OMB Control No.: 2127-0004

Part 573 Safety Recall Report

24V-149

Manufacturer Name: LIVEWIRE EV, LLC

Submission Date: FEB 26, 2024 NHTSA Recall No.: 24V-149

Manufacturer Recall No.: 1001



Manufacturer Information:

Manufacturer Name: LIVEWIRE EV, LLC

Address: 3700 W. Juneau Ave.

Milwaukee WI 53208

Company phone: 8553874337

Population:

Number of potentially involved: 523 Estimated percentage with defect: 100 %

Vehicle Information:

Vehicle 1: 2024-2024 LiveWire S2DM

Vehicle Type: MOTORCYCLES

Body Style: OTHER

Power Train: HYBRID ELECTRIC

Descriptive Information: Certain 2024 LiveWire (S2DM) model motorcycles within the production build range

are part of the recall population. These motorcycles contain software in the Vehicle Supervisory Controller (VSC) that is the subject of this recall. The number of this make/model/year covered by this recall is 523. Motorcycles outside of the affected

population have updated VSC software.

Production Dates: JUL 26, 2023 - JAN 30, 2024

VIN Range 1: Begin: 1HD3GCYB0RB550038 End: 1HD3GCYHXRB550939 ✓ Not sequential

Description of Defect:

Description of the Defect: The Vehicle Supervisory Control (VSC) software on the subject MY24 LiveWire

S2DM model motorcycles may, during certain operating conditions, initiate a shutdown of the electric vehicle powertrain without providing an indication to the rider prior to initiating the shutdown sequence. If this occurs while in

motion, the vehicle may not be able to be restarted.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: Unexpected loss of propulsion while the vehicle is in motion without the

ability to restart may increase the risk of a crash.

Description of the Cause: On the affected population, the Vehicle Supervisory Controller (VSC) may

initiate a shutdown of the electric vehicle powertrain due to exceeding

software voltage thresholds.

Identification of Any Warning NR that can Occur:

Involved Components:

Component Name 1: Power Electronics Unit

Component Description: Vehicle Supervisory Controller (within the Power Electronics Unit)

Component Part Number: 73100005

Supplier Identification:

Component Manufacturer

Name: LiveWire EV, LLC Address: 3700 W. Juneau Ave.

Milwaukee Wisconsin 53208

Country: United States

Chronology:

12/15/2023 - LiveWire's Service organization was notified of a report involving an alleged unexpected loss of propulsion on a LiveWire motorcycle.

01/22/2024 - The Technical Subcommittee (TSC) launched a formal investigation of this issue.

01/23/2024 - 02/01/2024 - The TSC conducted a warranty/field service review, which identified two additional reports of a loss of propulsion that appeared to be potentially related to the Vehicle Supervisory Controller (VSC). (None of the reported incidents involved reports of a crash or injuries.)

02/02/2024 – The TSC concluded its investigation and the root cause was determined to be related to software in the VSC. The TSC escalated the matter to the Field Action Committee (FAC).

02/13/2024 – The FAC reviewed the TSC's findings and analysis and escalated the matter to LiveWire's Executive Decision Authority (EDA).

02/16/2024 – Based upon the information developed during the investigation, the EDA authorized a recall to address this condition. There have been no reports of crashes or injuries related to this issue

Description of Remedy:

Description of Remedy Program: These motorcycles have the opportunity to be updated via firmware over the air (FOTA) via the telematics control unit (TCU) onboard each bike. This FOTA update was launched on 2/6/2024. Owners of affected motorcycles will be notified of this option to update their motorcycles. Instructions will be provided in the Owner Letter. Alternatively, owners of affected motorcycles will be informed that they may arrange service with an authorized LiveWire dealer, who will update the software on the Vehicle Supervisory Controller at no charge to the customer. Pursuant to 49 CFR 577.11(e), LiveWire requests that it be exempt from providing a notification of a reimbursement plan. Any pre-notification product failure would have been addressed under the manufacturer's limited warranty. Accordingly, no person would be eligible for reimbursement pursuant to 573.13.

How Remedy Component Differs The updated VSC software calibration revises the software thresholds from Recalled Component: which can cause the shutdown of the electric vehicle powertrain. In addition, the updated VSC software includes a provision to provide notice to a rider, via a limited performance mode, if a voltage threshold is being approached.

was Corrected in Production: updated software.

Identify How/When Recall Condition Beginning on or about 02/07/2024, production vehicles began receiving

Recall Schedule:

Description of Recall Schedule: Prior to making the recall determination, a service bulletin was sent to

dealers on 2/08/2024 and updated on 2/13/2024. The dealer

notification for the recall will occur between 2/29 and 3/4/2024. The

Owner Letters will be mailed between 3/5 and 3/12/2024.

Planned Dealer Notification Date: FEB 29, 2024 - MAR 04, 2024 Planned Owner Notification Date: MAR 05, 2024 - MAR 12, 2024

* NR - Not Reported