

Last modified: 03/03/2020 10:50:40

# Halfshaft - Front Drive Unit - LH (Lubricate at Hub)

Correction Code 39302405

Special tool(s) required for this procedure:

Supplier	Part Number	Description
Tesla	1117845-00-A	Wheel Lug Nut Cover Removal Tool
Tesla	1096075-00-A	Hydraulic Hub Puller

## Removal

1. Use a suction cup clamp to remove the LH front wheel center cap.



2. Use the wheel nut cover removal tool to remove the LH front wheel lug nut covers.



3. Loosen the LH front wheel lug nuts.



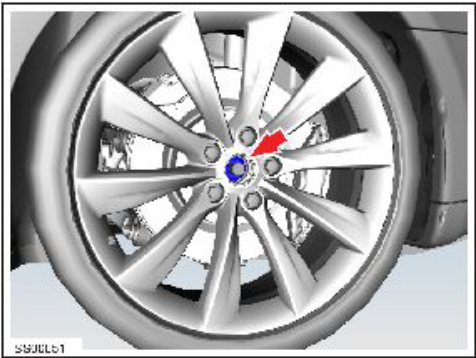
**CAUTION**


Use only hand tools to remove or install the fasteners. Do not use impact or power tools.

**CAUTION**

Use a 6 point socket. Do not use a 12 point socket or a specialty socket.

4. Loosen the LH front drive unit halfshaft nut.



5. Raise and support the vehicle. See [Raise Vehicle - 2 Post Lift](#) .
6. Remove the lug nuts from the LH front wheel, and then remove the wheel from the vehicle.

7. Remove and discard the LH front drive unit halfshaft nut and washer.



**Note**  
The washer is attached to the nut.

8. Use 2 lug nuts and 2 hydraulic hub puller washers to install the hydraulic hub puller tool onto the LH front wheel studs.

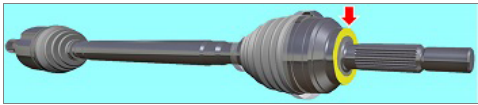


**CAUTION**  
Install the washer and nut sets on opposite sides of the LH front wheel hub.

9. Hold the hub in position, and turn the hydraulic hub puller tool handle clockwise to push the LH front drive unit halfshaft in from the LH front hub assembly for a distance of 50 mm.



**CAUTION**  
If the halfshaft stops moving in respect to the hub, stop, and turn the tool handle counter-clockwise for two turns.



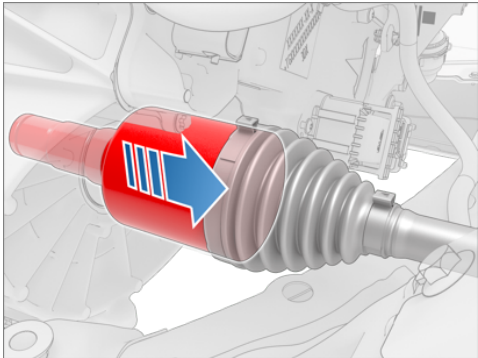
10. Apply approximately 1 gram of *Molykote M-77 Lubricant Paste* only to the hub mating face on the outboard side of the LH front drive unit halfshaft.

Tip: A bent acid brush can be of assistance.

**CAUTION**

Do not apply any lubricant to the halfshaft splines. If lubricant is mistakenly applied, wipe the splines clean with a shop towel.

11. Remove the hydraulic hub puller tool from the LH front wheel studs.



12. Pull on the inner halfshaft cup to confirm that the circlip is locked into place. If the halfshaft detaches from the drive unit then reinstall the halfshaft and then test that it is fully seated.

**CAUTION**


If reinstalling the halfshaft to the drive unit:

- Take care not to damage or displace the oil seals.
- Make sure that the opening of the snap rings are facing towards the bottom of the drive unit.
- Carefully push the halfshaft into the drive unit until there is an audible "click" from the halfshaft stub contacting the pinion shaft.
- There will be a slight pulling sensation on the halfshaft as the halfshaft circlip locks into place.
- Pull on the inner halfshaft cup to confirm that the circlip is locked into place. If the halfshaft detaches from the drive unit then reinstall the halfshaft and then test that it is fully seated.

13. Install the LH front drive unit halfshaft into the LH front hub assembly, and then install and hand-tighten the front drive unit halfshaft nut and new washer.



14. Install the LH front wheel, and then install and hand-tighten the wheel lug nuts.

15. Lower the vehicle. See [Raise Vehicle - 2 Post Lift](#)  .
16. Fully tighten the LH front wheel lug nuts in a star-pattern (torque 175 Nm).



17. Fully tighten the LH front drive unit halfshaft nut (torque 245 Nm).



18. Install the LH front wheel lug nut covers (x5).



19. Install the LH front wheel center cap.

**Note**

Make sure that the emblem is aligned with the valve stem.

