

Part 573 Safety Recall Report

23V-512

Manufacturer Name : Volvo Trucks North America

Submission Date : OCT 25, 2023

NHTSA Recall No. : 23V-512

Manufacturer Recall No. : RVXX2308



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 : 172

Estimated percentage with defect : 15 %

Vehicle Information :

Vehicle 1 : 2020-2024 Volvo VNR Electric

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : HYBRID ELECTRIC

Descriptive Information : The population of vehicles is those equipped with Akasol batteries which were assembled and/or reworked with improper torque control on the buss bars connecting battery cells.

Production Dates : APR 01, 2019 - FEB 10, 2023

VIN Range 1 : Begin : 4V5W19DF0LN252154 **End :** 4V4WB9KN4RN623109 ☒ Not sequential

Description of Defect :

Description of the Defect : Rivnut inserts are potentially overtorqued and could fail. The nut inserts can then become debris in the battery which could result in a short inside the battery pack.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : The overtorque of the busbar Rivnuts could result in nut inserts shearing off and shorting inside the battery which could result in a battery fire.

Description of the Cause : Akasol manufacturing insufficient process controls in assembly tooling (torque) and in battery assembly rework process.

Identification of Any Warning that can Occur : The vehicle battery thermal management system will provide warning to the driver of a battery overheating situation by the instrument cluster, driver information display.

Involved Components :

Component Name 1 : Battery

Component Description : Battery, complete battery pack

Component Part Number : 23364826

Supplier Identification :

Component Manufacturer

Name : Akasol Inc.

Address : 1400 E. 10 Mile Road

Suite 15 Hazel Park Michigan 48030

Country : United States

Chronology :

July 5, 2023 Volvo Manufacturing and Purchasing reports to Product Safety Working group that they have discovered a battery which had been shipped to our assembly plant had a fire (contained in the battery and not spreading in the battery). A formal investigation is opened.

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

There have been no warranty claims, field reports, accidents or injuries reported with this issue. The incident battery which initiated the investigation involved one battery which was on a trailer in shipment to our assembly operations. The battery was the only one found damaged with no spread of damage to the other batteries in the shipment, or to the trailer. During the investigation a second battery with evidence of arcing internally was identified at Akasol's assembly operations.

Description of Remedy :

Description of Remedy Program : The batteries on these vehicles will be replaced.
Reimbursement for the recall will be covered by Manufacturer's Reimbursement Plan on file with NHTSA.

How Remedy Component Differs from Recalled Component : The batteries will be replaced with batteries produced or re-certified by Akasol, after correction of the torque (torque and angle) issues at Akasol Inc. Battery, complete battery pack, 23364826

Identify How/When Recall Condition was Corrected in Production : Volvo manufacturing blocks all battery electric trucks at our assembly plant under an internal campaign July 12, 2023. All batteries on these vehicles will be replaced prior to shipment.

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. Interim owner's notification were sent on 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