

**MANDATORY****SEL-28-09****TITLE**

FUEL - INSPECTION OF 5100-00-4 ELECTRIC FUEL PUMP

**EFFECTIVITY****Group A Airplanes:**

The following airplanes were delivered with an 5100-00-4 Electric Fuel Pump with a serial number in the suspect range identified in this service document:

MODEL	SERIAL NUMBERS
172S	172S12129 thru 172S12182

**Group B Airplanes:**

The following airplanes if the 5100-00-4 Electronic Fuel Pump has been installed as spares between October 1, 2017 and the date of receipt of this service document:

MODEL	SERIAL NUMBERS
172R	17280001 and On
172S	172S8001 and On
182S	18280001 thru 18280944

**NOTE:** Also affected are fuel pumps received in Authorized Service Facility stock.

**REASON**

Some fuel pumps have been identified to have incorrectly installed seal and possible FOD that can cause pump vanes to stick or not pump correctly and must be replaced. A pump with an incorrectly installed seal does not meet engineering design and a pump with FOD can make a grinding noise during operation or fail to pump fuel. During a flight situation where the auxiliary electric fuel pump is required to provide fuel to the engine, a pump that is not pumping correctly or stops pumping fuel, can cause a total loss of engine power.

**DESCRIPTION**

This service document provides parts and instructions to inspect the maintenance records for suspect fuel pump serial numbers and replace the fuel pump if a suspect fuel pump is installed.

**NOTE:** Fuel pumps that have a serial number with an "R" suffix have been reworked by the manufacture and are acceptable for use. It is not necessary to replace a fuel pump that has a serial number with an "R" suffix.

November 2, 2018

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**MANDATORY****SEL-28-09****COMPLIANCE**

MANDATORY. This service document must be accomplished at the next 100-hour or 12-month (annual-type) inspection.

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.

**CONSUMABLE MATERIAL**

No specialized consumable materials are required to complete this service document.

**TOOLING**

No specialized tooling is required to complete this service document.

**REFERENCES**

Cessna Model 172R/172S Maintenance Manual

Cessna Model 182S/182T/T182T Maintenance Manual

**PUBLICATIONS AFFECTED**

None

**MANDATORY****SEL-28-09****ACCOMPLISHMENT INSTRUCTIONS**

1. Do an inspection of the maintenance log book and serial sheet for the serial number of the installed 5100-00-4 Fuel Pump.

**Serial Number List of Suspect 5100-00-4 Fuel Pumps**

142	283	444	1067
1163	1209	1482	1858
3431	4350	4503	5486
5855	6067	6111	6112
6571	6962	7069	7099
7548	7610	7663	7670
7937	8358	8360	8367
8526	8772	8899	9336
11862	13283 thru 13412	13419 thru 13502	

**NOTE:** Fuel pumps that have a serial number with an "R" suffix have been reworked by the manufacturer and are acceptable for use. It is not necessary to replace a fuel pump that has a serial number with an "R" suffix.

- A. If a suspect serial number fuel pump is installed, go to Step 2.
  - B. If a suspect serial number fuel pump is not installed, go to Step 5.
2. 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.
    - C. Disconnect electrical power from the airplane.
      - (1) Disconnect the airplane battery.
      - (2) Disconnect external electrical power.
    - D. Attach maintenance warning tags to the battery and external power receptacle that have **"DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS"** written on them.
  3. Replace the 5100-00-4 Fuel Pump. (Refer to the Model 172R/172S or 182S/182T/T182T Maintenance Manual, Chapter 28, Fuel Storage And Distribution - Maintenance Practices, Electric Auxiliary Fuel Pump Removal/Installation.)
  4. Remove the maintenance warning tags and connect the airplane battery.
  5. Make an entry in the airplane logbook that states compliance and method of compliance with this service document.

**MANDATORY****SEL-28-09****MATERIAL INFORMATION**

Order the kit/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>
M83248/2-908	2	O-Ring	Same	Discard Old, Install New
5100-00-4	1	Fuel Pump	Same	Install pump, Return removed pump

The existing 5100-00-4 Fuel Pump may be returned to Textron Aviation Parts Distribution, Warranty Administration, 285 South Greenwich Road, Bldg B89, Docks 1-4, Wichita, KS 67206, USA, and exchanged for an upgraded unit. Due to limited availability, advance scheduling is required, please expedite the return of the removed part.

**TITLE**

FUEL - INSPECTION OF 5100-00-4 ELECTRIC FUEL PUMP

**TO:**

Cessna Model 172R, 172S, and 182S Aircraft Owner

**REASON**

Some fuel pumps have been identified to have incorrectly installed seal and possible FOD that can cause pump vanes to stick or not pump correctly and must be replaced. A pump with an incorrectly installed seal does not meet engineering design and a pump with FOD can make a grinding noise during operation or fail to pump fuel. During a flight situation where the auxiliary electric fuel pump is required to provide fuel to the engine, a pump that is not pumping correctly or stops pumping fuel, can cause a total loss of engine power.

**COMPLIANCE**

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**LABOR HOURS**

For planning purposes only:

WORK PHASE	LABOR-HOURS
Modification	5.0

**MATERIAL AVAILABILITY**

PART NUMBER	AVAILABILITY	COST
M83248/2-908	*	*
5100-00-4RX	*	*

The existing 5100-00-4 Fuel Pump may be returned to Textron Aviation Parts Distribution, Warranty Administration, 285 South Greenwich Road, Bldg B89, Docks 1-4, Wichita, KS 67206, USA, and exchanged for an upgraded unit. Due to limited availability, advance scheduling is required, please expedite the return of the removed part.

In cases where the required part(s) are approved as exchange, order the exchange part and, upon completion, expedite the return of the removed part to avoid return penalties. Contact a Textron Aviation Authorized Service Facility for availability of exchange parts.

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

## WARRANTY

This service document is *mandatory*. Eligible airplanes may qualify for parts and labor coverage to the extent noted in the *Labor Hours* and *Material Availability* sections of this document.

**Eligibility:** All airplanes identified within the serial number effectivity of this service document that have a suspect 5100-00-4 Fuel Pump installed.

**Parts Coverage:** Textron Aviation-owned and Textron Aviation-authorized Service Facilities, operators, or other maintenance facilities may submit a claim for the parts required to accomplish this service document as defined in the *Material Availability* section of this document.

**Labor Coverage:** Textron Aviation-owned and Textron Aviation-authorized Service Facilities rated to perform maintenance on the specific model of Cessna Aircraft may submit a claim for the labor necessary to accomplish this service document as defined in the *Labor Hours* section of this document.

**Credit Application:** After this service document has been accomplished, a claim must be submitted to Textron Aviation within 30 days of the service document completion. Claims for compliance of this service document are to be filed as a W4 type claim.

Please submit your claim form online at [ww2.txtav.com/Parts](http://ww2.txtav.com/Parts) or email the completed Textron Aviation Claim Form to [warranty@txtav.com](mailto:warranty@txtav.com). If submitted on-line a Return Authorization will be provided. If a paper claim is submitted your claim will be entered into the system and a Return Authorization will be sent to you.

The Return Authorization must accompany any required return parts (see *Material Availability*), to the point of purchase.

Parts to be returned to Textron Aviation Parts Distribution should be forwarded to:

Textron Aviation Parts Distribution  
Warranty Administration  
285 South Greenwich Road  
Bldg B89, Docks 1-4  
Wichita, KS 67206  
USA

**Expiration:** November 2, 2019 (after this date the owner/operator assumes the responsibility for compliance costs)

Textron Aviation reserves the right to void continued airplane warranty coverage for the parts affected by this service document until the service document is accomplished.

**NOTE:** As a convenience, service documents are now available online to all our customers through a simple, free-of-charge registration process. If you would like to sign up, please visit the Customer Access link at [www.txtavsupport.com](http://www.txtavsupport.com) to register.