



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 21-004
Date Opened: 02/25/2021
Investigator: Kyle Bowker **Reviewer:** Joshua Neff
Approver: Stephen Ridella
Subject: Engine Electrical Wiring Harness Chafe

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Daimler Trucks North America, LLC
Products: Certain 2017-2021 Freightliner Cascadia Truck Tractors
Population: Confidential

Problem Description: Engine electrical wiring harness may chafe against the transmission or the support bracket affixed to the side of the engine block, possibly resulting in a short circuit and power disruption to the Motor Control Module (MCM), Aftertreatment Control Module (ACM) and Transmission Control Module (TCM), which may result in erratic instrument panel display, telltale illumination, inability to shift the transmission or unexpected shift to neutral, commanded engine shutdown and loss of motive power (LOMP).

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	6	TBD	TBD
Crashes/Fires:	0	TBD	TBD
Injury Incidents:	0	TBD	TBD
Number of Injuries:	0	TBD	TBD
Fatality Incidents:	0	TBD	TBD
Number of Fatalities:	0	TBD	TBD
Other*:	0	Confidential	Confidential

*Description of Other: Early Warning Reporting (EWR) field report data.

ACTION / SUMMARY INFORMATION

Action: A Preliminary Evaluation has been opened.

Summary:

The Office of Defects Investigation (ODI) received 1 complaint (NHTSA ID Number 11366557) from a fleet mechanic, who reported in a subsequent interview that he repaired at least 6 subject vehicles that experienced the alleged defect condition. ODI examination of certain EWR field report data further indicates a possible defect trend.

The manufacturer published "Service Solution 1034298 - New Cascadia Engine Harness Chafe at A06-95037-000 Bracket" (NHTSA ID Number 10162283) to address the alleged defect condition in May 2019. The manufacturer published "Freightliner Service Bulletin 54-330 Compressor Bracket Modification to Reduce Harness Chafing" (NHTSA ID Number 10177001) to address the alleged defect condition again in June 2020. The manufacturer submitted a "Tech talk discussion on DD harness Chaffe" document (NHTSA ID Number 10182006) to the agency in November 2020, where a mechanic reports the remedy prescribed in Service Bulletin 54-330 may not be effective because it does not adequately address the potential for the engine wiring harness to chafe against the rear mounting bolt for the subject support bracket.

A Preliminary Evaluation has been opened to assess the alleged defect.