



Technical Service Bulletin

Technical Service Bulletin: TSB200116

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Cold Weather Fault Codes

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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
- L9 CM2350 L116B
- L9 CM2450 L126B
- X15 CM2350 X114B
- X15 CM2350 X116B
- X15 CM2450 X124B
- X15 CM2450 X134B
- X15 CM2450 X142B

Issue

Symptom:

- Units experiencing the fault codes below while operating at lower ambient air temperatures 0°C [32°F] either one or multiple fault codes may be present. Root cause of malfunction is **not** found during other steps of the trouble shooting tree.
- Fault Codes: 4729, 7233, 1866, 1228, 125, 153, 3361, 691, 742, 3542, 1896, 3382, 3389, 7232

Root Cause:

- Units that have been exposed to lower ambient air temperatures without a Cummins® approved winter front, will be more prone to creating icing or condensation in the components mentioned below.
- Components in the EGR and air handling system have been identified to be prone to icing, condensation or residue.

- Air Handling System (charge air cooler, intake air throttle, air intake piping, intake manifold pressure)
- EGR System (EGR differential pressure sensor, EGR valve, EGR crossover pipe).

Verification

- Verify that unit has been operating in lower ambient air temperatures less than or equal to 0°C [32°F] from fault code snapshot in INSITE™ electronic service tool.
- Note that ice and condensation may **not** be present during trouble shooting and maintenance operations due to higher temperatures in the service location. In most cases fault code status may become inactive, indicating this malfunction.

Resolution

- Compare the ECM calibration code and revision number in the ECM to the calibration revision listed in the ECM calibration revision history for applicable changes. If an ECM calibration code update for this issue is available, the ECM calibration revision **must** be that revision or higher.
- Inspect and clean any component that have icing, condensation, or residue on EGR and Air Handling components.
- If no trouble is found and the engine has been operating in sub-freezing temperature, direct the customer to the Operation of Diesel Engines in Cold Climates, Service Bulletin 3379009 (/qs3/pubsys2/xml/en/bulletin/3379009.html). A winter front is recommended to reduce occurrences of this malfunction. A winter front will assist in reducing the time to increase the engine compartment temperatures. Operating with a winter front will reduce ice buildup prior to operation of EGR system and engine intake throttle actuator.
- Reference Radiator Shutter Assembly Procedure for guidelines on winter fronts. See corresponding Service Manual. Reference Procedure 008-049 in Section 8.

Document History

Date	Details
2020-5-13	Module Created
2020-5-14	Fixed hyperlink.
2021-3-1	Added B6.7 CM2450 B155B and L9 CM2450 L126B
2021-3-23	Added X15 engines. Added statement about ECM calibration revisions.
2025-1-29	No changes made, checking product affected section
2025-3-7	Added X15 CM2450 X142B.

