TITLE
SKY-TEC STARTER WIRE INSPECTION

EFFECTIVITY
The following airplanes were delivered from Cessna with the Sky-Tec 149-NL starter installed:

<table>
<thead>
<tr>
<th>Model</th>
<th>Serial Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>172R</td>
<td>17281377 thru 17281415</td>
</tr>
<tr>
<td>172S</td>
<td>172S10462 thru 172S10605</td>
</tr>
</tbody>
</table>

The following airplanes are also affected if a Sky-Tec 149-NL starter has been installed via Service Bulletin SB07-80-01/Modification Kit MK172-80-01:

<table>
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<th>Model</th>
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<tbody>
<tr>
<td>172R</td>
<td>17280001 thru 17281376</td>
</tr>
<tr>
<td>172S</td>
<td>172S8001 thru 172S10461</td>
</tr>
</tbody>
</table>

REASON
Reports have been received on some airplanes that the engine 0555324-22 baffle seal rubs against the electrical lead wire for the motor of the starter.

DESCRIPTION
The electrical lead wire on the motor of the starter should be inspected for damage. If necessary, sleeving should be installed over the electrical lead wire and under the insulation boots at the ends of the lead wire. The starter should be replace if there is damage to one or more of the electrical lead wire strands.

COMPLIANCE
Recommended: should be accomplished at the next scheduled 50 hour inspection, 100 hour/12 month (annual) type inspection or within the next 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.
MANPOWER

The man-hours listed below are based on the work being accomplished during a 50 hour or 100 hour/12 month (annual) type inspection.

0.9 man-hour to inspect the starter electrical lead wire for damage.

If necessary, an additional 0.9 man-hour to remove the starter, install sleeving, and reinstall the starter.

If necessary, an additional 0.7 man-hour to remove and install a serviceable starter.

If necessary, an additional 0.2 man-hour to remove material from the 0555324-22 seal.

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 and should be accomplished within the specified time requirement.

OTHER PUBLICATIONS AFFECTED

Model 172R & Model 172S 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.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Qty/Airplane</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2209-5</td>
<td>Tie Strap</td>
<td>5 (as required)</td>
</tr>
<tr>
<td>S2209A5A</td>
<td>Tie Strap (Blue)</td>
<td>2 (as required)</td>
</tr>
<tr>
<td>S4057-5</td>
<td>Sleeving</td>
<td>1 Foot (if required)</td>
</tr>
<tr>
<td>149-NL</td>
<td>Starter</td>
<td>1 (if required)</td>
</tr>
</tbody>
</table>

CREDIT INFORMATION

Applicable parts credit, a miscellaneous parts credit of $1.00, and a labor allowance credit of 0.9 man-hour per airplane will be provided to inspect the starter electrical lead wire for damage.

If necessary, an additional 0.9 man-hour per airplane will be provided to remove the starter, install sleeving, and reinstall the starter.

If necessary, an additional 0.7 man-hour per airplane will be provided to remove and install a serviceable starter.

If necessary, an additional 0.2 man-hour per airplane will be provided to remove material from the 0555324-22 seal.

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.
NOTE: For airplanes on which the 149-NL starter was installed via SB07-80-01/MK172-80-01, a copy of the airplane logbook entries must be included with the Warranty Claim.

Domestic........................................ February 11, 2009
International...................................... February 11, 2009

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>S2209-5</td>
<td>5</td>
<td>Tie Strap</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>S2209A5A</td>
<td>2</td>
<td>Tie Strap (Blue)</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>S4057-5</td>
<td>1</td>
<td>Foot Sleeving</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>149-NL</td>
<td>1</td>
<td>Starter</td>
<td>Same</td>
<td>Return to Cessna</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. Remove the upper and the lower engine cowls to get access to the starter. (Refer to the Model 172 Series 1996 and On Maintenance Manual, Chapter 71, Cowl - Maintenance Practices.)
3. (Refer to Figure 1, Detail A.) Do an inspection of the starter wire on the motor of the Sky-Tec 149-NL Starter to see if there is damage as follows:
   A. (Refer to Figure 2, Detail A.) Remove the 0555324-22 Seal. Keep the attachment hardware.
   B. If there is no damage to the insulation on the starter wire, go to Step 4.
   C. If there is damage to one or more of the strands of wire in the starter wire, go to Step 3E.
   D. If there is damage to the insulation on the starter wire, but there is no damage to the copper strands of the starter wire, install sleeving over the starter wire as follows:
      (1) (Refer to Figure 1, Detail A, Detail B, and Detail C.) Remove the S2209-5 Tie Straps and the S2209A5A Tie Straps that attach the 0570512-8 Start Cable Assembly to the Sky-Tec 149-NL Starter. Keep the S1781-2 Connectors (Standoffs).
      (2) Remove the Sky-Tec 149-NL Starter. (Refer to the Model 172 Series 1996 and On Maintenance Manual, Chapter 80, Starter - Maintenance Practices.)
      (3) (Refer to Figure 1, Detail A.) Measure the length of S4057-5 Sleeving that you will need to cover the starter wire and to extend the S4057-5 Sleeving under the insulation boots at the two ends.
(4) Cut the S4057-5 Sleeving to the correct length.

**CAUTION:** DO NOT PULL THE INSULATION BOOT ON THE MOTOR END OF THE WIRE OUT OF ITS RECESS. IF YOU DO, IT WILL NOT BE EASY TO INSTALL THE INSULATION BOOT INTO THE RECESS AGAIN.

(5) Remove the starter wire from the terminal at the gear reduction housing as necessary to install the S4057-5 Sleeving under the insulation boots. Do not pull the insulation boot out of the recess at the motor end.

(6) Install the S4057-5 Sleeving on the starter wire and make sure that the two ends of the S4057-5 Sleeving extend under the insulation boots.

(7) Install one S2209-5 Tie Strap around each of the two insulation boots to attach the S4057-5 Sleeving to the starter wire.

(8) Install the Sky-Tec 149-NL Starter. (Refer to the Model 172 Series 1996 and On Maintenance Manual, Chapter 80, Starter - Maintenance Practices.)

(9) Install two S2209-5 Tie Straps, two S2209A5A Tie Straps, and the two kept S1781-2 Connectors (Standoffs) that attach the 0570512-8 Start Cable Assembly to the Sky-Tec 149-NL Starter. As you install the two S2209A5A Tie Straps, put them around the middle of the starter wire to help to make sure that the starter wire does not touch the 0555324-22 Seal.

(10) Go to Step 4.

E. If there is damage to one or more of the strands of wire in the starter wire, replace the starter as follows:

(1) Remove the S2209-5 Tie Straps and the S2209A5A Tie Straps that attach the 0570512-8 Start Cable Assembly to the Sky-Tec 149-NL Starter. Keep the S1781-2 Connectors (Standoffs).

(2) Remove the Sky-Tec 149-NL Starter and return it to Cessna. (Refer to the Model 172 Series 1996 and On Maintenance Manual, Chapter 80, Starter - Maintenance Practices.)

(3) Install a replacement Sky-Tec 149-NL Starter, but do not install the tie straps at this time. (Refer to the Model 172 Series 1996 and On Maintenance Manual, Chapter 80, Starter - Maintenance Practices.)

(4) (Refer to Figure 1, Detail A, Detail B, and Detail C.) Install two S2209-5 Tie Straps, two S2209A5A Tie Straps, and the two kept S1781-2 Connectors (Standoffs) that attach the 0570512-8 Start Cable Assembly to the Sky-Tec 149-NL Starter. As you install the two S2209A5A Tie Straps, put them around the middle of the starter wire to help to make sure that the starter wire does not touch the 0555324-22 Seal.

4. Temporarily install the 0555324-22 Seal with the kept hardware.

5. Look to see if the starter wire touches the 0555324-22 Seal. If it does, remove material from the 0555324-22 Seal until there is clearance between the 0555324-22 Seal and the starter wire. Do not remove more material from the 0555324-22 Seal than necessary to provide clearance.

6. Install the 0555324-22 Seal with the kept hardware.

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

8. Install the upper and the lower engine cowls. (Refer to the Model 172 Series 1996 and On Maintenance Manual, Chapter 71, Cowl - Maintenance Practices.)

9. Do an operational test of the starter system.

10. Make an entry in the airplane logbook that states compliance and method of compliance with this service bulletin.
NOTE 1: Remove the insulation boot at the gear reduction housing as necessary to install the S4057–5 Sleevng under the insulation boots. Do not pull the insulation boot out of the recess at the motor end as it will not be easy to install the insulation boot into the recess again.

NOTE 2: As necessary to make sure the S4057–5 Sleevng is safely attached to the starter wire, install the S2209A5A Tie Straps that attach the 0570512–8 Start Cable Assembly to the starter around middle of starter wire and one S2209–5 Tie Strap around each of the insulation boots.

Figure 1. Sky-Tec Starter Wire Inspection (Sheet 1)
NOTE 3: Install the S1781–2 Connectors (Standoffs) in a position that does not let the 0770512–8 Start Cable Assembly move and that gives the maximum distance possible between the 149–NL Starter and the 0770512–8 Start Cable Assembly.

Figure 1. Sky-Tec Starter Wire Inspection (Sheet 2)
NOTE: Remove material from the 0555324–22 Seal until there is clearance between the seal and the starter wire. Do not remove more material from the seal than is necessary to provide clearance.

Figure 2. 0555324-22 Seal Installation (Sheet 1)
OWNER NOTIFICATION

On February 25, 2008 the following message will be sent to applicable owners of record in SB08-80-01A.

Dear Cessna Owner:

This Owner Advisory is to inform you that Service Bulletin SB08-80-01: Sky-Tec Starter Wire Inspection has been issued.

Reports have been received on some airplanes that the engine 0555324-22 baffle seal rubs against the electrical lead wire for the motor of the starter.

The electrical lead wire on the motor of the starter should be inspected for damage. If necessary, sleeving should be installed over the electrical lead wire and under the insulation boots at the ends of the lead wire. The starter should be replace if there is damage to one or more of the electrical lead wire strands.

Airplanes affected by SB08-80-01:

The following airplanes delivered from Cessna with the Sky-Tec 149-NL starter installed:

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Compliance is recommended: should be accomplished at the next scheduled 50 hour inspection, 100 hour/12 month (annual) type inspection or within the next 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 parts credit, a miscellaneous parts credit of $1.00, and a labor allowance credit of 0.9 man-hour per airplane will be provided to inspect starter electrical lead wire for damage.

If necessary, an additional 0.9 man-hour per airplane will be provided to remove the starter, install sleeving, and reinstall the starter.

If necessary, an additional 0.7 man-hour per airplane will be provided to remove and install a serviceable starter.

If necessary, an additional 0.2 man-hour per airplane will be provided to remove material from the 0555324-22 seal.

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.

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Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SB08-80-01 accomplished on your airplane.