Service Bulletin

October 11, 2004

TITLE
ENGINE FUEL MANIFOLD SPRING REPLACEMENT

EFFECTIVITY

Model          Serial Numbers

172R           17280001 thru 17281224
172S           172S8001 thru 172S9684
206H           20608001 thru 20608178 and 20608181
T206H          T20608001 thru T20608039, T20608041 thru T20608367, T20608369 thru T20608379, T20608381, T20608382 and T20608385

NOTE: Airplane serial numbers 17281225 and On, 172S9685 and On, 18280001 and On, T18208001 and On, 20608179, 20608180, 20608182 and On, T20608040, T20608368, T20608380, T20608383, T20608384, T20608386 and On were delivered from Cessna with the 4 psi engine fuel manifold spring installed.


REASON
To transmit Lycoming Service Instruction No. 1489B: Fuel Manifold Spring Change, which provides for replacement of the existing engine fuel manifold flow divider spring with a new spring designed to enhance engine idle characteristics during ground operations, especially in hot weather.

DESCRIPTION
The fuel flow divider spring in the engine fuel manifold should be replaced with a new spring as specified in Lycoming Service Instruction No. 1489B (or latest revision). Non-compliance with this Service Bulletin may allow a rough engine idle condition to occur.

COMPLIANCE
Optional; may be accomplished if desired

NOTE: Compliance with this Service Bulletin is not required for airplanes/engines in compliance with SB99-73-01 or SB99-73-01 Revision 1.
APPROVAL

FAA approval has been obtained on technical data in this publication that affects airplane type design.

MANPOWER

Approximately 1.5 man-hours per airplane for spring replacement.

REFERENCES

Lycoming Service Instruction No. 1489B (or latest revision)

NOTE: Make sure all publications used are complete and current.

NOTE: This information shall be considered an amendment to the Cessna Manufacturer’s Service/Maintenance Manual and should be accomplished within the specified time requirement.

OTHER PUBLICATIONS AFFECTED

Model 172R and Model 172S Illustrated Parts Catalog
Model 206H & Model T206H Illustrated Parts Catalog

NOTE: Make sure all publications used are complete and current.

MATERIAL PRICE AND AVAILABILITY

The following is available from Cessna Parts Distribution through an appropriate Cessna Service Station for the suggested list price shown.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Qty/Airplane</th>
<th>Price</th>
</tr>
</thead>
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<tr>
<td>2577011</td>
<td>Spring</td>
<td>1</td>
<td>$3.56 (LN) ea</td>
</tr>
</tbody>
</table>

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE
**CREDIT INFORMATION**

For affected 172R and 172S airplanes only:

Applicable parts credit and a labor allowance credit of 1.5 man-hours per airplane will be provided for spring replacement.

To receive credit, the work must be completed and a Warranty Claim submitted by a Cessna Single Engine Service Station within 30 calendar days of Service Bulletin compliance before the credit expiration dates shown below.

- Domestic ................... October 11, 2005
- International ................. October 11, 2005

**ACCOMPLISHMENT INSTRUCTIONS**

**NOTE:** Refer to appropriate sections of the applicable Maintenance Manual and Illustrated Parts Catalog as necessary to complete the following instructions.

1. Electrically ground the airplane and turn all switches to the "OFF" position. If external power is connected to the airplane, disconnect external power from receptacle.

2. Disconnect the airplane battery and attach maintenance warning tags to the battery and external power receptacle that have "**DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS**" written on them. (Refer to the Model 206H/T206H Series 1998 And On Maintenance Manual, Chapter 24, Electrical Power.)

3. Gain access to the engine fuel manifold flow divider.

4. Replace the flow divider spring according to Steps 1 through 9 of the attached Lycoming Service Instruction No. 1489B (or latest revision).

5. Reconnect the airplane battery. (Refer to the Model 206H/T206H Series 1998 And On Maintenance Manual, Chapter 24, Electrical Power.)

6. Do Step 10. of Lycoming Service Instruction No. 1489B (or latest revision).

   **NOTE:** Engine Oil operating temperature should be a minimum of 150 degrees Fahrenheit.

7. Do a leak test of any connections that were moved, disconnected, or otherwise changed.

8. Do Step 11. of Lycoming Service Instruction No. 1489B (or latest revision).

9. Install all items that were removed to gain access as necessary.

10. Make an entry in the appropriate logbooks stating compliance with this Service Bulletin/Lycoming Service Instruction No. 1489B (or latest revision).
On October 25, 2004 the following Owner Advisory message was sent to applicable owners of record in SB04-73-02A.

Dear Cessna Owner:

This is to inform you that Cessna Service Bulletin SB04-73-02 has been issued to transmit Lycoming Service Instruction No. 1489B. Service Instruction No. 1489B provides for replacement of the existing engine fuel manifold flow divider spring with a new spring that is designed to enhance engine idle characteristics during ground operations, especially in hot weather. Non-compliance with SB04-73-02/Lycoming Service Instruction No. 1489B may allow a rough engine idle condition to occur during ground operations in hot weather.

Compliance is optional; may be accomplished if desired.

NOTE: Compliance with this Service Bulletin is not required for airplanes/engines in compliance with SB99-73-01 or SB99-73-01 Revision 1.

The information contained in the referenced Cessna Service Bulletin shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual.

For affected 172R and 172S airplanes only:

Applicable parts credit and a labor allowance credit of 1.5 man-hours per airplane will be provided for spring replacement.

To receive credit, the work must be completed and a Warranty Claim submitted by a Cessna Single Engine Service Station within 30 calendar days of Service Bulletin compliance before the credit expiration dates shown below.

| Domestic | October 11, 2005 |
| International | October 11, 2005 |

Please contact a Cessna Single Engine Service Station for detailed information and make arrangements to have Service Bulletin SB04-73-02/Lycoming Service Instruction No. 1489B (or latest revision) accomplished on your airplane.
DATE: October 27, 2003

SERVICE INSTRUCTION

Service Instruction No. 1489B
(Supersedes Service Instruction No. 1489A)

SUBJECT: Fuel Manifold Spring Change

MODELS AFFECTED: IO-360-L2A model engines installed in Cessna 172R and 172S aircraft; IO-540-AB1A5 model engines installed in Cessna 182 aircraft; IO-540-AC1A5 model engines installed in Cessna 206 aircraft; TIO-540-AJ1A model engines installed in Cessna T206 aircraft with a 2psi fuel flow divider spring (with detail P/N 2576532-1 or 2576556-1 marked on top of cover).

TIME OF COMPLIANCE: At owner’s discretion.

To improve idle characteristics, especially in hot weather, a 2psi flow divider spring may be replaced with a new 4psi spring, Precision P/N 2577011 in IO-360-L2A, IO-540-AB1A5, IO-540-AC1A5 and TIO-540-AJ1A model engines.

The replacement of the spring is accomplished as follows:

1. Remove the top cowling.
2. Access the flow divider cover. If the divider is installed “cap down” it will have to be removed from the engine.
3. Remove the safety wire and the four screws securing the top of the flow divider.
4. Carefully remove the cover of the flow divider, using care not to damage the diaphragm. The diaphragm should not be removed from the body, and care should be taken not to allow the diaphragm to rotate in the body.
5. Remove the spring above the diaphragm and discard it.
6. Install the new Precision P/N 2577011 spring on top of the diaphragm insuring that it is seated in the metal cup on top of the diaphragm.
7. Reinstall the cover and torque the four screws to 20-30 in.-lbs. Retighten after 20 minutes. Insure the cover is reinstalled in the same position it was removed.
8. To show that the new 4psi spring has been installed, vibropeen “4psi” next to the Precision part number on the cover of the flow divider.
9. Lockwire the four cover screws with a single strand of .025” lockwire. Wire must pull screws clockwise and be twisted only at the ends.
10. Start the engine and warm it up to operating temperatures.
11. Check the idle speed and mixture and reset to the Cessna specified values if necessary.
12. Enter compliance in the airframe and/or maintenance records as required.

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