

COMPONENTS (Continued)

The CSI assembly has a stainless steel housing that contains a bottom-feed fuel injector and spray bar with two fuel line connections. One connection is the fuel supply inlet to the CSI from the fuel pump (FP). The second line connection is the CSI outlet and the fuel supply inlet for the fuel injection supply manifold (9F792).

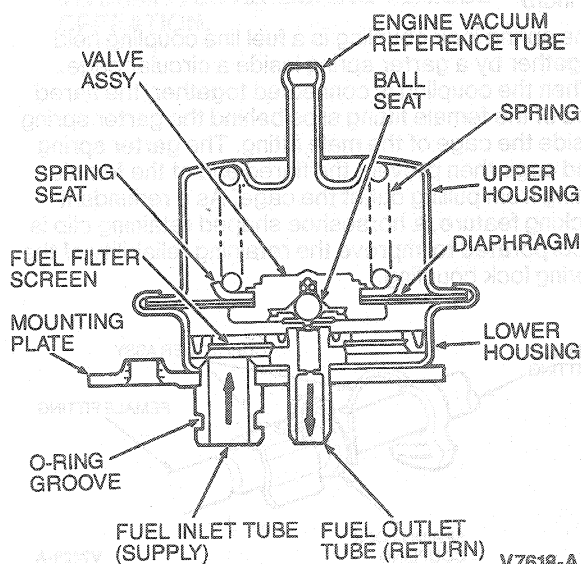
The fuel pressure relief valve (9H321) is located on the side of the CSI housing.

Refer to the illustration under Air Throttle body Assembly.

Fuel Pressure Regulator

NOTE: The flexible fuel pressure regulator (9C968) operates the same as the unleaded gasoline fuel pressure regulator. However, the internal components are strictly methanol compatible.

The fuel pressure regulator is attached to the fuel injection supply manifold assembly downstream of the fuel injector. It regulates the fuel pressure supplied to the fuel injectors. The fuel pressure regulator is a diaphragm-operated relief valve in which one side of the diaphragm senses fuel pressure and the other side is subjected to intake manifold pressure. The nominal fuel pressure is established by a spring preload applied to the diaphragm. Balancing one side of the diaphragm with manifold pressure maintains a constant fuel pressure drop across the fuel injector. Fuel, in excess of that used by the engine, is bypassed through the fuel pressure regulator and returned to the fuel tank.

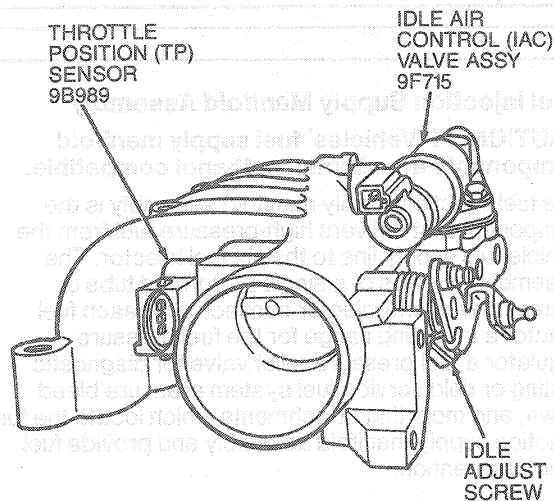


Throttle Body (TB) Assembly

The throttle body assembly controls airflow to the engine through a single butterfly-type valve. The throttle position is controlled by a conventional cable/four bar throttle linkage. The body is a single-piece ECP casting made of aluminum. It has a single bore with an air bypass channel around the throttle plate. This bypass channel controls both cold and warm engine idle airflow as regulated by an idle air control valve (IAC valve)(9F715) assembly mounted directly to the throttle body. The valve assembly is an electro-mechanical device controlled by the powertrain control module (PCM). It incorporates a linear actuator which positions a variable area metering valve.

Other features of the throttle body assembly include:

1. An adjustment screw to set the throttle plate at a minimum idle airflow position.
2. A pre-set stop to locate the WOT position.
3. A throttle body-mounted throttle position sensor (TP sensor)(9B989).
4. A positive crankcase ventilation (PCV) fresh air source located downstream of the throttle plate.
5. Individual ported vacuum taps (as required) for PCV and EVAP control signals.



The FF vehicle throttle body has been modified for use with methanol fuel by the addition of a cold start injector (CSI).

