

Part 573 Safety Recall Report

22E-001

Manufacturer Name : Volta Power Systems LLC

Submission Date : JAN 13, 2022

NHTSA Recall No. : 22E-001

Manufacturer Recall No. : NR



Manufacturer Information :

Manufacturer Name : Volta Power Systems LLC

Address : 12550 Superior Ct

Holland MI 49424

Company phone : 226-4222

Population :

Number of potentially involved : 646

Estimated percentage with defect : 100 %

Equipment Information :

Brand / Trade 1 : Volta Power Systems

Model : adaptor harness

Part No. : 100001146

Size : 8 inchs

Function : communication

Descriptive Information :

- This references an existing case 21V-793
- The population started at the date parts were first received from sub supplier.
- The previous parts built at Volta had a fuse and a diode in opposite positions on a circuit.
- Winnebago Travato 2021, Winnebago Boldt 2021, and Storyteller Overland Vans 2021

Production Dates : JUN 18, 2021 - OCT 01, 2021

Description of Defect :

Description of the Defect : Per the request of NHTSA representative Choon Lee, Volta submits this report: In the case that power connections are not properly seated severe voltage spike caused by intermittent connections could damage the filtering diode in the alternator control harness (10001447) resulting in the possibility of a shorted wire, on the same circuit the order of the fuse and diode were reversed.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : In the case that the diode is broken in a closed condition, the sense wire could be shorted to ground resulting in an overheated wire or broken wire.

Description of the Cause : The identified cause of the diode failure was excessive overvoltage spikes. When the diode failed, it failed closed and with the diode and fuse being reversed the wire continued to heat up instead of breaking the fuse.

Identification of Any Warning that can Occur : Load dump faults within the BMS of the battery system.

Involved Components :

Component Name : Adapter Harness

Component Description : Wire harness designed by Volta that controls communication to an alternator controller

Component Part Number : 100001146

Supplier Identification :

Component Manufacturer

Name : Tack Electronics

Address : 5030 Kraft Ave
Grand Rapids Michigan 49512

Country : United States

Chronology :

Winnebago contacted Volta on Oct 8, 2021 regarding a vehicle that experienced a thermal event. Winnebago asked Volta to review the vehicle and support the investigation. On Oct 11, 2021 a team from Volta was on site at Winnebago for three days to review the vehicles that had experienced the failure. Winnebago provided evidence that they believed the failure was due to a diode within the Volta designed alternator control harness. Volta then began looking for root cause of how the diode was damaged and/or failed. Volta verified the certification of the parts, reviewed the manufacturing processes at Volta's suppliers, reviewed engineering drawings, and inspected vehicles for installation errors. On Oct 12 we discovered that the main power connections, and ground bus bars installed by Winnebago on all vehicles present with the failure were finger tight and did not have the required torque marks signifying that the terminals were properly tightened. During the investigation of the drawings we also discovered that the fuse and diode order was reversed on the Volta harness drawings. The subject Adapter Harness was also part of a non-safety related review in connection with the Storyteller installations which commenced on or about Oct 13 and resulted in a replacement program being instituted by Storyteller for those vehicles on or about Oct 14.

Description of Remedy :

Description of Remedy Program :	Volta is cooperating with Winnebago's on-going recall and, further, is cooperating with Storyteller Overland's replacement program. Volta has provided the units at no cost and is supporting installation costs.
How Remedy Component Differs from Recalled Component :	New part number with order of fuse and diode reversed.
Identify How/When Recall Condition was Corrected in Production :	A revised drawing with the reversed order of the fuse and diode was provided to Volta supply chain and replacement parts where built. Volta conducted a retraining at Winnebago on the importance and methods of torquing power terminals.

Recall Schedule :

Description of Recall Schedule :	Winnebago recall performed by Winnebago. All parts requested have been supplied to Winnebago for their recall started Dec 3, 2021. Parts were also supplied to Storyteller Overland. As of January 7, 2022, Volta had sold 288 suspect units to Storyteller of which 61 were replaced within Storyteller's control and of the remaining 227 parts, 217 replacement parts have been shipped (and 191 of the original affected parts returned after replacement) in response to requests under the Storyteller replacement program. The owners of ten (10) vehicles are believed to have not yet responded to the Storyteller replacement program, attempts to contact continue.
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 : Winnebago Industries
Address : 605 Crystal Lake Rd
Forest City IA 50436-0152
Country : US
Company Phone : 6415856385

Name : Storyteller Overland
Address : 516 35th St N. Suite A
Birmingham AL 35222
Country : US
Company Phone : 8889997442

* NR - Not Reported