OMB Control No.: 2127-0004

Part 573 Safety Recall Report

21E-099

Manufacturer Name: Cummins, Inc.
Submission Date: DEC 13, 2021
NHTSA Recall No.: 21E-099
Manufacturer Recall No.: C2532



Manufacturer Information:

Manufacturer Name: Cummins, Inc.

Address: Box 3005, Mail Code 41303

Columbus IN 47202-3005

Company phone: 812-377-5000

Population:

Number of potentially involved: 10,938 Estimated percentage with defect: 1 %

Equipment Information:

Brand / Trade 1: Cummins Inc.

Model: X12

Part No.: D0S3009BX03

Size: NR

Function: Diesel engine

Descriptive Information: These engines are equipped with High Pressure Common Rail fuel systems and

sold for installation in mixer, truck, coach, emergency vehicle, refuse truck, recreational vehicle and crane applications. The recall consists of the entire population of engines equipped with a certain Injector Fuel Supply Tube (fuel

tube) prior to the implementation of corrective action.

Production Dates: AUG 27, 2019 - NOV 01, 2021

Brand / Trade 2: Cummins Inc.

Model: X12

Part No.: D0S3005BX03

Size: NR

Function: Diesel engine

Descriptive Information: These engines are equipped with High Pressure Common Rail fuel systems and

sold for installation in mixer, truck, coach, emergency vehicle, refuse truck, recreational vehicle and crane applications. The recall consists of the entire population of engines equipped with a certain Injector Fuel Supply Tube (fuel

tube) prior to the implementation of corrective action.

Production Dates: APR 26, 2016 - OCT 11, 2021

Description of Defect:

Description of the Defect: The fuel tubes between the fuel rail and the injector for cylinders 4, 5 and 6

may be susceptible to cracking, resulting in a high pressure fuel leak.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: A high pressure fuel leak in the presence of an ignition source may increase

the risk of a fire.

Description of the Cause: The subject fuel tubes (for cylinders 4, 5 and 6) are susceptible to cracking due

to metal fatigue failure resulting from a combination of vibration strain,

assembly strain and material strength.

Identification of Any Warning Fuel leaks may be detected during maintenance. An operator may smell fuel or

that can Occur: observe a mist due to the fuel leak.

Involved Components:

Component Name: Injector Fuel Supply Tube

Component Description: Fuel tube between fuel rail and fuel injector

Component Part Number: 5536516

Component Name: Injector Fuel Supply Tube

Component Description: Fuel tube between fuel rail and fuel injector

Component Part Number: 5486389

Component Name: Injector Fuel Supply Tube

Component Description: Fuel tube between fuel rail and fuel injector

Component Part Number: 3695190

Supplier Identification:

Component Manufacturer

Name: Usui International Corporation

Address: 44780 Helm Street

Plymouth Michigan 48170

Country: United States

Chronology:

19Apr2021 – Cummins received a Technical Service Request for a leaking fuel tube on an X12 engine.

19Apr-23Jul2021 - Cummins received additional reports of leaking fuel tubes on X12 engines and escalated the issue for further investigation.

23Jul2021 - Cummins initiated a Product Problem Solving (PPS) project to investigate the cause of the fuel tube leaks.

Aug-Oct2021 – Cummins continued to investigate this issue, including obtaining and analyzing parts from the field, conducting testing to understand the cause of the failures and evaluating potential corrective action. As part of the investigation, Cummins identified 29 warranty claims for fuel tube fuel leaks (not all of which had cracked tubes) with a date range of March 6, 2020 through September 22, 2021 (as of September 22, 2021).

190ct2021 - Cummins investigated a September 2021 fire on a vehicle equipped with an X12 engine.

250ct2021 - Cummins identified a leak of the #5 cylinder fuel tube as the cause of the fire.

280ct2023 - Cummins completed a Product Safety Hazard Analysis.

1Nov-23Nov2021 – Cummins escalated the issue through its Product Safety Defect Board process.

23Nov2023 - Based upon the results of the investigation, the Cummins Product Safety Defect Board decided to conduct a safety campaign to address this condition. To date, there have been no reports of injuries due to this condition.

Description of Remedy:

Description of Remedy Program: For engines having 75 miles or less, the remedy will consist of adding

vibration isolators to the fuel tubes; fuel tubes do not need to be replaced. For all other engines, the subject fuel tubes for cylinders 4, 5 and 6 (the rear half of the engine) will be replaced with new fuel tubes (having the same part number as the recalled components) and vibration isolators will be added to the fuel tubes to engines. A recall-specific reimbursement plan will be provided on the Recall Portal for those units not covered by the

manufacturer's limited warranty.

How Remedy Component Differs The replacement fuel tubes will also have vibration isolators. The fuel from Recalled Component: tube and vibration isolator combination will have a new part number.

Identify How/When Recall Condition The injector alignment to the cylinder head was improved by

was Corrected in Production: implementing an improved alignment fixture during engine assembly and vibration isolators were added to the fuel tubes during engine assembly on November 2, 2021.

Recall Schedule:

Description of Recall Schedule: Cummins expects to notify affected OEMs no later than December 10,

2021. Cummins will conduct the recall and notify owners. The timing of owner notification will be determined in consultation with the affected OEMs and subject to availability of addresses from the affected OEMs.

The recall schedule is being developed.

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: Watson Hopper Address: 19441 Highway 92

Delta CO 81416

Country: US

Company Phone: 9708747384102

Name: American Coach De Mexico

Address: Avienda Corredor Industrial 3R-2

Fraccionamiento, Industrialm 43998 Cd. Sahagun, Hidalgo 00

Country: MX

Company Phone: 15537073078

Name: Daimler Trucks North America

Address: 4747 N. Channel Ave

Portland OR 97217

Country: US

Company Phone: 5037457385

Name: E-One

Address: 4161 SW 13th Street

Ocala FL 34474

Country: US

Name: Ferrara Fire Apparatus Address: 27855 James Chapel Road

Holden LA 70744

Country: US

Company Phone: 80044390063011

Name: Grove Worldwide

Address: 1565 Buchanan Trail East

Shady Grove PA 17256

Country: US

Company Phone: 7175935234

Name: HME, Inc.

Address: 1950 Byron Center Ave

Wyoming MI 49519

Country: US

Company Phone: 6165341463256

Name: Hollingshead Mixer Company

Address: 1136 2nd Ave

North Nashville TN 37208

Country: US Company Phone: NR

Name: Jiangxi KAMA Business Bus Co., LTD

Address: No. 149 West Yuping Rd

Nanchang Economic Development Zone Jiangxi 00 330013

Country: CN

Company Phone: 13755681010

Name: KME

Address: One Industrial Complex

Nesquehoning PA 18240

Country: US

Company Phone: 5702732859

Name: Link-Belt Construction Equipment Co.

Address: 2651 Palumbo Drive

Lexington KY 40509

Country: US

Name: M-B Corporation Address: 202 MB Lane

Chilton WI 53014

Country: US

Company Phone: 9208981078

Name: Motor Coach Industries, LTD

Address: 1475 Clarence Ave

Winnepeg 00 MB R3T 1T5

Country: CA

Company Phone: 2042246707

Name: Oshkosh Defense

Address: 524 County Road 34 East

Dodge Center MN 55927

Country: US

Company Phone: 5073748246

Name: Pierce Manufacturing, Inc.

Address: 2600 American Drive

Appleton WI 54912

Country: US

Company Phone: 9208323346

Name: Rosenbauer Motors, LLC

Address: 5190 260th Street

Wyoming MN 55092

Country: US

Company Phone: 6514627589

Name: RPM Tech

Address: 2220 Boul. Jean-de-Brebeuf

Drummonville, Quebec 00 J2B 8A1

Country: CA

Company Phone: 8194781421

Name: Seagrave Fire Apparatus, LLC

Address: 105 East 12th Street

Clintonville WI 54929

Country: US

Name: The Shyft Group Address: 1541 Reynolds Road

Charlotte MI 48813

Country: US

Company Phone: 5177595793

Name: Spartan Fire, LLC Address: 1541 Reynolds Road

Charlotte MI 48813

Country: US

Company Phone: 51758847006024

Name: Sutphen Corporation Address: 6450 Eiterman Road

Dublin OH 43016

Country: US

Company Phone: 6148891005

Name: Temsa Skoda Sabanci Ulasim Araclari AS

Address: Sarihamzali Mahallesi

Turhan Cemal Beriker Bulv. 563A Seyhan, Adana 00 01323

Country: TR

Company Phone: 3224410226

Name: Terex Advance Mixer Address: 7727 Freedom Way

Fort Wayne IN 46818

Country: US

Company Phone: 2609694549

Name: Van Hool, NV

Address: Bernard Van Hoolstraat 58

Lier (Konishgshooikt) 00 BE-2500

Country: BE

Company Phone: 0323422731

Name: Autocar, LLC

Address: 551 South Washington Street

Hagerstown MD 47346

Country: US