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SERVICE DIRECTIVE BULLETIN

DATE: October 6, 2000

1. SUBJECT: Replacement of the Low Point Drain Valve

2. MODEL: TH-28 and 480

3. EFFECTIVITY: TH-28; Serial Number 3004 and 3006

480; Serial Numbers 5001 through 5019 and 5022

4. BACKGROUND:

The low point drain valves, P/N 4122034-11 (standard aircraft) and CAV-170H-4 (optional airframe fuel filter), are spring loaded, push to operate type drain valves. Field experience with the drain valves of this type mounted low on the fuselage has been unfavorable.

5. COMPLIANCE:

At or before the next 100 hour/annual inspection, modify the low point drain valve installation as applicable in paragraph 5.1 or 5.2.

NOTE

Some aircraft equipped with the optional airframe fuel filter have a "turn to open" type drain valve installed in the filter bowl. This Service Directive Bulletin <u>does not</u> apply to those aircraft.

5.1. MODIFICATION - Standard Aircraft (Refer to Figure 1)

1. Defuel the aircraft.

2. Disconnect the low point drain line from the valve.

3. Remove the hardware securing the push valve assembly to the pylon and remove the valve assembly and the overboard drain line.

4. Install the fittings into the replacement valve.

5. Install the valve into the mounting bracket using the following procedure:

1. Remove the toggle from the valve by removing the cotter pin.

2. Install the valve into the mounting bracket with the flow arrow on the valve pointing down and secure with the washer, lock washer, and nut.

3. Reinstall the toggle and secure with the cotter pin

6. Install the valve and bracket into position and secure with the mounting hardware.

7. Reconnect the low point drain line to the valve assembly.

NOTE

The overboard drain line may be bent as required to align with the exit location in the cowling.

8. Install the overboard drain line and secure it to the drain line with the cable tie.

CAUTION

Ensure all fuel lines are connected and the low point drain valve is closed before fueling the aircraft.

9. Service the aircraft with 5 gallons/19 liters of fuel and operate the drain valve. Check for proper operation and no leaks after shutoff, then finish fueling the aircraft.

10. Bleed the fuel system in accordance with the Rolls-Royce 250-C20 Series Operation and Maintenance Manual.

5.2. MODIFICATION - Aircraft Equipped With Optional Airframe Fuel Filter (Refer to Figure 2)

1. Pull the fuel shutoff valve to the "OFF" position and drain the fuel from the airframe fuel filter.

2. Remove the drain line from the low point drain valve located in the bottom of the airframe fuel filter assembly.

3. Remove the drain valve from the bottom of the filter bowl.

4. Install the swivel fitting into the filter bowl.

5. Install the fittings into the toggle valve and install the valve onto the swivel fitting with the flow arrow on the valve pointing down.

NOTE

The overboard drain line may be bent as required to align with the exit location in the

6. Install the drain line onto the shutoff valve.

7. Reinstall the existing drain line (hose) on to the drain line, secure with the cable tie and route the line out the bottom cowling.

8. Ensure the toggle drain valve is closed and open the fuel shutoff valve.

9. Check the drain valve for proper operation.

10. Bleed the fuel system in accordance with the Rolls-Royce 250-C20 Series Operation and Maintenance Manual.

5.3. PARTS:

NOTE

When ordering the Valve Kit, note if the aircraft is equipped with the optional airframe fuel filter.

Description	Part Number	Quantity
Valve Kit	4230009-1	1

6. SPECIAL TOOLS: None

7. MAN-HOURS: 2 Man-hours

8. WARRANTY: Valve Kit provided free of charge.

9. WEIGHT CHANGE: None

10. LOG BOOK ENTRY: Enter compliance with this Service Directive Bulletin.

11. REPETITIVE INSPECTIONS: None

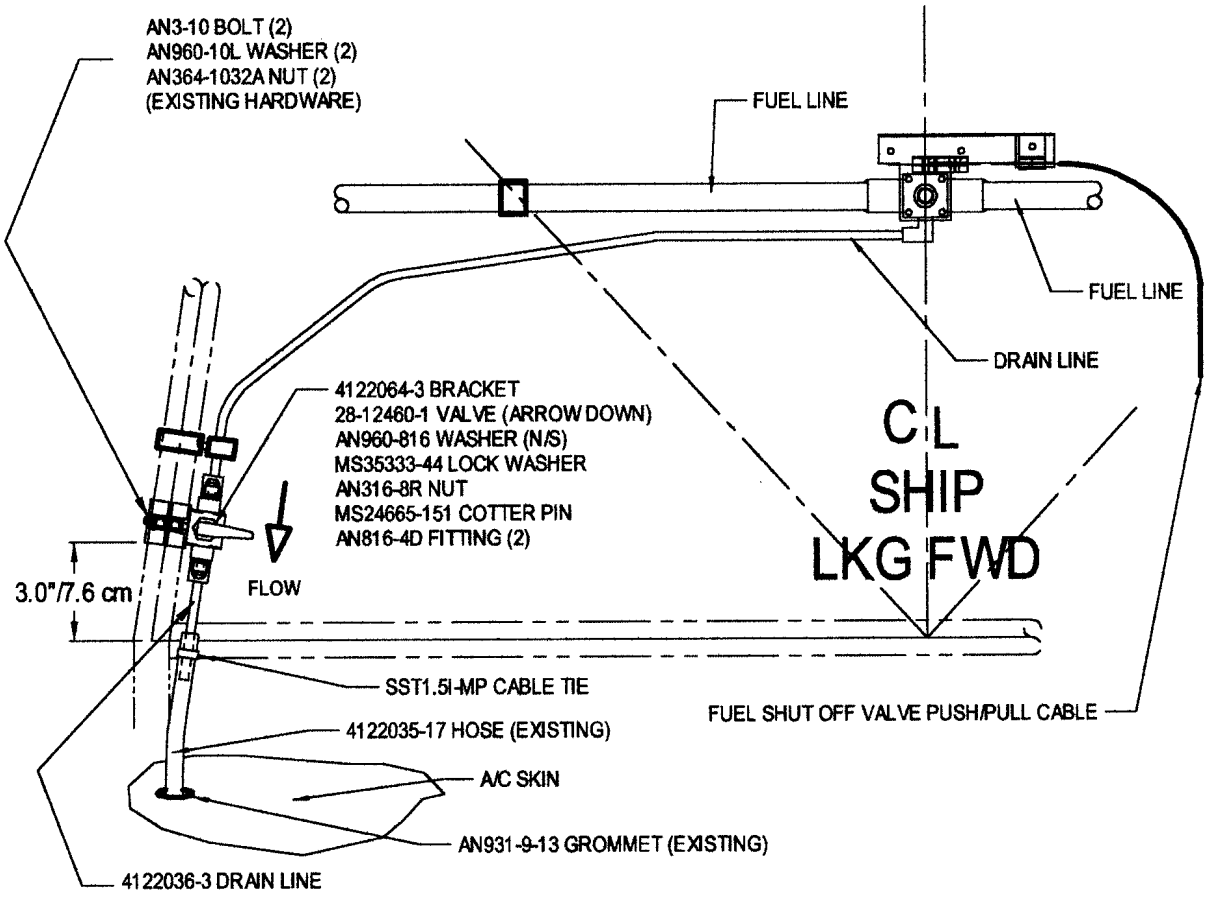
AN3-10 BOLT (2)
AN960-10L WASHER (2)
AN364-1032A NUT (2)
(EXISTING HARDWARE)
FUEL LINE
FUEL LINE
DRAIN LINE
4122064-3 BRACKET
28-12460-1 VALVE (ARROW DOWN)
AN960-816 WASHER (N/S)
MS35333-44 LOCK WASHER
AN316-8R NUT
MS24665-151 COTTER PIN
AN816-4D FITTING (2)
C L
SHIP
LKG FWD
3.0"/7.6 cm
FLOW
SST1.5I-MP CABLE TIE
FUEL SHUT OFF VALVE PUSH/PULL CABLE
4122035-17 HOSE (EXISTING)
A/C SKIN
AN931-9-13 GROMMET (EXISTING)
4122036-3 DRAIN LINE

FIGURE 1

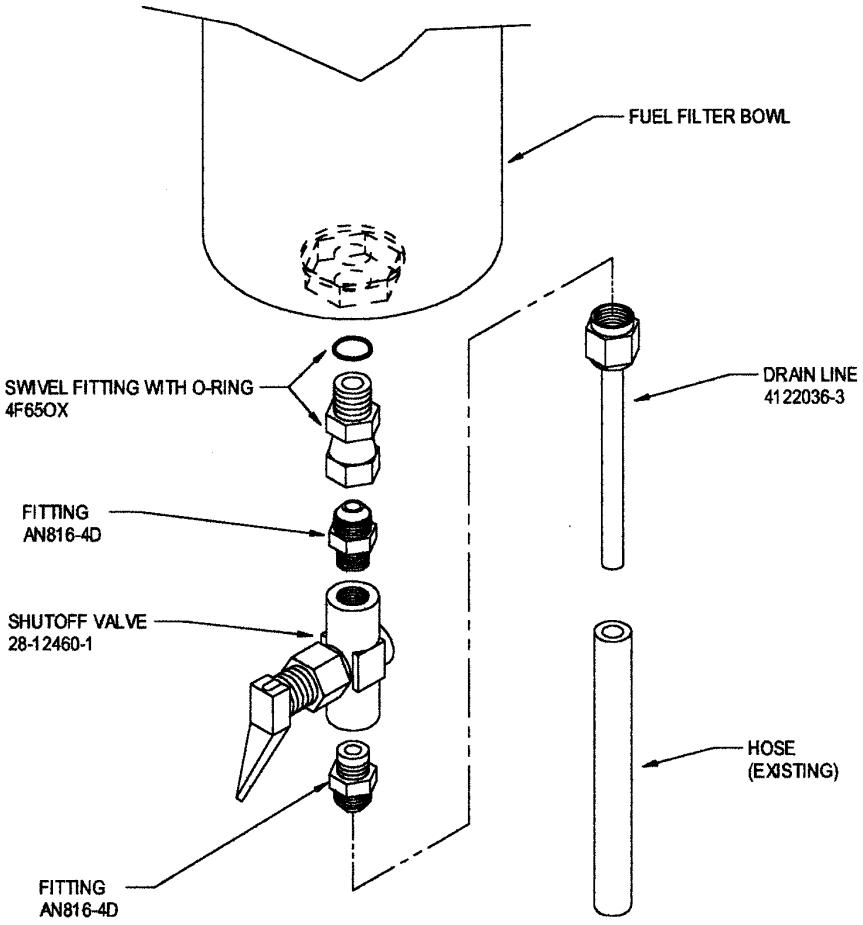
FUEL FILTER BOWL
SWIVEL FITTING WITH O-RING
4F65OX
DRAIN LINE
4122036-3
FITTING
AN816-4D
SHUTOFF VALVE
28-12460-1
HOSE
(EXISTING)
FITTING
AN816-4D

FIGURE 2