

CONTINENTAL MOTORS® AIRCRAFT ENGINE
SERVICE BULLETIN
Compliance Will Enhance Safety

CATEGORY 3

SB95-7A
 Supersedes SB95-7
TECHNICAL PORTIONS
FAA APPROVED

SUBJECT: MANIFOLD VALVE COVER INSPECTION

PURPOSE: To provide inspection and rework procedures for Continental Motors (CM) fuel manifold valves. The INSPECTION INSTRUCTIONS contained in this service bulletin must be included as a part of routine inspection and maintenance of all CM fuel injected engine models. A copy of this bulletin must be inserted into the CM Fuel Injection Overhaul Manual Form # X30593 to indicate the current manifold valve attaching hardware and installation procedures.

WARNING

FAILURE TO IDENTIFY AND CORRECT FUEL SYSTEM LEAKS CAN RESULT IN LOSS OF ENGINE POWER AND/OR ENGINE COMPARTMENT FIRE.

COMPLIANCE:

1. At each scheduled maintenance interval or whenever fuel flow fluctuation is encountered, inspect the fuel manifold valve in accordance with the INSPECTION INSTRUCTIONS set forth in this service bulletin.
2. If evidence of fuel leakage is observed at the manifold valve cover, prior to further flight, rework the manifold valve in accordance with the REWORK INSTRUCTIONS set forth in this service bulletin.

MODELS

AFFECTED: All CM fuel injected engine models.

INSPECTION INSTRUCTIONS

1. With engine cowling removed as instructed by the aircraft manufacturer, inspect the fuel manifold valve (and all other fuel system components) for signs of fuel stains.

WARNING

STAND CLEAR OF THE PROPELLER ARC WHILE PERFORMING THE FOLLOWING INSPECTION.

2. Pressurize and inspect the engine fuel system as follows:

- a. Aircraft fuel selector ON.
- b. Mixture control FULL RICH.
- c. Throttle control FULL OPEN.
- d. Aircraft master switch ON.

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- e. Place a suitable container under the induction system drain(s).
- f. While additional personnel observe the fuel manifold valve, (and all other fuel system components) engage the aircraft fuel boost pump for 5 seconds and verify fuel flow indication on the aircraft fuel flow gage.
- g. Inspect all fuel system components and lines for leaks.
- h. Repair fuel leaks prior to further flight. If fuel leakage is noted at the manifold valve cover to body mating surfaces, perform the following rework procedure.

REWORK PROCEDURE

Parts required for the upright and inverted valves are listed in Figures 1 and 2.

1. UPRIGHT VALVES - See Figure 1.

- a. Remove manifold valve cover safety wire.
- b. Remove one screw and discard.
- c. Install one set of attaching hardware as indicated in Figure 1. Torque to 22 to 26 inch pounds and the latest revision of M-0, Standard Practice Maintenance Manual.
- d. Repeat steps b and c replacing the attaching hardware in a crisscross pattern until all four sets have been replaced.
- e. Safety wire using approved practices outlined in the latest revision of M-0, Standard Practice Maintenance Manual.

2. INVERTED VALVES - See Figure 2.

- a. Aircraft fuel selector valve - OFF.
- b. Disconnect fuel manifold valve vent line, fuel inlet line, gage reference line (where used) and nozzle distribution lines. Remove manifold valve from engine and retain attaching hardware.
- c. Remove manifold valve mounting bracket/cover safety wire.
- d. Remove one screw and discard.
- e. Install one set of attaching hardware as indicated in Figure 2. Torque to 22 to 26 inch pounds.
- f. Repeat steps d and e replacing the attaching hardware in a crisscross pattern until all four sets have been replaced.

g. Safety wire using approved practices outlined in the latest revision of M-0, Standard Practice Maintenance Manual.

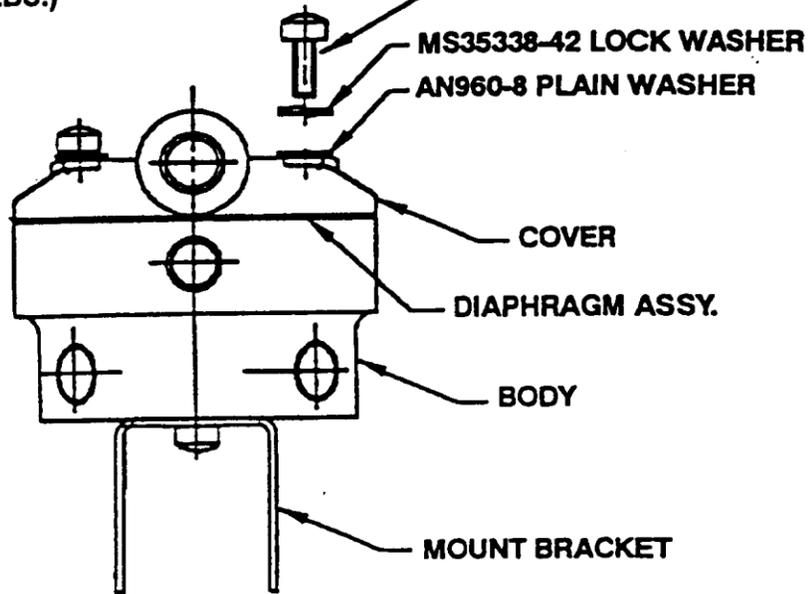
h. Reinstall manifold valve, attaching hardware and fuel lines in the reverse order of their removal and torque to the values as indicated in the latest revision of M-0, Standard Practice Maintenance Manual.

3. Check fuel system for leaks as set forth in the "INSPECTION INSTRUCTIONS" section of this bulletin.

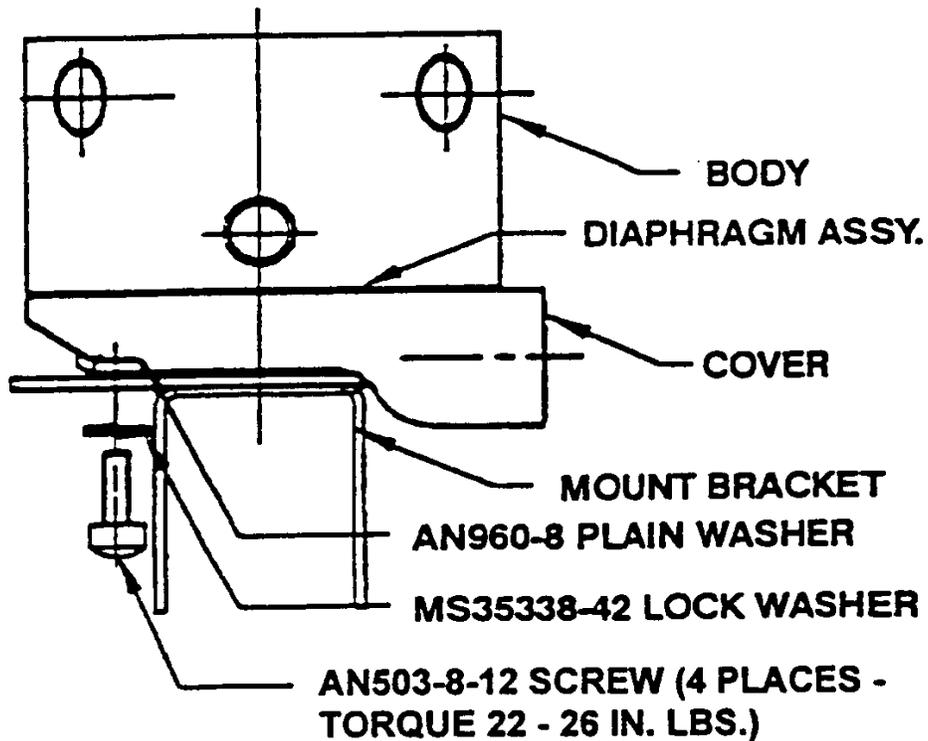
Warranty action required to comply with this service bulletin is covered by the CM Aircraft Engine Part, Component and Accessory Warranty, subject to its terms and conditions.

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AN503-8-12 SCREW (4 PLACES - TORQUE
22 - 26 IN. LBS.)



UPRIGHT VALVES
FIGURE 1



INVERTED VALVES
FIGURE 2

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