DAIMLER

Defect Information Report

(Section 573.6)

FL-693

Date of Submission: ***9/29/2015***

Manufacturer: Daimler Trucks North America LLC
P.O. BOX 3849
Portland, Oregon 97208

Type of Report: X **Safety Defect** ◯ **Non-Compliance**

Vehicle Information

Model Yr. Start: *2015* **Model Yr. End:** *2016*

Make: *Freightliner, Western Star*

Model: *Cascadia, Business Class M2, 108SD, 114SD, 4700*

Production Dates: **Begin:** *01/04/2015*
End: *04/24/2015*

Descriptive Information:

Vehicles manufactured with certain Eaton Fuller FR 10-speed manual transmissions

Number potentially involved: *14* **Estimated percentage of involve with defect:** *10%*

Defect / Noncompliance Description

For this Defect/Noncompliance:

Describe the defect or noncompliance:

Eaton has reported that "When the transmission shift lever is moved from reverse to neutral, the reverse gear may stay engaged. When the transmission shift lever is moved from reverse to a forward gear position, the transmission may mechanically lock (i.e., both the reverse gear and forward gear engage simultaneously)." See attached Eaton Corporation recall.

If a noncompliance, provide the applicable FMVSS:

◯ **Check if this recall only affects products in certain geographic regions.**

Describe the safety risk:

Eaton has reported "When shifting the transmission from reverse to neutral, the recall condition may result in a crash without prior warning."

If applicable, identify the manufacture of the defective or noncompliant component.

Eaton Corporation
1000 Eaton Blvd
Cleveland, OH 44122

Chronology of Defect / Noncompliance Determination

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

In September 2015, Eaton Corporation Notified DTNA that it had determined a defect existed in certain FR transmissions. DTNA decided to conduct a voluntary safety recall on vehicles equipped with suspect transmissions

Identify the Remedy

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

Transmissions will be inspected and repaired as necessary. 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.

Identify the Recall Schedule

Describe the recall schedule for notifications.:

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

Planned Dealer Notification Begin Date: *11/28/2015*
Planned Dealer Notification End Date: *11/28/2015*
Planned Owner Notification Begin Date: *11/28/2015*

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Planned Owner Notification End Date: *11/28/2015*

Manufacture's identification code for this recall (if applicable): *FL-693*

DTNA Representative;

Andy Jones
Senior Manager
Compliance and Regulatory Affairs

safercar.gov

Eaton Corporation

Equipment Report

Transaction ID: 15-0010630-16969-10 (Original Report)

Required fields indicated with *

Manufacturer: Eaton Corporation

1000 Eaton Blvd
Cleveland OH 44122

Jason Tutrone
2022634143,

This is a Safety Defect Report.

Equipment Information

Eaton Fuller FR Series See Descriptive Info

*** Brand/Trade:** Eaton Fuller
*** Model:** FR Series

Production Dates Begin: 12/18/2014
End: 12/21/2014

*** Part No.:** See Descriptive Info
Size: 10-speed

Function:
Transmission

Descriptive Information:
The affected equipment is a 10-speed manual transmission. The model numbers for the affected equipment are: FR-14210B, FRF-15210B, FRF-9210B, FRM-15210B, FRO-11210B, FRO-13210B, FRO-14210C, FRO-15210C, FRO-16210B, FRO-16210C, FROF-11210C, FROF-12210C, FROF-13210C, FROF-14210C, FROF-15210C, and FROF-16210C. Not all units under these model numbers are affected. Each affected unit bears a unique serial number. Only the units bearing a serial number listed in the attached document are affected.

Number potentially involved: 75 **Estimated percentage of involved with defect:** 10%

Defect / Noncompliance Description

For this Defect/Noncompliance:

*** Describe the defect or noncompliance:**
When the transmission shift lever is moved from reverse to neutral, the reverse gear may stay engaged. When the transmission shift lever is moved from reverse to a forward gear position, the transmission may mechanically lock (i.e., both the reverse gear and forward gear engage simultaneously).

If a noncompliance, provide the applicable FMVSS:

If applicable, provide any further FMVSS affected:

Describe the cause:
A spacer assembly that lacks necessary clearance for the transmission's main shaft key causes the recall condition by forcing the main shaft key out of position. When the main shaft key is out of position and the shift lever moves from reverse to neutral or forward gear positions, the reverse gear may move axially along the main transmission shaft resulting in continued engagement of the reverse gear.

*** Describe the safety risk:**
When shifting the transmission from reverse to neutral, the recall condition may result in a crash without prior warning. The defect does not present a known safety risk when shifting the transmission from reverse to a forward gear.

Identify any warning which can precede or occur:
A driver may need to apply increased force to shift into or out of reverse.

This Recall affects all vehicles.

If applicable, identify the manufacturer of the defective or noncompliant component. If the manufacturer of the component is unknown, provide the information for the company that supplied the subject component.

Component manufacturer

Company Information

Company Name:
Country:
Address 1:
Address 2:
City:
State:
Zip/Postal Code:

Company Contact Information

First Name:
Last Name:
Position:
Email:
Phone:

Purchaser Information

Company:	Peterbilt Motors, Inc.	**First Name:**	
Country:	United States	**Last Name:**	
Address 1:	1700 Woodbrook St.	**Position:**	
Address 2:		**Email:**	
City:	Denton	**Phone:**	9405914000
State:	TEXAS		
Zip/Postal Code:	76205-7864		

Company:	Kenworth Truck Company	**First Name:**	
Country:	United States	**Last Name:**	
Address 1:	PO Box 1000	**Position:**	
Address 2:		**Email:**	
City:	Kirkland	**Phone:**	4258285000
State:	WASHINGTON		
Zip/Postal Code:	98083-1000		

Company:	Volvo Trucks North America	**First Name:**	
Country:	United States	**Last Name:**	
Address 1:	7900 National Service Road	**Position:**	
Address 2:		**Email:**	
City:	Greensboro	**Phone:**	8005286586
State:	NORTH CAROLINA		
Zip/Postal Code:	27409		

Company:	Daimler Trucks North America	**First Name:**	
Country:	United States	**Last Name:**	
Address 1:	4747 N Channel Ave	**Position:**	
Address 2:		**Email:**	
City:	Portland	**Phone:**	5037458000
State:	OREGON		
Zip/Postal Code:	97217		

Company:	Navistar	**First Name:**	
Country:	United States	**Last Name:**	
Address 1:	4201 Winfield Rd	**Position:**	
Address 2:		**Email:**	
City:	Warrenville	**Phone:**	8004487825
State:	ILLINOIS		
Zip/Postal Code:	60555		

Chronology of Defect / Noncompliance Determination

Provide the chronology of events leading up to the defect decision or test data for the noncompliance decision.:
5/13/15: Eaton reviewed warranty data and discovered three units built without the appropriate spacer assembly. Eaton initiated analysis of warranty claim hardware and the transmission's engineering. 5/19/15: Eaton investigated the condition of the warranty units and commenced testing to replicate the damage found on the units. Eaton commenced shift cycle testing to evaluate main shaft key movement. 5/27/15: Eaton received an additional warranty claim and determined the warranty unit was built on same day and shift as the first 3 warranty units. Eaton continued searching for related claims and began identifying customers for field inspections. 5/29/15: Eaton suspended cycle testing, because the results had been inconclusive as to number of cycles to key failure. 6/11/15: Eaton identified mixed parts tote as suspected cause and decided to focus proposed field inspections to confirm the cause. 7/21/15: Eaton obtained the first transmission from the field inspection group and sent it for analysis. 7/23/15: Eaton inspected the first transmission from field inspection group and found it had the proper spacer assembly. 8/3/15: Eaton inspected the second transmission from the field inspection group and found it had the proper spacer assembly. 8/4/15: Eaton obtained the third through eighth transmissions from the field inspection group and sent them for analysis. 8/10/15: Eaton obtained the ninth transmission from the field inspection group and sent it for analysis. 8/26/15: Of the third through ninth transmission obtained from the field inspection group, Eaton discovered only one with the spacer assembly issue. Based on the serial number of the transmission, Eaton determined that more than one parts bin is involved. 9/4/15: Eaton's safety committee reviewed the results of inspections to date. 9/10/15: Eaton's safety committee concluded that a safety defect exists.

Identify the Remedy

Describe the defect/noncompliance remedy program, including the manufacturer's plan for reimbursement.
Not applicable. Eaton sells all the affected units to the vehicle manufacturers it identified in this report. The vehicle manufacturers install the units as original equipment in new motor vehicles. Some or all manufacturers may distribute units through their dealer or distribution networks for resale as replacement equipment.

Describe what distinguishes the remedy component from the recalled component.
Not applicable. Eaton sells all the affected units to the vehicle manufacturers it identified in this report. The vehicle manufacturers install the units as original equipment in new motor vehicles. Some or all manufacturers may distribute units through their dealer or distribution networks for resale as replacement equipment.

Identify and describe how and when the recall condition was corrected in production.
The recall condition appears to have been corrected after 12/19/2014, during the normal course of production. Upon investigation, Eaton believes that, on 12/19/2014, some assembly-line parts totes that were supposed to hold the spacer assembly having the necessary clearance also held a spacer assembly having insufficient clearance.

Identify the Recall Schedule

Describe the recall schedule for notifications.:
Not applicable. Eaton sells affected units to the vehicle manufacturers it identified in this report. The vehicle manufacturers install the units as original equipment in new motor vehicles. Some or all manufacturers may distribute units through their dealer or distribution networks for resale as replacement equipment.

Planned Dealer Notification Begin Date:

Planned Dealer Notification End Date:

Planned Owner Notification Begin Date:

Planned Owner Notification End Date:

Manufacturer's identification code for this recall (if applicable):

Please be reminded that owner notification letters must be mailed no more than 60 days from submission of this report.

Manufacturer Comments to NHTSA Staff

Document Upload

There are 1 documents associated with this report.

Transmission Serial Numbers for Affected Units

Transmission Serial Numbers
K1095066
K1095067
K1095073
K1095074
K1095075
K1095076
K1095077
K1095078
K1095079
K1095083
K1095084
K1095089
K1095090
K1095091
K1095092
K1095109
K1095148
K1095149
K1095150
K1095157
K1095158
K1095159
K1095160
K1095161
K1095180
K1095378
K1095379
K1095383
K1095385
K1095386
K1095387
K1095388
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K1095391
K1095392
K1095393
K1095394
K1095395
K1095396
K1095397
K1095398
K1095399
K1095400
K1095401
K1095402
K1095403
K1095404
K1095405
K1095406
K1095407
K1095408
K1095409
K1095410

Transmission Serial Numbers for Affected Units

Transmission Serial Numbers
K1095411
K1095412
K1095413
K1095414
K1095486
K1095487
K1095488
K1095489
K1095490
K1095493
K1095494
K1095497
K1095498
K1095499
K1095500
K1095501
K1095502
K1095504
K1095505
K1095506
K1095507