

September 26, 2024

**Re: Motiv Technical Bulletin for the following recall notices**

- 24V698 (Ring-terminal) non-school bus
- 24V699 (Ring-terminal SB)
- 2024-563 (Ring-terminal / TC)

**RECALL INFORMATION**

Motiv Power Systems, Inc. has determined that on certain vehicles converted to a Motiv Gen 4 E-450, F-59 and Gen 5 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. Motiv has not received any complaints or reports of vehicle crashes because of this issue; therefore, Motiv considers this as a proactive measure to protect the public and Motiv's customers from the potential risk associated with this defect.

To ensure that these vehicles meet Motiv's stringent quality requirements, follow the instructions outlined below to inspect all potentially affected vehicles and correct or replace any 12-volt control wires showing signs of fatigue, cracking, or improper retention or protection.

**VEHICLES AFFECTED**

Ford E-450 Motiv Gen 4 EPIC4 produced between 1/1/2016 and 5/30/2021

Ford F-59 Motiv Gen 4 EPIC4 produced between 9/1/2016 and 5/30/2021

Ford F-59 Motiv Gen 5 EPIC5 produced between 10/1/2020 and 7/1/2023

Ford F-53 Motiv Gen 5 EPIC5 produced between 10/1/2019 and 12/1/2022

**VEHICLE QUANTITY**

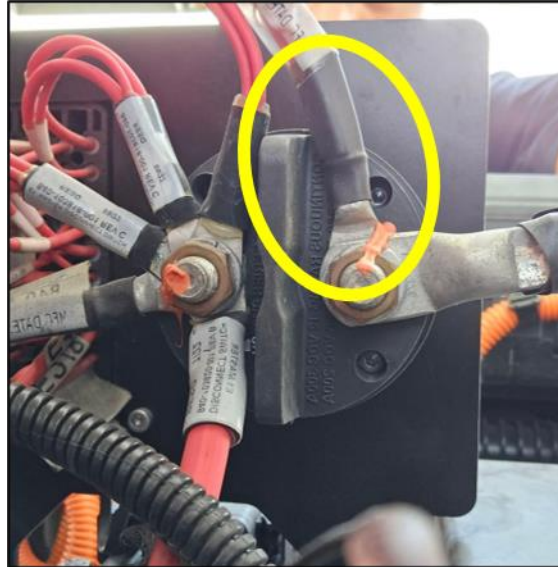
There are 169 vehicles affected by this recall (164 U.S, 5 Canada).

**REPAIR INSTRUCTIONS**

1. Locate the master disconnect switch under the hood.

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2. Locate wire harness P/N 840-106336-001 that runs from the post on the back - **DRIVER** - side of the master disconnect switch
3. Inspect the junction point of the six (6) wires and ring terminal for the presence of heat shrink.
4. If heat shrink is present and the harness has adequate strain relief, as circled yellow in the picture below, the harness is acceptable.



5. If there is no heat shrink, as circled in yellow in the picture below, the harness must be replaced.



6. To replace the harness

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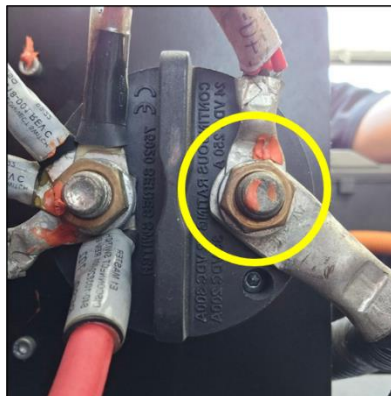
- a. Turn the mater disconnect switch to the OFF position and wait for five (5) minutes for the vehicle to completely de-energize.



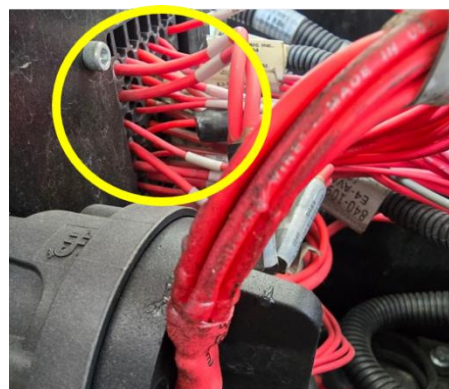
**ON position**

**OFF position**

- b. Disconnect the positive lead to the 12v battery
- c. Remove the 13mm nut that secures the ring terminal to the master disconnect switch.



- d. De-pin the six (6) wires that enter the back side of the adjacent fuse box - taking note of what positions the wires go into.



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- e. Remove the harness
- f. Reverse steps “b” through “c” to reinstall the new harness
- g. Tighten the nut on the back of the master disconnect switch to 13 ft/lbs.
- h. Turn master disconnect switch on
- i. Test drive vehicle

7. Harness P/N 840-106336-001 schematic for reference.

