

Part 573 Safety Recall Report

24V-670

Manufacturer Name : Trail King Industries, Inc.**Submission Date :** SEP 11, 2024**NHTSA Recall No. :** 24V-670**Manufacturer Recall No. :** NR**Manufacturer Information :**

Manufacturer Name : Trail King Industries, Inc.

Address : PO BOX 1064

Mitchell SD 57301

Company phone : 999

Population :

Number of potentially involved : 39

Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2019-2020 Trail King TKHDG Paver Special

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : The recall population includes all vehicles of this model from start of production until the addition of reinforced supports. The updated lower cylinder mounts will have visible added reinforcements. There are 39 units involved in this recall.

Production Dates : MAR 01, 2019 - JUN 30, 2024

VIN Range 1 : Begin :

NR

End : NR

 Not sequential**Description of Defect :**

Description of the Defect : The gooseneck lift lower cylinder mount can experience fatigue and develop cracks that could, over time, allow the part to fail during the raising or the lowering of the gooseneck throughout the loading operations. Once the gooseneck is in the transport position, the lower cylinder mount cannot fail due to a mechanical stop to support the load for transport.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : If the lower cylinder mount has developed cracks and fails, the trailer may drop to the ground during the loading or unloading process, increasing the risk of injury to the operator.

Description of the Cause : Insufficient reinforcement in the radius of the lower cylinder mount.

Identification of Any Warning that can Occur : Small cracks on the bottom side of the cylinder mounting plate to the web may be visible on the outside or underneath the gooseneck upon inspection.

Involved Components :

Component Name 1 : Lower Cylinder Mount

Component Description : NR

Component Part Number : 100277708

Component Name 2 : Lower Cylinder Mount

Component Description : NR

Component Part Number : 100302187

Component Name 3 : Lower Cylinder Mount

Component Description : NR

Component Part Number : 100302666

Component Name 4 : Lower Cylinder Mount

Component Description : NR

Component Part Number : 100281708

Supplier Identification :

Component Manufacturer

Name : Trail King Ind.

Address : NR

NR

Country : NR

Chronology :

In March 2019, Trail King began production of a new HDG Paver Special gooseneck design that was specially developed to transport paving equipment. This trailer uses a hydraulic cylinder that attaches to the lower end of the structure to raise and lower the trailer during the loading and unloading process.

On September 3, 2020, Trail King was notified by a customer of a failure in the lower cylinder mount. During the review, it was determined that the welds showed signs of fatigue cracking and which appeared to be due to dynamic loading by not having the transport doors in place during specific points during transport to achieve

clearance of road obstacles. However, reinforcements to the lower cylinder mount were added to new production in October 2020 to reinforce this area.

On February 10, 2021, Trail King was informed of another failure to the lower cylinder mount on a unit built prior to October 2020 that did not have reinforcements added. Trail King reviewed the unit and again indicated the failure was due to dynamic loading by not having the transport doors in place during specific points during transport to achieve clearance of road obstacles.

On August 21, 2024, Trail King was notified of a failure of the lower cylinder mount area of the gooseneck where the vehicle operator alleged an injury. Trail King initiated an investigation into the issue. The investigation indicated this unit appeared to have experienced fatigue-related cracks due to the presence of repair welds in the gooseneck. These welds suggested the presence of cracks or fractures over time where repairs were attempted but it was not clear when the repair welds were made and it could not be determined whether improper loading/unloading or operation of the trailer was a contributing factor to the failure.

Trail King decided to conduct a safety recall to address this issue on September 4, 2024.

Description of Remedy :

Description of Remedy Program : Trail King will add reinforcements to the lower cylinder mount on all affected trailers free of charge.

How Remedy Component Differs from Recalled Component : The reinforcements support the radius of the lower cylinder mount and will reduce the flex and fatigue of the concerned area. The reinforcement is an added component that is easily visible after installation.

Identify How/When Recall Condition was Corrected in Production : All trailers produced beginning in October-2020 had an updated design with added reinforcements that corrected the issue.

Recall Schedule :

Description of Recall Schedule : NR

Planned Dealer Notification Date : SEP 27, 2024 - OCT 25, 2024

Planned Owner Notification Date : SEP 27, 2024 - OCT 25, 2024

* NR - Not Reported