Single Engine

Service Bulletin

March 15, 2004

SB04-25-01

TITLE

CREW SEAT RECLINE MODIFICATION

EFFECTIVITY

<table>
<thead>
<tr>
<th>Model</th>
<th>Serial Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>172R</td>
<td>17280001 thru 17281140</td>
</tr>
<tr>
<td>172S</td>
<td>172S8001 thru 172S9286</td>
</tr>
<tr>
<td>182S</td>
<td>18280001 thru 18280944</td>
</tr>
<tr>
<td>182T</td>
<td>18280945 thru 18281195</td>
</tr>
<tr>
<td>T182T</td>
<td>T18208001 thru T18208183</td>
</tr>
<tr>
<td>206H</td>
<td>20608001 thru 20608187</td>
</tr>
<tr>
<td>T206H</td>
<td>T20608001 thru T20608385</td>
</tr>
</tbody>
</table>

REASON

To provide a modification for the crew seat recline and lock mechanism that is designed to provide a greater range of travel for the crew seat back and refine the adjustment of the seat back lock cylinder control cable.

DESCRIPTION

The modification shall be installed as described in Modification Kit MK172-25-07. Non-compliance with this Service Bulletin may result in it being more difficult to exit the airplane from an aft passenger seat if a crew seat is in the full aft position.

COMPLIANCE

Mandatory; shall be accomplished within the next 200 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.

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.

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

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MANPOWER

3.3 man-hours per airplane to install MK172-25-07

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 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>MK172-25-07</td>
<td>Crew Seat Recline Modification Kit</td>
<td>1</td>
<td>$90.00 (N) ea.</td>
</tr>
</tbody>
</table>

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

CREDIT INFORMATION

Applicable Modification Kit parts credit and a labor allowance credit of 3.3 man-hours per airplane will be provided to install MK172-25-07.

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.

Domestic .................................. March 15, 2005
International ............................ March 15, 2005
ACCOMPLISHMENT INSTRUCTIONS

Modification Kit MK172-25-07: Crew Seat Recline Modification instructions are attached.

OWNER NOTIFICATION

On March 15, 2004 the following Owner Advisory message will be sent to applicable owners of record in SB04-25-01A.

Dear Cessna Owner:

This Owner Advisory is to inform you that Service Bulletin SB04-25-01 has been issued. SB04-25-01 provides a modification for the crew seat recline and lock mechanism that is designed to provide a greater range of travel for the crew seat back and refine the adjustment of the seat back lock cylinder control cable. The modification shall be installed as described in Modification Kit MK172-25-07. Non-compliance with Service Bulletin SB04-25-01 may result in it being more difficult to exit the airplane from an aft passenger seat if a crew seat is in the full aft position.

Compliance is Mandatory; shall be accomplished within the next 200 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 43.13.

Applicable Modification Kit parts credit and a labor allowance credit of 3.3 man-hours per airplane will be provided to install MK172-25-07.

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<th>March 15, 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>International</td>
<td>March 15, 2005</td>
</tr>
</tbody>
</table>

Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SB04-25-01 accomplished on your airplane.

* * * * * * * *
Single Engine

MODIFICATION KIT

MK172-25-07

TITLE
CREW SEAT RECLINE MODIFICATION

EFFECTIVITY

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<tr>
<td>206H</td>
<td>20608001 thru 20608187</td>
</tr>
<tr>
<td>T206H</td>
<td>T20608001 thru T20608385</td>
</tr>
</tbody>
</table>

DESCRIPTION

This modification kit gives material information and instructions to do seat back recline modifications on both crew seats.

APPROVAL

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

REFERENCE

SB04-25-01

CHANGE IN WEIGHT AND BALANCE

NOTE: The information in this weight and balance table is for two crew seat modifications.

<table>
<thead>
<tr>
<th>Model</th>
<th>Weight Change</th>
<th>ARM</th>
<th>Resultant Moment</th>
<th>Moment/1000</th>
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</thead>
<tbody>
<tr>
<td>172S/172R</td>
<td>0.2 Pound</td>
<td>36 Inches</td>
<td>7.2 Inch-Pounds</td>
<td>0.007 Inch-Pounds</td>
</tr>
<tr>
<td>182S/182T/T182T</td>
<td>0.2 Pound</td>
<td>36 Inches</td>
<td>7.2 Inch-Pounds</td>
<td>0.007 Inch-Pounds</td>
</tr>
<tr>
<td>206H/T206H</td>
<td>0.2 Pound</td>
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<td>0.007 Inch-Pounds</td>
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March 15, 2004

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.

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MATERIAL INFORMATION

NOTE: The parts included in this modification kit cover installation for two crew seats in one airplane.

<table>
<thead>
<tr>
<th>NEW P/N</th>
<th>QUANTITY</th>
<th>DESCRIPTION</th>
<th>OLD P/N</th>
<th>DISPOSITION</th>
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<tbody>
<tr>
<td>MK172-25-07</td>
<td>1</td>
<td>Kit, consisting of the</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>following parts.</td>
<td></td>
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<tr>
<td>AN4-7A</td>
<td>2</td>
<td>Bolt</td>
<td>AN4-7A</td>
<td>Discard</td>
</tr>
<tr>
<td>AN4-12A</td>
<td>2</td>
<td>Bolt</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>AN4-13A</td>
<td>2</td>
<td>Bolt</td>
<td>AN4-12A</td>
<td>Discard</td>
</tr>
<tr>
<td>NAS6604-17</td>
<td>2</td>
<td>Bolt</td>
<td>AN4-14A</td>
<td>Discard</td>
</tr>
<tr>
<td>MS21042-4</td>
<td>6</td>
<td>Nut</td>
<td>MS21044N4</td>
<td>Discard</td>
</tr>
<tr>
<td>MS21044N4</td>
<td>2</td>
<td>Nut</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>MS24665-136</td>
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<td>Cotter Pin</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>NAS1149F0432P</td>
<td>8</td>
<td>Washer</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>NAS1149F0463P</td>
<td>12</td>
<td>Washer</td>
<td>Same</td>
<td>Discard</td>
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<tr>
<td>NAS561P4-10</td>
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<td>Pin</td>
<td>Same</td>
<td>Discard</td>
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<tr>
<td>S1438-17</td>
<td>8</td>
<td>Nylon Friction Washer</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>S2456-6-4</td>
<td>4</td>
<td>Rivet</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>0790007-2</td>
<td>2</td>
<td>Height Adjust Nut</td>
<td>0514037-3</td>
<td>Discard</td>
</tr>
<tr>
<td>0790007-4</td>
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<td>None</td>
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<tr>
<td>0790007-5</td>
<td>2</td>
<td>Shim</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>MK172-25-07</td>
<td>1</td>
<td>Instructions</td>
<td></td>
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</tr>
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</table>

ACCOMPLISHMENT 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. Disconnect the airplane battery. (Refer to the applicable Model Maintenance Manual, Chapter 24, Electrical Power.)

3. Attach maintenance warning tags to the battery and external power receptacle that have "DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS" written on them.

4. (Refer to Figure 1, Detail A.) Remove the crew seats from the airplane. (Refer to the applicable Model Maintenance Manual, Chapter 25, Flight Compartment - Maintenance Practices.)

5. Do a modification to each crew seat back mechanism.
   A. Disconnect the forward end of the cylinder lock assembly and discard the hardware that attached the cylinder lock assembly to the bracket on the crew seat. (Refer to your Model Maintenance Manual, Chapter 25, Flight Compartment - Maintenance Practices.)
B. (Refer to Figure 1, Detail B, View B-B, View C-C and View E-E.) Install the 0790007-4 Hydrolok Slip Fitting to the 1214192-18 Bracket and seat frame.

(1) Put the 0790007-4 Hydrolok Slip Fitting on the crew seat frame so it is inside of and in the most forward position of the 1214192-18 Bracket as shown.

(2) Put a mark on each side of the 0790007-4 Hydrolok Slip Fitting where you will match drill the 1214192-18 Bracket bolt holes.

(a) Remove the 0790007-4 Hydrolok Slip Fitting from the 1214192-18 Bracket on the crew seat.

1 Drill Size G (0.261 inch diameter) holes through the locations on the 0790007-4 Hydrolok Slip Fitting and deburr each hole. You may ream these holes up to a 0.265-inch diameter.

(3) Put the 0790007-4 Hydrolok Slip Fitting on the crew seat frame so it fits inside of and against the 1214192-18 Bracket. Temporarily install the new hardware through the holes drilled in Step 5B(2).

(4) (Refer to Figure 1, Sheet 4, View C-C.) Match-drill two Number 5 (0.205 inch diameter) holes through the 0790007-4 Hydrolok Slip Fitting and the crew seat frame.

(5) Remove the 0790007-4 Hydrolok Slip Fitting and deburr the two holes in the Hydrolok Slip Fitting and in the seat frame.

(6) (Refer to Figure 1, Sheet 4, View C-C.) Install the 0790007-4 Hydrolok Slip Fitting to the seat frame with two S2456-6-4 Rivets as shown.

C. (Refer to Figure 1, Detail B and View B-B.) Install the cylinder lock assembly to the 0790007-4 Hydrolok Slip Fitting and 1214192-18 Bracket with new hardware as shown.

**NOTE:** For smooth reclining action to occur, make sure that you install the S1438-17 Nylon Friction Washers as shown and do not over tighten the nut.

(1) (Refer to Figure 1, Sheet 1 and Sheet 3 View D-D.) Remove and discard the left aft seat frame to seat base hardware, and install a new AN4-7A Bolt and MS21044N4 Nut.

**NOTE:** The AN4-7A Bolt must be installed as shown with the bolt head facing inboard towards the seat cylinder for clearance.

**NOTE:** It is permissible for the cylinder lock assembly to lightly contact the head of the AN4-7A Bolt after installation.

D. Remove and discard the hardware that attaches the aft end of the cylinder lock assembly to the crew seat.

E. (Refer to Figure 1, View D-D.) Install the aft end of the cylinder lock assembly to the crew seat with new hardware as shown.

**NOTE:** For smooth reclining action to occur, make sure that you install the S1438-17 Nylon Friction Washers in the location shown. Do not over tighten the nut.

F. (Refer to Figure 1, View A-A.) Remove the pin at the aft end of the height adjustment shaft.

G. Lower the seat to the lowest position before you remove the height adjustment nut.

H. Remove the height adjustment nut and keep the hardware that attached it to the bell crank. Discard the cotter pin.

I. Discard the removed height adjustment nut.

J. Install the new 0790007-2 Height Adjustment Nut to the height adjustment shaft and attach it to the bell crank with the hardware kept in Step 5H.

(1) Install the pin through the height adjustment nut so the head of the pin is on the inner side of the seat bracket.

(2) Install the kept washer and a new MS24665-136 Cotter Pin on the outer side of the seat bracket.
K. Install a new NAS561P4-10 Pin in the aft end of the height adjustment shaft.
L. Turn the height adjustment crank to make sure the seat moves up and down smoothly.

6. (Refer to Figure 2, Detail A and Detail B.) Do a seat back recline cable lock mechanism adjustment.
   A. Turn the cable adjustment locking nut counterclockwise to unlock the cable adjustment nut.
   B. Turn the cable adjustment nut counterclockwise until there is a 0.06 inch slack in the cable.
   C. Tighten the adjustment locking nut to lock the tension on the cable.
      **CAUTION:** DO NOT TIGHTEN THE CABLE TO MUCH SINCE THIS COULD CAUSE THE SEAT RECLINE MECHANISM NOT TO LOCK.
   D. Move the seat back forward and aft a few times to make sure it operates smoothly and locks. Loosen and tighten the adjustment locking nut as necessary to keep the 0.06 inch slack in the cable.

7. Install the crew seats in the airplane. (Refer to the applicable Model Maintenance Manual, Chapter 25, Front Seats and Rails - Maintenance Practices.)

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

9. Connect the battery. (Refer to the applicable Model Maintenance Manual, Chapter 24, Battery - Maintenance Practices.)

10. Make an entry in the airplane logbook that you installed this Modification Kit.
NOTE 1: ALL PART QUANTITIES ARE FOR ONE CREW SEAT.

NOTE 2: ALL DIMENSIONS ARE IN INCHES.

Figure 1. Crew Seat Recline Modification (Sheet 1)
NOTE 3: DRILL A SIZE G, 0.261 INCH DIAMETER HOLE THROUGH THE 0790007-4 HYDROLOK SLIP FITTING TO MATCH 1214192-18 BRACKET ASSEMBLY HOLES.
Figure 1. Crew Seat Recline Modification (Sheet 3)
Figure 1. Crew Seat Recline Modification (Sheet 4)
Figure 2. Crew Seat Recline Modification (Sheet 1)
NOTE: MEASURE CABLE SLACK AT THIS END.

Figure 2. Crew Seat Recline Modification (Sheet 2)