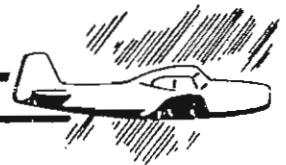




FIELD SERVICE BULLETIN



NORTH AMERICAN AVIATION, INC • MUNICIPAL AIRPORT • LOS ANGELES 45, CALIF.

NUMBER 36
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MANDATORY

TO: All Navion Owners.

SUBJECT: FUEL PUMP INLET LINES RELOCATION AND COMPLIANCE WITH
CONTINENTAL MOTORS' BULLETIN M-48-1.

This bulletin revises the fuel system between the fuel strainer and fuel pumps; and calls for installation of the replacement fuel pumps of Continental Motors' Bulletin M-48-1. The pumps are a new type, designed to give increased service life. The fuel system changes provide improved priming of the fuel pumps.

AIRPLANES AFFECTED:

NAV4-2 through NAV4-1110 inclusive.

Airplanes having the original factory installed fuel system, and airplanes with modified fuel systems which retain the original system between the firewall and the carburetor, must be modified per this bulletin.

Airplanes having other fuel systems approved by C.A.A. will require only the change of fuel pumps per Continental Bulletin M-48-1.

INSTALLATION INSTRUCTIONS:

1. Shut off fuel valve.
2. Remove the two fuel pump intake hoses and disconnect the pump outlet hoses at the pumps. Remove the 752 x 6 tee from the fuel strainer.

NOTE: The new fuel pumps are not provided with a fine mesh strainer, therefore per C.A.A. regulation, the strainer at the firewall must be used with the new pumps. Brackets and strainers are available from Ryan Aeronautical Company, San Diego, California.

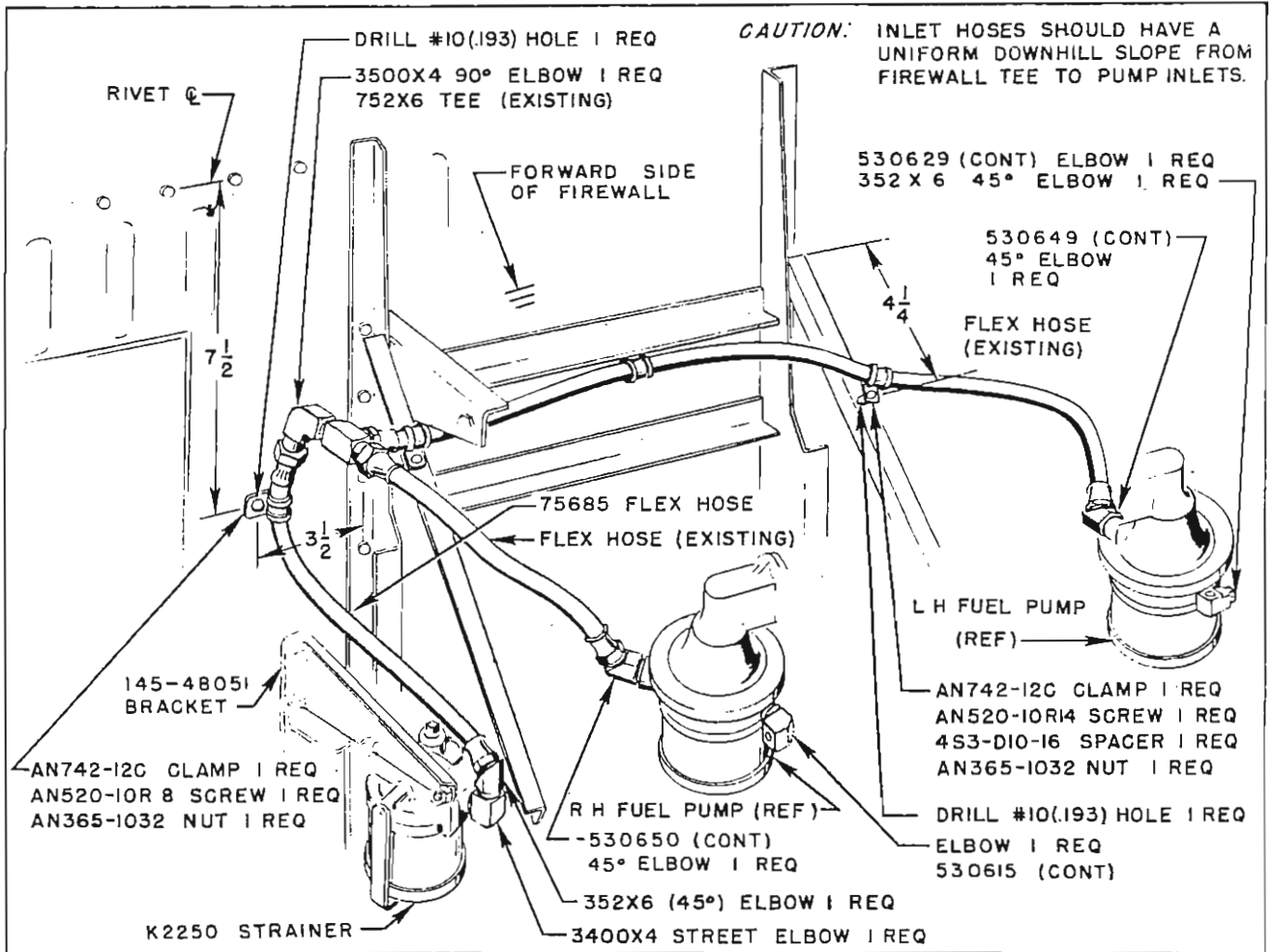


FIGURE 1 - RELOCATION OF FUEL LINES

3. Install the following parts in sequence, as listed: 3400 x 4 elbow in fuel strainer, 352 x 6 (45°) elbow, 75685 hose, 3500 x 4 (90°) elbow, and the previously removed 752 x 6 tee. See Figure 1.
4. Loosen the two AN742-12C clamps which secure the left fuel pump inlet hose and slide the hose to the left.
5. Secure the upper end of 75685 flexible hose to the firewall using an AN742-12C clamp, AN520-10R8 screw, and AN365-1032 nut. See Figure 1. Drill No. 10 (.193) hole.
6. Drill a No. 10 (.193) hole in the left hand diagonal firewall brace and secure left pump fuel hose with an AN742-13C clamp, a 4S3-D10-16 spacer between the clamp and brace and an AN520-10R14 screw and AN365-1032 nut. See Figure 1 for location of hole.

NOTE: A 90° snake will facilitate drilling of the required holes.

7. Remove the fuel pumps from the engine and remove the 45° elbow from the outlet fitting of the left hand pump.
8. Check that 45° steel elbows are installed in the inlet side of the new fuel pumps supplied by Continental's Bulletin M-48-1.
9. Check that new L.H. pump has steel "Tee" fitting with 1/8" and 1/4" female pipe taps installed at pump outlet. Check that new R.H. pump has steel 90° elbow installed at pump outlet.
10. Install 45° elbow removed from old pump into the outlet fitting of new L.H. pump. If heater is not installed, plug off 1/8" opening in L.H. pump outlet fitting.
11. Install new fuel pumps to engine per instructions of Continental Bulletin M-48-1.
12. Check pump and fitting clearance with engine baffles. (R.H. outlet fitting requires 3/16" x 45° chamfer on top edges of female opening, for baffle clearance).
13. Connect the fuel inlet hoses to the 752 x 6 tee at firewall per Paragraph No. 3.
14. Connect fuel inlet hoses, outlet hoses and heater supply line to same respective positions on new pumps.
15. Each fuel pump should be operated with the lines on the opposite pump plugged. Check the operation of each pump by reading fuel pressure gage on instrument panel. A visual inspection of pump lines should be made to check for fuel leaks.
16. NOTE: New fuel pumps do not require periodic cleaning of strainers as did the old style pumps.