OMB Control No.: 2127-0004

Part 573 Safety Recall Report

19E-020

Manufacturer Name: Cummins Inc.
Submission Date: JUL 25, 2019
NHTSA Recall No.: 19E-020
Manufacturer Recall No.: C2127



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 : 46,194 Estimated percentage with defect : 10 %

Equipment Information:

Brand / Trade 1: Cummins

Model: B6.7

Part No.: D313029BX03

Size: NR Function: NR

Descriptive Information: Medium duty diesel engine used in school buses, trucks and emergency vehicles

and equipped with a fuel module option number FS90301 or FS90453. The fuel

module contains an electric fuel heater.

Production Dates: DEC 16, 2015 - FEB 25, 2019

Description of Defect:

Description of the Defect: Internal electrical arcing within the fuel heater may create sufficient heat

inside the fuel heater to cause plastic in the fuel heater to melt and potentially

catch fire. It may also cause an engine stall.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: A fire, if undetected and uncontained, presents an increased risk of personal

injury. An unexpected engine stall may increase the risk of a crash.

Description of the Cause: The cause is electrical arcing internal to the fuel heater due to metallic debris in

the fuel that may accumulate in the heater over time.

Identification of Any Warning Melting of the fuel heater may be visible during a service event, smoke may

that can Occur: precede or accompany a fire or the engine may become increasingly difficult to

start.

Supplier Identification:

Component Manufacturer

Name: DBK David + Baader GmbH

Address: Nording 26

Rulzheim FOREIGN STATES 76761

Country: Germany

Chronology:

July – December 2018 – Cummins conducted an investigation into warranty claims primarily related to reports of hard-start/no-start in the subject engines. During this time, Cummins conducted a root cause analysis with the fuel heater supplier, including analysis of warranty claims and returned parts. While conducting this investigation, in October Cummins received parts from the field with reports of minor fires involving the fuel heater in two of the subject engines. (A previous fire, in October 2017, is now suspected to be related to this concern.)

January – February 2019 – By February 2019, Cummins had received a total of 123 warranty claims and 64 fuel heaters had been returned for analysis. There had been a total of six minor fires reported, all of which were contained to the fuel heater component or its immediate vicinity. Cummins conducted failure analysis on additional returned components and investigated the additional reports.

February 5-14, 2019: Cummins conducted a Product Safety Hazard Analysis based upon the information developed during the investigation.

February 26, 2019 – Based upon the data collected (including a report of one additional minor fire since the Product Safety Hazard Analysis was completed) and evaluation of the issue, Cummins decided to conduct a safety recall to address this condition. To date, there have been no reports of accidents or injuries related to this condition; each of the seven reported fires was contained to the immediate vicinity of the fuel heater.

Description of Remedy:

Description of Remedy Program: Cummins advised customers in an interim letter mailed on May 2, 2019 to remove the fuse supplying electrical power to the subject fuel heater and to inspect the heater for fuel leakage or damage and, if found, to contact Cummins to arrange for a repair (remove the damaged or leaking heater and replace it with a plug). Cummins issued a Temporary Repair Practice (TRP2129) on March 22, 2019 to notify dealers of this action.

> The remedy, to prevent heater damage due to metallic debris in the fuel that may accumulate in the heater over time, will consist of the following: (1) change the fuse in the vehicle to a 30A fuse, including installing revised fuse size information in the vehicle's owner's manual and, for school bus applications, on the vehicle fuse map (truck applications do not have a vehicle-mounted fuse map), (2) reverse the polarity of the wiring to the fuel heater, (3) install a new fuel heater, and (4) put a white paint dot on the fuel heater connector on the OEM wire harness (to readily identify units which have had the recall completed.)

Cummins will submit a recall-specific reimbursement plan through the Recalls Portal.

from Recalled Component:

How Remedy Component Differs The OEM wire harness connector to the fuel heater will be marked with a white paint dot to readily identify units which have had the recall completed. The vehicle fuse map (if applicable) and the vehicle's owner's manual will also be updated to identify the proper fuse size. The change to the polarity of the electrical supply to the fuel heater will be evident by the colors of the wires in the wire harness.

Identify How/When Recall Condition On February 26, 2019, engine production began with the subject fuel was Corrected in Production: heater removed from the engine. Cummins is pursuing a commercial (non-safety) action in conjunction with Navistar to implement all of the changes identified in the remedy in production engines/vehicles.

Recall Schedule:

Description of Recall Schedule: With the OEM's agreement, Cummins will conduct the recall and notify owners. The timing of owner notification will be determined in consultation with the affected OEM. Owner notification will commence promptly after the receipt of the vehicle OEM's customer contact information.

> Cummins issued a Technical Service Bulletin with instructions on how to complete the interim repair on March 14, 2019. Cummins issued the Temporary Repair Practice on March 22, 2019. Cummins mailed interim owner notifications on May 2, 2019.

Cummins plans to conduct the recall in two stages. Cummins expects to release the first stage of the Safety Campaign notice to its service network on August 2, 2019 and expects to expand the campaign's Engine Serial

Number list to include the second stage by August 23, 2019.

In the first stage, owner letters will be mailed to owners informing them of the remedy in the following states in the northern United States (and Canada): AK, ND, MN, ME, WI, VT, SD, NH, MT, WY, IA, MI, NY, ID, NE, CO, MA, UT, IL, PA, CT, IN, OH, RI, KS and the District of Columbia. Cummins expects to mail the first stage letters by August 23, 2019. In the second stage, Cummins will mail owner letters to owners in the remaining US states informing them of the remedy. The date of the second mailing is

expected to be by September 6, 2019.

Planned Dealer Notification Date: MAR 22, 2019 - MAR 22, 2019 Planned Owner Notification Date: MAY 02, 2019 - MAY 02, 2019

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: Navistar International Transportation

Address: 2701 Navistar Drive

Lisle IL 60532

Country: US

Company Phone: 331 332 1590

^{*} NR - Not Reported