OMB Control No.: 2127-0004

Part 573 Safety Recall Report

23V-511

Manufacturer Name: Volvo Trucks North America

Submission Date: JUL 24, 2023 **NHTSA Recall No.:** 23V-511 **Manufacturer Recall No.:** RVXX2309



Manufacturer Information:

Manufacturer Name: Volvo Trucks North America

Address: 7900 National Service Road

Greensboro NC 27409

Company phone: 800 528 6586

Population:

Number of potentially involved: 55,012 Estimated percentage with defect: 6 %

Vehicle Information:

Vehicle 1: 2022-2024 Volvo VNR/VNL/VHD/VAH Vehicle Type: BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER Power Train : DIESEL

Descriptive Information: The recall population is vehicles built from May 1, 2021 through July 5, 2023 with

motors which were manufactured with gears and lubricant from non-verified

suppliers.

Production Dates: MAY 03, 2021 - JUL 05, 2023

VIN Range 1: Begin: 4V5KG9EJ7NN281752 End: 4V4NC9EH9RN630247 ✓ Not sequential

Description of Defect:

Description of the Defect: Premature wear of the gears in the wiper motor system.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: If the windshield wipers become inoperative, it could limit the driver's

visibility under certain operating conditions, which may increase the risk of a

crash

Description of the Cause: Use of unvalidated components including motor housing, gears, and/or grease

creates incompatibility of components which results in wiper motor failure.

Identification of Any Warning The driver may notice wiper's slowing or stopping intermittently while in

that can Occur: steady operation prior to the wiper motor gear failing.

Involved Components:

Component Name 1: Windshield Wiper

Component Description: Windshield Wiper, Assembly LHD Reduced

Component Part Number: 84724203

Supplier Identification:

Component Manufacturer

Name: Commercial Vehicle Systems-Sprague

Address: 527 West US Highway 20

Michigan City Indiana 46360

Country: United States

Chronology:

October 22, 2021 Volvo Reliability Engineering in conjunction with Volvo Cab Engineering starts an investigation into wiper motor failures which indicated a increasing trend.

January 28, 2022 Initial reports on wiper motor failure analysis received from CVG Sprague.

February 11, 2022 CVG Sprague starts review with their Tier 1 supplier of the gears

October 20, 2022 CVG Sprague Tier 1 Testing Started

February 28, 2023 Lab Reviews (Plastic gears, Grease)

May 12, 2023 Volvo Audit and Review at CVG in USA

May 19, 2023 Volvo Audit and Review at Lucas Electric (Tier 2) Chennai India and Fine Plastics (Tier 3)

June 9, 2023 Volvo Audit and Review at Lucas Electric (Tier 2)

June 16, 2023 Volvo Audit and Review at (Tier 3) Grease supplier

June 25, 2023 Volvo Audit and Review at CVG Sprague

July 6, 2023 Stable production established.

July 19, 2023 Product Safety Working Group reviews product safety investigation results and recommends that this be brought to Product Safety Committee as a potential product safety defect.

July 19, 2023 The Product Safety Committee meets and decides that a product safety defect exists.

July 24, 2023 573 Report filed with NHTSA

Warranty claims reached 5.8 percent, 51 reports of service requests due to inoperative wipers, there have been no accidents or injuries attributed to this issue.

Description of Remedy:

Description of Remedy Program: Remedy program will be to replace windshield wiper motor assembly with

units produced with verified components.

Reimbursement for the recall will be covered by Manufacturer's

Reimbursement Plan on file with NHTSA.

How Remedy Component Differs Remedy Component has been built from known and verified gear and

from Recalled Component: grease supplier which have passed testing to our application. Windshield

Wiper, Windshield Wiper, Assembly LHD Reduced, 84724203

Identify How/When Recall Condition Windshield wiper motors with corrected components were introduced

was Corrected in Production: into production on July 6, 2023.

Recall Schedule:

Description of Recall Schedule: Dealer notification will begin on July 28, 2023 and owner notification will

begin on or before September 15, 2023

Planned Dealer Notification Date : JUL 28, 2023 - JUL 28, 2023 Planned Owner Notification Date : SEP 15, 2023 - SEP 15, 2023

^{*} NR - Not Reported