

Part 573 Safety Recall Report

24V-853

Manufacturer Name : Diamond C Trailer MFG**Submission Date :** DEC 06, 2024**NHTSA Recall No. :** 24V-853**Manufacturer Recall No. :** 24V853**Manufacturer Information :**

Manufacturer Name : Diamond C Trailer MFG

Address : 4006 FM 3417

Mount pleasant TX 75455

Company phone : 5722834

Population :

Number of potentially involved : 1,432

Estimated percentage with defect : 35 %

Vehicle Information :

Vehicle 1 : 2023-2024 Diamond C Trailer MFG HDT208(All Trim Levels), HDT210(All Trim Levels), HDT307(All Trim Levels)

Vehicle Type : TRAILERS

Body Style :

Power Train : NR

Descriptive Information : HDT210(All Trim Levels)
20,000 GVWR.
HDT208(All Trim Levels)
16,000 GVWR.
HDT307(All Trim Levels)
21,000 GVWR

Production Dates : JUN 01, 2023 -SEP 11, 2024

VIN Range 1 : Begin :

NR

End : NR

 Not sequential**Description of Defect :**

Description of the Defect : Failure of the axle fastener (nut/bolt) at the axle frame assembly.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : Installed axles on certain GVWR rated trailers with an integrated tilt tail may come loose from the manufactured axle hanger assembly. When this condition occurs, the axle may roll up in the axle hanger assembly and may come loose from the trailer. This condition could increase the chance of an accident.

Description of the Cause : Fastener installation procedure lacked sufficient enforcement.

Identification of Any Warning None
that can Occur :

Involved Components :

Component Name 1 : Axle assembly nut and bolt

Component Description : Grade 8, steel, 5/8" bolt and matching nut

Component Part Number : 70-02-0401009 (bolt), 70-02-201039 (nut)

Supplier Identification :

Component Manufacturer

Name : None

Address : NR

NR

Country : NR

Chronology :

June 1, 2023 – Diamond C's Engineering Department issues engineering change to modify the length of one component of assembly tubing in the subject trailers. July 17, 2024 – Diamond C receives first warranty complaint of torsion axle rolling in the mount. Diamond C's investigation determined that fasteners (bolt/nut) came loose causing axle to roll. Diamond C was unable to determine whether the bolt sheared or the nut came loose. There was no indication of hanger failure. September 3, 2024 – Diamond C receives an additional warranty complaint where torsion axle rolled in hanger assembly. This failure was attributable to missing fastener. Diamond C was unable to determine whether the bolt sheared or the nut came loose. September 27, 2024 – Diamond C receives an additional warranty complaint where the torsion axle rolled in frame assembly. The trailer involved exhibited significant pre-existing damage to the hanger frame and mating parts. This included evidence of multiple failures at the axle mount, suggesting significant overloading of the trailer's GVWR. October 21, 2024 – Diamond C receives warranty claim detailing HDT torsion axle rolling in the frame assembly. Diamond C Engineering Department begins its analysis of the broken sub-assembly. That analysis is ongoing. October 21, 2024 – November 1, 2024 – Diamond C continues to analyze September and October 2024 warranty claims involving rolled torsion axle. Through this analysis, Diamond C determined that the failures occurred due to loosening of hardware and not shearing. November 1, 2024 – While Diamond C continues to analyze relevant data to determine a root cause of hanger assembly failures, Diamond C's Product Recall Team made a determination that a defect related to motor vehicle safety existed and decided to conduct a safety recall.

Description of Remedy :

Description of Remedy Program : Diamond C has determined the remedy will be to introduce a flanged bolt and distortion locking flange nut to the torsion hanger frame assembly to prevent the nut from disengaging from the bolt. Diamond C will provide a repair kit to all dealers with instructions on how to replace the fastener hardware.

How Remedy Component Differs from Recalled Component : The remedy fastener construction uses a distortion thread flange nut. The nut is designed to distort the bolt threads as the nut is tightened on the bolt. This distortion will prevent unintended disengagement of the nut. Due to both the bolt and nut having a flange, the remedy eliminates the risk of improper washer usage.

Identify How/When Recall Condition was Corrected in Production : Defect was corrected in production on 12/5/2024 by introduction of replacement fasteners.

Recall Schedule :

Description of Recall Schedule : Diamond C will notify dealers and owners during the week of December 9, 2024 and anticipates that all notification will be concluded within one week.

Planned Dealer Notification Date : DEC 09, 2024 - DEC 31, 2024

Planned Owner Notification Date : DEC 12, 2024 - JAN 31, 2025

* NR - Not Reported