OMB Control No.: 2127-0004

Part 573 Safety Recall Report

22V-475

Manufacturer Name: Autocar, LLC
Submission Date: AUG 23, 2022
NHTSA Recall No.: 22V-475

Manufacturer Recall No.: ACX-2204 DC-2202



Manufacturer Information:

Manufacturer Name: Autocar, LLC

Address: 551 S WASHINGTON STREET

HAGERSTOWN IN 47346

Company phone: 7654895499

Population:

Number of potentially involved: 653 Estimated percentage with defect: 1 %

Vehicle Information:

Vehicle 1: 2022-2023 Autocar DC (Legend)

Vehicle Type: BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER Power Train : NR

Descriptive Information: Per Bendix/RH Sheppard 22E047 (attached). All Autocar units manufactured within

within the time frame and equipped with the suspect components are included.

Production Dates: MAY 13, 2021 - APR 27, 2022

VIN Range 1: Begin: 5VCCCLEG1NC236158 End: 5V4H4LF21PH241738 ✓ Not sequential

Vehicle 2: 2022-2023 Autocar ACTT (Xspotter)
Vehicle Type: BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER Power Train : NR

Descriptive Information: Per Bendix/RH Sheppard 22E047 (attached). All Autocar units manufactured within

within the time frame and equipped with the suspect components are included.

Production Dates: MAY 28, 2021 - APR 26, 2022

VIN Range 1: Begin: 5V4G4L313NH235797 End: 5V4H4LF28PH241736 ✓ Not sequential

Vehicle 3: 2022-2023 Autocar ACX (Xpeditor)
Vehicle Type: BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER Power Train : NR

Descriptive Information: Per Bendix/RH Sheppard 22E047 (attached). All Autocar units manufactured within

within the time frame and equipped with the suspect components are included.

Production Dates: MAY 14, 2021 - APR 27, 2022

VIN Range 1: Begin: 5VCACLCE5NC235460 End: 5V4H4LF2XPH241740 ✓ Not sequential

Description of Defect:

Description of the Defect: Per Bendix/RH Sheppard 22E047: 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.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: Per Bendix/RH Sheppard 22E047: 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.

Description of the Cause: Per Bendix/RH Sheppard 22E047: An anomaly in the steering gear

recirculating ball insertion operation occurred during assembly. Subsequent rework processes and inspections did not detect the missing recirculating balls.

Identification of Any Warning Per Bendix/RH Sheppard 22E047: Preceding the internal fracture, the steering

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

available.

Involved Components:

Component Name 1: Steering Gear

Component Description: Sheppard Steering Gear

Component Part Number: HD94E

Component Name 2: Steering Gear

Component Description: Sheppard Steering Gear

Component Part Number: M100P

Component Name 3: Steering Gear

Component Description: Sheppard Steering Gear

Component Part Number: M110P

Component Name 4: Steering Gear

Component Description: Sheppard Steering Gear

Component Part Number: HD94P

Component Name 5: Steering Gear

Component Description: Sheppard Steering Gear

Component Part Number: XD120P

Component Name 6: Steering Gear

Component Description: Sheppard Steering Gear

Component Part Number: MD83P

Component Name 7: Steering Gear

Component Description: Sheppard Steering Gear

Component Part Number: SD110P

Component Name 8: Steering Gear

Component Description: Sheppard Steering Gear

Component Part Number: M83P

Component Name 9: Steering Gear

Component Description: Sheppard Steering Gear

Component Part Number: M90P

Component Name 10: Steering Gear

Component Description: Sheppard Steering Gear

Component Part Number: M80P

Supplier Identification:

Component Manufacturer

Name: Bendix Commercial Vehicle Systems

Address: 35500 Chester Rd

Avon Ohio 44011

Country: United States

Chronology:

Per Bendix/RH Sheppard 22E047: 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, /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 June 22, 2022 Autocar received information regarding the recall and potential exposure. June 22-24 Production units are quarantined and a clean point established for production and field exposure is determined. June 24, 2021 Autocar management team is presented with the information and a decision to perform a voluntary safety recall is made. 8/23/2022 Out of an abundance of caution, Autocar has expanded the suspect population to 653 units.

Description of Remedy:

Description of Remedy Program: Per Bendix/RH Sheppard 22E047: A remedy program is under development. The 573 will be amended once an inspection and remedy plan has been developed. If Bendix/Sheppard cannot, Autocar will voluntarily initiate an owner notification and recall of all affected vehicles. Autocar will distribute to owners of affected vehicles an Owner Notification Letter, which will describe the defect and provide instructions for scheduling the inspection/repair of the vehicle at no cost to the vehicle's owner. The owner letter will instruct vehicle owners who have paid to have this condition remedied prior to this campaign to seek reimbursement pursuant to Autocar's General Reimbursement Plan, on file with the agency pursuant to 49 C.F.R. 573.6(c)(8)(i) and 49 C.F.R 573.13.

How Remedy Component Differs Per Bendix/Sheppard 22E047: NR 8/23/2022 The steering gear will be from Recalled Component: inspected and if found to be suspect serial numbers, the steering gear will be replaced at no charge to the owner.

Identify How/When Recall Condition Per Bendix Sheppard 22E047: On Feb 10, 2022 the recirculating ball

was Corrected in Production: insertion process control was

enhanced. Additional process controls and inspectors were added to the process to verify that the correct number of recirculating balls in each steering gear. Autocar Inspected production units and established a clean

point for production June 24, 2022.

Recall Schedule:

Description of Recall Schedule: Per Sheppard/Bendix 22E047: Dealer and customer notifications are

scheduled for July 15, 2022 Autocar will verify the schedule and if necessary, perform customer and dealer notifications beginning August

29 2022 and ending August 30, 2022

Planned Dealer Notification Date: AUG 29, 2022 - AUG 30, 2022 Planned Owner Notification Date: AUG 29, 2022 - AUG 30, 2022

^{*} NR - Not Reported