

Part 573 Safety Recall Report

23E-005

Manufacturer Name : Navico Group

Submission Date : FEB 01, 2023

NHTSA Recall No. : 23E-005

Manufacturer Recall No. : NR



Manufacturer Information :

Manufacturer Name : Navico Group

Address : N85 W12545 Westbrook Crossing
Menomonee Falls WI 53051

Company phone : 5807749054

Population :

Number of potentially involved : 4,746

Estimated percentage with defect : 1 %

Equipment Information :

Brand / Trade 1 : RELiON

Model : InSight 48V lithium-ion battery

Part No. : 48V030-GC2

Size : NR

Function : NR

Descriptive Information : For replacement equipment, the recall population was determined based on reviewing affected serial number data provided by the manufacturer. The potential defect is isolated to products built or reworked after May 19, 2021, when modifications were made in production to the sense board and a sense ribbon cable was added to the battery (replacing a traditional wire harness).

For batteries installed as original equipment in motor vehicles, Navico Group determined the population based on information from the two vehicle manufacturers. In total, Navico Group has identified 357 products installed as original equipment in motor vehicles.

Production Dates : MAY 19, 2021 - NOV 18, 2022

Description of Defect :

Description of the Defect : The concern with the product has been identified as a capacitor manufacturing issue. In some cases, improperly formed capacitors can leak electrolyte onto the Printed Circuit Board for the Battery Management System, resulting in corrosion across the terminal for the voltage sense ribbon. The corrosion can result in a short circuit across the voltage sense ribbon terminal which can lead to thermal damage of the resistors. Navico Group's testing establishes that the battery cells themselves pass propagation testing and do not lead to a battery cell thermal runaway event.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : The potential defect could give rise to thermal damage that could result in fire which could potentially escape the battery enclosure, posing a potential ignition risk to surrounding materials, and the potential risk of associated burn injuries. Navico has received no reports of thermal events, fires or burn injuries in any battery installed in a motor vehicle within NHTSA's jurisdiction.

Description of the Cause : Improperly formed capacitors.

Identification of Any Warning that can Occur : A thermal event may generate odor and/or smoke. However, Navico has received no reports of thermal events, fires or burn injuries in any battery installed in a motor vehicle within NHTSA's jurisdiction.

Involved Components :

Component Name : RELiON InSight 48 V lithium-ion battery

Component Description : Battery used to power off-road and on-road vehicles, as well as used for stand-alone units to increase system capacity.

Component Part Number : 48V030-GC2

Supplier Identification :

Component Manufacturer

Name : BMTPow (Shenzhen) Ltd.

Address : A404, Block 1, Phase 1, Intelligent Park
Long Gang District Shenzhen Foreign States 518112

Country : China

Chronology :

Chronology provided as a separate attachment.

Description of Remedy :

Description of Remedy Program : Navico Group will repair and replace in-field batteries and repair existing inventory. Once notified, customers will be provided an approved shipping container for return of the affected product(s), in compliance with applicable transportation laws and regulations. Navico Group will engage Cirba Solutions ("Cirba"), a third party recycling partner that specializes in battery recycling, logistics, and transportation. Navico Group will pay all shipping and repair/replacement costs.

How Remedy Component Differs from Recalled Component : Navico has identified a repair for the manufacturing issue detailed herein. The repair plan will address the root cause of the capacitors, which were added to the pack to prevent customer "nuisance" faults in the event of a current spike, and do not impact normal operation. Removing these capacitors eliminates the corrosion potential resulting from leaking electrolyte. Additionally, a thermal switch or fuse will be installed to disable the pack in the event of elevated pack temperatures.

Identify How/When Recall Condition was Corrected in Production : Navico stopped producing the affected batteries on November 18, 2022. Production has not yet resumed. Preliminarily, Navico anticipates production to resume in May of 2023. Newly manufactured units built after production resumes will have a different serial number. The recall condition will be corrected in production by removing the capacitors and installing a thermal fuse to disable the battery in the event of elevated pack temperatures.

Recall Schedule :

Description of Recall Schedule : NR

Planned Dealer Notification Date : NR - NR

Planned Owner Notification Date : NR - NR

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 : Garia Inc.

Address : 14820 North Freeway, Suite 200
Houston TX 77090

Country : US

Company Phone : NR

Name : Waev Inc.

Address : 2114 W Ball Road
Anaheim CA 92804

Country : US

Company Phone : NR

* NR - Not Reported