

Technical Service Bulletin

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Fault Code 3531 and 3532 With Updated Engine Control Module (ECM) Calibration Code

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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

- ISL G CM2180
- ISX12 G CM2180 EJ

Issue

Unexpected fault codes log after engine control module (ECM) calibration code update.

Symptom:

• After updating the engine ECM calibration code, Fault Code 3531 and/or Fault Code 3532 come active.

Root Cause:

The optional Ambient Temperature Shutdown Override feature has been added to the engine ECM calibration. In certain ECM
calibrations this feature may be enabled by default, causing engines without the appropriate hardware or configurable parameter
settings to log a fault code.

Verification

- Confirm that a J1939 datalink connected ambient air temperature sensor is **not** installed.
- Use the recommended Cummins® electronic service tool or equivalent to verify that the Ambient Temperature Override subfeature of the Idle Shutdown section of Features and Parameters shows "Enable".

Resolution

Use the recommended Cummins® electronic service tool or equivalent to change the following in Features and Parameters:

- In the Idle Shutdown section, set Ambient Temperature Override to **Disable**
- In the J1939 Controls section, set OEM Ambient Air Temperature Sensor to Disable

Reason for Change

The Ambient Temperature Override feature has been added. Engines **not** equipped by the OEM with a datalink connected Ambient Air Temperature Sensor will log fault codes if the Ambient Temperature Override feature is enabled.

Service Instructions

If Fault Code 3531 or 3532 come active after installation of a calibration update, first verify whether the vehicle has an OEM installed Ambient Air Temperature Sensor or not. If no sensor exists, use the recommended Cummins® electronic service tool or equivalent to set the Ambient Temperature Override feature and OEM Ambient Air Temperature Sensor parameters to **Disable**.

If the sensor is installed, or if the parameters are already disabled, troubleshoot the fault codes.

Publications Affected

Manual Type	Engine	Bulletin Number	Procedure Title	Procedure	Section
Fault Code Troubleshooting Manual	ISX12 G CM2180 EJ	4310680	Ambient Air Temperature Abnormal Update Rate	FC3531	TF
Fault Code Troubleshooting Manual	ISX12 G CM2180 EJ	4310680	Ambient Air Temperature – Received Network Data in Error	FC3532	TF

Document History

Date	Details
2020-12-3	Module Created

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