

# Part 573 Safety Recall Report

# 19E-040

**Manufacturer Name :** Cummins Inc.

**Submission Date :** JUN 13, 2019

**NHTSA Recall No. :** 19E-040

**Manufacturer Recall No. :** N/A



## 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 :** 40

**Estimated percentage with defect :** 100 %

## Equipment Information :

**Brand / Trade 1 :** Cummins Inc.

**Model :** Vehicle Control Unit for PowerDrive 7000 EV

**Part No. :** 300114 Revision A

**Size :** NR

**Function :** Vehicle Control

**Descriptive Information :** The subject Vehicle Control Units (VCU), consisting of hardware and software, were sold with PowerDrive 7000 EV electric drivetrain units that were installed exclusively in certain Blue Bird school buses. The VCU processes various inputs and determines (among other things) whether to open or close contactors that supply high voltage power to various vehicle systems, including the traction drive system and the power steering. The recall, which relates to the software installed on these VCUs, covers the entire population of VCUs sold to Blue Bird.

**Production Dates :** JUN 07, 2018 - JUN 03, 2019

## Description of Defect :

**Description of the Defect :** The VCU may unexpectedly command off the high voltage contactors, resulting in loss of all systems powered by high voltage, including the traction drive system and power steering.

**FMVSS 1 :** NR

**FMVSS 2 :** NR

**Description of the Safety Risk :** Loss of motive power and loss of power steering may increase the risk of a crash.

**Description of the Cause :** The cause of the issue is a software error.

**Identification of Any Warning that can Occur :** None.

**Supplier Identification :****Component Manufacturer**

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

**Chronology :**

4/5/2019 – Cummins received a report of a loss of power steering and loss of motive power in a Blue Bird school bus equipped with PowerDrive 7000 EV system.

4/5 – 5/24/2019 – Cummins conducted an investigation into the incident.

5/24/2019 – Cummins received a second report of a loss of power steering and loss of motive power in a Blue Bird bus equipped with the subject system. Cummins began an investigation into the second report.

5/30/2019 – Cummins' investigation determined that the vehicle control unit (VCU) in the subject systems may unexpectedly command “off” the high voltage contactors, which could result in a loss of all systems powered by high voltage, including the traction drive system and power steering. Based on the findings of the investigations, Cummins completed a Product Safety Hazard Analysis.

6/6/2019 – Based upon the results of the investigation 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.

**Description of Remedy :**

Description of Remedy Program : Cummins will work with its OEM customer, Blue Bird Corporation, to identify and notify affected vehicle owners and to arrange to have the VCUs updated with a revised version of the VCU software that addresses this condition.

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.

How Remedy Component Differs The updated software will have a new version number. The new software version will be BL\_2\_1\_0\_6.

from Recalled Component :

The following software versions will be replaced: BL\_2\_0\_2\_53, BL\_2\_0\_2\_63, BL\_2\_0\_2\_76, BL\_2\_0\_2\_77, BL\_2\_1\_0\_0, BL\_2\_1\_0\_4, BL\_2\_1\_1\_1, BL\_2\_1\_1\_2, BL\_2\_1\_1\_3

Identify How/When Recall Condition was Corrected in Production :

The updated VCU software will be installed in new production units as soon as the new software is validated. The last production unit was built on 6/3/2019.

## Recall Schedule :

Description of Recall Schedule : Cummins expects to notify its sole OEM customer, Blue Bird Corporation, on or before June 21, 2019. Pending consultation and agreement with Blue Bird, Cummins will immediately begin working with vehicle owners with a target of having the new software installed in the affected Vehicle Control Units by approximately July 31, 2019. Cummins will send part 577 letters no later than August 9, 2019 to any owners who have not received the software update as of August 1, 2019.

Planned Dealer Notification Date : NR - NR

Planned Owner Notification Date : AUG 09, 2019 - AUG 09, 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 : Blue Bird Corporation

Address : 3920 Arkwright Road  
Suite 200 Macon GA 31210

Country : US

Company Phone : 478-822-2148

\* NR - Not Reported