Part 573 Safety Recall Report

Manufacturer Name :	Volvo Trucks North America
Submission Date :	MAR 10, 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 %

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

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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 that can Occur :	There are no known warnings.

Involved Components :

The information contained in this report was submitted pursuant to 49 CFR §573

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Component Name 1 : Volvo Systems Engineering

Component Description : NA

Component Part Number: NA

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.
	Software installs counter for relay actuations and when a proscribed 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 was Corrected in Production :	Updated software introduced into production on November 23, 2022

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Recall Schedule :

Description of Recall Schedule : NR Planned Dealer Notification Date : JAN 27, 2023 - JAN 27, 2023 Planned Owner Notification Date : MAR 19, 2023 - MAR 19, 2023

* NR - Not Reported

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