

## Amended Defect Information Report

(Section 573.6)

### FL851

**Date of Submission:** March 20, 2023 (December 23, 2021)

**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:** 2020                      **Model Yr. End:** 2021

**Make:** Freightliner

**Model:** Cascadia

**Production Dates:**    **Begin:** 01/16/2019      **End:** 03/27/2020

**Type:** Truck/Tractor

### Descriptive Information:

On the affected vehicles, during certain Advanced Brake Assist (ABA) events that have progressed to require a full emergency brake application to avoid a collision, the hazard warning lights may activate automatically in the moments immediately before the vehicle comes to a complete stop, and flashes at a rate of 140 flashes per min.

**Number potentially involved:** 24,282    **Estimated percentage of involve with defect:** 100%

### Defect Description

#### Describe the defect:

On the affected vehicles, during certain Advanced Brake Assist (ABA) events that have progressed to require a full emergency brake application to avoid a collision, the hazard warning lights may activate automatically in the moments immediately before the vehicle comes to a complete stop and flashes at a rate of 140 flashes per min. FMVSS 108, requires the hazard warning signal lights to be driver controlled and flashing rate to be between 60-120 flashes per min and that the activation of the hazard warning operating unit be "driver controlled."

**If a noncompliance, provide the applicable FMVSS:** FMVSS 108

**Describe the safety risk:**

Certain Freightliner Cascadias with DTNA's ABA system will automatically activate the hazard lamps if the vehicle's safety system engages in extreme evasive braking, which can increase the risk of a crash for other road users. NHTSA considers the automatic hazard activation in these circumstances, as well as the flash rate at which the hazard lamps' flash rate, noncompliance under FMVSS 108 Lamps, reflective devices, and associated equipment.

**Identify any warning, which can precede or occur:** ABA events which progress to a full emergency braking stage occurs only after multiple warnings to the driver including auditory and visual warnings, haptic braking which involves partial braking along with auditory and visual warnings.

**If applicable, identify the manufacture of the defective or noncompliant component:** Hazard and Turn Signal Lighting parameters during Active Brake Assist (ABA)

**Involved Components**

**Component Name:** Detroit Assurance 5.0

**Component Description:** Advanced Drivers Assistance System (ADAS)

**Component Part Number:** NA

**Supplier Identification:** DTNA

**Component Manufacturer:** DTNA

**Chronology of Noncompliance Determination**

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

February 2020, DTNA began an investigation to review all its features related to ABA events as part of a study to develop systems for new trucks. During this study, it was identified that certain features may need further review to ensure the current product met the provisions of FMVSS 108. March 2020 through April 2020, Product validation conducted tests on certain vehicles to identify any potential non-compliance, and an extensive engineering investigation was undertaken to understand all the features of ABA and how they interact together. During this study, it was identified that in certain situations the hazard warning signals flash at a rate of 140 flashes per min. An in-depth review of NHTSA regulations and interpretations related to this issue indicated a potential non-compliance with the flash rate provisions. May 6, 2020, DTNA determined that a non-compliance existed as to the flash rate for the hazard warning lamps and decided to file a Part 573 non-compliance information report and petition for exemption from the notice and remedy provisions of the Safety Act for this issue. DTNA

believes that this non-compliance is inconsequential as it relates to motor vehicle safety, as the occurrence will be extremely rare, for a very short duration and does not contribute to confusion or distraction for other motorists. DTNA also recognized that the hazards automatically flash in severe brake events but deemed this not a non-compliance, nor an issue that needed NHTSA approval, based upon the permission granted to GM in essentially similar situations.

June 4, 2020, DTNA filed a petition for exemption from notification and remedy provisions of motor vehicle safety act for non-compliance with FMVSS no. 108, lamps, reflective devices and associated equipment. Between early June 2020 to Late July 2020, DTNA communicated with NHTSA, at the agency's request, regarding DTNA's non-compliance information report and inconsequentiality petition. DTNA made several verbal updates, presentations and provided evidence and data to support the inconsequentiality petition pertaining to hazard warning signals flashing at 140 flashes per min during certain ABA events that involves full braking. July 13, 2020, upon NHTSA's request, DTNA amended the inconsequentiality petition to include FMVSS S14.9.3.9.3 – flasher performance requirements as an additional non-compliance basis.

Between late August 2021 to late September 2021, DTNA again reviewed the inconsequentiality petition with NHTSA at the agency's request. At that time, NHTSA advised DTNA to consider automatic activation of the hazard lamps as an additional aspect of the non-compliance analysis. October 4, 2021, DTNA met with NHTSA and presented the company's basis for why it did not believe that automatic activation of the hazard warning lamps during the course of a severe automatic emergency braking event rose to the level of a non-compliance. DTNA presented, among other things, the severe and limited time frame for the automatic activation of the hazard lamps, the progressive phases of automatic braking required to trigger the hazard lamps and analysis of similar circumstances where the agency had concluded that automatic activation of the hazard lamps was appropriate to communicate a vehicular emergency. DTNA furnished the agency with additional information that it requested in the following weeks. On December 20, 2021, DTNA received a verbal report from NHTSA, which described that the agency views automatic activation of hazard warning signals during an emergency braking event in the DTNA vehicles as a non-compliance. December 22, 2021, based on this feedback from NHTSA, DTNA determined that a non-compliance existed and decided to amend Part 573 non-compliance information report and petition for exemption from the notice and remedy provisions of the Safety Act for this issue. DTNA believes that this non-compliance is inconsequential as it relates to motor vehicle safety, and will supply an inconsequentiality petition for the agency's consideration.

On March 20, 2023, DTNA received notice of denial of the inconsequentiality petition for noncompliance. Therefore, out of abundance of caution, and per the requirements of Motor Vehicle Safety Act, DTNA amended its Part 573 report in light of the agency's response.

## Identify the Remedy

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

On the affected vehicles, parameters controlling the enablement of hazards flashing automatically at a faster frequency during an ABA Emergency Braking Event will be disabled. Customer notification will be done by first class mail using Daimler Truck North America records to determine the customers affected. Repairs will be performed free of charge by Daimler Truck North America authorized service facilities. Details of the reimbursement plan will be included in the owner's notification letter. Owners are directed to seek reimbursement through authorized dealers.

## Identify the Recall Schedule

**Describe the recall schedule for notifications:**

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

**Planned Dealer Notification Begin Date:** 05/19/2023

**Planned Dealer Notification End Date:** 05/19/2023

**Planned Owner Notification Begin Date:** 05/19/2023

**Planned Owner Notification End Date:** 05/19/2023

**Manufacture's identification code for this recall (if applicable):** FL851

**DTNA Representative;**

*Tiffani Torgeson*

Tiffani Torgeson  
Manager, Compliance and Regulatory Affairs