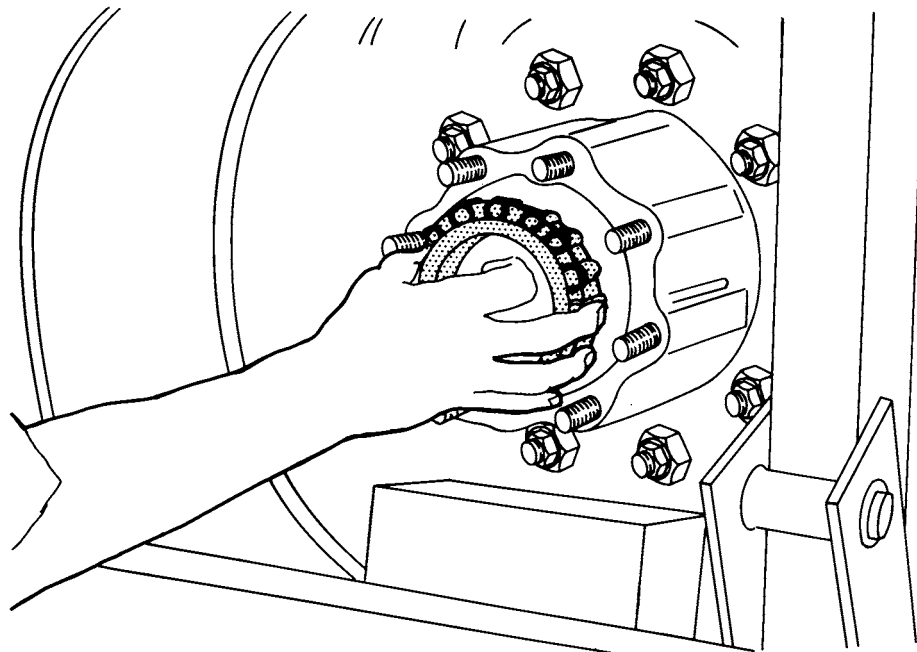


This Service Bulletin replaces TSI Service Bulletin 773-003, "Rear Axle Hubs, Seals, and Bearings" (03.2001), publication no. PV776-TSP154077.

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Rear Axle  
VN/VHD

## Rear Axle Hubs, Seals and Bearings



Outer Hub Bearing

The following bulletin covers the Axle Nut Torque Specifications, as well as the procedure for Wheel Seal Replacement for the Rear Axle. This information should be used in conjunction with any other service procedures concerning the Rear Axle Hubs, Seals, or Bearings.

**Note:** For further information on the Rear Axle, refer to the appropriate Volvo and vendor literature.

### Content

- ["Axle Flange Nut, Tightening Torques" page 2](#)
- ["Wheel Seal, Replacement \(Rear Axle\)" page 3](#)

# Specifications

## Axle Flange Nut, Tightening Torques

Axle Flange Nut Thread Size (Inches)	Nut Type	Torque, Nm (ft-lb)
5/8-18	Plain nut with tapered dowel and split lockwasher	136 ± 20 (100 ± 15)
5/8 x 18	Locknut with plain washer	373 ± 34 (275 ± 25) <b>Note:</b> Specification per QR7712Q2-001

## 7736-03-02-02 Wheel Seal, Replacement (Rear Axle)

(Includes removal and installation of wheel hub assembly, cleaning, inspection, lubrication, bearing, and brake adjustment.)

Not Included:

- Brake shoe/pad replacement or cleaning
- Inner bearing cup replacement
- Outer bearing cup replacement
- Oil seal wear sleeve replacement

### Procedure

1



Before working on a vehicle, set the parking brakes, place the transmission in neutral, and block the wheels. Failure to do so can result in unexpected vehicle movement and can cause serious personal injury or death.

Chock the front wheels to prevent the vehicle from moving.

2

Raise the vehicle to lift the rear wheel just off the floor. Install a jack stand under the axle housing to support the vehicle weight.

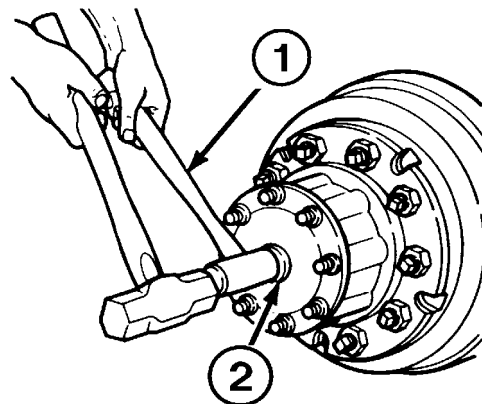
3

Loosen the axle shaft flange retaining nuts to the end of the studs.

4

Place a container at the wheel to catch draining oil.

5



W7000012



Always wear eye protection while performing this operation.

Place a brass drift or hammer (1) against the axle shaft flange (2) and strike with a heavy hammer to loosen the axle shaft. Be careful not to hit studs.

6

Remove the lock nut and plain washer.

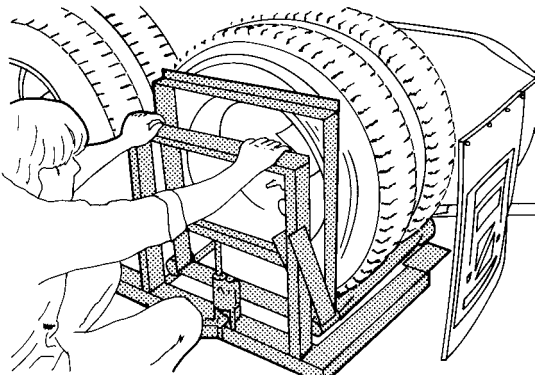
7

Remove the axle shaft and gasket.

8

Depending on the type of hub bearing nuts installed, remove the outer nut and tab lock washer, or spindle washer.

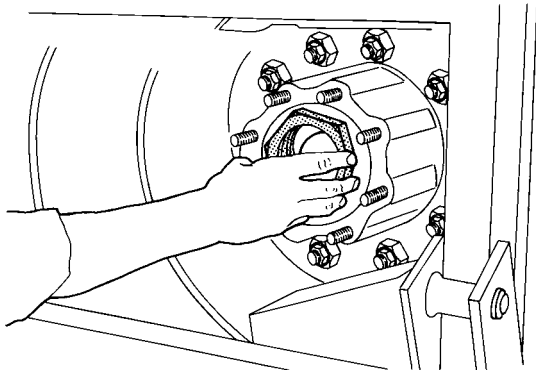
9



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Place a wheel dolly under the tires. Lift the tires just enough to take up the weight of the wheel and hub assembly.

10

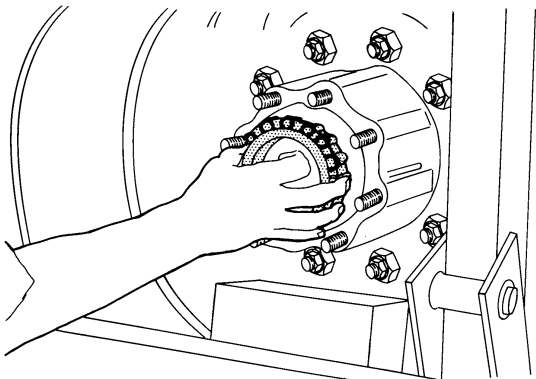


W7000039

Remove the inner hub bearing nut.

**Note:** Once the hub bearing adjustment nut is removed, bearing may come out on its own.

11



W7000040

Remove the outer hub bearing.

12

Pull the wheel and hub assembly off the axle housing spindle.

**Note:** If the wheel is difficult to remove, back off the brakes to allow clearance between the shoes and the drum. Refer to appropriate "service brake adjustment" procedure.

13

Use a pry bar or punch to remove the hub seal.

14

Clean and inspect the bearing assemblies. Replace faulty bearings as required.

15

Inspect the brake shoes, return springs and the axle housing spindle threads for damage.

16

Clean any oil from the brake shoes or drum.

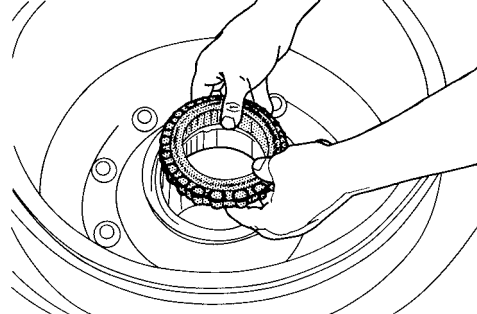
**Note:** For further information concerning cleaning the brake shoes and components, refer to the appropriate Volvo and vendor literature.

17

Lubricate the bearing assembly contact surfaces and bearing before assembly.

**Note:** For further information concerning lubricating the bearing assembly, refer to the appropriate Volvo literature.

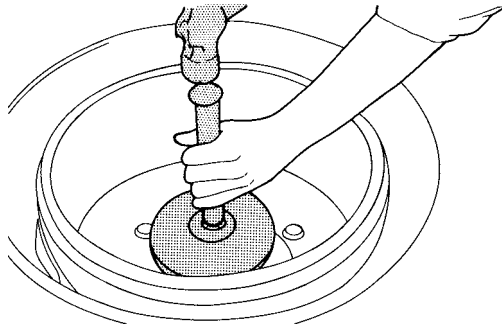
18



W7000042

Place the inner bearing into the hub.

19

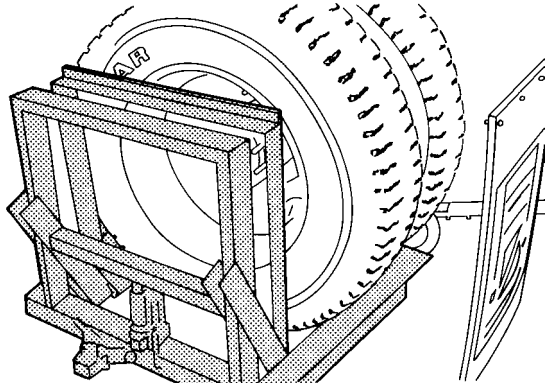


W7000043

Install the new hub seal.

**Note:** Refer to the seal manufacturer's recommendations for correct seal replacement tools.

20



W7000044

Using a wheel dolly, position the wheel and hub to the axle housing spindle and center the hub with the spindle. Push the wheel and hub assembly onto the spindle. Be careful not to damage the hub seal.

21

Install the hub bearing adjustment nut.

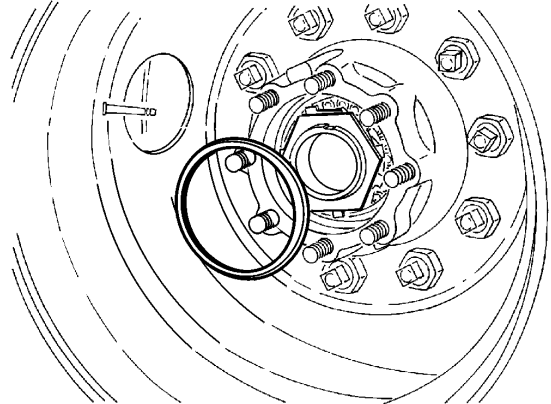
**Note:** Install the nut with the smooth, machined face toward the wheel bearing.

22

Complete the wheel bearing adjustment.

**Note:** This procedure is based on industry standards. For further information refer to Service Information in Group 7, "Wheel Bearing Adjustment", Specifications Table (Pg. 2). Also, refer to Service Information in Group 7, "Alternate Wheel Bearing Adjustment System".

23



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Install the reusable O-ring and/or gasket.

24

Install the Drive axle shaft. Install the lock nut and plain washer. Tighten the nuts according to torque values. See "Axle Flange Nut, Tightening Torques" page 2.

**Note:** Adjust the brakes, if required, before lowering the vehicle to the floor.

25

Remove the axle stand and lower the vehicle.

26

Check the rear axle oil level.