Technical Service Bulletin

Technical Service Bulletin: TSB150152	**Released Date**: 20-Feb-2024
Electronic Control Module (ECM) Will Not Communicate and Will Not Calibrate using Original Equipment Manufacturer (OEM) 9-pin Connector	

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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

- B4.5 CM2450 B214B
- B4.5 CM2450 B215B
- B6.7 CM2450 B216B
- B6.7 CM2450 B217B
- ISB6.7 CM2350 B101
- ISX15 CM2350 X101
- L9 CM2450 L169B

Issue

- Electronic control module (ECM), Part Number 5317106 and 6318121, is manufactured with a public controller area network (CAN) baud rate set at 250K.
- The relevant engines built with ECM, Part Number 5317106 or 6318121, will be installed in OEM chassis equipped with a 500K baud rate public CAN.
- There can **only** be one baud rate for any CAN. If the baud rates differ, communication can **not** be established using the original equipment manufacturer (OEM) 9-Pin connector.
- A 500K baud rate public CAN calibration code **must** be installed in the ECM to be able to function with the 500K baud rate public CAN and to be able to communicate through the OEM 9-Pin connector.

Verification

If communication with an un-calibrated or pre-calibrated 250K baud public CAN CM2350 or CM2450 ECM is **not** successful using the OEM 9-Pin connector, perform the following:

- Verify the ECM is Part Number 5317106 or 6318121.
- Verify the chassis is equipped with a 500K baud rate CAN and the OEM 9-pin connector is a Green Type 2 connector. See Figure 1.

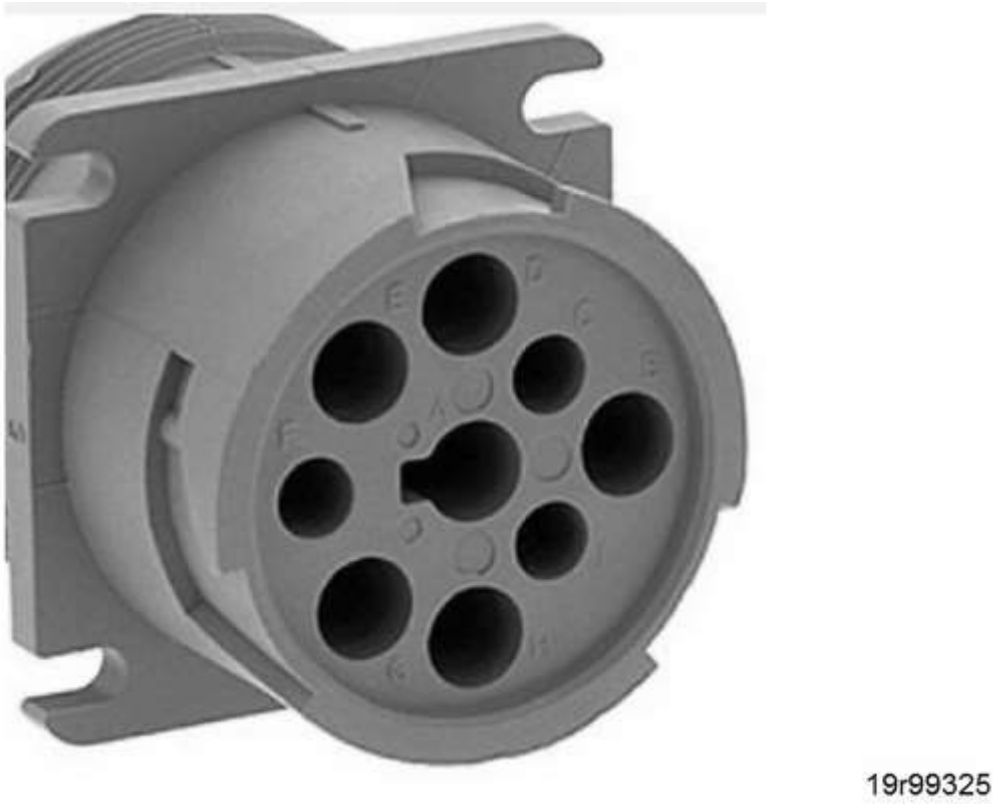

Figure 1, Type 2 OEM 9-Pin Connector

Resolution

Conditions:

- OEM chassis equipped with a 500K baud rate CAN.
- Replacing a CM2350 ECM, Part Number 5317106 or a CM2450 ECM, Part Number 6318121, or installing a pre-calibrated CM2350 ECM, Part Number 5317106 or a CM2450 ECM, Part Number 6318121 containing a 250K baud rate public CAN calibration.

Resolution:

- Calibrate the ECM with the latest calibration code from QuickServe TM Online using the on engine 3-Pin J1939 datalink or use benchtop calibration harness, Part Number 2892289. See corresponding Service Manual. Reference Procedure 019-032 in Section 19.
- Cable, Part Number 3165141, is used to connect to the engine mounted 3-pin Deutch TM connector for ECM calibration downloads. Equivalent 3-pin Deutch TM connector and datalink adapter can be used.

- ECM bench calibration base harness, Part Number 3163151, and power supply are also needed when using benchtop calibration cable, Part Number 2892289. Reference Service Tool Instruction, ECM Bench Calibration Base Harness, Bulletin 3377791 for more information.
- Perform a complete key cycle after the ECM has received the 500K baud rate public CAN ECM calibration code and then J1939 datalink communications using the OEM 9-pin connector can be established.
- Verify J1939 datalink communications using the OEM 9-pin connector can be established with the ECM.
- INLINE™ 5 and previous version datalink adapters will not communicate over the 500K baud rate public CAN.
- The ECM calibration is found on the engine dataplate. Reference the dataplate on parts.cummins.com and see the DO part option notes to determine the baud rate.

Document History

Date	Details
2015-9-14	Module Created
2017-2-21	Removed broken link to 3377791.
2017-6-8	Corrected 019-032 procedure link.
2024-2-19	Updated Product Affected, part numbers, and Resolution to include CM2450.

Last Modified: 20-Feb-2024