TITLE
ELEVATOR TRIM TAB ACTUATOR ASSEMBLY INSPECTION

EFFECTIVITY

Group A airplanes:

<table>
<thead>
<tr>
<th>Model</th>
<th>Serial Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>172R</td>
<td>172S81353 thru 172S81364, 172S81369 thru 172S81372</td>
</tr>
<tr>
<td>172S</td>
<td>172S810373 thru 172S810423, 172S810426, 172S810428 thru 172S810430, 172S810433, 172S810435 and 172S810436, 172S810441, 172S810444</td>
</tr>
<tr>
<td>206H</td>
<td>20608284</td>
</tr>
<tr>
<td>T206H</td>
<td>T20608692 thru T20608696, T20608699 thru T20608705, T20608709, T20608713 and T20608714</td>
</tr>
</tbody>
</table>

Group B airplanes:

Also affected are the following airplanes that have had a part number 1260074-1 (Models 172 and 182) replacement elevator trim tab actuator assembly installed that was shipped from Cessna Parts Distribution on October 2, 2006 through February 7, 2007; and part number 1260149-2 (Model 206) replacement elevator trim tab actuator assembly installed that was shipped from Cessna Parts Distribution on October 16, 2006 through February 5, 2007:

<table>
<thead>
<tr>
<th>Model</th>
<th>Serial Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>172R</td>
<td>17280001 thru 17281380</td>
</tr>
<tr>
<td>172S</td>
<td>172S8001 thru 172S8048</td>
</tr>
<tr>
<td>182S</td>
<td>18280001 thru 18280944</td>
</tr>
<tr>
<td>182T</td>
<td>18280945 thru 18281922</td>
</tr>
<tr>
<td>T182T</td>
<td>T18208001 thru T18208706</td>
</tr>
<tr>
<td>206H</td>
<td>20608001 thru 20608288</td>
</tr>
<tr>
<td>T206H</td>
<td>T20608001 thru T20608733</td>
</tr>
</tbody>
</table>

Also affected are any part number 1260074-1 elevator trim tab actuator assemblies that were shipped from Cessna Parts Distribution on October 2, 2006 through February 7, 2007; and part number 1260149-2 elevator trim tab actuator assemblies that were shipped from Cessna Parts Distribution on October 16, 2006 through February 5, 2007 in Service Station stock.

To obtain satisfactory results, procedures specified in this publication must be accomplished in accordance with accepted methods and prevailing government regulations. Cessna Aircraft Company cannot be responsible for the quality of work performed in accomplishing the requirements of this publication.
REASON
One report has been received of sheared groove pins on an elevator trim tab actuator chain sprocket.

DESCRIPTION
It has been determined that the affected elevator trim tab actuators shall have the groove pins replaced and the actuator assembly inspected as described in this Service Bulletin. Non-compliance with this Service Bulletin could allow the elevator trim tab actuator chain sprocket to come loose.

COMPLIANCE
Mandatory: shall be accomplished at the next scheduled airplane inspection, not to exceed 50 hours of operation or 4 months, whichever occurs first.

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

MANPOWER
0.3 man-hour for inspection to determine the elevator trim tab actuator assembly date

For airplanes without electric trim: If necessary, 5.7 man-hours for inspection, replacement of the groove pins, installation and rigging of the elevator trim tab actuator assembly

For airplanes with electric trim: If necessary, 6.9 man-hours for inspection, replacement of the groove pins, installation and rigging of the elevator trim tab actuator assembly

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 must be accomplished for ongoing airworthiness compliance as required per 14 CFR Part 43.13.

OTHER PUBLICATIONS AFFECTED
Model 172R & 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 parts below 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>0310332</td>
<td>Sprocket (Model 172, 182)</td>
<td>1 (if required)</td>
<td>$29.50 (SE) ea</td>
</tr>
<tr>
<td>0310362-5</td>
<td>Screw Assembly</td>
<td>1 (if required)</td>
<td>$389.00 (I) ea</td>
</tr>
<tr>
<td>1260074-1</td>
<td>Actuator (Model 172, 182)</td>
<td>1 (if required)</td>
<td>$1,299.00 (I) ea</td>
</tr>
<tr>
<td>1260113-1</td>
<td>Sprocket (Model 206)</td>
<td>1 (if required)</td>
<td>$171.65 (PS) ea</td>
</tr>
<tr>
<td>1260149-2</td>
<td>Actuator (Model 206)</td>
<td>1 (if required)</td>
<td>$1,651.00 (I) ea</td>
</tr>
<tr>
<td>GP3H094X0375-14</td>
<td>Groove Pin (Model 172, 182)</td>
<td>2 (if required)</td>
<td>$0.62 (PS) ea MQ 25</td>
</tr>
<tr>
<td>GP3H094X0500-14</td>
<td>Groove Pin (Model 206)</td>
<td>2 (if required)</td>
<td>$0.64 (PS) ea MQ 25</td>
</tr>
<tr>
<td>MS21256-1</td>
<td>Locking Clip</td>
<td>(See Note 1)</td>
<td>$0.38 (PS) ea MQ 100</td>
</tr>
<tr>
<td>MS24665-134</td>
<td>Cotter Pin</td>
<td>1 (if required)</td>
<td>$0.03 (PS) ea MQ 100</td>
</tr>
<tr>
<td>S3895-1</td>
<td>Bearing</td>
<td>1 (if required)</td>
<td>$69.80 (B) ea</td>
</tr>
</tbody>
</table>

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

NOTE 1: For model 172 and 182 airplanes, 2 each if required. For model 206 airplanes, 4 each if required.
CREDIT INFORMATION

A labor allowance credit of 0.3 man-hour per airplane will be provided for inspection to determine the elevator trim tab actuator assembly date as described in this Service Bulletin.

For airplanes without electric trim: If necessary, applicable parts credit and a labor allowance credit of 5.7 man-hours per airplane will be provided for inspection, replacement of the groove pins, installation and rigging of the elevator trim tab actuator assembly as described in this Service Bulletin.

For airplanes with electric trim: If necessary, applicable parts credit and a labor allowance credit of 6.9 man-hours per airplane will be provided for inspection, replacement of the groove pins, installation and rigging of the elevator trim tab actuator assembly as described in this Service Bulletin.

Actuators in Service Station stock: Any affected part number 1260074-1 elevator trim tab actuator assembly that was shipped from Cessna Parts Distribution on October 2, 2006 through February 7, 2007; or part number 1260149-2 elevator trim tab actuator assembly that was shipped from Cessna Parts Distribution on October 16, 2006 through February 5, 2007 shall be returned to Cessna for credit per standard procedures.

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. Any removed unusable elevator trim tab actuator assembly shall be returned with the Warranty Claim.

<table>
<thead>
<tr>
<th></th>
<th>Domestic</th>
<th>International</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>November 12, 2007</td>
<td>November 12, 2007</td>
</tr>
</tbody>
</table>

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 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>GP3H094X0375-14</td>
<td>2</td>
<td>Groove Pin (Model 172, 182)</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>GP3H094X0500-14</td>
<td>2</td>
<td>Groove Pin (Model 206)</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>MS21256-1</td>
<td>(See Note 1)</td>
<td>Locking Clip</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>MS24665-134</td>
<td>1</td>
<td>Cotter Pin</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>S3895-1</td>
<td>1</td>
<td>Bearing</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>0310332</td>
<td>1</td>
<td>Sprocket (Model 172, 182)</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>0310362-5</td>
<td>1</td>
<td>Screw Assembly</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>1260074-1</td>
<td>1</td>
<td>Actuator</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>1260113-1</td>
<td>1</td>
<td>Sprocket (Model 206)</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>1260149-2</td>
<td>1</td>
<td>Actuator</td>
<td>Same</td>
<td>Discard</td>
</tr>
</tbody>
</table>

**NOTE 1:** For model 172 and 182 airplanes, 2 each if required. For model 206 airplanes, 4 each if required.

The material, or equivalent, listed in this table may be necessary.

<table>
<thead>
<tr>
<th>NAME</th>
<th>NUMBER</th>
<th>MANUFACTURER</th>
<th>USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grease</td>
<td>MIL-G-21164C</td>
<td>Commercially Available</td>
<td>To lubricate the screw assembly.</td>
</tr>
</tbody>
</table>

Instructions

1. 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) Disconnect the airplane battery.
      
      (2) Disconnect external electrical power.
   
   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.

2. Put a support stand under the tail tiedown ring to make sure that the tailcone does not fall while you do work in the tail of the airplane. (Refer to the applicable maintenance manual, Chapter 7, Jacking - Maintenance Practices.)

3. Remove access panel 320AB (Model 172) or 310CB (Models 182 and 206) for access to the elevator trim tab actuator assembly. (Refer to the applicable maintenance manual, Chapter 6, Access/Inspection Plates - Description and Operation.)
4. (Refer to Figure 1 and 2, Detail C.) Use a mirror and a flashlight as necessary to find the part number decal on the 1260074-1 (Models 172 and 182) or 1260149-2 (Model 206) Elevator Trim Tab Actuator Assembly.

NOTE: There are three lines of data on the part number decal. The part number of the elevator trim tab actuator assembly is shown on the top line, the date of manufacture is shown on the middle line, and the Universal Product Code (UPC) is shown on the bottom line.

A. If the date of manufacture on the middle line reads ASSY DATE: 4 Q 06, or if you cannot tell what the assembly date is, go to Step 5.

B. If the date of manufacture does not read ASSY DATE: 4 Q 06, go to Step 6.

5. (Refer to Figure 1 and 2, Detail B.) Do an inspection of the elevator trim tab actuator assembly and replace the two groove pins as follows:

A. (Model 172 airplanes) Remove the baggage compartment aft wall for access to the turnbuckle for the manual elevator trim control cable. (Refer to the Model 172 Series 1996 and On Maintenance Manual, Chapter 25, Interior Upholstery - Maintenance Practices.)

B. (Model 182 airplanes) Remove the 310AR access panel to get access to the manual elevator trim control cable turnbuckle. (Refer to the Model 182/T182 Series 1997 and On Maintenance Manual, Chapter 6, Access/Inspection Plates - Description and Operation.)

C. (Model 206 airplanes) Get access to the manual elevator trim control cable turnbuckle as follows:
   (1) Remove the rear seat. (Refer to the Model 206/T206 Series 1998 and On Maintenance Manual, Chapter 25, Rear Seat - Maintenance Practices.)
   (2) Remove the baggage curtain. (Refer to the Model 206/T206 Series 1998 and On Maintenance Manual, Chapter 25, Interior Upholstery - Maintenance Practices.)

D. (Model 206 airplanes equipped with electric trim) Get access to the electric trim control cable turnbuckle. (Refer to the Model 206/T206 Series 1998 and On Maintenance Manual, Chapter 22, Autopilot - Maintenance Practices.)

E. Make marks at the positions of the different components (for example, chain to sprocket and screw to actuator positions) before you remove them to help later during installation and the rigging of the trim system.

F. Remove and discard the locking clips and relieve cable tension at the turnbuckle.

NOTE: For the Model 206 airplanes, there are two turnbuckles if the airplane is equipped with electric trim.

G. (Refer to Figure 1 and 2, Detail A.) At the elevator hinge gap, disconnect the push-pull tube (the Model 172 has a push-pull channel and the Models 182 and 206 have a push-pull tube) from the actuator screw assembly. Keep the attaching hardware and discard the cotter pin.

H. (Refer to Figure 1 and 2, Detail B.) Remove the chain guard from the trim tab actuator assembly. Keep the attaching hardware.

I. Remove the chain (remove the two chains if the airplane is equipped with electric trim) from the actuator sprocket.

J. (Refer to Figure 1 and 2, Detail A.) Remove and keep the attaching hardware that installs the elevator trim tab actuator assembly to the bracket, and carefully remove the elevator trim tab actuator assembly through the access panel.

K. (Refer to Figure 1 and 2, Detail B.) Remove and discard the two groove pins that attach the sprocket to the elevator trim tab actuator assembly.

L. Do an inspection of the elevator trim tab actuator assembly as follows:
   (1) Turn the bearing in the screw assembly to make sure that it moves freely and smoothly.
   (2) Remove the screw assembly and look at the threads to make sure that there is no damage.
   (3) Make sure that there are no cracks in the screw assembly in the area of the bearing.
(4) Make sure that there are no bends in the screw assembly.

(5) If there is damage to the threads on the screw assembly, or if there are cracks or bends in the screw assembly, replace the 0310362-5 Screw Assembly.

(6) If the bearing does not move freely and smoothly in the screw assembly due to damage of the bearing, replace the S3895-1 Bearing.

(7) Examine the sprocket for broken, chipped, or bent teeth and install a 0310332 (Models 172 and 182) or 1260113-1 (Model 206) Sprocket if necessary.

M. Install the two new GP3H094X0375-14 (Models 172 and 182) or GP3H094X0500-14 (Model 206) Groove Pins that attach the sprocket to the internal screw of the elevator trim tab actuator assembly.

N. Examine the linear free play at the sprocket end of the housing on the elevator trim tab actuator assembly to make sure that it is not more than 0.010 inch. If the linear free play is more than 0.010 inch, install a new 1260074-1 (Models 172 and 182) or 1260149-2 (Model 206) Elevator Trim Tab Actuator Assembly.

O. Install the screw assembly in the elevator trim tab actuator assembly with MIL-G-21164C Grease. Hold the screw assembly and turn the sprocket to make sure that it turns freely and smoothly through the full range of travel.

P. (Refer to Figure 1 and 2, Detail A.) Carefully put the elevator trim tab actuator assembly in position through the access panel and attach the actuator assembly to the bracket with the kept attaching hardware.

Q. (Refer to Figure 1 and 2, Detail B.) Install the chain (or chains) that you removed from the actuator sprocket.

R. At the elevator hinge gap, connect the elevator trim tab actuator assembly to the push-pull tube (the Model 172 has a push-pull channel and the Models 182 and 206 have a push-pull tube) with the kept attaching hardware and tighten with your hand.

S. Do the rigging of the trim system and install the MS21256-1 Locking Clips where you removed them at the turnbuckle (or turnbuckles). (Refer to the applicable maintenance manual, Chapter 27, Elevator Trim Control - Maintenance Practices and Chapter 22, Autopilot - Maintenance Practices.)

T. Install the chain guard with the kept attaching hardware.

U. Tighten the nut and install the MS24665-134 Cotter Pin for the push-pull tube/channel attach bolt nut.

V. (Model 172 airplanes) Install the baggage compartment aft wall. (Refer to the Model 172 Series 1996 and On Maintenance Manual, Chapter 25, Interior Upholstery - Maintenance Practices.)

W. (Model 182 airplanes) Install access panel 310AR. (Refer to the Model 182/T182 Series 1997 and On Maintenance Manual, Chapter 6, Access/Inspection Plates - Description and Operation.)

X. (Model 206 airplanes) Install the equipment that you removed to get access to the manual elevator trim control cable turnbuckle as follows:

   (1) Install the baggage curtain. (Refer to the Model 206/T206 Series 1998 and On Maintenance Manual, Chapter 25, Interior Upholstery - Maintenance Practices.)

   (2) Install the rear seat. (Refer to the Model 206/T206 Series 1998 and On Maintenance Manual, Chapter 25, Rear Seat - Maintenance Practices.)

Y. (Model 206 airplanes equipped with electric trim) Install the equipment that you removed to get access to the electric trim control cable turnbuckle. (Refer to the Model 206/T206 Series 1998 and On Maintenance Manual, Chapter 22, Autopilot - Maintenance Practices.)

6. Install the 320AB (Model 172) or 310CB (Models 182 and 206) access plate. (Refer to the applicable maintenance manual, Chapter 6, Access/Inspection Plates - Description and Operation.)

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

8. Make an entry in the airplane logbook that states compliance and method of compliance with this Service Bulletin.
NOTE: If Assembly Date is 4 Q 06, you must do an inspection of the 1260074–1 Trim Tab Actuator Assembly and replace the GP3H094X0375–14 Groove Pins.

Figure 1. Elevator Trim Tab Actuator Assembly Inspection - Models 172 and 182 (Sheet 1)
NOTE: If Assembly Date is 4 Q 06, you must do an inspection of the 1260149–2 Trim Tab Actuator Assembly and replace the GP3H094X0500–14 Groove Pins.

P/N: 1260149–2
ASSY DATE: 4 Q 06

Figure 2. Elevator Trim Tab Actuator Assembly Inspection - Model 206 (Sheet 1)
OWNER NOTIFICATION

On March 12, 2007 the following message will be sent to applicable owners of record in SB07-27-01A.

Dear Cessna Owner:

This Owner Advisory is to inform you that SB07-27-01 has been issued because one report has been received of sheared groove pins on an elevator trim tab actuator chain sprocket.

It has been determined that the affected elevator trim tab actuators shall have the groove pins replaced and the actuator assembly inspected as described in SB07-27-01. Non-compliance with SB07-27-01 could allow the elevator trim tab actuator chain sprocket to come loose.

Compliance is mandatory: shall be accomplished at the next scheduled airplane inspection, not to exceed 50 hours of operation or 4 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 43.13.

A labor allowance credit of 0.3 man-hour per airplane will be provided for inspection to determine the elevator trim tab actuator assembly date.

For airplanes without electric trim: If necessary, applicable parts credit and a labor allowance credit of 5.7 man-hours per airplane will be provided for inspection, replacement of the groove pins, installation and rigging of the elevator trim tab actuator assembly as described in SB07-27-01.

For airplanes with electric trim: If necessary, applicable parts credit and a labor allowance credit of 6.9 man-hours per airplane will be provided for inspection, replacement of the groove pins, installation and rigging of the elevator trim tab actuator assembly as described in SB07-27-01.

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.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>November 12, 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SB07-27-01 accomplished on your airplane.
Dear Cessna Owner:

This Owner Advisory is to inform you that SB07-27-01 has been issued because one report has been received of sheared groove pins on an elevator trim tab actuator chain sprocket.

It has been determined that the affected elevator trim tab actuators shall have the groove pins replaced and the actuator assembly inspected as described in SB07-27-01. Non-compliance with SB07-27-01 could allow the elevator trim tab actuator chain sprocket to come loose.

Compliance is mandatory: shall be accomplished at the next scheduled airplane inspection, not to exceed 50 hours of operation or 4 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 43.13.

A labor allowance credit of 0.3 man-hour per airplane will be provided for inspection to determine the elevator trim tab actuator assembly date.

For airplanes without electric trim: If necessary, applicable parts credit and a labor allowance credit of 5.7 man-hours per airplane will be provided for inspection, replacement of the groove pins, installation and rigging of the elevator trim tab actuator assembly as described in SB07-27-01.

For airplanes with electric trim: If necessary, applicable parts credit and a labor allowance credit of 6.9 man-hours per airplane will be provided for inspection, replacement of the groove pins, installation and rigging of the elevator trim tab actuator assembly as described in SB07-27-01.

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.

<table>
<thead>
<tr>
<th>Domestic</th>
<th>November 12, 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>International</td>
<td>November 12, 2007</td>
</tr>
</tbody>
</table>

Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SB07-27-01 accomplished on your airplane.

* * * * * * * *