#### OMB Control No.: 2127-0004

# Part 573 Safety Recall Report

## 20V-120

Manufacturer Name: Pierce Manufacturing

Submission Date: FEB 16, 2021 NHTSA Recall No.: 20V-120 Manufacturer Recall No.: NR



#### **Manufacturer Information:**

Manufacturer Name: Pierce Manufacturing

Address: 2600 American Drive

P.O. BOX 2017 Appleton WI

54912-2017

Company phone: 920-832-3000

## **Population:**

Number of potentially involved : 63 Estimated percentage with defect : 100 %

#### **Vehicle Information:**

Vehicle 1: 2019-2020 Pierce Arrow XT, Enforcer, Impel, Velocity

Vehicle Type: BUSES, MEDIUM & HEAVY VEHICLES

Body Style : ALL Power Train : DIESEL

Descriptive Information: Select Pierce vehicles built with a 107 ft or 110 ft aerial device.

Production Dates: JUL 22, 2019 - JAN 23, 2020

#### **Description of Defect:**

Description of the Defect: A rectangular tube in the upper mid-section of the aerial device may sustain

micro cracks at the corners. Over time and depending on the level of water ingress on the aerial device, corrosion may occur which can lead the tube material to become weak. The combination of the stress cracks and the weakened material could lead one of the tube walls to eventually fail.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: If the tube wall fails, the structural integrity of the aerial device may be

impaired which can increase the risk of injury to the firefighter. The operation of the fire truck itself is not affected by this condition and can

continue to be used as a pumper.

Description of the Cause: Due to a manufacturing deviation at a Pierce supplier, the source material used

to produce the rectangular tubes was formed improperly. The manufacturing deviation, in combination with corrosion inside the cracks, may lead to the

condition.

Identification of Any Warning Over time, if not treated with corrosion protection, the cracks could propagate

that can Occur: and be visible at the corners of the tube.

## **Involved Components:**

Component Name 1: NR Component Description: NR Component Part Number: NR

## **Supplier Identification:**

### **Component Manufacturer**

Name: NR Address: NR

NR

Country: NR

## **Chronology:**

On February 9, 2020, Pierce received notification from a fire department that found damage to the rectangular tube wall. Pierce immediately launched an investigation of the individual vehicle and found that one of the walls of the rectangular tube of the aerial device had micro cracks and corrosion was present at the corners of the tube. The part was produced by a new source to Pierce's supplier and in discussions with the supplier, Pierce learned that the steel was not appropriately formed. Pierce's investigation found that, in combination with corrosion, the material can degrade and the tube can fail. On February 25, 2020, Pierce decided to conduct a recall to remedy the issue.

## **Description of Remedy:**

Description of Remedy Program: All potentially affected vehicles will be inspected for the presence of mirco

cracks and/or evidence of corrosion. If no micro cracks or corrosion is found, the rectangular tube will receive a treatment to prevent rust corrosion. If cracks or corrosion is present upon inspection, the upper mid

section of the device will be replaced at a Pierce authorized facility.

How Remedy Component Differs The remedy section will be provided from a batch where the material was

from Recalled Component: prepared according to specification.

Identify How/When Recall Condition All potentially affected vehicles within Pierce's control were captured at its was Corrected in Production: production facility. The aerial devices on the vehicles are being manually inspected and remedied.

#### **Recall Schedule:**

Description of Recall Schedule: Pending NHTSA review & approval.

On February 28, 2020, Pierce issued an informal verbal notification to Pierce's dealer network informing them of the upcoming recall and directing them not to use the aerial device until the remedy campaign has

been performed.

Planned Dealer Notification Date: MAR 16, 2020 - MAR 27, 2020 Planned Owner Notification Date: MAR 16, 2020 - MAR 27, 2020

\* NR - Not Reported