DAIMLER

Defect Information Report

(Section 573.6)

FL-887

Date of Submission: ***June 16, 2021***

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

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

Vehicle Information

Model Yr. Start: *2017* **Model Yr. End:** *2022*
Make: *Freightliner*
Model: *New Cascadia*
Production Dates: **Begin:** *03/08/2016*
End: *05/20/2021*

Descriptive Information:
On the affected Freightliner Cascadia trucks within the production dates noted above

Number potentially involved: 72510 **Estimated percentage involved with defect:** 1.0%

Defect / Noncompliance Description

For this Defect/Noncompliance:

Describe the defect or noncompliance:
On certain Freightliner Cascadia vehicles, if halogen headlight/headlamp bulb is improperly installed upon replacement, that headlight/headlamp bulb may potentially dislodge and come into contact with other components of the headlight/headlamp assembly, increasing the risk of a melting condition or fire. Although DTNA does not believe this to be a defect related to motor vehicle safety within the meaning of the National Traffic and Motor Vehicle Safety Act, out of an abundance of caution DTNA is recalling vehicles with these halogen headlight/headlamp bulbs.

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

Describe the safety risk:
If a replacement bulb is improperly installed, it may melt beyond the headlight/headlamp assembly to potentially include the hood, cab and complete vehicle, increasing the risk of fire.

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 mid-June 2018, DTNA received one field report of a melted headlamp socket with a replacement headlamp (not resulting in a fire or other thermal event), prompting DTNA to open a preliminary investigation. This field report was timely submitted to NHTSA pursuant to 49 C.F.R. 579.22 in or about 8/20/2018. In or about late June through July 2018, DTNA examined the matter and, among other things, sought to identify potentially similar incidents. During that time frame, none were found. In or about August 2018, DTNA received a second field report involving a replacement headlamp that had overheated and melted approximately 11 months after replacement. This field report was timely submitted to NHTSA pursuant to 49 C.F.R. 579.22 in or about 11/30/2018. As of August 2018, DTNA's reasonable understanding of the facts presented in these first two field reports supported an owner aftermarket installation error for replacement headlamps and not a safety-related defect.

In or about October of 2018, DTNA determined that the headlamp supplier was preforming air pressure testing to confirm proper bulb placement into the assembly. DTNA also reviewed the relevant Service/Workshop Manual information for Halogen headlight repair/service resulting in an update request to align halogen bulb replacement with other models. Additionally, in or about early October 2018, DTNA received a third field report of a thermal event for a truck that had the headlight serviced twice prior. This field report was timely submitted to NHTSA pursuant to 49 C.F.R. 579.22 in or about 3/1/2019. DTNA's reasonable understanding of the facts presented in that field report continued to illustrate an owner aftermarket installation error for replacement headlamps and not a safety-related defect.

Towards the later part of October 2018, a cross-function team was tasked to conduct a headlamp accessibility test evaluation. Subsequently, in or about December 2018, DTNA compared customer supplied aftermarket replacement bulb to OEM bulb (the results of which are discussed below). Also, a fourth headlamp melt field report was received followed by a DTNA comparison review of customer supplied aftermarket vs OEM bulbs. This field report was timely submitted to NHTSA pursuant to 49 C.F.R. 579.22 in or about 3/1/2019. DTNA's reasonable understanding of the facts presented in that field report again continued to illustrate an owner aftermarket installation error for replacement headlamps, and not a safety-related defect.

In or about January 2019, the headlamp supplier conducted an accessibility review and DTNA reviewed the aforementioned PVE testing results, following which DTNA updated applicable installation diagrams noting the importance of proper owner installation, bulb orientation, quality alert at DTNA plants for awareness, and a service bulletin/driver manual update.

In or about late January 2019, DTNA closed its investigation, reasonably concluding no defect that presented an unreasonable risk to safety, with all issues arising from improper after first sale owner installation of replacement bulbs.

In or about February 2019, DTNA updated its Workshop Manual, and an initial Service Bulletin (54-309) was published to use SAE/DOT approved bulbs only. Among other things, it cautioned installers to ensure proper installation with bulb firmly seated in headlamp housing and that improper bulb installation may result in melting or fire damage to vehicle. This Service Bulletin was timely submitted to NHTSA pursuant to 49 C.F.R. 579.5 in or about 3/7/2019.

Over the course of January to July 2019, DTNA conducted design reviews considering accessibility improvements and warning labels in connection with owner error in bulb replacement. During this time period, 8 additional headlamp failure reports were received from the field. These field reports were also all timely submitted to NHTSA pursuant to 49 C.F.R. 579.22.

In or about August 2019, a warning label was developed. Viewing window opening in splash shield was reviewed in September 2019. In or about October 2019, DTNA issued a service option for warning labels, splash shield modification, and removal of bulb boot for installation of a foam donut. Later, in or about November 2019, DTNA issued a Customer Advisory Letter (CAL) regarding splash shield modification (2" visibility hole), warning label and grommet. This CAL was timely submitted to NHTSA pursuant to 49 C.F.R. 579.22 in or about 11/21/2019.

In or about December 2019, Service Bulletin (54-309) revision was published with warning label addition. This Service Bulletin was timely submitted to NHTSA pursuant to 49 C.F.R. 579.5 in or about 12/19/2019.

In or about June 2020, additional DTNA workshop manual and drivers manual updates were published, all of which were timely submitted to NHTSA pursuant to 49 C.F.R. 579.5.

During a December 2020 meeting with NHTSA, the agency inquired as to DTNA's analysis of replacement headlight failures. In response to NHTSA's inquiry, in January 2021, DTNA conducted a warranty data pull, and determined the population finalizing the warranty review by mid-January. DTNA's preliminary findings were discussed with NHTSA in or about mid-January 2021. Given NHTSA's inquiry, in January and February 2021, DTNA re-examined the matter and identified additional field incidents arising between August 2019 and November 2020, including approximately 24 incidents involving P4 Cascadias with comparable thermal incidents that resulted in melting of components and in some cases total vehicle loss.

On February 25, 2021, NHTSA opened PE21-006 to investigate halogen headlamp issues. DTNA reevaluated the matter, including efforts to assess relevant failure mechanisms. In late April and early May, 2021 DTNA reevaluated the data on vehicles found to have thermal events at low mileage and

decided to take a more conservative approach. While the issue is and was best understood as an owner aftermarket installation error for replacement headlamps, out of an abundance of caution, and without finding a safety-related defect, DTNA decided on May 10, 2021 to conduct a voluntary recall on the affected population of Freightliner New Cascadias. At all relevant times prior to May 10, 2021, given the facts as they were best understood at the time, DTNA reasonably did not know, nor could it have known, of a potential defect with an unreasonable risk to safety.

Two vehicles, now being added to the population, were inadvertently not included in the original recall population due to 2021 supply chain issues and parts shortages that shifted their build dates and delivery dates to two customers until after DTNA's original recall filing with NHTSA. DTNA promptly discovered the existence of these two additional vehicles and contacted the two customers at approximately the time the vehicles were delivered to those customers. DTNA ensured the customers understood the recall issue for the two additional vehicles and now adds these two additional vehicles to the recall population.

**June 2021: DTNA is in the process of sunsetting the terminology "New Cascadia" and transitioning to just "Cascadia."*

Identify the Remedy

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

Subject vehicles will require, on both sides of the vehicle, a foam grommet to replace the rubber boot within the headlight/headlamp assembly, a 4 inch access hole cut into the inner fender, and a warning label/sticker on both fenders. 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:	*07/12/2021*
Planned Dealer Notification End Date:	*07/12/2021*
Planned Owner Notification Begin Date:	*07/12/2021*
Planned Owner Notification End Date:	*07/12/2021*

Manufacture's identification code for this recall (if applicable): *FL-887*

DTNA Representative;

Larissa Stoffels
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