



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 21-006
Date Opened: 02/25/2021
Investigator: Xiaoming Tan
Approver: Stephen Ridella
Subject: Halogen Headlamps May Cause Fires
Reviewer: Joshua Neff

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Daimler Trucks North America, LLC
Products: 2018-2020 Freightliner Cascadia
Population: 55,552 (Estimated)
Problem Description: Halogen headlamps may generate high thermal heat and cause fires.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	0	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*:	33	Confidential	Confidential

***Description of Other:** Field reports

ACTION / SUMMARY INFORMATION

Action: Open the Preliminary Evaluation (PE)

Summary:

Research into a vehicle owner questionnaire (VOQ) filed on a Freightliner Cascadia vehicle for an unrelated topic, resulted in the Office of Defects Investigation (ODI) identifying a number of field reports concerning headlamp fires on Freightliner Cascadia trucks.

ODI contacted Daimler Trucks North America LLC (DTNA) and learned that they were aware of halogen bulb-related thermal events since the 2017 model. DTNA believes the issue is due to incorrect bulb replacement during maintenance. In July 2019, DTNA released service and installation information in the form of a Technical Service Bulletin (TSB) and a training video covering proper headlight bulb replacement.

ODI has further investigated the field reports submitted by DTNA (up to 2020, third quarter) and has identified a high percentage of cases of thermal-related field reports that involve fires and data analysis shows that there is an increasing trend of fire related field reports. Some vehicles have caught fire with mileages that were within the original equipment halogen bulb's expected life range. There have been additional fires, with total vehicle losses, even after DTNA released extra training information concerning proper headlight bulb replacement. In a review of peer Volvo truck or Mack truck vehicles, a similar issue is not evident.

A Preliminary Evaluation has been opened to assess the scope and frequency of the alleged defect.