

Part 573 Safety Recall Report

22V-855

Manufacturer Name : Proterra Operating Company, Inc.**Submission Date :** MAR 29, 2024**NHTSA Recall No. :** 22V-855**Manufacturer Recall No. :** SC-22-158**Manufacturer Information :**

Manufacturer Name : Proterra Operating Company, Inc.

Address : 1815 Rollins Road

Burlingame CA 94010

Company phone : 4380000

Population :

Number of potentially involved : 446

Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2020-2021 Proterra Transit Bus Catalyst 35'

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : HYBRID ELECTRIC

Descriptive Information : The recall population was determined based on Proterra's production records for the affected vehicle models. All buses with the air exhaust system described in this report are included in the recall population. The recalled vehicles differ from vehicles not included in the recall population because the pneumatic ride height air exhaust system may bleed past a check valve and actuate the parking brake in an unintended manner while the vehicle is in motion, whereas this issue is not present in vehicles outside of the recall population. This failure mode is specific to buses with the Parker ride height system installed.

Production Dates : JAN 01, 2020 - DEC 31, 2021

VIN Range 1 : Begin :

NR

End : NR

 Not sequential

Vehicle 2 : 2019-2022 Proterra Transit Bus ZX5 35' and 40'

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : HYBRID ELECTRIC

Descriptive Information : The recall population was determined based on Proterra's production records for the affected vehicle models. All buses with the air exhaust system described in this report are included in the recall population. The recalled vehicles differ from vehicles not included in the recall population because the pneumatic ride height air exhaust system may bleed past a check valve and actuate the parking brake in an unintended manner while the vehicle is in motion, whereas this issue is not present in vehicles outside of the recall population. This failure mode is specific to buses with the Parker ride height system installed.

Production Dates : JAN 01, 2019 - NOV 18, 2022

VIN Range 1 : Begin :

NR

End : NR

 Not sequential

Description of Defect :

Description of the Defect : Certain Proterra bus models incorporate a shared air exhaust port to vent the pneumatic ride height system and the parking brake control valve at the driver console. Backpressure in this exhaust line from the ride height system can bleed past a system check valve and present air pressure to the exhaust outlet of the parking brake control valve. This pressure can, in certain system conditions, actuate the parking brake in an unintended manner while the vehicle is in motion.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : If air pressure exhausted from the ride height system bleeds past the system check valve, it may cause the parking brake to unintentionally engage while the vehicle is in motion, which may increase the risk of a crash without prior warning.

Description of the Cause : Certain Proterra bus models incorporate a shared air exhaust port to vent the pneumatic ride height system and the parking brake control valve at the driver console. Backpressure in this exhaust line from the ride height system can bleed past a system check valve and present air pressure to the exhaust outlet of the parking brake control valve. This pressure, which can be present while driving, can, in certain system conditions, actuate the parking brake in an unintended manner.

Identification of Any Warning that can Occur : NR

Involved Components :

Component Name 1 : ASSEMBLY, INSTALL FRONT AIR VALVE SUBASSY

Component Description : Shared air exhaust port check valve assembly

Component Part Number : 062765

Supplier Identification :**Component Manufacturer**

Name : Proterra

Address : 1 Whittlee Ct

Greenville South Carolina 29607

Country : United States

Chronology :

On August 29, 2022, Proterra was asked by a customer to service the pneumatic system installed on the customer's bus.

Proterra replaced a check valve and parking brake valve on the subject bus at that time.

On September 23, 2022, Proterra was asked by another customer to address an instance where the parking brake unintentionally engaged. Proterra replaced a check valve and parking brake valve after inspecting the bus.

On November 4th, 2022, Proterra was asked by a different customer to address an issue where the parking brake was unintentionally engaged. Proterra replaced a check valve and parking brake valve after inspecting the bus. Proterra also initiated a in-depth review to determine the root cause of the parking brake issue.

On November 11, 2022, Proterra's Safety Committee reviewed the analysis and decided to conduct a voluntary safety recall. As of the date of this report, no injuries or accidents have been reported related to this issue.

Description of Remedy :

Description of Remedy Program : Proterra will install a redesigned air circuit that completely separates the Parker ride height exhaust line from the parking brake exhaust line. The change involves installing a small exhaust muffler dedicated to the parking brake valve behind the driver console. This remedy prevents air pressure from the Parker ride height system from bleeding into the parking brake system. Proterra will provide this remedy free of charge to owners of vehicles within the recall population. All affected owners are covered by Proterra's General Reimbursement Plan.

How Remedy Component Differs from Recalled Component : The remedy will result in a change in design that completely separates the ride height exhaust line and parking brake exhaust line, thereby preventing air pressure from the ride height exhaust from affecting the parking brake.

Identify How/When Recall Condition was Corrected in Production : Going forward, all production buses will incorporate the new independent parking brake exhaust system described in the remedy section of this report.

Recall Schedule :

Description of Recall Schedule : Proterra will mail notification letters to affected vehicle owners on or before January 17, 2023.

Planned Dealer Notification Date : DEC 12, 2022 - JAN 17, 2023

Planned Owner Notification Date : DEC 12, 2022 - JAN 17, 2023

* NR - Not Reported