine Dimensions:**

Bore: 4.49 in / 114 mm  
Stroke: 5.32 in / 135 mm

**Piston (M):**

3165, 9931, 9567, 2396

**Cummins CPLs**

954

1399

1435



**1) Engine O/H Kit**

› COK2399

**Thin Wall**

› COK2402

**Thick Wall**

**2) Engine I/F Kit**

› CIK2399

› CIK2402



**Piston-Liner Kit Thin Wall**

› C3802399

**Consist of:**

› a) C3923165

› b) C3901597

› c) C3901996

› d) C3802258

› e) C3802370



**Piston-Liner Kit Thick Wall**

› C3802402

**Consist of:**

› a) C3923165

› b) C3901597

› c) C3901996

› d) C3802258

› e) C3802407



**Main Bearing Set**

› C3802210 Std.

› C3802211 0.25 mm

› C3802212 0.50 mm

› C3802213 0.75 mm

**Use 1**



**Con Rod Bearing**

› C3901430 Std

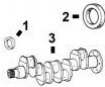
› C3901431 0.25 mm

› C3901432 0.50 mm

› C3901433 0.75 mm

› Use 12

**Rod bearings are priced and sold per shell**



**1) Front Seal**

› C3353977

**2) Rear Seal**

› C3353978

**3) Crankshaft**

› C3918986

**4) Front Wear Sleeve**

› C3908277

**5) Rear Wear Sleeve**

› C3906081

**6) Front Rect Seal**

› C3903475

**7) Rear Rect Seal**

› C3912473

**8) Ring Gear**

› C3903309 (173T)

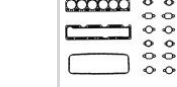
› C3905427 (127T)

› C3901774 (159T)

› C3902127 (138T)

**9) Crankshaft Gear**

› C3918776



**1) Top Gasket Set**

› C4025271

**2) Bottom Gsk Set**

› C3800348

**3) Head Gasket**

› C3938267

**4) Oil Pan Gasket**

› C3914017

**5) Valve Cover Gsk**

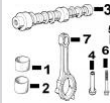
› C3905449

**6) Front Gear Gasket**

› C3929253

**7) Front Cover Gsk**

› C3917780



**1) Bushing, Piston**

› C3913990 x6

**2) Bushing, Cam**

› C3943199 x7

**3) Camshaft**

› C3924471

**4) Tappet**

› C3925031

**5) Push Rod**

› C3905194

**6) Rod bolt**

› C3928870

**7) Connecting Rod**

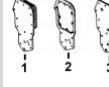
› C3901383

**8) Con Rod Nut**

› C3901381

**9) Camshaft Gear**

› C3918777



**1) Oil Cooler 12 Plates**

› C3918175

**2) Oil Cooler Gasket**

› C3918174

**3) Oil Cooler Gsk Filter Hd**

› C3914308

**4) Oil Pump**

› C3930338

**1) Intake, Valve Kit**

› C3802463

**Consist of:**

› C3924492 x1 Valve

› C3901177 x2 Collet

**2) Insert, Valve**

› C3924582

**Use 6**

**1) Exhaust, Valve Kit**

› C3802085

**Consists of:**

› C3921444 x1 Valve

› C3901177 x2 Collet

**2) Insert, Valve**

› C3924583

**Use 6**

**1) Spring, Valve**

› C3906412 x12

**2) Seal, Valve**

› C3915707 x12

**1) Guide, Valve**

› C3923564 x12

**2) Retainer, Valve Spring**

› C3912976 x12



**1) Water Pump**

› C3800976

› C3806180

› C3800975

**2) Water Pump Seal**

› C3902089

**3) Thermostat**

› C3928639 x2

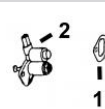


**1) Cylinder Head**

› C3973493

**2) Head Bolt Kit**

› C6C-HBK



**1) Fuel Lift Pump**

› C3917998

**2) Fuel Pump Gasket**

› C3914304



**Tensioner, Belt**

› C3976831

(1): Block 3802265 (Thin Wall) Flange ø 5.223".

(3): Order in multiples of two.

(5): Only use on engines built from year 1991 onwards.

(7): Some applications use short nose pump C3806180

(9): Consist of C3907792 Liner + C3907177 Seal.

(11): Check for proper application.

(2): Block 3802408 (Thick Wall / Long Liner) Flange ø 5.152", (Length: 9.33" / 237 mm).

(4): To use C3924471 to replace 3917882 buy the following from Cummins: 3918777 Cam Gear, 3927155 Thrust and 3902332 Key. Use ESN or application model to confirm correct camshaft.

(6): Do not use with Crankshaft part number 3965006.

(8): Marine applications use C3800975

(10): Consist of C3919937 Liner + C3907177 Seal.

CUMMINS 6CT 8.3 PISTON (M): 7707

**Engine Series:**

C

**Engine Model:**

6CT 8.3

**Engine Data:**

TURBOCHARGED

**Engine Info:**

6 Cyl

**Engine Dimensions:**

Bore: 4.49 in /  
114 mm Stroke:  
5.32 in / 135  
mm

**Piston (M):**

7707



**1) Engine O/H Kit**

- › COK2388
- Thin Wall**
- › COK2406
- Thick Wall Long**
- › COK2406S
- Thick Wall Short**
- 2) Engine I/F Kit**
- › CIK2388
- › CIK2406
- › CIK2406S



**Piston-Liner Kit**

- Thin Wall**
- › C3802388
- Consist of:**
- › a) C3917707
  - › b) C3901597
  - › c) C3901996
  - › d) C3802258
  - › e) C3802370

10



**Piston-Liner Kit Thick Wall**

- Long Liner**
- › C3802406
- Consist of:**
- › a) C3917707
  - › b) C3901597
  - › c) C3901996
  - › d) C3802258
  - › e) C3802407

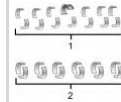
11



**Piston-Liner Kit Thick Wall**

- Short Liner**
- › C3802406S
- Consist of:**
- › a) C3917707
  - › b) C3901597
  - › c) C3901996
  - › d) C3802258
  - › e) C3800328

12



**1) Main Bearing Set**

- › C3802210 Std
  - › C3802211 0.25 mm
  - › C3802212 0.50 mm
  - › C3802213 0.75 mm
- Use 1**
- 2) Con Rod Bearing**
- › C3901430 Std
  - › C3901431 0.25 mm
  - › C3901432 0.50 mm
  - › C3901433 0.75 mm
  - › Use 12
- Rod bearings are priced and sold per shell**

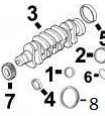
4

**Cummins CPL's**

- 1262
- 1263
- 1406
- 1615
- 1618
- 1668
- 2100
- 2367
- 2368
- 2531
- 2995
- 2996
- 8146

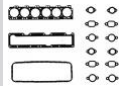
**Case IH**

- 2366 - Combine
- 2377 - Combine

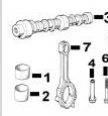


- 1) Front Seal**
- › C3353977
- 2) Rear Seal**
- › C3353978
- 3) Crankshaft**
- › C3918986
- 4) Front Wear Sleeve**
- › C3908277
- 5) Rear Wear Sleeve**
- › C3906081
- 6) Front Rect Seal**
- › C3903475
- 7) Rear Rect Seal**
- › C3912473
- 8) Ring Gear**
- › C3903309 (173T)
- › C3905427 (127T)
- › C3901774 (159T)
- › C3902127 (138T)
- 9) Crankshaft Gear**
- › C3918776

13  
13  
13  
13



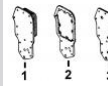
- 1) Top Gasket Set**
- › C4025271
- 2) Bottom Gsk Set**
- › C3800348
- 3) Head Gasket**
- › C3938267
- 4) Oil Pan Gasket**
- › C3914017
- 5) Valve Cover Gsk**
- › C3905449
- 6) Front Gear Gasket**
- › C3929253
- 7) Front Cover Gsk**
- › C3917780



- 1) Bushing, Piston**
- › C3913990 x6
- 2) Bushing, Cam**
- › C3943199 x7
- 3) Camshaft**
- › C3924471
- 4) Tappet**
- › C3925031
- 5) Push Rod**
- › C3905194
- 6) Rod Bolt**
- › C3928870
- 7) Connecting Rod**
- › C3901381
- 8) Con Rod Nut**
- › C3901381
- 9) Camshaft Gear**
- › C3918777

5

7



- 1) Oil Cooler 12 Plates**
- › C3918175
- 2) Oil Cooler Gasket**
- › C3918174
- 3) Oil Cooler Gsk Filter Hd**
- › C3914308
- 4) Oil Pump**
- › C3930338

**1) Intake, Valve Kit**

- › C3802463
- Consist of:**
- › C3924492 x1 Valve
  - › C3901177 x2 Collet
- 2) Insert, Valve**
- › C3924582
- Use 6**

**1) Exhaust, Valve Kit**

- › C3802085
- Consists of:**
- › C3921444 x1 Valve
  - › C3901177 x2 Collet
- 2) Insert, Valve**
- › C3924583
- Use 6**

**1) Spring, Valve**

- › C3906412 x12
- 2) Seal, Valve**
- › C3915707 x12

**1) Guide, Valve**

- › C3923564 x12
- 2) Retainer, Valve Spring**
- › C3912976 x12



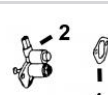
- 1) Water Pump**
- › C3800976
- › C4089647
- 2) Water Pump Seal**
- › C3902089
- 3) Thermostat**
- › C3928639 x2

9

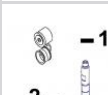
8  
13



- 1) Cylinder Head**
- › C3973493
- 2) Head Bolt Kit**
- › C6C-HBK



- 1) Fuel Lift Pump**
- › C3917998
- 2) Fuel Pump Gasket**
- › C3914304



- 1) Tensioner, Belt**
- › C3976831
- 2) Injector**
- › C3919602

13

13

(1): Block 3802265 (Thin Wall) Flange ø 5.223".

(3): Block 3934906 (Thick Wall / Short Liner) Flange ø 5.152", (Length: 9.12" / 234 mm).

(5): To use C3924471 to replace 3917882 buy the following from Cummins: 3918777 Cam Gear, 3927155 Thrust and 3902332 Key. Use ESN or application model to confirm correct camshaft.

(7): Do not use with Crankshaft part number 3965006.

(9): Marine applications use C3800975

(11): Consist of C3919937 Liner + C3907177 Seal.

(13): Check for proper application.

(2): Block 3802408 (Thick Wall / Long Liner) Flange ø 5.152", (Length: 9.33" / 237 mm).

(4): Order in multiples of two.

(6): Only use on engines built from year 1991 onwards.

(8): Some applications use short nose pump C3806180

(10): Consist of C3907792 Liner + C3907177 Seal.

(12): Consist of C3948095 Liner + C3907177 Seal.

CUMMINS 6CT 8.3 PISTON (M): 9566

Engine Series:

C

Engine Model:

6CT 8.3

Engine Data:

TURBOCHARGED

Engine Info:

6 Cyl

Engine Dimensions:

Bore: 4.49 in / 114 mm  
Stroke: 5.32 in / 135 mm

Piston (M):

9566



- 1) Engine O/H Kit
  - › COK2372
  - Thin Wall
    - › COK2405
  - Thick Wall Long
    - › COK4580
  - Thick Wall Short
    - 2) Engine I/F Kit
      - › CIK2372
      - › CIK2405
      - › CIK4580



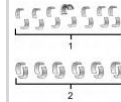
- Piston-Liner Kit Thin Wall**  
› C3802372
- Consist of:**
- › a) C3919566
  - › b) C3901597
  - › c) C3901996
  - › d) C3802258
  - › e) C3802370



- Piston-Liner Kit Thick Wall Long Liner**  
› C3802405
- Consist of:**
- › a) C3919566
  - › b) C3901597
  - › c) C3901996
  - › d) C3802258
  - › e) C3802407



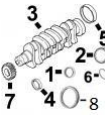
- Piston-Liner Kit Thick Wall Short Liner**  
› C3934580
- Consist of:**
- › a) C3919566
  - › b) C3901597
  - › c) C3901996
  - › d) C3802258
  - › e) C3800328



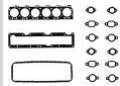
- 1) Main Bearing Set
    - › C3802210 Std
    - › C3802211 0.25 mm
    - › C3802212 0.50 mm
    - › C3802213 0.75 mm
  - Use 1
  - 2) Con Rod Bearing
    - › C3901430 Std
    - › C3901431 0.25 mm
    - › C3901432 0.50 mm
    - › C3901433 0.75 mm
    - › Use 12
- Rod bearings are priced and sold per shell

Cummins CPL's

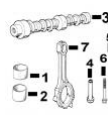
- 1221
- 1282
- 1366
- 1929
- 2172
- 2960
- 8089



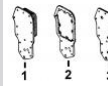
- 1) Front Seal
  - › C3353977
- 2) Rear Seal
  - › C3353978
- 3) Crankshaft
  - › C3918986
- 4) Front Wear Sleeve
  - › C3908277
- 5) Rear Wear Sleeve
  - › C3906081
- 6) Front Rect Seal
  - › C3903475
- 7) Rear Rect Seal
  - › C3912473
- 8) Ring Gear
  - › C3903309 (173T)
  - › C3905427 (127T)
  - › C3901774 (159T)
  - › C3902127 (138T)
- 9) Crankshaft Gear
  - › C3918776



- 1) Top Gasket Set
  - › C4025271
- 2) Bottom Gsk Set
  - › C3800348
- 3) Head Gasket
  - › C3938267
- 4) Oil Pan Gasket
  - › C3914017
- 5) Valve Cover Gsk
  - › C3905449
- 6) Front Gear Gasket
  - › C3929253
- 7) Front Cover Gsk
  - › C3917780



- 1) Bushing, Piston
  - › C3913990 x6
- 2) Bushing, Cam
  - › C3943199 x7
- 3) Camshaft
  - › C3924471
- 4) Tappet
  - › C3925031
- 5) Push Rod
  - › C3905194
- 6) Rod Bolt
  - › C3928870
- 7) Connecting Rod
  - › C3901381
- 8) Con Rod Nut
  - › C3901381
- 9) Camshaft Gear
  - › C3918777



- 1) Oil Cooler 12 Plates
  - › C3918175
- 2) Oil Cooler Gasket
  - › C3918174
- 3) Oil Cooler Gsk Filter Hd
  - › C3914308
- 4) Oil Pump
  - › C3930338

- 1) Intake, Valve Kit
    - › C3802463

**Consist of:**

    - › C3924492 x1 Valve
    - › C3901177 x2 Collet
  - 2) Insert, Valve
    - › C3924582
- Use 6

- 1) Exhaust, Valve Kit
    - › C3802085

**Consists of:**

    - › C3921444 x1 Valve
    - › C3901177 x2 Collet
  - 2) Insert, Valve
    - › C3924583
- Use 6

- 1) Spring, Valve
  - › C3906412 x12
- 2) Seal, Valve
  - › C3915707 x12

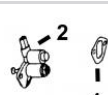
- 1) Guide, Valve
  - › C3923564 x12
- 2) Retainer, Valve Spring
  - › C3912976 x12



- 1) Water Pump
  - › C3800976
- 2) Water Pump Seal
  - › C3902089
- 3) Thermostat
  - › C3928639 x2



- 1) Cylinder Head
  - › C3973493
- 2) Head Bolt Kit
  - › C6C-HBK



- 1) Fuel Lift Pump
  - › C3917998
- 2) Fuel Pump Gasket
  - › C3914304



- Tensioner, Belt
  - › C3976831

(1): Block 3802265 (Thin Wall) Flange ø 5.223".

(3): Block 3934906 (Thick Wall / Short Liner) Flange ø 5.152", (Length: 9.12" / 234 mm).

(5): To use C3924471 to replace 3917882 buy the following from Cummins: 3918777 Cam Gear, 3927155 Thrust and 3902332 Key. Use ESN or application model to confirm correct camshaft.

(7): Do not use with Crankshaft part number 3965006.

(9): Marine applications use C3800975

(11): Consist of C3919937 Liner + C3907177 Seal.

(13): Check for proper application.

(2): Block 3802408 (Thick Wall / Long Liner) Flange ø 5.152", (Length: 9.33" / 237 mm).

(4): Order in multiples of two.

(6): Only use on engines built from year 1991 onwards.

(8): Some applications use short nose pump C3806180

(10): Consist of C3907792 Liner + C3907177 Seal.

(12): Consist of C3948095 Liner + C3907177 Seal.



**Engine Series:**

C

**Engine Model:**

6CTA 8.3

**Engine Data:**

TURBOCHARGED  
AFTERCOOLED

**Engine Info:**

6 Cyl

**Engine Dimensions:**

EMISSION  
Bore: 4.49 in /  
114 mm  
Stroke: 5.32 in /  
135 mm

**Piston (M):**

9161

Please see page 513 for a complete list of equipment models.



- 1) **Engine O/H Kit**  
  - COK9161L
- Thick Wall Long**  
  - COK9161S
- Thick Wall Short**
- 2) **Engine I/F Kit**  
  - CIK9161L
  - CIK9161S



- Piston-Liner Kit**  
  - CPLK9161L
- Consist of:**
- a) C3929161
- b) C3901597
- c) C3901996
- d) C3802258
- e) C3802407



- Piston-Liner Kit**  
  - CPLK9161S
- Consist of:**
- a) C3929161
- b) C3901597
- c) C3901996
- d) C3802258
- e) C3800328



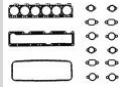
- Main Bearing Set**  
  - C3802210 Std.
  - C3802211 0.25 mm
  - C3802212 0.50 mm
  - C3802213 0.75 mm
- Use 1**



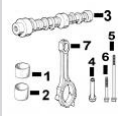
- Con Rod Bearing**  
  - C3901430 Std
  - C3901431 0.25 mm
  - C3901432 0.50 mm
  - C3901433 0.75 mm
  - Use 12
- Rod bearings are priced and sold per shell**



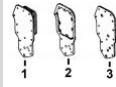
- 1) **Front Seal**  
  - C3353977
- 2) **Rear Seal**  
  - C3353978
- 3) **Crankshaft**  
  - C3918986
- 4) **Front Wear Sleeve**  
  - C3908277
- 5) **Rear Wear Sleeve**  
  - C3906081
- 6) **Front Rect Seal**  
  - C3903475
- 7) **Rear Rect Seal**  
  - C3912473
- 8) **Ring Gear**  
  - C3903309 (173T)
  - C3905427 (127T)
  - C3901774 (159T)
  - C3902127 (138T)
- 9) **Crankshaft Gear**  
  - C3918776



- 1) **Top Gasket Set**  
  - C4025271
- 2) **Bottom Gsk Set**  
  - C3800348
- 3) **Head Gasket**  
  - C3938267
- 4) **Oil Pan Gasket**  
  - C3914017
- 5) **Valve Cover Gsk**  
  - C3905449
- 6) **Front Gear Gasket**  
  - C3929253
- 7) **Front Cover Gsk**  
  - C3917780



- 1) **Bushing, Piston**  
  - C3913990 x6
- 2) **Bushing, Cam**  
  - C3943199 x7
- 3) **Camshaft**  
  - C3924471
- 4) **Tappet**  
  - C3925031
- 5) **Push Rod**  
  - C3905194
- 6) **Rod Bolt**  
  - C3928870
- 7) **Connecting Rod**  
  - C3901381
- 8) **Con Rod Nut**  
  - C3901381
- 9) **Camshaft Gear**  
  - C3918777



- 1) **Oil Cooler 12 Plates**  
  - C3918175
- 2) **Oil Cooler Gasket**  
  - C3918174
- 3) **Oil Cooler Gsk Filter Hd**  
  - C3914308
- 4) **Oil Pump**  
  - C3930338

**1) Intake, Valve Kit**

- C3802463
- Consist of:**
- C3924492 x1 Valve
- C3901177 x2 Collet

**2) Insert, Valve**

- C3924582
- Use 6**



- 1) **Water Pump**  
  - C3800976
- 2) **Water Pump Seal**  
  - C3902089
- 3) **Thermostat**  
  - C3928639 x2

**1) Exhaust, Valve Kit**

- C3802085
- Consists of:**
- C3921444 x1 Valve
- C3901177 x2 Collet

**2) Insert, Valve**

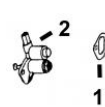
- C3924583
- Use 6**



- 1) **Cylinder Head**  
  - C3973493
- 2) **Head Bolt Kit**  
  - C6C-HBK

**1) Spring, Valve**

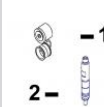
- C3906412 x12
- 2) Seal, Valve**  
  - C3915707 x12



- 1) **Fuel Lift Pump**  
  - C3917998
- 2) **Fuel Pump Gasket**  
  - C3914304

**1) Guide, Valve**

- C3923564 x12
- 2) Retainer, Valve Spring**  
  - C3912976 x12



- 1) **Tensioner, Belt**  
  - C3976831
- 2) **Injector**  
  - C3926787
  - C3930525
  - C3931735

(1): Block 3802265 (Thin Wall) Flange ø 5.223".

(3): Order in multiples of two.

(5): Only use on engines built from year 1991 onwards.

(7): Some applications use short nose pump C3806180

(9): Consist of C3919937 Liner + C3907177 Seal.

(11): Check for proper application.

(2): Block 3802408 (Thick Wall / Long Liner) Flange ø 5.152", (Length: 9.33" / 237 mm).

(4): To use C3924471 to replace 3917882 buy the following from Cummins: 3918777 Cam Gear, 3927155 Thrust and 3902332 Key. Use ESN or application model to confirm correct camshaft.

(6): Do not use with Crankshaft part number 3965006.

(8): Marine applications use C3800975

(10): Consist of C3948095 Liner + C3907177 Seal.

**Engine Series:**

C

**Engine Model:**

6CTA 8.3

**Engine Data:**

TURBOCHARGED  
AFTERCOOLED

**Engine Info:**

6 Cyl

**Engine Dimensions:**

Bore: 4.49 in /  
114 mm Stroke:  
5.32 in / 135  
mm

**Piston (M):**

9247



- 1) **Engine O/H Kit**
  - › COK9247
  - Thin Wall**
  - › COK9247L
  - Thick Wall Long**
  - › COK9247S
  - Thick Wall Short**
- 2) **Engine I/F Kit**
  - › CIK9247
  - › CIK9247L
  - › CIK9247S



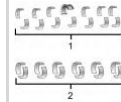
- Piston-Liner Kit Thin Wall**  
› CPLK9247
- Consist of:**
- › a) C3919247
  - › b) C3901597
  - › c) C3901996
  - › d) C3802258
  - › e) C3802370



- Piston-Liner Kit Thick Wall Long Liner**  
› CPLK9247L
- Consist of:**
- › a) C3919247
  - › b) C3901597
  - › c) C3901996
  - › d) C3802258
  - › e) C3802407



- Piston-Liner Kit Thick Wall Short Liner**  
› CPLK9247S
- Consist of:**
- › a) C3919247
  - › b) C3901597
  - › c) C3901996
  - › d) C3802258
  - › e) C3800328



- 1) **Main Bearing Set**
    - › C3802210 Std
    - › C3802211 0.25 mm
    - › C3802212 0.50 mm
    - › C3802213 0.75 mm
  - Use 1**
  - 2) **Con Rod Bearing**
    - › C3901430 Std
    - › C3901431 0.25 mm
    - › C3901432 0.50 mm
    - › C3901433 0.75 mm
    - › Use 12
- Rod bearings are priced and sold per shell**

**Cummins CPLs**

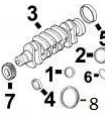
1371  
1372  
1684  
2028  
2381  
2383

**Shovel**

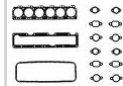
EX300 LCH -  
Tata Hitachi

**Skidder**

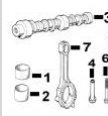
Ranger F68C  
Ranger F68G



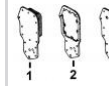
- 1) **Front Seal**
  - › C3353977
- 2) **Rear Seal**
  - › C3353978
- 3) **Crankshaft**
  - › C3918986
- 4) **Front Wear Sleeve**
  - › C3908277
- 5) **Rear Wear Sleeve**
  - › C3906081
- 6) **Front Rect Seal**
  - › C3903475
- 7) **Rear Rect Seal**
  - › C3912473
- 8) **Ring Gear**
  - › C3903309 (173T)
  - › C3905427 (127T)
  - › C3901774 (159T)
  - › C3902127 (138T)
- 9) **Crankshaft Gear**
  - › C3918776



- 1) **Top Gasket Set**
  - › C4025271
- 2) **Bottom Gsk Set**
  - › C3800348
- 3) **Head Gasket**
  - › C3938267
- 4) **Oil Pan Gasket**
  - › C3914017
- 5) **Valve Cover Gsk**
  - › C3905449
- 6) **Front Gear Gasket**
  - › C3929253
- 7) **Front Cover Gsk**
  - › C3917780



- 1) **Bushing, Piston**
  - › C3913990 x6
- 2) **Bushing, Cam**
  - › C3943199 x7
- 3) **Camshaft**
  - › C3924471
- 4) **Tappet**
  - › C3925031
- 5) **Push Rod**
  - › C3905194
- 6) **Rod Bolt**
  - › C3928870
- 7) **Connecting Rod**
  - › C3901383
- 8) **Con Rod Nut**
  - › C3901381
- 9) **Camshaft Gear**
  - › C3918777



- 1) **Oil Cooler 12 Plates**
  - › C3918175
- 2) **Oil Cooler Gasket**
  - › C3918174
- 3) **Oil Cooler Gsk Filter Hd**
  - › C3914308
- 4) **Oil Pump**
  - › C3930338

- 1) **Intake, Valve Kit**
  - › C3802463
- Consist of:**
  - › C3924492 x1 Valve
  - › C3901177 x2 Collet
- 2) **Insert, Valve**
  - › C3924582
- Use 6**

- 1) **Exhaust, Valve Kit**
  - › C3802085
- Consists of:**
  - › C3921444 x1 Valve
  - › C3901177 x2 Collet
- 2) **Insert, Valve**
  - › C3924583
- Use 6**

- 1) **Spring, Valve**
  - › C3906412 x12
- 2) **Seal, Valve**
  - › C3915707 x12

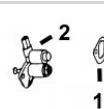
- 1) **Guide, Valve**
  - › C3923564 x12
- 2) **Retainer, Valve Spring**
  - › C3912976 x12



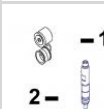
- 1) **Water Pump**
  - › C3800976
- 2) **Water Pump Seal**
  - › C3902089
- 3) **Thermostat**
  - › C3928639 x2



- 1) **Cylinder Head**
  - › C3973493
- 2) **Head Bolt Kit**
  - › C6C-HBK



- 1) **Fuel Lift Pump**
  - › C3917998
- 2) **Fuel Pump Gasket**
  - › C3914304



- 1) **Tensioner, Belt**
  - › C3976831
- 2) **Injector**
  - › C3919602

(1): Block 3802265 (Thin Wall) Flange ø 5.223".

(3): Block 3934906 (Thick Wall / Short Liner) Flange ø 5.152", (Length: 9.12" / 234 mm).

(5): To use C3924471 to replace 3917882 buy the following from Cummins: 3918777 Cam Gear, 3927155 Thrust and 3902332 Key. Use ESN or application model to confirm correct camshaft.

(7): Do not use with Crankshaft part number 3965006.

(9): Marine applications use C3800975

(11): Consist of C3919937 Liner + C3907177 Seal.

(13): Check for proper application.

(2): Block 3802408 (Thick Wall / Long Liner) Flange ø 5.152", (Length: 9.33" / 237 mm).

(4): Order in multiples of two.

(6): Only use on engines built from year 1991 onwards.

(8): Some applications use short nose pump C3806180

(10): Consist of C3907792 Liner + C3907177 Seal.

(12): Consist of C3948095 Liner + C3907177 Seal.

**Engine Series:**

C

**Engine Model:**

6CTA 8.3

**Engine Data:**

TURBOCHARGED  
AFTERCOOLED

**Engine Info:**

6 Cyl

**Engine Dimensions:**

Bore: 4.49 in /  
114 mm  
Stroke: 5.32 in /  
135 mm

**Piston (M):**  
5878

Please see page 514 for a complete list of equipment models.



- 1) **Engine O/H Kit**
  - › COK5878L
  - › COK5878S
- 2) **Engine I/F Kit**
  - › CIK5878L
  - › CIK5878S



- Piston-Liner Kit**
  - › CPLK5878L
- Consist of:**
  - a) C3925878
  - b) C3901597
  - c) C3901996
  - d) C3802258
  - e) C3802407



- Piston-Liner-Kit**
  - › CPLK5878S
- Consist of:**
  - a) C3925878
  - b) C3901597
  - c) C3901996
  - d) C3802258
  - e) C3800328



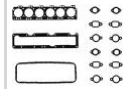
- Main Bearing Set**
  - › C3802210 Std.
  - › C3802211 0.25 mm
  - › C3802212 0.50 mm
  - › C3802213 0.75 mm
- Use 1**



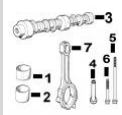
- Con Rod Bearing**
  - › C3901430 Std
  - › C3901431 0.25 mm
  - › C3901432 0.50 mm
  - › C3901433 0.75 mm
  - › Use 12
- Rod bearings are priced and sold per shell**



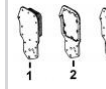
- 1) **Front Seal**
  - › C3353977
- 2) **Rear Seal**
  - › C3353978
- 3) **Crankshaft**
  - › C3918986
- 4) **Front Wear Sleeve**
  - › C3908277
- 5) **Rear Wear Sleeve**
  - › C3906081
- 6) **Front Rect Seal**
  - › C3903475
- 7) **Rear Rect Seal**
  - › C3912473
- 8) **Ring Gear**
  - › C3903309 (173T)
  - › C3905427 (127T)
  - › C3901774 (159T)
  - › C3902127 (138T)
- 9) **Crankshaft Gear**
  - › C3918776



- 1) **Top Gasket Set**
  - › C4025271
- 2) **Bottom Gsk Set**
  - › C3800348
- 3) **Head Gasket**
  - › C3938267
- 4) **Oil Pan Gasket**
  - › C3914017
- 5) **Valve Cover Gsk**
  - › C3905449
- 6) **Front Gear Gasket**
  - › C3929253
- 7) **Front Cover Gsk**
  - › C3917780



- 1) **Bushing, Piston**
  - › C3913990 x6
- 2) **Bushing, Cam**
  - › C3943199 x7
- 3) **Camshaft**
  - › C3924471
- 4) **Tappet**
  - › C3925031
- 5) **Push Rod**
  - › C3905194
- 6) **Rod Bolt**
  - › C3928870
- 7) **Connecting Rod**
  - › C3901381
- 8) **Con Rod Nut**
  - › C3901381
- 9) **Camshaft Gear**
  - › C3918777



- 1) **Oil Cooler 12 Plates**
  - › C3918175
- 2) **Oil Cooler Gasket**
  - › C3918174
- 3) **Oil Cooler Gsk Filter Hd**
  - › C3914308
- 4) **Oil Pump**
  - › C3930338

**1) Intake, Valve Kit**

- › C3802463
- Consist of:**
  - › C3924492 x1 Valve
  - › C3901177 x2 Collet

- 2) **Insert, Valve**
  - › C3924582
- Use 6**



- 1) **Water Pump**
  - › C3800976
- 2) **Water Pump Seal**
  - › C3902089
- 3) **Thermostat**
  - › C3928639 x2

**1) Exhaust, Valve Kit**

- › C3802085
- Consists of:**
  - › C3921444 x1 Valve
  - › C3901177 x2 Collet

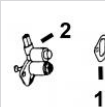
- 2) **Insert, Valve**
  - › C3924583
- Use 6**



- 1) **Cylinder Head**
  - › C3973493
- 2) **Head Bolt Kit**
  - › C6C-HBK

**1) Spring, Valve**

- › C3906412 x12
- 2) **Seal, Valve**
  - › C3915707 x12



- 1) **Fuel Lift Pump**
  - › C3917998
- 2) **Fuel Pump Gasket**
  - › C3914304

**1) Guide, Valve**

- › C3923564 x12
- 2) **Retainer, Valve Spring**
  - › C3912976 x12



- Tensioner, Belt**
  - › C3976831

(1): Block 3802265 (Thin Wall) Flange ø 5.223".

(3): Order in multiples of two.

(5): Only use on engines built from year 1991 onwards.

(7): Some applications use short nose pump C3806180

(9): Consist of C3919937 Liner + C3907177 Seal.

(11): Check for proper application.





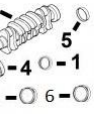
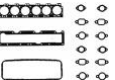
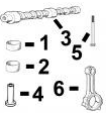
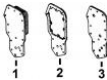

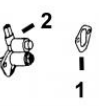

(2): Block 3802408 (Thick Wall / Long Liner) Flange ø 5.152", (Length: 9.33" / 237 mm).

(4): To use C3924471 to replace 3917882 buy the following from Cummins: 3918777 Cam Gear, 3927155 Thrust and 3902332 Key. Use ESN or application model to confirm correct camshaft.

(6): Do not use with Crankshaft part number 3965006.

(8): Marine applications use C3800975

(10): Consist of C3948095 Liner + C3907177 Seal.

|  |  |   |   |  |  |
|--|--|---|---|--|--|
| <p><b>Engine Series:</b><br/>C</p> <p><b>Engine Model:</b><br/>QSC 8.3</p> <p><b>Engine Desc:</b><br/>CAPS<br/>INJECTION</p> <p><b>Engine Data:</b><br/>24 VALVE</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.484 in /<br/>114 mm Stroke:<br/>5.31 in / 135<br/>mm</p> <p><b>Piston (M):</b><br/>2106, 3446</p> |  <p>1) <b>Engine O/H Kit</b><br/>• COK0319</p> <p>2) <b>Engine I/F Kit</b><br/>• CIK0319</p>   |  <p><b>Piston-Liner Kit</b><br/>• C3800319</p> <p><b>Consist of:</b></p> <p>• a) C3942106<br/>• b) C3901597<br/>• c) C3901996<br/>• d) C3802258<br/>• e) C3800328</p> <p><b>Use 6</b></p>   |  <p><b>Main Bearing Set</b><br/>• C3802210 <i>Std.</i><br/>• C3802211 0.25 mm<br/>• C3802212 0.50 mm<br/>• C3802213 0.75 mm</p> <p><b>Use 1</b></p>                 |  <p><b>Con Rod Bearing</b><br/>• C3901430 <i>Std</i><br/>• C3901431 0.25 mm<br/>• C3901432 0.50 mm<br/>• C3901433 0.75 mm</p> <p><b>Rod bearings are priced and sold per shell</b></p> |  <p>1) <b>Front Seal</b><br/>• C3353977</p> <p>2) <b>Rear Seal</b><br/>• C3353978</p> <p>3) <b>Crankshaft</b><br/>• C3918986</p> <p>4) <b>Front Wear Sleeve</b><br/>• C3908277</p> <p>5) <b>Rear Wear Sleeve</b><br/>• C3906081</p> <p>6) <b>Ring Gear</b><br/>• C3903309 (173T)<br/>• C3905427 (127T)<br/>• C3901774 (159T)<br/>• C3902127 (138T)</p> <p>7) <b>Crankshaft Gear</b><br/>• C3918776</p> |
| <p>Please see page 515 for a complete list of equipment models.</p>  |  <p>1) <b>Top Gasket Set</b><br/>• C4089958</p> <p>2) <b>Bottom Gsk Set</b><br/>• C3800343</p> <p>3) <b>Head Gasket</b><br/>• C3943366</p> <p>4) <b>Oil Pan Gasket</b><br/>• C3938160</p> <p>5) <b>Valve Cover Gsk</b><br/>• C3939284</p> <p>6) <b>Front Gear Gasket</b><br/>• C3944293</p> <p>7) <b>Rear Cover Gasket</b><br/>• C3939353</p> |  <p>1) <b>Bushing, Piston</b><br/>• C3913990 x6</p> <p>2) <b>Bushing, Cam</b><br/>• C3943199 x7</p> <p>3) <b>Camshaft</b><br/>• C3938163</p> <p>4) <b>Tappet</b><br/>• C3945866 x12</p> <p>5) <b>Head Bolt Long</b><br/>• C3917728 x26</p> <p>6) <b>Con Rod</b><br/>• C3971394</p> |  <p>1) <b>Oil Cooler 12 Plates</b><br/>• C3918175</p> <p>2) <b>Oil Cooler Gasket</b><br/>• C3918174</p> <p>3) <b>Oil Cooler Gsk Filter Hd</b><br/>• C3914308</p> |  |  |
| <p>1) <b>Intake Valve</b><br/>• C3942588 x12</p> <p>2) <b>Insert, Valve</b><br/>• C3940152 x12</p>   | <p>1) <b>Exhaust Valve</b><br/>• C3942589 x12</p> <p>2) <b>Insert, Valve</b><br/>• C3940153 x12</p>  | <p>1) <b>Valve Spring</b><br/>• C3940279 x24</p> <p>2) <b>Seal, Valve</b><br/>• C3948578 x12</p>  | <p>1) <b>Valve Guide</b><br/>• C3942645 x24</p> <p>2) <b>Retainer, Valve Spring</b><br/>• C3900250 X48</p>  |  |  |
|  <p>1) <b>Water Pump</b><br/>• C4089647</p> <p>2) <b>Water Pump Seal</b><br/>• C3940386</p> <p>3) <b>Thermostat</b><br/>• C5284903</p>  | <p><b>Oil, Pump</b><br/>• C3948072</p>   |  <p>1) <b>Fuel Lift Pump</b><br/>• C4988747</p> <p>2) <b>Fuel Pump Gasket</b><br/>• C3914304</p>  |  <p>1) <b>Tensioner, Belt</b><br/>• C3976831</p>   |  |  |

(1): Check Application for proper usage.

**Engine Series:**  
05

**Engine Model:**  
D1105-BB /  
D1105-BG2

**Engine Desc:**  
D1105-BBS

**Engine Data:**  
Indirect  
Injection  
Screw-in fuel  
injector

**Engine Info:**  
3 Cyl - Naturally  
Aspirated

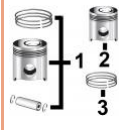
**Engine  
Dimensions:**  
Bore: 3.07 in /  
78mm Stroke:  
3.09 in /  
78.4mm

Please see  
page **516** for a  
complete list of  
equipment  
models.



**Engine O/H Kit**

- › KD1105 Std.
- › KD1105/50 0.50 mm.



**1) Piston & Ring Kit**

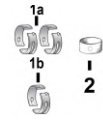
- › K1G069-21775 Std.
- › K1G069-21795 0.50 mm

**2) Piston**

- › K16060-21114 Std.
- › K16060-21914 0.50

**3) Ring Set**

- › K16261-21050 Std. **15**
- › K16261-21090 0.50 **16**



**1a) Main Bearing**

- › K16292-23480 Std.
- › K16292-23930 0.20 mm
- › K16292-23940 0.40 mm

**Use 2 Pairs**

**1b) Main Bearing**

- › K16292-23490 Std.
- › K16292-23860 0.20 mm
- › K16292-23870 0.40 mm

**Use 1 Pair**

**2) Frt. Crank Bushing**

- › K16292-23470 Std.
- › K16292-23910 0.20 mm
- › K16292-23920 0.40 mm

**Use 1**



**Con Rod Bearing**

- › K16292-22310 Std.
- › K16292-22970 0.20 mm
- › K16292-22980 0.40 mm

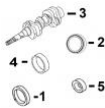
**Use 3 Pairs**



**Thrust Washer**

- › K15521-23530/40 Std.
- › K15521-23950/70 0.20 mm
- › K15521-23960/80 0.40 mm

**Set of 2 Pairs**



**1) Front Seal**

- › K16241-04212

**2) Rear Seal**

- › K16241-04460

**3) R. Crank Sleeve**

- › K16241-23280



**1) Top Gasket Set**

- › K07916-29116 **1**
- › K07916-29117 **17**

**2) Bottom Gasket Set**

- › K1G995-99362

**3) Head Gasket**

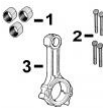
- › K16261-03310 **2**
- › K1E038-03310 **3**
- › K1G063-03310 **4**

**4) Rocker Cvr. Gasket**

- › K16261-14524

**5) Oil Pan**

- › K16299-01620



**1) Bushing, Con Rod**

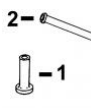
- › K1G700-21980 **18**

**2) Bolt, Con Rod**

- › K16241-22142

**3) Connecting Rod**

- › K16292-22016



**1) Tappet**

- › K1G673-15550

**2) Pushrod**

- › K16241-15114



**1) Thermostat**

- › K19434-73014 **5**
- › K1E399-73010 **6**

**2) Gasket, Thermostat**

- › K16221-73270 **7**
- › K16851-73270 **8**

**Valve, Intake**

- › K16241-13110

**Valve, Exhaust**

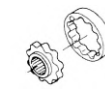
- › K16241-13120

**Guide, Valve Intake**

- › K16261-13540
- Guide, Valve Exh.**
- › K16261-13560

**Spring, Valve**

- › K16271-13240 **9**
- › K15261-13240 **10**
- Seal, Valve**
- › K1C010-13150
- Lock, Valve**
- › K15261-13980



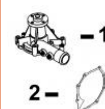
**Oil pump**

- › K16241-35070



**Fuel pump**

- › K16241-52030

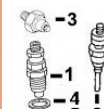


**1) Water pump**

- › K16251-73034 **11**
- › K16241-73034 **12**

**2) Gasket, water pump**

- › K16239-73430 **13**
- › K16261-73430 **14**



**1) Injector**

- › K16032-53902

**2) Glow Plug**

- › K16851-65510

**3) Oil pressure switch**

- › K15841-39010

**4) Copper gasket, injector**

- › K15841-53622

**5) Heat Shield, Injector**

- › K19077-53650

(1): Includes composite head gasket K16261-03310 (no gas vents between fire rings)

(3): Composite Material. It does have gas vents between fire rings. It is recommended to replace O-ring K15221-33700 when installing a new composite head gasket

(5): 71°C (160° F). Use Gasket K16221-73270 Flange outside diameter 44mm & inner diameter 22mm (below flange). Total height 40mm

(7): For thermostat K19434-73014. Installation holes center to center 60mm. Inner Diameter 41mm

(9): Free length ≈37.05mm

(11): Impeller diameter 68mm. Use Gasket K16239-73430

(13): Metal material. Use on water pump K16251-73034 (68mm impeller)

(15): Middle ring is Napier/Hook style ring. There is also available ring set 16292-21050 with a internally stepped middle ring

(17): Includes composite head gasket K1E038-03310 (gas vents between fire rings)

(2): Composite Material. No gas vents between fire rings. It is recommended to replace O-ring K15221-33700 when installing a new composite head gasket.

(4): MLS

(6): 71°C (160° F). Use Gasket K16851-73270 Flange outside diameter 38mm & inner diameter 27mm (below flange). Total height 45mm

(8): For thermostat K1E399-73010. Installation holes center to center 52mm. Inner Diameter 35mm

(10): Free length ≈35.6mm

(12): Impeller diameter 58mm. Use Gasket K16261-73430

(14): Paper material. Use on water pump 16241-73034 (58mm impeller)

(16): Middle ring is Napier/Hook style ring. There is also available ring set 16292-21090 with a internally stepped middle ring

(18): Finished Bore

**Engine Series:**  
05

**Engine Model:**  
D1105-T-E3B

**Engine Data:**  
Indirect Injection  
Screw-in fuel injector

**Engine Info:**  
3 Cyl - Turbocharged

**Engine Dimensions:**  
Bore: 3.07 in / 78mm  
Stroke: 3.09 in / 78.4mm

**BOBCAT**

B100 - Loader Backhoe  
B200 - Loader Backhoe  
B250 - Loader Backhoe

**DITCH WITCH**

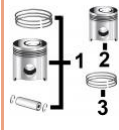
SK650 - Mini Skid Steer  
XT855 - Mini Skid Steer



**Engine O/H Kit**

- › KD1105T Std.
- › KD1105T/50 0.50 mm

1  
1



**1) Piston & Ring Kit**

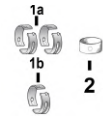
- › K1G993-21774 Std.
- › K1G995-21794 0.50 mm

**2) Piston**

- › K16292-21115 Std.
- › K16292-21915 0.50

**3) Ring Set**

- › K16292-21050 Std.
- › K16292-21090 0.50



**1a) Main Bearing**

- › K16292-23480 Std.
- › K16292-23930 0.20 mm
- › K16292-23940 0.40 mm

**Use 2 Pairs**

**1b) Main Bearing**

- › K16292-23490 Std.
- › K16292-23860 0.20 mm
- › K16292-23870 0.40 mm

**Use 1 Pair**

**2) Frt. Crank Bushing**

- › K16292-23470 Std.
- › K16292-23910 0.20 mm
- › K16292-23920 0.40 mm

**Use 1**



**Con Rod Bearing**

- › K16292-22310 Std.
- › K16292-22970 0.20 mm
- › K16292-22980 0.40 mm

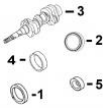
**Use 3 Pairs**



**Thrust Washer**

- › K15521-23530/40 Std.
- › K15521-23950/70 0.20 mm
- › K15521-23960/80 0.40 mm

**Set of 2 Pairs**



**1) Front Seal**

- › K16241-04212

**2) Rear Seal**

- › K16241-04460

**3) R. Crank Sleeve**

- › K16241-23280



**1) Top Gasket Set**

- › K07916-29117

**2) Bottom Gasket Set**

- › K1G995-99362

**3) Head Gasket**

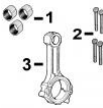
- › K16261-03310
- › K1E038-03310
- › K1G063-03310

**4) Rocker Cvr. Gasket**

- › K16261-14524

**5) Oil Pan**

- › K16299-01620



**1) Bushing, Con Rod**

- › K1G700-21980

**2) Bolt, Con Rod**

- › K16241-22142

**3) Connecting Rod**

- › K16292-22016



**1) Tappet**

- › K1G673-15550

**2) Pushrod**

- › K16241-15114



**1) Thermostat**

- › K19434-73014
- › K1E399-73010

**2) Gasket, Thermostat**

- › K16221-73270
- › K16851-73270

**Valve, Intake**

- › K16241-13110

**Valve, Exhaust**

- › K16241-13120

**Guide, Valve Intake**

- › K16261-13540

**Guide, Valve Exh.**

- › K16261-13560

**Spring, Valve**

- › K16271-13240
- › K15261-13240

**Seal, Valve**

- › K1C010-13150

**Lock, Valve**

- › K15261-13980



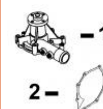
**Oil pump**

- › K16241-35070



**Fuel pump**

- › K16241-52030

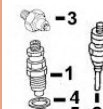


**1) Water pump**

- › K16251-73034
- › K16241-73034

**2) Gasket, water pump**

- › K16239-73430
- › K16261-73430



**1) Injector**

- › K16032-53902

**2) Glow Plug**

- › K16851-65510

**3) Oil pressure switch**

- › K15841-39010

**4) Copper gasket, injector**

- › K15841-53622

**5) Heat Shield, Injector**

- › K19077-53650

(1): Includes composite head gasket K1E038-03310 (gas vents between fire rings) Other head gaskets available

(3): Composite Material. It does have gas vents between fire rings. It is recommended to replace O-ring K15221-33700 when installing a new composite head gasket

(5): 71°C (160°F). Use gasket K16221-73270/Flange outside diameter 44mm & inner diameter 22mm (below flange). Total height 40mm

(7): For thermostat K19434-73014. Installation holes center to center 60mm. Inner Diameter 41mm

(9): Free length =37.05mm

(11): Impeller diameter 68mm. Use Gasket K16239-73430

(13): Metal material. Use on water pump K16251-73034 (68mm impeller)

(15): Finished Bore

(2): Composite Material. No gas vents between fire rings. It is recommended to replace O-ring K15221-33700 when installing a new composite head gasket.

(4): MLS

(6): 71°C (160°F). Use gasket K16851-73270/Flange outside diameter 38mm & inner diameter 27mm (below flange). Total height 45mm

(8): For thermostat K1E399-73010. Installation holes center to center 52mm. Inner Diameter 35mm

(10): Free length =35.6mm

(12): Impeller diameter 58mm. Use Gasket K16261-73430

(14): Paper material. Use on water pump 16241-73034 (58mm impeller)

**Engine Series:**  
05

**Engine Model:**  
V1505-E3B /  
V1505-BG2

**Engine Desc:**  
V1505-BB /  
V1505-BBS

**Engine Data:**  
Indirect  
Injection  
Screw-in fuel  
injector

**Engine Info:**  
4 Cyl - Naturally  
Aspirated

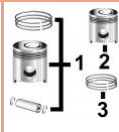
**Engine Dimensions:**  
Bore: 3.07 in /  
78mm Stroke:  
3.09 in /  
78.4mm

Please see page 517 for a complete list of equipment models.



**Engine O/H Kit**

- › KV1505 Std.
- › KV1505/50 0.50 mm



**1) Piston & Ring Kit**

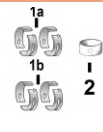
- › K1G069-21775 Std.
- › K1G069-21795 0.50 mm

**2) Piston**

- › K16060-21114 Std.
- › K16060-21914 0.50

**3) Ring Set**

- › K16261-21050 Std. **15**
- › K16261-21090 0.50 **16**



**1a) Main Bearing**

- › K16292-23480 Std.
- › K16292-23930 0.20 mm
- › K16292-23940 0.40 mm

**Use 2 Pairs**

**1b) Main Bearing**

- › K16292-23490 Std.
- › K16292-23860 0.20 mm
- › K16292-23870 0.40 mm

**Use 2 Pairs**

**2) Frt. Crank Bushing**

- › K16292-23470 Std.
- › K16292-23910 0.20 mm
- › K16292-23920 0.40 mm

**Use 1**



**Con Rod Bearing**

- › K16292-22310 Std.
- › K16292-22970 0.20 mm
- › K16292-22980 0.40 mm

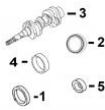
**Use 4 Pairs**



**Thrust Washer**

- › K15521-23530/40 Std.
- › K15521-23950/70 0.20 mm
- › K15521-23960/80 0.40 mm

**Set of 2 Pairs**



**1) Front Seal**

- › K16241-04212

**2) Rear Seal**

- › K16241-04460

**3) R. Crank Sleeve**

- › K16241-23280



**1) Top Gasket Set**

- › K16286-99352 **1**
- › K07916-27305 **17**

**2) Bottom Gasket Set**

- › K1G089-99365

**3) Head Gasket**

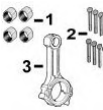
- › K16282-03310 **2**
- › K16292-03310 **3**
- › K16394-03313 **4**

**4) Rocker Cvr. Gasket**

- › K16241-14520

**5) Oil Pan**

- › K16299-01620



**1) Bushing, Con Rod**

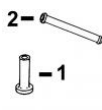
- › K1G700-21980 **18**

**2) Bolt, Con Rod**

- › K16241-22142

**3) Connecting Rod**

- › K16292-22016



**1) Tappet**

- › K1G673-15550

**2) Pushrod**

- › K16241-15114



**1) Thermostat**

- › K19434-73014 **5**
- › K1E399-73010 **6**

**2) Gasket, Thermostat**

- › K16221-73270 **7**
- › K16851-73270 **8**

**Valve, Intake**

- › K16241-13110 x4

**Valve, Exhaust**

- › K16241-13120 x4

**Guide, Valve Intake**

- › K16261-13540 x4
- Guide, Valve Exh.**
- › K16261-13560 x4

**Spring, Valve**

- › K16271-13240 x8 **9**
- › K15261-13240 x8 **10**
- Seal, Valve**
- › K1C010-13150 x8
- Lock, Valve**
- › K15261-13980 x8



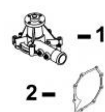
**Oil pump**

- › K16241-35070



**Fuel pump**

- › K16241-52030

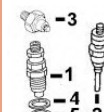


**1) Water pump**

- › K16251-73034 **11**
- › K16241-73034 **12**

**2) Gasket, water pump**

- › K16239-73430 **13**
- › K16261-73430 **14**



**1) Injector**

- › K16032-53902

**2) Glow Plug**

- › K16851-65510

**3) Oil pressure switch**

- › K15841-39010

**4) Copper gasket, injector**

- › K15841-53622

**5) Heat Shield, Injector**

- › K19077-53650

(1): Includes composite head gasket K16282-03310(no gas vents between fire rings)

(3): Composite Material. It does have gas vents between fire rings. It is recommended to replace O-ring K15221-33700 when installing a new composite head gasket

(5): 71°C (160° F). Use gasket K16221-73270 Flange outside diameter 44mm & inner diameter 22mm (below flange). Total height 40mm

(7): For thermostat K19434-73014. Installation holes center to center 60mm. Inner Diameter 41mm

(9): Free length =37.05mm

(11): Impeller diameter 68mm. Use Gasket K16239-73430

(13): Metal material. Use on water pump K16251-73034 (68mm impeller)

(15): Middle ring is Napier/Hook style ring. There is also available ring set 16292-21050 with a internally stepped middle ring

(17): Includes composite head gasket K16292-03310(gas vents between fire rings)

(2): Composite Material. No gas vents between fire rings. It is recommended to replace O-ring K15221-33700 when installing a new composite head gasket.

(4): MLS

(6): 71°C (160° F). Use gasket K16851-73270 Flange outside diameter 38mm & inner diameter 27mm (below flange). Total height 45mm

(8): For thermostat K1E399-73010. Installation holes center to center 52mm. Inner Diameter 35mm

(10): Free length =35.6mm

(12): Impeller diameter 58mm. Use Gasket K16261-73430

(14): Paper material. Use on water pump 16241-73034 (58mm impeller)

(16): Middle ring is Napier/Hook style ring. There is also available ring set 16292-21090 with a internally stepped middle ring

(18): Finished Bore

# KUBOTA 05 SERIES V1505T INDIRECT INJECTION

**Engine Series:**  
05

**Engine Model:**  
V1505-T-E3B /  
V1505-T-EBB

**Engine Desc:**  
V1505-T-E2B

**Engine Data:**  
Indirect  
Injection  
Screw-in fuel  
injector

**Engine Info:**  
4 Cyl -  
Turbocharged

**Engine Dimensions:**  
Bore: 3.07 in /  
78mm Stroke:  
3.09 in /  
78.4mm

**SNORKEL**

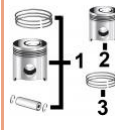
T40RT -  
Wheeled  
Telescopic Lift  
T46JRT -  
Wheeled  
Telescopic Lift



**Engine O/H Kit**

- › KV1505T Std.
- › KV1505T/50 0.50 mm

1



**1) Piston & Ring Kit**

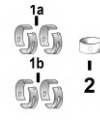
- › K1G993-21774 Std.
- › K1G995-21794 0.50 mm

**2) Piston**

- › K16292-21115 Std.
- › K16292-21915 0.50

**3) Ring Set**

- › K16292-21050 Std.
- › K16292-21090 0.50



**1a) Main Bearing**

- › K16292-23480 Std.
- › K16292-23930 0.20 mm
- › K16292-23940 0.40 mm

**Use 2 Pairs**

**1b) Main Bearing**

- › K16292-23490 Std
- › K16292-23860 0.20 mm
- › K16292-23870 0.40 mm

**Use 2 Pairs**

**2) Frt. Crank Bushing**

- › K16292-23470 Std.
- › K16292-23910 0.20 mm
- › K16292-23920 0.40 mm

**Use 1**



**Con Rod Bearing**

- › K16292-22310 Std.
- › K16292-22970 0.20 mm
- › K16292-22980 0.40 mm

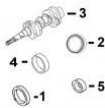
**Use 4 Pairs**



**Thrust Washer**

- › K15521-23530/40 Std.
- › K15521-23950/70 0.20 mm
- › K15521-23960/80 0.40 mm

**Set of 2 Pairs**



**1) Front Seal**

- › K16241-04212

**2) Rear Seal**

- › K16241-04460

**3) R. Crank Sleeve**

- › K16241-23280



**1) Top Gasket Set**

- › K07916-27305

**2) Bottom Gasket Set**

- › K1G089-99365

**3) Head Gasket**

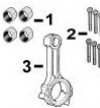
- › K16282-03310
- › K16292-03310
- › K16394-03313

**4) Rocker Cvr. Gasket**

- › K16241-14520

**5) Oil Pan**

- › K16299-01620



**1) Bushing, Con Rod**

- › K1G700-21980

**2) Bolt, Con Rod**

- › K16241-22142

**3) Connecting Rod**

- › K16292-22016



**1) Tappet**

- › K1G673-15550

**2) Pushrod**

- › K16241-15114



**1) Thermostat**

- › K19434-73014
- › K1E399-73010

**2) Gasket, Thermostat**

- › K16221-73270
- › K16851-73270

**Valve, Intake**

- › K16241-13110 x4

**Valve, Exhaust**

- › K16241-13120 x4

**Guide, Valve Intake**

- › K16261-13540 x4

**Guide, Valve Exh.**

- › K16261-13560 x4

**Spring, Valve**

- › K16271-13240 x8
- › K15261-13240 x8

**Seal, Valve**

- › K1C010-13150 x8

**Lock, Valve**

- › K15261-13980 x16



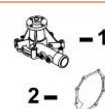
**Oil pump**

- › K16241-35070



**Fuel pump**

- › K16241-52030



**1) Water pump**

- › K16251-73034
- › K16241-73034

**2) Gasket, water pump**

- › K16239-73430
- › K16261-73430



**1) Injector**

- › K16032-53902

**2) Glow Plug**

- › K16851-65510

**3) Oil pressure switch**

- › K15841-39010

**4) Copper gasket, injector**

- › K15841-53622

**5) Heat Shield, Injector**

- › K19077-53650

(1): Includes composite head gasket K16292-03310(gas vents between fire rings) Other head gaskets available

(3): Composite Material. It does have gas vents between fire rings. It is recommended to replace O-ring K15221-33700 when installing a new composite head gasket

(5): 71°C (160°F). Use gasket K16221-73270/Flange Outside diameter 44mm & inner diameter 22mm (below flange). Total height 40mm

(7): For thermostat K19434-73014. Installation holes center to center 60mm. Inner Diameter 41mm

(9): Free length =37.05mm

(11): Impeller diameter 68mm. Use Gasket K16239-73430

(13): Metal material. Use on water pump K16251-73034 (68mm impeller)

(15): Finished Bore

(2): Composite Material. No gas vents between fire rings. It is recommended to replace O-ring K15221-33700 when installing a new composite head gasket.

(4): MLS

(6): 71°C (160°F). Use gasket K16851-73270/Flange outside diameter 38mm & inner diameter 27mm (below flange). Total height 45mm


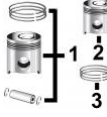
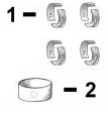


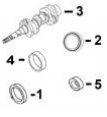
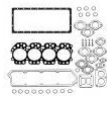

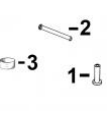

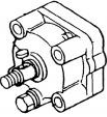

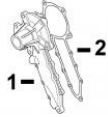
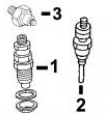

(8): For thermostat K1E399-73010. Installation holes center to center 52mm. Inner Diameter 35mm

(10): Free length =35.6mm

(12): Impeller diameter 58mm. Use Gasket K16261-73430

(14): Paper material. Use on water pump 16241-73034 (58mm impeller)



|  |   |   |   |  |  |  |  |
|--|---|---|---|--|--|--|--|
| <p><b>Engine Series:</b><br/>02</p> <p><b>Engine Model:</b><br/>V1702</p> <p><b>Engine Data:</b><br/>Indirect Injection<br/>Screw-in fuel injector</p> <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.228 in / 82 mm<br/>Stroke: 3.228 in / 82 mm</p>   |  <p><b>Engine O/H Kit</b></p> <ul style="list-style-type: none"> <li>› KV1702 Std.</li> <li>› KV1702/50 0.50 mm</li> </ul>  |  <p><b>1) Piston &amp; Ring Kit</b></p> <ul style="list-style-type: none"> <li>› K07916-26630 Std.</li> <li>› K07916-26640 0.50 mm</li> </ul> <p><b>Use 4</b></p> <p><b>2) Piston</b></p> <ul style="list-style-type: none"> <li>› K15201-21110 Std.</li> <li>› K15201-21910 0.50</li> </ul> <p><b>3) Ring Set</b></p> <ul style="list-style-type: none"> <li>› K15201-21052 Std.</li> <li>› K15201-21092 0.50</li> </ul> |  <p><b>1) Main Bearing</b></p> <ul style="list-style-type: none"> <li>› K17311-23480 Std.</li> <li>› K17311-23930 0.20 mm</li> <li>› K17311-23940 0.40 mm</li> </ul> <p><b>Use 4 Pairs</b></p> <p><b>2) Front Crank Bushing</b></p> <ul style="list-style-type: none"> <li>› K17311-23470 Std.</li> <li>› K17311-23910 0.20 mm</li> <li>› K17311-23920 0.40 mm</li> </ul> <p><b>Use 1</b></p> |  <p><b>1) Con Rod Bearing</b></p> <ul style="list-style-type: none"> <li>› K15471-22310 Std.</li> <li>› K15471-22970 0.20 mm</li> <li>› K15471-22980 0.40 mm</li> </ul> <p><b>Use 4 Pairs</b></p> <p><b>2) Kit Metal, Engine</b></p> <ul style="list-style-type: none"> <li>› K07916-28120 Std.</li> </ul> |  <p><b>Thrust Washer</b></p> <ul style="list-style-type: none"> <li>› K15521-23530/40 Std.</li> <li>› K15521-23950/70 0.20 mm</li> <li>› K15521-23960/80 0.40 mm</li> </ul> <p><b>Set of 2 Pairs</b></p> |  |  |
| <p><b>Kubota</b></p> <ul style="list-style-type: none"> <li>L2850 - Tractor</li> <li>L1850F - Tractor</li> <li>L2850DT - Tractor</li> <li>L2860GST - Tractor</li> <li>L2850T - Tractor</li> </ul> <p><b>Bobcat</b></p> <ul style="list-style-type: none"> <li>733 - Skid Steer Loader</li> <li>743 - Skid Steer Loader</li> <li>743B - Skid Steer Loader</li> <li>743DS - Skid Steer Loader</li> <li>1600 - Wheel Loader</li> </ul> <p><b>Genie</b></p> <ul style="list-style-type: none"> <li>Z45/22 - Boom lift</li> </ul> |  <p><b>1) Front Seal</b></p> <ul style="list-style-type: none"> <li>› K19202-04140</li> </ul> <p><b>2) Rear Seal</b></p> <ul style="list-style-type: none"> <li>› K19202-04460</li> </ul> <p><b>3) Crankshaft</b></p> <ul style="list-style-type: none"> <li>› K15476-23010</li> </ul> <p><b>4) Rear Crank Bushing</b></p> <ul style="list-style-type: none"> <li>› K19202-23280</li> </ul> <p><b>5) Front Crank Collar</b></p> <ul style="list-style-type: none"> <li>› K19202-23250</li> </ul> |  <p><b>1) Top Gasket Set</b></p> <ul style="list-style-type: none"> <li>› K07916-29695</li> </ul> <p><b>2) Bottom Gasket Set</b></p> <ul style="list-style-type: none"> <li>› K07916-29705</li> </ul> <p><b>3) Head Gasket</b></p> <ul style="list-style-type: none"> <li>› K15766-03310</li> </ul> <p><b>4) Rocker Cover Gasket</b></p> <ul style="list-style-type: none"> <li>› K15471-14520</li> </ul>                |  <p><b>1) Bushing, Con Rod</b></p> <ul style="list-style-type: none"> <li>› K15221-21980 x4</li> </ul> <p><b>2) Bolt, Con Rod</b></p> <ul style="list-style-type: none"> <li>› K1J700-22140 x8</li> </ul> <p><b>3) Connecting Rod</b></p> <ul style="list-style-type: none"> <li>› K15471-22013</li> </ul>   |  <p><b>1) Tappet</b></p> <ul style="list-style-type: none"> <li>› K15221-15550 x8</li> </ul> <p><b>2) Pushrod</b></p> <ul style="list-style-type: none"> <li>› K15221-15110 x8</li> </ul> <p><b>3) Cam Bushing</b></p>  |  <p><b>1) Thermostat</b></p> <ul style="list-style-type: none"> <li>› K15321-73010</li> </ul> <p><b>2) Switch, Thermostat</b></p> <ul style="list-style-type: none"> <li>› K33400-75250</li> </ul>      |  |  |
| <p><b>Valve, Intake</b></p> <ul style="list-style-type: none"> <li>› K15221-13110 x4</li> </ul>  |   | <p><b>Valve, Exhaust</b></p> <ul style="list-style-type: none"> <li>› K15221-13120 x4</li> </ul>  |   | <p><b>Guide, Valve Intake</b></p> <ul style="list-style-type: none"> <li>› K17321-13580 x4</li> </ul> <p><b>Guide, Valve Exh.</b></p> <ul style="list-style-type: none"> <li>› K17321-13560 x4</li> </ul>  |  | <p><b>Spring, Valve</b></p> <ul style="list-style-type: none"> <li>› K15221-13240 x8</li> </ul> <p><b>Seal, Valve</b></p> <ul style="list-style-type: none"> <li>› K15221-13153 x8</li> </ul> <p><b>Lock, Valve</b></p> <ul style="list-style-type: none"> <li>› K15221-13980 x16</li> </ul> |  |
|  <p><b>Oil Pump</b></p> <ul style="list-style-type: none"> <li>› K15471-35013</li> </ul>  |  <p><b>Fuel Lift Pump</b></p> <ul style="list-style-type: none"> <li>› K15263-52030</li> </ul>   |  <p><b>1) Water Pump</b></p> <ul style="list-style-type: none"> <li>› K15221-73030</li> </ul> <p><b>2) Water Pump Gasket</b></p> <ul style="list-style-type: none"> <li>› K15766-53430</li> </ul>  |  <p><b>1) Injector</b></p> <ul style="list-style-type: none"> <li>› K19202-53020 x4</li> </ul> <p><b>2) Glow Plug</b></p> <ul style="list-style-type: none"> <li>› K15521-65510 x4</li> </ul> <p><b>3) Switch, Oil</b></p> <ul style="list-style-type: none"> <li>› K15841-39010</li> </ul>  |  <p><b>Liner</b></p> <ul style="list-style-type: none"> <li>› 1) K15201-02310</li> <li>› 2) Cylinder Head K15422-03044UF <b>1</b></li> </ul>  |  |  |  |

(1): WITH OUT STEAM HOLES

**Engine Series:**  
03

**Engine Model:**  
V2003-M

**Engine Desc:**  
V2003-M-E2B  
/ V2003-M-  
E3BG

**Engine Data:**  
Indirect  
Injection  
Screw-in fuel  
injector  
Fuel solenoid  
on front cover  
Crankshaft  
Main Journal  
OD: 60 mm

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.268 in /  
83 mm Stroke:  
3.638 in / 92.4  
mm

**TYMCO**

**RED-D-ARC**

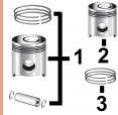
**REFORM**

**WERKE**



**Engine O/H Kit**

- › KV2003MW Std.
- › KV2003MW/25 0.25 mm



**1) Piston & Ring Kit**

- › K1G726-21772 Std.
- › K1G726-21782 0.25 mm

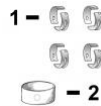
**Use 4**

**2) Piston**

- › K1A021-21112 Std.
- › K1A021-21902 0.25 mm

**3) Ring Set**

- › K1G464-21050 Std.
- › K1G464-21090 0.25 mm



**1) Main Bearing**

- › K1A091-23480 Std.
- › K1A091-23930 0.20 mm
- › K1A091-23940 0.40 mm

**Use 4 Pairs**

**2) Front Crank Bushing**

- › K1A091-23470 Std.
- › K1A091-23910 0.20 mm
- › K1A091-23920 0.40 mm

**Use 1**



**1) Con Rod Bearing**

- › K17311-22310 Std.
- › K17311-22970 0.20 mm
- › K17311-22980 0.40 mm

**Use 4 Pairs**

**2) Kit Metal, Engine**

- › K1G856-23570 Std.
- › K1G856-23760 0.20 mm
- › K1G856-23770 0.40 mm

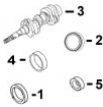


**Thrust Washer**

- › K1A091-23530/40 Std.
- › K1A091-23950/70 0.20 mm

- › K1A091-23960/80 0.40 mm

**Set of 2 Pairs**



**1) Front Seal**

- › K19202-04140

**2) Rear Seal**

- › K19202-04460

**3) Crankshaft**

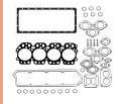
- › K16641-23020

**4) Rear Crank Bushing**

- › K19202-23280

**5) Front Crank Collar**

- › K19202-23250



**1) Top Gasket Set**

- › K1G468-99350

**2) Bottom Gasket Set**

- › K1G486-99360

**3) Head Gasket**

- › K1G770-03312 1.20

**4) Rocker Cover Gasket**

- › K1G911-14523



**1) Bushing, Con Rod**

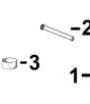
- › K17331-21980 x4

**2) Bolt, Con Rod**

- › K1J700-22140 x8

**3) Connecting Rod**

- › K17311-22010



**1) Tappet**

- › K15601-15550 x8

**2) Pushrod**

- › K19013-15110 x8

**3) Cam Bushing**



**1) Thermostat**

- › K1A021-73012

**2) Switch, Thermostat**

- › K31351-32830

**Valve, Intake**

- › K16484-13110 x4

**Valve, Exhaust**

- › K16484-13120 x4

**Guide, Valve Intake**

- › K17321-13580 x4

**Guide, Valve Exhaust**

- › K17321-13560 x4

**Spring, Valve**

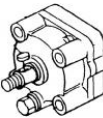
- › K15221-13240 x8

**Seal, Valve**

- › K15221-13153 x8

**Lock, Valve**

- › K15221-13980 x16



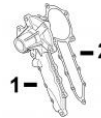
**Oil Pump**

- › K15471-35013



**Fuel Lift Pump**

- › K17121-52030



**1) Water Pump**

- › K1A051-73032

**2) Gasket, Water Pump**

- › K1A051-73430



**1) Injector**

- › K16454-53900 x4

**2) Glow Plug**


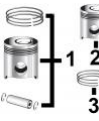
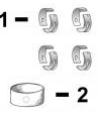



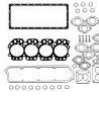

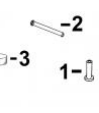

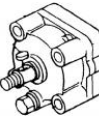

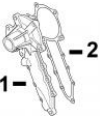
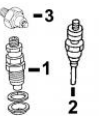

- › K19077-65510 x4


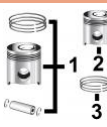
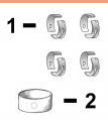


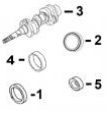
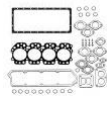

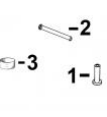

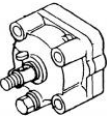

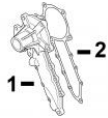
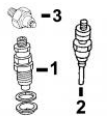

**3) Switch, Oil**

- › K15841-39010



**Repair Sleeve**

|  |   |   |   |  |  |  |
|--|---|---|---|--|--|--|
| <p><b>Engine Series:</b><br/>03</p> <p><b>Engine Model:</b><br/>V2003-M-TEB</p> <p><b>Engine Desc:</b><br/>V2003-M-T-E2B / V2003-M-TE3B</p> <p><b>Engine Data:</b><br/>Indirect Injection<br/>Screw-in fuel injector<br/>Fuel solenoid on front cover<br/>Crankshaft Main Journal OD: 60mm</p> <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.268 in / 83 mm<br/>Stroke: 3.638 in / 92.4 mm</p> |  <p><b>Engine O/H Kit</b></p> <ul style="list-style-type: none"> <li>› KV2003MTW Std.</li> <li>› KV2003MTW/25 0.25 mm</li> </ul>  |  <p><b>1) Piston &amp; Ring Kit</b></p> <ul style="list-style-type: none"> <li>› K1G468-21770 Std.</li> <li>› K1G468-21780 0.25 mm</li> </ul> <p><b>Use 4</b></p> <p><b>2) Piston</b></p> <ul style="list-style-type: none"> <li>› K1G624-21110 Std.</li> <li>› K1G624-21900 0.25 mm</li> </ul> <p><b>3) Ring Set</b></p> <ul style="list-style-type: none"> <li>› K1A024-21050 Std.</li> <li>› K1A024-21090 0.25 mm</li> </ul>   |  <p><b>1) Main Bearing</b></p> <ul style="list-style-type: none"> <li>› K1A091-23480 Std.</li> <li>› K1A091-23930 0.20 mm</li> <li>› K1A091-23940 0.40 mm</li> </ul> <p><b>Use 4 Pairs</b></p> <p><b>2) Front Crank Bushing</b></p> <ul style="list-style-type: none"> <li>› K1A091-23470 Std.</li> <li>› K1A091-23910 0.20 mm</li> <li>› K1A091-23920 0.40 mm</li> </ul> <p><b>Use 1</b></p> |  <p><b>1) Con Rod Bearing</b></p> <ul style="list-style-type: none"> <li>› K17311-22310 Std.</li> <li>› K17311-22970 0.20 mm</li> <li>› K17311-22980 0.40 mm</li> </ul> <p><b>Use 4 Pairs</b></p> <p><b>2) Kit Metal, Engine</b></p> <ul style="list-style-type: none"> <li>› K1G856-23570 Std.</li> <li>› K1G856-23760 0.20 mm</li> <li>› K1G856-23770 0.40 mm</li> </ul> |  <p><b>Thrust Washer</b></p> <ul style="list-style-type: none"> <li>› K1A091-23530/40 Std.</li> <li>› K1A091-23950/70 0.20 mm</li> <li>› K1A091-23960/80 0.40 mm</li> </ul> <p><b>Set of 2 Pairs</b></p> |  |
| <p><b>Bobcat</b></p> <p>337 - Mini Excavator<br/>341 - Midi Excavator<br/>S160 - Wheel Skid Steer Loader<br/>S185 - Skid Steer Loader<br/>T180 - Compact Track Loader</p>  |  <p><b>1) Front Seal</b></p> <ul style="list-style-type: none"> <li>› K19202-04140</li> </ul> <p><b>2) Rear Seal</b></p> <ul style="list-style-type: none"> <li>› K19202-04460</li> </ul> <p><b>3) Crankshaft</b></p> <ul style="list-style-type: none"> <li>› K16641-23020</li> </ul> <p><b>4) Rear Crank Bushing</b></p> <ul style="list-style-type: none"> <li>› K19202-23280</li> </ul> <p><b>5) Front Crank Collar</b></p> <ul style="list-style-type: none"> <li>› K19202-23250</li> </ul> |  <p><b>1) Top Gasket Set</b></p> <ul style="list-style-type: none"> <li>› K1G468-99350</li> </ul> <p><b>2) Bottom Gasket Set</b></p> <ul style="list-style-type: none"> <li>› K1G486-99360</li> </ul> <p><b>3) Head Gasket</b></p> <ul style="list-style-type: none"> <li>› K1G770-03602 1.15</li> <li>› K1G770-03312 1.20</li> <li>› K1G770-03612 1.25</li> <li>› K1G770-03622 1.30</li> <li>› K1G770-03632 1.35</li> </ul> <p><b>4) Rocker Cover Gasket</b></p> <ul style="list-style-type: none"> <li>› K1G911-14523</li> </ul> |  <p><b>1) Bushing, Con Rod</b></p> <ul style="list-style-type: none"> <li>› K17331-21980 x4</li> </ul> <p><b>2) Bolt, Con Rod</b></p> <ul style="list-style-type: none"> <li>› K1J700-22140 x8</li> </ul> <p><b>3) Connecting Rod</b></p> <ul style="list-style-type: none"> <li>› K17311-22010</li> </ul>   |  <p><b>1) Tappet</b></p> <ul style="list-style-type: none"> <li>› K15601-15550 x8</li> </ul> <p><b>2) Pushrod</b></p> <ul style="list-style-type: none"> <li>› K19013-15110 x8</li> </ul> <p><b>3) Cam Bushing</b></p>  |  <p><b>1) Thermostat</b></p> <ul style="list-style-type: none"> <li>› K1A021-73012</li> </ul> <p><b>2) Switch, Thermostat</b></p>   |  |
| <p><b>Valve, Intake</b></p> <ul style="list-style-type: none"> <li>› K16484-13110 x4</li> </ul>  |   | <p><b>Valve, Exhaust</b></p> <ul style="list-style-type: none"> <li>› K16419-13120 x4</li> </ul>  |   | <p><b>Guide, Valve Intake</b></p> <ul style="list-style-type: none"> <li>› K17321-13580 x4</li> </ul> <p><b>Guide, Valve Exhaust</b></p> <ul style="list-style-type: none"> <li>› K17321-13560 x4</li> </ul>   |  | <p><b>Spring, Valve</b></p> <ul style="list-style-type: none"> <li>› K15221-13240 x8</li> </ul> <p><b>Seal, Valve</b></p> <ul style="list-style-type: none"> <li>› K15221-13153 x8</li> </ul> <p><b>Lock, Valve</b></p> <ul style="list-style-type: none"> <li>› K15221-13980 x16</li> </ul> |
|  <p><b>Oil Pump</b></p> <ul style="list-style-type: none"> <li>› K15471-35013</li> </ul>  |  <p><b>Fuel Lift Pump</b></p> <ul style="list-style-type: none"> <li>› K17121-52030</li> </ul>   |  <p><b>1) Water Pump</b></p> <ul style="list-style-type: none"> <li>› K1G489-73030</li> </ul> <p><b>2) Water Pump Gasket</b></p> <ul style="list-style-type: none"> <li>› K1A051-73430</li> </ul>  |  <p><b>1) Injector</b></p> <ul style="list-style-type: none"> <li>› K16419-53905 x4</li> </ul> <p><b>2) Glow Plug</b></p> <ul style="list-style-type: none"> <li>› K19077-65510 x4</li> </ul> <p><b>3) Switch, Oil</b></p> <ul style="list-style-type: none"> <li>› K15841-39010</li> </ul>  |  |  <p><b>Liner</b></p> <ul style="list-style-type: none"> <li>›</li> </ul>  |  |

|   |  |   |   |  |   |   |
|---|--|---|---|--|---|---|
| <p><b>Engine Series:</b><br/>03</p> <p><b>Engine Model:</b><br/>V2003-M-DI-T-E2B</p> <p><b>Engine Data:</b><br/>Direct Injection<br/>Pencil fuel injector<br/>Fuel solenoid on front cover<br/>Crankshaft Main Journal OD: 60mm</p>   |  <p><b>Engine O/H Kit</b><br/>                 › KV2003MDITW Std.<br/>                 › KV2003MDITW/25 0.25 mm</p>  |  <p><b>1) Piston &amp; Ring Kit</b><br/>                 › K1G770-21772 Std.<br/>                 › K1G770-21782 0.25 mm</p> <p><b>Use 4</b></p> <p><b>2) Piston</b><br/>                 › K1G770-21112 Std.<br/>                 › K1G770-21902 0.25 mm</p> <p><b>3) Ring Set</b><br/>                 › K1A024-21050 Std.<br/>                 › K1A024-21092 0.25 mm</p>  |  <p><b>1) Main Bearing</b><br/>                 › K1A091-23480 Std.<br/>                 › K1A091-23930 0.20 mm<br/>                 › K1A091-23940 0.40 mm</p> <p><b>Use 4 Pairs</b></p> <p><b>2) Front Crank Bushing</b><br/>                 › K1A091-23470 Std.<br/>                 › K1A091-23910 0.20 mm<br/>                 › K1A091-23920 0.40 mm</p> <p><b>Use 1</b></p> |  <p><b>1) Con Rod Bearing</b><br/>                 › K17311-22310 Std.<br/>                 › K17311-22970 0.20 mm<br/>                 › K17311-22980 0.40 mm</p> <p><b>Use 4 Pairs</b></p> <p><b>2) Kit Metal, Engine</b><br/>                 › K1G856-23570 Std.<br/>                 › K1G856-23760 0.20 mm<br/>                 › K1G856-23770 0.40 mm</p> |  <p><b>Thrust Washer</b><br/>                 › K1A091-23530/40 Std.<br/>                 › K1A091-23950/70 0.20 mm<br/>                 › K1A091-23960/80 0.40 mm</p> <p><b>Set of 2 Pairs</b></p> |   |
| <p><b>Engine Info:</b><br/>4 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 3.268 in / 83 mm<br/>Stroke: 3.638 in / 92.4 mm</p> <p><b>Bobcat</b><br/>341 - Midi Excavator<br/>435ZHS - Mini Excavator<br/>S185 (Series 52 y 53) - Skid Steer Loader<br/>5600 TURBO - Toolcat<br/>S160 - Skid Steer Loader<br/>T190 - Compact track Loader</p> |  <p><b>1) Front Seal</b><br/>                 › K19202-04140</p> <p><b>2) Rear Seal</b><br/>                 › K19202-04460</p> <p><b>3) Crankshaft</b><br/>                 › K16641-23020</p> <p><b>4) Rear Crank Bushing</b><br/>                 › K19202-23280</p> <p><b>5) Front Crank Collar</b><br/>                 › K19202-23250</p> |  <p><b>1) Top Gasket Set</b><br/>                 › K1G468-99350</p> <p><b>2) Bottom Gasket Set</b><br/>                 › K1G486-99360</p> <p><b>3) Head Gasket</b><br/>                 › K1G770-03602 1.15<br/>                 › K1G770-03312 1.20<br/>                 › K1G770-03612 1.25<br/>                 › K1G770-03622 1.30<br/>                 › K1G770-03632 1.35</p> <p><b>4) Rocker Cover Gasket</b><br/>                 › K1G911-14523</p> |  <p><b>1) Bushing, Con Rod</b><br/>                 › K17331-21980 x4</p> <p><b>2) Bolt, Con Rod</b><br/>                 › K1J700-22140 x8</p> <p><b>3) Connecting Rod</b><br/>                 › K17311-22010</p>  |  <p><b>1) Tappet</b><br/>                 › K15601-15550 x8</p> <p><b>2) Pushrod</b><br/>                 › K19013-15110 x8</p> <p><b>3) Cam Bushing</b></p>  |  <p><b>1) Thermostat</b><br/>                 › K1E401-73010</p> <p><b>2) Switch, Thermostat</b></p>   |   |
| <p><b>Valve, Intake</b><br/>                 › K1G852-13112 x4</p>  |  | <p><b>Valve, Exhaust</b><br/>                 › K1G852-13122 x4</p>   |   | <p><b>Guide, Valve Intake</b><br/>                 › K17321-13580 x4</p> <p><b>Guide, Valve Exhaust</b><br/>                 › K17321-13560 x4</p>   |   | <p><b>Spring, Valve</b><br/>                 › K1G896-13240 x8</p> <p><b>Seal, Valve</b><br/>                 › K15221-13153 x8</p> <p><b>Lock, Valve</b><br/>                 › K15221-13980 x16</p> |
|  <p><b>Oil Pump</b><br/>                 › K15471-35013</p>  |  <p><b>Fuel Lift Pump</b><br/>                 › K17121-52030</p>   |  <p><b>1) Water Pump</b><br/>                 › K1G489-73030</p> <p><b>2) Gasket, Water Pump</b><br/>                 › K1A051-73430</p>   |  <p><b>1) Injector</b><br/>                 › K1G730-53000 x4</p> <p><b>2) Glow Plug</b><br/>                 › K1G852-65510 x4</p> <p><b>3) Switch, Oil</b><br/>                 › K15841-39010</p>   |  <p><b>Liner</b><br/>                 ›</p>   |   |   |

**Engine Series:**  
03

**Engine Model:**  
V2003-T

**Engine Desc:**  
V2003-T-EB

**Engine Data:**  
Indirect Injection  
Screw-in fuel injector  
Fuel solenoid on injection pump  
Crankshaft Main Journal OD: 52mm

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.268 in / 83 mm  
Stroke: 3.638 in / 92.4 mm

**Bobcat**  
773 TURBO - Skid Steer  
773 500K - Wheel Skid Steer Loader  
S160 (2002) - Compact Track Loader  
S185 (2002) - Wheel Skid Steer Loader  
331 (2000) - Midi Excavator  
337 (2001) - Mini Excavator  
341 (2000) - Midi Excavator  
T180 - Skid Steer Loader

**Princeton**  
PB50 - Forklift  
PB65 - Forklift

**Thomas**  
T175 - Compact track loader



**Engine O/H Kit**

- › KV2003TN Std.
- › KV2003TN/50 0.50 mm



**1) Piston & Ring Kit**

- › K16483-21770 Std.
- › K16483-21780 0.50 mm

**Use 4**

**2) Piston**

- › K16483-21110 Std.
- › K16483-21910 0.50 mm

**3) Ring Set**

- › K1G610-21050 Std.
- › K1G610-21090 0.50 mm



**1) Main Bearing**

- › K17311-23480 Std.
- › K17311-23930 0.20 mm
- › K17311-23940 0.40 mm

**Use 4 Pairs**

**2) Front Crank Bushing**

- › K17311-23470 Std.
- › K17311-23910 0.20 mm
- › K17311-23920 0.40 mm

**Use 1**



**1) Con Rod Bearing**

- › K17311-22310 Std.
- › K17311-22970 0.20 mm
- › K17311-22980 0.40 mm

**Use 4 Pairs**

**2) Kit Metal, Engine**

- › K07916-28000 Std.
- › K07916-28740 0.20 mm
- › K07916-28752 0.40 mm

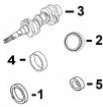


**Thrust Washer**

- › K15521-23530/40 Std.
- › K15521-23950/70 0.20 mm

- › K15521-23960/80 0.40 mm

**Set of 2 Pairs**



**1) Front Seal**

- › K19202-04140

**2) Rear Seal**

- › K19202-04460

**3) Crankshaft**

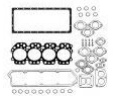
- › K16641-23010

**4) R. Crank Bushing**

- › K19202-23280

**5) Front Crank Collar**

- › K19202-23250



**Top Gasket Set**

- › K1G970-99350

**2) Bottom Gasket Set**

- › K1G974-99362

**3) Head Gasket**

- › K1E013-03312

**4) Rocker Cover Gasket**

- › K15471-14520



**1) Bushing, Con Rod**

- › K17331-21980 x4

**2) Bolt, Con Rod**

- › K1J700-22140 x8

**3) Connecting Rod**

- › K17311-22010



**1) Tappet**

- › K15601-15550 x8

**2) Pushrod**

- › K19013-15110 x8

**3) Cam Bushing**



**1) Thermostat**

- › K19434-73014

**2) Switch, Thermostat**

**Valve, Intake**

- › K16484-13110 x4

**Valve, Exhaust**

- › K16419-13120 x4

**Guide, Valve Intake**

- › K17321-13580 x4

**Guide, Valve Exhaust**

- › K17321-13560 x4

**Spring, Valve**

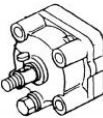
- › K15221-13240 x8

**Seal, Valve**

- › K15221-13153 x8

**Lock, Valve**

- › K15221-13980 x16



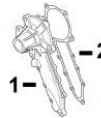
**Oil Pump**

- › K15471-35013



**Fuel Lift Pump**

- › K17121-52030



**1) Water Pump**

- › K1E017-73030 1

**2) Gasket, Water Pump**

- › K15766-73430



**1) Injector**

- › K16454-53900 1
- › K16419-53900 1

**2) Glow Plug**

- › K19077-65510

**3) Oil Switch**

- › K15841-39010



**Liner**

(1): Check application for proper usage.

**Engine Series:**  
03

**Engine Model:**  
V2003-T-EBB  
/ V2003-T-BG

**Engine Desc:**  
V2003-T-E2B  
/ V2003-T-  
E2BG

**Engine Data:**  
Indirect  
Injection  
Screw-in fuel  
injector  
Fuel solenoid  
on injection  
pump  
Crankshaft  
Main Journal  
OD: 60mm

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.268 in /  
83 mm Stroke:  
3.638 in / 92.4  
mm

**Thomas**

T185 - Skid  
Steer Loader  
T205 - Skid  
Steer Loader

**Toro**

Groundsmaster  
4100D - Rotary  
Mower

**Bobcat**

773 500K -  
Wheel Skid  
Steer Loader  
S185 (2002) -  
Wheel Skid  
Steer Loader  
S160 (2002) -  
Compact  
Track Loader  
331 (2000) -  
Midi Excavator  
341 (2000) -  
Midi Excavator  
337 (2001) -  
Mini Excavator  
T180 - Skid  
Steer Loader



**Engine O/H Kit**

- › KV2003TW Std.
- › KV2003TW/50 0.50 mm



**1) Piston & Ring Kit**

- › K16483-21770 Std.
- › K16483-21780 0.50 mm

**Use 4**

**2) Piston**

- › K16483-21110 Std.
- › K16483-21910 0.50 mm

**3) Ring Set**

- › K1G610-21050 Std.
- › K1G610-21090 0.50 mm



**1) Main Bearing**

- › K1A091-23480 Std.
- › K1A091-23930 0.20 mm
- › K1A091-23940 0.40 mm

**Use 4 Pairs**

**2) Front Crank Bushing**

- › K1A091-23470 Std.
- › K1A091-23910 0.20 mm
- › K1A091-23920 0.40 mm

**Use 1**



**1) Con Rod Bearing**

- › K17311-22310 Std.
- › K17311-22970 0.20 mm
- › K17311-22980 0.40 mm

**Use 4 Pairs**

**2) Kit Metal, Engine**

- › K1G856-23570 Std.
- › K1G856-23760 0.20 mm
- › K1G856-23770 0.40 mm

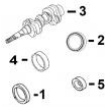


**Thrust Washer**

- › K1A091-23530/40 Std.
- › K1A091-23950/70 0.20 mm

› K1A091-23960/80 0.40 mm

**Set of 2 Pairs**



**1) Front Seal**

- › K19202-04140

**2) Rear Seal**

- › K19202-04460

**3) Crankshaft**

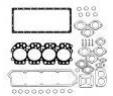
- › K16641-23020

**4) Rear Crank Bushing**

- › K19202-23280

**5) Front Crank Collar**

- › K19202-23250



**1) Top Gasket Set**

- › K1G970-99350

**2) Bottom Gasket Set**

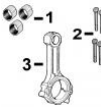
- › K1G974-99362

**3) Head Gasket**

- › K1E013-03312

**4) Rocker Cover Gasket**

- › K15471-14520



**1) Bushing, Con Rod**

- › K17331-21980 x4

**2) Bolt, Con Rod**

- › K1J700-22140 x8

**3) Connecting Rod**

- › K17311-22010



**1) Tappet**

- › K15601-15550 x8

**2) Pushrod**

- › K19013-15110 x8

**3) Cam Bushing**



**1) Thermostat**

- › K19434-73014

**2) Switch, Thermostat**

**Valve, Intake**

- › K16484-13110 x4

**Valve, Exhaust**

- › K16419-13120 x4

**Guide, Valve Intake**

- › K17321-13580 x4

**Guide, Valve Exhaust**

- › K17321-13560 x4

**Spring, Valve**

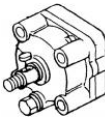
- › K15221-13240 x8

**Seal, Valve**

- › K15221-13153 x8

**Lock, Valve**

- › K15221-13980 x16



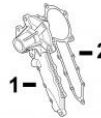
**Oil Pump**

- › K15471-35013



**Fuel Lift Pump**

- › K17121-52030



**1) Water Pump**

- › K1E017-73030

**2) Gasket, Water Pump**

- › K15766-73430



**1) Injector**

- › K16454-53900

- › K16419-53900

**2) Glow Plug**

- › K19077-65510

**3) Oil Switch**

- › K15841-39010



**Liner**

(1): Check application for proper usage.

**Engine Series:**  
03

**Engine Model:**  
V2203-M-DI /  
V2403-M-DI

**Engine Desc:**  
V2203-M-DI-  
E2B / V2403-  
M-DI-E2B /  
V2403-M-DI-  
E3B

**Engine Data:**

Direct  
Injection  
Pencil fuel  
injector  
Fuel solenoid  
on front cover  
Crankshaft  
Main Journal  
OD: 60mm

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.425 in /  
87 mm V2203  
Stroke: 3.638 in  
/ 92.4 mm  
V2403 Stroke:  
4.016 in / 102  
mm

**Bobcat**

331E - Mini  
Excavator  
334 - Mini  
Excavator  
335 - Mini  
Excavator  
430ZHS -  
Compact  
Excavator  
430ZHS FAST  
TRACK -  
Compact  
Excavator  
430ZHS CONV.  
- Compact  
Excavator  
5600 - Toolcat  
S130 - Skid  
Steer Loader  
S150 - Skid  
Steer Loader  
S175 - Skid  
Steer Loader  
S185 - Skid  
Steer Loader  
S205 - Skid  
Steer Loader  
S510 - Skid  
Steer Loader  
T140 - Multi  
Terrain Loader  
T190 - Multi  
Terrain Loader  
S530 - Skid  
Steer Loader  
S450 - Skid  
Steer Loader



**Engine O/H Kit**

- › KV2203MDIW Std. **1**
- › KV2203MDIW/25 0.25 mm **1**



**1) Piston & Ring Kit**

- › K1G796-21772 Std.
- › K1G796-21782 0.25 mm

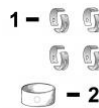
**Use 4**

**2) Piston**

- › K1G796-21112 Std.
- › K1G796-21902 0.25 mm

**3) Ring Set**

- › K1G790-21053 Std.
- › K1G790-21092 0.25 mm



**1) Main Bearing**

- › K1A091-23480 Std.
- › K1A091-23930 0.20 mm
- › K1A091-23940 0.40 mm

**Use 4 Pairs**

**2) Front Crank Bushing**

- › K1A091-23470 Std.
- › K1A091-23910 0.20 mm
- › K1A091-23920 0.40 mm

**Use 1**



**2) Con Rod Bearing**

- › K17311-22310 Std.
- › K17311-22970 0.20 mm
- › K17311-22980 0.40 mm

**Use 4 Pairs**

**2) Kit Metal, Engine**

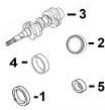
- › K1G856-23750 Std.
- › K1G856-23760 0.20 mm
- › K1G856-23770 0.40 mm



**Thrust Washer**

- › K1A091-23530/40 Std.
- › K1A091-23950/70 0.20 mm
- › K1A091-23960/80 0.40 mm

**Set of 2 Pairs**



**1) Front Seal**

- › K19202-04140

**2) Rear Seal**

- › K19202-04460

**3) Crankshaft**

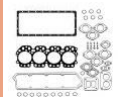
- › K16641-23020

**4) Rear Crank Bushing**

- › K19202-23280

**5) Front Crank Collar**

- › K19202-23250



**1) Top Gasket Set**

- › K1G465-99350 **1**

**2) Bottom Gasket Set**

- › K1G486-99360

**3) Head Gasket**

- › K1G790-03602 1.15
- › K1G790-03310 1.20
- › K1G790-03612 1.25 / 2 **1**
- notch
- › K1G790-03622 1.30 / 3 **1**
- notch
- › K1G790-03632 1.35 / 4 **1**
- notch

**4) Rocker Cover Gasket**

- › K1G911-14523



**1) Bushing, Con Rod**

- › K17331-21980 x4

**2) Bolt, Con Rod**

- › K1J700-22140 x8

**3) Connecting Rod**

- › K17311-22010



**1) Tappet**

- › K15601-15550 x8

**2) Pushrod**

- › K1A091-15110 x8

**3) Camshaft**



**1) Thermostat**

- › K1A021-73010

**2) Gasket, Thermostat**

**Valve, Intake**

- › K1G852-13112 x4

**Valve, Exhaust**

- › K1G852-13122 x4

**Guide, Valve Intake**

- › K17321-13580 x4

**Guide, Valve Exhaust**

- › K17321-13560 x4

**Spring, Valve**

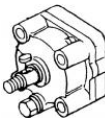
- › K15221-13240 x8

**Seal, Valve**

- › K15221-13153 x8

**Lock, Valve**

- › K15221-13980 x16



**1) Oil Pump**

- › K15471-35013

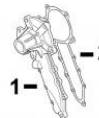
**2) Oil Cooler**

- › K1G896-37012 **3**



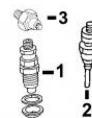
**Fuel Lift Pump**

- › K17121-52030



**1) Water Pump**

- › 1) K1G730-73035 **2**
- › 2) K1A021-73030 **2**



**1) Injector**

- › K1G796-53000 x4

**2) Glow Plug**

- › K1G852-65510 x4

**3) Switch, Oil**

- › K15841-39010



**Liner**

**(1):** Does not include head gasket. Head gasket thickness or notches must be verified and correct head gasket must be purchased separately.  
**(2):** Check application for proper usage.  
**(3):** Donut style, 7 plates, ports are 120° apart

**Engine Series:**  
03

**Engine Model:**  
V2203

**Engine Desc:**  
V2203-BG

**Engine Data:**  
Indirect Injection  
Screw-in fuel injector.  
Crankshaft Main Journal OD: 52mm

**Engine Info:**  
4 Cyl

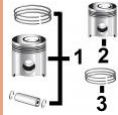
**Engine Dimensions:**  
Bore: 3.425 in / 87 mm  
Stroke: 3.638 in / 92.4 mm

Please see page 518 for a complete list of equipment models.



**Engine O/H Kit**

- › KV2203N Std.
- › KV2203N/50 0.50 mm



**1) Piston & Ring Kit**

- › K19077-21772 Std.
- › K19077-21782 0.50 mm

**Use 4**

**2) Piston**

- › K19077-21112 Std.
- › K19077-21912 0.50 mm

**3) Ring Set**

- › K17331-21050 Std.
- › K17331-21090 0.50 mm



**1) Main Bearing**

- › K17311-23480 Std.
- › K17311-23930 0.20 mm
- › K17311-23940 0.40 mm

**Use 4 Pairs**

**2) Front Crank Bushing**

- › K17311-23470 Std.
- › K17311-23910 0.20 mm
- › K17311-23920 0.40 mm

**Use 1**



**1) Con Rod Bearing**

- › K17311-22310 Std.
- › K17311-22970 0.20 mm
- › K17311-22980 0.40 mm

**Use 4 Pairs**

**2) Kit Metal, Engine**

- › K07916-28000 Std.
- › K07916-28740 0.20 mm
- › K07916-28752 0.40 mm

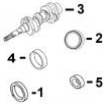


**Thrust Washer**

- › K15521-23530/40 Std.
- › K15521-23950/70 0.20 mm

- › K15521-23960/80 0.40 mm

**Set of 2 Pairs**



**1) Front Seal**

- › K19202-04140

**2) Rear Seal**

- › K19202-04460

**3) Crankshaft**

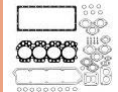
- › K16641-23010

**4) Rear Crank Bushing**

- › K19202-23280

**5) Front Crank Collar**

- › K19202-23250



**1) Top Gasket Set**

- › K07916-29505

**2) Bottom Gasket Set**

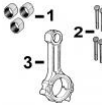
- › K07916-29515

**3) Head Gasket**

- › K19077-03310

**4) Rocker Cover Gasket**

- › K15471-14520



**1) Bushing, Con Rod**

- › K17331-21980 x4

**2) Bolt, Con Rod**

- › K1J700-22140 x8

**3) Connecting Rod**

- › K17311-22010



**1) Tappet**

- › K15601-15550 x8

**2) Pushrod**

- › K19013-15110 x8

**3) Camshaft**

- › K17343-16010



**1) Thermostat**

- › K19434-73014

**2) Thermostat Gasket**

- › K16221-73270

**Valve, Intake**

- › K16484-13110 x4

**Valve, Exhaust**

- › K16484-13120 x4

**Guide, Valve Intake**

- › K17321-13580 x4

**Guide, Valve Exhaust**

- › K17321-13560 x4

**Spring, Valve**

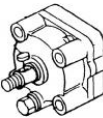
- › K15221-13240 x8

**Seal, Valve**

- › K15221-13153 x8

**Lock, Valve**

- › K15221-13980 x16



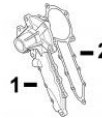
**Oil Pump**

- › K15471-35013



**Fuel Lift Pump**

- › K17121-52030
- › K16604-52032



**1) Water Pump**

- › K15521-73035

**2) Gasket, Water Pump**

- › K15766-73430



**1) Injector**

- › K16454-53900 x4

**2) Glow Plug**

- › K19077-65510 x4

**3) Switch, Oil**

- › K15841-39010

**4) Cylinder Head**

- › K19077-03048UF



**Liner**

(1): Check application for proper usage.



**Engine Series:**  
03

**Engine Model:**  
V2203-E2B

**Engine Desc:**  
V2203-E2BG

**Engine Data:**  
Indirect Injection  
Screw-in fuel injector.  
Crankshaft Main Journal OD: 60mm

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.425 in / 87 mm  
Stroke: 3.638 in / 92.4 mm

**Bobcat**

331 - Midi Excavator  
334 - Mini Excavator  
337 - Mini Excavator  
341 - Midi Excavator  
763H - Skid Steer Loader  
773 - Skid Steer Loader  
5600 - Toolcat  
7753 - Skid Steer Loader  
B300 - Backhoe Loader  
D300 - Skid Steer Loader  
S175 (2002) - Skid Steer Loader  
S150 (2002) - Skid Steer Loader  
S185 - Skid Steer Loader

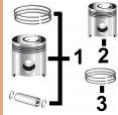
**Kubota**

L4300 - Tractor  
L4310 - Tractor  
KX121 - Mini Excavator  
KX161 - Mini Excavator  
KJ-T210VX - Generator



**Engine O/H Kit**

- › KV2203W Std.
- › KV2203W/50 0.50 mm



**Piston & Ring Kit**

- › K19077-21772 Std.
- › K19077-21782 0.50 mm

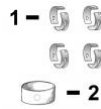
**Use 4**

**2) Piston**

- › K19077-21112 Std.
- › K19077-21912 0.50 mm

**3) Ring Set**

- › K17331-21050 Std.
- › K17331-21090 0.50 mm



**Main Bearing**

- › K1A091-23480 Std.
- › K1A091-23930 0.20 mm
- › K1A091-23940 0.40 mm

**Use 4 Pairs**

**2) Frt. Crank Bushing**

- › K1A091-23470 Std.
- › K1A091-23910 0.20 mm
- › K1A091-23920 0.40 mm

**Use 1**



**Con Rod Bearing**

- › K17311-22310 Std.
- › K17311-22970 0.20 mm
- › K17311-22980 0.40 mm

**Use 4 Pairs**

**Kit Metal, Engine**

- › K1G856-23750 Std.
- › K1G856-23760 0.20 mm
- › K1G856-23770 0.40 mm

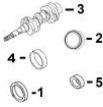


**Thrust Washer**

- › K1A091-23530/40 Std.
- › K1A091-23950/70 0.20 mm

- › K1A091-23960/80 0.40 mm

**Set of 2 Pairs**



**1) Front Seal**

- › K19202-04140

**2) Rear Seal**

- › K19202-04460

**3) Crankshaft**

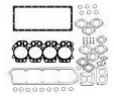
- › K16641-23020

**4) R. Crank Bushing**

- › K19202-23280

**5) Frt. Crank Collar**

- › K19202-23250



**1) Top Gasket Set**

- › K1G975-99350

**2) Bottom Gasket Set**

- › K1G486-99360

**3) Head Gasket**

- › K19077-03310

**4) Rocker Cvr. Gasket**

- › K1G911-14520



**1) Bushing, Con Rod**

- › K17331-21980 x4

**2) Bolt, Con Rod**

- › K1J700-22140 x8

**3) Connecting Rod**

- › K17311-22010



**1) Tappet**

- › K15601-15550 x8

**2) Pushrod**

- › K19013-15110 x8

**3) Camshaft**

- › K17343-16010



**1) Thermostat**

- › K19434-73014

**2) Thermostat Gasket**

- › K16221-73270

**Valve, Intake**

- › K16484-13110 x4

**Valve, Exhaust**

- › K16484-13120 x4

**Guide, Valve Intake**

- › K17321-13580 x4

**Guide, Valve Exh.**

- › K17321-13560 x4

**Spring, Valve**

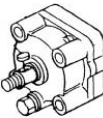
- › K15221-13240 x8

**Seal, Valve**

- › K15221-13153 x8

**Lock, Valve**

- › K15221-13980 x16



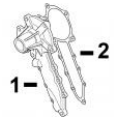
**Oil Pump**

- › K15471-35013



**Fuel Lift Pump**

- › K17121-52030
- › K16604-52032



**1) Water Pump**

- › K15521-73035

**2) Gaslet. water pump**

- › K15766-73430



**1) Injector**

- › K16454-53900 x4

**2) Glow Plug**

- › K19077-65510 x4

**3) Switch, Oil**

- › K15841-39010

**4) Cylinder Head**

- › K19077-03048UF **1**



**Liner**

(1): Check application for proper usage.

KUBOTA 03 SERIES V2203-M / V2403-M INDIRECT INJECTION

**Engine Series:**  
03

**Engine Model:**  
V2203-M /  
V2403-M

**Engine Desc:**  
V2203-M-E2B  
/ V2203-M-  
E3B / V2203-  
M-E3BG /  
V2403-M-E2B  
/ V2403-M-  
E3B / V2403-  
M-E3BG

**Engine Data:**  
Indirect  
Injection  
Screw-in fuel  
injector.  
Fuel solenoid  
on front cover  
Crankshaft  
Main Journal  
OD: 60mm

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.425 in /  
87 mm Stroke:  
3.638 in / 92.4  
mm 4.016 in /  
102 mm



**Engine O/H Kit**

- › KV2203MW Std. 1
- › KV2203MW/25 0.25 mm 1



**Piston & Ring Kit**

- › K1G466-21772 Std.
- › K1G466-21782 0.25 mm

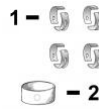
**Use 4**

**2) Piston**

- › K1G466-21110 Std.
- › K1G466-21900 0.25 mm

**3) Ring Set**

- › K1A091-21050 Std.
- › K1A091-21090 0.25 mm



**Main Bearing**

- › K1A091-23480 Std.
- › K1A091-23930 0.20 mm
- › K1A091-23940 0.40 mm

**Use 4 Pairs**

**2) Frt. Crank Bushing**

- › K1A091-23470 Std.
- › K1A091-23910 0.20 mm
- › K1A091-23920 0.40 mm

**Use 1**



**Con Rod Bearing**

- › K17311-22310 Std.
- › K17311-22970 0.20 mm
- › K17311-22980 0.40 mm

**Use 4 Pairs**

**Kit Metal, Engine**

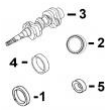
- › K1G856-23750 Std.
- › K1G856-23760 0.20 mm
- › K1G856-23770 0.40 mm



**Thrust Washer**

- › K1A091-23530/40 Std.
- › K1A091-23950/70 0.20 mm
- › K1A091-23960/80 0.40 mm

**Set of 2 Pairs**



**1) Front Seal**

- › K19202-04140

**2) Rear Seal**

- › K19202-04460

**3) Crankshaft**

- › K16641-23020

**4) R. Crank Bushing**

- › K19202-23280

**5) Frt. Crank Collar**

- › K19202-23250



**1) Top Gasket Set**

- › K1G465-99350 1

**2) Bottom Gasket Set**

- › K1G486-99360

**3) Head Gasket**

- › K1G790-03602 1.15
- › K1G790-03310 1.20
- › K1G790-03612 1.25 / 2 1
- notch
- › K1G790-03622 1.30 / 3 1
- notch
- › K1G790-03632 1.35 / 4 1
- notch

**4) Rocker Cvr. Gasket**

- › K1G911-14523



**1) Bushing, Con Rod**

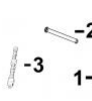
- › K17331-21980 x4

**2) Bolt, Con Rod**

- › K1J700-22140 x8

**3) Connecting Rod**

- › K17311-22010



**1) Tappet**

- › K15601-15550 x8

**2) Pushrod**

- › K1A091-15110 x8

**3) Camshaft**



**1) Thermostat**

- › K1A021-73010

**2) Gasket, Thermostat**

**Kubota**  
L4350DT -  
Tractor  
R510 - Backhoe  
Loader  
L4400DT -  
Compact Utility  
Tractor  
L4740 - Loader  
L5240 -  
Compact Utility  
Tractor  
MX5100 -  
Utility Tractor

**Ausa**  
C200H - Forklift  
C250H - Forklift  
C300H - Forklift  
D250A -  
Dumper  
D350A -  
Dumper  
D400A -  
Dumper  
T204H -  
Telehandler  
T235H -  
Telehandler  
BD202HL -  
Sweeper

**Valve, Intake**

- › K16484-13110 x4

**Valve, Exhaust**

- › K16484-13120 x4

**Guide, Valve Intake**

- › K17321-13580 x4

**Guide, Valve Exhaust**

- › K17321-13560 x4

**Spring, Valve**

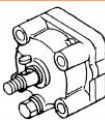
- › K15221-13240 x8

**Seal, Valve**

- › K15221-13153 x8

**Lock, Valve**

- › K15221-13980 x16



**1) Oil Pump**

- › K15471-35013

**2) Oil Cooler**

- › K1G896-37012 3



**Fuel Lift Pump**

- › K17121-52030 2

- › K16604-52032 2



**1) Water Pump**

- › K1G730-73035 2

- › K1A021-73030 2



**1) Injector**

- › K16454-53900 2

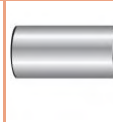
- › K16419-53900 2

**2) Glow Plug**

- › K19077-65510

**3) Switch, Oil**

- › K15841-39010



**Liner**

- ›

(1): Does not include head gasket. Head gasket thickness or notches must be verified and correct head gasket must be purchased separately.

(3): Donut style, 7 plates, ports are 120° apart

**Engine Series:**  
03

**Engine Model:**  
V2403-M-DI-T

**Engine Data:**  
Direct Injection  
Pencil fuel injector.  
Fuel solenoid on front cover  
Crankshaft Main Journal OD: 60mm

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.425 in / 87 mm  
Stroke: 4.016 in / 102 mm

**Bobcat**  
S205 - Skid Steer Loader  
T190 - Multi Terrain Loader



**Engine O/H Kit**

- › KV2403MDITW Std. 1
- › KV2403MDITW/25 mm 0.2 1



**Piston & Ring Kit**

- › K1G924-21772 Std.
- › K1G924-21782 0.25 mm

**Use 4**

- 2) **Piston**
  - › K1G924-21112 Std.
  - › K1G924-21902 0.25 mm
- 3) **Ring Set**
  - › K1G924-21052 Std.
  - › K1G924-21090 0.25 mm



**Main Bearing**

- › K1A091-23480 Std.
- › K1A091-23930 0.20 mm
- › K1A091-23940 0.40 mm

**Use 4 Pairs**

- 2) **Frnt. Crank Bushing**
  - › K1A091-23470 Std.
  - › K1A091-23910 0.20 mm
  - › K1A091-23920 0.40 mm

**Use 1**



**Con Rod Bearing**

- › K17311-22310 Std.
- › K17311-22970 0.20 mm
- › K17311-22980 0.40 mm

**Use 4 Pairs**

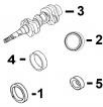
- Kit Metal, Engine**
- › K1G856-23750 Std.
  - › K1G856-23760 0.20 mm
  - › K1G856-23770 0.40 mm



**Thrust Washer**

- › K1A091-23530/40 Std.
- › K1A091-23950/70 0.20 mm
- › K1A091-23960/80 0.40 mm

**Set of 2 Pairs**



1) **Front Seal**

- › K19202-04140

2) **Rear Seal**

- › K19202-04460

3) **Crankshaft**

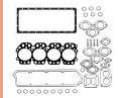
- › K1G851-23012

4) **R. Crank Bushing**

- › K19202-23280

5) **Frnt. Crank Collar**

- › K19202-23250



1) **Top Gasket Set**

- › K1G465-99350 1

2) **Bottom Gasket Set**

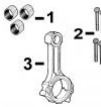
- › K1G486-99360

3) **Head Gasket**

- › K1G790-03602 1.15
- › K1G790-03310 1.20
- › K1G790-03612 1.25 / 2 1
- notch
- › K1G790-03622 1.30 / 3 1
- notch
- › K1G790-03632 1.35 / 4 1
- notch

4) **Rocker Cvr. Gasket**

- › K1G911-14523



1) **Bushing, Con Rod**

- › K1G924-21980

2) **Bolt, Con Rod**

- › K1J700-22140 x8

3) **Connecting Rod**

- › K1G924-22010



1) **Tappet**

- › K15601-15550 x8

2) **Pushrod**

- › K1A091-15110 x8

3) **Camshaft**



1) **Thermostat**

- › K1G924-73010

2) **Gasket, Thermo**

**Valve, Intake**

- › K1G852-13112 x4

**Valve, Exhaust**

- › K1G852-13122 x4

**Guide, Valve Intake**

- › K17321-13580 x4

**Guide, Valve Exh.**

- › K17321-13560 x4

**Spring, Valve**

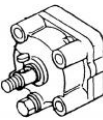
- › K1G896-13240 x8

**Seal, Valve**

- › K15221-13153 x8

**Lock, Valve**

- › K15221-13980 x16



**Oil Pump**

- › 1) K15471-35013 2

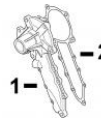
2) **Oil Cooler**

- › K1G896-37012 3



1) **Fuel Lift Pump**

- › K17121-52030



1) **Water pump**

- › K1G730-73035 2

- › K1A021-73030 2



1) **Injector**

- › K1G924-53000 x4

2) **Glowplug**

- › K1G852-65510 x4

3) **Switch, Oil**

- › K15841-39010



**Liner**

(1): Does not include head gasket. Head gasket thickness or notches must be verified and correct head gasket must be purchased separately.

(3): Donut style, 7 plates, ports are 120° apart

KUBOTA 03 SERIES V2403-M-T-E3B DIRECT INJECTION

**Engine Series:**  
03

**Engine Model:**  
V2403-M-T-E3B

**Engine Data:**  
Direct Injection  
Pencil fuel injector.  
Fuel solenoid on front cover  
Crankshaft Main Journal OD: 60mm

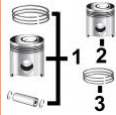
**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.425 in / 87 mm  
Stroke: 4.016 in / 102 mm



**Engine O/H Kit**

- › KV2403MTW Std. **1**
- › KV2403MTW/25 0.25 mm **1**



**Piston & Ring Kit**

- › K1J403-21772 Std.
- › K1J403-21782 0.25 mm

**Use 4**

- 2) Piston**
  - › K1J403-21110 Std.
  - › K1J403-21900 0.25 mm
- 3) Ring Set**
  - › K1G924-21052 Std.
  - › K1G924-21090 0.25 mm



**Main Bearing**

- › K1A091-23480 Std.
- › K1A091-23930 0.20 mm
- › K1A091-23940 0.40 mm

**Use 4 Pairs**

- 2) Frt. Crank Bushing**
  - › K1A091-23470 Std.
  - › K1A091-23910 0.20 mm
  - › K1A091-23920 0.40 mm

**Use 1**



**Con Rod Bearing**

- › K17311-22310 Std.
- › K17311-22970 0.20 mm
- › K17311-22980 0.40 mm

**Use 4 Pairs**

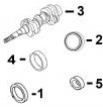
- Kit Metal, Engine**
- › K1G856-23750 Std.
  - › K1G856-23760 0.20 mm
  - › K1G856-23770 0.40 mm



**Thrust Washer**

- › K1A091-23530/40 Std.
- › K1A091-23950/70 0.20 mm
- › K1A091-23960/80 0.40 mm

**Set of 2 Pairs**



**1) Front Seal**

- › K19202-04140

**2) Rear Seal**

- › K19202-04460

**3) Crankshaft**

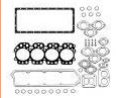
- › K16641-23020

**4) R. Crank Bushing**

- › K19202-23280

**5) Frt. Crank Collar**

- › K19202-23250



**1) Top Gasket Set**

- › K1G465-99350 **1**

**2) Bottom Gasket Set**

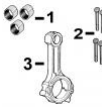
- › K1G486-99360

**3) Head Gasket**

- › K1G790-03602 1.15
- › K1G790-03310 1.20
- › K1G790-03612 1.25 / 2 **1**
- notch
- › K1G790-03622 1.30 / 3 **1**
- notch
- › K1G790-03632 1.35 / 4 **1**
- notch

**4) Rocker Cover Gasket**

- › K1G911-14523



**1) Bushing, Con Rod**

- › K17331-21980 x4

**2) Bolt, Con Rod**

- › K1J700-22140 x8

**3) Connecting Rod**

- › K17311-22010



**1) Tappet**

- › K15601-15550 x8

**2) Pushrod**

- › K1A091-15110 x8

**3) Camshaft**



**1) Thermostat**

- › K1A021-73010

**2) Gasket, Thermo**

**Valve, Intake**

- › K1G852-13112 x4

**Valve, Exhaust**

- › K1G852-13122 x4

**Guide, Valve Intake**

- › K17321-13580 x4

**Guide, Valve Exhaust**

- › K17321-13560 x4

**Spring, Valve**

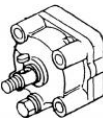
- › K15221-13240 x8

**Seal, Valve**

- › K15221-13153 x8

**Lock, Valve**

- › K15221-13980 x16



**1) Oil Pump**

- › K15471-35013

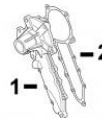
**2) Oil Cooler**

- › K1G896-37012 **3**



**Fuel Lift Pump**

- › K17121-52030



**1) Water Pump**

- › K1G730-73035 **2**
- › K1A021-73030 **2**



**1) Injector**

- › x4

**2) Glowplug**

- › K1G852-65510 x4

**3) Switch, Oil**

- › K15841-39010



**Liner**

(1): Does not include head gasket. Head gasket thickness or notches must be verified and correct head gasket must be purchased separately.

(3): Donut style, 7 plates, ports are 120° apart

KUBOTA V3 SERIES V3300 INDIRECT INJECTION

**Engine Series:**  
V3

**Engine Model:**  
V3300  
V3300-E2B

**Engine Desc:**  
V3300-BG /  
V3300-E2BG  
/ V3300-  
E3BG /  
V3300-T-E2B

**Engine Data:**  
Indirect  
Injection  
Screw-in fuel  
injector

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.858 in /  
98 mm Stroke:  
4.331 in / 110  
mm

**Bobcat**  
S300 - Skid  
Steer Loader

**Kubota**  
M8200 -  
Tractor



**Engine O/H Kit**

- › KV3300 Std.
- › KV3300/50 0.50 mm

1  
1



**1) Piston & Ring Kit**

- › K1G563-21772 Std.
- › K1G563-21792 0.50 mm

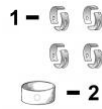
**Use 4**

**2) Piston**

- › K1C041-21110 Std.
- › K1C041-21910 0.50 mm

**3) Ring Set**

- › K1C011-21050 Std.
- › K1C011-21090 0.50 mm



**Main Bearing**

- › K1C020-23470 Std.
- › K1C020-23910 0.20 mm
- › K1C020-23920 0.40 mm

**Use 5 Pairs**



**Con Rod Bearing**

- › K1C020-22312 Std.
- › K1C020-22962 0.20 mm
- › K1C020-22972 0.40 mm

**Use 4 Pairs**



**Thrust Washer**

- › K1C010-23530/40 Std.
- › K1C010-23950/70 0.20 mm
- › K1C010-23960/80 0.40 mm

**Set of 2 Pairs**



**1) Front Seal**

- › K1C020-04140

**2) Rear Seal**

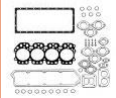
- › K1C010-04460

**3) Crankshaft**

- › K1C020-23012

**4) Rear Crank Bushing**

- › K1C020-23300



**1) Top Gasket Set**

- › K1G563-99350

**2) Bottom Gasket Set**

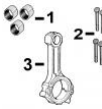
- › K1G533-99360

**3) Head Gasket**

- › K1C020-03312 0.80 / 2 notch
- › K1C020-03602 0.90
- › K1C020-03612 0.95

**4) Rocker Cover Gasket**

- › K1C010-14520
- › K1C020-14520



**1) Bushing, Con Rod**

- › K1C010-21980 x8

**2) Bolt, Con Rod**

- › K1C010-22142 x8

**3) Connecting Rod**

- › K1C020-22014



**1) Tappet**

- › K15601-15550 x8

**2) Pushrod**

- › K1C010-15110 x8

**3) Camshaft**



**1) Thermostat**

- › K1C011-73010

**2) Gasket, Thermostat**

**Valve, Intake**

- › K1C010-13110 x8

**Valve, Exhaust**

- › K1C010-13120 x8

**Guide, Valve Intake**

- › K16261-13540 x4

**Guide, Valve Exhaust**

- › K17321-13560 x4

**Spring, Valve**

- › K15221-13240 x8

**Seal, Valve - Intake**

- › K15221-13153 x8

**Seal, Valve - Exhaust**

- › K15221-13153 x8



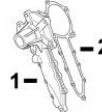
**Oil Pump Kit (Rotor Set)**

- › K1C010-35070



**Fuel Lift Pump**

- › K1C010-52030



**1) Water Pump**

- › K1C010-73032

**2) Water Pump Gasket**

- › K1C010-73430



**1) Injector**

- › K1C010-53900 x4

**2) Glow Plug**

- › K16415-65510 x4

**3) Switch, Oil**

- › K15841-39010



**Liner**

(1): Does not include head gasket. Head gasket thickness or notches must be verified and correct head gasket must be purchased separately.

**Engine Series:**

V3

**Engine Model:**

V3300-DI  
V3300-DI-T

**Engine Desc:**

V3300-DI-B /  
V3300-DI-TB  
/ V3300-DI-  
E2B / V3300-  
DI-TE2B

**Engine Data:**

Direct Injection  
Pencil fuel  
injector

**Engine Info:**

4 Cyl

**Engine**

**Dimensions:**

Bore: 3.858 in /  
98 mm Stroke:  
4.331 in / 110  
mm

**Bobcat**

A300 - Skid  
Steer Loader  
S220 - Skid  
Steer Loader  
S250 - Skid  
Steer Loader  
S300 - Skid  
Steer Loader  
T250 - Multi  
Terrain Loader  
T300 - Multi  
Terrain Loader



**Engine O/H Kit**

- › KV3300DI Std. **1**
- › KV3300DI/50 0.50 mm **1**



**1) Piston & Ring Kit**

- › K1G556-21774 Std. **1**
- › K1G556-21794 0.50 mm **1**

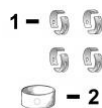
**Use 4**

**2) Piston**

- › K1G557-21110 Std.
- › K1G557-21910 0.50 mm

**3) Ring Set**

- › K1C020-21050 Std.
- › K1C020-21090 0.50 mm



**Main Bearing**

- › K1C020-23470 Std.
- › K1C020-23910 0.20 mm
- › K1C020-23920 0.40 mm

**Use 5 Pairs**



**Con Rod Bearing**

- › K1C020-22312 Std.
- › K1C020-22962 0.20 mm
- › K1C020-22972 0.40 mm

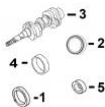
**Use 4 Pairs**



**Thrust Washer**

- › K1C010-23530/40 Std.
- › K1C010-23950/70 0.20 mm
- › K1C010-23960/80 0.40 mm

**Set of 2 Pairs**



**1) Front Seal**

- › K1C010-04140

**2) Rear Seal**

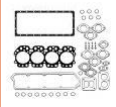
- › K1C010-04460

**3) Crankshaft**

- › K1C050-23010

**4) Rear Crank Bushing**

- › K1C020-23300



**1) Top Gasket Set**

- › K1G556-99352 **1**

**2) Bottom Gasket Set**

- › K1G526-99360

**3) Head Gasket**

- › K1C020-03312 0.80 / 2 notch
- › K1C020-03602 0.90 / 1 notch
- › K1C020-03612 0.95 / 0 notch

**4) Rocker Cover Gasket**

- › K1C010-14520
- › K1C020-14520



**1) Bushing, Con Rod**

- › K1C010-21980 x4

**2) Bolt, Con Rod**

- › K1C010-22142 x8

**3) Connecting Rod**

- › K1C020-22014



**1) Tappet**

- › K15601-15550 x8

**2) Pushrod**

- › K1C010-15110 x8

**3) Camshaft**



**1) Thermostat**

- › K1C011-73010

**2) Gasket, Thermostat**

**Valve, Intake**

- › K1C020-13110 x8

**Valve, Exhaust**

- › K1C020-13120 x8

**Guide, Valve Intake**

- › K16261-13540 x8

**Guide, Valve Exhaust**

- › K16261-13560 x8

**Spring, Valve**

- › K1C010-13240 x16

**Seal, Valve - Intake**

- › K1C010-13150 x16



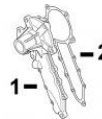
**Oil Pump Kit (Rotor Set)**

- › K1C010-35070



**Fuel Lift Pump**

- › K1C010-52030



**1) Water Pump**

- › K1C010-73032

**2) Water Pump Gasket**

- › K1C010-73430



**1) Injector**

- › K1G557-53000 x4

**2) Glow Plug**

- › K15841-39010



**Liner**

(1): Does not include head gasket. Head gasket thickness or notches must be verified and correct head gasket must be purchased separately.

**Engine Series:**

V3

**Engine Model:**

V3800-DI-E2B / V3800-DI-E3B

**Engine Desc:**

V3800-DI-T-E2B / V3800-DI-T-E3B / V3800-DI-T-E3BG

**Engine Data:**

Direct Injection  
Pencil fuel injector

**Engine Info:**

4 Cyl

**Engine Dimensions:**

Bore: 3.937 in / 100 mm Stroke: 4.724 in / 120 mm

**Kubota**

M105 - Tractor  
M9540 - Tractor

M108 - Tractor

**Bobcat**

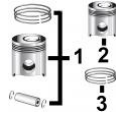
S300 - Skid Steer  
T870 - Compact track loader

T770 - Compact track loader



**Engine O/H Kit**

- KV3800DI Std. 1
- KV3800DI/50 0.50 mm 1



**1) Piston & Ring Kit**

- K1G549-21772 Std.
- K1G549-21792 0.50 mm

**Use 4**

**2) Piston**

- K1J550-21112 Std.
- K1J550-21912 0.50 mm

**3) Ring Set**

- K1J500-21050 Std.
- K1J500-21090 0.50 mm



**Main Bearing**

- K1C020-23470 Std.
- K1C020-23910 0.20 mm
- K1C020-23920 0.40 mm

**Use 5 Pairs**



**Con Rod Bearing**

- K1C020-22312 Std.
- K1C020-22962 0.20 mm
- K1C020-22972 0.40 mm

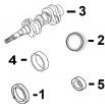
**Use 4 Pairs**



**Thrust Washer**

- K1C010-23530/40 Std.
- K1C010-23950/70 0.20 mm
- K1C010-23960/80 0.40 mm

**Set of 2 Pairs**



**1) Front Seal**

- K1C010-04140

**2) Rear Seal**

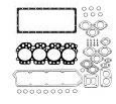
- K1C010-04460

**3) Crankshaft**

- K1G574-23010

**4) Rear Crank Bushing**

- K1C020-23300



**1) Top Gasket Set**

- K1G556-99352 1

**2) Bottom Gasket Set**

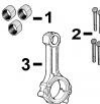
- K1G533-99360

**3) Head Gasket**

- K1G514-03314 2 Notch
- K1G514-03604 1 Notch
- K1G514-03614 No Notch

**4) Rocker Cover Gasket**

- K1C010-14520
- K1C020-14520



**1) Bushing, Con Rod**

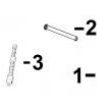
- K1C010-21980 x8

**2) Bolt, Con Rod**

- K1C010-22142 x8

**3) Connecting Rod**

- K1G514-22014



**Tappet**

- K15601-15550 x8

**2) Pushrod**

- K1C010-15110 x8

**3) Camshaft**



**Thermostat**

- K1C011-73010

**2) Gasket, Thermostat**

**Valve, Intake**

- K1C020-13110 x8

**Valve, Exhaust**

- K1C020-13120 x8

**Guide, Valve Intake**

- K16261-13540 x8

**Guide, Valve Exh.**

- K16261-13560 x8

**Spring, Valve**

- K1C010-13240 x16

**Seal, Valve - Intake**

- K1C010-13150 x16



**1) Oil Pump Kit (Rotor Set)**

- K1C010-35070

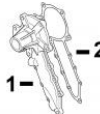
**2) Oil Cooler**

- K1J550-37010 2



**Fuel Lift Pump**

- K1C010-52030

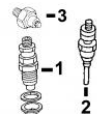


**1) Water Pump**

- K1C010-73032

**2) Water Pump Gasket**

- K1C010-73430



**1) Injector**

- K1G544-53003 x4

**2) Glow Plug**

- K15841-39010



**Liner**

(1): Does not include head gasket. Head gasket thickness or notches must be verified and correct head gasket must be purchased separately.

(2): Donut style, 8 plates, ports are 90° apart

**Engine Model:**  
S4S


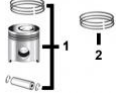



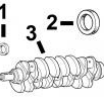

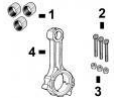

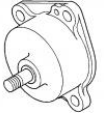



**Engine Desc:**  
INDIRECT INJECTION

**Engine Data:**  
NATURALLY ASPIRATED

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.7 in / 94.00 mm  
Stroke: 4.72 in / 120.00 mm  
Piston  
Compression Height:  
2.165 in / 55 mm

Please see page 519 for a complete list of equipment models.

|   |   |   |   |  |
|---|---|---|---|--|
|  <p><b>Basic Engine Kit</b><br/>                 , MBK401<br/>                 , MBK402<br/> <b>Spec Sheet - S4S</b></p>   |  <p><b>1) Piston &amp; Ring Kit</b><br/>                 , M32A17-05500 Std.<br/>                 , M32A17-05700 0.50<br/> <b>4 Per Engine</b><br/> <b>2) Ring Set</b><br/>                 , M32A17-02010 Std.<br/>                 , M32A17-02030 0.50</p> |  <p><b>Main Bearing Set</b><br/>                 , M32A09-00010 Std.<br/>                 , M32A09-00020 0.25<br/>                 , M32A09-00030 0.50<br/>                 , M32A09-00040 0.75<br/> <b>Set of 5 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>                 , M32A19-09011 Std.<br/>                 , M32A19-09021 0.25<br/>                 , M32A19-09031 0.50<br/>                 , M32A19-09041 0.75<br/> <b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer</b><br/>                 , M32B09-08101<br/> <b>Set of 3 Pcs</b></p> |
|  <p><b>1) Front Seal</b><br/>                 , M32A11-04010<br/> <b>2) Rear Seal</b><br/>                 , M34407-11090<br/>                 , M34407-11090S<br/> <b>3) Crankshaft</b><br/>                 , M32A20-00014</p> |  <p><b>1) O/H Gasket Set</b><br/>                 , M32A94-11020<br/> <b>2) Cyl Head Gsk</b><br/>                 , M32A01-12300<br/> <b>1</b><br/> <b>2</b><br/> <b>3) Valve Cover Gsk</b><br/>                 , M32A04-13200</p>                          |  <p><b>1) Bush, Con Rod</b><br/>                 , M32A19-00501 x4<br/> <b>2) Bolt, Con Rod</b><br/>                 , M32A19-00400 x8<br/> <b>3) Nut, Con Rod</b><br/>                 , M30619-10501 x8<br/> <b>4) Con Rod</b><br/>                 , M32A19-00012</p> |  <p><b>2</b>-<br/> <b>1</b><br/> <b>1) Tappet</b><br/>                 , M32A05-02101 x8<br/> <b>2) Push Rod</b><br/>                 , M32A05-13100 x8</p>  |  |
| <p><b>Valve Train</b></p>   | <p><b>1) Valve, Intake</b><br/>                 , M32A04-20100 x4<br/> <b>2) Valve, Exhaust</b><br/>                 , M32A04-21100 x4</p>  | <p><b>3) Guide, Valve</b><br/>                 , M32A01-01600 x8<br/> <b>4) Spring, Valve</b><br/>                 , M30604-21402 x8</p>  | <p><b>5) Lock, Valve</b><br/>                 , M34404-02901 x16<br/> <b>6) Seal, Valve</b><br/>                 , M32C04-06500 x8</p>  |  |
|  <p><b>Oil Pump</b><br/>                 , M32B35-00010</p>  |  <p><b>Water Pump</b><br/>                 , M32B45-10031<br/>                 , M32A45-10031<br/>                 , M32A45-00022<br/> <b>3</b><br/> <b>3</b><br/> <b>3</b></p>  |  <p><b>Thermostat</b><br/>                 , M32A46-02100</p>  |  <p><b>Glowplug</b><br/>                 , M32A66-03101 x4</p>   |  |

(1): Seal dimensions: 90x115x13 mm.

(2): Seal with sleeve (Seal dimensions: 97x115x12 mm)

(3): Check application for proper usage.



**Engine Model:**  
S4S DT

**Engine Desc:**  
DIRECT INJECTION

**Engine Data:**  
TURBOCHARGED


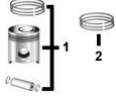



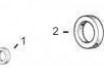
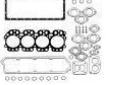
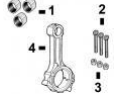
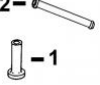



**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.7 in / 94.00 mm  
Stroke: 4.72 in / 120.00 mm

**Northern Light Generators (Marine And Industrial)**

M-NL944T

M38CR2

|   |   |   |   |  |
|---|---|---|---|--|
|  <p><b>Basic Engine Kit</b><br/>                 , MBK404<br/>                 , MBK405<br/> <b>Spec Sheet - S4S</b></p>   |  <p><b>1) Piston &amp; Ring Kit</b><br/>                 , M32A17-04500 Std.<br/>                 , M32A17-04700 0.50<br/> <b>4 Per Engine</b><br/> <b>2) Ring Set</b><br/>                 , M32A17-02010 Std.<br/>                 , M32A17-02030 0.50</p> |  <p><b>Main Bearing Set</b><br/>                 , M32A09-00010 Std.<br/>                 , M32A09-00020 0.25<br/>                 , M32A09-00030 0.50<br/>                 , M32A09-00040 0.75<br/> <b>Set of 5 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>                 , M32A19-09011 Std.<br/>                 , M32A19-09021 0.25<br/>                 , M32A19-09031 0.50<br/>                 , M32A19-09041 0.75<br/> <b>Set of 4 Pairs</b></p> |  <p><b>Thrust Washer</b><br/>                 , M32B09-08101<br/> <b>Set of 3 Pcs</b></p> |
|  <p><b>1) Front Seal</b><br/>                 , M32A11-04010<br/> <b>2) Rear Seal</b><br/>                 , M34407-11090<br/>                 , M34407-11090S</p> |  <p><b>1) O/H Gasket Set</b><br/>                 , MS4STOG<br/> <b>2) Cyl Head Gsk</b><br/>                 , M32K01-02100<br/> <b>3) Valve Cover Gsk</b><br/>                 , M32A04-03200</p>   |  <p><b>1) Bush, Con Rod</b><br/>                 , M32A19-00501 x4<br/> <b>2) Bolt, Con Rod</b><br/>                 , M32A19-00400 x8<br/> <b>3) Nut, Con Rod</b><br/>                 , M30619-10501 x8<br/> <b>4) Con Rod</b><br/>                 , M32A19-00012</p> |  <p><b>1) Tappet</b><br/>                 , M32A05-02101 x8<br/> <b>2) Pushrod</b><br/>                 , M32A05-13100 x8</p>  |  |
| <p><b>Valve Train</b></p>   | <p><b>1) Valve, Intake</b><br/>                 , M32A04-20100 x4<br/> <b>2) Valve, Exhaust</b><br/>                 , M32A04-21100 x4</p>  | <p><b>3) Guide, Valve</b><br/>                 , M32A01-01600 x8<br/> <b>4) Spring, Valve</b><br/>                 , M30604-21402 x8</p>  | <p><b>5) Lock, Valve</b><br/>                 , M34404-02901 x16<br/> <b>6) Seal, Valve</b><br/>                 , M32C04-06500 x8</p>  |  |
|  <p><b>1) Oil Pump</b><br/>                 , M32B35-00010<br/> <b>2) Oil Cooler</b><br/>                 , M32A39-03300</p>                                     |  <p><b>1) Water Pump</b><br/>                 , M32B45-10031<br/> <b>2) Thermostat</b><br/>                 , M32A46-02100</p>   |  <p><b>Glowplug</b><br/>                 , M32A66-07011 x4</p>   |   |  |

(1): Seal dimensions: 90x115x13 mm.

(2): Seal with sleeve (Seal dimensions: 97x115x12 mm).

**Engine Model:**  
S4S DT

**Engine Desc:**  
DIRECT INJECTION

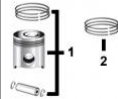
**Engine Data:**  
TURBOCHARGED

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.7 in / 94.00 mm  
Stroke: 4.72 in / 120.00 mm



**Basic Engine Kit**  
 , MBK407  
 , MBK408  
**Spec Sheet - S4S**



**1) Piston & Ring Kit**  
 , M32A17-55500 Std.  
 , M32A17-55700 0.50  
**4 Per Engine**  
**2) Ring Set**  
 , M32A17-03010 Std.  
 , M32A17-03030 0.50



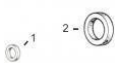
**Main Bearing Set**  
 , M32A09-00010 Std.  
 , M32A09-00020 0.25  
 , M32A09-00030 0.50  
 , M32A09-00040 0.75  
**Set of 5 Pairs**



**Con Rod Bearing Set**  
 , M32A19-09011 Std.  
 , M32A19-09021 0.25  
 , M32A19-09031 0.50  
 , M32A19-09041 0.75  
**Set of 4 Pairs**



**Thrust Washer**  
 , M32B09-08101  
**Set of 3 Pcs**



**1) Front Seal**  
 , M32A11-04010  
**2) Rear Seal**  
 , M34407-11090  
 , M34407-11090S



**1) O/H Gasket Set**  
 , MS4STOG  
**2) Cyl Head Gsk**  
 1 , M32K01-02100  
 2 **3) Valve Cover Gsk**  
 , M32A04-13200



**1) Bush, Con Rod**  
 , M32A19-00501 x4  
**2) Bolt, Con Rod**  
 , M32A19-00400 x8  
**3) Nut, Con Rod**  
 , M30619-10501 x8  
**4) Con Rod**  
 , M32A19-00012



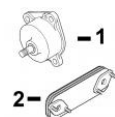
**1) Tappet**  
 , M32A05-02101 x8  
**2) Push Rod**  
 , M32A05-13100 x8

**Valve Train**

**1) Valve, Intake**  
 , M32A04-20100 x4  
**2) Valve, Exhaust**  
 , M32A04-21100 x4

**3) Guide, Valve**  
 , M32A01-01600 x8  
**4) Spring, Valve**  
 , M30604-21402 x8

**5) Lock, Valve**  
 , M34404-02901 x16  
**6) Seal, Valve**  
 , M32C04-06500 x8



**1) Oil Pump**  
 , M32B35-00010  
**2) Oil Cooler**  
 , M32A39-03300



**1) Water Pump**  
 , M32B45-10031  
**2) Thermostat**  
 , M32A46-02100



**Glowplug**  
 , M32A66-07011 x4

(1): Seal dimensions: 90x115x13 mm.

(2): Seal with sleeve (Seal dimensions: 97x115x12 mm)

**Engine Model:**  
S4S DT

**Engine Desc:**  
DIRECT INJECTION

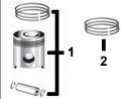
**Engine Data:**  
TURBOCHARGED

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.7 in / 94.00 mm  
Stroke: 4.72 in / 120.00 mm



**Basic Engine Kit**  
 , MBK410  
 , MBK411  
**Spec Sheet - S4S**



**1) Piston & Ring Kit**  
 , M32A17-55100 Std.  
 , M32A17-55300 0.50  
**4 Per Engine**  
**2) Ring Set**  
 , M32A17-03010 Std.  
 , M32A17-03030 0.50



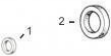
**Main Bearing Set**  
 , M32A09-00010 Std.  
 , M32A09-00020 0.25  
 , M32A09-00030 0.50  
 , M32A09-00040 0.75  
**Set of 5 Pairs**



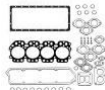
**Con Rod Bearing Set**  
 , M32A19-09011 Std.  
 , M32A19-09021 0.25  
 , M32A19-09031 0.50  
 , M32A19-09041 0.75  
**Set of 4 Pairs**



**Thrust Washer**  
 , M32B09-08101  
**Set of 3 Pcs**



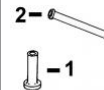
**1) Front Seal**  
 , M32A11-04010  
**2) Rear Seal**  
 , M34407-11090  
 , M34407-11090S



**1) O/H Gasket Set**  
 , MS4STOG  
**2) Cyl Head Gsk**  
 , M32K01-02100  
**3) Valve Cover Gsk**  
 , M32A04-13200



**1) Bush, Con Rod**  
 , M32A19-00501 x4  
**2) Bolt, Con Rod**  
 , M32A19-00400 x8  
**3) Nut, Con Rod**  
 , M30619-10501 x8  
**4) Con Rod**  
 , M32A19-00012



**1) Tappet**  
 , M32A05-02101 x8  
**2) Push Rod**  
 , M32A05-13100 x8

**Valve Train**

**1) Valve, Intake**  
 , M32A04-20100 x4  
**2) Valve, Exhaust**  
 , M32A04-21100 x4

**3) Guide, Valve**  
 , M32A01-01600 x8  
**4) Spring, Valve**  
 , M30604-21402 x8

**5) Lock, Valve**  
 , M34404-02901 x16  
**6) Seal, Valve**  
 , M32C04-06500 x8



**1) Oil Pump**  
 , M32B35-00010  
**2) Oil Cooler**  
 , M32A39-03300



**1) Water Pump**  
 , M32B45-10031  
**2) Thermostat**  
 , M32A46-02100


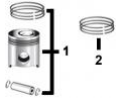



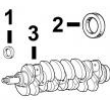
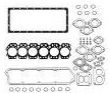
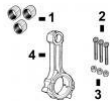







**Glowplug**  
 , M32A66-07011 x4

(1): Seal dimensions: 90x115x13 mm.

(2): Seal with sleeve (Seal dimensions: 97x115x12 mm)


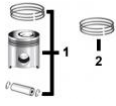



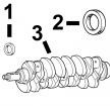

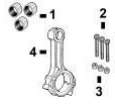







|                             |   |  |                              |  |
|-----------------------------|---|--|------------------------------|--|
| <b>Engine Model:</b><br>S6S | <b>Engine Desc:</b><br>INDIRECT INJECTION | <b>Engine Data:</b><br>NATURALLY ASPIRATED | <b>Engine Info:</b><br>6 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.7 in / 94.00 mm<br>Stroke: 4.72 in / 120.00 mm<br>Piston<br>Compression Height:<br>2.165 in / 55 mm |
|-----------------------------|---|--|------------------------------|--|

|  |   |   |   |  |
|--|---|---|---|--|
|  <p><b>Basic Engine Kit</b><br/>         , MBK601<br/>         , MBK602</p>  |  <p>1) <b>Piston &amp; Ring Kit</b><br/>         , M32A17-05500 Std.<br/>         , M32A17-05700 0.50<br/> <b>6 Per Engine</b><br/>         2) <b>Ring Set</b><br/>         , M32A17-02010 Std.<br/>         , M32A17-02030 0.50</p>         |  <p><b>Main Bearing Set</b><br/>         , M32B09-00010 Std.<br/>         , M32B09-00020 0.25<br/>         , M32B09-00030 0.50<br/>         , M32B09-00040 0.75<br/> <b>Set of 7 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>         , M32B09-09010 Std.<br/>         , M32B09-09020 0.25<br/>         , M32B09-09030 0.50<br/>         , M32B09-09040 0.75<br/> <b>Set of 6 Pairs</b></p>   |  <p><b>Thrust Washer</b><br/>         , M32B09-08101<br/> <b>Set of 3 Pcs</b></p> |
|  <p>1) <b>Front Seal</b><br/>         , M32A11-04010<br/>         2) <b>Rear Seal</b><br/>         , M34407-11090<br/>         , M34407-11090S<br/>         3) <b>Crankshaft</b><br/>         , M32B20-00012</p> |  <p>1) <b>O/H Gasket Set</b><br/>         , M32B94-00010<br/>         2) <b>Cyl Head Gsk</b><br/>         , M32B01-12101<br/>         3) <b>Valve Cover Gsk</b><br/>         , M32B04-03200<br/>         4) <b>Oil Pan Gasket MOILPG</b></p> |  <p>1) <b>Bush, Con Rod</b><br/>         , M32A19-00501 x6<br/>         2) <b>Bolt, Con Rod</b><br/>         , M32A19-00400 x12<br/>         3) <b>Nut, Con Rod</b><br/>         , M30619-10501 x12<br/>         4) <b>Con Rod</b><br/>         , M32A19-00012</p> |  <p>1) <b>Bushing, Cam</b><br/>         , M34307-12700 x1<br/>         , M34307-02801 x2<br/>         , M34307-02900 x1<br/>         2) <b>Camshaft</b><br/>         , M32B05-00200<br/>         3) <b>Tappet</b><br/>         , M32A05-02101 x12<br/>         4) <b>Pushrod</b><br/>         , M32A05-13100 x12</p> |  |
| <p><b>Valve Train</b></p>  | <p>1) <b>Valve, Intake</b><br/>         , M32A04-20100 x6<br/>         2) <b>Valve, Exhaust</b><br/>         , M32A04-21100 x6</p>  | <p>3) <b>Guide, Valve</b><br/>         , M32A01-01600 x12<br/>         4) <b>Spring, Valve</b><br/>         , M30604-21402 x12</p>  | <p>5) <b>Lock, Valve</b><br/>         , M34404-02901 x24<br/>         6) <b>Seal, Valve</b><br/>         , M32C04-06500 x12</p>   |  |
|  <p>1) <b>Oil Pump</b><br/>         , M32B35-00010<br/>         2) <b>Oil Cooler</b><br/>         , M32A39-03300</p>  |  <p>1) <b>Water Pump</b><br/>         , M32B45-10031<br/>         2) <b>Thermostat</b><br/>         , M32A46-02100</p>   |  <p><b>Repair Sleeve</b><br/>         , M32A07-00300</p>   |  <p><b>Glowplug</b><br/>         , M32A66-03101 x6</p>   |  |

(1): Seal dimensions: 90x115x13 mm.

(2): Seal with sleeve (Seal dimensions: 97x115x12 mm)

|                               |   |                                     |                              |  |
|-------------------------------|---|-------------------------------------|------------------------------|--|
| <b>Engine Model:</b><br>S4K-T | <b>Engine Desc:</b><br>DIRECT INJECTION | <b>Engine Data:</b><br>TURBOCHARGED | <b>Engine Info:</b><br>4 Cyl | <b>Engine Dimensions:</b><br>Bore: 4.016 in / 102.00 mm<br>Stroke: 5.12 in / 130.00 mm |
|-------------------------------|---|-------------------------------------|------------------------------|--|

|  |  |   |  |  |
|--|--|---|--|--|
|  <p><b>Basic Engine Kit</b><br/>         ‧ MBK748 Std.</p>   |  <p>1) <b>Piston &amp; Ring Kit</b><br/>         ‧ M34317-07100 Std.</p> <p>4 Per Engine</p> <p>2) <b>Ring Set</b><br/>         ‧ M34317-07010 Std.</p>                                 |  <p><b>Main Bearing Set</b><br/>         ‧ M34309-09051-4 Std.<br/>         ‧ M34309-09061-4 0.25<br/>         ‧ M34309-09071-4 0.50<br/>         ‧ M34309-09081-4 0.75</p> <p><b>Set of 5 Pairs</b></p>                                 |  <p><b>Con Rod Bearing Set</b><br/>         ‧ M34219-00500-4 Std.<br/>         ‧ M34219-00600-4 0.25<br/>         ‧ M34219-00700-4 0.50<br/>         ‧ M34219-00800-4 0.75</p> <p><b>Set of 4 Pairs</b></p>                    |  <p><b>Thrust Washer</b><br/>         ‧ M34309-00800</p> <p><b>Set of 3 Pcs</b></p> |
|  <p>1) <b>Front Seal</b><br/>         ‧ M34311-00800</p> <p>2) <b>Rear Seal</b><br/>         ‧ M34312-00080</p> <p>3) <b>Crankshaft</b><br/>         ‧ M34420-00042</p>  |  <p>1) <b>O/H Gasket Set</b><br/>         ‧ M34294-03050</p> <p>2) <b>Cyl Head Gsk</b><br/>         ‧ M34201-10700</p> <p>3) <b>Rocker Cover Gasket</b><br/>         ‧ M34404-35301</p> |  <p>1) <b>Bush, Con Rod</b><br/>         ‧ M34319-10501 x4</p> <p>2) <b>Bolt, Con Rod</b><br/>         ‧ MME012232 x8</p> <p>3) <b>Nut, Con Rod</b><br/>         ‧ MME023570 x8</p> <p>4) <b>Con Rod</b><br/>         ‧ M34319-01012</p> |  <p>1) <b>Tappet</b><br/>         ‧ M30605-62100</p> <p>2) <b>Push Rod</b><br/>         ‧ M34405-03100 x8</p> <p>3) <b>Camshaft</b><br/>         ‧ M34205-00302</p> <p>4) <b>Cam Bushing Kit</b><br/>         ‧ MS4KCBS x1</p> |  <p><b>Oil Pressure Switch</b><br/>         ‧ MMC840-219</p>                        |
| <p><b>Intake Valve</b><br/>         ‧ M34204-00200 x4</p> <p><b>Insert Valve</b><br/>         ‧ M34301-01800 x4</p>  | <p><b>Exhaust Valve</b><br/>         ‧ M36704-01601 x4</p> <p><b>Insert Valve</b><br/>         ‧ M34301-01600 x4</p>   | <p><b>Intake Valve Guide</b><br/>         ‧ M34301-02200 x4</p> <p><b>Exhaust Valve Guide</b><br/>         ‧ M34301-02300 x4</p>  | <p><b>Valve Seal</b><br/>         ‧ M30604-22801 x8</p> <p><b>Valve Spring</b><br/>         ‧ M36704-02100 x8</p>  |  |
|  <p>1) <b>Oil Pump Gears</b><br/>         ‧ M34235-03021 9 teeth<br/>         ‧ M34235-03031 9 teeth</p> <p>2) <b>Oil Pump Gasket</b><br/>         ‧ M34335-02400</p> <p>3) <b>Oil Cooler</b><br/>         ‧ M34239-02100</p> <p>4) <b>Oil Cooler Gasket</b><br/>         ‧ M34239-04101</p> |  <p>1) <b>Water Pump</b><br/>         ‧ M34345-10051</p> <p>2) <b>Water Pump, Gasket</b><br/>         ‧ M06016-13110</p>  |  <p>1) <b>Thermostat</b><br/>         ‧ M34346-11500</p> <p>2) <b>Thermostat Gasket</b><br/>         ‧ M34346-14100</p>  |  <p>1) <b>Fuel Lift Pump</b><br/>         ‧ M105220-7180</p> <p>2) <b>Injector</b><br/>         ‧ M34361-06070<br/>         ‧ M34361-03030</p>   |  <p><b>Repair Sleeve</b><br/>         ‧ M34307-00501</p>                          |

(1): Check application for proper usage

**Engine Model:**  
S4K-T

**Engine Desc:**  
DIRECT INJECTION

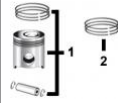
**Engine Data:**  
TURBOCHARGED

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 4.016 in / 102.00 mm  
Stroke: 5.12 in / 130.00 mm



**Basic Engine Kit**  
› MBK749 Std.



1) **Piston & Ring Kit**  
› M34317-07500 Std.  
**4 Per Engine**  
2) **Ring Set**  
› M34317-07010 Std.



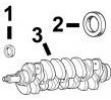
**Main Bearing Set**  
› M34309-09051-4 Std.  
› M34309-09061-4 0.25  
› M34309-09071-4 0.50  
› M34309-09081-4 0.75  
**Set of 5 Pairs**



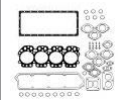
**Con Rod Bearing Set**  
› M34219-00500-4 Std.  
› M34219-00600-4 0.25  
› M34219-00700-4 0.50  
› M34219-00800-4 0.75  
**Set of 4 Pairs**



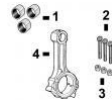
**Thrust Washer**  
› M34309-00800  
**Set of 3 Pcs**



1) **Front Seal**  
› M34311-00800  
2) **Rear Seal**  
› M34312-00080  
3) **Crankshaft**  
› M34220-00042



1) **O/H Gasket Set**  
› M34294-03050  
2) **Cyl Head Gsk**  
› M34201-10700  
3) **Rocker Cover Gasket**  
› M34404-35301



1) **Bush, Con Rod**  
› M34319-10501 x4  
2) **Bolt, Con Rod**  
› MME012232 x8  
3) **Nut, Con Rod**  
› MME023570 x8  
4) **Con Rod**  
› M34319-01012



1) **Tappet**  
› M30605-62100 x8  
2) **Push Rod**  
› M34405-03100 x8  
3) **Camshaft**  
› M34205-00302  
4) **Cam Bushing Kit**  
› MS4KCBS



**Oil Pressure Switch**  
› MMC840-219

**Intake Valve**  
› M36704-00401 x4  
**Insert Valve**  
› M34301-01800 x4

**Exhaust Valve**  
› M36704-01601 x4  
**Insert Valve**  
› M34301-01600 x4

**Intake Valve Guide**  
› M34301-02200 x4  
**Exhaust Valve Guide**  
› M34301-02300 x4

**Valve Seals**  
› M30604-22801 x8  
**Valve Spring**  
› M36704-02100 x8



1) **Oil Pump Gears**  
› M34235-03021 9 teeth  
› M34235-03031 9 teeth  
2) **Oil Pump Gasket**  
› 3) M34335-02400  
3) **Oil Cooler**  
› M34239-02100  
5) **Oil Cooler Gasket**  
› M34239-04101



1) **Water Pump**  
› M34345-10010  
2) **Water Pump, Gasket**  
› M06016-13110



1) **Thermostat**  
› M34346-11500  
2) **Thermostat Gasket**  
› M34346-14100



1) **Fuel Lift Pump**  
› M105220-7180  
2) **Injector**  
› M34361-11010



**Repair Sleeve**  
› M34307-00501


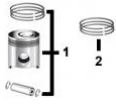



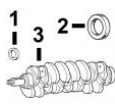
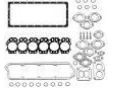
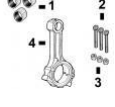

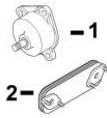



**Engine Model:**  
S6S D

**Engine Desc:**  
DIRECT INJECTION

**Engine Data:**  
NATURALLY ASPIRATED

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 3.7 in / 94.00 mm  
Stroke: 4.72 in / 120.00 mm

|  |  |  |  |  |
|--|--|--|--|--|
|  <p><b>Basic Engine Kit</b><br/>                     ‧ MBK604<br/>                     ‧ MBK605</p>  |  <p>1) <b>Piston &amp; Ring Kit</b><br/>                     ‧ M32A17-05102 <i>Std.</i><br/>                     ‧ M32A17-05302 <i>0.50</i><br/> <b>6 Per Engine</b><br/>                     2) <b>Ring Set</b><br/>                     ‧ M34417-02012 <i>Std.</i><br/>                     ‧ M34417-02032 <i>0.50</i></p>                    |  <p><b>Main Bearing Set</b><br/>                     ‧ M32B09-00010 <i>Std.</i><br/>                     ‧ M32B09-00020 <i>0.25</i><br/>                     ‧ M32B09-00030 <i>0.50</i><br/>                     ‧ M32B09-00040 <i>0.75</i><br/> <b>Set of 7 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b><br/>                     ‧ M32B09-09010 <i>Std.</i><br/>                     ‧ M32B09-09020 <i>0.25</i><br/>                     ‧ M32B09-09030 <i>0.50</i><br/>                     ‧ M32B09-09040 <i>0.75</i><br/> <b>Set of 6 Pairs</b></p>  |  <p><b>Thrust Washer</b><br/>                     ‧ M32B09-08101<br/> <b>Set of 3 Pcs</b></p> |
|  <p>1) <b>Front Seal</b><br/>                     ‧ M32A11-04010<br/>                     2) <b>Rear Seal</b><br/>                     ‧ M34407-11090<br/>                     ‧ M34407-11090S<br/>                     3) <b>Crankshaft</b></p> |  <p>1) <b>O/H Gasket Set</b><br/>                     ‧ M32B94-00010<br/>                     2) <b>Cyl Head Gsk</b><br/>                     ‧ M32B01-12101<br/>                     3) <b>Valve Cover Gsk</b><br/>                     ‧ M32B04-03200<br/>                     4) <b>Oil Pan Gasket</b><br/>                     ‧ MOILPG</p> |  <p>1) <b>Bush, Con Rod</b><br/>                     ‧ M32A19-00501 <i>x6</i><br/>                     2) <b>Bolt, Con Rod</b><br/>                     ‧ M32A19-00400 <i>x12</i><br/>                     3) <b>Nut, Con Rod</b><br/>                     ‧ M30619-10501 <i>x12</i><br/>                     4) <b>Con Rod</b><br/>                     ‧ M32A19-00012</p> |  <p>1) <b>Bushing, Cam</b><br/>                     ‧ M34307-12700 <i>x1</i><br/>                     ‧ M34307-02801 <i>x2</i><br/>                     ‧ M34307-02900 <i>x1</i><br/>                     2) <b>Camshaft</b><br/>                     ‧ M32B05-00200<br/>                     3) <b>Tappet</b><br/>                     ‧ M32A05-02101 <i>x12</i><br/>                     4) <b>Pushrod</b><br/>                     ‧ M32A05-13100 <i>x12</i></p> |  |
| <p><b>Valve Train</b></p>  | <p>1) <b>Valve, Intake</b><br/>                     ‧ M32A04-20100 <i>x6</i><br/>                     2) <b>Valve, Exhaust</b><br/>                     ‧ M32A04-21100 <i>x6</i></p>   | <p>3) <b>Guide, Valve</b><br/>                     ‧ M32A01-01600 <i>x12</i><br/>                     4) <b>Spring, Valve</b><br/>                     ‧ M30604-21402 <i>x12</i></p>   | <p>5) <b>Lock, Valve</b><br/>                     ‧ M34404-02901 <i>x24</i><br/>                     6) <b>Seal, Valve</b><br/>                     ‧ M32C04-06500 <i>x12</i></p>  |  |
|  <p>1) <b>Oil Pump</b><br/>                     ‧ M32B35-00010<br/>                     2) <b>Oil Cooler</b><br/>                     ‧ M32B39-00100</p>   |  <p>1) <b>Water Pump</b><br/>                     ‧ M32B45-10031<br/>                     2) <b>Thermostat</b><br/>                     ‧ M32A46-02100</p>  |  <p><b>Repair Sleeve</b><br/>                     ‧ M32A07-00300</p>  |  <p><b>Glowplug</b><br/>                     ‧ M32A66-07011 <i>x6</i></p>   |  |


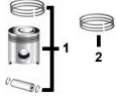



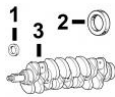
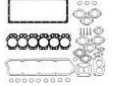
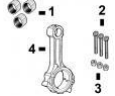
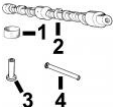
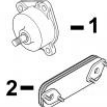



(1): Seal dimensions: 90x115x13 mm.

(2): Seal with sleeve (Seal dimensions: 97x115x12 mm)

|                                |   |                                     |                              |   |
|--------------------------------|---|-------------------------------------|------------------------------|---|
| <b>Engine Model:</b><br>S6S DT | <b>Engine Desc:</b><br>DIRECT INJECTION | <b>Engine Data:</b><br>TURBOCHARGED | <b>Engine Info:</b><br>6 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.7 in / 94.00 mm<br>Stroke: 4.72 in / 120.00 mm |
|--------------------------------|---|-------------------------------------|------------------------------|---|

Hyundai  
R160LCD-7

R180LCD-7

|   |  |   |   |  |
|---|--|---|---|--|
|  <p><b>Basic Engine Kit</b><br/>         ‧ MBK607<br/>         ‧ MBK608</p>   |  <p><b>1) Piston &amp; Ring Kit</b><br/>         ‧ M32A17-06101 Std.<br/>         ‧ M32A17-06301 0.50<br/> <b>6 Per Engine</b><br/> <b>2) Ring Set</b><br/>         ‧ M34417-02012 Std.<br/>         ‧ M34417-02032 0.50</p>        |  <p><b>Main Bearing Set</b><br/>         ‧ M32B09-00010 Std.<br/>         ‧ M32B09-00020 0.25<br/>         ‧ M32B09-00030 0.50<br/>         ‧ M32B09-00040 0.75<br/> <b>Set of 7 Pairs</b></p>   |  <p><b>Con Rod Bearing Set</b><br/>         ‧ M32B09-09010 Std.<br/>         ‧ M32B09-09020 0.25<br/>         ‧ M32B09-09030 0.50<br/>         ‧ M32B09-09040 0.75<br/> <b>Set of 6 Pairs</b></p>   |  <p><b>Thrust Washer</b><br/>         ‧ M32B09-08101<br/> <b>Set of 3 Pcs</b></p> |
|  <p><b>1) Front Seal</b><br/>         ‧ M32A11-04010<br/> <b>2) Rear Seal</b><br/>         ‧ M34407-11090<br/>         ‧ M32A20-00012<br/> <b>3) Crankshaft</b></p> |  <p><b>1) O/H Gasket Set</b><br/>         ‧ M32B94-00010<br/> <b>2) Cyl Head Gsk</b><br/>         ‧ M32B01-12101<br/> <b>3) Valve Cover Gsk</b><br/>         ‧ M32B04-03200<br/> <b>4) Oil Pan Gasket</b><br/>         ‧ MOILPG</p> |  <p><b>1) Bush, Con Rod</b><br/>         ‧ M32A19-00501 x6<br/> <b>2) Bolt, Con Rod</b><br/>         ‧ M32A19-00400 x12<br/> <b>3) Nut, Con Rod</b><br/>         ‧ M30619-10501 x12<br/> <b>4) Con Rod</b><br/>         ‧ M32A19-00012</p> |  <p><b>1) Bushing, Cam</b><br/>         ‧ M34307-12700 x1<br/>         ‧ M34307-02801 x2<br/>         ‧ M34307-02900 x1<br/> <b>2) Camshaft</b><br/>         ‧ M32B05-00200<br/> <b>3) Tappet</b><br/>         ‧ M32A05-02101 x12<br/> <b>4) Pushrod</b><br/>         ‧ M32A05-13100 x12</p> |  |
| <p><b>Valve Train</b></p>   | <p><b>1) Valve, Intake</b><br/>         ‧ M32A04-20100 x6<br/> <b>2) Valve, Exhaust</b><br/>         ‧ M32A04-21100 x6</p>   | <p><b>3) Guide, Valve</b><br/>         ‧ M32A01-01600 x12<br/> <b>4) Spring, Valve</b><br/>         ‧ M30604-21402 x12</p>  | <p><b>5) Lock, Valve</b><br/>         ‧ M34404-02901 x24<br/> <b>6) Seal, Valve</b><br/>         ‧ M32C04-06500 x12</p>   |  |
|  <p><b>1) Oil Pump</b><br/>         ‧ M32B35-00010<br/> <b>2) Oil Cooler</b><br/>         ‧ M32B39-00100</p>  |  <p><b>1) Water Pump</b><br/>         ‧ M32B45-10031<br/> <b>2) Thermostat</b><br/>         ‧ M32A46-02100</p>  |  <p><b>Repair Sleeve</b><br/>         ‧ M32A07-00300</p>   |  <p><b>Glowplug</b><br/>         ‧ M32A66-07011 x6</p>   |  |

(1): Seal dimensions: 90x115x13 mm.

(2): Seal with sleeve (Seal dimensions: 97x115x12 mm)




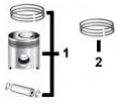



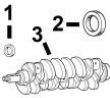

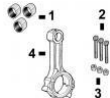
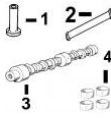





**Engine Model:**  
S6K

**Engine Desc:**  
DIRECT INJECTION

**Engine Data:**  
TURBO

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 102.00 mm  
Stroke: 130.00 mm

|  |  |   |  |   |
|--|--|---|--|---|
|  <p><b>Basic Engine Kit</b><br/>• MBK7500</p>  |  <p>1) <b>Piston &amp; Ring Kit</b><br/>• M34317-07500 <i>Std.</i><br/>2) <b>Ring Set</b><br/>• M34317-07010 <i>Std.</i></p>  |  <p><b>Main Bearing Set</b><br/>• M34309-09051 <i>Std.</i><br/>• M34309-09061 <i>0.25</i><br/>• M34309-09071 <i>0.50</i><br/>• M34309-09081 <i>0.75</i><br/><b>Set of 7 Pairs</b></p>                                      |  <p><b>Con Rod Bearing Set</b><br/>• M34219-00500 <i>Std.</i><br/>• M34219-00600 <i>0.25</i><br/>• M34219-00700 <i>0.50</i><br/>• M34219-00800 <i>0.75</i><br/><b>Set of 6 Pairs</b></p>           |  <p><b>Thrust Washer Set of 3 Pcs</b><br/>• M34309-00800</p>                                       |
|  <p>1) <b>Front Seal</b><br/>• M34311-00800<br/>2) <b>Rear Seal</b><br/>• M34312-00080<br/>3) <b>Crankshaft</b><br/>• M34320-00040</p>   |  <p>1) <b>O/H Gasket Set</b><br/>• M34394-20010<br/>2) <b>Cyl Head Gsk</b><br/>• M34301-00203<br/>3) <b>Rocker Cover Gasket</b><br/>• M34304-00701<br/>• M34704-15301</p> |  <p>1) <b>Bush, Con Rod</b><br/>• M34319-10501 <i>x6</i><br/>2) <b>Bolt, Con Rod</b><br/>• ME012232 <i>x12</i><br/>3) <b>Nut, Con Rod</b><br/>• ME023570 <i>x12</i><br/>4) <b>Con Rod</b><br/>• M34319-01012 <i>x6</i></p> |  <p>1) <b>Tappet</b><br/>• M30605-62100 <i>x12</i><br/>2) <b>Push Rod</b><br/>• M34405-03100 <i>x12</i><br/>3) <b>Camshaft</b><br/>• M34305-00601<br/>4) <b>Cam Bushing Kit</b><br/>• MS6KCBS</p> |   |
| <p><b>Intake Valve</b><br/>• M34204-00200 <i>x6</i><br/>• M36704-00401 <i>x6</i><br/><b>Valve Insert</b><br/>• M34301-01800</p>  | <p><b>Exhaust Valve</b><br/>• M36704-01601 <i>x6</i><br/><b>Valve Insert</b><br/>• M34301-01600 <i>x6</i></p>  | <p><b>Intake Valve Guide</b><br/>• M34301-02200<br/><b>Exhaust Valve Guide</b><br/>• M34301-02300</p>   | <p><b>Valve Spring</b><br/>• M36704-02100<br/><b>Valve Seals</b><br/>• M30604-22801</p>  |   |
|  <p>1) <b>Oil Pump</b><br/>• M32B35-00010<br/>2) <b>Oil Pump Gasket</b><br/>• M34335-02400<br/>• M34335-01301<br/>3) <b>Oil Cooler</b><br/>• M34339-02102<br/>4) <b>Oil Cooler Gasket</b><br/>• M34239-04101</p> |  <p>1) <b>Water Pump</b><br/>• M34345-10010<br/>• M34345-10051<br/>2) <b>Water Pump, Gasket</b><br/>• M06016-13110</p>  |  <p>1) <b>Thermostat</b><br/>• M34346-11500<br/>2) <b>Thermostat Gasket</b><br/>• M34346-14100<br/>3) <b>Oil Pressure Switch</b><br/>• MMC840-219</p>  |  <p>1) <b>Fuel Lift Pump</b><br/>• M105220-7180<br/>2) <b>Injector</b><br/>• M34365-03040</p>  |  <p>1) <b>Repair Sleeve</b><br/>• M34307-00501<br/>2) <b>Turbocharger</b><br/>• M49179-02300</p> |

(1): Check for proper application.

(3): Intake valve – 44mm head diameter.

(5): 8 installation holes.

(7): 7 vanes impeller wheel.

(2): Intake valve – 46mm head diameter.

(4): For intake valve M34204-00200 – 46mm head diameter.

(6): 7 installation holes.

(8): 8 vanes impeller wheel.

**Engine Model:**  
S6K

**Engine Desc:**  
DIRECT INJECTION

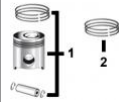
**Engine Data:**  
TURBO

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 102.00 mm  
Stroke: 130.00 mm



**Basic Engine Kit**  
• MBK7100



**1) Piston & Ring Kit**  
• M34317-07100 Std.  
**2) Ring Set**  
• M34317-07010 Std.



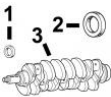
**Main Bearing Set**  
• M34309-09051 Std.  
• M34309-09061 0.25  
• M34309-09071 0.50  
• M34309-09081 0.75  
**Set of 7 Pairs**



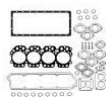
**Con Rod Bearing Set**  
• M34219-00500 Std.  
• M34219-00600 0.25  
• M34219-00700 0.50  
• M34219-00800 0.75  
**Set of 6 Pairs**



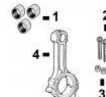
**Thrust Washer**  
• M34309-00800  
**Set of 3 Pcs**



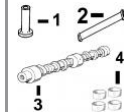
**1) Front Seal**  
• M34311-00800  
**2) Rear Seal**  
• M34312-00080  
**3) Crankshaft**  
• M34320-00040



**1) O/H Gasket Set**  
• M34394-20010  
**2) Cyl Head Gsk**  
• M34301-00203  
**3) Rocker Cover Gasket**  
• M34304-00701  
• M34704-15301



**1) Bush, Con Rod**  
• M34319-10501 x6  
**2) Bolt, Con Rod**  
• ME012232 x12  
**3) Nut, Con Rod**  
• ME023750 x12  
**4) Con Rod**  
• M34319-01012 x6



**1) Tappet**  
• M30605-62100 x8  
**2) Push Rod**  
• M34405-03100 x8  
**3) Camshaft**  
• M34305-00601  
**4) Cam Bushing Kit**  
• MS6KCBS

**Intake Valve**  
• M34204-00200 x6  
• M36704-00401 x6  
**Valve Insert**  
• M34301-01800 x6

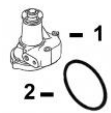
**Exhaust Valve**  
• M36704-01601 x6  
**Valve Insert**  
• M34301-01600 x6

**Intake Valve Guide**  
• M34301-02200  
**Exhaust Valve Guide**  
• M34301-02300

**Valve Spring**  
• M36704-02100  
**Valve Seals**  
• M30604-22801



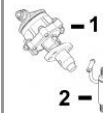
**1) Oil Pump**  
• M32B35-00010  
**2) Oil Pump Gasket**  
• M34335-02400  
• M34335-01301  
**3) Oil Cooler**  
• M34339-02102  
**4) Oil Cooler Gasket**  
• M34239-04101



**1) Water Pump**  
• M34345-10010  
• M34345-10051  
**2) Water Pump, Gasket**  
• M06016-13110



**1) Thermostat**  
• M34346-11500  
**2) Thermostat Gasket**  
• M34346-14100  
**3) Oil Pressure Switch**  
• MMC840-219



**1) Fuel Lift Pump**  
• M105220-7180  
**2) Injector**  
• M34365-03040



**1) Repair Sleeve**  
• M34307-00501  
**2) Turbocharger**  
• M49179-02300

(1): Check for proper application  
(3): Intake valve – 44mm head diameter.  
(5): 8 installation holes.  
(7): 7 vanes impeller wheel.

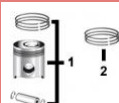
(2): Intake valve – 46mm head diameter.  
(4): For intake valve M34204-00200 – 46mm head diameter.  
(6): 7 installation holes.  
(8): 8 vanes impeller wheel.

|                                   |                              |  |                              |   |
|-----------------------------------|------------------------------|--|------------------------------|---|
| <b>Engine Series:</b><br>Shibaura | <b>Engine Model:</b><br>N843 | <b>Engine Desc:</b><br>NATURALLY ASPIRATED | <b>Engine Info:</b><br>3 Cyl | <b>Engine Dimensions:</b><br>Bore: 3.3 in / 84.00 mm<br>Stroke: 3.5 in / 90.00 mm<br>Displacement: 91 in <sup>3</sup> / 1.496 Lt<br>Compression Ratio: 22.5:1 |
|-----------------------------------|------------------------------|--|------------------------------|---|

|                    |                    |                |                |                          |       |
|--------------------|--------------------|----------------|----------------|--------------------------|-------|
| <b>New-Holland</b> |                    | <b>Case IH</b> |                | <b>Shibaura Tractors</b> |       |
| L140 - Skid Steer  | L150 - Skid Steer  | D33 - Tractor  | DX31 - Tractor | CM314                    | SG280 |
| LS465 - Skid Steer | LX485 - Skid Steer | DX33 - Tractor |                | ST330                    | ST333 |
| TC30 - Tractor     | TC33D - Tractor    |                |                |                          |       |
| TC33 - Tractor     | TC33DA - Tractor   |                |                |                          |       |



- 1) Engine O/H Kit**
  - POK316 Std.
  - POK317 0.50
- 2) Basic Engine Kit**
  - PBK316 Std.
  - PBK317 0.50
  - Spec Sheet - 400C Series



- 1) Piston & Ring Kit**
  - P115017541 Std.
  - P115017541B 0.50
- 3 Per Engine**
- 2) Ring Set**
  - P115107970 Std.
  - P115107970B 0.50



- Main Bearing Set**
  - P198586050 Std.
  - P198586054 0.010
  - P198586057 0.020
- Set of 3 Pairs**



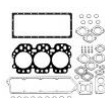
- Con Rod Bearing Set**
  - P198586080 Std.
  - P198586084 0.010
  - P198586087 0.020
- Set of 3 Pairs**



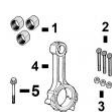
- 1) Thrust Washer**
  - P199266200 x2
- 2) Crank Bushing**
  - P198517222 Std.
  - P198517226 0.010
  - P198517229 0.020



- 1) Front Seal**
  - P198636160
- 2) Rear Seal**
  - P198636170
- 3) Crankshaft**
  - P115256950
- 4) Crankshaft Gear**
  - PU15276270
- 5) Key, Crank Gear**
  - P030509020
- 6) Flywheel Ring Gear**
  - P115376040 109T
  - PU15376160 126T



- 1) O/H Gasket Set**
  - PU5LC0018
- 2) Cyl Head Gsk**
  - P111147501
- 3) Seal Rocker Box**
  - P120996140
- 4) Seal, Cyl HD Cov**
  - P111996410
- 5) Oil Pan Gasket**
  - P110996910



- 1) Bush, Con Rod**
  - P198517265 x3
- 2) Bolt, Con Rod**
  - P115176140 x6
- 3) Nut, Con Rod**
  - P020109120 x6
- 4) Connecting Rod**
  - P115026251
- 5) Head Bolt**
  - P111136480 x11
  - P111136490 x3



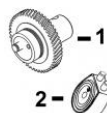
- 1) Tappet**
  - P120116160
- 2) Seal, Intk Valve**
  - P120406070 x3
- 3) Seal, Exh Valve**
  - P120406050 x3

- Valve Train Kit**
  - PVTK308

- 1) Valve, Intake**
- 2) Valve, Exhaust**
  - P120166350 x3
  - P120176360 x3

- 3) Spring, Valve**
  - P198217470 x6
- 4) Retainer, Valve Spring**
  - P120186080 x6

- 5) Lock, Valve**
  - P120226070 x12



- 1) Oil Pump**
  - PU5MK8266
- 2) Oil Cooler**
  - P2486A218



- 1) Lift Pump**
  - P130506351
- 2) Thermostat**
  - P145206182
- 3) Atomiser**
  - P131406490



- 1) Water Pump**
  - P145017951
- 2) Gasket, W Pump**
  - P145996921



- Repair Sleeve**
  - 84RS

(1): Use with HL and HLC Builds.

(2): Not included in valve train kit.

(3): If 2 bolt auxiliary drive timing cover gasket is needed, also sell P165996630, with the gasket set PU5LC0018.

(4): Not compatible with engines that have a crank driven balancer unit.

**Engine Series:**  
Shibaura

**Engine Model:**  
N843L

**Engine Desc:**  
NATURALLY ASPIRATED

**Engine Info:**  
3 Cyl

**Engine Dimensions:**  
Bore: 3.3 in / 84.00 mm  
Stroke: 3.9 in / 100.00 mm  
Displacement: 101.4 in3 / 1.662 Lt  
Compression Ratio: 22.5:1

**Case IH**

D35 - Tractor  
DX35 - Tractor

**Boomer**

2035 - Tractor

**New Holland**

TC35DA - Tractor  
TC35A - Tractor  
TC34DA - Tractor  
T1520 - Tractor  
TC35D - Tractor  
TC35 - Tractor  
T2220 - Tractor

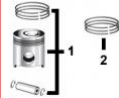


**1) Engine O/H Kit**

- POK318 Std.
- POK319 0.50

**2) Basic Engine Kit**

- PBK318 Std.
- PBK319 0.50
- Spec Sheet - 400C Series



**1) Piston & Ring Kit**

- P115017491 Std.
- P115017491B 0.50

**3 Per Engine**

**2) Ring Set**

- P115107970 Std.
- P115107970B 0.50



**Main Bearing Set**

- P198586050 Std.
- P198586054 0.010
- P198586057 0.020

**Set of 3 Pairs**



**Con Rod Bearing Set**

- P198586080 Std.
- P198586084 0.010
- P198586087 0.020

**Set of 3 Pairs**

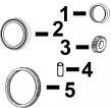


**1) Thrust Washer**

- P199266200 x2

**2) Crank Bushing**

- P198517222 Std.
- P198517226 0.010
- P198517229 0.020



**1) Front Seal**

- P198636160

**2) Rear Seal**

- P050209083

**3) Crankshaft Gear**

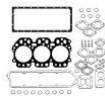
- PU15276270

**4) Key, Crank Gear**

- P030509020

**5) Flywheel Ring Gear**

- P115376040 109T
- PU15376160 126T



**1) O/H Gasket Set**

- PU5LC0018

**2) Cyl Head Gsk**

- P111147501

**3) Seal Rocker Box**

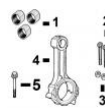
- P120996140

**4) Seal, Cyl HD Cov**

- P111996410

**5) Oil Pan Gasket**

- P110996910



**1) Bush, Con Rod**

- P198517265 x3

**2) Bolt, Con Rod**

- P115176140 x6

**3) Nut, Con Rod**

- P020109120 x6

**4) Connecting Rod**

- P115026330

**5) Head Bolt**

- P111136480 x11
- P111136490 x3



**1) Tappet**

- P120116160

**2) Seal, Intk Valve**

- P120406070 x3

**3) Seal, Exh Valve**

- P120406050 x3

**Valve Train Kit**

- PVTK309

**1) Valve, Intake**

**2) Valve, Exhaust**

- 1) P120166350 x3
- 2) P120176360 x3

**3) Spring, Valve**

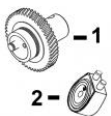
- P198216700 x6

**4) Retainer, Valve Spring**

- P120186080 x6

**5) Lock, Valve**

- P120226070 x12



**1) Oil Pump**

- PU5MK8266
- PU5MK8267

**2) Oil Cooler**

- P2486A218



**1) Lift Pump**

- P130506351

**2) Thermostat**

- P145206182
- P145206230

**3) Atomiser**

- P131406490



**1) Water Pump**

- P145017951
- PU45010062

**2) Gasket, W Pump**

- P145996921



**Repair Sleeve**

- 84RS

(1): Use with GS Build, 403D-17 Engine.

(3): Under development, not included in Valve Train Kit.

(2): Depending on the serial number or production date, the TC35, TC35D, D35, & DX35 may require additional manifold gaskets not offered in PU5LC0018

(4): If 2 bolt auxiliary drive timing cover gasket is needed, also sell P165996630, with the gasket set PU5LC0018.

**Engine Series:** Shibaura      **Engine Model:** N844      **Engine Desc:** NATURALLY ASPIRATED      **Engine Data:** INDIRECT INJECTION      **Engine Info:** 4 Cyl

**Engine Dimensions:**  
 Bore: 3.3 in / 84.00 mm Stroke: 3.54 in / 90.00 mm Displacement: 121.7 in3 / 2.0 Lt Compression Ratio: 22.5:1

**Case IH**

Farmall 40 - Tractor  
 D40 - Tractor

DX40 - Tractor

**New Holland**

L160 - Skid Steer  
 L213 - Skid Steer  
 LX565 - Skid Steer

T2310 - Tractor  
 TC40A - Tractor  
 TC40DA - Tractor

LS160 - Skid Steer  
 L565 - Skid Steer  
 1920, from MSN 43784 - Tractor  
 TC40 - Tractor  
 TC40D - Tractor  
 Boomer 3040 - Tractor

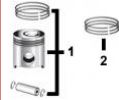


**1) Engine O/H Kit**

- POK844 Std.
- POK845 0.50

**2) Basic Engine Kit**

- PBK844 Std.
- PBK845 0.50
- Spec Sheet - 400C Series



**1) Piston & Ring Kit**

- P115017541 Std.
- P115017541B 0.50

**4 Per Engine**

**2) Ring Set**

- P115107970 Std.
- P115107970B 0.50



**Main Bearing Set**

- P198586140 Std.
- P198586150 0.010
- P198586160 0.020

**Set of 4 Pairs**



**Con Rod Bearing Set**

- PU5ME0011 Std.
- PU5ME0011A 0.010
- PU5ME0011B 0.020

**Set of 4 Pairs**



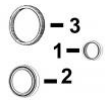
**1) Thrust Washer**

- P199266200/10

**Set of 3 Pcs**

**2) Crank Bushing**

- P198517222 Std.
- P198517226 0.010
- P198517229 0.020



**1) Front Seal**

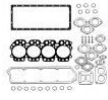
- P198636160

**2) Rear Seal**

- P198636170

**3) Flywheel Ring Gear**

- P115376040 109T
- PU15376160 126T



**1) O/H Gasket Set**

- P195907110

**2) Cyl Head Gsk**

- P111147520

**3) Rocker Box Seal**

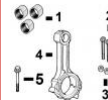
- P052109074

**4) Rocker Box Cover Seal**

- P052109072

**5) Oil Pan Gasket**

- P110996920



**1) Bush, Con Rod**

- P198517265 x4

**2) Bolt, Con Rod**

- P115176140 x8

**3) Nut, Con Rod**

- P020109120 x8

**4) Connecting Rod**

- P115026251

**5) Head Bolt**

- P111136480 x14
- P111136490 x4



**1) Tappet**

- P120116160

**2) Seal, Intk Valve**

- P120406070 x4

**3) Seal, Exh Valve**

- P120406050 x4

**Valve Train Kit**

- PVTK440

**1) Valve, Intake**

**2) Valve, Exhaust**

- 1) P120166350 x4
- 2) P120176360 x4

3

4

**3) Spring, Valve**

- P198216700 x8

**4) Retainer, Valve Spring**

- P120186080 x8

6

**5) Lock, Valve**

- P120226070 x16



**Oil Pump**

- PU5MK8266
- PU5MK8267

5

5



**1) Water Pump**

- P145017951

**2) Gasket, W Pump**

- P145996921



**Thermostat**

- P145206182



**1) Repair Sleeve**

- 84RS

**2) Cylinder Head**

- P111017420UF

5

(1): Does not include Crankshaft Oil Seals.  
 (3): 37mm head diameter.  
 (5): Check application for proper usage.

(2): Must verify valve head diameter before ordering.  
 (4): 33mm head diameter.  
 (6): Not included in Valve Train Kit.

**Engine Series:** Shibauro  
**Engine Model:** N844T  
**Engine Desc:** TURBOCHARGED  
**Engine Data:** TIER 1 and TIER 2  
**Engine Info:** 4 Cyl

**Engine Dimensions:**

Bore: 3.3 in / 84.00 mm Stroke: 3.54 in / 90.00 mm Displacement: 121.7 in<sup>3</sup>/ 2.0 Lt Compression Ratio: 22.5:1

**New Holland**

L170 - Skid Steer  
 L215 - Skid Steer

**Case IH**

SR150 - Skid Steer

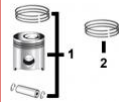


**1) Engine O/H Kit**

- POK848 Std.
- POK849 0.50

**2) Basic Engine Kit**

- PBK848 Std.
- PBK849 0.50
- Spec Sheet - 400C Series



**1) Piston & Ring Kit**

- P115017581 Std.
- P115017581B 0.50

**4 Per Engine**

**2) Ring Set**

- P115104021 Std.
- P115104021B 0.50



**Main Bearing Set**

- P198586140 Std.
- P198586150 0.010
- P198586160 0.020

**Set of 4 Pairs**



**Con Rod Bearing Set**

- PU5ME0011 Std.
- PU5ME0011A 0.010
- PU5ME0011B 0.020

**Set of 4 Pairs**



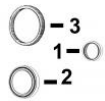
**1) Thrust Washer**

- P199266200/10

**Set of 3 Pcs**

**2) Crank Bushing**

- P198517222 Std.
- P198517226 0.010
- P198517229 0.020



**1) Front Seal**

- P198636160

**2) Rear Seal**

- P198636170

**3) Flywheel Ring Gear**

- P115376040 109T
- PU15376160 126T



**1) O/H Gasket Set**

- P195907110

**2) Cyl Head Gsk**

- P111147520

**3) Rocker Box Seal**

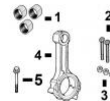
- P052109074

**4) Rocker Box Cover Seal**

- P052109072

**5) Oil Pan Gasket**

- P110996920



**1) Bush, Con Rod**

- P198517265 x4

**2) Bolt, Con Rod**

- P115176140 x8

**3) Nut, Con Rod**

- P020109120 x8

**4) Connecting Rod**

- P115026251

**5) Head Bolt**

- P111136480 x14
- P111136490 x4



**1) Tappet**

- P120116160

**2) Seal, Intk Valve**

- P120406070 x4

**3) Seal, Exh Valve**

- P120406050 x4

**Valve Train Kit**

- PVTK440

**1) Valve, Intake**

**2) Valve, Exhaust**

- 1) P120166350 x4
- 2) P120176360 x4

**3) Spring, Valve**

- P198216700 x8

**4) Retainer, Valve Spring**

- P120186080 x8

**5) Lock, Valve**

- P120226070 x16



**Oil Pump**

- PU5MK8266
- PU5MK8267



**1) Water Pump**

- P145017951

**2) Gasket, W Pump**

- P145996921



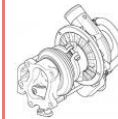
**Thermostat**

- P145206182



**Repair Sleeve**

- 84RS



**Turbocharger**

- P135756170

(1): Does not include Crankshaft Oil Seals.  
 (3): 37mm head diameter.  
 (5): Check application for proper usage.

(2): Must verify valve head diameter before ordering.  
 (4): 33mm head diameter.  
 (6): Not included in Valve Train Kit.

N844L SHIBAURA TIER 1 & 2

**Engine Series:**  
Shibaura

**Engine Model:**  
N844L

**Engine Desc:**  
NATURALLY  
ASPIRATED

**Engine Info:**  
4 Cyl

**Engine Dimensions:**

Bore: 3.3 in /  
84.00 mm  
Stroke: 3.9 in /  
100.00 mm  
Displacement:  
135 in3/ 2.216  
Lt  
Compression  
Ratio: 23.3:1

**New Holland**

L213 - Skid  
Steer  
3415 - Tractor  
TC45 - Tractor  
TC45A -  
Tractor  
TC45D -  
Tractor  
TC45DA -  
Tractor  
TC45DA -  
Tractor  
TC48DA -  
Tractor

**Case IH**

SR130 - Skid  
Steer  
410 - Skid  
Steer  
D45 - Tractor  
DX45 - Tractor  
DX48 - Tractor

**Marine Power  
Systems**

422GM

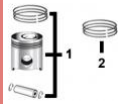


**1) Engine O/H Kit**

- POK404 Std.
- POK405 0.50

**2) Basic Engine Kit**

- PBK404 Std.
- PBK405 0.50
- Spec Sheet - 400C Series



**1) Piston & Ring Kit**

- P115017491 Std.
- P115017491B 0.50

**4 Per Engine**

**2) Ring Set**

- P115107970 Std.
- P115107970B 0.50



**Main Bearing Set**

- P198586140 Std.
- P198586150 0.010
- P198586160 0.020

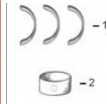
**Set of 4 Pairs**



**Con Rod Bearing Set**

- PU5ME0011 Std.
- PU5ME0011A 0.010
- PU5ME0011B 0.020

**Set of 4 Pairs**



**1) Thrust Washer**

- P199266200/10

**Set of 3 Pcs**

**2) Crank Bushing**

- P198517222 Std.
- P198517226 0.010
- P198517229 0.020



**1) Front Seal**

- P198636160

**2) Rear Seal**

- P050209083

**3) Crankshaft**

- P115256990

**4) Crankshaft Gear**

- PU15276270

**5) Key, Crank Gear**

- P030509020

**6) Flywheel Ring Gear**

- P115376040 109T
- PU15376160 126T



**1) O/H Gasket Set**

- PU5LC0017

**2) Cyl Head Gsk**

- P111147741

**3) Seal Rocker Box**

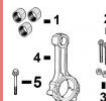
- P120996130

**4) Seal, Cyl HD Cov**

- P111996401

**5) Oil Pan Gasket**

- P110996920



**1) Bush, Con Rod**

- P198517265 x4

**2) Bolt, Con Rod**

- P115176140 x8

**3) Nut, Con Rod**

- P020109120 x8

**4) Connecting Rod**

- P115026330

**5) Head Bolt**

- P111136480 x14
- P111136490 x4



**1) Tappet**

- P120116160

**2) Seal, Intk Valve**

- P120406070 x4

**3) Seal, Exh Valve**

- P120406050 x4

**Valve Train Kit**

- PVTK440

**1) Valve, Intake**

**2) Valve, Exhaust**

- 1) P120166350 x4
- 2) P120176360 x4

**3) Spring, Valve**

- P198216700 x8

**4) Retainer, Valve Spring**

- P120186080 x8

**5) Lock, Valve**

- P120226070 x16



**1) Oil Pump**

- PU5MK8266

**2) Oil Cooler**

- P2486A218



**1) Lift Pump**

- P130506351

**2) Thermostat**

- P145206182

**3) Atomiser**

- P131406490



**1) Water Pump**

- P145017951

**2) Gasket, W Pump**

- P145996921



**Repair Sleeve**

- 84RS



**Fuel Lines**

- 1) P131507700
- 2) P131507710
- 3) P131507720
- 4) P131507730

(1): Does not include Crankshaft Oil Seals.

(2): Use with HP Builds.

(3): Do not use in applications that require a Crankshaft Driven Balancer Unit. The new style front gear is P/N U15276270, (.887" or 22.5mm Wide) and the key way P/N P030509020, must be used.

(4): Use with HP and HPC Builds.

(5): Not included in valve train kit.

## N844LT SHIBAURA TIER 1 & 2

### Engine Series:

Shibaura

### Engine Model:

N844LT

### Engine Desc:

TURBOCHARGE

### Engine Info:

4 Cyl

### Engine

#### Dimensions:

Bore: 3.3 in /  
84.00 mm  
Stroke: 3.9 in /  
100.00 mm  
Displacement:  
135 in3/ 2.216  
Lt  
Compression  
Ratio: 23.3:1

### New Holland

C175 - Skid  
Steer  
L175 - Skid  
Steer  
LS175 - Skid  
Steer  
L215 - Skid  
Steer  
L218 - Skid  
Steer  
L220 - Skid  
Steer  
L170 - Skid  
Steer  
L216 - Skid  
Steer  
TC55DA -  
Tractor

### Case IH

420 - Skid  
Steer  
420CT - Skid  
Steer  
SR160 - Skid  
Steer  
SV185 - Skid  
Steer  
DX55 - Tractor

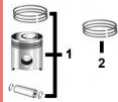


#### 1) Engine O/H Kit

- POK406 Std.
- POK407 0.50

#### 2) Basic Engine Kit

- PBK406 Std.
- PBK407 0.50
- Spec Sheet - 400C Series



#### 1) Piston & Ring Kit

- P115017581 Std.
- P115017581B 0.50

#### 4 Per Engine

#### 2) Ring Set

- P115104021 Std.
- P115104021B 0.50



#### Main Bearing Set

- P198586140 Std.
- P198586150 0.010
- P198586160 0.020

#### Set of 4 Pairs



#### Con Rod Bearing Set

- PU5ME0011 Std.
- PU5ME0011A 0.010
- PU5ME0011B 0.020

#### Set of 4 Pairs



#### 1) Thrust Washer

- P199266200/10

#### Set of 3 Pcs

- 2) Crank Bushing
  - P198517222 Std.
  - P198517226 0.010
  - P198517229 0.020



#### 1) Front Seal

- P198636160

#### 2) Rear Seal

- P050209083

#### 3) Crankshaft

- P115256990

#### 4) Crankshaft Gear

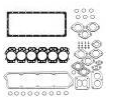
- PU15276270

#### 5) Key, Crank Gear

- P030509020

#### 6) Flywheel Ring Gear

- P115376040 109T
- PU15376160 126T



#### 1) O/H Gasket Set

- P404TOG

#### 2) Cyl Head Gsk

- P111147741

#### 3) Seal Rocker Box

- P120996130

#### 4) Seal, Cyl HD Cov

- P111996401

#### 5) Oil Pan Gasket

- P110996920



#### 1) Bush, Con Rod

- P198517265 x4

#### 2) Bolt, Con Rod

- P115176140 x8

#### 3) Nut, Con Rod

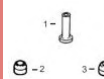
- P020109120 x8

#### 4) Connecting Rod

- P115026330

#### 5) Head Bolt

- P111136480 x14
- P111136490 x4



#### 1) Tappet

- P120116160

#### 2) Seal, Intk Valve

- P120406070 x4

#### 3) Seal, Exh Valve

- P120406050 x4

#### Valve Train Kit

- PVTK440

#### 1) Valve, Intake

#### 2) Valve, Exhaust

- 1) P120166350 x4
- 2) P120176360 x4

#### 3) Spring, Valve

- P198216700 x8

#### 4) Retainer, Valve Spring

- P120186080 x8

#### 5) Lock, Valve

- P120226070 x16



#### 1) Oil Pump

- PU5MK8266 5
- PU5MK8267 5

#### 2) Oil Cooler

- P2486A218



#### 1) Water Pump

- P145017951

#### 2) Gasket, W Pump

- P145996921



#### 1) Lift Pump

- P130506351

#### 2) Thermostat

- P145206182

#### 3) Atomiser

- P131406490

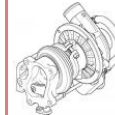


#### Repair Sleeve

- 1) 84RS

#### 2) Cylinder Head

- PTPN488UF 6



#### Turbocharger

- P135756180 5
- P135756170 5



#### Fuel Lines

- 1) P131507700 5
- 2) P131507710 5
- 3) P131507720 5
- 4) P131507730 5

(1): Does not include Crankshaft Oil Seals.

(3): Do not use in applications that require a Crankshaft Driven Balancer Unit. The new style front gear is P/N U15276270, (.887" or 22.5mm Wide) and the key way P/N P030509020, must be used.

(5): Check application for proper usage.

(2): Use with HR Build.

(4): Not included in valve train kit.

(6): For use on 400 series engines only where the intake manifold is part of the cylinder head cover.



**Engine Series:**  
Shibaura

**Engine Model:**  
N844L-D

**Engine Desc:**  
NATURALLY  
ASPIRATED

**Engine Data:**

**Engine Info:**  
4 Cyl

**Engine Dimensions:**

Bore: 3.3 in /  
84.00 mm  
Stroke: 3.9 in /  
100.00 mm  
Displacement:  
134.25 in<sup>3</sup> /2.2  
Lt  
Compression  
Ratio: 23.3:1

**Case IH**

Farmall45 -  
Tractor  
Farmall45A -  
Tractor  
Farmall45B -  
Tractor  
Farmall50 -  
Tractor  
Farmall50B -  
Tractor  
SR130 - Skid  
Steer

**New-Holland**

L213 - Skid  
Steer  
Workmaster  
45 - Tractor

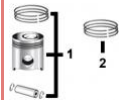


**1) Engine O/H Kit**

- POK464 Std.
- POK465 0.50

**2) Basic Engine Kit**

- PBK464 Std.
- PBK465 0.50
- Spec Sheet - 400D Series



**1) Piston & Ring Kit**

- P115017491 Std.
- P115017491B 0.50

**4 Per Engine**

**2) Ring Set**

- P115107970 Std.
- P115107970B 0.50



**Main Bearing Set**

- P198586140 Std.
- P198586150 0.010
- P198586160 0.020

**Set of 4 Pairs**



**Con Rod Bearing Set**

- PU5ME0011 Std.
- PU5ME0011A 0.010
- PU5ME0011B 0.020

**Set of 4 Pairs**



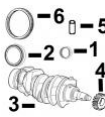
**1) Thrust Washer**

- P199266200/10

**Set of 3 Pcs**

**2) Crank Bushing**

- P198517222 Std.
- P198517226 0.010
- P198517229 0.020



**1) Front Seal**

- P198636160

**2) Rear Seal**

- P050209083

**3) Crankshaft**

- P115256990

**4) Crankshaft Gear**

- PU15276270

**5) Key, Crank Gear**

- P030509020

**6) Flywheel Ring Gear**

- P115376040 109T
- PU15376160 126T



**1) O/H Gasket Set**

- P404D TOG

**2) Cyl Head Gsk**

- P111147771

**3) Seal Rocker Box**

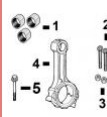
- P120996130

**4) Seal, Cyl HD Cov**

- P111996401

**5) Oil Pan Gasket**

- P110996920



**1) Bush, Con Rod**

- P198517265 x4

**2) Bolt, Con Rod**

- P115176140 x8

**3) Nut, Con Rod**

- P020109120 x8

**4) Connecting Rod**

- P115026330

**5) Head Bolt**

- P111136480 x14
- P111136490 x4



**1) Tappet**

- P120116160

**2) Seal, Intk Valve**

- P120406070 x4

**3) Seal, Exh Valve**

- P120406050 x4

**Valve Train Kit**

- PVTK440

**1) Valve, Intake**

**2) Valve, Exhaust**

- 1) P120166350 x4
- 2) P120176360 x4

**3) Spring, Valve**

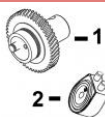
- P198216700 x8

**4) Retainer, Valve Spring**

- P120186080 x8

**5) Lock, Valve**

- P120226070 x16

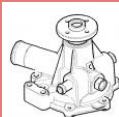


**1) Oil Pump**

- PU5MK8267

**2) Oil Cooler**

- P2486A218



**Water Pump**

- PU45010062



**1) Lift Pump**

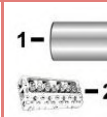
- P130506351

**2) Thermostat**

- P145206230

**3) Atomiser**

- P131406490



**Repair Sleeve**

- 1) 84RS

**2) Cylinder Head**

- P111011030UF



**Fuel Lines**

- 1) P131507700
- 2) P131507710
- 3) P131507720
- 4) P131507730

(1): Does not include Crankshaft Oil Seals.

(2): Do not use in applications that require a Crankshaft Driven Balancer Unit. The new style front gear is P/N U15276270, (.887" or 22.5mm Wide) and the key way P/N P030509020, must be used.

(3): Use with GN Build, 404D-22 Engine.

(4): Not included in valve train kit.

(5): For use on 400 series engines only where the intake manifold is part of the cylinder head cover.

**Engine Series:**  
Shibaura

**Engine Model:**  
N844LT-D

**Engine Desc:**  
TURBOCHARGED

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.3 in / 84.00 mm  
Stroke: 3.9 in / 100.00 mm  
Displacement: 134.25 in3 / 2.2 Lt  
Compression Ratio: 23.3:1

**Shibaura Tractors**  
ST450

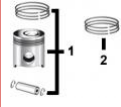
ST460

**New Holland**  
Workmaster 55 -  
Tractor

**Case IH**  
410 - Skid Steer  
SR175 - Skid Steer  
SV185 - Skid Steer  
DX55 - Tractor



- 1) Engine O/H Kit**
  - POK466 Std.
  - POK467 0.50
- 2) Basic Engine Kit**
  - PBK466 Std.
  - PBK467 0.50
  - Spec Sheet - 400D Series



- 1) Piston & Ring Kit**
  - P115017581 Std.
  - P115017581B 0.50
- 4 Per Engine**
- 2) Ring Set**
  - P115104021 Std.
  - P115104021B 0.50



- Main Bearing Set**
  - P198586140 Std.
  - P198586150 0.010
  - P198586160 0.020
- Set of 4 Pairs**



- Con Rod Bearing Set**
  - PU5ME0011 Std.
  - PU5ME0011A 0.010
  - PU5ME0011B 0.020
- Set of 4 Pairs**



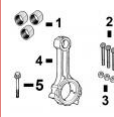
- 1) Thrust Washer**
  - P199266200/10
- Set of 3 Pcs**
- 2) Crank Bushing**
  - P198517222 Std.
  - P198517226 0.010
  - P198517229 0.020



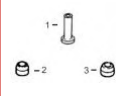
- 1) Front Seal**
  - P198636160
- 2) Rear Seal**
  - P050209083
- 3) Crankshaft**
  - P115256990
- 4) Crankshaft Gear**
  - PU15276270
- 5) Key, Crank Gear**
  - P030509020
- 6) Flywheel Ring Gear**
  - P115376040 109T
  - PU15376160 126T



- 1) O/H Gasket Set**
  - P404DTOG
- 2) Cyl Head Gsk**
  - P111147771
- 3) Seal Rocker Box**
  - P120996130
- 4) Seal, Cyl HD Cov**
  - P111996401
- 5) Oil Pan Gasket**
  - P110996920



- 1) Bush, Con Rod**
  - P198517265 x4
- 2) Bolt, Con Rod**
  - P115176140 x8
- 3) Nut, Con Rod**
  - P020109120 x8
- 4) Connecting Rod**
  - P115026330
- 5) Head Bolt**
  - P111136480 x14
  - P111136490 x4



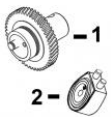
- 1) Tappet**
  - P120116160
- 2) Seal, Intk Valve**
  - P120406070 x4
- 3) Seal, Exh Valve**
  - P120406050 x4

**Valve Train Kit**  
• PVTK440

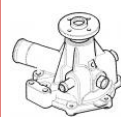
- 1) Valve, Intake**
- 2) Valve, Exhaust**
  - 1) P120166350 x4
  - 2) P120176360 x4

- 3) Spring, Valve**
  - P198216700 x8
- 4) Retainer, Valve Spring**
  - P120186080 x8

**5) Lock, Valve**  
• P120226070 x16



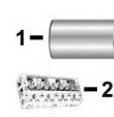
- 1) Oil Pump**
  - PU5MK8267
- 2) Oil Cooler**
  - P2486A218



- Water Pump**
  - PU45010062
  - P145017951



- 1) Lift Pump**
  - P130506351
- 2) Thermostat**
  - P145206230
- 3) Atomiser**
  - P131406490



- 1) Repair Sleeve**
  - 84RS
- 2) Cylinder Head**
  - P111011090UF



- Turbocharger**
  - P135756180
  - P135756170

(1): Does not include Crankshaft Oil Seals.

(2): Do not use in applications that require a Crankshaft Driven Balancer Unit. The new style front gear is P/N U15276270, (.887" or 22.5mm Wide) and the key way P/N P030509020, must be used.

(3): Not included in valve train kit.

(4): Check application for proper usage.

**Engine Series:**  
Shibaura

**Engine Model:**  
N844LTA-D

**Engine Desc:**  
TURBOCHARGED  
AFTERCOOLED

**Engine Info:**  
4 Cyl

**Engine Dimensions:**  
Bore: 3.3 in / 84.00 mm  
Stroke: 3.9 in / 100.00 mm  
Displacement: 134.25 in3/ 2.2 Lt  
Compression Ratio: 23.3:1

**Case IH**

DX55 - Tractor  
SV185 - Skid Steer

SR175 - Skid Steer

**New Holland**

C175 - Skid Steer  
L215 - Skid Steer  
L220 - Skid Steer

L175 - Skid Steer  
L218 - Skid Steer  
T2420 - Tractor

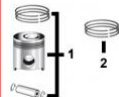


**1) Engine O/H Kit**

- POK468 Std.
- POK469 0.50

**2) Basic Engine Kit**

- PBK468 Std.
- PBK469 0.50
- Spec Sheet - 400D Series



**1) Piston & Ring Kit**

- P115017581 Std.
- P115017581B 0.50

**4 Per Engine**

**2) Ring Set**

- P115104021 Std.
- P115104021B 0.50



**Main Bearing Set**

- P198586140 Std.
- P198586150 0.010
- P198586160 0.020

**Set of 4 Pairs**



**Con Rod Bearing Set**

- PU5ME0011 Std.
- PU5ME0011A 0.010
- PU5ME0011B 0.020

**Set of 4 Pairs**



**1) Thrust Washer**

- P199266200/10

**Set of 3 Pcs**

**2) Crank Bushing**

- P198517222 Std.
- P198517226 0.010
- P198517229 0.020



**1) Front Seal**

- P198636160

**2) Rear Seal**

- P050209083

**3) Crankshaft**

- P115256990

**4) Crankshaft Gear**

- PU15276270

**5) Key, Crank Gear**

- P030509020

**6) Flywheel Ring Gear**

- P115376040 109T
- PU15376160 126T



**1) O/H Gasket Set**

- P404D TOG

**2) Cyl Head Gsk**

- P111147771

**3) Seal Rocker Box**

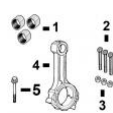
- P120996130

**4) Seal, Cyl HD Cov**

- P111996401

**5) Oil Pan Gasket**

- P110996920



**1) Bush, Con Rod**

- P198517265 x4

**2) Bolt, Con Rod**

- P115176140 x8

**3) Nut, Con Rod**

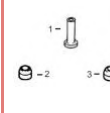
- P020109120 x8

**4) Connecting Rod**

- P115026330

**5) Head Bolt**

- P111136480 x14
- P111136490 x4



**1) Tappet**

- P120116160

**2) Seal, Intk Valve**

- P120406070 x4

**3) Seal, Exh Valve**

- P120406050 x4

**Valve Train Kit**

- PVTK440

**1) Valve, Intake**

**2) Valve, Exhaust**

- 1) P120166350 x4
- 2) P120176360 x4

**3) Spring, Valve**

- P198216700 x8

**4) Retainer, Valve Spring**

- P120186080 x8

**5) Lock, Valve**

- P120226070 x16



**1) Oil Pump**

- PU5MK8267

**2) Oil Cooler**

- P2486A218



**Water Pump**

- PU45010062

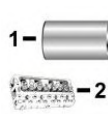


**1) Lift Pump**

- P130506351

**2) Thermostat**

- P145206230



**1) Repair Sleeve**

- 84RS

**2) Cylinder Head**

- P111011090UF



**Turbocharger**

- P135756180

- P135756170



**Fuel Lines**

- 1) P131507700

- 2) P131507710

- 3) P131507720

- 4) P131507730

(1): Does not include Crankshaft Oil Seals.

(2): Do not use in applications that require a Crankshaft Driven Balancer Unit. The new style front gear is P/N U15276270, (.887" or 22.5mm Wide) and the key way P/N P030509020, must be used.


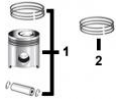





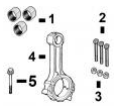
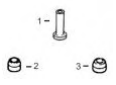




(3): Not included in valve train kit.

(4): Check application for proper usage.

|                                   |                                 |  |   |  |
|-----------------------------------|---------------------------------|--|---|--|
| <b>Engine Series:</b><br>Shibaura | <b>Engine Model:</b><br>N844L-F | <b>Engine Desc:</b><br>NATURALLY ASPIRATED | <b>Engine Data:</b><br>INDIRECT INJECTION | <b>Engine Dimensions:</b><br>Bore: 3.3", 84mm Stroke:<br>3.9", 100mm<br>Displacement:135<br>in3 Compression Ratio:<br>23.3:1 |
|-----------------------------------|---------------------------------|--|---|--|

**New Holland**  
L213 - Skid Steer

**Case IH**  
SR130 - Skid Steer

|   |  |   |  |  |
|---|--|---|--|--|
|  <p><b>1) Engine O/H Kit</b><br/>         , POK520 Std.<br/>         , POK521 0.50</p> <p><b>2) Basic Engine Kit</b><br/>         , PBK520 Std.<br/>         , PBK521 0.50<br/>         , Spec Sheet - 400D Series</p>  |  <p><b>1) Piston &amp; Ring Kit</b><br/>         , P115017790 Std.<br/>         , P115017790B 0.50</p> <p><b>4 Per Engine</b></p>   |  <p><b>Main Bearing Set</b><br/>         , P198586140 Std.<br/>         , P198586150 0.010<br/>         , P198586160 0.020</p> <p><b>Set of 4 Pairs</b></p>  |  <p><b>Con Rod Bearing Set</b><br/>         , PU5ME0011 Std.<br/>         , PU5ME0011A 0.010<br/>         , PU5ME0011B 0.020</p> <p><b>Set of 4 Pairs</b></p>                    |  <p><b>1) Thrust Washer</b><br/>         , P199266200/10</p> <p><b>Set of 3 Pcs</b></p> <p><b>2) Crank Bushing</b><br/>         , P198517222 Std.<br/>         , P198517226 0.010<br/>         , P198517229 0.020</p> |
|  <p><b>1) Front Seal</b><br/>         , P198636160</p> <p><b>2) Rear Seal</b><br/>         , P050209083</p> <p><b>3) Crankshaft</b><br/>         , P115256990</p> <p><b>4) Crankshaft Gear</b><br/>         , PU15276270</p> <p><b>5) Key, Crank Gear</b><br/>         , P030509020</p> |  <p><b>1) O/H Gasket Set</b><br/>         , P404DTOG</p> <p><b>2) Cyl Head Gsk</b><br/>         , P111147771</p> <p><b>3) Seal Rocker Box</b><br/>         , P120996130</p> <p><b>4) Seal, Cyl HD Cov</b><br/>         , P111996401</p> <p><b>5) Oil Pan Gasket</b><br/>         , P110996920</p> |  <p><b>1) Bush, Con Rod</b><br/>         , P198517265 x4</p> <p><b>2) Bolt, Con Rod</b><br/>         , P115176140 x8</p> <p><b>3) Nut, Con Rod</b><br/>         , P020109120 x8</p> <p><b>4) Con Rod</b><br/>         , P115026330</p> |  <p><b>1) Tappet</b><br/>         , P120116160</p> <p><b>2) Seal, Intk Valve</b><br/>         , P120406070 x4</p> <p><b>3) Seal, Exh Valve</b><br/>         , P120406050 x4</p> |  |
| <p><b>Valve Train Kit</b><br/>         , PVTK440</p>  | <p><b>1) Valve, Intake</b><br/> <b>2) Valve, Exhaust</b><br/>         , 1) P120166350 x4<br/>         , 2) P120176360 x4</p>   | <p><b>3) Spring, Valve</b><br/>         , P198216700 x8</p> <p><b>4) Retainer, Valve Spring</b><br/>         , P120186080 x8</p>  | <p><b>5) Lock, Valve</b><br/>         , P120226070 x16</p>   |  |
|  <p><b>1) Oil Pump</b><br/>         , PU5MK8267</p> <p><b>2) Oil Cooler</b><br/>         , P2486A218</p>  |  <p><b>Water Pump</b><br/>         , PU45010062</p>   |  <p><b>1) Lift Pump</b><br/>         , P130506351</p> <p><b>2) Thermostat</b><br/>         , P145206230</p> <p><b>3) Atomiser</b><br/>         , P131406490</p>  |  <p><b>Repair Sleeve</b><br/>         , 84RS</p>  |  |

(1): Crankshaft oil seals and after-treatment component (EGR) gaskets are not included in the gasket set

(3): Check application for proper usage.

(2): Do not use in applications that use a crankshaft driven balancer unit. This crank requires new style front gear PU15276270 (22.5mm wide) and crank key P030509020.

(4): Under development, not included in Valve Train Kit.

**Engine Series:**  
Shibaura

**Engine Model:**  
N844LT-F

**Engine Desc:**  
TURBOCHARGED

**Engine Data:**  
INDIRECT INJECTION

**Engine Dimensions:**  
Bore: 3.3", 84mm Stroke:  
3.9", 100mm  
Displacement:135  
in3 Compression Ratio:  
23.5:1

**Case IH**

SR160 - Skid Steer  
SV185 - Skid Steer

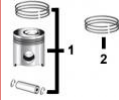
**New-Holland**

L216 - Skid Steer  
L220

L218 - Skid Steer



- 1) **Engine O/H Kit**
  - POK522 Std.
  - POK523 0.50
- 2) **Basic Engine Kit**
  - PBK522 Std.
  - PBK523 0.50
  - Spec Sheet - 400D Series



- 1) **Piston & Ring Kit**
  - P115017800 Std.
  - P115017800B 0.50
- 4 Per Engine



- Main Bearing Set**
  - P198586140 Std.
  - P198586150 0.010
  - P198586160 0.020
- Set of 4 Pairs



- Con Rod Bearing Set**
  - PU5ME0011 Std.
  - PU5ME0011A 0.010
  - PU5ME0011B 0.020
- Set of 4 Pairs



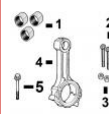
- 1) **Thrust Washer**
  - P199266200/10
- Set of 3 Pcs
- 2) **Crank Bushing**
  - P198517222 Std.
  - P198517226 0.010
  - P198517229 0.020



- 1) **Front Seal**
  - P198636160
- 2) **Rear Seal**
  - P050209083
- 3) **Crankshaft**
  - P115256990
- 4) **Crankshaft Gear**
  - PU15276270
- 5) **Key, Crank Gear**
  - P030509020



- 1) **O/H Gasket Set**
  - P404D TOG
- 2) **Cyl Head Gsk**
  - P111147771
- 3) **Seal Rocker Box**
  - P120996130
- 4) **Seal, Cyl HD Cov**
  - P111996401
- 5) **Oil Pan Gasket**
  - P110996920



- 1) **Bush, Con Rod**
  - P198517265 x4
- 2) **Bolt, Con Rod**
  - P115176140 x8
- 3) **Nut, Con Rod**
  - P020109120 x8
- 4) **Con Rod**
  - P115026330



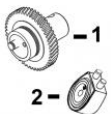
- 1) **Tappet**
  - P120116160
- 2) **Seal, Intk Valve**
  - P120406070 x4
- 3) **Seal, Exh Valve**
  - P120406050 x4

**Valve Train Kit**  
• PVTK440

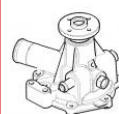
- 1) **Valve, Intake**
- 2) **Valve, Exhaust**
  - 1) P120166350 x4
  - 2) P120176360 x4

- 3) **Spring, Valve**
  - P198216700 x8
- 4) **Retainer, Valve Spring**
  - P120186080 x8

5) **Lock, Valve**  
• P120226070 x16



- 1) **Oil Pump**
  - PU5MK8267
- 2) **Oil Cooler**
  - P2486A218



**Water Pump**  
• PU45010062



- 1) **Lift Pump**
  -
- 2) **Thermostat**
  - P145206230



**Repair Sleeve**  
• 84RS



**Turbocharger**  
• P135756180  
• P135756170






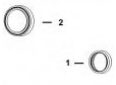



(1): Crankshaft oil seals and after-treatment component (EGR) gaskets are not included in the gasket set





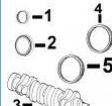
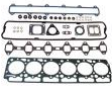
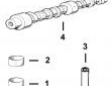



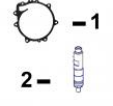
(3): Check application for proper usage.

(5): Not included in Valve Train Kit.

(2): Do not use in applications that use a crankshaft driven balancer unit. This crank requires new style front gear PU15276270 (22.5mm wide) and crank key P030509020.

(4): Under development, not included in Valve Train Kit.

| <b>Engine Model:</b><br>DT360  | <b>Engine Desc:</b><br>From ESN 39375  | <b>Engine Data:</b><br>IHC<br>Navistar  | <b>Engine Info:</b><br>6 Cyl   | <b>Engine Dimensions:</b><br>Bore: 4.01 in / 101.90 mm  |
|--|--|---|--|---|
|  <p><b>Engine I/F Kit</b><br/>                     , 1817253</p>  |  <p><b>Piston-Liner Kit</b><br/>                     , 1817250 <span style="float: right;">3</span></p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>, a) 1817178 <span style="float: right;">3</span></li> <li>, b) 1809935</li> <li>, c) 1809938</li> </ul>  |  <p><b>Ring, Piston</b><br/>                     , 1817251 <span style="float: right;">3</span></p>  |  <p><b>Main Bearing</b><br/>                     , 1823859 <i>Std.</i><br/>                     , 1823860 <i>0.010</i><br/>                     , 1823861 <i>0.020</i><br/> <b>Set of 7 Pairs</b></p>  |  <p><b>Con Rod Bearing</b><br/>                     , 1823863 <i>Std.</i><br/>                     , 1823864 <i>0.010</i><br/>                     , 1823865 <i>0.020</i><br/> <b>Set of 6 Pairs</b></p> |
|  <p><b>1) Front Seal</b><br/>                     , 690437</p> <p><b>2) Rear Seal</b><br/>                     , 1809964</p>                                      |  <p><b>1) O/H Set, Cyl Head</b><br/>                     , 1817255</p> <p><b>2) O/H Set, Crankcase</b><br/>                     , 1817256</p> <p><b>3) Head Gasket</b><br/>                     , 1819546</p> <p><b>4) Oil Pan Gasket</b><br/>                     , 671825</p> <p><b>5) Oil Suction Gasket</b><br/>                     , 1802867</p> <p><b>6) Gasket, Intake Manifold</b><br/>                     , 682199</p> |  <p><b>1) Bush, Con Rod</b><br/>                     , 1810049</p> <p><b>2) Bushing, Cam</b><br/>                     , 680117</p> <p><b>3) Tappet</b><br/>                     , 1802340</p> <p><b>4) Thermostat</b><br/>                     , 1801191 <i>180° F</i></p> |  <p><b>1) Oil Pump</b><br/>                     , 1802666 <span style="float: right;">1</span><br/>                     , 1808832 <span style="float: right;">2</span></p> <p><b>2) Water Pump</b><br/>                     , 1815538<br/>                     , 685155</p> |   |
| <p><b>Valve, Intake</b><br/>                     , 676687</p>  | <p><b>Valve, Exhaust</b><br/>                     , 1810086</p>  | <p><b>Insert, Valve</b></p> <p><b>1) Intake</b><br/>                     , 671602</p> <p><b>2) Exhaust</b><br/>                     , 671599</p>  | <p><b>1) Guide, Valve</b><br/>                     , 675439 <span style="float: right;">1</span></p> <p><b>2) Seal, Stem</b><br/>                     , 1815374</p>  | <p><b>Spring, Valve</b><br/>                     , 682064</p>   |
| <p>(1): Turbocharged.(2) Turbocharged, Aftercooled.(3) Replace in sets only for ESN 39375 to 90975      (2): Turbocharged, Aftercooled.(3) Replace in sets only for ESN 39375 to 90975</p> <p>(3): Replace in sets only for ESN 39375 to 90975</p> |  |   |  |   |

|   |  |  |  |  |   |
|---|--|--|--|--|---|
| <p><b>Engine Model:</b><br/>DT414</p> <p><b>Engine Data:</b><br/>IHC<br/>Navistar</p> <p><b>Engine Info:</b><br/>6 Cyl</p> <p><b>Engine Dimensions:</b><br/>Bore: 4.3005 in / 109.23 mm<br/>Stroke: 4.75 in / 120.70 mm</p> |  <p>1) <b>Engine O/H Kit</b><br/>› NOKDT414</p> <p>2) <b>Engine I/F Kit</b><br/>› NIKDT414</p>   |  <p><b>Piston-Liner Kit</b><br/>› 684260</p> <p><b>Consists of:</b></p> <ul style="list-style-type: none"> <li>› a) 684251</li> <li>› b) 1346908</li> <li>› c) 1810504</li> <li>› d) 680086</li> </ul> |  <p><b>Main Bearing</b><br/>› 1823847 <i>Std.</i><br/>› 1823848 <i>0.010</i><br/>› 1823849 <i>0.020</i><br/>› 1823850 <i>0.030</i></p> <p><b>Set of 7 Pairs</b></p>                  |  <p><b>Con Rod Bearing</b><br/>› 1823855 <i>Std.</i><br/>› 1823856 <i>0.010</i><br/>› 1823857 <i>0.020</i><br/>› 1823858 <i>0.030</i></p> <p><b>Set of 6 Pairs</b></p> |  <p>1) <b>Front Seal</b><br/>› 690437</p> <p>2) <b>Rear Seal</b><br/>› 1809964</p> <p>3) <b>Crankshaft</b><br/>› 675050</p> <p>4) <b>Flywheel Ring Gear</b><br/>› 326759 <i>132T</i><br/>› 341604 <i>132T</i></p> |
| <p><b>Agricultural</b></p> <p>915<br/>1066<br/>1086</p>   |  <p>1) <b>O/H Set, Cyl Head</b><br/>› 1817254</p> <p>2) <b>O/H Set, Crankcase</b><br/>› 674399</p> <p>3) <b>Head Gasket</b><br/>› 1819547</p> <p>4) <b>Oil Pan Gasket Set</b><br/>› 671827SET</p> <p>5) <b>Valve Cover Gasket</b><br/>› 1342828</p> <p>6) <b>Gasket, Intake Manifold</b><br/>› 682199</p> <p>7) <b>Gasket, Exh. Manifold</b><br/>› 1349062</p> <p>8) <b>Gasket, Oil Suction Tube</b><br/>› 671821</p> <p>9) <b>Oil Suction Gasket</b><br/>› 1802867</p> |  |  <p>1) <b>Bush, Con Rod</b><br/>› 675006</p> <p>2) <b>Bushing, Cam</b><br/>› 680117</p> <p>3) <b>Tappet</b><br/>› 684729<br/>› 1802340</p> <p>4) <b>Camshaft</b><br/>› 1802337</p> |  |   |
| <p><b>Valve Train Kit</b><br/>› NVK400</p>  |  | <p>1) <b>Valve, Intake</b><br/>› x6) 675046</p> <p>2) <b>Valve, Exhaust</b><br/>› 676865 x6</p>  | <p><b>Insert, Valve</b></p> <p>1) <b>Intake</b><br/>› 671559 x6</p> <p>2) <b>Exhaust</b><br/>› 671563 x6</p>   | <p>1) <b>Guide, Valve</b><br/>› 675439 x12</p> <p>2) <b>Lock, Valve</b><br/>› 76951 x24</p> <p>3) <b>Valve Rotator</b><br/>› 1811581 x12</p>   | <p>1) <b>Spring, Valve</b><br/>› 682064 x12</p> <p>2) <b>Seal, Stem</b><br/>› 681234 x6</p> <p>3) <b>Fuel Injector Tube</b><br/>› 675442 x6</p>   |
|  <p><b>Thermostat</b><br/>› 1801191 <i>180° F</i></p>  |  |  <p><b>Oil Pump</b><br/>› 1802666<br/>› 1808832</p>   |  <p><b>Water Pump</b><br/>› 673162</p>   |  <p>1) <b>Water Pump Gasket</b><br/>› 675808</p> <p>2) <b>Injector</b><br/>› 631571<br/>› 687372</p>  |   |
| <p>(1): Turbocharged, 1.0" Rotor. To ESN 466,775.</p> <p>(3): Valve Train Kit include Intake Valves, Exhaust Valves, Valve Springs, Guides, and Locks.</p>  |  |  | <p>(2): Turbocharged, Aftercooled, 1.25" Rotor. From ESN 466,776.</p> <p>(4): Check application for proper usage.</p>  |  |   |

**Engine Model:**

DT436 /  
DT437

**Engine Data:**

IHC Navistar

**Engine Info:**

6 Cyl

**Engine**

**Dimensions:**

Bore: 4.3005 in /  
109.23 mm  
Stroke: 5.04 in /  
128.00 mm



- 1) **Engine O/H Kit**  
‣ NOKDT436
- 2) **Engine I/F Kit**  
‣ NIKDT436



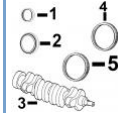
- Piston-Liner Kit**  
‣ 684261
- Consists of:**
  - a) 684253
  - b) 1346908
  - c) 1810504
  - d) 680086



- Main Bearing**  
‣ 1823847 *Std.*  
‣ 1823848 *0.010*  
‣ 1823849 *0.020*  
‣ 1823850 *0.030*
- Set of 7 Pairs**



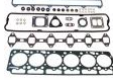
- Con Rod Bearing**  
‣ 1823855 *Std.*  
‣ 1823856 *0.010*  
‣ 1823857 *0.020*  
‣ 1823858 *0.030*
- Set of 6 Pairs**



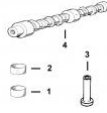
- 1) **Front Seal**  
‣ 690437
- 2) **Rear Seal**  
‣ 1809964
- 3) **Crankshaft**  
‣ 675051
- 4) **Flywheel Ring Gear**  
‣ 326759 *132T*  
‣ 341604 *132T*

**Agricultural**

3388  
1460  
4166  
1480  
4186  
1466  
5088  
1486  
6388  
1566  
1586



- 1) **O/H Set, Cyl Head**  
‣ 1817254
- 2) **O/H Set, Crankcase**  
‣ 674399
- 3) **Head Gasket**  
‣ 1819547
- 4) **Oil Pan Gasket Set**  
‣ 671827SET
- 5) **Valve Cover Gasket**  
‣ 1342828
- 6) **Gasket, Intake Manifold**  
‣ 682199
- 7) **Gasket, Exh. Manifold**  
‣ 1349062
- 8) **Gasket, Oil Suction Tube**  
‣ 671821
- 9) **Oil Suction Gasket**  
‣ 1802867



- 1) **Bush, Con Rod**  
‣ 675006
- 2) **Bushing, Cam**  
‣ 680117
- 3) **Tappet**  
‣ 684729  
‣ 1802340
- 4) **Camshaft**  
‣ 1802337



- 1) **Con Rod Bolts**  
‣ 676679
- 2) **Head Bolts**  
‣ 676119 *x6*  
‣ 676120 *x20*

- Valve Train Kit**  
‣ NVK400

3

- 1) **Valve, Intake**  
‣ 675046 *x6*
- 2) **Valve, Exhaust**  
‣ 676865 *x6*

- Insert, Valve**
- 1) **Intake**  
‣ 671559 *x6*
- 2) **Exhaust**  
‣ 671563 *x6*

- 1) **Guide, Valve**  
‣ 675439 *x12*
- 2) **Lock, Valve**  
‣ 76951 *x24*
- 3) **Valve Rotator**  
‣ 1811581 *x12*

- 1) **Spring, Valve**  
‣ 682064 *x12*
- 2) **Seal, Stem**  
‣ 681234 *x6*
- 3) **Fuel Injector Tube**  
‣ 675442 *x6*



- Thermostat**  
‣ 1801191 *180° F*

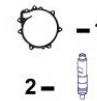


- Oil Pump**  
‣ 1802666  
‣ 1808832



1  
2

- Water Pump**  
‣ 673162



- 1) **Water Pump Gasket**  
‣ 675808
- 2) **Injector**  
‣ 631571  
‣ 687372

4  
4

(1): Turbocharged, 1.0" Rotor. To ESN 466,775.  
(3): Valve Train Kit include Intake Valves, Exhaust Valves, Valve Springs, Guides, and Locks.

(2): Turbocharged, Aftercooled, 1.25" Rotor. From ESN 466,776.  
(4): Check application for proper usage.



**Engine Model:**  
DT466

**Engine Desc:**  
To ESN  
440,035

**Engine Data:**  
Narrow  
Bearings  
Rod Bearing  
Width: 1.20"  
Main Bearing  
Width: 1.225"  
IHC  
Navistar

**Engine Info:**  
6 Cyl

**Engine Dimensions:**  
Bore: 4.3005 in /  
109.23 mm  
Stroke: 5.35 in /  
135.90 mm

**Agricultural**

5488 Early  
1470  
6588  
1480 Early  
6788  
3588  
7288 Early  
3788  
7388 Early  
4366 Early  
4386



- 1) **Engine O/H Kit**  
› NOKDT466N
- 2) **Engine I/F Kit**  
› 1825442



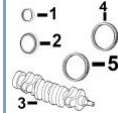
- Piston-Liner Kit**  
› 1817645
- Consists of:**
- › a) 1817520
  - › b) 1817247
  - › c) 1810504
  - › d) 680086



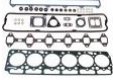
- Main Bearing**
- › 1823847 Std.
  - › 1823848 0.010
  - › 1823849 0.020
  - › 1823850 0.030
- Set of 7 Pairs**



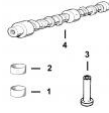
- Con Rod Bearing**
- › 1823855 Std.
  - › 1823856 0.010
  - › 1823857 0.020
  - › 1823858 0.030
- Set of 6 Pairs**



- 1) **Front Seal**  
› 690437
- 2) **Rear Seal**  
› 1809964
- 3) **Crankshaft**  
› 675669
- 4) **Flywheel Ring Gear**  
› 326759 132T 8  
› 341604 132T 8



- 1) **O/H Set, Cyl Head**  
› 1817254
- 2) **O/H Set, Crankcase**  
› 674399
- 3) **Head Gasket**  
› 1819547
- 4) **Oil Pan Gasket Set**  
› 671827SET
- 5) **Valve Cover Gasket**  
› 1342828
- 6) **Gasket, Intake Manifold**  
› 682199
- 7) **Gasket, Exh. Manifold**  
› 1349062
- 8) **Gasket, Oil Suction Tube**  
› 671821
- 9) **Oil Suction Gasket**  
› 1802867



- 1) **Bush, Con Rod**  
› 675006
- 2) **Bushing, Cam**  
› 680117
- 3) **Tappet**  
› 684729  
› 1802340
- 4) **Camshaft**  
› 1802337



- 1) **Con Rod Bolts**  
› 676679
- 2) **Head Bolts**  
› 676119 x6  
› 676120 x20

**Valve Train Kit**  
› NVK400 7

- 1) **Valve, Intake**  
› 675046 x6
- 2) **Valve, Exhaust**  
› 676865 x6

- Insert, Valve**
- 1) **Intake**  
› 671559 x6
  - 2) **Exhaust**  
› 671563 x6

- 1) **Guide, Valve**  
› 675439 x12 1  
› 1815264 x12 2
- 2) **Lock, Valve**  
› 76951 x24
- 3) **Valve Rotator**  
› 1811581 x12

- 1) **Spring, Valve**  
› 682064 x12 1
- 2) **Seal, Stem**  
› 681234 x6 2  
› 1815374 x6
- 3) **Fuel Injector Tube**  
› 675442 x6



**Thermostat**  
› 1801191 180° F

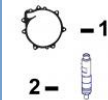


**Oil Pump**  
› 1802666 3  
› 1808832 4



**Water Pump**

- › 1815538 5
- › 685155 5
- › 673162 6



- 1) **Water Pump Gasket**  
› 675808 5
- 2) **Injector**  
› 687372 6



**Injection Control Pressure Sensor**  
› 1830669 8

(1): To ESN 594,839.

(3): Turbocharged, 1.0" Rotor. To ESN 466,775.

(5): Use for truck applications.

(7): Valve Train Kit include Intake Valves, Exhaust Valves, Valve Springs, Guides, and Locks.

(2): From ESN 594,840.

(4): Turbocharged, Aftercooled, 1.25" Rotor. From ESN 466,776.

(6): Use for AG applications.

(8): Check application for proper usage.

**Engine Model:**

DT466 (esn 440,036 - 532,980)

**Engine Desc:**

Perkins 1300 Series

**Engine Data:**

Perkins Build WB- T6.466  
Perkins Build WC- CC6.466  
Wide Bearings  
Rod Bearing Width: 1.26"  
Main Bearing Width: 1.229"

**Engine Info:**

6 Cyl

**Engine Dimensions:**

Bore: 4.3005 in / 109.23 mm  
Stroke: 5.35 in / 135.90 mm

Please see page 520 for a complete list of equipment models.



- 1) **Engine O/H Kit**
- ↳ NOKDT466W
- 2) **Engine I/F Kit**
- ↳ 1825443



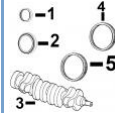
- Piston-Liner Kit**
- ↳ 1817645
- Consists of:**
- ↳ a) 1817520
- ↳ b) 1817247
- ↳ c) 1810504
- ↳ d) 680086



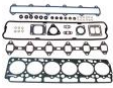
- Main Bearing**
- ↳ 1823843 Std.
- ↳ 1823844 0.010
- ↳ 1823845 0.020
- Set of 7 Pairs**



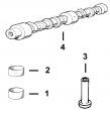
- Con Rod Bearing**
- ↳ 1823851 Std.
- ↳ 1823852 0.010
- ↳ 1823853 0.020
- Set of 6 Pairs**



- 1) **Front Seal**
- ↳ 690437
- 2) **Rear Seal**
- ↳ 1809964
- 3) **Crankshaft**
- ↳ 675669
- 4) **Flywheel Ring Gear**
- ↳ 326759 132T
- ↳ 341604 132T



- 1) **O/H Set, Cyl Head**
- ↳ 1817254
- 2) **O/H Set, Crankcase**
- ↳ 674399
- 3) **Head Gasket**
- ↳ 1819547
- 4) **Oil Pan Gasket Set**
- ↳ 671827SET
- 5) **Valve Cover Gasket**
- ↳ 1342828
- 6) **Gasket, Intake Manifold**
- ↳ 682199
- 7) **Gasket, Exh. Manifold**
- ↳ 1349062
- 8) **Gasket, Oil Suction Tube**
- ↳ 671821
- 9) **Oil Suction Gasket**
- ↳ 1802867



- 1) **Bush, Con Rod**
- ↳ 675006
- 2) **Bushing, Cam**
- ↳ 680117
- 3) **Tappet**
- ↳ 684729
- ↳ 1802340
- 4) **Camshaft**
- ↳ 1802337



- 1) **Con Rod Bolts**
- ↳ 676679
- 2) **Head Bolts**
- ↳ 676119 x6
- ↳ 676120 x20

- Valve Train Kit**
- ↳ NVK400

7

- 1) **Valve, Intake**
- 2) **Valve, Exhaust**
- ↳ 1) 675046 x6
- ↳ 2) 676865 x6

- Insert, Valve**
- 1) **Intake**
- 2) **Exhaust**
- ↳ 1) 671559 x6
- ↳ 2) 671563 x6

- 1) **Guide, Valve**
- 2) **Lock, Valve**
- 3) **Valve Rotator**
- ↳ 1) 675439 x12
- ↳ 1815264 x12
- ↳ 2) 76951 x24
- ↳ 3) 1811581 x12

10

11

10

10

10

- 1) **Spring, Valve**
- 2) **Seal, Stem**
- 3) **Fuel Injector Tube**
- ↳ 1) 682064 x12
- ↳ 2) 681234 x6
- ↳ 1815374 x6
- ↳ 3) 675442 x6

9

2

10

11

2



- Thermostat**
- ↳ 1801191 180° F



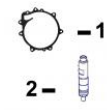
- Oil Pump**
- ↳ 1802666
- ↳ 1808832



- Water Pump**
- ↳ 1815538
- ↳ 685155
- ↳ 673162

3

4



- 1) **Water Pump Gasket**
- ↳ 675808
- 2) **Injector**
- ↳ 687372

5

5

6

8



- Injection Control Pressure Sensor**
- ↳ 1830669

(1): To ESN 594,839.

(3): Turbocharged, 1.0" Rotor. To ESN 466,775.

(5): Use for truck applications.

(7): Valve Train Kit include Intake Valves, Exhaust Valves, Valve Springs, Guides, and Locks.

(9): For engines to serial number 532980.

(11): For engine serial number 594,840 and up.

(2): From ESN 594,840.

(4): Turbocharged, Aftercooled, 1.25" Rotor. From ESN 466,776.

(6): Use for AG applications.

(8): Check application for proper usage.

(10): For engines to serial number 594,839.

# JOHN DEERE 4.219 LARGE PIN, O'RINGS ON BLOCK

## EQUIPMENT MODELS

### Cotton Pickers

499

### Windrowers

2270      2280      2320

### Backhoe Loaders

310      310B      401B      401C      401D      410  
410B

### Forklifts

480B      480C

### Farm Tractors

1035      1130      1635      2030      2035      2120  
2440      2530

### Combines

3300

### Crawler Dozers

450C      450D      455D

### Skidders

440B      540B

### Excavators

490

# JOHN DEERE 4.239D

## EQUIPMENT MODELS

### Combines

940      942      6602

### Windrowers

2360      3430

### Backhoe Loaders

210C      310C      310D      315C      415B      415C  
515B

### Farm Tractors

1640      1840      2130      2135      2250      2350  
2355      2355CS      2450      2535      2550      2555CS  
2650      2730      2735      3330

### Excavators

70      70D      290D

### Wheel Loaders

244E

### Crawler Dozers

400G

# JOHN DEERE 4.239T

## EQUIPMENT MODELS

### Combines

945      952      1052      1155

### Windrowers

3430      3830

### Farm Tractors

2140      2450      2555      2555TSS      2650      2750  
2755      2755CS      2755TSS      2850      2855      2855N

### Backhoe Loaders

310C      310D      315C      315D      515B

# JOHN DEERE 4045D LITER DESIGNATED

## EQUIPMENT MODELS

### Farm Tractors

6100 SE6100

### Backhoe Loaders

410C 410D 510B

### Crawler Dozers

450E 450G 455E

### Skidders

340D 440C

### Wheel Loaders

344E

### Renault Tractors

Ares 550 RX Ares 550 RZ Ceres 330 Ceres 330X Ceres 340 Ceres 340X Ceres 355

### Excavators

490D 493D

### Skid Steers

270 270 Series II

# JOHN DEERE 4.276T

## EQUIPMENT MODELS

### Backhoe Loaders

410C    410D    510C    610C

### Crawler Dozers

450E    450G    455E    455G    550A    550B  
550G    555A    555B    555G    650G    550  
555

### Wheel Loaders

444E    444G    344G

### Excavators

490E    495D    590D    595D    595

### Skidders

340D    440C    448D    540D    548D

# JOHN DEERE 4045T LITER DESIGNATED

## EQUIPMENT MODELS

### Farm Tractors

6400      6400L      6500      6500L      SE6400

### Sprayers

6700

### Crawler Dozers

450E      450G      455E      455G      550      550A  
550B      550G      555      555A      555B      555G  
650G

### Skidders

340D      440C      448D      540D      548D

### Engine Model

4045DF001    4045TT006    4045TT007    4045TT013    4045TT015

### Renault Tractors

Ares 550    Ares 550    Ceres 330    Ceres 330X    Ceres 340    Ceres 340X  
RX          RZ          Ceres 355    Ares 550    Ares 550  
RX          RX          RZ

### Backhoe Loaders

410C      410D      510C      510D      610B      610C

### Excavators

490E      495D      590D      595D

### Wheel Loaders

344G      444E      444G

### Skid Steers

280      280 Series  
II



# JOHN DEERE 6.359D

## EQUIPMENT MODELS

### Combines

955      975      985      1055      1075

### Farm Tractors

2940      2950      2955      3040      3050      3140  
3150      3155      3155TSS      3255      3350      3640  
4420      4530

### Cotton Pickers

7440      7445      9900      9910      9920

### Wheel Loaders

444D

### Motor Graders

570B

# JOHN DEERE 6.414T

## EQUIPMENT MODELS

### Crawler Dozers

|         |      |      |     |      |      |
|---------|------|------|-----|------|------|
| 655A    | 655B | 750B | 755 | 755A | 755B |
| 755BMIL |      |      |     |      |      |

### Motor Graders

|      |      |      |      |  |  |
|------|------|------|------|--|--|
| 670A | 670B | 672A | 672B |  |  |
|------|------|------|------|--|--|

### Wheel Loaders

|      |      |      |      |       |      |
|------|------|------|------|-------|------|
| 544B | 544C | 544D | 624E | 624EH | 624G |
|------|------|------|------|-------|------|

### Excavators

|      |      |      |
|------|------|------|
| 690D | 690E | 790E |
|------|------|------|

### Feller Bunchers Log Loaders

|     |      |      |
|-----|------|------|
| 643 | 643D | 693D |
|-----|------|------|

### Skidders

|     |      |      |
|-----|------|------|
| 640 | 640D | 648D |
|-----|------|------|

# JOHN DEERE 6068T LITER DESIGNATED

## EQUIPMENT MODELS

### Combines

9400

### Forage Cane Harvesters

7500

### Excavators

690D      690E      790E

### Motor Graders

670A      670B      672A      672B

### Wheel Loaders

544B      544C      544D      624E      624EH      624G

### Engine Model

6068TDW10 6068TP052 6068TRW01 6068TT005 6068TT007 6068HH001  
6068TDW02 6068TF001 6068TRW02 6068TT002 6068TJ01 6068TDW06

### Renault Tractors

Ares 630    Ares 630    Ares 640    Ares 710    Ares 720    Ares 735  
RX          RZ          RZ          RZ          RZ          RZ  
Ares 815    Ares 825  
RZ          RZ

### Crawler Dozers

655A      655B      750      750B      755      755A  
755B      755BMIL

### Feller Bunchers Log Loaders

643      643D      653      693D

### Skidders

640D      648D      648E

### Farm Tractors

6800      6900      7400      7410      7600

# JOHN DEERE 6.466A/T CON ROD (M) R71074

## EQUIPMENT MODELS

### Combines

6602      6620      7720

### Farm Tractors

4250      4440      4450      4640      4650      5460  
6622

### Excavators

690C      790D      892D

### Scrapers

762A      762B

### Cotton Pickers

9940      9950

### Forage Cane Harvesters

5720      5730

### Crawler Dozers

850B

### Motor Graders

770A      770B

### Wheel Loaders

644C

# JOHN DEERE 6076 T/A/H HIGH RING PISTON

## EQUIPMENT MODELS

### Combines

1185      2066      9500      9600      9965

### Farm Tractors

4055      4255      4455      4555      4560      4755  
4760      7700      7800      8100      8200      8300

### Motor Graders

770B      770BH      772B      772BH

### Wheel Loaders

644E      644ER      644G      644GH

### Cotton Pickers

9960

### Crawler Dozers

850C

### Excavators

792D      792LC

### Skidders

740E      740G      748E      748G

### Engine Model

6076AFM30 6076TRW30 6068TRW08

# JOHN DEERE 3TNV84 84MM BORE NON TURBO & TURBO

## EQUIPMENT MODELS

### Utility Tractors

|       |       |      |      |      |      |
|-------|-------|------|------|------|------|
| 3036E | 3038E | 3120 | 3203 | 3520 | 3720 |
| 4105  | 3045R | 3605 |      |      |      |

### Fairway Mowers

|       |       |
|-------|-------|
| 3225C | 3235C |
|-------|-------|

### Mowers

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 7400 | 7500 | 7700 | 8000 | 8400 | 8500 |
| 8700 | 8800 |      |      |      |      |

### Rotary Deck Mowers

|       |
|-------|
| 3245C |
|-------|

# JOHN DEERE 3029 2.9D PISTON (M) RE61467

## EQUIPMENT MODELS

### Farm Tractors

|      |      |       |      |      |      |
|------|------|-------|------|------|------|
| 3100 | 5105 | 5200  | 5205 | 5210 | 5220 |
| 5300 | 5310 | 5310N |      |      |      |

### Skidders

240

### Sdmo Generator

|     |      |     |      |
|-----|------|-----|------|
| J22 | J20U | J33 | J30U |
|-----|------|-----|------|

### Engine Model

|                    |           |                    |           |                    |           |
|--------------------|-----------|--------------------|-----------|--------------------|-----------|
| 3029DF129          | 3029DAT01 | 3029DAT50          | 3029DF120 | 3029DF124          | 3029DF150 |
| 3029DF151          | 3029DF180 | 3029DFG20          | 3029DKV50 | 3029DKV51          | 3029DKV54 |
| 3029DKV55          | 3029DPY07 | 3029TF129          | 3029TF100 | (FROM ESN 43,681)  | 3029TF120 |
| (FROM ESN 140,914) | 3029TF150 | (FROM ESN 140,914) | 3029TF270 | (FROM ESN 140,914) | 3029TFG20 |
| 3029TFG80          | 3029TFG89 | 3029TFU20          | 3029TFU29 | 3029TFU80          | 3029TFU89 |

### Aksa

|                |                |           |           |
|----------------|----------------|-----------|-----------|
| APD-<br>EPAJ30 | APD-<br>EPAJ40 | APD-ULJ30 | APD-ULJ40 |
|----------------|----------------|-----------|-----------|

### Oem

2.9L

### Sdmo-Generator

|      |     |      |     |
|------|-----|------|-----|
| J20U | J22 | J30U | J33 |
|------|-----|------|-----|

### Genmac

|                |                 |
|----------------|-----------------|
| Alpha<br>G30JO | Strong<br>G30JS |
|----------------|-----------------|

### Skid Steer

240

# JOHN DEERE 3029 2.9D/T PISTON (M) RE520573

## EQUIPMENT MODELS

### Farm Tractors

|       |        |       |       |       |       |
|-------|--------|-------|-------|-------|-------|
| 5103  | 5203   | 5303  | 5310  | 5403  | 5410  |
| 5503  | 5610   | 5036C | 5038D | 5039C | 5039D |
| 5041C | 5042C  | 5042D | 5045D | 5045E | 5047D |
| 5050D | 5050E  | 5055D | 5055E | 5060E | 5065E |
| 5075E | 5075EF | 5075M |       |       |       |

### Genmac

|       |        |
|-------|--------|
| ALPHA | STRONG |
| G40JO | G40JS  |

### Combine

|     |          |
|-----|----------|
| R40 | R40 PLUS |
|-----|----------|

### Engine Model

|           |           |           |            |           |           |
|-----------|-----------|-----------|------------|-----------|-----------|
| 3029TPY04 | 3029TPY11 | 3029TPY21 | 3029TPY211 | 3029TPY22 | 3029TPY24 |
| 3029TPY25 | 3029TPY26 | 3029TPY27 | 3029TPY28  | 3029TPY29 | 3029TPY30 |
| 3029TPY33 | 3029TPY35 | 3029TPY38 | 3029TPY39  | 3029TPY40 | 3029TPY41 |
| 3029TPY42 | 3029TPY43 | 3029TPY44 | 3029TPY45  | 3029TPY46 | 3029TPY48 |
| 3029TPY49 | 3029TPY50 | 3029TPY61 |            |           |           |



# JOHN DEERE 3029 2.9T PISTON (M) RE500211

## EQUIPMENT MODELS

### Farm Tractors

5400 5400N

### Sdmo Generator

J44K J40U R45U

### Engine Model

|           |                     |           |           |                    |                                  |
|-----------|---------------------|-----------|-----------|--------------------|----------------------------------|
| 2.9L      | 3029TAT70           | 3029TAT71 | 3029TF100 | (TO ESN<br>43,680) | 3029TF120<br>(TO ESN<br>140,913) |
| 3029TF150 | (TO ESN<br>140,913) | 3029TF152 | 3029TF160 | 3029TF270          | (TO ESN<br>140,913)              |
| 3029TKV50 | 3029TKV51           | 3029TKV52 | 3029TKV53 | 3029TAT02          | 3029TAT50                        |

### Skidders

8875

### Sdmo-Generator

J40U J44K R45U

# JOHN DEERE 4045D 4.5D PISTON (M) RE59279/RE505101

## EQUIPMENT MODELS

### Farm Tractors

|      |      |      |       |      |      |
|------|------|------|-------|------|------|
| 5410 | 5415 | 5420 | 5420N | 5510 | 5615 |
| 5715 | 6010 | 6110 | 6610  |      |      |

### Forklifts

|      |      |      |
|------|------|------|
| 485E | 486E | 488E |
|------|------|------|

### Engine Model

|           |           |           |           |           |           |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 4045DF120 | 4045DFM70 | 4045DT050 | 4045DF150 | 4045DT055 | 4045DF158 |
| 4045DT056 | 4045DF270 | 4045DT058 | 4045DFM50 | 4045DT059 | 4045DJ01  |
| 4045DT060 | 4045DLV51 | 4045TKV50 | 4045DF159 |           |           |

### Backhoe Loaders

|       |      |
|-------|------|
| 210LE | 310E |
|-------|------|

### Crawler Dozers

|      |      |      |
|------|------|------|
| 450H | 550H | 650H |
|------|------|------|

### Skid Steers

|     |               |     |
|-----|---------------|-----|
| 270 | 270 Series II | 280 |
|-----|---------------|-----|

### Genmac

|       |       |        |        |        |         |
|-------|-------|--------|--------|--------|---------|
| BETA  | BETA  | GAMMA  | KING   | KING   | QUEEN   |
| G60JO | G85JO | G105JO | G60JS* | G85JS* | G125JS* |

### Wacker

|     |           |
|-----|-----------|
| G50 | Generator |
|-----|-----------|

# JOHN DEERE 4045T 4.5T PISTON (M) RE59277/RE505100

## EQUIPMENT MODELS

### Farm Tractors

|       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|
| 3410  | 4890  | 5415  | 5425  | 5510  | 5520  |
| 5525  | 5615  | 5625  | 5715  | 5725  | 3410X |
| 5425N | 5510N | 5520N | 5525N | 5625N |       |

### Excavators

230LCR

### Wheel Loaders

344H

### Skid Steers

|     |                  |
|-----|------------------|
| 280 | 280 Series<br>II |
|-----|------------------|

### Engine Model

|           |           |           |           |           |           |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 4045DF120 | 4045TP073 | 4045DF150 | 4045TP074 | 4045DF158 | 4045TP075 |
| 4045DF270 | 4045TP076 | 4045DFM50 | 4045TP077 | 4045DJ01  | 4045TP078 |
| 4045DLV51 | 4045TP079 | 4045DT050 | 4045TP080 | 4045DT055 | 4045TP081 |
| 4045DT056 | 4045TRT50 | 4045DT058 | 4045TT050 | 4045DT059 | 4045TT053 |
| 4045DT060 | 4045TT056 | 4045HT050 | 4045TT057 | 4045HT051 | 4045TT058 |
| 4045TAT50 | 4045TT064 | 4045TAT70 | 4045TT065 | 4045TAT71 | 4045TT066 |
| 4045TCQ02 | 4045TT070 | 4045TE050 | 4045TT080 | 4045TE051 | 4045TT081 |
| 4045TF120 | 4045TT082 | 4045TF150 | 4045TT083 | 4045TF151 | 4045TT084 |
| 4045TF152 | 4045TT085 | 4045TF158 | 4045TT086 | 4045TF270 | 4045TT087 |
| 4045TF273 | 4045TT088 | 4045TF275 | 4045TT089 | 4045TLV50 | 4045TT090 |
| 4045TLV51 | 4045TT091 | 4045TLV52 | 4045TT092 | 4045TLV53 | 4045TT093 |
| 4045TLV54 | 4045TT094 | 4045TLV56 | 4045TT095 | 4045TN050 | 4045TT096 |
| 4045TP059 | 4045TT851 | 4045TP066 | 4045TT852 | 4045TP072 |           |

### Aksa-Gensets

|               |          |                |           |
|---------------|----------|----------------|-----------|
| APD-<br>AGJ60 | APD-AT65 | APD-<br>EPAJ65 | APD-ULJ65 |
|---------------|----------|----------------|-----------|

### Windrowers

4895

### Sprayers

6700

### Backhoe Loaders

|       |      |      |       |       |       |
|-------|------|------|-------|-------|-------|
| 310E  | 310G | 310J | 310SE | 310SG | 315SE |
| 315SG | 410E | 410G | 410J  |       |       |

### Crawler Dozers

|      |      |      |
|------|------|------|
| 450H | 550H | 650H |
|------|------|------|

### Sdmo Generator

|      |      |      |      |
|------|------|------|------|
| J66K | J60U | J77K | J70U |
|------|------|------|------|

### Sdmo-Generator

|      |      |      |      |
|------|------|------|------|
| J60U | J66K | J70U | J77K |
|------|------|------|------|

# JOHN DEERE 4045 4.5T/H PISTON (M) RE55512/RE505102

## EQUIPMENT MODELS

### Farm Tractors

|       |       |       |      |       |       |
|-------|-------|-------|------|-------|-------|
| 6010  | 6110  | 6110L | 6210 | 6210L | 6310  |
| 6310L | 6310S | 6405  | 6410 | 6410L | 6410S |
| 6510L | 6610S | 6605  | 6610 |       |       |

### Wheel Loaders

|      |        |        |
|------|--------|--------|
| 444H | 444HCL | TC444H |
|------|--------|--------|

### Sdmo Generator

|        |       |       |       |       |      |
|--------|-------|-------|-------|-------|------|
| J88K   | J80U  | J110K | R66RC | R90RC | R90U |
| R110RC | R110U |       |       |       |      |

### Engine Model

|           |           |           |           |           |           |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 4045HBM01 | 4045TFM75 | 4045TL051 | 4045HDW52 | 4045TL052 | 4045HF120 |
| 4045TL053 | 4045HF150 | 4045TL054 | 4045HF157 | 4045TL055 | 4045HF158 |
| 4045TL056 | 4045HF275 | 4045TL057 | 4045HL070 | 4045TL058 | 4045HL071 |
| 4045TL059 | 4045HL072 | 4045TL060 | 4045HL073 | 4045TL061 | 4045HL270 |
| 4045TL062 | 4045HL271 | 4045TL063 | 4045HL272 | 4045TL064 | 4045HL273 |
| 4045TL070 | 4045HLA70 | 4045TL071 | 4045HLA72 | 4045TL072 | 4045HLA73 |
| 4045TL073 | 4045HP050 | 4045TL270 | 4045HP051 | 4045TL271 | 4045HP053 |
| 4045TL272 | 4045HTJ76 | 4045TL273 | 4045HTJ77 | 4045TL274 | 4045HZ050 |
| 4045TLA50 | 4045HZ275 | 4045TLA51 | 4045TCQ01 | 4045TP057 | 4045TCQ03 |
| 4045TP060 | 4045TDW50 | 4045TP061 | 4045TF157 | 4045TP070 | 4045TF158 |
| 4045TP071 | 4045TF220 | 4045TT052 | 4045TF250 | 4045TT054 | 4045TF254 |
| 4045TT055 | 4045TF258 | 4045TT061 | 4045TF275 | 4045TT062 | 4045TF276 |
| 4045TT063 | 4045TF278 | 4045TT067 | 4045TFM50 | 4045TT069 | 4045TFM75 |
| 4045TZ250 | 4045TL050 |           |           |           |           |

### Sdmo-Generator

|       |       |      |        |       |       |
|-------|-------|------|--------|-------|-------|
| J80U  | R90U  | J88K | R110U  | J100U | R66RC |
| J110K | R90RC | R70U | R110RC |       |       |

### Backhoe Loaders

120

### Forwarders

|       |       |      |      |
|-------|-------|------|------|
| 1010D | 1010E | 810D | 810E |
|-------|-------|------|------|

### Crawler Dozers

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 450G | 455G | 550G | 550H | 555G | 650G |
|------|------|------|------|------|------|

|       |      |
|-------|------|
| J100U | R70U |
|-------|------|

### Skid Steers

|     |               |
|-----|---------------|
| 280 | 280 Series II |
|-----|---------------|

# JOHN DEERE 4045 4.5T/H PISTON (M) RE527039 TIER 2 & TIER 3

## EQUIPMENT MODELS

### Farm Tractors

|        |       |        |       |        |       |
|--------|-------|--------|-------|--------|-------|
| 6130   | 6230  | 6325   | 6330  | 6425   | 6430  |
| 6534   | 5080R | 5080RN | 5090R | 5090RN | 5100R |
| 5100RN | 5105M | 5105ML | 6100D | 6110D  | 6115D |
| 6125D  | 6130D | 6140D  |       |        |       |

### Loaders

344J

### Backhoe Loaders

310J 710J

### Skid Steers

280 280 Series II

### Sdmo Generator

R90C3 R110C3

### Engine Model

|            |           |            |           |           |           |
|------------|-----------|------------|-----------|-----------|-----------|
| 4045HCP05  | 4045HL288 | 4045HCP07  | 4045HLV50 | 4045HCP11 | 4045HP052 |
| 4045HCP28  | 4045HT054 | 4045HDW53  | 4045HT056 | 4045HDW54 | 4045HT059 |
| 4045HE050  | 4045HT061 | 4045HE051  | 4045HT064 | 4045HF285 | 4045HT065 |
| 4045HF285H | 4045HT067 | 4045HF285I | 4045HT072 | 4045HF287 | 4045HT074 |
| 4045HL280  | 4045HT075 | 4045HL281  | 4045HT086 | 4045HL282 | 4045HT087 |
| 4045HL283  | 4045HT281 | 4045HL284  | 4045HXU01 | 4045HL287 | 4045TF285 |

### Aksa-Gensets

|             |             |            |            |            |            |
|-------------|-------------|------------|------------|------------|------------|
| APD-AGJ80   | APD-AGJ100  | APD-AGJ125 | APD-AT80   | APD-AT100  | APD-EPAJ80 |
| APD-EPAJ100 | APD-EPAJ125 | APD-ULJ80  | APD-ULJ100 | APD-ULJ125 |            |

### Excavator

160DLC

### Knuckleboom Log Loaders

335D 437D

### Crawlers

650J

### Telehandlers

ML1335

### Hi Power Genset

HJW85T6 HJW105T6 HJW130T6 HRJW75T6 HRJW90T6 HRJW115T6 HRJW145T6

# JOHN DEERE 4045 4.5T/H PISTON (M) RE521616 TIER 2 & TIER 3

## EQUIPMENT MODELS

### Farm Tractors

6430      6534      7130

### Forwarders

1010D      1010E      810D      810E

### Crawler Dozers

450G      455G      550G      550H      555G      650G

### Engine Model

4045AFM85 4045HTJ86 4045HF485 4045HTJ87 4045HL481 4045HXU04  
4045HRW50 4045HXU05 4045HTJ85

### Loader Backhoes

120

### Wheel Loaders

444HCL      TC444H

### Skid Steers

280      280 Series  
         II

### Excavators

E210      E230LC

# JOHN DEERE 4045 4.5T/H PISTON (M) RE515037 TIER 2 & TIER 3

## EQUIPMENT MODELS

### Farm Tractors

6430      6534      7130

### Forwarders

1010D      1010E      810D      810E

### Wheel Loaders

444HCL      TC444H

### Skid Steers

280      280 Series  
II

### Loader Backhoes

120

### Wheel Loader

444H

### Crawler Dozers

450G      455G      550G      550H      555G      650G

### Engine Model

4045HL472    4045HL475    4045HL473    4045HL476    4045HL474

# JOHN DEERE 4045 4.5T/H PISTON (M) RE515037 TIER 2 & TIER 3 (2)

## EQUIPMENT MODELS

### Backhoe Loaders

310K 310L 310SK 310SL

### Forwarders

1010D 1010E 810D 810E

### Crawler Dozers

450G 455G 550G 550H 555G 650G

### Engine Model

4045HBZ02 4045HL482 4045HL480 4045HT085

### Farm Tractor

6230 6330 6430  
PREM. PREM. PREM.

### Wheel Loaders

444HCL TC444H

### Skid Steers

280 280 Series  
II



# JOHN DEERE 6068 6.8T/H PISTON (M) RE55512 / RE505102

## EQUIPMENT MODELS

### Sprayers

4700

### Farm Tractors

|      |        |       |        |        |         |
|------|--------|-------|--------|--------|---------|
| 6605 | 6615   | 6715  | 7210   | 7405   | 7410    |
| 7510 | 7610   | 7505  | 7515   | 7520   | 7715    |
| 7810 | 7815   | 4700  | 9400   | 4710   | 4990    |
| 9450 | 4995   | 6125J | 6515   | 6130J  | 6145J   |
| 6610 | 6165J  | 6180J | 6620   | 6910S  | 6920S   |
| 6810 | 7185J  | 6820  | 7205J  | 6910   | 9470STS |
| 7220 | SE6520 | 7320  | SE6620 | SE6920 | 7420    |
| 740  | 330    |       |        |        |         |

### Combines

|      |      |      |         |      |      |
|------|------|------|---------|------|------|
| 9410 | 1165 | 1170 | 1175    | 1450 | 1470 |
| 1550 | 2254 | 3518 | 9540WTS | W210 |      |

### Wheel Loaders

|      |      |      |       |       |
|------|------|------|-------|-------|
| 544H | 544J | 624H | TC54H | TC62H |
|------|------|------|-------|-------|

### Backhoe Loaders

|      |      |      |
|------|------|------|
| 710D | 710G | 710J |
|------|------|------|

### Crawler Dozers

|      |      |      |
|------|------|------|
| 850G | 850J | 750C |
|------|------|------|

### Feller Bunchers

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 643G | 643H | 653E | 653G | 843H | 843G |
| 648G |      |      |      |      |      |

### Engine Model

|           |           |           |           |           |           |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 6068HBM02 | 6068HBM03 | 6068HBM04 | 6068HCQ01 | 6068HCQ04 | 6068HCQ06 |
| 6068HCQ60 | 6068HCQ61 | 6068HDW50 | 6068HDW53 | 6068HDW55 | 6068HDW56 |
| 6068HDW59 | 6068HDW60 | 6068HF120 | 6068HF150 | 6068HF157 | 6068HF158 |
| 6068HF250 | 6068HF252 | 6068HF254 | 6068HF258 | 6068HF275 | 6068HH050 |
| 6068HH051 | 6068HH052 | 6068HL270 | 6068HL271 | 6068HL272 | 6068HLA70 |
| 6068HLA71 | 6068HLA72 | 6068HLA73 | 6068HRT72 | 6068HRW01 | 6068HRW63 |
| 6068HRW71 | 6068HT050 | 6068HT051 | 6068HT052 | 6068HT053 | 6068HT054 |
| 6068HT055 | 6068HT056 | 6068HT057 | 6068HT059 | 6068HYC53 | 6068HZ050 |
| 6068HZ060 | 6068SFM50 | 6068TBM01 | 6068TBM02 | 6068TBM03 | 6068TCQ01 |
| 6068TCQ02 | 6068TCQ03 | 6068TCQ11 | 6068TCQ12 | 6068TCQ13 | 6068TCQ14 |
| 6068TCQ18 | 6068TCQ50 | 6068TDW50 | 6068TDW51 | 6068TDW52 | 6068TDW54 |
| 6068TDW55 | 6068TDW56 | 6068TDW57 | 6068TDW58 | 6068TE050 | 6068TE051 |
| 6068TF157 | 6068TF158 | 6068TF220 | 6068TF250 | 6068TF252 | 6068TF258 |
| 6068TF275 | 6068TFM50 | 6068TFM75 | 6068TFM76 | 6068TJ07  | 6068TJ11  |
| 6068TJ12  | 6068TJ14  | 6068TJ31  | 6068TJ32  | 6068TJ61  | 6068TJ62  |
| 6068TL050 | 6068TL051 | 6068TL052 | 6068TL053 | 6068TL071 | 6068TL072 |
| 6068TL074 | 6068TLA50 | 6068TLA51 | 6068TLA52 | 6068TLA53 | 6068TN050 |
| 6068TN052 | 6068TP051 | 6068TP055 | 6068TP056 | 6068TP057 | 6068TP058 |
| 6068TRW50 | 6068TRW51 | 6068TRW52 | 6068TRW53 | 6068TRW54 | 6068TRW70 |
| 6068TRW73 | 6068TT050 | 6068TT051 | 6068TT052 | 6068TT053 | 6068TT055 |
| 6068TT057 | 6068TT058 | 6068TT061 | 6068TT852 | 6068TTJ50 | 6068TTJ51 |
| 6068TYC50 | 6068TYC51 | 6068TYC52 | 6068TJ08  | 6068TJ04  | 6068HRW59 |
| 6068HRW70 |           |           |           |           |           |

### Sdmo-Generator

|       |       |       |      |       |       |
|-------|-------|-------|------|-------|-------|
| J120U | R130U | J130K | R135 | J150U | R165  |
| J165K | R170U | J175U | R200 | J200K | R200U |

### Excavators

|       |        |        |        |        |       |
|-------|--------|--------|--------|--------|-------|
| 200LC | 200CLC | 230CLC | 230LCR | 270CLC | 270LC |
| 360D  | 460D   | 690E   |        |        |       |

### Motor Graders

|      |       |       |
|------|-------|-------|
| 670C | 670CH | 672CH |
|------|-------|-------|

### Log Loader

|      |        |      |      |      |      |
|------|--------|------|------|------|------|
| 2054 | 624HLL | 2554 | 335C | 430B | 435C |
| 437C | 544HLL |      |      |      |      |

### Skidders

|        |         |      |        |         |      |
|--------|---------|------|--------|---------|------|
| 540G   | 540GLL  | 548G | 548GII | 548GIII | 640G |
| 640GII | 640GIII | 648G | 648GII | 648GIII |      |

### Neuson

18002HVT

### Rottne

SMV -  
Rapid  
Forwarder

# JOHN DEERE 6068 6.8T/H PISTON (M) RE521616 TIER 2 & TIER 3

## EQUIPMENT MODELS

### Sprayers

4730 4830 5430I

### Wheeled Harvesters

1170E 1270D 1470D

### Forestry Swing Machines

2954D

### Backhoe Loaders

535 530B

### Motor Grader

672G 672GP 670GP

### Forwarders

1510E 1210E

### Hi Power Genset

HJW205T6

### Engine Model

|           |           |           |           |           |            |
|-----------|-----------|-----------|-----------|-----------|------------|
| 6068HBM01 | 6068HCQ07 | 6068HCQ81 | 6068HDW64 | 6068HDW66 | 6068HDW69  |
| 6068HDW71 | 6068HDW75 | 6068HDW77 | 6068HDW80 | 6068HDW83 | 6068HF485  |
| 6068HFG85 | 6068HFL84 | 6068HH058 | 6068HH059 | 6068HH060 | 6068HH061  |
| 6068HH062 | 6068HL483 | 6068HN053 | 6068HN056 | 6068HN057 | 6068HNNW02 |
| 6068HRT81 | 6068HRT82 | 6068HRW64 | 6068HRW65 | 6068HRW78 | 6068HT061  |
| 6068HT062 | 6068HT070 | 6068HT077 | 6068HT083 | 6068HT087 | 6068HT090  |
| 6068HT480 | 6068HTJ89 | 6068HWZ80 | 6068HXU01 | 6068HZ480 | 6068HZ482  |
| 6068HZ483 | 6068RW208 | 6068HBZ05 | 6068HBZ06 | 6068HT109 | 6068HN065  |
| 6068HZ484 | 6068HCQ05 | 6068HDW91 | 6068DW201 | 6068DW301 | 6068RW301  |
| 6068RW203 | 6068HT082 | 6068HTJ01 | 6068HL484 | 6068HDW90 | 6068HT121  |

### Aksa-Gensets

APD- APD-AT200 APD- APD-  
AJG200 EPAJ200 ULJ200

### Farm Tractors

6520 6620 6820 6920 7530 7630  
7730 7830 7930 7195J 7210J 7225J  
7430E 7530E

### Combines

1450CWS 1450WTS 1550CWS 1550WTS 9540I WTS 9560 STS  
9560I WTS 9570 STS 9580I WTS S550 STS T550 W540  
W550

### Excavators

370 330C 330C LC 330LC 330LCR 370C

### Wheel Loaders

644K 644J 524K-II 544K-II 624K

### Crawlers

850J 850J-II 755D

### Skidder

648L 648H 648G-III 748H 848H 640G-III  
640H

### Claas Tractor

Axion 850

### Liebherr

L550 -  
Wheel  
Loader

# JOHN DEERE 6068 6.8T/H PISTON (M) RE515037 TIER 2 & TIER 3

## EQUIPMENT MODELS

### Sprayers

4730 4830 5430I

### Wheeled Harvesters

1170E 1270D 1470D

### Forestry Swing Machines

2954D

### Backhoe Loaders

535 530B

### Scrapers

762B

### Crawlers

850C 850C-II

### Forwarders

1710D

### Skidders

560D 660D 740G 748G 748GII 748GIII  
786G 848G

### Track Harvesters

753GL

### Hi Power-Gensets

HJW205T6

### Farm Tractors

7530 7630 7730 7830 7930 7195J  
7210J 7225J 7430E 7530E

### Combines

1450CWS 1450WTS 1550CWS 1550WTS 9540I WTS 9560 STS  
9560I WTS 9570 STS 9580I WTS S550 STS T550 W540  
W550

### Excavators

370 330C 330C LC 330LC 330LCR 370C

### Wheel Loaders

644G 644H 644J 724J

### Motor Graders

770C 770C II 770CH 770CH II 770D 772CH  
772CH II 772D 870D 872D

### Logger

3554

### Clam Bunks

1711D

### Feller Bunchers

608L 608S 753G 753J 753JH 759G  
759J 759JH 853G 903G 953G

### Articulated Dump Trucks

250D

### Engine Model

6068HL470 6068HL471 6068HL472 6068HL473

# JOHN DEERE 6068 6.8T/H PISTON (M) RE507758 TIER 2 & TIER 3

## EQUIPMENT MODELS

### Sprayers

4730 4830 5430I

### Wheeled Harvesters

1170E 1270D 1470D

### Excavators

370 330C 330C LC 330LC 330LCR 370C

### Wheel Loaders

644G 644H 644J 724J

### Motor Graders

770C 770C II 770CH 770CH II 770D 772CH  
772CH II 772D 870D 872D

### Forwarders

1710D

### Skidders

560D 660D 740G 748G 748GII 748GIII  
786G 848G

### Track Harvesters

753GL

### Engine Model

6068HDW57 6068HDW58 6068HDW61 6068HF475 6068HH054 6068HH055  
6068HN051 6068HN052 6068HRW54 6068HRW61 6068HTJ54 6068HTJ55  
6068HZ470

### Farm Tractors

7530 7630 7730 7830 7930 7195J  
7210J 7225J 7430E 7530E

### Combines

9550 9550SH 9560 9560SH 9970

### Backhoe Loaders

535 530B

### Scrapers

762B

### Crawlers

850C 850C-II

### Logger

3554

### Clam Bunks

1711D

### Feller Bunchers

608L 608S 753G 753J 753JH 759G  
759J 759JH 853G 903G 953G

### Articulated Dump Trucks

250D

### Hi Power-Gensets

HJW205T6

### Genmac-Gensets

STAR ROYAL  
G200JO G200JS

# JOHN DEERE 6068 6.8T/H PISTON (M) RE527039 TIER 2 & TIER 3 (2)

## EQUIPMENT MODELS

### Forwarder

1110D 1110E 1210E 1410D 1510E

### Skidders

640H 648GIII 648H 540H 548H 648L  
748H

### Wheel Loaders

624KII 624KR 640GIII 624J 624K

### Hi Power-Gensets

HJW205T6

### Harvester

970D 1070D 1070E 1490D

### Farm Tractors

6530 7230 6630 7330 6830 7430  
PREM PREM PREM PREM PREM PREM  
6930 7530  
PREM PREM

### Engine Model

6068HF285 6068HDW65 6068HDW67 6068HDW73 6068HDW76 6068HDW79  
6068HL480 6068HL481 6068HL482 6068HRT80 6068HRW73 6068HRW75  
6068HRW77 6068HRW83 6068HTJ75 6068HTJ85 6068HTJ86 6068HTJ87  
6068HTJ88 6068HL488 6068HRW82 6068HL486 6068HL487 6068HDW89

# JOHN DEERE 6081 HIGH COMPRESSION PISTON, TO ESN 199,999

## EQUIPMENT MODELS

### Combines

|          |           |          |           |          |           |
|----------|-----------|----------|-----------|----------|-----------|
| 2256     | 2258      | 2264     | 2266      | 9510     | 9550      |
| 9510 SH  | 9550 SH   | 9560 WTS | 9560i WTS | 9580 WTS | 9580i WTS |
| 9640 WTS | 9640i WTS |          |           |          |           |

### Cotton Pickers

9970

### Crawler Dozers

|       |          |       |      |
|-------|----------|-------|------|
| 850 C | 850 C-II | 850 J | 850J |
|-------|----------|-------|------|

### Excavators

|     |         |        |         |       |
|-----|---------|--------|---------|-------|
| 370 | 330C LC | 330 LC | 330 LCR | 370 C |
|-----|---------|--------|---------|-------|

### Forwarders

1710 D

### Motor Graders

|           |       |           |        |       |           |
|-----------|-------|-----------|--------|-------|-----------|
| 770 C     | 770 C | 770 CH    | 770 CH | 770 D | 772 CH    |
| Series II |       | Series II |        |       | Series II |
| 772 CH    | 772 D | 870 D     | 872 D  |       |           |

### Engine Model

|           |           |           |           |           |           |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 6081AF001 | 6081AN001 | 6081AT001 | 6081AT002 | 6081ATJ01 | 6081ATJ02 |
| 6081ATJ03 | 6081HDW01 | 6081HDW03 | 6081HDW04 | 6081HDW05 | 6081HDW06 |
| 6081HDW10 | 6081HH001 | 6081HH002 | 6081HH008 | 6081HH009 | 6081HH020 |
| 6081HH021 | 6081HRW01 | 6081HRW03 | 6081HRW04 | 6081HRW06 | 6081HRW08 |
| 6081HRW09 | 6081HRW10 | 6081HRW11 | 6081HRW12 | 6081HRW13 | 6081HRW14 |
| 6081HRW15 | 6081HRW16 | 6081HRW27 | 6081HT001 | 6081HT006 | 6081TDW01 |
| 6081TF001 | 6081TRW01 | 6081TRW02 | 6081TRW03 | 6081TRW04 | 6081TRW05 |
| 6081TRW06 | 6081TRW07 | 6081TRW08 | 6081TRW09 | 6081TRW10 | 6081AJ61  |

### Farm Tractors

|       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|
| 7710  | 7810  | 8100  | 8110  | 8200  | 8210  |
| 8300  | 8310  | 8400  | 9100  | 8100T | 8110T |
| 8200T | 8210T | 8300T | 8310T | 8400T |       |

### Harvesters

|       |       |        |
|-------|-------|--------|
| 1270D | 1470D | 753 GL |
|-------|-------|--------|

### Scrapers

762 B

### Feller Bunchers Log Loaders

|       |        |       |       |        |       |
|-------|--------|-------|-------|--------|-------|
| 608 L | 608 S  | 753 G | 753 J | 753 JH | 759 G |
| 759 J | 759 JH | 850   | 853 G | 900    | 903 G |
| 950   | 953 G  | 535   | 530 B | 3554   |       |

### Loaders

|       |       |       |       |
|-------|-------|-------|-------|
| 644 G | 644 H | 644 J | 724 J |
|-------|-------|-------|-------|

### Skidders

|       |       |       |       |          |           |
|-------|-------|-------|-------|----------|-----------|
| 560 D | 660 D | 740 G | 748 G | 748 G-II | 748 G-III |
| 848 G |       |       |       |          |           |

# JOHN DEERE 6081 LOW COMPRESSION PISTON, TO ESN 199,999

## EQUIPMENT MODELS

### Combines

|          |          |           |           |           |          |
|----------|----------|-----------|-----------|-----------|----------|
| 2264     | 2266     | 9610      | 9650      | 9660      | 9560 STS |
| 9580 WTS | 9640 WTS | 9640i WTS | 9650 CTS  | 9650 STS  | 9660 CTS |
| 9660 STS | 9660 WTS | 9660i WTS | 9680 WTS  | 9680i WTS | 9750 STS |
| 9760 STS | 9780 CTS | 9780i CTS | 9850i WTS | CTS       | CTS II   |

### Forage Harvesters

|      |      |      |
|------|------|------|
| 6610 | 6650 | 7200 |
|------|------|------|

### Cotton Pickers

|      |      |      |
|------|------|------|
| 9976 | 9986 | 9996 |
|------|------|------|

### Cane Harvesters

|      |        |
|------|--------|
| 3510 | CH3510 |
|------|--------|

### Sprayers

|      |
|------|
| 4920 |
|------|

### Farm Tractors

|      |      |      |       |
|------|------|------|-------|
| 8400 | 8410 | 9100 | 8410T |
|------|------|------|-------|

### Engine Model

|           |           |           |           |           |           |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 6081HF001 | 6081HH003 | 6081HH005 | 6081HH006 | 6081HH010 | 6081HN001 |
| 6081HN003 | 6081HRW02 | 6081HRW05 | 6081HRW07 | 6081HT004 | 6081HT005 |
| 6081HZ001 | 6081HZ002 | 6081HZ004 | 6081HZ005 | 6081HZ006 | 6081HZ007 |

# JOHN DEERE 6081 FORGED STEEL PISTON, FROM ESN 200,000 AND UP

## EQUIPMENT MODELS

### Farm Tractors

|      |       |       |       |       |       |
|------|-------|-------|-------|-------|-------|
| 8120 | 8220  | 8320  | 8420  | 8520  | 7710  |
| 7810 | 8120T | 8220T | 8320T | 8420T | 8520T |
| 7820 | 7920  |       |       |       |       |

### Loggers

3554

### Harvesters

703JH

### Feller Bunchers

|      |      |       |       |       |      |
|------|------|-------|-------|-------|------|
| 608S | 753G | 608L  | 753GL | 608B  | 703G |
| 759G | 753J | 753JH | 759J  | 759JH |      |

### Excavators

330CLC 370C

### Motor Graders

770D 772D 870D 872D

### Engine Model

6081HDW08 6081HDW09 6081HDW13 6081HRW25 6081HRW31 6081HRW32  
6081HRW33 6081HRW34 6081HRW41 6081HRW42 6081HRW43 6081HT002  
6081HT008 6081HTJ05 6081HTJ06 6081HTJ07 6081HTJ08 6081HZ009



# JOHN DEERE POWERTECH 6090 9.0L

## EQUIPMENT MODELS

### Farm Tractors

|              |              |             |              |               |             |
|--------------|--------------|-------------|--------------|---------------|-------------|
| 2854         | 3520         | 8520        | 8130         | 8230          | 8330        |
| 8430         | 8530         | 9230        | 8130 AT2 ILS | 8130 AT2 MFWD | 8130 ILS    |
| 8130 MFWD    | 8225R        | 8225R ILS   | 8225R MFWD   | 8230 HDMFWD   | 8230 ILS    |
| 8230 MFWD    | 8230         | 8230T       | 8330         | 8330 ILS      | 8235R       |
| 8245R        | 8245R HDMFWD | 8245R ILS   | 8245R MFWD   | 8260R         | 8270R       |
| 8270R HDMFWD | 8270R ILS    | 8270R MFWD  | 8285R        | 8295R HDMFWD  | 8295R ILS   |
| 8295R MFWD   | 8295RT       | 8310R       | 8310RT       | 8320R         | 8320R MFWD  |
| 8320RT       | 8330 HD MFWD | 8330 HDMFWD | 8330 ILS     | 8330 MFWD     | 8330T       |
| 8335R        | 8335RT       | 8345R       | 8345R ILS    | 8345R MFWD    | 8345RT      |
| 8430 HDMFWD  | 8430 MFWD    | 8430        | 8530         | 8430T         | 8530 HDMFWD |
| 8530 ILS     | 870G         | 870GP       | 8360R        | 8360RT        | 8370R       |
| 8370RT       | 8320T        | 8320RT      |              |               |             |

### Sugar Cane Harvesters

8320 3522

### Self Propelled Forage Harvesters

7200 7250

### Tractor Atlas

8030 8030 HDMFWD 8030 ILS

### Harvesters

1270D 1270E 1470D 1470E 703JH 753JH  
759J 759JH 909KH 1270G 1470G 959K

### Motor Graders

670G 670GP 672G 672GP 770G 770GP  
772G 772GP 872G 872GP

### Engine Model

6090HCQ01 6090HF475 6090HF484 6090HF485 6090HFG86 6090HH008  
6090HN005 6090HT007 6090HT009 6090HTJ03 6090HTJ04 6090HRW31

### Sdmo-Generator

R260UC3 R275C3E R275RC R330C3 R330RC R330C3E

### Self Propelled Sprayers

4930 4940 7180 R4038

### Cotton Pickers

7660

### Combines

9640 9660 9680 9560 STS 9560i STS 9660 STS  
9670 STS 9760 STS 9770 STS C670 S560 S660 STS  
S670 STS S670 STS T560 T660 T670 W650  
W660 9780CTS

### Excavators

350DLC 350GLC 380GLC E330LC E360

### Forestry Swing Machines

3754D

### Forwarders

1710D

### Clam Bunks

1711D 1711D2

### Aksa-Gensets

APD-AT250

### Hi Power-Gensets

HJW225T6 HJW275T6 HRJW250T6 HRJW310T6

### Vermeer Mfg

T655iii

# PERKINS 104-22

## EQUIPMENT MODELS

### Miller Electric

|                                  |                                  |                                  |
|----------------------------------|----------------------------------|----------------------------------|
| BIG BLUE<br>402P - Arc<br>Welder | BIG BLUE<br>502P - Arc<br>Welder | BIG BLUE<br>602P - Arc<br>Welder |
|----------------------------------|----------------------------------|----------------------------------|

### Ditch Witch-Directional Boring System

|       |        |       |        |
|-------|--------|-------|--------|
| JT920 | JT920L | JT921 | JT921S |
|-------|--------|-------|--------|

### Scat Track

1500C -  
Skid Steer

### Volvo

1500C -  
Skid Steer

### JCB

|                                |                                |                       |                                    |                                    |   |
|--------------------------------|--------------------------------|-----------------------|------------------------------------|------------------------------------|---|
| 8040ZTS -<br>Mini<br>Excavator | 8045ZTS -<br>Midi<br>Excavator | TLT25D -<br>Teletruck | TLT30D -<br>Telescopic<br>Forklift | TLT35D -<br>Telescopic<br>Forklift | 515-40 -<br>Telehandler<br>520-40 -<br>Telescopic<br>Forklift |
|--------------------------------|--------------------------------|-----------------------|------------------------------------|------------------------------------|---|

### Genie-Boom Lift

|        |           |         |            |        |
|--------|-----------|---------|------------|--------|
| Z45/25 | Z45/25 IC | Z45/25J | Z45/25J IC | Z60/34 |
|--------|-----------|---------|------------|--------|

# 403C-15 PERKINS

## EQUIPMENT MODELS

### Case IH-Farm Tractors

D33      DX31      DX33      DX33

### New-Holland

|                   |                   |                    |                    |                    |                |
|-------------------|-------------------|--------------------|--------------------|--------------------|----------------|
| L140 - Skid Steer | L150 - Skid Steer | LS465 - Skid Steer | LX485 - Skid Steer | TC30 - Tractor     | TC33 - Tractor |
| TC33D - Tractor   | TC33DA - Tractor  | LX465 - Skid Steer | LS140 - Skid Steer | LS150 - Skid Steer |                |

### Fg Wilson-Gensets

|         |         |           |        |         |         |
|---------|---------|-----------|--------|---------|---------|
| P10P2S  | P11-4S  | P11-6S    | P11E2S | P12.5P2 | P13.5-4 |
| P13.5-6 | P13.5E2 | PH17.5E2S | PH22E2 |         |         |

### Aksa-Gensets

|            |             |            |
|------------|-------------|------------|
| APD-EPAP13 | APD-EPAP13S | APD-UPLP13 |
|------------|-------------|------------|

### Marine Power Systems-Engine

415GM

# PERKINS 403A-15 (GU), 403D-15 (GK)

## EQUIPMENT MODELS

### Aksa-Gensets

APD-      APD-      APD-EPA13   APD-ULP13  
EPAP13   EPAP13S

### JCB-Excavators

8029 CTS   8035 ZTS   8029 CTS   8035 ZTS

### Rcg Power-Gensets

R-P13      R-P13-1

### Yanan

PE13-ER   PE13-ER-E

### ASV

PT-30 -  
Posi-Track  
Comp  
Track  
Loader

### KZ Power

KZP-G15 -  
Genset

### Dingxin-Genset

DP11S

### Genmac-Gensets

Duplex      Dynamic      Duplex      Dynamic  
G13PO      G13PS      G15PO      G15PS

### Mpmc Powertech-Gensets

MP13-1      MP15-1      MP15S-1      MP13-2      MLT4PME-      MP13S-1  
4000LHC      MP15-2

MP15S-2      MP13S-2

### Teksan-Gensets

TJ17PE6A   TJ16PE6S

### Weidemann-Hoftrac

1160      1240LP

### Case-IH

FARMALL  
31 - Tractor

### New-Holland

BOOMER      L150 - Skid      T1510 -      T2210 -  
2030 -      Steer      Tractor      Tractor  
Tractor

# PERKINS 404C-22 PERKINS

## EQUIPMENT MODELS

### Case-IH

SR130 - Skid Steer    410 - Skid Steer    D45 - Tractor    DX45 - Tractor    DX48 - Tractor

### Genie-Boom Lifts

Z45/25    Z45/25 IC    Z45/25J    Z45/25J IC    Z60/34

### Hobart

5040P - Welder

### New-Holland

L213 - Skid Steer    3415 - Tractor    TC45 - Tractor    TC45A - Tractor    TC45D - Tractor    TC45DA - Tractor  
TC48DA - Tractor    L160 - Skid Steer    L565 - Skid Steer    LS160 - Skid Steer    LX565 - Skid Steer

### Takeuchi

TW50 - Comp Track Loader

### Ditch Witch-Directional Drill

JT920    JT920L    JT921    JT921S

### Fg Wilson-Gensets

P13P2S    P14E2S    P15P2S    P16.5E2S    P16.5P2    P18E2  
P20P2    P22E2    PH24E2S    PH28E2S    PH30E2    PH35E2

### JCB

8040ZTS - Mini Excavator    8045ZTS - Mini Excavator    TLT25D - Teletruck 520-40 - Loadall    TLT30D - Teletruck    TLT35D - Teletruck    515-40 - Loadall

### Miller Electric-Gensets

BIG BLUE 302P    BIG BLUE 452P    BIG BLUE 500PT    BIG BLUE 500X    BIG BLUE 600X

### Asv-Posi-Track

RC-50 - Track Loader    SCOUT    SC50 - Track Loader

### Marine Power Systems-Gensets

422GM

# 404C-22T PERKINS

## EQUIPMENT MODELS

### Asv -Posi Track Loader

PT50      PT60      RC-60

### Case-IH

420 - Skid Steer    420CT - Skid Steer    DX55 - Tractor    SR160 - Skid Steer    SV185 - Skid Steer

### New-Holland

C175 - Skid Steer    L175 - Skid Steer    LS175 - Skid Steer    L215 - Skid Steer    L218 - Skid Steer    L220 - Skid Steer  
L170 - Skid Steer    TC55DA - Tractor

### Ransomes

HR-6010 - Mower

### JCB-Teletucks

TLT30      TLT30D  
                 4x4

### Marine Power Systems

422TGM

### Takeuchi

TW60 - Wheel Loader



# PERKINS 404D-22T (GP)

## EQUIPMENT MODELS

### Aksa-Gensets

APD-      APD-      ADP-ULP28  
EPAP28    EPAP28S

### SINOBOOM-Wheeled Articulated Work Platforms

AB15J    AB15      TB18J    TB16

### Takeuchi

TS60R -    TS60V -  
Skid Steer    Skid Steer

### Mpmc-Powertech

MP28-2    MP28S-2

### New-Holland

T2410 -    T2420 -  
Tractor    Tractor

### Godlike

GDP26\*S -  
Genset

### Case-IH

410 - Skid    SR175 -    SV185 -    DX55 -    DX60 -    FARMALL  
Steer        Skid Steer    Skid Steer    Tractor    Tractor    60 - Tractor

### Grandwatt-Gensets

G24XHD    G28XHD

### Terex

TSR-60 -    TSV-60 -    PT-60 -  
Skid Steer    Skid Steer    Posi-Track

### Yanan

PE25-ER    PE25-ERE-  
E

### Lincoln-Electric

K2728-5

### Dingxin

DP22S -  
Genset



# PERKINS 404D-22TA (GR)

## EQUIPMENT MODELS

### Aksa-Gensets

APD-      APD-      ADP-ULP30 AT30  
EPAP30   EPAP30S

### Mpmc-Powertech

MP30-2    MP30S-2

### Case-IH

DX55 -    DX60 -    FARMALL    SR150 -    SR175 -    SV185 -  
Tractor    Tractor    60 - Tractor    Skid Steer    Skid Steer    Skid Steer

### New-Holland

BOOMER    BOOMER    C175 - Skid    L175 - Skid    L215 - Skid    L218 - Skid  
4055 -    4060 -    Steer    Steer    Steer    Steer  
Tractor    Tractor    L220 - Skid    T2420 -  
Steer    Steer    Tractor

# PERKINS 404F-22 (EN)

## EQUIPMENT MODELS

### Build List

|         |         |         |         |         |         |
|---------|---------|---------|---------|---------|---------|
| EN71225 | EN71358 | EN82259 | EN82366 | EN82981 | EN82984 |
| EN83007 | EN83269 | EN83356 | EN71204 |         |         |

### Takeuchi-Skid Steers

|       |       |
|-------|-------|
| TS50R | TS50V |
|-------|-------|

### New-Holland

|                             |                           |                      |                    |                    |                    |
|-----------------------------|---------------------------|----------------------|--------------------|--------------------|--------------------|
| BOOMER<br>3045 -<br>Tractor | BOOMER<br>8N -<br>Tractor | L213 - Skid<br>Steer | T1530 -<br>Tractor | T2320 -<br>Tractor | T2330 -<br>Tractor |
|-----------------------------|---------------------------|----------------------|--------------------|--------------------|--------------------|

### Aksa-Gensets

|            |                 |                |
|------------|-----------------|----------------|
| APD-U LP20 | APD-<br>EPAP20S | APD-<br>EPAP20 |
|------------|-----------------|----------------|

### Terex

|                        |                        |  |
|------------------------|------------------------|--|
| TSR-50 -<br>Skid Steer | TSV-50 -<br>Skid Steer | PT-50 -<br>Posi-Track<br>Compact<br>Loader |
|------------------------|------------------------|--|

### Case-Ih

|                         |                             |                             |                         |                             |                       |
|-------------------------|-----------------------------|-----------------------------|-------------------------|-----------------------------|-----------------------|
| FARMALL<br>45 - Tractor | FARMALL<br>45A -<br>Tractor | FARMALL<br>45B -<br>Tractor | FARMALL<br>50 - Tractor | FARMALL<br>50B -<br>Tractor | SR130 -<br>Skid Steer |
|-------------------------|-----------------------------|-----------------------------|-------------------------|-----------------------------|-----------------------|

### Fg-Wilson-Gensets

|                 |        |          |          |       |       |
|-----------------|--------|----------|----------|-------|-------|
| P14-4S<br>P22-6 | P14-6S | P16.5-4S | P16.5-6S | P18-6 | P22-4 |
|-----------------|--------|----------|----------|-------|-------|

### Weidemann

|       |          |          |                |                         |                            |
|-------|----------|----------|----------------|-------------------------|----------------------------|
| 1380  | 1880 FSD | 1880 CAB | 2070<br>CX50LP | 2080<br>2070<br>CX50LPT | 3080LP<br>2080T<br>3080LPT |
| T5522 |          |          |                |                         |                            |

# PERKINS 404F-22T (EP)

## EQUIPMENT MODELS

### Build List

|         |         |         |         |         |         |
|---------|---------|---------|---------|---------|---------|
| EP71239 | EP71255 | EP82260 | EP82368 | EP82467 | EP82982 |
| EP82983 | EP82985 | EP83521 |         |         |         |

### Vermeer

D16X20A -  
Directional  
Drill

### Takeuchi

|                       |                       |
|-----------------------|-----------------------|
| TS50R -<br>Skid Steer | TS50V -<br>Skid Steer |
|-----------------------|-----------------------|

### New-Holland

|                             |                           |                      |                    |                    |                    |
|-----------------------------|---------------------------|----------------------|--------------------|--------------------|--------------------|
| BOOMER<br>3045 -<br>Tractor | BOOMER<br>8N -<br>Tractor | L213 - Skid<br>Steer | T1530 -<br>Tractor | T2320 -<br>Tractor | T2330 -<br>Tractor |
|-----------------------------|---------------------------|----------------------|--------------------|--------------------|--------------------|

### Aksa-Gensets

|           |                 |                |
|-----------|-----------------|----------------|
| APD-ULP20 | APD-<br>EPAP20S | APD-<br>EPAP20 |
|-----------|-----------------|----------------|

### Bobcat

843 - Skid  
Steer

### Terex

|                        |                        |   |
|------------------------|------------------------|---|
| TSR-50 -<br>Skid Steer | TSV-50 -<br>Skid Steer | PT-50 Posi-<br>Track<br>Compact<br>Loader |
|------------------------|------------------------|---|

### Case-IH

|                         |                             |                             |                         |                             |                       |
|-------------------------|-----------------------------|-----------------------------|-------------------------|-----------------------------|-----------------------|
| FARMALL<br>45 - Tractor | FARMALL<br>45A -<br>Tractor | FARMALL<br>45B -<br>Tractor | FARMALL<br>50 - Tractor | FARMALL<br>50B -<br>Tractor | SR130 -<br>Skid Steer |
|-------------------------|-----------------------------|-----------------------------|-------------------------|-----------------------------|-----------------------|

### Fg-Wilson

|                 |        |          |          |       |       |
|-----------------|--------|----------|----------|-------|-------|
| P14-4S<br>P22-6 | P14-6S | P16.5-4S | P16.5-6S | P18-6 | P22-4 |
|-----------------|--------|----------|----------|-------|-------|

### Weidemann

|       |          |          |                |                         |                            |
|-------|----------|----------|----------------|-------------------------|----------------------------|
| 1380  | 1880 FSD | 1880 CAB | 2070<br>CX50LP | 2080<br>2070<br>CX50LPT | 3080LP<br>2080T<br>3080LPT |
| T5522 |          |          |                |                         |                            |

# PERKINS 704-30 (UA) NATURALLY ASPIRATED

## EQUIPMENT MODELS

### Build List

|         |         |         |         |         |         |
|---------|---------|---------|---------|---------|---------|
| UA35050 | UA35052 | UA35055 | UA36174 | UA36183 | UA36252 |
| UA36267 | UA36272 | UA36276 | UA36305 | UA36314 | UA36335 |
| UA36351 | UA36355 | UA36370 | UA36383 | UA36385 | UA36429 |
| UA36496 | UA36524 | UA36590 | UA36614 | UA36625 | UA36641 |
| UA36709 | UA36771 | UA36811 | UA36835 | UA36872 | UA36928 |
| UA36987 | UA37052 | UA37093 | UA37099 | UA37136 | UA37208 |
| UA37217 | UA37223 | UA37241 | UA37245 | UA37247 | UA37249 |
| UA37254 | UA37277 | UA70384 | UA70412 | UA70454 | UA70478 |
| UA70505 | UA80863 | UA80870 | UA80979 | UA80992 | UA81024 |
| UA81057 | UA81059 | UA81084 | UA81106 | UA81127 | UA81150 |
| UA81175 | UA81185 | UA81263 | UA81321 | UA81358 |         |

### Bobcat

843 - Skid  
Steer

### Vermeer-Mfg

D16X20A -  
Drill

# PERKINS 804C-33T (UF) ENGINE, TURBOCHARGED

## EQUIPMENT MODELS

### Agco

UF35160 UF35161 UF35162

### Skid Steers

UF35216 UF35246 UF35217 UF35248 UF35250

### Industrial

UF35153 UF35154 UF35155 UF35156 UF35157 UF35147  
UF35148 UF35149 UF35150

### Landini Tractors

ALPINE 65 ALPINE 75 ALPINE 85

# PERKINS 804D-33T (UL) ENGINE, TURBOCHARGED

## EQUIPMENT MODELS

### Access Platforms

|         |         |         |         |         |        |
|---------|---------|---------|---------|---------|--------|
| UL35233 | UL35237 | UL35251 | UL35252 | UL35253 | UL3256 |
| UL70773 | UL70968 | UL81951 | UL82581 |         |        |

### Wheel Loaders

|         |         |         |         |         |         |
|---------|---------|---------|---------|---------|---------|
| UL35230 | UL35236 | UL35255 | UL35259 | UL70774 | UL70839 |
| UL81977 | UL82076 | UL82118 | UL35232 | UL35239 | UL35257 |
| UL35260 | UL70838 | UL81954 | UL82048 | UL82104 | UL82433 |
| UL82650 |         |         |         |         |         |

### Forklift Trucks

|         |         |
|---------|---------|
| UL35234 | UL35254 |
|---------|---------|

### Skid Steer

|         |         |         |         |
|---------|---------|---------|---------|
| UL35245 | UL70770 | UL35258 | UL71072 |
|---------|---------|---------|---------|

# PERKINS 1004.40

## EQUIPMENT MODELS

### Clark Equipment-Fork Lift Trucks

|                     |                     |                     |                     |                     |                     |
|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| CGC40 -<br>(CGC470) | CGC50 -<br>(CGC470) | CGC55 -<br>(CGC470) | CGC60 -<br>(CGC470) | CGC70 -<br>(CGC470) | CGP40 -<br>(CGP460) |
| CGP45 -<br>(CGP460) | CGP50 -<br>(CGP460) | CGP55 -<br>(CGP460) |                     |                     |                     |

### Hyster

|                             |                               |                             |
|-----------------------------|-------------------------------|-----------------------------|
| H70-155XL<br>-<br>(AA70218) | S80-<br>S155XL -<br>(AA70218) | H80-155XL<br>-<br>(AA70216) |
|-----------------------------|-------------------------------|-----------------------------|

### Manitou

|    |                     |
|----|---------------------|
| KD | KD Low<br>Emissions |
|----|---------------------|

### Landini

Globus 65 -  
Tractor

### Fg Wilson

|        |         |        |        |         |         |
|--------|---------|--------|--------|---------|---------|
| P27P1S | XP27P1S | P30E1  | P30E1S | P32P1S  | XP32P1S |
| P35E1S | P36P1S  | P40E1S | P40P1  | XP35E1S | XP36P1S |
| XP40P1 | P44E1   | P45P1  | XP44E1 | XP45P1  | P50E1   |
| XP50E1 |         |        |        |         |         |

### Jcb

3CX -  
Backhoe  
(AA50508)

### Harlan-Low Profile Tractors

|       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|
| HLP30 | HLP40 | HLP50 | HLP80 | HTA30 | HTA40 |
| HTA50 | HTA60 | HTA70 | HTA80 |       |       |

# PERKINS 1004.40 2

## EQUIPMENT MODELS

### Clark Equipment-Fork Lift Trucks

|                                  |  |  |  |  |                     |
|----------------------------------|--|--|--|--|---------------------|
| C500Y 110-<br>155 -<br>(AA70370) | CGC40 -<br>(CGC470)<br>CGP40 -<br>(CGP460) | CGC50 -<br>(CGC470)<br>CGP45 -<br>(CGP460) | CGC55 -<br>(CGC470)<br>CGP50 -<br>(CGP460) | CGC60 -<br>(CGC470)<br>CGP55 -<br>(CGP460) | CGC70 -<br>(CGC470) |
|----------------------------------|--|--|--|--|---------------------|

### Hyster-Forklifts

|                             |                             |                               |
|-----------------------------|-----------------------------|-------------------------------|
| H70-155XL<br>-<br>(AA70218) | H80-155XL<br>-<br>(AA70218) | S80-<br>S155XL -<br>(AA70218) |
|-----------------------------|-----------------------------|-------------------------------|

### Manitou

|    |                     |
|----|---------------------|
| KD | KD Low<br>Emissions |
|----|---------------------|

### Fg Wilson

|        |         |        |         |         |        |
|--------|---------|--------|---------|---------|--------|
| P27P1S | XP27P1S | P30E1S | P32P1S  | XP32P1S | P35E1S |
| P36P1S | P40E1S  | P40P1  | XP35E1S | XP36P1S | XP40P1 |
| P44E1  | P45P1   | XP44E1 | XP45P1  | P50E1   | XP50E1 |

### Harlan-Low Profile Tractors

|       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|
| HLP30 | HLP40 | HLP50 | HLP80 | HTA30 | HTA40 |
| HTA50 | HTA60 | HTA70 | HTA80 |       |       |

### Jcb

|                               |                                  |
|-------------------------------|----------------------------------|
| 3CX -<br>Backhoe<br>(AA50508) | Backhoe<br>loader -<br>(AA50608) |
|-------------------------------|----------------------------------|

### Perkins Sabre Marine

44GM -  
Power Unit



# PERKINS 1004.40T FROM ESN U608301W (1992)

## EQUIPMENT MODELS

### Fg Wilson

|        |         |        |         |         |         |
|--------|---------|--------|---------|---------|---------|
| P45P1S | XP45P1S | P50E1S | XP50E1S | P56P1S  | P60P1   |
| P62E1S | XP60P1  | P65E1  | P72SP1  | P75P1   | P80ESP1 |
| P80SP1 | XP65E1  | XP75P1 | P83E1   | P88ESP1 | P100    |
| P100E  | XP83E1  | XP90   | XP100   | XP100E  |         |

### Tovel

TL20-22-25 TL6-44-36 -  
- Telehandler  
Telehandler

### Jcb

|           |         |                  |
|-----------|---------|------------------|
| 3CX -     | 3CX -   | 415 -            |
| Backhoe   | Backhoe | 30250r (AB50253) |
| (AB50609) |         |                  |

### Komatsu

|          |          |            |
|----------|----------|------------|
| PC120-5K | PC130-5K | PC150HD-5K |
|----------|----------|------------|

### Bobcat

963 - Skid  
Steer

### MF Agricultural

6130 6140

# PERKINS 1004.40/40T

## EQUIPMENT MODELS

### Jcb

Backhoe - Shovel  
(AK50628) Loader -  
(AK50610)

### Tovel

TL20-22-25 TL6-44-36 -  
- Tovelazer Tovelazer

### Bobcat

963 -  
(AK70383)

### Case IH

|                    |                  |                   |                  |                   |                   |
|--------------------|------------------|-------------------|------------------|-------------------|-------------------|
| CX100 -<br>Tractor | C90 -<br>Tractor | C100 -<br>Tractor | C80 -<br>Tractor | CX80 -<br>Tractor | CX90 -<br>Tractor |
|--------------------|------------------|-------------------|------------------|-------------------|-------------------|

### MF Agricultural

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 3330 | 3350 | 3355 | 4325 | 4345 | 4355 |
| 4365 | 6235 | 6245 | 6255 | 6265 |      |

### McCormick

|                   |                    |                   |
|-------------------|--------------------|-------------------|
| MC80 -<br>Tractor | MC100 -<br>Tractor | MC90 -<br>Tractor |
|-------------------|--------------------|-------------------|

# PERKINS 1006.60T FROM ESN 557977X

## EQUIPMENT MODELS

### Build List

YD35099

### Dingxin

DP88S    DP120S    DP132S

### Jcb

435 - Front  
Loader  
(YB50292)

### Tovel

TS18-44

### Hyster

H165-  
360XL -  
(YB70344)

### MF Agricultural

3625 -    6190    640    660    680  
(YB31245)

### Komatsu

PC180NLC-5K    PC210-5K    PC210LC-5K    PC240NLC-5K    PC240LC-5K    PW170-5K  
PC180LC-5K

### Perkins

Power  
Units -  
(YB30127)

### Fg-Wilson

XP110E

### CLAAS

Dominator 88 - Combine    Dominator 98 - Combine

# PERKINS 1006.60T YG, YH, YK, YJ BUILDS

## EQUIPMENT MODELS

### MF Agricultural

|           |      |      |      |      |      |
|-----------|------|------|------|------|------|
| 6180 -    | 4270 | 4360 | 4370 | 6170 | 6180 |
| (YH31310) | 6260 | 6270 | 6280 | 6290 | 8110 |
| 8120      | 8210 | 8220 | 8240 |      |      |

### Hyster

|           |           |
|-----------|-----------|
| H165-     | H165-     |
| 360XL -   | 360XL -   |
| (YG70403) | (YH70393) |

### Mc Cormick-Tractors

|           |           |           |           |           |
|-----------|-----------|-----------|-----------|-----------|
| MTX110 -  | MTX125 -  | MTX140 -  | MTX155 -  | MTX170 -  |
| (YH50918) | (YH50919) | (YH50920) | (YK50921) | (YJ51192) |

### Tovel

TS18-44

# PERKINS 1103C (DC) (DF) (DJ) (XK) BUILDS

## EQUIPMENT MODELS

### Fg Wilson

|         |        |        |        |        |         |
|---------|--------|--------|--------|--------|---------|
| P24P2S  | P26-1S | P26-2S | P26E1S | P27P1  | XP24P1S |
| XP26E1S | XP27P1 | P30E1  | P30E2  | P30P1  | P30P2   |
| P33-1   | P33-2  | P33E1  | P33E2  | XP30E1 | XP30P1  |
| XP33E1  |        |        |        |        |         |

### Mpmc-Powertech

|        |        |         |         |
|--------|--------|---------|---------|
| MP30-1 | MP30-2 | MP30S-1 | MP30S-2 |
|--------|--------|---------|---------|

### Teksan

|          |          |
|----------|----------|
| TJ39PE6A | TJ39PE6S |
|----------|----------|

### Godlike

GDP30\*S -  
Genset

### MF Agricultural

|                    |                    |
|--------------------|--------------------|
| 410 -<br>(DC38077) | 431 -<br>(DC38027) |
|--------------------|--------------------|

### Genmac

Alpha  
G30PO

### RCG Power

R-P30

### Kz-Power

KZP-G33

# PERKINS 1103C (DC) (XK) BUILDS

## EQUIPMENT MODELS

### Fg Wilson

|         |        |        |        |        |         |
|---------|--------|--------|--------|--------|---------|
| P24P2S  | P26-1S | P26-2S | P26E1S | P27P1  | XP24P1S |
| XP26E1S | XP27P1 | P30E1  | P30E2  | P30P1  | P30P2   |
| P33-1   | P33-2  | P33E1  | P33E2  | XP30E1 | XP30P1  |
| XP33E1  |        |        |        |        |         |

### Godlike

GDP30\*S -  
Genset

# PERKINS 1103C-33T (DD), 1103A-33 (DK)

## EQUIPMENT MODELS

### Fg Wilson

|         |         |         |        |         |         |
|---------|---------|---------|--------|---------|---------|
| P32P2S  | P32P3S  | XP32P3S | P35-1S | P35-2S  | P35E2S  |
| P35E3S  | P40P1S  | P40P2   | P40P3  | P44E1S  | P44E2   |
| P44E3   | P45P2   | P45P3   | P45P3S | P50-1   | P50-1S  |
| P50-2   | P50E2   | P50E3   | P50E3S | P50P1   | P55-1   |
| P55E1   | P60P3   | P65-1   | P65E3  | XP35E3S | XP40P1S |
| XP40P3  | XP44E1S | XP45P3  | XP44E3 | XP45P3S | XP50E3  |
| XP50E3S | XP50P1  | XP55E1  | XP60P3 | XP65E3  |         |

### Kz-Power

KZP-G50 KZP-G66

### Genmac

Alpha Alpha Strong Strong King  
G45PO\* G60PO\* G45PS G60PS G60PS\*

### Rcg-Power

R-P45 R-P60

### Godlike-Gensets

GDP30\*S GDP45\*S GDP60\*S

### Dingxin

DP40S DP52S

### Mpmc-Powertech

MP45-1 MP45S-1 MP47-2 MP47S-2 MP55-2 MP55S-2  
MP60-1 MP60S-1

### Teksan

TJ61PE6A TJ76PE6A TJ60PE6S TJ76PE6S

# PERKINS 1104C-44 (RE), 1104C-E44 (RF), 1104A-44 (RR) 3

## EQUIPMENT MODELS

### Build List

RE38059

### Agricultural

|                      |                      |                      |                       |                        |                     |
|----------------------|----------------------|----------------------|-----------------------|------------------------|---------------------|
| 3435S -<br>(RE37990) | 3435F -<br>(RE37990) | 3435V -<br>(RE37990) | 3435GE -<br>(RE37990) | 3435GEV -<br>(RE37990) | 573 -<br>(RE60126)  |
| 3425C -<br>(RE38157) | 471 -<br>(RE38157)   | 481 -<br>(RE37830)   | 5425 -<br>(RE37873)   | 5425 -<br>(RE37917)    | 5435 -<br>(RE37831) |
| 5435 -<br>(RE37919)  |                      |                      |                       |                        |                     |

### Jcb

Telehandler  
-  
(RE51141)

### Marine Power Systems

4.4GM

### Gehl

7610 - Skid Steer    7710 - Skid Steer

### KIOTI

DK751 - Tractor    DK752 - Tractor

### Noble (Liftking)

RC60 - Forklift    RT50 - Forklift    RT60 - Forklift    RT80 - Forklift

### Asv Posi-Track

RC-85 - Comp Track Loader



# PERKINS 1104C-44T (RG), (RH), (RK), (RS), (RT) BUILDS

## EQUIPMENT MODELS

### Engine Arrangement

|         |         |          |                        |                       |                    |
|---------|---------|----------|------------------------|-----------------------|--------------------|
| RT60118 | RT60119 | RT60119B | RG38100 -<br>(U220361) | Genset -<br>(RG51247) | Sprayers -<br>(RT) |
|---------|---------|----------|------------------------|-----------------------|--------------------|

### Asv Posi-Track

|  |  |
|--|--|
| RC-100 -<br>Multi<br>terrain<br>loader | PT-100 -<br>Multi<br>terrain<br>loader |
|--|--|

### Mpmc-Powertech

|        |         |         |          |          |
|--------|---------|---------|----------|----------|
| MP80-1 | MP100-1 | MP100-2 | MP100S-1 | MP100S-2 |
|--------|---------|---------|----------|----------|

### Godlike

|         |         |         |
|---------|---------|---------|
| GDP60*S | GDP65*S | GDP80*S |
|---------|---------|---------|

### Perkins-Sabre

44TW2GM  
-  
(RJ30890)

### FG Wilson

|        |        |        |        |        |       |
|--------|--------|--------|--------|--------|-------|
| P40P2S | P45P2S | P50-2S | P50E2S | P50P2  | P55-2 |
| P55E2  | P58P2S | P60P2  | P64E2S | P65-2  | P65E2 |
| P72P2S | P80-2S | P80E2S | P80P2  | P88-2  | P88E2 |
| P100P1 | P100P2 | P110-2 | P110E1 | P110E2 |       |

### Kz-Power

|         |         |
|---------|---------|
| KZP-G72 | KZP-G88 |
|---------|---------|

### Dingxin

DP88S

### Rcg-Power

|         |        |
|---------|--------|
| R-P80-1 | R-P100 |
|---------|--------|

### Bobcat

|                    |                       |
|--------------------|-----------------------|
| V723 -<br>Forklift | V518 -<br>Telehandler |
|--------------------|-----------------------|

### Marine-Power-Systems

4.4TGM

# PERKINS 1104C-44T (RG), (RJ), (RK) BUILDS

## EQUIPMENT MODELS

Telehandler - (RG38084)    Tractors - (RG38397)    JCB - (RG51136)

### Marine Power Systems

4.4TGM    4.4TWGM    4.4TW2GM

### Godlike

GDP60\*S    GDP80\*S    GDP100\*S

### Kz-Power

KZP-G110

### Fg Wilson

|        |        |        |        |        |       |
|--------|--------|--------|--------|--------|-------|
| P40P2S | P45P2S | P50-2S | P50E2S | P50P2  | P55-2 |
| P55E2  | P58P2S | P60P2  | P64E2S | P65-2  | P65E2 |
| P72P2S | P80-2S | P80E2S | P80P2  | P88-2  | P88E2 |
| P100P1 | P100P2 | P110-2 | P110E1 | P110E2 |       |

### Teksan

TJ130PE6A    TJ128PE6S

### Asv-Posi-Track

|                                     |                                     |
|-------------------------------------|-------------------------------------|
| RC-100 -<br>Comp<br>Track<br>Loader | PT-100 -<br>Comp<br>Track<br>Loader |
|-------------------------------------|-------------------------------------|

# PERKINS 1104C-44T (RG), 1104C-E44T (RH)

## EQUIPMENT MODELS

### Agricultural

|                        |                         |                       |                        |                      |                       |
|------------------------|-------------------------|-----------------------|------------------------|----------------------|-----------------------|
| 3455 -<br>(RG37989)    | 3455F -<br>(RG37989)    | 3455GE -<br>(RG37989) | 3455GEV -<br>(RG37989) | 3455S -<br>(RG37991) | 3455SF -<br>(RG37991) |
| 3455SGE -<br>(RG37991) | 3455SGEV -<br>(RG37991) | 491 -<br>(RG37828)    | 492 -<br>(RG37829)     | 493 -<br>(RG38179)   | 5435T -<br>(RG38401)  |
| 5445 -<br>(RG38121)    | 5460 -<br>(RG37833)     | 5435T -<br>(RG38402)  | 5445 -<br>(RG37832)    | 5445 -<br>(RG37915)  | 5445 -<br>(RG38120)   |
| 6445 -<br>(RG38121)    |                         | 5460 -<br>(RG51400)   | 6445 -<br>(RG37832)    | 6445 -<br>(RG37915)  | 6445 -<br>(RG38120)   |

### Fg Wilson

|        |        |        |        |        |       |
|--------|--------|--------|--------|--------|-------|
| P40P2S | P45P2S | P50-2S | P50E2S | P50P2  | P55-2 |
| P55E2  | P58P2S | P60P2  | P64E2S | P65-2  | P65E2 |
| P72P2S | P80-2S | P80E2S | P80P2  | P88-2  | P88E2 |
| P100P1 | P100P2 | P110-2 | P110E1 | P110E2 |       |

### Godlike

GDP60\*S -  
Genset

### KIOTI

|                     |                    |                    |                    |                    |                     |
|---------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| DK1002 -<br>Tractor | DK801 -<br>Tractor | DK901 -<br>Tractor | DK902 -<br>Tractor | DX100 -<br>Tractor | DX7510 -<br>Tractor |
| DX9010 -<br>Tractor |                    |                    |                    |                    |                     |

### Asv Posi-Track

|                                     |                                     |
|-------------------------------------|-------------------------------------|
| RC-100 -<br>Comp<br>Track<br>Loader | PT-100 -<br>Comp<br>Track<br>Loader |
|-------------------------------------|-------------------------------------|

### Gehl-Mfg

7810 - Skid  
Steer

### Terex

PT-100G -  
Comp  
Track  
Loader

### Marine-Power-Systems

4.4TGM

# PERKINS 1104A-44T (RS) 2

## EQUIPMENT MODELS

### Kz-Power

KZP-G72 KZP-G88

### Dingxin

DP70S -  
Genset

### Mpmc-Powertech

MP65-1 MP65-1 MP65S-1 MP65S-2 MP80-1 MP80-2  
MP80S-1 MP80S-2

### Godlike

GDP65\*S - GDP80\*S -  
Genset Genset

### Olympian

GEP44SP1 GEP50-2 GEP50SP-7 GEP50SP11 GEP64SP1 GEP65-7  
GEP65-11 GEP88-1

### Genmac

BETA KING  
G80PO G80PS\*

### Rcg-Power

R-P65 R-P80

### Teksan

TJ103PE6A TJ102PE6S

# PERKINS 1104A-44T (RS)

## EQUIPMENT MODELS

### Engine Arrangement

|         |          |                 |                  |
|---------|----------|-----------------|------------------|
| RT38788 | RT38788B | Gensets -<br>RS | Sprayers -<br>RT |
|---------|----------|-----------------|------------------|

### Kz-Power

|         |         |
|---------|---------|
| KZP-G72 | KZP-G88 |
|---------|---------|

### Godlike

|                     |                     |
|---------------------|---------------------|
| GDP65*S -<br>Genset | GDP80*S -<br>Genset |
|---------------------|---------------------|

### Fg Wilson

|                 |                 |                 |                   |         |       |
|-----------------|-----------------|-----------------|-------------------|---------|-------|
| P50-3S<br>P80P1 | P58P1S<br>P88-1 | P64E1S<br>P88E1 | XP58P1S<br>XP88E1 | XP64E1S | P65-3 |
|-----------------|-----------------|-----------------|-------------------|---------|-------|

### Olympian

|                      |                    |           |           |          |         |
|----------------------|--------------------|-----------|-----------|----------|---------|
| GEP44SP1<br>GEP65-11 | GEP50-2<br>GEP88-1 | GEP50SP-7 | GEP50SP11 | GEP64SP1 | GEP65-7 |
|----------------------|--------------------|-----------|-----------|----------|---------|

# PERKINS 1104D-44T (NL), 1104D-44TA (NM)

## EQUIPMENT MODELS

### Aksa

APD-EPA56   APD-EPAP56   APD-EPA56S   APD-EPAP56S   AT56   APD-ULP56

### KIOTI

DK75 - Tractor   DK90 - Tractor   PX9020 - Tractor

### HAULOTTE

HTL3210 - Telehandler   HTL4010 - Telehandler

### Manitex-Liftking

2200-15D   842-GR Reach   ARM6T36-E   LK10M22   LK10M42   LK12M22   LK12M42   LK16M22   LK16M42  
LK20M22   LK20M42   LK20P22   LK20P44   LK25P44   LK8M22  
LK8M42   LK8P44-B

# PERKINS 1104D-E44T (NH), 1104D-E44TA (NJ) 0060

## EQUIPMENT MODELS

### Aksa

|             |              |            |            |            |             |
|-------------|--------------|------------|------------|------------|-------------|
| APD-EPAP56  | APD-EPAP56S  | APD-EPA65S | APD-EPAP65 | APD-EPAP82 | APD-EPAP100 |
| APD-EPAP65S | APD-EPAP100S | ADP-ULP65  | ADP-ULP82  | ADP-ULP100 | AT65        |
| AT100       |              |            |            |            | AT82        |

### Grandwatt

G50XHD -  
Genset

### Asphalt Pavers

|                     |                     |
|---------------------|---------------------|
| Vogele Super 1600-2 | Vogele Super 1603-2 |
|---------------------|---------------------|

### Yanan

|         |           |         |           |
|---------|-----------|---------|-----------|
| PE73-ER | PE73-ER-E | PE91-ER | PE91-ER-E |
|---------|-----------|---------|-----------|

# PERKINS 1106-E60TA VK BUILDS

## EQUIPMENT MODELS

### Mc Cormick-Wheeled Tractors

|         |         |         |         |         |         |
|---------|---------|---------|---------|---------|---------|
| VK37779 | VK37780 | VK37781 | VK37782 | VK37783 | VK37784 |
| VK37785 | VK37786 | VK37787 |         |         |         |

### Loadlifter

|          |          |                   |                   |
|----------|----------|-------------------|-------------------|
| 4400-18F | 4400-20F | ARM-XL<br>20T32-E | ARM-XL<br>20T42-E |
|----------|----------|-------------------|-------------------|

### Mf Agricultural

|                     |                     |                     |                     |                     |                     |
|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 5465 -<br>(VK31483) | 5465 -<br>(VK31486) | 5465 -<br>(VK31505) | 6360 -<br>(VK31483) | 6370 -<br>(VK31484) | 6380 -<br>(VK31485) |
| 6465 -<br>(VK31483) | 6465 -<br>(VK31486) | 6465 -<br>(VK31505) | 6475 -<br>(VK31484) | 6475 -<br>(VK31487) | 6475 -<br>(VK31503) |
| 6475 -<br>(VK31506) | 6480 -<br>(VK31485) | 6480 -<br>(VK31507) | 7465 -<br>(VK31486) | 7465 -<br>(VK31505) | 7475 -<br>(VK31487) |
| 7475 -<br>(VK31503) | 7475 -<br>(VK31506) | 7480 -<br>(VK31507) |                     |                     |                     |

### Manitou

LK30P44

### Hyster

HD F.L.T  
Tier 2  
Electronic -  
(VK37857)



# PERKINS 1106-E60TA VK BUILDS FRACTURED SPLIT ROD

## EQUIPMENT MODELS

### Mc Cormick-Wheeled Tractors

|         |         |         |         |         |         |
|---------|---------|---------|---------|---------|---------|
| VK37779 | VK37780 | VK37781 | VK37782 | VK37783 | VK37784 |
| VK37785 | VK37786 | VK37787 |         |         |         |

### Load Lifter

|          |          |                    |                    |
|----------|----------|--------------------|--------------------|
| 4400-18F | 4400-20F | ARM-XL-<br>20T32-E | ARM-XL-<br>20T42-E |
|----------|----------|--------------------|--------------------|

### Manitou

LK30P44

### MF Agricultural

|                     |                     |                     |                     |                     |                     |
|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 5465 -<br>(VK31483) | 5465 -<br>(VK31486) | 5465 -<br>(VK31505) | 6360 -<br>(VK31483) | 6370 -<br>(VK31484) | 6380 -<br>(VK31485) |
| 6465 -<br>(VK31483) | 6465 -<br>(VK31486) | 6465 -<br>(VK31505) | 6475 -<br>(VK31484) | 6475 -<br>(VK31487) | 6475 -<br>(VK31503) |
| 6475 -<br>(VK31506) | 6480 -<br>(VK31485) | 6480 -<br>(VK31507) | 7465 -<br>(VK31486) | 7465 -<br>(VK31505) | 7475 -<br>(VK31487) |
| 7475 -<br>(VK31503) | 7475 -<br>(VK31506) | 7480 -<br>(VK31507) |                     |                     |                     |

### Omega Lift

|                |                |                |                |                   |           |
|----------------|----------------|----------------|----------------|-------------------|-----------|
| 2430 HERC<br>3 | 2435 HERC<br>3 | 2440 HERC<br>4 | 2450 HERC<br>5 | ARM-XL<br>30T28-E | 2425 HERC |
|----------------|----------------|----------------|----------------|-------------------|-----------|

### Hyster

HD F.L.T  
Tier 2  
Electronic -  
(VK37857)

# PERKINS 4.236 TO ESN U106654N

## EQUIPMENT MODELS

### Bobcat

|                             |                             |                             |                             |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| 943 - Skid Steer<br>LD70177 | 953 - Skid Steer<br>LD70177 | 970 - Skid Steer<br>LD70095 | 974 - Skid Steer<br>LD70095 |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|

### Landini Tractors

|                     |                     |      |                     |                     |      |
|---------------------|---------------------|------|---------------------|---------------------|------|
| 6500 -<br>(LD22573) | 6550 -<br>(LD22573) | 6830 | 7500 -<br>(LD22574) | 7550 -<br>(LD22574) | 7830 |
|---------------------|---------------------|------|---------------------|---------------------|------|

### Mf Industrial

|                    |                                 |
|--------------------|---------------------------------|
| 50C -<br>(LD22824) | 6000 -<br>Forklift<br>(LD22055) |
|--------------------|---------------------------------|

### Jcb

|                               |                              |                               |
|-------------------------------|------------------------------|-------------------------------|
| 3CX -<br>Backhoe<br>(LD50096) | 410 -<br>Loader<br>(LD50105) | 520 -<br>Handler<br>(LD50103) |
|-------------------------------|------------------------------|-------------------------------|

### Mf Agricultural

|                    |                    |                    |                    |                    |
|--------------------|--------------------|--------------------|--------------------|--------------------|
| 175 -<br>(LD20022) | 255 -<br>(LD22694) | 255 -<br>(LD22695) | 275 -<br>(LD22051) | 275 -<br>(LD22052) |
|--------------------|--------------------|--------------------|--------------------|--------------------|

# PERKINS 4.236 FROM ESN U106655N

## EQUIPMENT MODELS

### Bobcat

|                  |                  |                  |                  |
|------------------|------------------|------------------|------------------|
| 943 - Skid Steer | 953 - Skid Steer | 970 - Skid Steer | 974 - Skid Steer |
|------------------|------------------|------------------|------------------|

### Landini Tractors

|                  |                  |      |                  |                  |      |
|------------------|------------------|------|------------------|------------------|------|
| 6500 - (LD22573) | 6550 - (LD22573) | 6830 | 7500 - (LD22574) | 7550 - (LD22574) | 7830 |
|------------------|------------------|------|------------------|------------------|------|

### MF Industrial

50C - (LD22824)

### Jcb

|                         |                        |                         |
|-------------------------|------------------------|-------------------------|
| 3CX - Backhoe (LD50096) | 410 - Loader (LD50105) | 520 - Handler (LD50103) |
|-------------------------|------------------------|-------------------------|

### Mf Agricultural

|                 |                 |                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 175 - (LD20022) | 255 - (LD22694) | 255 - (LD22695) | 275 - (LD22051) | 275 - (LD22052) | 362 - (LD31234) |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|

# PERKINS 4.236 TO ESN U106654N 2

## EQUIPMENT MODELS

### Bobcat

|                            |                            |                            |                            |
|----------------------------|----------------------------|----------------------------|----------------------------|
| 943 - Skid Steer (LD70177) | 953 - Skid Steer (LD70177) | 970 - Skid Steer (LD70095) | 974 - Skid Steer (LD70095) |
|----------------------------|----------------------------|----------------------------|----------------------------|

### Hyster

|                                |                      |                     |                      |                    |                 |
|--------------------------------|----------------------|---------------------|----------------------|--------------------|-----------------|
| C300-530 - Compactor (LD70119) | H110-150 - (LD70121) | S60-100 - (LD70115) | S120-150 - (LD70116) | P60-80 - (LD70117) | A66 - (LD70118) |
|--------------------------------|----------------------|---------------------|----------------------|--------------------|-----------------|

### Lincoln-Electric

500 - Amp Welder (LD70147)

### Clark Equipment

|                         |                         |                          |
|-------------------------|-------------------------|--------------------------|
| CY60-70-80B - (LD21386) | Tow Tractor - (LD21324) | CY60-70-80B - (LD21386R) |
|-------------------------|-------------------------|--------------------------|

### Towmotor

|                  |                  |                  |                  |                  |                  |
|------------------|------------------|------------------|------------------|------------------|------------------|
| V100 - (LD22043) | V100 - (LD22044) | V120 - (LD22043) | V120 - (LD22044) | V140 - (LD22043) | V140 - (LD22044) |
|------------------|------------------|------------------|------------------|------------------|------------------|

### Sullair-Corp

185-250 - Compressor (LD70147)

### Allis-Chalmers

715B - Loader (LD22682)

# PERKINS 4.236 FROM ESN U106655N 2

## EQUIPMENT MODELS

### Build List

LD70160 LD22151 LD33776 LD22580 LD21359 LD22784  
LD30830 LD70323

### Clark Equipment

CY60-70- Tow  
80B - Tractor -  
(LD21386) (LD21324)

### Towmotor

V100 - V100 - V120 - V120 - V140 - V140 -  
(LD22043) (LD22044) (LD22043) (LD22044) (LD22043) (LD22044)

### Lincoln-Electric

500 - Amp  
Welder  
(LD70147)

### Allis Chalmers

715B -  
(LD22682)

### Bobcat

943 - Skid 953 - Skid 970 - Skid 974 - Skid  
Steer Steer Steer Steer

### Hyster

C300-530 - H110-150E S60-100 - H110-150F  
Compactor - (LD70115) -  
(LD70119) (LD70121) (LD21100R)

### Sullair-Corp

185-250 -  
Compressor  
(LD70147)

### Caterpillar

6-8000 lb -  
Forklift

# PERKINS 4.248 FROM ESN UA123424L

## EQUIPMENT MODELS

### Build List

|         |         |         |         |         |         |
|---------|---------|---------|---------|---------|---------|
| LF22790 | LF31105 | LF31189 | LF31275 | LF31288 | LF22575 |
| LF22762 | LF31176 | LF31177 | LF31204 | LF31141 | LF31186 |
| LF31235 | LF31249 | LF31152 | LF31130 | LF31164 | LF31203 |

### MF Industrial

50H

### Mf Agricultural

|   |                                       |                            |  |  |  |
|---|---------------------------------------|----------------------------|--|--|--|
| 50EX -<br>Wheel<br>Tractors             | 50HX -<br>Wheel<br>Tractors           | 60H -<br>Wheel<br>Tractors | 194 -<br>(LF22762)<br>275 -<br>(LF22313)<br>390 -<br>Tractor | 194F -<br>Tractor<br>283 -<br>Tractor<br>394S -<br>Tractor | 275 -<br>(LF22312)<br>285 -<br>(LF22471)<br>590 -<br>(LF22486) |
| 290 -<br>(LF22790)<br>3055 -<br>Tractor | 294 -<br>Tractor<br>3060 -<br>Tractor | 383 -<br>Tractor           |  |  |  |

### Landini-Tractors

R8500 -  
(LF22575)

# CATERPILLAR 3013C (C1.5)

## EQUIPMENT MODELS

### ESN

313      C5N      E1M      G3P      G7N

### Engine Arrangement

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 214-4665 | 230-9551 | 216-6387 | 230-9552 | 225-0574 | 234-1828 |
| 225-0576 | 241-8612 | 225-0579 | 242-3134 | 225-0583 | 242-3139 |
| 225-0584 | 242-3140 | 225-0595 | 242-6041 | 225-0604 | 242-6048 |
| 226-8701 | 257-8333 | 228-0879 | 264-4473 | 168-3312 |          |

### Olympian

|           |           |          |           |            |                          |
|-----------|-----------|----------|-----------|------------|--------------------------|
| GEP7.5SP2 | GEP13.5-2 | GEP9.5-2 | GEP13.5-4 | GEP11-6SP6 | GEP13.5-6<br>GEP11.5SP-2 |
| GEPH17SP  | GEP11SP-2 | GEPK22-2 | GEP11SP-4 |            |                          |

### Vibratory Compactors

|        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|
| CB214E | CB235E | CB224E | CB334E | CB225E | CB335E |
| CB234E |        |        |        |        |        |

### Caterpillar

303.5 -  
Mini  
Hydraulic  
Excavator

### Allmand

MH500IQ

# CATERPILLAR 3024/C

## EQUIPMENT MODELS

### ESN

E2M1-UP 4RF GGA05643

### Compact Track Loaders

RC-50

### Olympian

|              |          |           |          |           |          |
|--------------|----------|-----------|----------|-----------|----------|
| GEP14-6SP6   | GEP22-2  | GEP14SP-2 | GEP22-4  | GEP14SP4  | GEP22-6  |
| GEP16.5-6SP6 | GEPH24SP | GEP16SP-2 | GEPH28SP | GEP16SP-4 | GEPH30-2 |
| GEP18-2      | GEPH35-2 | GEP18-4   |          |           |          |

### Skid Steer

|      |      |       |            |       |            |
|------|------|-------|------------|-------|------------|
| 216B | 232B | 216B2 | 232B2      | 216B3 | 232 CAB-ON |
| 226B | 242B | 226B2 | 242 CMB-ON | 226B3 | 902 7ES-ON |

### Wheel Loaders

902

### Engine Arrangement

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 177-3269 | 183-1335 | 177-3272 | 196-8763 | 177-3273 | 197-7203 |
| 177-3274 | 199-2653 | 177-3275 | 199-9054 | 177-3278 | 213-3185 |
| 177-3287 | 214-2362 | 177-3297 | 216-6386 | 177-3298 | 225-0581 |
| 177-3306 | 226-8709 | 179-1808 | 230-9521 |          | 266-4535 |

### Miller Electric

|           |            |            |            |           |            |
|-----------|------------|------------|------------|-----------|------------|
| BIG 40 C  | Arc Welder | BIG 40 CAT | Arc Welder | BIG 40 CX | Arc Welder |
| BIG 40 WG | Arc Welder |            |            |           |            |



# CATERPILLAR 3024C/T

## EQUIPMENT MODELS

### ESN

E6K1-UP GGA1-UP CSD1-UP

### Skid Steer

|       |      |            |       |       |            |
|-------|------|------------|-------|-------|------------|
| 216B  | 242B | 216B2      | 242B2 | 216B3 | 242 CMB-ON |
| 226B  | 247B | 226B2      | 247B2 | 232B  | 257B2      |
| 232B2 |      | 232 CAB-ON |       |       |            |

### Compact Track Loaders

RC-60

### Engine Arrangement

224-5881 230-0823 233-6648 300-5206

### Miller Electric

BIG 40 C Arc Welder BIG 40 CAT Arc Welder BIG 40 CX Arc Welder  
BIG 40 WG Arc Welder

### Princeton

D45 - Piggyback Forklift PB50 - Piggyback Forklift PB65 - Piggyback Forklift PB70 - Piggyback Forklift PBX - Piggyback Forklift

# CATERPILLAR 3034C NATURALLY ASPIRATED

## EQUIPMENT MODELS

### Engine Arrangement

144-6194 159-9213 147-1232 163-0248 147-1233 224-7498

### Multi Terrain Loader

247 267 257 277

### Wheel Loaders

906

### Skid Steer

216 242 226 246 228 248  
232 252 236 262

# CATERPILLAR 3044CT TURBOCHARGED

## EQUIPMENT MODELS

### ESN

|         |                |                |                 |
|---------|----------------|----------------|-----------------|
| CJS1-UP | CJS1-<br>38908 | CJS1-<br>70000 | CJS61913-<br>UP |
|---------|----------------|----------------|-----------------|

### Engine Arrangement

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 179-1853 | 234-2196 | 179-1854 | 234-2197 | 179-1858 | 262-7288 |
| 234-2190 | 262-7289 | 234-2192 | 305-5286 | 234-2195 | 308-9664 |

### Skid Steer

|       |      |       |      |      |      |
|-------|------|-------|------|------|------|
| 236B  | 262C | 236B2 | 267B | 246B | 268B |
| 246C  | 272C | 248B  | 277B | 252B | 277C |
| 252B2 | 287C | 256C  | 297C | 262B |      |

### Wheel Loaders

|     |     |      |      |      |
|-----|-----|------|------|------|
| 906 | 908 | 906H | 908H | 907H |
|-----|-----|------|------|------|

# CATERPILLAR 3044C/T TURBOCHARGED

## EQUIPMENT MODELS

### ESN

CJS1-UP CYM1-UP

### Engine Arrangement

287-8074 319-6806 305-2572 389-9244

### C3.4 Engine Arrangement

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 294-4464 | 350-6970 | 294-4465 | 388-1871 | 294-4467 | 388-1874 |
| 294-4468 | 390-5141 | 294-4469 | 390-5147 | 311-1332 | 392-5661 |
| 321-7700 | 431-1752 |          |          |          |          |

### Compact Track Loaders

279C 277C 289C 287C

### Skid Steer

256C 262C

### Wheel Loaders

908H

# CATERPILLAR 3046 NATURALLY ASPIRATED

## EQUIPMENT MODELS

### ESN

5XK1-UP    5XK10800-UP    5XK12250-UP

### Track Loader Power Shift

933            933 LGP

### Tractor Power Shift

D3C XL    D4C XL    D4C LGP    D4C LGP XL

### Engine Arrangement

6I-3535    115-4841    6I-3536    137-7383    107-2350    148-8215  
115-4840    148-8216

### Hystat Track Loader

933C            933C LGP

### Hystat Tractor

D3C LGP    D3C XL    D4C XL

# CATERPILLAR 3046 NATURALLY ASPIRATED

## EQUIPMENT MODELS

### ESN

5XK1-UP    5XK10800-UP    5XK109-UP    5XK12250-UP    5XK30700-UP

### Engine Arrangement

149-8742    174-5996    149-8743    174-5997    149-8745    189-4295  
149-8746    214-5157    149-8748    214-5158

### Caterpillar

|                                    |   |                                 |  |  |                                  |
|------------------------------------|---|---------------------------------|--|--|----------------------------------|
| 933 - Track Loaders<br>Power Shift | 933 LGP - Track Loaders<br>Power Shift      | 933C - Hystat Track<br>Loader   | 933C LGP - Hystat Track<br>Loader      | D3C - XL Series III Hystat<br>Tractors | D3C LGP - XL Series<br>Hystat    |
| D3G LGP - Track Type<br>Tractors   | D3C XL - Series III<br>Tractors Power Shift | D3G XL - Track Type<br>Tractors | D4C XL - Series III Hystat<br>Tractors | D4G XL - Track Type<br>Tractors        | D4G LGP - Track Type<br>Tractors |
| D5G LGP - Track Type<br>Tractors   | D5G XL - Track Type<br>Tractors             |                                 |  |  |                                  |

# CATERPILLAR 3046 TURBOCHARGED

## EQUIPMENT MODELS

### ESN

5XK1-UP    5XK10800-UP    5XK12250-UP

### Engine Arrangement

6I-3537    117-1896    105-1997    148-8217    110-4741    149-4607  
115-4842    170-4053    115-4843

### Caterpillar

315 - Track-Type  
Excavators  
D3C LGP - XL Series  
Hystat Tractors

315B - Track-Type  
Excavators  
D3C XL - Series III  
Tractors Power Shift

315B L - Track-Type  
Excavators  
D4C XL - Series III  
Tractors

315L - Track-Type  
Excavators  
D5C LGP XL - Series III  
Tractors Power Shift

939 - Track Loader  
Power Shift  
D5C XL - Series III  
Tractors Power Shift

939C - Track Loader  
Power Shift  
D5C XL - Series III Hystat  
Tractors

# CATERPILLAR 3046 TURBOCHARGED

## EQUIPMENT MODELS

### ESN

5XK10800-UP   5XK12250-UP   5XK15489-UP   5XK15503-UP   5XK30700-UP

### Engine Arrangement

137-6382   149-8749   149-8744   174-5998   149-8747   189-4296

### Caterpillar

|  |  |                                    |                                   |                           |   |
|--|--|------------------------------------|-----------------------------------|---------------------------|---|
| 315 -<br>Track-Type<br>Excavator                 | 315B -<br>Forest<br>Machine                  | 315BL -<br>Track-Type<br>Excavator | 315L -<br>Track-Type<br>Excavator | 939C -<br>Track<br>Loader | D5C -<br>Series III<br>Tractor<br>Direct Drive<br>Power Shift |
| D5C LGP,<br>XL - Series<br>III Hystat<br>Tractor | D5C XL -<br>Series III<br>Hystat<br>Tractors | D5G LGP -<br>Track-Type<br>Tractor | D5G XL -<br>Track-Type<br>Tractor |                           |   |



# CATERPILLAR 3054 ESN 6FK1-UP

## EQUIPMENT MODELS

### ESN

6FK1-UP

### Caterpillar

554 -  
Forwarder

### Telehandlers

TH62

### Engine Arrangement

6I-2215                    100-4276  
7E-9558                    108-0495

6I-2220                    7E-9559

106-5001                    115-1697

7E-7702                    7E-9650

107-3778                    118-2942

### Backhoe Loaders

416B            428B            416C            428C

### Hydraulic Excavators

307

### Olympian

GEP30SP-3    GEP44-3            GEP35SP-3    GEP50-3            GEP40SP-3

### Vibratory Compactors

CB434B            CB434D

# CATERPILLAR 3054T ESN 6FK1-UP

## EQUIPMENT MODELS

### ESN

6FK1-UP

### Caterpillar

PS200B - PS360B -  
Pneumatic Pneumatic  
Roller Roller

### Engine Arrangement

6I-2216 106-5001  
7E-9559 108-0496  
153-5364

### Backhoe Loaders

416B 426C 416C 428B 426B 428C

### Hydraulic Excavators

317 M312 317N M315

106-5002 7E-9558 107-9664  
108-2783 105-7971 115-1697

# CATERPILLAR 3054 ESN 5YS1-13498

## EQUIPMENT MODELS

### ESN

5YS1-  
13498

### Backhoe Loaders

416D      428C      420D      428D      426C

### Caterpillar

554 -  
Forwarder

### Telehandlers

TH63      TH103      TH82      TH350B      TH83

### Hydraulic Excavators

M312      312L      312B      315B

### Vibratory Compactors

|        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|
| AP600  | CS323C | AP650B | CS323E | AP655C | CS423E |
| AP800C | CS431C | AP800D | CS433C | CB434C | CS433E |
| CB434D | CS533E | CB534B | CS563E | CB534C | CS573E |
| CB534D | CS583E | CB535B | CS663E | CB544  | CS683E |
| CB545  | PF290B | CB564D | PF300C | CP323C | PF300B |
| CP323E | PS150B | CP433C | PS150C | CP433E | PS200B |
| CP533E | PS300C | CP563E | PS360B | CP573E | PS360C |
| CP583E | CP663E |        |        |        |        |

### Wheel Loaders

908

### Engine Arrangement

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 100-8184 | 187-1696 | 107-3778 | 186-0601 | 118-2942 | 187-8014 |
| 122-8803 | 178-9011 | 122-8804 | 188-0883 | 122-8805 | 189-6184 |
| 130-4666 | 204-5369 | 130-4799 | 204-5371 | 130-4800 | 204-5372 |
| 130-6340 | 212-3603 | 130-6342 | 220-5713 | 130-6343 | 221-8141 |
| 139-9582 | 222-3717 | 158-6066 | 223-5544 | 162-9785 | 224-4011 |
| 163-0555 | 231-6116 | 163-0949 | 234-1969 | 163-1652 | 235-0598 |
| 165-7604 | 238-6808 |          |          |          |          |

# CATERPILLAR 3054 ESN 5YS13499-UP

## EQUIPMENT MODELS

### ESN

5YS13499-  
UP

### Backhoe Loaders

416D      426C      420D      428D

### Caterpillar

554 -  
Forwarder

### Telehandlers

TH63      TH103      TH82      TH350B      TH83

### Hydraulic Excavators

312B      315B      312L

### Vibratory Compactors

|        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|
| CB434C | CS573E | CB434D | CP573E | CB534B | CS583E |
| CB534C | CP583E | CB534D | CS663E | CB535B | CP663E |
| CB544  | CS683E | CB545  | PF300C | CB564D | PS300C |
| CP323C | PF290B | CS323E | PF300B | CP323E | PS150B |
| CS423E | PS150C | CS431C | PS200B | CS433C | PS360B |
| CP323C | PS360C | CS533E | AP600  | CP533E | AP650B |
| CS433C | AP655C | CP433C | AP800C | CS433E | AP800D |
| CP433E | CS323C | CS563E |        | CP563E |        |

### Wheel Loaders

908

### Engine Arrangement

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 100-8184 | 158-6066 | 107-3778 | 178-9011 | 118-2942 | 187-8014 |
| 122-8804 | 233-6273 | 122-8805 | 188-0883 | 130-4666 | 189-6184 |
| 130-4799 | 204-5369 | 130-4800 | 204-5371 | 130-6340 | 204-5372 |
| 130-6342 | 212-3603 | 139-4666 | 139-9582 |          |          |

# CATERPILLAR 3054C/E ESN 3341-UP

## EQUIPMENT MODELS

### ESN

3341-UP

### Eco Log

554B -  
Forwarder

### Engine Arrangement

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 207-1080 | 207-1173 | 219-7588 | 219-7589 | 207-1104 | 230-3483 |
| 207-1108 | 230-5540 | 207-1126 | 241-8593 | 207-1149 | 241-8594 |
| 207-1151 | 241-8596 | 207-1159 | 244-3104 | 207-1170 | 257-8360 |
| 207-1171 | 257-8370 |          |          |          |          |

### Compact Track Loaders

RC-85

### Telehandlers

TH210      TH215

# CATERPILLAR 3054C/E ESN CRS1-UP

## EQUIPMENT MODELS

### ESN

CRS1-UP G4D1-UP D1K E4M

### Eco Log

554B -  
Forwarder

### Engine Arrangement

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 176-3163 | 291-0357 | 234-3058 | 292-7768 | 234-3059 | 297-4050 |
| 245-6841 | 309-0731 | 266-4538 | 322-1922 | 266-4539 | 329-9929 |
| 273-0872 |          |          |          |          |          |

### Backhoe Loaders

416D 424D

### Olympian

GEP44-7 GEP44-9

# CATERPILLAR 3054C/E ESN 3341-UP 3

## EQUIPMENT MODELS

### ESN

3341-UP

### Caterpillar

|                                 |                                 |                                 |
|---------------------------------|---------------------------------|---------------------------------|
| PS150C -<br>Pneumatic<br>Roller | PS300C -<br>Pneumatic<br>Roller | PS360C -<br>Pneumatic<br>Roller |
|---------------------------------|---------------------------------|---------------------------------|

### Hydraulic Excavators

|       |      |      |      |
|-------|------|------|------|
| M313C | 315C | 313C | 315L |
|-------|------|------|------|

### Olympian

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| GEP44SP2 | GEP80SP2 | GEP50SP2 | GEP80SP4 | GEP50SP4 | GEP88-2  |
| GEP55-2  | GEP88-3  | GEP55-4  | GEP88-4  | GEP64SP2 | GEP110-1 |
| GEP65-2  | GEP110-2 | GEP65-4  | GEP110-4 |          |          |

### Telehandlers

|        |        |        |
|--------|--------|--------|
| TH460B | TH580B | TH560B |
|--------|--------|--------|

### Engine Arrangement

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 176-3172 | 234-3059 | 176-3180 | 234-3061 | 177-9752 | 241-8582 |
| 178-9011 | 241-8584 | 179-1795 | 241-8585 | 188-5099 | 241-8586 |
| 188-5100 | 244-3103 | 194-9477 | 244-3105 | 207-1175 | 256-4720 |
| 213-0296 | 257-8359 | 219-7590 | 257-8362 | 219-7591 | 257-8364 |
| 223-6467 | 257-8369 | 223-6511 | 257-8374 | 223-7570 | 257-8375 |
| 227-4805 | 257-8376 | 230-5539 | 257-8380 | 231-0178 | 257-8381 |
| 231-0179 | 270-0073 | 231-0180 | 307-2279 | 231-0181 | 318-5435 |
| 231-0182 | 318-5436 | 231-0183 | 319-2121 | 231-0184 | 320-8414 |
| 231-0186 | 323-5725 | 232-4502 | 323-6954 | 304-1647 |          |

### Backhoe Loaders

|      |      |      |      |
|------|------|------|------|
| 416E | 428D | 422E | 428E |
|------|------|------|------|

### Compact Track Loaders

RC-100

### Eco Log

554B -  
Forwarder

### Wheel Loaders

|       |       |
|-------|-------|
| IT14G | M313C |
|-------|-------|

# CATERPILLAR 3054C/E ESN 3341-UP 4

## EQUIPMENT MODELS

### ESN

3341-UP

### Caterpillar

PS150C - PS300C - PS360C -  
Pneumatic Pneumatic Pneumatic  
Roller Roller Roller

### Compact Track Loaders

RC-100

### Eco Log

554B -  
Forwarder

### Olympian

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| GEP44SP2 | GEP80SP2 | GEP50SP2 | GEP80SP4 | GEP50SP4 | GEP88-2  |
| GEP55-2  | GEP88-3  | GEP55-4  | GEP88-4  | GEP64SP2 | GEP110-1 |
| GEP65-2  | GEP110-2 | GEP65-4  | GEP110-4 |          |          |

### Engine Arrangement

207-1097 207-1100 207-1098 207-1103 207-1099



# CATERPILLAR 3054C/E ESN CRX107-UP

## EQUIPMENT MODELS

### ESN

BLN FDP 304 E4M G4D J1Z  
CRS

### Backhoe Loaders

414E 428D 416E 428E 420D 430E

### Caterpillar

PS150C - PS300C - PS360C -  
Pneumatic Pneumatic Pneumatic  
Roller Roller Roller

### Compact Track Loaders

PT100

### Eco Log

554B -  
Forwarder

### Olympian

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| GEP44SP2 | GEP80SP2 | GEP50SP2 | GEP80SP4 | GEP50SP4 | GEP88-2  |
| GEP55-2  | GEP88-3  | GEP55-4  | GEP88-4  | GEP64SP2 | GEP110-1 |
| GEP65-2  | GEP110-2 | GEP65-4  | GEP110-4 |          |          |

### Telehandlers

TH220B TH330B

### Engine Arrangement

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 176-3180 | 273-3610 | 194-9477 | 273-3611 | 207-1082 | 286-2370 |
| 227-1368 | 291-0358 | 234-3060 | 291-0359 | 234-3061 | 291-0360 |
| 245-6842 | 292-7769 | 266-4540 | 319-2122 | 266-4541 | 320-8414 |
| 266-4542 | 320-8415 | 266-4544 | 322-1923 | 272-2837 | 322-1924 |
| 272-2839 | 323-5725 | 272-2841 | 325-5121 | 273-1454 | 325-5122 |

# CATERPILLAR 3054C/E TURBOCHARGED

## EQUIPMENT MODELS

### ESN

CC2-UP    C49-777    C4Z-UP    CRS-UP

### Engine Arrangement

352-1451    364-5753    571-4255

### Backhoe Loaders

|       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|
| 416F  | 416F  | 420F  | 420F2 | 422F  | 422F2 |
| 424   | 426F2 | 428F  | 430F  | 430F2 | 432F  |
| 432F2 | 434F  | 434F2 | 444F  | 444F2 |       |

# CATERPILLAR 3056 ESN 7MS1-2098

## EQUIPMENT MODELS

| ESN                |          |          | Wheel Loaders |          |          |
|--------------------|----------|----------|---------------|----------|----------|
| 7MS1-UP            |          |          | 924G          |          |          |
| Engine Arrangement |          |          |               |          |          |
| 145-9235           | 204-5211 | 163-0101 | 205-8747      | 163-0870 | 206-7850 |
| 173-9705           | 208-5963 | 183-5132 | 218-4670      | 184-5444 | 223-1158 |
| 185-3600           | 234-9528 | 187-1338 | 236-6617      | 194-2050 | 239-6060 |
| 196-5004           |          |          |               |          |          |

# CATERPILLAR 3056 ESN 7MS2099-UP

## EQUIPMENT MODELS

| ESN                |          |          | Wheel Loaders |          |          |
|--------------------|----------|----------|---------------|----------|----------|
| 7MS2099-UP         |          |          | 924G          |          |          |
| Engine Arrangement |          |          |               |          |          |
| 163-0101           | 205-8747 | 163-0870 | 206-7850      | 173-9705 | 208-5963 |
| 183-5132           | 218-4670 | 184-5444 | 223-1158      | 185-3600 | 234-9528 |
| 187-1338           | 236-6617 | 194-2050 | 239-6060      | 196-5004 | 204-5211 |

# CATERPILLAR 3056E ESN CPT1-843

## EQUIPMENT MODELS

### ESN

CPT1-843

### Caterpillar

501 - 501HD -  
Harvester Harvester

### Hydraulic Excavators

M316C M318C M322C

### Vibratory Compactors

CS583E

### Engine Arrangement

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 176-3165 | 207-1166 | 176-3166 | 254-2236 | 179-1797 | 263-9665 |
| 188-5096 | 295-9745 | 188-5097 | 297-4053 | 188-5098 | 297-4054 |
| 206-2745 | 302-0524 | 207-1121 | 302-0525 |          |          |

### Asphalt Pavers

AP600 - BB760 -  
Case Bitelli

### Eco Log

564B - 574B -  
Forwarder Forwarder

### Wheel Loaders

930G

# CATERPILLAR 3056E ESN CPT844-UP

## EQUIPMENT MODELS

### ESN

CPT844-UP

### Caterpillar

501 - Harvester      501HD - Harvester

### Hydraulic Excavators

M316C      M318C      M322C

### Vibratory Compactors

CS583E

### Engine Arrangement

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 176-3165 | 207-1166 | 176-3166 | 254-2236 | 179-1797 | 263-9665 |
| 188-5096 | 295-9745 | 188-5097 | 297-4053 | 188-5098 | 297-4054 |
| 206-2745 | 302-0524 | 207-1121 | 302-0525 |          |          |

### Asphalt Pavers

AP600 - Case      BB760 - Bitelli

### Eco Log

564B - Forwarder      574B - Forwarder

### Wheel Loaders

930G

# CATERPILLAR 3066

## EQUIPMENT MODELS

### ESN

|           |           |           |           |           |           |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 7JK1 - UP | AXK       | BBL1 - UP | BCN1 - UP | BDE1 - UP | BEA1 - UP |
| BMZ       | BTG       | CXY       | CYD       | DBG1      | EAG       |
| EBY       | EGA1      | EGL1      | GAD       | GNG       | GPA       |
| JPL1      | KCR       | MAB1 - UP | MAC       | MCF       | PAB1 - UP |
| PBM       | RAW1 - UP | SBN1 - UP | SDC       |           |           |

### Arrangement Number

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 222-8198 | 239-6530 | 201-3721 | 201-3878 | 201-3880 | 205-6695 |
| 205-6731 | 205-6743 | 217-5494 | 222-8277 | 239-6511 | 239-6563 |
| 239-6568 | 255-3065 | 272-4638 | 282-4707 |          |          |

### Machine Models

|       |       |        |       |        |         |
|-------|-------|--------|-------|--------|---------|
| 320C  | 320CL | 320CLN | 318CL | 318CLN | 321CLCR |
| 323DL |       |        |       |        |         |

# CATERPILLAR 3066

## EQUIPMENT MODELS

### ESN

|             |           |           |           |           |           |
|-------------|-----------|-----------|-----------|-----------|-----------|
| 7JK54000-UP | GPA1 - UP | BTG1 - UP | HKT1 - UP | CXY1 - UP | KGL1 - UP |
| DAH1 - UP   | MAB1 - UP | DHK1 - UP | MAE1 - UP | EAG1 - UP | MDY1 - UP |
| EBY1 - UP   | PAB1 - UP | FAA1 - UP | PAC1 - UP | FXK1 - UP | RAW1 - UP |
| GAD1 - UP   | SAH1 - UP | GKL1 - UP | SBN1 - UP | GNG1 - UP | TBR1 - UP |

### Arrangement Number

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 201-3721 | 205-6695 | 287-0092 | 287-0093 | 287-0095 | 287-0097 |
| 287-0098 | 287-0099 | 287-0100 | 287-0101 | 287-0102 | 287-0103 |
| 287-0104 | 287-0105 | 305-4783 | 305-4858 |          |          |

### Excavators

|         |       |        |         |       |        |
|---------|-------|--------|---------|-------|--------|
| 318C    | 318CL | 318CLN | 319CLN  | 320C  | 320CL  |
| 320D    | 320DL | 320DRR | 320DLRR | 320CU | 320CLU |
| 321CLCR | 323D  | 323DL  | 323DLN  |       |        |



# CATERPILLAR C2.2 NATURALLY ASPIRATED

## EQUIPMENT MODELS

### Engine Arrangement

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 292-5718 | 425-7997 | 302-8138 | 433-1379 | 310-5634 | 435-1641 |
| 318-1708 | 454-4433 | 326-4001 | 489-4694 | 348-2243 | 489-4704 |
| 372-3410 | 507-0038 | 396-6293 | 507-0039 | 415-5549 | 521-6796 |
| 421-9194 |          |          |          |          |          |

### Caterpillar

|                              |                    |                            |                        |                            |                             |
|------------------------------|--------------------|----------------------------|------------------------|----------------------------|-----------------------------|
| 1.4M - Small Track Paver     | 216B2 - Skid Steer | 216B3 - Skid Steer         | AP255E - Asphalt Paver | CB34 - Vibratory Compactor | CB34B - Vibratory Compactor |
| CB34XW - Vibratory Compactor | CB36B - Compactor  | CC34 - Vibratory Compactor | CC34B - Compactor      | DE18E3 - Genset            | DE22E3 - Genset             |

# CATERPILLAR C2.2 TURBOCHARGED-AFTERCOOLED

## EQUIPMENT MODELS

### Engine Arrangement

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 292-5719 | 425-7998 | 310-5635 | 433-1380 | 310-5636 | 435-1636 |
| 341-3007 | 435-1638 | 370-1526 | 454-4428 | 415-5550 | 454-4434 |
| 415-5551 | 456-4680 | 415-5552 | 465-7070 | 416-6044 | 521-6797 |
| 310-7852 |          |          |          |          |          |

### Caterpillar

|                              |                             |                             |                              |                             |                              |
|------------------------------|-----------------------------|-----------------------------|------------------------------|-----------------------------|------------------------------|
| 216B - Skid Steer Loader     | 226B - Skid Steer Loader    | 226B2 - Skid Steer Loader   | 226B3 - Skid Steer Loader    | 232B - Skid Steer Loader    | 232B2 - Skid Steer Loader    |
| 232D - Skid Steer Loader     | 239D - Compact Track Loader | 242B - Skid Steer Loader    | 242B2 - Skid Steer Loader    | 247B - Multi Terrain Loader | 247B2 - Multi Terrain Loader |
| 247B3 - Multi Terrain Loader | 249D - Compact Track Loader | 257B - Multi Terrain Loader | 257B2 - Multi Terrain Loader | C2.2 - Industrial Engine    | CB34B - Compactor            |
| CC34B - Compactor            |                             |                             |                              | CB34B XW - Compactor        | CB36B - Compactor            |

# CATERPILLAR C3.3T ESN E3J1-UP

## EQUIPMENT MODELS

### ESN

E3J1-UP

### Olympian

|          |         |          |          |          |          |
|----------|---------|----------|----------|----------|----------|
| GEP44-2  | GEP50-7 | GEP44-5  | GEP50SP5 | GEP35SP2 | GEP50SP9 |
| GEP35SP4 | GEP55-1 | GEP35SP5 | GEP55-3  | GEP35SP9 | GEP65-5  |
| GEP50-4  | GEP65-9 | GEP50-5  |          |          |          |

### Engine Arrangement

|          |          |
|----------|----------|
| 284-5163 | 284-5164 |
|----------|----------|

# CATERPILLAR C4.4T/TA

## EQUIPMENT MODELS

### ESN

AT31-UP C4Z1-777 C4Z1-UP C4Z778-UP E3L1-UP E3N1-UP

### Engine Arrangement

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 321-7704 | 445-7653 | 321-7705 | 445-7657 | 322-0590 | 457-2054 |
| 354-7363 | 460-5760 | 362-9384 | 467-7946 | 364-5743 | 503-0968 |
| 375-1273 | 520-1413 | 375-1284 | 521-6422 | 383-7265 | 521-6433 |
| 391-6308 | 552-3344 | 398-1579 | 558-3582 | 417-2321 | 575-8544 |
| 315-8091 |          |          |          |          |          |

### Asphalt Pavers

AP300D

### Backhoe Loaders

|       |       |       |      |       |       |
|-------|-------|-------|------|-------|-------|
| 416E  | 432E  | 416F2 | 432F | 420F  | 432F2 |
| 420F2 | 434E  | 422E  | 434F | 426F2 | 434F2 |
| 428E  | 442E  | 428F  | 444E | 428F2 | 444F  |
| 430F  | 444F2 |       |      |       |       |

### Gensets

D40 D50 D60 DE68E3 DE88E0 DE88E3  
DE110E2 DE110E3 XQP60

### Wheel Loaders

910K 914K 920K

### Hydraulic Excavators

312D2 313D2

### Telehandlers

TH336C TH414C TH337C TH417C TH406C TH514C  
TH407C

### Vibratory Compactors

CS10 CS11 CS12

# CATERPILLAR C4.4T/TA 9269

## EQUIPMENT MODELS

### Engine Arrangement

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 242-1329 | 362-9387 | 254-9233 | 378-4730 | 288-5219 | 384-6683 |
| 288-5220 | 386-6652 | 313-1226 | 417-2322 | 319-5615 | 435-1677 |
| 369-9302 | 435-1669 | 383-7321 | 435-1676 | 383-7322 |          |

### Backhoe Loaders

|      |      |
|------|------|
| 420E | 430E |
|------|------|

### Telehandlers

|        |        |
|--------|--------|
| TH336C | TL943C |
|--------|--------|

### Vibratory Compactors

|       |      |       |       |      |       |
|-------|------|-------|-------|------|-------|
| CB44B | CS54 | CB54B | CS54B | CP44 | CS64B |
| CS44  | CW34 |       |       |      |       |

### Caterpillar

|        |         |         |        |        |         |
|--------|---------|---------|--------|--------|---------|
| D3K XL | D4K LGP | D3K LGP | D5K XL | D4K XL | D5K LGP |
|--------|---------|---------|--------|--------|---------|

### Gensets

|        |         |        |         |        |
|--------|---------|--------|---------|--------|
| DE65E3 | DE110E2 | DE88E0 | DE110E3 | DE88E3 |
|--------|---------|--------|---------|--------|

### Wheel Loaders

|       |
|-------|
| 914G2 |
|-------|

# CATERPILLAR C4.4T/TA 9905

## EQUIPMENT MODELS

### Engine Arrangement

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 242-1346 | 380-3644 | 242-1347 | 381-7577 | 254-0115 | 381-7578 |
| 264-6804 | 384-6680 | 285-3201 | 384-6681 | 298-5087 | 435-1671 |
| 355-5617 | 435-1684 | 355-5618 | 435-1685 | 362-9386 | 435-1695 |
| 369-7852 | 438-5085 | 369-7854 | 438-5086 | 369-7856 | 442-6157 |
| 380-3645 |          |          |          |          |          |

### Asphalt Pavers

|        |        |        |        |
|--------|--------|--------|--------|
| AP500E | AP555E | BG500E | BG555E |
|--------|--------|--------|--------|

### Gensets

|        |      |        |         |        |         |
|--------|------|--------|---------|--------|---------|
| D80    | D100 | DE65E3 | DE110E2 | DE88E0 | DE110E3 |
| DE88E3 |      |        |         |        |         |

### Wheel Loaders

|       |       |         |         |
|-------|-------|---------|---------|
| M313D | M315D | M315 D2 | M317 D2 |
|-------|-------|---------|---------|

### Backhoe Loaders

|      |
|------|
| 450E |
|------|

### Telehandlers

|         |         |
|---------|---------|
| TL1055C | TL1255C |
|---------|---------|

### Vibratory Compactors

|      |      |
|------|------|
| CB54 | CB64 |
|------|------|

# CATERPILLAR C6.6 7475

## EQUIPMENT MODELS

### Arrangement Number

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 242-1319 | 242-1327 | 242-1348 | 242-1349 | 242-1350 | 242-1356 |
| 242-1357 | 242-1382 | 242-1385 | 242-1399 | 247-7088 | 257-6932 |
| 257-8006 | 264-0593 | 283-6282 | 284-5729 | 292-5305 | 292-5306 |
| 301-3356 | 301-3357 | 301-3360 | 301-3361 | 318-8074 | 319-7200 |
| 319-7201 | 319-7202 | 319-7261 | 361-1612 | 361-1613 | 361-1614 |
| 362-9381 | 362-9392 | 367-6735 | 367-6736 | 367-6737 | 367-6738 |
| 368-1859 | 368-4773 | 369-7838 | 369-7839 | 369-7840 | 369-7841 |
| 369-7842 | 369-7843 | 369-7844 | 369-7845 | 369-7846 | 369-7847 |
| 369-7848 | 370-3677 | 378-1549 | 378-4731 | 378-4732 | 381-7571 |
| 381-7572 | 381-7573 | 381-7574 | 381-7575 | 381-7576 | 384-6682 |
| 388-1878 | 393-2216 | 435-1668 | 435-1670 | 435-1672 | 435-1674 |
| 435-1678 | 435-1679 | 435-1681 | 435-1682 | 435-1688 | 435-1691 |
| 435-1693 | 435-1694 | 435-1696 | 435-1697 | 454-2921 | 454-2923 |
| 458-2400 | 461-7981 | 461-8932 | 461-8933 | 462-0676 | 462-0677 |
| 462-1057 | 469-9730 | 492-0875 | 493-5254 | 539-4769 | 539-6726 |
| 539-6728 | 539-6733 | 539-7818 | 543-1897 | 543-6310 |          |

### Machine Models

|                   |                   |                        |                       |                   |                   |
|-------------------|-------------------|------------------------|-----------------------|-------------------|-------------------|
| 120M - Grader     | 12M - Grader      | 2470C - Feller Buncher | 320D - Feller Buncher | 323D - Excavator  | 613G - Excavator  |
| M316D - Excavator | M318D - Excavator | M322D - Excavator      | 924H - Scraper        | 930H - Loader     | 928H - Loader     |
| 928HZ - Loader    | 938H - Loader     | IT38H - Loader         | 953D - Loader         | AP655D - Paver    | CS56 - Compactor  |
| CP56 - Compactor  | CS64 - Compactor  | CS74 - Compactor       | CP74 - Compactor      | CS56B - Compactor | CS68B - Compactor |
| CP68B - Compactor | CS76 - Compactor  | CP76 - Compactor       | CS78B - Compactor     | CS74B - Compactor | CP74B - Compactor |
| CS79B - Compactor | D5R - Dozer       | D6K - Dozer            | D6N - Dozer           |                   |                   |

# CATERPILLAR C6.6 2224

## EQUIPMENT MODELS

### Arrangement Number

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 242-1358 | 266-4556 | 266-4557 | 266-4558 | 270-0059 | 270-0060 |
| 270-0069 | 270-0070 | 270-0071 | 270-0072 | 272-4908 | 274-1171 |
| 274-1174 | 274-1175 | 274-1179 | 274-1180 | 274-1181 | 274-1182 |
| 274-1183 | 274-1184 | 274-1185 | 274-1186 | 274-9042 | 276-8689 |
| 278-4267 | 278-4268 | 278-4269 | 278-4270 | 278-4271 | 278-4272 |
| 278-4273 | 278-4275 | 278-4277 | 278-4285 | 279-3956 | 284-4624 |
| 284-4634 | 284-4635 | 284-4637 | 285-3417 | 285-3418 | 285-3419 |
| 288-5168 | 288-5169 | 288-5172 | 288-5177 | 288-5180 | 288-5181 |
| 288-5186 | 291-0361 | 291-0362 | 291-0363 | 291-1766 | 291-1767 |
| 291-1768 | 292-5296 | 292-5298 | 292-5302 | 294-7196 | 295-2161 |
| 295-2164 | 300-5062 | 300-5063 | 300-5065 | 300-5070 | 300-5075 |
| 300-5076 | 300-5077 | 301-3361 | 302-8566 | 302-8574 | 302-8578 |
| 305-0471 | 308-5595 | 308-5597 | 310-6944 | 310-6950 | 310-6953 |
| 313-1210 | 313-1217 | 313-1229 | 321-3053 | 321-3054 | 321-3057 |
| 324-7133 | 329-3148 | 329-3154 | 329-3157 | 329-3164 | 335-1529 |
| 335-1532 | 335-1535 | 335-1537 | 335-1547 | 340-5322 | 340-5325 |
| 344-4808 | 344-4817 | 344-4818 | 345-0170 | 345-0171 | 348-8485 |
| 348-8490 | 356-7057 | 361-1611 | 361-4530 | 361-4531 | 362-9118 |
| 362-9373 | 362-9385 | 362-9389 | 369-1651 | 369-1652 | 370-2936 |
| 370-2937 | 370-5532 | 371-8073 | 371-8074 | 371-8075 | 371-8076 |
| 372-0846 | 372-0847 | 372-4498 | 372-4499 | 372-4500 | 372-4502 |
| 373-1620 | 373-1621 | 373-1624 | 373-8066 | 373-8069 | 373-8073 |
| 373-8077 | 373-8078 | 373-8088 | 374-0419 | 375-4010 | 375-4011 |
| 375-4014 | 376-4677 | 376-4679 | 376-4680 | 378-1551 | 378-1552 |
| 378-1553 | 378-1554 | 381-7590 | 384-6666 | 384-6675 | 387-1624 |
| 387-8148 | 387-8149 | 390-3314 | 390-5139 | 390-5140 | 391-1914 |
| 393-6997 | 395-0737 | 396-4489 | 397-1545 | 398-1578 | 420-4741 |
| 423-8913 | 423-8917 | 431-1749 | 433-2678 | 435-1673 | 435-1686 |
| 435-1689 | 435-1690 | 435-1698 | 435-3722 | 435-3727 | 438-0897 |
| 441-5483 | 444-1460 | 444-1464 | 444-1468 | 448-2161 | 450-3601 |
| 450-3602 | 451-2882 | 451-2895 | 454-6984 | 454-6985 | 460-0600 |
| 463-8914 | 539-6732 | 539-7807 |          |          |          |



# YANMAR 3TNE84

## EQUIPMENT MODELS

### Kobelco

35SR - Excavator    SK035 - Excavator    LK40Z - Loader    SK030-2 - Excavator    SK30UR - Excavator    SK35SR - Excavator

### Gravelly

PRO CHIP  
944 -  
Chipper

### Komatsu Engine Model

|           |           |             |             |           |           |
|-----------|-----------|-------------|-------------|-----------|-----------|
| 3D84E-1FB | 3D84E-2FB | 3D84E-3A    | 3D84E-3B    | 3D84E-3F  | 3D84E-3K  |
| 3D84E-3K  | 3D84E-3LN | 3D84E-FX-AB | 3D84E-5X-AB | 3D84N-2AA | S3D84E-3B |
| S3D84E-3A | S3D84E-3C | 3D84E       | S3D84E      |           |           |

### Komatsu

|                        |                      |                      |                       |                        |                      |
|------------------------|----------------------|----------------------|-----------------------|------------------------|----------------------|
| GC50-1 - Road Cutter   | JV25CW-2 - Roller    | JV25DW-2 - Roller    | JV25W-2 - Roller      | JV40CW-3 - Roller      | JV40DW-3 - Roller    |
| MX35 - Excavator       | PC20-6 - Excavator   | PC25-1 - Excavator   | PC30-6 - Excavator    | PC30-7 - Excavator     | PC30MR-1 - Excavator |
| PC30MR-1-K - Excavator | PC30MR-3 - Excavator | PC30MR-5 - Excavator | PC30MRX-1 - Excavator | PC30R-8 - Excavator    | PC30UU - Excavator   |
| PC30UU-3 - Excavator   | PC30UU-6 - Excavator | PC35R-7 - Excavator  | PC35R-8 - Excavator   | PC35MRX-1A - Excavator | PC38UU-1 - Excavator |
| PC38UU-2 - Excavator   | PC38UU-3 - Excavator | SK05J-2 - Skid Steer | SK07-2 - Skid Steer   | WA30-2 - Loader        | WA30-5-NA - Loader   |
| WA30-5-W - Loader      | WA30-5-X - Loader    | WA40-3 - Loader      | WA40-3RS-X - Loader   | WA40-3SF-X - Loader    | WA40-3-X - Loader    |
| WA50-3 - Loader        | WA50-3-X - Loader    |                      |                       |                        |                      |

### Hitachi

LX30-2 - Loader

### Kohler Generators

10ROY    10ROZ    10R091    11.5EFOZ    12KW    14EFOZ  
13EFOZ    15EOZ    15.5EOZ

### Doosan

602 PLUS - Loader    DSL602 - Loader

# YANMAR 4TNE84

## EQUIPMENT MODELS

### Yanmar

YEG400DSHQYEG400DSHSYEG400DTHQYEG400DTHSYEG400DTHSPRO CHIP  
- Generator - Generator - Generator - Generator 5B - 944 -  
Generator Chipper

### Kobelco

SK40SR-2 -  
Excavator

### Komatsu

BC70 - Drill Machine      PC45-1 - Excavator      PC40-7 - Excavator      PC40R-8 - Excavator      PC45R-8 - Excavator      PC40MRX-1-E -  
Excavator  
PC45MRX-1-E -      RAM700-3 - Backhoe      SK510 - Skid Steer      SK815 - Skid Steer      SK820 - Skid Steer      SK820-5 - Skid Steer  
Excavator

### Komatsu Engine Models

4D84E-3FB    4D84E-3B    4D84E-3C    4D84E-3D    S4D84E-  
1FD      4D84E-3E  
4D84E

### Yanmar Engine Models

4TNE84-AF    4TNE84-  
GB2B      4TNE84-  
EAF

### Daewoo

1340XL -    602 Plus -    DSL601 -  
Skid Steer    Skid Steer    Skid Steer

### Mustang

2040      2042      2044      2050

# YANMAR 3TNE88

## EQUIPMENT MODELS

### Yanmar

B37-2B - Excavator  
B37V - Excavator  
B37V-1 - Excavator  
ViO40 - Excavator  
ViO40-1 - Excavator  
ViO40-2 - Excavator  
ViO45 - Excavator

### Komatsu

PC40FR-1 - Excavator  
PC40FR-2 - Excavator  
ZHM1500-2 - Mower

### Landini-Tractors

MISTRAL 38  
MISTRAL 40

### Yanmar Engine Model

|             |             |              |            |              |             |
|-------------|-------------|--------------|------------|--------------|-------------|
| 3TNE88-ACG  | 3TNE88-ACGD | 3TNE88-AGD   | 3TNE88-AMU | 3TNE88-BUE   | 3TNE88-CR   |
| 3TNE88-EG1A | 3TNE88-GIA  | 3TNE88-G1A01 | 3TNE88-LAN | 3TNE88-MC-EK | 3TNE88-MC-K |
| 3TNE88-NSR  | 3TNE88-PG   | 3TNE88-SA    | 3TNE88-TB  | 3TNE88-YC    | 3TNE88-TB   |
| 3TNE88-TB1  | 3TNE88-ETB  | 3TNE88-ETB1  |            |              |             |

### Mustang

2032 - Skid Steer

### Gehl

SL3635 - Skid Steer  
3635 - Skid Steer  
3935 - Skid Steer

### Takeuchi

TB135 - Excavator  
TTR4400 - Tractor  
QAS15 - Generator

### Komatsu Engine Models

3D88E-3A  
3D88-3B  
3D88E  
3D88

### Kohler-Generators

11EFOZ  
13EOZ

# YANMAR 4TNE88

## EQUIPMENT MODELS

### Yanmar Engine Models

|             |             |             |             |             |              |
|-------------|-------------|-------------|-------------|-------------|--------------|
| 4TNE88-ACG  | 4TNE88-ACGD | 4TNE88-AD   | 4TNE88-ADEL | 4TNE88-AGD  | 4TNE88-BEN   |
| 4TNE88-BUE  | 4TNE88-EACG | 4TNE88-EAD  | 4TNE88-EAD1 | 4TNE88-EADS | 4TNE88-EC1MC |
| 4TNE88-EFL  | 4TNE88-EG1A | 4TNE88-GR   | 4TNE88-HP   | 4TNE88-YS   | 4TNE88-IKA   |
| 4TNE88-LAN  | 4TNE88-M-EK | 4TNE88-MS   | 4TNE88-NS   | 4TNE88-NSR  | 4TNE88-NSW   |
| 4TNE88-PG   | 4TNE88-P2   | 4TNE88-SA   | 4TNE88-TB   | 4TNE88-TB1  | 4TNE88-ETB   |
| 4TNE88-ETB1 | 4TNE88-ETBZ | 4TNE88-EYBC |             |             |              |

### Komatsu Engine Models

|          |            |             |           |          |          |
|----------|------------|-------------|-----------|----------|----------|
| 4D88E-3A | 4D88E-3B   | 4D88E-3C    | 4D88E-3GB | 4D88E-3H | 4D88E-3D |
| 4D88E-3F | 4D88E-3C-M | 4D88E-3C-04 | 4D88E     |          |          |

### Case

|                  |                   |
|------------------|-------------------|
| CX47 - Excavator | CX50B - Excavator |
|------------------|-------------------|

### Kohler

19EOZ

### Landini

MISTRAL  
50 - Tractor

### Yanmar

|                    |                    |                     |                     |                   |                  |
|--------------------|--------------------|---------------------|---------------------|-------------------|------------------|
| B50-2A - Excavator | B50-2B - Excavator | B6-3 - Excavator    | B6U - Excavator     | B6U-1 - Excavator | B7-5 - Excavator |
| B7-5A - Excavator  | ViO50 - Excavator  | ViO50-1 - Excavator | ViO50-2 - Excavator | ViO55 - Excavator |                  |

### Hyundai

HSL610

### Kobelco-Excavators

|     |      |          |          |     |     |
|-----|------|----------|----------|-----|-----|
| B84 | CX47 | SK45SR-2 | SK50UR-3 | Z75 | Z76 |
|-----|------|----------|----------|-----|-----|

### Komatsu

|                          |                          |
|--------------------------|--------------------------|
| CD30R-1 - Tracked Dumper | CR30R-1 - Tracked Dumper |
|--------------------------|--------------------------|

### Mustang

|      |      |                  |
|------|------|------------------|
| 2050 | 2054 | 940 - Skid steer |
|------|------|------------------|

# YANMAR 4TNE94

## EQUIPMENT MODELS

### Yanmar Engine Models

|                |                |                 |                |                |                |
|----------------|----------------|-----------------|----------------|----------------|----------------|
| 4TNE94-<br>ACG | 4TNE94-<br>DBW | 4TNE94-<br>DBWK | 4TNE94-<br>EIK | 4TNE94-<br>G1A | 4TNE94-<br>HLB |
| 4TNE94-<br>HYB | 4TNE94-SA      | 4TNE94-SF       | 4TNE94-<br>SFW | 4TNE94-WI      |                |

### Clark Equipment

|                    |                    |                    |
|--------------------|--------------------|--------------------|
| C20D -<br>Forklift | C25D -<br>Forklift | C30D -<br>Forklift |
|--------------------|--------------------|--------------------|

### Hyundai

|                           |                          |                               |
|---------------------------|--------------------------|-------------------------------|
| Robex 55-3<br>- Excavator | Robex 55W<br>- Excavator | Robex<br>55W-3 -<br>Excavator |
|---------------------------|--------------------------|-------------------------------|

### Komatsu

|                     |                     |                     |                     |                     |                      |
|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|
| 500PD-14 - Forklift | D20P-7 - Dozer      | D20A-7-M - Tractor  | D20P-7A-M - Tractor | D20PL-7-M - Tractor | D20PLL-7-M - Tractor |
| D20Q-7-M - Tractor  | D21P-7A-M - Tractor | D21PL-7-M - Tractor | D21Q-7-M - Tractor  | FD20 - Forklift     | FD20T - Forklift     |
| FD20T-14 - Forklift | FD25 - Forklift     | FD30 - Forklift     | FD30T-14 - Forklift | P60-BXD - Forklift  | FG25T-12 - Forklift  |
| D20S-7-M - Loader   | D21S-7-M - Loader   | WA65-3 - Loader     | WA65PT-3 - Loader   | WA75-3 - Loader     |                      |

### Landini

TREKKER  
60F -  
Tractor

### Komatsu Engine Models

4D94E-1A 4D94E

### Yanmar

B55W -  
Excavator

B55W-1 -  
Excavator

### Daewoo

SOLAR 55V  
- Excavator

### Atlas Copco

QAS28 -  
Generator

# YANMAR 4TNE98 DIRECT INJECTION

## EQUIPMENT MODELS

### Hyundai

HSL810 - R80-CR-9 -  
Skid Steer Excavator

### Komatsu

|                     |                     |                    |                     |                      |                      |
|---------------------|---------------------|--------------------|---------------------|----------------------|----------------------|
| D21A-7T-M - Tractor | D21P-7T-M - Tractor | XD30 - Forklift    | FD20TH - Forklift   | FD30H - Forklift     | PC70FR-1 - Excavator |
| PC75R-1 - Excavator | PC75R-2 - Excavator | PW75-1 - Excavator | PW75R-2 - Excavator | SK09J-2 - Skid Steer | WA75-3 - Loader      |
| WA85-3 - Loader     | WB70A - Loader      | WB70A-1 - Backhoe  |                     |                      |                      |

### Komatsu Engine Models

4D98E-1A- 4D98E-1C 4D98E-1FB 4D98E  
TR

### Takeuchi

TL130

### Yanmar Engine Model

|            |              |            |            |            |            |
|------------|--------------|------------|------------|------------|------------|
| 4TNE98-ACG | 4TNE98-ACG24 | 4TNE98-AD  | 4TNE98-ADS | 4TNE98-AG  | 4TNE98-AMM |
| 4TNE98-DB  | 4TNE98-FB    | 4TNE98-G1A | 4TNE98-HYS | 4TNE98-KM  | 4TNE98-NSR |
| 4TNE98-SA  | 4TNE98-TB    | 4TNE98-TBZ | 4TNE98-TBL | 4TNE98-TBW | 4TNE98-TBA |
| 4TNE98-TLB | 4TNE98-WI    |            |            |            |            |

### Doosan

SOLAR 75-  
V -  
Excavator

### Yanmar

ViO70 - ViO70-2 - ViO75 -  
Excavator Excavator Excavator

### Kohler

32EOZ -  
Generator

### Mustang

MTL16 -  
Loader

### Atlas Copco

QAS38 - QAS38 24  
Generator Volt -  
Generator

# YANMAR 4TNE106D

## EQUIPMENT MODELS

### Yanmar Engine Models

4TNE106D-AMM   4TNE106D-G1   4TNE106D-G1A   4TNE106D-GE   4TNE106D-SA   4TNE106D-TB

### Gehl

7600 - Skid Steer   SL7600 - Skid Steer

### Komatsu

PC95R-2 - Excavator   PW95R-2 - Excavator   WA115-3 - Loader   WA90-3 - Loader   WA95-3 - Loader   WB140-2 - Backhoe  
WB140-2N - Backhoe   WB140PS-2 - Backhoe   WB140PS-2N - Backhoe   WB150-2 - Backhoe   WB150-2N - Backhoe   WB150AWS-2 - Backhoe  
WB150AWS-2N - Backhoe   WB150PS-2 - Backhoe   WB150PS-2N - Backhoe   WB91R-2 - Backhoe

# YANMAR 3TNV84

## EQUIPMENT MODELS

### Yanmar Engine Models

|             |             |              |              |              |              |
|-------------|-------------|--------------|--------------|--------------|--------------|
| 3TNV84-K5FD | 3TNV84-BGKL | 3TNV84-BGMG  | 3TNV84-BKSA2 | 3TNV84-BMCU  | 3TNV84-BMNK  |
| 3TNV84-BXNK | 3TNV84-DUW  | 3TNV84-DZP01 | 3TNV84-DZP02 | 3TNV84-DZP03 | 3TNV84-GDG   |
| 3TNV84-GGE  | 3TNV84-GKL  | 3TNV84-GMG   | 3TNV84-GKM   | 3TNV84-GYM   | 3TNV84-GZG01 |
| 3TNV84-KMW  | 3TNV84-KSA  | 3TNV84-KSA2  | 3TNV84-KSA3  | 3TNV84-KUP   | 3TNV84-LUZ   |
| 3TNV84-MU2  | 3TNV84-NBK  | 3TNV84-NU1   | 3TNV84-Q1K   | 3TNV84-Q1KA  | 3TNV84-S1K   |
| 3TNV84-XKMR | 3TNV84-XWL  |              |              |              |              |

### Komatsu Engine Models

|                 |                 |                 |                  |                  |                 |
|-----------------|-----------------|-----------------|------------------|------------------|-----------------|
| 3D84E-5Q-<br>QB | 3D84E-5N-<br>BA | 3D84E-5X-<br>AB | S3D84E-<br>5X-AC | S3D84E-<br>5X-AB | S3D84-5X-<br>AB |
|-----------------|-----------------|-----------------|------------------|------------------|-----------------|

### Komatsu

|                          |                       |                         |                          |                        |                          |
|--------------------------|-----------------------|-------------------------|--------------------------|------------------------|--------------------------|
| JV25CW-3 - Roller        | JV25DW-3 - Roller     | PC30MR-2 - Excavator    | PC30MR-2-A - Excavator   | PC30MR-2-B - Excavator | PC30MR-2-C - Excavator   |
| PC30MR-2-D - Excavator   | SK510-5 - Excavator   | SR3000 - Chipper        | WA30-5 - Wheel Loader    | WA40-3 - Wheel Loader  | WA40-3-CB - Wheel Loader |
| WA40-3-CN - Wheel Loader | WA50-3 - Wheel Loader | WA50-3CB - Wheel Loader | WA50-3-CN - Wheel Loader |                        |                          |

### Marine Pleasure

|          |           |            |
|----------|-----------|------------|
| 3JH3 (*) | 3JH3E (*) | 3JH3CE (*) |
|----------|-----------|------------|



# YANMAR 4TNV84T

## EQUIPMENT MODELS

### Yanmar Engine Models

|              |              |               |              |               |              |
|--------------|--------------|---------------|--------------|---------------|--------------|
| 4TNV84T-XVS  | 4TNV84T-ZDVS | 4TNV88-BDVS   | 4TNV84T-BGGE | 4TNV84T-BGKL  | 4TNV84T-BGMG |
| 4TNV84T-BGYM | 4TNV84T-BMSA | 4TNV84T-BMSA2 | 4TNV84T-BPCU | 4TNV84T-DFM   | 4TNV84T-DMW  |
| 4TNV84T-DSA  | 4TNV84T-DSA3 | 4TNV84T-GGE   | 4TNV84T-GGEH | 4TNV84T-GGEHC | 4TNV84T-GKL  |
| 4TNV84T-GKM  | 4TNV84T-GKMR | 4TNV84T-GMG   | 4TNV84T-K5FD | 4TNV84T-K5FN  | 4TNV84T-KLAN |
| 4TNV84T-KSNV | 4TNV84T-KWA  | 4TNV84T-MWA   | 4TNV84T-XNSS | 4TNV84T-XTBL  | 4TNV84T-XWL  |

### Yanmar

ViO55 - Excavator  
ViO57 - Excavator

### Hi-Power Genset Model

HYW-20 T5   HYW-25 M5   HYW-25 T6   HYW-25 M6   HRYW-20 T5   HRYW-25 T6

### Komatsu

PC50MR-2 - Mini Excavator   SK815-5 TURBO - Skid Steer   SK816-6 - Skid Steer   SK820-5 TURBO - Skid Steer   SK820-6 - Skid Steer

### Landini

MISTRAL  
55 - Tractor

### Gehl

CTL55 -  
Skid Steer

### Komatsu Engine Models

S4D84E-5P-BA   S4D84E   S4D84E-5KFD

### Takeuchi

TL120 -  
Compact  
Loader

### New-Holland

T3040 -  
Tractor

### Kobelco

Z138 -  
Excavator

### Volvo

MC70 - Skid Steer   MC70C - Skid Steer

# YANMAR 3TNV88

## EQUIPMENT MODELS

### Yanmar Engine Models

3TNV88-BDCR  
3TNV88-DCR

3TNV88-BDVR  
3TNV88-DSAP

3TNV88-BKMW  
3TNV88-EMS

3TNV88-BPTB  
3TNV88-GYM

3TNV88-BPTB2  
3TNV88-MU2

3TNV88-BPYB  
3TNV88-NBK

### Yanmar

V3-6 - Loader  
ViO30 - Excavator  
ViO33 - Excavator  
ViO35 - Excavator

### Gehl

340 - Articulated Loader  
KL168 - Loader  
SL3635 - Skid Steer  
KL178 - Loader  
SL3840 - Skid Steer  
2026 - Skid Steer  
SL3935 - Skid Steer  
3640E - Skid Steer  
1448 - Asphalt Paver  
3840 - Skid Steer  
AP1448 +- Asphalt Paver

### Mustang

350Z NXT2 - Skid Steer  
2026 - Skid Steer  
2032 - Skid Steer

### Hitachi

ZX27U-2  
ZX27UNA-3  
ZX30UR-3

ZX30UR-2  
ZX29U-3  
ZX30UR-3U

ZX30U-2  
ZX29U-3F  
ZX33U-3

ZX35U-2  
ZX30U-3  
ZX33U-3F

ZX27U-3  
ZX30U-3F  
ZX35U-3U

ZX27U-3F  
ZX30U-3U  
ZX35UNA-3 Mini Excavator

ZX38U-3

ZX38U-3F

### Vermeer

SC372 - Stump Cutter

### Case

CX31B CX36B

### Marine Pleasure

3JH4 3JH5

### Rcg-Power

R-YM13

### Landini

4645 ISM-ARM 4645 VRM

### Dixie Chopper

XWD3500 - Mower  
XWD5000 - Mower

### Wacker Neuson

38Z3 VDS - Excavator  
2503 - Compact Excavator

### Komatsu Engine Models

3D88E-5P-BA 3D88E-6BP-DA 3D88E-6 3D88E 3D88E-5NFA

### Hi-Power Genset Model

HYW-13 T5 HYW-13 M5 HYW-14 M6 HYW-14 T6

### Volvo

EC27C - Excavator ECR38 - Excavator

### Takeuchi

TB135 TB138FR TB230 TB235 TB250

### Komatsu

PC35MR-2NA - Excavator PC35MR-2-NB - Excavator PC35MR-2-S - Excavator PC35MR-2-SB - Excavator PC30MR-3 - Excavator PC35MR-2-A - Excavator PC35MR-2-B - Excavator PC35MR-3 - Excavator PC35R-8 - Excavator WA30-6 - Wheel Loader

### New-Holland

T3010 E30B E30BSR E35B E35BSR E36B

### Kobelco

CX31 - Excavator Z82 - Excavator CX31B - Excavator Z83 - Excavator CX36 - Excavator Z83RP - Excavator CX36B - Excavator Z83RP CHN - Excavator SK30-5 - Excavator SK35SR-5 - Excavator

### Hyundai

R35Z7 - Excavator R35Z7A - Excavator

### Genmac

DUPLEX G15YO DYNAMIC G15YS

### Wacker

3001 - Dumper TTR4400 - Tractor

### Cub Cadet

EX2900 - Tractor EX3200 - Tractor SX3100 - Tractor

# YANMAR 4TNV88

## EQUIPMENT MODELS

### Yanmar Engine Models

|               |             |              |              |               |             |
|---------------|-------------|--------------|--------------|---------------|-------------|
| 4TNV88-BDAW   | 4TNV88-BDSA | 4TNV88-BPNKR | 4TNV88-BPTB  | 4TNV88-BDAW   | 4TNV88-BPNS |
| 4TNV88-BXPYBD | 4TNV88-DSA  | 4TNV88-DSAP  | 4TNV88-GGEH  | 4TNV88-GGEP   | 4TNV88-GKM  |
| 4TNV88-GYM    | 4TNV88-LU2  | 4TNV88-NBK   | 4TNV88-PTBZ1 | 4TNV88-QTB    | 4TNV88-XMS  |
| 4TNV88-XWL    | 4TNV88-N5FA | 4TNV88-K5FD  | 4TNV88-BPHB  | 4TNV88-BDHKS1 | 4TNV88-BNBK |
| 4TNV88-DAE    |             |              |              |               |             |

### Yanmar

YEG230DSLCEG230DSLSEYEG230DTLCYEG230DTLSVIO45 - VIO45-5B -  
- Generator - Generator - Generator - Generator Excavator Excavator  
VIO50 -  
Excavator

### Gehl

|                     |                    |                  |                   |                    |                    |
|---------------------|--------------------|------------------|-------------------|--------------------|--------------------|
| AP1648 - Paver      | 353 - Excavator    | 373 - Excavator  | 503Z - Excavator  | KL278 - Skid Steer | KL398 - Skid Steer |
| SL4240 - Skid Steer | 4240E - Skid Steer | 540 - Skid Steer | 540R - Skid Steer | 2044 - Skid Steer  | 2054 - Skid Steer  |
| 4240 - Loader       | 940 - Loader       | 2041 - Loader    |                   |                    |                    |

### Wacker Neuson

3503 VDS - Excavator  
50Z3 VDS - Excavator  
280 - Wheel Loader

### Volvo

MC60 - Skid Steer  
MC60B - Skid Steer  
EC35 - Excavator  
C45 - Excavator  
EC45 - Excavator  
ECR48C - Excavator

### Hi-Power-Genset-Model

HYW-17 T5  
HYW-20 M5  
HYW-20 M6  
HYW-20 T6  
HRYW-17 T5  
HRYW-20 T6

### Mustang

450Z NXT2 - Excavator  
1350R - Skid Steer  
1500R - Skid Steer  
2041 - Skid Steer  
2044 - Skid Steer  
2054 - Skid Steer  
2054B

### Takeuchi

TB53RF - Excavator  
TB145  
TB153FR - Excavator  
TB53FR  
TB250

### New-Holland

T3030 Tractor  
E55BX

### Hitachi-Excavators

ZX40U-2  
ZX40UR-3D  
ZX50U-3F  
ZX50U-2  
ZX40UR-3DU  
ZX50U-3U  
ZX40U-3  
ZX40UR-3U  
ZX50UNA-3  
ZX40U-3F  
ZX48U-3  
ZX52U-3  
ZX40U-3U  
ZX48U-3F  
ZX52U-3F  
ZX40UR-3  
ZX50U-3

### Kobelco-Excavators

CX50  
Z85RP  
CHN  
CX50B  
Z89  
CX55B  
Z76RP  
Z84  
Z85

### Kohler

20EOZD  
Marine  
Generator

### Komatsu Engine Models

4D88E-5X-AB  
4D88E-5X-AC  
4D88E-6  
4D88E-5X-BB  
4D88E-5X-BC  
4D88E-4D88E-5NFA  
4D88E-5KFD

### Komatsu

PC40MR-2 - Excavator  
WA50-6 - Loader  
PC40MR-2-AC - Excavator  
PC40MR-3 - Excavator  
PC50MR-2-AC - Excavator  
PC45MR-3 - Excavator  
PC50MR-3 - Excavator  
SK818-5 - Excavator  
PC45R-8 - Excavator  
PC55MR-3 - Excavator  
SK714-5 - Skid Steer  
PC50MR-2 - Excavator  
PC58UU-3 - Excavator  
SK815-5 - Skid Steer

### Clark Equipment

C20SD

### Genmac

DUPLEX G20YO-E  
DYNAMIC G20YS-E

### Husqvarna

FS4800D

### Jcb

G20RX  
G22QX  
G22X

### Rcg-Power

R-YM15  
R-YM18

### Terex

TC50 - Excavator

### Loadlifter

AR50 - Loader

### Landini Tractors

2-050  
4655 ISM-ARM  
4655 VRM

### Marine Pleasure

4JH4E  
4JH5E  
4JH4-TE  
4JH4-HTE

### Cub Cadet

EX450 - Tractor  
LX450 - Tractor

# YANMAR 4TNV94L

## EQUIPMENT MODELS

### Yanmar Engine Models

|               |               |               |               |               |               |
|---------------|---------------|---------------|---------------|---------------|---------------|
| 4TNV94L-NCKM  | 4TNV94L-NCKMK | 4TNV94L-NCKSK | 4TNV94L-NDL   | 4TNV94L-NHZ   | 4TNV94L-NWI   |
| 4TNV94L-PDBWE | 4TNV94L-PDBWK | 4TNV94L-PHYBC | 4TNV94L-PHYBW | 4TNV94L-PIK   | 4TNV94L-PIKA1 |
| 4TNV94L-PIKA2 | 4TNV94L-PLY   | 4TNV94L-SBK   | 4TNV94L-SFN   | 4TNV94L-SXZ   | 4TNV94L-XDB   |
| 4TNV94L-XDBC  | 4TNV94L-XDBK  | 4TNV94L-XDBKC | 4TNV94L-XHYB  | 4TNV94L-XHYBC | 4TNV94L-PHYBY |

### Hyundai

|                              |                                |                      |                       |
|------------------------------|--------------------------------|----------------------|-----------------------|
| 60-9S -<br>Mini<br>Excavator | R60W-9S -<br>Mini<br>Excavator | R55-7 -<br>Excavator | R55W-7 -<br>Excavator |
|------------------------------|--------------------------------|----------------------|-----------------------|

### Daewoo

SOLAR 55-  
V PLUS -  
Excavator

### Komatsu Engine Model

|                  |                  |                  |                |                  |        |
|------------------|------------------|------------------|----------------|------------------|--------|
| 4D94LE-2Z-<br>AD | 4D94LE-2Z-<br>AE | 4D94LE-2Z-<br>AB | 4D94LE-2<br>AC | 4D94LE-2Z-<br>AC | 4D94LE |
|------------------|------------------|------------------|----------------|------------------|--------|

### Landini

|                        |                             |
|------------------------|-----------------------------|
| GLOBUS 55<br>- Tractor | TREKKER<br>60F -<br>Tractor |
|------------------------|-----------------------------|

### Komatsu

|                                |                                  |                                 |                                |                                 |                                  |
|--------------------------------|----------------------------------|---------------------------------|--------------------------------|---------------------------------|----------------------------------|
| D21A-8-W -<br>Crawler<br>Dozer | D21P-8-W -<br>D21P-8<br>Dozer    | D20A-8 -<br>Crawler<br>Tractor  | D20P-8 -<br>Crawler<br>Tractor | D20PL-8 -<br>Crawler<br>Tractor | D20PLL-8 -<br>Crawler<br>Tractor |
| D21A-8 -<br>Crawler<br>Tractor | D21A-8E0 -<br>Crawler<br>Tractor | D21A-8T -<br>Crawler<br>Tractor | D21P-8 -<br>Crawler<br>Tractor |                                 |                                  |

### Volvo

|                      |                      |                      |                      |                       |                      |
|----------------------|----------------------|----------------------|----------------------|-----------------------|----------------------|
| EC55B -<br>Excavator | ECR58 -<br>Excavator | EW55B -<br>Excavator | EC55C -<br>Excavator | ECR58D -<br>Excavator | EC55C -<br>Excavator |
|----------------------|----------------------|----------------------|----------------------|-----------------------|----------------------|

# YANMAR 4TNV98

## EQUIPMENT MODELS

### Yanmar Engine Models

|              |              |               |              |              |              |
|--------------|--------------|---------------|--------------|--------------|--------------|
| 4TNV98-EPDBW | 4TNV98-EPHYB | 4TNV98-EPHYBU | 4TNV98-EPIK  | 4TNV98-EPIKA | 4TNV98-EPIKB |
| 4TNV98-ESDB6 | 4TNV98-ZNGT  | 4TNV98-ZNMS   | 4TNV98-ZNMS2 | 4TNV98-ZNTBL | 4TNV98-ZQTB  |
| 4TNV98-ZQTBZ | 4TNV98-ZWDB8 | 4TNV98-ZWDB8F | 4TNV98-X2FB  | 4TNV98-ZPIKB |              |

### Yanmar

|                        |                      |
|------------------------|----------------------|
| ViO80-1 -<br>Excavator | ViO82 -<br>Excavator |
|------------------------|----------------------|

### Hi Power-Gensets

|              |              |           |           |               |               |
|--------------|--------------|-----------|-----------|---------------|---------------|
| HYW-30<br>M5 | HYW-35<br>M6 | HYW-35 T5 | HYW-35 T6 | HRYW-35<br>T5 | HRYW-35<br>T6 |
|--------------|--------------|-----------|-----------|---------------|---------------|

### Doosan

|                        |                        |                      |                     |                      |                      |
|------------------------|------------------------|----------------------|---------------------|----------------------|----------------------|
| D20S-5 -<br>Lift Truck | D30S-5 -<br>Lift Truck | DX60R -<br>Excavator | DX55 -<br>Excavator | DX55W -<br>Excavator | DX80R -<br>Excavator |
|------------------------|------------------------|----------------------|---------------------|----------------------|----------------------|

### Gehl

|                                   |                            |                      |                         |                                 |                            |
|-----------------------------------|----------------------------|----------------------|-------------------------|---------------------------------|----------------------------|
| 4640E<br>Power2 -<br>Skid Steer   | 5240 - Skid<br>Steer       | R190 - Skid<br>Steer | SL4640E -<br>Skid Steer | 5240E<br>Power2 -<br>Skid Steer | CTL65 -<br>Track<br>Loader |
| RS5-19 -<br>Telescopic<br>handler | RT175 -<br>Track<br>Loader |                      |                         |                                 |                            |

### Takeuchi

|       |         |       |
|-------|---------|-------|
| TB175 | TB180FR | TL230 |
|-------|---------|-------|

### Landini

|                        |
|------------------------|
| ALPINE 65<br>- Tractor |
|------------------------|

### Ditch Witch-Directional Boring System

|      |       |
|------|-------|
| DX55 | DX55W |
|------|-------|

### Volvo

|                       |                      |                      |                      |                       |                      |
|-----------------------|----------------------|----------------------|----------------------|-----------------------|----------------------|
| MC80B -<br>Skid Steer | EC55C -<br>Excavator | EW60C -<br>Excavator | ECR88 -<br>Excavator | ECR88C -<br>Excavator | MC80 -<br>Skid Steer |
|-----------------------|----------------------|----------------------|----------------------|-----------------------|----------------------|

### Wacker Neuson

|                                  |                                 |                     |
|----------------------------------|---------------------------------|---------------------|
| 8003 Pivot<br>arm -<br>Excavator | 6003 Mono<br>arm -<br>Excavator | 75Z3 -<br>Excavator |
|----------------------------------|---------------------------------|---------------------|

### Komatsu

|                             |  |   |                        |                        |                         |
|-----------------------------|--|---|------------------------|------------------------|-------------------------|
| BM653F -<br>Hydra<br>Screen | CK20-1 -<br>Skid Steer<br>PC75R-2 -<br>Excavator | CK25-1 -<br>Skid Steer<br>PC80MR-3<br>- Excavator | FD20T-16 -<br>Forklift | FD28T-16 -<br>Forklift | FD35AT-16<br>- Forklift |
|-----------------------------|--|---|------------------------|------------------------|-------------------------|

### Mustang

|                      |                             |                             |                                   |                      |
|----------------------|-----------------------------|-----------------------------|-----------------------------------|----------------------|
| 519 -<br>Telehandler | 1750RT -<br>Track<br>Loader | MTL316 -<br>Track<br>Loader | 2056<br>Series II -<br>Skid Steer | 2066 - Skid<br>Steer |
|----------------------|-----------------------------|-----------------------------|-----------------------------------|----------------------|

### Terex

|                     |
|---------------------|
| TW70 -<br>Excavator |
|---------------------|

### Manitou

|           |
|-----------|
| MT 5519XT |
|-----------|

### Bobcat

|     |     |
|-----|-----|
| E60 | E80 |
|-----|-----|

### Kohler-Generators

|        |        |          |
|--------|--------|----------|
| 25EORZ | 28EQZD | 30EORZDB |
|--------|--------|----------|

### Daewoo

|           |
|-----------|
| SOLAR 75V |
|-----------|

### Hyundai

|       |       |        |       |       |        |
|-------|-------|--------|-------|-------|--------|
| R557A | R55 9 | R55W7A | R55W9 | R80 7 | R80 7A |
|-------|-------|--------|-------|-------|--------|

### Hitachi

|           |                |                               |
|-----------|----------------|-------------------------------|
| ZX60USB-3 | ZX60USB-<br>3F | ZX60USBNA-ZX65USB-<br>3<br>3F |
|-----------|----------------|-------------------------------|

# YANMAR 4TNV98 D2

## EQUIPMENT MODELS

### Yanmar Engine Models

|             |              |              |              |               |              |
|-------------|--------------|--------------|--------------|---------------|--------------|
| 4TNV98-GECS | 4TNV98-GGB1B | 4TNV98-NSA2  | 4TNV98-GGE   | 4TNV98-GGEH   | 4TNV98-GGEHC |
| 4TNV98-GGEP | 4TNV98-GGK   | 4TNV98-GGKM  | 4TNV98-GPGE  | 4TNV98-NKTC   | 4TNV98-NSAP  |
| 4TNV98-NWI  | 4TNV98-NXG   | 4TNV98-SBK   | 4TNV98-SCKS  | 4TNV98-SDF    | 4TNV98-SSA   |
| 4TNV98-SSU  | 4TNV98-STB1  | 4TNV98-VDB24 | 4TNV98-VHYB  | 4TNV98-VNS    | 4TNV98-VTBZ2 |
| 4TNV98-VTBZ | 4TNV98-XTBW  | 4TNV98-YTB   | 4TNV98-VTBZC | 4TNV98-VTBZC1 | 4TNV98-WTB   |
| 4TNV98-X2FB | 4TNV98-XDB   | 4TNV98-XKMR  | 4TNV98-YTBL  | 4TNV98-YTBL1  | 4TNV98-YTBL2 |

### Wacker Neuson

6503 Mono  
arm -  
Excavator

### Takeuchi

TL130      TB175 -  
Excavator

### Genmac

ALPHA      STRONG  
G30Y0\*      G30YS\*

### Rcg-Power

R-YM25      R-YM30      R-YM33

### Komatsu

PC75R-2 -      PC75R-      PW75R-2 -      WA90-3 -      WA95-3 -      WB70A-1 -  
Midi      2HD - Midi      Excavator      Wheel      Wheel      Backhoe  
Excavator      Excavator      Loader      Loader

### Ditch Witch-Directional Boring Systems

DX55      DX55W

### Doosan

D20S-5 -      D30S-5 -      DX55 -      DX55W -      DX60R -      DX80R -  
Lift truck      Lift truck      Crawler      Crawler      Crawler      Crawler  
Excavator      Excavator      Excavator      Excavator      Excavator      Excavator

### Hitachi-Excavators

ZX60USB-3      ZX60USB-      ZX60USBNA-ZX65USB-  
3F      3      3F

# YANMAR 4TNV98T

## EQUIPMENT MODELS

### Yanmar Engine Models

|              |             |               |               |              |                |
|--------------|-------------|---------------|---------------|--------------|----------------|
| 4TNV98T-GECS | 4TNV98T-GGE | 4TNV98T-GGEH  | 4TNV98T-GGEHC | 4TNV98T-GGEP | 4TNV98T-GPGE   |
| 4TNV98T-N2FN | 4TNV98T-NDI | 4TNV98T-NLANG | 4TNV98T-NNSV  | 4TNV98T-NSA  | 4TNV98T-NSA2   |
| 4TNV98T-NSAP | 4TNV98T-NSV | 4TNV98T-NU24  | 4TNV98T-SBK   | 4TNV98T-SHYB | 4TNV98T-SHYB24 |
| 4TNV98T-SFN  |             |               |               |              |                |

### Komatsu

|  |  |   |                                     |   |   |
|--|--|---|-------------------------------------|---|---|
| CK30-1 -<br>Compact<br>Track<br>Loader | CK35-1 -<br>Compact<br>Track<br>Loader | SK1020-5<br>TURBO -<br>Skid Steer<br>Loader | SK1020-5N<br>- Skid Steer<br>Loader | SK1026-5<br>TURBO -<br>Skid Steer<br>Loader | SK1026-5N<br>- Compact<br>Track<br>Loader |
| WA90-3 -<br>Wheel<br>Loader            | WA95-3 -<br>Wheel<br>Loader            |   |                                     |   |   |

### Hi Power

|                                   |                                   |           |           |               |               |
|-----------------------------------|-----------------------------------|-----------|-----------|---------------|---------------|
| HYW-40<br>M5<br>EAGLE<br>TUGSTT12 | HYW-45<br>M6<br>EAGLE<br>TUGSTT10 | HYW-45 T5 | HYW-45 T6 | HRYW-45<br>T5 | HRYW-45<br>T6 |
|-----------------------------------|-----------------------------------|-----------|-----------|---------------|---------------|

### Tractors

|         |          |          |               |
|---------|----------|----------|---------------|
| T80 4WD | T80N 4WD | EG782HMT | EG782M<br>4WD |
|---------|----------|----------|---------------|

### Terex

TC85 -  
Excavator

### Kohler

40WORZD

### Komatsu Engine Model

S4D98E-  
2NFN

### Genmac

|                 |                  |
|-----------------|------------------|
| ALPHA<br>G40YO* | STRONG<br>G40YS* |
|-----------------|------------------|

### Rcg-Power

|                 |               |                |                   |       |         |
|-----------------|---------------|----------------|-------------------|-------|---------|
| R-YM40<br>5640E | V270<br>6640E | V330<br>2100RT | CTL75<br>Yan T210 | 2700V | Yan S22 |
|-----------------|---------------|----------------|-------------------|-------|---------|

# YANMAR 4TNP98T 2

## EQUIPMENT MODELS

### Yanmar Engine Models

|              |               |               |                |                |               |
|--------------|---------------|---------------|----------------|----------------|---------------|
| 4TNP98T-ZGGE | 4TNP98T-ZGGEH | 4TNP98T-ZGPGE | 4TNP98T-ZNDI   | 4TNP98T-ZNIKB  | 4TNP98T-ZNMS  |
| 4TNP98T-ZNTB | 4TNP98T-ZNTBL | 4TNP98TL-ZNTG | 4TNP98T-ZNSA2D | 4TNP98T-ZSBK   | 4TNP98T-ZSLY  |
| 4TNP98T-ZSOM | 4TNP98T-ZSTBW | 4TNP98T-CR    | 4TNP98T-ZXNMS  | 4TNP98T-ZXNMS2 | 4TNP98T-ZXWTB |
| 4TNP98T-SBV  |               |               |                |                |               |

### Yanmar

SV100

### Gehl

|                       |                       |                      |                      |                            |                            |
|-----------------------|-----------------------|----------------------|----------------------|----------------------------|----------------------------|
| 5640E -<br>Skid Steer | 6640E -<br>Skid Steer | V270 - Skid<br>Steer | V330 - Skid<br>Steer | CTL75 -<br>Track<br>Loader | RT210 -<br>Track<br>Loader |
|-----------------------|-----------------------|----------------------|----------------------|----------------------------|----------------------------|

### Hi Power

|              |              |           |           |               |               |
|--------------|--------------|-----------|-----------|---------------|---------------|
| HYW-40<br>M5 | HYW-45<br>M6 | HYW-45 T5 | HYW-45 T6 | HRYW-45<br>T5 | HRYW-45<br>T6 |
|--------------|--------------|-----------|-----------|---------------|---------------|

### Mustang

|                      |                      |                       |                       |                             |                             |
|----------------------|----------------------|-----------------------|-----------------------|-----------------------------|-----------------------------|
| 2076 - Skid<br>Steer | 2086 - Skid<br>Steer | 2700V -<br>Skid Steer | 3300V -<br>Skid Steer | 2100RT -<br>Track<br>Loader | MTL320 -<br>Track<br>Loader |
|----------------------|----------------------|-----------------------|-----------------------|-----------------------------|-----------------------------|

### Takeuchi

|                       |                      |                              |                      |                      |                         |
|-----------------------|----------------------|------------------------------|----------------------|----------------------|-------------------------|
| TB175W -<br>Excavator | TB285 -<br>Excavator | TL240 -<br>Crawler<br>loader | Eagle Tugs<br>- TT12 | Eagle Tugs<br>- TT10 | Ergit Series<br>Tractor |
|-----------------------|----------------------|------------------------------|----------------------|----------------------|-------------------------|

### Volvo

|                      |                       |                        |                      |                      |
|----------------------|-----------------------|------------------------|----------------------|----------------------|
| MC90 -<br>Skid Steer | MC90B -<br>Skid Steer | MC110B -<br>Skid Steer | MT11 -<br>Skid Steer | MC80 -<br>Skid Steer |
|----------------------|-----------------------|------------------------|----------------------|----------------------|



# YANMAR 4TNV106

## EQUIPMENT MODELS

### Yanmar Engine Models

|                |               |               |               |                |                  |
|----------------|---------------|---------------|---------------|----------------|------------------|
| 4TNV106T       | 4TNV106-GGB1  | 4TNV106-S2FB  | 4TNV106-S2FA  | 4TNV106T-GGB1  | 4TNV106T-GGE     |
| 4TNV106T-GGL   | 4TNV106T-S2FA | 4TNV106T-S2FC | 4TNV106T-W2FB | 4TNV106T-XTBL1 | 4TNV106T-XTBL(*) |
| 4TNV106T-XTBL2 |               |               |               |                |                  |

### Takeuchi

TL150

### Komatsu

|                              |                                |                      |                      |                     |                          |
|------------------------------|--------------------------------|----------------------|----------------------|---------------------|--------------------------|
| BM393 - Hydra Screen         | BM595 - Hydra Screen           | BM798 - Hydra Screen | PC95R-2 - Excavator  | PW95R-2 - Excavator | WB91R-2 - Excavator      |
| PC110R-1 - Midi<br>Excavator | PW110R-1 - Mobile<br>Excavator | WB140-2N - Backhoe   | WB140PS-2N - Backhoe | WB150-2N - Backhoe  | WB150AWS-2N -<br>Backhoe |
| WB150PS-2N - Backhoe         |                                |                      |                      |                     |                          |

### Rcg-Power

R-YM50 R-YM60

# CUMMINS 4BT 3.9 PISTON (M): 7163

## EQUIPMENT MODELS

### Cummins CPLs

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 690  | 727  | 730  | 762  | 763  | 817  |
| 857  | 858  | 971  | 1201 | 1202 | 1268 |
| 1277 | 1508 | 1287 | 1631 | 1659 | 2021 |
| 2340 | 2414 |      |      |      |      |

### Case IH

|                   |                   |                     |
|-------------------|-------------------|---------------------|
| 5120 -<br>Tractor | 5220 -<br>Tractor | 8840 -<br>Windrower |
|-------------------|-------------------|---------------------|

### Case

|                 |                         |                |                     |                   |                 |
|-----------------|-------------------------|----------------|---------------------|-------------------|-----------------|
| 450C - Crawler  | 455C - Crawler          | 550 - Crawler  | 550E - Crawler      | 550G - Crawler    | 650G - Crawler  |
| 9010 - Crawler  | 570LXT - Backhoe        | 580K - Backhoe | 580L - Backhoe      | 580SE - Backhoe   | 580SK - Backhoe |
| 580SL - Backhoe | 688 - Crawler Excavator | 860 - Trencher | W11B - Wheel Loader | 95XT - Skid Steer |                 |

### Hyundai

|                                    |                                     |
|------------------------------------|-------------------------------------|
| R140W-9S -<br>Wheeled<br>Excavator | R140LC-9S<br>- Wheeled<br>Excavator |
|------------------------------------|-------------------------------------|

### Timberjack

|                    |
|--------------------|
| 230 -<br>Forwarder |
|--------------------|

### YTO

|                                  |
|----------------------------------|
| LRS1016 -<br>Pneumatic<br>Roller |
|----------------------------------|

# CUMMINS 4BTA 3.9 PISTON (M): 7156

## EQUIPMENT MODELS

### Cummins CPLs

|      |      |      |            |      |      |
|------|------|------|------------|------|------|
| 594  | 595  | 696  | 710        | 711  | 826  |
| 937  | 961  | 1173 | 1278       | 1520 | 1521 |
| 1525 | 1526 | 2377 | 741 Marine |      |      |

### Ingersoll Rand

PF161 -  
Asphalt  
Pavers

### Case

9010B - 9020 -  
Excavator Excavator

### Case IH

1800 - 5120 - 5150 - 6590 -  
Cotton Tractor Tractor Tractor  
Harvesters

### Skidder

Ranger  
F65G

# CUMMINS 4B 3.9 PISTON (M): 6223

## EQUIPMENT MODELS

### Cummins CPLs

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 591  | 681  | 721  | 725  | 791  | 843  |
| 895  | 981  | 0591 | 0681 | 0721 | 0591 |
| 0721 | 0791 | 0895 | 0725 | 1172 | 1259 |
| 1312 | 1522 | 1932 | 0791 | 0843 | 0895 |
| 0981 | 0681 | 0725 | 0843 | 0981 |      |

### CASE-IH

|                     |                     |                     |                     |
|---------------------|---------------------|---------------------|---------------------|
| 6000 -<br>Windrower | 6500 -<br>Windrower | 8820 -<br>Windrower | 8830 -<br>Windrower |
|---------------------|---------------------|---------------------|---------------------|

### CASE

|                              |                   |                         |                |                 |                          |
|------------------------------|-------------------|-------------------------|----------------|-----------------|--------------------------|
| 450C - Crawler               | 455C - Crawler    | 550 - Crawler           | 550E - Crawler | 480E - Backhoe  | 480E LL - Backhoe        |
| 480F - Backhoe               | 480F LL - Backhoe | 580L Series 1 - Backhoe | 580K - Backhoe | 580SE - Backhoe | 580SK - Backhoe          |
| 584E - Forklift              | 585E - Forklift   | 586E - Forklift         | 660 - Trencher | 760 - Trencher  | 1840 - Skid Steer Loader |
| 1845C - Skid Steer<br>Loader |                   |                         |                |                 |                          |

# CUMMINS 4BTA 3.9 PISTON (M): 8673

## EQUIPMENT MODELS

### Cummins CPLs

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 1965 | 1966 | 1967 | 2109 | 2142 | 2144 |
| 2302 | 2351 | 2359 | 2478 | 2528 | 2623 |
| 2672 | 2808 | 2857 | 2881 |      |      |

### Case IH

8860 - Windrower    8870 - Windrower

### CASE

|                                       |   |   |  |                                       |                                       |
|---------------------------------------|---|---|--|---------------------------------------|---------------------------------------|
| 90 XT - Skid Loader<br>650G - Crawler | 95 XT - Skid Loader<br>686G - Telescopic<br>handler | 570 LXT - Series 2<br>686 GXR - Telescopic<br>handler | 580 SL - Series 2<br>9010B - Excavator<br>8870 - Windrower | 580 L - Series 2<br>9020B - Excavator | 590 SL - Series 2<br>8860 - Windrower |
|---------------------------------------|---|---|--|---------------------------------------|---------------------------------------|

### Skidder

Ranger  
F65G

### Ingersoll Rand

PF161 -  
Asphalt  
Paver

# CUMMINS 6BT 5.9 PISTON (M): 7163

## EQUIPMENT MODELS

### Cummins CPL's

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 597  | 692  | 716  | 729  | 761  | 804  |
| 807  | 856  | 938  | 943  | 947  | 948  |
| 949  | 950  | 994  | 1160 | 1163 | 1168 |
| 1189 | 1207 | 1245 | 1246 | 1266 | 1279 |
| 1288 | 1289 | 1440 | 1627 | 1685 | 2049 |
| 2413 |      |      |      |      |      |

### Terex

|                               |                               |                               |
|-------------------------------|-------------------------------|-------------------------------|
| VDA 600 -<br>Asphalt<br>paver | VDA 621 -<br>Asphalt<br>paver | VDA 700 -<br>Asphalt<br>paver |
|-------------------------------|-------------------------------|-------------------------------|

### Case IH

|                   |                   |                   |                   |
|-------------------|-------------------|-------------------|-------------------|
| 1896 -<br>Tractor | 5140 -<br>Tractor | 5240 -<br>Tractor | 5250 -<br>Tractor |
|-------------------|-------------------|-------------------|-------------------|

### Case

|                     |                     |                    |                     |                   |                  |
|---------------------|---------------------|--------------------|---------------------|-------------------|------------------|
| W14B - Wheel Loader | W14C - Wheel Loader | 621 - Wheel Loader | 621B - Wheel Loader | 680L - Backhoe    | 780C - Backhoe   |
| 780D - Backhoe      | 850D - Crawler      | 850E - Crawler     | 855D - Crawler      | 855E - Crawler    | 855G - Crawler   |
| 880D - Crawler      | 888 - Excavator     | 1085B - Excavator  | 1085C - Excavator   | 1086B - Excavator | 1088 - Excavator |
| 1150E - Excavator   | 1150G - Excavator   | 1155E - Excavator  | 9030 - Excavator    | 9030B - Excavator | 8850 - Windrower |
| W14B - Wheel Loader | W14C - Wheel Loader |                    |                     |                   |                  |

### Hyundai

|                                    |                                     |
|------------------------------------|-------------------------------------|
| R210W-9S -<br>Wheeled<br>Excavator | R220LC-9S<br>- Crawled<br>Excavator |
|------------------------------------|-------------------------------------|

### Stavstroj

|                                     |                                   |                                    |
|-------------------------------------|-----------------------------------|------------------------------------|
| VV1400D -<br>Vibratory<br>Compactor | VV900 -<br>Vibratory<br>Compactor | VV900D -<br>Vibratory<br>Compactor |
|-------------------------------------|-----------------------------------|------------------------------------|

### YTO

|      |          |
|------|----------|
| YL25 | LGS1822B |
|------|----------|

# CUMMINS 6BTA 5.9 PISTON (M): 7156

## EQUIPMENT MODELS

### Cummins CPLs

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 599  | 600  | 698  | 712  | 715  | 742  |
| 792  | 834  | 912  | 940  | 961  | 962  |
| 983  | 998  | 1174 | 1209 | 1518 | 1519 |
| 1523 | 1524 | 1581 | 2050 | 2530 | 2891 |

### CASE Ih

|                   |                   |                            |                            |                   |                               |
|-------------------|-------------------|----------------------------|----------------------------|-------------------|-------------------------------|
| 1640 -<br>Combine | 1644 -<br>Combine | 1822 -<br>Cotton<br>Picker | 2022 -<br>Cotton<br>Picker | 2096 -<br>Tractor | 1800 -<br>Cotton<br>Harvester |
|-------------------|-------------------|----------------------------|----------------------------|-------------------|-------------------------------|

### Skidder

|                 |                |            |                |                |                |
|-----------------|----------------|------------|----------------|----------------|----------------|
| Ranger<br>F66DS | Ranger<br>F66G | Ranger F67 | Ranger<br>F667 | Ranger<br>F67G | Ranger<br>G67G |
|-----------------|----------------|------------|----------------|----------------|----------------|

### YTO

LRS2030 -  
Pneumatic  
Roller

# CUMMINS 6B 5.9 PISTON (M): 6223

## EQUIPMENT MODELS

### Cummins CPLs

|      |      |                     |                     |      |      |
|------|------|---------------------|---------------------|------|------|
| 596  | 691  | 714 - Marine Engine | 791 - Marine Engine | 802  | 845  |
| 0596 | 0691 | 0714                | 0802                | 960  | 999  |
| 1320 | 1403 | 1433                | 0845                | 0960 | 0999 |
| 0791 |      |                     |                     |      |      |

### Case IH

|                   |                   |
|-------------------|-------------------|
| 5130 -<br>Tractor | 5230 -<br>Tractor |
|-------------------|-------------------|

### Case

|                           |                           |                   |                   |                   |                   |
|---------------------------|---------------------------|-------------------|-------------------|-------------------|-------------------|
| 680K -<br>Backhoe         | 680L -<br>Backhoe         | 850D -<br>Crawler | 850E -<br>Crawler | 855D -<br>Crawler | 855E -<br>Crawler |
| W14B -<br>Wheel<br>Loader | W14C -<br>Wheel<br>Loader |                   |                   |                   |                   |



# CUMMINS 6BT 5.9 PISTON (M): 6632

## EQUIPMENT MODELS

### Cummins CPLs

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 1551 | 1552 | 1553 | 1888 | 1895 | 1914 |
| 1915 | 1916 | 2000 | 2175 | 2243 | 2249 |
| 2252 | 2253 | 2305 | 2347 |      |      |

### Terex

|                               |                               |                               |
|-------------------------------|-------------------------------|-------------------------------|
| VDA 600 -<br>Asphalt<br>Paver | VDA 621 -<br>Asphalt<br>Paver | VDA 700 -<br>Asphalt<br>Paver |
|-------------------------------|-------------------------------|-------------------------------|

### YTO

|                               |  |
|-------------------------------|--|
| YL25 -<br>Pneumatic<br>Roller | LGS1822B -<br>Static<br>Smooth<br>Drum<br>Roller |
|-------------------------------|--|

### Stavstroj

|                                     |                                   |                                    |
|-------------------------------------|-----------------------------------|------------------------------------|
| VV1400D -<br>Vibratory<br>Compactor | VV900 -<br>Vibratory<br>Compactor | VV900D -<br>Vibratory<br>Compactor |
|-------------------------------------|-----------------------------------|------------------------------------|

### Liu Gong

|                                  |
|----------------------------------|
| 614H -<br>Vibratory<br>Compactor |
|----------------------------------|

# CUMMINS 6BTA 5.9 PISTON (M): 2571

## EQUIPMENT MODELS

### Cummins CPL's

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 1549 | 1550 | 1815 | 1816 | 1863 | 1901 |
| 1959 | 1968 | 2022 | 2023 | 2174 | 2265 |
| 2268 | 2292 | 2308 | 2346 | 2349 |      |

### Skidder

|                  |                   |                 |                  |                  |                  |
|------------------|-------------------|-----------------|------------------|------------------|------------------|
| F66G -<br>Ranger | F66DS -<br>Ranger | F67 -<br>Ranger | F67G -<br>Ranger | G67G -<br>Ranger | F667 -<br>Ranger |
|------------------|-------------------|-----------------|------------------|------------------|------------------|

### LiuGong

614H -  
Vibratory  
compactors

### YTO

LRS2030 -  
Pneumatic  
Roller

# CUMMINS 6BTA 5.9 PISTON (M): 8673

## EQUIPMENT MODELS

### Cummins CPL's

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 1902 | 1948 | 1961 | 1962 | 2014 | 2015 |
| 2016 | 2071 | 2122 | 2146 | 2296 | 2303 |
| 2372 | 2373 | 2417 | 2538 | 2868 |      |

### LiuGong

614H

### Skidder

|              |             |                  |             |             |             |
|--------------|-------------|------------------|-------------|-------------|-------------|
| Ranger F66DS | Ranger F66G | Ranger F67 Cable | Ranger F67G | Ranger G67G | Ranger F667 |
|--------------|-------------|------------------|-------------|-------------|-------------|

### Case

|                     |                            |                              |                    |                    |                     |
|---------------------|----------------------------|------------------------------|--------------------|--------------------|---------------------|
| 90 XT - Skid Loader | 95 XT - Skid Loader        | 570 LXT - Series 2           | 580 L - Series 2   | 590 SL - Series 2  | 621C - Wheel Loader |
| 650 G - Crawler     | 686 G - Telescopic Handler | 686 GXR - Telescopic Handler | 9010 B - Excavator | 9020 B - Excavator |                     |

### Komatsu

|                          |                          |                           |                            |                          |                           |
|--------------------------|--------------------------|---------------------------|----------------------------|--------------------------|---------------------------|
| WA200-3 - Wheel Loader   | WA200-5 - Wheel Loader   | WA200-5 SS - Wheel Loader | WA250-3 - Wheel Loader     | WA250-3L - Wheel Loader  | WA250-5 - Wheel Loader    |
| WA250L-5 - Wheel Loader  | WA250PT-3 - Wheel Loader | WA250PT-3L - Wheel Loader | WA250PT-3MC - Wheel Loader | WA250PT-5 - Wheel Loader | WA250L-3 - Wheel Loader   |
| WA250PZ-5 - Wheel Loader | WA320-3 - Wheel Loader   | WA320-3CS - Wheel Loader  | WA320-5 - Wheel Loader     | WA320-5L - Wheel Loader  | WA250PTL-5 - Wheel Loader |

### Ingersoll Rand

PF161 - Asphalt Paver

### Case IH

|                  |                  |
|------------------|------------------|
| 8860 - Windrower | 8870 - Windrower |
|------------------|------------------|

### YTO

LRS2030 - Pneumatic Roller

# CUMMINS 6BTA 5.9 ISB PISTON (M): 6153

## EQUIPMENT MODELS

### Cummins CPL's

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 2024 | 2076 | 2077 | 2098 | 2446 | 2447 |
| 2448 | 2496 | 2497 | 2498 | 2512 | 2513 |
| 2514 | 2515 | 2516 | 2517 | 2518 | 2519 |
| 2569 | 2570 | 2571 | 2595 | 2596 | 2597 |
| 2616 | 2617 | 2618 | 2619 | 2660 | 2661 |
| 2662 | 2663 | 2685 | 2686 | 2687 | 2865 |
| 2902 | 2903 | 2904 | 2905 | 8030 | 8031 |
| 8032 | 8033 |      |      |      |      |

# CUMMINS 4BT 4.5 QSB

## EQUIPMENT MODELS

### Cummins CPL's

|       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|
| 1700  | 1701  | 2743  | 8725  | 8754  | 8755  |
| 8756  | 41100 | 41472 | 41700 | 41701 | 41703 |
| 42743 | 43172 | 44195 |       |       |       |

### Case

4000V - V400 - Skid  
Skid Steer Steer

### Antec

PW5000 -  
Asphalt  
Paver

### Komatsu

WA200-6 - WA200PZ-  
Wheel 6 - Wheel  
Loader Loader

### Hyundai

HL730-9S -  
Front  
Loader

### Dynapac

CA250

### Vibratory Compactors

|                     |                      |                     |                      |                      |                     |
|---------------------|----------------------|---------------------|----------------------|----------------------|---------------------|
| Ammann -<br>ASC110D | Ammann -<br>ASC110HD | Ammann -<br>ASC130D | Ammann -<br>ASC130HD | Ammann -<br>ASC150HD | Ammann -<br>ASC150D |
| Case -<br>SV212     | Case -<br>SV216      |                     |                      |                      |                     |

# CUMMINS 6BT 5.9 QSB PISTON (M): 7416

## EQUIPMENT MODELS

### Cummins CPL's

|      |      |      |      |       |      |
|------|------|------|------|-------|------|
| 8186 | 8187 | 8217 | 8236 | 8237  | 8276 |
| 8296 | 8298 | 8300 | 8304 | 8305  | 8306 |
| 8339 | 8340 | 8341 | 8400 | 8428  | 8485 |
| 8487 | 8488 | 8553 | 8554 | 40568 |      |

### Ingersoll Rand

|                              |                              |                              |                              |                              |
|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| PF2181 -<br>Asphalt<br>Paver | PF3172 -<br>Asphalt<br>Paver | PF3200 -<br>Asphalt<br>Paver | PF4410 -<br>Asphalt<br>Paver | PF5510 -<br>Asphalt<br>Paver |
|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|

### TADANO

GR300EX -  
Rough  
Terrain  
Crane

### Terex

|                              |                               |                             |                               |                             |                               |
|------------------------------|-------------------------------|-----------------------------|-------------------------------|-----------------------------|-------------------------------|
| CR452 -<br>Asphalt<br>Paver  | CR452RX -<br>Asphalt<br>Paver | CR462 -<br>Asphalt<br>Paver | CR462S -<br>Asphalt<br>Paver  | CR552 -<br>Asphalt<br>Paver | CR552RX -<br>Asphalt<br>Paver |
| CR562S -<br>Asphalt<br>Paver | CR562RX -<br>Asphalt<br>Paver | CR562 -<br>Asphalt<br>Paver | VR452RX -<br>Asphalt<br>Paver |                             |                               |

### Dynapac

PL600S -  
Cold Planer

### Madill

800 -  
Harvester

1800 -  
Harvester

# CUMMINS 6BT 6.7 QSB

## EQUIPMENT MODELS

### Cummins CPL's

|       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|
| 426   | 427   | 656   | 1584  | 1610  | 1629  |
| 2605  | 8466  | 8510  | 8610  | 8611  | 8615  |
| 8733  | 40426 | 40427 | 40656 | 41452 | 41584 |
| 41586 | 41610 | 41629 | 42605 | 42827 | 43068 |
| 43293 | 43460 | 43858 | 43859 | 43861 | 43862 |

### Dynapac

|                                     |                                     |                                     |                                     |                                     |                                     |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| SD2500CS<br>- Asphalt<br>Paver      | CA260PD -<br>Vibratory<br>Compactor | CA702PD -<br>Vibratory<br>Compactor | CA612PD -<br>Vibratory<br>Compactor | CA602PD -<br>Vibratory<br>Compactor | CA512PD -<br>Vibratory<br>Compactor |
| CA362PD -<br>Vibratory<br>Compactor | CT3000 -<br>Vibratory<br>Compactor  | CA260D -<br>Vibratory<br>Compactor  |                                     |                                     |                                     |

### JCB

|     |     |        |
|-----|-----|--------|
| 427 | 437 | 437 ZX |
|-----|-----|--------|

### Ingersoll Rand

|        |        |        |
|--------|--------|--------|
| PF6110 | PF6160 | PF6170 |
|--------|--------|--------|

### Svedala Demag

|         |        |
|---------|--------|
| DF145CS | DF145C |
|---------|--------|

### Skidder

|                       |                       |                       |                  |       |                       |
|-----------------------|-----------------------|-----------------------|------------------|-------|-----------------------|
| 220C - Harvester      | 230C - Harvester      | 234 - Harvester       | T234 - Harvester | 250B  | T250B                 |
| H250B                 | 604C                  | 610C                  | 620C             | E625C | 718E - Feller Buncher |
| 720E - Feller Buncher | 724E - Feller Buncher | 726E - Feller Buncher |                  |       |                       |

### Komatsu

|                              |                                 |                              |                               |                                 |
|------------------------------|---------------------------------|------------------------------|-------------------------------|---------------------------------|
| WA250-6 -<br>Wheel<br>Loader | WA250PZ-<br>6 - Wheel<br>Loader | WA320-6 -<br>Wheel<br>Loader | WA320-6N<br>- Wheel<br>Loader | WA320PZ-<br>6 - Wheel<br>Loader |
|------------------------------|---------------------------------|------------------------------|-------------------------------|---------------------------------|

### Hyundai

|          |         |
|----------|---------|
| HL757-9S | HL749-9 |
|----------|---------|

### TADANO

|  |                               |  |  |
|--|-------------------------------|--|--|
| GR300XL -<br>Rough<br>Terrain<br>Crane | 10010MX -<br>Crawler<br>Crane | GR350XL-2<br>- Rough<br>Terrain<br>Crane | GR350XL-1<br>- Rough<br>Terrain<br>Crane |
|--|-------------------------------|--|--|

### Ammann - Vibratory Compactors

|          |         |         |          |
|----------|---------|---------|----------|
| ASC200HD | ASC200D | ASC250D | ASC250HD |
|----------|---------|---------|----------|

### Vogele Vision

|        |        |        |        |
|--------|--------|--------|--------|
| 5100-2 | 5103-2 | 5200-2 | 5203-2 |
|--------|--------|--------|--------|

# CUMMINS 6CT 8.3 PISTON (M): 3163

## EQUIPMENT MODELS

### Cummins CPL's

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 602  | 603  | 753  | 819  | 828  | 955  |
| 985  | 1248 | 1274 | 1275 | 1281 | 1603 |
| 9820 |      |      |      |      |      |

### Case IH

|                |                |                |                |                |                      |
|----------------|----------------|----------------|----------------|----------------|----------------------|
| 1660 - Combine | 1666 - Combine | 1670 - Combine | 1680 - Combine | 2166 - Combine | 2044 - Cotton Picker |
| 7110 - Tractor | 7120 - Tractor | 7130 - Tractor | 7140 - Tractor | 7150 - Tractor | 7210 - Tractor       |
| 7220 - Tractor | 9110 - Tractor | 9130 - Tractor | 9210 - Tractor | 9230 - Tractor | 9240 - Tractor       |
| 9310 - Tractor |                |                |                |                |                      |

### Case

|                 |                |                   |                  |                   |                 |
|-----------------|----------------|-------------------|------------------|-------------------|-----------------|
| 721 - Loader    | 721B - Loader  | 821 - Loader      | 821B - Loader    | W36 - Loader      | 1150E - Crawler |
| 1155E - Crawler | 1550 - Crawler | 1187C - Excavator | 9040 - Excavator | 9040B - Excavator |                 |

### Hyundai

|                               |
|-------------------------------|
| R330LC-9S - Crawler Excavator |
|-------------------------------|



# CUMMINS 6CTA 8.3 PISTON (M): 3164

## EQUIPMENT MODELS

### Cummins CPL's

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 604  | 754  | 755  | 830  | 893  | 959  |
| 984  | 1212 | 1222 | 1270 | 1273 | 1321 |
| 1377 | 1539 | 1547 | 1612 | 1633 | 1804 |
| 1826 | 1903 | 2054 | 2380 | 9803 | 9883 |

### Case IH

|                      |                      |                |                |                      |                      |
|----------------------|----------------------|----------------|----------------|----------------------|----------------------|
| 1670 - Combine       | 1680 - Combine       | 1688 - Combine | 2188 - Combine | 1844 - Cotton Picker | 2044 - Cotton Picker |
| 2055 - Cotton Picker | 2155 - Cotton Picker | 7140 - Tractor | 7150 - Tractor | 9230 - Tractor       | 9240 - Tractor       |
| 9330 - Tractor       |                      |                |                |                      |                      |

### Case

6830TA -  
Power Unit

# CUMMINS 6CTA 8.3 PISTON (M): 9161

## EQUIPMENT MODELS

### Cummins CPL's

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 1845 | 1846 | 1943 | 1949 | 2007 | 2055 |
| 2056 | 2057 | 2060 | 2061 | 2062 | 2082 |
| 2118 | 2120 | 2185 | 2216 | 2218 | 2642 |
| 2833 | 2874 | 2894 |      |      |      |

### Shovel

EX300 LCH  
- Tata  
Hitachi

### Skidder

Ranger F68C    Ranger F68G

### Case

721C -  
Loader

### Case IH

2155 - Cotton Picker    2166 - Combine    2188 - Combine    2366 - Combine    2388 - Combine

### Komatsu

WA320-3L - Wheel Loader    WA320-3MC - Wheel Loader

# CUMMINS 6CTA 8.3 PISTON (M): 5878

## EQUIPMENT MODELS

### Cummins CPL's

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 1563 | 1569 | 1917 | 1920 | 1923 | 1972 |
| 2018 | 2101 | 2103 | 2106 | 2108 | 2193 |
| 2194 | 2196 | 2307 | 2532 | 2536 |      |

### Shovel

EX300 LCH  
- Tata  
Hitachi

### Skidder

Ranger  
F68C      Ranger  
F68G

# CUMMINS QSC 8.3 PISTON (M): 2106, 3446

## EQUIPMENT MODELS

### Cummins CPLs

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 2092 | 2230 | 2231 | 2232 | 2233 | 2234 |
| 2235 | 2236 | 2237 | 2241 | 2299 | 2688 |
| 2689 | 2690 | 2691 | 2692 | 2693 | 2694 |
| 2964 | 8088 | 8153 | 8203 | 8578 |      |

### Dynapac

F30CE -  
Asphalt  
Paver

### New Holland

TG255 TJ275

### Case IH

MX240 MX255 MX270

### Cold Planer

W120F - W130F -  
Wirtgen Wirtgen

### Skidder

630C - 635C - C640C -  
Tigercat Tigercat Tigercat

# KUBOTA 05 SERIES D1105 INDIRECT INJECTION

## EQUIPMENT MODELS

### BLAW KNOX

M-450 -  
Asphalt  
Paver

### DITCH WITCH

XT850 - Mini Skid Steer  
HT25 - Trenchers

### HITACHI

EX12-2 - Mini Excavator  
EX15-2 - Mini Excavator  
EX22 - Mini Excavator  
EX25-2 - Mini Excavator

### Kubota

|  |  |  |   |   |  |
|--|--|--|---|---|--|
| B2400D - Tractor<br>B2410HSE - Tractor       | B2400E - Tractor<br>B7610HSD - Tractor   | B2400HSD - Tractor<br>B2630HSD - Tractor   | B2400HSE - Tractor<br>B2620HSD - Tractor              | B2410HSD - Tractor<br>U25S - Compact<br>Excavator                   | B2410HSDB - Tractor<br>B26 - Loader backhoe<br>F2400 - Lawn Mowers<br>F2680E - Lawn Mowers |
| FZ2400 - Lawn Mowers<br>F2880F - Lawn Mowers | F2560 - Lawn Mowers<br>RTV1100CR (2007 -<br>2009) - Utility Vehicle<br>RTV1140CPX - Utility<br>Vehicle | F2560E - Lawn Mowers<br>RTV1100CR9 (2009<br>-2011) - Utility Vehicle<br>RTV1140CPXR - Utility<br>Vehicle | ZD28 - Lawn Mowers<br>RTV1100CRX - Utility<br>Vehicle | ZD28F - Lawn Mowers<br>RTV1100CW (2007 -<br>2009) - Utility Vehicle | RTV1100CW9 (2009 -<br>2011) - Utility Vehicle  |
| RTV1100CWX - Utility<br>Vehicle              |  |  |   |   |  |

### MANITOU

TMT 45 - Forklift  
TMT45FL - Forklift

### VERMEER

S600TX - Mini Loader  
S600T - Mini Loader

### BOBCAT

553 - Skid  
Steer

### SINOBOOM

GTSZ30J - Crawler  
Telescopic  
Work  
Platform

### GENIE

GS-4069 RT - Wheeled Scissor Lift  
GS-3369 RT - Wheeled Scissor Lift  
GS-2669 RT - Wheeled Scissor Lift

### HYUNDAI

HSL275T - Skid Steer

### JLG

340AJ - Articulating  
Boom Lift

### TAKEUCHI

TB 020 - Mini  
Excavator

# KUBOTA 05 SERIES V1505 INDIRECT INJECTION

## EQUIPMENT MODELS

### AUSA

C150H - Forklift    C150H X4 - Forklift    CH150X4 AWD - Forklift

### HITACHI

EX30-2 - Mini Excavator

### MILLER

Big Blue  
400 Pro - Welder

### BOBCAT

S100 - Skid Steer    425 - Mini Excavator

### CASE

1825B - Skid Steer    460 - Trencher

### KUBOTA

B2910HSD - Tractor    B7800HSD - Tractor    B3030HSD - Tractor    B3030HSDC - Tractor    B3000HSDC - Tractor    B3000HSDCC - Tractor  
B3030HSDCC - Tractor    B3200HSD - Tractor    B3200HSDW - Tractor    B3300SUHSD - Tractor    F3680 - Lawn Mowers

### SWINGER

1600 - Forklift

### VERMEER

S800TX - Mini Skid Steer

# KUBOTA 03 SERIES V2203 INDIRECT INJECTION

## EQUIPMENT MODELS

### Bobcat

|                         |                         |                             |                             |                          |                          |
|-------------------------|-------------------------|-----------------------------|-----------------------------|--------------------------|--------------------------|
| 331E - Mini Excavator   | 334 - Mini Excavator    | 337 (1997) - Midi Excavator | 341 (1997) - Midi Excavator | 753 - Skid Steer Loader  | 753B - Skid Steer Loader |
| 763 - Skid Steer Loader | 773 - Skid Steer Loader | S175 - Skid Steer Loader    | S185 - Skid Steer Loader    | 753H - Skid Steer Loader | 753L - Skid Steer Loader |

### Kubota

|                 |                 |                 |                        |                        |                       |                       |
|-----------------|-----------------|-----------------|------------------------|------------------------|-----------------------|-----------------------|
| L4200 - Tractor | L4300 - Tractor | L4310 - Tractor | KX121 - Mini Excavator | KX161 - Midi Excavator | KJ-T210VX - Generator | KJ-S150VX - Generator |
|-----------------|-----------------|-----------------|------------------------|------------------------|-----------------------|-----------------------|

### Denyo

DCA25ESK - Generator

# MITSUBISHI S4S INDIRECT INJECTION, NATURALLY ASPIRATED

## EQUIPMENT MODELS

### Gensets

BCM 33-50 E2    BCM 24-50SP E2    BCM 31-60    BCM 31-60SP    BCM 31-60 IT4    BCM 31-60SP IT4

### LS

U5030 - Tractor    U5030C - Tractor

### OEM

DH 30 - Generator    DS 30 - Generator    DHR 30 - Generator    G40WMI-2A-T4i - Generator    HB 25-45 - Generator    MI35TSX - Generator  
 TJ34MS - Generator    W-SQ 20 MOBILE - Generator  
 W-SQ 20 MARINE - Generator    W-SQ 22 MOBILE - Generator    W-SQ 22 MARINE - Generator    W-SQ 27 MOBILE - Generator    W-SQ 27 MARINE - Generator    W-SQ 32 MOBILE - Generator  
 W-SQ 32 MARINE - Generator

### Clark Equipment - Forklift Trucks

CDP20    CDP25    CDP30    CDP32    CGP20 (P365)    CGP20-30 (P365)  
 CGP25    CGP30 (P365)    CGP30

### Wheel-Loaders

VF363F

### Ingersoll Rand

S30 - Compressors    G30 - Compressors    G33 - Compressors    G34 - Compressors

### Marine

G-35M-15 - Generator    G-35T-15 - Generator    JF30-1500 - Generator    JF40-1500 - Generator    JF44-1500 - Generator    MINI-74 - Generator

### SDMO

R33C2 - Generator    T25C2M - Generator    T25C3M - Generator    T30U - Generator    T30UM - Generator    T33C3 - Generator  
 T33K - Generator    TM30 - Generator    TM30UCM - Generator

### Caterpillar

DP20N - Forklifts    DP25N - Forklifts    DP30N - Forklifts    DP35N - Forklifts



# INTERNATIONAL HARVESTER / NAVISTAR DT466 (ESN 440,036 – 532,980) / PERKINS 1300 SERIES (WB & WC BUILDS)

## EQUIPMENT MODELS

### Agricultural

1660 Early 1680 Early 5488 Late 7288 Late 7488

### WB - T6.466 / Industrial

|        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|
| WB5003 | WB5006 | WB5007 | WB5018 | WB5019 | WB5023 |
| WB5035 | WB5036 | WB5037 | WB7002 | WB7009 | WB7010 |
| WB7012 | WB7013 | WB7020 | WB7023 |        |        |

### WC - CC6.466

|                      |                     |                     |                     |                      |                      |
|----------------------|---------------------|---------------------|---------------------|----------------------|----------------------|
| WC5001 - F.G WILSON  | WC5002 - F.G WILSON | WC5009 - INDUSTRIAL | WC5010 - INDUSTRIAL | WC5012 - INDUSTRIAL  | WC5013 - INDUSTRIAL  |
| WC5014 - INDUSTRIAL  | WC5016 - INDUSTRIAL | WC5022 - INDUSTRIAL | WC5024 - INDUSTRIAL | WC5025 - INDUSTRIAL  | WC5026 - INDUSTRIAL  |
| WC5027 - INDUSTRIAL  | WC5030 - INDUSTRIAL | WC5033 - INDUSTRIAL | WC5038 - INDUSTRIAL | WC5040 - INDUSTRIAL  | WC5041 - INDUSTRIAL  |
| WC5042 - INDUSTRIAL  | WC5043 - INDUSTRIAL | WC7014 - INDUSTRIAL | WC7015 - INDUSTRIAL | WC7016 - INDUSTRIAL  | WC7017 - INDUSTRIAL  |
| WC7018 - INDUSTRIAL  | WC7019 - INDUSTRIAL | WC7026 - INDUSTRIAL | WC7029 - INDUSTRIAL | WC70355 - INDUSTRIAL | WC5017 - 1300 SERIES |
| WC5020 - 1300 SERIES | WC5028 - GENSET     | WC5032 - AUTOMOTIVE | WC5039 - AUTOMOTIVE | WC7003 - AUTOMOTIVE  | WC7004 - AUTOMOTIVE  |
| WC7005 - AUTOMOTIVE  |                     |                     |                     |                      |                      |

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