



How to change front  
suspension strut on  
**Mercedes W124** –  
replacement guide

**VIDEO TUTORIAL**



**ⓘ Important!**

This replacement procedure can be used for:

MERCEDES-BENZ Saloon (W124) 300 E 3.0 (124.030), MERCEDES-BENZ Saloon (W124) 300 E 3.0, MERCEDES-BENZ E-Class Saloon (W124) E 250 D (124.126, 124.129), MERCEDES-BENZ Saloon (W124) 250 2.5 Turbo diesel (124.128), MERCEDES-BENZ Saloon (W124) 300 D 3.0 (124.130), MERCEDES-BENZ E-Class Saloon (W124) E 300 D (124.131), MERCEDES-BENZ Saloon (W124) 300 3.0 Turbo diesel (124.133), MERCEDES-BENZ E-Class Saloon (W124) E 280 (124.028), MERCEDES-BENZ Saloon (W124) 300 E-24 3.0 (124.031), MERCEDES-BENZ E-Class Saloon (W124) E 320 (124.032), MERCEDES-BENZ W124 Estate (S124) 300 D 3.0 (124.190), MERCEDES-BENZ E-Class T-modell (S124) E 300 TD (124.191), MERCEDES-BENZ E-Class T-modell (S124) E 280 T (124.088), MERCEDES-BENZ W124 Estate (S124) 300 TE-24 3.0 (124.091), MERCEDES-BENZ E-Class T-modell (S124) E 320 T (124.092), (+ 12)

The steps may slightly vary depending on the car design.

**REPLACEMENT: SUSPENSION STRUT – MERCEDES W124. 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**

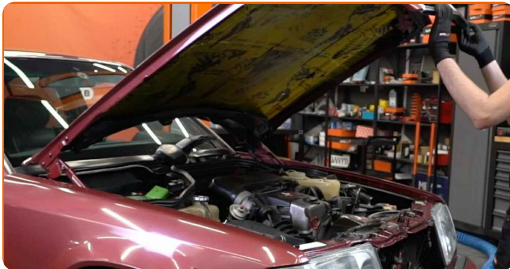
### Replacement: suspension strut – Mercedes W124. Tip from AUTODOC experts:

- 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.

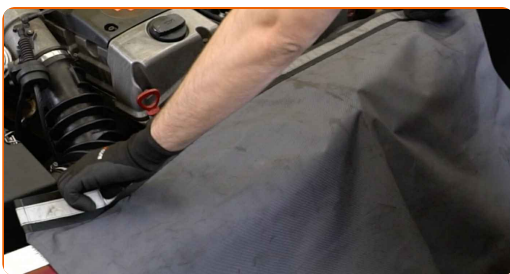
## REPLACEMENT: SUSPENSION STRUT – MERCEDES W124. USE THE FOLLOWING PROCEDURE:

**1**

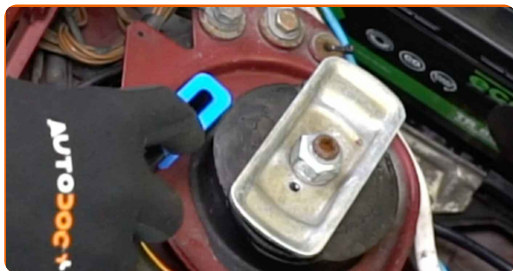
Open the bonnet.

**2**

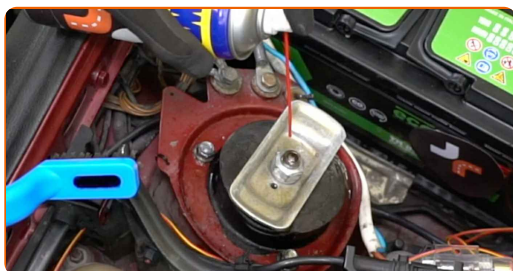
Use a fender protection cover to prevent damaging paintwork and plastic parts of the car.



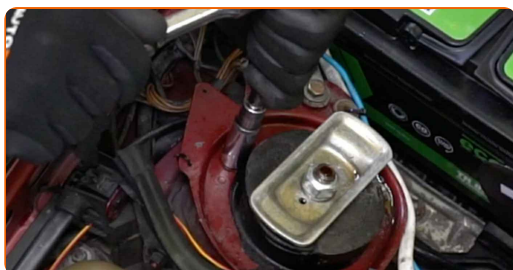
**3** Clean the fasteners of the shock absorber upper mount. Use a wire brush. Use WD-40 spray.



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



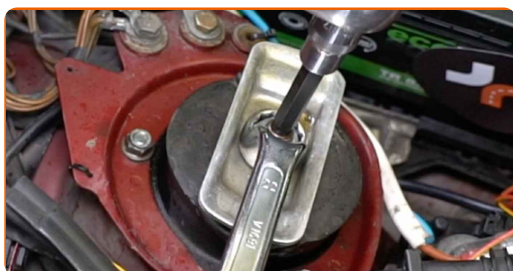
**5** Loosen the fasteners of the upper strut mount. Use a drive socket #13. Use a ratchet wrench.



**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 W124. 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 W124

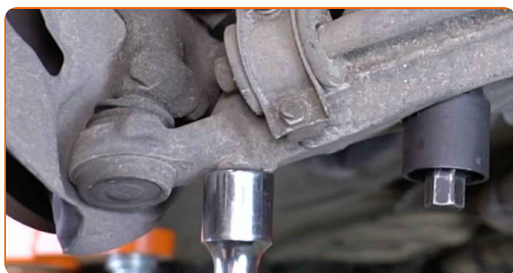
**11**

Remove the wheel.



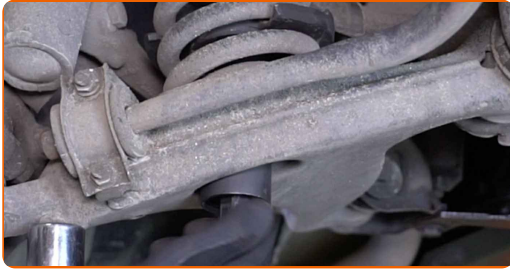
**12**

Support the steering knuckle. Use a hydraulic transmission jack.



**13**

Install the coil spring compressor on the coil spring.

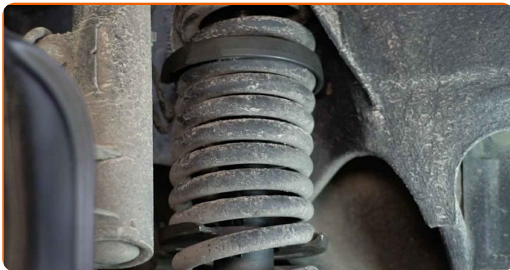


**AUTODOC recommends:**

- 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 W124. AUTODOC recommends:**

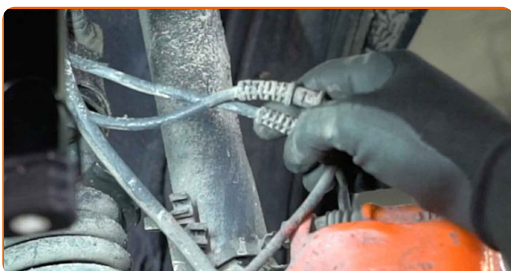
- Be careful. The compressed spring is powerful and can cause injury if it comes loose.



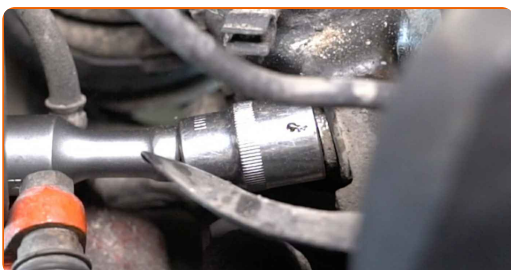
**15** Clean the shock absorber fasteners. Use a wire brush. Use WD-40 spray.



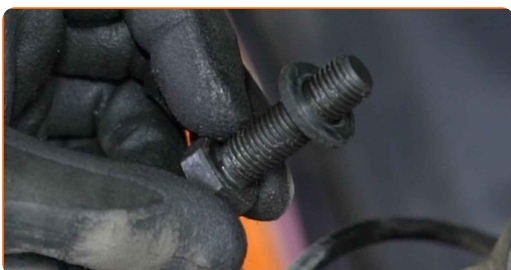
**16** Disconnect the wiring from the strut.



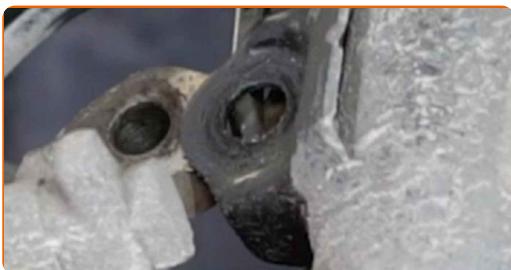
**17** Unscrew the lower fasteners on the shock absorber. Use a drive socket #19. Use a ratchet wrench.



**18** Remove the fastening bolts.

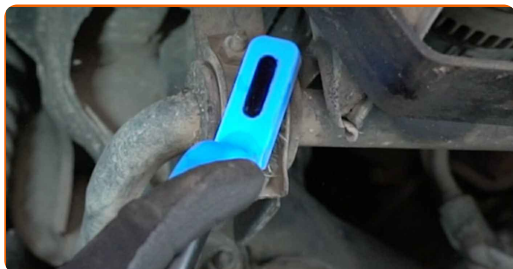


**19** Detach the strut from the steering knuckle. Use a crowbar.



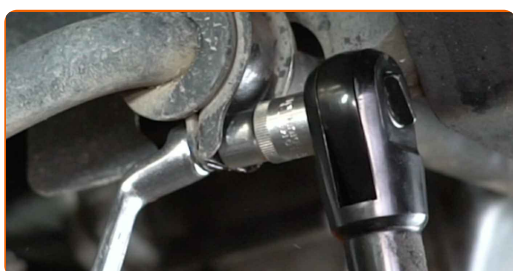
20

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



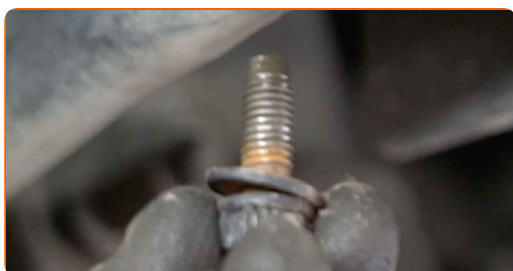
21

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.



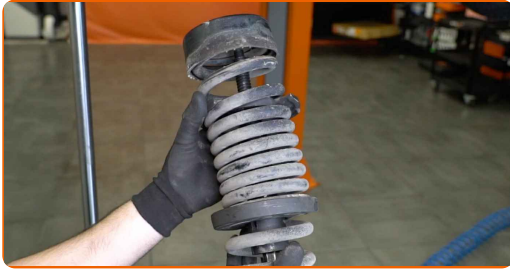
23

Remove the stabilizer bush brackets.



24

Remove the coil spring together with the coil spring compressor.



Replacement: suspension strut – Mercedes W124. AUTODOC experts recommend:

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

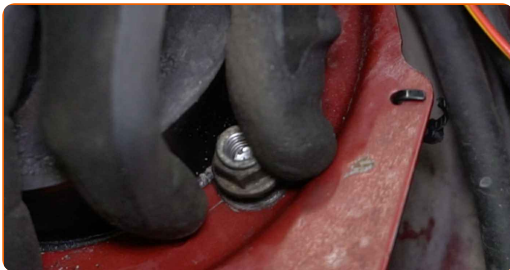
25

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



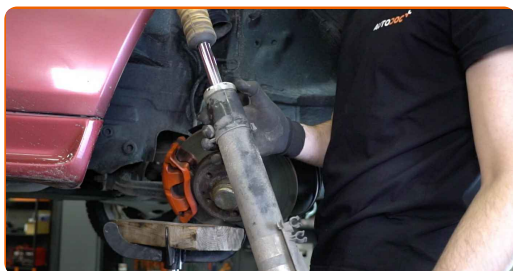
26

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



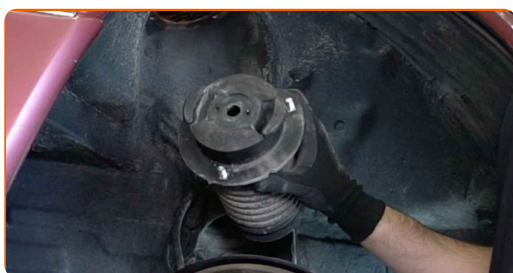
27

Remove the shock absorber.



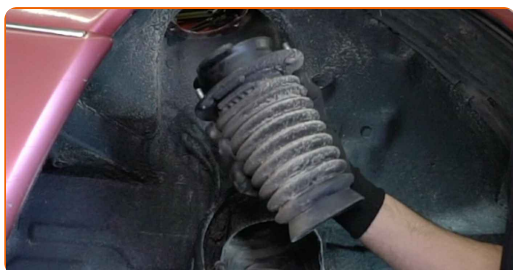
28

Remove the strut mount.



29

Remove the shock absorber dust boot and bump stop.



**AUTODOC recommends:**

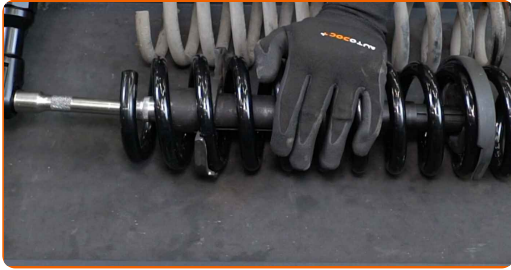
- Carefully inspect the dust boot and bump stop of the suspension strut. Replace them if necessary.

30

Decompress the spring.



**31** Install the coil spring compressor on the coil spring.



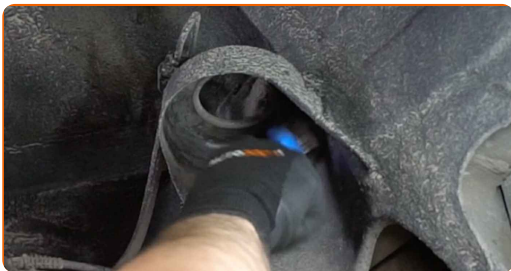
**32** Compress the spring.



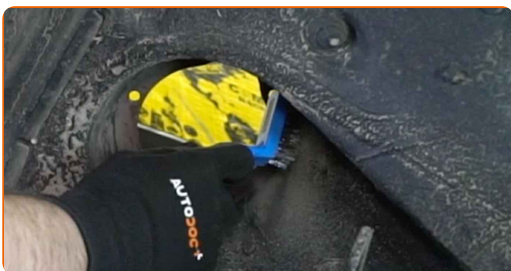
**AUTODOC recommends:**

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

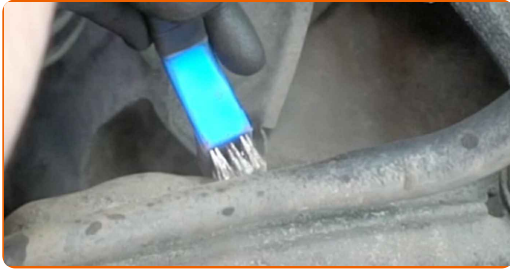
**33** Clean the coil spring mounting seats. Use a wire brush. Use all-purpose cleaning spray.



**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:**

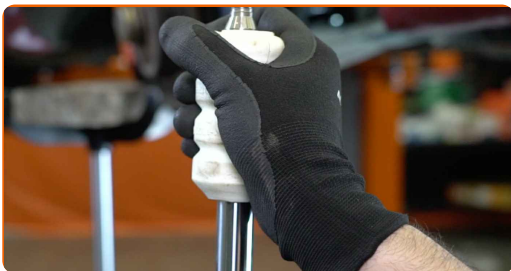
- Make sure that the coil spring is correctly positioned in its mounting seats.

**37** Install the top suspension strut mount.

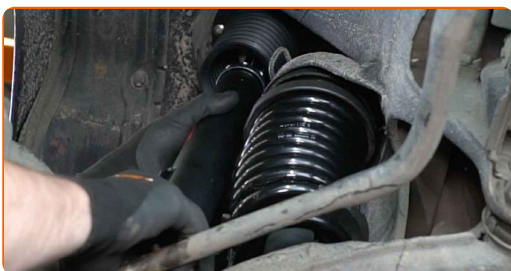


**38** Screw on the fasteners of the upper strut mount.

**39** Install the dust boot and the bump stop.



**40** Install a new suspension strut.

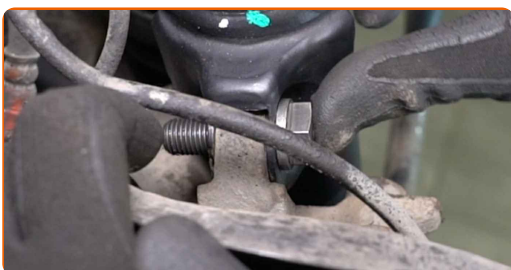


Replacement: suspension strut – Mercedes W124. Tip from AUTODOC experts:

- 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**

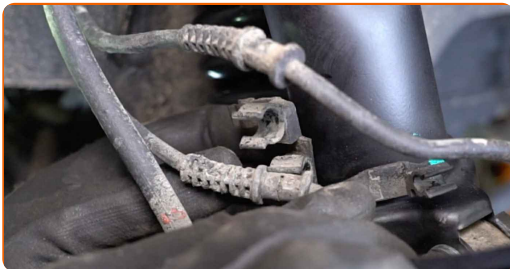
Remove the support from under the steering knuckle.

**AUTODOC recommends:**

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

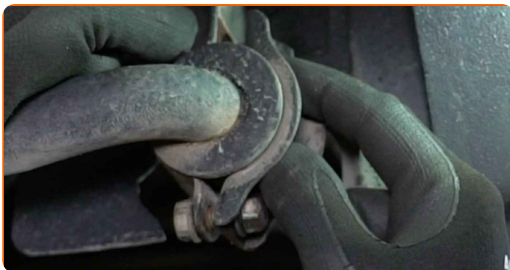
**45**

Secure the wiring to the strut.



**46**

Install the stabilizer bush brackets. Use water pump pliers.

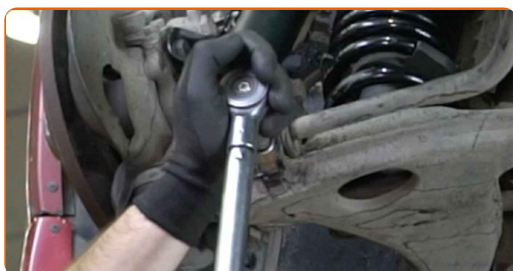


**47**

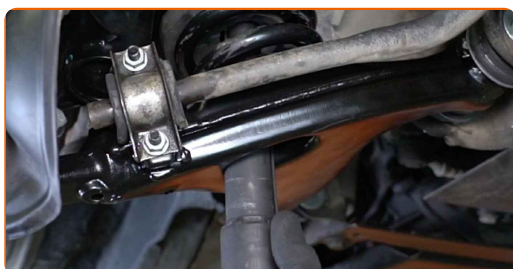
Install the fastening bolts.



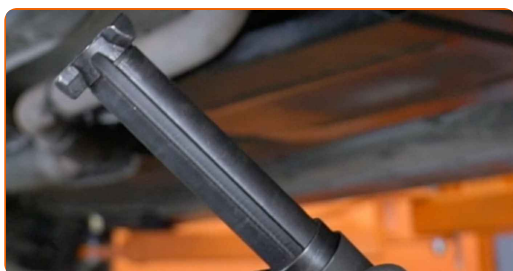
- 48** Tighten the fasteners on the anti-roll bar bush brackets. Use a combination spanner #13. Use a drive socket #13. Use a torque wrench. Tighten it to 20 Nm torque.



- 49** Decompress the spring.



- 50** Remove the coil spring compressor.

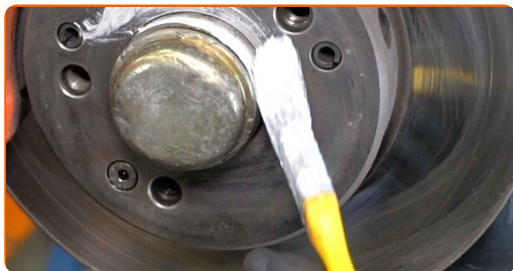


- 51** Clean the wheel rim mounting seat. Use a wire brush. Use all-purpose cleaning spray.



52

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



53

Install the wheel.



Replacement: suspension strut – Mercedes W124. AUTODOC recommends:

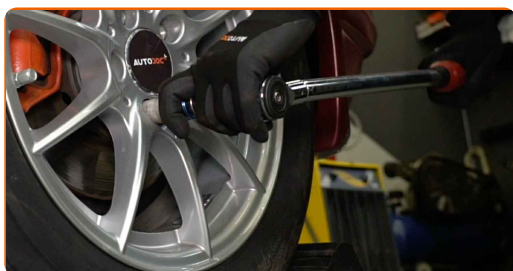
- To avoid injury, hold up the wheel when screwing in the fastening bolts.

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.

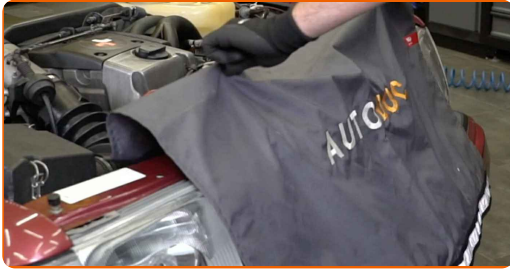


- 58** Tighten the fasteners of the upper strut mount. Use a drive socket #13. Use a torque wrench. Tighten it to 20 Nm torque.



59

Remove the fender protection cover.



60

Close the bonnet.



**WELL DONE!** 

[VIEW MORE TUTORIALS](#)

# AUTODOC – TOP QUALITY AND AFFORDABLE CAR PARTS ONLINE

**AUTODOC MOBILE APP: GREAT DEALS AND CONVENIENT SHOPPING**



**+ AUTODOC**

GET IT ON  **Google Play**

 **Download on the App Store**

**Download**

**A GREAT SELECTION OF SPARE PARTS FOR YOUR CAR**

**BUY SPARE PARTS FOR MERCEDES**

**SHOCK ABSORBERS: A WIDE SELECTION**

**CHOOSE CAR PARTS FOR MERCEDES W124**

**SHOCK ABSORBERS FOR MERCEDES: BUY NOW**

**SHOCK ABSORBERS FOR MERCEDES W124: THE BEST  
DEALS & OFFERS**

### **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.