Defect Information Report

(Section 573.6)

FL-938

Date of Submission: June 28, 2022

Manufacturer: Daimler Truck North America LLC

P.O. BOX 3849

Portland, Oregon 97208

Type of Report: X Safety Defect Non-Compliance

Vehicle Information

Model Yr. Start: 2022 Model Yr. End: 2023

Make: Freightliner, FCCC

Model: Cascadia, MT 45/MT45G

Production Dates: Begin: 06/09/2021 **End:** 05/23/22

Type: Truck/Tractor

Descriptive Information: DTNA's supplier Bendix, acting through subsidiary R.H. Sheppard Co., Inc. states per NHTSA filing 22E-047, "A small number of steering gears were assembled without the required number of recirculating balls. The recall population was determined by identifying the oldest production lot associated with a gear failure, and including all production from that lot to the date in February 2022 when the improvements in the assembly process were instituted."

Number potentially involved: 5768 Estimated percentage of involve with defect: 10%

DAIMLER

Defect Description

Describe the defect:

DTNA's supplier Bendix, acting through subsidiary R.H. Sheppard Co., Inc. states per NHTSA filing 22E-047, "Steering gear was assembled with fewer than the required number of recirculating balls which can lead to a fracture in the steering gear worm-shaft and loss of vehicle steering."

If a noncompliance, provide the applicable FMVSS: N/A

Describe the safety risk:

DTNA's supplier Bendix, acting through subsidiary R.H. Sheppard Co., Inc. states per NHTSA filing 22E-047, "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 gear's worm-shaft and concentrated loads may cause the gear's internal parts to fracture resulting in loss of vehicle steering. Loss of steering increases the likelihood of a crash."

Identify any warning, which can precede or occur: DTNA's supplier Bendix, acting through subsidiary R.H. Sheppard Co., Inc. states per NHTSA filing 22E-047, "Preceding the internal fracture, the steering may be perceived as strained by the driver. No audible or visual warning is available."

If applicable, identify the manufacture of the defective or noncompliant component: Steering System

Involved Components

Component Name: Steering Gear

Component Description: DTNA's supplier Bendix, acting through subsidiary R.H. Sheppard Co.,

Inc. states per NHTSA filing 22E-047, "NR"

Component Part Number: DTNA's supplier Bendix, acting through subsidiary R.H. Sheppard Co.,

Inc. states per NHTSA filing 22E-047, "NR"

DAIMLER

Supplier Identification:

Bendix Corp Heavy Vehicle Systems Group subsidiary R.H Sheppard Co.,Inc. 100 Jessica In
Del Rio, Tx 78840-8527
David Scuito
Account Manager
david.scuito@bendix.com
503-504-3248

Component Manufacturer: Bendix Corp Heavy Vehicle Systems Group subsidiary R.H. Sheppard Co., Inc.

Chronology of Noncompliance Determination

Provide the chronology of events leading up to the defect decision or test data for the noncompliance decision.

DTNA's supplier Bendix, acting through subsidiary R.H. Sheppard Co., Inc. states per NHTSA filing 22E-047:

"2/8/22-Sheppard warranty lab receives a gear built 8/20/2021 with failed worm-shaft. 2/9/22 - warranty lab inspection/disassembly indicates fracture of the worm-shaft and less than the required number of recirculating balls 2/10/22-plant stops production. Additional inspections and process verifications put in place. Clean point is established. Material on hand is inspected and confirmed defect free. Production resumes.

(2/10/22 - 5/13/22): review of all warranty from 2015-present indicated no similar failure ever received. engineering tests are performed to understand and to reproduce failure mode. 3/10/2022 – Sheppard contacted vehicle driver for description of event and confirmed no accident or injury, low speed and while backing up. 4/12/22 - Sheppard receives a second gear at incoming shipping facility 5/5/22- Sheppard warranty lab receives/inspects/disassembles the second gear built on 6/26/21 with failed worm-shaft and less than the required number of recirculating balls 5/6/22- The Product Integrity Committee meets for update on the product investigation. 5/13/22 - The Product Integrity Committee meets and recommends submission of a defect report 573."

DAIMLER

Bendix notified DTNA on May 25, 2022 of a possible defect. DTNA investigated the matter and promptly declared a recall.

Meanwhile, thru early June of 2022, Bendix continued to refine the serial numbers of the suspect parts and around mid-June, provided DTNA an updated list of suspect component serial numbers. DTNA immediately began the process of matching vehicle serial numbers to the suspect steering gear serial numbers. After an exhaustive review of available data, DTNA was able to refine and match the list from Bendix to the population as of this filing. There are no known deaths or injuries related to issue to the best of DTNA's knowledge. Based on information provided by Bendix, in early July 2022 DTNA updated the estimated of the number of units involved with the defect.

Identify the Remedy

Describe the defect/noncompliance remedy program, including the manufacture's plan for reimbursement.

DTNA's supplier Bendix, acting through subsidiary R.H. Sheppard Co., Inc. states per NHTSA filing 22E-047, "A remedy program is under development. The 573 will be amended once an inspection and remedy plan has been developed."

Identify the Recall Schedule

Describe the recall schedule for notifications:

Customer notification will be made by first class mail using Daimler Trucks North America records to determine the customers affected.

Planned Dealer Notification Begin Date:08/06/2022Planned Dealer Notification End Date:08/06/2022Planned Owner Notification Begin Date:08/06/2022Planned Owner Notification End Date:08/06/2022

Manufacture's identification code for this recall (if applicable): FL-938

DTNA Representative;

Sam Geser

Sam Geser

Product Defect Investigation Engineering Manager