Single Engine

Service Bulletin

May 28, 2001

SB01-27-02

TITLE

CONTROL YOKE ASSEMBLY INSPECTION

EFFECTIVITY

<table>
<thead>
<tr>
<th>Model</th>
<th>Serial Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>172R</td>
<td>17280001 thru 17281025</td>
</tr>
<tr>
<td>172S</td>
<td>172S8001 thru 172S8790 and 172S8792 thru 172S8797</td>
</tr>
</tbody>
</table>

REASON

It has been determined that the self locking nuts on the bolts used to secure the control yoke drum cable retention clamps may be too thick to allow the self locking feature of the nut to provide adequate locking onto the retention bolts.

DESCRIPTION

The control yoke drum assembly shall be inspected for the specified cable clamp retention nuts, and if required, the nuts shall be replaced as directed by this service bulletin. Non-compliance with this service bulletin could allow nuts to remain installed that may not provide for the desired protrusion of bolt threads beyond the self locking feature of the nut.

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

0.9 man-hour per airplane for inspection

If required, 0.4 man-hour per airplane for replacement of the control yoke drum cable retention upper clamp nut.

If required, 0.6 man-hour per airplane for replacement of the control yoke drum cable retention lower clamp nut.

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 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>MS21083N3</td>
<td>Nut</td>
<td>2 (if required)</td>
<td>$0.21 (PS) ea.</td>
</tr>
</tbody>
</table>

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

CREDIT INFORMATION

A labor allowance credit of 0.9 man-hour per airplane will be provided to inspect the control yoke drum assembly as described in this service bulletin. If nut replacement is required, applicable parts credit and an additional labor allowance credit of 0.4 man-hour per airplane will be provided to replace the upper clamp nut and 0.6 man-hour per airplane to replace the lower clamp nut.

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.

- Domestic .......................... May 28, 2002
- International ..................... May 28, 2002
ACCOMPLISHMENT INSTRUCTIONS

Weight And Balance Information

MODEL ......................... 172R/172S
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>MS21083N3</td>
<td>2 (If required)</td>
<td>Nut</td>
<td>MS21044N3</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 cowl or battery access panel 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, Detail A.) Inspect the drum assembly:
   A. Using an inspection mirror and a flashlight, locate the drum assembly.
      (1) Locate the clamps on the drum assembly and inspect the nut on the bolt that attaches each clamp to the drum for minimal thread engagement.
      NOTE: Attachments with less than two visible threads protruding through the self-locking nuts require fastener replacement using MS21083N3 Nuts.
      (a) If nut installations meet minimal thread requirement, proceed to Step 5.
      (b) If nut installations do not meet minimal thread requirement:
          1. Remove the pilot seat. (Refer to the Model 172 Series 1996 And On Maintenance Manual, Chapter 25, Equipment and Furnishings-Maintenance Practices.)
          2. Install the control lock to hold drum in place during nut replacement.
      (2) Remove and discard existing nut(s) not meeting minimal thread requirement. Install new MS21083N3 Nut(s) as required. Reinspect the new attachment installation(s) to assure a minimum of two visible threads are protruding through the new nut(s). (Refer to the Model 172 Series 1996 And On Maintenance Manual, Chapter 20, Torque Data-Maintenance Practices.)
         (a) Reinstall the pilot seat.
         (b) Remove the control lock.

5. Remove maintenance warning tags from battery and external power receptacle. Reconnect the battery and reinstall the cowl or battery access panel as required.

6. Make an entry in the airplane logbook stating compliance and method of compliance with this service bulletin.
Figure 1. Control Yoke Assembly Inspection. (Sheet 1)
OWNER NOTIFICATION

On May 28, 2001 the following Owner Advisory message will be sent to applicable owners of record in SB01-27-02A.

Dear Cessna Owner:

This Owner Advisory is to inform you that an inspection is required of the self locking nuts used to secure the control yoke drum cable retention bolts and clamps on your airplane. These nuts may be too thick to allow the self locking feature of the nut to provide adequate locking onto the retention bolts. The control yoke drum assembly shall be inspected for the specified cable clamp retention nuts, and if required, the nuts shall be replaced as directed by Service Bulletin SB01-27-02. Non-compliance with Service Bulletin SB01-27-02 could allow nuts to remain installed that may not provide for the desired protrusion of bolt threads beyond the self locking feature of the nut.

Compliance is mandatory, shall be accomplished within the next 100 hours of operation or 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 0.9 man-hour per airplane will be provided to inspect the control yoke drum assembly. If nut replacement is required, applicable parts credit and an additional labor allowance credit of 0.4 man-hour per airplane will be provided to replace the upper clamp nut and 0.6 man-hour per airplane to replace the lower clamp nut.

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Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SB01-27-02 accomplished on your airplane.

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