

**TITLE**

OIL - OIL PRESSURE SWITCH RELOCATION

**EFFECTIVITY**

Airplane Serial numbers that follow that have a Lycoming IO-360-L2A engine.

MODEL	SERIAL NUMBERS
172R	17280001 thru 17281622
172S	172S00001 thru 172S12620

The equivalent of this service bulletin has been incorporated on airplanes 172S12621 and On.

**REASON**

To reduce cyclic loading forces on the Hobbs Oil Pressure Switch.

**DESCRIPTION**

This service bulletin provides parts and instructions to move switch downstream to reduce cyclic loading forces on the Hobbs Oil Pressure Switch.

**NOTE:** Any switch that has operated in the right crankcase location must be replaced at 1,000 hours and must not be moved to the new location on the accessory housing.**NOTE:** Any switch that will be installed in the accessory housing location by this service bulletin must be a new zero time-in-service switch and must never have been operated in the right crankcase location.

- For additional information refer to Model 172R/172S Maintenance Manual, ICA Supplement NO: ICA-172-79-00001.
- Beginning with aircraft serial number 172S12621 and on, the switch has been moved from the engine right crankcase to the left side of the engine accessory housing.
  - These aircraft retain the existing 3,000 hour time in service replacement requirement.
- New requirements have been added to Chapter 5-11-00 Component Time Limits to reduce the mandatory replacement time for switches installed in the right crankcase location from 3,000 hours to 1,000 hours time in service.
  - The airplanes identified in the Serial Effectivity section of this service document are eligible to re-establish the 3,000 hour time in service replacement requirement by compliance with this service bulletin.

**COMPLIANCE**

OPTIONAL. This service bulletin can be accomplished at the discretion of the owner.

**NOTE:** Moving the installed location of the oil pressure switch with this service bulletin is optional. The references to the ICA and life limits for the oil pressure switch must be followed in accordance with the guidance published within the ICA.A service document published by Textron Aviation may be recorded as *completed* in an aircraft log only when the following requirements are satisfied:

- 1) The mechanic must complete all of the instructions in the service document, including the intent therein.

- 2) The mechanic must correctly use and install all applicable parts supplied with the service document kit. Only with written authorization from Textron Aviation can substitute parts or rebuilt parts be used to replace new parts.
- 3) The mechanic or airplane owner must use the technical data in the service document only as approved and published.
- 4) The mechanic or airplane owner must apply the information in the service document only to aircraft serial numbers identified in the *Effectivity* section of the document.
- 5) The mechanic or airplane owner must use maintenance practices that are identified as acceptable standard practices in the aviation industry and governmental regulations.

No individual or corporate organization other than Textron Aviation is authorized to make or apply any changes to a Textron Aviation-issued service document or flight manual supplement without prior written consent from Textron Aviation.

Textron Aviation is not responsible for the quality of maintenance performed to comply with this document, unless the maintenance is accomplished at a Textron Aviation-owned Service Center.

#### APPROVAL

Textron Aviation received FAA approval for the technical data in this publication that changes the airplane type design.

#### FLIGHT CREW OPERATIONS

No Changes

#### CONSUMABLE MATERIAL

You must use the consumable materials that follow, or their equivalent, to complete this service document.

NAME	NUMBER	MANUFACTURER	USE
Thread Sealant	Loctite 592, (1.69 fl. oz).(Thread Sealant Alternate)	Commercially Available	To seal pipe threads.
Thread Sealant	U544006 (Thread Sealant)	Textron Aviation Parts Distribution 7121 Southwest Boulevard Wichita, KS 67215	To seal pipe threads.
Sealant	U000117 (Firewall Sealant)	Textron Aviation Parts Distribution 7121 Southwest Boulevard Wichita, KS 67215	To seal engine baffle.
Sealant	Dapco 2100 (Firewall Sealant Alternate)	Commercially Available	To seal engine baffle.
Tie Straps	Various sizes	Commercially Available	To secure wiring.

#### TOOLING

No specialized tooling is required to complete this service document.

#### WEIGHT AND BALANCE INFORMATION

Negligible

#### REFERENCES

Model 172R/172S Maintenance Manual

#### PUBLICATIONS AFFECTED

ICA Supplement NO: ICA-172-79-00001

Model 172R/172S Maintenance Manual

Model 172R/172S Illustrated Parts Catalog

### ACCOMPLISHMENT INSTRUCTIONS

1. Prepare the airplane for maintenance.
  - A. Make sure that the airplane is electrically grounded.
  - B. Make sure that all switches are in the OFF/NORM position.
2. Remove the upper cowl. (Refer to the Model 172R/172S Maintenance Manual, Chapter 71, Cowling - Maintenance Practices).
3. (Refer to Figure 1, Sheet 1.) Disconnect the electrical connector (JN005) from the 83278 Oil Pressure Switch (SN001).
  - A. Remove the three center bolts for the aft vertical engine baffle to provide space to feed the connector through.
  - B. Reroute the wires from in front of the aft vertical baffle to behind the aft vertical baffle and to the new switch location on the accessory housing.
  - C. Install the three removed bolts for the aft vertical engine baffle.
  - D. Fill the holes in the baffle with U000117 (or equivalent) Sealant after you reroute the wires.
4. (Refer to Figure 1, Sheet 1.) Remove and discard the 83278 Oil Pressure Switch mounted on top of the Right-Hand crank case at the aft end.
5. (Refer to Figure 1, Sheet 3.) Remove and keep the 1102 plug from accessory housing oil port.

**CAUTION:** Do not use teflon tape.

6. (Refer to Figure 1, Sheet 1.) Put a light coat of U544006 (or equivalent) Sealant on the external (male) threads of the 1102 Plug and install in the right side engine crankcase engine oil port and torque 40 to 44 Inch-Pounds. Do not allow sealant to enter oil port.
7. (Refer to Figure 1, Sheet 2.) Install the 83278 Oil Pressure Switch as follows:

**NOTE:** Any switch that has operated in the RH crankcase location must be replaced at 1,000 hours and must not be moved to the new location on the accessory housing.

**NOTE:** Any switch that will be installed in the accessory housing location by this service bulletin must be a new zero time-in-service switch and must never have been operated in the right crankcase location.

**CAUTION:** Do not use teflon tape.

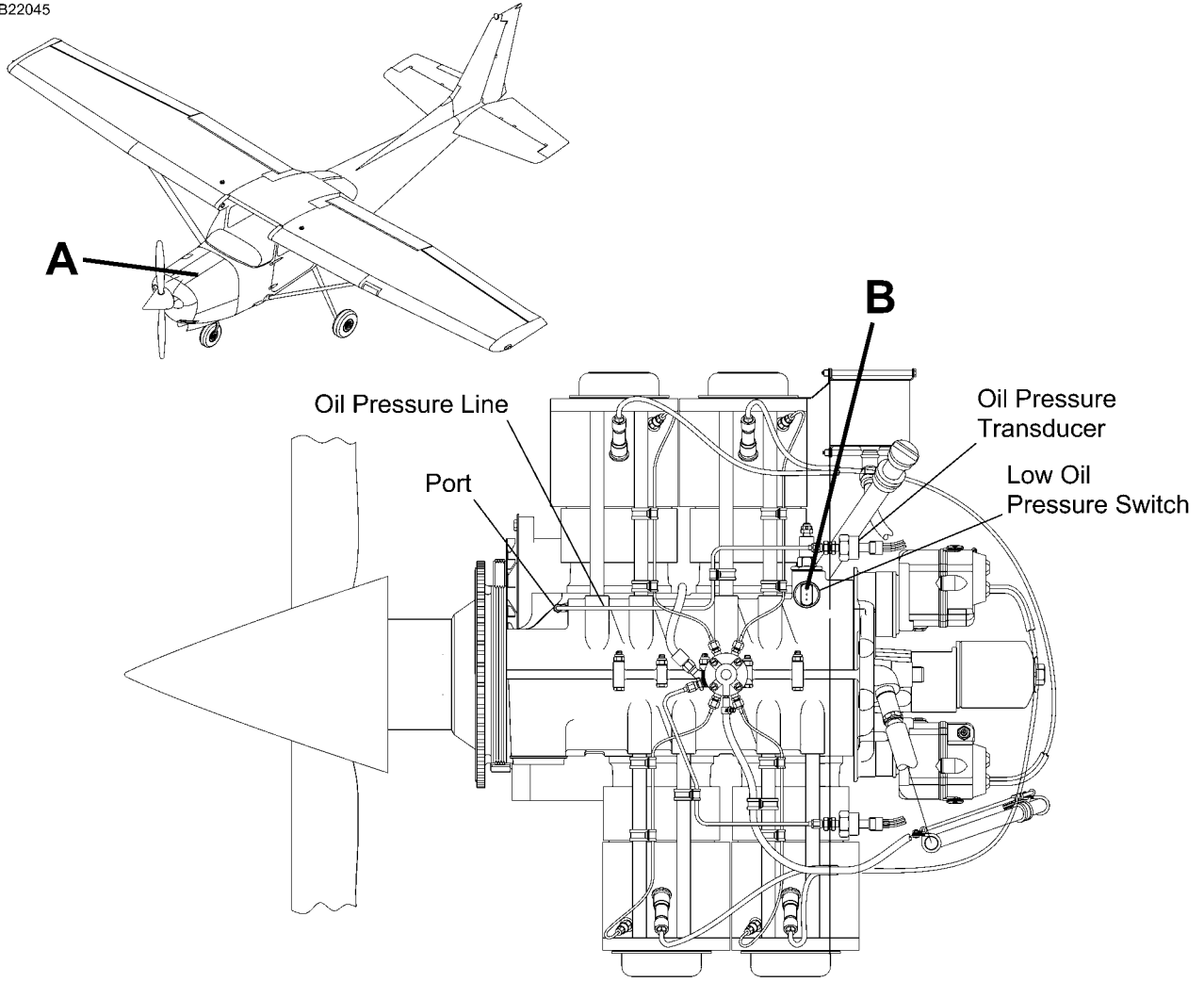
- A. Put a light coat of U544006 (or equivalent) Sealant, on the external (male) threads of the AN914-1J Elbow and 83278 Oil Pressure Switch.
- B. Install the AN914-1J Elbow until hand tight then rotate one additional turn and then rotate until the elbow is in an aft direction that provides clearance as not to be in contact with any other components.
- C. Install the new 83278 Oil Pressure Switch to the AN914-1J Elbow.
  - (1) Make sure that there is optimum clearance of all surrounding components and structure.

**CAUTION:** Use only the hex fitting to final tighten. Do not use plier-type tools on the plastic housing or the circular metal base of the 83278 Oil Pressure Switch. The switch can be damaged between the swaged connections between plastic housing and circular metal base and/or the metal base and the hex fitting. Damage to either of these swaged connections can cause an oil leak.

- D. Tighten the 83278 Oil Pressure Switch approximately 1 to 1 1/2 turns beyond hand tight.

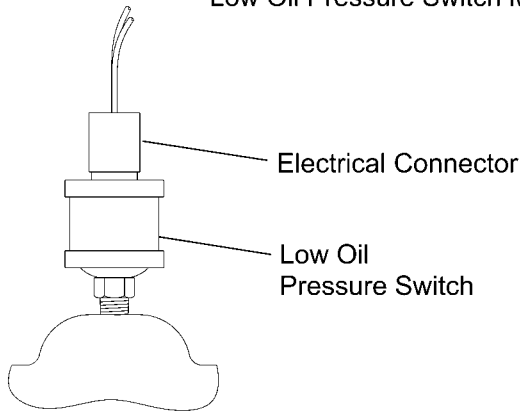
8. Connect the electrical connector (JN005) to the 83278 Oil Pressure Switch (SN001).  
**NOTE:** Use tie straps as necessary to properly secure the wiring harness.
9. Install the upper cowl. (Refer to the Model 172R/172S Maintenance Manual, Chapter 71, Cowling - Maintenance Practices).
10. Make sure the Low Oil Pressure Switch operates correctly by performing an engine run.
  - A. With the engine off, the OIL PRESS annunciator must be ON.
  - B. With the engine on, the OIL PRESS annunciator must be OFF and the Hobbs Hourmeter must be ON.
11. Remove the upper cowl. (Refer to the Model 172R/172S Maintenance Manual, Chapter 71, Cowling - Maintenance Practices).
12. Make sure there are no oil leaks from any of the fitting, switch, or plug.
13. Install the upper cowl. (Refer to the Model 172R/172S Maintenance Manual, Chapter 71, Cowling - Maintenance Practices).
14. Make an entry in the airplane logbook that states compliance and method of compliance with this service bulletin.

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**DETAIL A**

Low Oil Pressure Switch Mounted on Top of Right-Hand Case at the Aft End

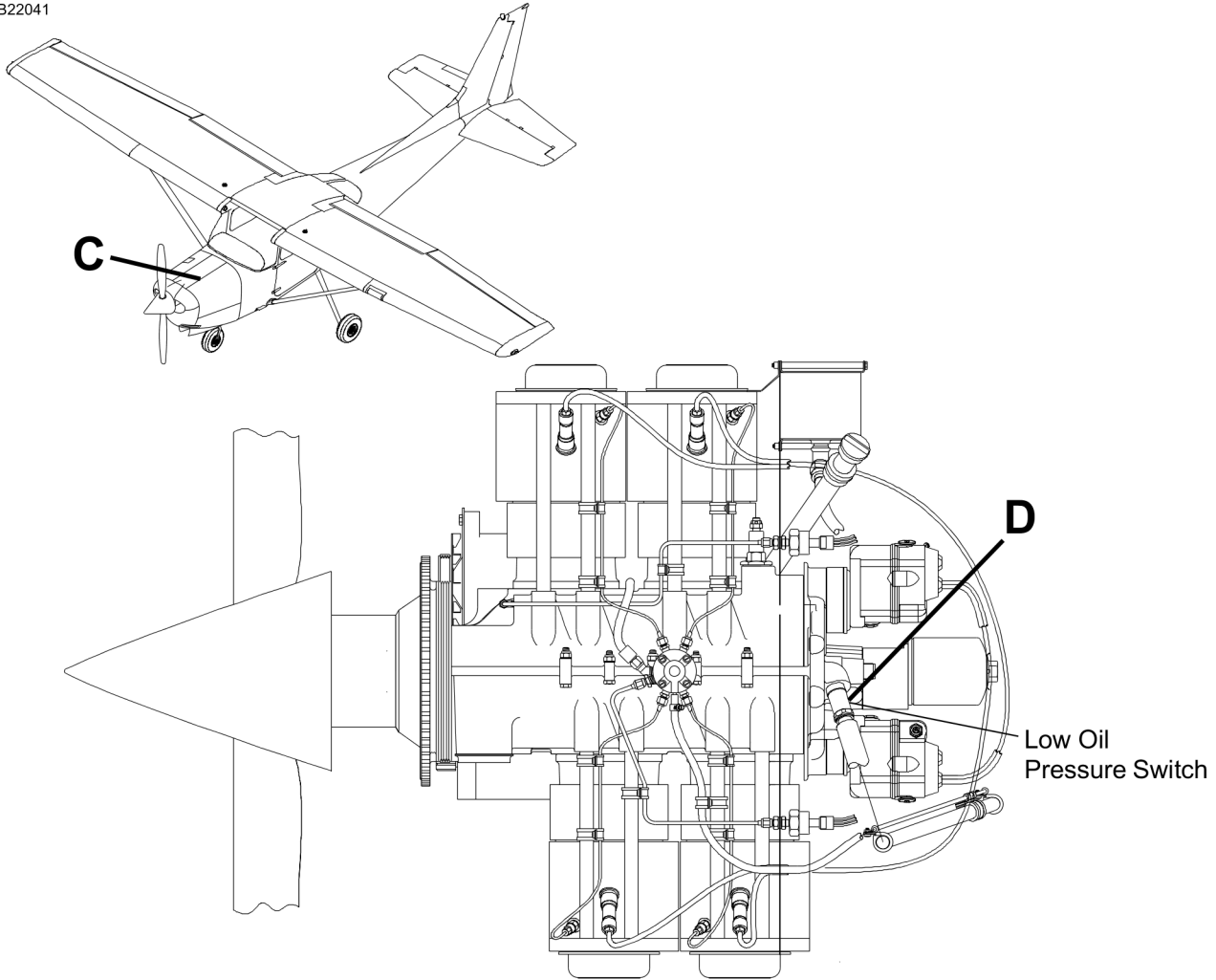


**DETAIL B**

Figure 1. Oil Pressure Switch Locations (Sheet 1)

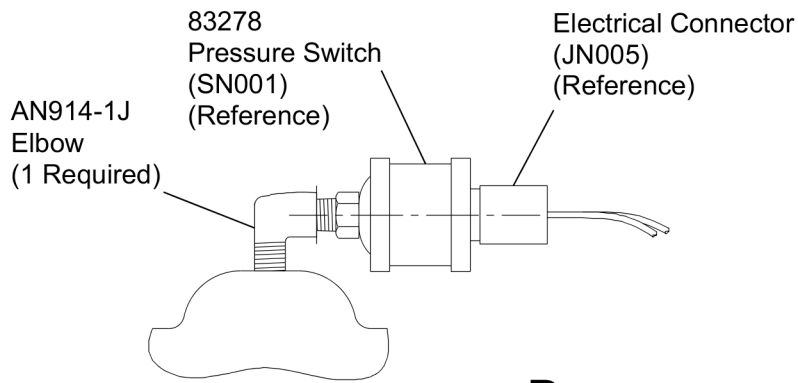
0510T1007  
A0556T1008  
B0550T365

B22041



### DETAIL C

Low Oil Pressure Switch Mounted Left Side of the Accessory Housing

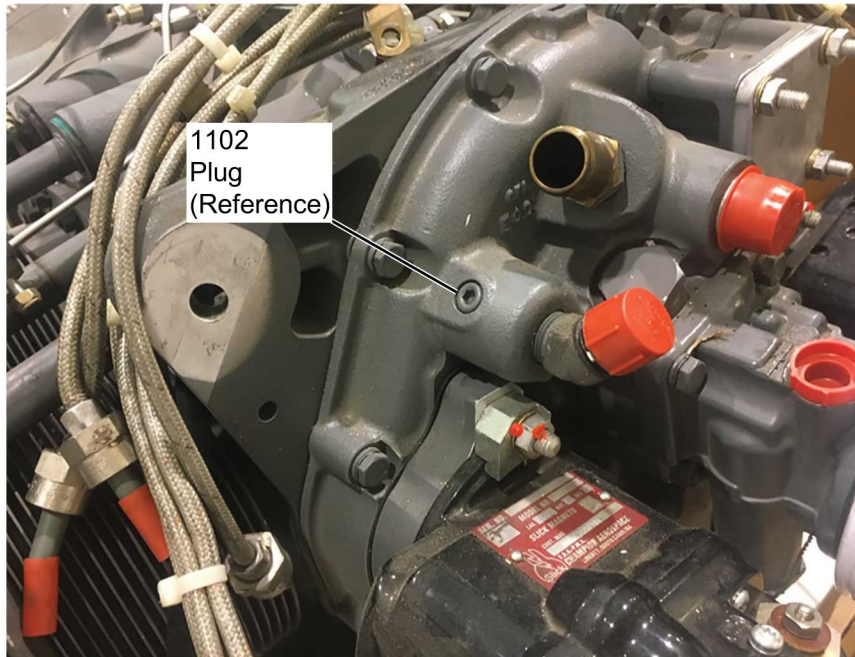


### DETAIL D

Figure 1. Oil Pressure Switch Locations (Sheet 2)

0510T1007  
C0518T1034  
D0556T1008

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### DETAIL D

Figure 1. Oil Pressure Switch Locations (Sheet 3)

**MATERIAL INFORMATION**

Order the parts below to install this modification.

<b>NEW P/N</b>	<b>QUANTITY</b>	<b>KEY WORD</b>	<b>OLD P/N</b>	<b>INSTRUCTIONS/ DISPOSITION</b>
AN914-1J	1	Elbow		
83278	1	Oil Pressure Switch	Same	Discard

\*Please contact a Textron Aviation Authorized Service Facility for current cost and availability of parts listed in this service document.



**TITLE**

OIL - OIL PRESSURE SWITCH RELOCATION

**TO:**

Cessna Model 172R and 172S Aircraft Owner

**NOTE:** Airplanes that have a Lycoming IO-360-L2A engine.

**REASON**

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**COMPLIANCE**

OPTIONAL. This service document can be accomplished at the discretion of the owner.

**LABOR HOURS**

**WORK PHASE**

Modification

**LABOR-HOURS**

As Necessary

**MATERIAL AVAILABILITY**

**PART NUMBER**

**AVAILABILITY**

**COST**

AN914-1J

\*

\*

83278

\*

\*

\* Please contact a Textron Aviation Authorized Service Facility for current cost and availability of parts listed in this service document.

Based on availability and lead times, parts may require advanced scheduling.

February 12, 2021

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## WARRANTY

None

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