Part 573 Safety Recall Report

15E-077

Manufacturer Name : Eaton Corporation
Submission Date : SEP 17,2015
NHTSA Recall No. : 15E-077
Manufacturer Recall No. : NR

Manufacturer Information :

Manufacturer Name : Eaton Corporation
Address : 1000 Eaton Blvd
Cleveland OH 44122
Company phone : 800-386-1911

Population :

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

Equipment Information :

Brand / Trade : Eaton Fuller
Model : FR Series
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.

Production Dates : DEC 18, 2014 - DEC 21, 2014

Description of Defect :

Description of the Defect : 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).

FMVSS 1 : NR
FMVSS 2 : NR

Description of 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.

Description of 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.

Identification of Any Warning that can Occur : A driver may need to apply increased force to shift into or out of reverse.

Supplier Identification :

Component Manufacturer

Name : NR

Address : NR
NR

Country : NR

Chronology :

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.

Description of Remedy :

Description of Remedy Program : 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.

How Remedy Component Differs from 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 How/When 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.

Recall Schedule :

Description of Recall Schedule : 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 Date : NR - NR

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 : Daimler Trucks North America
Address : 4747 N Channel Ave
Portland OR 97217
Country : US
Company Phone : 5037458000

Name : Navistar
Address : 4201 Winfield Rd
Warrenville IL 60555
Country : US
Company Phone : 8004487825

Name : Peterbilt Motors, Inc.
Address : 1700 Woodbrook St.
Denton TX 76205-7864
Country : US
Company Phone : 9405914000

Name : Kenworth Truck Company
Address : PO Box 1000
Kirkland WA 98083-1000
Country : US
Company Phone : 4258285000

Name : Volvo Trucks North America
Address : 7900 National Service Road
Greensboro NC 27409
Country : US
Company Phone : 8005286586

* NR - Not Reported