FUEL PUMP ASSEMBLY REPLACEMENT INSTRUCTIONS

Thoroughly read and understand these instructions prior to replacing the fuel pump.

SAFETY: Repair procedures and techniques, tools and parts for servicing motor vehicles, as well as the skill and experience of the individual performing the work vary widely. It is not possible to anticipate all of the conceivable ways or conditions under which vehicles may be serviced, or to provide cautions as to all possible hazards that may result. Standard and accepted safety precautions and equipment should be used when handling toxic or flammable materials and lifting heavy vehicles. Safety goggles and other protection should be used during cutting, grinding, chiseling, prying, or any other process that can cause any type of bodily injury.

Wear appropriate clothing: long-sleeve shirt, trousers, safety glasses and safety shoes. Make sure your work area is well ventilated, away from heat, electricity, sparks, open flames, and definitely no smoking! Clean up spills immediately. A Class ABC fire extinguisher should be readily accessible. Consult repair manuals for any needed special tools.

SAFETY PRECAUTIONS
• Work on a level surface.
• Use safety stands for supporting vehicles and other heavy components, not a jack.
• Keep an ABC fire extinguisher close by.
• Work in a well ventilated area.
• Do not smoke or allow open flames or sparks in and around the work area.
• Allow the engine and vehicle to cool before beginning work on any part of the fuel system.
• Avoid inhaling gasoline fumes and prolonged contact with skin. Immediately wash any part of the body that has come in contact with gasoline.
• Store fuel in approved containers only.
• Clean up spills quickly and dispose of according to local codes.
• Disconnect battery cables prior to beginning work on any component of the fuel system.

This fuel pump assembly will not correct any issues related to faulty injectors, fuel filters, pressure regulators or any other malfunctioning component of the fuel system. Consult manufacturer specific service and repair manuals for procedures to properly diagnose fuel system failures.

This fuel pump is not approved for aircraft or marine use. Running this pump dry will result in damage to the pump. Keep pump, fuel tank, lines and fittings clean. Dirt and contamination will damage the pump.

1. Instructions
2. Strainer
3. O-Ring, Fuel Tank to Pump flange assembly
4. Fuel Line Retaining Clips
5. Butt Connector (2)
6. Wedge
7. Tank Unit

5/16" (Natural)
3/8" (Black)
Flat Bottom Tank Unit
Angled Bottom Tank Unit
RELIEVE FUEL SYSTEM PRESSURE
A. Remove the ground (-) cable from the battery and assure that it cannot accidentally make a connection to the battery during the fuel pump replacement procedure.
B. Connect Ford service tool T80L-99748 or equal to the fuel rail Schrader valve.
C. To relieve system pressure, slowly open the pressure gauge and drain the fuel into an approved container. CAUTION: Opening a pressurized line could spray fuel creating a risk of fire and/or personal injury.
D. At the fuel tank filler neck, use an approved gasoline transfer pump to remove the fuel from the fuel tank. Remove as much fuel as possible. Store the fuel in approved safety containers only.

FUEL TANK REMOVAL
Note: Certain vehicles are equipped with two fuel tanks. Make sure the correct tank is being removed.
1. Safely raise and safely support the vehicle.
2. Support the fuel tank and remove the retaining straps.
3. Slowly and carefully, with assistance, partially lower the fuel tank just enough to be able to mark and disconnect the electrical connectors.
4. Mark all lines, hoses and electrical connections for ease of re-assembly.
5. Remove the fuel line retaining clips and remove the fuel lines and fuel filler neck.
6. Check for, mark and remove any remaining fuel lines, hoses and electrical connections.
7. With assistance, completely remove the fuel tank from the vehicle.
8. Be careful and avoid spilling any fuel. Clean up spills immediately.
9. Note the position and condition of all fuel tank mounting pads and isolators used to isolate the fuel tank from the vehicle body. Deteriorated, improperly installed or incorrect pads or isolators can cause noise transmission into the vehicle.

FUEL PUMP ASSEMBLY REMOVAL
A. Thoroughly clean all dirt and debris from the fuel pump area. assure no dirt or other contaminants enter the fuel tank.
B. Using the appropriate Ford special service tool or equal, remove the tank unit retaining ring by rotating it counterclockwise. To prevent sparks and the danger of fire or explosion, use only non-ferrous tools when working around gasoline fuel systems and components.
C. Remove the fuel pump assembly being careful not to drop any dirt into the fuel tank, bend the float arm or damage the float.

D. Remove and save the screws that attach the fuel level sender/float arm assembly to the tank unit. If necessary, detach the level sender terminal from the flange of the tank unit.
E. Remove any other screws, and save for re-assembly, that attach the tank unit to the tubing or flange assembly.
F. DO NOT CUT THE LEVEL SENDER WIRE.
Note the colors of the wires and any sleeves covering the terminals. Cut the tank unit wires where they exit the tank unit, leaving about 1" remaining. Strip 1/4" of insulation from each end.

G. Refer to FIG. 2. Using a screwdriver or similar prying device and the enclosed horseshoe shaped wedge, pry the tubing/flange assembly and the plastic tank unit apart. Remove any old retaining clips from the tank unit. Discard the old tank unit with strainer attached.

TUBE RETAINING CLIP
WEDGE

FIG. 2

H. Install the provided new strainer. Set the strainer on a hard surface, position the tank unit and press down being careful not to damage the strainer.
I. Install the tubing/flange assembly into the new tank unit. Be careful not to damage the strainer.
J. Maintaining proper polarity, crimp the butt connectors onto the wires using a crimping tool. Note: The wires will either have black or red insulation or a colored sleeve covering the terminal at the underside of the flange.

INSTALLING FUEL PUMP ASSEMBLY
A. Thoroughly clean and inspect the inside of the fuel tank for dirt and debris. Dirt and rust will damage the new fuel pump and void warranty.
B. Install the new tank O-ring seal into the groove in the tank opening.
C. Carefully install the fuel pump assembly into the fuel tank.
D. Install the retaining ring and tighten it by rotating in a clockwise direction.

INSTALLING THE FUEL TANK INTO VEHICLE
A. Inspect the position and condition of all fuel tank mounting pads, isolators and brackets. Deteriorated, missing, or improperly installed or incorrect pads or isolators can cause noise transmission into the vehicle.
B. With the triangular portion of the clip facing away from the fuel line connector opening, install the fuel line retaining clips (Fig. 3), 5/16" (natural/clear) and 3/8" (black), into the correct size fuel line connector. A "snap" indicates the clip is in proper position.

FUEL LINE CONNECTOR
FUEL LINE RETAINING CLIP

FIG. 3

C. Inspect and replace any deteriorated lines, lines, filler neck, electrical connectors, fuel tank straps, bolts and fittings.
D. With assistance, reinstall the fuel tank in the vehicle. Reconnect all electrical connectors, lines and hoses and tighten securely. Install fuel tank support straps and tighten the bolts. Make sure that any fuel tank shields, that may have been removed to replace the fuel pump, are reinstalled correctly.

FINALLY
A. Fill the fuel tank with about 3 gallons of clean, fresh fuel. Check for leaks and repair. Be sure to clean up any fuel spills before proceeding.
B. With the ignition key removed, reconnect the ground (-) cable to the battery.
C. Insert the key, start the engine and inspect fuel lines and connections for leaks. If any leaks exist, stop the engine and correct.
D. Clear any trouble codes that may exist as a result of fuel pump replacement. Refer to manufacturer service manuals for assistance.

TROUBLESHOOTING
If the pump fails to operate: Check the fuel pump related connectors, fuel pump fuse, fuel pump relay and grounds. Refer to manufacturer service manuals.