Part 573 Safety Recall Report 18V-837

Manufacturer Name : Daimler Vans USA, LLC
Submission Date : DEC 15, 2018
NHTSA Recall No. : 18V-837
Manufacturer Recall No. : NR

NHTSA
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Manufacturer Information :

Manufacturer Name : Daimler Vans USA, LLC
Address : One Mercedes-Benz Drive
Sandy Springs GA 30328
Company phone : 854-888-3214

Population :

Number of potentially involved : 12,383
Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2016-2017 Mercedes-Benz Metris
Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES
Body Style : VAN
Power Train : GAS
Descriptive Information : The recall population refers to the NAFTA Metris vehicles (Platform 447) which were either equipped with the Veritas fuel hose on the upper connection and/or assembled during the period when the incorrect tool could have been used to affix the clamp on the lower connection.

Other NAFTA Metris vehicles (Platform 447) have already been equipped with the ContiTech fuel hose and were produced outside the affected production period March 2015 (SOP) until March 15, 2017. Potentially affected Mercedes-Benz Metris vehicles (Platform 447) will be repaired as follows: At the lower connection, the hose and clamp will be replaced and the correct mounting ensured, as necessary. At the upper connection, the existing hose will be replaced by a hose with improved material properties produced by another supplier. The replacement hose demonstrates improved performance with respect to aging. 12,383 Mercedes[-Benz Metris vehicles are potentially affected in the US.

Production Dates : MAR 02, 2015 - MAR 15, 2017
VIN Range 1 : Begin : NR End : NR ☐ Not sequential

Description of Defect :

Description of the Defect :	Daimler AG (DAG), the manufacturer of Mercedes-Benz Vans, has determined that certain Mercedes-Benz Metris vehicles (Platform 447) may show a minor fuel leakage at the lower connecting point of the transition hose, between the underbody fuel line and the Schrader valve. In addition, limited fuel "weeping" in the upper connection of the fuel line to the fuel pump - which typically produces fuel odor, but no significant loss of fuel from the system - could be present during cold start conditions.
FMVSS 1 :	NR
FMVSS 2 :	NR
Description of the Safety Risk :	Fuel leakage in the presence of a potential ignition source within the engine compartment could create the risk of a fire.
Description of the Cause :	The main cause of the fuel leakage at the lower connection point of the transition hose between the underbody fuel line and the Schrader valve is the possible use of an unsuitable tool for fixing the clamp on the hose in the US vehicle reassembly plant.
Identification of Any Warning that can Occur :	Fuel odor might be perceptible in the interior compartment even in case of minimal fuel leakage.

Supplier Identification :

Component Manufacturer

Name :	Veritas AG
Address :	Stettiner Str. 1-9 Gelnhausen FOREIGN STATES 63571
Country :	Germany

Chronology :

Based on field reports of fuel odor following cold start conditions in cooler climate markets (e.g. Russia), Daimler AG initiated an analysis and testing program which identified the root cause and failure mode. This review included testing to evaluate the emissions impact of the potential leak. Moreover, durability and emissions testing was carried out in the context of this review. Based on the findings gathered, the company made a change in the supplier of the subject component.

On March 15, 2018 Daimler Vans USA (DVUSA) received a preliminary evaluation (PE) information request from NHTSA in relation to reports of fuel hose leakage in model year 2016 Metris vehicles.

On May 9 and May 24, 2018 DVUSA provided responses to NHTSA's PE information request, setting out details of its internal analysis and a preliminary technical assessment in respect to the issue.

In order to verify its initial technical assessment, further investigations were conducted, including detailed analysis of field return parts from the US market, focusing on the upper connection of the fuel line to the fuel pump. This included visual examination of the affected area of the hose as well as a check of its condition, check of part dimensions, tightness testing, and check of material properties (tear resistance and elongation at fracture).

Daimler AG subsequently conducted analysis of the lower connection point of the transition hose, between the underbody fuel line and the Schrader valve. This analysis included the use of videos/pictures showing the concerned components in customer vehicles. Simulation on vehicles at a Daimler test facility was used to reproduce the conditions customers described under which fuel smell was detected.

Although Daimler AG's analysis and evaluation did not result in evidence of a specific risk of fire or vehicle disablement, on November 21, 2018, Daimler AG decided to initiate a voluntary recall campaign based on feedback from NHTSA.

Description of Remedy :

Description of Remedy Program :	An authorized Mercedes-Benz Metris dealer will repair the subject vehicles as follows: At the lower connection, the hose and clamp will be replaced and the correct mounting ensured, as necessary. At the upper connection, the existing hose will be replaced. Pursuant to 49 C.F.R. § 577.11(e), Daimler Vans does not plan to provide notice about pre-notice reimbursement to owners since all involved vehicles remain covered under the new vehicle warranty.
How Remedy Component Differs from Recalled Component :	Potentially affected Mercedes-Benz Metris vehicles (Platform 447) will be repaired as follows: At the lower connection, the hose and clamp will be replaced and the correct mounting ensured, as necessary. At the upper connection, the existing hose will be replaced by a hose with improved material properties produced by another supplier. The replacement hose demonstrates improved performance with respect to aging. Lower connecting point of the transition hose, between the underbody fuel line and the Schrader valve. Part number: N000000004158
Identify How/When Recall Condition was Corrected in Production :	The usage of the correct tool for the clamp assembly at the lower connecting point was ensured in the reassembly plant and a change of the hose material for the upper joint area was introduced in the engine plant by February 2017.

Recall Schedule :

Description of Recall Schedule :	Owners will be notified approximately one week after the recall launch to the dealers. Dealers will be notified of the pending voluntary recall

	campaign approximately in December 2018. A copy of all communications will be provided when available.
Planned Dealer Notification Date :	JAN 18, 2019 - JAN 18, 2019
Planned Owner Notification Date :	JAN 25, 2019 - JAN 25, 2019

* NR - Not Reported