

Amended Defect Information Report

(Section 573.6)

FL-815

Date of Submission: *May 21, 2021*

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

Type of Report: Safety Defect Non-Compliance

Vehicle Information

Model Yr. Start: 2004 Model Yr. End: 2019

Make: *Freightliner, Western Star, Sterling*

Models: *108SD, 114SD, 122SD, Columbia, Classic, FL80, FLD, M2, Cascadia, 4700, 4900, 6900, Acterra, and L-Line*

Production Dates: Begin: *01/8/2004*

End: *10/12/2018*

Descriptive Information: *Certain vehicle configurations with air tank reservoir volume with less than 12:1 ratio brake chamber volume.*

Number potentially involved: 741 Estimated percentage of involve with defect: 100%

Defect / Noncompliance Description

For this Defect/Noncompliance:

Describe the defect or noncompliance: *The vehicles in question do not comply with FMVSS 121 S5.1.2.1. The regulation requires the combined volume of all service reservoirs and supply reservoirs to be at least 12 times the combined volume of all service brake chambers.*

If a noncompliance, provide the applicable FMVSS: *FMVSS 121 – Air Brake Systems*

Describe the safety risk: *The mandated reservoir ratio is intended to ensure air availability during operation regardless of heavy usage, or loss of part of the pneumatic system. An insufficient ratio can affect brake performance if several brake applications are required over a short period. Reduced brake effectiveness could increase the risk of a vehicle crash.*

DTNA has not received any complaints due to reduced air reservoir volume on these vehicles.

Chronology of Defect / Noncompliance Determination

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

In May 2018, DTNA identified a potential non-compliance related to vehicle air tank capacity and began an extensive investigation. May 2018 – August 2018, DTNA evaluated vehicle configurations to determine potentially affected vehicles. Additional review of vehicle specifications and volume calculations revealed a potential issue relating to air chamber and air tank sizing requirements. August 2018 – December 2018, DTNA reviewed potentially affected population to confirm vehicle configuration on air chamber and tank sizing and quantity of parts. In January 2019, DTNA internally evaluated actual volumes related to stroke of chambers to compare with table 5 in FMVSS 121. February 2019, DTNA discussed the issue with NHTSA Office of Defects Investigation and it was recommended that DTNA seek guidance from NHTSA Office of Vehicle Safety Compliance (OVSC). March 2019, DTNA discussed the issue with OVSC and requested clarity on the regulation. April, DTNA received requested information from OVSC. DTNA consulted with external lawyers for legal advice on the interpretation of the rule. May 2019, with an abundance of caution, DTNA decided to initiate a voluntary recall campaign on affected vehicles manufactured within the above dates. June 2019, DTNA amended the population to include vehicles previously included in 19V-369 and removed 254 auto transporter trucks (i.e. built without fifth wheels) which FMVSS 121 exempts from meeting reservoir volume requirements. May 2021, the final owner letters have not yet been sent. The recall is active and repairs are being worked through on an individualized basis.

Identify the Remedy

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

Additional air reservoir capacity will be added to subject vehicles. 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 made by first class mail using Daimler Trucks North America records to determine the customers affected.*

Planned Dealer Notification Begin Date: 07/12/2019

Planned Dealer Notification End Date: 07/12/2019

Planned Owner Notification Begin Date: 07/12/2019

Planned Owner Notification End Date: 07/12/2019

Manufacture's identification code for this recall (if applicable): FL-815

DTNA Representative;



Larissa Stoffels

Executive Manager, Vehicle Safety
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