OMB Control No.: 2127-0004

# Part 573 Safety Recall Report

## 23V-578

**Manufacturer Name:** Trail King Industries, Inc.

**Submission Date:** AUG 14, 2023 **NHTSA Recall No.:** 23V-578 **Manufacturer Recall No.:** TK202301



#### **Manufacturer Information:**

Manufacturer Name: Trail King Industries, Inc.

Address: PO BOX 1064

Mitchell SD 57301

Company phone: 999

## **Population:**

Number of potentially involved : 5,641 Estimated percentage with defect : 100%

#### **Vehicle Information:**

Vehicle 1: 1992-2023 Trail King TKFA, TKPA, AB, AB EXT

Vehicle Type: TRAILERS

Body Style : Power Train : NR

Descriptive Information: The Flip Axle, Pin-on Axle, Air Boosters, and Air Booster Extension models are

additional pin-on axles or pivot extensions that can be added to the rear of certain trailers manufactured by Trail King Industries, Inc. The recall population includes all the above-listed trailers produced until a design change was made to the shims on the

axle extensions.

Production Dates: JAN 01, 2013 - AUG 10, 2023

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

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

Description of the Defect: The affected trailers use additional pin-on axles or pivot extensions installed at

the rear of the trailer to extend the trailer's load-carrying capacity and more evenly distribute weight over the trailers' axles. The pin-on axles and pivot extensions are attached to the trailer by lower pins and use shims to compress against the trailer at the top. The shims are used to transfer weight between the trailer and the pin-on axle. If an airline or the air ride suspension under the trailer or pin-on axle experiences a sudden failure (e.g., struck by road debris) and becomes disconnected, the pin-on axle or pivot extension could suddenly lose compression with the trailer allowing it to shift suddenly. In this event, while there is no loss of control of the trailer, the shims could become loose and ultimately dislodge from the connection point.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: In the case that the pin-on axle or pivot extension suddenly loses

compression, and it shifts suddenly there is a potential for the shims to

The information contained in this report was submitted pursuant to 49 CFR §573

become dislodged from the unit. The shims may fall onto the road increasing

the potential risk of a crash for following traffic.

Description of the Cause: There is no separate retention method used on the shims in the event the pin-

on axle or pivot extension loses compression with the trailer.

Identification of Any Warning The driver may notice a loss of compression and bouncing of the pin-on axle if

that can Occur: the airline or air suspension suddenly becomes disconnected.

## **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 June 16, 2023, Trail King received a report from a customer that a shim located between a loaded heavy-duty trailer and the pin-on axle had detached while the trailer was in operation and with a pilot car following behind the load. The customer reported that a shim was projected into the air and into the front of the pilot car following the load.

Because of this event, Trail King initiated an investigation to determine if this condition was an isolated incident or potentially a broader issue. It was determined that the suspension supply line of the trailer had suddenly and unexpectedly become disconnected (possibly struck by road debris that severed the line), causing the air in the flip axle to quickly release, resulting in loss of compression on the shims. Trail King has been manufacturing trailers with the same pin-on axle and pivot extension design for decades and is not aware of any similar reports. Through the investigation, it was identified that with a unique chain of events such as the customer described the possibility that the same or similar chain of events could happen again could not be ruled out. Although no injuries were involved in this incident, Trail King thus decided to proceed with a recall. On August 8, 2023, Trail King decided to conduct a recall for this issue.

#### **Description of Remedy:**

Description of Remedy Program: Trail King will provide new shims, tether, and hardware to tether the

shims to the pin-on axle or pivot extension. Trail King will provide up to 1

hour of labor and replacement parts necessary to remedy units.

How Remedy Component Differs The remedy components will have a tab on the new shims that allow it to from Recalled Component: be tethered to the unit. This will eliminate the possibility of a shim coming

loose from the trailer in the event of a sudden and rapid loss of

compression.

was Corrected in Production: shim package.

Identify How/When Recall Condition All trailers produced on August 10, 2023, will have the updated tethered

#### **Recall Schedule:**

Description of Recall Schedule: NR

Planned Dealer Notification Date: SEP 08, 2023 - OCT 06, 2023 Planned Owner Notification Date: SEP 08, 2023 - OCT 06, 2023

\* NR - Not Reported