ELECTRICAL GROUND STRAP INSPECTION

MODEL SERIAL NUMBERS

The following airplanes delivered from Cessna may have a part number 0412007-8, 0412007-15, or 0412007-18 ground strap installed that is affected by this Service Bulletin.

172R 17281201 thru 17281292, 17281295 and 17281296
172S 172S9569 thru 172S10123 and 172S10125
182T 182801298 thru 18281764
T182T T18208225 thru T18208503
206H 20608209 thru 20608258
T206H T20608438 thru T20608586, T20608588 and T20608591 and T20608593 thru T20608595

Also affected are the following airplanes that have had a part number 0412007-8, 0412007-15, or 0412007-18 replacement ground strap installed that was shipped from Cessna Parts Distribution on March 11, 2004 through February 20, 2006.

172R 17280001 thru 17281330
172S 172S8001 thru 172S10185
182S 18280001 thru 18280944
182T 18280945 thru 18281816
T182T T18208001 thru T18208546
206H 20608001 thru 20608264
T206H T20608001 thru T20608624

Also affected are any part number 0412007-8, 0412007-15, or 0412007-18 ground straps in Service Station stock that were shipped from Cessna Parts Distribution on March 11, 2004 through February 20, 2006.
REASON

It has been determined that some electrical ground straps may not have been manufactured correctly.

DESCRIPTION

The ground straps shall be inspected and if necessary, replaced as described in this Service Bulletin. Non-compliance with this Service Bulletin could allow corrosion to form on the ground strap and adjacent attachment points and potentially affect the performance of the electrical and avionics systems and related components.

COMPLIANCE

Mandatory: shall be accomplished at the next scheduled 100 hour or annual (12 month) type inspection, not to exceed the next 12 months, whichever occurs first.

APPROVAL

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

MANPOWER

If necessary, 0.2 man-hour per strap for replacement

REFERENCES

Model 172R and Model 172S Wiring Diagram Manual
Model 182S, 182T and Model T182T Wiring Diagram Manual
Model 206H and Model T206H Wiring Diagram Manual

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>0412007-8</td>
<td>Ground Strap (See Note 1)</td>
<td>(as required)</td>
<td>$ 12.50 (PS) ea</td>
</tr>
<tr>
<td>0412007-15</td>
<td>Ground Strap (See Note 2)</td>
<td>(as required)</td>
<td>$ 17.80 (PS) ea</td>
</tr>
<tr>
<td>0412007-18</td>
<td>Ground Strap (See Note 3)</td>
<td>(as required)</td>
<td>$ 20.30 (PS) ea</td>
</tr>
<tr>
<td>K000912</td>
<td>Corrosion Resistant Primer (1.5 gal kit)</td>
<td>(as required)</td>
<td>$ 326.00 (VS) ea</td>
</tr>
<tr>
<td>U074093</td>
<td>Alodine 1132 Marker</td>
<td>(as required)</td>
<td>$ 146.00 (VA) ea</td>
</tr>
</tbody>
</table>

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

NOTE 1: For model 172 and 182 airplanes, 1 each if required.

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

NOTE 3: For model 172 and 182 airplanes, 1 each if required.

CREDIT INFORMATION

If ground strap replacement is necessary, a miscellaneous parts credit of $ 6.50 per airplane and applicable ground strap parts credit and a labor allowance credit of 0.2 man-hour per strap will be provided.

Any affected part number 0412007-8, 0412007-15, or 0412007-18 Ground Strap in Service Station stock 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. Affected removed ground straps shall be held for field scrap per standard procedures.

<table>
<thead>
<tr>
<th></th>
<th>Domestic</th>
<th>International</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>May 8, 2007</td>
<td>May 8, 2007</td>
</tr>
</tbody>
</table>

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>0412007-8</td>
<td>as required</td>
<td>Ground Strap</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>0412007-15</td>
<td>as required</td>
<td>Ground Strap</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>0412007-18</td>
<td>as required</td>
<td>Ground Strap</td>
<td>Same</td>
<td>Discard</td>
</tr>
</tbody>
</table>

The materials below, or equivalent, may be necessary.

<table>
<thead>
<tr>
<th>NAME</th>
<th>NUMBER</th>
<th>MANUFACTURER</th>
<th>USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrosion-Resistant Primer</td>
<td>K00925</td>
<td>Cessna Aircraft Company Cessna Parts Distribution 5800 East Pawnee PO Box 1521 Wichita, KS 67218</td>
<td>To apply to bare metal after new strap installation.</td>
</tr>
<tr>
<td>Alodine 1132 Marker</td>
<td>U074093</td>
<td>Cessna Aircraft Company Cessna Parts Distribution 5800 East Pawnee PO Box 1521 Wichita, KS 67218</td>
<td>To apply to bare metal on electrical grounding surfaces.</td>
</tr>
<tr>
<td>Isopropyl Alcohol</td>
<td></td>
<td>Commercially Available</td>
<td>To clean grounding surfaces.</td>
</tr>
<tr>
<td>Methyl N-Propyl Ketone</td>
<td></td>
<td>Commercially Available</td>
<td>To clean grounding surfaces.</td>
</tr>
<tr>
<td>Emery Paper or Emery Cloth</td>
<td>400 thru 600 Grit</td>
<td>Commercially Available</td>
<td>To clean grounding surfaces.</td>
</tr>
</tbody>
</table>

Instructions

1. Find your airplane in the Effectivity section of this Service Bulletin.
   A. If your airplane may have been delivered with one or more 0412007-8, 0412007-15, or 0412007-18 Ground Straps installed, go to Step 3.
   B. If your airplane has had one or more 0412007-8, 0412007-15, or 0412007-18 Replacement Ground Straps installed that were shipped from Cessna Parts Distribution on March 11, 2004 through February 20, 2006, go to Step 2.

2. Determine if an affected ground strap is installed by reviewing applicable airplane paperwork such as logbooks, and/or applicable work orders and sales/shipping receipts or visual inspection of the ground straps.
   A. If an affected ground strap is installed, proceed to Step 3.
   B. If an affected ground strap is not installed, proceed to Step 8.

3. 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.
4. (Refer to Figure 1.) Do an inspection of all of the ground straps in the engine compartment.

**NOTE:** (Model 172R/172S)

1. There is one 0412007-8 Ground Strap on the engine mount that goes to the engine.
2. There is one 0412007-15 Ground Strap on the battery.
3. There is one 0412007-15 Ground Strap on the engine mount that goes to the firewall ground stud.
   **NOTE:** The firewall ground stud is on the firewall below the airplane battery.
4. There is one 0412007-18 Ground Strap on the power junction box.

**NOTE:** (Model 182S/182T/T182T)

1. There is one 0412007-8 Ground Strap on the engine mount that goes to the engine.
2. There is one 0412007-15 Ground Strap on the engine mount that goes to the firewall ground stud.
   **NOTE:** The firewall ground stud is on the firewall below the power junction box.
3. There is one 0412007-18 Ground Strap on the power junction box.

**NOTE:** (Model 206H/T206H)

1. There is one 0412007-15 Ground Strap on the power junction box.

A. Remove the necessary components for access to do the inspection of the ground strap. (Refer to applicable sections of the appropriate airplane model Maintenance Manual.)

B. (Refer to Figure 1.) Examine one of the terminals on each ground strap to see if it has an open end.
   **NOTE:** You only have to examine one terminal on each ground strap. If one terminal on the ground strap has corrosion-resistant plating, the other terminal on that ground strap will also have corrosion-resistant plating. If one terminal on the ground strap does not have corrosion-resistant plating, the other terminal on that ground strap will not have corrosion-resistant plating.

   (1) If the terminal does not have an open end, go to Step 6.
   (2) If the terminal is open on the end, go to Step 5.
   **NOTE:** The ground strap terminals that do not have corrosion-resistant plating have open ends and a split on one side.

5. Replace the ground strap.

**CAUTION:** BEFORE YOU INSTALL A NEW GROUND STRAP, MAKE SURE THAT THERE IS NO CORROSION, PAINT, PRIMER, GREASE, OIL, OR OTHER NONCONDUCTIVE MATERIAL AT THE ATTACH POINTS.

A. Remove and discard the ground strap.

B. Do a visual check for corrosion on the remaining terminals, attaching hardware, and the structure. (Refer to the Single Engine Structural Repair Manual, Chapter 51, Corrosion and Corrosion Control - General.)

   (1) If there is no corrosion, clean all grounding surfaces with Isopropyl Alcohol, and install a new 0412007-8, 0412007-15, or 0412007-18 Ground Strap as applicable. Go to Step 6.
   (2) If there is corrosion on the attaching hardware, replace the hardware, clean all grounding surfaces with Isopropyl Alcohol, and install a new 0412007-8, 0412007-15, or 0412007-18 Ground Strap as applicable. Go to Step 6.
(3) If there is corrosion on the airplane structure or the engine truss structure where the ground straps are attached, determine the degree of corrosion damage before you install the new ground strap. (Refer to the Single Engine Structural Repair Manual, Chapter 51, Corrosion and Corrosion Control - General.)

(a) If there is light corrosion to moderate corrosion, install new ground straps as follows.

1. With 400 thru 600-grit emery paper, lightly sand the affected area to remove corrosion.
2. Clean the surfaces with Isopropyl Alcohol.
3. Apply Alodine to bare aluminum surfaces. (Refer to the applicable airplane model Maintenance Manual, Chapter 20, Standard Practices - Airframe.)
4. After the Alodine has cured, clean the surfaces with Isopropyl Alcohol again.
5. Install a new 0412007-8, 0412007-15, or 0412007-18 Ground Strap with new hardware. (Refer to the applicable airplane model Wiring Diagram Manual, Chapter 20, Standard Practices Airframe.)
6. Apply corrosion-resistant primer to all exposed surfaces.

(b) If the damage is severe or worse, contact Cessna Propeller Aircraft Product Support, PO Box 7706, Wichita, KS, 67277, USA, for assistance.

**NOTE:** The telephone number of Cessna Propeller Aircraft Product Support is 316-517-5800. The fax number is 316-942-9006.

6. Install the components that you removed for access. (Refer to applicable sections of the appropriate airplane model Maintenance Manual.)

7. Remove maintenance warning tags and connect the airplane battery. (Refer to applicable airplane model Maintenance Manual, Chapter 24, Electrical Power.)

8. Make an entry in the airplane logbook that states compliance and method of compliance with this Service Bulletin.
Figure 1. Ground Strap Inspection (Sheet 1)
OWNER NOTIFICATION

On May 8, 2006 the following message will be sent to applicable owners of record in SB06-24-01A.

Dear Cessna Owner:

This Owner Advisory is to inform you that it has been determined that some electrical ground straps may not have been manufactured correctly and may be installed on your airplane.

Airplanes affected by Service Bulletin SB06-24-01 are:

A. Airplane serial numbers 17281201 thru 17281292, 17281295, 17281296, 172S9569 thru 172S10123, 172S10125, 182801298 thru 18281764, T18208225 thru T18208503, 20608209 thru 20608258, T20608438 thru T20608586, T20608588, T20608591, T20608593, T20608594 and T20608595.

B. The following airplane serial numbers that have had a part number 0412007-8, 0412007-15, or 0412007-18 replacement ground strap installed that was shipped from Cessna Parts Distribution on March 11, 2004 through February 20, 2006: 17280001 thru 17281330, 72S8001 thru 172S10185, 18280001 thru 18280944, 18280945 thru 18281816, T18208001 thru T18208546, 20608001 thru 20608264 and T20608001 thru T20608624.

The ground straps shall be inspected and if necessary, replaced as described in SB06-24-01. Non-compliance with SB06-24-01 could allow corrosion to form on the ground strap and adjacent attachment points and potentially affect the performance of the electrical and avionics systems and related components.

Compliance is mandatory, shall be accomplished at the next scheduled 100 hour or annual (12 month) type inspection, not to exceed 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.

If ground strap replacement is necessary, a miscellaneous parts credit of $6.50 per airplane and applicable ground strap parts credit and a labor allowance credit of 0.2 man-hour per strap will be provided.

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 | May 8, 2007 |
| International | May 8, 2007 |

Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SB06-24-01 accomplished on your airplane.