

Technical Instructions
Safety Recall SR-23-01-0
Contactor Replacement

Model: Air

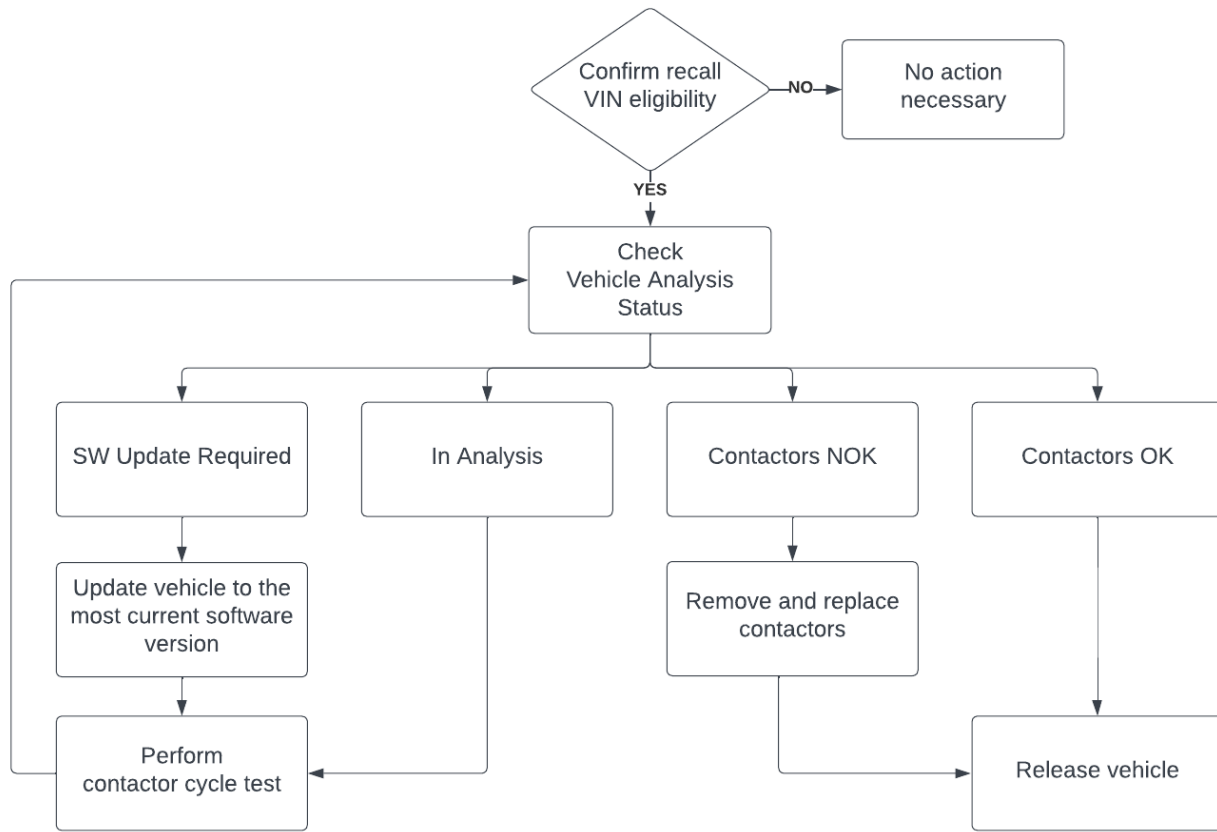
Year: 2022 / 2023

Market: USA / CAN

Rev 1

Release Date: 04/18/2023

I. PROCESS OVERVIEW



NOTE: SW = Software

II. VIN ELIGIBILITY

Model	Year	Production Date	Market
Air	2022 / 2023	10/2021 – 11/2022	USA / CAN

III. WORK ORDER DOCUMENTATION

Include the following information in the work order:

Concern	Perform Safety Recall SR-23-01-0 Contactor Replacement
Cause	<p>Safety Recall SR-23-01-0 (Please choose one of the following):</p> <ul style="list-style-type: none"> • Vehicle contactor analysis resulted in contactors requiring replacement • Vehicle contactor analysis resulted in confirmed good contactors
Correction	<p>Current Vehicle Contactor Status (Choose one of the following):</p> <ul style="list-style-type: none"> • SW Update Required • In Analysis • Contactors NOK • Contactors OK <p>Use the correction that best reflects the actions taken (Choose one of the following):</p> <ul style="list-style-type: none"> • Vehicle software updated to version #.#.##, completed contactor cycle test, and contactors NOK. Removed and replaced contactors. • Vehicle software updated to version #.#.##, completed contactor cycle test, and contactors OK. No further action required. • Completed the contactor cycle test and contactors NOK. Removed and replaced contactors. • Completed the contactor cycle test and contactors OK. No further action required. • Contactors NOK. Removed and replaced contactors. • Contactors OK. No further action required. <p>Removed Contactor Serial Numbers Positive: Negative:</p> <p>New Contactor Installed Serial Numbers Positive: Negative:</p>

IV. DOCUMENTATION DETAILS

To ensure that vehicle campaign repairs are documented correctly, please reference the following when creating work orders for SR-23-01-0:

Job Code	SR-23-01-0 Contactor Replacement
Pay Type	<p>Campaign [Post-Handoff Customer Cars]</p> <p>Rectify [Lucid Internal Vehicles]</p>
Defect Code	Campaign
Casual PN	P00-HJ4100-00

Select the Labor Op Code that best reflects the procedure performed on the vehicle:

Labor Op Code	Description	FRT*
96.230101	SR-23-01-0 SW Updated; Completed Cycle Test: Contactors NOK	8.2
96.230102	SR-23-01-0 Completed Cycle Test: Contactors NOK	7.4
96.230103	SR-23-01-0 R&R Contactors: Contactors NOK	5.1
96.230104	SR-23-01-0 SW Updated; Completed Cycle Test: Contactors OK	3.1
96.230105	SR-23-01-0 Completed Cycle Test: Contactors OK	2.3
96.230106	SR-23-01-0 Contactors OK	0.0


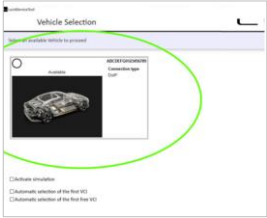
*Flat Rate Time (FRT) is subject to change

NOTE: Safety Recall Campaign claim should be submitted as **“CAMPAIGN”** Pay Type

Campaign Completion Notes:

- For all affected vehicles, click on the VIN recall record (under the related section on the asset)
- Insert the Work Order number in the Work Order field to automatically populate the required job code(s)
- Once the repair is finished, change the status on the VIN Recall to “Closed”
- Leave the status “Open” if the repair is not complete and/or rescheduled to a different day

V. SPECIAL TOOLS

Tool Part Number	Tool Name	Tool Picture
T1S-Z19200-00	HYDRAULIC LIFTING TABLE SERVICE	
-	LUCID DIAGNOSTIC SYSTEM	

VI. PARTS AND MATERIALS

These per vehicle parts are required **ONLY WHEN CONTACTORS REQUIRE REPLACEMENT:**

Part Number	Name	Qty
P00-HJ4100-01*	CONTACTOR GXV600-18 - INTERNALLY ECONOMIZED	2
P00-F857AX-00	SCREW 50x25 DELTA ROUND WASHER HEAD ZnNi TORX PLUS	4
P00-F14JDG-02	SCREW M6X17.05 8.8 STEEL BUTTON FLANGE NYLON ZN/Ni 6-LOBE	21
P00-F332PK-00	NUT M8 10 STEEL FLANGE HI TEMP NYLON Zn/Ni HEX	4
P00-F124DA-00	M6-1X17.5 BUTTON HEAD SEMS SCREW, STEEL 8.8, ZN/AL 200, CONICAL/FLAT	10
P00-F19DAG-00	SCREW M5X16 8.8 STEEL BUTTON HEAD ZN/Ni 6-LOBE	4

***NOTE:** UPDATED part number has a revision identifier of -01. Previous generation contactor (P/N: P00-HJ4100-00) should NOT be used.



VII. IMPORTANT INFORMATION



CAUTION:

- Removal and replacement of the contactors **MUST** be performed by a Lucid-trained technician who has successfully completed the **HV Response - BDU Service (Tech Level)** course.
- Follow Lucid-approved repair procedures
- Use only Lucid approved Special Tools
- Personal Protective Equipment (PPE) must be used when performing this repair

VIII. REPAIR INSTRUCTIONS

1. **Use latest Technical Instructions (TI)**
Use the latest revision Technical Instructions (TI) by checking the revision (REV) number displayed on the title page and in the document footer.
2. **Confirm VIN Eligibility**
Eligible VIN will have a Service Campaign Flag and a Work Hold.
Title: SR-23-01-0 Contactor Replacement

IX. CHECK VEHICLE ANALYSIS STATUS

1. **Check Vehicle Analysis Status**
 - a) Using Salesforce, check the vehicle status in the Vehicle Analysis Status field:

Service Campaign CP-00014	VIN 000008914	Work Order	Status Open
Related		Details	
VIN Campaign Name VR-01475	Work Order		
VIN 000008914	Status Open		
Service Campaign CP-00014	Campaign Name CP-00014		
Currency USD - U.S. Dollar	Work hold Reason SR-23-01-0 Contactor Replacement		
Closed Date	Vehicle Analysis Status In Analysis		
	Contactor Cycle Count 6		
Created By 	Last Modified By 		
 - b) Use the following process to determine the next step:


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graph TD
    A[Check Vehicle Analysis Status] --> B[SW Update Required]
    A --> C[In Analysis]
    A --> D[Contactors NOK]
    A --> E[Contactors OK]
    B --> B1[Section X. SW Update Required]
    C --> C1[Section XI. In Analysis]
    D --> D1[Section XIII. Contactors NOK]
    E --> E1[Section XIV. Contactors OK]
          
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2. Vehicle Analysis Status Description and Actions Summary

Vehicle Analysis Status	Description	Action
SW Update Required	<ul style="list-style-type: none"> • Software is not at or above v2.0.45 • Unable to perform analysis 	<ul style="list-style-type: none"> • Update software to current version • Perform Contactor Cycle Test • Check Vehicle Analysis Status • Perform action based on analysis result
In Analysis	<ul style="list-style-type: none"> • Software is at or above v2.0.45 • Analysis is in process 	<ul style="list-style-type: none"> • Perform Contactor Cycle Test • Check Vehicle Analysis Status • Perform action based on analysis result
Contactors NOK	<ul style="list-style-type: none"> • Analysis is complete 	<ul style="list-style-type: none"> • Remove and replace (R&R) contactors
Contactors OK	<ul style="list-style-type: none"> • Analysis is complete 	<ul style="list-style-type: none"> • Contactor replacement is not necessary • No further action is required

X. SW UPDATE REQUIRED

The SW (Software) version installed does not meet the minimum version (v2.0.45) required to perform the analysis of the contactors. Software must be updated.

1. Update Vehicle Software

Follow the instructions in the Service Manual to update the vehicle's software to the most current version available.

Service Manual / Inspection / [Over the Air \(OTA\) Flashing](#)

2. Contactor Cycle Test

Proceed to Section XII. Contactor Cycle Test.

XI. IN ANALYSIS

The vehicle has not completed the necessary cycles to analyze the contactors.

1. Check Contactor Cycle Count

- The Contactor Cycle Count field, located under the asset Service Campaign, displays the count of contactor analysis cycles completed
- This field displays the number of cycles that have been completed

Example:

Contactor Cycle Count Required	22
Contactor Cycle Count	6
Cycles Remaining needed to Complete	16

Service Campaign CP-00014	VIN 000008914	Work Order	Status Open
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Related **Details**

VIN Campaign Name VR-01475	Work Order
VIN 000008914	Status Open
Service Campaign CP-00014	Campaign Name CP-00014
Currency USD - U.S. Dollar	Work hold Reason SR-23-01-0 Contactor Replacement
Closed Date	Vehicle Analysis Status In Analysis
	Contactor Cycle Count 6
Created By	Last Modified By

2. Contactor Cycle Test

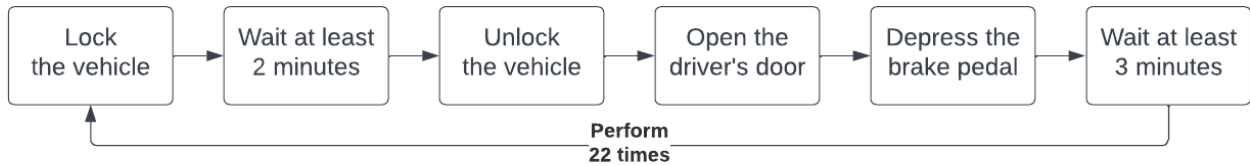
Proceed to Section XII. Contactor Cycle Test to complete the required number of cycles.

XII. CONTACTOR CYCLE TEST

To perform this test, ensure the following:

- Vehicle has a strong and reliable cellular network or Wi-Fi data connection
- Use one key fob or NFC keycard in the area of the vehicle
- Wait time between contactor cycle tests is critical

Contactor Cycle Test:



<p>1. Lock the Vehicle</p> <ul style="list-style-type: none"> a) Ensure all doors, front hood (frunk), and trunk are closed b) Lock the vehicle using either the button on the key fob or the NFC keycard at the B-Pillar c) Start a timer d) Wait AT LEAST 2 minutes before proceeding
<p>2. Unlock the Vehicle</p> <ul style="list-style-type: none"> a) Unlock the vehicle b) Open the driver’s door c) Depress the brake pedal d) Leave the driver’s door open e) Start a timer f) Wait AT LEAST 3 minutes before proceeding
<p>3. Complete Cycle Count</p> <p>It will be necessary to repeat steps 1 & 2 a total of 22 times (cycle from lock to unlock). Continue to Step 1 until all 22 cycles have been completed.</p>
<p>4. Check Vehicle Analysis Status</p> <ul style="list-style-type: none"> • Once the Contactor Cycle test has been completed, the data will be analyzed. • The results of the analysis will be updated in Salesforce every 2 hours starting at 3:00am PST (i.e., 3:00, 5:00, 7:00, etc.). • If the contactor cycle test was completed after the data processing cutoff, the Vehicle Analysis Status will display “In Analysis”. Check again at the next 2 hours interval. <p>Proceed to Section IX. Vehicle Analysis Status.</p>

XIII. CONTACTORS NOK

1. Replace Contactors

Follow the instructions in Service Manual to replace the Contactors:

Service Manual / High-Voltage Electrical / [Battery Pack Contactors Remove and Replace](#)

2. Release Vehicle

No further action required. The campaign is complete.

XIV. CONTACTORS OK

1. Release Vehicle

No further action required. The campaign is complete.