



SERVICE BULLETIN

No. 417

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

"FAA DOA EA-1 Approved"

August 26, 1974

Subject:

Removal of Manual Heater Fuel Shut Off Valve

Models Affected:

PA-31 and PA-31-300 Navajo

Serial Numbers Affected:

31-2 to 31-7401258 incl.

Compliance Time:

At the next 100 hour or annual inspection, whichever occurs first.

Purpose:

A recent report received from the field concerned fuel leakage through the heater fuel shut off valve and subsequent introduction of fuel vapor in the fuselage nose area. The leakage was traced to deteriorated "O" rings in the heater fuel shut off valve body, which is quite possible due to the very infrequent use of the heater fuel shut off valve.

This service release authorizes the removal of the heater fuel shut off valve from the above referenced aircraft.

Instructions:

Refer to attached sketch/instruction sheets for Heater Fuel Shut Off Valve Removal procedures.

Material Required:

The attached sketch/instruction sheets specify the several items required to accomplish reinstallation of the heater fuel line subsequent to Heater Fuel Shut Off Valve Removal. These items are common hardware items, and may be procured either locally or through Piper Field Service Facilities (Piper Part Nos. of applicable items are depicted).

Availability of Parts:

See Material Required, above.

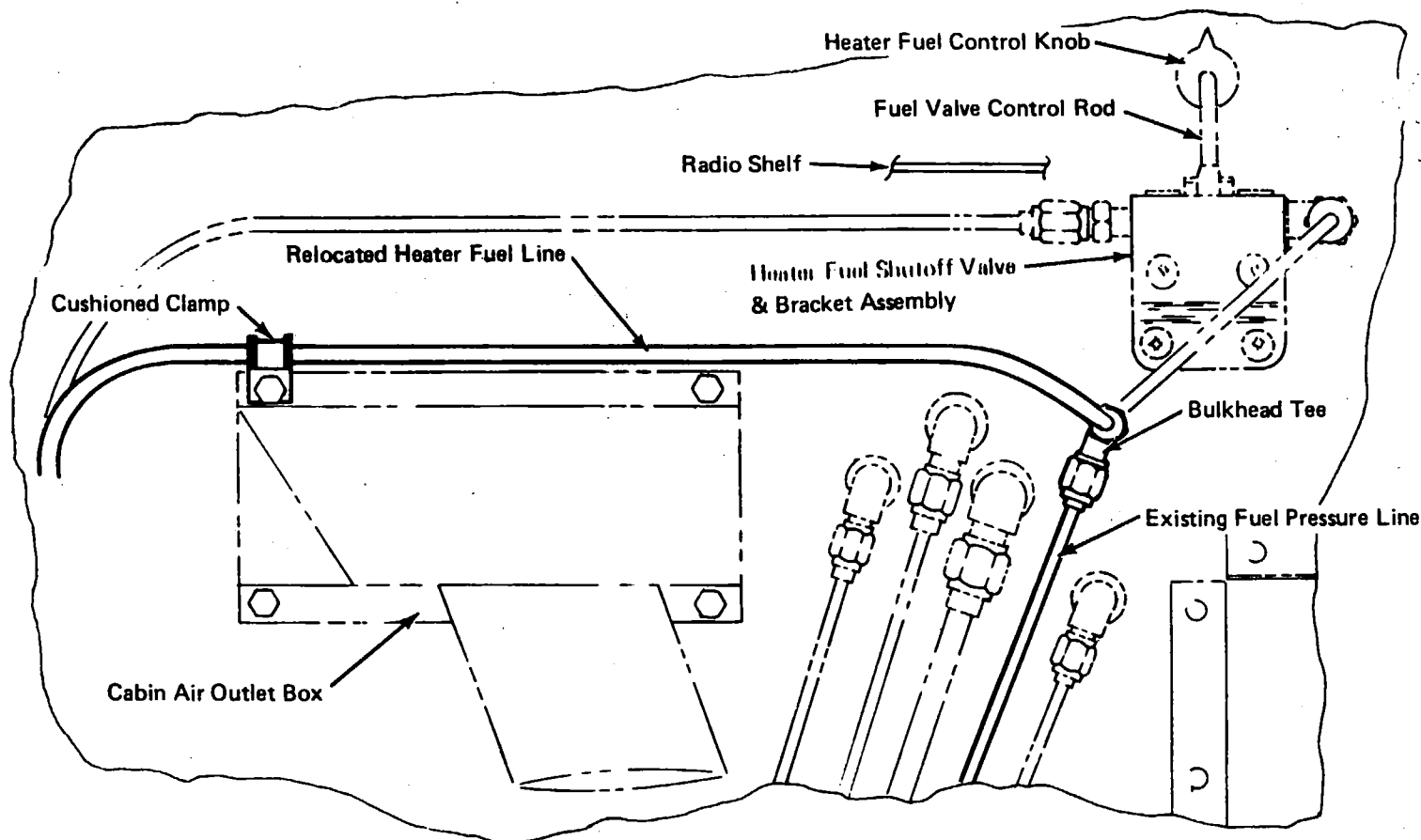
Effectivity Date:

-This service release is effective upon receipt.

Summary:

Please contact your Piper Field Service Facility to make arrangements for compliance with the provisions of this service release in accordance with Compliance Time, above. Material cost and time required for this modification is negligible.

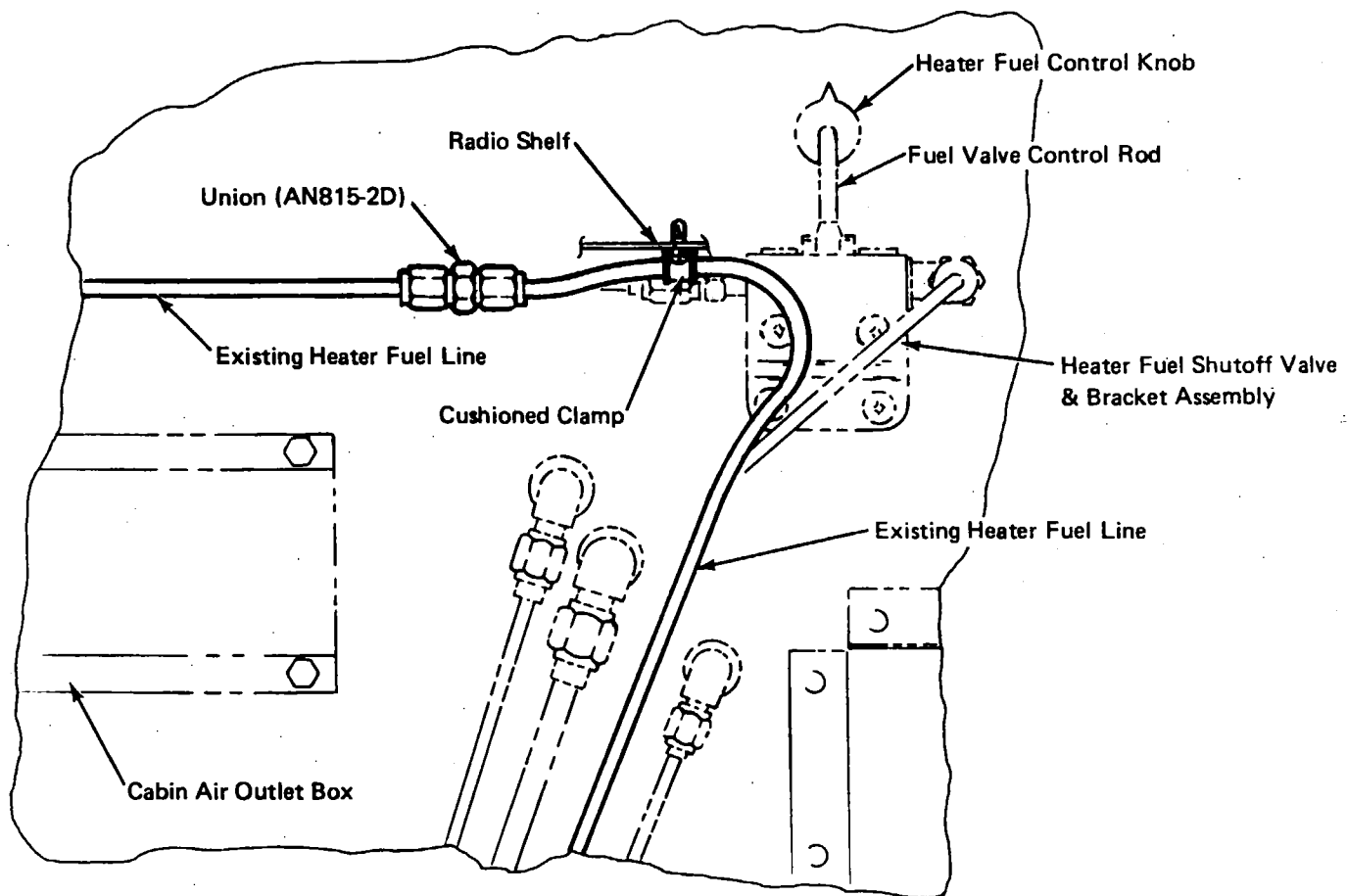
A Service Publication Compliance Form is enclosed with each copy of this service release mailed to owners of record; subsequent to compliance, fill out the enclosed form per instructions on the form reverse side and leave the form with the Piper Field Service Facility performing the modification.



FRONT VIEW OF FUSELAGE BULKHEAD – STA. 81

● **INSTRUCTIONS**

1. Remove access panel from right forward fuselage to gain access to the heater fuel shutoff valve.
2. Disconnect and remove strobe light power unit from bottom of radio shelf, if installed.
3. Remove heater fuel control knob from end of control rod, at cabin air control panel, inside the cockpit and discard.
4. Disconnect two fuel lines from fittings on heater fuel shutoff valve. Also disconnect other end of short line at bulkhead tee, remove line and discard.
5. Remove four valve bracket attachment screws. Remove valve and bracket as complete unit and discard.
6. Pull fuel valve control rod forward thru bulkhead and discard. Apply tape over 9/16" hole in bulkhead.
7. Relocate existing heater fuel line to bulkhead tee and connect.
8. Secure fuel line to heater air outlet box using cushioned clamp (Piper P/N 454 927) as shown.
9. Reinstall strobe light power unit, if previously installed, and reinstall access panel.
10. Install black plug button (Piper P/N 453 799) in vacant 7/16" hole in cabin air control panel.
11. Make proper logbook entry of heater fuel shutoff valve removal.



FRONT VIEW OF FUSELAGE BULKHEAD – STA. 81

● INSTRUCTIONS

1. Remove access panel from right forward fuselage to gain access to the heater fuel shutoff valve.
2. Remove heater fuel control knob from end of control rod, at cabin air control panel, inside the cockpit and discard.
3. Disconnect two fuel lines from fittings on heater fuel shutoff valve.
4. Remove four valve bracket attachment screws. Remove valve and bracket as complete unit and discard.
5. Pull fuel valve control rod forward thru bulkhead and discard. Apply tape over 9/16" hole in bulkhead.
6. Connect existing heater fuel lines using AN815-2D union (Piper P/N 491 048) as shown.
7. Secure fuel line to radio shelf using cushioned clamp (Piper P/N 454 927) as shown.
8. Reinstall access panel.
9. Install black plug button (Piper P/N 453 799) in vacant 7/16" hole in cabin air control panel.
10. Make proper logbook entry of heater fuel shutoff valve removal.