



**Replacement Parts for**  
**DETROIT DIESEL®**  
**50/60 SERIES® ENGINES**







# TABLE OF CONTENTS

<b>50/60 SERIES .....</b>	<b>4-36</b>
Accessory Drive & Air Compressor.....	29
Cooling System .....	26-27
Crankshaft & Seals .....	12
Cylinder Block.....	12
Cylinder Components.....	8-9
Cylinder Head Components .....	14-16
Cylinder Kit Cross Reference - S50 .....	4
Cylinder Kit Cross Reference - S60 .....	4
Electronic Fuel Injector & Component Kits.....	20
Engine Bearings.....	10
Engine Bearing Kits .....	11
Engine Kits - S50 .....	5
Engine Kits - S60 .....	6
Engine Sensors .....	30
Exhaust System.....	22
Flywheel & Vibration Damper.....	28
Fuel Injector Components.....	18-20
Fuel Pump & Components.....	16-17
Gasket Seals .....	30-34
Gasket Sets - Cylinder Head & Overall .....	11
Gasket Sets & Kits.....	34-36
Index .....	37-44
Lubrication System.....	24-25
Rebuilt Injectors.....	21
Re-Ring Engine Kits - S50 .....	7
Re-Ring Engine Kits - S60 .....	7
Rocker Cover Mounting .....	13-14
Turbocharger .....	23
Warranties.....	46-47

## 50/60 SERIES

### S50 CYLINDER KIT CROSS REFERENCE

CYLINDER KIT	CR	FIRE RING	PISTON TYPE	NOTE	PAGE	LINE
A-23532554 <sup>+</sup>	16.5:1	3.0mm	Articulated Steel	22mm piston pin ID "heavy pin"	5	50-1
A-23532555 <sup>++</sup>	15:1	2.5mm	Cast Iron	TLC Cylinder Liner	5	50-2
A-23532556 <sup>++</sup>	15:1	3.5mm	Cast Iron	TLC Cylinder Liner	5	50-3
A-23532557 <sup>+</sup>	15:1	2.5mm	Cast Iron	Elliptical Dome Piston	5	50-4
A-23532558 <sup>+</sup>	16.5:1	2.5mm	Cast Iron	TLC Cylinder Liner	5	50-5
A-23533204 <sup>+</sup>	15:1	3.0mm	Articulated Steel	22mm piston pin ID "heavy pin"	5	50-6

**NOTE:** \* = Narrow and wide bearings available.

### S60 CYLINDER KIT CROSS REFERENCE

CYLINDER KIT	CR	FIRE RING	PISTON TYPE	NOTE	PAGE	LINE
A-23530661 <sup>+</sup>	15:1	3.0mm	Articulated Steel	14L - 2 piece Piston	5	60-1
A-23530663 <sup>+</sup>	16:1	3.0mm	Articulated Steel	14L - 2 piece Piston	5	60-2
A-23530665 <sup>+</sup>	16:1	3.0mm	Articulated Steel	14L - 2 piece Piston - EGR	5	60-3
A-23532554 <sup>+</sup>	16.5:1	3.0mm	Articulated Steel	12.7L MY 1999-2003 - 22mm piston pin ID "heavy pin"	5	60-4
A-23532555 <sup>++</sup>	15:1	2.5mm	Cast Iron	11.1L/12.7L - TLC Cylinder Liner	5	60-5
A-23532556 <sup>++</sup>	15:1	3.5mm	Cast Iron	11.1L/12.7L - TLC Cylinder Liner	6	60-6
A-23532557 <sup>+</sup>	15:1	2.5mm	Cast Iron	12.7L - Elliptical Dome Piston	6	60-7
A-23532558 <sup>+</sup>	16.5:1	2.5mm	Cast Iron	12.7L - TLC Cylinder Liner 22mm piston pin ID "heavy pin"	6	60-8
A-23532590	15:1	2.5mm	Cast Iron	12.7L - Non-TLC liner	6	60-9
A-23532591	15:1	3.5mm	Cast Iron	12.7L - Non-TLC liner	6	60-10
A-23533204 <sup>+</sup>	15:1	3.0mm	Articulated Steel	12.7L MY 1998 - 22mm piston pin ID "heavy pin"	6	60-11
A-23536256 <sup>+</sup>	17:1	3.0mm	1pc Steel	14L - EGR	6	60-13
A-23538831 <sup>+</sup>	16.75:1	3.0mm	1pc Steel	14L - EGR - 2007	6	60-12

**NOTE:** \* = Narrow and wide bearings available.

+ = These items are currently not available for sale, installation or use for any vehicles in the state of California until the applicable regulatory approvals are granted by the California Air Resource Board.



# ENGINE KITS CODES AND CONTENTS

## Interstate-McBee Custom Engine Kits contain:

Cylinder Kits (Cylinder Liner & Seals, Piston or Crowns & Skirts, Ring Sets, Piston Pins, Retainers, if required - Slipper bearings and Piston Cooling Nozzles), Rod Bearings, Main Bearings, Thrust Washers, Oil Pan Gasket, appropriate Gasket Set (including Injector O-rings).

Interstate-McBee also offers specialized engine kits that contain all of the items listed above but also additional items. These kits are designated by an N, Q or T inserted at the end of the part number and their additional contents are listed below.

**N** = Narrow Rod Bearings

**Q** = Camshaft Bearings and Head Bolt Kit

**T** = Thermostats and Seals

## S50 ENGINE KITS

LINE	INFRAME KIT	OVERHAUL KIT	BASIC KIT	BEARING KIT	NOTE
50-1	A-MCIF23532554-50 <sup>+</sup>	A-MCOH23532554-50 <sup>+</sup>			
	A-MCIF23532554Q-50 <sup>+</sup>	A-MCOH23532554Q-50 <sup>+</sup>			
50-2	A-MCIF23532555-50 <sup>+</sup>	A-MCOH23532555-50 <sup>+</sup>			ESN ≥4R6665
	A-MCIF23532555Q-50 <sup>+</sup>	A-MCOH23532555Q-50 <sup>+</sup>			
	A-MCIF23532555N-50 <sup>+</sup>	A-MCOH23532555N-50 <sup>+</sup>			ESN ≤4R6664
	A-MCIF23532555NQ-50 <sup>+</sup>	A-MCOH23532555NQ-50 <sup>+</sup>			
50-3	A-MCIF23532556-50 <sup>+</sup>	A-MCOH23532556-50 <sup>+</sup>			ESN ≥4R6665
	A-MCIF23532556Q-50 <sup>+</sup>	A-MCOH23532556Q-50 <sup>+</sup>			
	A-MCIF23532556N-50 <sup>+</sup>	A-MCOH23532556N-50 <sup>+</sup>			ESN ≤4R6664
	A-MCIF23532556NQ-50 <sup>+</sup>	A-MCOH23532556NQ-50 <sup>+</sup>			
50-4	A-MCIF23532557-50 <sup>+</sup>	A-MCOH23532557-50 <sup>+</sup>			
	A-MCIF23532557Q-50 <sup>+</sup>	A-MCOH23532557Q-50 <sup>+</sup>			
50-5	A-MCIF23532558-50 <sup>+</sup>	A-MCOH23532558-50 <sup>+</sup>			
		A-MCOH23532558Q-50 <sup>+</sup>			
50-6	A-MCIF23533204-50 <sup>+</sup>	A-MCOH23533204-50 <sup>+</sup>			
	A-MCIF23533204Q-50 <sup>+</sup>	A-MCOH23533204Q-50 <sup>+</sup>			

+ = These items are currently not available for sale, installation or use for any vehicles in the state of California until the applicable regulatory approvals are granted by the California Air Resource Board.



# 50/60 SERIES

## S60 ENGINE KITS

LINE	INFRAME KIT	OVERHAUL KIT	BASIC KIT	BEARING KIT	NOTE
60-1	A-MCIF23530661Q	A-MCOH23530661Q			**
60-2	A-MCIF23530663Q	A-MCOH23530663Q	A-23532307	A-23527914 or A-23535280	
60-3	A-MCIF23530665Q	A-MCOH23530665Q	A-23537081	A-23527914 or A-23535280 or A-23533692	
	A-MCIF23530665QT	A-MCOH23530665QT			
60-4	A-MCIF23532554 <sup>+</sup>	A-MCOH23532554 <sup>+</sup>	A-23532577 <sup>+</sup>	A-23531605	
	A-MCIF23532554Q <sup>+</sup>	A-MCOH23532554Q <sup>+</sup>			
	A-MCIF23532554QT <sup>+</sup>	A-MCOH23532554QT <sup>+</sup>			
60-5	A-MCIF23532555 <sup>+</sup>	A-MCOH23532555 <sup>+</sup>	A-23532565 <sup>+</sup>	A-23531604 or A-23531605	11.1L ESN 6R184523 to MY 2000 12.7L ESN 6R188252 to MY 2000
	A-MCIF23532555Q <sup>+</sup>	A-MCOH23532555Q <sup>+</sup>			11.1L ESN 6R151000 to approx. 6R184522 12.7L ESN 6R151000 to approx. 6R188251
	A-MCIF23532555QT <sup>+</sup>	A-MCOH23532555QT <sup>+</sup>			
	A-MCIF23532555N <sup>+</sup>	A-MCOH23532555N <sup>+</sup>			
	A-MCIF23532555NQ <sup>+</sup>	A-MCOH23532555NQ <sup>+</sup>			
60-6	A-MCIF23532556 <sup>+</sup>	A-MCOH23532556 <sup>+</sup>	A-23532581 <sup>+</sup>	A-23531604 or A-23531605	11.1L ESN 6R18423 to MY 2000 12.7L ESN 6R188252 to MY 2000
	A-MCIF23532556Q <sup>+</sup>	A-MCOH23532556Q <sup>+</sup>			11.1L ESN 6R151000 to approx. 6R184522 12.7L ESN 6R151000 to approx. 6R188251
	A-MCIF23532556QT <sup>+</sup>				
	A-MCIF23532556N <sup>+</sup>	A-MCOH23532556N <sup>+</sup>			
	A-MCIF23532556NQ <sup>+</sup>	A-MCOH23532556NQ <sup>+</sup>			
60-7	A-MCIF23532557 <sup>+</sup>	A-MCOH23532557 <sup>+</sup>	A-23532585 <sup>+</sup>	A-23531604 or A-23531605	
	A-MCIF23532557Q <sup>+</sup>	A-MCOH23532557Q <sup>+</sup>			
	A-MCIF23532557QT <sup>+</sup>				
60-8	A-MCIF23532558 <sup>+</sup>	A-MCOH23532558 <sup>+</sup>	A-23533033 <sup>+</sup>	A-23531605	
	A-MCIF23532558Q <sup>+</sup>	A-MCOH23532558Q <sup>+</sup>			
	A-MCIF23532558QT <sup>+</sup>				
60-9	A-MCIF23532590	A-MCOH23532590	A-23532592	A-23531604	
	A-MCIF23532590Q	A-MCOH23532590Q			
60-10	A-MCIF23532591	A-MCOH23532591		A-23531604	
	A-MCIF23532591Q	A-MCOH23532591Q			
60-11	A-MCIF23533204 <sup>+</sup>	A-MCOH23533204 <sup>+</sup>	A-23532574 <sup>+</sup>	A-23531606	
	A-MCIF23533204Q <sup>+</sup>	A-MCOH23533204Q <sup>+</sup>			
	A-MCIF23533204QT <sup>+</sup>	A-MCOH23533204QT <sup>+</sup>			
60-12	A-MCIF23538418Q <sup>+</sup>	A-MCOH23538418Q <sup>+</sup>	A-23538418 <sup>+</sup>	A-23533692	
60-13	A-MCIF23539316Q <sup>+</sup>	A-MCOH23539316Q <sup>+</sup>	A-23539316 <sup>+</sup>		

**Note: \*\* = Interstate-McBee only carries the listed version for this crown/skirt.**

+ = These items are currently not available for sale, installation or use for any vehicles in the state of California until the applicable regulatory approvals are granted by the California Air Resource Board.

## 50/60 SERIES

# S50 RE-RING ENGINE KITS

+A-23532556RE-RING KITS DO NOT CONTAIN PISTONS - CROWN AND SKIRT UNLESS OTHERWISE NOTED

RING SET	FIRE RING	PISTON TYPE	INFRAME KIT	OVERHAUL KIT	NOTE
A-23503747	2.5mm	Cast Iron	A-MCIFS50 <sup>+</sup>	A-MCOHS50 <sup>+</sup>	
A-23503747	2.5mm	Articulated Steel	A-MCIFS50-4 <sup>+</sup>	A-MCOHS50-4 <sup>+</sup>	DDEC IV
A-23503747	2.5mm	Articulated Steel	A-MCIFS50-4S <sup>+</sup>	A-MCOHS50-4S <sup>+</sup>	DDEC IV w/A-23521802 Piston Skirt

**Note - All Re-Ring Engine Kits contain "wide" bearings. Narrow bearings may be substituted upon request.**

# S60 RE-RING ENGINE KITS

++RE-RING KITS DO NOT CONTAIN PISTONS - CROWN AND SKIRT UNLESS OTHERWISE NOTED

RING SET	FIRE RING	PISTON TYPE	INFRAME KIT	OVERHAUL KIT	NOTE
A-23503747	2.5mm	Cast Iron	A-MCIFS60 <sup>+</sup>	A-MCOHS60 <sup>+</sup>	11.1L or 12.7L
A-23503747	2.5mm	Cast Iron	A-MCIFS60Q <sup>+</sup>	A-MCOHS60Q <sup>+</sup>	11.1L or 12.7L w/ Cam Bearings and Head Bolts
A-23503747	2.5mm	Cast Iron	A-MCIFS60-1 <sup>+</sup>	A-MCOHS60-1 <sup>+</sup>	11.1L or 12.7L w/o Piston Pin and Retainers
A-23503747	2.5mm	Articulated Steel	A-MCIFS60-4 <sup>+</sup>	A-MCOHS60-4 <sup>+</sup>	DDEC IV
A-23503747	2.5mm	Articulated Steel	A-MCIFS60-4-1 <sup>+</sup>	A-MCOHS60-4-1 <sup>+</sup>	DDEC IV w/o Piston Pin and Retainers
A-23503747	2.5mm	Articulated Steel	A-MCIFS60-4S <sup>+</sup>	A-MCOHS60-4S <sup>+</sup>	DDEC IV w/ A-23521802 Piston Skirt
A-23531251	3.0mm	Articulated Steel	A-MCIFS60-5M <sup>+</sup>	A-MCOHS60-5M <sup>+</sup>	12.7L DDEC V w/ A-23531504 Cylinder Liner
A-23531252	3.0mm	1 Piece Steel	A-MCIFS60-5 <sup>+</sup>	A-MCOHS60-5 <sup>+</sup>	14L DDEC V Use only for ESNs calling for 23533282 Piston and 23531502 Cylinder Liner
A-23531252	3.0mm	1 Piece Steel	A-MCIFS60-5B <sup>+</sup>	A-MCOHS60-5B <sup>+</sup>	14L DDEC V Use only for ESNs calling for 23537126 Piston and 23531504 Cylinder Liner

**Note - All Re-Ring Engine Kits contain "wide" bearings. Narrow bearings may be substituted upon request.**

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# 50/60 SERIES

## CYLINDER COMPONENTS

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-23532468		6	6		Kit - Cylinder Liner	Early - Non-TLC w/ Seal Kit
A-23531249 <sup>+</sup>	4	6	6		Kit - Cylinder Liner	TLC w/ Seal Kit
A-23531250 <sup>+</sup>				6	Kit - Cylinder Liner	TLC w/ Seal Kit
<b>Note - TLC = Top Liner Cooled</b>						
A-23531502KT	4	6	6	6	Kit - Cylinder Liner Seal	
A-8929013	4	6	6	6	Liner Seal - Crevice	1 ea. included in A-23531502KT
A-8929176	8	12	12	12	Liner Seal - D-ring	
A-23519635	4	6	6		Kit - Piston (23530141 Crown)	Cast Iron - 3.5mm Ring - 15:1 CR
A-23519624	4	6	6		Kit - Piston (23529367 Crown)	Cast Iron - 2.5mm Ring - 15:1 CR
A-23519646	4		6		Kit - Piston (23529370 Crown)*	Cast Iron - 2.5mm Ring - 15:1 CR
A-23524601	4		6		Kit - Piston (23532966 Crown)	Cast Iron - 2.5mm Ring - 16.5:1 CR
A-23533203	4		6		Kit - Piston (23532465 Crown)+	Articulated Steel - 3mm Ring - 15:1 CR
A-23530668	4		6		Kit - Piston (23530727 Crown)+	Articulated Steel - 3mm Ring - 16.5:1 CR
A-23530660				6	Kit - Piston (23530592 Crown)	Articulated Steel - 3mm Ring - 15:1 CR
A-23530662				6	Kit - Piston (23530597 Crown)	Articulated Steel - 3mm Ring - 16:1 CR
A-23530664				6	Kit - Piston (23527774 Crown)#	Articulated Steel - 3mm Ring - 16:1 CR
A-23537531				6	Kit - Piston (23536674 Piston)#	1pc Steel - 3mm Ring - 17:1 CR
A-23537899				6	Kit - Piston (23537126 Piston)#	1pc Steel - 3mm Ring - 16.75:1 CR
<b>Note - Piston Kits include Piston or Crown/Dome, Skirt (where used), Pin and Retainers</b>						
<b>* = Elliptical Dome + = "Heavy Pin" Use ONLY in sets # = EGR</b>						
A-23503747	4	6	6		Set - Piston Ring	2.5mm Top Ring
A-23505729	4	6	6		Set - Piston Ring	3.5mm Top Ring
A-23531251	4		6		Set - Piston Ring	3.0mm Top Ring
A-23531252				6	Set - Piston Ring	3.0mm Top Ring - 1 and 2 pc Pistons
A-23537529				6	Set - Piston Ring	3.0mm Top Ring - 1 pc Piston
A-23519723	4	6	6		Kit - Slipper Bearing	X-head Iron OE Crown
MCB23519723	4	6	6		Kit - Slipper Bearing	X-head Iron IMCB Crown
A-8929087	4	6	6		Pin - Piston	X-head Iron
A-8929337	8	12	12		Bolt - Piston Pin	
A-8929504	8	12	12		Spacer Bolt - Piston Pin	
A-23525168	4		6		Pin - Piston - 22mm +	Articulated Steel
A-23522872				6	Pin - Piston	
A-23521781	8		12	12	Retainer - Piston Pin	
A-23532007				6	Pin - Piston	1pc Steel
A-23521781				12	Retainer - Piston Pin	
<b>Note - + = "Heavy Pin" Use ONLY in sets</b>						

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# 50/60 SERIES

## CYLINDER COMPONENTS

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
MCB7133	4		6	6	Rod Bushing Closed Rod (trunk)	Use in Drilled Rods Only
A-8929355	8	12	12		Rod Cap Bolt	M14 x 1.5 x 108
A-8929019	8	12	12	12	Rod Cap Nut	M14 x 1.5
A-23522877			12	12	Rod Cap Bolt	M14 x 1.5 x 111.5
A-23528493	4		6	6	Piston Cooling Nozzle	
A-23506222	4		6	6	Piston Cooling Nozzle Bolt	



# 50/60 SERIES

## ENGINE BEARINGS

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-8929710	4	6	6		Connecting Rod Bearing - STD	X-Head - Narrow - Early ≤4R6664 ≤6R184521 - 11.1L ≤6R188250 - 12.7L 1.710" w/ 43mm
A-8929711	4	6	6		Connecting Rod Bearing - .254mm	
A-8929712	4	6	6		Connecting Rod Bearing - .508mm	
A-8929713	4	6	6		Connecting Rod Bearing - .762mm	
A-23515581	4	6	6		Connecting Rod Bearing - STD	X-Head - Wide - Early ≥4R6665 ≥6R184522 - 11.1L ≥6R188251 - 12.7L 1.863" w/ 47mm
A-23515582	4	6	6		Connecting Rod Bearing - .254mm	
A-23515583	4	6	6		Connecting Rod Bearing - .508mm	
A-23515584	4	6	6		Connecting Rod Bearing - .762mm	
A-23526142	4		6		Connecting Rod Bearing - STD	Closed Rod / Steel Piston
A-23527065	4		6		Connecting Rod Bearing - .254mm	
A-23527066	4		6		Connecting Rod Bearing - .508mm	
A-23527067	4		6		Connecting Rod Bearing - .762mm	
A-23526141			6	6	Connecting Rod Bearing - STD	Closed Rod / Large Journal
A-23533567			6	6	Connecting Rod Bearing - .254mm	
A-23533568			6	6	Connecting Rod Bearing - .508mm	
A-8929670	4	6	6	6	Main Bearing - STD	
A-8929680	1	1	1	1	Main Bearing - STD	Thrust
A-8929671	4	6	6	6	Main Bearing - .254mm	
A-8929681	1	1	1	1	Main Bearing - .254mm	Thrust
A-8929672	4	6	6	6	Main Bearing - .508mm	
A-8929682	1	1	1	1	Main Bearing - .508mm	Thrust
A-8929673	4	6	6	6	Main Bearing - .762mm	
A-8929683	1	1	1	1	Main Bearing - .762mm	Thrust
A-23533263			AR	AR	Main Bearing - STD - Upper	Thrust
A-23532926			AR	AR	Main Bearing - STD - Lower	
A-8929085	2	2	2	2	Thrust Washer	6R0762048 & up
A-23530554			2	2	Thrust Washer - Front	
A-23530555			2	2	Thrust Washer - Rear	
A-8929690	5	7	7	7	Camshaft Bearing - STD	
A-8929691	5	7	7	7	Camshaft Bearing - .254mm	
A-8929692	5	7	7	7	Camshaft Bearing - .508mm	
A-8929693	5	7	7	7	Camshaft Bearing - .762mm	
MCB7133	4		6	6	Connecting Rod Bushing	For Drilled Rods <u>ONLY</u>
A-8929430		1	1	1	Bull Gear Bearing Assembly	

## 50/60 SERIES

### ENGINE BEARING KITS

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-23531604		1	1		Lower Bearing Kit - STD	Narrow Mains - 43mm Early
A-23531605		1	1		Lower Bearing Kit - STD	
A-23519905		1	1		Lower Bearing Kit - .254mm	Wide Mains - 47mm
A-23519906		1	1		Lower Bearing Kit - .508mm	
A-23531606			1		Lower Bearing Kit - STD	Articulated Steel Piston
A-23538953			1		Lower Bearing Kit - .254mm	
A-23538954			1		Lower Bearing Kit - .508mm	
A-23527914				1	Lower Bearing Kit - STD	Non-EGR Engine
A-23535280			1	1	Lower Bearing Kit - STD	Hooked & Tabbed Thrust Washers
A-23533692			1	1	Lower Bearing Kit - STD	Tabbed Thrust Washers
A-23535010	1	1	1	1	Thrust Bearing Kit - STD	
A-23524154	1	1	1	1	Thrust Bearing Kit - STD	Lower

### GASKET SETS

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-23532330	1				Cylinder Head Gasket Set	use only w/ NEW style bolts
A-23532333		1	1	1	Cylinder Head Gasket Set	
A-23536442			1	1	Cylinder Head Gasket Set - EGR	
A-23538506				1	Cylinder Head Gasket Set - MY2007	
A-23532329	1				Overhaul Gasket Set	includes Rocker Cover Gasket
A-23532720		1	1	1	Overhaul Gasket Set	w/o Rocker Cover Gaskets
MCB23512691		1	1	1	Overhaul Gasket Set*	
A-23536443			1	1	Overhaul Gasket Set - EGR	

**Note - \* = DOES NOT include Injector Seals**

## 50/60 SERIES

### CYLINDER BLOCK

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-23525500	AR	AR	AR		Sleeve - Counter Bore Repair	Upper
A-23525500-20	AR	AR	AR		Sleeve - Counter Bore Repair - .020" OS	
A-8924380	AR	AR	AR	AR	Plug	1/8" Square Socket
A-8922327	AR	AR	AR	AR	Plug	1/4" Square Socket
A-8923847	AR	AR	AR	AR	Plug	1/4" Square Socket
A-8924517	AR	AR	AR	AR	Plug	3/8" Square Socket
A-23511572	AR	AR	AR	AR	Plug	1/2" Square Socket
A-8923916	AR	AR	AR	AR	Plug	1/2" Square Socket
A-23511573	AR	AR	AR	AR	Plug	3/4" Square Socket
A-8923313	AR	AR	AR	AR	Plug	3/4" Square Socket
A-5139988	AR	AR	AR	AR	Plug - Cup	
A-5139991	AR	AR	AR	AR	Plug - Cup	
A-8929152	AR	AR	AR	AR	Pin - Dowel	20mm
A-103325	8	8	8	8	Lock Washer - Engine Mount	
A-23539134	AR	AR	AR	AR	Cylinder Liner Shim - .010"	Stainless
A-23539135	AR	AR	AR	AR	Cylinder Liner Shim - .030"	Stainless
A-S60-031 SHIM	AR	AR	AR	AR	Cylinder Liner Shim - .031"	Brass
A-23539136	AR	AR	AR	AR	Cylinder Liner Shim - .060"	Stainless
A-S60-062 SHIM	AR	AR	AR	AR	Cylinder Liner Shim - .062"	Brass

### CRANKSHAFT & SEALS

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-23515598			1		Crankshaft - 6-hole - Wide	>6R188251 w/ Cast Pistons
A-23527225				1	Crankshaft - 12-hole	
A-8929808	1	1	1	1	Key - Woodruff	Gear
A-147489	1	1	1	1	Ball - Steel - Crankshaft Pulley	3/8"
A-23518355	1	1	1	1	Seal Assembly - Front	Unitized Seal & Wear Sleeve
A-23519651	1	1	1	1	Seal Assembly - Rear	Unitized Seal & Wear Sleeve
A-23516969	1	1	1	1	Seal Assembly - Rear - OS	
A-23501544	1	1	1	1	Seal - Rear - OS	w/o Wear Sleeve
A-23513578	1	1	1	1	Seal Assembly - Rear	Wet Housing

# 50/60 SERIES

## ROCKER COVER MOUNTING

### 1 PIECE COVER

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-23516322		1	1	1	Gasket - Rocker Cover to Cylinder Head	≤ 6/1999 MY 4-Bolt Grey
A-8929255		4	4	4	Isolator	43.25mm x 39.5mm
A-5104514		4	4	4	Isolator Washer	use with A-5104514
A-23517911		4	4	4	Isolator Assembly	33mm x 22mm w/ Washer
A-23517912		4	4	4	Isolator Assembly	44.75mm x 33.75mm w/ Washer
A-23522269		1	1	1	Gasket - Rocker Cover to Cylinder Head	MY 6/1999 & up - 10 Bolt - Black
A-23522271		10	10	10	Bolt & Isolator Assembly	MY 6/1999 & up
A-5101760		1	1	1	Breather Element	1pc covers
A-5103646		1	1	1	Seal Ring - Breather	
A-5186840		1	1	1	Clamp - Breather Tube	

## ROCKER COVER MOUNTING

### 2 PIECE COVER

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-23511772	1				Gasket - Upper to Lower	
A-8929803		1	1	1	Gasket - Upper to Lower	≤ 6/1999 MY
A-23516531	1				Gasket - Lower to Cylinder Head	Valve Cover
A-23516322		1	1	1	Gasket - Lower to Cylinder Head	≤ 6/1999 MY Grey
A-11504822	6	8	8	8	Bolt - Upper to Lower	
A-5152122		8	8	8	Washer	Copper
A-8929255		10	10	10	Isolator - Lower to Cylinder Head	up to 1996
A-5104514		10	10	10	Isolator Washer - Lower to Cylinder Head	up to 1996
A-23517911	8	10	10	10	Isolator Assembly - Lower to Cylinder Head	includes Washer (S60 = 1996 - 1999)
A-23511991		1	1	1	Gasket - Upper to Lower	MY 6/1999 & up
A-11504822		8	8	8	Bolt - Upper to Lower	MY 6/1999 & up
A-5152122		8	8	8	Washer	Copper
A-23522269		1	1	1	Gasket - Lower to Cylinder Head	MY 6/1999 & up Black
A-23522271		10	10	10	Isolator Assembly - Lower to Cylinder Head	6/99 & up



## 50/60 SERIES

# ROCKER COVER MOUNTING

### 3 PIECE COVER

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-23506153		1	1	1	Gasket - Upper to Intermediate	≤ 6/1999 MY
A-11504822		8	8	8	Bolt - Upper to Intermediate	
A-8929803		1	1	1	Gasket - Intermediate to Lower	≤ 6/1999 MY
A-11504822		8	8	8	Bolt - Intermediate to Lower	
A-23516322		1	1	1	Gasket - Lower to Cylinder Head	≤ 6/1999 MY    Grey
A-8929255		10	10	10	Isolator - Lower to Cylinder Head	up to 1996
A-5104514		10	10	10	Isolator Washer - Lower to Cylinder Head	up to 1996
A-23517911		10	10	10	Isolator Assembly - Lower to Cylinder Head	1996 - 1999
A-23511992		1	1	1	Gasket - Upper to Intermediate	MY 6/1999 & up
A-11504822		8	8	8	Bolt - Upper to Intermediate	
A-23511991		1	1	1	Gasket - Intermediate to Lower	MY 6/1999 & up
A-11504822		8	8	8	Bolt - Intermediate to Lower	
A-23522269		1	1	1	Gasket - Lower to Cylinder Head	MY 6/1999 & up    Black
A-23522271		10	10	10	Isolator Assembly - Lower to Cylinder Head	6/99 & up

## CYLINDER HEAD COMPONENTS

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-23501576	8	12	12	12	Valve Kit - Intake	"A"
A-23501577		12	12		Valve Kit - Exhaust	"U" - Pre-1991    %
A-23507504	8	12	12	12	Valve Kit - Exhaust	"H" - 1991-2001    %
<b>Note: Valve kits include valve, locks, seal &amp; rotator.</b>						
A-8929589	8	12	12	12	Valve - Intake	"A"
A-23529629	8		12	12	Valve - Intake	EGR
A-23520149	8		12		Valve - Intake	GAS
A-8929590		12	12		Valve - Exhaust	"U" - Pre-1991    %
A-23506350	8	12	12	12	Valve - Exhaust	"H" - 1991-2001    %
A-23529596	8		12	12	Valve - Exhaust	EGR - 2002 & up
A-23520148	8		12		Valve - Exhaust	GAS
<b>"A" or large dimple, "U" &amp; NO machined ID ring &amp; "H" or small dimple</b>						
<b>Note - % = Valve lash settings for these are not the same and cannot be mixed in an engine</b>						
A-8929573	32	48	48	48	Valve Lock	
A-23518571	16	24	24	24	Valve Guide - Rifled	14.30 - 14.32mm OD
A-23533552	16	24	24	24	Valve Guide - Smooth	14.30 - 14.32mm OD
A-23518572	AR	AR	AR	AR	Valve Guide	14.43 - 14.45mm OD
A-23523930	16	24	24	24	Valve Stem Seal	
A-23521944	16		24		Valve Stem Seal	GAS

# 50/60 SERIES

## CYLINDER HEAD COMPONENTS

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-8929127	8	12	12	12	Valve Seat - Intake - STD	
A-8929127-010	AR	AR	AR	AR	Valve Seat - Intake - .010"	
A-23517058	8		12		Valve Seat - Intake	GAS
A-8929126	8	12	12	12	Valve Seat - Exhaust - STD	
A-8929126-010	AR	AR	AR	AR	Valve Seat - Exhaust - .010"	
A-23519090	8		12		Valve Seat - Exhaust	GAS
A-8929415	16	24	24	24	Valve Spring	Both non-EGR
A-8929415	8		12	12	Valve Spring - Intake	EGR
A-23535122	8		12	12	Valve Spring - Exhaust	EGR
A-8929076	16	24	24	24	Valve Spring Seat	STD
A-8929105	16	24	24	24	Valve Rotator	
A-23501580	4	6	6	6	N2 Injector Tube Kit	*
A-8929078	4	6	6	6	N2 Injector Tube Tube	*
A-23515470	4	6	6	6	N2 Injector Tube Seal	*
A-5104701	4	6	6	6	N2 Injector Tube Auxiliary Seal	Large
A-23511870	4	6	6	6	N2 Injector Tube Auxiliary Seal	Small
A-23538840	4		6	6	N3 Injector Tube - Threaded	Stainless
A-23533147	4		6	6	N3 Injector Tube Seal	
A-23534745			6	6	E3 Injector Tube - Threaded	Stainless
A-23534743			6	6	E3 Injector Tube Seal	
A-23536862			AR	AR	E3 Injector Tube Shim - .007"	
A-23536863			AR	AR	E3 Injector Tube Shim - .012"	1 notch
A-23536864			AR	AR	E3 Injector Tube Shim - .018"	2 notches
<b>Note - * = items included in kit 23501580</b>						
A-23531306	1				Gasket - Cylinder Head	
A-23538406		1	1	1	Gasket - Cylinder Head	
A-23530768	26	38	38	38	Cylinder Head Bolt	
A-8929328	26	38	38	38	Cylinder Head Bolt Washer	
MCB50HBK	1				Cylinder Head Bolt Kit	w/ Bolts and Washers
MCB60HBK		1	1	1	Cylinder Head Bolt Kit	
A-8926993	AR	AR	AR	AR	Plug	1/4" Square Socket
A-23511572	AR	AR	AR	AR	Plug	1/2" Square Socket
A-8923916	AR	AR	AR	AR	Plug	1/2" Square Socket
A-23511573	AR	AR	AR	AR	Plug	3/4" Square Socket
A-8923313	AR	AR	AR	AR	Plug	3/4" Square Socket
A-23511574	AR	AR	AR	AR	Plug	1" Square Socket
A-9421745	AR	AR	AR	AR	Plug - Cup	1/2"
A-5139991	AR	AR	AR	AR	Plug - Cup	1 1/2"
A-5138638		7	7	7	Dowel	
A-8929129	5	7	7	7	Camshaft Journal Cap Bolt	
A-8929587	4	6	6	6	Camshaft Journal Cap Bolt	

## 50/60 SERIES

# CYLINDER HEAD COMPONENTS

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-8929588		2	2	2	Camshaft Journal Cap Stud	
A-23500708	2	2	2	2	Camshaft Journal Cap Nut	
A-8929586	6	8	8	8	Spacer - Rocker Shaft	
A-23521111	2	2	2	2	Seal - Rocker Shaft	
A-8929059	3	3	3	3	Rocker Arm Bushing - Valve	Narrow
A-8929536	1	1	1	1	Rocker Arm Bushing - Valve	Wide
A-5138643		30	30	30	Button - Valve Adjustment	≤MY 2000
A-23520818	8	12	12	12	Adjustment Screw Assembly	Intake
A-23537089	8	12	12	12	Adjustment Screw Assembly	Exhaust
A-23520820	4	6	6	6	Adjustment Screw Assembly	Injector
A-23514371	20	30	30	30	Adjustment Screw Nut	

# FUEL PUMP & COMPONENTS

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-23532981	1	1	1	1	Fuel Pump	Compressor Driven ref. 23517845
R-8929481	1	1	1	1	Fuel Pump - Remanufactured	Old Style - 3/8" - LH ref.R23517845
A-23537686RK	1	1	1	1	Repair Kit	Kits include - Bearings, Gaskets, Gear Pin, Retainers, Coupling, Oil Seals, Relief Spring
A-23517845RK	1	1	1	1	Repair Kit	
A-23517845RK-S	1	1	1	1	Repair Kit - w/ Shaft	
A-23517845RK-SG	1	1	1	1	Repair Kit - w/ Shaft & Gears	
A-5150193	1	1	1	1	Gasket - Mounting	Early Style
A-23505248	1	1	1	1	Gasket - Mounting	Pump to Air Compressor
A-23533010	1	1	1	1	Seal Ring - Pump Drive to Front Cover	Square Cut
A-8929253	1	1	1	1	Seal Ring - Pump Drive to Front Cover	
A-23516117	1	1	1	1	Gasket - Cover	0.0015 Thick
A-23516118	1	1	1	1	Gasket - Cover	0.001 Thick
A-5107223	1	1	1	1	Seal - Cover	
A-23532977	1	1	1	1	Shaft & Hub Assembly	
A-9411502	1	1	1	1	Retaining Ring - Shaft	
A-5174975	1	1	1	1	Gear - Drive	0.249" wide - Std w/ Hole
A-23506546	AR	AR	AR	AR	Gear - Drive	0.375" wide - w/ Hole
A-5128217	1	1	1	1	Gear - Drive	3/8" wide - Hi Output w/ Hole
A-8923523	1	1	1	1	Key - Drive Gear	
A-8923521	1	1	1	1	Pin - Drive Gear	
A-103709	1	1	1	1	Pin - Drive Gear	5/32"
A-8923522	AR	AR	AR	AR	Ring - Gear Retainer	

# 50/60 SERIES

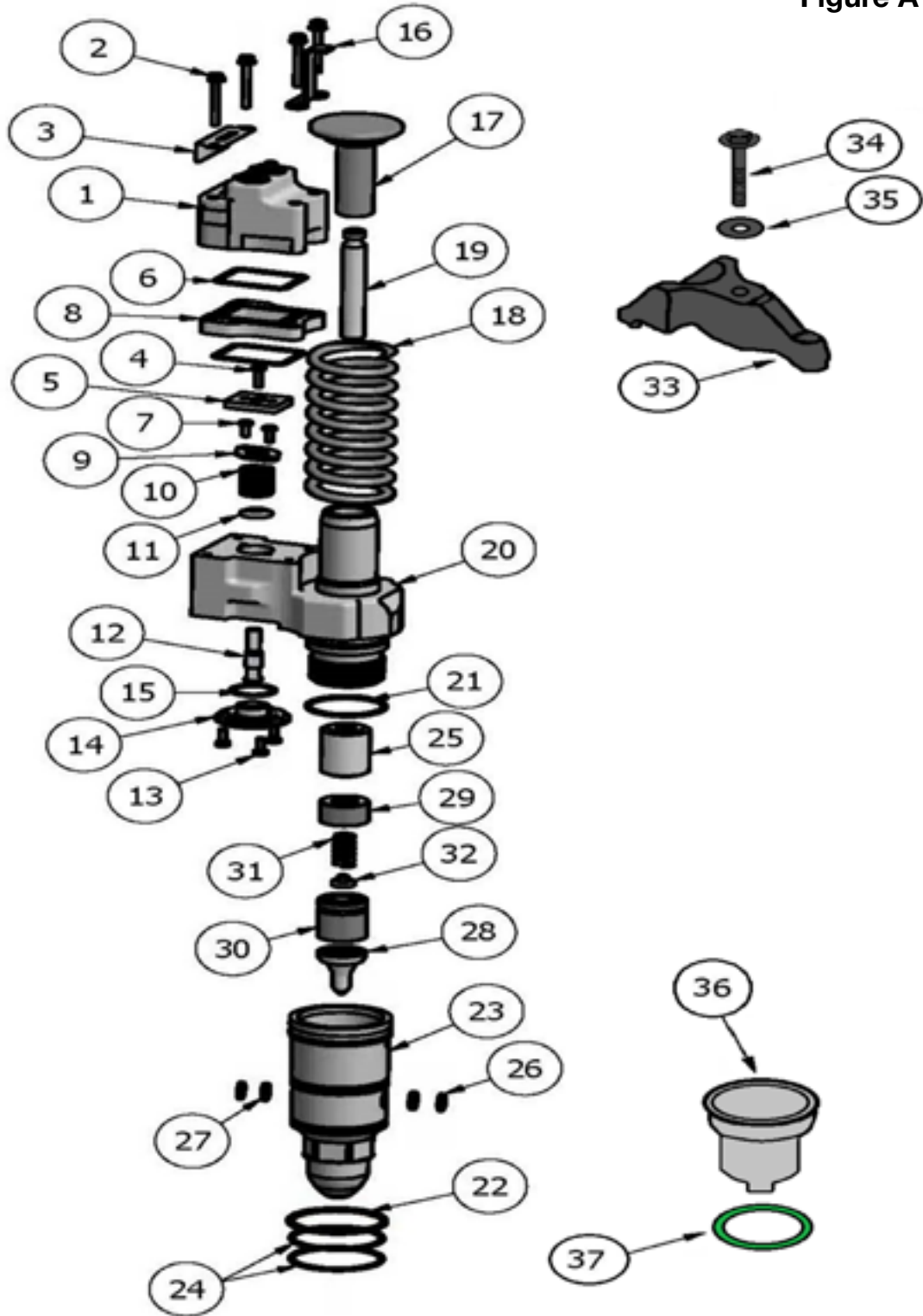
## FUEL PUMP & COMPONENTS

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-23516919	AR	AR	AR	AR	Check Valve	Female #8 SST
A-23516918	AR	AR	AR	AR	Check Valve	
A-23516993	AR	AR	AR	AR	Check Valve	Female #6 SST
A-23535129	AR	AR	AR	AR	Check Valve	
A-23517723	AR	AR	AR	AR	Check Valve	1/2" NPTF male #8 male flare
A-5174973	1	1	1	1	Check Valve	
A-8923528	1	1	1	1	Check Valve	*
A-23506563	AR	AR	AR	AR	Kit - Check Valve	
A-23506555	1	1	1	1	Cap - Relief Valve	*
A-23506560	1	1	1	1	Spacer - Relief Valve	*
A-23506564	1	1	1	1	Pin - Shear - Relief Valve	*
A-5161003	1	1	1	1	Seal - Valve Plug	*
A-23506556	1	1	1	1	Seal Ring - Relief Valve	*
A-23506557	1	1	1	1	Spring - Relief Valve	*
A-5184530	1	1	1	1	Spring - Relief Valve	
<b>Note - * = items included in kit 23506563</b>						
A-23500694	2	2	2	2	Alignment Pin	
A-23512243	2	2	2	2	Seal - Oil - Drive Shaft	
A-8923526	4	4	4	4	Bearing - Shaft	
A-23506549	1	1	1	1	Shaft - Drive	
A-8929483	1	1	1	1	Shaft - Drive	w/o Gear
A-23506559	AR	AR	AR	AR	Snap Ring - Drive Shaft	
A-23505249	1	1	1	1	Drive Coupling - Spider	Shock Coupling
A-5102257	1	1	1	1	Fork - Coupling	ref. 8921934
4991613	1	1	1	1	Gasket - Green	
A-8925325	1	1	1	1	Bushing - Pipe	Red - 3/8" to 1/4" Zinc
A-5174971	1	1	1	1	Plug - Body	
A-23506553	1	1	1	1	Plug - Body	1/8"
A-8924380	1	1	1	1	Plug - Pipe	1/8" x 27"
A-8924517	1	1	1	1	Plug	3/8" Socket Head
A-3719219	4	4	4	4	Adapter Bolt Assembly	w/ Washer
A-8925603	AR	AR	AR	AR	Bolt	5/16" x 18" x 3/4"
A-103319	4	4	4	4	Lock Washer	
A-147481	1	1	1	1	Steel Ball	1/8" Dia

# 50/60 SERIES

## FUEL INJECTOR COMPONENTS

Figure A





# 50/60 SERIES

## FUEL INJECTOR COMPONENTS

Call out #	PART #	DESCRIPTION	NOTE	QTY
1	4991685	Solenoid - w/o Groove	<i>for reference only</i>	1
2	A-5235586	Screw - Solenoid Assembly		4
3	4991452	Load Plate		1
4	4991454	Screw - Armature		1
5	4991453	Armature	<i>for reference only</i>	1
6	A-5234224	Seal - Solenoid Spacer		2
7	4991455	Screw - Control Valve Spring Retainer		2
8	4991456	Spacer - Solenoid	<i>for reference only</i>	1
9	4991457	Retainer - Spring		1
10	4991458	Spring - Control Valve		1
11	4991469	Seat - Control Valve Spring		1
12	4991459	Control Valve	contact IM for sizes	1
13	4991470	Screw - Control Valve Stop	Hex Head	3
14	4991460	Valve Stop	contact IM for sizes	1
15	4991539	O-ring - Internal	Small	1
16	4991450	Retainer - Follower	Old Style	1
	4991598		New Style	
17	4991444	Follower		1
18	4991597	Spring - Follower	New Style	1
19	4991446	Plunger		1
20	4991471	Body Assembly		1
21	A-5234701	O-ring - Internal		1
22	A-5234702	O-ring - External - Injector Mounting	Upper	1
	4992288*		Upper - E3	
	4991720*		Upper - N3	
23	4991636	Nut Assembly	Filters Installed	1
24	A-5234699	O-ring - External - Injector Mounting	Lower	2
	4992289*		Lower - E3	1
	4991721*		Lower - N3	1
	4991722*			1
25	4991462	Spacer		1
26	4991448	Retainer - Filter		2
27	4991449	Retainer - Filter		2
28	See Chart	Spary Tip		1
29	4991463	Cage - Check Valve		1
30	4991465	Cage - Valve Spring		1
31	4991464	Valve Spring		1
32	4991466	Valve Spring Seat	STD	1
	4991466-2		Under Sized	AR
33	A-8929088	Clamp - Injector Hold Down	<i>for reference only</i>	1
34	A-8929393	Bolt - Injector Hold Down	Hex Head	1
35	A-23535699	Washer - Injector Hold Down		1

**Note:** \* = Not Shown in Figure A

## 50/60 SERIES

### FUEL INJECTOR COMPONENTS

Call out #	PART #	DESCRIPTION	NOTE	QTY
36	A-8929075	Injector Hole Tube	N2	1
	A-23538840*		N3 - Threaded - Stainless	
	A-23534745*		E3 - Threaded - Stainless	
37	A-23515470	Seal - Injector Tube	N2	1
	A-23533147*		N3	
	A-23534743*		E3	
37B	A-5104701*	Seal - Injector Auxiliary	N2	1
37C	A-23511870*	Seal - Injector Auxiliary	N2 - Nose	

**Note: \* = Not Shown in Figure A**

### ELECTRONIC FUEL INJECTOR & COMPONENTS KITS

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	CONTAINS CALL OUT # IN FIG. A
MCBS60INJ	4	6	6	6	Installation Kit DDEC II-IV	24 (2), 22, 21, 21B
A-23537111	4		6	6	Installation Kit DDEC V (N3)	22 (2), 24 (2), 34, 35
A-23537123			6	6	Installation Kit DDEC V (E3)	22, 24, 34, 35
MCB26209	4	6	6	6	Internal O-ring Kit	6 (2), 15, 21
MCB26209-25	25	25	25	25		
MCB262312	4	6	6	6	Internal O-ring Expansion Kit	6 (2), 15, 21, 22, 24 (2), 37B
A-5234699K	4	6	6	6	Complete O-ring Kit	6 (2), 15, 21, 21B, 22, 24 (2), 37B
A-5230001	4	6	6	6	Injector Repair Kit	2 (4), 4, 6 (2), 7 (2), 10, 13 (3), 15, 21, 21B, 22, 24 (2), 31, 32, 37B
A-5230001-25	25	25	25	25		
MCB26210	4	6	6	6	Nut Assembly O-ring Kit	21, 22, 24 (2)
MCB26210-25	25	25	25	25		
A-5236116	4	6	6	6	Solenoid Seal & Screw Kit	2 (4), 6 (2)
A-23528939	4	6	6	6	Follower Spring & Retainer Kit	2 (2), 16, 18

# 50/60 SERIES

## REBUILT INJECTORS

PART #	S50	S60	DESCRIPTION	CORE CODE	SPRAY TIP	HOLES
R-5234785		X	Fuel Injector - Remanufactured	C-S60DDEC1	4991753-C2A	9
R-5234795		X	Fuel Injector - Remanufactured	C-S60DDEC2	4991754-D5	9
R-5234865		X	Fuel Injector - Remanufactured	C-S60DDEC2	4991753-C1A	9
R-5234870		X	Fuel Injector - Remanufactured	C-S60DDEC2	4991753-C2	9
R-5234935		X	Fuel Injector - Remanufactured	C-S60DDEC2	4991753-C1	9
R-5234940		X	Fuel Injector - Remanufactured	C-S60DDEC2	4991753-C3	9
R-5234945		X	Fuel Injector - Remanufactured	C-S60DDEC2	4991754-D4	9
R-5234970		X	Fuel Injector - Remanufactured	C-S60DDEC2	4991754-D3	9
R-5235550	X	X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991752-B3	8
R-5235575	X	X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991752-B5	8
R-5235580		X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991751-A1	8
R-5235600	X	X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991754-D2	9
R-5235605		X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991753-C1	9
R-5235695		X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991754-D3	9
R-5235915	X	X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991752-B6	8
R-5236347	X	X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991752-B4	8
R-5236977	X	X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991752-B3	8
R-5236978	X	X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991751-A1	8
R-5236980		X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991752-B4	8
R-5236981	X	X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991752-B1	8
R-5236995	X	X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991754-D2	9
R-5237014		X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991754-D2	9
R-5237042		X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991751-A2	8
R-5237045		X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991752-B4	8
R-5237099		X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991752-B2	8
R-5237315		X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991748-E3	9
R-5237320		X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991754-D2	9
R-5237466		X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991752-B5	8
R-5237473		X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991748-E5	9
R-5237635		X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991753-C2	9
R-5237650		X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991754-D1	9
R-5237787	X	X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991753-C1	9
R-5237820		X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991753-C1A	9
R-5237821		X	Fuel Injector - Remanufactured	C-S60DDEC3/4	4991753-C1A	9

**Note: Contact Interstate-McBee w/ESN for injector application**

### CORE RETURNS MUST MEET THE FOLLOWING CRITERIA:

- Units must be properly identified with part number.
- Units must be returned as off of the engine – assembled and complete.
- Units damaged by fire or excessive other damage will not be acceptable.
- Units with damaged or broken terminal screws will not be accepted. (See Figure B).

### GROUP CLASSIFICATION OF CORES:

Cores will be accepted for any of the exchange injectors within the specific group classification. Unacceptable cores not meeting the above criteria will be scrapped and no credit will be issued. Copy of the original invoice or a packing slip referring to said invoice must accompany cores upon return.

### C-S60DDEC1, C-S60DDEC2, C-S60DDEC3/4

Each core can be identified by the tower of the body, underneath the spring. The C-S60DDEC2 core has two distinct steps and the C-S60DDEC3/4 has a tapered tower. Series 60 cores with a broken or missing terminal screw will not be accepted.

### CORE MUST BE RETURNED TO:

**Attn: Core Department  
4901 Lakeside Avenue  
Cleveland, OH 44114**



**Figure B**

**BROKEN  
TERMINAL  
SCREW**



# 50/60 SERIES

## EXHAUST SYSTEM

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-23512896		1	1		Exhaust Manifold Kit - Non-EGR	High mount - flat center section
A-23512897		1	1	1	Exhaust Manifold Kit - Non-EGR	High mount - setback center section
A-23516107		1	1		Exhaust Manifold Kit - Non-EGR	Medium mount - offset center section
A-23511666	2	3	3	3	Gasket - Exhaust Manifold	ref - 23533983
A-8929357	8	AR	AR	AR	Bolt - Manifold Mounting	
A-11506101		AR	AR	AR	Nut - Manifold Mounting	
A-8929529	1	1	1	1	Gasket - Turbo Mounting	
A-23535457	1	1	1	1	Gasket - Turbo Exhaust Inlet	
A-23535477	1	1	1	1	Gasket - Turbo Exhaust Outlet	
A-8929285	1	1	1	1	Gasket - Turbo Oil Drain	
A-23508408	1	1	1	1	Seal - Turbo Compressor Outlet Elbow	
A-23507438	4	4	4	4	Stud - Turbo Mounting	M10 1.5 x 44
A-8929425	4	4	4	4	Stud - Turbo Mounting	M10 1.5 x 50
A-11506101	4	4	4	4	Nut - Turbo Mounting	
A-8929169	4	4	4	4	Washer - Turbo Mounting	
A-23505398	AR	AR	AR	AR	Lock Nut - Turbo Spacer Plate	
A-5186840	2	2	2	2	Clamp - Turbo Water Return Hose	1 1/2"
A-23505789	1	1	1	1	Clamp - V-Band	w/ Nut
A-5139988	1	1	1	1	Plug - Cup	
A-23533534			1	1	Gasket - EGR Valve	3 Bolt
A-23535506			1	1	Seal Ring - EGR Valve	Square
A-23535507			1	1	Seal Ring - EGR Mixer	Square
A-23517875	2	3	3	3	Gasket - Intake Manifold	ref - 23533983
A-23531110				3	Gasket - Intake Manifold	EGR engines
A-8922327	2	2	2	2	Plug	1/4" Square Socket Head
A-8923847	1	1	1	1	Plug	1/4" Square Socket Head
A-8924517	1	1	1	1	Plug	3/8" Square Socket Head
A-8923916	1	1	1	1	Plug	1/2" Square Socket Head
A-23511572	1	1	1	1	Plug	1/2" Square Socket Head
A-89293313	1	1	1	1	Plug	3/4" Square Socket Head
A-23511574	1	1	1	1	Plug	1" Square Socket Head

# 50/60 SERIES

## TURBOCHARGER

REF PART NUMBER	IM PART NUMBER	APPLICATION	MODEL
23508405	A-23508405	11.1L	TV405
23508410	A-23508410	12.7L	TMF5102
23515635	23515635M	12.7L	TMF55
23518588	23518588M	12.7L	TMF55
23518688	23518588M	12.7L	TMF55
23522188	23528065M	12.7L	GT4294
23522190	23528065M	12.7L	GT4202
23522190M	23528065M	12.7L	GT4202
23522306	23528065M	12.7L	GT4294S
23522312M	23528065M	12.7L	GT4202
23525464	23528065M	12.7L	GT42
23526272	23528065M	12.7L	GT4294
23526272M	23528065M	12.7L	GT4294
23526679	23528065M	12.7L	GT4294
23526679M	23528065M	12.7L	GT4294
23526680	23528065M	12.7L	GT4294D
23526681	23528065M	12.7L	GT4294S
23526682	23528065M	12.7L	GT4294S
23526683	23528065M	12.7L	GT4294D
23526684	23528065M	12.7L	GT4294D
23526685	23528065M	12.7L	GT4294S
23526692	23528065M	12.7L	GT4294
23528052	23528065M	12.7L	GT4294
23528052M	23528065M	12.7L	GT4294
23528053	23528065M	12.7L	GT35/42
23528054	23528065M	12.7L	GT4294
23528055	23528065M	12.7L	GT4294
23528056	23528065M	12.7L	GT4294
23528057	23528065M	12.7L	GT4294BDN
23528058	23528065M	12.7L	GT4294BNS
23528060	23528065M	12.7L	GTA4202BDN
23528062	23528065M	12.7L	GTA4202BNS
23528062M	23528065M	12.7L	GTA4202BNS
23528063	23528065M	12.7L	GTA4202BDN
23528064	23528065M	12.7L	GT4202S
23528064M	23528065M	12.7L	GT4202S
23528065	23528065M	12.7L	GT4294
23528066	23528065M	12.7L	GT4294
23528069	23528065M	12.7L	GT4294
23528069M	23528065M	12.7L	GT4294
23528089	23528065M	12.7L	GT4294
23528512	23528065M	12.7L	GTA4202BDN
23529103	23528065M	12.7L	GT35/42
23534361	A-23534361	14L	GT45
23536348	23536348M	14L	GT47

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# 50/60 SERIES

## LUBRICATION SYSTEM

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-23505886		1	1	1	Oil Pump Assembly	option type #232
A-23527448		1	1	1	Oil Pump Assembly	for option type #195
A-5127978	AR	AR	AR	AR	Bushing - Oil Pump	
A-23511656	1				Gasket - Oil Inlet Pipe	
A-23505992		1	1	1	Gasket - Oil Inlet Pipe	
A-8929344		2	2	2	Gasket - Oil Inlet/Outlet	
A-23505891		1	1	1	O-ring - Oil Outlet Pipe	Front
A-23505892	2	1	1	1	O-ring - Oil Outlet Pipe	Rear
A-8929347		1	1	1	Gasket - Oil Outlet	to Cylinder Block
A-5103646		1	1	1	Seal Ring - Breather	
A-8929393	2	2	2	2	Bolt - Oil Pump Mount	Short
A-23505062	2	2	2	2	Bolt - Oil Pump Mount	Long
A-23522416	1	1	1		Oil Cooler Core - 10-plate	MY 1991 & up
A-23522415			1	1	Oil Cooler Core - 11-plate	
MCBS0060	1	1	1	1	Kit - Oil Cooler Installation*	▲ ▲ ▲ MY 1991 & up ▲ ▲
A-23506247	1	1	1	1	Gasket - Oil Cooler Housing	
A-23508392	2	2	2	2	Seal Ring - Core to Filter Head	
A-8929289	1	1	1	1	Seal Ring - Housing Neck to Cylinder Block	
A-23505902	1	1	1	1	Seal Ring - Bypass	
A-23508392	1	1	1	1	Seal Ring - Filter Housing to Cylinder Block	
A-8929348		1	1	1	Gasket - Oil Cooler Core Housing	Prior to MY 1991
A-23506247	1	1	1	1	Gasket - Oil Cooler Core Housing	MY 1991 & up
A-8922327	1	1	1	1	Plug - Oil Cooler Cover	1/4" - Square Socket
A-8923313	2	2	2	2	Plug - Oil Cooler Cover	3/4" - Square Socket
A-23511573	4	4	4	4	Plug - Oil Cooler Cover	3/4" - Square Socket
A-23511574	1	1	1	1	Plug - Oil Cooler Cover Drain	1" - Square Socket
A-8929280	1	1	1	1	Seal Ring - Coolent Return	
A-8922740		2	2	2	Valve - Regulator & Relief	
A-5126327		2	2	2	Valve Spring	Regulator and Relief Valve
A-5117269		1	1	1	Gasket - Oil Pressure Regulator	
A-8929340	1	1	1	1	Seal - Oil Filter Bypass	
A-8929341	1	1	1	1	Seal - Oil Filter	
A-8929342	1	1	1	1	Seal - Oil Filter Adapter	

Note - \* = ▲ denotes items included in kit

# 50/60 SERIES

## LUBRICATION SYSTEM

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-23532850	1	1	1	1	Seal - Oil Filter Adapter Bypass	MY 1991 & up ref -23532850
A-23513919	AR	AR	AR	AR	Seal - Oil Filter Cover	ref - 23536199
A-23514465	1	1	1	1	Seal - Dipstick	
A-5117362	1	1	1	1	Cap - Oil Filler	
A-8929302	1	1	1	1	Gasket - Oil Filler Tube	4 Hole
A-103321	1	1	1	1	Lock Washer - Oil Filler Tube Bracket	
A-23511580	1				Seal - Oil Pan	
A-8929102		1	1	1	Seal - Oil Pan**	up to April 1999
A-23517243	8	10	10	10	Spacer	
A-23517242	8	10	10	10	Isolator	
A-11504571	8	10	10	10	Bolt	
A-23522282		1	1	1	Oil Pan Assembly - Front Sump	April 1999 & up
A-23522279		1	1	1	Seal - Oil Pan***	
A-23522281		10	10	10	Isolator Bolt Assembly	Bolt, Isolator & Spacer
A-23511574	1	1	1	1	Plug - Oil Pan Drain	1" Square Socker Head
A-23505720	1	1	1	1	Plug - Oil Pan Drain	3/4" Square Socker Head
A-23530682	1	1	1	1	O-ring - Oil Pan Drain	

**Note - \*\* = requires separate Spacer/Isolator/Bolt**  
**\*\*\* = requires one piece Isolator Bolt Assembly**



# 50/60 SERIES

## COOLING SYSTEM

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-23522707	1	1	1		Water Pump Assembly	6R37023 - 6R579833
A-23520377	1	1	1		Seal Ring - Mounting	Square Cut
A-23526039	1	1	1	1	Water Pump Assembly	6R579834 & up Non-EGR
A-23526038	1	1	1	1	Seal - Mounting O-ring	
A-23535017	1	1	1	1	Water Pump Assembly	EGR - Vertical Inlet
A-23527272	1	1	1	1	Seal - Mounting O-ring	
A-23538636				1	Water Pump Assembly	EGR - Side Inlet
A-23527272				1	Seal - Mounting O-ring	
A-23532543				1	Water Pump Assembly	EGR - Horizontal neck
A-23527272				1	Seal - Mounting O-ring	
A-23535018			1	1	Water Pump Assembly	EGR - Horizontal Inlet
A-23527272			1	1	Seal - Mounting O-ring	
A-8929158			1	1	Seal - Mounting O-ring	Early front mount
A-23529962	1	1	1	1	Kit - Water Pump Reconditioning	▲ denotes items in kit
A-23512048	1	1	1	1	Seal Ring - Water Pump Cover	▲
A-23522433	1	1	1	1	Water Seal Assembly	▲
A-23528190	1	1	1	1	Oil Seal	▲
A-8929422	1	1	1	1	Bearing Assembly	▲
A-8929427	1	1	1	1	Bearing Retainer Ring	▲
A-23529962NB	1	1	1	1	Kit - Water Pump Reconditioning	w/o Bearings
A-23538693	1	1	1	1	Kit - Water Pump Cover Replacement	Steel Cover, Snap Ring & O-ring Seal
A-23538538	1	1	1	1	Cover - Water Pump	Steel
A-8922383	1	1	1	1	Cover - Water Pump	Non-metallic
A-8922407	1	1	1	1	Retainer Ring - Cover	
A-8929510	1	1	1	1	Seal Ring - Water Pump Cover	
A-23527385	1	1	1	1	Seal Ring - Water Pump	Elbow to Water Pump
A-23517973	1	1	1	1	Impeller	6-vane C.I.
A-8929512	1	1	1	1	Impeller	type #263 & 270 Pumps ONLY
A-23507073	1	1	1	1	Gasket	
A-23505896	1	1	1	1	Pump Shaft	
A-23505910	1	1	1	1	Gear	
A-9428477	AR	AR	AR	AR	Plug - Cup	15/16"
A-23505998	1	1	1	1	Impeller - Fresh Water Pump	Hi-Cap Body
A-23507913	1	1	1	1	Impeller - Fresh Water Pump	After 12/90
A-8515850	1	1	1	1	Electrode - Raw Water Pump	Zinc - 3 3/8" long

# 50/60 SERIES

## COOLING SYSTEM

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-5101160	1	1	1	1	Seal Ring - Fresh Water Pump Cover	
A-23522434	1	1	1	1	Seal - Fresh Water Pump Coolent	Unitized
A-8927581	2	2	2	2	Bolt - Raw Water Pump Tube	Bracket
A-5180370	1	1	1	1	Washer	Copper
A-103321	4	4	4	4	Lock Washer - Raw Water Inlet Mount	
A-103325	1	1	1	1	Lock Washer - Raw Water Pump Mount	
A-8924380	1	1	1	1	Plug	1/8" Square Socket Head
A-8922327	1	1	1	1	Plug	1/4" Square Socket Head
A-23511572	1	1	1	1	Plug	1/2" Square Socket Head
A-8923916	1	1	1	1	Plug	1/2" Square Socket Head
A-23503827			2		Thermostat 160°	
A-23503825			2	2	Thermostat 180°	
A-23533492			2	2	Kit - Thermostat 185°	Qty 1ea. Thermostat & Seal
A-23533312			2	2	Thermostat 185°	
A-23532436	2	2	2	2	Kit - Thermostat 190°	Qty 1ea. Thermostat & Seal
A-8929878	2	2	2	2	Thermostat 190°	
A-5132155	2	2	2	2	Seal - Thermostat	
A-8924517	2	2	2	2	Plug	3/8" Square Socket Head
A-23511572	2	2	2	2	Plug	1/2" Square Socket Head
A-23511573	2	2	2	2	Plug	3/4" Square Socket Head
A-8923313	2	2	2	2	Plug	3/4" Square Socket Head
A-8929875		2	2	2	Hose - Water Bypass	1.75" x 3.25"
A-23505048		4	4	4	Clamp - Water Bypass	
A-23506325		2	2	2	Hose - Pump to Cooler Housing	2.75" x 3.01"
A-8929213	1	1	1	1	Seal - Oil - Fan Spindle	
A-8929820	1	1	1	1	Bearing - Roller - Fan Spindle	
A-5103951	1	1	1	1	Seal - Fan Shaft	
A-23503704	1	1	1	1	Bearing - Ball	Single Row
A-5131978	AR	AR	AR	AR	Washer	General Usage

# 50/60 SERIES

## FLYWHEEL & VIBRATION DAMPER

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-23507442	1	1	1	1	Flywheel Assembly - 15"	Flat type - 8" Plate
A-23509709	1	1	1	1	Flywheel Assembly - 15"	Flat type - 10" Plate
A-8929795	12	12	12	12	Bolt - Flywheel Mounting	9/16"-18 x 3/4" (short)
A-9410925	12	12	12	12	Bolt - Flywheel Mounting	9/16"-18 x 2 1/4" (long)
A-9412015	12	12	12	12	Bolt - Flywheel Mounting	9/16"-18 x 2 1/2" (special)
A-23503707	1	1	1	1	Bearing - Clutch Pilot	Ball type - Single Row
A-23522643	1	1	1	1	Housing - Flywheel	Aluminum - 14mm
A-23511574	1	1	1	1	Plug	1" Square Socket Head
MCBS60007		1	1	1	Gasket Set - Front Cover	
A-8929130	1	2	2	2	Gasket - Camshaft Access Cover	
A-23528491	1	1	1	1	Seal Ring - Camshaft Thrust Plate	Perimeter ref - 8929318
A-23527416		1	1	1	Seal Ring - Camshaft Thrust Plate	Perimeter EGR units
A-23521935		1	1	1	Seal Ring - Camshaft Thrust Plate	2 Bolt - Plate to Cylinder Head
A-23521894		1	1	1	Seal Ring - Camshaft Thrust Plate	2 Bolt - Plate to Cylinder Head
A-23522975	1	1	1	1	Seal Ring - Camshaft Cap - Front	Racetrack
A-23516871	1	1	1	1	Seal - Oil - Balance Weight Cover	
A-8929740	1	1	1	1	Seal Ring - Gear Case	
A-5141452	1	1	1	1	Seal Ring - Gear Case Cover	
A-5155596	1	1	1	1	Washer - Front Cover Copper Special	Copper
A-23550030	1				Damper 13.5"	
A-23525990	1	1	1	1	Damper 13.5"	April 1993 & up ref - 8929502
A-8929222	6	6	6	6	Bolt - Vibration Damper Mount	
A-5133981	6	6	6	6	Washer - Vibration Damper Mount	

# 50/60 SERIES

## ACCESSORY DRIVE & AIR COMPRESSOR

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-23509203	1	1	1	1	Bearing - Ball - Accessory Drive	
A-23518178	1	1	1	1	Bearing - Ball - Alternate Drive	Heat Stabilizer
A-8929024	1	1	1	1	Bearing - Accessory Drive Shaft	
A-8929062	1	1	1	1	Ring - Lock - Accessory Drive	
A-8929216	1	1	1	1	Ring - Retaining - Accessory Drive	
A-8929154	1	1	1	1	Seal - Oil - Accessory Drive Shaft	
A-23511747	1	1	1	1	Seal - Oil - Accessory Drive Shaft	Heavy Duty
A-23527826	1	1	1	1	Gasket - Accessory Drive Gear Cover	
A-8929253	1	1	1	1	Seal Ring - Drive to Front Cover	
A-8929820	1	1	1		Bearing - Roller - Air Compressor	
A-5141773	1	1	1		Coupling - Compressor to Drive	≤ MY1994
A-23527273	1	1	1	1	Seal Ring - Air Compressor Oil Supply	
A-23527273	1	1	1	1	Seal Ring - Air Compressor to Cyl Block	
A-23515145	1	1	1		Gasket - Compressor to Drive	≤ MY1994
A-8929299	1	1	1		Gasket - A/C or Drive to Gear Case	
A-5110410	1	1	1	1	Gasket - Air Strainer Mounting	
A-103320	AR	AR	AR	AR	Lock Washer - Air Compressor Mounting	
A-179816	AR	AR	AR	AR	Bolt - Air Compressor Booster Tube	Hex - 5/16"-18 x 3/4"
A-8924380	1	1	1	1	Plug	1/8" Square Socket Head
A-8922327	1	1	1	1	Plug	1/4" Square Socket Head
A-8923847	1	1	1	1	Plug	1/4" Square Socket Head
A-8923916	1	1	1	1	Plug	1/2" Square Socket Head
A-23511572	1	1	1	1	Plug	1/2" Square Socket Head
A-23511573	1	1	1	1	Plug	3/4" Square Socket Head
A-5186840	2	2	2	2	Clamp - Hose	1/2"



# 50/60 SERIES

## ENGINE SENSORS

PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	DESCRIPTION	NOTE
A-8929387		1	1	1	Sensor - Position	SRS
A-8929388		1	1	1	Sensor - Position	TRS
A-23527338				1	Sensor - Position	SRS - DDEC V
A-23527339				1	Sensor - Position	TRS - DDEC V
A-23522322			1	1	Sensor - Pressure	Turbocharger
A-23532797		1	1	1	Sensor - Pressure	Engine Oil
A-23531531		1	1	1	Sensor - Speed	Turbocharger
A-23514708	1	1	1	1	Sensor - Temperature	Coolant
A-23515251			1	1	Sensor - Temperature	Engine Oil
A-23518092	1	1	1	1	Sensor - Temperature	Multi-System
A-8928652	AR	AR	AR	AR	Seal Ring	
A-8923847	AR	AR	AR	AR	Plug	1/4" Square Socket Head
A-5182977	1	1	1	1	Seal - Boost Sensor	
A-23512307	8	8	8	8	Isolator - ECM Mounting	

## GASKETS & SEALS

DESCRIPTION	PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	NOTE
Accessory Drive Gear Cover Gasket	A-23527826	1	1	1	1	
Accessory Drive Seal Ring - Drive to Front Cover	A-8929253	1	1	1	1	
Accessory Drive Shaft Oil Seal	A-23511747	1	1	1	1	Heavy Duty
Accessory Drive Shaft Oil Seal	A-8929154	1	1	1	1	
Air Compressor Air Strainer Mounting Gasket	A-5110410	1	1	1	1	
Air Compressor Gasket - Drive to Gear Case	A-8929299	1	1	1		
Air Compressor Oil Supply Seal Ring	A-23527273	1	1	1	1	
Air Compressor to Cyl Block Seal Ring	A-23527273	1	1	1	1	
Air Compressor to Drive Gasket	A-23515145	1	1	1		≤ MY1994
Balance Weight Cover Oil Seal	A-23516871	1	1	1	1	
Camshaft Access Cover Gasket	A-8929130	1	2	2	2	
Camshaft Cap Seal Ring - Front	A-23522975	1	1	1	1	Racetrack style
Camshaft Thrust Plate Seal Ring	A-23521894		1	1	1	3 Bolt - Plate to Cylinder Head
Camshaft Thrust Plate Seal Ring	A-23521935		1	1	1	2 Bolt - Plate to Cylinder Head
Camshaft Thrust Plate Seal Ring	A-23527416		1	1	1	Perimeter EGR units

# 50/60 SERIES

## GASKETS & SEALS

DESCRIPTION	PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	NOTE
Camshaft Thrust Plate Seal Ring	A-23528491	1	1	1	1	Perimeter ref - 8929318
Crankshaft Front Seal Assembly	A-23518355	1	1	1	1	Unitized Seal & Wear Sleeve
Crankshaft Rear Seal - OS	A-23501544	1	1	1	1	w/o Wear Sleeve
Crankshaft Rear Seal Assembly	A-23513578	1	1	1	1	Wet Housing
Crankshaft Rear Seal Assembly	A-23519651	1	1	1	1	Unitized Seal & Wear Sleeve
Crankshaft Rear Seal Assembly - OS	A-23516969	1	1	1	1	
Cylinder Head Gasket	A-23531306	1				
Cylinder Head Gasket	A-23538406		1	1	1	
Cylinder Liner Seal - Crevice	A-8929013	4	6	6	6	
Cylinder Liner Seal - D-ring	A-8929176	8	12	12	12	
Dipstick Seal	A-23514465	1	1	1	1	
EGR Valve Gasket	A-23533534			1	1	3 Bolt
EGR Valve Seal Ring	A-23535506			1	1	Square
EGR Valve Seal Ring	A-23535507			1	1	Square
Exhaust Manifold Gasket	A-23511666	2	3	3	3	ref - 23533983
Fan Shaft Seal	A-5103951	1	1	1	1	
Fan Spindle Oil Seal	A-8929213	1	1	1	1	
Fuel Filter O-ring Seal	A-23524657	1	1	1	1	Water Separator
Fuel Injector Lower Aux O-ring - Internal	A-23511870	AR	AR	AR	AR	Small
Fuel Injector Mounting O-ring - External	A-5234702	AR	AR	AR	AR	Upper
Fuel Injector Mounting O-ring - External	A-5234699	AR	AR	AR	AR	Lower
Fuel Injector O-ring	4991720	4		6	6	Blue - N3
Fuel Injector O-ring	4991721	4		6	6	Purple - N3
Fuel Injector O-ring - Internal	4991539	AR	AR	AR	AR	Small
Fuel Injector O-ring Washer	4991722	4		6	6	Grey - N3
Fuel Injector Seal Ring	4992288			6	6	E3
Fuel Injector Seal Ring	4992289			6	6	E3
Fuel Injector Solenoid Spacer Seal	A-5234224	AR	AR	AR	AR	
Fuel Injector Upper Aux O-ring - Internal	A-5234701	AR	AR	AR	AR	Large
Fuel Pump Cover Gasket	A-23516118	1	1	1	1	0.001 Thick
Fuel Pump Cover Gasket - OS	A-23516117	1	1	1	1	0.0015 Thick
Fuel Pump Cover Seal	A-5107223	1	1	1	1	
Fuel Pump Drive Seal Ring - Pump Drive to Front Cover	A-23533010	1	1	1	1	Square Cut

# 50/60 SERIES

## GASKETS & SEALS

DESCRIPTION	PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	NOTE
Fuel Pump Drive Seal Ring - Pump Drive to Front Cover	A-8929253	1	1	1	1	
Fuel Pump Mounting Gasket - Pump to Air Compressor	A-23505248	1	1			Late style
Fuel Pump Mounting Gasket - Pump to Drive	A-5150193	1	1			Early style
Fuel Pump Oil Seal	A-23512243	2	2	2	2	
Fuel Pump Valve Plug Seal	A-5161003	1	1	1	1	
Gear Case Cover Seal Ring	A-5141452	1	1	1	1	
Gear Case Seal Ring	A-8929740	1	1	1	1	
Injector Mounting O-ring Seal	A-5234699	8	12	12	12	Lower
Injector Mounting O-ring Seal	A-5234702	4	6	6	6	Upper
Injector Tube Auxiliary Seal - N2	A-23511870	4	6	6	6	Small
Injector Tube Auxiliary Seal - N2	A-5104701	4	6	6	6	Large
Injector Tube Seal - E3	A-23534743			6	6	
Injector Tube Seal - N2	A-23515470	4	6	6	6	
Injector Tube Seal - N3	A-23533147	4		6	6	
Intake Manifold Gasket	A-23517875	2	3	3	3	ref - 23533983
Intake Manifold Gasket	A-23531110				3	14L EGR engines
Oil Cooler Bypass Seal Ring	A-23505902	1	1	1	1	
Oil Cooler Coolant Return Seal Ring	A-8929280	1	1	1	1	
Oil Cooler Core Filter Housing to Cylinder Block Seal Ring	A-23508392	1	1	1	1	
Oil Cooler Core Housing Gasket	A-23506247	1	1	1	1	MY 1991 & up
Oil Cooler Core Housing Gasket	A-8929348		1	1	1	Prior to MY 1991
Oil Cooler Core to Filter Head Seal Ring	A-23508392	2	2	2	2	
Oil Cooler Housing Seal Ring - Neck to Cyl Block	A-8929289	1	1	1	1	
Oil Filler Tube Gasket	A-8929302	1	1	1	1	4 hole
Oil Filter Adapter Bypass Seal	A-23532850	1	1	1	1	MY 1991 & up ref - 23532850
Oil Filter Adapter Seal	A-8929342	1	1	1	1	
Oil Filter Bypass Seal	A-8929340	1	1	1	1	
Oil Filter Cover Seal	A-23513919	AR	AR	AR	AR	ref - 23536199
Oil Filter Seal	A-8929341	1	1	1	1	
Oil Pan Drain O-ring	A-23530682	1	1	1	1	
Oil Pan Seal	A-23511580	1				
Oil Pan Seal	A-23522279		1	1	1	use w/one piece Isolator Bolt Assemblies

# 50/60 SERIES

## GASKETS & SEALS

DESCRIPTION	PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	NOTE
Oil Pan Seal	A-8929102		1	1	1	up to April 1999
Oil Pressure Regulator Gasket	A-5117269		1	1	1	
Oil Pump Breather Seal Ring	A-5103646		1	1	1	
Oil Pump Inlet Pipe Gasket	A-23505992		1	1	1	
Oil Pump Inlet Pipe Gasket	A-23511656	1				
Oil Pump Inlet/Outlet Gasket	A-8929344		2	2	2	
Oil Pump Outlet Gasket	A-8929347		1	1	1	to Cylinder Block
Oil Pump Outlet Pipe O-ring	A-23505891		1	1	1	Front
Oil Pump Outlet Pipe O-ring	A-23505892	2	1	1	1	Rear
Power Steering Pump Gasket	A-23516100	1	1	1	1	
Relief Valve Seal Ring	A-23506556	1	1	1	1	
Rocker Cover Gasket - Cover to Cylinder Head	A-23516322		1	1	1	≤ 6/1999 MY 4-Bolt Grey
Rocker Cover Gasket - Cover to Cylinder Head	A-23522269		1	1	1	MY 6/1999 & up - 10-bolt Black
Rocker Cover Gasket - Intermediate to Lower	A-23511991		1	1	1	MY 6/1999 & up
Rocker Cover Gasket - Intermediate to Lower	A-8929803		1	1	1	≤ 6/1999 MY
Rocker Cover Gasket - Lower to Cylinder Head	A-23516322		1	1	1	≤ 6/1999 MY Grey
Rocker Cover Gasket - Lower to Cylinder Head	A-23516531	1				
Rocker Cover Gasket - Upper to Lower	A-23511772	1				
Rocker Cover Gasket - Upper to Lower	A-8929803		1	1	1	≤ 6/1999 MY
Rocker Cover Gasket - Upper to Intermediate	A-23506153		1	1	1	≤ 6/1999 MY
Rocker Cover Gasket - Upper to Intermediate	A-23511992		1	1	1	MY 6/1999 & up
Rocker Shaft Seal	A-23521111	2	2	2	2	
Sensor Seal - Boost	A-5182977	1	1	1	1	
Sensor Seal Ring	A-8928652	AR	AR	AR	AR	
Thermostat Seal	A-5132155	2	2	2	2	
Turbo Compressor Outlet Elbow Seal	A-23508408	1	1	1	1	
Turbo Exhaust Inlet Gasket	A-23535457	1	1	1	1	
Turbo Exhaust Outlet Gasket	A-23535477	1	1	1	1	
Turbo Mounting Gasket	A-8929529	1	1	1	1	
Turbo Oil Drain Gasket	A-8929285	1	1	1	1	

## 50/60 SERIES

### GASKETS & SEALS

DESCRIPTION	PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	NOTE
Water Pump Coolant Seal	A-23522434	1	1	1	1	Unitized
Water Pump Cover Seal Ring	A-23512048	1	1	1	1	
Water Pump Cover Seal Ring	A-5101160	1	1	1	1	
Water Pump Cover Seal Ring	A-8929510	1	1	1	1	
Water Pump Elbow Seal Ring	A-23527385	1	1	1	1	Elbow to Water Pump
Water Pump Gasket	A-23507073	1	1	1	1	
Water Pump Mounting O-ring Seal	A-23526038	1	1	1	1	
Water Pump Mounting O-ring Seal	A-23527272	1	1	1	1	
Water Pump Mounting O-ring Seal	A-8929158	1	1	1	1	
Water Pump Mounting Seal Ring	A-23520377	1	1	1		Square Cut
Water Pump Oil Seal	A-23528190	1	1	1	1	
Water Pump Seal - Lip Type	A-8929134	1	1	1	1	
Water Pump Water Seal Assembly	A-23522433	1	1	1	1	

### GASKET SETS & KITS

DESCRIPTION	PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	NOTE
Cylinder Head Bolt Kit	MCB50HBK	1				includes Bolts and Washers
Cylinder Head Bolt Kit	MCB60HBK		1	1	1	
Cylinder Head Gasket Set	A-23532330	1				use only w/ NEW style bolts
Cylinder Head Gasket Set	A-23532333		1	1	1	
Cylinder Head Gasket Set - MY2007	A-23538506				1	
Cylinder Head Gasket Set - EGR	A-23536442			1	1	
Cylinder Liner Seal Kit	A-23531502KT	4	6	6	6	Contains Crevice Seal & D Ring
Exhaust Manifold Kit - Non-EGR	A-23512896		1	1		High mount flat center section
Exhaust Manifold Kit - Non-EGR	A-23512897		1	1	1	High mount setback center section
Exhaust Manifold Kit - Non-EGR	A-23516107		1	1		Medium mount offset center section
Front Cover Gasket Set	MCBS60007	1	1	1	1	
Front Cover O-ring Kit	MCBS0007		1	1	1	
Fuel Injector Complete O-ring Kit	A-5234699K	1	1	1	1	
Fuel Injector Follower Spring & Retainer Kit	A-23528939	1	1	1	1	
Fuel Injector Installation Kit	MCBS60INJ	4	6	6	6	DDEC II-IV

# 50/60 SERIES

## GASKET SETS & KITS

DESCRIPTION	PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	NOTE
Fuel Injector Installation Kit	A-23537111	4		6	6	DDEC V (N3)
Fuel Injector Installation Kit	A-23537123			6	6	DDEC V (E3)
Fuel Injector Internal O-ring Kit	MCB26209	1	1	1	1	
Fuel Injector Internal O-ring Kit - Bulk	MCB26209-25	25	25	25	25	
Fuel Injector Nut Assembly O-ring Kit	MCB26210	1	1	1	1	
Fuel Injector Nut Assembly O-ring Kit - Bulk	MCB26210-25	25	25	25	25	
Fuel Injector Repair Kit	A-5230001	1	1	1	1	
Fuel Injector Repair Kit - Bulk	A-5230001-25	25	25	25	25	
Fuel Injector Solenoid Seal & Screw Kit	A-5236116	1	1	1	1	
Fuel Pump Check Valve Kit	A-23506563	AR	AR	AR	AR	
Fuel Pump Repair Kit	A-23517845RK	1	1	1	1	
Fuel Pump Repair Kit	A-23537686RK	1	1	1	1	
Fuel Pump Repair Kit - w/ Shaft	A-23517845RK-S	1	1	1	1	
Fuel Pump Repair Kit - w/ Shaft & Gears	A-23517845RK-SG	1	1	1	1	
Injector Installation Kit - DDEC V (E3)	A-23537123			6	6	Seals, Bolt & Washer
Injector Installation Kit - DDEC II-IV	MCBS60INJ	4	6	6	6	
Injector Installation Kit - DDEC V (N3)	A-23537111	4		6	6	Seals, Gasket, Bolt & Washer
Injector Tube Kit - N2	A-23501580	4	6	6	6	includes Seal A-23515470
Lower Bearing Kit - STD	A-23531604		1	1		Narrow Mains - 43mm Early
Lower Bearing Kit - STD	A-23531605		1	1		Wide Mains - 47mm
Lower Bearing Kit - STD	A-23531606			1		Articulated Steel Piston
Lower Bearing Kit - STD	A-23527914				1	Non-EGR Engine
Lower Bearing Kit - STD	A-23533692			1	1	Tabbed Thrust Washers
Lower Bearing Kit - STD	A-23535280			1	1	Hooked & Tabbed Thrust Washers
Lower Bearing Kit - .254mm	A-23538953			1		Articulated Steel Piston
Lower Bearing Kit - .254mm	A-23519905		1	1		Wide Mains - 47mm



## 50/60 SERIES

### GASKET SETS & KITS

DESCRIPTION	PART #	S50 8.5L	S60 11.1L	S60 12.7L	S60 14L	NOTE
Lower Bearing Kit - .508mm	A-23538954			1		Articulated Steel Piston
Lower Bearing Kit - .508mm	A-23519906		1	1		Wide Mains - 47mm
Oil Cooler Installation Kit	MCBS0060	1	1	1	1	MY 1991 & up
Overhaul Gasket Set	A-23532329	1				includes Rocker Cover Gaskets
Overhaul Gasket Set	MCB23512691		1	1	1	w/o Rocker Cover Gaskets
Overhaul Gasket Set	A-23532720		1	1	1	
Overhaul Gasket Set - EGR	A-23536443			1	1	
Slipper Bearing Kit	A-23519723	4	6	6		X-head Iron - OE Crown
Slipper Bearing Kit	MCB23519723	4	6	6		X-head Iron - IMCB Crown
Water Pump Cover Replacement Kit	A-23538693	1	1	1	1	Steel Cover, Snap Ring & O-ring Seal
Water Pump Reconditioning Kit	A-23529962	1	1	1	1	
Water Pump Reconditioning Kit	A-23529962NB	1	1	1	1	w/o Bearings



# INDEX

PART #	DESCRIPTION	PAGE	PART #	DESCRIPTION	PAGE
23515635M	Turbocharger	23	4991752-B3	Fuel Injector Spray Tip	21
23518588M	Turbocharger	23	4991752-B4	Fuel Injector Spray Tip	21
23528065M	Turbocharger	23	4991752-B5	Fuel Injector Spray Tip	21
23536348M	Turbocharger	23	4991752-B6	Fuel Injector Spray Tip	21
4991444	Follower	19	4991753-C1A	Fuel Injector Spray Tip	21
4991446	Plunger	19	4991753-C1	Fuel Injector Spray Tip	21
4991448	Filter Retainer	19	4991753-C2A	Fuel Injector Spray Tip	21
4991449	Filter Retainer	19	4991753-C2	Fuel Injector Spray Tip	21
4991450	Follower Retainer	19	4991753-C3	Fuel Injector Spray Tip	21
4991452	Injector Load Plate	19	4991754-D1	Fuel Injector Spray Tip	21
4991453	Armature	19	4991754-D2	Fuel Injector Spray Tip	21
4991454	Screw - Armature	19	4991754-D3	Fuel Injector Spray Tip	21
4991455	Control Valve Spring Retainer Screw	19	4991754-D4	Fuel Injector Spray Tip	21
4991456	Solenoid Spacer	19	4991754-D5	Fuel Injector Spray Tip	21
4991457	Spring Retainer	19	4992288	Fuel Injector Seal Ring	19, 31
4991458	Control Valve Spring	19	4992289	Fuel Injector Seal Ring	19, 31
4991459	Control Valve	19	A-103319	Lock Washer	17
4991460	Valve Stop	19	A-103320	Lock Washer	29
4991462	Spacer	19	A-103321	Lock Washer	25, 27
4991463	Cage - Check Valve	19	A-103325	Lock Washer	12, 27
4991464	Valve Spring	19	A-103709	Drive Gear Pin	16
4991465	Cage - Valve Spring	19	A-11504571	Bolt	25
4991466-2	Valve Spring Seat	19	A-11504822	Bolt	13, 14
4991466	Valve Spring Seat	19	A-11506101	Nut	22
4991469	Control Valve Spring Seat	19	A-147481	Steel Ball	17
4991470	Control Valve Stop Screw	19	A-147489	Steel Ball	12
4991471	Body Assembly	19	A-179816	Bolt	29
4991539	Fuel Injector O-ring	19, 31	A-23500694	Alignment Pin	17
4991597	Follower Spring	19	A-23500708	Camshaft Journal Cap Nut	16
4991598	Follower Retainer	19	A-23501544	Crankshaft Rear Seal	12, 31
4991613	Gasket - Green	17	A-23501576	Intake Valve Kit	14
4991636	Nut Assembly	19	A-23501577	Exhaust Valve Kit	14
4991685	Solenoid	19	A-23501580	Injector Tube Kit	15, 35
4991720	Fuel Injector O-ring	19, 31	A-23503704	Ball Bearing	27
4991721	Fuel Injector O-ring	19, 31	A-23503707	Pilot Clutch Bearing	28
4991722	Fuel Injector O-ring Washer	19, 31	A-23503747	Piston Ring Set	7, 8
4991748-E3	Fuel Injector Spray Tip	21	A-23503825	Thermostat	27
4991748-E5	Fuel Injector Spray Tip	21	A-23503827	Thermostat	27
4991751-A1	Fuel Injector Spray Tip	21	A-23505048	Clamp - Water Bypass	27
4991751-A2	Fuel Injector Spray Tip	21	A-23505062	Bolt	24
4991752-B1	Fuel Injector Spray Tip	21	A-23505248	Fuel Pump Mounting Gasket	16, 32
4991752-B2	Fuel Injector Spray Tip	21	A-23505249	Drive Coupling - Spider	17

# INDEX

PART #	DESCRIPTION	PAGE	PART #	DESCRIPTION	PAGE
A-23505398	Lock Nut	22	A-23511574	Plug	15, 22, 24, 25, 28
A-23505720	Oil Pan Drain Plug	25	A-23511580	Oil Pan Seal	25, 32
A-23505729	Piston Ring Set	8	A-23511656	Oil Pump Inlet Pipe Gasket	24, 33
A-23505789	Clamp - V-Band	22	A-23511666	Exhaust Manifold Gasket	22, 31
A-23505886	Oil Pump Assembly	24	A-23511747	Accessory Drive Shaft Oil Seal	29, 30
A-23505891	Oil Pump Outlet Pipe O-ring	24, 33	A-23511772	Rocker Cover Gasket	13, 33
A-23505892	Oil Pump Outlet Pipe O-ring	24, 33	A-23511870	Fuel Injector Lower Auxiliary O-ring	15, 19, 31, 32
A-23505896	Pump Shaft	26	A-23511991	Rocker Cover Gasket	13, 14, 33
A-23505902	Oil Cooler Bypass Seal Ring	24, 32	A-23511992	Rocker Cover Gasket	14, 33
A-23505910	Gear	26	A-23512048	Water Pump Cover Seal Ring	26, 34
A-23505992	Oil Pump Inlet Pipe Gasket	24, 33	A-23512243	Fuel Pump Oil Seal	17, 32
A-23505998	Impeller	26	A-23512307	Isolator	30
A-23506153	Rocker Cover Gasket	14, 33	A-23512896	Exhaust Manifold Kit	22, 34
A-23506222	Piston Cooling Nozzle Bolt	9	A-23512897	Exhaust Manifold Kit	22, 34
A-23506247	Gasket - Oil Cooler Housing	24, 32	A-23513578	Crankshaft Rear Seal Assembly	12, 31
A-23506325	Water Pump Hose	27	A-23513919	Oil Filter Cover Seal	25, 32
A-23506350	Exhaust Valve	14	A-23514371	Adjustment Screw Nut	16
A-23506546	Drive Gear	16	A-23514465	Dipstick Seal	25, 31
A-23506549	Drive Shaft	17	A-23514708	Temperature Sensor	30
A-23506553	Plug	17	A-23515145	Air Compressor Gasket	29, 30
A-23506555	Relief Valve Cap	17	A-23515251	Temperature Sensor	30
A-23506556	Relief Valve Seal Ring	17, 33	A-23515470	Injector Tube Seal	15, 20, 32, 35
A-23506557	Relief Valve Spring	17	A-23515581	Connecting Rod Bearing	10
A-23506559	Drive Shaft Snap Ring	17	A-23515582	Connecting Rod Bearing	10
A-23506560	Relief Valve Spacer	17	A-23515583	Connecting Rod Bearing	10
A-23506563	Fuel Pump Check Valve Kit	17, 35	A-23515584	Connecting Rod Bearing	10
A-23506564	Relief Valve Shear Pin	17	A-23515598	Crankshaft	12
A-23507073	Water Pump Gasket	26, 34	A-23516100	Power Steering Pump Gasket	33
A-23507438	Turbo Mounting Stud	22	A-23516107	Exhaust Manifold Kit	22, 34
A-23507442	Flywheel Assembly	28	A-23516117	Fuel Pump Cover Gasket	16, 31
A-23507504	Exhaust Valve Kit	14	A-23516118	Fuel Pump Cover Gasket	16, 31
A-23507913	Impeller	26	A-23516322	Rocker Cover Gasket	13, 14, 33
A-23508392	Oil Cooler Core Seal Ring	24, 32	A-23516531	Rocker Cover Gasket	13, 33
A-23508405	Turbocharger	23	A-23516871	Balance Weight Cover Oil Seal	28, 30
A-23508408	Turbo Compressor Outlet Elbow Seal	22, 33	A-23516918	Check Valve	17
A-23508410	Turbocharger	23	A-23516919	Check Valve	17
A-23509203	Accessory Drive Ball Bearing	29	A-23516969	Crankshaft Rear Seal Assembly	12, 31
A-23509709	Flywheel Assembly	28	A-23516993	Check Valve	17
A-23511572	Plug	12, 15, 22, 27, 29	A-23517058	Intake Valve Seat	15
A-23511573	Plug	12, 15, 24, 27, 29			

# INDEX

PART #	DESCRIPTION	PAGE	PART #	DESCRIPTION	PAGE
A-23517242	Isolator	25	A-23522434	Water Pump Coolent Seal	27, 34
A-23517243	Spacer	25	A-23522643	Flywheel Housing	28
A-23517723	Check Valve	17	A-23522707	Water Pump Assembly	26
A-23517845RK-S	Fuel Pump Repair Kit	16, 35	A-23522872	Piston Pin	8
A-23517845RK-SG	Fuel Pump Repair Kit	16, 35	A-23522877	Rod Cap Bolt	9
A-23517845RK	Fuel Pump Repair Kit	16, 35	A-23522975	Seal Ring - Camshaft Cap - Front	28, 30
A-23517875	Intake Manifold Gasket	22, 32	A-23523930	Valve Stem Seal	14
A-23517911	Isolator Assembly	13, 14	A-23524154	Thrust Bearing Kit	11
A-23517912	Isolator	13	A-23524601	Piston Kit	8
A-23517973	Impeller	26	A-23524657	Fuel Filter O-ring Seal	31
A-23518092	Temperature Sensor	30	A-23525168	Piston Pin	8
A-23518178	Alternate Drive Ball Bearing	29	A-23525500	Counter Bore Repair Sleeve	12
A-23518355	Crankshaft Front Seal Assembly	12, 31	A-23525990	Damper 13.5"	28
A-23518571	Valve Guide	14	A-23526038	Water Pump Mounting O-ring Seal	26, 34
A-23518572	Valve Guide	14	A-23526039	Water Pump Assembly	26
A-23519090	Exhaust Valve Seat	15	A-23526141	Connecting Rod Bearing - STD	10
A-23521935	Seal Ring - Camshaft Thrust Plate	28, 30	A-23526142	Connecting Rod Bearing - STD	10
A-23519624	Piston Kit	8	A-23527065	Connecting Rod Bearing - .254mm	10
A-23519635	Piston Kit	8	A-23527066	Connecting Rod Bearing - .508mm	10
A-23519646	Piston Kit	8	A-23527067	Connecting Rod Bearing - .762mm	10
A-23519651	Crankshaft Rear Seal Assembly	12, 31	A-23527225	Crankshaft - 12-hole	12
A-23519723	Slipper Bearing Kit	8, 36	A-23527272	Water Pump Mounting O-ring Seal	26, 34
A-23519905	Lower Bearing Kit	11, 35	A-23527273	Seal Ring	29, 30
A-23519906	Lower Bearing Kit	11, 36	A-23527338	Position Sensor	30
A-23520148	Exhaust Valve	14	A-23527339	Position Sensor	30
A-23520149	Intake Valve	14	A-23527385	Water Pump Elbow Seal Ring	26, 34
A-23520377	Water Pump Mounting Seal Ring	26, 34	A-23527416	Seal Ring - Camshaft Thrust Plate	28, 30
A-23520818	Adjustment Screw Assembly	16	A-23527448	Oil Pump Assembly	24
A-23520820	Adjustment Screw Assembly	16	A-23527826	Gasket - Accessory Drive Gear Cover	29, 30
A-23521111	Rocker Shaft Seal	16, 33	A-23527914	Lower Bearing Kit	5, 11, 35
A-23521781	Piston Pin Retainer	8	A-23528190	Water Pump Oil Seal	26, 34
A-23521894	Seal Ring - Camshaft Thrust Plate	28, 30	A-23528491	Seal Ring - Camshaft Thrust Plate	28, 31
A-23521944	Valve Stem Seal	14	A-23528493	Piston Cooling Nozzle	9
A-23522269	Rocker Cover Gasket	13, 14, 33	A-23528939	Fuel Injector Follower Spring & Retainer Kit	20, 34
A-23522271	Bolt & Isolator Assembly	13, 14	A-23529596	Exhaust Valve	14
A-23522279	Oil Pan Seal	25, 32	A-23529629	Intake Valve	14
A-23522281	Isolator Bolt Assembly	25	A-23529962NB	Water Pump Reconditioning Kit	26, 36
A-23522282	Oil Pan Assembly	25	A-23529962	Water Pump Reconditioning Kit	26, 36
A-23522322	Pressure Sensor	30	A-23530554	Thrust Washer	10
A-23522415	Oil Cooler Core	24	A-23530555	Thrust Washer	10
A-23522416	Oil Cooler Core	24	A-23530660	Piston Kit	8
A-23522433	Water Pump Water Seal Assembly	26, 34			

# INDEX

PART #	DESCRIPTION	PAGE
A-23530662	Piston Kit	8
A-23530664	Piston Kit	8
A-23530668	Piston Kit	8
A-23530682	Oil Pan Drain O-ring	25, 32
A-23530768	Cylinder Head Bolt	15
A-23531110	Intake Manifold Gasket	22, 32
A-23531249	Cylinder Liner Kit	8
A-235312508	Cylinder Liner Kit	8
A-23531251	Piston Ring Set	7, 8
A-23531252	Piston Ring Set	7, 8
A-23531306	Cylinder Head Gasket	15, 31
A-23531502KT	Cylinder Liner	8, 34
A-23531504	Cylinder Liner	7
A-23531531	Speed Sensor	30
A-23531604	Lower Bearing Kit	5, 6, 11, 35
A-23531605	Lower Bearing Kit	5, 6, 11, 35
A-23531606	Lower Bearing Kit	6, 11, 35
A-23532007	Piston Pin	8
A-23532307	Lower Bearing Kit	5
A-23532329	Overhaul Gasket Set	11, 36
A-23532330	Cylinder Head Gasket Set	11, 34
A-23532333	Cylinder Head Gasket Set	11, 34
A-23532436	Thermostat Kit	27
A-23532468	Cylinder Liner Kit	8
A-23532543	Water Pump Assembly	26
A-23532565	Lower Bearing Kit	5
A-23532574	Lower Bearing Kit	6
A-23532577	Lower Bearing Kit	5
A-23532581	Lower Bearing Kit	6
A-23532585	Lower Bearing Kit	6
A-23532592	Lower Bearing Kit	6
A-23532720	Overhaul Gasket Set	11, 36
A-23532797	Pressure Sensor	30
A-23532850	Oil Filter Adapter Bypass Seal	25, 32
A-23532926	Main Bearing	10
A-23532977	Shaft & Hub Assembly	16
A-23532981	Fuel Pump	16
A-23533010	Fuel Pump Drive Seal Ring	16, 31
A-23533033	Lower Bearing Kit	6
A-23533147	Injector Tube Seal	15, 20, 32
A-23533203	Piston Kit	8

PART #	DESCRIPTION	PAGE
A-23533263	Main Bearing	10
A-23533312	Thermostat	27
A-23533534	Gasket - EGR Valve	22, 31
A-23533567	Connecting Rod Bearing - .254mm	10
A-23533568	Connecting Rod Bearing - .508mm	10
A-23533492	Thermostat Kit	27
A-23533552	Valve Guide	14
A-23533692	Lower Bearing Kit	5, 6, 11, 35
A-23534361	Turbocharger	23
A-23534743	Injector Tube Seal	15, 20, 32
A-23534745	Injector Hole Tube	15, 20
A-23535010	Thrust Bearing Kit	11
A-23535017	Water Pump Assembly	26
A-23535018	Water Pump Assembly	26
A-23535122	Valve Spring	15
A-23535129	Check Valve	17
A-23535280	Lower Bearing Kit	5, 11, 35
A-23535457	Turbo Exhaust Inlet Gasket	22, 33
A-23535477	Turbo Exhaust Outlet Gasket	22, 33
A-23535506	Seal Ring - EGR Valve	22, 31
A-23535507	Seal Ring - EGR Mixer	22, 31
A-23535699	Washer	19
A-23536442	Cylinder Head Gasket Set - EGR	11, 34
A-23536443	Overhaul Gasket Set	11, 36
A-23536862	E3 Injector Tube Shim - .007"	15
A-23536863	E3 Injector Tube Shim - .012"	15
A-23536864	E3 Injector Tube Shim - .018"	15
A-23537081	Lower Bearing Kit	5
A-23537089	Adjustment Screw Assembly	16
A-23537111	Fuel Injector Installation Kit	20, 35
A-23537123	Fuel Injector Installation Kit	20, 35
A-23537529	Piston Ring Set	8
A-23537531	Piston Kit	8
A-23537686RK	Fuel Pump Repair Kit	16, 35
A-23537899	Piston Kit	8
A-23538406	Cylinder Head Gasket	15, 31
A-23538418	Lower Bearing Kit	6
A-23538506	Cylinder Head Gasket Set - MY2007	11, 34
A-23538538	Cover - Water Pump	26
A-23538636	Water Pump Assembly	26
A-23538693	Water Pump Cover Replacement Kit	26, 36



# INDEX

PART #	DESCRIPTION	PAGE	PART #	DESCRIPTION	PAGE
A-23538840	Injector Hole Tube	15, 20	A-5184530	Relief Valve Spring	17
A-23538953	Lower Bearing Kit	11, 35	A-5186840	Clamp - Hose	13, 22, 29
A-23538954	Lower Bearing Kit	11, 36	A-5230001-25	Fuel Injector Repair Kit	20, 35
A-23539134	Cylinder Liner Shim	12	A-5230001	Fuel Injector Repair Kit	20, 35
A-23539135	Cylinder Liner Shim	12	A-5234224	Fuel Injector Solenoid Spacer Seal	19, 31
A-23539136	Cylinder Liner Shim	12	A-5234699	Fuel Injector Mounting O-ring	19, 31, 32
A-23539316	Lower Bearing Kit	6	A-5234699K	Fuel Injector Complete O-ring Kit	20, 34
A-23550030	Damper 13.5"	28	A-5234701	Fuel Injector Upper Auxiliary O-ring	19, 31
A-3719219	Adapter Bolt Assembly	17	A-5234702	Fuel Injector Mounting O-ring	19, 31, 32
A-5101160	Water Pump Cover Seal Ring	27, 34	A-5235586	Solenoid Assembly Screw	19
A-5101760	Breather Element	13	A-5236116	Fuel Injector Solenoid Seal & Screw Kit	20, 35
A-5102257	Fork - Coupling	17	A-8515850	Electrode - Raw Water Pump	26
A-5103646	Oil Pump Breather Seal Ring	13, 24, 33	A-8922327	Plug	12, 22, 24, 27, 29
A-5103951	Seal - Fan Shaft	27, 31	A-8922383	Cover - Water Pump	26
A-5104514	Isolator Washer	13, 14	A-8922407	Retainer Ring - Cover	26
A-5104701	Injector Tube Auxiliary Seal	15, 20, 32	A-8922740	Regulator & Relief Valve	24
A-5107223	Fuel Pump Cover Seal	16, 31	A-8923313	Plug	12, 15, 24, 27
A-5110410	Gasket - Air Strainer Mounting	29, 30	A-8923521	Drive Gear Pin	16
A-5117269	Oil Pressure Regulator Gasket	24, 33	A-8923522	Gear Retainer Ring	16
A-5117362	Cap - Oil Filler	25	A-8923523	Drive Gear Key	16
A-5126327	Valve Spring	24	A-8923526	Bearing - Shaft	17
A-5127978	Bushing - Oil Pump	24	A-8923528	Check Valve	17
A-5128217	Drive Gear	16	A-8923847	Plug	12, 22, 29, 30
A-5131978	Washer	27	A-8923916	Plug	12, 15, 22, 27, 29
A-5132155	Thermostat Seal	27, 33	A-8924380	Plug	12, 17, 27, 29
A-5133981	Washer	28	A-8924517	Plug	12, 17, 22, 27
A-5138638	Dowel	15	A-8925325	Bushing - Pipe	17
A-5138643	Button - Valve Adjustment	16	A-8925603	Bolt	17
A-5139988	Plug - Cup	12, 22	A-8926993	Plug	15
A-5139991	Plug - Cup	12, 15	A-8927581	Bolt - Raw Water Pump Tube	27
A-5141452	Gear Case Cover Seal Ring	28, 32	A-8928652	Sensor Seal Ring	30, 33
A-5141773	Coupling - Compressor to Drive	29	A-8929013	Liner Seal - Crevice	8, 31
A-5150193	Fuel Pump Mounting Gasket	16, 32	A-8929019	Rod Cap Nut	9
A-5152122	Washer	13	A-8929024	Bearing - Accessory Drive Shaft	29
A-5155596	Washer	28	A-8929059	Rocker Arm Bushing	16
A-5161003	Fuel Pump Valve Plug Seal	17, 32	A-8929062	Lock Ring	29
A-5174971	Plug	17			
A-5174973	Check Valve	17			
A-5174975	Drive Gear	16			
A-5180370	Washer	27			
A-5182977	Boost Sensor Seal	30, 33			



# INDEX

PART #	DESCRIPTION	PAGE	PART #	DESCRIPTION	PAGE
A-8929075	Injector Hole Tube	20	A-8929415	Valve Spring	15
A-8929076	Valve Spring Seat	15	A-8929422	Bearing Assembly	26
A-8929078	Injector Tube Tube	15	A-8929425	Turbo Mounting Stud	22
A-8929085	Thrust Washer	10	A-8929427	Bearing Retainer Ring	26
A-8929087	Piston Pin	8	A-8929430	Bull Gear Bearing Assembly	10
A-8929088	Clamp - Injector Hold Down	19	A-8929483	Drive Shaft	17
A-8929102	Oil Pan Seal	25, 33	A-8929504	Piston Pin Spacer Bolt	8
A-8929105	Valve Rotator	15	A-8929510	Water Pump Cover Seal Ring	26, 34
A-8929126-010	Exhaust Valve Seat	15	A-8929512	Impeller	26
A-8929126	Exhaust Valve Seat	15	A-8929529	Turbo Mounting Gasket	22, 33
A-8929127	Intake Valve Seat	15	A-8929536	Rocker Arm Bushing	16
A-8929129	Camshaft Journal Cap Bolt	15	A-8929573	Valve Lock	14
A-8929130	Gasket - Camshaft Access Cover	28, 30	A-8929586	Rocker Shaft Spacer	16
A-8929134	Water Pump Seal	34	A-8929587	Camshaft Journal Cap Bolt	15
A-8929152	Dowel Pin	12	A-8929588	Camshaft Journal Cap Stud	16
A-8929154	Seal - Oil - Accessory Drive Shaft	29, 30	A-8929589	Intake Valve	14
A-8929158	Water Pump Mounting O-ring Seal	26, 34	A-8929590	Exhaust Valve	14
A-8929169	Washer	22	A-8929670	Main Bearing	10
A-8929176	Liner Seal - D-ring	8, 31	A-8929671	Main Bearing	10
A-8929213	Seal - Oil - Fan Spindle	27, 31	A-8929672	Main Bearing	10
A-8929216	Retaining Ring	29	A-8929673	Main Bearing	10
A-8929222	Bolt - Vibration Damper Mount	28	A-8929680	Main Bearing	10
A-8929299	Gasket - A/C or Drive to Gear Case	29, 30	A-8929681	Main Bearing	10
A-8929393	Bolt - Injector Hold Down	19, 24	A-8929682	Main Bearing	10
A-8929253	Seal Ring	16, 29, 30, 32	A-8929683	Main Bearing	10
A-8929255	Isolator	13, 14	A-8929690	Camshaft Bearing - STD	10
A-8929280	Oil Cooler Coolent Return Seal Ring	24, 32	A-8929691	Camshaft Bearing - .254mm	10
A-8929285	Turbo Oil Drain Gasket	22, 33	A-8929692	Camshaft Bearing - .508mm	10
A-8929289	Oil Cooler Housing Seal Ring	24, 32	A-8929693	Camshaft Bearing - .762mm	10
A-8929302	Oil Filler Tube Gasket	25, 32	A-8929710	Connecting Rod Bearing - STD	10
A-8929328	Cylinder Head Bolt	15	A-8929711	Connecting Rod Bearing - .254mm	10
A-8929337	Bolt - Piston Pin	8	A-8929712	Connecting Rod Bearing - .508mm	10
A-89293313	Plug	22	A-8929713	Connecting Rod Bearing - .762mm	10
A-8929340	Oil Filter Bypass Seal	24, 32	A-8929740	Gear Case Seal Ring	28, 32
A-8929341	Oil Filter Seal	24, 32	A-8929795	Bolt - Flywheel Mounting	28
A-8929342	Oil Filter Adapter Seal	24, 32	A-8929803	Rocker Cover Gasket	13, 14, 33
A-8929344	Oil Pump Inlet/Outlet Gasket	24, 33	A-8929808	Woodruff Key	12
A-8929347	Oil Pump Outlet Gasket	24, 33	A-8929820	Bearing - Roller - Fan Spindle	27, 29
A-8929348	Oil Cooler Core Housing Gasket	24, 32	A-8929875	Water Bypass Hose	27
A-8929355	Rod Cap Bolt	9	A-8929878	Thermostat	27
A-8929357	Bolt - Manifold Mounting	22	A-9410925	Bolt - Flywheel Mounting	28
A-8929387	Position Sensor	30			
A-8929388	Position Sensor	30			

# INDEX

PART #	DESCRIPTION	PAGE	PART #	DESCRIPTION	PAGE
A-9411502	Retaining Ring - Shaft	16	A-MCIF23533204-50	Inframe Kit	5
A-9412015	Bolt - Flywheel Mounting	28	A-MCIF23533204	Inframe Kit	6
A-9421745	Plug - Cup	15	A-MCIF23533204Q-50	Inframe Kit	5
A-9428477	Plug - Cup	26	A-MCIF23533204Q	Inframe Kit	6
A-MCIF23530661Q	Inframe Kit	5	A-MCIF23533204QT	Inframe Kit	6
A-MCIF23530663Q	Inframe Kit	5	A-MCIF23538418Q	Inframe Kit	6
A-MCIF23530665Q	Inframe Kit	5	A-MCIF23539316Q	Inframe Kit	6
A-MCIF23530665QT	Inframe Kit	5	A-MCIFS50-4	Re-Ring Inframe Kit	7
A-MCIF23532554-50	Inframe Kit	5	A-MCIFS50-4S	Re-Ring Inframe Kit	7
A-MCIF23532554	Inframe Kit	5	A-MCIFS50	Re-Ring Inframe Kit	7
A-MCIF23532554Q-50	Inframe Kit	5	A-MCIFS60-1	Re-Ring Inframe Kit	7
A-MCIF23532554Q	Inframe Kit	5	A-MCIFS60-4-1	Re-Ring Inframe Kit	7
A-MCIF23532554QT	Inframe Kit	5	A-MCIFS60-4	Re-Ring Inframe Kit	7
A-MCIF23532555-50	Inframe Kit	5	A-MCIFS60-4S	Re-Ring Inframe Kit	7
A-MCIF23532555	Inframe Kit	5	A-MCIFS60-5B	Re-Ring Inframe Kit	7
A-MCIF23532555N-50	Inframe Kit	5	A-MCIFS60-5M	Re-Ring Inframe Kit	7
A-MCIF23532555N	Inframe Kit	5	A-MCIFS60-5	Re-Ring Inframe Kit	7
A-MCIF23532555NQ-50	Inframe Kit	5	A-MCIFS60Q	Re-Ring Inframe Kit	7
A-MCIF23532555NQ	Inframe Kit	5	A-MCIFS60	Re-Ring Inframe Kit	7
A-MCIF23532555Q-50	Inframe Kit	5	A-MCOH23530665Q	Overhaul Kit	5
A-MCIF23532555Q	Inframe Kit	5	A-MCOH23530665QT	Overhaul Kit	5
A-MCIF23532555QT	Inframe Kit	5	A-MCOH23532554-50	Overhaul Kit	5
A-MCIF23532556-50	Inframe Kit	5	A-MCOH23532554	Overhaul Kit	5
A-MCIF23532556	Inframe Kit	6	A-MCOH23532554Q-50	Overhaul Kit	5
A-MCIF23532556N-50	Inframe Kit	5	A-MCOH23532554Q	Overhaul Kit	5
A-MCIF23532556N	Inframe Kit	6	A-MCOH23532554QT	Overhaul Kit	5
A-MCIF23532556NQ-50	Inframe Kit	5	A-MCOH23532555-50	Overhaul Kit	5
A-MCIF23532556NQ	Inframe Kit	6	A-MCOH23532555N-50	Overhaul Kit	5
A-MCIF23532556Q-50	Inframe Kit	5	A-MCOH23532555N	Overhaul Kit	5
A-MCIF23532556Q	Inframe Kit	6	A-MCOH23532555NQ-50	Overhaul Kit	5
A-MCIF23532556QT	Inframe Kit	6	A-MCOH23532555NQ	Overhaul Kit	5
A-MCIF23532557-50	Inframe Kit	5	A-MCOH23532555	Overhaul Kit	5
A-MCIF23532557	Inframe Kit	6	A-MCOH23532555Q-50	Overhaul Kit	5
A-MCIF23532557Q-50	Inframe Kit	5	A-MCOH23532555Q	Overhaul Kit	5
A-MCIF23532557Q	Inframe Kit	6	A-MCOH23532555QT	Overhaul Kit	5
A-MCIF23532557QT	Inframe Kit	6	A-MCOH23532556-50	Overhaul Kit	5
A-MCIF23532558-50	Inframe Kit	5	A-MCOH23532556N-50	Overhaul Kit	5
A-MCIF23532558	Inframe Kit	6	A-MCOH23532556N	Overhaul Kit	6
A-MCIF23532558Q	Inframe Kit	6	A-MCOH23532556NQ-50	Overhaul Kit	5
A-MCIF23532558QT	Inframe Kit	6	A-MCOH23532556NQ	Overhaul Kit	6
A-MCIF23532590	Inframe Kit	6	A-MCOH23532556	Overhaul Kit	6
A-MCIF23532590Q	Inframe Kit	6	A-MCOH23532556Q-50	Overhaul Kit	5
A-MCIF23532591	Inframe Kit	6	A-MCOH23532556Q	Overhaul Kit	6
A-MCIF23532591Q	Inframe Kit	6	A-MCOH23532557-50	Overhaul Kit	5

# INDEX

PART #	DESCRIPTION	PAGE	PART #	DESCRIPTION	PAGE
A-MCOH23532557	Overhaul Kit	6	MCB7133	Rod Bushing	9, 10
A-MCOH23532557Q-50	Overhaul Kit	5	MCBS0007	Front Cover O-ring Kit	34
A-MCOH23532557Q	Overhaul Kit	6	MCBS0060	Oil Cooler Installation Kit	24, 36
A-MCOH23532558-50	Overhaul Kit	5	MCBS60INJ	Fuel Injector Installation Kit	20, 34, 35
A-MCOH23532558	Overhaul Kit	6	MCBS60007	Gasket Set - Front Cover	28, 34
A-MCOH23532558Q-50	Overhaul Kit	5	R-5234785	Remanufactured Fuel Injector	21
A-MCOH23532558Q	Overhaul Kit	6	R-5234795	Remanufactured Fuel Injector	21
A-MCOH23532590	Overhaul Kit	6	R-5234865	Remanufactured Fuel Injector	21
A-MCOH23532590Q	Overhaul Kit	6	R-5234870	Remanufactured Fuel Injector	21
A-MCOH23532591	Overhaul Kit	6	R-5234935	Remanufactured Fuel Injector	21
A-MCOH23532591Q	Overhaul Kit	6	R-5234940	Remanufactured Fuel Injector	21
A-MCOH23533204-50	Overhaul Kit	5	R-5234945	Remanufactured Fuel Injector	21
A-MCOH23533204	Overhaul Kit	6	R-5234970	Remanufactured Fuel Injector	21
A-MCOH23533204Q-50	Overhaul Kit	5	R-5235550	Remanufactured Fuel Injector	21
A-MCOH23533204Q	Overhaul Kit	6	R-5235575	Remanufactured Fuel Injector	21
A-MCOH23533204QT	Overhaul Kit	6	R-5235580	Remanufactured Fuel Injector	21
A-MCOH23538418Q	Overhaul Kit	6	R-5235600	Remanufactured Fuel Injector	21
A-MCOH23539316Q	Overhaul Kit	6	R-5235605	Remanufactured Fuel Injector	21
A-MCOHS50-4	Re-Ring Overhaul Kit	7	R-5235695	Remanufactured Fuel Injector	21
A-MCOHS50-4S	Re-Ring Overhaul Kit	7	R-5235915	Remanufactured Fuel Injector	21
A-MCOHS50	Re-Ring Overhaul Kit	7	R-5236347	Remanufactured Fuel Injector	21
A-MCOHS60-1	Re-Ring Overhaul Kit	7	R-5236977	Remanufactured Fuel Injector	21
A-MCOHS60-4-1	Re-Ring Overhaul Kit	7	R-5236978	Remanufactured Fuel Injector	21
A-MCOHS60-4	Re-Ring Overhaul Kit	7	R-5236980	Remanufactured Fuel Injector	21
A-MCOHS60-4S	Re-Ring Overhaul Kit	7	R-5236981	Remanufactured Fuel Injector	21
A-MCOHS60-5B	Re-Ring Overhaul Kit	7	R-5236995	Remanufactured Fuel Injector	21
A-MCOHS60-5M	Re-Ring Overhaul Kit	7	R-5237014	Remanufactured Fuel Injector	21
A-MCOHS60-5	Re-Ring Overhaul Kit	7	R-5237042	Remanufactured Fuel Injector	21
A-MCOHS60Q	Re-Ring Overhaul Kit	7	R-5237045	Remanufactured Fuel Injector	21
A-MCOHS60	Re-Ring Overhaul Kit	7	R-5237099	Remanufactured Fuel Injector	21
A-S60-031 SHIM	Cylinder Liner Shim	12	R-5237315	Remanufactured Fuel Injector	21
A-S60-062 SHIM	Cylinder Liner Shim	12	R-5237320	Remanufactured Fuel Injector	21
MCB23512691	Overhaul Gasket Set	11, 36	R-5237466	Remanufactured Fuel Injector	21
MCB23519723	Slipper Bearing Kit	8, 36	R-5237473	Remanufactured Fuel Injector	21
MCB26209-25	Fuel Injector Internal O-ring Kit	20, 35	R-5237635	Remanufactured Fuel Injector	21
MCB26209	Fuel Injector Internal O-ring Kit	20, 35	R-5237650	Remanufactured Fuel Injector	21
MCB26210-25	Fuel Injector Nut Assembly O-ring Kit	20, 35	R-5237787	Remanufactured Fuel Injector	21
MCB26210	Fuel Injector Nut Assembly O-ring Kit	20, 35	R-5237820	Remanufactured Fuel Injector	21
MCB262312	Internal O-ring Expansion Kit	20	R-5237821	Remanufactured Fuel Injector	21
MCB50HBK	Cylinder Head Bolt Kit	15, 34	R-8929481	Fuel Pump - Remanufactured	16
MCB60HBK	Cylinder Head Bolt Kit	15, 34			