

Technical Service Bulletin

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Incorrect Pressure/Temperature Sensor: Fault Code 125, 743, 2191, 2973, 1664, 5989

Incorrect Pressure/Temperature Sensor: Fault Code 125, 743, 2191, 2973, 1664, 5989

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
- B6.7 CM2450 B155B
- ISB6.7 CM2150 (EPA 2007)
- ISB6.7 CM2250 (EPA 2010)
- ISB6.7 CM2350 B101
- ISC CM2150
- ISC CM2250
- ISL CM2150
- ISL CM2250
- ISL CM2350 L101
- ISM CM876
- ISX11.9/12 CM2250
- ISX12 CM2350 X102
- ISX15 CM2250
- ISX15 CM2350 X101
- ISX15 CM871
- L9 CM2350 L116B
- L9 CM2350 L119B
- L9 CM2450 L126B
- QSB6.7 CM2250
- QSB6.7 CM2350 B105
- QSL9 CM2250
- QSL9 CM2350 L102

- QSX15 CM2250
- QSX15 CM2350 X105
- X12 CM2350 X119B
- X12 CM2450 X137B
- X15 CM2350 X114B
- X15 CM2350 X116B
- X15 CM2450 X124B
- X15 CM2450 X134B

Issue

Symptom:

- Fault Codes 125, 222, 743, 2191, 2973, 1664, 5989
- Low power
- · White smoke
- · Engine misfire
- · Aftertreatment performance complaints

Root Cause:

• Incorrect pressure/temperature sensor installed in the incorrect location on the engine.

Verification

- Remove the pressure/temperature sensor in question and verify pressure/temperature sensor part number.
- View pressure/temperature sensor values in a key on engine off condition using INSITE® electronic service tool or equivalent, an incorrect pressure/temperature sensor can give an incorrect value.
- At key ON engine off, the barometric air pressure should read the local barometric air pressure, and the intake manifold pressure should read 0.0 in-hg.

Resolution

Refer to QuickServe Online parts catalog on to determine the correct sensor to use in the correct location for a given engine.

Install correct pressure/temperature sensor. See Table 1 below for part numbers.

| Table 1, Sensor Part Number and Application | | | | |
|---|---|-------------|---------------------------|--|
| Part Number | Pressure Sensing Rangemm- hg [in- hg] | Application | Alternate Part Numbers | |

| Table 1, Sensor Part Number and Application | | | | |
|---|--|--|---------------------------|--|
| Part Number | Pressure Sensing Rangemm- hg [in- hg] | Application | Alternate Part Numbers | |
| 2897332 | 330 mm-hg [13 in- hg] to 838 mm-hg [33 in-hg] | Barometric air pressure and/or turbocharger compressor intake pressure | 4921850 | |
| 2897333 | 330 mm-hg [13 in- hg] to 1574.8 mm-hg [62 in-hg] | Intake manifold pressure on 6.7L or smaller engines | 4921322 | |
| 2897334 | 330 mm-hg [13 in- hg] to 3810 mm-hg [150 in-hg] | Intake manifold pressure on 8.3L or larger engines | 4921324, 2872784 | |

Part Identification

- Pressure/temperature sensor part number is located on underside of pressure/temperature sensor body.
- Pressure/temperature sensor **must** be removed to verify part number. See Figure 1 for part number location. See Figure 2 for pressure/temperature sensor similarity examples.



Figure 1, Pressure/Temperature Sensor Part Number Location.



Figure 2, Pressure/Temperature Sensor Similarity Example.

Document History

| Date | Details |
|------------|---|
| 2019-6-5 | Module Created |
| 2019-12-20 | Non-Product Problem Solving (PPS) |
| 2021-9-20 | Updated Product Affected. Added Fault Code 743. |
| 2022-8-4 | Added Fault Code 5989. |

Last Modified: 04-Aug-2022

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