OMB Control No.: 2127-0004

Part 573 Safety Recall Report

22E-054

Manufacturer Name: Cummins, Inc.
Submission Date: APR 24, 2023
NHTSA Recall No.: 22E-054
Manufacturer Recall No.: C2619



Manufacturer Information:

Manufacturer Name: Cummins, Inc.

Address: Box 3005

Mail Code COB118 Columbus IN

47202-3005

Company phone: 812-377-5000

Population:

Number of potentially involved : 530 Estimated percentage with defect : 100 %

Equipment Information:

Brand / Trade 1: Cummins Inc.

Model: PD7000 Part No.: PD7000 Size: N/A

Function: Electric Drive

Descriptive Information: The subject Electric Drivetrain contains an electric air compressor to supply

compressed air to the vehicle. These systems were sold as original equipment for installation in certain school buses and as original or upfit equipment for installation in certain medium duty trucks and terminal tractors. This recall

consists of the entire population of PD7000 systems built prior to

implementation of a new air compressor.

Production Dates: JUN 01, 2018 - APR 18, 2022

Description of Defect:

Description of the Defect: The air compressor housing on these units is not properly grounded. As a

consequence, the air compressor housing may experience an electrical voltage

potential greater than 50V AC during air compressor operation.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: This condition may lead to an electric shock for any person (in particular,

service personnel) touching the air compressor housing assembly while the

air compressor is operating.

Description of the Cause: The cause is missing electrical grounding of the air compressor housing with

respect to the vehicle chassis.

Identification of Any Warning None that can Occur:

Involved Components:

Component Name: Compressor, Air

Component Description: Electrically driven air compressor

Component Part Number: 5611745

Supplier Identification:

Component Manufacturer

Name: N/A

Address : NR NR

Country: NR

Chronology:

4/21/22 – A Cummins employee experienced a mild electric shock when he touched the air compressor motor housing at a Cummins facility. 4/21 – 5/11/22 – An investigation was conducted to understand the cause of the issue. During the investigation, the voltage between the air compressor housing and vehicle chassis for the incident unit was measured as 110 V to 130 V AC. Testing was conducted on the two configurations of air compressor and inverter assemblies to understand the ground paths and to verify the missing ground. 5/11 – 6/1/22 – A Product Safety Hazard Analysis was conducted. Testing was completed on the current production air compressor to confirm that it does not have this condition. 6/1 – 6/28/22 – Cummins escalated the issue through its Product Safety Defect Determination process. 6/28/22 – 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 electrical shock (other than the Cummins employee on 4/21/22) or injuries due to this condition.

Description of Remedy:

Description of Remedy Program: An electrical ground strap will be installed between the air compressor

motor housing and the vehicle chassis. 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 air compressor with the remedy ground strap installed will be visibly

from Recalled Component: different than the air compressor without the ground strap.

from Recalled Component. under ent than the air compressor without the ground strap.

Identify How/When Recall Condition For reasons unrelated to this condition, units manufactured on and after was Corrected in Production : 4/19/2022 are equipped with a new air compressor (P/N 5678863) in

which the air compressor and electrical inverter are integrated into a single assembly that is collectively electrically grounded and does not have

this condition.

Recall Schedule:

Description of Recall Schedule: Cummins expects to notify affected OEMs no later than July 13, 2022.

Cummins will conduct the recall and notify owners. The timing of owner notification will be determined in consultation with the affected OEMs.

Cummins notified owners with an interim letter on September 2, 2022. Cummins expects the remedy to be available and published to Cummins' service network in January 2023 and will mail owner letters shortly after

the campaign is released to the field.

Planned Dealer Notification Date : JAN 31, 2023 - JAN 31, 2023

Planned Owner Notification Date: JAN 31, 2023 - JAN 31, 2023

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: NR Name: TICO

Address: 66 Cypress Ridge Drive

Ridgeland SC 29936

Country: US Company Phone: NR

Name: Daimler Trucks North America

Address: 4747 N. Channel Ave

Portland OR 97217

Country: US Company Phone: NR

^{*} NR - Not Reported