

# RCA-18-24-001-1: Tighten Hub to Knuckle Fasteners

Rivian is initiating a customer satisfaction campaign for some model year 2023-2024 R1T and R1S vehicles. On these vehicles, the wheel hub to knuckle joint may have been assembled with an updated fastener using a torque value intended for the previously-used fastener. A fastener torqued to the previously-used lower value may cause an audible noise while driving at low speeds but will not impact vehicle performance. Rivian will retorque the affected fasteners. Rivian is launching this campaign for customer satisfaction and to ensure the quality of Rivian vehicles.

<b>Document Type</b>	Customer Satisfaction Campaign Bulletin
<b>Date</b>	September 20, 2024
<b>Affected Region(s)</b>	USA, Canada
<b>Affected Model(s)</b>	R1T, R1S
<b>Model Year(s)</b>	2023-2024
<b>Approximate Build Dates</b>	March 2023-February 2024
 Refer to <b>Open Containments</b> in ServiceOS to determine if this document applies to a specific vehicle.	
<b>Vehicle System</b>	18 - Suspension
<b>Minimum Service Location</b>	Mobile

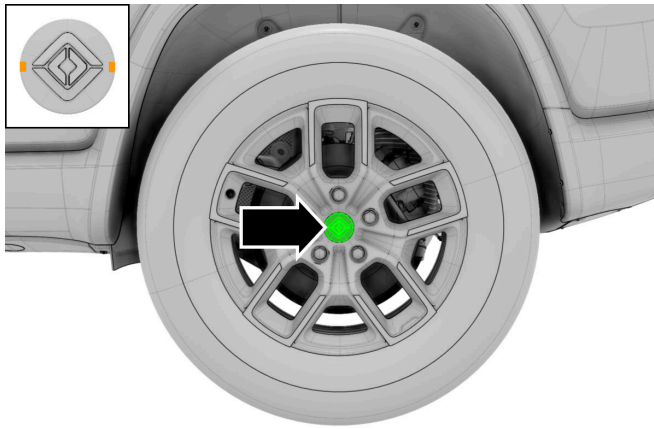
## Required Parts


Part Number	Quantity	Engineering Name	Service Name/Notes
SC00006346-B	4	BOLT - M10X1.5X50 HX FL WSHR LOCK SPCL CL10.9 R105G	

**!** **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.

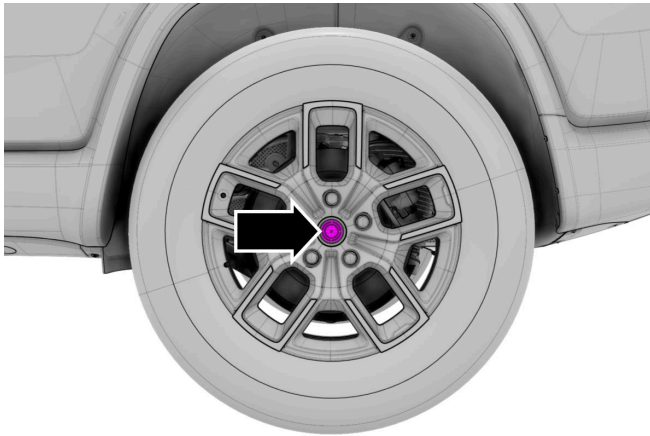
## Procedure


1.
  - If using a vehicle lift: Raise and Support Vehicle (refer to service manual procedure 981020017).  
If not using a vehicle lift: Set the ride height to highest.
2. LH rear:
  - a.
    - Vehicles with 21 inch wheels: Remove: Cover, Wheel (refer to service manual procedure 221025010).
    - Other vehicles: Remove:



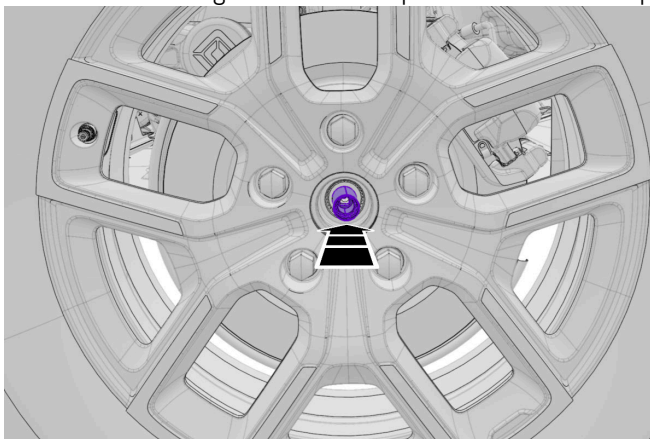
 **Note:** Pry in the highlighted area(s).

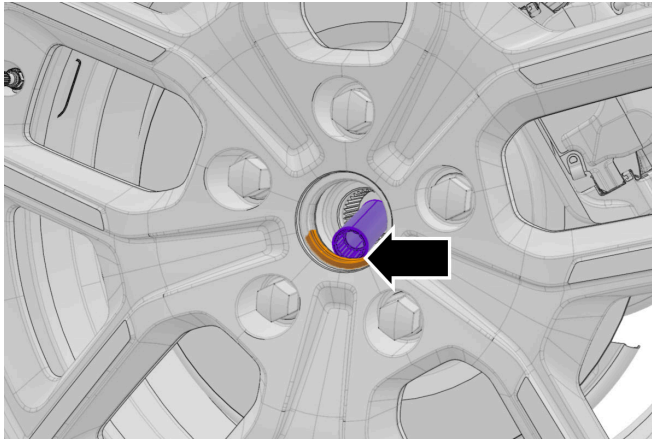
b. Remove and discard:



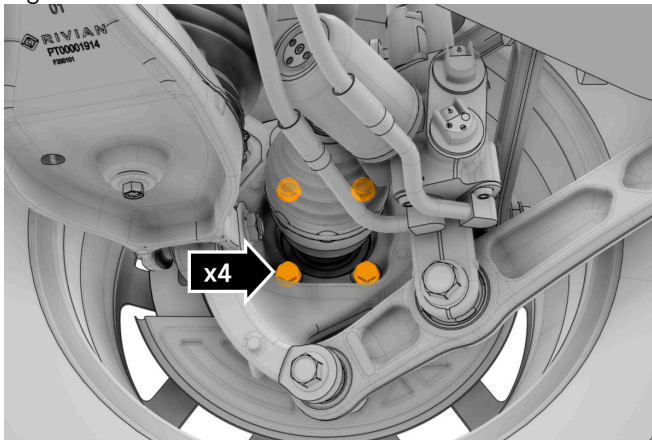
 **CAUTION:** Non-reusable component(s).


c. Using a 3/8 inch drive 17 mm deep socket: Press in on the rear halfshaft as much as possible, then brace the socket against the inner lip of the wheel to keep the halfshaft in place.





d. Tighten:



e.  **Warning:** Put on work gloves to avoid a pinch condition in the next step.

f. Remove the socket that was installed in step [2.c](#).

g. Make sure that the halfshaft is properly seated within the knuckle.

h. Install, using new component(s):



**Note:** When installing the halfshaft bolt:

- i. Use a new bolt.
- ii. Torque the bolt to 80 Nm.



- iii. Loosen the bolt 1 turn.
- iv. Torque the bolt to 128 Nm.

i. Reinstall the components that were removed in step 2.a.

3. Repeat step 2 on the RH side.

4. LH front:

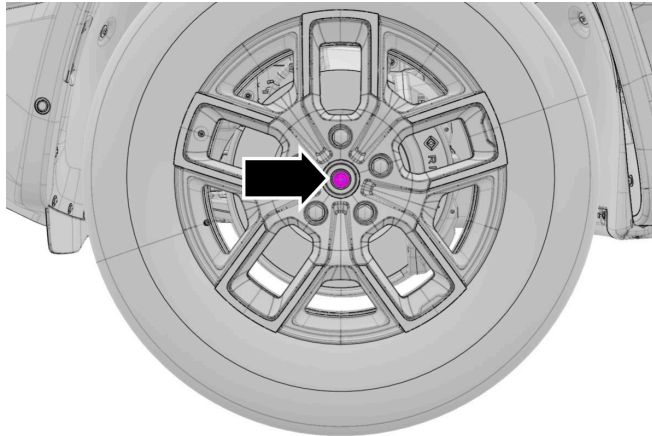
a.

- Vehicles with 21 inch wheels: Remove: Cover, Wheel (refer to service manual procedure 221025010).
- Other vehicles: Remove:



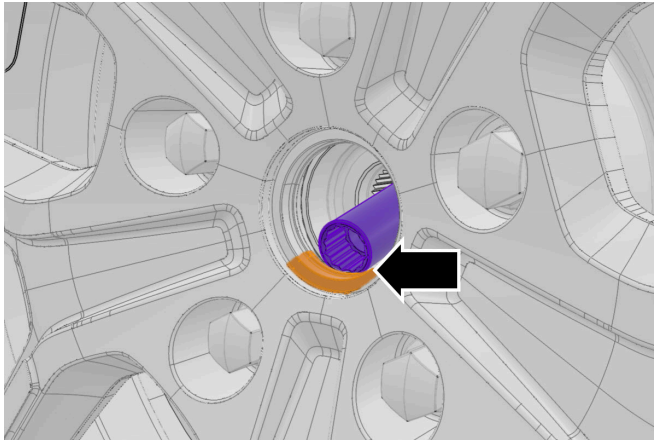
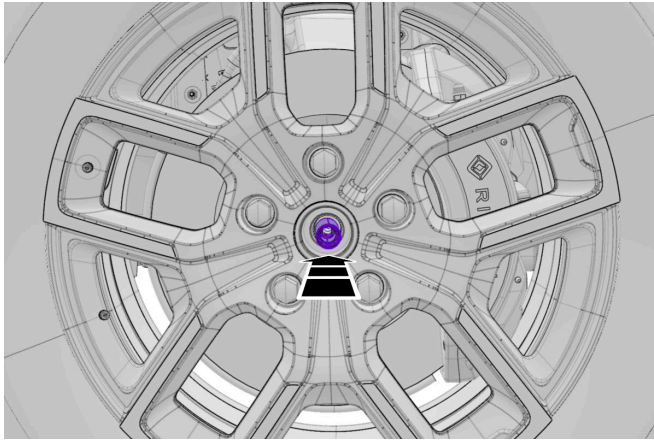
**Note:** Pry in the highlighted area(s).

b. Remove and discard:

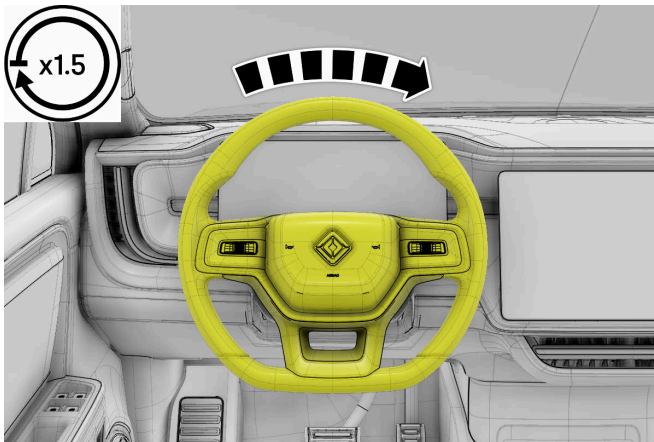


**CAUTION:** Non-reusable component(s).

c. Using a 3/8 inch drive 17 mm deep socket: Press in on the front halfshaft as much as possible, then brace the socket against the inner lip of the wheel to keep the halfshaft in place.

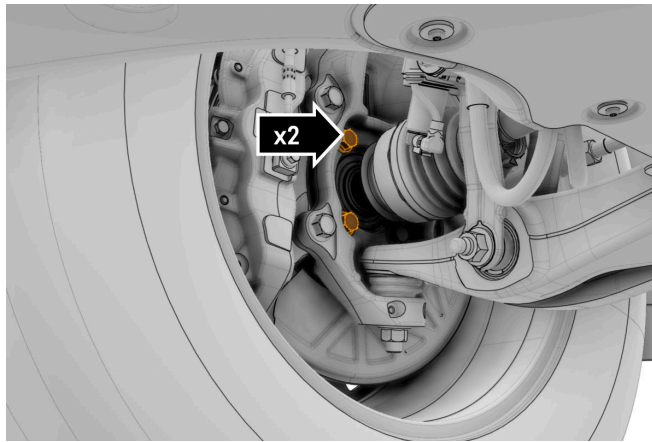


d.



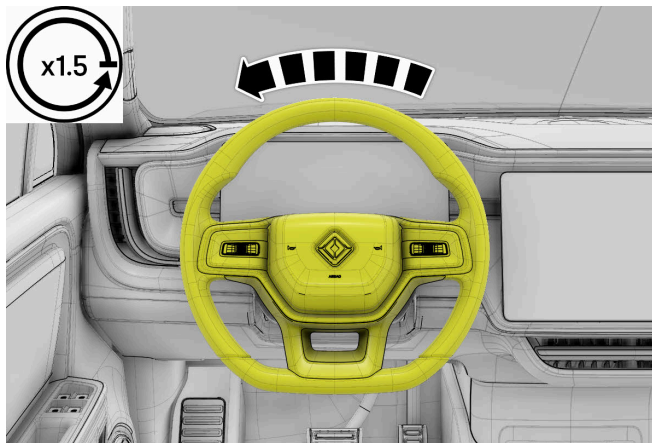
e. At the rear of the component: Tighten:



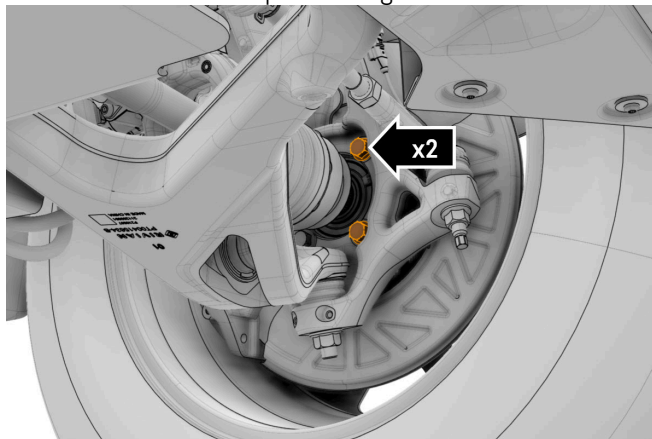



 **Tip:** Use a 3/8 inch drive socket and a 1/2 to 3/8 inch adapter.

f.



g. At the front of the component: Tighten:

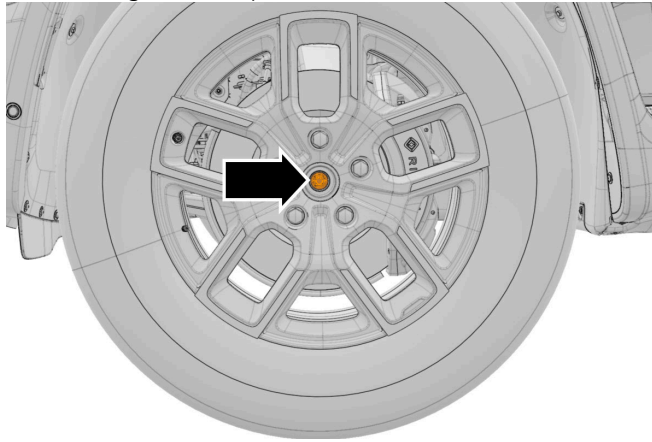


h.  **Warning:** Put on work gloves to avoid a pinch condition in the next step.

i. Remove the socket that was installed in step 4.c.

j. Make sure that the halfshaft is properly seated within the knuckle.

k. Install, using new component(s):



**Note:** When installing the halfshaft bolt:

- i. Use a new bolt.
- ii. Torque the bolt to 80 Nm.
- iii. Loosen the bolt 1 turn.
- iv. Torque the bolt to 128 Nm.

l. Reinstall the components that were removed in step 4.a.

5. Repeat step 4 on the RH side.

**Torque specifications in this section**

Step Number	Torque (Nm)
2.d	105
2.h	128
4.e	105
4.g	105
4.k	128

## Labor Codes

Labor Code	Description
RCA182400100	RCA-18-24-001 not applicable
RCA182400101	Tighten all hub to knuckle fasteners
Contact <a href="mailto:ServiceDocumentFeedback@rivian.com">ServiceDocumentFeedback@rivian.com</a> regarding labor codes and document content.	