

Part 573 Safety Recall Report

24E-005

Manufacturer Name : Renogy

Submission Date : JAN 26, 2024

NHTSA Recall No. : 24E-005

Manufacturer Recall No. : NR



Manufacturer Information :

Manufacturer Name : Renogy

Address : 5050 S. Archibald Ave

Ontario CA 91762

Company phone : 636 1132

Population :

Number of potentially involved : 1,800

Estimated percentage with defect : 10 %

Equipment Information :

Brand / Trade 1 : RNG International Inc.

Model : RBT210LFP51S-12

Part No. : RBT210LFP51S-12-G1-U

Size : NR

Function : Battery Pack

Descriptive Information : The recall focuses on implementing a firmware update to address safety concerns associated with the battery packs. The update is intended to enhance safety features and ensure the proper functioning of the units. Users can verify whether their units have been updated by checking the version number displayed on the Samkoon screen. This verification process ensures transparency and allows users to confirm the status of their battery packs. The battery packs subject to the recall were originally designed for installation in recreational vehicles of OEM partners. The recall aims to ensure the safety and reliability of these units within the intended RV installations. Overall, the recall emphasizes the commitment to safety and the proactive measures taken to address any potential risks associated with the specified battery packs.

Production Dates : MAY 17, 2021 - DEC 15, 2023

Description of Defect :

Description of the Defect : Battery relay activation, protection, and recovery logic do not fully safeguard the battery from being engaged in a negative feedback loop that exasperates relay mechanical life. This condition may result in stuck relay contactors.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : Under certain conditions, contactors that are stuck in a closed position could lead to a thermal runaway event when charging.

Description of the Cause : Activation and Recovery logic conditions are engaged without fully evaluating the system criteria resulting in a negative feedback loop exasperating relay mechanical life.

Identification of Any Warning that can Occur : "Cell Imbalance" on the samkoon screen
Live voltage on the battery terminals when the battery is in the off position

Involved Components :

Component Name : 51.2 210Ah Smart Lithium Iron Phosphate Battery

Component Description : Battery pack rated at 51.2 Volts and a storage capacity of 210-Ah. Used by customers to store electrical energy.

Component Part Number : RBT210LFP51S-12-G1-US

Supplier Identification :

Component Manufacturer

Name : Shenzhen Lithtech Energy Co.,Ltd

Address : 5400 Beck Drive

14F, Block D, Central Avenue, Baoyuan Ro Shenzhen City Foreign States 518102

Country : China

Chronology :

11/01/2021 V137.3.1 is released

01/30/2023 Customer complaints: Over discharge and thermal failure

01/2023-06/2023 Testing and optimization of V 137.3.13

07/03/2023 V 137.3.13 is released

07/30/2023 Problems found in internal testing: When over discharged, the shutdown time is not accurate.

07/2023-08/23 Testing and optimization of V137.3.15

08/22/2023 V137.3.15 is released

09/15/2023 Potential**Problems found in internal testing: After the battery undervoltage protection is restored, the 12V is not restored and there is no output.

09/15/2023-09/20/2023 Testing and optimization of V137.4.1

09/27/2023 V137.4.1 is released

11/16/2023 Problems found in internal testing: High Temperature protection, single cell undervoltage/ overvoltage protection time is unreasonable.
11/20/2023 V137.4.2 Released Need to verify timeline with end-user
11/22/2023 Customer Complaints "need to verify firmware version": 1.12V continuous output, K3 Relay Sticky
2. When charging and heating at low temperature, the battery is over discharged to 1.696V
3. When the PV power is insufficient, the heating film rely frequently draws
4. the heating film opens and the temperature reached 77C without closing.
Weekly meetings before transitioning to daily meetings.
12/18/2023 Daily meetings OEM JAYCO
12/29/2023 Gained access to Jayco FB group
01/15/2024 Created pole to gather feedback from End-users on preferred implementation of firmware update
01/17/2024 Safety Committee officially Established and informed of all pertinent data and possible risks
01/19/2024 Safety Committee unanimous vote on Recall
01/26/2024 File Part 573 Recall Report

Description of Remedy :

Description of Remedy Program : Renogy is currently developing the remedy for the recalled units. Renogy will complete this section when the remedy is developed.

How Remedy Component Differs from Recalled Component : NR

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

Recall Schedule :

Description of Recall Schedule : Renogy expect to notify the affected OEMs no later than Monday 03/25/2024.
Renogy will conduct the recall and notify owners with the agreement of OEMs. Renogy is currently developing the schedule for implementation of the recall.

Planned Dealer Notification Date : JAN 31, 2024 - MAR 25, 2024

Planned Owner Notification Date : FEB 02, 2024 - MAR 25, 2024

Purchaser Information :

The following manufacturers purchased this defective/noncompliant equipment for possible use or installation in new motor vehicles or new items of motor vehicle equipment:

Name : Patrick Distribution

Address : 5400 Beck Drive
IN 46516

Country : US

Company Phone : 5746126271

* NR - Not Reported