Service Bulletin

October 17, 2005

TITLE
ENGINE DRIVEN FUEL PUMP INSPECTION

EFFECTIVITY

The following airplanes were delivered from Cessna with an engine driven fuel pump that may be affected by Lycoming Mandatory Service Bulletin No. 548A:

<table>
<thead>
<tr>
<th>Model</th>
<th>Serial Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>172R</td>
<td>17280870 thru 17281300</td>
</tr>
<tr>
<td>172S</td>
<td>172S8430 thru 172S10000</td>
</tr>
<tr>
<td>182S</td>
<td>182S0700 thru 182S0944</td>
</tr>
<tr>
<td>182T</td>
<td>182S0945 thru 182S1730</td>
</tr>
<tr>
<td>206H</td>
<td>2060S100 thru 2060S275</td>
</tr>
</tbody>
</table>

The following airplanes on which a new, rebuilt or overhauled engine has been installed with a part number LW-15473 fuel pump that was shipped from Lycoming on February 1, 2000 through September 15, 2005 and any airplane on which a part number LW-15473 replacement fuel pump has been installed that was shipped from Lycoming on February 22, 2000 through September 15, 2005:

NOTE: New, rebuilt or overhauled engines equipped with a part number LW-15473 fuel pump and part number LW-15473 replacement fuel pumps affected by Lycoming Mandatory Service Bulletin No. 548A would have been shipped from Cessna Parts Distribution on February 3, 2000 through September 23, 2005.

<table>
<thead>
<tr>
<th>Model</th>
<th>Serial Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>172R</td>
<td>172S0001 thru 172S1300</td>
</tr>
<tr>
<td>172S</td>
<td>172S0001 thru 172S1000</td>
</tr>
<tr>
<td>182S</td>
<td>182S0001 thru 182S0944</td>
</tr>
<tr>
<td>182T</td>
<td>182S0945 thru 182S1730</td>
</tr>
<tr>
<td>206H</td>
<td>206S0001 thru 206S275</td>
</tr>
</tbody>
</table>
Also affected are any new, rebuilt or overhauled engine in Service Station stock with a part number LW-15473 fuel pump that was shipped from Lycoming on February 1, 2000 through September 15, 2005 and any part number LW-15473 replacement fuel pump that was shipped from Lycoming on February 22, 2000 through September 15, 2005.

**NOTE:** New, rebuilt or overhauled engines with a part number LW-15473 fuel pump and part number LW-15473 replacement fuel pumps affected by Lycoming Mandatory Service Bulletin No. 548A would have been shipped from Cessna Parts Distribution on February 3, 2000 through September 23, 2005.

**REASON**

To transmit Lycoming Mandatory Service Bulletin No. 548A; Diaphragm-Type Fuel Pump Inspection/Replacement.

**DESCRIPTION**

Lycoming has determined that some diaphragm-type fuel pumps may have been manufactured in a manner that could restrict fuel pressure to the engine in the event operation of the pump is compromised. These fuel pumps shall be inspected, and if required, replaced as described in this Service Bulletin. Non-compliance with this Service Bulletin may result in restricted or loss of engine fuel pressure.

**COMPLIANCE**

Mandatory: shall be inspected within the next 50 hours of operation. If an affected pump is installed, it must be replaced within the next 100 hours of operation or 180 days, whichever occurs first as specified in Lycoming Mandatory Service Bulletin No. 548A (or latest revision).

**NOTE:** Compliance with SB01-73-01 Revision 2 is not required if in compliance with SB01-73-01 Revision 1.

**APPROVAL**

Refer to the attached Lycoming Mandatory Service Bulletin No. 548A (or latest revision). FAA approval has been obtained on technical data in this publication that affects airplane type design.

**MANPOWER**

0.5 man-hour per airplane for inspection
If required, add 1.0 man-hour per airplane to replace the engine driven fuel pump

**REFERENCES**

Lycoming Mandatory Service Bulletin No. 548A (or latest revision)

**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 182/T182 Illustrated Parts Catalog
Model 206H & Model T206H Illustrated Parts Catalog

**NOTE:** Make sure all publications used are complete and current.
Revision Transmittal

October 17, 2005

TO: Cessna Distributors, Single Engine Service Stations and CPC's


REASON FOR REVISION

To add airplane serial numbers 172S9101 thru 172S10000 to the Effectivity section.

Miscellaneous changes as necessary.

REQUIRED ACTION

Please replace any copy of SB01-73-01 and SB01-73-01 Revision 1 and Textron Lycoming Mandatory Service Bulletin No. 548 with the attached copy of SB01-73-01 Revision 2 and Lycoming Mandatory Service Bulletin No. 548A which are printed in their entirety.

NOTE: Compliance with SB01-73-01 Revision 2 is not required if in compliance with SB01-73-01 Revision 1.

LOG OF EFFECTIVE PAGES

<table>
<thead>
<tr>
<th>Page No.</th>
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<td>2</td>
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<td>3</td>
<td>October 17, 2005</td>
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<td>6</td>
<td>October 17, 2005</td>
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<td>7</td>
<td>October 17, 2005</td>
</tr>
</tbody>
</table>

* * * * *
DATE: August 31, 2005  Service Bulletin No. 548A  
(Supersedes Service Bulletin No. 548)

SUBJECT: Diaphragm-Type Fuel Pump Inspection/Replacement

MODELS AFFECTED: New, rebuilt and overhauled engines from Lycoming with fuel pumps P/N LW-15399, LW-15472, LW-15473, and LW-16335 shipped between February 1, 2000 and September 15, 2005. Engine models affected are O-235; O-290; O-340; (L)O and IO-320, -360, -540; AIO-320, -360; AEIO-320, -360, -540; HO-360; HIO-360; and TO-360.


TIME OF COMPLIANCE: Compliance is required within 180 calendar days from the date of this Service Bulletin, or as specified below, whichever occur first:
1. Inspect within 50 hours of operation:
2. If affected, replace within 100 hours of operation or earlier at owner’s discretion.

NOTE Prior compliance with Service Bulletin No. 548 does not preclude compliance with this Service Bulletin.

Lycoming has determined that a number of lots of diaphragm-type fuel pumps, Lycoming P/N LW-15399, LW-15472, LW-15473, and LW-16335, may not have been manufactured in conformance with acceptable standards. In the event operation of the pump is compromised, restricted fuel flow or loss of fuel pressure could result.

If your Lycoming engine has a diaphragm-type fuel pump with Lycoming P/N LW-15399, LW-15472, LW-15473, or LW-16335 installed, and has a date code of 0700 through 0401, the pump must be replaced within the next 100 hours of operation or 180 calendar days from the date of this Service Bulletin, whichever occurs first.

To identify affected pumps, check the manufacturer’s code scribed on the flange of the pump (See Figure 1). If the first five digits are 15399, 15472, 15473, or 16335, and the 6th through 9th digits are 0700, 0800, 1100, 1200, 1300, 1400, 1500, 1600, 1800, 2000, 2100, 2200, 2300, 2400, 2800, 2900, 3000, 3100, 3200, 3300, 3400, 3500, 3600, 3700, 3800, 3900, 4000, 4100, 4200, 4300, 4400, 4500, 4600, 4700, 4800, 4900, 5000, 5100, 5200, 0101, 0201, 0301 or 0401, the pump is affected and must be replaced.

NOTE
If the letter “A” is marked as a suffix to the date code, the pump has been brought into conformity and need not be replaced.
WARRANTY:

If replacement is required, reimbursement is available for a replacement fuel pump and for up to 1.5 hours labor through a Lycoming Distributor. The engine serial number must be furnished when a replacement pump is ordered. Lycoming requires the replaced pump be returned with a valid warranty claim for warranty consideration.

![Diagram of fuel pump with labels](image)

**Figure 1**

NOTE: Revision "A" adds new date codes and part number LW-15399.
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.

NOTE: The engine serial number that the pump will be installed on must be provided when ordering a replacement pump.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Qty/Airplane</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>LW15473</td>
<td>Fuel Pump</td>
<td>1 (if required)</td>
<td>$233.71 (Q) ea.</td>
</tr>
<tr>
<td>60096</td>
<td>Gasket</td>
<td>1 (if required)</td>
<td>$1.10 (LN) ea.</td>
</tr>
</tbody>
</table>

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

CREDIT INFORMATION

For airplane serial numbers 17280999 thru 17281300, 172S8780 thru 172S10000, 1828945 thru 18281730 and 20608131 thru 20608275 delivered from Cessna with an engine driven fuel pump that may be affected by Lycoming Mandatory Service Bulletin No. 548A: A labor allowance credit of 0.5 man-hour per airplane will be provided to inspect the engine driven fuel pump for an applicable date code. If fuel pump replacement is required, applicable parts credit and an additional 1.0 man-hour labor allowance credit per airplane will be provided.

For all other affected airplane serial numbers: After determining that a new, rebuilt or overhauled engine equipped with a part number LW-15473 fuel pump has been installed that was shipped from Lycoming on February 1, 2000 through September 15, 2005 or that a part number LW-15473 replacement fuel pump has been installed that was shipped from Lycoming on February 22, 2000 through September 15, 2005, a labor allowance credit of 0.5 man-hour per airplane will be provided to inspect the engine driven fuel pump for an applicable date code. If fuel pump replacement is required, applicable parts credit and an additional 1.0 man-hour labor allowance credit per airplane will be provided.

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. The engine serial number must be furnished when ordering a replacement fuel pump and the removed fuel pump must be returned with the Warranty Claim.

|                | Domestic | April 10, 2006 | International | June 10, 2006 |

ACCOMPLISHMENT INSTRUCTIONS

Weight And Balance Information

WEIGHT CHANGE ................. Negligible

Material Information

The parts below may be required:

<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>LW-15473</td>
<td>1 (if required)</td>
<td>Fuel Pump</td>
<td>Same</td>
<td>Return to Cessna</td>
</tr>
<tr>
<td>60096</td>
<td>1 (if required)</td>
<td>Gasket</td>
<td>Same</td>
<td>Discard</td>
</tr>
</tbody>
</table>

SB01-73-01 Revision 2
October 17, 2005
Instructions

NOTE: Refer to applicable airplane model maintenance manual as required to accomplish the following instructions.

1. Determine if a new, rebuilt or overhauled engine has been installed with a part number LW-15473 fuel pump that was shipped from Lycoming on February 1, 2000 through September 15, 2005 or if a part number LW-15473 replacement fuel pump has been installed that was shipped from Lycoming on February 22, 2000 through September 15, 2005 as stated in Lycoming Mandatory Service Bulletin No. 548A (or latest revision) by reviewing the airplane paperwork such as logbooks and/or applicable work orders and sales/shipping receipts or visually inspect the fuel pump.

NOTE: New, rebuilt or overhauled engines with a part number LW-15473 fuel pump and part number LW-15473 replacement fuel pumps affected by Lycoming Mandatory Service Bulletin No. 548A would have been shipped from Cessna Parts Distribution on February 3, 2000 through September 23, 2005.

A. If it is determined that an affected pump is installed, proceed to Step 2.
B. If it is determined that an affected pump is not installed, proceed to Step 4.

2. Remove the engine cowling and accomplish Lycoming Mandatory Service Bulletin No. 548A (or latest revision).

A. If fuel pump replacement is not required, proceed to Step 3.
B. If fuel pump replacement is required, disconnect the airplane battery and attach maintenance warning tags on the battery and external power receptacle stating: **DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS.**

**CAUTION:** BEFORE INSTALLING THE DIAPHRAGM TYPE FUEL PUMP, MAKE SURE THAT THE PUMP DRIVE PLUNGER IS ALL THE WAY UP AND THE CAM OF GEAR IS ON THE LOW SIDE. IF THE PLUNGER IS DOWN WHEN THE PUMP IS INSTALLED, THE PUMP ARM WILL CONTACT THE SIDE OF PLUNGER AND IN TURN WILL BREAK OUT THE ACCESSORY CASE AT BOTTOM OF PLUNGER.

C. Replace the fuel pump and torque attachment screws to 225-250 inch-pounds and safety wire. (Refer to applicable sections of the appropriate engine overhaul manual.)
D. Remove maintenance warning tags and connect the airplane battery.
E. Perform a leak and functional check of the engine fuel pump system.

3. Install the engine cowling.

4. Make an entry in the airplane logbook stating compliance and method of compliance with this Service Bulletin, and if applicable, date and airplane time in service when replacement of the fuel pump is required.

OWNER NOTIFICATION

A. On May 28, 2001 the following Owner Advisory message was sent to applicable owners of record in SB01-73-01A.

Dear Cessna Owner:

This advisory is to inform you that Service Bulletin SB01-73-01 has been issued to transmit Textron Lycoming Mandatory Service Bulletin No. 548; Diaphragm-Type Fuel Pump Inspection/Replacement. Your airplane may be affected if it is equipped with a part number LW-15473 fuel pump that was shipped from Textron Lycoming on September 18, 2000 through February 8, 2001.

Page 4
Textron Lycoming has determined that some diaphragm-type fuel pumps may have been manufactured in a manner that could restrict fuel pressure to the engine in the event operation of the pump is compromised. These fuel pumps shall be inspected, and if required, replaced as described in Service Bulletin SB01-73-01. Non-compliance with Service Bulletin SB01-73-C1 may result in restricted or loss of engine fuel pressure.

Compliance is mandatory; shall be inspected within the next 50 hours of operation. If an affected fuel pump is installed, it must be replaced within the next 100 hours of operation or 180 days, whichever occurs first as specified in Textron Lycoming Mandatory Service Bulletin No. 548 (or latest revision).

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 (FAR) 43.13.

For airplanes delivered from Cessna with an engine driven fuel pump that may be affected by Textron Lycoming Mandatory Service Bulletin No. 548, a labor allowance credit of 0.5 man-hour per airplane will be provided to inspect the engine driven fuel pump for an applicable date code. If fuel pump replacement is required, applicable parts credit and an additional 1.0 man-hour labor allowance credit per airplane will be provided.

For airplanes on which a part number LW-15473 replacement fuel pump has been installed that was shipped from Textron Lycoming on September 18, 2000 through February 8, 2001, a labor allowance credit of 0.5 man-hour per airplane will be provided to inspect the engine driven fuel pump for an applicable date code. If fuel pump replacement is required, applicable parts credit and an additional 1.0 man-hour labor allowance credit per airplane will be provided.

To receive credit, the work must be completed and a Warranty Claim submitted by a Cessna Single Engine Service Station before the dates shown below.

- Domestic: May 28, 2002
- International: May 28, 2002

Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SB01-73-01/Textron Lycoming Mandatory Service Bulletin No. 548 (or latest revision) accomplished on your airplane.

B. On October 10, 2005 the following Owner Advisory message was sent to applicable owners of record in SB01-73-01AR1.

Dear Cessna Owner:

This advisory is to inform you that Service Bulletin SB01-73-01 Revision 1 has been issued to transmit Lycoming Mandatory Service Bulletin No. 548A; Diaphragm-Type Fuel Pump Inspection/Replacement. Your airplane may be affected if it is equipped with a new, rebuilt or overhauled engine with a part number LW-15473 fuel pump that was shipped from Lycoming on February 1, 2000 through September 15, 2005 or if a replacement part number LW-15473 fuel pump has been installed that was shipped from Lycoming on February 22, 2000 through September 15, 2005.

NOTE: New, rebuilt or overhauled engines equipped with a part number LW-15473 fuel pump and part number LW-15473 replacement fuel pumps affected by Lycoming Mandatory Service Bulletin No. 548A would have been shipped from Cessna Parts Distribution on February 3, 2000 through September 23, 2005.

Lycoming has determined that some diaphragm-type fuel pumps may have been manufactured in a manner that could restrict fuel pressure to the engine in the event operation of the pump is compromised. These fuel pumps shall be inspected, and if required, replaced as described in Service Bulletin SB01-73-01 Revision 1. Non-compliance with Service Bulletin SB01-73-01 Revision 1 may result in restricted or loss of engine fuel pressure.
Compliance is mandatory; shall be inspected within the next 50 hours of operation. If an affected fuel pump is installed, it must be replaced within the next 100 hours of operation or 180 days, whichever occurs first as specified in Lycoming Mandatory Service Bulletin No. 548A (or latest revision).

**NOTE:** Compliance with SB01-73-01 Revision 1 is required if in compliance with the Original Issue.

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.

For airplane serial numbers 17280999 thru 17281300, 172S8780 thru 172S9100, 1828945 thru 18281730 and 20608131 thru 20608276 delivered from Cessna with an engine driven fuel pump that may be affected by Lycoming Mandatory Service Bulletin No. 548A: A labor allowance credit of 0.5 man-hour per airplane will be provided to inspect the engine driven fuel pump for an applicable date code. If fuel pump replacement is required, applicable parts credit and an additional 1.0 man-hour labor allowance credit per airplane will be provided.

For all other affected airplane serial numbers: After determining that a new, rebuilt or overhauled engine equipped with a part number LW-15473 fuel pump has been installed that was shipped from Lycoming on February 1, 2000 through September 15, 2005 or that a part number LW-15473 replacement fuel pump has been installed that was shipped from Lycoming on February 22, 2000 through September 15, 2005, a labor allowance credit of 0.5 man-hour per airplane will be provided to inspect the engine driven fuel pump for an applicable date code. If fuel pump replacement is required, applicable parts credit and an additional 1.0 man-hour labor allowance credit per airplane 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**
  - April 10, 2006

- **International**
  - June 10, 2006

Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SB01-73-01 Revision 1/Lycoming Mandatory Service Bulletin No. 548A (or latest revision) accomplished on your airplane.

C. On October 17, 2005 the following Owner Advisory message will be sent to applicable owners of record for airplane serial numbers 172S9101 thru 172S10000 in SB01-73-01AR2.

Dear Cessna Owner:

This advisory is to inform you that Service Bulletin SB01-73-01 Revision 2 has been issued to transmit Lycoming Mandatory Service Bulletin No. 548A; Diaphragm-Type Fuel Pump Inspection/Replacement. Your airplane may be affected if it is equipped with a new, rebuilt or overhauled engine with a part number LW-15473 fuel pump that was shipped from Lycoming on February 1, 2000 through September 15, 2005 or if a replacement part number LW-15473 fuel pump has been installed that was shipped from Lycoming on February 22, 2000 through September 15, 2005.

**NOTE:** New, rebuilt or overhauled engines equipped with a part number LW-15473 fuel pump and part number LW-15473 replacement fuel pumps affected by Lycoming Mandatory Service Bulletin No. 548A would have been shipped from Cessna Parts Distribution on February 3, 2000 through September 23, 2005.

Lycoming has determined that some diaphragm-type fuel pumps may have been manufactured in a manner that could restrict fuel pressure to the engine in the event operation of the pump is compromised. These fuel pumps shall be inspected, and if required, replaced as described in Service Bulletin SB01-73-01 Revision 2. Non-compliance with Service Bulletin SB01-73-01 Revision 2 may result in restricted or loss of engine fuel pressure.
Compliance is mandatory; shall be inspected within the next 50 hours of operation. If an affected fuel pump is installed, it must be replaced within the next 100 hours of operation or 180 days, whichever occurs first as specified in Lycoming Mandatory Service Bulletin No. 548A (or latest revision).

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 0.5 man-hour per airplane will be provided to inspect the engine driven fuel pump for an applicable date code. If fuel pump replacement is required, applicable parts credit and an additional 1.0 man-hour labor allowance credit per airplane 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.

<table>
<thead>
<tr>
<th>Category</th>
<th>Date</th>
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<tbody>
<tr>
<td>Domestic</td>
<td>April 10, 2006</td>
</tr>
<tr>
<td>International</td>
<td>June 10, 2006</td>
</tr>
</tbody>
</table>

Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SB01-73-01 Revision 2/Lycoming Mandatory Service Bulletin No. 548A (or latest revision) accomplished on your airplane.