OMB Control No.: 2127-0004

Part 573 Safety Recall Report

23V-025

Manufacturer Name: Volvo Trucks North America

Submission Date: APR 26, 2023 NHTSA Recall No.: 23V-025 Manufacturer Recall No.: RVXX2301



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 : 135 Estimated percentage with defect : 100 %

Vehicle Information:

Vehicle 1: 2019-2023 Volvo VNRE

Vehicle Type: BUSES, MEDIUM & HEAVY VEHICLES

Body Style: OTHER

Power Train: HYBRID ELECTRIC

Descriptive Information: Vehicle population determined by battery electric trucks which have not received

updated software (generation) which removes the risk of thermal escalation

Production Dates: JUN 29, 2018 - SEP 14, 2022

VIN Range 1: Begin: 4V4WC9DG9KN217067 End: 4V4NC9EHXPN315762 ✓ Not sequential

Description of Defect:

Description of the Defect: EV vehicle heater thermal escalation. The coolant heater may stay energized

and when in a no flow or low coolant level condition, the heater could catch

fire.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: Safety risk is the potential for a fire if a relay fails in the closed position and

other conditions are met.

Description of the Cause: If a relay fails in a closed position when the vehicle is energized, key in ignition,

and cabin heater on. With no coolant flow or a low coolant level, the heater

could catch fire.

Identification of Any Warning There are no known warnings.

that can Occur:

Involved Components:

Component Name 1: Relay

Component Description: HOR150 Bridge Make 24V

Component Part Number: 20709545

Supplier Identification:

Component Manufacturer

Name : Volvo Address : NR

NR

Country: NR

Chronology:

June 24, 2021, Volvo Europe Product Safety Committee (PSC) meets and makes a recall decision relative to their EMOB platform. August 18, 2021, Volvo North America is informed of the decision. October 26, 2021 Volvo North America Product Safety Working Group (PSWG) is made aware and opens investigation (21-095) into findings made by Europe PSC and recommends a foreign recall report be filed because the relay in question is used in North American product. November 17, 2021 Volvo North America Foreign Recall Report 21F252 EV vehicle heater thermal escalation. December 16 2022, PSWG Investigation findings concluded. January 5, 2023 Investigation findings reviewed with product engineering and verified. January 13, 2023 PSWG makes recommendation that a safety defect finding be made. January 18, 2023, North American PSC meets and makes the determination that a product safety defect exists. January 23, 2023 573 Report Filed with NHTSA.

There have been no accidents or injuries or field complaints or warranty claims related to this issue.

Description of Remedy:

Description of Remedy Program: Update software for Hybrid Powertrain Control Unit (HPCU) and

Instrument Cluster (IC). Install replacement relays.

Reimbursement for the recall will be covered by Manufacturer's

Reimbursement Plan on file with NHTSA.

How Remedy Component Differs Software installs counter for relay actuations and when a proscribed

from Recalled Component: number of actuations is attained then will flag the vehicle for maintenance,

if the actuation numbers are exceeded then the heater itself is disabled.

Identify How/When Recall Condition Updated software introduced into production on November 23, 2022

was Corrected in Production:

Recall Schedule:

Description of Recall Schedule : Dealer notification was released 1/27/2023. Owner notification was

released on 3/16/2023.

Planned Dealer Notification Date : JAN 27, 2023 - JAN 27, 2023 Planned Owner Notification Date : MAR 19, 2023 - MAR 19, 2023

* NR - Not Reported