Typical In-Tank Electric Fuel Pump Installation Instructions

CAUTION: Gasoline is involved, so work in a well ventilated area away from sparks and open flames. To reduce the risk of fire and personal injury, relieve the fuel system pressure before servicing fuel system components.

A. FUEL SYSTEM PRESSURE RELIEF

- 1. Remove the "fuel pump" fuse from the fuse block.
- Crank engine engine will start and run until fuel pressure in tubes is reduced. Engage starter for another 3 seconds to assure relief of any remaining pressure.
- With ignition "OFF" replace fuel pump fuse. Unless this procedure is followed, fuel spray could occur when fuel lines are disconnected.

B. FUEL PUMP AND SENDER ASSEMBLY REMOVAL

- Remove the negative cable from the battery.
 Have a Class B fire extinguisher near the work area.
- 2. Drain fuel tank.
- 3. Disconnect electrical connectors and fuel hoses from sender assembly.
- 4. Remove fuel level sender retaining cam ring.
- 5. Remove fuel level sender assembly from tank.
- 6. Have the tank professionally cleaned. Dirt, rust and scale, if not removed, will destroy the pump.

AVOID BENDING THE PUMP MOUNTING BRACKET AND THE FLOAT ARM WHEN HANDLING THE FUEL LEVEL SENDER.

C. FUEL PUMP AND STRAINER REMOVAL

- Note position of strainer on pump and mark. Remove strainer by rotating in one direction while pulling off, and discard.
- 2. Disconnect electrical terminals from pump.
- Remove pump from sender assembly.
 a) If unit has a pulsator, remove pump by placing assembly upside down on the bench. Grasp pump and push downwards. Pull pump inlet away from bracket and pull pump and pulsator off fuel tube. Discard pulsator.
 b) If unit has a rubber hose coupling without pulsator, remove clamps, cut coupler and discard, then follow the procedure as in 3a.

NOTE: PULSATOR MAY NOT BE REQUIRED WITH THE NEW PUMP. USE ONLY THE HOSE AND CLAMPS PROVIDED. CHECK INSTRUCTIONS SUPPLIED WITH PUMP FOR SPECIFIC DIRECTIONS.

D. FUEL PUMP INSTALLATION

- Lubricate the fuel hose and pump outlet with a small amount of petroleum jelly. Place coupler and clamp on fuel pump and place second clamp on fuel hose.
- 2. Place assembly upside-down on bench. Place rubber insulator on inlet of pump. Install pump and coupler in same manner as removed, pushing downward on pump while fitting inlet into mounting bracket. Seat rubber insulator and pump securely in mounting bracket. Tighten both clamps securely, if applicable. Reposition foam rubber sleeve against the insulator.
- 3. Reconnect electrical terminals to the fuel pump, making certain polarity is observed (negative (-) terminal to grounded lead wire). If the pump being replaced had a Metri-Pac® connector, select the appropriate leads to match the pump terminals to those on the hanger assembly.
 - a) If leads on sending unit have ring terminals for screw connector, use the enclosed screw, nut, and lock washer to attach ring terminal to the spade terminals of the pump. (Torque nuts to 10 in. lbs.)
 - b) If leads on sending unit have female spade terminals, make certain they are secure (squeeze sides of terminal with pliers to provide a tight fit).
 - c) If the pump being serviced has a welded ground wire and terminal that won't fit the pump terminals, it must be adapted using the wire provided. Simply cut the wire (not too short!). Strip off a section of the insulation and solder the replacement wire in place. Do not use electrical tape, as gasoline will dissolve it.
- 4. Install the new strainer on the pump in the same position as original (see step C-1). Push the new strainer straight on until fully seated by applying pressure to the outer edge of the metal ferrule, being careful not to damage the strainer.
- 5. Inspect the pump to see that it is properly seated on the insulator and in the mounting bracket.

TO PREVENT DAMAGE TO THE PUMP, DO NOT RUN PUMP DRY.

E. FUEL PUMP AND SENDER ASSEMBLY INSTALLATION

- Replace and position assembly in tank; use new gasket provided.
- 2. Install cam locking ring and tighten.
- 3. Reconnect hoses and electrical connectors.
- 4. Reconnect battery and refill tank.
- 5. Start car and inspect hose connections and sender unit gasket for fuel leaks.

WARNING: NOT FOR MARINE, AIRCRAFT, OR NON-AUTOMOTIVE USE.

Typical Tank Removal/Installation

After the positive diagnosis of a failed in-tank electric pump has occurred, the proper service procedure must be followed. Before doing any service work, disconnect the negative battery cable. This will prevent unnecessary arcing.

Step 1 ▶

Remove as much gasoline from the tank as possible. This should be done using a gas caddy containing a storage tank. The fuel should be disposed of properly or filtered for reuse on the vehicle. Remember, all you are doing at this point is making the tank lighter. The tank will always contain some gasoline and explosive vapors.



Step 2 ▶

Raise the vehicle on a lift or jack, allowing sufficient room for a transmission jack to support the tank. Always block the wheels to prevent the vehicle from moving. Disconnect the electrical terminals from the assembly. Also remove the fuel lines, noting which line went to the fittings on the pump. Loosen the straps that hold the tank to the body of the vehicle. Always inspect any components that could be damaged, and replace if necessary.



Step 3 ▶

After the tank removal, plug the filler neck hole and clean the area of the tank where the pump flange is located. There is usually dirt and rust in this area. Mark the orientation of the fuel lines and electrical connections. The tank lock ring can now be removed using a nonferrous (brass) punch. The tank can now be cleaned and the pump replaced.



REVERSING THESE PROCEDURES WILL COMPLETE THE PUMP REMOVAL AND REPLACEMENT PROCESS. REMEMBER, ALWAYS WEAR PROTECTIVE EYE TREATMENT AND PROPER CLOTHING. WORK IN A WELL-VENTILATED AREA AND HAVE A CLASS B/C FIRE EXTINGUISHER IN THE WORK AREA.