OMB Control No.: 2127-0004

Part 573 Safety Recall Report

21E-033

Manufacturer Name: Cummins, Inc.
Submission Date: APR 20, 2021
NHTSA Recall No.: 21E-033

NHTSA

NATIONAL HIGHWAY TRAFFIC
SAESTY ADMINISTRATION

Manufacturer Information:

Manufacturer Recall No.: NR

Manufacturer Name: Cummins, Inc.

Address: Box 3005, Mail Code 41303

Columbus IN 47202-3005

Company phone: 812-377-5000

Population:

Number of potentially involved : 329 Estimated percentage with defect : 100 %

Equipment Information:

Brand / Trade 1: Cummins Inc.

Model: PowerDrive EV

Part No.: 4000EV/6000EV/7000EV

Size: NR

Function: Electric Drive

Descriptive Information: The subject Electric Drivetrain consists of high voltage batteries and other

components to control and distribute high voltage to a drive motor and other components. The system may also supply and control power to an electrically assisted power steering pump, which is supplied by Cummins. These systems were sold as original equipment in certain school buses and as original or upfit equipment in certain medium duty trucks. This recall consists of the entire

population of systems built prior to February 23, 2021.

Production Dates: JUN 01, 2018 - FEB 23, 2021

Description of Defect:

Description of the Defect: Due to electromagnetic noise on the Control Area Network (CAN) bus, the

subject Electric Drivetrain systems may experience loss of control of the inverter that provides electrical power to the power steering pump, possibly resulting in the loss of electrically assisted power steering. Power steering

functionality is restored after a keyswitch recycle.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: In the event of loss of power steering assist, manual steering functionality is

retained but would require increased steering effort, particularly at lower

speeds, increasing the risk of a crash.

Description of the Cause: The cause is electrical noise on the CAN bus.

Identification of Any Warning None. that can Occur:

Involved Components:

Component Name: NR
Component Description: NR
Component Part Number: NR

Supplier Identification:

Component Manufacturer

Name: N/A
Address: NR
NR
Country: NR

Chronology:

December 9, 2020 – Cummins' product safety team initiated an investigation into reports of temporary loss of power steering in vehicles equipped with the subject engines. The investigation included a review of data and consideration of a prior design review for wiring harness modifications and root cause analysis.

January 28 - February 22, 2021 - Cummins conducted a Product Safety Hazard Analysis.

March 12 – April 12, 2021 – Cummins escalated the issue through its Product Safety Defect Board process and gathered additional data, including conducting a demonstration of the failure in a test vehicle.

April 13, 2021 – Based upon the information developed during the investigation, 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 replaced under the manufacturer's limited warranty. Accordingly, no person would be eligible for

reimbursement pursuant to 573.13.

Cummins is developing the remedy and will amend this report accordingly.

How Remedy Component Differs NR

from Recalled Component:

Identify How/When Recall Condition This condition was corrected in a wire harness change that was

was Corrected in Production: implemented in production on February 23, 2021.

Recall Schedule:

Description of Recall Schedule: Cummins expects to notify affected OEMs no later than April 30.

Cummins will conduct the recall and notify owners. The timing of owner notification will be determined in consultation with the affected OEMs. Cummins is developing the recall schedule, but in any case expects to

notify owners no later than June 19, 2021.

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: Blue Bird Corporation Address: 3920 Arkwright Road

Macon GA 31210

Country: US

Company Phone: 4788222148

Name: Daimler Trucks North America

Address: 4747 N. Channel Drive

Portland OR 97217

Country: US

Company Phone: 5037457385

Name: Thomas Built Buses, Inc.

Address: 1408 Courtesy Road

High Point NC 27260

Country: US

Company Phone: 3368784825

Name: The Shyft Group

Address: 1541 Reynolds Road

Charlote MI 48813

Country: US

Company Phone: 5177595793

^{*} NR - Not Reported