

# Part 573 Safety Recall Report

## 24V-698

**Manufacturer Name :** Motiv Power Systems

**Submission Date :** SEP 19, 2024

**NHTSA Recall No. :** 24V-698

**Manufacturer Recall No. :** NR



### Manufacturer Information :

Manufacturer Name : Motiv Power Systems

Address : 330 Hatch Drive

Foster City CA 94404

Company phone : 650-425-3032

### Population :

Number of potentially involved : 151

Estimated percentage with defect : 100 %

### Vehicle Information :

Vehicle 1 : 2020-2023 Motiv Gen 5 EPIC F-53 & F-59 BEV

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : VAN

Power Train : HYBRID ELECTRIC

Descriptive Information : 100% of vehicles in the date range are included.

Production Dates : JAN 01, 2020 - DEC 31, 2023

VIN Range 1 : Begin :

NR

End : NR

☐ Not sequential

Vehicle 2 : 2017-2020 Motiv Gen 4 EPIC E-450 & F-59 BEV

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : VAN

Power Train : HYBRID ELECTRIC

Descriptive Information : 100% of vehicles in date range are included.

Production Dates : JAN 01, 2017 - DEC 31, 2020

VIN Range 1 : Begin :

NR

End : NR

☐ Not sequential

### Description of Defect :

Description of the Defect : Motiv Power Systems, Inc. has determined that on certain vehicles converted to a Motiv Gen 5 EPIC F-59 and F-53 model powertrain, 12-volt power wires crimped to a ring terminal on the master disconnect switch under the hood could deteriorate over time and lose connection from the crimp barrel resulting in a loss of 12-volt control power to the HV batteries. This, in turn could result in a loss of vehicle propulsion.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : Loss of propulsion while the vehicle is in motion could increase the risk of a crash.

Description of the Cause : Mis-built wiring harness without heat shrink insulator and retention clip resulted in inadequate retention and protection of wires adjacent to a ring terminal.

Identification of Any Warning that can Occur : None. The operator would not receive a warning in advance of such an occurrence.

Involved Components :

Component Name 1 : Wiring Harness

Component Description : Wire harness between fuse box and master disconnect switch

Component Part Number : 840-106336-001

Supplier Identification :

Component Manufacturer

Name : NR

Address : NR

NR

Country : NR

Chronology :

9/5/2024: Motiv received a customer report alleging a loss of power on a Ford F-59 Motiv Gen 5 vehicle. The customer reported a loss of propulsion while driving. Motiv immediately grounded the vehicle and began an investigation of the incident.

9/6/2024: Motiv field technicians conducted an inspection of the affected vehicle. That inspection determined the vehicle had experienced a temporary loss of 12-volt control power to the High Voltage (HV) batteries.

9/9 – 9/13/2024: Motiv conducted additional analysis and testing to identify a failure or malfunction that may have led to a reported loss of propulsion. The investigation determined that a wire harness with a ring terminal did not have a protective heat shrink installed and was routed with inadequate retention. Over time, the wires attached to the ring terminal fatigued, cracked, and lost connection – temporarily interrupting 12-volt control power to the HV batteries. The temporary loss of 12-volt control power to the batteries was responsible for the loss of vehicle propulsion.

9/12/2024: Motiv inspected 29 similar vehicles in the field. This inspection identified similar signs of fatigue, cracks, or lack of retention and protection on the same 12-volt control wires in 8 of these vehicles.

9/13/2024 Based on its investigation and analysis, Motiv concluded that a potential safety risk could not be

ruled out and decided to conduct a recall.  
Motiv is currently aware of 1 field report (including warranty claims, field reports, and service reports) received in the US potentially related to this defect. Motiv is not aware of any reported crashes, injuries, or property damage in connection with the defect.

Description of Remedy :

Description of Remedy Program :	Motiv field support technicians will inspect all potentially affected vehicles and correct or replace any 12-volt control wires showing signs of fatigue, cracking, or improper retention or protection. There will be no charge for this service. In the unlikely event that the vehicle owner has previously incurred costs to remedy this potential defect, Motiv will reimburse the owner for reasonable costs of that repair.
How Remedy Component Differs from Recalled Component :	Proper heat shrink insulation and retention.
Identify How/When Recall Condition was Corrected in Production :	Vehicle not currently in production.

Recall Schedule :

Description of Recall Schedule :	NR
Planned Dealer Notification Date :	NR - NR
Planned Owner Notification Date :	NOV 11, 2024 - NR

\* NR - Not Reported