

# DAIMLER

Daimler Trucks North America  
Nasser Zamani  
Senior Manager  
Compliance and Regulatory Affairs

June 4, 2010

Dan Smith  
Associate Administrator for Enforcement  
National Highway Traffic Safety Administration  
Attention: Recall Management Division (NVS-215)  
1200 New Jersey Avenue S.E.  
Washington D.C. 20590

## Re: Defect Information Report FL-579, Eaton Hybrid Transmission Recall

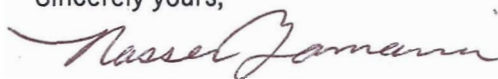
Mr. Smith

In accordance with Part 573 of Title 49 of the Code of Federal Regulations, Daimler Trucks North America LLC herewith reports a safety campaign to recall approximately 204 Freightliner Custom Chassis MT chassis manufactured June 18, 2009 through April 15, 2010 and approximately 39 Thomas Built Buses Saf-T-Liner C2 school bus vehicles manufactured April 16, 2009 through May 10, 2010, and equipped with an Eaton Hybrid Transmission with Park Feature with a defect that may prevent the Park Feature from engaging.

Attached is Daimler Trucks North America's Defect Information Report.

Please contact me if you have any questions.

Sincerely yours,



Nasser Zamani

Cc: Michael Mason, CAL-OSHA  
Enclosure  
Certified Mail# 7006 3450 0000 3866 7928

A Daimler Company

Daimler Trucks North America LLC  
4747 N. Channel Avenue  
Portland OR 97217-7699  
503-745-6910 Phone  
503-745-5544 Fax  
Nasser.Zamani@Daimler.com

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## Defect Information Report (Section 573.6)

Date: June 4, 2010

**(c)(1) Manufacturer:** Daimler Trucks North America LLC  
P.O. BOX 3849  
Portland, Oregon 97208  
(503) 745-5219

**Brands: Freightliner Custom Chassis Corporation**

**(c)(2) Vehicles identification:**

**Model(s) affected:** MT Chassis

**Model Years affected:** 2010, 2011

**Manufacture Dates:** June 18, 2009 through April 15, 2010

**Basis for determining population:** All vehicles built June 2009 through April 2010 with an Eaton Hybrid Transmission with Park Feature manufactured February 12, 2009 through April 13, 2010.

**Component manufacturer if other than the vehicle manufacturer:**

Eaton Corporation  
1111 Superior Avenue  
Cleveland, Ohio 44114

**(c)(3) Total number of vehicles potentially affected:** Approximately 204

**(c)(4) Percentage of vehicles estimated to contain the defect:** 100%

**(c)(5) Description of the defect:** Eaton has submitted a Part 573 Defect Information Report to NHTSA to recall certain Hybrid Transmissions with Park Feature for a defect in the reverse idler installation. The reverse idler shaft may contact the Park Feature and the two components may bind, preventing the Park Feature from engaging. See attached Defect Information Report from Eaton Corporation (10E-017)

**49CFR Section 577.5(f) Evaluation of the risk to motor vehicle safety:** In the event that an operator places the vehicle in park and exits the vehicle without first properly applying the parking brakes, the vehicle could roll and potentially crash.

**(c)(6) Chronology of principal events:** See attached Defect Information Report from Eaton Corporation. Eaton Corporation notified DTNA that it had filed a 573 Defect Information Report to NHTSA on 5/13/2010.

**(c)(7) Noncompliance-test or other data:** Not Applicable

**(c)(8) (i) Remedial program:** Eaton Corporation will administer this recall campaign. Repairs will be performed by Eaton Corporation. See attached Defect Information Report from Eaton Corporation.

**Reimbursement Plan:** Eaton Corporation will administer this recall campaign.

**(ii) Estimated Owner and Dealer Notification Date:** Customer notification will be by first class mail using Daimler Trucks North America records to determine the customers affected. This will be completed approximately August 27, 2010.

Dealer notification will be completed approximately August 27, 2010

**(c)(9) Information for tire recalls:** Not Applicable

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**(c)(10) Communications sent to manufacturers, dealers and owners:** Copies will be submitted as a supplemental report when available.

**(c)(11) Manufacturer's campaign number:** FL-579

**Preliminary 49 C.F.R. Part 573 Defect and Noncompliance Report**

**On May 7, 2010, Eaton Corporation ("Eaton") decided that a defect which relates to motor vehicle safety exists in the items of motor vehicle equipment listed below. Accordingly, Eaton is furnishing notification to the National Highway Traffic Safety Administration in accordance with 49 C.F.R. § 573.6 Defect and Noncompliance Reports.**

**In accordance with 49 C.F.R. § 573.6(b), Eaton submits the following preliminary information listed immediately below. Eaton will supplement its filing as soon as additional information becomes available to Eaton.**

**1. Pursuant to 49 C.F.R. § 573.6(c)(1), furnish the manufacturer's name.**

Eaton Corporation  
1111 Superior Avenue  
Cleveland, Ohio 44114

The equipment that is the subject of this notification is branded as both "Eaton" and "Fuller". Both brand names are the property of Eaton Corporation.

**2. Pursuant to 49 C.F.R. § 573.6(c)(2), identify the Items of Equipment involved in this Recall, for each make and model or applicable item of equipment product line, provide:**

**(a) Generic name of the item: Medium Duty Automated Mechanical Transmission (AMT)**

**Make:** Eaton/Fuller

**Model:** UltraShift HV with Park Feature

**Part Numbers:** FO-5506B-DM3, FO-6506B-DM3, F-5505B-DM3, F-6505B-DM3

**Size:** Medium Duty 5/6 Speed for commercial vehicles of Class 5, 6 and 7

**Dates of Manufacture:** November 1, 2009 through May 5, 2010.

**Function:** Automated transmission for medium-duty commercial vehicles

**(b) Generic Name: Medium Duty Automated Mechanical Transmission (AMT)**

**Make:** Eaton/Fuller

**Model:** Hybrid Transmission with Park Feature

**Part Numbers:** EH-6E606B-CD, EH-6E606B-P, EH-6E706B-CD, EH-6E706B-P and EH-6E706B-UPG

**Size:** Medium Duty 5/6 Speed for commercial vehicles of Class 5, 6 and 7

**Dates of Manufacture:** February 12, 2009 through April 13, 2010.

**Function:** Automated transmission for medium-duty commercial vehicles

**3. Pursuant to 49 C.F.R. § 573.(c)(2), provide a description of the manufacturer's basis for its determination of the recall population (e.g. how recalled models were selected and the basis for the beginning and final dates of manufacture for the recalled items of equipment) and a description of how the vehicles or items of equipment to be recalled differ from similar vehicles or items of equipment that the manufacturer has not included in the recall.**

The models listed in Item 2.a. were manufactured using the same reverse idler installation process between November 1, 2009 and May 5, 2010, while those listed in Item 2.b. were manufactured using the same reverse idler installation process between February 12, 2009 and May 5, 2010. This process was determined to have the potential to result in the issue described in Item 7. As this process was used on 100% of the models listed in Item 2a and b, 100% of these models are potentially defective.

On May 6, 2010, a controlled process was implemented to ensure that Eaton corrected the defect for all models listed in Item 2 prior to leaving the manufacturing plant. Further, Eaton is proactively repairing those units in the production process that have not yet been released to the final customer. As of May 13, 2010, 808 units have been repaired.

The Park Feature is a secondary means used to prevent the movement of a stopped vehicle. Normally, a brake is applied when a vehicle is parked. If a brake is not engaged or is defective, the Park Feature is a secondary measure to prevent the vehicle from moving. However, with a defective Park Feature, the misalignment of the reverse idler shaft results in a failure of the Park Feature mechanism to prevent the vehicle from moving.

**4. Pursuant to 49 C.F.R. 573.6(c)(2), identify the name, business address, and business telephone number of every manufacturer that purchases the defective component for use or installation in new motor vehicles or new items of motor vehicle equipment.**

Navistar  
4201 Winfield Road  
Warrenville, Illinois 60555  
Phone: 630-753-5000  
Toll Free: 800-448-7825

Daimler Trucks North America, LLC  
4747 N. Channel Ave.  
Portland, OR 97217  
Phone: (503) 745-8000

Freightliner Custom Chassis Corporation  
552 Hyatt St.  
Gaffney, SC 29341  
(phone) 864-487-1700  
(fax) 864-487-6400

**5. Pursuant to 49 C.F.R. § 573.6(c)(3), list the total number of items of equipment potentially containing the defect.**

<b>Model</b>	<b>Number Affected</b>
UltraShift HV with Park	1567
Hybrid Transmission with Park	345

**Total Number Affected by Recall: 1912**

**6. Pursuant to 49 C.F.R. § 573.6(c)(4), list the percentage of items of equipment that are estimated to contain the defect. 100%**

**7. Pursuant to 49 C.F.R. § 573.6(c)(5), provide a description of the defect including both a brief summary and detailed description, with graphic aid as necessary, of the nature and physical location (if applicable) of the defect.**

The defect involves the failure of the park pawl to engage when a shift lever in the vehicle cab is placed in the "Park" position. Due to an error in the installation process, the reverse idler is pressed beyond the rear wall of the transmission case in an excess of 0.016", which exposes the shoulder on the reverse idler shaft. If the length of the exposed shoulder contacts the park pawl the two components may bind, preventing the park pawl from engaging.

**8. Pursuant to 49 C.F.R. § 573.6(c)(6), provide a chronological summary of all the principal events that were the basis for the determination of the defect.**

The problem was first identified on a school bus in Bay Shore, New York. On April 6, 2010, the bus driver selected Park feature without applying the brake. The Park feature did not hold, allowing the bus, which was empty at the time, to move. The bus driver used the service brake to stop the motion safely with no harm or damage to people or equipment. The school bus was taken in for service and Eaton was notified on April 7, 2010. On April 14, 2010, the transmission was removed from the bus and shipped to Eaton's offices in Galesburg, Michigan for disassembly and testing.

Approximately 90 other units were inspected in Eaton's Kings Mountain, North Carolina transmission assembly plant. Of these, only one unit potentially exhibited the problem. There have been no accidents or warranty claims. However, on Friday, May, 7, 2010, Eaton determined that the manufacturing process for installing reverse idler shafts could lead to a defect that could have an impact on safety.

**9(a). Pursuant to 49 C.F.R. § 573.6(c)(8) provide a description of the manufacturer's program for remedying the defect. Clearly describe the difference between the recall condition and the remedy.**

Eaton is working cooperatively with vehicle manufacturers to identify the affected units and to remedy such units at no cost to vehicle owners. Specifically, Eaton has provided vehicle manufacturers with a listing of the transmission serial numbers for the potentially affected units, which will be used to determine the location of such units. Eaton will then dispatch technicians to each location to examine each potentially affected unit and to provide repairs as necessary.

Eaton has developed a fixture and associated process to eliminate the potential for the Park mechanism to bind. Eaton estimates that the process will take no longer than 10 minutes to complete. No parts will be removed or added to the transmission. The fixture is attached to an existing drilled and threaded hole on the reverse idler shaft at the back of the transmission with a 1/2"x13x1" bolt. The bolt is then torqued to 45 to 50lb-ft drawing the idler shaft rearward to its design intent position. The bolt and fixture is removed and the shaft visually inspected to confirm it is properly positioned, flush to the outer case of the transmission. Eaton and qualified customer personnel will perform the repair process at no cost to the vehicle owners.

**(b) Clearly describe the distinguishing characteristics of the remedy/component assembly versus the called component/assembly.**

A distinguishing characteristic of the remedy is the location of the idler shaft with respect to the rear face of the transmission case. A potentially defective assembly will have the idler shaft face recessed more than 0.016" from the outer face of the transmission. A remedied assembly will have the idler shaft face essentially flush to not greater than 0.016" below the rear face of the transmission case.

Eaton will mark remedied units by placing an identifying mark on the reverse idler shaft face. Eaton will also record the serial numbers of the remedied vehicles.

**(c) Identify and describe how and when the recall condition was corrected in production. If the production remedy was identical to the recall remedy in the field, so state.**

A controlled operation has been added to the production process to verify the proper location of the reverse idler shaft to prevent any further defective production.

**10. Recall Schedule**

Eaton has notified all affected vehicle manufacturers. Eaton notified Navistar of the recall on May 10, 2010, while Daimler Trucks North America, LLC, and Freightliner Custom Chassis Corporation were notified on May 14th.

**11. Name the Corporate Officials that the Agency should contact with respect to this recall.**

William J. Mack, Principal Engineer, Eaton Corporation  
(269) 342-3242 (phone)  
(269) 746-6242 (fax)

Jonathan Dean  
Vice President and Chief Counsel, Vehicle Group.  
Eaton Corporation  
(216) 523-4129 (phone)  
(216) 479-7122 (fax)

**12. Name and Title of Person who prepared this report.**

Jennifer M. Gartlan  
*Counsel for Eaton Corporation*

**Signed:**