


# RSB-93-24-001-2: Excessive Cabin Noise and Vibration from A/C Compressor

Rivian is launching a technical service bulletin for some model year 2022-2024 R1T and R1S vehicles that are prone to excessive cabin noise and vibration from the A/C compressor. While the vehicle is safely functioning as designed, some customers might be unaccustomed to the noise of the A/C compressor in an electric vehicle; such noise is usually not noticeable in vehicles powered by an internal combustion engine. Upon customer complaint of excessive cabin noise or vibration while the A/C compressor is running, Rivian will retrofit brackets on the A/C lines, and, if necessary, reroute a harness to reduce noise and vibration in the cabin.



**Note:** This document supersedes RSB-93-24-001-1. Revision 2 changes the order of installation of the low pressure line brackets.

<b>Document Type</b>	Technical Service Bulletin
<b>Date</b>	October 1, 2024
<b>Affected Region(s)</b>	USA, Canada
<b>Affected Model(s)</b>	R1T, R1S
<b>Model Year(s)</b>	2022-2024
<b>Approximate Build Dates</b>	January 2022-April 2024
 Refer to the TSB Guide Dashboard to determine if this document applies to a specific vehicle.	
<b>Vehicle System</b>	93 - Noise Vibration and Harshness
<b>Minimum Service Location</b>	Service Center

## Required Parts

Part Number	Quantity	Engineering Name	Service Name/Notes
SC00004344-A	1	NUT - M6X1.0 HX FL CL8 R107G	
PT01208787-A	1	R1T/S Suction and Discharge AC line Brackets assembly service	Bracket Kit, Refrigerant Lines
SC00004361-A	7	SCREW - M5X0.8X10 SO TI PL CL8.8 R103C	
SC00035718-A	1	CLIP - 7.0X6.85 PR FIR TUBE R101	
SC00007332-A	2	NUT - M6X1.0X4.2 RIV RND R105C	Rivet nuts
SC00006307-A	2	BOLT - M6X1.0X15.55 HX FL MAT CL8.8 R105G	Bolts for rivet nuts



**Attention:** The parts listed in this table are only for unique steps that are called out in this bulletin. Some sections of this bulletin might refer to Service Manual procedures which require additional parts. Always review the bulletin and all potentially related Service Manual procedures before ordering parts and beginning work.

**Potentially Required Parts**

Part Number	Quantity	Engineering Name	Service Name/Notes
PT00100804-C	1	R1-ALL: BRACKET - BATTERY CRADLE; LWR	Bracket, 12V Battery, Lower
SC00019236-A	1	B00BK00009	Clip, Cowl Harness
PT00550288-B	1	BRKT; TVX STIFFENER	Reinforcement, Expansion Valve
PT00598898-A	1	STUD; DOUBLE ENDED M8-M6	Stud, Flange, Front A/C
SC00004344-A	1	NUT - M6X1.0 HX FL CL8 R107G	

**!** **Attention:** The parts listed in this table are only for unique steps that are called out in this bulletin. Some sections of this bulletin might refer to Service Manual procedures which require additional parts. Always review the bulletin and all potentially related Service Manual procedures before ordering parts and beginning work.

**Required Special Tools:**

Tool Number	Tool Name
TSN00733	Rivet nut installation kit

**!** **Attention:** The special tools listed in this table are only for unique steps that are called out in this bulletin. Some sections of this bulletin might refer to Service Manual procedures which require additional special tools. Always review the bulletin and all potentially related Service Manual procedures before beginning work.

## Preparation

Evacuate refrigerant (refer to service manual procedure 264650024).



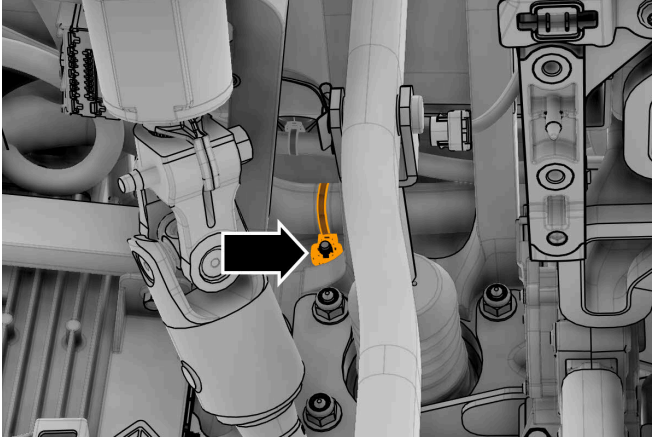
**Note:** Do not replace the desiccant insert.



**Note:** Perform the procedure through **Install Refrigerant Line Brackets** step 3 while the refrigerant is being recovered.

## Inspection

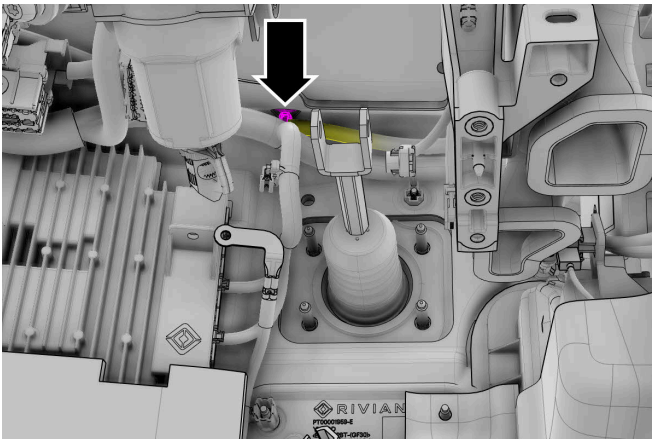
1. Check the vehicle build date:
  - If the vehicle was built before September 16, 2022: Skip to the [Reroute Low Voltage Harness](#) section.
  - If the vehicle was built between September 16, 2022 and October 17, 2022: Continue to the next step.
  - If the vehicle was built after October 17, 2022: Skip to the [Install Refrigerant Line Brackets](#) section.
2. Remove: Airbag, Knee, LH (refer to service manual procedure 724015010).
3. Inspect for the presence of the highlighted component(s).



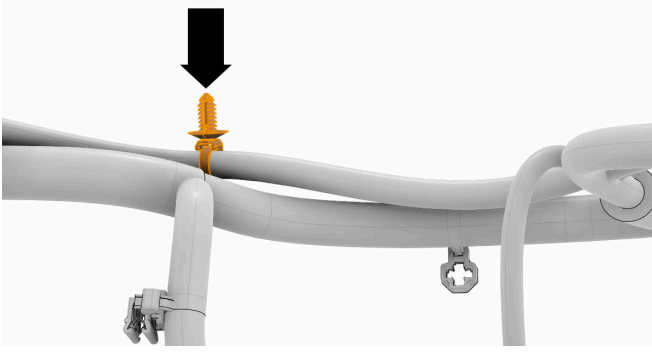
- If the component is present: Skip to the [Install Refrigerant Line Brackets](#) section.
- If the component is not present: Continue to the next section.

## Reroute Low Voltage Harness

1. Remove: Pedal, Brake (refer to service manual procedure 145510010).
- 2.

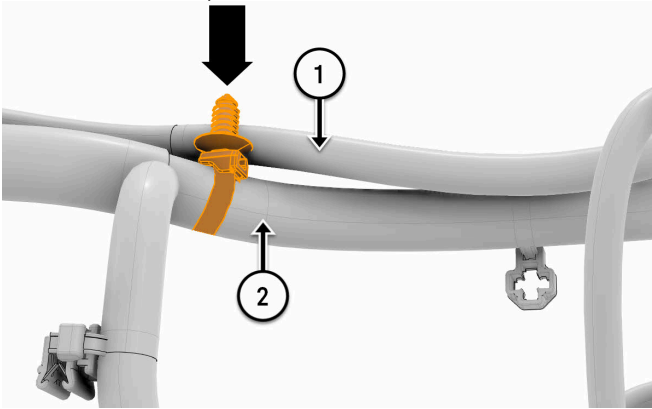



3. Remove and discard:



 **Note:** Shown with components removed for clarity.

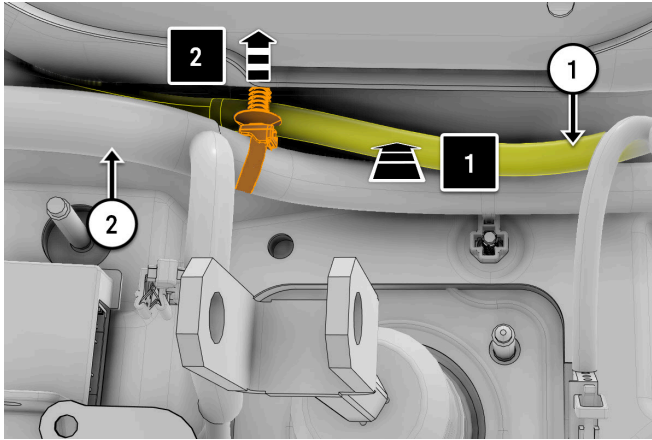
4. Attach the new clip to **Harness, Cowl**, as shown.




 **Note:** Shown with components removed for clarity.

1	Harness, 12V Batteries - LH Fuse Box
2	Harness, Cowl

5. Push **Harness, 12V Batteries - LH Fuse Box** forward until it makes contact with the body. Position **Harness, Cowl** to hold **Harness, 12V Batteries - LH Fuse Box** against the body. Secure the new clip.




1	Harness, 12V Batteries - LH Fuse Box
2	Harness, Cowl

 **Note:** The rework in this step might not be possible on some early production vehicles. In these cases: Use cable ties to secure the harnesses so that they do not contact the brake pedal assembly.

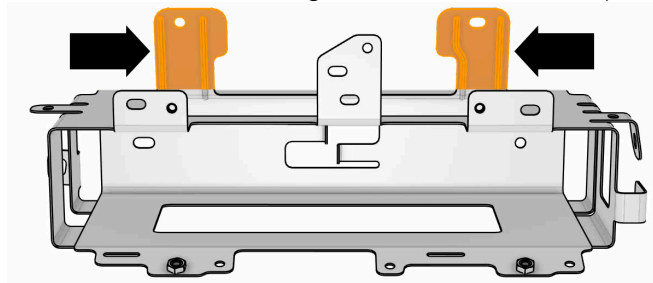
6. Continue to the next section.

## Install Refrigerant Line Brackets

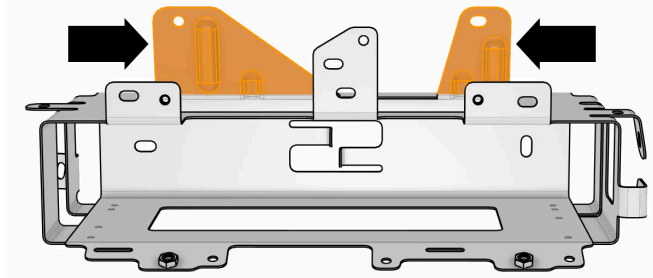
1. Remove: Screen, Leaf (refer to service manual procedure 647920010).
2. Remove: Bracket, 12V Battery (refer to service manual procedure 786620010).

 **Note:** Inspect the highlighted area(s).

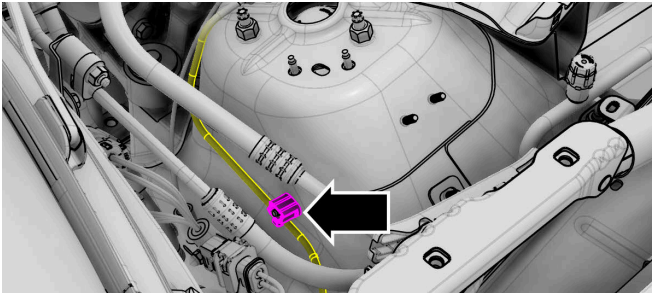
- If the highlighted tabs on the component appear as shown: Replace the component with revision C or later before reinstalling. Continue to the next step.




- If the highlighted tabs on the component appear as shown: Continue to the next step.



3. Remove and discard:

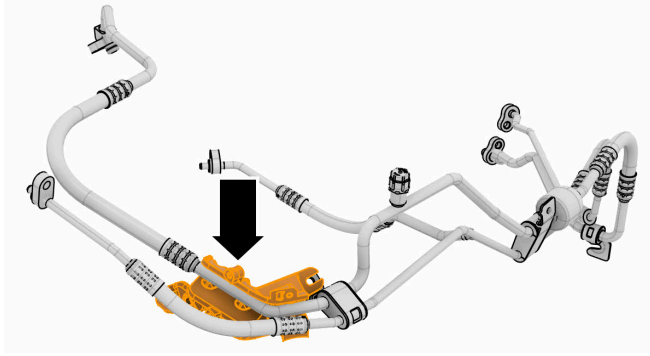


 **Warning:** Make sure that the refrigerant has been fully recovered before continuing.

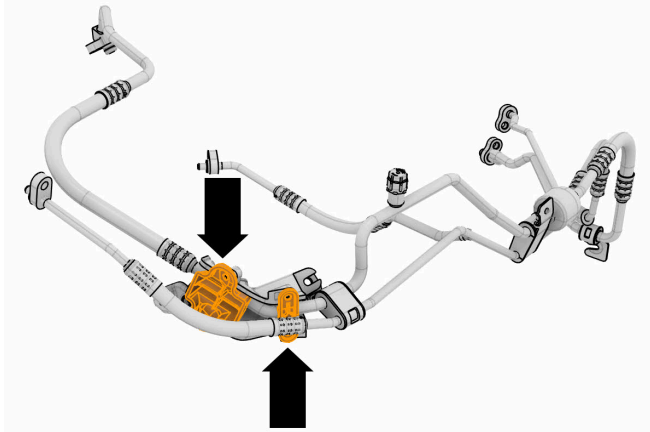
4. Remove: Line, Refrigerant, High Pressure (refer to service manual procedure 264634010).
5. Use plugs or caps to cover all opening(s).

6. On the removed component(s):

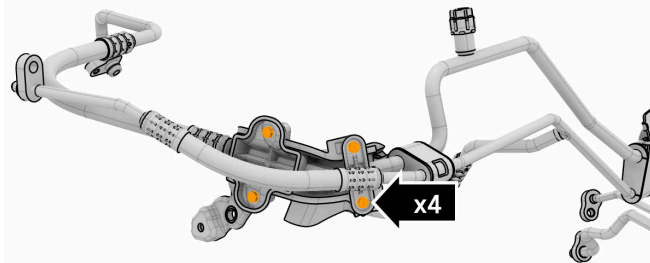
a. Install:



b. Install:

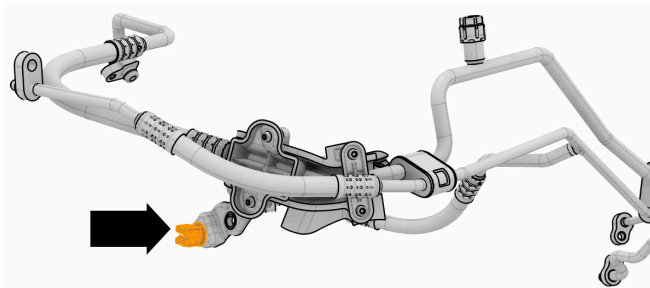


c. Install:

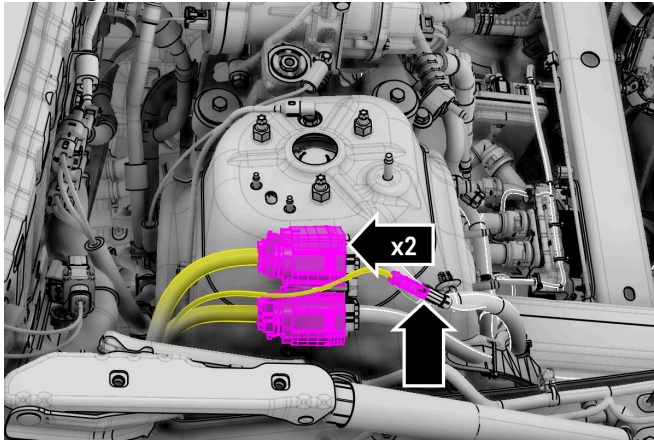


**Note:** Do not fully tighten the fastener(s) at this time.

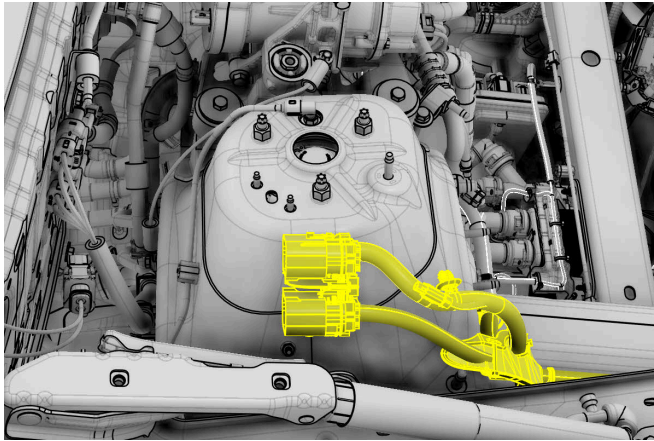
d. Install:



7. Working on the RH side of the vehicle:



8.

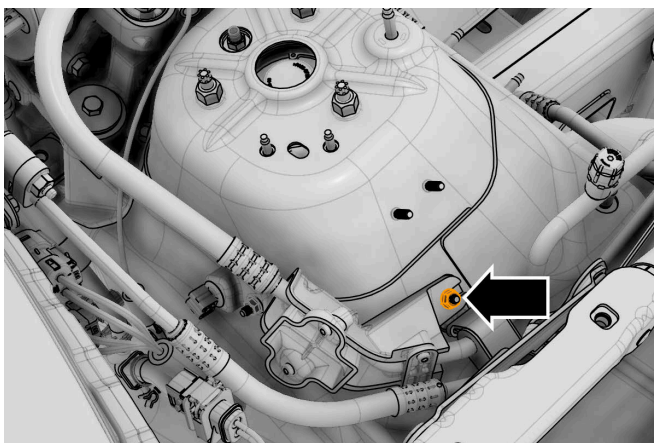


9. Remove plugs or caps covering all opening(s).

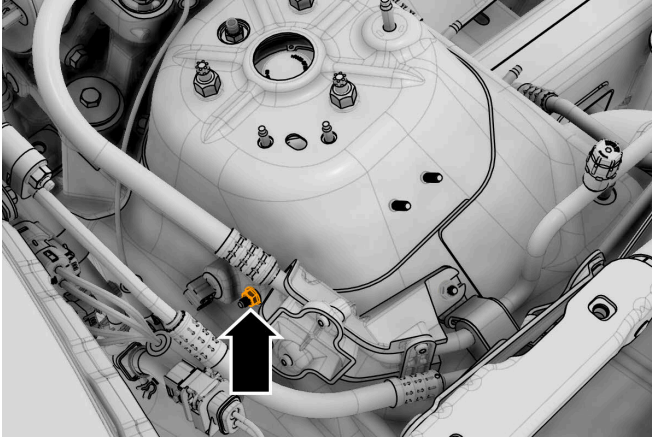
10. Install: Line, Refrigerant, High Pressure (refer to service manual procedure 264634010).



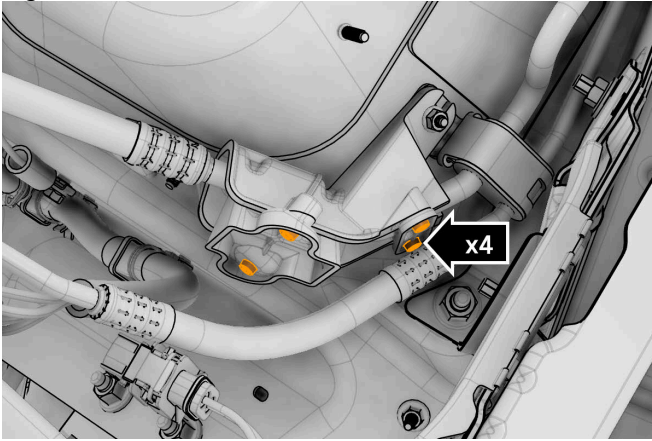
**Note:** Reinstall the fastener in the highlighted position.



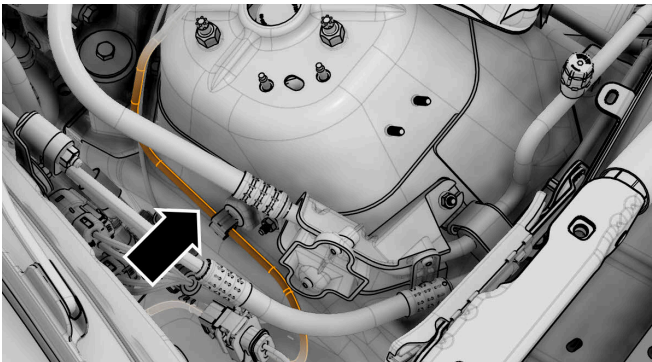
11. Install:



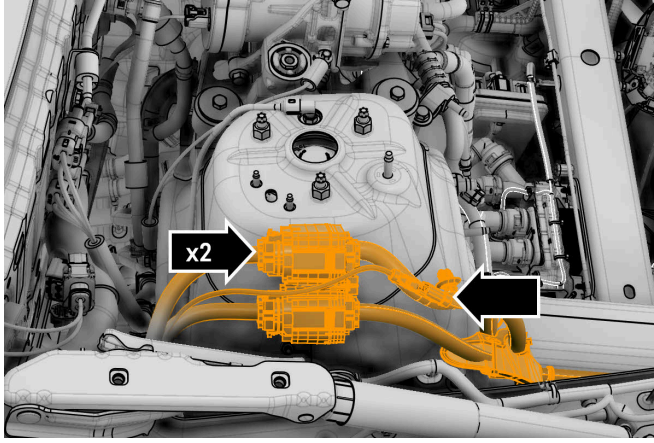
12. Tighten:



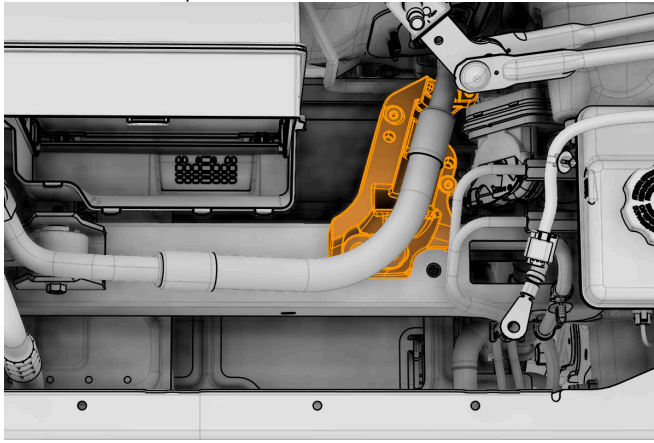
13. Attach:



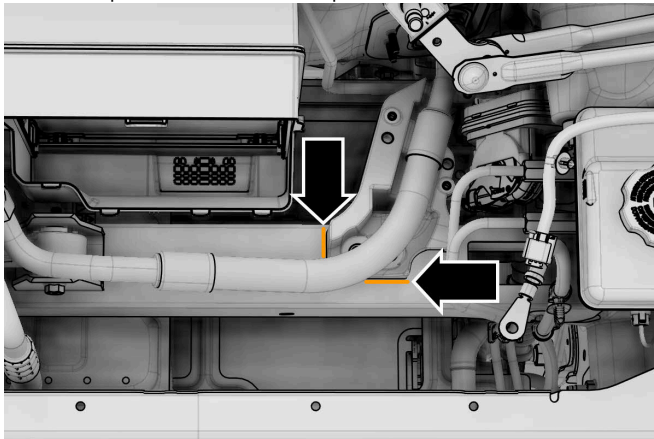
14. Reconnect:



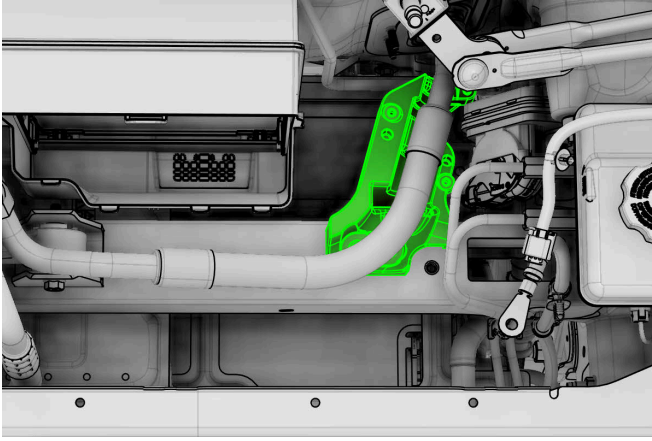
15. Test-fit the component.



16. Mark the position of the component.



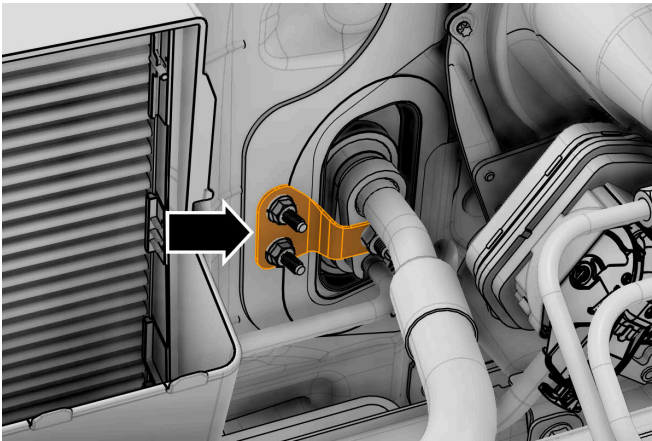
17. Remove:



18. Inspect for the presence of the highlighted component(s).



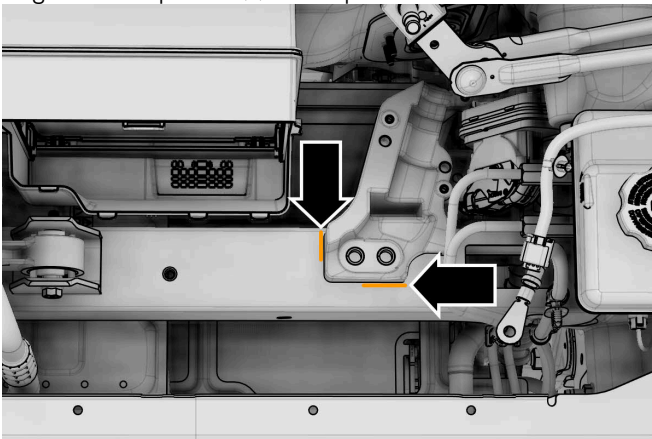
**Note:** This information will be used in a later step.



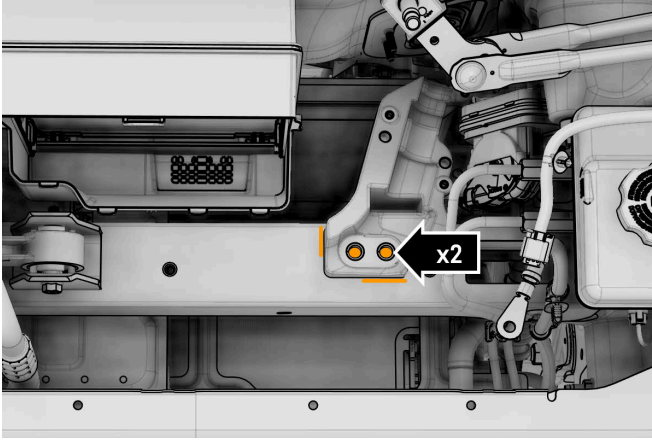
19. Remove: Line, Refrigerant, Compressor, Low Pressure (refer to service manual procedure 264630010).

20. Use plugs or caps to cover all opening(s).

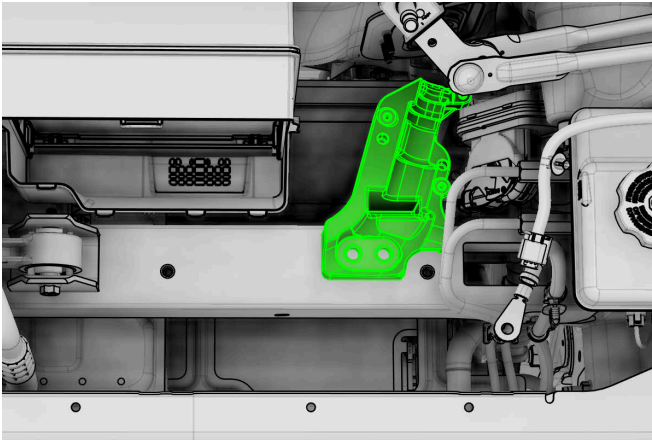
21. Align the component(s) to the position that was marked earlier.



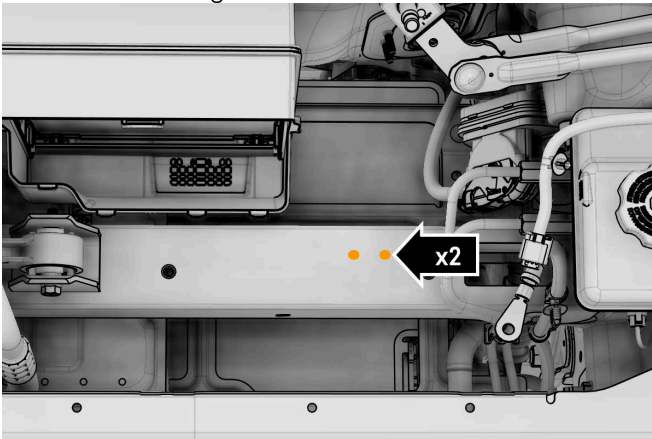
22. In 2 locations: Using a marking punch: Mark the center of each hole in the component.



23. Remove:

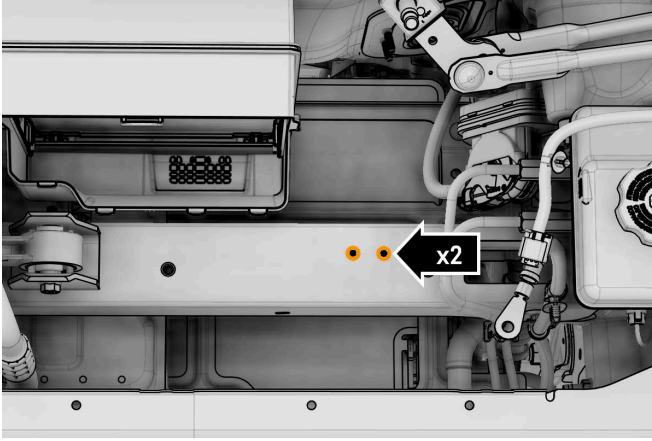


24. In 2 locations: Using a drill with a 3.2 mm (1/8 inch) drill bit: Drill through the marks.

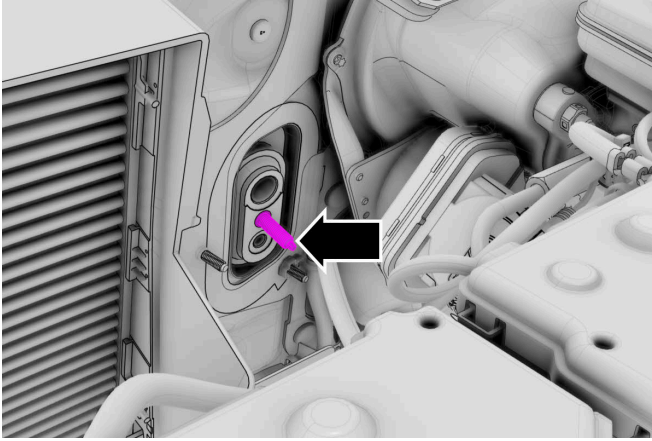


25. In 2 locations: Using a drill with a 10 mm drill bit: Drill through the holes.

26. Using the rivet nut installation kit: Install the rivet nuts.



27. If the component shown in step 18 was not present: Replace:

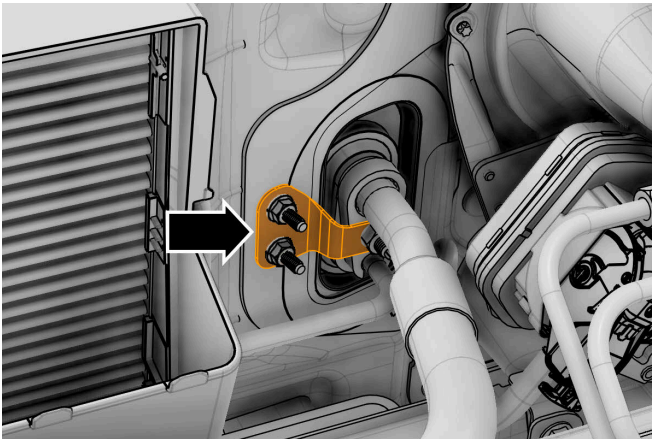


28. Remove plugs or caps covering all opening(s).

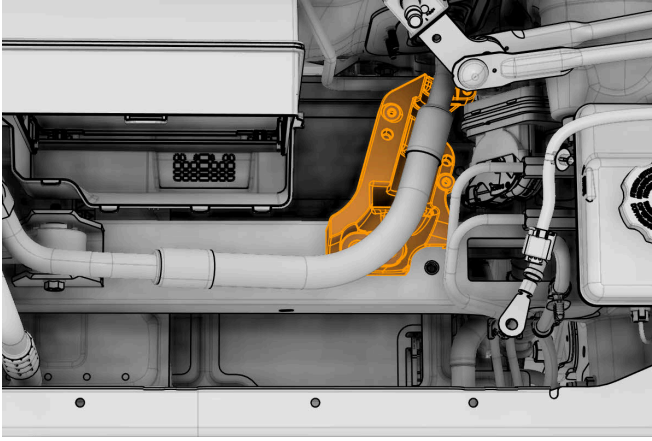
29. Install: Line, Refrigerant, Compressor, Low Pressure (refer to service manual procedure 264630010).

30.

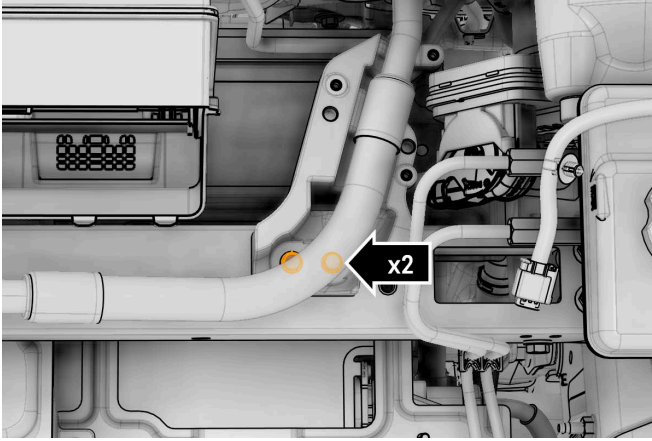
- If the component shown in step 18 was present: Reinstall the original component.
- If the component shown in step 18 was not present: Install a new component.



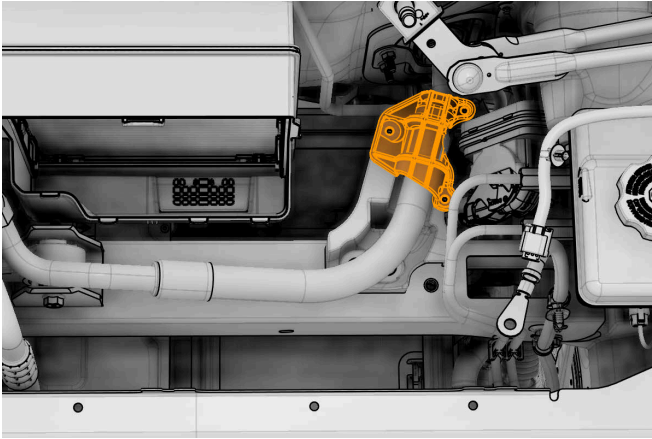
31. Install:



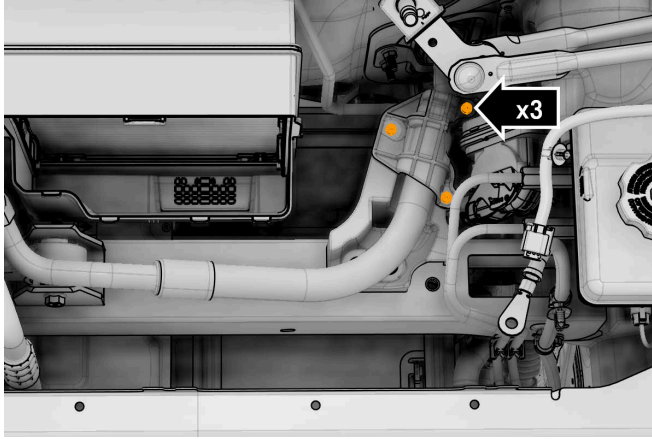
32. Install:



33. Install:



34. Install:



35. Continue to the next section.

#### Torque specifications in this section

Step Number	Torque (Nm)
10	10
11	10
12	5
27	7
32	10
34	5

## Final Steps

1. Recharge refrigerant (refer to service manual procedure 264650024).



**Note:** Do not replace the desiccant insert.

2. Reinstall all components that were removed for access and replace all non-reusable components. Refer to the service manual procedures referenced in this document for additional component reusability information and torque specifications.

## Labor Codes

<b>Labor Code</b>	<b>Description</b>
RSB932400100	RSB-93-24-001 not applicable
RSB932400101	Retrofit refrigerant line brackets
RSB932400102	Retrofit refrigerant line brackets, replace lower 12V battery bracket
RSB932400103	Retrofit refrigerant line brackets, retrofit expansion valve reinforcement
RSB932400104	Retrofit refrigerant line brackets, retrofit expansion valve reinforcement, replace lower 12V battery bracket
RSB932400105	Inspect low voltage harness, retrofit refrigerant line brackets
RSB932400106	Inspect low voltage harness, retrofit refrigerant line brackets, replace lower 12V battery bracket
RSB932400107	Inspect low voltage harness, retrofit refrigerant line brackets, retrofit expansion valve reinforcement
RSB932400108	Inspect low voltage harness, retrofit refrigerant line brackets, retrofit expansion valve reinforcement, replace lower 12V battery bracket
RSB932400109	Reroute low voltage harness, retrofit refrigerant line brackets
RSB932400110	Reroute low voltage harness, retrofit refrigerant line brackets, replace lower 12V battery bracket
RSB932400111	Reroute low voltage harness, retrofit refrigerant line brackets, retrofit expansion valve reinforcement
RSB932400112	Reroute low voltage harness, retrofit refrigerant line brackets, retrofit expansion valve reinforcement, replace lower 12V battery bracket
Contact <a href="mailto:ServiceDocumentFeedback@rivian.com">ServiceDocumentFeedback@rivian.com</a> regarding labor codes and document content.	