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SERVICE BULLETIN

No. SB-AG-72

Initial Release: 1/25/2019

S2R-H80 FUEL PUMP FITTINGS & LINES IMPROVEMENT AND RELOCATION

AIRPLANES AFFECTED:

MODEL

S2R-H80

SERIAL NUMBERS

H80-101 & subsequent

A handwritten signature in blue ink, appearing to read "Levan Tabidze", written over a horizontal line.

Levan Tabidze

Vice President of Engineering

LOG OF REVISIONS

NOTE: Reformatting and correction of typographical errors is not considered revision. True revisions are indicated by a dark vertical line at the right margin of the lines revised.

Rev.	Page	Description of Revision	By:
IR	All	New Document Initial Release.	K. Sheppard 01/25/2019

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1. PURPOSE/REASON FOR PUBLICATION:

This Service Bulletin provides instructions and parts for an improved fuel pump system including new hardware, fuel lines, and location of pumps.

2. SCOPE/COMPLIANCE:

This Service Bulletin is highly recommended for S2R-H80 airplanes.

3. BY WHOM WORK WILL BE ACCOMPLISHED:

The work is to be accomplished by a FAA Certified A&P mechanic or foreign equivalent.

4. APPROVAL:

This Service Bulletin is approved by the Vice President of Engineering at Thrush Aircraft, Inc.

5. MAN HOURS:

8 hours will be required.

6. SPECIAL TOOLS:

No special tools required

7. PARTS LIST:

QUANTITY	PART NUMBER	DESCRIPTION
1	60191-11	TORQUE TUBE ASSY, FUEL SHUTOFF
1	282020077-001	FUEL VALVE PLATE
4	AN3H-4A	BOLT
8	MS20426AD3	RIVET
4	MS21059-L3	NUT PLATE
1	282020080-001	ANGLE
1	282020078-001	ANGLE
2	282020079-001	TUBE, FUEL PUMP
4	AN3-4A	BOLT
1	AN823-12D	ELBOW 45 DEGREE
6	MS21044N3	NUT
6	AN960-10	WASHER
1	AN816-8D	NIPPLE
1	AN912-8D	BUSHING, PIPE
4	MS21919WDG38	CLAMP, LOOP
4	M83248-1-908	O-RING
4	AS933-08	NIPPLE-TUBE
1	111417-8D-0630	HOSE ASSY
1	AN5261032R8	SCREW
1	AN3-10A	BOLT
1	0716-015	TEE
1	1MS21919WDG-12	CLAMP LOOP
1	1MS21919WDG-24	CLAMP LOOP
A/R	AN995B.040	SAFETY WIRE*

*SHALL BE OBTAINED LOCALLY

8. MODIFICATION

- 1) Remove panels shown in Figures 72-1 & 72-2.
- 2) Disconnect battery



Figure 72-1
Emergency Fuel Pump Location



Figure 72-2
Main Fuel Pump Location

- 3) Defuel aircraft due to shutoff valve relocation.
- 4) Main Fuel Pump removal. (Refer to Figure 72-3 for the following steps).
 - a) Disconnect electrical connector from aircraft frame.
 - b) Disconnect ground wire connector from the aircraft frame.
 - c) Remove hoses at fuel line fittings from fuel pump and cap all open connections.
 - d) Detach drain tube at pump.
 - e) Remove attaching hardware and remove pump
 - f) Remove and discard pump bracket.

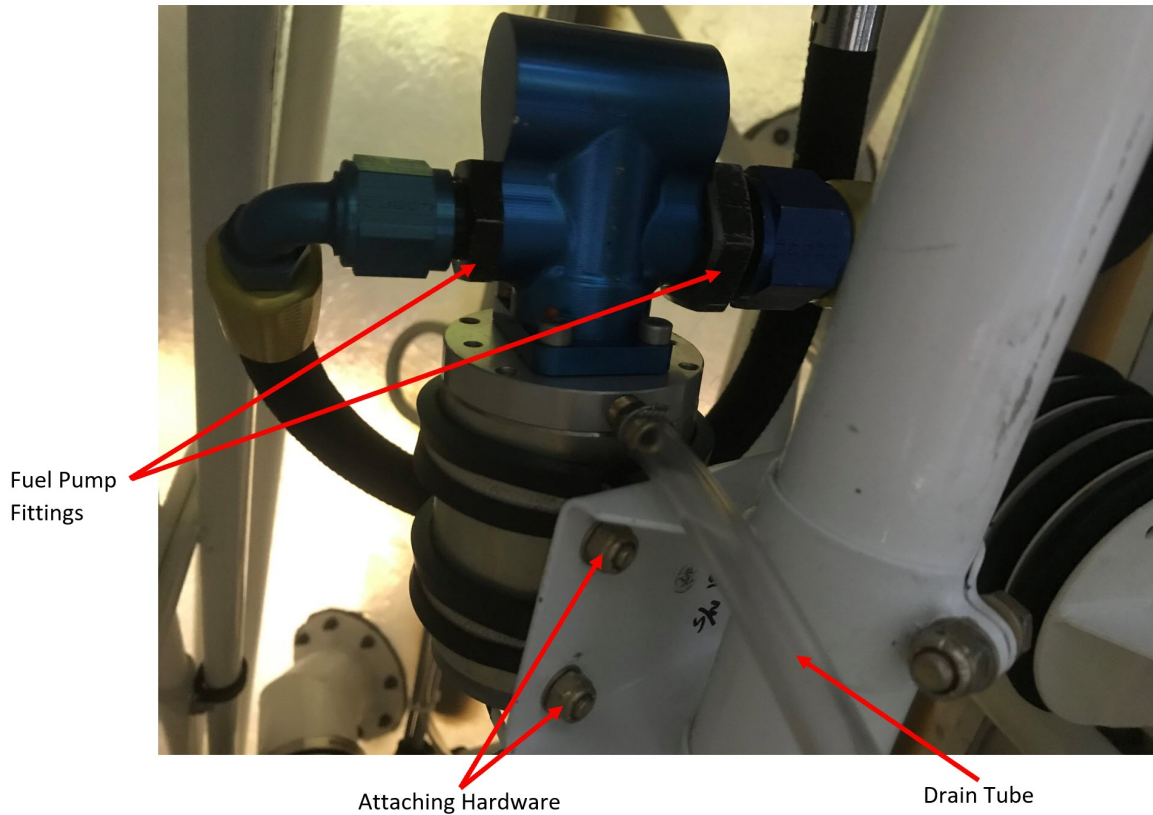


Figure 72-3
Main Fuel Pump Removal

- 5) After removing the main fuel pump, remove the hose connected from the pump to the fuel filter and discard. Disconnect the hose connected from the main fuel pump to the emergency fuel pump and discard. See Figure 72-4.

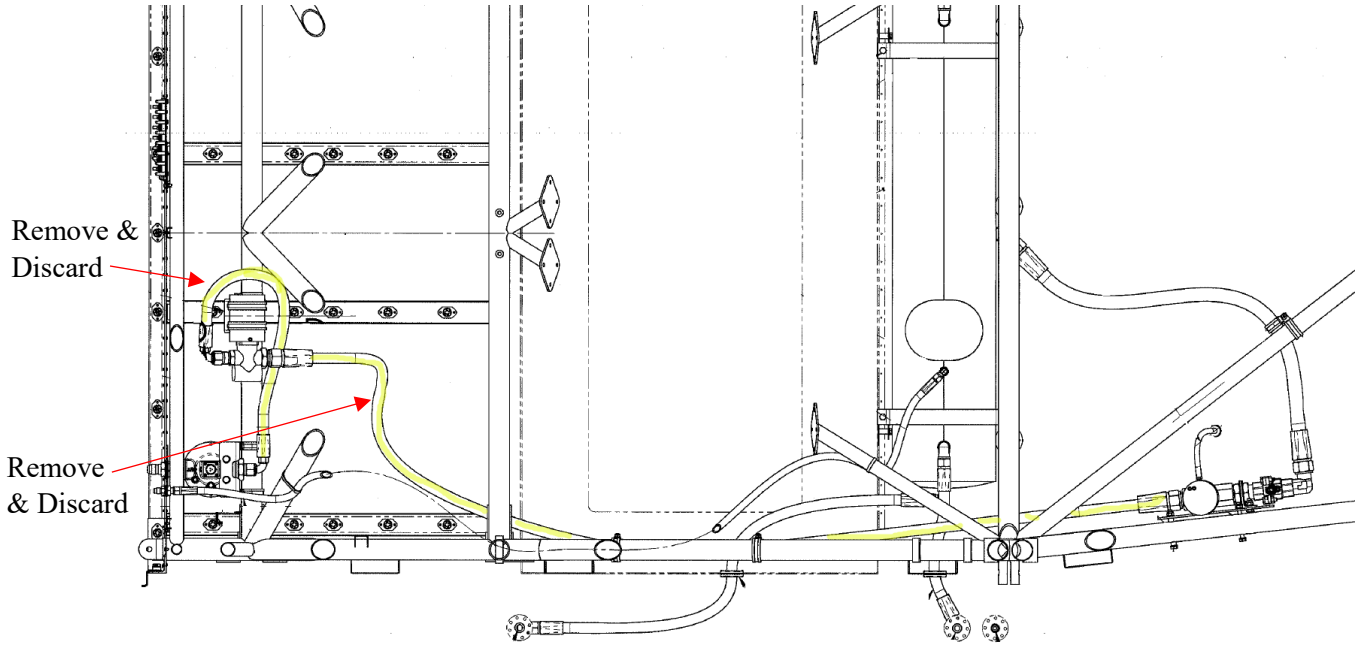


Figure 72-4
Fuel Pump & Filter System
Top View

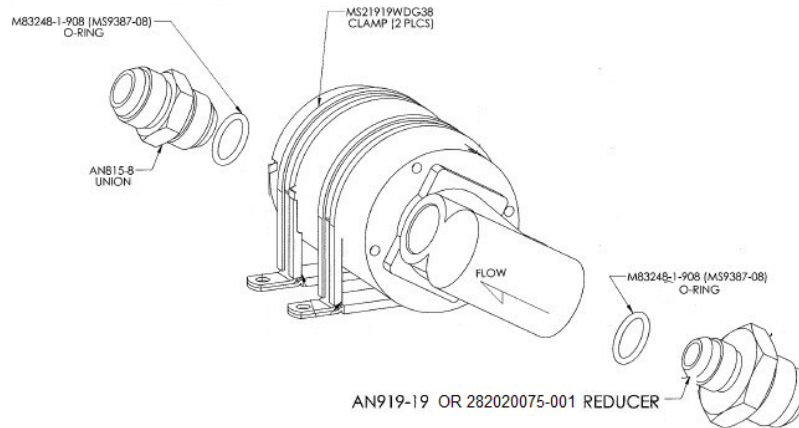


Figure 72-5
Exploded View of Main Fuel Pump

- 6) Remove and discard AN815-8 Union, AN919-19 Reducer, and (2) M83248-1-908 O-Rings from pump. Cap all open connections of the pump. See Figure 72-5.

- 7) Emergency Fuel Pump Removal (See Figure 72-6 for the following steps (a-g)).
- a) Disconnect electrical connector from aircraft frame.
 - b) Disconnect ground wire connector from the aircraft frame
 - c) Disconnect outlet hose and cap all open connections.
 - d) Detach drain tube at pump.
 - e) Remove fuel shutoff valve torque tube.
 - f) Remove fuel pump plate from fuselage frame.

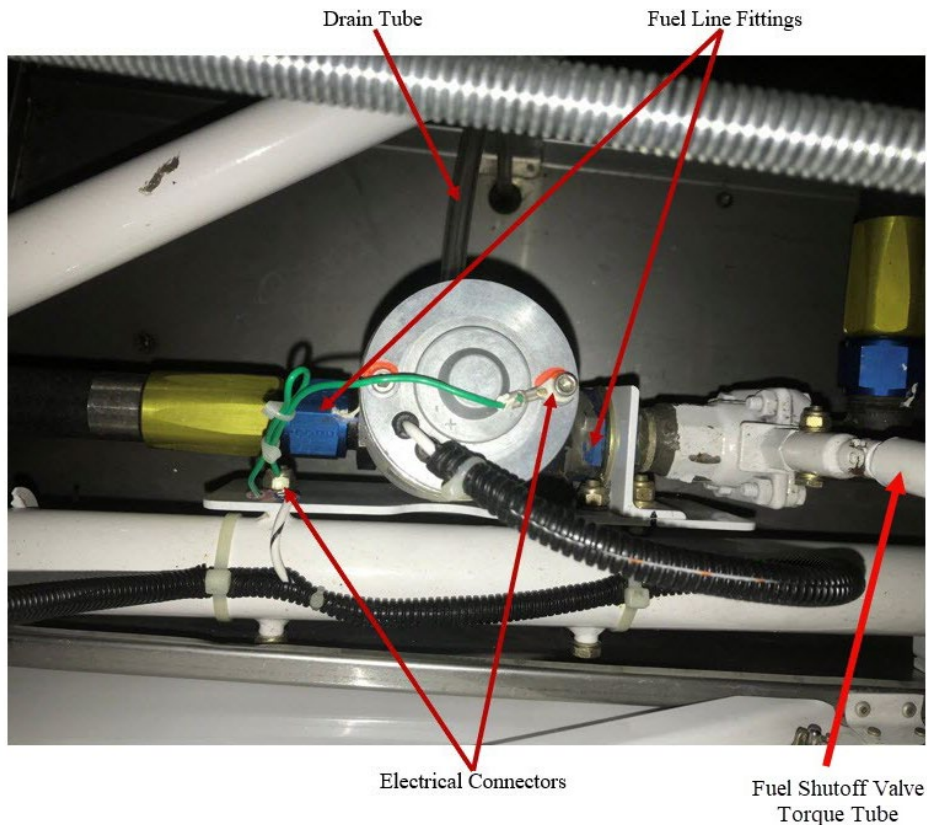


Figure 72-6
Emergency Fuel Pump

- g) Remove and discard AN894-12-8 Bushing Expander, AN919-19 Reducer, and (2) M83248-1-908 o-rings, AN924-12D Nut, AN960-1716 Washer, and 19831-9 Modified Union from pump. Cap all open connections of the pump See Figure 72-7.

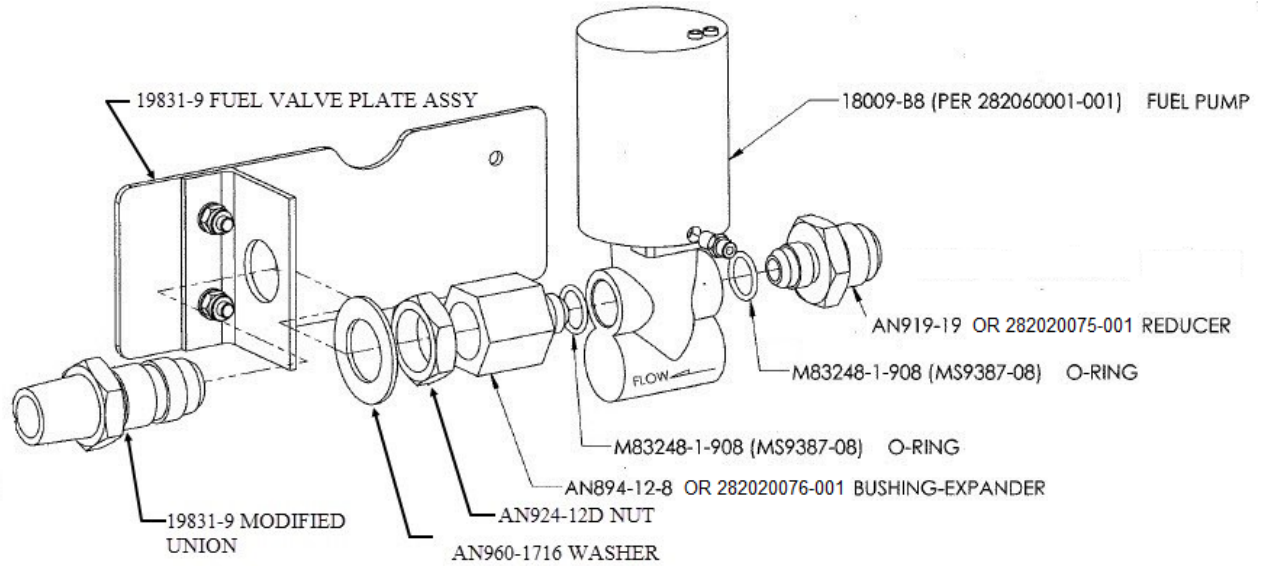


Figure 72-7
Exploded View of Emergency Fuel Pump

- 11) Install Fuel Pumps at new location:
 - a) Using existing fuel pumps and fuel shutoff valve assembly, assemble the fuel pump plate assembly per Figure 72-8 & 72-9.

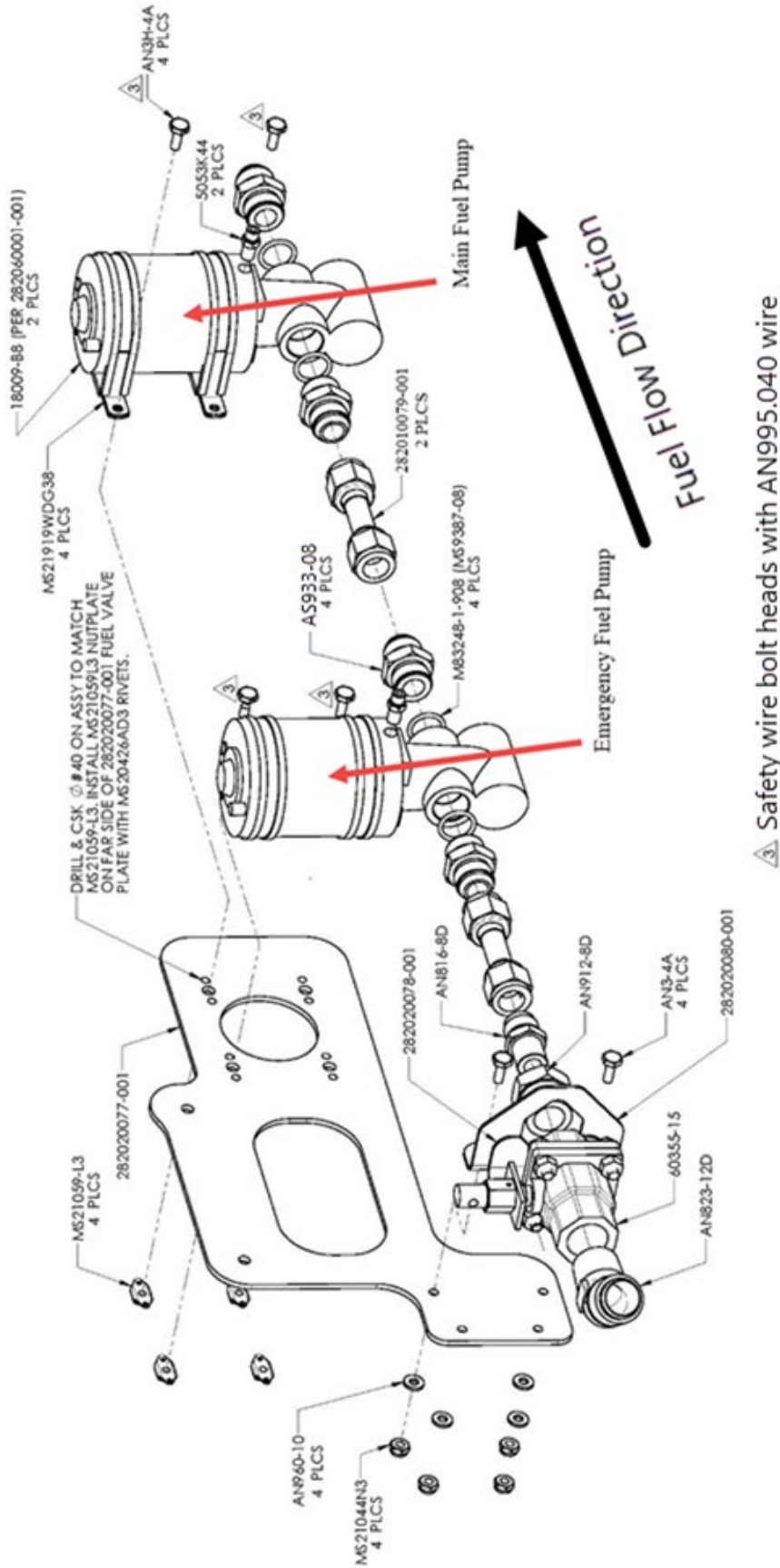


Figure 72-8
Exploded View of Fuel Pump Plate

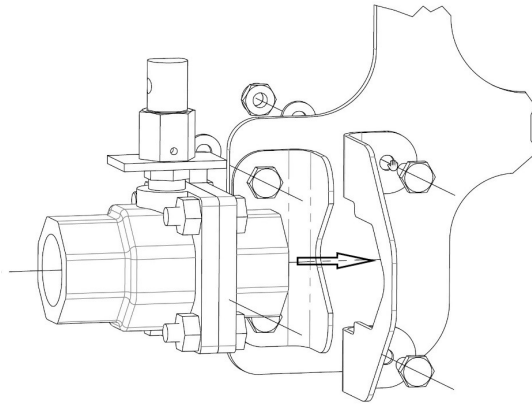


Figure 72-9
Detailed View of Fuel Shutoff Valve Bracket Assy
(Exploded view shown)

- b) Install new fuel pump plate assembly in the same location of the previous emergency fuel pump. See Figure 72-10.
- c) Reconnect outlet hose and install new hose 111417-8D-0630 from fuel filter to inlet of main pump. See Figure 72-10.
- d) Reroute electrical connector from old main pump location to new main pump location and connect.
- e) Reconnect electrical connections of the emergency fuel pump.
- f) Connect ground of the pump casing to the aircraft frame for each pump.
- g) Install new torque tube 60191-11 for fuel shutoff valve using hardware shown in Figure 72-11.
- h) Install drain lines connected by 0716-015 Tee through the existing Grommet on the bottom skin from fuel pumps. See Figure 72-11.
- i) Complete installation shown in Figure 72-12

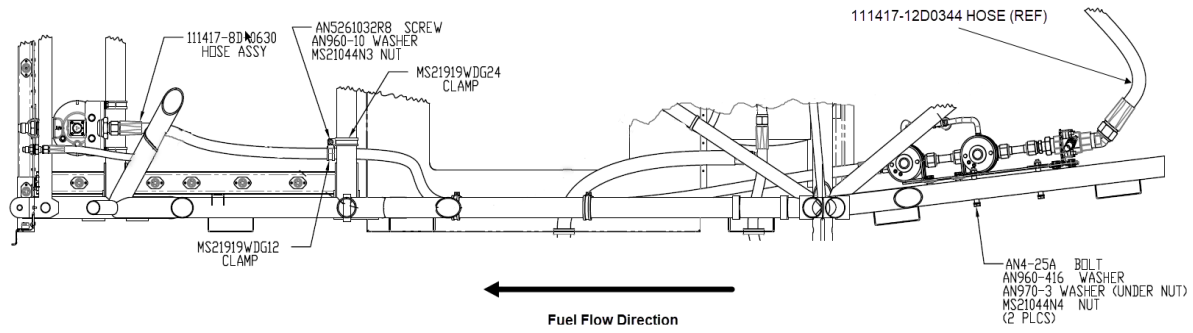


Figure 72-10
View of Fuel Pump & Filter System

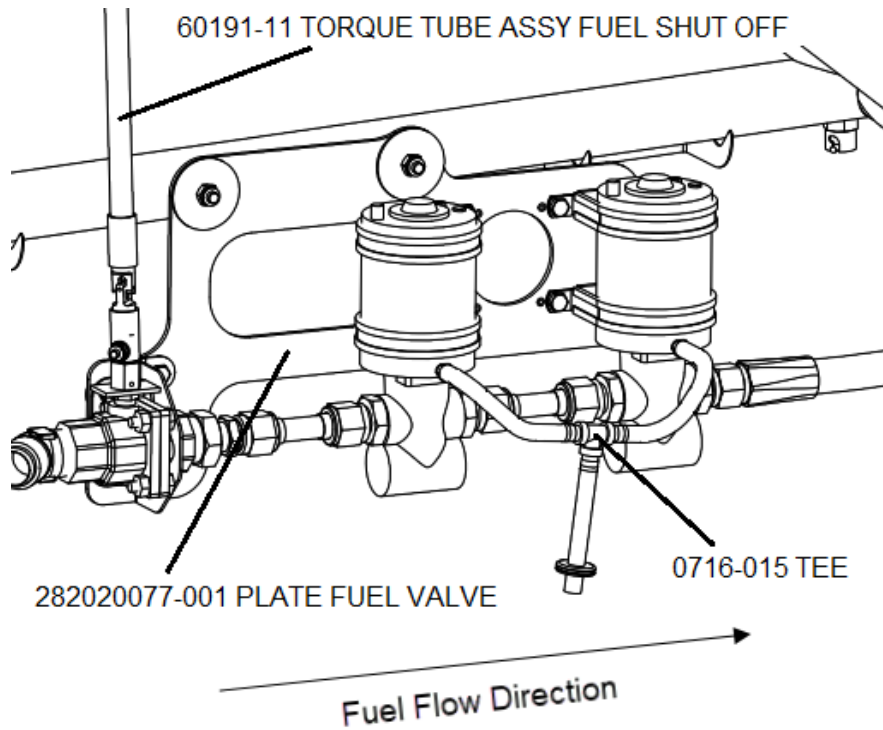


Figure 72-11
Fuel Shutoff Valve Torque Tube and
Drain Tube Installation
(Aircraft skin not shown for clarity)

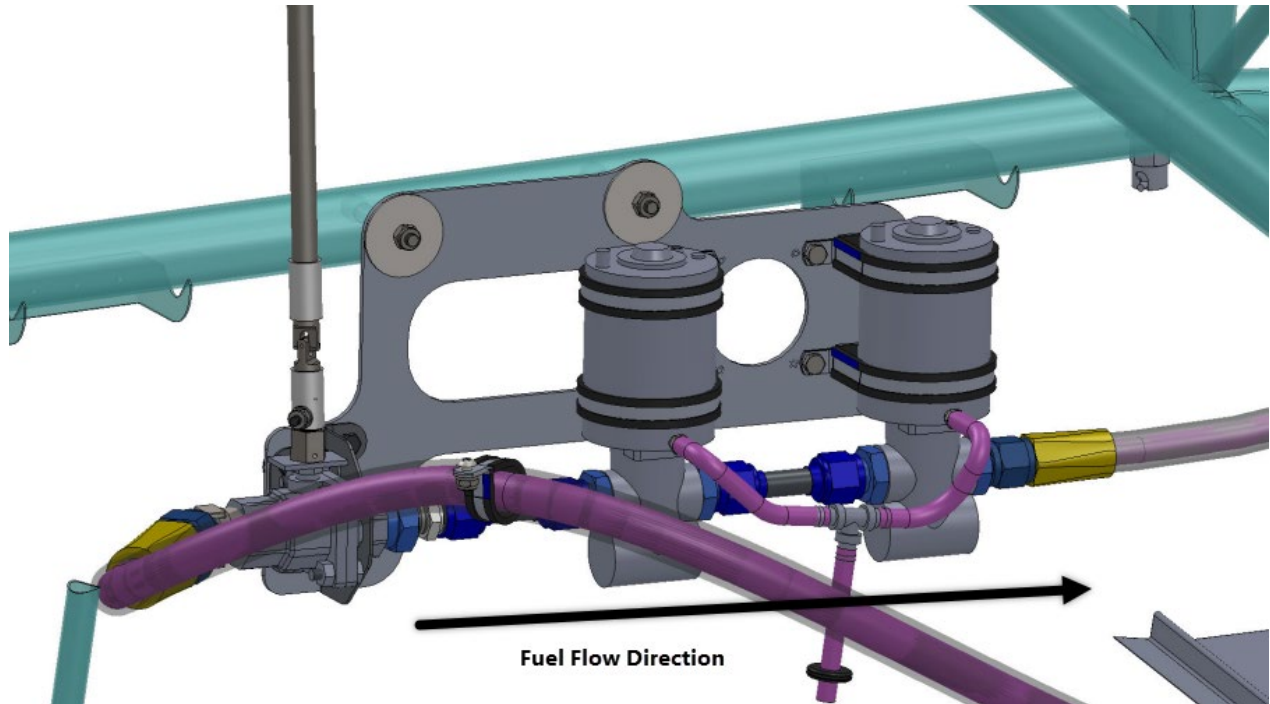


Figure 72-12
View of Fuel Pump System
(Aircraft skin and frames not shown for clarity)

- 12) Connect Battery.
- 13) Open fuel shutoff valve.
- 14) De aerate all devices of the fuel system. Ref. GE H80 Maintenance Manual 73-20-01.
- 15) Operate fuel pump and check for pressure fuel leaks at lines and fittings.
- 16) Reinstall panels.

9. RECORD OF COMPLIANCE:

Make appropriate entry in airplane maintenance records as follows:

“Thrush Service Bulletin SB-AG-72 Rev. IR complied with at _____ total hours on aircraft.”

Modification accomplished by:

Name & Certificate #	Date
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10. RESPONSE CARD

The final step in compliance with this Service Bulletin is to complete and return the compliance card on the next page. It may be mailed, Faxed, or scanned and e-mailed.

Fax to:	Ed Rusk	229-439-9790
Email to:	Ed Rusk	erusk@thrushaircraft.com

Service Bulletin SB-AG-72 Rev. IR Compliance Report

Aircraft S/N:	Aircraft Owner:
Aircraft Registration #:	Address of Owner:
Airframe total time:	City & State:
Engine total time:	Physical location:
Complied with by:	Date of Compliance:
Signature:	Certificate #:

PLEASE RETURN THIS REPORT ONLY AFTER MODIFICATION IS MADE

This response card may be mailed, faxed to (229) 439-9760, or emailed to erusk@thrushaircraft.com.

Fold, Tape & Mail (Do Not Staple)

Return Address

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