

Part 573 Safety Recall Report

23V-823

Manufacturer Name : Pierce Manufacturing

Submission Date : DEC 14, 2023

NHTSA Recall No. : 23V-823

Manufacturer Recall No. : 74B330



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 : 314

Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2019-2023 Pierce 100' Mid Mount Tower Trucks on Arrow XT, Enforcer & Velocity Chassis

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : ALL

Power Train : DIESEL

Descriptive Information : The vehicles affected by this recall include 100' mid-mount tower trucks of the models described within this report that are equipped with an aerial platform basket.

Production Dates : MAY 07, 2019 - OCT 31, 2023

VIN Range 1 : Begin :

NR

End : NR

☐ Not sequential

Description of Defect :

Description of the Defect : During assembly of the aerial portion to the truck, Pierce connects the male and female ends of an electrical connector on the aerial turntable wiring harness and installs tie straps to reduce the potential for strain and unintended movement of the harness. If the tie straps are not correctly installed, this condition may lead to strain on the electrical connector which could allow for movement of the electrical connector. Movement of the connector could permit a gap to develop at the connection point. Should a gap develop, and moisture enters at the connection point, over time the pins inside the connector could corrode and potentially disrupt the electrical signal which controls the platform basket leveling feature. The signal to adjust the raise, lower, and rotate commands of the aerial device movement, and the emergency shut off button, are not affected by this issue.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : If the electrical signal for the platform basket leveling feature is disrupted, it may not send a consistent, or any, signal which could lead to the platform

Description of the Cause : NR

basket rotating past the horizontal (level) position. Should this occur, the risk of injury to platform basket occupants is increased if the emergency stop button is not depressed and the required safety restraints are not being worn.

Identification of Any Warning that can Occur : There is no known warning to occupants in the platform basket should this condition exist. If the condition occurs, occupants of the platform basket can push the emergency stop button to cease all platform movement.

Involved Components :

Component Name 1 : Connector

Component Description : Deutsch connector for CAN Bus communication.

Component Part Number : DT06-3S-CE13

Supplier Identification :

Component Manufacturer

Name : NR

Address : NR

NR

Country : NR

Chronology :

August 2022 a customer contacts Pierce and advises that the platform basket on an aerial device, which was near to the ground, went through its leveling operation and the platform basket made contact with the ground. Pierce personnel visit the subject truck and performs visual / functional checks. Corrosion is discovered in the connector in the aerial turntable wiring harness. The corroded pins are replaced and shrink tubing applied to prevent corrosion from redeveloping.

January 2023, a customer contacts Pierce and informs that occupants in the platform basket of an aerial truck experienced platform leveling which was not consistent with normal operation. No contact with the ground was reported and operator error could not be ruled out. Pierce visits the subject truck and performs visual / functional checks. The condition described could not be duplicated. During this inspection corrosion was observed in the connector on the aerial turntable wiring harness. The connector was re-pinned and sealed with heat shrink tubing.

October 2023, an updated wire harness, incorporating a crimped / sealed connection, is introduced into

production.

November 2023, Pierce receives a report from a customer that during that during a training exercise, with the platform basket approximately one foot off the ground, as the platform operator commanded the aerial to raise, and as the platform basket leveled itself, the front of the platform basket contacted the ground. No injuries were reported. Pierce personnel visits the subject truck and performs visual / functional inspections. During this inspection, the condition as described could not be duplicated but moisture intrusion / corrosion is observed in the connector on the aerial turntable wiring harness.

November 2023, Pierce makes the determination that a safety defect exists in the electrical cable connector. Pierce is not aware of any injuries to persons related to the above referenced condition.

Description of Remedy :

Description of Remedy Program : Pierce will supply, at no charge to the customer, a replacement aerial turntable wiring harness which utilizes an electrical connection that is permanently crimped together and sealed. An appropriate labor allowance to install the remedy component will be provided.

How Remedy Component Differs from Recalled Component : The remedy component will consist of an electrical connection that is no longer a "plug", but instead is permanently crimped together and sealed – thus preventing influence from and sensitivity to external factors such as strain relief and moisture. Vehicles outside the recall population use an electrical connection that do not use a plug style connection.

Identify How/When Recall Condition was Corrected in Production : The remedy component described above became effective in production in October 2023

Recall Schedule :

Description of Recall Schedule : Notifications to customers will be made via a customer letter. The 577 customer letter will be mailed pending NHTSA approval.

Planned Dealer Notification Date : DEC 15, 2023 - DEC 15, 2023

Planned Owner Notification Date : DEC 15, 2023 - DEC 18, 2023

* NR - Not Reported