Part 573 Safety Recall Report 22E-080

Manufacturer Name :	Dexter Axle Company
Submission Date :	NOV 11, 2022
NHTSA Recall No. :	22E-080
Manufacturer Recall No. :	NR

Manufacturer Information :

Manufacturer Name :	Dexter Axle Company
Address :	2900 INDUSTRIAL PARKWAY EAST PO BOX 250 ELKHART IN 46516
Company phone :	574-295-7888

Population :

Number of potentially involved :	81
Estimated percentage with defect :	100 %

Equipment Information :

Brand / Trade 1 :	Dexter Canada
Model :	Smart-Steer Axle with 702887 Steer Arm
Part No. :	Model #'s attached
Size :	25,000 Pounds
Function :	Self Steer Axle
Descriptive Information :	- Smart-Steer 2.0 self-steering axle with a bolt-on steer arm (702887) with a 3/4" drop to tie-rod location, built from October 13, 2017 to October 30, 2022. Previous design level was a welded steering arm/knuckle asy and new design has stronger steer arm plus a weld. A total of 56 units have been sold to customers between 2017-2022.
Production Dates :	OCT 13, 2017 - OCT 30, 2022

Description of Defect :

Description of the Defect :	Under low speed, high lateral loading events, the steer arm may fracture.
FMVSS 1 :	NR
FMVSS 2 :	NR
Description of the Safety Risk :	The fractured steer arm and attached tie rod will fall to the ground causing a risk for separation resulting in a potential crash hazard. There is no loss of control of the unit when this failure occurs.
Description of the Cause :	The material strength was not sufficient to withstand the high lateral loads
Identification of Any Warning that can Occur :	Independent castering of steer axle wheels and noise from dragging parts

Involved Components :

Component Name :	Bolt-on Steer Arm
Component Description :	bolt-on steer arm that connects the knuckle assembly to the tie rod
Component Part Number :	702887-xx

Supplier Identification :

Component Manufacturer

Name :	NR
Address :	NR
	NR
Country :	NR

Chronology :

After reviewing recent claims with a key customer, a service bulletin was requested to address the customer issues. Upon further investigations and reviews, Dexter Canada conducted an analysis of the failure mode and determined the material was not robust enough to withstand the higher loading events which may occur in this configuration. Re-design activities were initiated to define a steer arm design that will withstand the unique, higher load events based on collected road load data. There has been only two (2) reported claims of this defect.

Description of Remedy :

Description of Remedy Program :	Service work will include the following steps (per SB015): 1. Remove the existing steer arms and mounting hardware. 2. Clean mounting surface and surrounding surfaces to prepare for mounting of the new bolt-on steer arm and additional welds. 3. Grind a 3/16” chamfer along the mounting face edge (see page three for location & detail). 4. Mount new design steer arms (Part # 703293-LH/RH) with supplied hardware and torque to 400 ft-lbs. 5. Add welds as shown on page three of this bulletin.
How Remedy Component Differs from Recalled Component :	New design has a higher strength material and welded to the steering knuckle
Identify How/When Recall Condition was Corrected in Production :	Implemented a new design with higher strength material as well as an additional weld connecting the arm to the knuckle into production at Dexter Canada on 30-October-2022.

Recall Schedule :

Description of Recall Schedule :	Letter will be issued to all customers no later than 15-Oct-2022
Planned Dealer Notification Date :	OCT 10, 2022 - OCT 14, 2022
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 :	NR
Address :	NR
	NR
Country :	NR
Company Phone :	NR

* NR - Not Reported