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

# Part 573 Safety Recall Report

# 21V-748

**Manufacturer Name:** Motor Coach Industries

NHTSA Recall No.: 21V-748

Manufacturer Recall No.: R21-010



#### **Manufacturer Information:**

Manufacturer Name: Motor Coach Industries

Address: 200 East Oakton Street

Des Plaines IL 60018

Company phone: 1-800-241-2947

# **Population:**

Number of potentially involved : 2,455 Estimated percentage with defect : 100 %

#### **Vehicle Information:**

Vehicle 1: 2018-2018 MCI D4000

Vehicle Type: BUSES, MEDIUM & HEAVY VEHICLES

Body Style: OTHER Power Train: DIESEL

Descriptive Information: The recall population includes all buses equipped with a specific component at time

of manufacture. MCI manufactured 6 Model D4000 buses with this component.

Production Dates: APR 26, 2018 - MAY 01, 2018

VIN Range 1: Begin: 1M8SDMBA3JP015032 End: 1M8SDMBA2JP015037 Not sequential

Vehicle 2: 2018-2020 MCI D4000ISTV

Vehicle Type: BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER Power Train : DIESEL

Descriptive Information: The recall population includes all buses equipped with a specific component at time

of manufacture. MCI manufactured 25 Model D4000ISTV buses with this component.

Production Dates: NOV 15, 2017 - DEC 02, 2019

VIN Range 1: Begin: 1M81DMBA9JP014821 End: 1M81DMNA5LP015723 ✓ Not sequential

Vehicle 3: 2018-2020 MCI D4005

Vehicle Type: BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER Power Train : DIESEL

Descriptive Information: The recall population includes all buses equipped with a specific component at time

of manufacture. MCI manufactured 20 Model D4005 buses with this component.

Production Dates: NOV 16, 2017 - AUG 12, 2019

VIN Range 1: Begin: 1M85DMBA4JP014825 End: 1M85DMNA0LP015582 ✓ Not sequential

Descriptive Information :	The recall population includes all buses equipped with a specific component at time of manufacture. MCI manufactured 505 Model D4500 buses with this component. MAY 11, 2017 - JAN 20, 2020
VIN Range 1:	Begin: 1M8PDMBA3HP014589 End: 1M8PDMNA0LP015722
Descriptive Information :	The recall population includes all buses equipped with a specific component at time of manufacture. MCI manufactured 106 Model D4505 buses with this component.
	JUN 19, 2017 - JUN 09, 2020         Begin: 1M86DMBA9HP014642       End: 1M86DMNA0LP015716       ✓ Not sequential
Descriptive Information :	The recall population includes all buses equipped with a specific component at time of manufacture. MCI manufactured 2 Model D4520 buses with this component.
	MAR 24, 2020 - JUL 28, 2020  Begin: 1M8GDMNA5LP081084 End: 1M8PDMGA0LP081085
Descriptive Information :	The recall population includes all buses equipped with a specific component at time of manufacture. MCI manufactured 114 Model D45CRTLE buses with this component.
	NOV 27, 2017 - MAY 25, 2021 Begin: 2MGZDMBA1JW068606 End: 1M8ZDMNA7MP081128 ✓ Not sequential

Vehicle 8: 2018-2021 MCI J3500

Vehicle Type: BUSES, MEDIUM & HEAVY VEHICLES

Body Style: OTHER Power Train: DIESEL

Descriptive Information: The recall population includes all buses equipped with a specific component at time

of manufacture. MCI manufactured 88 Model J3500 buses with this component.

Production Dates: MAY 18, 2018 - OCT 28, 2020

VIN Range 1: Begin: 2MGKJMXA6JW068877 End: 2MGKJMXA3JW068965 ✓ Not sequential

Vehicle 9: 2017-2021 MCI J4500

Vehicle Type: BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER Power Train : DIESEL

Descriptive Information: The recall population includes all buses equipped with a specific component at time

of manufacture. MCI manufactured 1389 Model J4500 buses with this component.

Production Dates: JUN 07, 2016 - OCT 26, 2020

VIN Range 1: Begin: 2MG3JM8A3HW068011 End: 2MG3JM8A4MW069954 ✓ Not sequential

#### **Description of Defect:**

Description of the Defect: The Main Distribution Panel (MDP) located within the battery compartment

contains a circuit board which may fail resulting in a thermal event and/or loss

of motive power.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: The MDP circuit board may fail in such a manner that a thermal event and/or

unexpected vehicle shutdown could occur increasing the risk of a crash.

Description of the Cause: Failures of the MDP circuit board have been determined to be the result of

several design, manufacturing, and component quality issues, which can be

exacerbated by standard maintenance practices.

Identification of Any Warning Evidence of thermal stress, corrosion, as well as cracks in the circuit board

that can Occur: conformal coating, may be noticed during visual inspection of the circuit board.

MCI will recommend that customers inspect the MDP circuit board for

condition, on a rotational basis until the corrective action can be implemented.

#### **Involved Components:**

Component Name 1: MDP - Battery Compt. MCI PN 07-08-7940\_A

Component Description: Main Distribution Panel Circuit Board

Component Part Number: P51918-01 REV 001

# **Supplier Identification:**

# **Component Manufacturer**

Name: Wurth Electronics ICS, Inc.

Address: 1982 Byers Rd.

Miamisburg Ohio 45342

**Country: United States** 

### **Chronology:**

20 Mar 20 - customer reports a thermal event on the Main Distribution Panel (MDP) circuit board on a 2018 D4505 model bus.

18 Dec 20 - customer reports a thermal event on the MDP circuit board on a 2018 D4505 model bus.

21 Jan 21 - customer reports a thermal event on the MDP circuit board on a 2018 J4500 model bus.

Late Jan 21 - a failure trend was noted with regards to the MDP circuit boards located in the battery compartment on specific buses resulting in minor thermal events.

3 Feb 21 - customer report a thermal event on the MDP circuit board on a 2018 J4500 model bus.

17 Feb 21 - the MCI Vehicle Safety Committee began its review and analysis of the issue with the engineering team.

Mid-April 21 - the final analysis determined a range of problems associated with the MDP circuit board, mostly related to the circuit board design and supplier quality issues. MCI engineering began redesigning the panel for impending production and introduced a replacement for the MDP with a Main Disconnect and Circuit Breaker Assembly, which had a series of heavy-duty circuit breakers in place of the circuit board. This change was introduced into production in late May of 2021.

18 May 21 - customer reports a thermal event on the MDP circuit board on a 2019 J4500 model bus. In parallel to the production redesign, engineering also attempted to create a corrective action for those buses already in the field. In August of 2021, after several different proposals it was determined by MCI engineering that the most effective corrective action would be to implement the same changes on buses in the field, as were being incorporated into new production.

Between 19 July 2021 and 10 September 2021, MCI was notified of four additional minor thermal events reported by customers on 2018 D4505 model buses as a result of the original MDP circuit board failures.

17 Sept 21 - MCI Vehicle Safety Committee decided to declare a recall with the NHTSA.

24 Sept 21 - MCI declares a vehicle safety recall.

# **Description of Remedy:**

Description of Remedy Program: Customers will have the option of either sending their vehicles to an MCI

Service Center where the retrofit will be conducted at no cost, or, being supplied with a kit and instructions from MCI on how to conduct the retrofit on the vehicle themselves and then charge back the labor required

through the normal MCI warranty process.

How Remedy Component Differs 
The removal of the Main Distribution Panel and replacement with the Main

from Recalled Component: Disconnect and Circuit Breaker Assembly is a visually distinctive

modification.

Identify How/When Recall Condition The last production bus to have the Main Distribution Panel circuit board

was Corrected in Production: installed was on 27 May 2021. All production after that date had the

updated Main Disconnect and Circuit Breaker Assembly design.

#### **Recall Schedule:**

Description of Recall Schedule: Customer notification will begin once the sample customer letter has

been approved by the RMD. MCI has no dealer network.

Planned Dealer Notification Date : OCT 18, 2021 - OCT 18, 2021 Planned Owner Notification Date : OCT 18, 2021 - NOV 24, 2021

\* NR - Not Reported