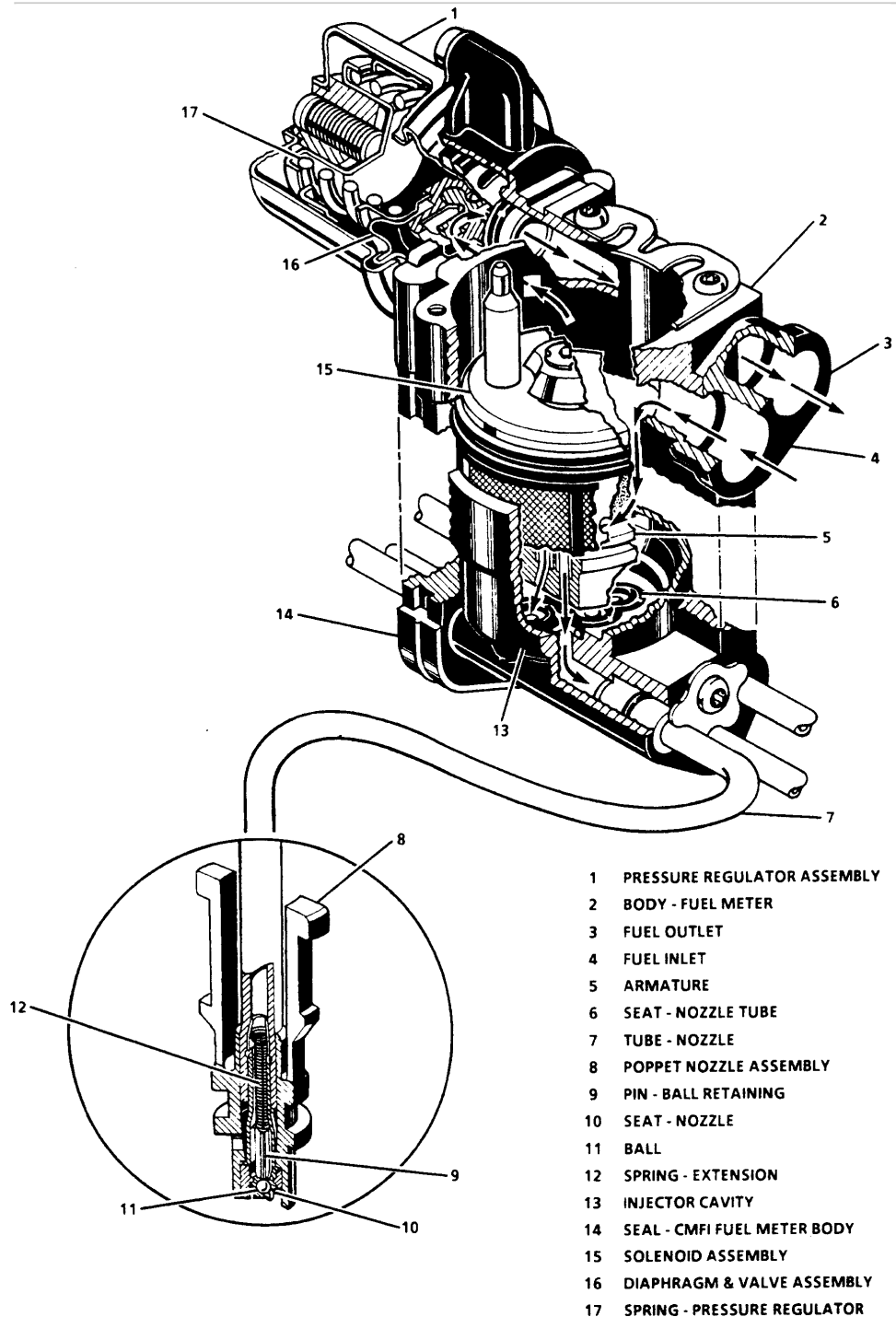


1993 Chevy Truck S10/T10 Blazer 4WD V6-262 4.3L VIN W CPI

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CENTRAL MULTIPOINT FUEL INJECTOR (CMFI) ASSEMBLY

CMFI Assembly



The non-repairable CMFI injector assembly consists of a fuel meter body, gasket seal, fuel pressure regulator, fuel injector and six poppet nozzles with fuel tubes. The CMFI assembly is housed in the lower manifold assembly. Fuel system pressure range is 380-420 kPa (55-61 psi).

The CMFI assembly has a low gain fuel pressure regulator to maintain pressure at the fuel injector through a range of fuel recirculation rates from the in-tank fuel pump. With the ignition "ON" and engine "OFF," fuel pressure at the pressure test connection should be 380-420 kPa (55-61 psi) for 2 seconds. Fuel enters the fuel meter body through the inlet and flows into the injector cavity. When the control module de-energizes the injector solenoid, fuel is recirculated through the pressure regulator. Fuel pressure applied to the regulator diaphragm acts against the spring force and opens the valve from its seat. This allows fuel to flow through the fuel meter body outlet and back to the fuel tank via the fuel return line. When the control module energizes the injector solenoid, the armature lifts off the six fuel tube seats, delivers fuel through the fuel meter body and out to the six poppet nozzles. The reduction in fuel recirculation reduces pressure on the regulator diaphragm and the spring force closes the valve toward its seat until pressure is regained.

When the control module energizes the injector solenoid, pressurized fuel flows through fuel tubes to each poppet nozzle. An increase in fuel pressure will cause the poppet nozzle ball to open from its seat against the extension spring force and allows fuel to flow from the nozzle (at approximately 350 kPa). De-energizing the injector solenoid closes the armature and reduces the fuel pressure acting on the poppet nozzle ball. The extension spring closes the ball to the seat and checks pressure between the ball/seat and the injector armature/fuel tube shutoff.