DATE: February 23, 2012

Service Bulletin No. 240W
(Supersedes Service Bulletin No. 240V)
Engineering Aspects are FAA Approved

SUBJECT: Mandatory Parts Replacement at Overhaul and During Repair or Maintenance

MODELS AFFECTED: All Lycoming reciprocating aircraft engines

TIME OF COMPLIANCE: As specified below

NOTE
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.

AT OVERHAUL OR UPON REMOVAL:
Any time the following parts are removed from any Lycoming reciprocating engine, it is mandatory that the following parts be replaced regardless of their apparent condition:

- All circlips, lockplates, retaining rings and laminated shims
- All counterweight washers
- All lockwashers and locknuts
- All main and connecting rod bearings (may also be referred to as “bearing inserts”)
- All V-band coupling gaskets
- Stressed bolts and fasteners, such as:
  - Stationary drive gear bolts (reduction gear)
  - Camshaft gear attaching bolts
  - Connecting rod bolts and nuts
  - Crankshaft flange bolts
  - Crankshaft gear bolt

AT OVERHAUL:
During overhaul of any Lycoming reciprocating engine, it is mandatory that the following parts be replaced regardless of their apparent condition:

- All engine hoses
- All engine hose assemblies
- All oil seals
- All cylinder base seals
- All gaskets
- Piston rings
- Piston pins (thin wall)*
- Piston pin plugs
- Propeller governor oil line elbow (aluminum)**
- Propeller shaft sleeve rings
- Propeller shaft rollers (reduction gear pinion cage)
- Propeller shaft thrust bearings (all geared drive engines)
- Supercharger bearing oil seal (mechanically supercharged series)
- All exhaust valves (replace with current exhaust valves)
- All intake and exhaust valve guides
- All exhaust valve retaining rings
- Rocker arms and fulcrums (O-320-H, O, LO, TO, LTO-360-E Series)
- Aluminum push rod assemblies (O-235 Series)
- Cylinder fin stabilizers
- Magneto drive cushions
- Magneto isolation drive bearings
- Thermostatic bypass valves
- Damaged ignition cables
- Crankshaft sludge tubes
- Counterweight bushings in crankshaft and in counterweights (See latest revision of Service Instructions No. 1142 and 1143 for instructions.)
- Accessory drive coupling springs (supercharged and VO-540 engines)
- AC diaphragm fuel pumps
- Fuel pump plunger for diaphragm fuel pumps
- Oil pump bodies (two-piece)
- Oil pump gears *** (Refer to the latest revision of Service Bulletin No. 524 for replacement gear service kit, if necessary, and Service Instruction No. 1164 for individual impeller part numbers.)
- All V-band couplings and gaskets
- Roller tappet assemblies ♦
- Hydraulic tappet plunger assemblies ♦

Requirements for replacement of parts for accessories such as magnetos, carburetors, fuel injectors, AN fuel pumps, and turbochargers are described in the applicable manufacturer’s manual.

* Heavy-wall piston pins P/N LW-14078 may be reused; all other may not be reused. See the latest revision of Service Instruction No. 1340 and No. 1267 for replacement data.

** P/N MS20822-6D aluminum propeller governor oil line elbow must be replaced with P/N MS20822-6 steel elbow at overhaul. It is not necessary to replace a steel elbow. See the latest revision of Service Instruction No. 1435 and Service Bulletin No. 488.

*** Nitrided/carburized steel oil pump impeller gears can be examined during overhaul and can be re-used if they pass inspection as per the latest revision of Lycoming Direct Drive Overhaul Manual 60294-7 and Table of Limits SSP-1776.

Roller tappet assemblies must be replaced at overhaul and after a propeller strike. See latest revision of Service Instruction Nos. 1011 and 1514 for instructions.

♦ Refer to the latest revision of Service Instruction No. 1011.

♦ Refer to the latest revision of Service Instruction No. 1480.

Carry out the dimensional inspections in accordance with measurements and tolerances as listed in “Table of Limits” (SSP-1776) for all parts approved for use.