OMB Control No.: 2127-0004

Part 573 Safety Recall Report

23V-899

Manufacturer Name: Mack Trucks, Inc.

Submission Date: DEC 26, 2023

NHTSA Recall No.: 23V-899

MATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Manufacturer Information:

Population:

Manufacturer Name: Mack Trucks, Inc.

Manufacturer Recall No.: SC0457

Number of potentially involved: 284 Estimated percentage with defect: 1 %

Address: 2100 Mack Boulevard

PO Box M Allentown PA 18105-5000

Company phone: 610-709-2131

Vehicle Information:

Vehicle 1: 2024-2024 Mack Anthem, Pinnacle, TerraPro

Vehicle Type: BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER Power Train : DIESEL

Descriptive Information: The recall population is vehicles built which may have steering gears identified by R.

H. Sheppard Co., as having been assembled without the required number of

recirculating balls as outlined in their equipment recall.

Production Dates: MAR 16, 2023 - OCT 27, 2023

VIN Range 1: Begin: 1M1PN3GY5RM014284 End: 1M2TE2GC2RM011397 ✓ Not sequential

Description of Defect:

Description of the Defect: As described in Sheppard's equipment recall, the defect is a steering gear

assembled with fewer than the required number of recirculating balls.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: As described in Sheppard's equipment recall, a steering gear with fewer than

the required number of recirculating balls may bind when loads are applied. In some cases the balls may align on the same side of the worm-shaft and concentrated loads may cause the gear's internal part to fracture resulting in the loss of steering. Loss of steering increases the likelihood of a crash.

Description of the Cause: As described in Sheppard's equipment recall, an error of the steering gear

recirculating ball insertion process occurred during assembly. A gap in the rework process allowed for potentially less than the required number of balls

to be installed into the gear without detection.

Identification of Any Warning As described in Sheppard's equipment recall, preceding the internal fracture

that can Occur: the steering may be perceived as strained by the driver. No audible or visual

warning is available

Involved Components:

Component Name 1: Steering Gear

Component Description: M100/XD120/SD110/HD94

Component Part Number: 23851030, 21129326, 23851046, 23851052

Supplier Identification:

Component Manufacturer

Name: R.H. Sheppard Co., Inc. Address: 101 Philadelphia Street

Hanover Pennsylvania 17331-0877

Country: United States

Chronology:

December 18, 2023 Volvo Product Safety Office receives notification from Bendix (Sheppard) regarding their filing of an equipment recall on December 18, 2023

December 19, 2023 Sheppards filing is reviewed and recommendation that this be raised to Product Safety Committee as a potential product safety defect.

December 21, 2023 The Product Safety Committee meets and decides that a product safety defect exists. December 26, 2023 DIR 573 Report filed with NHTSA

There have been no accidents or injuries related to this issue, there have been no warranty claims, field reports or customer complaints associated with this issue.

Description of Remedy:

Description of Remedy Program: Vehicles will be recalled and inspected for suspect steering gear serial

numbers and those suspect gears will be replaced with remedy gears.

Reimbursement for the recall will be covered by Manufacturer's

Reimbursement Plan on file with NHTSA.

How Remedy Component Differs The remedy gears are assembled after the addition steps were added to

from Recalled Component: confirm that any rework certainly contains the correct number of

recirculating balls. Steering Gear, M100/XD120/SD110/HD94, 23851030,

21129326,23851046, 23851052

Identify How/When Recall Condition Steering gears quarantined and inspected for suspect steering gears at our

was Corrected in Production: impacted assembly plant on December 20, 2023

Recall Schedule:

Description of Recall Schedule: Dealer notification will begin on Dec 29, 2023 and owner notification will

begin on or before February 23, 2024

Planned Dealer Notification Date : DEC 29, 2023 - DEC 29, 2023 Planned Owner Notification Date : FEB 23, 2024 - FEB 23, 2024

* NR - Not Reported