

Part 573 Safety Recall Report

22E-047

Manufacturer Name : R.H. Sheppard Co., Inc.

Submission Date : MAR 10, 2023

NHTSA Recall No. : 22E-047

Manufacturer Recall No. : NR



Manufacturer Information :

Manufacturer Name : R.H. Sheppard Co., Inc.

Address : 101 Philadelphia Street

P.O. Box 877 Hanover PA 17331-0877

Company phone : 717-637-3751

Population :

Number of potentially involved : 105,271

Estimated percentage with defect : 1 %

Equipment Information :

Brand / Trade 1 : Sheppard

Model : HD94E

Part No. : various

Size : NR

Function : Steering

Descriptive Information : 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.

Production Dates : JUN 01, 2021 - FEB 01, 2022

Brand / Trade 2 : Sheppard

Model : M100P

Part No. : various

Size : NR

Function : Steering

Descriptive Information : 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.

Production Dates : JUN 01, 2021 - FEB 01, 2022

Brand / Trade 3 : Sheppard

Model : M110P

Part No. : various

Size : NR

Function : Steering

Descriptive Information : 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.

Production Dates : JUN 01, 2021 - FEB 10, 2022

Brand / Trade 4 : Sheppard

Model : M80P

Part No. : various

Size : NR

Function : Steering

Descriptive Information : 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.

Production Dates : JUN 01, 2021 - FEB 10, 2022

Brand / Trade 5 : Sheppard

Model : XD120P

Part No. : various

Size : NR

Function : Steering

Descriptive Information : 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.

Production Dates : JUN 01, 2021 - FEB 10, 2022

Brand / Trade 6 : Sheppard

Model : M90P

Part No. : various

Size : NR

Function : Steering

Descriptive Information : 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.

Production Dates : JUN 01, 2021 - FEB 01, 2022

Brand / Trade 7 : Sheppard

Model : MD83P

Part No. : various

Size : NR

Function : Steering

Descriptive Information : 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.

Production Dates : JUN 01, 2021 - FEB 10, 2022

Brand / Trade 8 : Sheppard

Model : SD110P

Part No. : various

Size : NR

Function : Steering

Descriptive Information : 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.

Production Dates : JUN 01, 2021 - FEB 10, 2022

Brand / Trade 9 : Sheppard

Model : HD94P

Part No. : various

Size : NR

Function : Steering

Descriptive Information : 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.

Production Dates : JUN 01, 2021 - FEB 10, 2022

Brand / Trade 10 : Sheppard

Model : M83P

Part No. : various

Size : NR

Function : Steering

Descriptive Information : 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.

Production Dates : JUN 01, 2021 - FEB 10, 2022

Description of Defect :

Description of the Defect : 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 : 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 : 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 : Preceding the internal fracture, the steering may be perceived as strained by that can Occur : the driver. No audible or visual warning is available.

Involved Components :

Component Name : Recirculating Ball

Component Description : Ball bearing used in recirculating ball steer gears.

Component Part Number : N/A

Supplier Identification :

Component Manufacturer

Name : NR

Address : NR

NR

Country : NR

Chronology :

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

Description of Remedy :

Description of Remedy Program : Purchasers will identify the unique serial number imprinted on the recalled equipment. A web-based tool is available after August 1, 2022 to vehicle manufactures and their service networks to classify the serial number. Serial numbers will be classified as either suspect and must be replaced or as not-suspect and may remain in service. Vehicle Manufactures will be handling completion reporting.

How Remedy Component Differs from Recalled Component : The remedy component was assembled after the recall condition was corrected in production when additional controls were put in place. The remedy component has been verified to have the correct number of recirculating balls. Each remedy component is identifiable by an imprinted unique serial number.

Identify How/When Recall Condition was Corrected in Production : On Feb 10, 2022 the recirculating ball 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.

Recall Schedule :

Description of Recall Schedule : NR

Planned Dealer Notification Date : JUL 15, 2022 - JUL 15, 2022

Planned Owner Notification Date : JUL 15, 2022 - JUL 15, 2022

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 : SUPACAT LTD.

Address : THE AIRFIELD DUNKESWELL
England Devon 00

Country : GB

Company Phone : 1404 892082

Name : SUPACAT LTD.

Address : THE AIRFIELD DUNKESWELL
England 00

Country : GB

Company Phone : 1404 892082

Name : Crane Carrier Co
Address : 1951 Reiser Avenue S.E.
New Philadelphia OH 44663
Country : US
Company Phone : NR

Name : TICO Mfg/Terminal Services
Address : PO Box 1434
Savannah GA 31402
Country : US
Company Phone : 843-536-8139

Name : Oshkosh Truck Corp.
Address : 2307 Oregon St.
Oshkosh WI 54903
Country : US
Company Phone : NR

Name : Orange EV LLC
Address : 500 NW Business Park Lane
Riverside MO 64150
Country : US
Company Phone : NR

Name : New Flyer of America
Address : 711 Kernaghan Ave
Winnipeg Manitoba 00 R2C 2T4
Country : CA
Company Phone : NR

Name : Link-Belt Construction Equip.
Address : 2651 Palumbo Dr
Lexington KY 40509
Country : US
Company Phone : (859) 264-6439

Name : Kovatch Mobile Equipment
Address : One Industrial Complex
Nesquehoning PA 18240
Country : US
Company Phone : (570) 669-5581

Name : Kodiak America
Address : PO Box 370
Paul ID 43347
Country : US
Company Phone : NR

Name : Kalmar Solutions
Address : 415 E. Dundee
Ottawa KS 66067
Country : US
Company Phone : (785) 248-0776

Name : JCB Manufacturing Inc.
Address : 2000 Bamford Blvd.
Pooler GA 31322
Country : US
Company Phone : (912) 447-2094

Name : Peterbilt Motors Inc
Address : 3200 Airport Road
Denton TX 31322
Country : US
Company Phone : 940-220-2760

Name : AM General LLC
Address : 105 N. Niles Avenue
South Bend IN 46617
Country : US
Company Phone : NR

Name : Global Environmental Products
Address : 5405 Industrial Parkway
San Bernardino CA 92407
Country : US
Company Phone : NR

Name : Emergency One, Inc
Address : 1601 SW 37th Ave
Ocala FL 34474
Country : US
Company Phone : NR

Name : Ferrara Fire Apparatus, Inc.
Address : 27855 James Chapel Road North
Holden LA 70744
Country : US
Company Phone : 800-443-9006

Name : Eldorado National Inc
Address : 9670 Galena St.
Riverside CA
Country : US
Company Phone : 951.727.9339

Name : Capacity of Texas
Address : 401 Capacity Drive
Longview TX 75604
Country : US
Company Phone : NR

Name : Autocar LLC
Address : 551 South Washington St.
Hagerstown IN 47346
Country : US
Company Phone : NR

Name : Navistar Inc
Address : 2701 Navistar Dr
Lisle IL 60532
Country : US
Company Phone : 331-332-1590

Name : Mil-Stak, Inc.
Address : 2201 Hwy. 30 w
Fruitland ID 83619
Country : US
Company Phone : 208-452-6045

Name : Meritor, Inc
Address : 2135 West Maple Rd
Troy MI 48084
Country : US
Company Phone : 920-424-5307

Name : Grove (Manitowoc) Worldwide
Address : Box 21
Shady Grove PA 17256-0021
Country : US
Company Phone : 717-593-5116

Name : Volvo Trucks North America, Inc
Address : 7900 National Service Road
Greensboro NC 27409-9416
Country : US
Company Phone : 301-573-5972

Name : B&J Tech
Address : 45 Hwy 23
Suwanee GA 30024
Country : US
Company Phone : 770-904-0013

Name : Daimler Trucks North America
Address : 4555 N. Channel Ave.
Portland OR 97217
Country : US
Company Phone : 503-745-5508

Name : Kenworth Truck Co.
Address : 10630 NE 38th Place
Kirkland WA
Country : US
Company Phone : 425-828-5201

* NR - Not Reported