

# RCA-38-23-001-1: Inadequate Halfshaft Spline Interference

Rivian is initiating a customer satisfaction campaign for some model year 2022 R1S and R1T vehicles that may have been built with inadequate press fit force between the halfshaft splines and the wheel hubs. In some instances, this condition may result in a loss of torque of the halfshaft bolt and subsequent noise and/or separation of the bolt and wheel center cap. Without this bolt there may be additional movement of the components and/or noise but there will be no resulting changes in the performance of the vehicle. Rivian will replace the halfshaft bolts and torque them to a higher specification to improve the press fit force and bolt retention. In addition, washers will be installed on the halfshafts to reduce potential noise. 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>	April 10, 2023
<b>Affected Region(s)</b>	USA
<b>Affected Model(s)</b>	R1T, R1S
<b>Model Year(s)</b>	2022
<b>Approximate Build Dates</b>	August 2021 - May 2022
 Refer to <b>Open Containments</b> in ServiceOS to determine if this document applies to a specific vehicle.	
<b>Vehicle System</b>	38 - Front Drive Unit
<b>Minimum Service Location</b>	Mobile

## Required Parts

Part Number	Quantity	Engineering Name	Service Name/Notes
PT00753512-B	2	TING WASHER; FRONT HALFSHAFT	
PT00753511-C	2	TING WASHER; REAR HALFSHAFT	
One of the following:			
PT00856494-A	As needed	Molykote M-77	
PT00856493-A	As needed	Molykote Anti-Seize	Molykote 1000

**!** **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.

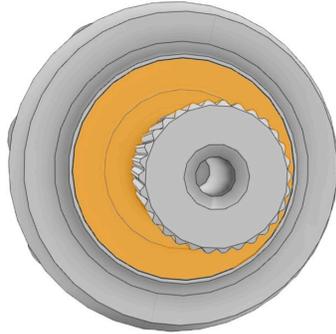
## Required Special Tools:

Tool Number	Tool name
TSN01096-300-A	Ting Washer Installation Tool

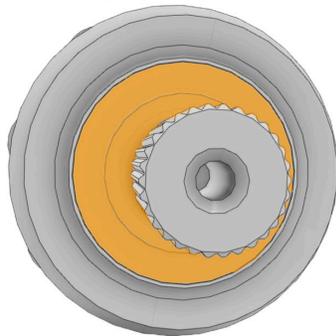
- !** **Attention:** The special tools listed in this table are only for unique steps that are called out in this bulletin. Some sections of this bulletin might refer to Service Manual procedures which require additional special tools. Always review the bulletin and all potentially related Service Manual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

## Front Halfshafts

1. Remove: Knuckle, Front, LH (refer to service manual procedure 181020011).
2. Using a nylon mesh scuff pad: Clean the highlighted area(s).



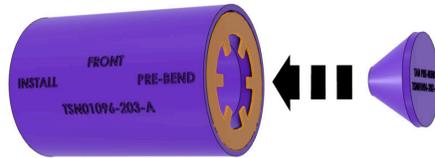
3. Apply grease to the highlighted area(s).



4. Position the washer in the "PRE-BEND" side of the front washer sleeve.

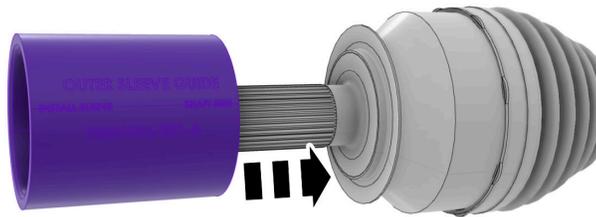


5. Push the pre-bend tool into the sleeve to bend the washer tabs. Continue pressing until the tabs do not bend any further.



**i** **Tip:** If necessary: Use a vise or C-clamp to apply pressure to the pre-bend tool.

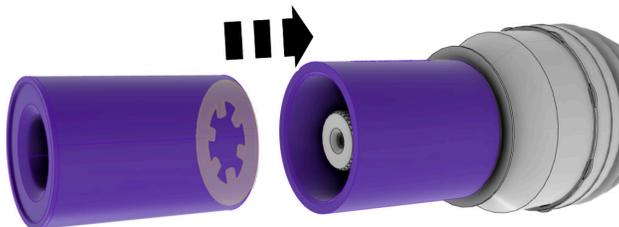
6. Position the outer sleeve onto the halfshaft. Make sure that the side of the sleeve labeled "SHAFT SIDE" points toward the vehicle.



7. Position the washer in the "INSTALL" side of the front washer sleeve. Make sure that the bent tabs point toward the inside of the tool.



8. Install the front washer sleeve into the outer sleeve. Make sure that the side of the tool labeled "INSTALL" points toward the vehicle.



9. Push on the front washer sleeve to fully seat the washer onto the halfshaft. If necessary: Use a mallet.

- Remove the special tools. Make sure that the washer is fully seated onto the halfshaft. If the washer is not fully seated, repeat steps 6 - 9.



- Repeat the steps in this section on the opposite side of the vehicle.
- Continue to the [Rear Halfshafts](#) section.

## Rear Halfshafts

- Remove: Knuckle, Rear, LH (refer to service manual procedure 183225010).



**Note:** It is not necessary to remove the hub from the knuckle.

- Using the rear washer sleeve: Repeat steps 2-10 of the previous section on the rear halfshaft.
- Repeat the steps in this section on the opposite side of the vehicle.
- 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

Labor Code	Description
RCA382300100	RCA-38-23-001 not applicable
RCA382300101	Install washers on 4 halfshafts
Contact <a href="mailto:ServiceDocumentFeedback@rivian.com">ServiceDocumentFeedback@rivian.com</a> regarding labor codes and document content.	