



How to change front
suspension strut 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) 300 3.0 Turbo diesel (124.193), (+ 5)

The steps may slightly vary depending on the car design.

Please note that this tutorial was created based on the replacement procedure for this car part on a car with a similar 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: SUSPENSION STRUT – MERCEDES-BENZ W124 ESTATE (S124). LIST OF THE TOOLS YOU'LL 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
- HEX bit no.H6
- HEX bit no.H7
- Wheel impact socket #17
- Ratchet wrench
- Tap wrench
- Water pump pliers
- Crow bar
- Strut spring compressor
- Hydraulic transmission jack
- Fender cover
- Wheel chock

Buy tools

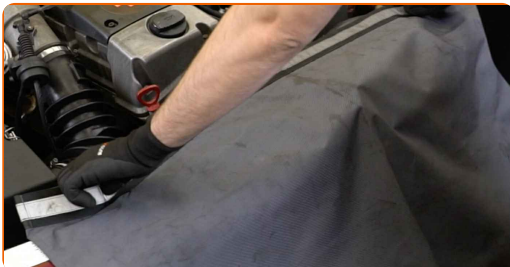
Replacement: suspension strut – MERCEDES-BENZ W124 Estate (S124). Tip from AUTODOC experts:

- Both shock struts of the front suspension should be replaced simultaneously.
- The replacement procedure is identical for the left and right shock struts of the front suspension.
- All work should be done with the engine stopped.

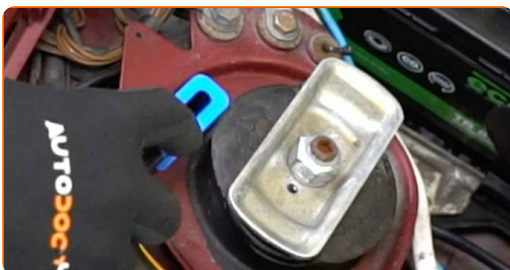
REPLACEMENT: SUSPENSION STRUT – MERCEDES-BENZ W124 ESTATE (S124). USE THE FOLLOWING PROCEDURE:

1 Open the bonnet.

2 Use a fender protection cover to prevent damaging paintwork and plastic parts of the car.



3 Clean the fasteners of the shock absorber upper mount. Use a wire brush. Use WD-40 spray.



4 Clean the shock absorber rod fastener. Use a wire brush. Use WD-40 spray.



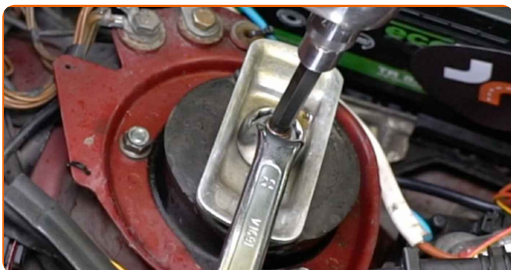
5 Loosen the fasteners of the upper strut mount. Use a drive socket #13. Use a ratchet wrench.



AUTODOC recommends:

- Don't unscrew it completely.

6 Loosen the fastener of the strut piston rod. Use a combination spanner #22. Use HEX No.H7. Use a ratchet wrench.



Replacement: suspension strut – MERCEDES-BENZ W124 Estate (S124). Tip:

- Don't unscrew it completely.

7 Secure the wheels with chocks.

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



9 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.

10 Unscrew the wheel bolts.



AUTODOC recommends:

- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts.
MERCEDES-BENZ W124 Estate (S124)

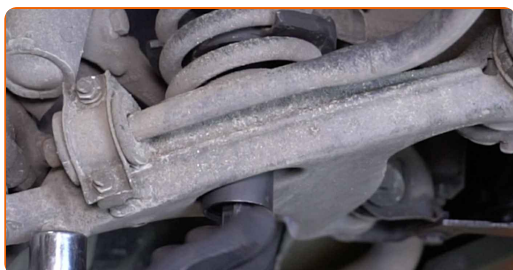
11 Remove the wheel.



12 Support the steering knuckle. Use a hydraulic transmission jack.



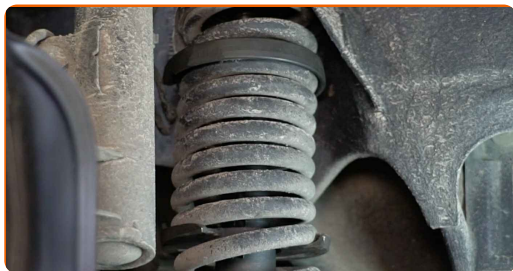
13 Install the coil spring compressor on the coil spring.



AUTODOC recommends:

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

14 Compress the spring.



Replacement: suspension strut – MERCEDES-BENZ W124 Estate (S124).
AUTODOC recommends:

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

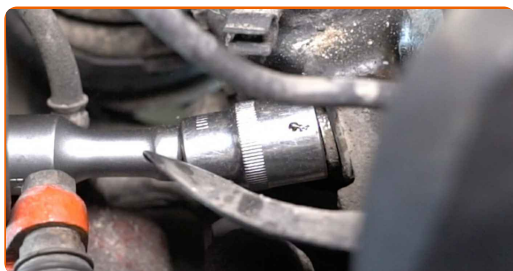
15 Clean the shock absorber fasteners. Use a wire brush. Use WD-40 spray.



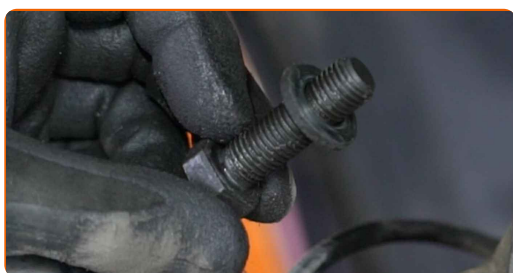
16 Disconnect the wiring from the strut.



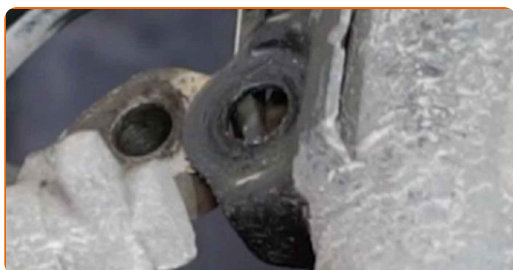
17 Unscrew the lower fasteners on the shock absorber. Use a drive socket #19. Use a ratchet wrench.



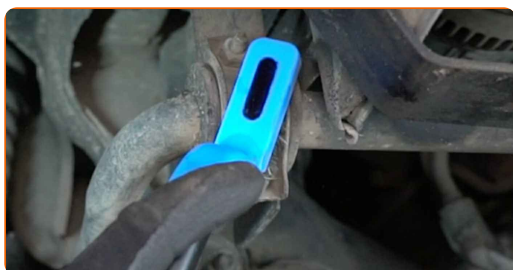
18 Remove the fastening bolts.



19 Detach the strut from the steering knuckle. Use a crowbar.



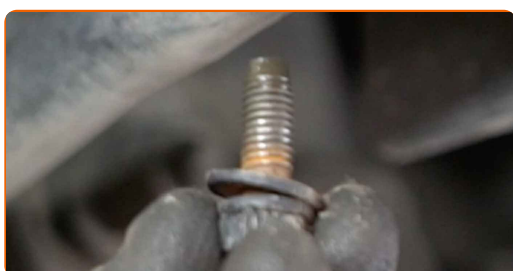
20 Clean the fasteners of the stabilizer bush brackets. Use a wire brush. Use WD-40 spray.



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



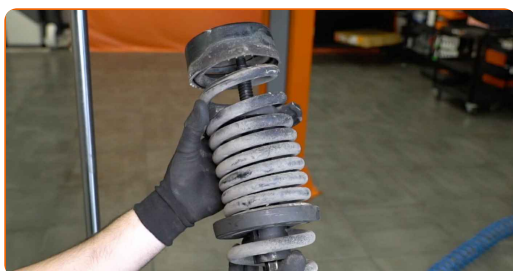
- 22** Remove the fastening bolts.



- 23** Remove the stabilizer bush brackets.



- 24** Remove the coil spring together with the coil spring compressor.



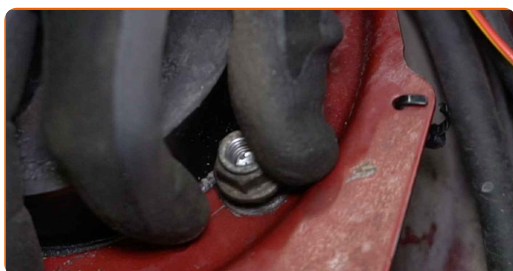
Replacement: suspension strut – MERCEDES-BENZ W124 Estate (S124).
 AUTODOC experts recommend:

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

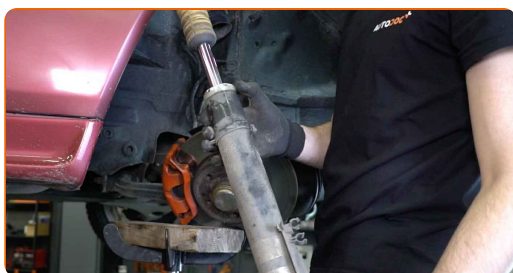
- 25** Remove the fastener of the shock absorber piston rod. Use a combination spanner #22. Use HEX No.H7. Use a ratchet wrench.



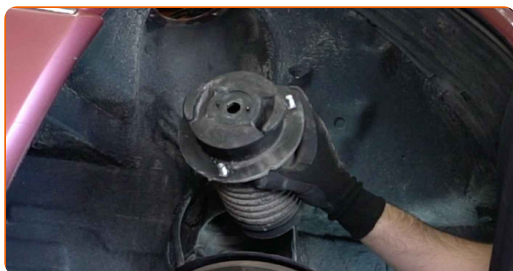
- 26** Unscrew the fasteners of the upper strut mount. Use a drive socket #13. Use a ratchet wrench.



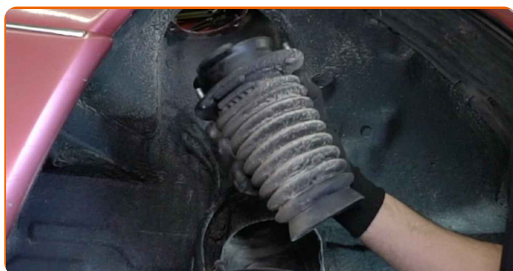
- 27** Remove the shock absorber.



- 28** Remove the strut mount.



- 29** Remove the shock absorber dust boot and bump stop.



AUTODOC recommends:

- Carefully inspect the dust boot and bump stop of the suspension strut. Replace them if necessary.

30

Decompress the spring.



31

Install the coil spring compressor on the coil spring.



32

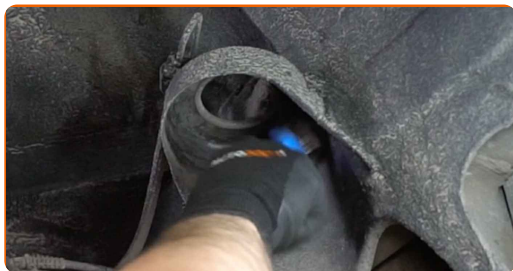
Compress the spring.



AUTODOC recommends:

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

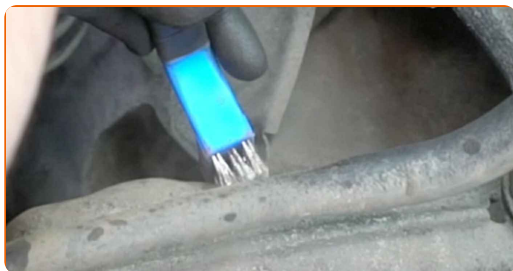
33 Clean the coil spring mounting seats. Use a wire brush. Use all-purpose cleaning spray.



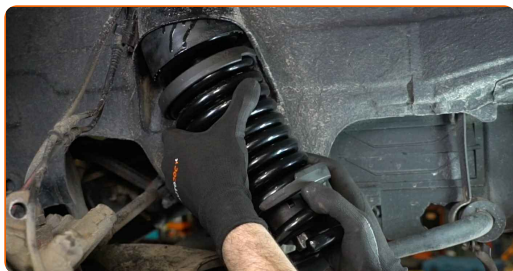
34 Clean the shock absorber mounting seats. Use a wire brush. Use all-purpose cleaning spray.



35 Clean the mounting seat of the suspension strut mount. Use a wire brush. Use all-purpose cleaning spray.



36 Install the spring together with the compressor.



AUTODOC recommends:

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

37 Install the top suspension strut mount.

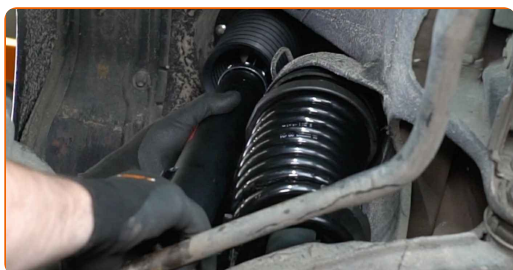


38 Screw on the fasteners of the upper strut mount.

39 Install the dust boot and the bump stop.



40 Install a new suspension strut.



Replacement: suspension strut – MERCEDES-BENZ W124 Estate (S124). Tip from AUTODOC experts:

- Before installing a new shock absorber you should pump it 3–5 times by hand.

41 Screw on the fastener of the strut piston rod.

42 Install the fastening bolts.



43 Tighten the lower fasteners on the shock absorbers. Use a drive socket #19. Use a torque wrench. Tighten it to 110 Nm torque.

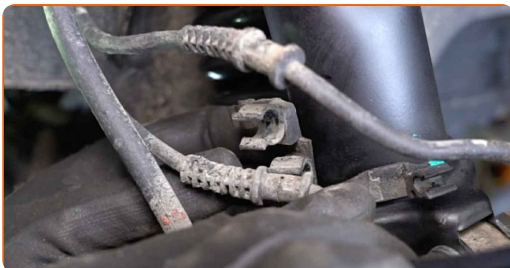


44 Remove the support from under the steering knuckle.

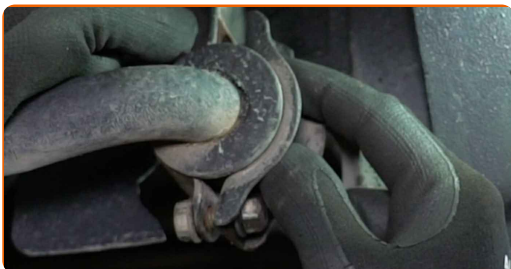
AUTODOC recommends:

- Lower the hydraulic transmission jack smoothly, without jerks, to avoid damaging assemblies and mechanisms.

45 Secure the wiring to the strut.

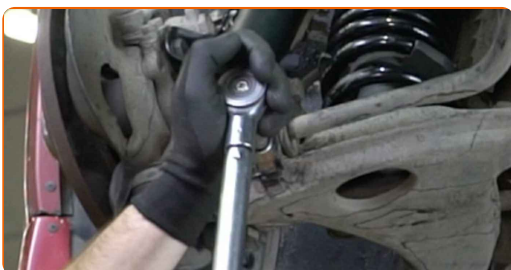


46 Install the stabilizer bush brackets. Use water pump pliers.



47 Install the fastening bolts.

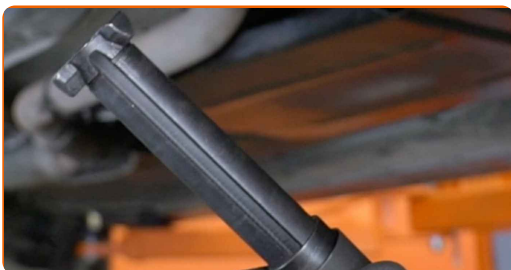
48 Tighten the fasteners on the anti-roll bar bush brackets. Use a combination spanner #13. Use a drive socket #13. Use a torque wrench. Tighten it to 20 Nm torque.



49 Decompress the spring.

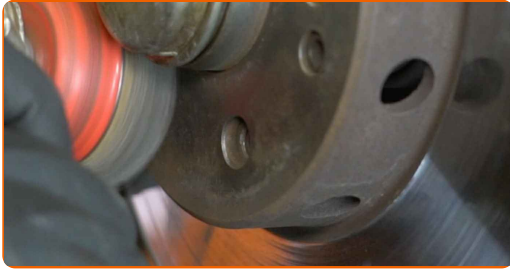


50 Remove the coil spring compressor.



51

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



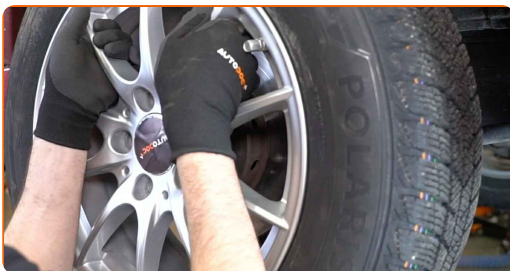
52

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



53

Install the wheel.



Replacement: suspension strut – MERCEDES-BENZ W124 Estate (S124).
AUTODOC recommends:

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

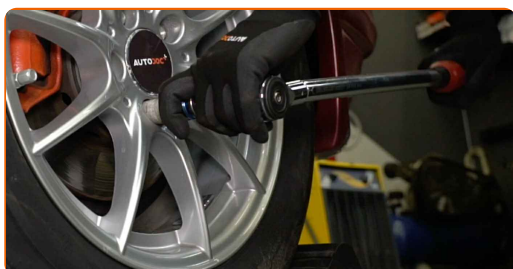
54

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



55

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.



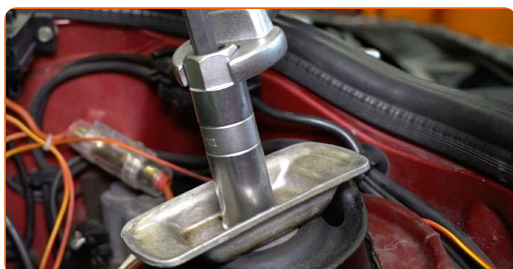
56

Remove the jacks and chocks.



57

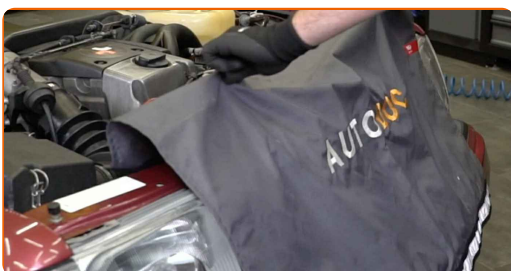
Tighten the shock absorber rod nut. Use a combination spanner #19. Use HEX No.H6. Use a torque wrench. Tighten it to 60 Nm torque.



- 58 Tighten the fasteners of the upper strut mount. Use a drive socket #13. Use a torque wrench. Tighten it to 20 Nm torque.



- 59 Remove the fender protection cover.



- 60 Close the bonnet.

WELL DONE! 

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