

Part 573 Safety Recall Report

23E-022

Manufacturer Name : Meritor, Inc.

Submission Date : MAR 20, 2023

NHTSA Recall No. : 23E-022

Manufacturer Recall No. : C23AB



Manufacturer Information :

Manufacturer Name : Meritor, Inc.

Address : 2135 West Maple Road
Troy MI 48084

Company phone : 248-435-1725

Population :

Number of potentially involved : 37

Estimated percentage with defect : 11 %

Equipment Information :

Brand / Trade 1 : Meritor

Model : MX23810, MX24810

Part No. : MC238110DANC8-538

Size : NR

Function : Axle

Descriptive Information : Meritor received a report from the field regarding vibration in a right-hand wheel end on a front axle. As a result of the investigation, Meritor determined the affected axles had gone through a rework process and did not have the required torque applied to the fasteners. The affected axles were built between 1/10/2022 and 11/11/2022 at the Laurinburg manufacturing site.

Production Dates : JAN 10, 2022 - NOV 11, 2022

Brand / Trade 2 : Meritor

Model : MX23810, MX24810

Part No. : MX23810DANC12-538

Size : NR

Function : Axle

Descriptive Information : Meritor received a report from the field regarding vibration in a right-hand wheel end on a front axle. As a result of the investigation, Meritor determined the affected axles had gone through a rework process and did not have the required torque applied to the fasteners. The affected axles were built between 1/10/2022 and 11/11/2022 at the Laurinburg manufacturing site.

Production Dates : JAN 10, 2022 - NOV 11, 2022

Brand / Trade 3 : Meritor

Model : MX23810, MX24810

Part No. : MX24810DANC3-614

Size : NR

Function : Axle

Descriptive Information : Meritor received a report from the field regarding vibration in a right-hand wheel end on a front axle. As a result of the investigation, Meritor determined the affected axles had gone through a rework process and did not have the required torque applied to the fasteners. The affected axles were built between 1/10/2022 and 11/11/2022 at the Laurinburg manufacturing site.

Production Dates : JAN 10, 2022 - NOV 11, 2022

Description of Defect :

Description of the Defect : Potential of under torque of fasteners on the axle assembly, specifically: brake caliper to knuckle, steer arm to knuckle, lower kingpin to knuckle, tie-rod to knuckle

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : The OEMs determined failure of these joints could lead to loss of control of the vehicle, which could result in a crash.

Description of the Cause : The rework process was bypassed during the assembly operations.

Identification of Any Warning : The driver may experience an audible noise during braking. Handling issues that can Occur : may precede a joint failure.

Involved Components :

Component Name : NR

Component Description : NR

Component Part Number : NR

Supplier Identification :

Component Manufacturer

Name : NR

Address : NR

NR

Country : NR

Chronology :

12/6/22 –Mack Defense, during a road test, noted a vehicle vibration. After further inspections, caliper socket head cap screws were found to be backed off on the RH wheel end of a MX24810DANC3-614 axle on HDT chassis 1202 and reported to Meritor.

12/8/22 Suspect axle determined to have undergone rework due to a quality defect. Axle originally built on 10/13/22.

12/8/22 – In reviewing quality defect history in the Manufacturing Execution System (MES), quality determined not only were the caliper socket head cap screw torques suspect, but the kingpin hex head cap screws and tie rod castle nut torques are suspect due to the presence of permissive bits in the MES data, along with the lack of torque data in MES for these joints.

12/13/22 Quality determined twenty-six reworked axles for Mack Defense and twenty reworked axles for Terex Advance, built between January 2022 and December 2022 are suspect for these issues.

12/16/22 – Creation of a new rework offline guide for MX810 axles. 1/11/23 – Field service arrived at Mack facility to evaluate torque values and found six out of nine inspected axles with various under torqued fasteners. Under torqued fasteners were found in all suspect joints of at least one of the nine axles audited and subsequently reworked.

1/2023 - Meritor engineering analysis continues based on field service and plant problem solving actions.

2/16/2023 – Meritor Product Safety and Compliance Committee reviewed engineering technical position conclusion and determined a possible safety related concern has been identified and impacted customers should be notified.

2/16 – 3/2/23 – Communication to customer regarding technical position conclusion.

3/3/2023 -Meritor received confirmation from Mack Trucks, Inc. that they filed a 573 Defect Report with NHTSA

3/14/2023 – Meritor received confirmation from Terex Advance Mixer, Inc. that they had filed a 573 Defect Report with NHTSA.

Description of Remedy :

Description of Remedy Program : The affected OEMs will conduct the remedy program. Fasteners will be torqued to proper value; specifically inspect and tighten caliper socket head cap screws, replace king pin cap, and steer arm fasteners, inspect tie rod and connecting points for damage, tighten castle nut as needed and replace cotter pin. Reimbursement for the recall will be covered by Manufacturer's Reimbursement Plan on file with NHTSA.

How Remedy Component Differs from Recalled Component : Components and assemblies in question will be torqued to proper values and hardware which needs replacement will be replaced.

Identify How/When Recall Condition was Corrected in Production : Rework process corrected, work instructions updated, and operators trained. Implemented torque traceability system. January 31, 2023

Recall Schedule :

Description of Recall Schedule : The affected OEM's will conduct the recall and will process notifications. Meritor will support, as required.

Planned Dealer Notification Date : NR - NR

Planned Owner Notification Date : NR - NR

Purchaser Information :

The following manufacturers purchased this defective/noncompliant equipment for possible use or installation in new motor vehicles or new items of motor vehicle equipment:

Name : Mack Trucks, Inc.

Address : 7900 National Service Rd
Greensboro NC 27409

Country : US

Company Phone : 3362915311

Name : Terex Advanced Mixer, Inc.

Address : 7727 Freedom Way
Fort Wayne IN 46818

Country : US

Company Phone : 2609694568

* NR - Not Reported