OMB Control No.: 2127-0004

Part 573 Safety Recall Report

19V-402

Manufacturer Name: Proterra Inc. Submission Date: OCT 29, 2019 NHTSA Recall No.: 19V-402 Manufacturer Recall No.: NR



Manufacturer Information:

Manufacturer Name: Proterra Inc.

Address: 1815 Rollins Road

Burlingame CA 94010

Company phone: 4380000

Population:

Number of potentially involved: 147 Estimated percentage with defect: 100 %

Vehicle Information:

Vehicle 1: 2017-2018 Catalyst Catalyst

Vehicle Type: BUSES, MEDIUM & HEAVY VEHICLES

Body Style: UNKNOWN

Power Train: NR

Descriptive Information: Proterra is replacing swivel valves in 77 vehicles manufactured before February 1,

2019 with check valves in compliance with FMVSS 121.

Production Dates: MAY 01, 2017 - FEB 28, 2019

VIN Range 1: Begin: NR End: NR Not sequential

Description of Noncompliance:

Description of the FMVSS 121 S5.1.2.3 requires that each service reservoir system in an air brake Noncompliance: system shall be protected against loss of air pressure due to failure or leakage in the system between the service reservoir and the source of air pressure, by check valves or equivalent devices whose proper functioning can be checked

without disconnecting any air line or fitting.

FMVSS 1: 121 - Air brake systems

FMVSS 2: NR

Description of the Safety Risk: If an air tank was damaged resulting in a leak, the lack of a check valve or

equivalent could result in both air tanks in the air tank system losing pressure

which could lead to brake failure.

Description of the Cause: Proterra determined that the swivel valve specified in one set of manufacturing

instructions was not a sufficient equivalent to the check valve specified in

FMVSS 121. The manufacturing instructions have been updated.

Identification of Any Warning An air pressure warning light and buzzer will alert the driver when the air

that can Occur: pressure in the air brake system drops below 70 PSI. Also, the second

mechanical safety brake will automatically engage if the air pressure drops into

the range of 25-45 PSI to provide braking power for the driver.

Supplier Identification:

Component Manufacturer

Name: NR

Address: NR

NR

Country: NR

Chronology:

In February 2019, a customer inquired about the use of a swivel value instead of a check valve in the air brake system. Proterra's Safety and Compliance Committee began an investigation in February 2019. In May 2019, the Safety and Compliance Committee determined that a change in manufacturing instructions in 2017 had lead to the adoption of a swivel valve. The Committee also determined that the manufacturing instructions were subsequently changed again, also in 2017, to require a check valve, but that buses in one facility had yet to adopt the manufacturing change to require the check valve. The Committee also determined that the swivel valve would be replaced with a check valve on all buses to ensure compliance with FMVSS 121 instead of engaging in additional FMVSS compliance testing for the swivel valve solution.

Description of Remedy:

Description of Remedy Program: The valve type is different, but does not require any other alteration of the

bus. Proterra will replace the swivel valve with a check valve in all

affected buses free of charge.

How Remedy Component Differs The type of valve used between air tank reservoirs in the air brake system

from Recalled Component: will be updated from a swivel valve to a check valve.

Identify How/When Recall Condition Updated manufacturing instructions requiring a check valve to be installed

was Corrected in Production: in the air brake system were adopted in all factories.

Recall Schedule:

Description of Recall Schedule: There are no dealers. Customer buses are being serviced now and all

customer buses will be updated within 60 days.

Planned Dealer Notification Date: NR - NR

Planned Owner Notification Date: JUL 26, 2019 - JUL 26, 2019

* NR - Not Reported