

# Part 573 Safety Recall Report

# 22V-713

**Manufacturer Name :** Osage Industries, Inc.**Submission Date :** AUG 28, 2023**NHTSA Recall No. :** 22V-713**Manufacturer Recall No. :** NR**Manufacturer Information :**

Manufacturer Name : Osage Industries, Inc.

Address : P.O. BOX 718

Linn MO 65051

Company phone : 1-800-822-3634

**Population :**

Number of potentially involved : 14

Estimated percentage with defect : 100 %

**Vehicle Information :**

Vehicle 1 : 2022-2022 Ford E450 Super Warrior

Vehicle Type : BUSES, MEDIUM &amp; HEAVY VEHICLES

Body Style : OTHER

Power Train : NR

**Descriptive Information :** All of the parts under this part number are are part of the recall as they share the same build issue. Similar parts with a different part number were built to specification and are not part of the recall population. Weldon, a division of Akron Brass Company, produces Node, an electrical multiplex module, under both a private label to a single customer as well as to multiple OEMs for installation in emergency vehicles. In the affected products, the Node contains a termination resistor installed on the node circuit board instead of the termination resistor being installed only within the electrical harness. If the vehicle network design has not accounted for this additional resistor, it may reduce the bus resistance below the defined tolerance levels and may lead to a loss of data on the CAN network. Installations with multiple nodes are more likely to experience the condition.

f the bus resistance is reduced, the CAN network connection could fail which may interrupt the transfer of data on this connection. If the CAN network connection is interrupted or fails and depending on how the vehicle's electrical systems are designed, it may impact the operation of various electrical loads controlled by the Node, including vehicle lighting, which may increase the risk of a crash.

Due to a bill of material error, a resistor installed on the printed circuit board was inadvertently included.

Production Dates : JAN 21, 2022 - APR 29, 2022

VIN Range 1 : Begin : 1FDXE4FN7NDC20158 End : 1FDXE4FN1NDC22343

 Not sequential

Vehicle 2 : 2022-2022 Ford F450 Warrior

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : DIESEL

**Descriptive Information :** All of the parts under this part number are are part of the recall as they share the same build issue. Similar parts with a different part number were built to specification and are not part of the recall population. Weldon, a division of Akron Brass Company, produces Node, an electrical multiplex module, under both a private label to a single customer as well as to multiple OEMs for installation in emergency vehicles. In the affected products, the Node contains a termination resistor installed on the node circuit board instead of the termination resistor being installed only within the electrical harness. If the vehicle network design has not accounted for this additional resistor, it may reduce the bus resistance below the defined tolerance levels and may lead to a loss of data on the CAN network. Installations with multiple nodes are more likely to experience the condition. f the bus resistance is reduced, the CAN network connection could fail which may interrupt the transfer of data on this connection. If the CAN network connection is interrupted or fails and depending on how the vehicle's electrical systems are designed, it may impact the operation of various electrical loads controlled by the Node, including vehicle lighting, which may increase the risk of a crash. Due to a bill of material error, a resistor installed on the printed circuit board was inadvertently included.

Production Dates : JAN 21, 2022 - APR 29, 2022

VIN Range 1 : Begin : 1FDUF4GT1NDA00625 End : 1FDUF4HT1NEC37821  Not sequential

Vehicle 3 : 2022-2022 Ford F550 Super Warrior  
Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES  
Body Style : OTHER  
Power Train : NR

**Descriptive Information :** All of the parts under this part number are are part of the recall as they share the same build issue. Similar parts with a different part number were built to specification and are not part of the recall population. Weldon, a division of Akron Brass Company, produces Node, an electrical multiplex module, under both a private label to a single customer as well as to multiple OEMs for installation in emergency vehicles. In the affected products, the Node contains a termination resistor installed on the node circuit board instead of the termination resistor being installed only within the electrical harness. If the vehicle network design has not accounted for this additional resistor, it may reduce the bus resistance below the defined tolerance levels and may lead to a loss of data on the CAN network. Installations with multiple nodes are more likely to experience the condition.

f the bus resistance is reduced, the CAN network connection could fail which may interrupt the transfer of data on this connection. If the CAN network connection is interrupted or fails and depending on how the vehicle's electrical systems are designed, it may impact the operation of various electrical loads controlled by the Node, including vehicle lighting, which may increase the risk of a crash.

Due to a bill of material error, a resistor installed on the printed circuit board was inadvertently included.

Production Dates : JAN 21, 2022 - APR 29, 2022

VIN Range 1 : Begin : 1FDUF5HN5NEC18745 End : 1FDOW5HT2NEC36116  Not sequential

## Description of Defect :

**Description of the Defect :** Weldon, a division of Akron Brass Company, produces Node, an electrical multiplex module, under both a private label to a single customer as well as to multiple OEMs for installation in emergency vehicles. In the affected products, the Node contains a termination resistor installed on the node circuit board instead of the termination resistor being installed only within the electrical harness. If the vehicle network design has not accounted for this additional resistor, it may reduce the bus resistance below the defined tolerance levels and may lead to a loss of data on the CAN network. Installations with multiple nodes are more likely to experience the condition.

FMVSS 1 : NR

FMVSS 2 : NR

**Description of the Safety Risk :** If the bus resistance is reduced, the CAN network connection could fail which may interrupt the transfer of data on this connection. Suppose the CAN network connection is interrupted or fails and depending on how the vehicle's electrical systems are designed. In that case, it may impact the operation of various electrical loads controlled by the Node, including vehicle lighting, which may increase the risk of a crash.

Description of the Cause : Due to a bill of material error, a resistor installed on the printed circuit board was inadvertently included

Identification of Any Warning that can Occur : None

## Involved Components :

Component Name 1 : V-mux Hercules HC Node 1.5

Component Description : Multiplex Input / Output Node for Weldon V-mux compatible systems

Component Part Number : 6060-1000-00

## Supplier Identification :

### Component Manufacturer

Name : Weldon Division of Akron Brass

Address : 3656 Paragon Drive  
Columbus Ohio 43228

Country : United States

## Chronology :

On April 29, 2022, Weldon was contacted by an OEM that described an issue with the CAN connection when installing the Node. Weldon was able to isolate the issue to the inclusion of the additional termination resistor on the circuit board. Weldon stopped the shipment of additional units. On May 2, 2022, Weldon reviewed the technical details affecting the Node to confirm the issue, considered whether the same issue impacts any similar products and decided to conduct a safety recall. On May 3, 2022, Weldon determined a recent shipment of a variation of the Node sold under a private label and to a single customer was also impacted. Weldon confirmed with the customer these units had never been installed in a vehicle and remained in the customer's inventory. Weldon secured all of the affected products from the customer's inventory and on May 4, 2022 reworked those units to remove the additional resistor.

## Description of Remedy :

**Description of Remedy Program :** The remedy for this recall will be shipping new nodes to you, preprogrammed to your specific truck(s). These will be shipped out as they become available to us from Weldon dependent upon the availability of components to them and their production capabilities. Weldon has stated they will reimburse 0.5 hours in labor for the replacement of these nodes. There will be a return label or labels included for you to ship the affected nodes back to us so that we can ship them back to Weldon also per the terms of the recall.

**How Remedy Component Differs from Recalled Component :** The recalled components were manufactured with a termination resistor on the CAN ports, the remedy components are manufactured without that resistor on the CAN ports which prevents any possible malfunctions that may have occurred with the resistor in place.

**Identify How/When Recall Condition was Corrected in Production :** In early May Osage Industries was contacted by Weldon in the form of Technical Service Bulletin 22-001 stating that NHTSA recall 22 E 037 had been issued concerning their part number 6060-1000-00 that described an issue with the CAN connection when installing the Node. Weldon was able to isolate the issue to the inclusion of the additional termination resistor on the circuit board. Weldon stopped the shipment of additional units. On May 2, 2022, Weldon reviewed the technical details affecting the Node to confirm the issue, considered whether the same issue impacts any similar products, and decided to conduct a safety recall. On ( fill in the date) Osage industries started an internal audit to identify any affected units both in current production and inventory as well as identifying vehicles already delivered that potentially had affected units. Any affected units found in production were removed and replaced with remedy units. Vehicles already delivered with affected units are being located and replaced with remedy units as they become available from Weldon.

## Recall Schedule :

**Description of Recall Schedule :** Customers have been notified and letters will also be sent to them.

**Planned Dealer Notification Date :** SEP 22, 2022 - NOV 22, 2022

**Planned Owner Notification Date :** SEP 22, 2022 - NOV 22, 2022

\* NR - Not Reported