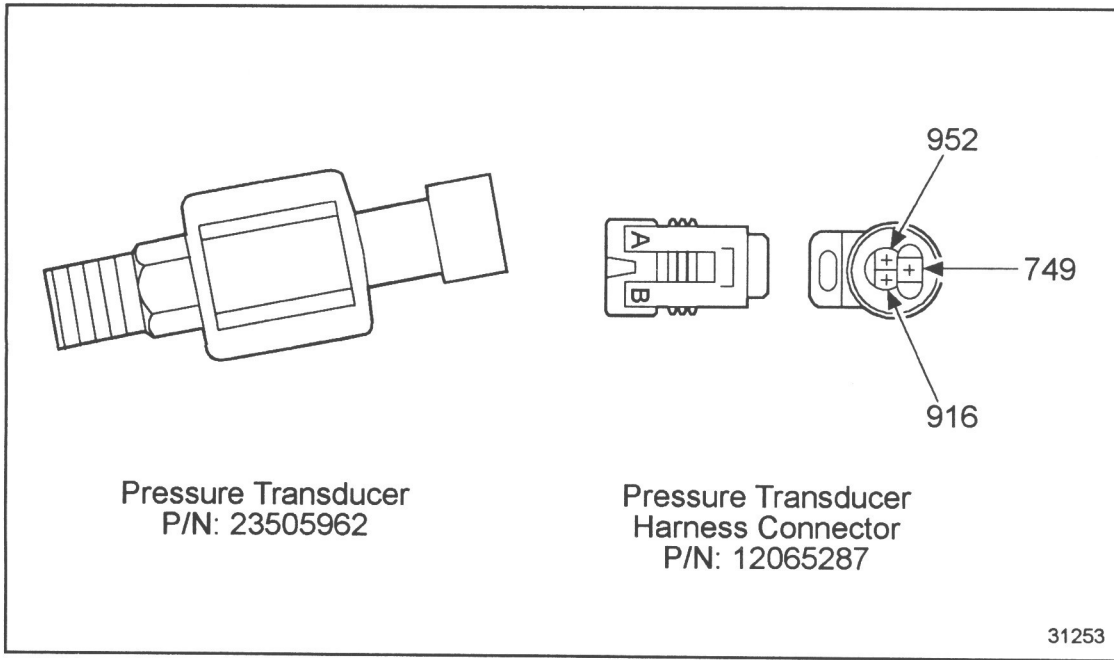


## 86 FLASH CODE 86 – PGS SENSOR HIGH

Section		Page
86.1	DESCRIPTION OF FLASH CODE 86 .....	86-3
86.2	SAE J1587 EQUIVALENT CODE FOR FLASH CODE 86 .....	86-3
86.3	TROUBLESHOOTING FLASH CODE 86 .....	86-3



**Figure 86-1 Pressure Transducer**

## 86.1 DESCRIPTION OF FLASH CODE 86

Flash Code 86 indicates that the pump pressure circuit failed high. For pressure transducer and connector, see Figure 86-1.

## 86.2 SAE J1587 EQUIVALENT CODE FOR FLASH CODE 86

The SAE J1587 equivalent code for Flash Code 86 is p 073 3.

## 86.3 TROUBLESHOOTING FLASH CODE 86

The following procedure will troubleshoot Flash Code 86.

### 86.3.1 Multiple Code Check

Perform the following steps to check for multiple codes.

1. Turn ignition ON.
2. Plug in DDR.
3. Read active codes.
  - [a] If active code 73/3 was logged, and no other codes were logged, refer to section 86.3.2.
  - [b] If active code 73/4 and any other codes were logged, refer to section 86.3.3.
  - [c] If any codes other than 73/3 were logged, refer to section 91.1.

### 86.3.2 Sensor Check

Perform the following steps to check the sensor.

1. Turn ignition OFF.
2. Disconnect the Pressure Governor System (PGS) sensor connector.
3. Turn ignition ON.
4. Start engine and operate the PGS in the PRESSURE mode.
5. Read active codes.
  - [a] If active code 73/3 and any other codes were logged, refer to section 86.3.5.
  - [b] If active code 73/4 and any other codes except 73/3 were logged, refer to section 86.3.3.

### 86.3.3 Return Circuit Check

Perform the following steps to check the return circuit.

1. Turn vehicle ignition OFF.
2. Disconnect the vehicle harness connector at the ECM. See Figure 86-2.
3. Install a jumper wire between pins A and B of the PGS sensor harness connector.
4. Measure resistance between sockets D3 and C3 on the vehicle harness connectors.
  - [a] If resistance measurement is less than or equal to 5  $\Omega$ , refer to section 86.3.4.
  - [b] If resistance measurement is greater than 5  $\Omega$ , or open, the return line (circuit #952) is open. Repair the open and refer to section 86.3.9.

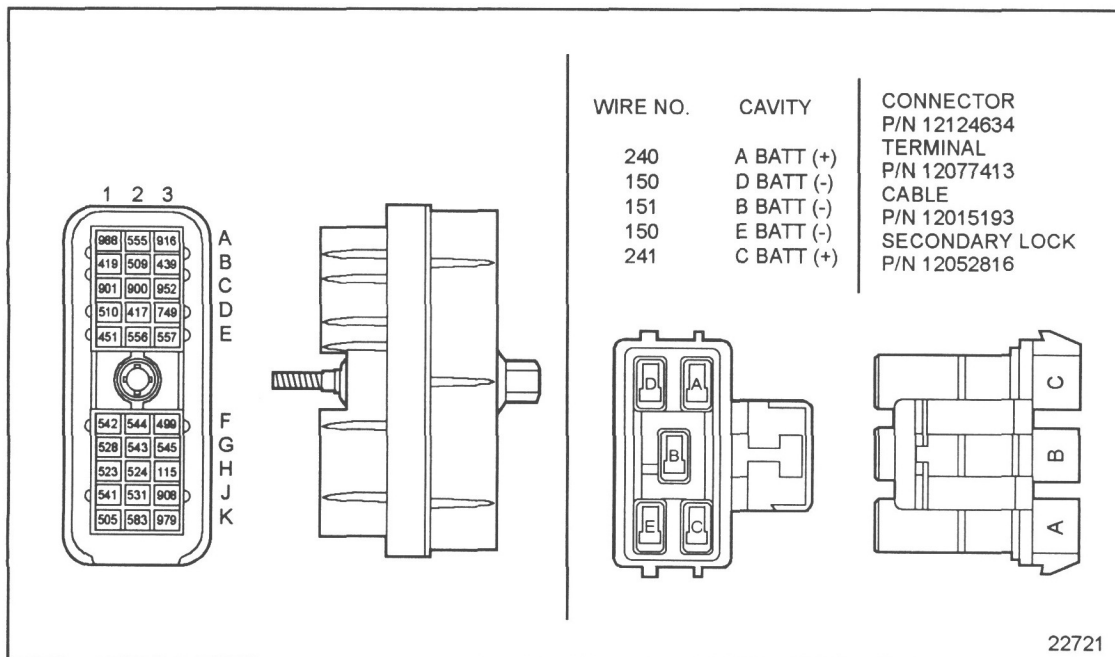


Figure 86-2 ECM Vehicle Interface Harness Connector

### 86.3.4 Check Pressure Governor System Connectors

Perform the following steps to check the PGS connectors.

1. Inspect terminals at the PGS sensor connector (both the sensor and harness side) for damage: bent, corroded, and unseated pins or sockets.
  - [a] If the terminals and connectors are damaged, repair them and refer to section 86.3.9.
  - [b] If the terminals and connectors are not damaged, replace the PGS sensor and refer to section 86.3.9.

### 86.3.5 Check for Short to +5 Volts

Perform the following steps to check for a short to the +5 volts.

1. Turn ignition OFF.
2. Disconnect the vehicle harness connectors at the ECM.
3. Measure resistance between sockets A3 and D3 on the engine harness connector.
  - [a] If the resistance measurement is greater than 100  $\Omega$  or open, refer to section 86.3.6.
  - [b] If the resistance measurement is less than or equal to 100  $\Omega$ , the signal line (#749) is shorted to the engine +5 volt line (#916). Repair the short and refer to section 86.3.9.

### 86.3.6 Check for Short to Battery +

Perform the following steps to check for a short to battery.

1. Remove both fuses to the ECM.
2. Disconnect the vehicle harness and 5-way power connectors at the ECM.
3. Measure resistance between socket D3 on the engine harness connector and battery (+).
4. Measure resistance between socket D3 of the engine harness connector, and the 5-way power harness sockets A and C.
  - [a] If the resistance measurement for all readings is greater than 100  $\Omega$  or open, refer to section 86.3.7.
  - [b] If the resistance measurement is less than or equal to 100  $\Omega$ , a short exists between the signal line (circuit #749) and battery (+). Repair short and reinsert fuses. Refer to section 86.3.9.

### 86.3.7 Check ECM Connectors

Perform the following steps to check the ECM connectors.

1. Inspect terminals at the ECM connectors (both ECM and harness side) for damage: bent, corroded, and unseated pins or sockets.
  - [a] If terminals and connectors are damaged, repair them. Refer to section 86.3.9.
  - [b] If terminals and connectors are not damaged, install a test ECM. Refer to section 86.3.8.

### 86.3.8 Final Check

Perform the following steps to do a final check.

1. Reconnect all connectors.
2. Turn vehicle ignition ON.
3. Clear codes.
4. Start and run the engine for one minute.
5. Stop engine.
6. Check DDR for active codes.
  - [a] If no codes are logged, troubleshooting is complete.
  - [b] If active code 73/3 is logged, install a test ECM. Refer to section 86.3.9.
  - [c] If any codes except code 73/3 are logged, refer to section 9.1, to service other codes.

### 86.3.9 Verify Repairs

Perform the following steps to verify repairs.

1. Turn ignition switch OFF.
2. Reconnect all connectors.
3. Turn ignition ON.
4. Clear codes.
5. Start and run the engine for one minute.
6. Stop engine.
7. Check DDR for inactive codes.
  - [a] If no codes are logged, troubleshooting is complete.
  - [b] If code 73/3 is not logged, and other codes are logged, refer to section 9.1, to service other codes.
  - [c] If code 73/3 is logged, and other codes are logged, all system diagnostics are complete. Review this section from the first step to find the problem. Refer to section 86.3.1.

