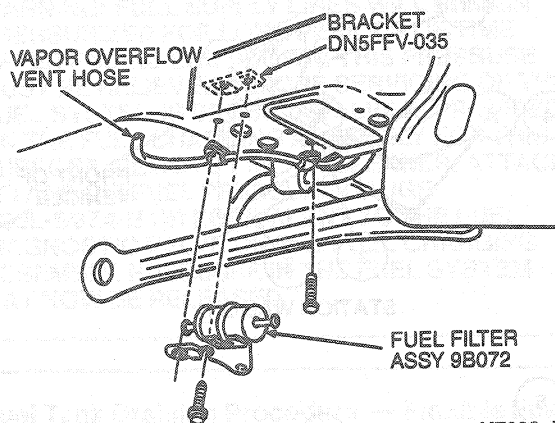


DESCRIPTION AND OPERATION (Continued)

FF Vehicles

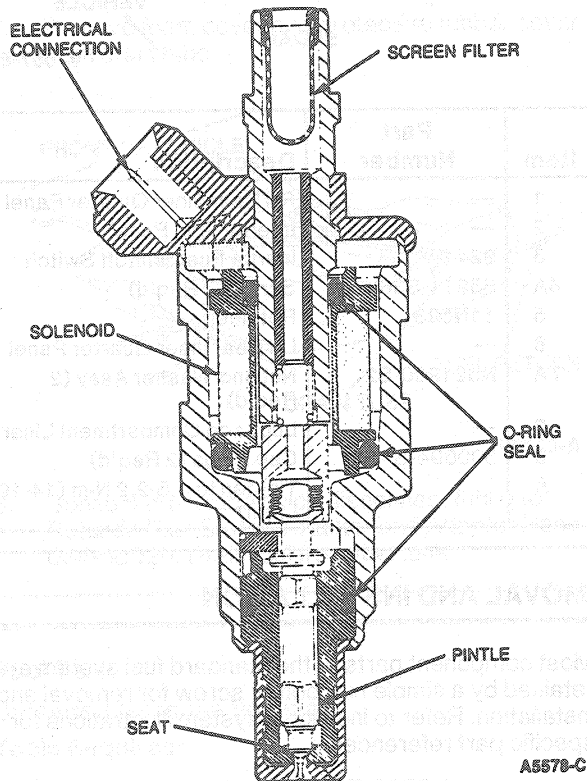


NOTE: When replacing fuel filters, use the fuel filter specified for the engine being serviced.

Injector Filter Screen

An injector filter is located at the top of each injector and is not serviceable. If injector screen becomes clogged, the complete injector assembly must be replaced. Refer to Section 03-04A (3.0L / 3.0L FF), 03-04B (3.0L / 3.2L SHO), and 03-04C (3.8L) for fuel injector information.

Fuel Injector



Fuel Pump (FP)

NOTE: The FF vehicle fuel pump operates the same as unleaded gasoline fuel pumps, but is made of methanol compatible materials.

The fuel system has a fuel pump relay controlled by the powertrain control module (PCM) (12A650), which provides power to the fuel pump under various operating conditions. When the ignition switch is in the OFF position, the contacts of the powertrain control module (PCM) power and fuel pump relays are open. The fuel pump and powertrain control module (PCM) relays are contained in the constant control relay module (CCRM) (12B577) which is serviced as a separate unit.

When the ignition switch is first turned to the ON position, the powertrain control module (PCM) power relay is energized, closing its contacts. Power is provided to both the fuel pump relay and a timing device in the powertrain control module (PCM). The fuel pump runs through the contacts of the fuel pump relay and the inertia switch. If the ignition switch is not turned to the START position, the timing device in the powertrain control module (PCM) will open the ground Circuit 57 after approximately one second. Opening the ground circuit de-energizes the fuel pump relay (opening its contacts), which in turn de-energizes the fuel pump. This circuitry provides for pre-pressurization of the fuel system.

When the ignition switch is turned to the START position, the powertrain control module (PCM) operates the fuel pump relay to provide fuel for starting the engine while cranking.

After the engine starts, the ignition switch is returned to the ON position, and power to the fuel pump is again supplied through the fuel pump relay. The powertrain control module (PCM) senses engine speed and shuts off the fuel pump by opening the ground circuit to the fuel pump relay when the engine stops, or is below 120 rpm.

The fuel system uses a fuel tank sending unit and pump assembly. The fuel tank has an internal reservoir in which the fuel tank sending unit and pump rests. This design increases satisfactory pump operation during extreme vehicle maneuvers and steep vehicle attitudes with low tank fill levels.

The fuel pump is mounted on the fuel sender assembly inside the fuel tank. This assembly includes a check valve which is inside the fuel pump outlet. The function of this valve is to maintain pressure in the system after the vehicle is shut down.