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MANDATORY

SERVICE BULLETIN

DATE: September 16, 2021 Service Bulletin No. 643
Engineering Aspects are
FAA Approved

SUBJECT: Crankcase Nut Safety Wire Inspection

MODELS AFFECTED: Lycoming engines identified in Tables 1 and 2.

TIME OF COMPLIANCE: Aerobatic engines – within the next 10 hours of operation or next scheduled maintenance event, whichever occurs first (Table 1).
 Non-aerobatic engines - within the next 50 hours of operation or next scheduled maintenance event, whichever occurs first (Table 2).

NOTICE: Incomplete review of all the information in this document can cause errors. Read the entire Service Bulletin to make sure you have a complete understanding of the requirements.

Lycoming has become aware of 2 factory-delivered engines that were found to be missing the safety wire securing the nuts located inside the oil sump joining the crankcase halves (Figures 1 and 2). Without this safety wire, any loss of fastener torque can allow a nut to back off from a bolt and fall into the oil sump. Any hardware that has fallen out would be found in the bottom of the oil sump or in the suction screen.



Figure 1

Safety Wire on Nuts in a 4 Cylinder Engine

Figure 2

Safety Wire on Nuts in a 6 Cylinder Engine

Factory delivered aerobatic (AEIO) engines or non-aerobatic engines that have been modified to include an inverted oil system for aerobatic operations must have this inspection performed within the next 10 hours of operation due to the increased opportunity for inverted operation which may dislodge any Foreign Object Debris (FOD) that has fallen into the oil sump.

⚠ WARNING FOD IN THE OIL SUMP THAT BECOMES DISLODGED DURING AEROBATIC OPERATION CAN CAUSE DAMAGE TO ROTATING COMPONENTS OR GEAR TRAIN WHICH COULD LEAD TO DEATH OR SERIOUS INJURY.

Non-aerobatic engines may have this inspection deferred until the next oil change but not to exceed 50 hours, at the owner’s discretion.

NOTICE: THIS INSPECTION ONLY APPLIES TO ENGINES LISTED IN TABLES 1 OR 2 THAT HAVE **NOT** BEEN DISASSEMBLED WITH THE CRANKCASE SEPARATED AND REASSEMBLED IN THE FIELD AFTER BEING RECEIVED FROM THE LYCOMING ENGINES FACTORY.

This service bulletin requires the inspection of certain engines shipped from the Lycoming factory between 2009 and 2014 for the presence of safety wire securing the nuts located inside the oil sump joining the crankcase halves.



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Inspection Procedure

Remove any aircraft cowling in accordance with the aircraft maintenance manual to enable oil drainage and access for the borescope through one of the points of entry.

Drain the oil from the engine in accordance with the latest revision of the applicable Maintenance Manual or the Direct Drive Overhaul Manual.

NOTICE: Oil changes are to include removal and inspection of the suction screen for contamination or FOD in accordance with the latest revision of Service Bulletin No. 480.

As the least invasive inspection method, Lycoming recommends the use of an articulating borescope with a maximum cable diameter of 0.25 inches (6.35 mm) to inspect for the presence of safety wire securing the nuts located inside the oil sump at the lower crankcase halves (Figure 1 or 2).

Points of entry for the borescope can be:

- Remove the oil sump drain plug and go up through oil sump drain plug fitting (Figure 3).
- In through the left-hand crankcase (Figure 4) at the oil drain tube nipples (if necessary, the nipple can be removed). On engines with oil sump baffles, this would be the preferred method.
- If the use of borescope is not possible or inconclusive, remove the oil sump.

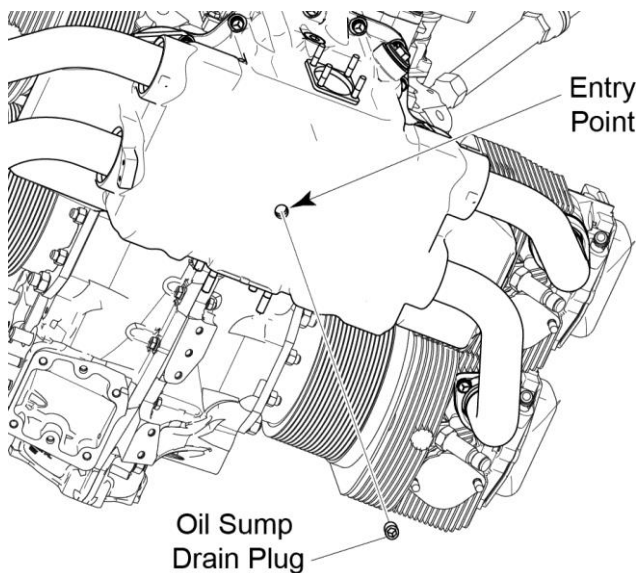


Figure 3

Example of the Oil Sump Drain Plug Fitting Entry Point on a Four Cylinder Engine

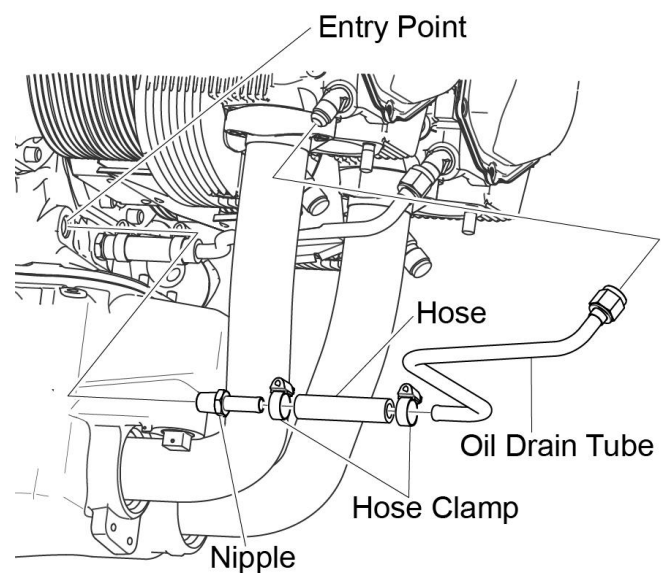


Figure 4

Example of the Oil Drain Tube Entry Point on the Left Side of a Six Cylinder Engine

Any required disassembly and re-assembly required for this inspection is to be performed in accordance with the latest revision of the applicable Maintenance Manual or the Direct Drive Overhaul Manual.

If the presence of safety wire is confirmed, no further action is needed. Reassemble as necessary and complete the oil change in accordance with the latest revision of Service Bulletin No. 480. Proceed to Step 10.

Any engine found to be missing the safety wire must be disassembled and repaired before further flight then reassembled as follows:

1. Remove any engine accessories and aircraft accessories to enable oil sump removal in accordance with the applicable Maintenance Manual or Direct Drive Overhaul Manual and the Aircraft Maintenance Manual.
2. Remove the oil sump in accordance with the applicable Lycoming maintenance or overhaul manual. Discard the oil sump gasket.

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NOTICE: Refer to the applicable illustrated parts catalog for part numbers of crankcase fasteners and oil sump gasket. Refer to Figures 3 and 4 in Service Bulletin No. 480 for the Oil Suction Screen's location.

3. Replace any missing or damaged crankcase fasteners.
4. Ensure that the crankcase nuts are correctly torqued to 55 in.-lb. (6 Nm).
5. Safety wire the nuts with .032 diameter Type 302/304 stainless steel safety wire (soft temper) per MS20995 as shown in Figure 1 or 2.
6. Ensure the oil sump is clean and free from any FOD. If any nut, bolt, or washer shown in Figures 1 or 2 has fallen out, it must be found to ensure it does not stay in the engine after reassembly.
7. Install the oil sump, with a new oil sump gasket, in accordance with the latest revision of the applicable Maintenance Manual or the Direct Drive Overhaul Manual.
8. Fill the engine with the correct type and amount of oil in accordance with the latest revision of the applicable Installation and Operation Manual.
9. Reinstall any engine accessories and aircraft accessories that had been removed to enable oil sump removal in accordance with the applicable Maintenance Manual or Direct Drive Overhaul Manual and the Aircraft Maintenance Manual.
10. Complete an operational ground run and check for oil leaks.
11. Reinstall the aircraft cowling in accordance with the aircraft maintenance manual

Record the inspection results, any maintenance completed, and compliance with this Mandatory Service Bulletin in the engine maintenance records.

If you have any questions, contact Lycoming Technical Support by phone at 570-327-7222 or 877-839-7878 or email to Technicalsupport@lycoming.com.

Table 1 identifies new, rebuilt, and overhauled aerobatic engines delivered from the Lycoming Engines factory that must be inspected within the next 10 hours of operation or next scheduled maintenance event, whichever occurs first.

**Table 1
Affected Aerobatic Engines**

Engine Model	Engine S/N	Engine Model	Engine S/N	Engine Model	Engine S/N
AEIO-320-D1B	L-4709-55E	AEIO-360-B1F	L-30675-51E	AEIO-540-L1B5D	RL-14001-48E
AEIO-360-A1A	L-35051-51E	AEIO-360-B1F	L-32341-51E	AEIO-580-B1A	L-181-79E
AEIO-360-A1B6	L-35269-51E	AEIO-360-B1F	L-32442-51E	AEIO-580-B1A	L-198-79E
AEIO-360-A1B6	L-35270-51E	AEIO-360-B2F	RL-19622-51E	AEIO-580-B1A	L-200-79E
AEIO-360-A1B6	L-35274-51E	AEIO-360-H1A	RL-27352-51E	AEIO-580-B1A	L-202-79E
AEIO-360-A1B6	RL-22086-51E	AEIO-360-H1B	L-35048-51E	AEIO-580-B1A	L-205-79E
AEIO-360-A1B6	RL-27337-51E	AEIO-360-H1B	L-35087-51E	AEIO-580-B1A	L-206-79E
AEIO-360-A1B6	RL-28457-51E	AEIO-360-H1B	L-35234-51E	AEIO-580-B1A	L-209-79E
AEIO-360-A1B6	RL-32856-51E	AEIO-360-H1B	L-35257-51E	AEIO-580-B1A	L-212-79E
AEIO-360-A1B6	RL-35038-51E	AEIO-360-H1B	L-35273-51E	AEIO-580-B1A	L-214-79E
AEIO-360-A1B6	RL-35102-51E	AEIO-540-D4A5	L-27784-48E	AEIO-580-B1A	L-218-79E
AEIO-360-A1B6	RL-35177-51E	AEIO-540-D4A5	L-28357-48E	AEIO-580-B1A	L-221-79E
AEIO-360-B1F	L-23489-51E	AEIO-540-D4A5	L-28384-48E	AEIO-580-B1A	L-224-79E
AEIO-360-B1F	L-29267-51E	AEIO-540-D4A5	L-28475-48E	AEIO-580-B1A	L-231-79E
AEIO-360-B1F	L-29348-51E	AEIO-540-L1B5	L-34370-48E	AEIO-580-B1A	L-239-79E
AEIO-360-B1F	L-29415-51E	AEIO-540-L1B5D	RL-1270-48E		

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Table 2 identifies new, rebuilt, and overhauled non-aerobatic engines delivered from the Lycoming Engines factory that must be inspected within the next 50 hours of operation or next scheduled maintenance event, whichever occurs first.

Table 2
Affected Non-Aerobatic Engines

Engine Model	Engine S/N	Engine Model	Engine S/N	Engine Model	Engine S/N
O-235-C1	RL-10290-15	O-235-L2C	RL-16032-15	O-320-B2C	L-14058-39E
O-235-C2A	RL-18388-15	O-235-L2C	RL-19202-15	O-320-B2C	L-15459-39A
O-235-C2A	RL-20364-15	O-235-L2C	RL-20153-15	O-320-B2C	RL-18590-39E
O-235-C2A	RL-20917-15	O-235-L2C	RL-21568-15	O-320-B2D	RL-14613-39E
O-235-H2C	RL-14274-15	O-235-L2C	RL-21776-15	O-320-D1A	L-20448-39E
O-235-H2C	RL-25455-15	O-235-L2C	RL-22067-15	O-320-D1D	L-18027-39E
O-235-K2C	L-25926-15	O-235-L2C	RL-22070-15	O-320-D2A	L-16078-39E
O-235-K2C	L-25927-15	O-235-L2C	RL-22202-15	O-320-D2A	RL-10289-39E
O-235-K2C	L-25928-15	O-235-L2C	RL-23601-15	O-320-D2A	RL-10301-39E
O-235-L2A	RL-12373-15	O-235-L2C	RL-23625-15	O-320-D2A	RL-11808-39E
O-235-L2A	RL-13093-15	O-235-L2C	RL-23647-15	O-320-D2A	RL-11878-39E
O-235-L2A	RL-13906-15	O-235-L2C	RL-24193-15	O-320-D2A	RL-17461-39E
O-235-L2A	RL-14031-15	O-235-L2C	RL-24281-15	O-320-D2A	RL-19120-39E
O-235-L2A	RL-15108-15	O-235-L2C	RL-24685-15	O-320-D2G	L-10755-39E
O-235-L2A	RL-15272-15	O-235-L2C	RL-3687-15	O-320-D2J	L-10799-39E
O-235-L2A	RL-15502-15	O-235-L2C	RL-5529-15	O-320-D2J	L-12057-39E
O-235-L2A	RL-19462-15	O-235-N2C	L-25666-15	O-320-D2J	L-13151-39E
O-235-L2A	RL-23937-15	O-235-N2C	L-9583-15	O-320-D2J	L-13630-39E
O-235-L2A	RL-24015-15	O-235-N2C	RL-10830-15	O-320-D2J	L-16631-39E
O-235-L2A	RL-24150-15	O-235-N2C	RL-14939-15	O-320-D2J	L-17528-39E
O-235-L2A	RL-24332-15	O-235-N2C	RL-20820-15	O-320-D2J	L-20397-39E
O-235-L2A	RL-25654-15	O-235-N2C	RL-23392-15	O-320-D2J	L-20402-39E
O-235-L2A	RL-25895-15	O-235-N2C	RL-23538-15	O-320-D2J	L-20442-39E
O-235-L2C	L-14475-15	O-235-N2C	RL-23890-15	O-320-D2J	L-20443-39E
O-235-L2C	L-24029-15	O-235-N2C	RL-23938-15	O-320-D2J	RL-11869-39E
O-235-L2C	L-24162-15	O-320-A2B	L-28145-27E	O-320-D2J	RL-12557-39E
O-235-L2C	L-24375-15	O-320-A2B	RL-27370-27E	O-320-D2J	RL-13055-39E
O-235-L2C	L-24537-15	O-320-A2B	RL-28562-27E	O-320-D2J	RL-14487-39E
O-235-L2C	L-25180-15	O-320-B2B	L-19989-39E	O-320-D2J	RL-15247-39E
O-235-L2C	L-25324-15	O-320-B2B	L-20014-39E	O-320-D2J	RL-15882-39E
O-235-L2C	L-25387-15	O-320-B2B	L-20405-39E	O-320-D2J	RL-17839-39E
O-235-L2C	L-25420-15	O-320-B2B	L-20418-39E	O-320-D2J	RL-18304-39E
O-235-L2C	L-25442-15	O-320-B2B	L-20438-39E	O-320-D2J	RL-18345-39E
O-235-L2C	L-25923-15	O-320-B2B	L-20452-39E	O-320-D2J	RL-18534-39E
O-235-L2C	RL-13785-15	O-320-B2B	RL-7118-39E	O-320-D2J	RL-18551-39E
O-235-L2C	RL-14837-15	O-320-B2B	RL-7299-39E	O-320-D2J	RL-18677-39E
O-235-L2C	RL-15035-15	O-320-B2B	RL-9904-39E	O-320-D2J	RL-19374-39E
O-235-L2C	RL-15122-15	O-320-B2B	RL-9989-39E	O-320-D2J	RL-8020-39E
O-235-L2C	RL-15609-15	O-320-B2C	L-10167-39E	O-320-D2J	RL-8926-39E

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**Table 2 (Cont.)
Affected Non-Aerobatic Engines**

Engine Model	Engine S/N	Engine Model	Engine S/N	Engine Model	Engine S/N
O-320-D3G	L-10297-39E	O-320-D3G	L-9740-39E	O-320-H2AD	L-841-76T
O-320-D3G	L-10322-39E	O-320-D3G	RL-10014-39E	O-320-H2AD	L-8472-76T
O-320-D3G	L-10624-39E	O-320-D3G	RL-10039-39E	O-320-H2AD	RL-1656-76T
O-320-D3G	L-10665-39E	O-320-D3G	RL-10140-39E	O-320-H2AD	RL-2583-76T
O-320-D3G	L-10871-39E	O-320-D3G	RL-11089-39E	O-320-H2AD	RL-2598-76T
O-320-D3G	L-11573-39E	O-320-D3G	RL-11426-39E	O-320-H2AD	RL-2978-76T
O-320-D3G	L-11675-39E	O-320-D3G	RL-12915-39E	O-320-H2AD	RL-3416-76T
O-320-D3G	L-11805-39E	O-320-D3G	RL-13131-39E	O-320-H2AD	RL-4469-76T
O-320-D3G	L-12456-39E	O-320-D3G	RL-13732-39E	O-320-H2AD	RL-4658-76T
O-320-D3G	L-131-39E	O-320-D3G	RL-15291-39E	O-320-H2AD	RL-4767-76T
O-320-D3G	L-13644-39E	O-320-D3G	RL-15870-39E	O-320-H2AD	RL-4843-76T
O-320-D3G	L-13803-39E	O-320-D3G	RL-18625-39E	O-320-H2AD	RL-5243-76T
O-320-D3G	L-14197-39E	O-320-D3G	RL-19910-39E	O-320-H2AD	RL-532-76T
O-320-D3G	L-17685-39E	O-320-D3G	RL-5710-39E	O-320-H2AD	RL-5493-76T
O-320-D3G	L-17827-39E	O-320-D3G	RL-6187-39E	O-320-H2AD	RL-5576-76T
O-320-D3G	L-19102-39E	O-320-D3G	RL-8740-39E	O-320-H2AD	RL-5608-76T
O-320-D3G	L-19817-39E	O-320-D3G	RL-9275-39E	O-320-H2AD	RL-5739-76T
O-320-D3G	L-20139-39E	O-320-D3G	RL-9696-39E	O-320-H2AD	RL-6085-76T
O-320-D3G	L-20388-39E	O-320-D3G	RL-9811-39E	O-320-H2AD	RL-6124-76T
O-320-D3G	L-20389-39E	O-320-D3G	RL-9985-39E	O-320-H2AD	RL-6175-76T
O-320-D3G	L-20390-39E	O-320-E2A	L-26312-27E	O-320-H2AD	RL-8437-76T
O-320-D3G	L-20391-39E	O-320-E2A	L-26335-27E	IO-320-B1A	RL-3898-55E
O-320-D3G	L-20393-39E	O-320-E2A	L-26431-27E	IO-320-B1A	RL-3981-55E
O-320-D3G	L-20398-39E	O-320-E2D	L-28239-27E	IO-320-D1A	L-6128-55E
O-320-D3G	L-20406-39E	O-320-E2D	L-29013-27E	YO-320-D1A	L-20394-39E
O-320-D3G	L-20407-39E	O-320-E2D	RL-15215-27E	YO-320-D1A	L-20399-39E
O-320-D3G	L-20411-39E	O-320-E2D	RL-20524-27E	YO-320-D1A	L-20410-39E
O-320-D3G	L-20416-39E	O-320-E2D	RL-28181-27E	YO-320-D1A	L-20412-39E
O-320-D3G	L-20417-39E	O-320-E2D	RL-28203-27E	YO-320-D1A	L-20451-39E
O-320-D3G	L-20423-39E	O-320-E3D	L-28255-27E	YO-320-D1A	L-20454-39E
O-320-D3G	L-20425-39E	O-320-E3D	L-28871-27E	YIO-320-D1A	L-6095-55E
O-320-D3G	L-20427-39E	O-320-E3D	L-28881-27E	YIO-320-D1A	L-6102-55E
O-320-D3G	L-20431-39E	O-320-E3D	RL-26199-27E	YIO-320-D1A	L-6107-55E
O-320-D3G	L-20432-39E	O-320-E3D	RL-28679-27E	YIO-320-D1A	L-6110-55E
O-320-D3G	L-20437-39E	O-320-H2AD	L-1098-76T	YIO-320-D1A	L-6112-55E
O-320-D3G	L-20440-39E	O-320-H2AD	L-1224-76T	YIO-320-D1A	L-6117-55E
O-320-D3G	L-20441-39E	O-320-H2AD	L-1281-76T	YIO-320-D1A	L-6118-55E
O-320-D3G	L-20444-39E	O-320-H2AD	L-144-76T	YIO-320-D1A	L-6120-55E
O-320-D3G	L-5467-39E	O-320-H2AD	L-1633-76T	YIO-320-D1A	L-6123-55E
O-320-D3G	L-766-39E	O-320-H2AD	L-8277-76T	YIO-320-D1A	L-6129-55E

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Affected Non-Aerobatic Engines**

Engine Model	Engine S/N	Engine Model	Engine S/N	Engine Model	Engine S/N
YIO-320-D1A	L-6131-55E	O-360-A1H6	RL-32002-36E	O-360-A4M	L-41623-36E
YIO-320-D1A	L-6133-55E	O-360-A1P	L-41634-36E	O-360-A4M	L-41624-36E
YIO-320-D1A	L-6135-55E	O-360-A1P	L-41637-36E	O-360-A4M	L-41630-36E
YIO-320-D1A	L-6137-55E	O-360-A1P	L-41662-36E	O-360-A4M	L-41632-36E
YIO-320-D1A	L-6138-55E	O-360-A1P	L-41696-36E	O-360-A4M	L-41639-36E
YIO-320-D1A	L-6147-55E	O-360-A1P	L-41712-36E	O-360-A4M	L-41646-36E
O-360-A1A	L-41608-36E	O-360-A1P	L-41731-36E	O-360-A4M	L-41659-36E
O-360-A1A	RL-34145-36E	O-360-A1P	L-41739-36E	O-360-A4M	L-41661-36E
O-360-A1A	RL-6940-36E	O-360-A1P	L-41753-36E	O-360-A4M	L-41663-36E
O-360-A1AD	L-10491-36E	O-360-A3A	L-29401-36E	O-360-A4M	L-41665-36E
O-360-A1AD	RL-11049-36E	O-360-A3A	L-32809-36E	O-360-A4M	L-41676-36E
O-360-A1AD	RL-32018-36E	O-360-A3A	L-34554-36E	O-360-A4M	L-41678-36E
O-360-A1AD	RL-32036-36E	O-360-A3A	L-35414-36E	O-360-A4M	L-41699-36E
O-360-A1AD	RL-32065-36E	O-360-A3A	RL-11603-36E	O-360-A4M	L-41700-36E
O-360-A1AD	RL-33235-36E	O-360-A3A	RL-12183-36E	O-360-A4M	L-41733-36E
O-360-A1AD	RL-34963-36E	O-360-A3A	RL-28524-36E	O-360-A4M	L-41758-36E
O-360-A1AD	RL-35852-36E	O-360-A3A	RL-38330-36E	O-360-A4M	L-41763-36E
O-360-A1AD	RL-36682-36E	O-360-A3A	RL-8969-36E	O-360-A4M	L-41766-36E
O-360-A1AD	RL-4219-36E	O-360-A4A	L-32373-36E	O-360-A4M	L-41774-36E
O-360-A1AD	RL-5696-36E	O-360-A4A	RL-22730-36E	O-360-A4M	L-42157-36E
O-360-A1AD	RL-6498-36E	O-360-A4A	RL-26085-36E	O-360-A4M	L-42251-36E
O-360-A1D	RL-12315-36E	O-360-A4A	RL-38791-36E	O-360-A4M	L-42253-36E
O-360-A1D	RL-22565-36E	O-360-A4A	RL-4169-36E	O-360-A4M	RL-10176-36E
O-360-A1D	RL-27715-36E	O-360-A4A	RL-7535-36E	O-360-A4M	RL-11160-36E
O-360-A1D	RL-30513-36E	O-360-A4K	L-29301-36E	O-360-A4M	RL-12785-36E
O-360-A1F6	RL-36770-36E	O-360-A4K	RL-35502-36E	O-360-A4M	RL-13704-36E
O-360-A1G6D	L-29642-36E	O-360-A4K	RL-39699-36E	O-360-A4M	RL-16308-36E
O-360-A1G6D	RL-34514-36E	O-360-A4M	L-15399-36E	O-360-A4M	RL-16750-36E
O-360-A1H6	L-37775-36E	O-360-A4M	L-21312-36E	O-360-A4M	RL-28204-36E
O-360-A1H6	L-41041-36E	O-360-A4M	L-24503-36E	O-360-A4M	RL-28574-36E
O-360-A1H6	L-41611-36E	O-360-A4M	L-29162-36E	O-360-A4M	RL-28912-36E
O-360-A1H6	L-41636-36E	O-360-A4M	L-32807-36E	O-360-A4M	RL-29145-36E
O-360-A1H6	L-41647-36E	O-360-A4M	L-35357-36E	O-360-A4M	RL-31143-36E
O-360-A1H6	L-41683-36E	O-360-A4M	L-38149-36E	O-360-A4M	RL-32538-36E
O-360-A1H6	L-41713-36E	O-360-A4M	L-39614-36E	O-360-A4M	RL-33295-36E
O-360-A1H6	L-41722-36E	O-360-A4M	L-39826-36E	O-360-A4M	RL-33716-36E
O-360-A1H6	L-41727-36E	O-360-A4M	L-40440-36E	O-360-A4M	RL-35449-36E
O-360-A1H6	L-41736-36E	O-360-A4M	L-41613-36E	O-360-A4M	RL-37655-36E
O-360-A1H6	L-41738-36E	O-360-A4M	L-41616-36E	O-360-A4M	RL-39197-36E
O-360-A1H6	L-41741-36E	O-360-A4M	L-41617-36E	O-360-A4M	RL-7241-36E

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Engine Model	Engine S/N	Engine Model	Engine S/N	Engine Model	Engine S/N
O-360-A4M	RL-9057-36E	O-360-J2A	L-41657-36E	IO-360-A1B6	RL-23455-51E
O-360-A4M	RL-9312-36E	O-360-J2A	L-41669-36E	IO-360-A1B6	RL-27584-51E
O-360-A4M	RL-9393-36E	O-360-J2A	L-41679-36E	IO-360-A1B6	RL-27832-51E
O-360-C1G	L-41653-36E	O-360-J2A	L-41680-36E	IO-360-A1B6	RL-29694-51A
O-360-C1G	L-41656-36E	O-360-J2A	L-41686-36E	IO-360-A1B6	RL-30033-51E
O-360-C1G	L-41702-36E	O-360-J2A	L-41691-36E	IO-360-A1B6	RL-35039-51E
O-360-C1G	L-41715-36E	O-360-J2A	L-41692-36E	IO-360-A1B6	RL-35068-51E
O-360-C1G	L-41730-36E	O-360-J2A	L-41701-36E	IO-360-A1B6	RL-35110-51E
O-360-C1G	L-41743-36E	O-360-J2A	L-41706-36E	IO-360-A1B6	RL-35139-51E
O-360-C1G	L-41772-36E	O-360-J2A	L-41735-36E	IO-360-A1B6	RL-35141-51E
O-360-C1G	L-41816-36E	O-360-J2A	L-41740-36E	IO-360-A1B6	RL-35187-51E
O-360-C1G	RL-24207-36E	O-360-J2A	L-41742-36E	IO-360-A1B6D	L-30831-51E
O-360-C1G	RL-7930-36E	O-360-J2A	L-41765-36E	IO-360-A1D6	L-34989-51E
O-360-C4F	RL-15294-36E	O-360-J2A	L-41859-36E	IO-360-A1D6	L-35014-51E
O-360-C4F	RL-33502-36E	O-360-J2A	L-41861-36E	IO-360-A1D6	L-35020-51E
O-360-C4P	L-11819-36E	O-360-J2A	RL-34497-36E	IO-360-A1D6	L-35199-51E
O-360-C4P	L-41598-36E	O-360-J2A	RL-39825-36E	IO-360-A3B6	L-31355-51E
O-360-C4P	L-41599-36E	O-360-J2A	RL-40141-36E	IO-360-A3B6	RL-8571-51E
O-360-C4P	L-41621-36E	O-360-J2A	RL-40650-36E	IO-360-A3B6D	L-15481-51E
O-360-C4P	L-41633-36E	O-360-J2A	RL-7978-36E	IO-360-A3B6D	L-26334-51E
O-360-C4P	L-41650-36E	IO-360-A1A	L-4305-51A	IO-360-A3B6D	RL-20098-51E
O-360-C4P	L-41664-36E	IO-360-A1A	RL-11655-51E	IO-360-A3B6D	RL-30260-51E
O-360-C4P	L-41670-36E	IO-360-A1A	RL-35079-51E	IO-360-A3B6D	RL-35003-51E
O-360-C4P	L-41674-36E	IO-360-A1B	RL-30142-51E	IO-360-A3B6D	RL-3967-51E
O-360-C4P	L-41693-36E	IO-360-A1B6	L-10866-51E	IO-360-B1B	RL-16358-51E
O-360-C4P	L-41718-36E	IO-360-A1B6	L-20469-51E	IO-360-B1B	RL-35078-51E
O-360-C4P	L-41767-36E	IO-360-A1B6	L-22819-51E	IO-360-B1E	RL-32002-51E
O-360-E1A6D	L-118-77T	IO-360-A1B6	L-30856-51E	IO-360-C1C	L-31091-51E
O-360-E1A6D	L-303-77T	IO-360-A1B6	L-31382-51E	IO-360-C1C	RL-27505-51E
O-360-E1A6D	RL-511-77T	IO-360-A1B6	L-31468-51E	IO-360-C1C	RL-29169-51E
O-360-F1A6	L-10170-36E	IO-360-A1B6	L-31666-51E	IO-360-C1C6	L-27418-51E
O-360-F1A6	L-25041-36E	IO-360-A1B6	L-34675-51E	IO-360-C1C6	L-29613-51E
O-360-F1A6	L-6933-36E	IO-360-A1B6	L-35155-51E	IO-360-C1C6	L-35066-51E
O-360-F1A6	RL-24973-36E	IO-360-A1B6	L-35223-51E	IO-360-C1C6	L-35095-51E
O-360-F1A6	RL-27630-36E	IO-360-A1B6	L-35258-51E	IO-360-C1C6	L-9226-51E
O-360-F1A6	RL-30624-36E	IO-360-A1B6	L-35268-51E	IO-360-C1C6	RL-15267-51E
O-360-F1A6	RL-33605-36E	IO-360-A1B6	L-35344-51E	IO-360-C1C6	RL-2644-51E
O-360-F1A6	RL-36014-36E	IO-360-A1B6	L-35346-51E	IO-360-C1C6	RL-29665-51E
O-360-F1A6	RL-37682-36E	IO-360-A1B6	RL-12733-51E	IO-360-C1D6	L-27531-51E
O-360-F1A6	RL-39831-36E	IO-360-A1B6	RL-19210-51E	IO-360-C1G6	L-32269-51E

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Engine Model	Engine S/N	Engine Model	Engine S/N	Engine Model	Engine S/N
IO-360-C1G6	RL-28925-51E	IO-360-L2A	L-35186-51E	IO-360-L2A	RL-28756-51E
IO-360-L2A	L-152-51E	IO-360-L2A	L-35187-51E	IO-360-L2A	RL-28924-51E
IO-360-L2A	L-16952-51E	IO-360-L2A	L-35203-51E	IO-360-L2A	RL-29434-51E
IO-360-L2A	L-18289-51E	IO-360-L2A	L-35207-51E	IO-360-L2A	RL-30797-51E
IO-360-L2A	L-18351-51E	IO-360-L2A	L-35208-51E	IO-360-L2A	RL-30906-51E
IO-360-L2A	L-23121-51E	IO-360-L2A	L-35214-51E	IO-360-L2A	RL-30985-51E
IO-360-L2A	L-25656-51E	IO-360-L2A	L-35226-51E	IO-360-L2A	RL-31262-51E
IO-360-L2A	L-27670-51E	IO-360-L2A	L-35231-51E	IO-360-L2A	RL-3128-51E
IO-360-L2A	L-28074-51E	IO-360-L2A	L-35232-51E	IO-360-L2A	RL-3220-51E
IO-360-L2A	L-28318-51A	IO-360-L2A	L-35240-51E	IO-360-L2A	RL-32251-51E
IO-360-L2A	L-29524-51E	IO-360-L2A	L-35242-51E	IO-360-L2A	RL-32972-51E
IO-360-L2A	L-30745-51E	IO-360-L2A	L-35243-51E	IO-360-L2A	RL-35002-51E
IO-360-L2A	L-30810-51E	IO-360-L2A	L-35246-51E	IO-360-L2A	RL-35006-51E
IO-360-L2A	L-30849-51E	IO-360-L2A	L-35250-51E	IO-360-L2A	RL-35008-51E
IO-360-L2A	L-30855-51E	IO-360-L2A	L-35251-51E	IO-360-L2A	RL-35058-51E
IO-360-L2A	L-30975-51E	IO-360-L2A	L-35254-51E	IO-360-L2A	RL-35075-51E
IO-360-L2A	L-31006-51E	IO-360-L2A	L-35256-51E	IO-360-L2A	RL-35104-51E
IO-360-L2A	L-31024-51E	IO-360-L2A	L-35265-51E	IO-360-L2A	RL-35106-51E
IO-360-L2A	L-31440-51E	IO-360-L2A	L-35267-51E	IO-360-L2A	RL-35133-51E
IO-360-L2A	L-31740-51E	IO-360-L2A	L-35279-51E	IO-360-L2A	RL-35138-51E
IO-360-L2A	L-31868-51E	IO-360-L2A	L-35288-51E	IO-360-L2A	RL-4251-51E
IO-360-L2A	L-31999-51E	IO-360-L2A	L-35289-51E	IO-360-L2A	RL-7603-51E
IO-360-L2A	L-32117-51E	IO-360-L2A	L-35290-51E	IO-360-M1A	L-35013-51E
IO-360-L2A	L-32982-51E	IO-360-L2A	L-35292-51E	IO-360-M1A	L-35016-51E
IO-360-L2A	L-33418-51E	IO-360-L2A	L-35305-51E	IO-360-M1A	L-35018-51E
IO-360-L2A	L-34936-51E	IO-360-L2A	L-35326-51E	IO-360-M1A	L-35035-51E
IO-360-L2A	L-34965-51E	IO-360-L2A	L-35334-51E	IO-360-M1A	L-35061-51E
IO-360-L2A	L-34988-51E	IO-360-L2A	L-35338-51E	IO-360-M1A	L-35113-51E
IO-360-L2A	L-34995-51E	IO-360-L2A	L-35351-51E	IO-360-M1A	L-35117-51E
IO-360-L2A	L-35011-51E	IO-360-L2A	L-35354-51E	IO-360-M1A	L-35120-51E
IO-360-L2A	L-35060-51E	IO-360-L2A	L-35357-51E	IO-360-M1A	L-35125-51E
IO-360-L2A	L-35062-51E	IO-360-L2A	L-7979-51E	IO-360-M1A	L-35144-51E
IO-360-L2A	L-35090-51E	IO-360-L2A	L-893-51E	IO-360-M1A	L-35145-51E
IO-360-L2A	L-35091-51E	IO-360-L2A	RL-18558-51E	IO-360-M1A	L-35166-51E
IO-360-L2A	L-35123-51E	IO-360-L2A	RL-20396-51E	IO-360-M1A	L-35172-51E
IO-360-L2A	L-35129-51E	IO-360-L2A	RL-23748-51E	IO-360-M1A	L-35175-51E
IO-360-L2A	L-35152-51E	IO-360-L2A	RL-24298-51E	IO-360-M1A	L-35188-51E
IO-360-L2A	L-35158-51E	IO-360-L2A	RL-24920-51E	IO-360-M1A	L-35217-51E
IO-360-L2A	L-35159-51E	IO-360-L2A	RL-25121-51E	IO-360-M1A	L-35225-51E
IO-360-L2A	L-35177-51E	IO-360-L2A	RL-27509-51E	IO-360-M1A	L-35229-51E

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Engine Model	Engine S/N	Engine Model	Engine S/N	Engine Model	Engine S/N
IO-360-M1A	L-35264-51E	HIO-360-D1A	L-35192-51A	TIO-360-C1A6D	L-250-64A
IO-360-M1A	L-35294-51E	HIO-360-D1A	L-35197-51A	TIO-360-C1A6D	L-251-64A
IO-360-M1A	L-35308-51E	HIO-360-D1A	L-35216-51A	YO-360-A1A	L-41565-36E
IO-360-M1A	L-35311-51E	HIO-360-D1A	L-35219-51A	YO-360-A1A	L-41575-36E
IO-360-M1A	L-35319-51E	HIO-360-D1A	L-35220-51A	YO-360-A1A	L-41576-36E
IO-360-M1A	L-35336-51E	HIO-360-D1A	L-35282-51A	YO-360-A1A	L-41602-36E
IO-360-M1A	L-35341-51E	HIO-360-D1A	L-35283-51A	YO-360-A1A	L-41609-36E
IO-360-M1A	RL-13223-51E	HIO-360-D1A	L-35331-51A	YO-360-A1A	L-41610-36E
IO-360-M1A	RL-24472-51E	HIO-360-D1A	RL-15664-51A	YO-360-A1A	L-41622-36E
IO-360-M1A	RL-35052-51E	HIO-360-D1A	RL-18525-51A	YO-360-A1A	L-41629-36E
IO-360-M1A	RL-8685-51E	HIO-360-D1A	RL-24120-51A	YO-360-A1A	L-41644-36E
IO-360-M1B	L-34986-51E	HIO-360-D1A	RL-24310-51A	YO-360-A1A	L-41684-36E
IO-360-M1B	L-35332-51E	HIO-360-D1A	RL-24327-51A	YO-360-A1A	L-41757-36E
LO-360-A1G6D	L-557-71E	HIO-360-D1A	RL-24801-51A	YO-360-A1F6	L-41615-36E
LO-360-A1G6D	L-788-71E	HIO-360-D1A	RL-24968-51A	YO-360-A1F6	L-41667-36E
LO-360-A1G6D	RL-717-71E	HIO-360-D1A	RL-24994-51A	YIO-360-A1B6	L-34910-51E
LO-360-A1H6	L-736-71E	HIO-360-D1A	RL-26054-51A	YIO-360-A1B6	L-35022-51E
LO-360-A1H6	L-763-71E	HIO-360-D1A	RL-26058-51A	YIO-360-A1B6	L-35030-51E
LO-360-A1H6	L-766-71E	HIO-360-D1A	RL-26510-51A	YIO-360-B1B	L-35025-51E
LO-360-A1H6	L-778-71E	HIO-360-D1A	RL-26726-51A	YIO-360-B1B	L-35026-51E
LO-360-A1H6	L-809-71E	HIO-360-D1A	RL-28655-51A	YIO-360-M1A	L-35271-51E
LO-360-A1H6	L-916-71E	HIO-360-D1A	RL-35057-51A	YIO-360-M1A	L-35287-51E
LO-360-A1H6	L-919-71E	HIO-360-D1A	RL-606-51A	YIO-360-M1B	L-34934-51E
LO-360-A1H6	L-920-71E	HIO-360-F1AD	L-35222-51A	YIO-360-M1B	L-34987-51E
LO-360-A1H6	L-923-71E	HIO-360-G1A	L-30623-51E	YIO-360-M1B	L-35019-51E
LO-360-A1H6	L-925-71E	HIO-360-G1A	RL-26825-51E	YIO-360-M1B	L-35021-51E
LO-360-A1H6	L-927-71E	HIO-360-G1A	RL-27851-51E	YIO-360-M1B	L-35027-51E
LO-360-A1H6	L-929-71E	HIO-360-G1A	RL-29193-51E	YIO-360-M1B	L-35029-51E
LO-360-A1H6	L-931-71E	IVO-360-A1A	L-288-58A	YIO-360-M1B	L-35031-51E
LO-360-A1H6	RL-705-71E	IVO-360-A1A	L-289-58A	YIO-360-M1B	L-35033-51E
LO-360-A1H6	RL-782-71E	IVO-360-A1A	L-291-58A	YIO-360-M1B	L-35034-51E
LO-360-E1A6D	L-137-72T	IVO-360-A1A	L-294-58A	YIO-360-M1B	L-35036-51E
LO-360-E1A6D	L-158-72T	IVO-360-A1A	L-296-58A	YIO-360-M1B	L-35037-51E
LO-360-E1A6D	L-227-72T	IVO-360-A1A	L-299-58A	YIO-360-M1B	L-35084-51E
LO-360-E1A6D	RL-108-72T	IVO-360-A1A	L-300-58A	YIO-360-M1B	L-35085-51E
HIO-360-C1A	RL-22931-51A	LIO-360-C1E6	L-992-67E	YIO-360-M1B	L-35089-51E
HIO-360-D1A	L-26731-51A	LIO-360-C1E6	RL-181-67E	YIO-360-M1B	L-35099-51E
HIO-360-D1A	L-28484-51A	LIO-360-M1A	L-1153-67E	YIO-360-M1B	L-35101-51E
HIO-360-D1A	L-32938-51A	LIO-360-M1A	L-1154-67E	YIO-360-M1B	L-35168-51E
HIO-360-D1A	L-34999-51A	TIO-360-C1A6D	L-248-64A	YIO-360-M1B	L-35176-51E

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Engine Model	Engine S/N	Engine Model	Engine S/N	Engine Model	Engine S/N
YIO-360-M1B	L-35184-51E	O-540-B4B5	L-25379-40E	O-540-G1A5	L-27170-40E
YIO-360-M1B	L-35193-51E	O-540-B4B5	L-27131-40E	O-540-G1A5	RL-6421-40E
YIO-360-M1B	L-35195-51E	O-540-B4B5	RL-10179-40E	O-540-J3A5D	L-10806-40E
YIO-360-M1B	L-35200-51E	O-540-B4B5	RL-13381-40E	O-540-J3A5D	L-11629-40E
YIO-360-M1B	L-35206-51E	O-540-B4B5	RL-17115-40E	O-540-J3A5D	L-15106-40E
YIO-360-M1B	L-35210-51E	O-540-B4B5	RL-20884-40E	O-540-J3A5D	RL-17077-40E
YIO-360-M1B	L-35211-51E	O-540-E4B5	L-20668-40E	O-540-J3A5D	RL-20510-40E
YIO-360-M1B	L-35218-51E	O-540-E4B5	RL-11679-40E	O-540-J3A5D	RL-23920-40E
YIO-360-M1B	L-35228-51E	O-540-E4B5	RL-19385-40E	O-540-J3C5D	L-11528-40E
YIO-360-M1B	L-35230-51E	O-540-E4C5	L-10709-40E	O-540-J3C5D	L-21261-40E
YIO-360-M1B	L-35247-51E	O-540-E4C5	L-10933-40E	O-540-J3C5D	L-21927-40E
YIO-360-M1B	L-35262-51E	O-540-E4C5	L-11665-40E	O-540-J3C5D	L-27165-40E
YIO-360-M1B	L-35275-51E	O-540-E4C5	L-12413-40E	O-540-J3C5D	RL-13024-40E
YIO-360-M1B	L-35278-51E	O-540-E4C5	L-20471-40E	O-540-J3C5D	RL-14349-40E
YIO-360-M1B	L-35296-51E	O-540-E4C5	L-20981-40E	O-540-J3C5D	RL-20465-40E
YIO-360-M1B	L-35298-51E	O-540-E4C5	L-21541-40E	O-540-J3C5D	RL-25457-40E
YIO-360-M1B	L-35306-51E	O-540-E4C5	L-27125-40E	O-540-L3C5D	L-19897-40E
YIO-360-M1B	L-35307-51E	O-540-E4C5	L-27126-40E	O-540-L3C5D	RL-19552-40E
YIO-360-M1B	L-35313-51E	O-540-E4C5	RL-14216-40E	O-540-L3C5D	RL-20709-40E
YIO-360-M1B	L-35315-51E	O-540-E4C5	RL-24717-40E	IO-540-AB1A5	L-11192-48E
YIO-360-M1B	L-35316-51E	O-540-F1B5	L-27111-40E	IO-540-AB1A5	L-26277-48E
YIO-360-M1B	L-35327-51E	O-540-F1B5	L-27135-40E	IO-540-AB1A5	L-34039-48E
YIO-360-M1B	L-35330-51E	O-540-F1B5	L-27136-40E	IO-540-AB1A5	L-34041-48E
YIO-360-M1B	L-35340-51E	O-540-F1B5	L-27139-40E	IO-540-AB1A5	L-34053-48E
YIO-360-M1B	L-35345-51E	O-540-F1B5	L-27142-40E	IO-540-AB1A5	L-34068-48E
IO-390-A1A6	RL-347-80E	O-540-F1B5	L-27144-40E	IO-540-AB1A5	L-34139-48E
IO-390-A1B6	L-245-80E	O-540-F1B5	L-27150-40E	IO-540-AB1A5	L-34166-48E
IO-390-A3A6	L-222-80E	O-540-F1B5	L-27152-40E	IO-540-AB1A5	L-34190-48E
IO-390-A3A6	RL-237-80E	O-540-F1B5	L-27153-40E	IO-540-AB1A5	L-34198-48E
YIO-390-EXP	EL-326-80E	O-540-F1B5	L-27154-40E	IO-540-AB1A5	L-34199-48E
YIO-390-EXP	EL-338-80E	O-540-F1B5	L-27158-40E	IO-540-AB1A5	L-34200-48E
YIO-390-EXP	L-226-80E	O-540-F1B5	RL-16321-40E	IO-540-AB1A5	L-34202-48E
YIO-390-EXP	L-236-80E	O-540-F1B5	RL-16983-40E	IO-540-AB1A5	L-34240-48E
YIO-390-EXP	L-242-80E	O-540-F1B5	RL-17018-40E	IO-540-AB1A5	L-34273-48E
O-540-A1D5	RL-13092-40E	O-540-F1B5	RL-19028-40E	IO-540-AB1A5	L-34287-48E
O-540-A4B5	L-27132-40E	O-540-F1B5	RL-19374-40E	IO-540-AB1A5	L-34299-48E
O-540-A4B5	L-27138-40E	O-540-F1B5	RL-20701-40E	IO-540-AB1A5	L-34310-48E
O-540-B2C5	L-27163-40E	O-540-F1B5	RL-26269-40E	IO-540-AB1A5	L-34316-48E
O-540-B2C5	RL-24727-40E	O-540-F1B5	RL-9081-40E	IO-540-AB1A5	L-34320-48E
O-540-B4B5	L-25320-40E	O-540-G1A5	L-27167-40E	IO-540-AB1A5	L-34323-48E

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Engine Model	Engine S/N	Engine Model	Engine S/N	Engine Model	Engine S/N
IO-540-AB1A5	L-34351-48E	IO-540-AB1A5	RL-5643-48E	IO-540-AE1A5	L-34105-48E
IO-540-AB1A5	L-34353-48E	IO-540-AB1A5	RL-5754-48E	IO-540-AE1A5	L-34117-48E
IO-540-AB1A5	L-34363-48E	IO-540-AB1A5	RL-5793-48E	IO-540-AE1A5	L-34125-48E
IO-540-AB1A5	L-34384-48E	IO-540-AB1A5	RL-6941-48E	IO-540-AE1A5	L-34130-48E
IO-540-AB1A5	L-34386-48E	IO-540-AB1A5	RL-7662-48E	IO-540-AE1A5	L-34133-48E
IO-540-AB1A5	L-34387-48E	IO-540-AB1A5	RL-8296-48E	IO-540-AE1A5	L-34137-48E
IO-540-AB1A5	L-34395-48E	IO-540-AB1A5	RL-9345-48E	IO-540-AE1A5	L-34142-48E
IO-540-AB1A5	L-34401-48E	IO-540-AC1A5	L-11629-48E	IO-540-AE1A5	L-34145-48E
IO-540-AB1A5	L-34405-48E	IO-540-AC1A5	L-34232-48E	IO-540-AE1A5	L-34147-48E
IO-540-AB1A5	L-34406-48E	IO-540-AC1A5	L-34367-48E	IO-540-AE1A5	L-34150-48E
IO-540-AB1A5	L-34411-48E	IO-540-AC1A5	L-34399-48E	IO-540-AE1A5	L-34153-48E
IO-540-AB1A5	L-34412-48E	IO-540-AC1A5	RL-12530-48E	IO-540-AE1A5	L-34155-48E
IO-540-AB1A5	L-34415-48E	IO-540-AC1A5	RL-16578-48E	IO-540-AE1A5	L-34162-48E
IO-540-AB1A5	L-34416-48E	IO-540-AC1A5	RL-17351-48E	IO-540-AE1A5	L-34165-48E
IO-540-AB1A5	L-34432-48E	IO-540-AC1A5	RL-20137-48E	IO-540-AE1A5	L-34168-48E
IO-540-AB1A5	L-34433-48E	IO-540-AC1A5	RL-25988-48E	IO-540-AE1A5	L-34173-48E
IO-540-AB1A5	L-34435-48E	IO-540-AC1A5	RL-30424-48E	IO-540-AE1A5	L-34176-48E
IO-540-AB1A5	RL-12336-48E	IO-540-AC1A5	RL-30792-48E	IO-540-AE1A5	L-34181-48E
IO-540-AB1A5	RL-12804-48E	IO-540-AC1A5	RL-31641-48E	IO-540-AE1A5	L-34184-48E
IO-540-AB1A5	RL-14382-48E	IO-540-AC1A5	RL-3739-48E	IO-540-AE1A5	L-34192-48E
IO-540-AB1A5	RL-15837-48E	IO-540-AC1A5	RL-8943-48E	IO-540-AE1A5	L-34194-48E
IO-540-AB1A5	RL-16055-48E	IO-540-AE1A5	L-33916-48E	IO-540-AE1A5	L-34195-48E
IO-540-AB1A5	RL-16084-48E	IO-540-AE1A5	L-33923-48E	IO-540-AE1A5	L-34197-48E
IO-540-AB1A5	RL-16289-48E	IO-540-AE1A5	L-33926-48E	IO-540-AE1A5	L-34213-48E
IO-540-AB1A5	RL-16556-48E	IO-540-AE1A5	L-33977-48E	IO-540-AE1A5	L-34216-48E
IO-540-AB1A5	RL-19092-48E	IO-540-AE1A5	L-34027-48E	IO-540-AE1A5	L-34295-48E
IO-540-AB1A5	RL-19228-48E	IO-540-AE1A5	L-34028-48E	IO-540-AE1A5	L-34301-48E
IO-540-AB1A5	RL-19976-48E	IO-540-AE1A5	L-34032-48E	IO-540-AE1A5	L-34322-48E
IO-540-AB1A5	RL-20191-48E	IO-540-AE1A5	L-34044-48E	IO-540-AE1A5	L-34374-48E
IO-540-AB1A5	RL-20786-48E	IO-540-AE1A5	L-34046-48E	IO-540-AE1A5	L-34382-48E
IO-540-AB1A5	RL-2315-48E	IO-540-AE1A5	L-34054-48E	IO-540-AE1A5	L-34490-48E
IO-540-AB1A5	RL-24463-48E	IO-540-AE1A5	L-34064-48E	IO-540-AE1A5	L-34603-48E
IO-540-AB1A5	RL-24640-48E	IO-540-AE1A5	L-34070-48E	IO-540-AE1A5	L-34604-48E
IO-540-AB1A5	RL-27118-48E	IO-540-AE1A5	L-34072-48E	IO-540-AE1A5	L-35467-48E
IO-540-AB1A5	RL-27810-48E	IO-540-AE1A5	L-34079-48E	IO-540-AE1A5	L-35631-48E
IO-540-AB1A5	RL-27814-48E	IO-540-AE1A5	L-34084-48E	IO-540-AE1A5	L-35637-48E
IO-540-AB1A5	RL-28253-48E	IO-540-AE1A5	L-34095-48E	IO-540-AE1A5	L-35656-48E
IO-540-AB1A5	RL-28256-48E	IO-540-AE1A5	L-34096-48E	IO-540-AE1A5	L-35697-48E
IO-540-AB1A5	RL-4165-48E	IO-540-AE1A5	L-34101-48E	IO-540-AE1A5	RL-10338-48E
IO-540-AB1A5	RL-5283-48E	IO-540-AE1A5	L-34103-48E	IO-540-AE1A5	RL-13168-48E

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Affected Non-Aerobatic Engines**

Engine Model	Engine S/N	Engine Model	Engine S/N	Engine Model	Engine S/N
IO-540-AE1A5	RL-20402-48E	IO-540-K1G5	RL-20701-48E	IO-540-M1C5	L-34376-48E
IO-540-AE1A5	RL-21025-48E	IO-540-K1G5	RL-21695-48E	IO-540-M1C5	L-34377-48E
IO-540-AF1A5	L-35651-48E	IO-540-K1G5	RL-25862-48E	IO-540-S1A5	RL-14582-48E
IO-540-C4B5	RL-12146-48E	IO-540-K1G5	RL-26886-48E	IO-540-S1A5	RL-18852-48E
IO-540-C4B5	RL-12664-48E	IO-540-K1G5	RL-28185-48E	IO-540-S1A5	RL-19968-48E
IO-540-C4D5D	L-15573-48E	IO-540-K1G5D	L-10731-48E	IO-540-V4A5	L-27512-48A
IO-540-C4D5D	L-17028-48E	IO-540-K1G5D	L-14463-48E	IO-540-V4A5	L-27865-48A
IO-540-C4D5D	L-19805-48E	IO-540-K1G5D	L-34186-48E	IO-540-V4A5	L-33970-48E
IO-540-C4D5D	L-20185-48E	IO-540-K1G5D	L-34361-48E	IO-540-V4A5	L-34203-48E
IO-540-C4D5D	L-34167-48E	IO-540-K1G5D	RL-20279-48E	IO-540-V4A5	L-34218-48E
IO-540-C4D5D	L-34447-48E	IO-540-K1G5D	RL-28145-48E	IO-540-V4A5	L-34221-48E
IO-540-C4D5D	RL-19642-48E	IO-540-K1J5	L-27021-48E	IO-540-V4A5	L-34223-48E
IO-540-C4D5D	RL-20630-48E	IO-540-K1J5	L-33958-48E	IO-540-V4A5	L-34224-48E
IO-540-C4D5D	RL-21292-48E	IO-540-K1J5	L-33971-48E	IO-540-V4A5	L-34225-48E
IO-540-C4D5D	RL-32299-48E	IO-540-K1J5	L-34099-48E	IO-540-V4A5	L-34241-48E
IO-540-C4D5D	RL-9519-48E	IO-540-K1J5	L-34100-48E	IO-540-V4A5	L-34264-48E
IO-540-D4A5	L-34178-48E	IO-540-K1J5	L-34104-48E	IO-540-V4A5	L-34265-48E
IO-540-D4A5	RL-5355-48E	IO-540-K1J5	L-34121-48E	IO-540-V4A5	L-34267-48E
IO-540-D4B5	RL-15313-48E	IO-540-K1J5	L-34124-48E	IO-540-V4A5	L-34268-48E
IO-540-K1A5	L-27051-48E	IO-540-K1J5	L-34158-48E	IO-540-V4A5	L-34272-48E
IO-540-K1A5	L-34062-48E	IO-540-K1J5	L-34214-48E	IO-540-V4A5	L-34276-48E
IO-540-K1A5	RL-10048-48E	IO-540-K1J5	L-34245-48E	IO-540-V4A5	L-34277-48E
IO-540-K1A5	RL-21737-48E	IO-540-K1J5	L-34247-48E	IO-540-V4A5	L-34288-48E
IO-540-K1A5	RL-5228-48E	IO-540-K1J5	L-34249-48E	IO-540-V4A5	L-34331-48E
IO-540-K1A5	RL-8301-48E	IO-540-K1J5	L-34293-48E	IO-540-V4A5	L-34332-48E
IO-540-K1A5	RL-8356-48E	IO-540-K1J5	L-34302-48E	IO-540-V4A5	L-34336-48E
IO-540-K1B5	L-19096-48E	IO-540-K1J5	L-34305-48E	IO-540-V4A5	L-34344-48E
IO-540-K1B5	L-34037-48E	IO-540-K1J5	L-34312-48E	IO-540-V4A5	L-34345-48E
IO-540-K1B5	L-34042-48E	IO-540-K1J5	L-34324-48E	IO-540-W1A5	RL-10276-48E
IO-540-K1B5	RL-13831-48E	IO-540-K1J5	L-34339-48E	TIO-540-A2C	L-13519-61A
IO-540-K1B5	RL-31468-48E	IO-540-K1J5	L-34340-48E	TIO-540-A2C	L-13549-61A
IO-540-K1D5	L-34207-48E	IO-540-K1J5	L-34355-48E	TIO-540-A2C	RL-10006-61A
IO-540-K1D5	L-34400-48E	IO-540-K1J5	L-34366-48E	TIO-540-A2C	RL-3357-61A
IO-540-K1G5	L-10839-48E	IO-540-K1J5	L-34417-48E	TIO-540-A2C	RL-9029-61A
IO-540-K1G5	L-17415-48E	IO-540-K1J5	L-34425-48E	TIO-540-AE2A	L-13162-61A
IO-540-K1G5	L-34065-48E	IO-540-K1J5	L-34436-48E	TIO-540-AE2A	L-13437-61A
IO-540-K1G5	L-34337-48E	IO-540-K1J5	L-34437-48E	TIO-540-AE2A	L-13450-61A
IO-540-K1G5	RL-11689-48E	IO-540-K1J5	L-35696-48E	TIO-540-AE2A	L-13462-61A
IO-540-K1G5	RL-14156-48E	IO-540-K1J5	L-5066-48E	TIO-540-AE2A	L-13466-61A
IO-540-K1G5	RL-17570-48E	IO-540-K1J5D	RL-8715-48E	TIO-540-AE2A	L-13487-61A

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TIO-540-AE2A	L-13488-61A	TIO-540-AJ1A	L-13504-61E	TIO-540-C1A	RL-5561-61A
TIO-540-AE2A	L-13495-61A	TIO-540-AJ1A	L-13506-61E	TIO-540-F2BD	RL-1165-61A
TIO-540-AE2A	L-13502-61A	TIO-540-AJ1A	L-13507-61E	TIO-540-J2B	L-10313-61A
TIO-540-AE2A	L-13505-61A	TIO-540-AJ1A	L-13509-61E	TIO-540-J2B	L-11462-61A
TIO-540-AE2A	L-13515-61A	TIO-540-AJ1A	L-13512-61E	TIO-540-J2B	L-768-61A
TIO-540-AE2A	L-13518-61A	TIO-540-AJ1A	L-13516-61E	TIO-540-J2B	RL-10674-61A
TIO-540-AE2A	L-13531-61A	TIO-540-AJ1A	L-13522-61E	TIO-540-J2B	RL-7961-61A
TIO-540-AE2A	L-13541-61A	TIO-540-AJ1A	L-13523-61E	TIO-540-J2B	RL-8963-61A
TIO-540-AE2A	L-13553-61A	TIO-540-AJ1A	L-13524-61E	TIO-540-J2B	RL-9013-61A
TIO-540-AE2A	L-13558-61A	TIO-540-AJ1A	L-13535-61E	TIO-540-J2BD	L-10103-61A
TIO-540-AE2A	L-13562-61A	TIO-540-AJ1A	L-13540-61E	TIO-540-J2BD	L-3331-61A
TIO-540-AE2A	L-13572-61A	TIO-540-AJ1A	L-13542-61E	TIO-540-J2BD	RL-10236-61A
TIO-540-AE2A	L-13573-61A	TIO-540-AJ1A	L-13550-61E	TIO-540-J2BD	RL-12540-61A
TIO-540-AE2A	L-13631-61A	TIO-540-AJ1A	L-13556-61E	TIO-540-J2BD	RL-1263-61A
TIO-540-AE2A	RL-10643-61A	TIO-540-AJ1A	L-13557-61E	TIO-540-J2BD	RL-3380-61A
TIO-540-AE2A	RL-4017-61E	TIO-540-AJ1A	L-13560-61E	TIO-540-J2BD	RL-3500-61A
TIO-540-AH1A	L-12832-61A	TIO-540-AJ1A	L-13578-61E	TIO-540-J2BD	RL-6257-61A
TIO-540-AH1A	L-13484-61A	TIO-540-AJ1A	L-13582-61E	TIO-540-J2BD	RL-6809-61A
TIO-540-AH1A	L-13485-61A	TIO-540-AJ1A	L-2406-61E	TIO-540-J2BD	RL-7332-61A
TIO-540-AH1A	L-13528-61A	TIO-540-AJ1A	RL-10044-61E	TIO-540-J2BD	RL-8499-61A
TIO-540-AH1A	L-13538-61A	TIO-540-AJ1A	RL-10797-61E	TIO-540-U2A	L-13327-61A
TIO-540-AH1A	L-13570-61A	TIO-540-AJ1A	RL-1679-61E	LTIO-540-F2BD	L-1827-68A
TIO-540-AH1A	L-13580-61A	TIO-540-AJ1A	RL-1810-61E	LTIO-540-F2BD	L-3015-68A
TIO-540-AH1A	L-13605-61A	TIO-540-AJ1A	RL-1898-61E	LTIO-540-F2BD	RL-757-68A
TIO-540-AH1A	L-13643-61A	TIO-540-AJ1A	RL-3260-61E	LTIO-540-J2B	L-2109-68A
TIO-540-AH1A	RL-10010-61A	TIO-540-AJ1A	RL-6224-61E	LTIO-540-J2B	L-2335-68A
TIO-540-AH1A	RL-11210-61A	TIO-540-AJ1A	RL-7524-61E	LTIO-540-J2B	L-2354-68A
TIO-540-AH1A	RL-9875-61A	TIO-540-AJ1A	RL-9468-61E	LTIO-540-J2B	L-2554-68A
TIO-540-AJ1A	L-12439-61E	TIO-540-AK1A	L-13425-61A	LTIO-540-J2B	L-2813-68A
TIO-540-AJ1A	L-12609-61E	TIO-540-AK1A	L-13444-61A	LTIO-540-J2B	RL-1893-68A
TIO-540-AJ1A	L-13435-61E	TIO-540-AK1A	L-13454-61A	LTIO-540-J2B	RL-2712-68A
TIO-540-AJ1A	L-13457-61E	TIO-540-AK1A	L-13456-61A	LTIO-540-J2BD	L-1036-68A
TIO-540-AJ1A	L-13469-61E	TIO-540-AK1A	L-13460-61A	LTIO-540-J2BD	L-1106-68A
TIO-540-AJ1A	L-13471-61E	TIO-540-AK1A	L-13461-61A	LTIO-540-J2BD	L-1441-68A
TIO-540-AJ1A	L-13475-61E	TIO-540-AK1A	L-13555-61A	LTIO-540-J2BD	L-226-68A
TIO-540-AJ1A	L-13476-61E	TIO-540-AK1A	L-13563-61A	LTIO-540-J2BD	L-269-68A
TIO-540-AJ1A	L-13483-61E	TIO-540-AK1A	L-13575-61A	LTIO-540-J2BD	L-709-68A
TIO-540-AJ1A	L-13492-61E	TIO-540-AK1A	RL-3810-61A	LTIO-540-J2BD	RL-114-68A
TIO-540-AJ1A	L-13498-61E	TIO-540-C1A	L-2471-61A	LTIO-540-J2BD	RL-1195-68A
TIO-540-AJ1A	L-13501-61E	TIO-540-C1A	L-2493-61A	LTIO-540-J2BD	RL-2062-68A

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LTIO-540-J2BD	RL-2483-68A	YIO-540-D4A5	L-34060-48E	YIO-540-D4A5	L-34281-48E
LTIO-540-J2BD	RL-2670-68A	YIO-540-D4A5	L-34061-48E	YIO-540-D4A5	L-34286-48E
LTIO-540-J2BD	RL-2947-68A	YIO-540-D4A5	L-34074-48E	YIO-540-D4A5	L-34290-48E
LTIO-540-J2BD	RL-2962-68A	YIO-540-D4A5	L-34083-48E	YIO-540-D4A5	L-34291-48E
LTIO-540-J2BD	RL-563-68A	YIO-540-D4A5	L-34090-48E	YIO-540-D4A5	L-34303-48E
YIO-540-D4A5	EL-34549-48E	YIO-540-D4A5	L-34092-48E	YIO-540-D4A5	L-34334-48E
YIO-540-D4A5	EL-35178-48E	YIO-540-D4A5	L-34108-48E	YIO-540-D4A5	L-34350-48E
YIO-540-D4A5	EL-35265-48E	YIO-540-D4A5	L-34109-48E	YIO-540-D4A5	L-34379-48E
YIO-540-D4A5	EL-35267-48E	YIO-540-D4A5	L-34114-48E	YIO-540-D4A5	L-34383-48E
YIO-540-D4A5	EL-35275-48E	YIO-540-D4A5	L-34119-48E	YIO-540-D4A5	L-34407-48E
YIO-540-D4A5	EL-35409-48E	YIO-540-D4A5	L-34135-48E	YIO-540-D4A5	L-34410-48E
YIO-540-D4A5	EL-35421-48E	YIO-540-D4A5	L-34159-48E	YIO-540-D4A5	L-34414-48E
YIO-540-D4A5	EL-35422-48E	YIO-540-D4A5	L-34172-48E	YIO-540-D4A5	L-34444-48E
YIO-540-D4A5	EL-35444-48E	YIO-540-D4A5	L-34179-48E	IO-580-B1A	L-219-79E
YIO-540-D4A5	EL-35445-48E	YIO-540-D4A5	L-34215-48E	IO-580-B1A	L-225-79E
YIO-540-D4A5	EL-35453-48E	YIO-540-D4A5	L-34234-48E	IO-720-D1B	L-1693-54A
YIO-540-D4A5	EL-35635-48E	YIO-540-D4A5	L-34236-48E	IO-720-D1B	L-1694-54A
YIO-540-D4A5	L-33973-48E	YIO-540-D4A5	L-34237-48E	IO-720-D1B	L-1695-54A
YIO-540-D4A5	L-34050-48E				

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