TITLE
FUEL STRAINER FITTINGS INSPECTION

EFFECTIVITY

<table>
<thead>
<tr>
<th>Model</th>
<th>Serial Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>172R</td>
<td>17280001 thru 17281496</td>
</tr>
<tr>
<td>172S</td>
<td>172S8001 thru 172S10685, 172S10687, 172S10689 thru 172S10699, 172S10701, 172S10702, 172S10706 thru 172S10708</td>
</tr>
</tbody>
</table>

REASON
It has been determined that some airplanes may have been delivered with an improperly manufactured fuel strainer firewall fitting, and that this fitting may have been torqued to a value higher than the specified torque.

DESCRIPTION
The 0516029-1 Firewall Fuel Fitting is replaced with a 259-2240-6-8 Adapter and different attachment washer configuration. The 0756039-6 Fuel Strainer Top Assembly is examined for thread damage, and if damage is found, it is replaced.

COMPLIANCE
Recommended: should be accomplished at the next scheduled 100 hour/12 month (annual) type inspection or within 12 months, whichever occurs first.

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

MANPOWER
Man-hours are based on the inspection being done during a 100 hour/12 month (annual) type inspection.
1.2 man-hours to inspect the fuel strainer top assembly and replace the firewall fitting.
If necessary, 0.4 man-hour to replace the top assembly.

Cessna Aircraft Company, Customer Service, P.O. Box 7706, Wichita, Kansas 67277, U.S.A. (316) 517-5800, Facsimile (316) 942-9006
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REFERENCES


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 & Model 172S Illustrated Parts Catalog

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

MATERIAL AVAILABILITY

The following parts are available from Cessna Parts Distribution through an appropriate Cessna Service Station.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Qty/Airplane</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAS1149C1290R</td>
<td>Washer</td>
<td>2 or 3 (as required)</td>
</tr>
<tr>
<td>NAS1149C1232R</td>
<td>Washer</td>
<td>1</td>
</tr>
<tr>
<td>259-2240-6-8</td>
<td>Adapter</td>
<td>1</td>
</tr>
<tr>
<td>M83248/1-138</td>
<td>O-ring</td>
<td>1 (if required)</td>
</tr>
<tr>
<td>M83248/1-011</td>
<td>O-ring</td>
<td>1 (if required)</td>
</tr>
<tr>
<td>0756039-6</td>
<td>Top Assembly</td>
<td>1 (if required)</td>
</tr>
<tr>
<td>U064053</td>
<td>Thread Sealant, Loctite 569 (50 ml)</td>
<td>(as required)</td>
</tr>
<tr>
<td>U000717</td>
<td>Grease, Dow Corning 4 Silicon (5.3 oz)</td>
<td>(as needed)</td>
</tr>
</tbody>
</table>

CREDIT INFORMATION

For airplanes in warranty:

Applicable parts credit, a miscellaneous parts credit of $1.00, and a labor allowance credit of 1.2 man-hours per airplane will be provided to inspect the fuel strainer top assembly and replace the 0516029-1 Firewall Fuel Fitting with a 259-2240-6-8 Adapter.

If necessary, applicable parts credit and a labor allowance credit of 0.4 man-hour will be provided to replace a fuel strainer top assembly that has thread damage.

For airplanes beyond warranty:

Applicable parts credit and a miscellaneous parts credit of $1.00 per airplane will be provided to replace the 0516029-1 Firewall Fuel Fitting with a 259-2240-6-8 Adapter.

If necessary, applicable parts credit will be provided to replace a fuel strainer top assembly that has thread damage.
Freight will be credited at the most economical method unless pre-approved by Cessna. For pre-approval contact Cessna Parts Distribution Warranty Administration at Telephone: 316-831-4296, Fax: 316-206-2746 or E-mail: cpd2claims@cessna.textron.com.

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.

NOTE: Any fuel strainer top assembly found to have thread damage shall be removed and kept for field scrap per standard procedures.

Domestic ........................ March 30, 2010
International ........................ March 30, 2010

Special Note to Service Stations:

When you complete the Warranty Claim, the labor allowance claimed shall be itemized for each above action completed.

ACCOMPLISHMENT INSTRUCTIONS

Weight And Balance Information

Negligible

Material Information

The parts below will be necessary:

<table>
<thead>
<tr>
<th>NEW P/N</th>
<th>QUANTITY</th>
<th>DESCRIPTION</th>
<th>OLD P/N</th>
<th>DISPOSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAS1149C1290R</td>
<td>2 or 3 (as required)</td>
<td>Washer</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>NAS1149C1232R</td>
<td>1</td>
<td>Washer</td>
<td>AN960C1216L</td>
<td>Discard</td>
</tr>
<tr>
<td>259-2240-6-8</td>
<td>1</td>
<td>Adapter</td>
<td>0516029-1</td>
<td>Discard</td>
</tr>
</tbody>
</table>

The parts below may be necessary:

<table>
<thead>
<tr>
<th>NEW P/N</th>
<th>QUANTITY</th>
<th>DESCRIPTION</th>
<th>OLD P/N</th>
<th>DISPOSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>M83248/1-138</td>
<td>1</td>
<td>O-ring</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>M83248/1-011</td>
<td>1</td>
<td>O-ring</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>0756039-6</td>
<td>1</td>
<td>Top Assembly</td>
<td>Same</td>
<td>Hold for field scrap</td>
</tr>
</tbody>
</table>

The material that follows, or equivalent, is necessary:

<table>
<thead>
<tr>
<th>NAME</th>
<th>NUMBER</th>
<th>MANUFACTURER</th>
<th>USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loctite 569 Thread Sealant</td>
<td>U064053</td>
<td>Cessna Aircraft Company Cessna Parts Distribution 5800 East Pawnee PO Box 1521 Wichita, KS 67218</td>
<td>Apply to the threads of the fuel strainer fittings</td>
</tr>
</tbody>
</table>
The material that follows, or equivalent, may be necessary:

<table>
<thead>
<tr>
<th>NAME</th>
<th>NUMBER</th>
<th>MANUFACTURER</th>
<th>USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dow Corning 4 Silicon Grease</td>
<td>U000717</td>
<td>Cessna Aircraft Company Cessna Parts Distribution 5800 East Pawnee PO Box 1521 Wichita, KS 67218</td>
<td>To lubricate O-rings</td>
</tr>
</tbody>
</table>

**Instructions**

1. Remove the engine cowl. (Refer to the Model 172 Series 1996 and On Maintenance Manual, Chapter 71, Cowl - Maintenance Practices.)

2. Prepare the airplane for maintenance.
   A. Make sure that all switches are in the OFF/NORM position.
   B. Disconnect electrical power from the airplane.
      1. Electrically ground the airplane.
      2. Disconnect external electrical power.
      3. Disconnect the airplane battery.
   C. Attach maintenance warning tags to the battery and external power receptacle that have “DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS” written on them.

3. Put the fuel shutoff valve to the OFF position.

**WARNING:** OBEY ALL FUEL SYSTEM FIRE AND SAFETY PROCEDURES.

**WARNING:** REMOVE ALL FLAMMABLE SOURCES FROM THE AIRPLANE AND FROM ALL VAPOR HAZARD AREAS.

**CAUTION:** MAKE SURE THAT NO FOREIGN OBJECT DEBRIS (FOD) GETS INTO THE FITTINGS AND HOSES AS YOU DO WORK IN THE FUEL SYSTEM.

4. (Refer to Figure 1, Detail A and View A-A.) Remove the fuel strainer assembly as follows:
   A. Disconnect the flexible fuel hose from the MS20822-6-6D Elbow at the outlet of the fuel strainer assembly.
   B. Remove and discard the safety wire from the four screws that attach the fuel strainer assembly to the fuel strainer brackets.
   C. Remove and keep the four screws and washers that attach the fuel strainer assembly to the fuel strainer brackets.
   D. With a backup wrench in position at the firewall fuel fitting on the forward side of the firewall, disconnect the fuel inlet line (or swivel adapter, if equipped) at the aft end of the firewall fuel fitting on the aft side of the firewall.
   E. With a backup wrench in position at the firewall fuel fitting on the forward side of the firewall, remove and keep the nut that holds the fuel strainer assembly to the engine firewall. Discard the two AN960C1216L Washers.
   F. Remove the fuel strainer assembly from the airplane.

5. Remove the 0516029-1 Firewall Fuel Fitting from the inlet side of the fuel strainer top assembly and discard it.

6. Remove the MS20822-6-6D Elbow from the fuel strainer assembly.
7. Examine the inlet and outlet threaded bosses on the 0756039-6 top assembly for visible evidence of deformed, torn, flattened, distorted, pulled, gouged, cross threaded or otherwise damaged threads.
   A. If there is no damage, go to Step 8.
   B. If there is damage to either threaded boss, replace the 0756039-6 Fuel Strainer Top Assembly. Keep the damaged top assembly for field scrap. (Refer to the Model 172 Series 1996 and On Maintenance Manual, Chapter 28, Fuel Storage and Distribution - Maintenance Practices.)

8. (Refer to Figure 1, Detail B.) Install the 259-2240-6-8 Adapter to the 0756039-6 Fuel Strainer Top Assembly as follows:
   A. Use the kept nut and discard the new nut that comes with the new 259-2240-6-8 Adapter.
   B. Apply Loctite 569 to the pipe threads of the 259-2240-6-8 Adapter and install the adapter into the inlet side of the top assembly at the position shown. Do not apply Loctite to the first two pipe threads of the adapter.
   C. Torque the 259-2240-6-8 Adapter from 150 inch-pounds to 195 inch-pounds.
   D. (Refer to Figure 1, View A-A.) Install the fuel strainer assembly on the airplane firewall as follows:
      (1) Install the fuel strainer assembly with two (or three as required for correct alignment) NAS1149C1290R Washers (between the adapter and the forward side of the firewall), one NAS1149C1232R Washer (between the aft side of the firewall and the kept nut) and loosely install the kept nut.
      (2) Loosely connect the fuel inlet line (or swivel adapter, if equipped) at the aft side of the firewall to the 259-2240-6-8 Adapter.
      (3) Loosely install the kept screws and washers that attach the top assembly to the fuel strainer brackets.
      (4) Put a backup wrench on the hex of the 259-2240-6-8 Adapter at the forward side of the firewall.
      (5) Torque the kept nut from 150 inch-pounds to 195 inch-pounds. (Refer to the Model 172 Series 1996 and On Maintenance Manual, Chapter 20, Torque Data - Maintenance Practices.)
      (6) Torque the fuel inlet line (or swivel adapter, if equipped) as follows:
          (a) If no swivel adapter is installed on the fuel inlet line, torque the fuel inlet line, with the aluminum B-nut, from 270 inch-pounds to 350 inch-pounds.
          (b) If the swivel adapter is installed on the fuel inlet line, torque the swivel adapter, with the steel B-nuts, from 470 inch-pounds to 550 inch-pounds.
      (7) Tighten the screws that attach the fuel strainer assembly to the brackets.
      (8) Safety the screws with safety wire. (Refer to the Model 172 Series 1996 and On Maintenance Manual, Chapter 20, Safetying - Maintenance Practices.).

9. (Refer to Figure 1, Detail A.) Install the MS20822-6-6D Elbow as follows:
   A. Apply Loctite 569 to the threads of the MS20822-6-6D Elbow. Do not apply the Loctite to the first two threads.
   B. Install the MS20822-6-6D Elbow.
      **CAUTION:** DO NOT TORQUE THE ELBOW TO MORE THAN 195 INCH-POUNDS.
   C. Torque the MS20822-6-6D Elbow to 150 inch-pounds. If necessary for alignment of the elbow and the hose, increase torque to 195 inch-pounds but do not torque to more than 195 inch-pounds. (Refer to the Model 172 Series 1996 and On Maintenance Manual, Chapter 20, Torque Data - Maintenance Practices.)

10. Connect the flexible fuel hose B-nut to the elbow on the fuel strainer assembly and torque the B-nut from 150 inch-pounds to 195 inch-pounds.

12. Torque the flexible fuel hose fuel servo inlet from 270 inch-pounds to 300 inch-pounds.


14. Remove maintenance warning tags from battery and external power receptacle and connect the battery.

15. Install the engine cowl. (Refer to the Model 172 Series 1996 and On Maintenance Manual, Chapter 71, Cowl - Maintenance Practices.)

16. Make an entry in the airplane logbook that states compliance and method of compliance with this service bulletin.
NOTE 1: Apply Loctite 569 and torque from 150 inch–pounds to 195 inch–pounds.
NOTE 2: Remove the 0516029–1 Firewall Fuel Fitting and two washers.
NOTE 3: Lubricate with Dow Corning 4 Silicone Grease or equivalent.
NOTE 4: Arrows show direction of fuel flow.

Figure 1. Fuel Strainer Fitting Inspection (Sheet 1)
NOTE 5: On some airplanes, the fuel line between the firewall shutoff valve and the firewall fuel fitting is a continuous aluminum fuel line (with aluminum B–nuts).
On other airplanes, the fuel line has a steel swivel adapter (with steel B–nuts) installed between the fuel line and the firewall fuel fitting.
If your airplane has aluminum B–nuts, you must torque them from 270 inch–pounds to 350 inch–pounds.
If your airplane has steel B–nuts, you must torque them from 470 inch–pounds to 550 inch–pounds.

Figure 1. Fuel Strainer Fitting Inspection (Sheet 2)
OWNER NOTIFICATION

On April 13, 2009 the following message will be sent to applicable owners of record in SB09-28-01A.

Dear Cessna Owner:

This Owner Advisory is to inform you that Service Bulletin SB09-28-01 Fuel Strainer Fittings Inspection has been issued.

It has been determined that some airplanes may have been delivered with an improperly manufactured fuel strainer firewall fitting, and that this fitting may have been torqued to a value higher than the specified torque.

The 0516029-1 Firewall Fuel Fitting is replaced with a 259-2240-6-8 Adapter and different attachment washer configuration. The 0756039-6 Fuel Strainer Top Assembly is examined for thread damage, and if damage is found, it is replaced.

Compliance is recommended: should be accomplished at the next scheduled 100 hour/12 month (annual) type inspection or within 12 months, whichever occurs first.

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<table>
<thead>
<tr>
<th></th>
<th>Domestic</th>
<th>March 30, 2010</th>
<th>International</th>
<th>March 30, 2010</th>
</tr>
</thead>
</table>

Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SB09-28-01 accomplished on your airplane.

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