OMB Control No.: 2127-0004

Part 573 Safety Recall Report

24V-790

Manufacturer Name: Volvo Trucks North America

Submission Date: OCT 23, 2024 **NHTSA Recall No.:** 24V-790 **Manufacturer Recall No.:** RVXX2409



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 : 126,649 Estimated percentage with defect : 100 %

Vehicle Information:

Vehicle 1: 2020-2025 Volvo VN/VAH/VHD/VNRE Vehicle Type: BUSES, MEDIUM & HEAVY VEHICLES

Body Style: OTHER Power Train: DIESEL

Descriptive Information: The recall population is defined by specific vehicles equipped with Bendix EC80

electronic control units (ECU's) and equipped to tow a trailer. Vehicles without towing capability and Bendix EC80 and Power Line Carrier (PLC) communication are

excluded from the population. 126649 units, Volvo, VN/VAH/VHD/VNRE,

MY2020-2025.

Production Dates: MAY 01, 2019 - OCT 19, 2024

VIN Range 1: Begin: 4V4NC9EH5LN89745 End: 4V4WC9EH0SN692548 ✓ Not sequential

Description of Defect:

Description of the Defect: As described in 24E-086, EC80 is an electronic control unit mounted on a

towing vehicle. It is a component of an antilock braking system (ABS). Power Line Carrier (PLC) is a trailer to tractor communication system that sends a signal on the electrical connection between the tractor and trailer. PLC purpose is to control the cab mounted trailer-ABS indicator lamp in the towing vehicle. In the presence of high electrical interference (i.e. noise) on the vehicle power line and low PLC signal strength, the EC80 PLC functionality may incorrectly

process certain signals. The EC80 may set a fault or stop operating or

malfunction. The combination of high electrical interference and low PLC signal strength is more likely on vehicles that tow more than one trailer than vehicles that tow only one trailer. The PLC signal strength may be substantially reduced when other optional devices are connected to the power line. These optional devices include trailer based tracking systems. Vehicles with low noise levels

and high signal strength may never exhibit the vehicle effects.

FMVSS 1: NR

FMVSS 2: NR

Description of the Safety Risk: As described in 24E-086, The ABS, Automatic Traction Control (ATC), or

Electronic Stability Control(ESC) may set an ABS fault or may stop operating.

Other functions which strongly interact with ABS such as Active Cruise

Control (ACC) and Collison

Mitigation System (CMS) may also fault. In extremely rare situations before

the system faults or stops operating, if there is a stability event or an

automated braking request, the system may respond incorrectly to the event.

This can increase the likelihood of a crash.

Description of the Cause: Inadequate systems validation in an operational environment.

Identification of Any Warning The ABS warning lamp will be illuminated when an ABS fault is detected or

that can Occur: when the ABS stops operating.

Involved Components:

Component Name 1: Control Unit

Component Description: ABS-Advanced (ESP+)

Component Part Number: 22865025

Supplier Identification:

Component Manufacturer

Name: Bendix Commercial Vehicle Systems, LLC.

Address: 35500 Chester Road

Avon Ohio 44011

Country: United States

Chronology:

October 11 2024: Bendix management contacts our purchasing organization concerning their upcoming filing of a equipment DIR relative to their EC80 Advanced Electronic Control Units.

October 11, 2024: Product Safety is notified of the potential issue and opens investigation.

October 14, 2024: Product Safety Evaluation Committee meets and reviews communications from Bendix and our internal investigation and recommends that this be escalated to the Product Safety Committee as a potential safety defect.

October 17, 2024: Product Safety Committee meets and determines that a product safety defect exists and vehicles will be recalled.

October 23, 2024: DIR report filed with NHTSA.

There have been 55 warranty claims where an ABS light became illuminated, ABS off line, without additional ABS/ATC/ESC/ACC or CMS systems in use failures.

There have been no field reports, no accidents or no injuries reported with this issue.

Description of Remedy:

Description of Remedy Program: Vehicle will be recalled and the Bendix EC80 electronic control unit

software will be updated.

Reimbursement for the recall will be covered by Manufacturer's

Reimbursement Plan on file with NHTSA.

How Remedy Component Differs The remedy software does not contain the defective PLC functionality.

from Recalled Component: Control Unit, ABS-Advanced (ESP+), 22865025

Identify How/When Recall Condition Vehicles have been identified on October 18, 2024 and placed on hold and

was Corrected in Production: will not be released until the EC 80 electronic control unit software is

updated.

Recall Schedule:

Description of Recall Schedule: Dealer Notifications will be on or before October 29, 2024 Owners

Notifications will be on or before December 13, 2024

Planned Dealer Notification Date: OCT 29, 2024 - OCT 29, 2024 Planned Owner Notification Date: DEC 13, 2024 - DEC 13, 2024

^{*} NR - Not Reported