

**A L L Diagnostic Trouble Codes ( DTC ): P Code Charts****P0190****B : Fuel Rail Pressure Sensor. P0190, P0192, P0193****B1 : CHECK THE FUEL PRESSURE REGULATOR SUPPLY VOLTAGE**

1. Turn the ignition switch to the OFF position.
2. Disconnect the fuel pressure regulator electrical connector IL012.
3. Turn the ignition switch to the ON position.
4. Measure the supply voltage to the fuel pressure regulator electrical connector IL012 pin 1, (OY) and GROUND.

**Is the supply voltage between 4.5 and 5.5 volts?****Yes**Goto **B2****No**

REPAIR the circuit between IL012 pin 1, (OY) and EN1012. For additional information, refer to wiring diagrams. CLEAR the DTC. TEST the system for normal operation.

The fault could be in any of the components or sensors in the 5 volt supply circuit, or the PCM If the DTC is repeated, INSTALL a new PCM.

**B2 : CHECK THE FUEL PRESSURE REGULATOR GROUND CIRCUIT FOR OPEN CIRCUIT**

1. Turn the ignition switch to the OFF position.
2. Measure the resistance between the fuel pressure regulator electrical connector IL012, pin 2, (BG) and GROUND.

**Is the resistance greater than 10,000 ohms?****Yes**

REPAIR the circuit between IL012, pin 2, (BG) and ground at ILS02. For additional information, refer to wiring diagrams. CLEAR the DTC. TEST the system for normal operation.

**No**Goto **B3****B3 : CHECK THE FUEL PRESSURE REGULATOR SIGNAL CIRCUIT FOR OPEN CIRCUIT**

1. Disconnect the PCM electrical connector, EN1.
2. Measure the resistance between the fuel pressure regulator electrical connector IL012, pin 3, (U) and EN1, pin 73.

**Is the resistance greater than 5 ohms?****Yes**

REPAIR the circuit between IL012, pin 3, (U) and EN1, pin 73, (U). For additional information, refer to wiring diagrams. CLEAR the DTC. TEST the system for normal operation.

**No**Goto **B4****B4 : CHECK THE FUEL PRESSURE REGULATOR SIGNAL CIRCUIT FOR SHORT TO GROUND**

1. Measure the resistance between the fuel pressure regulator electrical connector IL012, pin 3 (U) and GROUND.

**Is the resistance less than 10,000 ohms?****Yes**

REPAIR the circuit between IL012 pin 3, (U) and EN1 pin 73, (U). For additional information, refer to wiring diagrams. CLEAR the DTC. TEST the system for normal operation.

**No**Goto **B5****B5 : CHECK THE FUEL PRESSURE REGULATOR CIRCUIT RESISTANCE**

1. Disconnect the fuel pressure regulator electrical connector IL012 pressure regulator.
2. Measure the resistance between the fuel pressure regulator pins 1 and

**Is the resistance between 10,000 and 12,000 ohms?****Yes**Goto **B6**

**No**

INSTALL a new fuel pressure regulator. CLEAR the DTC. TEST the system for normal operation.

**B6 : CHECK THE FUEL PRESSURE REGULATOR CIRCUIT RESISTANCE**

1. Measure the resistance between the fuel pressure regulator pins 2 and 3.

**Is the resistance between 22,000 and 33,000 ohms?**

**Yes**

Goto **B7**

**No**

INSTALL a new fuel pressure regulator. CLEAR the DTC. TEST the system for normal operation.

**B7 : CHECK THE FUEL PRESSURE REGULATOR CIRCUIT RESISTANCE**

1. Measure the resistance between the fuel pressure regulator pins 1 and 3.

**Is the resistance between 22,000 and 33,000 ohms?**

**Yes**

INSTALL a new powertrain control module (PCM).

**No**

INSTALL a new fuel pressure regulator. CLEAR the DTC. TEST the system for normal operation.