# Wheel bearing housing, removing and installing

#### Removing

 Vehicle must be standing on its wheels above vehicle lift

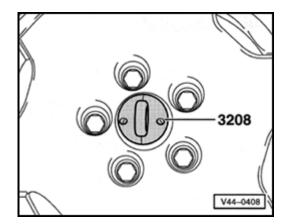


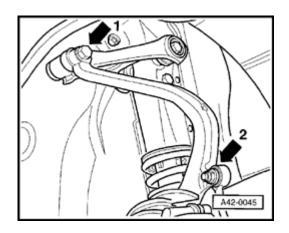
- Remove wheel trim.
  - On light alloy wheels use puller in vehicle tool kit to remove trim cap
  - Loosen collar bolt ⇒ page 42-94, item 7 -.

#### **WARNING!**

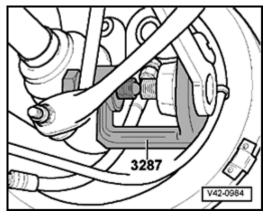
The vehicle must be standing on its wheels when loosening or tightening the collar bolt for the drive axle. Otherwise the risk of an accident exists.

- Loosen wheel bolts.
- Raise vehicle on lift.
- Remove wheel.
- Pull ABS wheel speed sensor from wheel bearing housing.
- Remove collar bolt ⇒ page 42-94, item 7 -.





- Remove bolt for connecting link to wheel bearing housing (arrow -2-).
  - Remove track rod from wheel bearing housing  $\Rightarrow$  page 42-43.

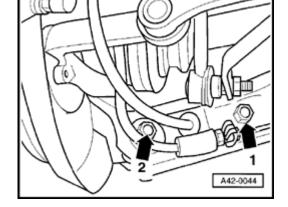


 Using 3287 ejection device for steering rod, press track rod off wheel bearing housing.

- Remove bolts mounting brake caliper to wheel bearing housing.
- Remove brake caliper and hang from body.

#### **CAUTION!**

- Do not allow caliper to hang by brake hose.
  The unsupported weight can stretch and damage the hose
- Do not loosen brake hose or lines.
- Remove brake disc.
- <
- Mark installation position of eccentric washer for bolt (arrow -2-) for wheel bearing housing to lower control arm ( ⇒ page 42-41 ) and remove.



- Remove wheel bearing housing to upper control arm bolt (arrow -1-).

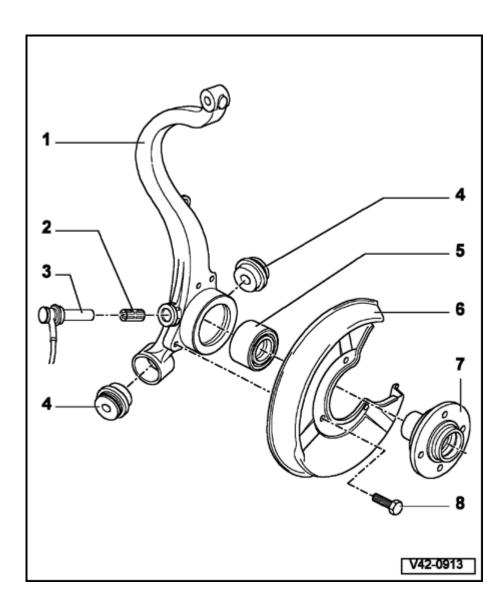
- Remove wheel bearing housing from drive axle and remove.

#### Installing

- Install in reverse order of removal.

#### **CAUTION!**

- ◆ Some fasteners are designed to be used only once, and are unreliable and may fail if used a second time. This includes, but is not limited to, nuts, bolts, washers, circlips and cotter pins. Always follow recommendations in this manual-replace these fasteners with new parts where indicated, and any other time it is deemed necessary by inspection.
- ◆ Bonded rubber bushings can only be turned to a limited extent. The bolted connection between the wheel bearing housing and the upper control arm must only be tightened when the vehicle is standing on the ground. Otherwise the bonded rubber bushings will be subjected to a torsional stress resulting in shortened service life
- Check wheel alignment and adjust if necessary ⇒ page 44-6.



#### Wheel bearing housing, servicing

#### 1 - Wheel bearing housing

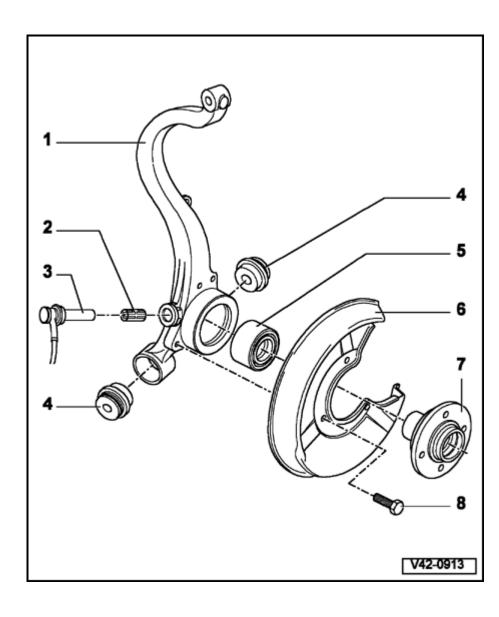
- Do not grease bearing seat in wheel bearing housing before pressing in wheel bearing
- After replacing, check and if necessary adjust wheel alignment

#### 2 - Clamping sleeve

- Always replace
- ◆ Left and right-sides identical
- Grease all around with brake cylinder paste before inserting into wheel bearing housing
- Press into wheel bearing housing until fully seated

#### 3 - ABS wheel speed sensor

- ◆ To remove, pull out
- Do not install until drive axle has been installed
- To install, press in by hand until fully seated



#### 4 - Bonded rubber bushing

- ♦ Replacing  $\Rightarrow$  Figs. 1,  $\Rightarrow$  2 and  $\Rightarrow$  3
- Always replace both bushing halves

#### 5 - Wheel bearing

- Stepped design
- Installation position: larger inner diameter of wheel bearing faces wheel hub - 7 -
- ♦ Removing ⇒ Fig. 4
- ♦ Installing ⇒ Fig. 5

#### 6 - Splash shield

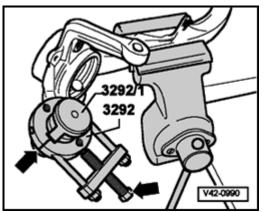
Bolt to wheel bearing housing

#### 7 - Wheel hub

- ♦ Removing ⇒ Fig. 6
- ♦ Installing ⇒ Fig. 7
- Pressing off bearing inner race ⇒ Figs. 8 and ⇒ 9

#### 8 - Bolt

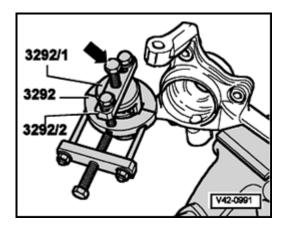
♦ 10 Nm (7 ft lb)





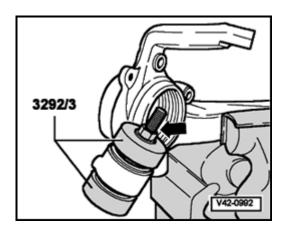
### Fig. 1 Inserting assembly device into wheel bearing housing

- Position 3292/1 support onto bonded rubber bushing.
- Push 3292 assembly device over 3292/1 support and move into position.
- Tighten threaded spindle up to stop so that both jaws of 3292 assembly device are located in annular groove between bonded rubber bushing and wheel bearing housing.



## Fig. 2 Bolting cross bar onto assembly device

- Center 3292/2 cross bar and move fully up against 3292/1 support by tightening both bolts.
- Screw in spindle of 3292/2 cross bar until bushing is drawn out.



- Fig. 3 Installing bonded rubber bushing
  - Install bonded rubber bushing on both sides and perpendicular to hole in wheel bearing housing.
  - Position one 3293/3 thrust piece each onto two bushings and use threaded spindle to draw in bushing up to stop.

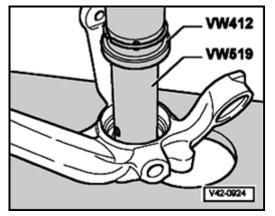
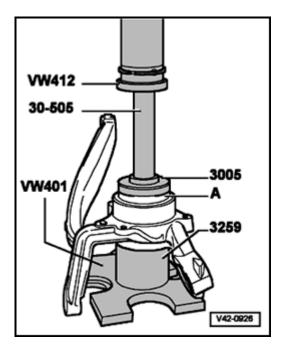


Fig. 4 Removing wheel bearing from wheel bearing housing



- Fig. 5 Installing wheel bearing
  - If necessary, remove any corrosion/dirt from hole in wheel bearing housing.
  - Press in bearing -A- until fully seated.
    Larger inner diameter of wheel bearing faces wheel hub

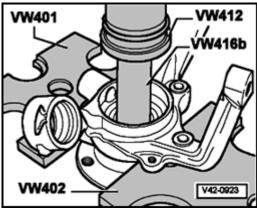


Fig. 6 Removing wheel hub from wheel bearing housing

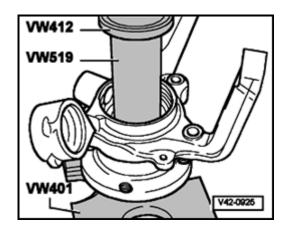
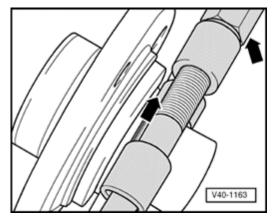


Fig. 7 Installing wheel hub

#### **CAUTION!**

VW519 sleeve must only contact the bearing inner race when pressing in the wheel hub.

- Press fully home.



## Fig. 8 Installing separating device

- Install separating device into annular groove of bearing inner race and preload with spindle.

#### Note:

Use commercially available separating device, e.g. KUKKO 15-17.

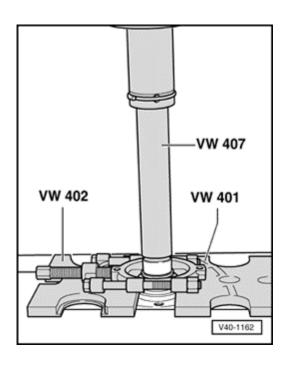


Fig. 9 Pressing bearing inner race off wheel hub

⋖

## Wheel bearing housing, servicing using VAG1459B

Instead of using the VAG1290 workshop press, the VAG1459B hydraulic wheel bearing and wheel hub removal and installation tool together with the VAG1459B/2 accessory can instead be used to service the wheel bearing housing.

#### Advantages:

- Wheel bearing housing does not need to be completely disassembled
- Track rod and lower control arm remain in position at wheel bearing housing; therefore wheel alignment does not need to be checked