Service Newsletter

March 5, 2003

SNL03-3

TITLE
ALTERNATE PROPELLER SPINNER INSTALLATION

TO
Cessna Distributors, Single Engine Service Stations and Cessna Pilot Centers

MODELS AFFECTED
Model 172R serial numbers 17280001 thru 17281142 and Model 172S serial numbers 172S8001 thru 172S9288 (except Millennium Edition airplanes)

DISCUSSION
An alternate heavier gage propeller spinner has been made available to replace the existing propeller spinner on the Model 172R and 172S airplanes. The existing propeller spinner may be replaced with an alternate heavier gage propeller spinner by the incorporation of Modification Kit MK172-61-02. If the existing aft spinner bulkhead requires replacement, a new design strengthened aft spinner bulkhead that incorporates refined attach holes is also available.

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>MK172-61-02</td>
<td>Alternate Propeller Spinner Installation Kit</td>
<td>1</td>
<td>$5.00 (N) ea.</td>
</tr>
<tr>
<td>0550367-3</td>
<td>Spinner</td>
<td>1</td>
<td>$379.00 (SE) ea.</td>
</tr>
<tr>
<td>0550321-12</td>
<td>Aft Bulkhead</td>
<td>1 (if required)</td>
<td>$252.00 (SE) ea.</td>
</tr>
</tbody>
</table>

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

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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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TITLE
ALTERNATE PROPELLER SPINNER INSTALLATION

EFFECTIVITY

<table>
<thead>
<tr>
<th>Model</th>
<th>Serial Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>172R</td>
<td>17280001 thru 17281142</td>
</tr>
<tr>
<td>172S</td>
<td>172S8001 thru 172S9288 (except Millennium Edition airplanes)</td>
</tr>
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</table>

DESCRIPTION
This modification kit provides instructions for the installation of an alternate heavier gage propeller spinner to replace an existing installed spinner.

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

REFERENCES
SNL03-3
SB02-61-01 (or latest revision)
Model 172R & Model 172S Illustrated Parts Catalog
NOTE: Make sure all publications used are complete and current.

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CHANGE IN WEIGHT AND BALANCE

Model ........................................ 172R and 172S
Weight Change ............................... +0.5 lb.
ARM ............................................. -42.6 in.
Resultant Moment ......................... -21.3 in. lb.
Moment/1000 ................................. -0.021 in. lb.

MATERIAL INFORMATION

<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>MK172-61-02</td>
<td>1</td>
<td>Kit, consisting of the following parts:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 Instructions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In addition to the MK172-61-02 Kit, the following parts will/may be required as shown below:

<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>0550367-3</td>
<td>1</td>
<td>Spinner, Painted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0550321-12</td>
<td>1 (if required)</td>
<td>Bulkhead, Aft</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ACCOMPLISHMENT INSTRUCTIONS

NOTE: Refer to applicable sections of the Model 172 Series 1996 And On Maintenance Manual and Model 172R & Model 172S Illustrated Parts Catalog as necessary to accomplish the following 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 the engine cowling and disconnect the airplane battery.
3. Attach maintenance warning tags to the airplane battery and external power receptacle stating: DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS.

WARNING: EXERCISE CARE WHEN WORKING WITH THE PROPELLER. ALWAYS TREAT THE PROPELLER AS IF THE IGNITION SWITCH WERE ON. DO NOT STAND, NOR ALLOW ANYONE ELSE TO STAND, WITHIN THE ARC OF THE PROPELLER. MAKE SURE MAGNETO SWITCH IS IN THE OFF POSITION BEFORE TURNING PROPELLER.

WARNING: MAKE SURE MAGNETOS ARE GROUNDED BEFORE TURNING PROPELLER.

4. (Refer to Figure 1, Sheet 1, Detail A.) Remove screws securing spinner to forward and aft propeller spinner bulkheads.
5. Remove and discard existing spinner.
6. Inspect the aft bulkhead for cracks as described in Cessna Service Bulletin SB02-61-01 (or latest revision).
   A. If no cracks are found, proceed to Step 8.
   B. If crack(s) are found, remove the propeller and cracked bulkhead and discard the bulkhead. Install a new part number 0550321-12 aft bulkhead using procedures in SB02-61-01 (or latest revision).

7. Install propeller if it was previously removed. Position spacer, aft bulkhead, propeller and forward bulkhead to the crankshaft and install propeller mounting bolts finger tight.
   **NOTE:** Tighten propeller mounting bolts only enough to allow aft bulkhead to rotate for spinner attach screw alignment.

8. Position the new 0550367-3 spinner over the forward bulkhead and install screws in forward bulkhead finger tight.
   **NOTE:** If propeller has not been removed, it may be necessary to remove the mounting bolts safety wire and loosen the propeller mounting bolts to aid in aligning the new spinner and the aft bulkhead.
   **NOTE:** (Refer to Figure 1, Sheet 1, Detail A.) The forward bulkhead propeller mounting bolt holes may have been undersized due to original torquing of the propeller mounting bolts and may cause an inability to align the spinner to the bulkhead screw holes. The specified propeller mounting bolt hole diameter of the forward bulkhead is 0.516 inch to 0.527 inch. If necessary, remove bulkhead and enlarge the propeller mounting bolt holes within specified hole size using a 33/64th drill bit.

9. Rotate aft bulkhead until spinner attach screws can be installed with little or no effort.
   **NOTE:** It may be necessary to rotate the spinner 180 degrees for best spinner to aft bulkhead hole alignment. If attach holes do not align after rotating the spinner 180 degrees, it may be necessary to replace the aft bulkhead with a new 0550321-12 aft bulkhead that incorporates optimized coordination of the attach holes.

10. Remove the spinner carefully so the forward and aft bulkheads remain aligned.

11. Finger tighten the propeller mounting bolts (dry), then further tighten bolts in a crossing pattern. Do not torque the propeller mounting bolts until all bolts have been tightened equally.

12. Torque (dry) propeller mounting bolts in a crossing pattern to 55 to 65 ft-lbs (660-780 in-lbs) while maintaining alignment and clearance previously established.

13. Safety wire propeller bolts in pairs using S488599 or equivalent safety wire.

14. Install the spinner in same position as previously aligned.

15. Check spinner to propeller blade clearance.
   A. Verify minimum 0.10 inch clearance between the spinner and the propeller blade as described in SB02-61-01 (or latest revision).
   **NOTE:** If maximum available adjustment does not provide a minimum 0.10 inch clearance it is permissible to trim the spinner a maximum of 0.080 inch. Trim spinner only if maximum adjustment does not allow adequate clearance. Remove as little material as possible for clearance to minimize propeller balance changes. Restore corrosion protection. (Refer to the Model 172 Series 1996 And On Maintenance Manual, Chapter 20 Interior and Exterior Finish.)

16. Paint spinner as necessary.

17. Install and tighten spinner screws in a crossing pattern in small steps to make sure equal pressure is obtained around the spinner.

18. Remove maintenance warning tags from the battery and external power receptacle and reconnect the airplane battery.

19. Revise the airplane weight and balance paperwork.

20. Make an entry in the airplane logbook stating this modification kit has been installed.
Figure 1. Propeller Spinner Installation (Sheet 1)