

SAFETY RECALL

Volvo Trucks North America
Greensboro, NC USA

VOLVO

Date	Number	Release	Page
02.2017	RVXX1607	01	1 (17)

Front Axle Hubs, Underrated

VN, VHD

SAFETY RECALL INFORMATION:

(February 2017)

Some VOLVO VNL, VNM, and VHD models built between 01/01/2016 and 12/31/2016 were assembled with front steer axle hubs that do not support the gross axle weight rating of the front steer axle. Specifically, 5,987 Kg (13,200 lb) rated front hubs were used on trucks requiring a 6,622 Kg (14,600 lb) rated front axle. This condition could result in premature failure of the hub, bearings etc., which may cause the front hub assembly to separate from the front axle. If the front hub assembly separates, the driver may lose control of the vehicle or parts may be dropped on the road that can present a risk for other motorists. The repair procedure outlined in this safety recall will replace the aluminum steer axle hubs with steel hubs that are rated to the 6,622 Kg (14,600 lb) gross axle weight rating.

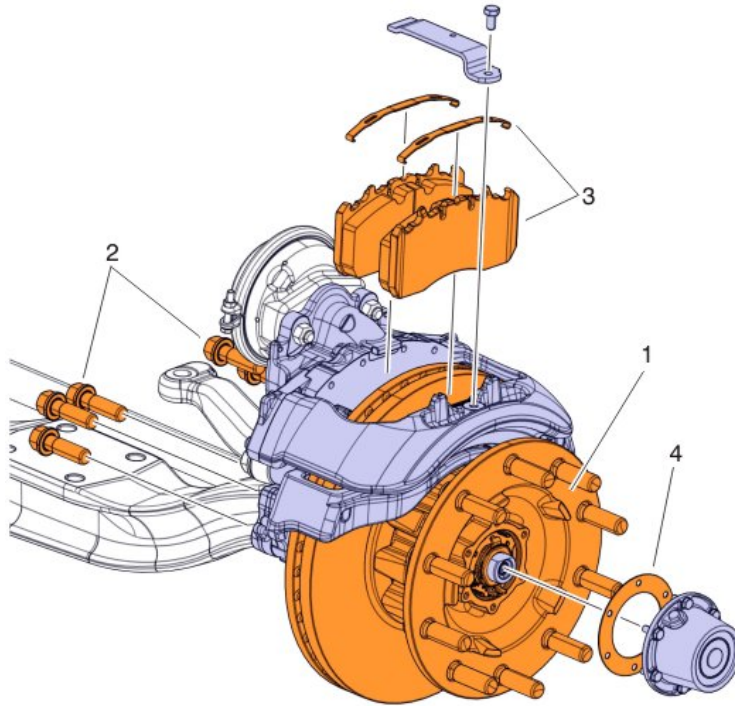
VOLVO Trucks has received no reports of personal injury as a result of this condition. Therefore, VOLVO considers this as a proactive measure to protect the public and VOLVO's customers from the potential risk associated with this defect.

VEHICLES AFFECTED:

Vehicles affected by this recall include certain 2017 VNL, VNM and VHD truck models.

VEHICLE IDENTIFICATION NUMBERS (VIN):

There are 31 trucks affected by this recall (16 USA, and 15 Canada).



Required Parts:

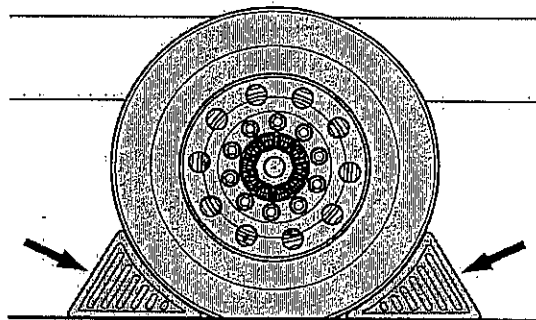
To schedule parts orders and repairs, please call (877) 986-5862 with the Vehicle Identification Number (VIN) of the vehicle in need of this repair. See the **VIN Key for VOLVO Underrated Hub Parts** table on page 3.

Parts List for Repair 1A (VOLVO Tapered Hub)			
Item	Description	Part Number	Qty
1	Wheel Hub, Front	22757125	2
2	Flange Screw	1079435	12
3	Pad, Service Kit	85151479	1
4	Gasket, Hub Cap	25155409	2
5	Hub Oil	N/A	591 ml (20 oz)

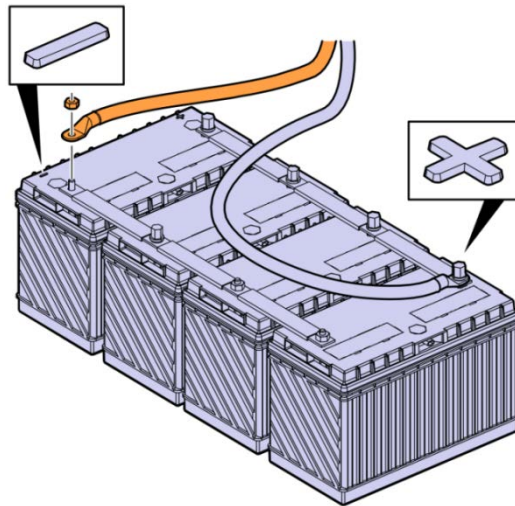
Parts List for Repair 1B (VOLVO Tapered Hub)			
Item	Description	Part Number	Qty
1	Wheel Hub, Front	22757125	2
2	Flange Screw	1079435	12
3	Pad, Service Kit	22120798	1
4	Gasket, Hub Cap	25155409	2
5	Hub Oil	N/A	591 ml (20 oz)

Decommissioning the Truck for Repair:

1. Secure the vehicle for service by parking on a flat and level surface, placing the transmission in neutral, applying the parking brake, turning the ignition key to the OFF position, and chocking the front wheels.



2. Disconnect the cable from the battery's negative (ground) terminal.



3. Using a jack, lift the drive axle and support with the drive axle with jack stands.

 **DANGER**

A raised vehicle which has not been properly secured can cause serious or death.

NOTE

Use only jack stands with adequate rating. Verify the jack stands are fault free. **DO NOT** work under a vehicle until it is supported on jack stands.

NOTE

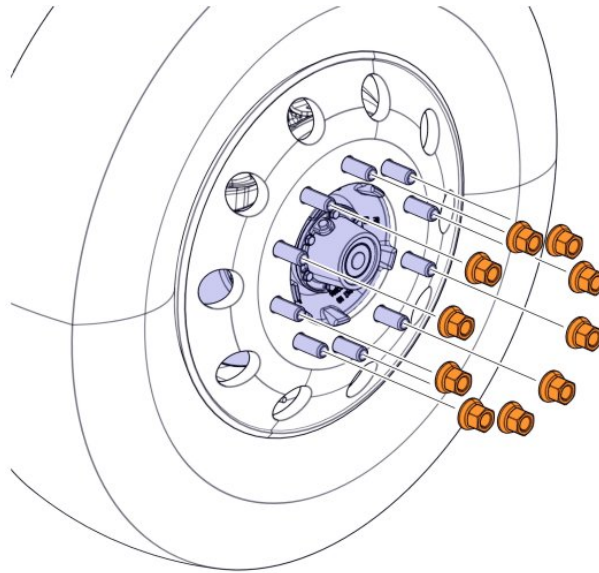
The Illustrations shown in this document are used for reference only and may differ slightly from the actual vehicle being serviced. However, the replacement procedure is represented as accurately as possible.

Underrated Front Axle Hubs Replacement 1A and 1B (driver side shown):

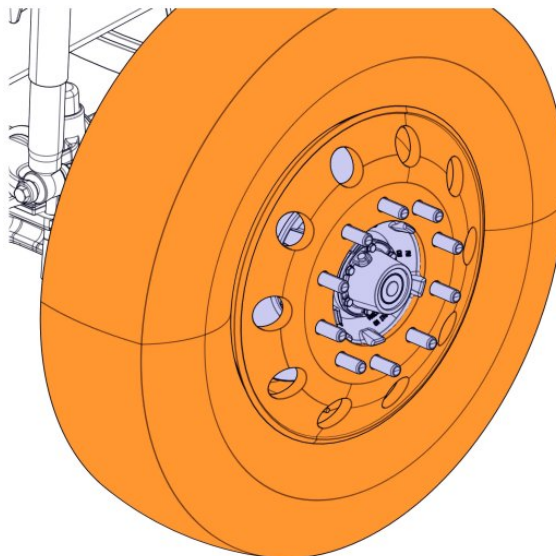
NOTE

Use the appropriate parts table for repair procedure 1A or 1B per VIN number shown on page 3.

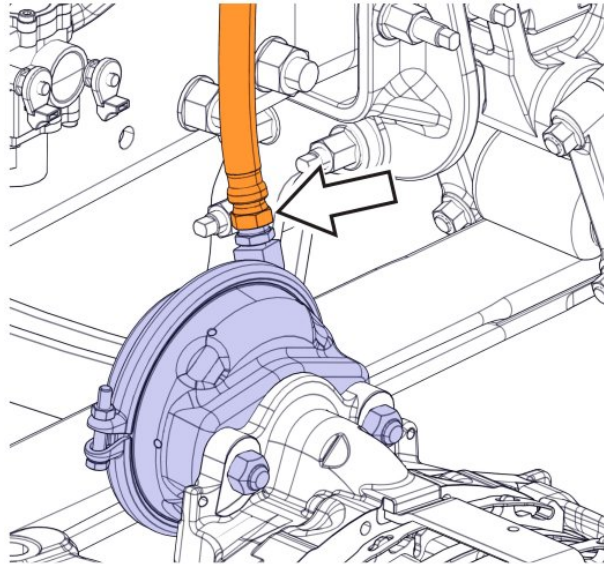
1. Remove the wheel nuts.



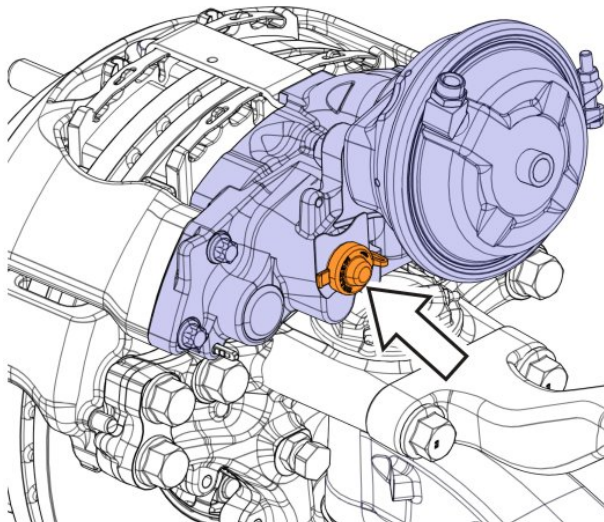
2. Remove the wheels.



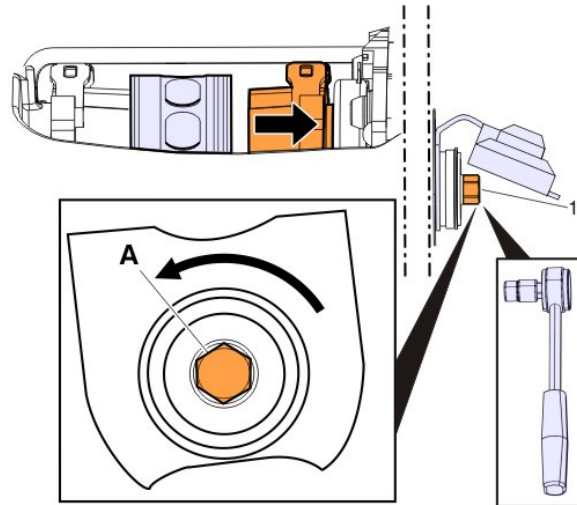
3. Remove the brake chamber air line.



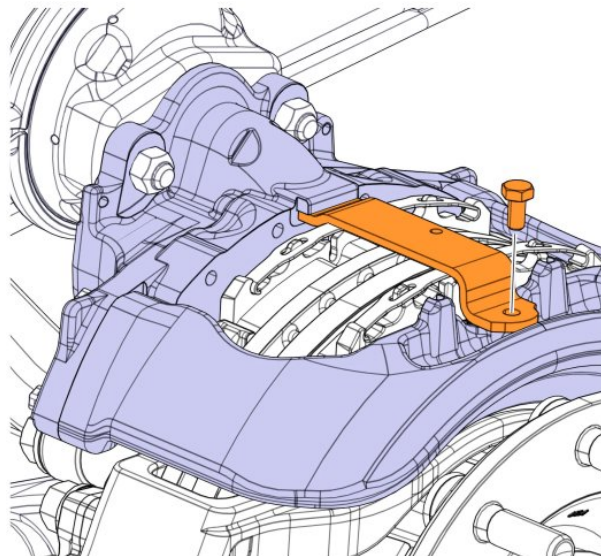
4. Remove the adjuster cover on the caliper.



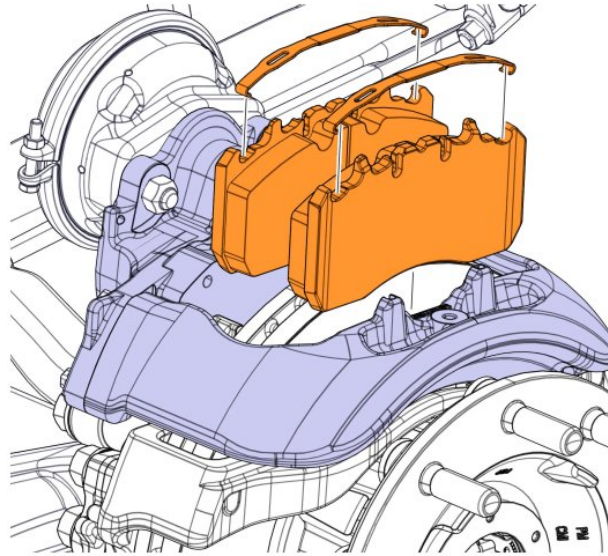
5. Using a 10 mm (0.39 in) socket wrench, rotate the adjuster screw (1) counter clockwise (A) to move the brake pads away from the rotor.



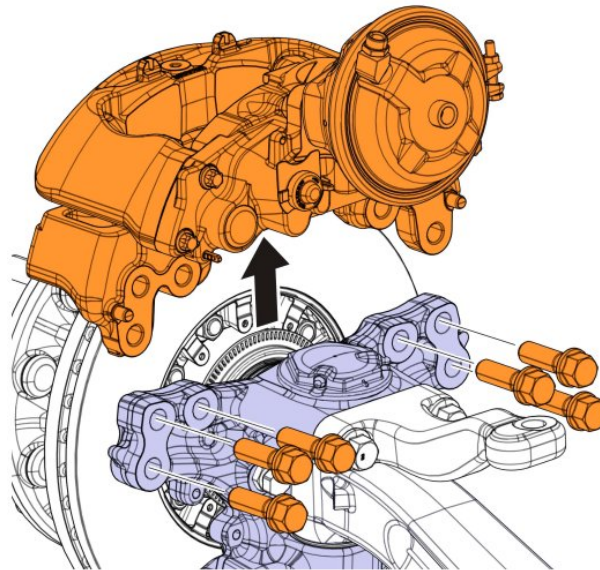
6. Remove the disc brake pad shield and fastener securing the brake pads.



7. Remove the spring clips and disc brake pads.



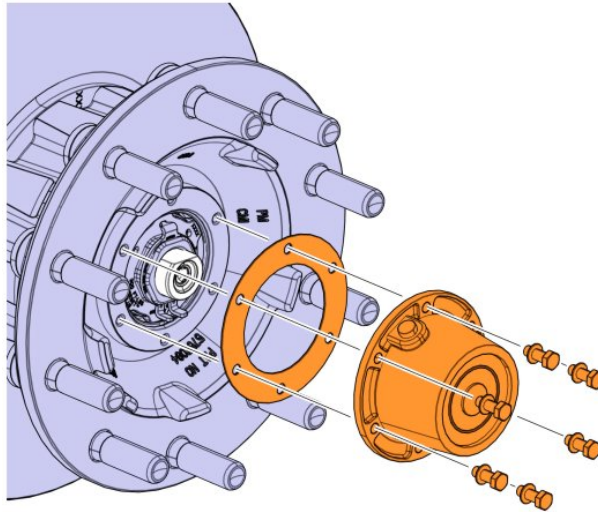
8. Remove the fasteners securing the brake caliper to the backing plate.
9. Remove the caliper assembly with brake chamber.



10. Remove the hub cap and gasket as shown in the figure below.

NOTE

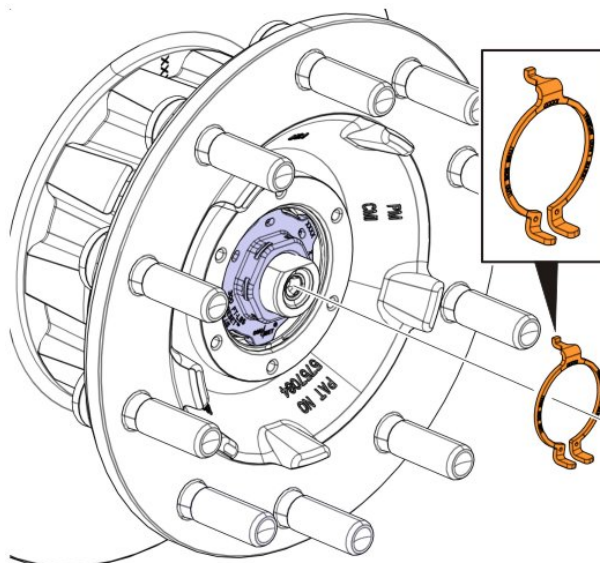
Ensure a drain pan is used to catch oil from the axle and hub while removing the hub cap and gasket.



11. Remove the hub bearing lock.

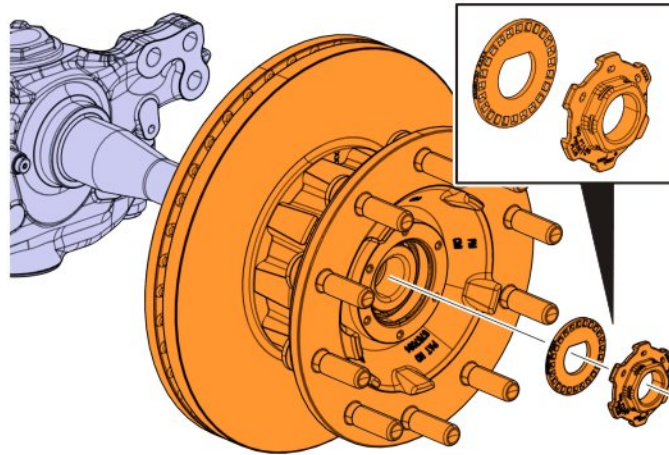
NOTE

Ensure a drain pan is used to catch oil from the axle and hub while removing the hub bearing lock.



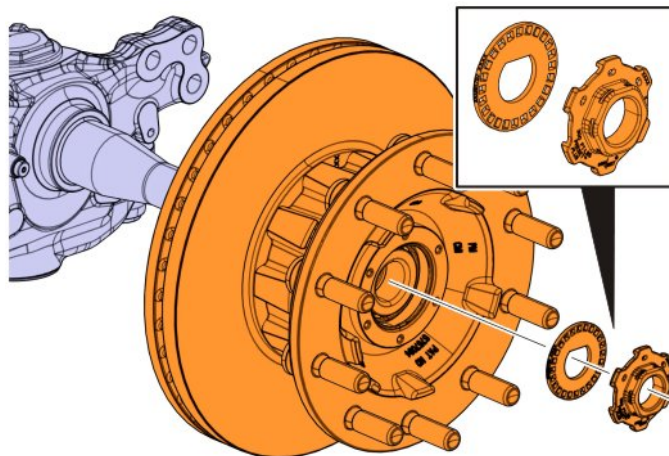
12. Remove the hub nut and washer securing the hub to the axle.

13. Using a lifting device, remove the hub and rotor from the axle.



14. Using a lifting device, position the replacement hub onto the axle and secure with the new hub washer and nut.

15. Tighten the nut to 406 Nm (300 ft-lb)



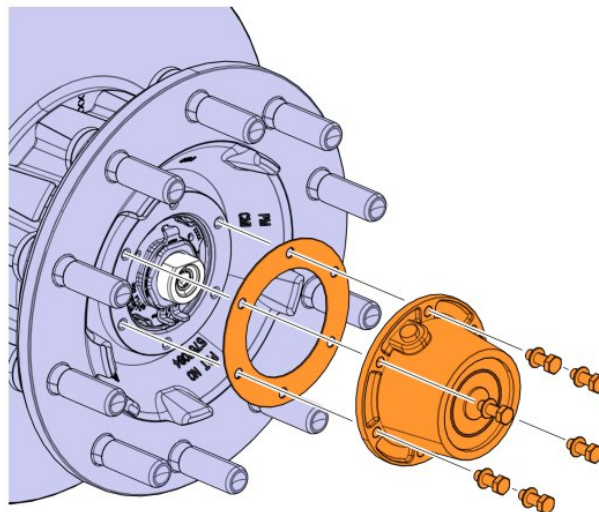
16. Install the new locking clip as shown.



17. Install the hub cap gasket (part number 25155409), hub cap and fasteners.

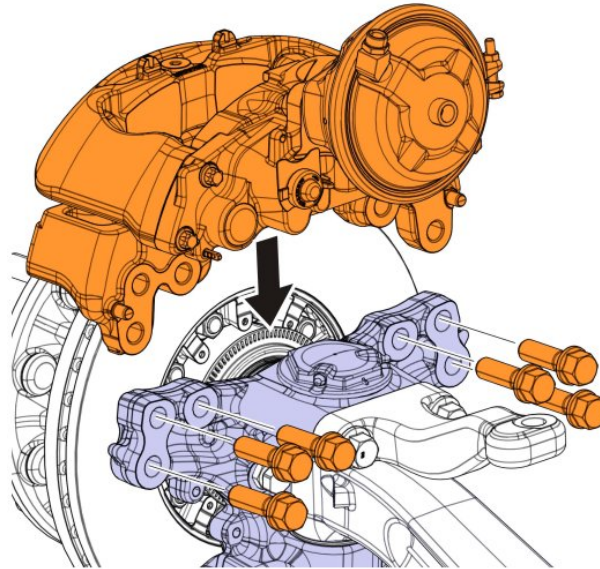
18. Tighten the fasteners to 16 to 21 Nm (12 to 16 ft-lb).

19. Fill the hub cap with hub oil.

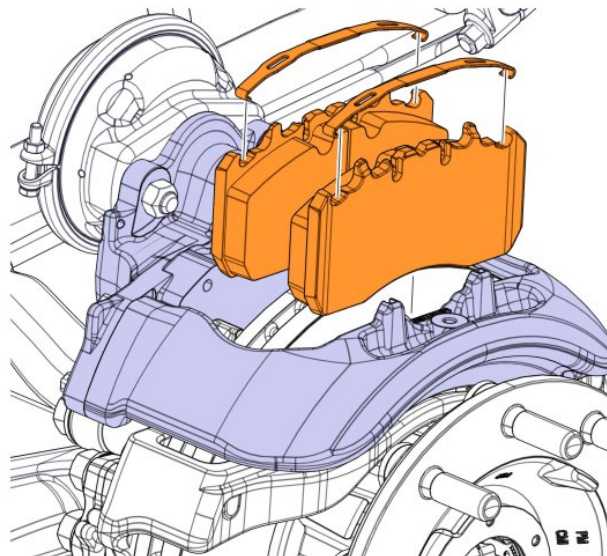


20. Install the brake caliper assembly with brake chamber to the backing plate with new fasteners (part number 1079435).

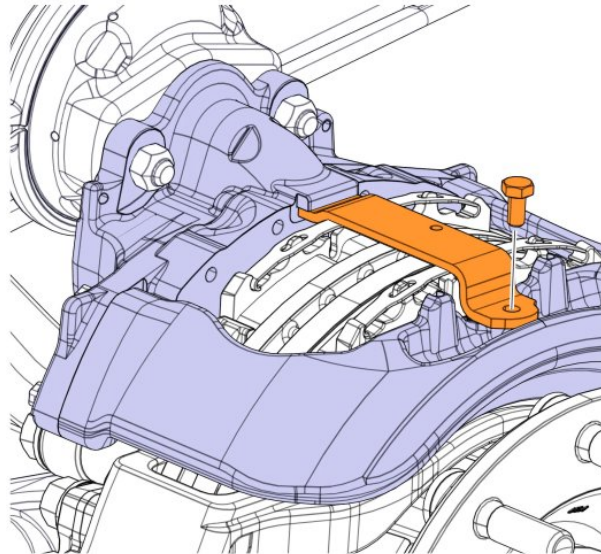
21. Tighten the fasteners to 299 Nm (221 ft-lb). Then, torque each fastener +60 Degrees.



22. Install the replacement disc brake pads and spring clips as shown.



23. Install the disc brake pad shield and fastener. Tighten the fastener to 34 to 40 Nm (25 to 30 ft-lb).

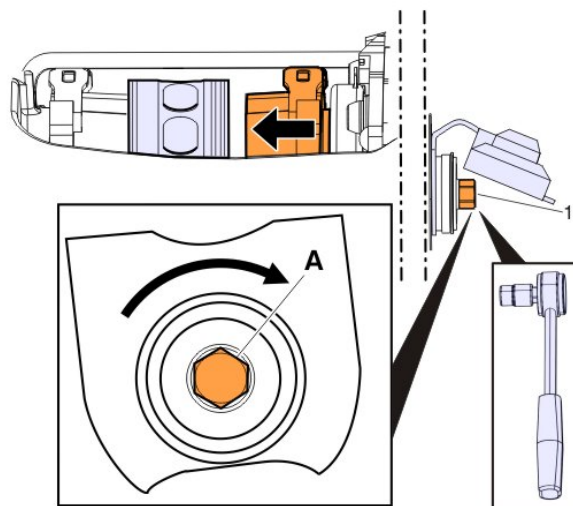


24. Adjust the steer axle brakes as follows:

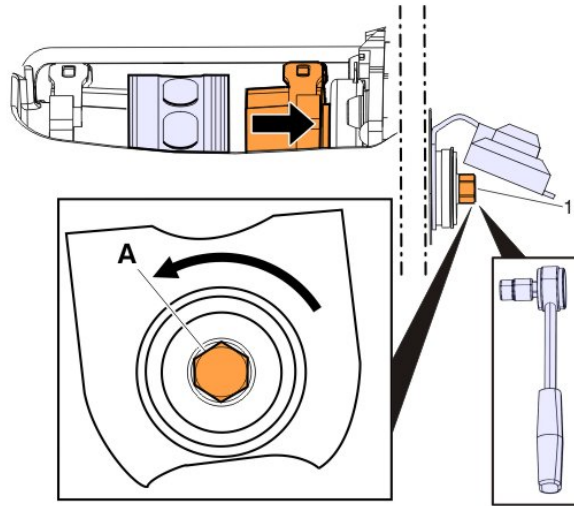
⚠ CAUTION

The brake adjuster can be damaged if excessive force is used on the adjuster shaft. DO NOT exceed the maximum specified torque. Use a box end wrench or quarter inch drive socket with a short ratchet handle for this procedure.

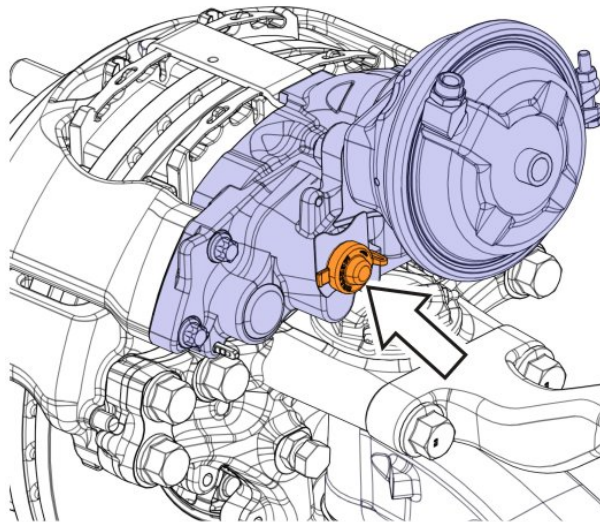
1. Rotate the adjuster (1) clockwise (A) until the disc brake pads contact the rotor.



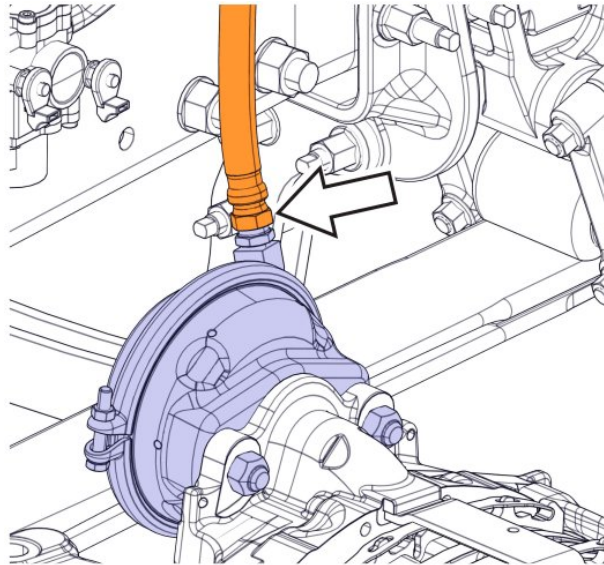
2. Rotate the adjuster (1) counter-clockwise (A) one-half turn.



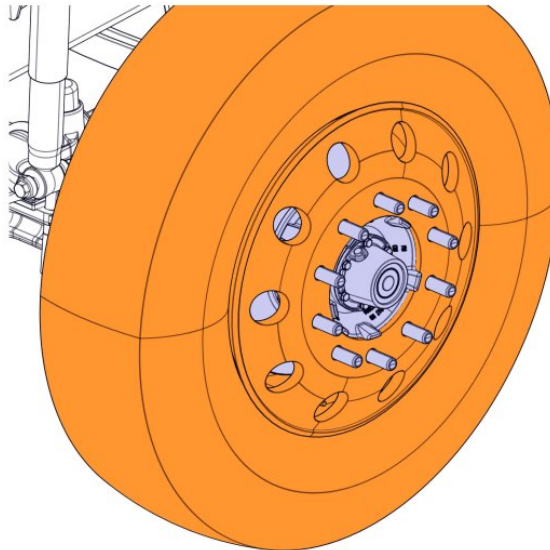
25. Install the adjuster cover.



26. Install the brake chamber air line.

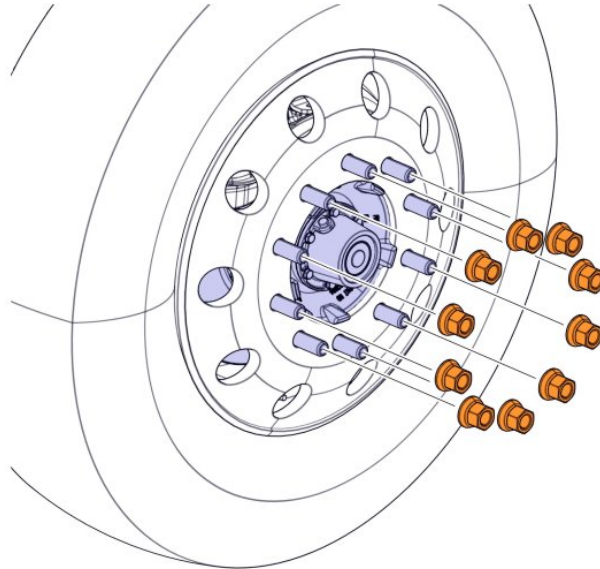


27. Install the wheel.



28. Install the wheel nuts.

29. Tighten the wheel nuts to 610 Nm (450 ft-lb).

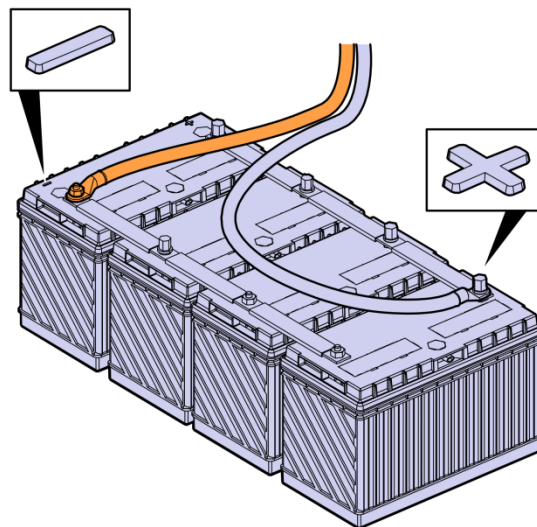


30. Repeat steps 3 through 30 for the remaining side of the vehicle.

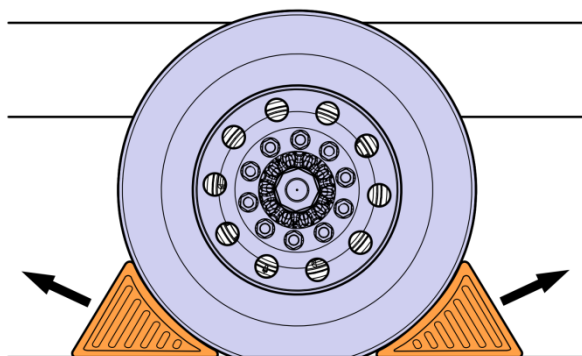
31. Lift the vehicle with a jack, remove the jack stands and lower the vehicle.

Commissioning the Truck for Operation:

1. Connect the battery cable to the negative (ground) terminal.



2. Remove the wheel chocks.



3. Start the vehicle and check the brakes and air lines for proper operation and function.

Reimbursement:

This repair is covered by an authorized Safety Recall campaign. Reimbursement is obtained through the normal claim handling process.	
	UCHP Reimbursement
Claim Type (used only when uploading from the Dealer Business System)	R
Recall Status	
Vehicle repaired per instructions	1-Modified per instructions
Labor Code	
Primary Labor Code (Per Axle) (Front Axle Hubs, Underrated, Repair 1A or Repair 1B)	7731-03-09-01 2.3 hrs
Time to take charge of vehicle and determine campaign status	1700-03-02-13 0.3 hrs
Scrap Parts Disposition	Scrap all replaced parts in accordance with state and local authorities.
Causal Part	22755582
Authorization Number	C6581

Take-charge time is not included in the labor code for this operation. Take charge may be eligible, but can only be used once per vehicle repair visit. If the vehicle is having other warranty repairs performed, take-charge should be charged to the warranty repair, otherwise take-charge can be charged to this Safety Recall campaign.