

# **Technical Service Bulletin**

Technical Service Bulletin: TSB210058 Released Date: 02-Sep-2021

Engine Wiring Harness Malfunctions Causing J1939 Datalink Faults

# Engine Wiring Harness Malfunctions Causing J1939 Datalink Faults

# 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 CM2350 B135B
- B6.7 CM2350 B148B
- B6.7 CM2350 B153B
- B6.7 CM2450 B155B
- ISB6.7 CM2350 B101
- ISB6.7 CM2450 B155B
- ISL9 CM2350 L101
- L9 CM2350 L116B
- L9 CM2350 L119B
- L9 CM2350 L123B
- L9 CM2450 L126B
- QSB6.7 CM2350 B105
- QSL9 CM2350 L102

#### Issue

Engine wiring harness issues on J1939 datalink are causing datalink related fault codes.

#### Symptom:

- · Amber check engine light
- Occurrence of one or more of the following Fault Codes: 1894, 2771, 3232, 3868, 3911, 4151, 4152, 4572, 4677, or 6688.

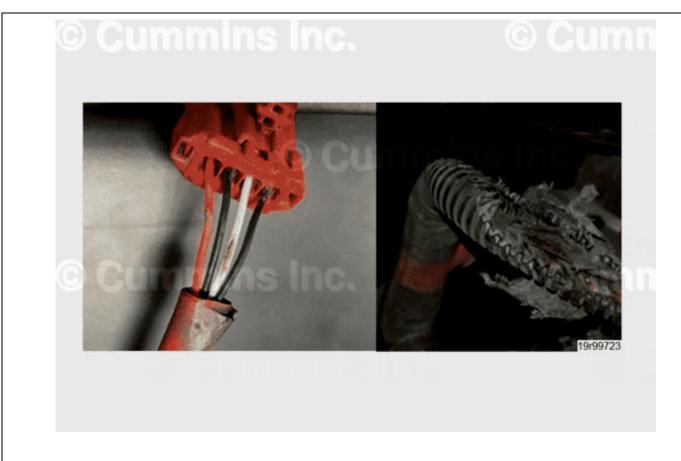
#### **Root Causes:**

- · Engine wiring harness chafing
- Use of dielectric grease in connector
- Water intrusion into 14 pin connectors (example: OEM cross over connector, connectors on both ends of OEM aftertreatment jumper harness, and aftertreatment harness connector).

#### Verification

Check the following before ruling out intermittent engine wiring harness issues:

1. Visually inspect the variable geometry turbocharger and aftertreatment interface wiring harness for evidence of wear or damage caused by chafing. See Figure 1 below.



2. If checking a connector while following the published troubleshooting tree, visually inspect the connector for evidence of dielectric grease usage. See Figure 2 below.

Figure 1, Wire Chafing.

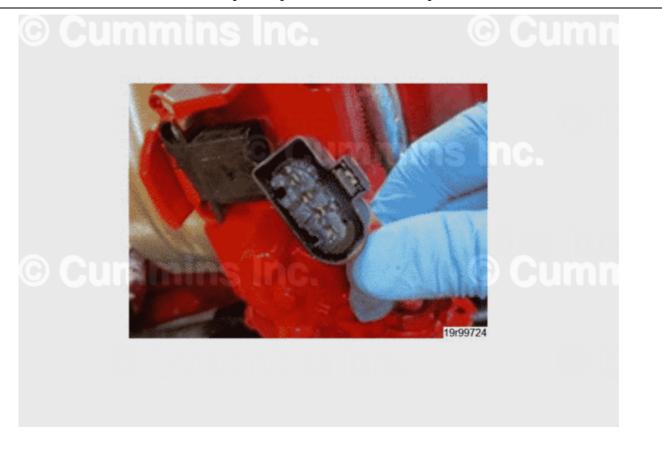


Figure 2, Dielectric Grease in Connector.

3. If checking a 14 pin connector while following the published troubleshooting tree, inspect connector for evidence of water intrusion or corrosion. See Figure 3 below.

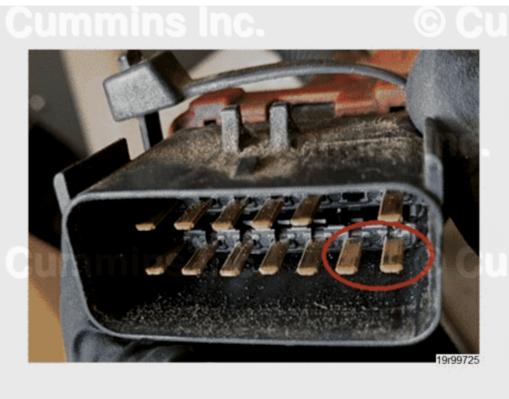


Figure 3, Evidence of Water Intrusion or Corrosion.



Figure 4, Evidence of Water Intrusion or Corrosion.

## Resolution

- If evidence of engine wiring harness chafing is observed, remove and replace that section of the engine wiring harness before replacing any other component.
- If there is evidence of dielectric grease usage in a connector, remove the dielectric grease and clean the connector.
- If there is evidence of water intrusion through into a connector, follow the corresponding service procedure to repair or replace the connector.

# **Document History**

Date	Details
2021-3-8	Module Created
2021-8-31	Updated product affected. Added Figure 4.

Last Modified: 02-Sep-2021