

# Part 573 Safety Recall Report

## 22V-887

**Manufacturer Name :** Proterra Operating Company, Inc.

**Submission Date :** OCT 18, 2023

**NHTSA Recall No. :** 22V-887

**Manufacturer Recall No. :** TBD



### Manufacturer Information :

**Manufacturer Name :** Proterra Operating Company, Inc.

**Address :** 1815 Rollins Road  
Burlingame CA 94010

**Company phone :** 4380000

### Population :

**Number of potentially involved :** 300

**Estimated percentage with defect :** 13 %

### Vehicle Information :

**Vehicle 1 :** 2017-2019 Proterra Catalyst

**Vehicle Type :** BUSES, MEDIUM & HEAVY VEHICLES

**Body Style :** OTHER

**Power Train :** HYBRID ELECTRIC

**Descriptive Information :** Vehicles within the recall population are equipped with certain battery packs manufactured between 2017-2019 with spines from the suppliers identified in this report.

Each vehicle is equipped with software (the "Software") and sensors that detect if there is an accumulation of liquid inside the battery pack enclosure. When liquid accumulation inside the battery pack enclosure is detected, the Software will turn on a warning light in the driver's dash display and provide fault code information through the vehicle diagnostics tool.

The recall population was determined by reviewing production records, vehicle telemetry data, battery pack fault code data, and physically inspecting battery packs returned to Proterra to identify which battery packs have an accumulation of liquid inside the battery pack enclosure. A total of 300 vehicles are in the recall population.

**Production Dates :** OCT 02, 2017 - DEC 31, 2019

**VIN Range 1 : Begin :** NR

**End :** NR

☐ Not sequential

**Description of Defect :**

Description of the Defect : The spine of a battery pack in the recalled vehicle may have a defect which allows liquid coolant to slowly seep out of the spine and accumulate in the battery pack enclosure. Over time, if left unaddressed, the accumulation of liquid inside the battery pack enclosure may reach a level that could result in the occurrence of a thermal event.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : Over time, the accumulation of liquid inside a battery pack enclosure may reach a level that could result in the occurrence of a thermal event, which may cause personal injury or property damage.

Description of the Cause : The spine of a battery pack in the recall population may have a defect which allows liquid coolant to slowly seep out of the spine and accumulate in the battery pack enclosure.

Identification of Any Warning that can Occur : The Software will turn on a warning light in the driver's dash display and provide fault code information retrievable through the vehicle diagnostics tool when liquid accumulation is detected in a battery pack. Depending upon the amount of liquid present, liquid may also be observed in or around the battery pack enclosure, such as in the desiccant bags or ports of the battery pack.

**Involved Components :**

Component Name 1 : Battery Spine

Component Description : Battery Spine

Component Part Number : 22328

**Supplier Identification :****Component Manufacturer**

Name : Sigma Machine

Address : 3358 Center Park Plaza

Kalamazoo Michigan 49048

Country : United States

**Chronology :**

On November 9, 2022, a battery pack installed on a Proterra vehicle experienced a thermal event. After

conducting its investigation of this incident, Proterra believes that the thermal event was caused by the accumulation of liquid coolant inside the battery pack enclosure over the course of several years due to the spine defect described in this report. The liquid accumulation was detected by the battery pack sensors and the Software triggered the driver’s dash display warning light and generated the corresponding fault codes. Nevertheless, the thermal event occurred when the battery pack was operated without first addressing the liquid accumulation that was present. There were no injuries as a result of this incident.

On November 22, 2022, Proterra’s Safety Committee voted to initiate this recall and investigate the root cause of the issue. Between late November 2022 and October 2023, Proterra conducted its investigation, identified root cause of the incident, and devised an effective remedy. Proterra’s investigation included physical inspection of the returned battery packs and the associated fault codes generated by the Software.

Prior to the initiation of this recall, Proterra received 15 warranty claims and the same number of field or service reports related to this recall. Other than the November 9, 2022 event described in the first paragraph of this section, as of October 18, 2023, Proterra has received no reports of any other battery pack experiencing a thermal event. Proterra knows of no injuries caused by or related to the spine defect described in this report.

Description of Remedy :

|  |   |
|--|---|
| Description of Remedy Program :                                  | <p>For any vehicle that detects the accumulation of liquid inside the battery pack enclosure due to the spine defect described in this report, Proterra will remove and replace the defective battery pack with a non-defective battery pack at no cost to the owner. Affected owners should immediately discontinue use of a vehicle and contact Proterra for service if there are any indications of liquid accumulation inside the battery pack, including but not limited to the observation of a warning light, diagnostic fault codes, or leaks around the battery pack enclosure.</p> <p>In addition, at no cost to the owner, all vehicles in the recall population will receive an update to the Software that enables the following features when certain fault codes associated with battery pack liquid accumulation and/or a thermal event are detected: (1) prevent the vehicle’s battery pack from being charged, (2) engage a “limp mode” that imposes limitations on the battery pack regen and power discharge levels, and (3) trigger a flashing red warning light on the driver’s dash display and an audible alarm (collectively, the “Updated Software Features”). Once the Updated Software Features are applied, the vehicle will need to be serviced by Proterra before it is returned to normal operating conditions.</p> |
| How Remedy Component Differs from Recalled Component :           | <p>The remedy battery pack does not have a spine that allows coolant to slowly seep out of the spine and accumulate in the battery pack enclosure.</p>  |
| Identify How/When Recall Condition was Corrected in Production : | <p>The battery pack spine at issue in this recall was no longer in production at the time this recall was initiated.</p>  |

**Recall Schedule :**

Description of Recall Schedule : Proterra will notify affected owners about this recall on or before November 14, 2023.

Planned Dealer Notification Date : NOV 07, 2023 - NOV 14, 2023

Planned Owner Notification Date : NOV 07, 2023 - NOV 14, 2023

\* NR - Not Reported