



Technical Service Bulletin

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Exhaust Gas Recirculation (EGR) System Differential Pressure Sensor Incorrect Installation: Fault Codes 3361, 3389, 3382 and 3383

Exhaust Gas Recirculation (EGR) System Differential Pressure Sensor Incorrect Installation: Fault Codes 3361, 3389, 3382 and 3383

Warranty Statement

The information in this document has no effect on present warranty coverage or repair practices, nor does it authorize TRP or Campaign actions.

Contents

Product Affected

- B6.7 CM2350 B121B
- ISB6.7 CM2350 B101
- ISL9 CM2350 L101
- L9 CM2350 L116B
- L9 CM2350 L123

Issue

Symptoms:

- Yellow check engine light
- Low engine power
- Fault Codes 3361, 3389, 3382 and 3383
- Engine surge

Root Cause:

- Installing the differential pressure sensor 180 degrees off original orientation.
- Differential pressure sensor will read negative pressure if mounted incorrectly and will cause inaccurately controlled flow into the air intake manifold.

Verification

Use steps below, in sequential order, to determine if differential pressure sensor is installed correctly:

- Verify the engine wiring harness connector reaches the differential pressure sensor connector.
- The air intake connection has a lip and provides reference as to the correct orientation of the differential pressure sensor. The air intake connection lip can look different on different engines families. Two examples of the air intake connection lip are shown in Figure 1 below. Verify if there is interference between the differential pressure sensor and the lip on the air intake connection. See Figure 2 below.

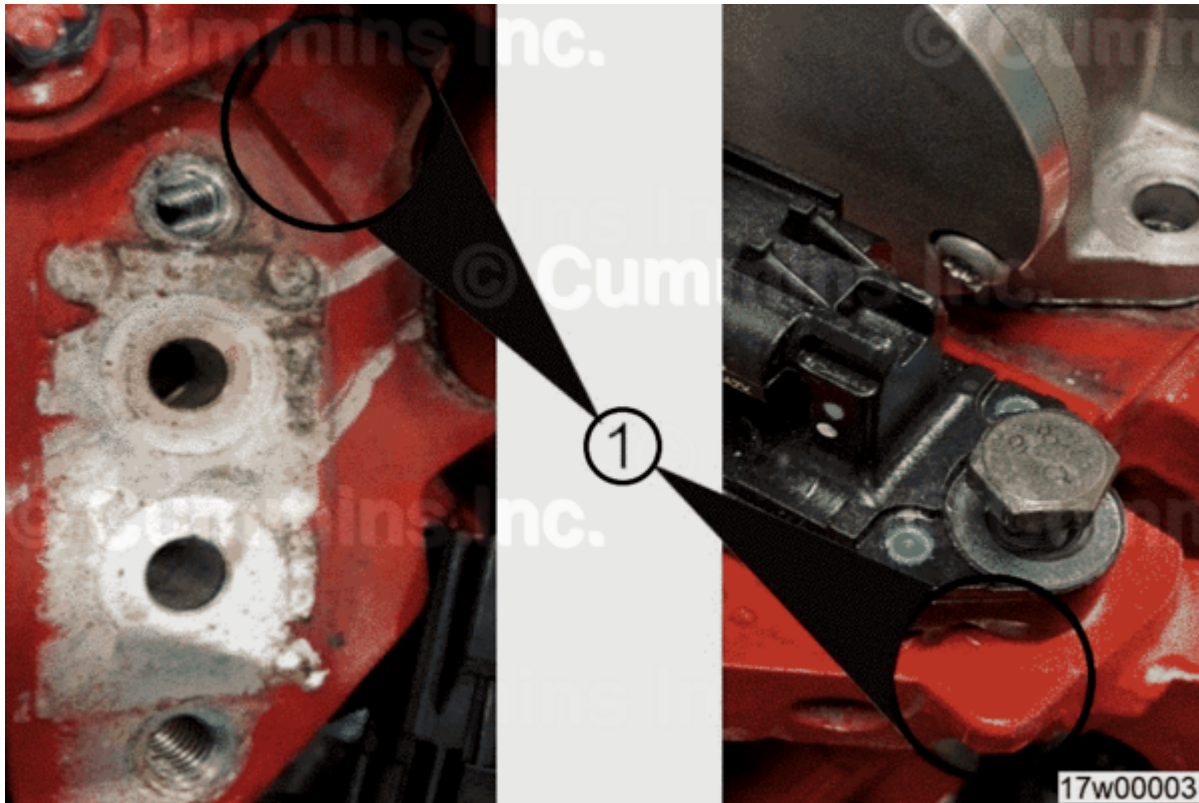


Figure 1, Examples Of Air Intake Connection Lips. Left: L9 Right: B6.7.

Air intake connection lips (1) look different when comparing two engines.



Figure 2, Incorrectly Installed Differential Pressure Sensor.

This interference (1) is proof that the differential pressure sensor is installed incorrectly.

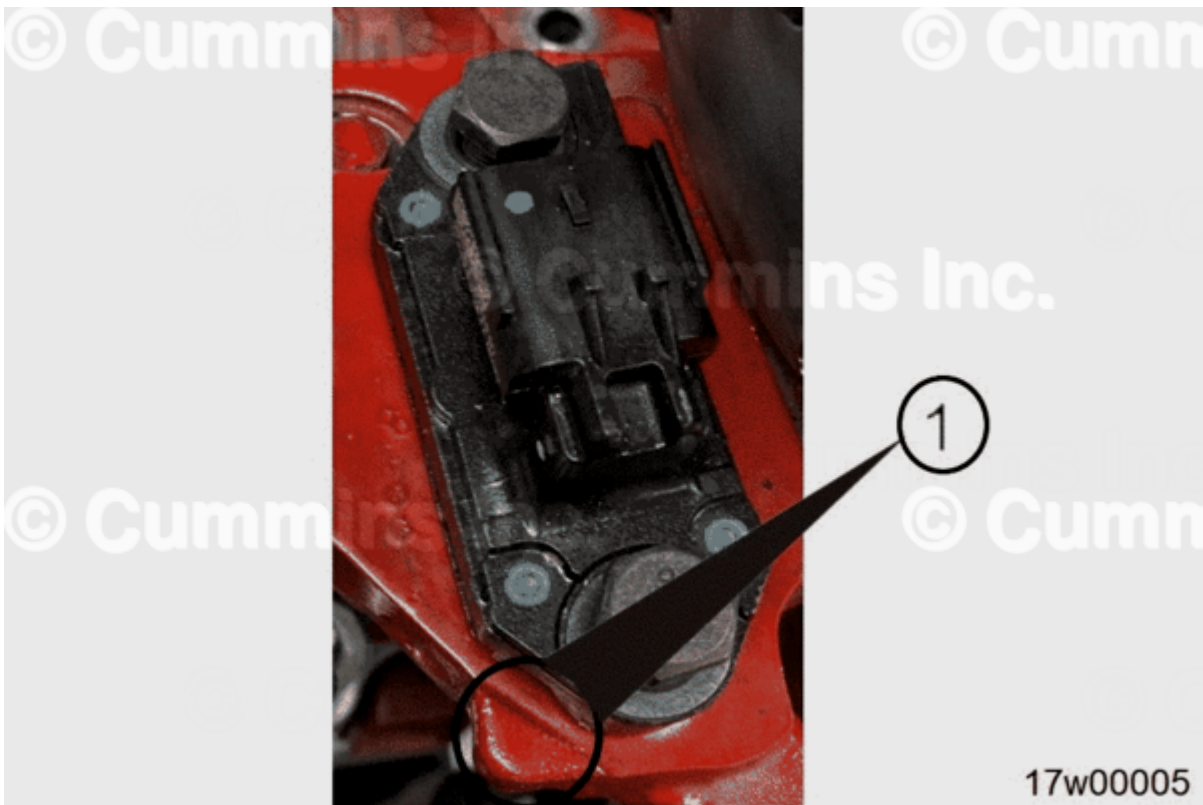


Figure 3, Correctly Installed Differential Pressure Sensor.

There is no interference (1) when the differential pressure sensor is installed correctly.

- Some engines are painted after assembly with differential pressure sensor installed. If any unpainted surface can be seen on engines after installation, this indicates the differential pressure sensor was installed incorrectly. An example can be seen in Figure 4 below.

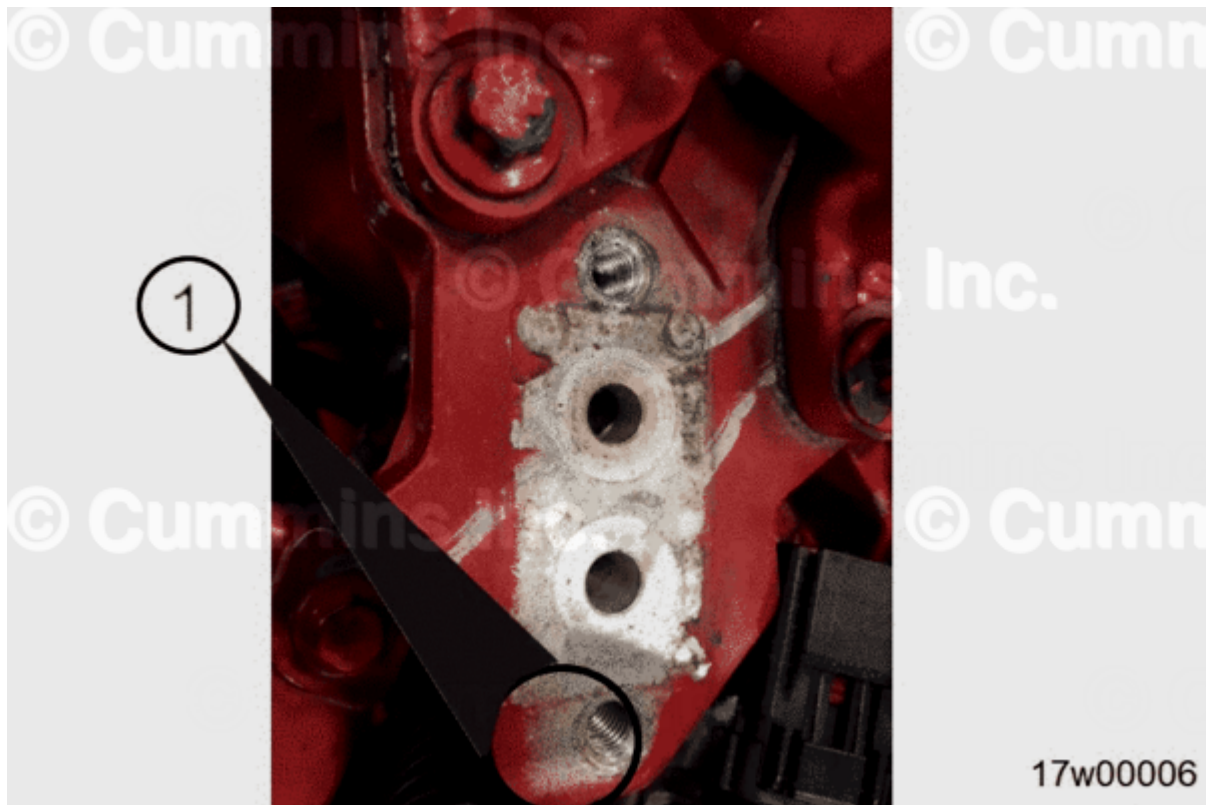


Figure 4, Differential Pressure Sensor Location Without Sensor Installed.

If installed incorrectly, this unpainted surface (1) would be visible.

Resolution

While installing the differential pressure sensor perform the following:

- Locate the air intake connection lip. Differential pressure sensor 90 degree cornered side **must** be on the opposite side of the air intake connection lip.



Figure 5, Differential Pressure Sensor With Sides Marked.

The two sides of the differential pressure sensor are the cornered side (1) and the side that **must** be connected to the opposite side of the air intake connection lip (2).

- Verify differential pressure sensor is completely flat before tightening capscrews. If installed incorrectly, the air intake connection lip would make differential pressure sensor uneven on the surface. See Figure 6 below.

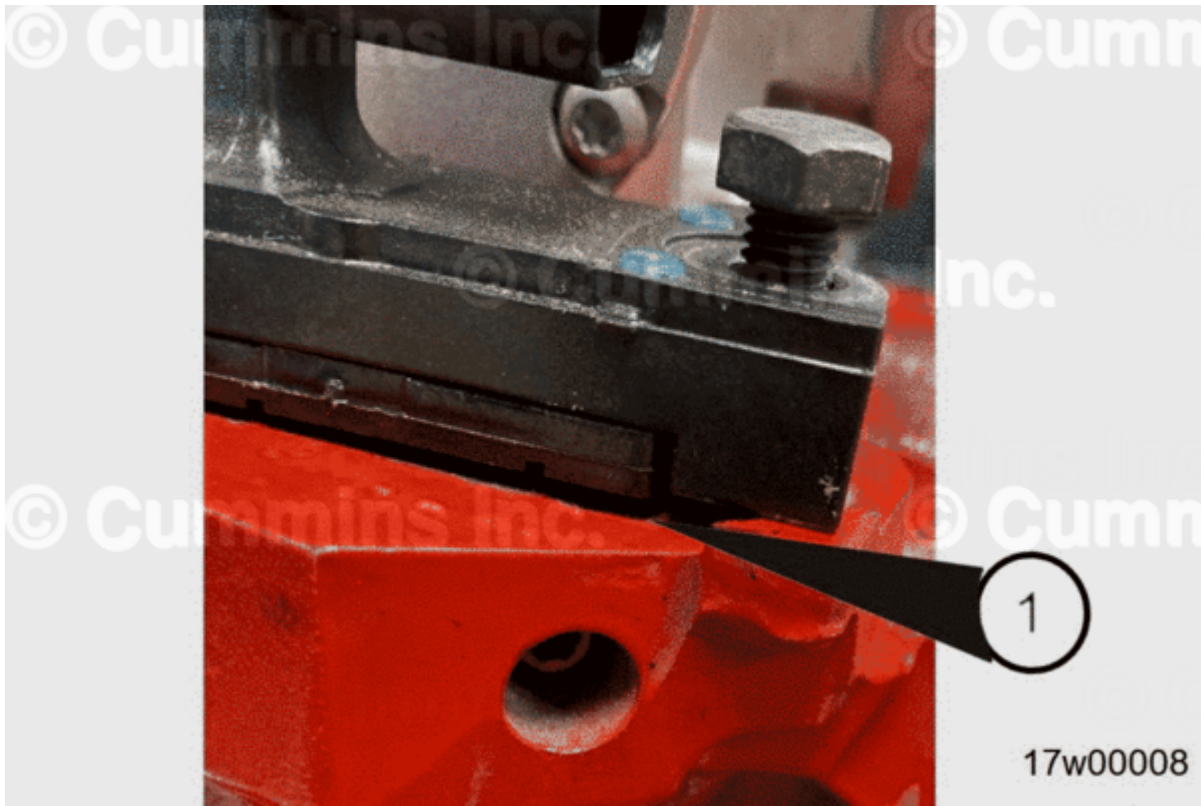


Figure 6, Incorrectly Installed Differential Pressure Sensor Sitting Unevenly On The Air Intake Connection Lip.

If the differential pressure sensor is installed incorrectly, the differential pressure sensor will lay unevenly on the air intake connection lip (1).

- Verify no unpainted surfaces are visible at the location as shown in Figure 4 above.

Document History

Date	Details
2019-10-28	Module Created

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