

Part 573 Safety Recall Report

21E-083

Manufacturer Name : Cummins, Inc.**Submission Date :** SEP 03, 2021**NHTSA Recall No. :** 21E-083**Manufacturer Recall No. :** C2491**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 : 30

Estimated percentage with defect : 50 %

Equipment Information :

Brand / Trade 1 : Cummins Inc.

Model : BES CM2450 EV101B

Part No. : D1U0001BX03

Size : N/A

Function : Electric Drive

Descriptive Information : The subject Electric Drivetrain System consists of high voltage batteries and other components to control and distribute high voltage to a drive motor and other components. The system has a Hybrid System Protection feature that, under certain fault conditions, shuts down the high voltage system, resulting in loss of motive power to the vehicle. The system also has a high voltage shutdown override switch that allows the driver to temporarily override the high voltage shutdown. These systems were sold as original equipment in certain transit bus applications. The recall population consists only of certain systems that have had hardware and software updated in the field.

Production Dates : NOV 01, 2020 - MAY 21, 2021

Description of Defect :

Description of the Defect : Due to an incorrect parameter setting that may exist in units that received a hardware and software update in the field, under certain circumstances, the high voltage shutdown override switch may not function, without warning the driver, when a system shutdown fault occurs.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : If the vehicle shuts down sooner than the driver expects, the driver may have insufficient opportunity to move the vehicle to a safe location, increasing the risk of a crash.

Description of the Cause : The high voltage shutdown override switch input was moved from the Cummins-supplied System Control Module (SCM) to the OEM-supplied Body Controller. In the new configuration, the Body Controller communicates the switch input status to the SCM through a J1939 CAN message. On certain vehicles that were upfit in the field to the new configuration, the SCM may not have been configured to correctly recognize the override switch input status.

Identification of Any Warning that can Occur : A dashboard light warns the driver that the system is triggering a shutdown. There is no warning to the driver that the shutdown override is not functioning properly.

Involved Components :

Component Name : N/A

Component Description : N/A

Component Part Number : N/A

Supplier Identification :

Component Manufacturer

Name : N/A

Address : NR

NR

Country : NR

Chronology :

5/22/2021 – Production began with the shutdown override function implemented through a J1939 message instead of a switch that was hardwired to the SCM.

6/11/2021 – Cummins Service Engineering discovered, during a field recalibration event, that the high voltage shutdown override feature was not properly enabled after the recalibration. Cummins Service Engineering began corrective action by making appropriate changes to affected units.

6/21/2021 – 7/27/2021 – Cummins conducted an investigation of the issue, including conducting a Product Safety Hazard Analysis. There were no warranty claims filed for this issue.

7/27/2021 – 8/27/2021 – Cummins escalated the issue through its Product Safety Defect Board process and gathered additional input.

8/27/2021 – Based upon the information developed during the investigation and the additional information, Cummins Product Safety Defect Board decided to conduct a safety campaign to address this condition.

To date, there have been no reports of accidents or injuries related to this condition.

Description of Remedy :

Description of Remedy Program : Pursuant to 49 CFR 577.11 (e), Cummins requests that it be exempt from providing notification of a reimbursement plan. Any pre-notification product failure would have been addressed under the manufacturer's limited warranty. Accordingly, no person would be eligible for reimbursement pursuant to 573.13.

The remedy is to connect the Cummins INSITE Service Tool to the SCM, verify the parameter settings for the System Protection Override Switch, and update parameter settings if necessary.

How Remedy Component Differs from Recalled Component : The remedy involves changing parameter settings. No component (hardware or software) is involved in the recall. The remedy can be confirmed by connecting a Cummins INSITE Service Tool to the SCM and viewing the appropriate parameter settings.

Identify How/When Recall Condition was Corrected in Production : The recall condition does not present itself in production units. It only presents itself if an older system is updated to the system configuration that began production after May 21, 2021.

Recall Schedule :

Description of Recall Schedule : Cummins expects to notify the affected OEM no later than September 10, 2021. Cummins expects to conduct the recall and notify owners, subject to consultation with the affected OEM. Cummins expects to release a Safety Campaign and send owner notifications no later than October 29, 2021.

Planned Dealer Notification Date : OCT 29, 2021 - OCT 29, 2021

Planned Owner Notification Date : OCT 29, 2021 - OCT 29, 2021

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 : Gillig Corporation

Address : 451 Discovery Drive
Livermore CA 94551

Country : US

Company Phone : 5102643833

* NR - Not Reported