

Technical Service Bulletin

Technical Service Bulletin: TSB190202

Released Date: 17-Apr-2023

Aftertreatment Diesel Exhaust Fluid (DEF) Dosing Unit and DEF Dosing Valve with OEM Wiring Harness Fault Codes

Aftertreatment Diesel Exhaust Fluid (DEF) Dosing Unit and DEF Dosing Valve with OEM Wiring Harness Fault Codes

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
- X12 CM2350 X119B
- X12 CM2450 X137B
- X15 CM2350 X114B
- X15 CM2350 X116B
- X15 CM2450 X124B
- X15 CM2450 X134B

Issue

Multiple trouble not found aftertreatment DEF dosing units and DEF dosing valves have been returned from the field due to being replaced while troubleshooting the following Fault Codes:

• 1683

https://quickserve.cummins.com/qs3/pubsys2/xml/en/tsb/2019/tsb190202.html

- 3237
- 3238
- 3241
- 3423
- 3558
- 3559
- 3563
- 5867

Symptom:

- Active Fault Codes listed present.
- Aftertreatment diesel exhaust fluid (DEF) dosing unit or DEF dosing valve can appear to be non-functional

Root Cause:

- Neither a good nor malfunctioning aftertreatment DEF dosing unit or DEF dosing valve can cause the listed Fault Codes to become active as these fault codes are isolated within the OEM wiring harness.
- An electrical short or open circuit has been detected in the DEF dosing unit or DEF dosing valve OEM wiring harness.

Verification

- Active Fault Codes listed present.
- Aftertreatment DEF dosing unit or DEF dosing valve can appear to be nonfunctional.

Resolution

- Follow appropriate troubleshooting steps as outlined in the corresponding fault code troubleshooting trees and/or EDS.
- Review OEM service information for documentation related to the listed Fault Codes

Service Instructions

- Connect with INSITE[™] electronic service tool and check for active fault codes.
- Follow appropriate troubleshooting steps as outlined in the corresponding fault code troubleshooting trees and/or EDS.
- If the listed Fault Codes are the only active fault codes, do **not** replace aftertreatment DEF dosing unit or DEF dosing valve. Follow corresponding troubleshooting documentation.
- Check OEM aftertreatment DEF dosing unit or DEF dosing valve relay wiring harness for chaffed wires, damaged/exposed wires, and/or damaged pins.

- Check OEM aftertreatment DEF dosing unit or DEF dosing valve relay for proper operation.
- Check OEM wire between the aftertreatment DEF dosing unit and ECM pin 79 for chaffed wires, damaged/exposed wires, and/or damaged pins.
- Review OEM service information for documentation related to the listed Fault Codes.

Document History

Date	Details
2019-11-21	Module Created
2021-6-11	Updated Product Affected section.
2023-4-13	Added fault codes and metion of DEF dosing valve.

Last Modified: 17-Apr-2023