#### OMB Control No.: 2127-0004

Not sequential

# Part 573 Safety Recall Report

# 18V-503

**Manufacturer Name:** Daimler Trucks North America LLC

Submission Date: JUL 31, 2018 NHTSA Recall No.: 18V-503 Manufacturer Recall No.: FL782



#### **Manufacturer Information:**

Manufacturer Name: Daimler Trucks North America LLC

Address: 4747 N. Channel Avenue

Portland OR 97217-3849

Company phone: 800-745-8000

# **Population:**

Number of potentially involved: 1,256 Estimated percentage with defect: 1 %

#### **Vehicle Information:**

Vehicle 1: 2012-2015 Freightliner Cascadia

Vehicle Type :
Body Style :
Power Train : NR

Tower Trum. Two

Descriptive Information: Certain vehicles built with a specific combination of front axle, brake lining, and brake

spider within the above referenced dates.

Production Dates: JUL 01, 2011 - JAN 30, 2014

VIN Range 1 : Begin : NR End : NR

Vehicle 2: 2012-2015 Freightliner Coronado

Vehicle Type :
Body Style :
Power Train : NR

Descriptive Information: Certain vehicles built with a specific combination of front axle, brake lining, and brake

spider within the above referenced dates.

Production Dates: JUL 01, 2011 - JAN 30, 2014

VIN Range 1 : Begin : NR End : NR Not sequential

Vehicle 3: 2012-2015 Freightliner Business Class M2

Vehicle Type :
Body Style :
Power Train : NR

Descriptive Information: Certain vehicles built with a specific combination of front axle, brake lining, and brake

spider within the above referenced dates.

Production Dates: JUL 01, 2011 - JAN 30, 2014

VIN Range 1 : Begin : NR End : NR Not sequential

Vehicle 4: 2012-2015 Freightliner 114SD

	Vehicle Type:					
	Body Style :					
	Power Train :	NR				
	Descriptive Information :	: Certain vehicles built with a specific combination of front axle, brake lining, and brak spider within the above referenced dates.				
	<b>Production Dates:</b>	JUL 01, 2011 - J	JAN 30, 201	5		
	VIN Range 1:	Begin:	NR	End:	NR	☐ Not sequential
	Vehicle 5:	2012-2015 We	stern Star 4	1900		
	Vehicle Type :					
	Body Style :					
	Power Train :	NR				
	Descriptive Information : Certain vehicles built with a specific combination of front axle, brake lining, and brake spider within the above referenced dates.					
	<b>Production Dates:</b>	JUL 01, 2011 - J	JAN 30, 201	4		
	VIN Range 1:	Begin:	NR	End:	NR	☐ Not sequential

## **Description of Defect:**

Description of the Defect: In certain circumstances, high brake vibrations may occur due to a

combination of front axle, brake lining, and brake spider. Under certain

circumstances, these vibrations may lead to a reduced fatigue life of the tie-rod  $\,$ 

tube, particularly if the component is subject to corrosion.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: Separation of the tie-rod may lead to a disconnect between the front wheels

of the vehicle and reduce the ability to steer the vehicle, which could increase

the risk of a crash.

Description of the Cause: NR Identification of Any Warning NR

that can Occur:

## **Supplier Identification:**

#### **Component Manufacturer**

Name: NR Address: NR

NR

Country: NR

#### **Chronology:**

January 2017 DTNA Service Engineering received a report from a customer of tie-rod failures on vehicles out of warranty coverage. Two failed parts were supplied to Detroit Axle for inspection.

February 2017, metallurgical analysis found heavy corrosion and evidence of road salt inside the tie rod tubes. The original failure was believed to be isolated to one customer due to a non-typical operating environment. May 2017, DTNA received a report of tie-rod tube failure from a second customer. The failed tube and a tube that had not failed were provided to DTNA for inspection. DTNA began an extensive investigation to determine the scope and potential impact of the issue. The primary tie-rod supplier, whose products had failed, provided DTNA with its material specifications and proposed vibration as a potential root cause.

June 2017, metallurgical analysis of the tubes from the second customer found corrosion only in the failed tube. The report concluded that the crack was caused by the heavy corrosion inside of the tube.

June 2017, DTNA conducted a field inspection of vehicles to identify the corrosion issue, inspecting tie rods on the first affected fleet, then other vehicles in the same region, and then vehicles in a dry climate.

July 2017 to February 2018, DTNA continued to do an extensive investigation into root cause of the failures which included instrumenting a vehicle with a failed tie-rod. DTNA coordinated with the second customer to arrange a visit to investigate the root cause of the failures. During the on-site investigation vibration data was collected while the truck was both stationary idling and while driving. The results were inconclusive and failed to identify the root cause.

Please see miscellaneous document submission for FL-782 for later events.

#### **Description of Remedy:**

Description of Remedy Program : Certain brake linings, brake spider and tie-rod will be replaced. Repairs

will be performed by Daimler Trucks North America authorized service facilities. Copies of the reimbursement plan will be submitted as a

supplemental report when available

How Remedy Component Differs NR

from Recalled Component:

Identify How/When Recall Condition NR

was Corrected in Production:

#### **Recall Schedule:**

Description of Recall Schedule: Customer notification will be made by first class mail using Daimler

Trucks North America records to determine the customers affected.

Planned Dealer Notification Date: SEP 24, 2018 - SEP 24, 2018 Planned Owner Notification Date: SEP 24, 2018 - SEP 24, 2018

\* NR - Not Reported