

DETROIT DIESEL



DDEC® VI Troubleshooting

NUMBER: 07 DDEC VI-40 S.M. REF.: 90 ENGINE: EPA07 MBE 4000 DATE: December 2007

SUBJECT: 2630/FMI 3 AND SPN 2630/FMI 4

PUBLICATION: 6SE568

SPN 2630/FMI 3 and SPN 2630/FMI 4 have been added.

SPN 2630/FMI 3

This diagnosis typically is Intake Manifold temperature circuit failed high.

Check as follows:

1. Disconnect the Intake Manifold Pressure/Temperature Sensor.
2. Turn the ignition ON.

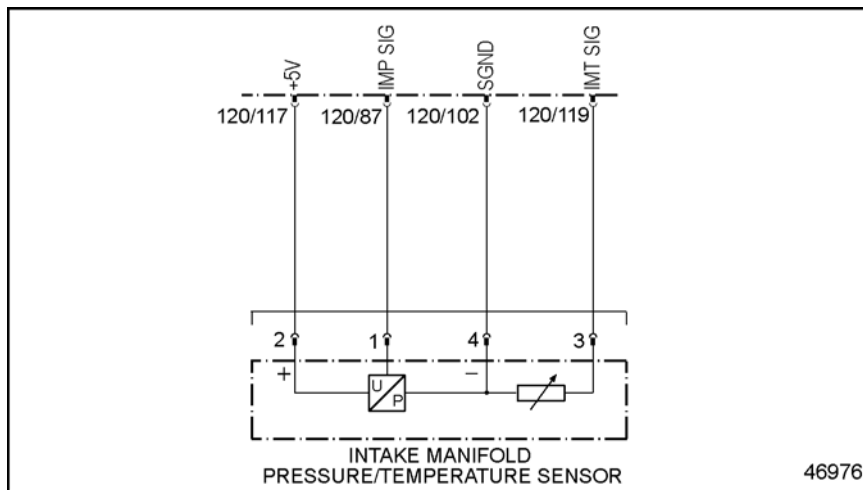


Figure 1 Intake Manifold Pressure/Temperature Sensor

3. Measure the voltage between pins 3 and 4 of the Intake Manifold Pressure/Temperature Sensor harness connector.
 - [a] If the voltage is between 2.75 and 3 volts replace the Intake Manifold Pressure/Temperature Sensor.
 - [b] If the voltage is less than 2.75 volts, go to step 4.
4. Measure the voltage between pin 3 of the Intake Manifold Pressure/Temperature Sensor harness connector and ground.

- [a] If the voltage is between 2.75 and 3 volts repair open between pin 4 of the Intake Manifold Pressure/Temperature Sensor harness connector and pin 102 of the MCM 120-pin connector.
- [b] If the voltage is less than 2.75 volts, repair open between pin 3 of the Intake Manifold Pressure/Temperature Sensor harness connector and pin 119 of the MCM 120-pin connector.

VERIFY REPAIRS

Verify repairs as follows:

1. Turn ignition OFF.
2. Reconnect any electrical connections that were disconnected to perform the diagnosis.
3. Clear codes with DDDL 7.0 or latest version.
4. Start and bring engine up to operating temperature (over 140°F/60°C).
5. Verify operation is satisfactory and no warning lamps illuminate. If warning lamps illuminate, troubleshoot the codes. If assistance is required, call the Detroit Diesel Customer Support Center at 313-592-5800.

SPN 2630/FMI 4

This diagnosis typically is Intake Manifold temperature circuit failed low.

Check as follows:

1. Disconnect the Intake Manifold Pressure/Temperature Sensor.
2. Disconnect the MCM 120-pin connector.

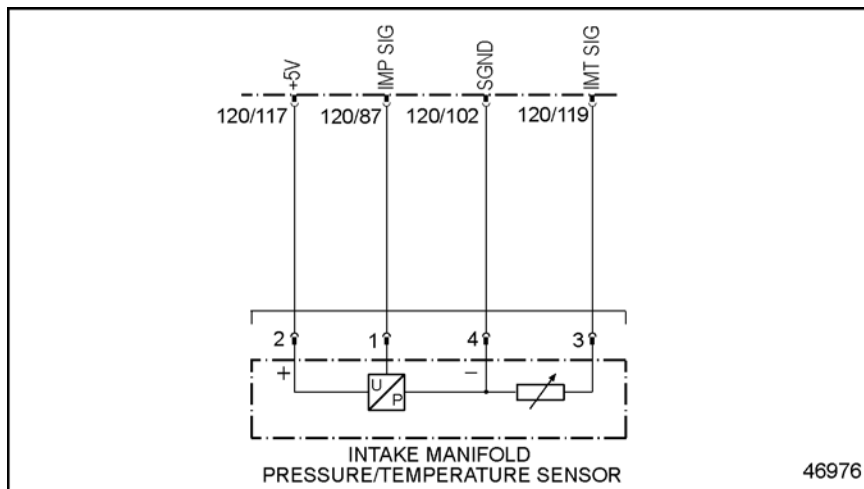


Figure 2 Intake Manifold Pressure/Temperature Sensor

3. Measure the resistance between pin 3 of the Intake Manifold Pressure/Temperature Sensor and ground.
 - [a] If the resistance is less than 3 Ω , repair short to ground between pin 3 of the Intake Manifold Pressure/Temperature Sensor and pin 119 of the MCM 120-pin connector.
 - [b] If the resistance is greater than 3 Ω , replace the Intake Manifold Pressure/Temperature Sensor.

VERIFY REPAIRS

Verify repairs as follows:

1. Turn ignition OFF.
2. Reconnect any electrical connections that were disconnected to perform the diagnosis.
3. Clear codes with DDDL 7.0 or latest version.
4. Start and bring engine up to operating temperature (over 140°F/60°C).

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5. Verify operation is satisfactory and no warning lamps illuminate. If warning lamps illuminate, troubleshoot the codes. If assistance is required, call the Detroit Diesel Customer Support Center at 313-592-5800.

ADDITIONAL SERVICE INFORMATION

Additional service information is available in one of the DDEC VI troubleshooting guides.