



U.S. Department  
of Transportation  
**National  
Highway  
Traffic Safety  
Administration**

**ODI RESUME**

**Investigation:** RQ20001  
**Prompted By:** VOQs and EWR Field Report Review  
**Date Opened:** 08/31/2020      **Date:** 06/26/2025  
**Closed:**  
**Investigator:** Robert Nguyen      **Reviewer:** Joshua Neff  
**Approver:** Tanya Topka  
**Subject:** SAM Cab Water Intrusion

**MANUFACTURER & PRODUCT INFORMATION**

**Manufacturer:** Daimler Trucks North America, LLC  
**Products:** 2007-2021 Freightliner Cascadia  
**Population:** 350,000 (Estimated)

**Problem Description:** Water intrusion into the SAM cab module resulting in the loss of electrical functions and potential fire, increasing the risk of a crash and personal injury.

**FAILURE REPORT SUMMARY**

	ODI	Manufacturer	EWR D&I	Other	Total	EWR Field Reports
<b>All Incidents:</b>	7	0	0	0	7	CONF
<b>Crashes/Fires:</b>	0	0	0	0	0	0
<b>Injury Incidents:</b>	0	0	0	0	0	0
<b>Number of Injuries:</b>	0	0	0	0	0	0
<b>Fatality Incidents:</b>	0	0	0	0	0	0
<b>Number of Fatalities:</b>	0	0	0	0	0	0

**Description of Other:**

**ACTION/SUMMARY INFORMATION**

**Action:** This Recall Query (RQ) is closed without a manufacturer action.

**Summary:**

On August 31, 2020, the Office of Defects Investigation (ODI) opened a recall query, RQ20001, to investigate the allegations of water intrusion into the truck cab signal-detect and activation

module (SAM cab). The investigation further evaluated the effectiveness of the original recall remedy, and the installation of an updated drip shield as it relates to continual water intrusion resulting in the loss of electrical functions and potential fire. The potential hazard was the increased risk of a crash and injury in certain model year (MY) 2007-2021 Freightliner Cascadia P3 vehicles manufactured by Daimler Trucks North America (DTNA).

ODI sent DTNA an information request (IR) letter on September 29, 2020. DTNA's November 20, 2020, IR response detailed how the company had implemented various improvements through recall 09V024 and multiple technical service bulletins (TSBs) to mitigate water intrusion. The effectiveness of new windshield seals and revisions to the drip shield is evident by the downward trend in claims rate from an average high of 7.64% in the beginning product life of Cascadia P3 (MYs 2007-2009), to 1.79% average for MYs 2011-2018, and down to 0.49% towards the end of the Cascadia P3 production. Moreover, the data shows that most failures occurred within the first three years of service with a significant downward trend thereafter.

In view of the current overall low failure rate, the nature of early-life failure, and failure rate trending downward since model year 2017, this Recall Query (RQ) is closed. The Agency reserves the right to take additional action if warranted by future circumstances. To review the ODI reports cited in the Closing Resume ODI Report Identification Number document, go to [NHTSA.gov](https://www.nhtsa.gov).