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

OMB Control No.: 2127-0004 23V-514

11

Part 573 Safety Recall Report

Manufacturer Name : Mack Trucks, Inc. Submission Date : OCT 19, 2023 NHTSA Recall No.: 23V-514 Manufacturer Recall No.: SC0447

Manufacturer Information :

Manufacturer Name : Mack Trucks, Inc. Address: 2100 Mack Boulevard PO Box M Allentown PA 18105-5000 Company phone : 610-709-2131

Vehicle Information :

Vehicle 1:	2022-2023 Mack LR Battery Electric	
Vehicle Type :	BUSES, MEDIUM & HEAVY VEHICLES	
Body Style :	UNKNOWN	
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 :	NOV 16, 2021 - JAN 04, 2023	
VIN Range 1:	Begin: 1M2LRDGC6NM001028 End: 1M2LRDGC7PM001073 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.
	The vehicle battery thermal management system can provide warning to the
that can Occur :	driver of a battery overheating situation by the instrument cluster, driver information display.

Involved Components :

Population : Number of potentially involved : Estimated percentage with defect : 15~%



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 RoadSuite 15 Hazel Park Michigan 43080Country :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 one incident battery which initiated the investigation was in shipment to our assembly operations and was found with the damage without any spread or other damage to batteries in the shipment or 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.
	The batteries will be replaced with batteries produced after correction of the torque (torque and angle) issues at Akasol Inc. Battery, Battery, complete battery pack, 23364826
	Mack 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.

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

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 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

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