DAIMLER

Amended Defect Information Report
(Section 573.6)

FL-893

Date of Submission: November 2, 2021 (Amendment: 4/28/2022)

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

Type of Report: X **Safety Defect** ◯ **Non-Compliance**

Vehicle Information

Model Yr. Start: 2019 **Model Yr. End:** 2022
Make: Freightliner, Western Star
Model: Cascadia P4, 49X, 57X
Production Dates: **Begin:** 04/28/2018 **End:** 06/14/2021

Type: Buses, Medium & Heavy Duty Vehicles

Descriptive Information: Freightliner Cascadia trucks and Western Star vehicles equipped with aluminum battery cables.

Number potentially involved: 122,469 **Estimated percentage of involve with defect:** Under 1%

Defect / Noncompliance Description
For this Defect/Noncompliance:
Describe the defect or noncompliance: On certain vehicles, the battery cable terminal at the frame connecting point may break resulting loss of electrical power and unintended engine shut down without warning.

Basis for determining the population and how the population differs from other vehicles not subject to recall: Vehicles built with aluminum battery cables.

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

Describe the safety risk: Unintended engine shut down without warning may result in a vehicle being stalled on the roadway which could increase the risk of a vehicle crash.

Identify any warning which can precede or occur: None
If applicable, identify the manufacture of the defective or noncompliant component:
Auto Kabel de Mexico SA de CV
Parque Industrial, Av. Hermanos Escobar 7151, Omega,
Ciudad Juárez, Chihuahua,32320
Navia Saul
Sales Account Manager
saul.navia@autokabel.com
Phone: 915.217.2253

Involved Components
Component Name: Power cables
Component Description: Positive and negative power cables

Component Part Number: Multiple part numbers

Chronology of Defect / Noncompliance Determination
Provide the chronology of events leading up to the defect decision or test data for the noncompliance decision. In or about January 2021, DTNA received a single field report of unintended vehicle shutdown while in motion due to a broken battery cable. In or about March 2021, DTNA received another field report of positive battery cable separation at the 90 degree frame terminal and promptly began an investigation by, among other things, seeking to identify potentially similar incidents and seeking supplier analysis. In April 2021, DTNA received a failed part analysis report from the supplier. As a result, DTNA reviewed relevant warranty rate data to assess the matter. In or about May 2021, DTNA's cross-functional team was tasked to conduct a battery cable test evaluation. Test reports suggested that mating two incompatible galvanic materials, Aluminum and Brass, and not sealing them appropriately increases the likelihood of debris intrusion, which in turn may cause progressive damage to the weld joint area. However, at this time, DTNA lacked information sufficient to determine if a defect existed or in what population it existed. In or about June 2021, supplier process investigation revealed that the current procedure doesn't involve preheating of the joint before application of the wrap and due to that, it may not achieve a required surface bond which would be enough to prevent debris intrusion. Field input disclosed that the largest portion of these events are occurring outside of warranty and parts are being replaced by customers with dealer made copper cables, further complicating DTNA's effort to understand if there was a defect observed in the field and, if so, what was the population. That said, DTNA's estimates indicated a rate of occurrence significantly below 1%. Despite the uncertainty and the low rate of occurrence, out of an abundance of caution, on June 21, 2021, DTNA reasonably decided to conduct a voluntary

recall as set forth in this report. July 20, 2021, upon final review of production dates, bookend dates were revised, and therefore DTNA adjusted the recall population. November 2, 2021, due to parts availability, the recall release has been delayed and is expected to launch in late-February 2022. Pursuant to rule 573.6, DTNA in good faith, filed a DIR for recall based on the best information available at that time. Subsequently, in late April 2022, upon obtaining updated vehicle registration data not previously known at the time of the previous submission, DTNA has amended the applicable sections of the DIR to reflect the most current information for units registered in the United States and territories.

Identify the Remedy

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

The subject Aluminum battery cables on the affected vehicles will be inspected for corrosion and/or damage and will be repaired or replaced with Copper cables accordingly. Customer notification will be done by first class mail using Daimler Trucks North America records to determine the customers affected. Copies of the reimbursement plan will be submitted as a supplemental report when available.

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:	02/25/2022
Planned Dealer Notification End Date:	02/25/2022
Planned Owner Notification Begin Date:	02/25/2022
Planned Owner Notification End Date:	02/25/2022

Manufacture's identification code for this recall (if applicable): FL-893

DTNA Representative;

Tiffani Torgeson

Tiffani Torgeson
Manager,
Compliance and Regulatory Affairs