









#### VIDEO TUTORIAL

## ① Important!

This replacement procedure can be used for: AUDI A4 (8E2, B6) 1.9 TDI, AUDI A4 Avant (8E5, B6) 1.9 TDI

The steps may slightly vary depending on the car design.

WWW.AUTODOC.CO.UK 1–23



### **REQUIRED TOOLS:**



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #18
- Combination spanner #22
- Drive socket # 13
- Drive socket # 16

- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Hammer
- Flat chisel
- Adjustable wrench
- Vernier caliper
- Wheel chock

WWW.AUTODOC.CO.UK 2–23



### AUTODOC recommends:

- Replace tie rod ends in pairs.
- The replacement procedure is identical for the right and left tie rod ends.
- All work should be done with the engine stopped.

#### CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

1



Secure the wheels with chocks.

WWW.AUTODOC.CO.UK 3–23





Loosen the wheel mounting bolts. Use wheel impact socket #17.

3



Raise the front of the car and secure on supports.

WWW.AUTODOC.CO.UK 4–23





Unscrew the wheel bolts.

## AUTODOC recommends:

• To avoid injury, hold up the wheel when unscrewing the bolts.

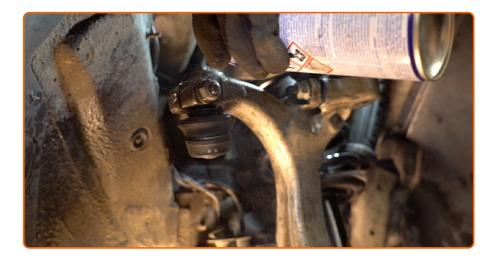
5



Remove the wheel.

WWW.AUTODOC.CO.UK 5–23





Clean the fastener connecting the tie rod end to the steering knuckle. Use a wire brush. Use WD-40 spray.

7



Unscrew the end fastening nut to the steering knuckle. Use a drive socket #13. Use a ratchet wrench.

WWW.AUTODOC.CO.UK 6–23





Unscrew the end fastening nut to the steering knuckle. Use a drive socket #16. Use a ratchet wrench.

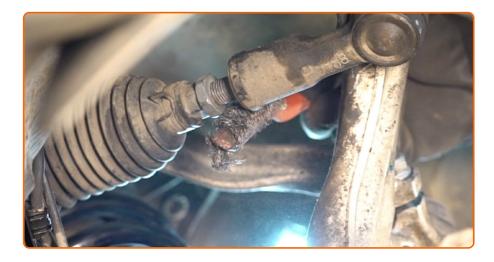
9



Remove the fastening bolt. Use a flat metal-working chisel. Use a hammer.

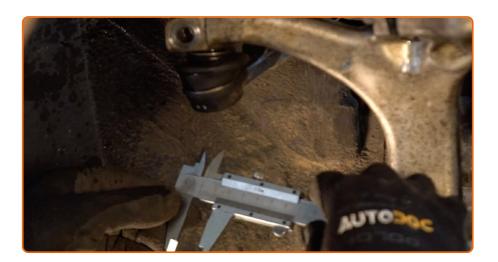
WWW.AUTODOC.CO.UK 7–23





Clean the fastener connecting the tie rod end to the steering knuckle. Use a wire brush. Use WD-40 spray.

11



When deinstalling, mark or measure the precise position of the ball joint on the track rod, or count the number of turns in order to prevent misalignment afterward. Use a vernier caliper.

WWW.AUTODOC.CO.UK 8–23





Loosen the lock nut securing the tie rod end to the tie rod. Use a combination spanner #18. Use a combination spanner #22.

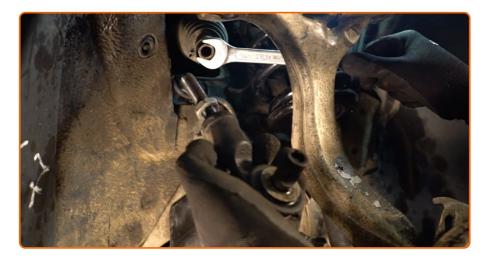
13



Disconnect the tie rod end from the steering knuckle. Use a flat metal-working chisel. Use a hammer.

WWW.AUTODOC.CO.UK 9–23





Screw the end out of the tie rod. Use an adjustable wrench.

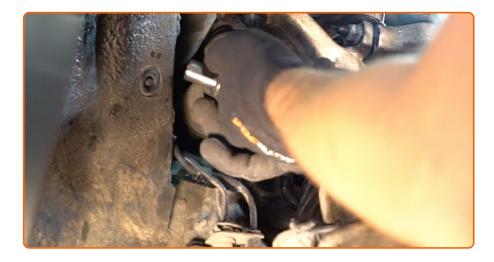
15



Clean the mounting seats of the tie rod end. Use a wire brush. Use WD-40 spray.

WWW.AUTODOC.CO.UK 10-23





Screw on a new tie rod end.

#### **AUTODOC** recommends:

 While installing the steering rod end remember to make the same number of turns or to leave the same length of thread showing as per your measurements

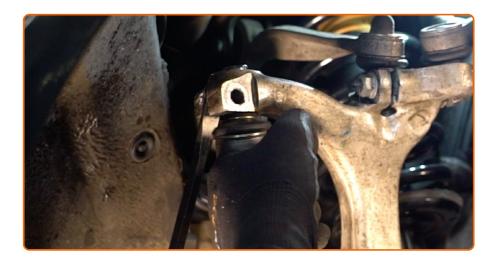
17



Release the fastener connecting the ball joint to the steering knuckle. Use a flat metal-working chisel. Use a hammer.

WWW.AUTODOC.CO.UK 11–23





Connect the tie rod end to the steering knuckle.

19



Install the fastening bolt.

WWW.AUTODOC.CO.UK 12–23





Screw on the fastening nut that connects the tie rod end to the steering knuckle. Use a drive socket #13. Use a ratchet wrench.

21



When deinstalling, mark or measure the precise position of the ball joint on the track rod, or count the number of turns in order to prevent misalignment afterward. Use a vernier caliper.

WWW.AUTODOC.CO.UK 13–23



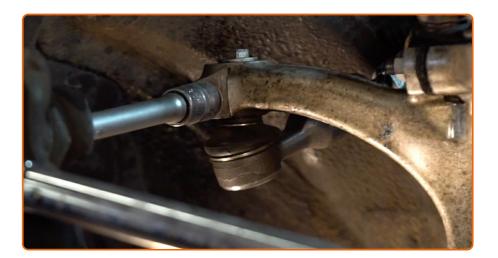


Tighten the tie rod end locknut. Use a combination spanner #18. Use a combination spanner #22. Use a torque wrench. Tighten it to 55 nm torque.

23

Screw on the fastening nut that connects the tie rod end to the steering knuckle. Use a drive socket #16. Use a ratchet wrench.

24



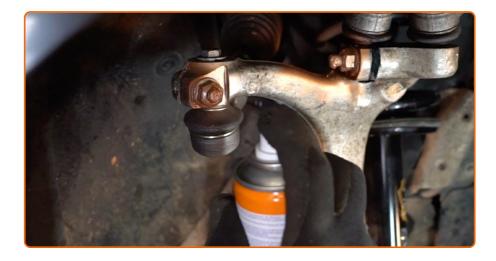
Tighten the fastening nut connecting the tie rod end to the steering knuckle. Use a drive socket #16. Use a torque wrench. Tighten it to 70 nm torque.

WWW.AUTODOC.CO.UK 14–23



Tighten the fastening nut connecting the tie rod end to the steering knuckle. Use a drive socket #13. Use a torque wrench. Tighten it to 35 nm torque.

26



Treat the fastener connecting the tie rod end to the steering knuckle. Use copper grease.

27



Treat the surface where the brake disc contacts the wheel rim. Use copper grease.

WWW.AUTODOC.CO.UK 15–23





Clean the brake disk surface. Use a brake cleaner.

## AUTODOC recommends:

• After applying the spray, wait a few minutes.

29



Install the wheel.

WWW.AUTODOC.CO.UK 16–23



## AUTODOC recommends:

 To avoid injury, hold up the wheel when screwing in the fastening bolts.

30



Screw in the wheel bolts. Use wheel impact socket #17.

31



Lower the car and working in a cross order, tighten the wheel bolts. Use a torque wrench. Tighten it to 120 nm torque.

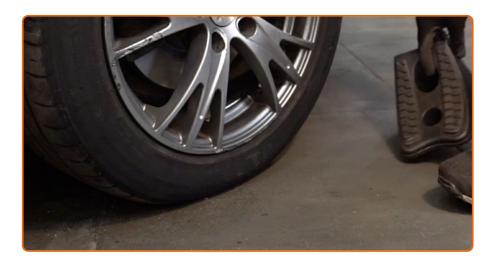
WWW.AUTODOC.CO.UK 17–23



## AUTODOC recommends:

• Check and adjust wheel alignment if necessary.

32



Remove the jacks and chocks.

WWW.AUTODOC.CO.UK 18–23



# DID YOU FIND THESE INSTRUCTIONS HELPFUL?

YES

NO

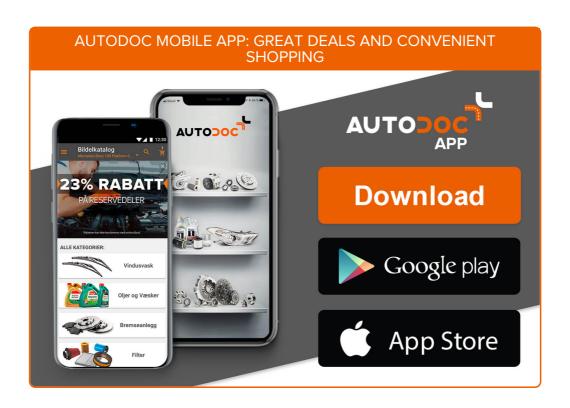


**BECOME A MEMBER OF AUTODOC CLUB!** 

WWW.AUTODOC.CO.UK 19–23



## AUTODOC — TOP QUALITY AND AFFORDABLE CAR PARTS ONLINE





WWW.AUTODOC.CO.UK 20–23

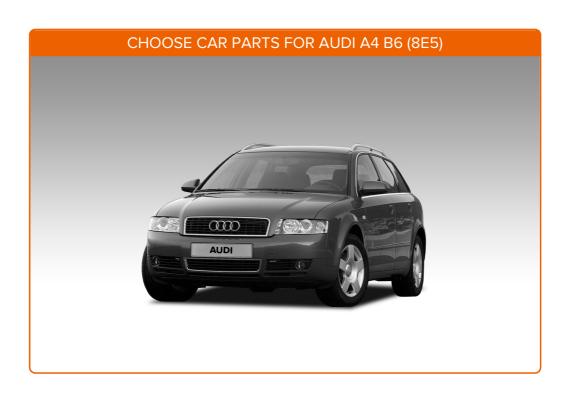






WWW.AUTODOC.CO.UK 21–23







WWW.AUTODOC.CO.UK 22–23





#### i Disclaimer:

The document contains only general recommendations that may be useful for you when you perform repair or replacement work. AutoDoc shall not be liable for any loss, injury, damage of property occurring in the repair or replacement process due to incorrect use or misinterpretation of the provided information.

AutoDoc shall not be liable for any possible mistakes and uncertainties in this guide. The information provided is for information purposes only and cannot replace advice from specialists.

AutoDoc shall not be liable for incorrect or hazardous usage of equipment, tools and car parts. AutoDoc strongly recommends to be careful and observe the safety rules when performing repair or replacement works. Remember: usage of low quality auto parts does not guarantee you the appropriate level of road safety.

© Copyright 2018 – All the contents of this website, in particular texts, photographs and graphics, are protected by copyright. All rights, including reproduction, publication, editing and translation rights, are reserved by Autodoc GmbH.

WWW.AUTODOC.CO.UK 23–23