

TEXTRON Lycoming
 Reciprocating Engine Division/
 Subsidiary of Textron Inc.
 652 Oliver Street
 Williamsport, PA 17701 U.S.A.

SERVICE INSTRUCTION

DATE: February 19, 1993

Service Instruction No. 1037K
 (Supersedes Service Instruction No. 1037J)
 Engineering Aspects are
 FAA Approved

SUBJECT: Approved Piston, Rings and Cylinders for Use on Textron Lycoming Aircraft Engines

MODELS AFFECTED: All Textron Lycoming opposed series aircraft engines.

TIME OF COMPLIANCE: When installing new rings, pistons, valves and cylinders.

This list shows the piston, ring, cylinder and valve combinations that are currently available for use on Textron Lycoming engines. It will be noted that ring combinations vary with cylinder barrel materials. These various differences must be observed when making piston ring replacement.

CAUTION

Chrome plated rings (designated by "c") are used in plain or nitrided steel cylinder barrels, but never in chrome plated barrels. Serious engine damage will occur if chrome plated rings are used in chrome plated cylinder barrels.

Engine models listed as having serial number suffix "A" are built with crankcases designed for wide cylinder base mounting flanges, and consequently must be assembled with cylinders so specified.

NOTE

Chrome plated cylinder assemblies and kits containing chrome plated cylinders are no longer available from Textron Lycoming. However, the compatible piston and ring combinations used with chrome cylinders are still available and listed herein.

Alphabetical symbols used in the list to describe the components are defined as follows:

- *C - Chrome plated steel cylinder barrel
- FW - Full-Wedge compression ring
- HW - Half-Wedge compression ring
- N - Nitride hardened steel cylinder barrel
- P - Plain steel cylinder barrel
- S - Suffix to piston part number to indicate service application
- a - 3/16 inch "wide" oil regulating ring
- b - 5/32 inch "narrow" oil regulating ring
- c - Chrome plated piston ring
- d - Cold forged piston
- e - Requires long reach spark plugs
- f - 1/2 inch diameter Inconel sodium cooled exhaust valve
- g - 1/2 inch diameter sodium cooled exhaust valve
- h - 7/16 inch diameter sodium cooled exhaust valve
- j - 1/2 inch diameter chrome plated sodium cooled exhaust valve
- k - Solid stem exhaust valve
- m - 1/2 inch diameter Nimonic sodium cooled exhaust valve (TIO/TIGO)541
- p - Plain steel piston ring
- r - Angle valve cylinder head (cylinders not marked "r" have parallel valves)

NOTE

* - If choked chrome cylinder assemblies are used in any of the engine applications listed, the compression ring gap must be increased to .045/.055 inch which is the same for nitrided cylinder assemblies. Refer to SSP-1776, Table of Limits.

ENGINE MODEL	CYL. BARREL TYPE	PISTON RING TYPE	PISTON	TOP COMP. RING	2ND COMP. RING	3RD COMP. RING	OIL REG. RING	OIL SCRAPER RING	CYLINDER ASSY. NO.	EXHAUST VALVE	INTAKE VALVE	CYL. PISTON AND RING ASSY. KIT
O-235-C1, -C1B, -C2A -C2B, -C2C, -E2A and -H2C (low compression)	P	FW	73851	68196c	68196c		LW-16867c	60072p	16A19731	17B19712k	66429	N/A
	P	FW	73851	68196c	68196c		LW-16867c	60072p	LW-16704	LW-19034h	LW-11901	05K21232
	C	FW		LW-14233p	LW-14233p		LW18352p	60072p	N/A			N/A
O-235-F1B, -F2A, -F2B, -G1A, -G2A, -J2A (high compression)	N	HW	LW-18725	78862c	78862c		78864c		LW-16703	LW-19034h	LW-11901	05K21233
	C	HW		LW-14234p	LW14234p		LW-14235p		N/A			N/A
O-235-K2A, -K2B, -K2C -L2A, -L2C, -M1, -M2 (high compression)	N	HW	LW-18729	78862c	78862c		78864c		LW-16703	LW-19034h	LW-11901	05K21114
	C			LW-14234p	LW14234p		LW-14235p		N/A			N/A
O-235-N2C, -P1, -P2A -P2C, -P3C (high compression)	N	HW	LW-18729	78862c	78862c		78864c		LW-18290	LW-19034h	LW-11901	05K21123
O-290-D (low compression) Cylinder Assy.'s No Longer Available	P	FW	69958	62916c	62916c		69401ca		N/A	17B19712k	66429	N/A
	C	FW	69958	LW-13883p	LW-13883p		68338pa		N/A	17B19712k	66429	N/A
O-290-D2 (high compression) Cylinder Assy.'s No Longer Available	P	FW	69841	62916c	62916c		69401ca		N/A	17B19712k	73938	N/A
	C	FW	69841	LW-13883p	LW-13883p		68338pa		N/A	17B19712k	73938	N/A
O-290-D2B, -D2C (low compression) Cylinder Assy.'s No Longer Available	P	FW	70396	62916c	62916c		68338pa		N/A	17B19712k	73938	N/A
	C	FW	70396	LW-13883p	LW-13883p		68338pa		N/A	17B19712k	73938	N/A
O-320-A, -E (low compression) (S/N Suffix "A")	N	HW	75413	74241c	74241c		73857cb		LW-12416	LW-19001j	73938	05K21237-A
	P	HW	75413	74989c	74989c		73857cb		N/A	LW-19001j	73938	N/A
	C	HW	75413	74673p	74673p		73998pb		N/A	LW-19001j	73938	N/A
O-320-B, -D IO-320-B1A, -B1C, -B1D, -B1E, -B2A, -D1A -D1AD, -D1B LIO-320-B1A AIO-320-A1B, -B1B, -C1B AEIO-320-D1B, -D2B (high compression) (S/N Suffix "A")	N	HW	75089	74241c	74241c		73857cb		LW-12416	LW-19001j	73938	05K21100
	C	HW	75089	74673p	74673p		73998pb		N/A	LW-19001j	73938	N/A
O-320-E2A, -E2C IO-320-E1A, -E1B, -E2A, -E2B AEIO-320-E1A, -E1B, -E2A, -E2B (low compression) (S/N Suffix "A")	N	HW	75413	74241c	74241c		73857cb		LW-12416	LW-19001j	73938	05K21237-A
O-320-H2AD, -H3AD (76 Series)	N	HW	LW-15357	74241c	74241c		73857cb		LW-15318	LW-19001j	LW-15314	05K21119
	C	HW		74673p	74673p		73998pb		N/A			N/A
IO-320-C1A, -C1B, -C1F LIO-320-C1A (high compression) (S/N Suffix "A")	N	HW	75089	74241c	74241c		73857cb		LW-12418e	LW-19001j	73938	05K21242

ENGINE MODEL	CYL. BARREL TYPE	PISTON RING TYPE	PISTON	TOP COMP. RING	2ND COMP. RING	3RD COMP. RING	OIL REG. RING	OIL SCRAPER RING	CYLINDER ASSY. NO.	EXHAUST VALVE	INTAKE VALVE	CYL. PISTON AND RING ASSY. KIT
O-320-A, -E (low compression)	N	HW	75413	74241c	74241c		73857cb		16821508	LW-19001j	73938	05K21423-A
	P	HW	75413	74989c	74989c		73857cb		N/A	LW-19001j	73938	N/A
	C	HW	75413	74673p	74673p		73998pb		N/A	LW-19001j	73938	N/A
IO-320-B1A (high compression)	N	HW	75089	74241c	74241c		73857cb		LW-12413	LW-19001j	73938	05K21101
O-320-B, D1A, -D2A -D2B (high compression)	P	HW	75089	74989c	74989c		73857cb		LW-13393	LW-19001j	73938	05K21236
	P	FW	71594	68513c	68513c		69457ca		LW-13393	LW-19001j	73938	05K21235
	N	HW	75089	74241c	74241c		73857cb		LW-12411	LW-19001j	73938	05K21132
	C	FW	71594	LW-14253p	LW-14253p		72454pa		N/A	LW-19001j	73938	N/A
	C	HW	75089	74673p	74673p		73998pb		N/A	LW-19001j	73938	N/A
O-340-A (high compression)	P	HW	75089	74989c	74989c		73857cb		N/A	LW-19001j	73938	N/A
	N	HW	75089	74241c	74241c		73857cb		N/A	LW-19001j	73938	N/A
	C	FW	71594	LW-14253p	LW-14253p		72454pa		N/A	LW-19001j	73938	N/A
	C	HW	75089	74673p	74673p		73998pb		N/A	LW-19001j	73938	N/A
O-360-A, -C (high compression)	N	HW	75089	74241c	74241c		73857cb		LW-12425	LW-19001j	73938	05K21102
	N	HW	75089	74241c	74241c		73857cb		LW-12422	LW-19001j	73938	05K21244
	P	HW	75089	74989c	74989c		73857cb		N/A	LW-19001j	73938	N/A
	P	FW	71594	68513c	68513c		69457ca		N/A	LW-19001j	73938	N/A
	C	HW	75089	74673p	74673p		73998pb		N/A	LW-19001j	73938	N/A
	C	FW	71594	LW-14253p	LW-14253p		72454pa		N/A	LW-19001j	73938	N/A
O-360-B, -D (low compression)	N	HW	75413	74241c	74241c		73857cb		LW-12422	LW-19001j	73938	05K21243
	p	HW	75413	74989c	74989c		73857cb		or LW-12425 N/A	LW-19001j	73938	N/A
	C	HW	75413	74673p	74673p		73998pb		N/A	LW-19001j	73938	N/A
HO-360-A1A, -B1A, -B1B (high compression)	N	HW	75089	74241c	74241c		73857cb		LW-12422	LW-19001j	73938	05K21244
	C	HW	75089	74673p	74673p		73998pb		N/A	LW-19001j	73938	N/A
HIO-360-A1A (high compression)	N	HW	LW10207Sd	74241c	74241c		73857cb		LW-19046r	LW-16740j	LW-12949	05K21224
	N	HW	N/A	74241c	74241c	74241c	69457ca		LW-19046r	LW-16740j	LW-12949	N/A
IO-360-A1A (high compression)	N	HW	LW10207Sd	74241c	74241c		73857cb		LW-13530r	LW-16740j	LW-13622	05K21112
	N	HW	N/A	74241c	74241c	74241c	69457ca		LW-13530r	LW-16740j	LW-13622	N/A
IO-360-B1A, -B1B HIO-360-B1A (high compression)	N	HW	75089	74241c	74241c		73857cb		LW-12425	LW-19001j	73938	05K21102
O-360-A, -C, -F1A6, -G1A6 IO-360-B HIO-360-B1A LO-360-A1G6D, -A1H6 AEIO-360-B, -H1A (high compression) (S/N Suffix "A")	N	HW	75089	74241c	74241c		73857cb		LW-12427	LW-19001j	73938	05K21104
	C	HW	75089	74673p	74673p		73998pb		N/A	LW-19001j	73938	N/A

ENGINE MODEL	CYL. BARREL TYPE	PISTON RING TYPE	PISTON	TOP COMP. RING	2ND COMP. RING	3RD COMP. RING	OIL REG. RING	OIL SCRAPER RING	CYLINDER ASSY. NO.	EXHAUST VALVE	INTAKE VALVE	CYL. PISTON AND RING ASSY. KIT
IO-360-A, -C, -D1A -J1A6D, -K2A	N	HW	LW-10207Sd	74241c	74241c		73857cb		LW-12993r	LW-16740j	LW-13622	05K21120
AIO-360-A1A, -A1B, -B1B	N	HW	N/A	74241c	74241c	74241c	69457ca		LW-12993r	LW-16740j	LW-13622	N/A
AEIO-360-A1A, -A1B	C	HW	N/A	74673p	74673p	74673p	72454pa		N/A	LW-16740j	LW-13622	N/A
-A1B6, -A1D, -A1E, -A2B	C	HW	LW-10207Sd	74673p	74673p		73998pb		N/A	LW-16740j	LW-13622	N/A
LIO-360-C1E, -C1E6 -C1E6D (high compression) (S/N Suffix "A")												
HIO-360-A1A, -C1A, -C1B	N	HW	LW-10207Sd	74241c	74241c		73857cb		LW-19047r	LW-16740j	LW-12949	05K21281
LHIO-360-C1A	N	HW	N/A	74241c	74241c	74241c	69457ca		LW-19047r	LW-16740j	LW-12949	N/A
(high compression) (S/N Suffix "A")	C	HW	N/A	74673p	74673p	74673p	72454pa		N/A	LW-16740j	LW-12949	N/A
	C	HW	LW-10207Sd	74673p	74673p		73998pb		N/A	LW-16740j	LW-12949	N/A
HIO-360-D1A (high compression) (S/N Suffix "A")	N	HW	LW-11487Sd	74241c	74241c		73857cb		LW-19047r	LW-16740j	73117	05K21124
HIO-360-E1AD, -E1BD -FIAD (high compression) (S/N Suffix "A")	N	HW	LW-13358S	74241c	74241c		73857cb		LW-12988er	LW-16740j	LW-13622	05K21275
	N	HW	LW14610S	74241c	74241c		73857cb		LW-12988er	LW-16740j	LW-13622	05K21274
TO-360-C1A6D, -F1A6D TIO-360-C1A6D (low compression) (S/N Suffix "A")	N	HW	LW-10545Sd	74241c	74241c		73857cb		LW-13964r	LW-18497j	LW-13262	05K21276
TIO-360-A1B, -A3B6 (low compression) (S/N Suffix "A")	N	HW	LW-10545Sd	74241c	74241c		73857cb		77544er	LW-16740j	LW-12949	05K21277
IO-360-C1F (for turbocharging)	N	HW	LW-10207Sd	74241c	74241c		73857cb		77544er	LW-16740j	LW-12949	05K21278
IO-360-A3B6D, -C1F (for turbocharging)	N	HW	LW-10207Sd	74241c	74241c		73857cb		LW-12988er	LW-16740j	LW-13622	05K21279
O-360-E1A6D LO-360-E1A6D (76 Series)	N	HW	LW-15357	74241c	74241c		73857cb		LW-15322	LW-19001j	LW-15314	05K21121
TO-360-E1A6D LTO-360-E1A6D (76 Series)	N	HW	LW-12733	74241c	74241c		73857cb		LW-16290e	LW-19001j	LW-15314	05K21122
IVO-360-A1A (high compression)	N	HW	75089	74241c	74241c		73857cb		74498 or LW-12432	N/A	73938	N/A
VO-360-A1A, -A1B, -B1A (high compression)	N	HW	75089	74241c	74241c		73857cb		LW-12431	N/A	73938	N/A
	C	FW	71594	LW-12453p	LW-12453p		72454pb		N/A	N/A	73938	N/A
	C	HW	75089	74673p	74673p		73998pb		N/A	N/A	73938	N/A
O-435-A (low compression)	P	FW	69958	62916c	62916c		67540pa		71854	66531k	66429	N/A
GO-435-C2 (low compression)	N	HW	75984	73933c	73933c		73934cb		LW-19035r	LW-16740j	73129	05K21229
	C	HW	75984	74984p	74984p		75985pb		N/A	LW-16740j	73129	N/A
	P	FW	67266	62916c	62916c		69401ca	69322c	77604r	LW-16740j	73129	N/A
	C	FW	67266	LW-13883p	LW-13883p		68338pa	61824p	N/A	LW-16740j	73129	N/A

ENGINE MODEL	CYL. BARREL TYPE	PISTON RING TYPE	PISTON	TOP COMP. RING	2ND COMP. RING	3RD COMP. RING	OIL REG. RING	OIL SCRAPER RING	CYLINDER ASSY. NO.	EXHAUST VALVE	INTAKE VALVE	CYL. PISTON AND RING ASSY. KIT
VO-435-A1B, -A1C, -A1D -A1E (low compression)	N	HW	75984	73933c	73933c		73934cb		LW-19036r	LW-16740j	73129	05K21214
	N	HW	75984	73933c	73933c		73934cb		LW-19036r	LW-16740j	73129	05K21215-A
	C	HW	75984	74984p	74984p		75985pb		N/A	LW-16740j	73129	N/A
VO-435-A1D, -A1E, -A1F TVO-435-A1A, -B1A, -B1B, -D1A, -D1B, -F1A, -G1A, -G1B (low compression)	N	HW	75984	73933c	73933c		73934cb		74218er	LW-16740j	73129	05K21212
	N	HW	75984	73933c	73933c		73934cb		74218er	LW-16740j	73129	05K21213-A
	C	HW	75984	74984p	74984p		75985pb		N/A	LW-16740j	73129	N/A
VO-435-A1F TVO-435-A1A (low compression)	N	HW	75984	73933c	73933c		73934cb		LW-19036r	LW-16740j	73129	05K21214
	N	HW	75984	73933c	73933c		73934cb		LW-19036r	LW-16740j	73129	05K21215-A
VO-435-B1A (high compression)	N	HW	76172	73933c	73933c		73934cb		74218er	LW-16740j	73129	05K21216
	N	HW	76172	73933c	73933c		73934cb		74218er	LW-16740j	73129	05K21217-A
GO-480-B, -D, -F (low compression)	N	HW	LW-10208Sd	74241c	74241c		73857cb		LW-19037r	LW-16740j	73129	05K21273
	P	FW	69236	68513c	68513c		69457ca	69330c	16A21005e	LW-16740j	73129	05K21283
	C	FW	69236	LW-14253p	LW-14253p		72454pb	69235p	N/A	LW-16740j	73129	N/A
	C	HW	73976Sd	74673p	74673p	74673p	73998pb	69235p	N/A	LW-16740j	73129	N/A
GO-480-C1B6, -C1D6, -C2 Series GO-480-G1A6, -G1B6, -G1D6, -G2D6, -G1E6, -G1F6, -G2F6, -G1G6, -G1J6 (high compression)	N	HW	LW-10207Sd	74241c	74241c		73857cb		75215er	LW-16740j	73129	05K21272
	C	HW	73947Sd	74673p	74673p	74673p	73998pb	69235p	N/A	LW-16740j	73129	N/A
	C	HW	LW-10207Sd	74673p	74673p		73998pb		N/A	LW-16740j	73129	N/A
GO-480-G1D6 (Helio) (high compression)	N	HW	LW-10207Sd	74241c	74241c		73857cb		75215er	LW-16740j	73129	05K21272*
IGO-480-A1B6 (Helio) GO-480-G1A6 (Helio) (high compression)	N	HW	LW-10207Sd	74241c	74241c		73857cb		LW-19038er	LW-16740j	73129	05K21271
GSO-480-A, -B IGSO-480-A (low compression)	N	HW	LW-10208Sd	74241c	74241c		73857cb		75215er	LW-16740j	73129	05K21270
	C	FW	71545	LW-14253p	LW-14253p		72454pb	69235p	N/A	LW-16740j	73129	N/A
	C	HW	72578	74673p	74673p	74673p	72454pb	69235p	N/A	LW-16740j	73129	N/A
	C	HW	73976Sd	74673p	74673p	74673p	73998pb	69235p	N/A	LW-16740j	73129	N/A
O-540-A, -F (high compression)	N	HW	75089	74241c	74241c		73857cb		LW-12425	LW-19001j	73938	05K21102
	P	HW	75089	74989c	74989c		73857cb		N/A	LW-19001j	73938	N/A
	C	FW	71594	LW-14253p	LW-14253p		72454pb		N/A	LW-19001j	73938	N/A
O-540-A IO-540-C (high compression)	C	HW	75089	74673p	74673p		73998pb		N/A	LW-19001j	73938	N/A
O-540-B (low compression)	N	HW	75413	74241c	74241c		73857cb		LW-12425	LW-19001j	73938	05K21103
	P	HW	75413	74989c	74989c		73857cb		N/A	LW-19001j	73938	N/A
	C	HW	75413	74673p	74673p		73998pb		N/A	LW-19001j	73938	N/A

ENGINE MODEL	CYL. BARREL TYPE	PISTON RING TYPE	PISTON	TOP COMP. RING	2ND COMP. RING	3RD COMP. RING	OIL REG. RING	OIL SCRAPER RING	CYLINDER ASSY. NO.	EXHAUST VALVE	INTAKE VALVE	CYL. PISTON AND RING ASSY. KIT
O-540-E1A, -E4A5, -E4B5, -E4C5, -G1A5, -G2A5 IO-540-C, -D4A5, -D4B5, -N1A5 (high compression)	N	HW	75089	74241c	74241c		73857cb		LW-12425	LW-19001j	73938	05K21102
IO-540M1A5 IO-540-E1B5 (for turbocharger) (high compression)	N	HW	LW-10207Sd	74241c	74241c		73857cb		LW-13533er	LW-16740j	LW-13622	05K21226
IO-540-A, -G, -K, -L HIO-540-A1A (high compression)	N N N C C	HW HW HW HW HW	LW-10207Sd LW-10207Sd N/A N/A LW-10207Sd	74241c 74241c 74241c 74673p 74673p	74241c 74241c 74241c 74673p 74673p		73857cb 73857cb 69457ca 72454pb 73998pb		LW-13530r LW-13528r LW-13528r N/A N/A	LW-16740j LW-16740j LW-16740j LW-16740j LW-16740j	LW-13622 LW-13622 LW-13622 LW-13622 LW-13622	05K21112 LW-13587 N/A N/A N/A
IO-540-B, -E (high compression)	N N N C C	HW HW HW HW HW	LW-10207Sd LW-10207Sd N/A LW-10207Sd N/A	74241c 74241c 74241c 74673p 74673p	74241c 74241c 74241c 74673p 74673p		73857cb 73857cb 69457ca 73998pb 72454pb		LW-13532r LW-13537r LW-13537r N/A N/A	LW-16740j LW-16740j LW-16740j LW-16740j LW-16740j	LW-13622 LW-13622 LW-13622 LW-13622 LW-13622	05K21110 LW-13581 N/A N/A N/A
IO-540-G, -K, -P, -S (high compression)	N C	HW HW	LW-10207Sd LW-10207Sd	74241c 74673p	74241c 74673p		73857cb 73998pb		LW-13534er N/A	LW-16740j LW-16740j	LW-13622 LW-13622	05K21204 N/A
IO-540-J4A5, -R1A5 TIO-540-G1A (high compression)	N	HW	75089	74241c	74241c		73857cb		LW-12433e	LW-19001j	73938	05K21241
TIO-540-A1A, -A1B, -A2A, -A2B, -A2C (low compression)	N C	HW HW	LW-10545Sd LW-10545Sd	74241c 74673p	74241c 74673p		73857cb 73998pb		LW-13447er N/A	LW-16740j LW-16740j	LW-13622 LW-13622	05K21109 N/A
O-540-A4D5, -E, -G, -H IO-540-C, -D, -N, -T, -V AEIO-540-D4A5, -D4B5 (high compression) (S/N Suffix "A")	N	HW	75089	74241c	74241c		73857cb		LW-12427	LW-19001j	73938	05K21104
O-540-B (low compression) (S/N Suffix "A")	N	HW	75413	74241c	74241c		73857cb		LW-12427	LW-19001j	73938	05K21192
O-540-L3C5D (high compression) (S/N Suffix "A")	N	HW	75089	74241c	74241c		73857cb		LW-15605e	LW-19001j	73938	05K21231
O-540-J1A5D, -J1C5D, -J2A5D, -J3A5, -J3A5D, -J3C5D IO-540-W1A5D, -W3A5D (high compression) (S/N Suffix "A")	N	HW	LW-13396	74241c	74241c		73857cb		LW-13870	LW-19001j	73938	05K21117

ENGINE MODEL	CYL. BARREL TYPE	PISTON RING TYPE	PISTON	TOP COMP. RING	2ND COMP. RING	3RD COMP. RING	OIL REG. RING	OIL SCRAPER RING	CYLINDER ASSY. NO.	EXHAUST VALVE	INTAKE VALVE	CYL. PISTON AND RING ASSY. KIT
IO-540-K1A5, -K1A5D -K1B5, -K1D5, -K1F5, -K1F5D, -K1G5, -K1G5D, -K1H5, -K1J5, -K1J5D, -K1K5, -L1A5D, -L1B5D, -L1C5 AE10-540-L1B5, -L1B5D (high compression) (S/N Suffix "A")	N N	HW HW	LW-10207Sd LW-10207Sd	74241c 74241c	74241c 74241c		73857cb 73857cb		LW-12993r LW-12987r	LW-16740j LW-16740j	LW-13622 LW-13622	05K21120 LW-15485
IO-540-M1A5D, -M1B5, -M1B5D, -U1A5D, -U1B5D (high compression) (S/N Suffix "A")	N	HW	LW-10207Sd	74241c	74241c		73857cb		LW-19048er	LW-16740j	LW-13622	05K21263
IO-540-G1D5, -K1B5, -K1E5, -K1E5D, -S1A5 (high compression) (S/N Suffix "A")	N	HW	LW-10207Sd	74241c	74241c		73857cb		LW-12988er	LW-16740j	LW-13622	05K21118
IO-540-AA1A5 TIO-540-AE2A, -U2A LTIO-540-U2A (low compression) (S/N Suffix "A")	N	HW	LW-10545Sd	74241c	74241c		73857cb		LW-12988er	LW-16740j	LW-13622	05K21262
TIO-540-C1A, -C1AD (low compression) (S/N Suffix "A")	N	HW	75413	74241c	74241c		73857cb		LW-12429e	LW-19001j	73938	05K21107
TIO-540-A2C, -F2BD, -J2B, -J2BD, -N2BD, -R2AD, -S1AD LTIO-540-F2BD, -J2B, -J2BD, -N2BD, -R2AD (low compression) (S/N Suffix "A")	N C	HW HW	LW-10545Sd LW-10545Sd	74241c 74673p	74241c 74673p		73857cb 73998pb		LW-12966er N/A	LW-16740j LW-16740j	LW-13622 LW-13622	05K21108 N/A
TIO-541-A1A (low compression)	N	HW	LW-10545Sd	74241c	74241c		73857cb		N/A	LW-16740j	73117	N/A
TIO-541-E1A4, -E1B4, -E1C4, -E1D4 TIGO-541-E1A (low compression)	N N	HW HW	LW-10545Sd LW-10545Sd	74241c 74241c	74241c 74241c		73857cb 73857cb		LW-14116er LW-13907er Kit**	LW-18498j LW-18498j	LW-13262 LW-13262	05K21116 LW-13987
TIGO-541-D1B (low compression)	N	HW	LW-10545Sd	74241c	74241c		73857cb		LW-13121er	LW-18498j	LW-13262	05K21259
IGO-540-A1A, -A1C (high compression)	N N C C	HW HW HW HW	LW-10207Sd N/A 73947Sd LW-10207Sd	74241c 74241c 74673p 74673p	74241c 74241c 74673p 74673p		73857cb 73857cb 73998pb 73998pb		76261er 76261er N/A N/A	LW-16740j LW-16740j LW-16740j LW-16740j	LW-12949 LW-12949 LW-12949 LW-12949	05K21265 N/A N/A N/A
IGO-540-B1A, -B1C (high compression)	N N C C	HW HW HW HW	LW-10207Sd N/A 73947Sd LW-10207Sd	74241c 74241c 74673p 74673p	74241c 74241c 74673p 74673p		73857cb 73857cb 73998pb 73998pb		76187er 76187er N/A N/A	LW-16740j LW-16740j LW-16740j LW-16740j	LW-12949 LW-12949 LW-12949 LW-12949	05K21267 N/A N/A N/A
IGSO-540-A1A, -A1C, -A1D, -A1E, -A1H (low compression)	N C C	HW HW HW	LW-10208Sd LW-10208Sd 73976Sd	74241c 74673p 74673p	74241c 74673p 74673p		73857cb 73998pb 73998pb		LW-12714er N/A N/A	LW-16740j LW-16740j LW-16740j	LW-13622 LW-13622 LW-13622	05K21264 N/A N/A

ENGINE MODEL	CYL. BARREL TYPE	PISTON RING TYPE	PISTON	TOP COMP. RING	2ND COMP. RING	3RD COMP. RING	OIL REG. RING	OIL SCRAPER RING	CYLINDER ASSY. NO.	EXHAUST VALVE	INTAKE VALVE	CYL. PISTON AND RING ASSY. KIT
IGSO-540-B1A, -B1C (low compression)	N	HW	LW-10208Sd	74241c	74241c		73857cb		LW-12717er	LW-16740j	LW-13622	05K21269
	C	HW	LW-10208Sd	74673p	74673p		73998pb		N/A	LW-16740j	LW-13622	N/A
	C	HW	73976Sd	74673p	74673p	74673p	73998pb	69235p	N/A	LW-16740j	LW-13622	N/A
	C	HW	72578	74673p	74673p	74673p	72454pb	69235p	N/A	LW-16740j	LW-13622	N/A
VO-540-A, -B TVO-540-A1A (high compression)	N	HW	73976Sd	74241c	74241c	74241c	73857cb	69330c	75137er	LW-16740j	LW-12949	05K21227
	N	HW	LW-10208Sd	74241c	74241c		73857cb		75137er	LW-16740j	LW-12949	05K21228
	C	HW	73976Sd	74673p	74673p	74673p	73998pb	69235p	N/A	LW-16740j	LW-12949	N/A
	C	HW	LW-10208Sd	74673p	74673p		73998pb		N/A	LW-16740j	LW-12949	N/A
VO-540-C (high compression)	N	HW	73947Sd	74241c	74241c	74241c	73857cb	69330c	75137er	LW-16740j	LW-12949	05K21222
	N	HW	LW-10207Sd	74241c	74241c		73857cb		75137er	LW-16740j	LW-12949	05K21223
	C	HW	73947Sd	74673p	74673p	74673p	73998pb	69235p	N/A	LW-16740j	LW-12949	N/A
	C	HW	LW-10207Sd	74673p	74673p		73998pb		N/A	LW-16740j	LW-12949	N/A
IVO-540-A1A (high compression)	N	HW	LW-10207Sd	74241c	74241c		73857cb		74236er	LW-16740j	LW-12949	05K21220
	N	HW	73947Sd	74241c	74241c	74241c	73857cb	69330c	74236er	LW-16740j	LW-12949	05K21221
TIVO-540-A2A, -A2B (low compression)	N	HW	73976Sd	74241c	74241c	74241c	73857cb	69330c	74236er	LW-16740j	LW-12949	05K21218
	N	HW	LW-10208Sd	74241c	74241c		73857cb		74236er	LW-16740j	LW-12949	05K21219
IO-720-A1A, -D1B (high compression)	N	HW	LW-10207Sd	74241c	74241c		73857cb		LW-13530r	LW-16740j	LW-13622	05K21112
	N	HW	N/A	74241c	74241c	74241c	69457ca		LW-13530r	LW-16740j	LW-13622	N/A
IO-720-A1B (high compression)	N	HW	LW-10207Sd	74241c	74241c		73857cb		LW-13530r	LW-16740j	LW-13622	05K21112
	N	HW	LW-10207Sd	74241c	74241c		73857cb		LW-13534er	LW-16740j	LW-13622	05K21204
IO-720-B1B, -C1B (high compression)	N	HW	LW-10207Sd	74241c	74241c		73857cb		LW-13532r	LW-16740j	LW-13622	05K21110
	N	HW	LW-10207Sd	74241c	74241c		73857cb		LW-13533er	LW-16740j	LW-13622	05K21226
	N	HW	LW-10207Sd	74241c	74241c		73857cb		LW-13537r	LW-16740j	LW-13622	LW-19149
IO-720-A1B, -D1B, -D1C, -D1CD (high compression) (S/N Suffix "A")	N	HW	LW-10207Sd	74241c	74241c		73857cb		LW-12988er	LW-16740j	LW-13622	05K21118
	N	HW	LW-10207Sd	74241c	74241c		73857cb		LW-15438er	LW-16740j	LW-13622	LW-15465
IO-720-B1B, -B1BD (high compression) (S/N Suffix "A")	N	HW	LW-10207Sd	74241c	74241c		73857cb		LW-19048er	LW-16740j	LW-13622	05K21263

NOTE: VO, TVO-435 - Kits with P/N having a suffix "A" employ heavy piston pin LW-13445 (1) and plugs 77856 (2). Interchangeable engine sets only. O-320, IO-320 (low compression) - Kits having a suffix "A" employ heavy piston pin LW-13445. Plugs unchanged. Interchangeable engine sets only.

* 05K21272 Kit is for use with 71265 and 71266 high lift rocker assemblies to be used with 77134 camshaft assembly. New engines serial number 425-37 and up. Remanufactured engines - Built after 12-14-66.

** LW-13907 Kit (Detail of LW-13987 Kit) contains LW-14116 cylinder assembly with compatible shroud tubes required when servicing superseded cylinder assemblies and their shroud tubes.

NOTE: Revision "K" to Service Instruction No. 1037 adds new piston and ring combinations, adds new engine models and adds nitrided cylinders to O-320, O-360 and O-540 low compression engines.

23644, 24177 - These numbers for Textron Lycoming reference only.