# - AUTODOC CLUB

How to change front ball joint on MERCEDES-BENZ E-Class T-modell (S124) – replacement guide



## SIMILAR VIDEO TUTORIAL



This video shows the replacement procedure of a similar car part on another vehicle

# (i) Important!

This replacement procedure can be used for:

MERCEDES-BENZ E-Class T-modell (S124) E 300 TD (124.191), MERCEDES-BENZ E-Class T-modell (S124) E 200 T (124.079), MERCEDES-BENZ E-Class T-modell (S124) E 220 T (124.082), MERCEDES-BENZ E-Class T-modell (S124) E 280 T (124.088), MERCEDES-BENZ E-Class T-modell (S124) E 320 T (124.092), MERCEDES-BENZ E-Class T-modell (S124) E 250 TD (124.186), MERCEDES-BENZ E-Class T-modell (S124) E 36 T AMG (124.092), MERCEDES-BENZ E-Class T-modell (S124) E 300 T Turbo-D (124.193), MERCEDES-BENZ E-Class T-modell (S124) E 300 T 4-matic (124.290), MERCEDES-BENZ E-Class T-modell (S124) E 300 T Turbo-D 4-matic (124.393), MERCEDES-BENZ E-Class T-modell (S124) E 250 Turbo D

The steps may slightly vary depending on the car design.

This tutorial was created based on the replacement procedure for a similar car part on: MERCEDES-BENZ 190 (W201) 2.0 (201.023)



## REPLACEMENT: BALL JOINT – MERCEDES-BENZ E-CLASS T-MODELL (S124). TOOLS YOU MIGHT NEED:



- Wire brush
- WD-40 spray
- All-purpose cleaning spray
- Ceramic grease
- Torque wrench
- Combination spanner #13
- Combination spanner #19
- Combination spanner #22
- Drive socket # 13
- Drive socket # 19
- Drive socket # 22
- Wheel impact socket #17

- Ratchet wrench
- Tap wrench
- Hammer
- Flat chisel
- Crow bar
- Flat screwdriver
- Ball joint puller set
- Water pump pliers
- Strut spring compressor
- Hydraulic transmission jack
- Wheel chock

**Buy tools** 



Replacement: ball joint – MERCEDES-BENZ E-Class T-modell (S124). Tip from AUTODOC:

• The replacement procedure is identical for the left and right ball joints.

• All work should be done with the engine stopped.

# **REPLACEMENT: BALL JOINT – MERCEDES-BENZ E-CLASS T-MODELL (S124). USE THE FOLLOWING PROCEDURE:**



Secure the wheels with chocks.

2

Loosen the wheel bolts. Use wheel impact socket #17. Use a tap wrench.



3

Raise the car.

#### AUTODOC recommends:

- If you are using a jack, make sure it rests on a flat surface without any unevenness.
- Be sure to additionally secure the car with jack stands.





Unscrew the wheel bolts.



# Replacement: ball joint - MERCEDES-BENZ E-Class T-modell (S124). Tip:

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



#### Remove the wheel.



6

Support the control arm. Use a hydraulic transmission jack.



7

Install the coil spring compressor on the coil spring.





#### AUTODOC recommends:

- Use adapters and jaws of the appropriate size.
- The sping coils should be securely fixed with the coil spring compressor.
- Use high quality coil spring compressors.
- 8

Compress the spring.



Replacement: ball joint – MERCEDES-BENZ E-Class T-modell (S124). AUTODOC recommends:

- Be careful. The compressed spring is powerful and can cause injury if it comes loose.
- 9

Clean the fasteners of the stabilizer bush brackets. Use a wire brush. Use WD-40 spray.





Unscrew the fasteners of the stabilizer bush brackets. Use a combination spanner #13. Use a drive socket #13. Use a ratchet wrench.



11

Remove the fastening bolts.



Remove the stabilizer bush brackets.



13

Detach the anti-roll bar from the suspension arms.





Clean all joints of the arm. Use a wire brush. Use WD-40 spray.



# + AUTODOC CLUB



15

Make marks on the camber bolts.



16

Unscrew the front fastener of the control arm. Use a combination spanner #22. Use a drive socket #22. Use a ratchet wrench.



17 Unscrew the rear fastener of the control arm. Use a combination spanner #22. Use a drive socket #22. Use a ratchet wrench.



18

Unscrew the fastener connecting the ball joint to the steering knuckle. Use a combination spanner #19. Use a drive socket #19. Use a ratchet wrench.





Remove the fastening bolt.



#### 20

Disconnect the ball joint from the steering knuckle. Use a flat metal-working chisel. Use a hammer. Use a crowbar.



21

Remove the support from under the control arm.

22

Remove the coil spring together with the coil spring compressor.



Replacement: ball joint – MERCEDES-BENZ E-Class T-modell (S124). AUTODOC experts recommend:

• While the spring is compressed, do not do any operations on it.

# + AUTODOC CLUB



23

Clean the ball joint. Use all-purpose cleaning spray.



24

Remove the retaining ring from the ball joint boot. Use a flat screwdriver.



25

Remove the ball joint boot. Use a flat screwdriver.



26

Dismantle the ball joint. Use a ball joint puller set.





Clean the ball joint mounting seat. Use a wire brush. Use all-purpose cleaning spray.



28

Install a new ball joint. Use a ball joint puller set.



29

Install the spring together with the compressor.



#### AUTODOC recommends:

• Make sure that the coil spring is correctly positioned in its mounting seats.



Connect the ball joint to the steering knuckle.





Support the control arm. Use a hydraulic transmission jack.

32

Install the fastening bolt.



33

Tighten the fastener connecting the ball joint to the steering knuckle. Use a combination spanner #19. Use a drive socket #19. Use a torque wrench. Tighten it to 75 Nm torque.



34

Decompress the spring.



35

Remove the coil spring compressor.





For tightening the fasteners correctly, you have to jack up the suspension components to their working position.



37

Adjust the position of the camber bolts according to the marks.

38

Tighten the front fastener of the arm. Use a combination spanner #22. Use a drive socket #22. Use a torque wrench. Tighten it to 120 Nm torque.



39

Tighten the rear fastener of the control arm. Use a combination spanner #22. Use a drive socket #22. Use a torque wrench. Tighten it to 120 Nm torque.





Remove the support from under the control arm.





#### AUTODOC recommends:

- Replacement: ball joint MERCEDES-BENZ E-Class T-modell (S124). Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.
- 41

Clean the mounting seats of the stabilizer bushes. Use a wire brush. Use all-purpose cleaning spray.



42

Attach the anti-roll bar to the suspension arms. Use a crowbar.



43

Install the stabilizer bush brackets. Use water pump pliers.



44

Install the fastening bolts.



Tighten the fasteners on the anti-roll bar bush brackets. Use a combination spanner #13. Use a drive socket #13. Use a torque wrench. Tighten it to 20 Nm torque.



46

Clean the wheel rim mounting seat. Use a wire brush. Use all-purpose cleaning spray.



**47** 

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



48

Install the wheel.





#### AUTODOC recommends:

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

49

Screw in the wheel bolts. Use wheel impact socket #17. Use a ratchet wrench.



50

Lower the car and working in a cross order, tighten the wheel bolts. Use wheel impact socket #17. Use a torque wrench. Tighten it to 110 Nm torque.



51

Remove the jacks and chocks.

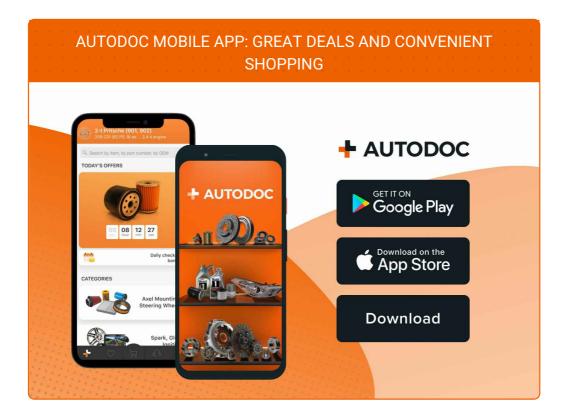




**VIEW MORE TUTORIALS** 



# AUTODOC – TOP QUALITY AND AFFORDABLE CAR PARTS ONLINE



## A GREAT SELECTION OF SPARE PARTS FOR YOUR CAR

#### **BALL JOINT: A WIDE SELECTION**

# **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 2023 – 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 SE.