

2.31 HIGH PRESSURE FUEL REGULATOR FOR THE SERIES 50G ENGINE

The Conoflow high pressure fuel regulator is typically mounted in the vehicle's engine compartment. The function of the regulator is to supply fuel flow based on engine demand at a reduced pressure. The regulator reduces tank pressure, which can be as high as 3600 PSI, to approximately 110 PSI. The regulator is coolant heated with coolant supply from the cylinder head and return to the water pump inlet. The regulator includes a pressure relief device to protect down stream components. The pressure relief valve is set to open at approximately 300 PSI. The pressure relief is connected to the vehicle gas vent system. The gas inlet connection to the regulator is a female SAE No. 6 O-ring connection. The gas outlet is a female SAE No. 8 O-ring connection. The pressure relief is a male 1/4 NPTF connection. Coolant supply and return connections are 1/4 inch NPTF female pipe thread holes. See Figure 2-89.

NOTE:

The O-ring material is nitrile. If the O-ring is replaced, it must be replaced by a nitrile based O-ring.

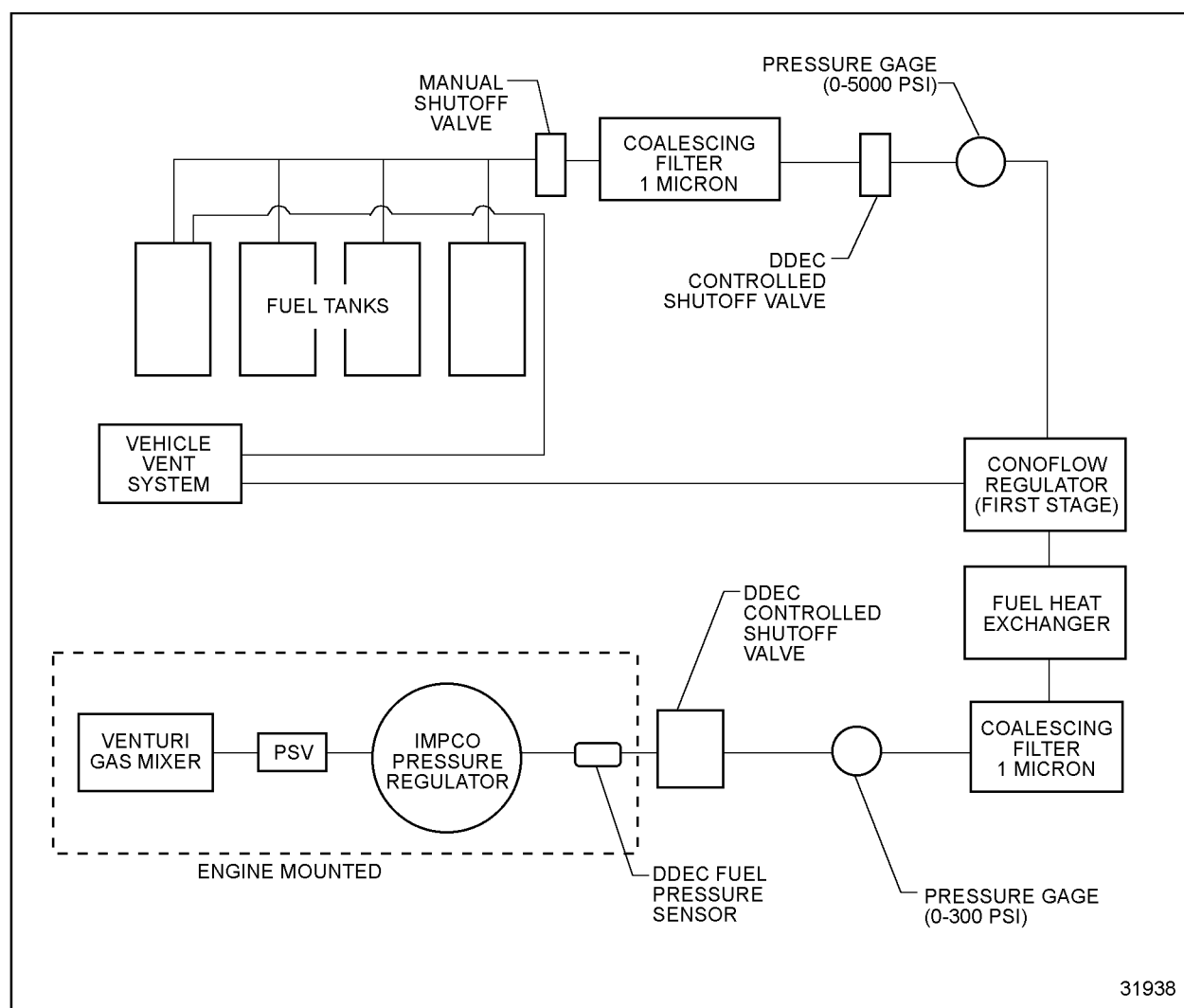


Figure 2-89 High Pressure Fuel Regulator for Series 50G Engines

2.31.1 Replacement of the High Pressure Regulator for the Series 50G Engine

The high pressure fuel regulator is not serviceable and should be replaced as a unit. No adjustment is required.

2.31.2 Removal of the High Pressure Regulator for the Series 50G Engine

Remove the high pressure fuel regulator as follows:

1. Vent fuel system, refer to Section 2.43.
2. Disconnect fuel supply pipe at regulator inlet.
3. Disconnect fuel pipe from regulator outlet.
4. Drain coolant.
5. Disconnect coolant supply and return hoses at regulator.
6. Disconnect vent pipe at regulator.
7. Remove two M8 bolts attaching the regulator to its mounting bracket.
8. Remove regulator from bracket and remove fittings for reuse.

2.31.3 Installation of the High Pressure Regulator for the Series 50G Engine

Install the high pressure fuel regulator as follows:

1. Install gas inlet and outlet O-ring fittings.

NOTE:

The O-ring material is nitrile. If the O-ring is replaced, it must be replaced by a nitrile based O-ring.

2. Position regulator on mounting bracket.
3. Install two M8 mounting bolts.
4. Connect fuel outlet pipe.
5. Connect fuel supply pipe.
6. Connect coolant supply and return hoses.
7. Refill with coolant.
8. Connect vent pipe.
9. Open fuel shutoff valves and crank engine to supply fuel to regulator.
10. Check for leaks, refer to Section 2.43.3.