Single Engine

Service Bulletin

February 18, 2002

SB02-37-03

TITLE

VACUUM SYSTEM REDUCER FITTING REPLACEMENT

EFFECTIVITY

The following airplanes equipped with a HSI gyro system. Airplanes on which a part number 0518031-1 replacement fitting has been installed are not affected.

<table>
<thead>
<tr>
<th>Model</th>
<th>Serial Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>172R</td>
<td>17280001 thru 17281090</td>
</tr>
<tr>
<td>172S</td>
<td>172S8001 thru 172S9024</td>
</tr>
<tr>
<td>182S</td>
<td>18280001 thru 18280944</td>
</tr>
<tr>
<td>206H</td>
<td>20608001 thru 20608173</td>
</tr>
<tr>
<td>T206H</td>
<td>T20608001 thru T20608346</td>
</tr>
</tbody>
</table>

REASON

It has been determined that the existing reducer fitting installed in the vacuum system between the regulator valve and the horizon gyro may crack or break as a result of performing maintenance that requires removal of the pilot’s center instrument panel.

DESCRIPTION

The existing reducer fitting should be replaced with the specified metal reducer fitting. Non-compliance with this service bulletin could result in a broken reducer fitting and possible loss of vacuum to the horizon gyro.

COMPLIANCE

Recommended; should be accomplished at the next removal of the pilot’s center instrument panel or other maintenance of the vacuum system that would provide access to the existing reducer fitting or scheduled airplane 100 hour type inspection, whichever occurs first.

APPROVAL

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

Approximately 1.5 man-hours

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 or Instructions for continued airworthiness and should be accomplished within the specified time requirement.

OTHER PUBLICATIONS AFFECTED

Model 172R and Model 172S Illustrated Parts Catalog
Model 182S/182T/T182T 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>
<tbody>
<tr>
<td>0518031-1</td>
<td>Reducer 5/8 inch - 3/8 inch</td>
<td>1</td>
<td>$35.50 (SE) ea.</td>
</tr>
</tbody>
</table>

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

CREDIT INFORMATION

Applicable parts credit will be provided to replace the vacuum system reducer fitting as described in this Service Bulletin.

Special Note To Service Stations: Hold removed fitting for field scrap per normal procedures.

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>February 18, 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>International</td>
<td>February 18, 2003</td>
</tr>
</tbody>
</table>

SB02-37-03
February 18, 2002
ACCOMPLISHMENT INSTRUCTIONS

Weight And Balance Information

WEIGHT CHANGE .................. Negligible

Material Information

The following part 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>0518031-1</td>
<td>1</td>
<td>Reducer 5/8 inch - 3/8 inch</td>
<td>P1OUCB6</td>
<td>Hold For Field</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Scrap</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 cowling or battery access panel as required and disconnect the battery. (Refer to the appropriate model 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. Remove and retain the screws from the pilot's center panel. Slide the center panel aft to allow clearance for the pilot's inboard panel to be removed. (Refer to the appropriate model Maintenance Manual, Chapter 31, Instrument and Control Panels.)

5. Remove and retain screws from the pilot's inboard panel. Remove the pilot's inboard panel.

6. (Refer to Figure 1, Sheet 1, Detail A and Detail B.) Disconnect hoses and discard the existing reducer fitting. Retain all hose clamps.

7. (Refer to Figure 1, Sheet 1, Detail A and Detail B.) Install replacement 0518031-1 Reducer 5/8 inch - 3/8 inch fitting and secure with retained hose clamps.

8. Reinstall pilot's inboard panel using retained screws.

9. Slide the pilot's center panel forward and install retained screws.

10. Reconnect the battery and reinstall the cowling and battery access panel as necessary. (Refer to the appropriate Model 1996 And On Maintenance Manual, Chapter 24, Electrical Power.)

11. Perform operational checks on affected systems. (Refer to applicable sections of the appropriate Model 1996 And On Maintenance Manual as necessary.)

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

13. Make an entry in the airplane logbook stating compliance with this service bulletin.
MODEL 182 SHOWN MODELS 172 AND 206 SIMILAR

PILOT'S CENTER PANEL (REFERENCE)

HORIZON GYRO (REFERENCE)

HOSE CLAMPS (REFERENCE)

EXISTING REDUCER (REFERENCE)

0518031-1 REDUCER 5/8 INCH - 3/8 INCH (1 REQUIRED)

DETAIL A
VACUUM SYSTEM HSI VIEW LOOKING AFT
MODEL 182 SHOWN MODELS 172 AND 206 SIMILAR

DETAIL B

Figure 1. Vacuum System Reducer Fitting Replacement (Sheet 1)
OWNER NOTIFICATION

On March 1, 2002 the following Owner Advisory message will be sent to applicable owners of record in SB02-37-03A.

Dear Cessna Owner:

This Owner Advisory is to inform you that Service Bulletin SB02-37-03 has been issued. SB02-37-03 recommends replacement of the existing vacuum system reducer fitting installed under the instrument panel between the vacuum system regulator valve and the horizon gyro. It has been determined that the existing reducer fitting may crack or break as a result of performing maintenance that requires removal of the pilot's center instrument panel. The existing reducer fitting should be replaced with the specified metal reducer fitting. Airplanes on which a part number 0518031-1 replacement fitting has been installed are not affected. Non-compliance with this service bulletin could result in a broken reducer fitting and possible loss of vacuum to the horizon gyro.

Compliance is recommended; should be accomplished at the next removal of the pilot's center instrument panel or other maintenance of the vacuum system that would provide access to the existing reducer fitting or scheduled airplane 100 hour type inspection, 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 and should be accomplished within the specified time requirement.

Applicable parts credit will be provided to replace the vacuum system reducer fitting as described in Service Bulletin SB02-37-03.

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.

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Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SB02-37-03 accomplished on your airplane.