

Part 573 Safety Recall Report

23V-523

Manufacturer Name : Lucid USA, Inc.**Submission Date :** JUL 27, 2023**NHTSA Recall No. :** 23V-523**Manufacturer Recall No. :** SR-23-04-0**Manufacturer Information :****Manufacturer Name :** Lucid USA, Inc.**Address :** 7373 Gateway Blvd.

Newark CA 94560

Company phone : 1-510-648-3553**Population :****Number of potentially involved :** 778**Estimated percentage with defect :** 1 %**Vehicle Information :****Vehicle 1 :** 2022-2023 Lucid Air**Vehicle Type :** LIGHT VEHICLES**Body Style :** 4-DOOR**Power Train :** NR

Descriptive Information : Lucid observed inverter power module failures in certain 2022 and 2023 Lucid Airs, which in most cases lead to the driver receiving a drive motor failure warning followed by power derating or a drive motor shutdown approximately 2 minutes after the warning. In 7 customer vehicles, however, the vehicle caused fuses to open that resulted in loss of power without warning. While Lucid investigated the condition, beginning on May 20, 2023, Lucid deployed an over-the-air (OTA) software update, version 2.0.66, that ensures drivers experiencing a power module failure will always receive a minimum 2-minute warning prior to any loss of power. The 7 customer vehicles experiencing open fuses represent 0.096% of customer vehicles as of May 20. Lucid is issuing this recall to encourage all Lucid Air Owners to install the latest version of software, which prevents experiencing an unwarned loss of power. Vehicles subject to this recall are those 2022 and 2023 Lucid Airs that currently have a software version prior to 2.0.66 installed, which Lucid determined is 778 customer vehicles as of July 26.

Production Dates : OCT 22, 2021 - JUN 29, 2023**VIN Range 1 : Begin :**

NR

End : NR☐ Not sequential**Description of Defect :**

Description of the Defect : Vehicles that have not updated to software version 2.0.66 or later do not have the software feature that prevents unwarned loss of motive power in the event of a power module inverter failure. Unwarned loss of motive power can result in increased risk of a crash.

FMVSS 1 : NR**FMVSS 2 :** NR

Description of the Safety Risk : A loss of motive power without warning to the driver increases the likelihood of a crash.

Description of the Cause : In vehicles with software prior to version 2.0.66, the Lucid software might not detect the power module failure correctly and provide the usual warning prior to power derate or drive motor shutdown. This can lead to the Lucid Air opening fuses which result in loss of motive power without warning.

Identification of Any Warning that can Occur : Depending on the specific failure scenario, warnings can include one or more of the following: (1) "Drive System Fault, Pull over and Contact Customer Care," (2) a yellow or red warning triangle with exclamation mark telltale, (3) a turtle icon, and (4) "Battery System Fault, Vehicle powering down in 2 minutes ..." In vehicles on software prior to version 2.0.66, one or more of the warnings could precede loss of motive power or loss of motive power could occur without warning. In vehicles with version 2.0.66 or later, any power module failure will result in one or more warnings at least two minutes prior to power derate or drive system shutdown.

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 :

In May 2022, Lucid observed a power module inverter failure at a Service Center. Lucid began investigating the issue and determined that the issue did not present an unreasonable risk to safety. Prior to Oct 2022, all failures resulted in a minimum 2-minute warning prior to a power derate or drive motor shutdown. On Oct 9, a customer vehicle experienced an unwarned loss of motive power. Lucid continued investigating to determine why loss of power could occur without warning and the population of affected vehicles. While Lucid's investigation continued, Lucid developed software that prevents any unwarned losses of power. That software

was pushed to Lucid Air vehicles in version 2.0.66 starting on May 20, 2023. On May 23, Lucid's Product Safety Working Group (PSWG) was briefed on this issue and the power module failures resulting in unwarned loss of power in customer vehicles that had occurred since October 2022. As of May 20, 2023, there were 7 failures representing 0.096% of customer vehicles. The PSWG and Product Safety Officer reopened their consideration of the case in light of the 7 failures and briefed the Product Safety Executive Council (PSEC) on July 20, 2023. The PSEC determined on July 20 that an unreasonable risk to safety exists in vehicles that have not installed SW version 2.0.66 or later due to the risk of unwarned loss of motive power.

Description of Remedy :

Description of Remedy Program : Software upgrades have been provided to customers at NO COST. Owners of affected vehicles will be notified by first class mail with instructions to upgrade their software or contact Lucid Customer Care for assistance in doing so, at NO COST.

Lucid will reimburse owners for costs an owner reasonably incurred to obtain a remedy for this 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 : Remedied vehicles will have installed version 2.0.66 or later of Lucid software.

Identify How/When Recall Condition was Corrected in Production : As of May 23, 2023, all vehicles at the factory have had version 2.0.66 or later installed, and all vehicles have been upgraded to 2.0.66 or later prior to delivery to customers.

Recall Schedule :

Description of Recall Schedule : Owners of vehicles in the recall population will be notified by email and first class mail with instructions to update their software to the latest version and that they may contact Lucid Customer Care or a Lucid Service Center if they need assistance with software updates. There will be NO COST for this service.

Planned Dealer Notification Date : AUG 04, 2023 - AUG 04, 2023

Planned Owner Notification Date : SEP 25, 2023 - SEP 25, 2023

* NR - Not Reported