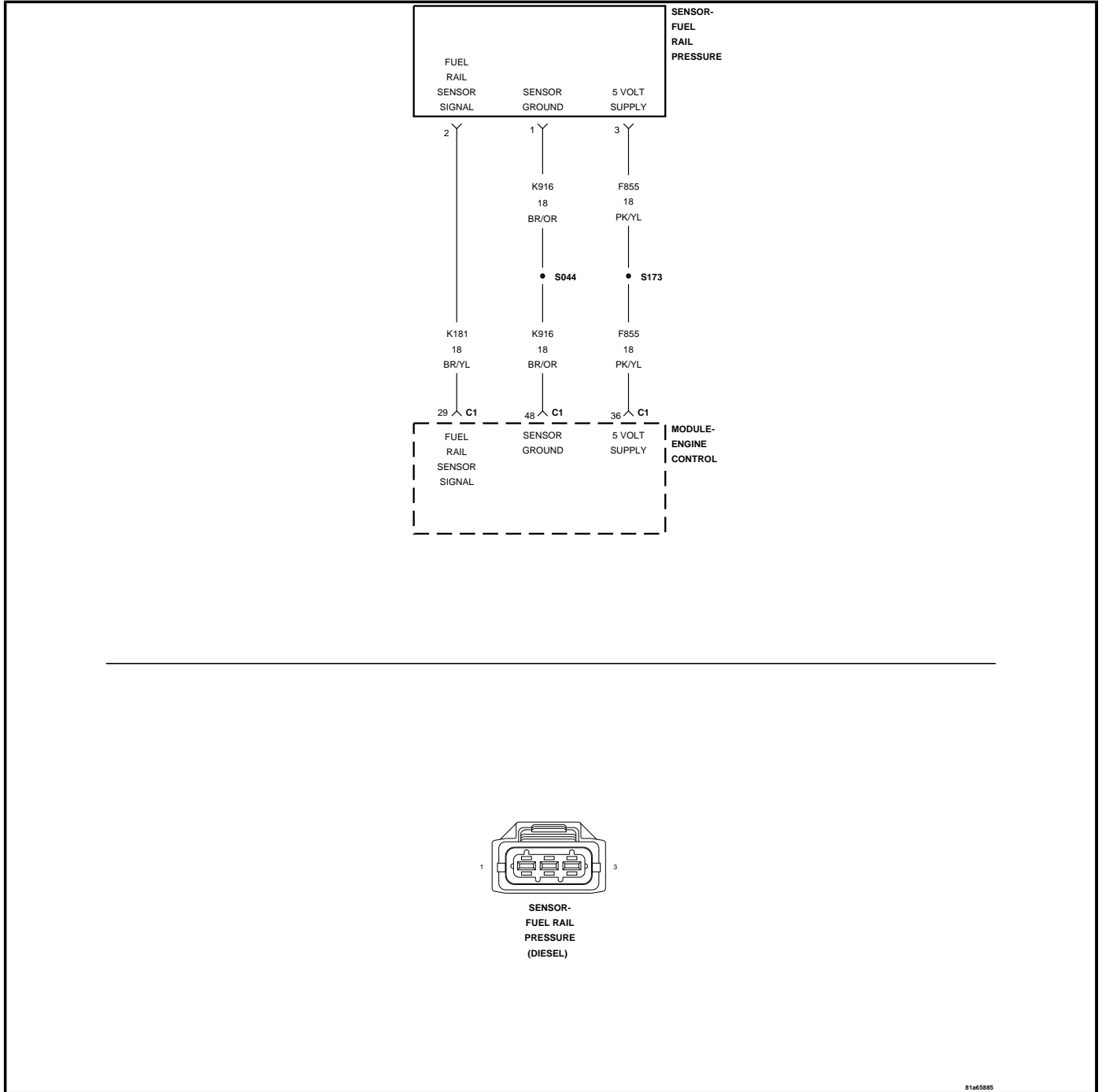


## P0087-FUEL RAIL PRESSURE TOO LOW



For a complete wiring diagram, refer to the **Wiring Information**.

### Theory of Operation

The Engine Control Module (ECM) will turn on the MIL lamp immediately after this diagnostic runs and fails. This DTC will cause active regeneration to be disabled. The ECM will turn off the MIL lamp after the diagnostic runs and passes in 4 consecutive drive cycles.

- **When Monitored:**

Engine running.

- **Set Condition:**

Actual fuel pressure differs from set point more than a calibrated amount for a calibratable amount of time.

Possible Causes
FUEL FILTER
EXTERNAL FUEL LEAKS
LOW FUEL PUMP MODULE FLOW DUE TO FAULTY IN TANK LIFT PUMP MODULE OR WIRING
HIGH PRESSURE PUMP
INJECTOR LEAKAGE
FUEL PRESSURE LIMITING VALVE

**Always perform the Pre-Diagnostic Troubleshooting procedure before proceeding. (Refer to 28 - DTC-Based Diagnostics/MODULE, Engine Control (ECM) - Standard Procedure).**

### 1. EXTERNAL FUEL LEAKS

**NOTE:** If P000F DTC is present, perform the diagnostics for P000F before continuing with this test.

1. Put on personal protective equipment.
2. Operate engine at idle when looking for fuel leaks.
3. Use the scan tool to operate engine at a variety of engine speeds.

#### **Any external fuel leaks detected?**

- Yes**
- Repair or replace component with external fuel leak.
  - Perform the POWERTRAIN VERIFICATION TEST - 6.7L. (Refer to 28 - DTC-Based Diagnostics/MODULE, Engine Control (ECM) - Standard Procedure).

- No**
- Go To [2](#)

### 2. OTHER DTCS

1. With the scan tool, read DTCs.

#### **Are any other injector/fuel pressure related DTCs present?**

- Yes**
- Troubleshoot other injector/fuel pressure related DTCs first.

- No**
- Go To [3](#)

### 3. CHECKING THE FUEL DELIVERY SYSTEM

1. Using the scan tool, monitor the fuel pressure reading from the Fuel Pressure Sensor at idle and at 2000 RPM.

#### **Is the fuel rail pressure reading higher at 2000 RPM than at idle?**

- Yes**
- (Refer to 29 - Non-DTC Diagnostics/Drivability - Diesel - Diagnosis and Testing) and perform the CHECKING THE FUEL DELIVERY SYSTEM diagnostic procedure.
- No**
- Replace the Fuel Pressure Sensor in accordance with the service information.
  - Perform the POWERTRAIN VERIFICATION TEST - 6.7L. (Refer to 28 - DTC-Based Diagnostics/MODULE, Engine Control (ECM) - Standard Procedure).