Single Engine

Service Bulletin

May 28, 2001

TITLE
FUEL SELECTOR SHAFT ASSEMBLY INSPECTION/REPLACEMENT

EFFECTIVITY

<table>
<thead>
<tr>
<th>Model</th>
<th>Serial Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>172R</td>
<td>17280001 thru 17280988</td>
</tr>
<tr>
<td>172S</td>
<td>172S8001 thru 172S8728</td>
</tr>
</tbody>
</table>

REASON
It has been determined that during assembly, some fuel selector handle retention screws may have been installed in a manner that could lead to cracking of the fuel selector shaft.

DESCRIPTION
The fuel selector shaft assembly shall be inspected for cracks, and if required, replaced as directed by this service bulletin. Non-compliance with this service bulletin could allow the fuel selector handle to loosen and possibly come off of the fuel selector shaft assembly.

COMPLIANCE
Mandatory, shall be accomplished within the next 100 hours of operation or 12 months, whichever occurs first.

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

MANPOWER
1.1 man-hours per airplane for inspection.
If required, 1.6 man-hours per airplane to replace the fuel selector shaft assembly.
REFERENCES


NOTE: Ensure all publications used are complete and current.

NOTE: This information shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual or Instructions for continued airworthiness, and must be accomplished for ongoing airworthiness compliance as required per 14 CFR Part (FAR) 43.13.

OTHER PUBLICATIONS AFFECTED

Model 172R And Model 172S Illustrated Parts Catalog

NOTE: Ensure all publications used are complete and current.

MATERIAL PRICE AND AVAILABILITY

The following are 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>
<tbody>
<tr>
<td>0516024-9</td>
<td>Shaft Assembly, Fuel Selecto...</td>
<td>1 (if required)</td>
<td>$ 75.00 (SE) ea.</td>
</tr>
<tr>
<td>MS21044N3</td>
<td>Locknut</td>
<td>2 (if required)</td>
<td>$ 0.17 (PS) ea.</td>
</tr>
<tr>
<td>MS24665-1</td>
<td>Cotter Pin</td>
<td>1 (if required)</td>
<td>$ 3.00 (PS) pkg.</td>
</tr>
</tbody>
</table>

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

CREDIT INFORMATION

A labor allowance credit of 1.1 man-hours per airplane will be provided to inspect the fuel selector shaft assembly.

If required, applicable parts credit and an additional 1.6 man-hours labor allowance credit per airplane will be provided to replace the fuel selector shaft assembly as described in this service bulletin.

To receive credit, the work must be completed and a Warranty Claim submitted by a Cessna Single Engine Service Station before the dates shown below. The removed shaft assembly must be returned with the Warranty Claim.

| Domestic | May 28, 2002 |
|          | International | May 28, 2002 |
ACCOMPLISHMENT INSTRUCTIONS

Weight And Balance Information

MODEL ................................. 172R, 172S
WEIGHT CHANGE ....................... Negligible

Material Information
The following parts may be required:

<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>0516024-9</td>
<td>1</td>
<td>Shaft Assembly</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>MS21044N3</td>
<td>2</td>
<td>Locknut</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>MS24665-1</td>
<td>1</td>
<td>Cotter Pin</td>
<td>Same</td>
<td>Discard</td>
</tr>
</tbody>
</table>

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. Remove cowlings as required and disconnect the battery. (Refer to the Model 172 Series 1996 And On Maintenance Manual, Chapter 24, Electrical Power.)
3. Attach maintenance warning tags to the battery and external power receptacle stating: DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS.
4. (Refer to Figure 1, Sheet 1 and Sheet 2.) Inspect the 0516024-9 Fuel Selector Shaft Assembly for crack(s):
   A. Ensure the fuel selector is in the "BOTH" position.
   B. Remove and retain plug button from top of fuel selector handle to expose screw.
   C. Remove screw and washer then lift up to disconnect the handle from fuel selector shaft. Retain hardware for reinstallation.
   D. (Refer to Figure 1, Sheet 3, Detail C.) Using a mirror and flashlight, inspect around the entire upper one inch of the shaft assembly for crack(s).
      NOTE: If shaft has primer applied, use a Scratchbrite pad or equivalent, to clean primer off inspection area.
      (1) If inspection reveals crack(s), proceed to Step 5.
      (2) If inspection reveals no crack(s), proceed to Step 6.E.
5. Remove shaft assembly:
   A. (Refer to Figure 1, Sheet 1.) Remove the pedestal cover and components to gain access to the fuel shaft assembly, retain hardware for reinstallation:
      (1) Remove fuel selector placard from pedestal.
      (2) Remove the microphone mounting bracket.
      (3) Remove fuel shut-off control knob.
(4) Disconnect electrical wiring to the pedestal light.

(5) Remove and retain screws from the pedestal column.

**CAUTION:** USE CARE NOT TO OVERTURN OR DAMAGE THE PEDESTAL COVER DURING REMOVAL.

(6) Remove pedestal cover.

(7) Peel back carpet as required for removal of floor cover plate(s) at the base of the pedestal.

(8) Remove floor cover plate(s) as required to gain access to the lower selector shaft assembly.

B. (Refer to Figure 1, Sheet 2.) Remove fuel selector shaft assembly:
C. Remove and discard cotter pin from pin securing shaft assembly to the fitting. Remove pin from shaft assembly and retain for reinstallation.
D. Remove screws, washers and locknuts attaching the fuel selector shaft support assembly to the pedestal and remove the shaft support assembly with the fuel selector shaft attached. Retain screws and washers for reinstallation discard the locknuts.
E. Remove fuel selector shaft from shaft support assembly. Retain shaft support assembly for reinstallation. Return removed fuel selector shaft to Cessna.

6. (Refer to Figure 1, Sheet 1 and Sheet 2.) Install the new 0516024-9 Fuel Selector Shaft Assembly:
A. Install shaft assembly into fitting and secure with retained pin and one (1) new MS24665-1 Cotter Pin.
B. Reinstall floor access plate(s) and lay carpet back down.
C. Reinstall fuel selector shaft support assembly to the pedestal using retained screws and washers, and new MS21044N3 Locknuts.
D. Reinstall the pedestal cover and removed components with retained hardware.
E. Reinstall fuel selector handle with retained washer and screw then install plug button on handle.
F. Ensure correct rotation of the fuel selector handle through "LEFT", "RIGHT" and "BOTH" positions.

7. Remove maintenance warning tags from battery and external power receptacle.

8. Reconnect the battery and reinstall the cowlings as required. (Refer to the Model 172 Series 1996 And On Maintenance Manual, Chapter 24, Electrical Power.)

9. Perform an operational check of any systems or components disturbed while performing this service bulletin. (Refer to applicable sections of the maintenance manual).

10. Make an entry in the airplane logbook stating compliance and method of compliance with this service bulletin.
Figure 1. Fuel Shaft Assembly Inspection/Replacement (Sheet 1)
DETAIL B

Figure 1. Fuel Shaft Assembly Inspection/Replacement (Sheet 2)
Figure 1. Fuel Shaft Assembly Inspection/Replacement (Sheet 3)
OWNER NOTIFICATION

On May 28, 2001 the following Owner Advisory message will be sent to applicable owners of record in SB01-28-02A.

Dear Cessna Owner:

This Owner Advisory is to inform you it has been determined that during assembly, some fuel selector handle retention screws may have been installed in a manner that could lead to cracking of the fuel selector shaft. The fuel selector shaft assembly shall be inspected for cracks, and if required, replaced as directed by Service Bulletin SB01-28-02. Non-compliance with Service Bulletin SB01-28-02 could allow the fuel selector handle to loosen and possibly come off of the fuel selector shaft assembly.

Compliance is mandatory, shall be accomplished within the next 100 hours of operation or within 12 months, whichever occurs first.

The information contained in the referenced Cessna Service Bulletin shall be considered an amendment to the Cessna Manufacturer’s Service/Maintenance Manual or Instructions for continued airworthiness, and must be accomplished for ongoing airworthiness compliance as required per 14 CFR Part (FAR) 43.13.

A labor allowance credit of 1.1 man-hours per airplane will be provided to inspect the fuel selector shaft assembly. If required, applicable parts credit and an additional 1.6 man-hours labor allowance credit will be provided to replace the fuel selector shaft assembly.

To receive credit, the work must be completed and a Warranty Claim submitted by a Cessna Single Engine Service Station before the dates shown below.

<table>
<thead>
<tr>
<th>Domestic</th>
<th>International</th>
<th>May 28, 2002</th>
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<tr>
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Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SB01-28-02 accomplished on your airplane.

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