



SERVICE LETTER

No. 779

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

August 16, 1976 M

Subject: Heater Fuel Pressure Relief Valve Inspection.

Models Affected:

PA-31T Cheyenne

Serial Numbers Affected:

31T-7400002 to 31T-7620015 Inclusive

Compliance Time:

At owner/operators discretion; recommended at the next Programmed Inspection Event.

Purpose:

A few reports concerning Cheyenne heater malfunctions have been attributed to "coking" of the heater ignitor plug. This condition was traced to an improper union installed in the heater fuel pressure relief valve and/or an improper pressure relief valve setting.

This service release provides instructions (1.) to inspect the Cheyenne heater fuel pressure relief valve to determine if the proper fuel line union is installed and (2.) to obtain proper heater fuel pressure. Refer to attached sketch/instruction sheet to locate affected area.

Instructions:

1. Refer to attached sketch/instruction sheet; accomplish steps 1 and 2.
2. Detach existing fuel line union from pressure relief valve "downstream" port, and inspect union.
3. If union is flared at the end which seats in the valve body, continue with remaining instructions contained on the attached sketch/instruction sheet.
4. If union is "flat" (i.e., non-flared) at the end which seats in the valve body, check heater fuel pressure per steps 8, 9 and 10.
5. Make appropriate log book entry.

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Material Required:

One (1) each per aircraft Union (Special), Piper part number 50579-00 and One (1) each per aircraft Pressure Relief Valve, Piper part number 756 542 only if required per Instructions (above) number 3.

NOTE:

Pressure Relief Valve must be replaced in addition to the Union due to the possibility of damage within the valve body caused by the flared union.

Availability of Parts:

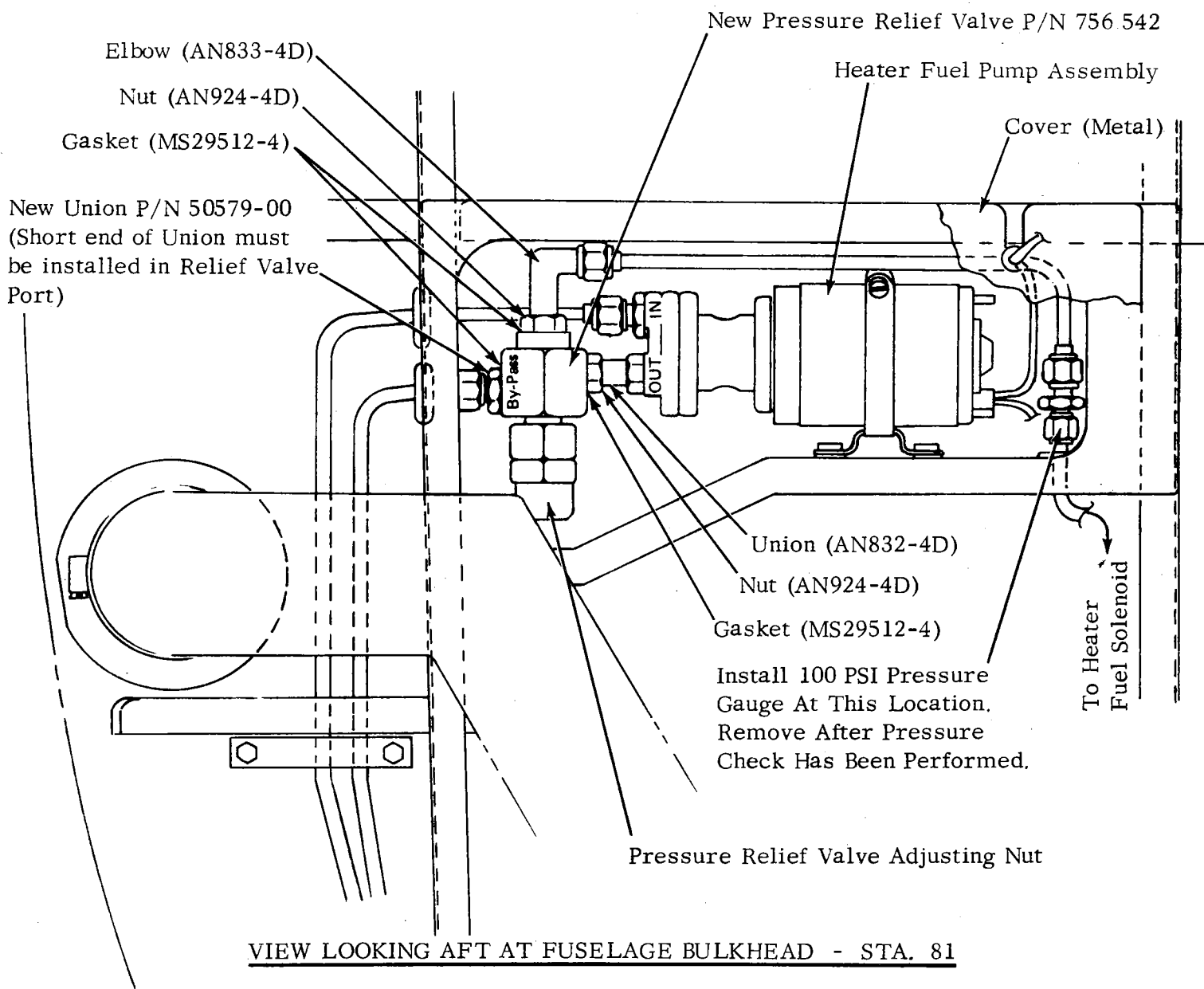
Your Piper Field Service Facility.

Effectivity Date:

This service letter is effective upon receipt.

Summary:

Please contact your Piper Field Service Facility to make arrangements for compliance with this service release in accordance with the recommendations contained herein. Material required, if any, per this service release (described above) will be provided at no charge through your Piper Field Service Facility for a period of time not to exceed twelve (12) months from this publication date.



INSTRUCTIONS

1. Gain access to heater fuel pump and pressure relief valve by removing access panel from right side of fuselage nose section.
2. Remove metal cover from bulkhead to expose pump and valve.
3. Disconnect fuel lines attached to pump and valve.
4. Remove pressure relief valve from fuel pump and disassemble fittings from valve.
NOTE: Discard nipple installed in By-Pass port of valve, and retain balance of fittings for reassembly on new valve.
5. Install short (flat) end of new union, P/N 50579-00, into By-Pass port of new pressure relief valve, P/N 756 542, using existing MS29512-4 gasket.
6. Install balance of existing fittings to new valve and assemble to pump.
7. Connect fuel lines to valve and pump, and tighten.
8. Install 100 psi pressure gauge into line from pressure relief valve to heater fuel solenoid.
9. With an engine fuel boost pump ON and with heater in operation, adjust heater fuel pressure to 100 psi with the pressure relief valve adjusting nut.
10. After adjustment, remove pressure gauge and reconnect heater line.
11. Reinstall metal cover and fuselage access panel.
12. Make proper logbook entry of valve and nipple replacement.