Part 573 Safety Recall Report

Manufacturer Name :Lucid USA, Inc.Submission Date :SEP 29, 2022NHTSA Recall No. :22V-727Manufacturer Recall No. :SR-22-02-0

Manufacturer Information :

Manufacturer Name : Lucid USA, Inc. Address : 7373 Gateway Blvd. Newark CA 94560

Company phone : 1-510-648-3553

Vehicle Information :

Vehicle 1 :2022-2022 Lucid Air (All grades)Vehicle Type :LIGHT VEHICLESBody Style :4-DOORPower Train :NRDescriptive Information :Ethos Automation, Inc. ("Ethos") and Martinrea International, Inc. ("Martinrea") manufactured subframes for Model Year (MY) 2022 Lucid Air vehicles. On vehicle	-		
Body Style :4-DOORPower Train :NRDescriptive Information :Ethos Automation, Inc. ("Ethos") and Martinrea International, Inc. ("Martinrea")			5
Power Train : NR Descriptive Information : Ethos Automation, Inc. ("Ethos") and Martinrea International, Inc. ("Martinrea")		Vehicle Type :	LIGHT VEHICLES
Descriptive Information : Ethos Automation, Inc. ("Ethos") and Martinrea International, Inc. ("Martinrea")		Body Style :	4-DOOR
•		Power Train :	NR
detach during vehicle recovery operations without warning due to inadequate adhesive properties, creating a risk of property damage, crash or injury. The rec population consists of all Lucid vehicles that might have a front subframe that w manufactured by Ethos. Lucid established a clean point at its manufacturing plan vehicles with production dates starting on April 21, 2022. Prior to April 21, subf manufactured by both Ethos and Martinrea were being installed on Lucid vehicle. Subframes, including tow eye brackets, manufactured after the clean point were manufactured only by Martinrea, and Lucid has confirmed the Martinrea subfram have tow eye brackets attached with adequate adhesive properties. Lucid deterr 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 ensure that Ethos front subframe tow eye brackets are adequately secured by th addition of two rivets. Lucid estimates that 304 of the population of 571 MY 202		Descriptive Information :	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
Production Dates : OCT 22, 2021 - APR 20, 2022		Production Dates :	OCT 22, 2021 - APR 20, 2022
VIN Range 1 : Begin : NR End : NR		VIN Range 1:	Begin : NR End : NR

Description of Defect :

Description of the Defect : The front subframe tow eye bracket may have inadequate adhesive properties. FMVSS 1 : NR

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



22V-727

Population :

Number of potentially involved :304Estimated percentage with defect :6 %

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NR
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.
Some vehicle front subframe tow eye brackets were manufactured with inadequate adhesive properties for securing the bracket to the subframe.
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 July 22, Lucid received a report of a tow eye failure on a Lucid-owned vehicle.

On August 3, Lucid engineering notified the Product Safety Working Group (PSWG) of a potential concern with front subframe tow eye detachments. The PSWG reconvened on Aug 15 to review the investigation and test plans for evaluating the tow eye design specifications and manufacturing data. As part of the investigation, Lucid determined that the tow eye brackets failed in the July 15 and July 22 incidents because of inadequate adhesive properties. During its investigation, Lucid learned of three additional tow eye bracket failures caused by inadequate adhesion, one on a customer vehicle and two on Lucid-owned vehicles.

On August 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

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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 April 21, 2022, after which all subframes were manufactured by Martinrea.

On Sept 20, Lucid engineering staff 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.
	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

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	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

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