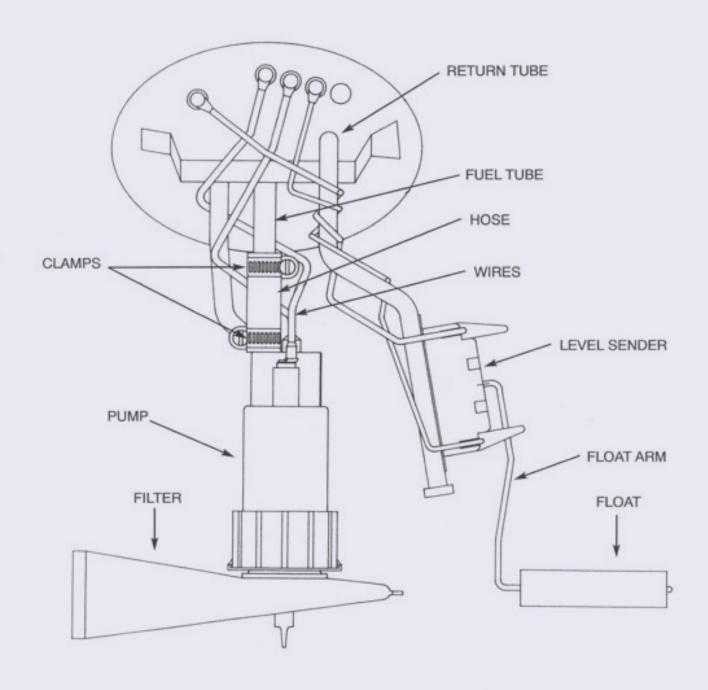
Installation Instructions

Fluid thinking. TI Automotive

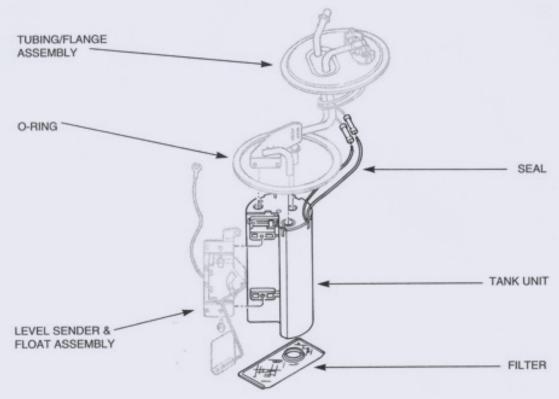
PUMP/BRACKET TYPICAL ASSEMBLY

FORD MOTOR COMPANY



TYPICAL TANK UNIT ASSEMBLY

FORD CORPORATION



TYPICAL INSTALLATION INSTRUCTIONS

FUEL PUMP REPLACEMENT INSTRUCTIONS

NOTE: The words "tank unit" used throughout these instructions means fuel pump tank unit and fuel level sender assembly.

I. PREPARATIONS

- A) Relieve Fuel System Pressure
- 1. Relieve the fuel system pressure by using a pressure gauge tool, Ford service tool number T80L-9974-B or equivalent. Connect the pressure gauge to the Schrader valve located on the engine fuel rail. Slowly open the pressure gauge valve and drain the fuel into a suitable container to relieve the fuel system pressure. (This procedure is necessary since the fuel system can retain gasoline under pressure for a considerable period of time. Opening a pressurized line could spray fuel creating a risk of fire and/or personal injury.)
- B) Remove the ground (-) cable from the battery and position it so that it cannot accidentally make a connection to the battery during the fuel pump replacement procedure.
- C) First, make sure an appropriate fire extinguisher is at hand. Then, using an OSHA approved gasoline transfer pump, drain the fuel tank

through the filler neck to remove as much fuel as possible. Store the fuel in approved safety containers only.

II. FUEL TANK REMOVAL

NOTE: Some vehicles have two fuel tanks. Be certain of which tank is to be removed before starting this operation.

- A) Safely raise and safely support the vehicle and locate the tank unit in the fuel tank. Supporting and partially lowering the fuel tank if necessary, disconnect the electrical connector at the tank unit to main harness connector.
- B) Prior to removing the retaining clips in the fuel line connectors, note their color and their respective fuel line location. Remove the retaining clips from the fuel line connectors and remove the fuel lines from the tank unit. Check for and remove any other hoses that may be attached to the fuel tank.
- C) Disconnect and remove the fuel filler neck, if necessary.
- D) Support the fuel tank and remove the retaining straps to allow the tank to be removed from the vehicle. Obtain assistance and remove the fuel tank being careful to avoid spilling fuel.
- E) Note the position and condition of all fuel tank

mounting pads and insulators used in isolating the fuel tank from the body. Mislocated, deteriorated, or incorrect pads and/or isolators can cause objectionable transmission of fuel pump noise into the vehicle.

III. REMOVE TANK UNIT FROM TANK

- A) Once the fuel tank has been removed from the vehicle it is necessary to clean all dirt and debris from the tank unit area. This is necessary to prevent contaminating the fuel tank while removing the tank unit.
- B) Using the appropriate Ford special service tool or equivalent, remove the tank unit retaining ring by rotating it counterclockwise. The special tool for this job is best, although other methods may be used. Whatever method is used, do not use any that can cause sparks and a resultant fire or explosion.
- C) Being careful not to drop any dirt into the fuel tank, bend the float arm or damage the float, remove the tank unit.

IV. REMOVE AND REPLACE TANK UNIT

- A) Remove the screws that attach the fuel level sender/float arm assembly to the tank unit, Save the screws to use for re-attaching the level sender assembly to the new tank unit. If necessary, detach the level sender terminal from the flange of the tank unit.
- B) Remove any other screws that might possibly attach the tank unit to the tubing or flange assembly.
- C) DO NOT CUT THE LEVEL SENDER WIRE.

Note the colors of the wires and any sleeve that may be over the terminals. Cut the tank unit wires as close to where the wires enter the plastic portion of the tank unit, as possible. Strip ¼" of insulation from the ends.

- D) Using the tool provided, and referring to the diagrams for various tank units, pry the tubing/ flange assembly and the plastic tank unit apart. The tubes should not have any of the retaining clips from the tank unit on them. Discard the old tank unit with filter attached.
- E) Install the new filter provided onto the new tank unit so that the new tank unit looks the same as the old one. It is best to set the filter on a hard surface and press the plastic hub of the tank unit into the filter.
- F) Press the tubing/flange assembly into the plastic portion of the new tank unit, being careful not to damage the filter.
- G) Maintaining proper polarity, crimp the butt connectors onto the wires, using the recommended tool.
- H) Re-attach level sender assembly to the new tank unit with the screws.

NOTE: The wires will either have black or red insulation or a colored sleeve over the terminal, where connected to underside of flange.

V. INSTALLATION OF TANK UNIT INTO FUEL TANK

- A) Thoroughly inspect the inside of the fuel tank for dirt and debris. Make sure that the fuel tank is clean before installing the tank unit. A clean tank will insure long pump service life.
- B) Install the new tank o-ring seal into the groove in the fuel tank opening.
- C) Carefully install the tank unit into the fuel tank.
- D) Install the retaining ring and tighten it by rotating in a clockwise direction.

VI. INSTALL FUEL TANK INTO VEHICLE

- A) Inspect the condition and location of all tank mounting pads, insulators, and brackets.
 Defective, missing, or mislocated pads and insulators will cause the transmission of excessive noise into the vehicle.
- B) Install the fuel line retaining clips, 5/16" (natural/clear) and 3/8" (black), into their respectively sized fuel line connector with the triangular portion of the clip facing away from the fuel line connector opening.
- C) Inspect and correct any defects in the fuel hoses, filler neck connections, or similar components related to the fuel tank installation.
- D) Obtain assistance and install the fuel tank in the vehicle and tighten the tank support strap bolts. Reconnect all lines and hoses and tighten securely. Connect the electrical connections. Make sure that any fuel tank shields, that may have been removed to replace the fuel pump, are reinstalled and placed correctly.
- E) Make certain that all hoses, fittings and electrical connections are correctly and securely attached.

VII. WRAP UP

- A) Using only equipment designed for use with gasoline, refuel the fuel tank with gasoline. (**NOTE: Be sure to clean up any fuel spills before proceeding.)**
- B) Inspect the system for fuel leaks and correct them, if required.
- C) With the ignition switch off, reconnect the ground (-) cable to the battery.
- D) Start the engine and inspect fuel lines and connections for leaks. Correct leaks if any exist.
- E) Clear any trouble codes in the electronic control system that may exist as a result of the fuel pump replacement procedure. Use the specific vehicle service manual for assistance, if necessary.

TROUBLE SHOOTING

Should the pump fail to operate:

Check the fuel pump fuse and fuel pump relay as outlined in the service manual.

If the pump has power and proper polarity, check the remainder of the fuel system as outlined in the service manual.

NOTE: This pump will not remedy malfunctions of the regular, injectors or other fuel system components.