

SUBJECT: Installation of New Fuel Pump Bracket

MODELS AFFECTED: M20C, Serials 2623-2690
M20D, Serials 201-226
M20E, Serials 101-263

TIME OF COMPLIANCE: Within the next 100 hours of operation

INTRODUCTION

To increase service life of the Dukes electric pump, we recommend the supporting bracket be changed.

INSTRUCTIONS

1. Remove left side cowling.
2. Remove left side 310010 augments cavity fairing.
3. Disconnect all lines from fuel pump.
4. Use care in keeping open fuel lines clear of foreign particles.
5. Remove fuel pump.
6. Remove breather line and grommets from fuel pump bracket.
7. Remove existing bracket.
8. For M20E only - remove clamp holding HD-LF-180 oil quick drain to side of 600102 firewall fuel fitting box. Retain clamp.
9. Plug the six holes with AN435 M-4 rivets.
10. Attach the new bracket (610048) to the fuel pump using two AN9 60-10 washers. Safety wire the two screws. (See Fig. 1).
11. Ream the hole in the 600102 firewall fuel fitting box. (See Fig. 2).
12. After reaming the hole, place the fuel pump in position and mark the two pilot hole locations on the side of the firewall fuel fitting box.
13. Drill the two holes .190/.194. (Drill #11).
14. For M20C and M20D clamp 620013-5 breather tube at same place battery box drain line is clamped. Use existing hole with AN3-10 bolt, AN 960-10 washer, AN 742-12 clamp, 914035-5 bushing, and AN 970-3 washer. (See Fig. 3). For M20E clamp 620013-5 breather tube and HD-LF-180 oil quick drain together using existing hole with AN 3-10 bolt, AN 742-12 clamp, 914035-5 bushing, and AN 970-3 washer (See Fig. 3).
15. Place fuel pump in position and tighten fuel fitting box lock nut.
16. Attach the bracket to the side of the fuel fitting box using two AN3-3 bolts, two AN365-1032 nuts, and four AN9 60-10 washers. (See Fig. 1).
17. Reconnect all lines. (See Fig. 4).
18. Pressure check fuel system for possible leaks.
19. Replace 310010 augments cavity fairing.
20. Replace cowling.

PARTS LIST - S.L. 20-120 KIT

No. Req'd	Item		
1	AN435 M-4 rivets	7	AN960-10 washers
2	AN501AC10-8 screws	1	AN970-3 washer
1	610048 bracket	1	AN742-12 clamp
1	AN3-10 bolt	1	914035-5 bushing
2	AN3-3 bolts	4 in.	AN995-C32 safety wire
2	AN365-1032 nuts		

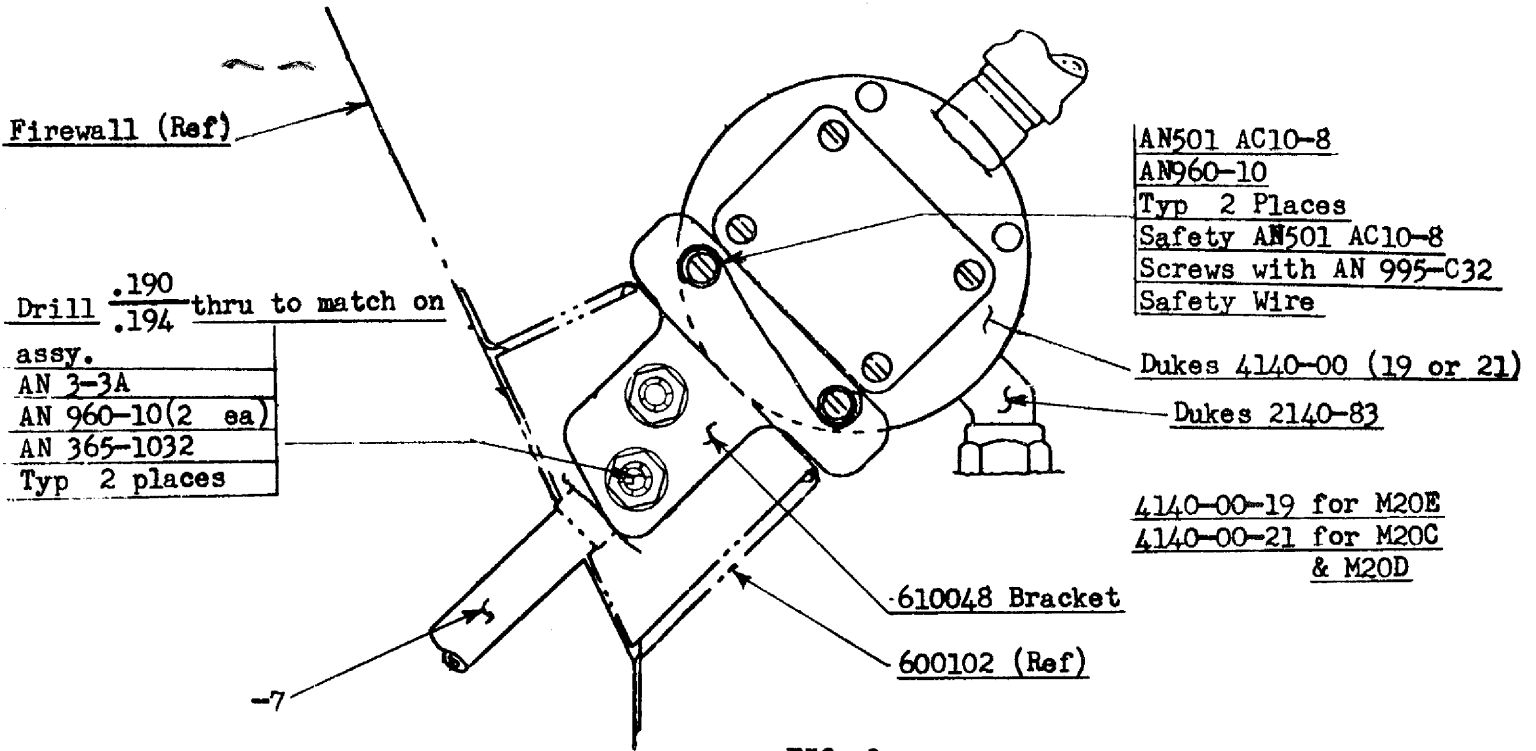


FIG. 1

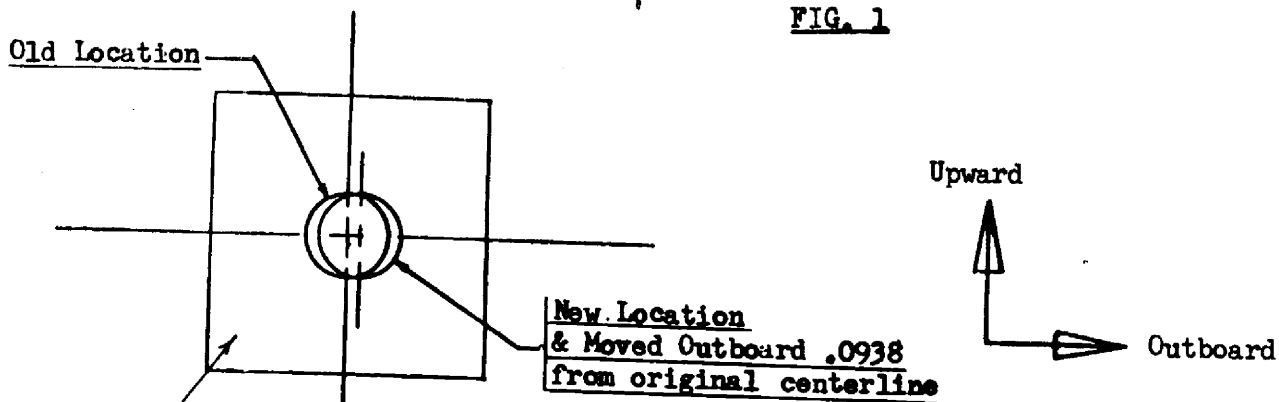


Fig. 2

620006-3
AN742-8
For M20C & M20D only

AN 742-10
HD-LF-180
For M20E only

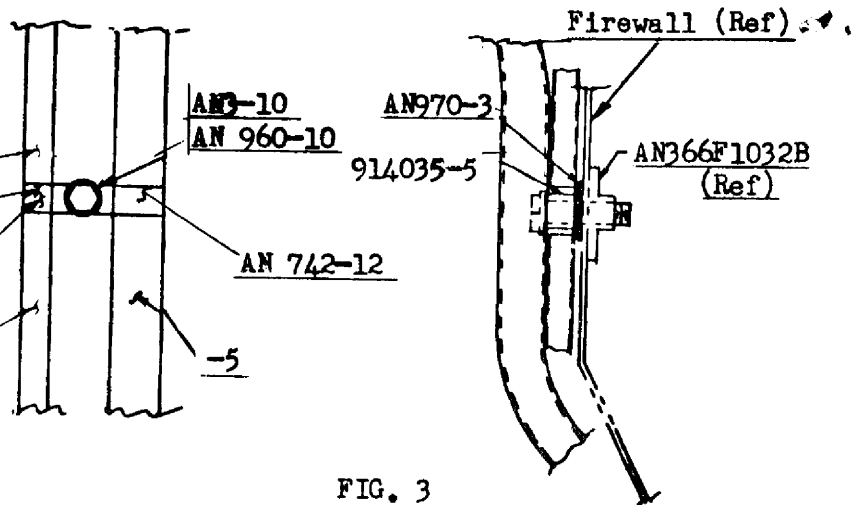
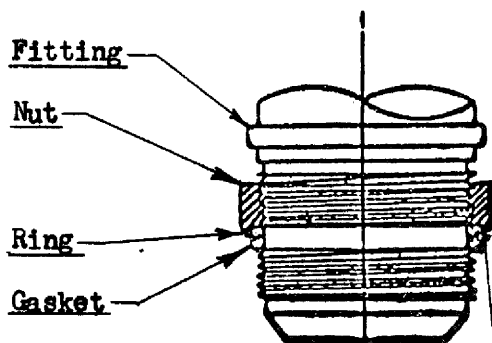


FIG. 3

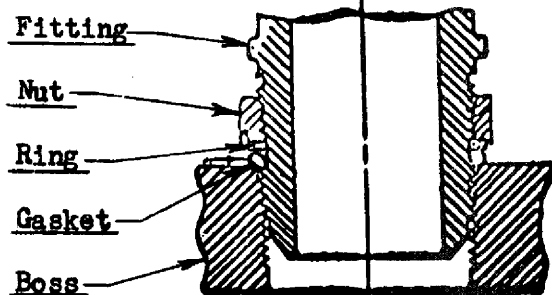
Procedure for Reconnecting Fuel Outlet Fitting



Step 1

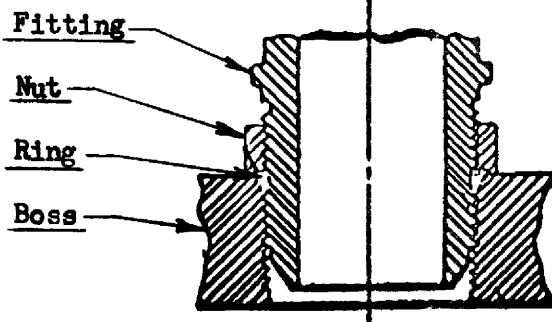
Coat male threads of fitting, ring and gasket, sparingly with petrolatum, Spec. AN-P-51 (vaseline), or hydraulic fluid and assemble as shown. Work the ring into the counterbore of the nut; then turn the nut down until the gasket is pushed firmly against the lower threaded section of the fitting.

Install ring with smooth (hair) side toward the O ring



Step 2

Install the fitting into the boss and, at the same time, keep the nut turning with the fitting until the gasket contacts the boss. This point can be determined by a sudden increase in torque. With the fitting in this position, put a wrench on the nut to prevent its turning and, at the same time, turn the fitting in $1\frac{1}{2}$ turns. Position fitting by turning in not more than one additional turn.



Step 3

Hold the fitting and turn the nut down tightly against the boss. Slight extrusion of the ring is not detrimental

FIG. 4