

Defect Information Report

(Section 573.6)

FL-949

Date of Submission: July 29, 2022

Manufacturer: Daimler Truck North America LLC
P.O. BOX 3849
Portland, Oregon 97208

Type of Report: ☒ **Safety Defect** ☐ **Non-Compliance**

Vehicle Information

Model Yr. Start: 2022 **Model Yr. End:** 2023

Make: Freightliner, Western Star, FCCC

Model: 108SD, 114SD, Business Class M2, Cascadia, 4700, 47X, 49X, MC Chassis, MT45 Chassis, S2C 106Cab, S2CRV 106 Cab, XCM Chassis, XCR Chassis, XCS Chassis

Production Dates: **Begin:** 03/17/2022 **End:** 07/19/22

Type: Truck/Tractor

Descriptive Information: DTNA's supplier Cummins states, "Printed Circuit Boards (PCB) for certain engines were manufactured with a defective solder fixture. The recall population was determined by identifying the oldest production lot associated with an Engine Control Module (ECM) failure, and including all production from that lot to the date in June 2022 when the improvements in the assembly process were instituted."

Number potentially involved: 1375 **Estimated percentage of involve with defect:** 100%

Defect Description

Describe the defect:

DTNA's supplier Cummins states, "The soldering fixture had a loose screw, which in certain cases may contacting the Lytic cap and applying excess force into the PCB. Over time with scrubbing or movement of PCB, the capacitor may wear through the dielectric layer into the V-Batt layer resulting in high current draw, which may cause loss of communication to the ECM.

If a noncompliance, provide the applicable FMVSS: N/A

Describe the safety risk:

DTNA's supplier Cummins states, "Loss of communication to the ECM while driving may cause unexpected engine stall without prior warnings, and the inability of restart, which may increase the risk of a crash."

Identify any warning, which can precede or occur: Unknown

If applicable, identify the manufacture of the defective or noncompliant component: Engine

Involved Components

Component Name: Printed Circuit Boards (PCB)

Component Description: Engine PCB

Component Part Number: Multiple

Supplier Identification:

Cummins Inc.

OEM Service & Quality Leader

Mobile: (812) 314-9887

Email: steve.collins@cummins.com

500 Jackson St.

Columbus, Indiana 47201

Mail Code: COB111

Component Manufacturer: Cummins Inc.

Chronology of Noncompliance Determination

Provide the chronology of events leading up to the defect decision or test data for the noncompliance decision.

On July 11, 2022, Cummins notified DTNA Compliance of 10 documented occurrences of ECM communication failure on DTNA vehicles powered by specific Cummins engines. DTNA immediately began an investigation to learn about failure modes and the detectability of such failure modes. In parallel with DTNA's investigation, as DTNA understands, Cummins had already been investigating the issue. On July 22, 2022, Cummins informed DTNA of an impending equipment recall. DTNA on July 25, 2022, immediately issued a recall out of an abundance of caution.

Identify the Remedy

Describe the defect/noncompliance remedy program, including the manufacture's plan for reimbursement.

As DTNA understands, Cummins is in the process of developing a remedy program. The 573 will be amended once an inspection and remedy plan has been developed. A recall-specific reimbursement plan will be provided on the Recall Portal for those units not covered by the manufacturer's limited warranty.

Identify the Recall Schedule

Describe the recall schedule for notifications:

Customer notification will be made by first class mail using Daimler Trucks North America records to determine the customers affected.

Planned Dealer Notification Begin Date:	09/26/2022
Planned Dealer Notification End Date:	09/26/2022
Planned Owner Notification Begin Date:	09/26/2022
Planned Owner Notification End Date:	09/26/2022

Manufacture's identification code for this recall (if applicable): FL-949

DTNA Representative;



Tiffani Torgeson
Manager
Compliance and Regulatory Affairs