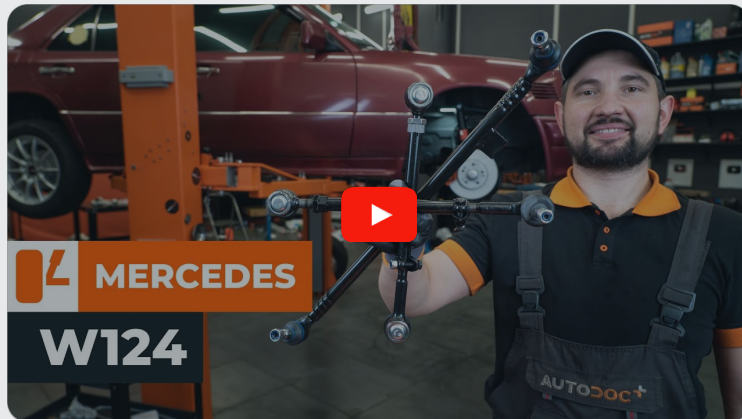




How to change inner tie  
rod on **MERCEDES-BENZ**  
**W124 Estate (S124)** –  
replacement guide

### SIMILAR VIDEO TUTORIAL



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

### Important!

This replacement procedure can be used for:

MERCEDES-BENZ W124 Estate (S124) 200 2.0 (124.080), MERCEDES-BENZ W124 Estate (S124) 200 TE 2.0 (124.081), MERCEDES-BENZ W124 Estate (S124) 200 TE 2.0, MERCEDES-BENZ W124 Estate (S124) 230 TE 2.3 KAT (124.083), MERCEDES-BENZ W124 Estate (S124) 230 TE 2.3 (124.083), MERCEDES-BENZ W124 Estate (S124) 300 TE 3.0 (124.090), MERCEDES-BENZ W124 Estate (S124) 200 D 2.0 (124.180), MERCEDES-BENZ W124 Estate (S124) 250 D 2.5 (124.185), MERCEDES-BENZ W124 Estate (S124) 300 D 3.0 (124.190), MERCEDES-BENZ W124 Estate (S124) 300 TE-24 3.0 (124.091), MERCEDES-BENZ W124 Estate (S124) 260 TE 2.6 FGST., MERCEDES-BENZ W124 Estate (S124) 260 TE FGST. 2.6, MERCEDES-BENZ W124 Estate (S124) 220 TE 2.2 (124.082), MERCEDES-BENZ W124 Estate (S124) 300 3.0 Turbo diesel, MERCEDES-BENZ W124 Estate (S124) 320 TE 3.2 (124.092), (+ 4)

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 E-Class Saloon (W124) E 250 D (124.126, 124.129)

**REPLACEMENT: INNER TIE ROD – MERCEDES-BENZ W124 ESTATE (S124). TOOLS YOU'LL NEED:**



- Wire brush
- WD-40 spray
- All-purpose cleaning spray
- Ceramic grease
- Torque wrench
- Combination spanner #13
- Combination spanner #17
- Combination spanner #19
- Combination spanner #22
- Drive socket # 13
- Drive socket # 17
- Drive socket # 19
- Wheel impact socket #17
- Ratchet wrench
- Tap wrench
- Vernier caliper
- Ball joint puller
- Wheel chock

**Buy tools**

Replacement: inner tie rod – MERCEDES-BENZ W124 Estate (S124). AUTODOC experts recommend:

- All work should be done with the engine stopped.

## REPLACEMENT: INNER TIE ROD – MERCEDES-BENZ W124 ESTATE (S124). RECOMMENDED SEQUENCE OF STEPS:

**1** 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.

**4** Unscrew the wheel bolts.



**AUTODOC recommends:**

- Important! Hold the wheel while unscrewing the fastening bolts. MERCEDES-BENZ W124 Estate (S124)

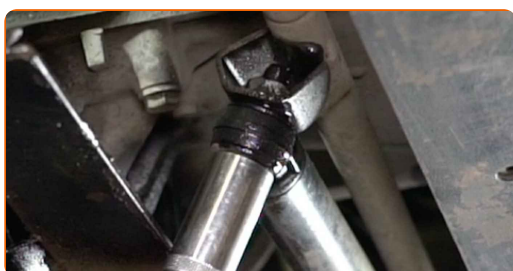
**5** Remove the wheels.



**6** Clean the steering damper fasteners. Use a wire brush. Use WD-40 spray.

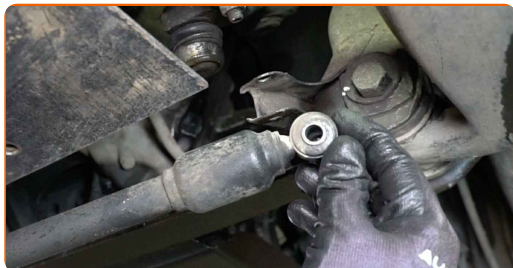


**7** Unscrew the steering damper fasteners. Use a combination spanner #17. Use a drive socket #17. Use a ratchet wrench.

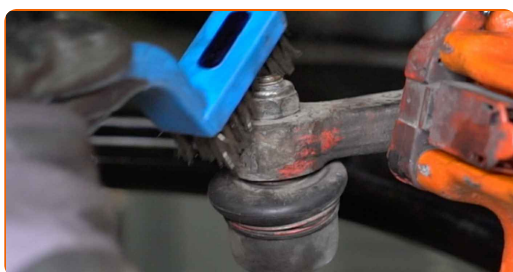


**8** Remove the fastening bolts.

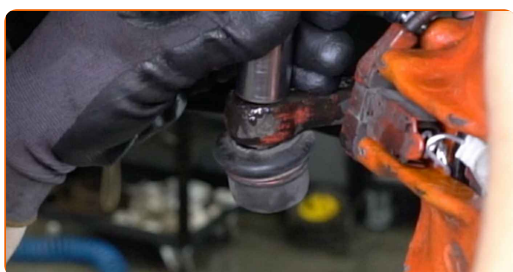
**9** Remove the steering damper.



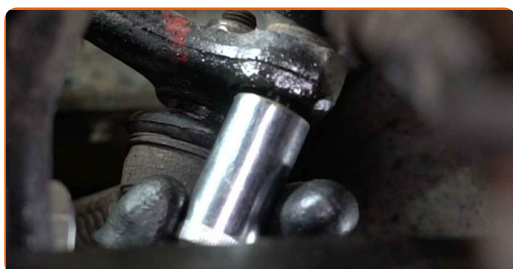
**10** Clean the tie rod ends fasteners. Use a wire brush. Use WD-40 spray.



**11** Unscrew the fastening nut connecting the tie rod end to the steering knuckle. Use a drive socket #17. Use a ratchet wrench.

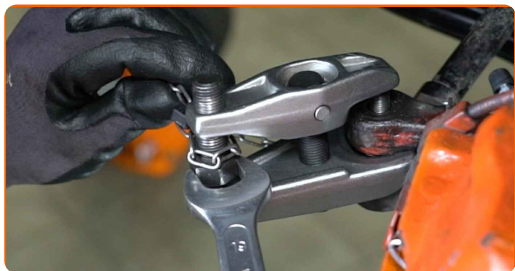


**12** Unscrew the fastener connecting the tie rod end to the idler arm. Use a drive socket #17. Use a ratchet wrench.

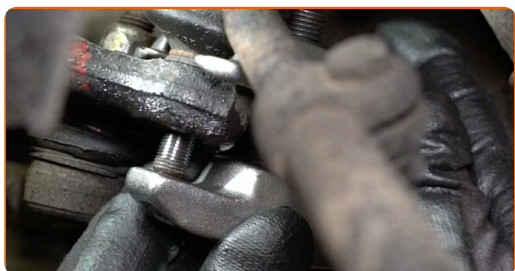


**13**

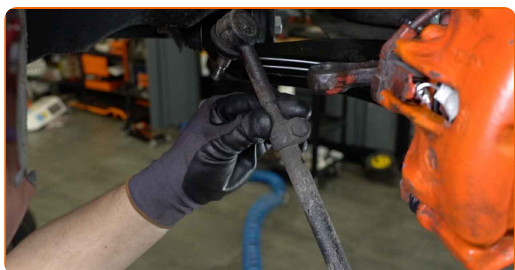
Disconnect the tie rod end from the steering knuckle. Use a ball joint puller.

**14**

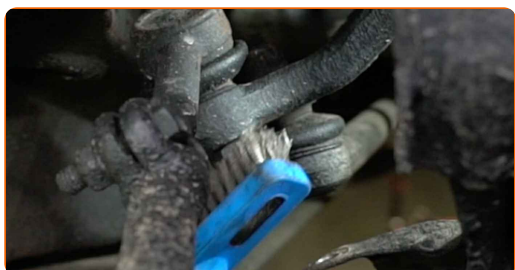
Detach the tie rod end from the idler arm. Use a ball joint puller.

**15**

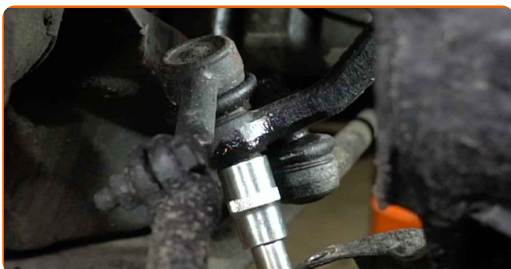
Remove the steering tie rod.

**16**

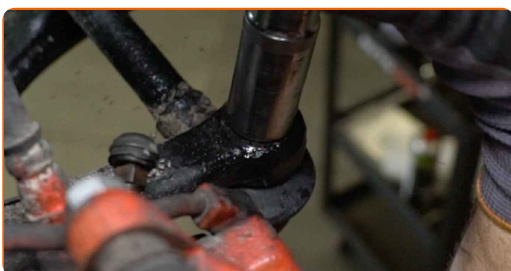
Clean the tie rod ends fasteners. Use a wire brush. Use WD-40 spray.



- 17 Unscrew the fastening nut connecting the tie rod end to the steering knuckle. Use a drive socket #17. Use a ratchet wrench.



- 18 Unscrew the fastener connecting the tie rod end to the idler arm. Use a drive socket #17. Use a ratchet wrench.

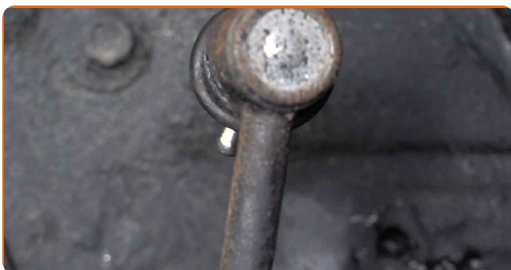


- 19 Disconnect the tie rod end from the steering knuckle. Use a ball joint puller.



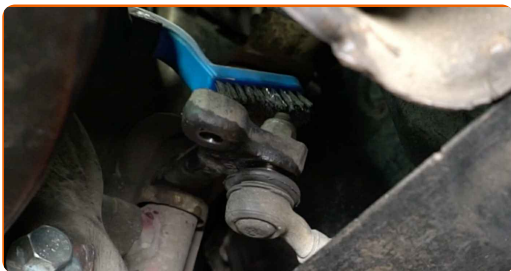
- 20 Detach the tie rod end from the idler arm. Use a ball joint puller.

- 21 Remove the steering tie rod.

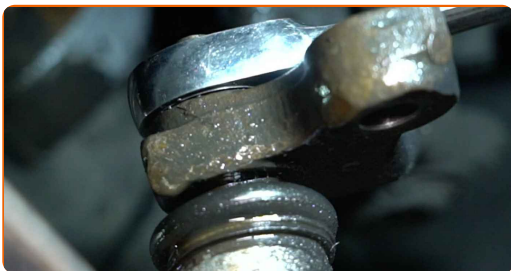




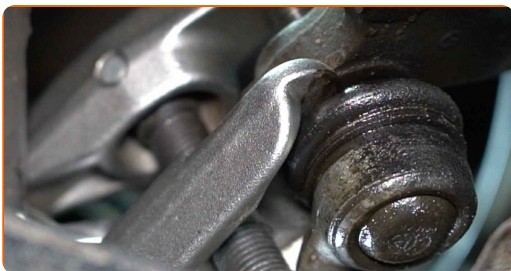
**22** Clean the centre drag link ends fasteners. Use a wire brush. Use WD-40 spray.



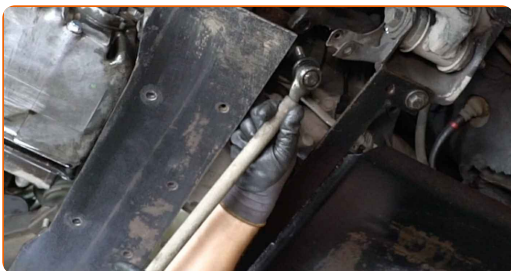
**23** Unscrew the centre drag link fasteners from the idler arms. Use a combination spanner #19.



**24** Detach the centre drag link ends from the idler arms. Use a ball joint puller.



**25** Remove the centre drag link.



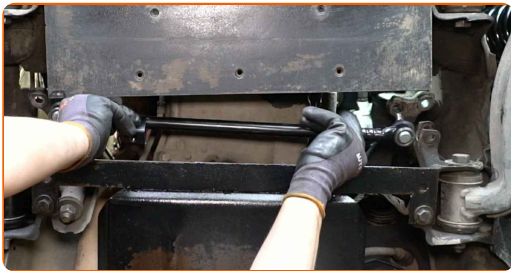
**26**

Clean the mounting seats of the drag link and tie rods. Use a wire brush. Use all-purpose cleaning spray.



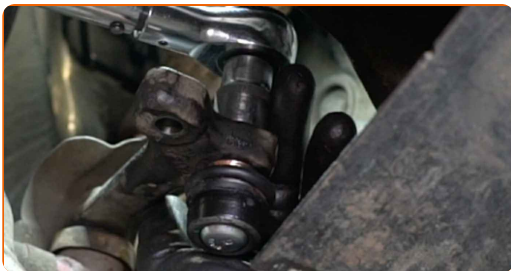
**27**

Install a new centre drag link.



**28**

Tighten the fasteners connecting the centre drag link ends to the idler arms. Use a drive socket #19. Use a torque wrench. Tighten it to 35 Nm torque.

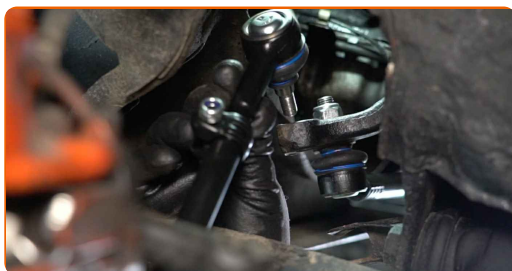


**29**

Adjust the length of new tie rods, using the old ones as reference. Use a combination spanner #13. Use a combination spanner #22 (2 pieces). Use a drive socket #13. Use a ratchet wrench. Use a vernier caliper.



**30** Install the new tie rod.



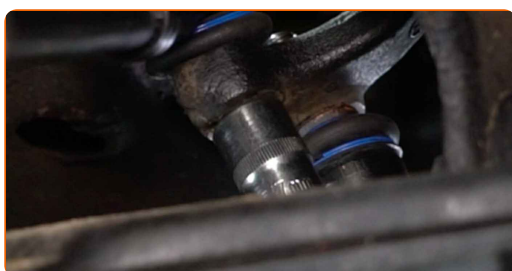
**31** Tighten the tie rod end fastening bolt. Use a combination spanner #13. Use a drive socket #13. Use a torque wrench. Tighten it to 20 Nm torque.



**32** Tighten the tie rod end locknut. Use a combination spanner #22. Use a torque wrench. Tighten it to 50 Nm torque.



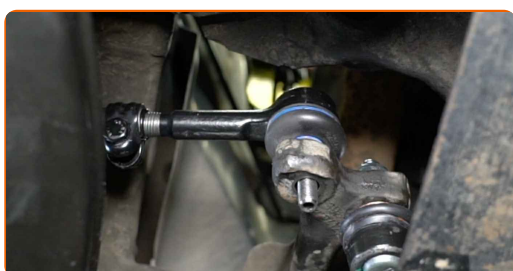
**33** Tighten the fastener connecting the tie rod end to the idler arm. Use a drive socket #17. Use a torque wrench. Tighten it to 35 Nm torque.



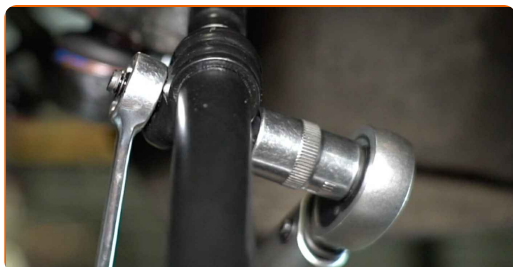
- 34** Tighten the fastening nut connecting the tie rod end to the steering knuckle. Use a drive socket #17. Use a torque wrench. Tighten it to 35 Nm torque.



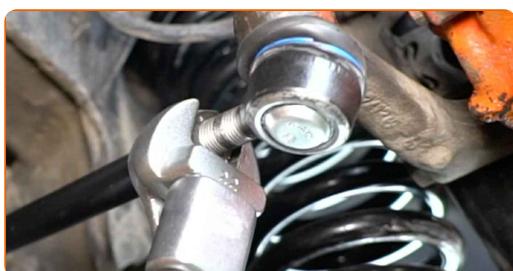
- 35** Install the new tie rod.



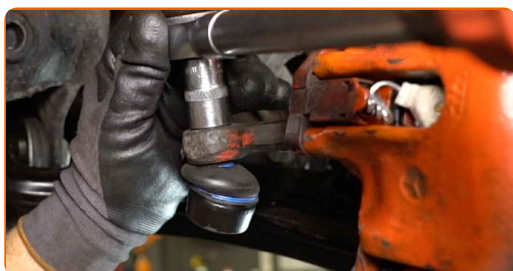
- 36** Tighten the tie rod end fastening bolt. Use a combination spanner #13. Use a drive socket #13. Use a torque wrench. Tighten it to 20 Nm torque.



- 37** Tighten the tie rod end locknut. Use a combination spanner #22. Use a torque wrench. Tighten it to 50 Nm torque.



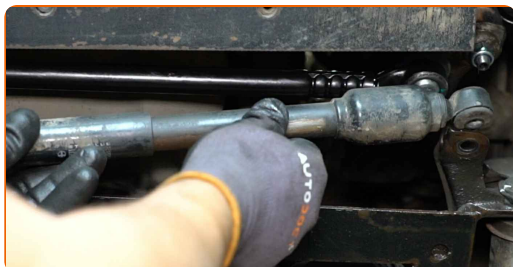
- 38** Tighten the fastener connecting the tie rod end to the idler arm. Use a drive socket #17. Use a torque wrench. Tighten it to 35 Nm torque.



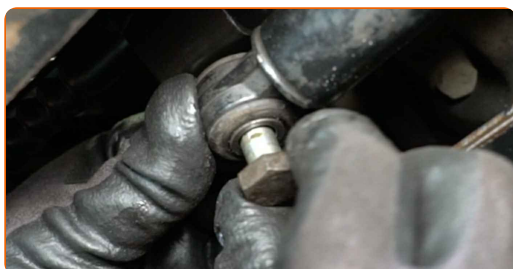
- 39** Tighten the fastening nut connecting the tie rod end to the steering knuckle. Use a drive socket #17. Use a torque wrench. Tighten it to 35 Nm torque.



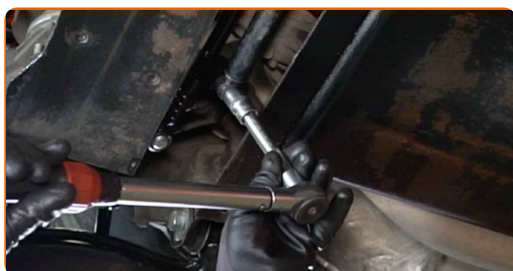
- 40** Install the steering damper.



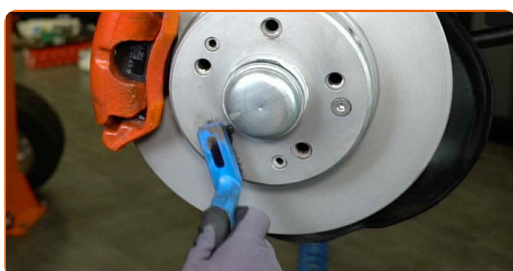
- 41** Install the fastening bolts.



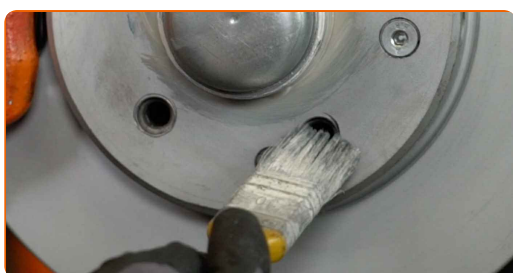
- 42 Tighten the steering damper fasteners. Use a combination spanner #17. Use a drive socket #17. Use a torque wrench. Tighten it to 40 Nm torque.



- 43 Clean the wheel rims mounting seats. Use a wire brush. Use all-purpose cleaning spray.



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



- 45 Install the wheels.



**AUTODOC recommends:**

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

**46**

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



**47**

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.



**48**

Remove the jacks and chocks.



Replacement: inner tie rod – MERCEDES-BENZ W124 Estate (S124).  
Professionals recommend:

- After replacing the component, it is advisable to realign the wheels using a wheel aligner.

**WELL DONE!** 

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