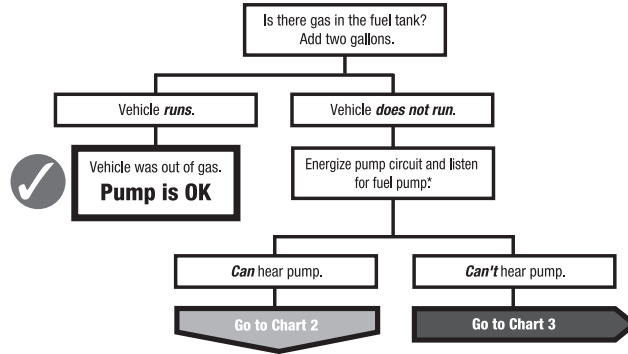


# Fuel System Diagnosis

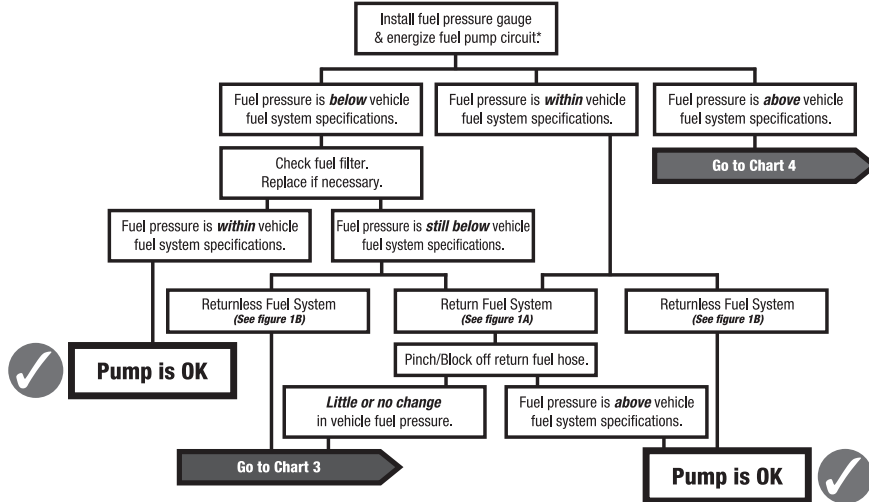
Use these Diagnostic Charts to quickly and accurately determine the exact cause of electric fuel system malfunction. The fuel pump is only one of many possible factors that must be evaluated before the proper repairs can be performed.

## Chart 1

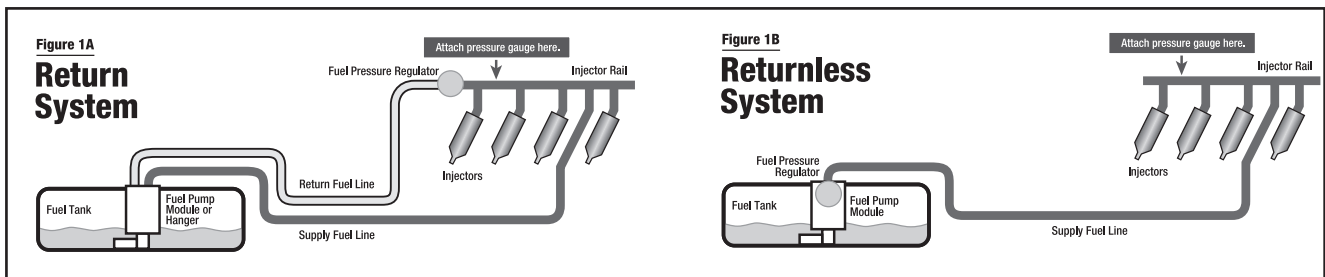


\* Some vehicles have a pigtail coming out of the wiring harness which can be connected to the positive battery terminal to energize the pump. If not, the fuel pump relay can be removed and a jumper wire can be installed across the switched side of the relay circuit.

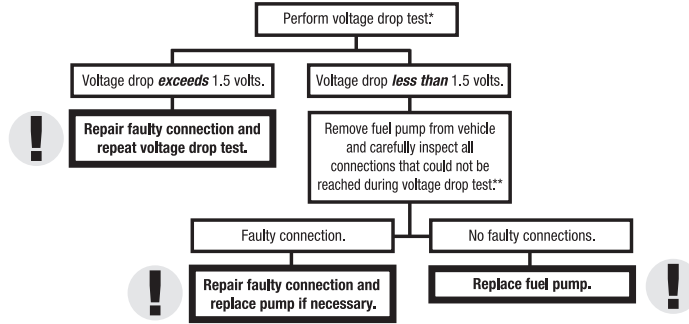
## Chart 2 (Pressure Test)



\* Make sure the pressure gauge you use is rated for the specified fuel system pressure of the vehicle. Most vehicles will have a Schrader valve on the fuel rail to hook a pressure gauge to. If it does not, refer to Figures 1A & 1B for correct gauge location or refer to the OE service manual for correct gauge connection.



## Chart 3 (Voltage Test)



\* While performing the voltage drop test, it is critical that the pump remain wired into the circuit. Failure to do this will make this test invalid. It is important to perform the voltage drop test on both the positive and the negative sides of the circuit. Test points should be chosen to cover as much of the circuit as is possible to reach. (See Figure 2)

\*\* Inspect for melted insulation on wiring close to connectors. Check for melted plastic or black soot where positive and negative terminals enter the connector. This evidence indicates a faulty connector. Check for loose connections where positive or negative wires attach to the pump hanger bracket assembly.

## Chart 4

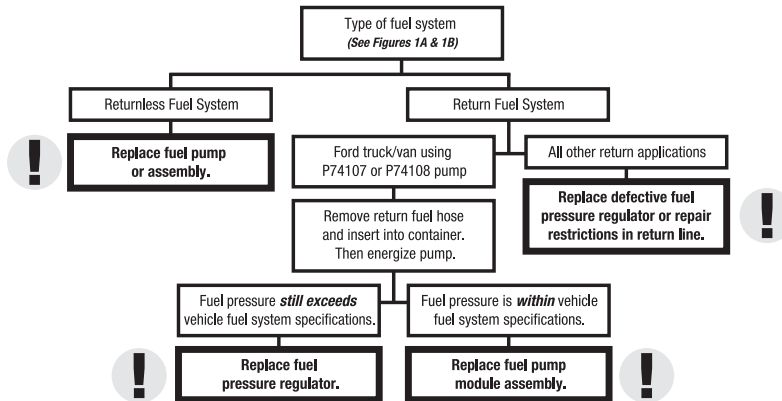
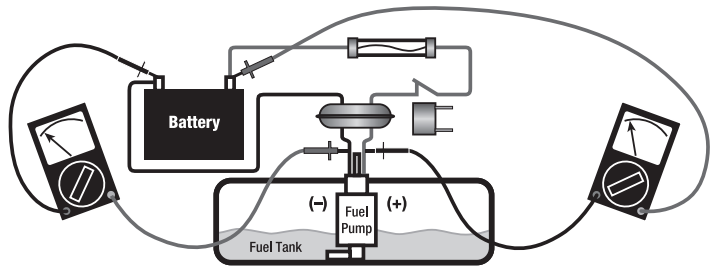


Figure 2

## Voltage Drop Test

- The sum of the voltage drops of the positive and negative sides of the circuit should not exceed 1.5 volts.
- If it does, check voltage drops across each connector, relay, fuse and ground, and across the wiring, for a faulty connection.
- Pump must be wired into the circuit and energized during this test.
- Use of a digital-type volt/ohm meter is recommended.



### CAUTION:

Gasoline is volatile and vapors will settle in low areas, so work in a well-ventilated space away from sparks or open flame such as a pilot light. Have a class B fire extinguisher close by. To eliminate the chance of fire or personal injury, the fuel system pressure must be relieved before servicing any fuel system component. Refer to the manufacturer's service manual for specific steps.