

Part 573 Safety Recall Report

22V-727

Manufacturer Name : Lucid USA, Inc.**Submission Date :** OCT 05, 2022**NHTSA Recall No. :** 22V-727**Manufacturer Recall No. :** SR-22-02-0**Manufacturer Information :****Population :**

Manufacturer Name : Lucid USA, Inc.

Number of potentially involved : 571

Address : 7373 Gateway Blvd.

Estimated percentage with defect : 3 %

Newark CA 94560

Company phone : 1-510-648-3553

Vehicle Information :

Vehicle 1 : 2022-2022 Lucid Air (All grades)

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : NR

Descriptive Information : Ethos Automation, Inc. ("Ethos") and Martinrea International, Inc. ("Martinrea") manufactured subframes for Model Year (MY) 2022 Lucid Air vehicles. On vehicles with subframes manufactured by Ethos, the front subframe tow eye bracket may detach during vehicle recovery operations without warning due to inadequate adhesive properties, creating a risk of property damage, crash or injury. The recall population consists of all Lucid vehicles that might have a front subframe that was manufactured by Ethos. Lucid established a clean point at its manufacturing plant for vehicles with production dates starting on April 21, 2022. Prior to April 21, subframes manufactured by both Ethos and Martinrea were being installed on Lucid vehicles. Subframes, including tow eye brackets, manufactured after the clean point were manufactured only by Martinrea, and Lucid has confirmed the Martinrea subframes have tow eye brackets attached with adequate adhesive properties. Lucid determined that 571 customer vehicles manufactured prior to the clean point are potentially affected. Lucid will inspect each of the 571 vehicles to verify the subframe origin and ensure that Ethos front subframe tow eye brackets are adequately secured by the addition of two rivets. Lucid estimates that 304 of the population of 571 MY 2022 Lucid Air vehicles delivered to U.S. customers have a front subframe manufactured by Ethos.

Production Dates : OCT 22, 2021 - APR 20, 2022

VIN Range 1 : Begin :

NR

End : NR

☐ Not sequential**Description of Defect :**

Description of the Defect : The front subframe tow eye bracket may have inadequate adhesive properties.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : The front subframe tow eye bracket may detach during vehicle recovery operations resulting in release of the vehicle without warning, increasing the risk of property damage, crash, or injury.

Description of the Cause : Some vehicle front subframe tow eye brackets were manufactured with inadequate adhesive properties for securing the bracket to the subframe.

Identification of Any Warning that can Occur : The condition may occur without warning.

Involved Components :

Component Name 1 : Front Subframe

Component Description : Front Subframe Tow Eye Bracket

Component Part Number : P11-SA0000-09

Supplier Identification :

Component Manufacturer

Name : Ethos Automation

Address : 10 Plant Farm Blvd. Unit 4
Branford Foreign States N3S 7W3

Country : Canada

Chronology :

On or about July 15, 2022, Lucid learned that the tow eye bracket on a customer Lucid Air failed while being winched onto a flatbed truck using the tow eye. On Jul 22, Lucid received a report of a tow eye failure on a Lucid-owned vehicle.

On Aug 3, Lucid engineering notified the Product Safety Working Group (PSWG) of a potential concern with tow eye detachments. The PSWG reconvened on Aug 15 to review plans for investigating the tow eye design specifications and manufacturing data. As part of the investigation, Lucid determined that the tow eye brackets in the Jul 15 and Jul 22 incidents failed due to inadequate adhesive properties, and learned of three other failures caused by inadequate adhesion. A crack was discovered on a Lucid corrosion test vehicle on July 26, though the date of occurrence is unknown. Failures occurred on a customer vehicle on Aug 18, 2022, and on a Lucid test vehicle on Aug 24, 2022.

On Aug 31, Lucid lab tested subframe assembly tow eyes manufactured by the current manufacturer,

Martinrea. These tests confirmed that subframe and tow eye brackets installed with the current manufacturing process exceed the design strength specification and have substantial margin. Given those results, Lucid analyzed the processes of the prior subframe manufacturer, Ethos.

By Sept 20, Lucid confirmed that all tow eye bracket adhesive failures occurred on subframes manufactured by Ethos, and Lucid concluded it did not have engineering confidence in the Ethos processes for these parts. Lucid established a clean point at the plant for vehicles with production dates beginning Apr 21, 2022, after which all subframes were manufactured by Martinrea.

On Sept 20, Lucid engineering briefed the PSWG on its findings and conclusions. On Sept 22, the PSWG and Product Safety Officer briefed Lucid's Product Safety Executive Council (PSEC). The PSEC concluded the subframes manufactured by Ethos present an unreasonable risk to safety and decided to initiate a recall.

Description of Remedy :

Description of Remedy Program : Owners of subject vehicles will be notified by first class mail with instructions when to contact Lucid to schedule inspection and, if necessary , securing of the tow eye bracket through addition of two rivets, AT NO COST to the customer. The remedy is being examined and will be forthcoming AT NO COST to the customer. Lucid will reimburse owners for costs an owner reasonably incurred to obtain a remedy for this safety defect during the period starting from initial vehicle delivery through 10 days after Lucid's mailing of the owner notification letter concerning this noncompliance. If an owner has such a claim for pre-notification reimbursement, they may contact Lucid Customer Care at 1-888-99-LUCID or 1-888-995-8243.

How Remedy Component Differs from Recalled Component : The remedy is to add two rivets to the subframe tow eye bracket manufactured by Ethos via a Lucid-designed jig to ensure adequate strength of the bracket connection to the subframe. Prior to the remedy, the recalled bracket lacks the rivets.

Identify How/When Recall Condition was Corrected in Production : Lucid confirmed that all vehicle subframes manufactured on or after April 21, 2022, were manufactured by Martinrea. Our inspection and testing of Martinrea produced subframes indicate the design and manufacturing process demonstrate adequate strength and substantial margin.

Recall Schedule :

Description of Recall Schedule : Owners of affected vehicles will be notified by email with instructions not to use the tow eye for recovery operations and to remove the tow eye from the vehicle until they have the recall remedy completed. The instructions to owners will recommend alternative methods for recovery operations in lieu of use of the tow eye. When Lucid has distributed sufficient parts, jigs, and tools for proper rivet installation, Lucid will notify owners via email and U.S. mail that they may contact Lucid Customer Care or a Lucid Certified Service Center to schedule the recall

repair. There will be NO COST for this service. Lucid will send reminder emails reminders to all customers who have uncompleted recall campaigns on a quarterly basis.

Planned Dealer Notification Date : OCT 03, 2022 - OCT 03, 2022

Planned Owner Notification Date : NOV 14, 2022 - NOV 14, 2022

* NR - Not Reported