



HUGHES SERVICE INFORMATION NOTICE

NOTICE NO. N-11.1*

DATE Nov. 29, 1968

PAGE 1 OF 8

FAA Approved

*Supersedes Service Information
Notice N-11, dated August 25, 1966

SUBJECT: FIELD REPLACEMENT - AUXILIARY FUEL BOOST PUMP

MODELS AFFECTED:
269A Helicopter Serial No's. 0011 through 0575
269A-1 Helicopter Serial No's. 0001 through 0041
269B Helicopter Serial No's. 0001 through 0268

TIME OF COMPLIANCE: At owners and operators discretion

PREFACE:

The information given in this Service Information Notice lists a procedure to provide a replacement fuel pump (P/N 269A8304) for field installation. The following instructions define the information necessary to remove the old pump (P/N 269A8345 or P/N 269A4626) and install the new pump.

Reference

269A/A-1/TH-55A Handbook of Maintenance Instructions, Revised 1 June 1968
269B Handbook of Maintenance Instructions, Revised 1 July 1968

PARTS LIST

<u>Model Helicopter</u>	<u>Helicopter Serial No.</u>	<u>Kit No.</u>
269A	0011-0262	M10002-11
269A	0263-0314	M10002-9
269A	0315-0575	M10002-1
269A-1	0001-0041	M10002-3
269B	0001-0268	M10002-5

(■) Bar denotes portion of text superseded

Customer Service Department

NOTICE NO. N-11.1
DATE Nov. 29, 1968
PAGE 2 OF 8

PROCEDURE - MODEL 269A/A-1 HELICOPTERS

- a. Determine that throttle is closed, mixture control is in idle cutoff, and fuel shutoff valve is closed. Disconnect battery.
- b. Remove external fuel boost pump from rotorcraft, per HMI; remove mounting clamp and bracket from center frame section.

NOTE

For helicopters equipped with P/N 269A4626 booster pump installed in sump of main fuel tank, remove pump and install sump cap, per PRELIMINARY PROCEDURE on page 5.

- c. Install two rubber cushion clamps on center frame section tube located between forward L/H engine mount and lower L/H cluster fitting. (See Figure 1)

NOTE

Position clamp on tube so the upper clamp ears are outboard and lower clamp ears are inboard.

- d. Secure pump body to rubber cushion clamp using two bolts, lockwire bolts.

NOTE

Position pump so that in-out housing points outboard and inlet side is up.

- e. Remove fuel line attached to fuel shut-off valve.
- f. Assemble line between fuel strainer and auxiliary fuel pump as follows and install on outlet side of pump.
 1. Install nut and "O" ring on bulkhead union.
 2. Secure union in pump housing.
 3. Install "O" ring on union, attach elbow to union.
 4. Install "O" ring on reducer and attach to elbow.
 5. Attach reducer to fuel strainer line.
 6. Align assembled hardware to provide smooth radius, torque all hardware.
- g. Assemble rigid line between fuel shut-off valve and auxiliary fuel pump as follows and install on inlet side of pump.

1. Install nut and "O" ring on bulkhead union.
 2. Secure union to pump housing.
 3. Install "O" ring on union, attach elbow to union.
 4. Install "O" ring on reducer and attach to elbow.
 5. Attach rigid line to reducer.
 6. Attach rigid line to fuel shut-off valve.
 7. Align rigid tube assembly, torque all hardware.
- h. Connect electrical leads to pump motor; connect battery.

NOTE

If 269A4626 pump has been removed from sump of fuel tank, connect existing electrical leads to new external fuel pump motor; splice additional lead wiring to existing wiring, as required.

- i. Pressurize fuel system; perform an operational check of pump.

NOTE

When installing P/N 269A8304-11 pump on 269A Helicopter Serial Nos. 0011 through 0314, readjust output pressure of pump, using fuel pressure gage in rotorcraft, to 9-18 PSI. Adjustment screw is located between ports on pump.

- j. With fuel system pressurized, visually inspect fuel lines for leakage, first with pump inoperative, then with pump operating.
- k. Secure rotorcraft.

PROCEDURE - MODEL 269B HELICOPTERS

- a. Determine that throttle is closed, mixture control is in idle cutoff, and fuel shutoff valve is closed. Disconnect battery.
- b. Remove auxiliary fuel boost pump from rotorcraft, per HMI.
- c. Remove mounting clamp and bracket from center frame section.
- d. Secure mounting plate to pump body using four bolts, lockwire bolts.
(See Figure 2)
- e. Position one rubber cushion clamp on center frame section tube located between R/H forward engine mount and lower forward R/H cluster fitting.
- f. Position one rubber cushion clamp on center frame section tube located between lower forward R/H cluster fitting and upper center fitting outboard on R/H side.

NOTE

Clamps are positioned so that tabs are facing one another on bottom side of frame tubes.

- g. Secure pump assembly plate to cushion clamps using screw, nut and washer, each side.

NOTE

Pump in-out housing shall be up with "out" side of in-out housing aft.

- h. Remove fuel line attached to fuel strainer.
- i. Remove fuel line attached to fuel shut-off valve.
- j. Assemble fuel strainer to auxiliary fuel pump line as follows and install on outlet side of pump.
 1. Install nut and "O" ring on bulkhead union.
 2. Secure union in pump housing.
 3. Install "O" ring on union; attach elbow to union.

4. Install "O" ring on reducer; secure reducer in elbow.
 5. Attach line assembly to fuel pump.
 6. Install elbow in fuel strainer, attach flex line.
 7. Align assembled hardware to provide smooth radius, torque all hardware.
- k. Assemble rigid line between fuel shut-off valve and auxiliary fuel pump as follows and install on inlet side of pump.
1. Install "O" ring on reducer
 2. Secure reducer in inlet of pump housing.
 3. Attach rigid line to reducer.
 4. Attach rigid line to fuel shut-off valve.
 5. Secure rigid line to frame tube using existing hardware.
 6. Align rigid tube assembly, torque all hardware.
- l. Connect electrical leads to pump motor; connect battery.
- m. Pressurize fuel system; perform operational check of pump.
- n. With fuel system pressurized, visually inspect fuel lines for leakage, first with pump inoperative, then with pump operating.
- o. Secure rotorcraft.

Weight & Balance Data

Installing P/N 269A8304 Series Fuel Pump

ADD: 3.2 lbs. at 77.5 in. arm.

Removing P/N 269A8345 Series Fuel Pump

SUBTRACT: 1.9 lbs. at 77.5 in. arm.

Removing P/N 269A4626 Series Fuel Pump

SUBTRACT: 2.4 lbs. at 104.0 in. arm.

PRELIMINARY PROCEDURE

Applicable only to Model 269A Helicopter Serial Nos.
0011 through 0262 equipped with P N 269A4626 fuel
booster pump installed in sump of main fuel tank assembly.

- a. Check all cockpit electrical switches for OFF condition.

CAUTION

Pay particular attention to MAG switch.

- b. Remove fuel tank cap and place container below drain line located on left-hand side of frame section; position fuel drain valve control in OPEN position and drain fuel tank; install fuel tank cap.
- c. Remove main fuel tank firewall assembly, per HMI.
- d. Remove two nuts securing main fuel flex line and fuel flex drain line to booster pump.
- e. Disconnect wiring from fuel low warning light switch at bottom of fuel tank; disconnect electrical leads at pump motor.
- f. Remove bolts, washers, nuts and clamp securing booster pump to sump flange at bottom of fuel tank; remove booster pump from fuel tank. (See Figure 1)
- g. Install new gasket and sump cap to bottom of fuel tank, using existing nuts, washers and bolts; reinstall clamp to secure wiring to fuel low warning switch.
- h. Reconnect wiring to fuel low warning switch.
- i. Install union and "O" ring to sump cap.
- j. Install nut and "O" ring on outlet and strainer; secure outlet and strainer assembly to sump cap.
- k. Install main fuel flex line to outlet and strainer assembly.
- l. Install flex fuel drain line to union on sump cap.
- m. Reinstall firewall assembly, per HMI.
- n. Position flex fuel drain line on fuel drain valve fitting in firewall pan, secure with nut; position fuel drain valve to CLOSED position.
- o. Position main fuel flex line on fuel shut-off valve fitting in firewall pan; secure with nut.
- p. Fill fuel tank and inspect fuel lines for leakage.

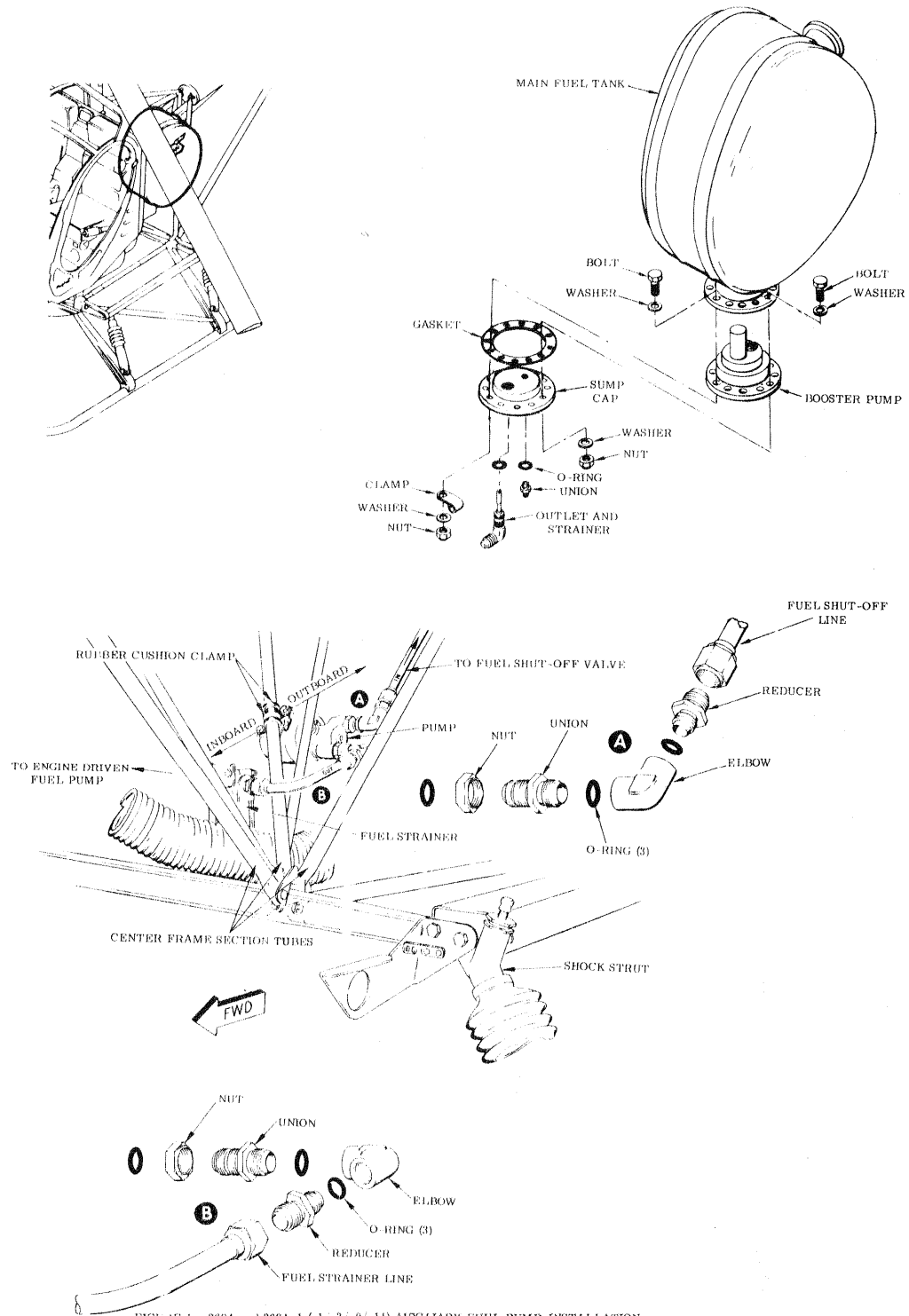


FIGURE 1. 269A and 269A-1 (-1/-3/-9/-11) AUXILIARY FUEL PUMP INSTALLATION

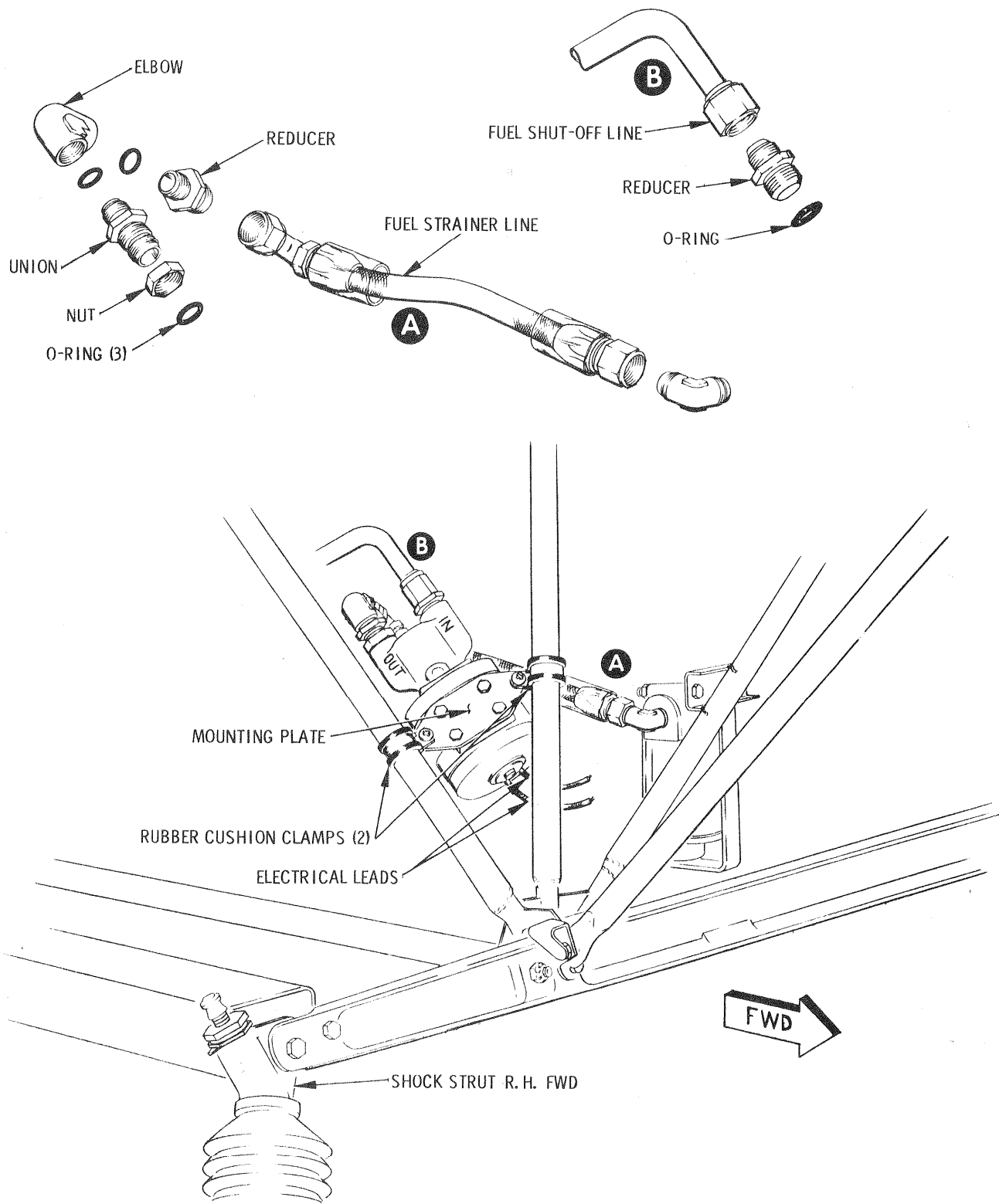


FIGURE 2. 269B(-5) AUXILIARY FUEL PUMP INSTALLATION