#### OMB Control No.: 2127-0004

# Part 573 Safety Recall Report

# 22V-554

**Manufacturer Name:** Daimler Trucks North America, LLC

Submission Date: OCT 05, 2022 NHTSA Recall No.: 22V-554 Manufacturer Recall No.: FL-949



#### **Manufacturer Information:**

Manufacturer Name: Daimler Trucks North America, LLC

Address: 4747 N. Channel Avenue

Portland OR 97217-3849

Company phone: 800-745-8000

# **Population:**

Number of potentially involved : 1,375 Estimated percentage with defect :  $100\,\%$ 

#### **Vehicle Information:**

Vehicle 1: 2023-2023 Freightliner 108SD

Vehicle Type :
Body Style :
Power Train : NR

Descriptive Information: DTNA's supplier Cummins states, "Printed Circuit Boards (PCB) for certain engines

were manufactured with a defective solder fixture. The recall population was

determined by identifying the oldest production lot associated with an Engine Control Module (ECM) failure, and including all production from that lot to the date in June

2022 when the improvements in the assembly process were instituted."

Production Dates: MAY 27, 2022 - JUL 15, 2022

VIN Range 1 : Begin : NR End : NR Not sequential

Vehicle 2: 2023-2023 Freightliner 114SD

Vehicle Type : Body Style : Power Train : NR

Descriptive Information : DTNA's supplier Cummins states, "Printed Circuit Boards (PCB) for certain engines

were manufactured with a defective solder fixture. The recall population was

determined by identifying the oldest production lot associated with an Engine Control Module (ECM) failure, and including all production from that lot to the date in June

2022 when the improvements in the assembly process were instituted."

Production Dates: MAY 27, 2022 - JUL 14, 2022

VIN Range 1 : Begin : NR End : NR Not sequential

Vehicle 3 : Vehicle Type : Body Style :	2023-2023 Fre	ightiner Busir	ness Class M2	
Power Train :	NR			
Descriptive Information :	DTNA's supplier Cummins states, "Printed Circuit Boards (PCB) for certain engines were manufactured with a defective solder fixture. The recall population was determined by identifying the oldest production lot associated with an Engine Control Module (ECM) failure, and including all production from that lot to the date in June 2022 when the improvements in the assembly process were instituted."			
Production Dates :	MAY 25, 2022 -	JUL 13, 2022		
VIN Range 1:	Begin:	NR	End: NR	☐ Not sequential
Vehicle 4:	2023-2023 Fre	ightliner Casc	adia	
Vehicle Type :				
Body Style :				
Power Train :				
		or Cummine et	atos "Printod Circui	t Roards (PCR) for cortain angines
Descriptive information.	DTNA's supplier Cummins states, "Printed Circuit Boards (PCB) for certain engines were manufactured with a defective solder fixture. The recall population was determined by identifying the oldest production lot associated with an Engine Control Module (ECM) failure, and including all production from that lot to the date in June 2022 when the improvements in the assembly process were instituted."			
Production Dates :		•	3 1	
VIN Range 1:		NR	End: NR	☐ Not sequential
			Liid. IVIV	Not sequential
Vehicle 5:	2023-2023 We	stern Star 470	00	
Vehicle Type :				
Body Style :				
Power Train :	NR.			
		or Cumming st	atos "Printod Circui	t Roards (PCR) for cartain angines
Descriptive information.	DTNA's supplier Cummins states, "Printed Circuit Boards (PCB) for certain engines were manufactured with a defective solder fixture. The recall population was determined by identifying the oldest production lot associated with an Engine Control Module (ECM) failure, and including all production from that lot to the date in June 2022 when the improvements in the assembly process were instituted."			
Production Dates:	JUN 14, 2022 - J	UL 08, 2022		
VIN Range 1:	Begin:	NR	End: NR	■ Not sequential

Vehicle 6 : Vehicle Type : Body Style :		estern Star 4	17X		
Power Train :					
Descriptive Information :	DTNA's supplier Cummins states, "Printed Circuit Boards (PCB) for certain engines were manufactured with a defective solder fixture. The recall population was determined by identifying the oldest production lot associated with an Engine Control Module (ECM) failure, and including all production from that lot to the date in June 2022 when the improvements in the assembly process were instituted."				
Production Dates :	JUN 30, 2022 -	JUL 12, 202	22		
VIN Range 1:	Begin:	NR	End:	NR	■ Not sequential
Vehicle 7 : Vehicle Type : Body Style : Power Train :		estern Star 4	19X		
Descriptive Information :	DTNA's supplier Cummins states, "Printed Circuit Boards (PCB) for certain engines were manufactured with a defective solder fixture. The recall population was determined by identifying the oldest production lot associated with an Engine Control Module (ECM) failure, and including all production from that lot to the date in June 2022 when the improvements in the assembly process were instituted."				
Production Dates :	JUN 17. 2022 -	JUN 30, 202	22		
VIN Range 1:		NR	End:	NR	☐ Not sequential
Vehicle 8 : Vehicle Type : Body Style : Power Train :		eightliner (I	FCCC) MC Chas	ssis	
Descriptive Information :	DTNA's supplier Cummins states, "Printed Circuit Boards (PCB) for certain engines were manufactured with a defective solder fixture. The recall population was determined by identifying the oldest production lot associated with an Engine Control Module (ECM) failure, and including all production from that lot to the date in June 2022 when the improvements in the assembly process were instituted."				
Production Dates:	JUN 07, 2022 -	JUN 20, 202	22		
VIN Range 1:	Begin:	NR	End:	NR	☐ Not sequential

Vehicle 9 : Vehicle Type : Body Style :		ightliner (FCC	CC) MT45 Chassis	
Power Train :	NR			
Descriptive Information :	DTNA's supplier Cummins states, "Printed Circuit Boards (PCB) for certain engines were manufactured with a defective solder fixture. The recall population was determined by identifying the oldest production lot associated with an Engine Control Module (ECM) failure, and including all production from that lot to the date in June 2022 when the improvements in the assembly process were instituted."			
<b>Production Dates:</b>	MAY 02, 2022 -	JUL 19, 2022		
VIN Range 1:	Begin:	NR	End: NR	☐ Not sequential
Vehicle 10:	2023-2023 Fre	ightliner (FCC	CC) S2C 106CAB	
Vehicle Type :				
Body Style :				
Power Train:				
		or Cummine et	atos "Printad Circuis	t Roards (PCR) for cortain angines
Descriptive information.	DTNA's supplier Cummins states, "Printed Circuit Boards (PCB) for certain engines were manufactured with a defective solder fixture. The recall population was determined by identifying the oldest production lot associated with an Engine Control Module (ECM) failure, and including all production from that lot to the date in June 2022 when the improvements in the assembly process were instituted."			
Production Dates :		_	V -	
VIN Range 1:		NR	End: NR	☐ Not sequential
	208			
Vehicle 11 : Vehicle Type : Body Style : Power Train :		ightliner (FCC	CC) S2RV 106CAB	
		_		
Descriptive Information :	DTNA's supplier Cummins states, "Printed Circuit Boards (PCB) for certain engines were manufactured with a defective solder fixture. The recall population was determined by identifying the oldest production lot associated with an Engine Control Module (ECM) failure, and including all production from that lot to the date in June 2022 when the improvements in the assembly process were instituted."			
Production Dates:	JUN 06, 2022 - J	JUL 11, 2022		
VIN Range 1:	Begin:	NR	End: NR	☐ Not sequential

Vehicle 12 : Vehicle Type : Body Style :	2023-2023 Fre	eightliner (F	CCC) XCM Chassis	
Power Train :	NR			
Descriptive Information :	DTNA's supplier Cummins states, "Printed Circuit Boards (PCB) for certain engines were manufactured with a defective solder fixture. The recall population was determined by identifying the oldest production lot associated with an Engine Control Module (ECM) failure, and including all production from that lot to the date in June 2022 when the improvements in the assembly process were instituted."			
Production Dates :	JUN 01, 2022 -	JUN 24, 202	22	
VIN Range 1:	Begin:	NR	End: NR	☐ Not sequential
Vehicle 13 : Vehicle Type : Body Style : Power Train :		eightliner (F	CCC) XCR Chassis	
		_		
Descriptive information :	DTNA's supplier Cummins states, "Printed Circuit Boards (PCB) for certain engines were manufactured with a defective solder fixture. The recall population was determined by identifying the oldest production lot associated with an Engine Control Module (ECM) failure, and including all production from that lot to the date in June 2022 when the improvements in the assembly process were instituted."			
Production Dates :	JUN 01, 2022 -	JUL 13, 202	2	
VIN Range 1:		NR	End: NR	☐ Not sequential
Vehicle 14 : Vehicle Type : Body Style : Power Train :		eightliner (F	CCC) XCS Chassis	
Descriptive Information :	DTNA's supplier Cummins states, "Printed Circuit Boards (PCB) for certain engines were manufactured with a defective solder fixture. The recall population was determined by identifying the oldest production lot associated with an Engine Control Module (ECM) failure, and including all production from that lot to the date in June 2022 when the improvements in the assembly process were instituted."			
Production Dates :	JUN 07, 2022 -	JUL 07, 202	2	
VIN Range 1:	Begin:	NR	End: NR	☐ Not sequential

### **Description of Defect:**

Description of the Defect: DTNA's supplier Cummins states, "The soldering fixture had a loose screw,

which in certain

cases may contacting the Lytic cap and applying excess force into the PCB. Over

time with

scrubbing or movement of PCB, the capacitor may wear through the dielectric

layer into the VBatt

layer resulting in high current draw, which may cause loss of communication to

the ECM.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: DTNA's supplier Cummins states, "Loss of communication to the ECM while

driving may cause

unexpected engine stall without prior warnings, and the inability of restart,

which may increase the risk of a crash."

Description of the Cause: NR
Identification of Any Warning NR
that can Occur:

## **Involved Components:**

Component Name 1: Printed Circuit Boards (PCB)

Component Description : Engine PCB
Component Part Number : Multiple

#### **Supplier Identification:**

#### **Component Manufacturer**

Name: Cummins, Inc. Address: 500 Jackson St

Columbus Indiana 47201

**Country: United States** 

#### **Chronology:**

On July 11, 2022, Cummins notified DTNA Compliance of 10 documented occurrences of ECM communication failure on DTNA vehicles powered by specific Cummins engines. DTNA immediately began an investigation to learn about failure modes and the detectability of such failure modes. In parallel with DTNA's investigation, as DTNA understands, Cummins had already been investigating the issue. On July 22, 2022, Cummins informed DTNA of an impending equipment recall. DTNA on July 25, 2022, immediately issued a recall out of an abundance of caution.

# **Description of Remedy:**

Description of Remedy Program: Per Cummins 22E-063 573 filing, "Cummins will replace the suspect ECM"

How Remedy Component Differs NR from Recalled Component:

Identify How/When Recall Condition NR was Corrected in Production :

### **Recall Schedule:**

Description of Recall Schedule: Customer notification will be made by first class mail using Daimler

Trucks North America records to determine the customers affected.

Planned Dealer Notification Date: SEP 26, 2022 - SEP 26, 2022 Planned Owner Notification Date: SEP 26, 2022 - SEP 26, 2022

\* NR - Not Reported