#### The information contained in this report was submitted pursuant to 49 CFR §573

### Part 573 Safety Recall Report

Manufacturer Recall No. : NR

#### **Manufacturer Information :**

Manufacturer Name : Proterra Inc. Address : 1815 Rollins Road Burlingame CA 94010 Company phone : 4380000

Manufacturer Name : Proterra Inc.

NHTSA Recall No.: 19V-871

Submission Date : JAN 29, 2020

#### Vehicle Information :

	2019-2019 Proterra Catalyst
Vehicle Type :	BUSES, MEDIUM & HEAVY VEHICLES
Body Style :	OTHER
Power Train :	NR
Descriptive Information :	Parking brake engagement warnings (lights and sound) were disabled unintentionally on certain Catalyst vehicles after a July 23, 2019 software update. Unaware drivers may be allowed to drive with the rear brake interlock engaged which could cause the rear brakes to overheat, damaging the vehicle and reducing the ability to slow down or stop. Proterra was able to determine the recall population through records identifying the specific vehicles that received the software update. 151 vehicles are the subject of this recall.
Production Dates :	JUL 23, 2019 - DEC 02, 2019
VIN Range 1:	Begin :NREnd :NRNot sequential

### **Description of Defect :**

Description of the Defect : A body controller software update was made to certain Proterra Catalyst vehicles on July 23, 2019 that contained a bug that in certain circumstances, disabled both audible and visible warnings that the brake interlock could be engaged. This circumstance occurs when the driver shifts the vehicle to neutral and then switches the HV master switch on the dash to off, without out first manually engaging the parking brake. In this scenario, the vehicle controller engages the rear brake interlock to prevent the vehicle from rolling. If the vehicle HV system is switched back on, the rear brake interlock remains engaged and the vehicle does not provide a warning to the driver. At this point it is possible to drive the vehicle away with the rear brake interlock engaged causing the rear brakes to overheat.

19V-871

OMB Control No.: 2127-0004



Number of potentially involved : 140

Estimated percentage with defect : 100 %

**Population**:

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**19V-871** 

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FMVSS 2 :	NR
Description of the Safety Risk :	The potential for the rear brakes to overheat during vehicle operation if the brake interlock drag is not detected by the driver. Driving with the rear brake interlock engaged could cause the rear brakes to overheat, damaging the vehicle and reducing the ability to slow down or stop. Although the vehicle would operationally appear to have the rear brakes engaged, continuing to drive could eventually cause the loss or reduction of the rear brakes and increase the risk of a fire or crash.
Description of the Cause :	A software update unintentionally disabled the brake interlock warnings if the vehicle is turned off without setting the parking brake.
	The defect prevents audible and visible warning to the driver that the interlock brake is engaged. The driver may notice that the rear brakes are dragging but does not see or hear the normal warning on the dash. Driving with the rear brakes engaged would eventually cause visible smoke and a burning smell that would be a warning to the driver.

#### **Supplier Identification :**

#### **Component Manufacturer**

Name : NR Address : NR NR Country : NR

#### **Chronology**:

On November 7, 2019, a customer reported that the rear brakes on an off-duty bus had "locked up" while driving. Proterra's field service team investigated and notified the company's safety committee. The Safety Committee Chairperson ordered an immediate investigation of the incident on November 7, 2019.

On November 14, 2019 a second customer reported a similar issue.

On November 19, 2019 and November 22, 2019, the Safety Committee met to review the matter and to expand the November 7th investigation.

On November 26, 2019, an additional customer reported a similar issue.

As a result of the investigation, on December 2, 2019, the Safety Committee concluded that the driver error of driving the bus with the brake engaged was related to a software update in July 2019 that inadvertently

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disabled the audible and visual warning systems that alerted drivers that the parking brake system was engaged. The Committee determined that a recall would be issued.

#### **Description of Remedy :**

Description of Remedy Program :	Proterra will update software on all affected vehicles at no cost to the customer. Driver will always have visual and audible indication that the brake interlock is set when they are attempting to drive.
How Remedy Component Differs from Recalled Component :	
	The recall condition was corrected with a software update in production that was implemented on $12/4/2019$ .

#### **Recall Schedule :**

Description of Recall Schedule :	Proterra does not have any dealers and sells directly to customers. All
	letters will go out at the same time.
Planned Dealer Notification Date :	JAN 09, 2020 - JAN 09, 2020
Planned Owner Notification Date :	JAN 09, 2020 - JAN 09, 2020

\* NR - Not Reported

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