



How to change front coil  
springs on **MERCEDES-  
BENZ C-Class T-modell  
(S203)** – replacement  
guide

### SIMILAR VIDEO TUTORIAL



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

#### **i Important!**

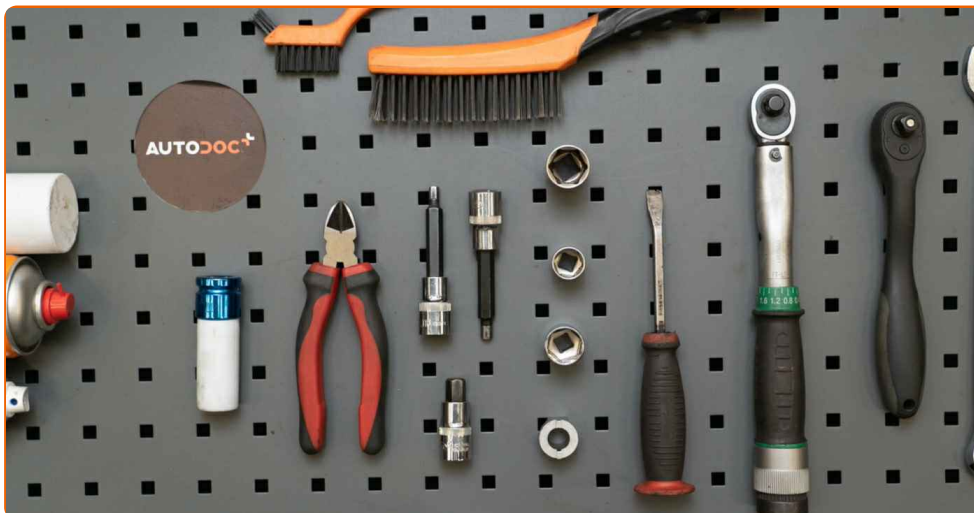
This replacement procedure can be used for:

MERCEDES-BENZ C-Class T-modell (S203) C 220 CDI (203.208), MERCEDES-BENZ C-Class T-modell (S203) C 200 Kompressor (203.245), MERCEDES-BENZ C-Class T-modell (S203) C 200 CDI (203.204), MERCEDES-BENZ C-Class T-modell (S203) C 220 CDI (203.206), MERCEDES-BENZ C-Class T-modell (S203) C 240 (203.261), MERCEDES-BENZ C-Class T-modell (S203) C 200 CDI (203.204, 203.207), MERCEDES-BENZ C-Class T-modell (S203) C 180 Kompressor (203.246), MERCEDES-BENZ C-Class T-modell (S203) C 200 Kompressor (203.242), MERCEDES-BENZ C-Class T-modell (S203) C 200 CGI Kompressor (203.243), MERCEDES-BENZ C-Class T-modell (S203) C 200 CDI (203.207), MERCEDES-BENZ C-Class T-modell (S203) C 230 Kompressor (203.240), MERCEDES-BENZ C-Class T-modell (S203) C 280 (203.254), MERCEDES-BENZ C-Class T-modell (S203) C 230 (203.252)

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 C-Class Saloon (W203) C 240 (203.061)

**REPLACEMENT: COIL SPRINGS – MERCEDES-BENZ C-CLASS T-MODELL (S203). TOOLS YOU NEED:**



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Torque wrench
- Combination spanner #21
- HEX bit No.H6.
- HEX bit No.H7.
- HEX bit No.H12.
- Drive socket # 16
- Drive socket # 19
- Drive socket # 21
- 14X2.5-mm strut nut socket
- Wheel impact socket #17
- Ratchet wrench
- Tap wrench
- Crow bar
- Nippers
- Hydraulic strut spring compressor
- Hydraulic transmission jack
- Fender cover
- Wheel chock

**Buy tools**

Replacement: coil springs – MERCEDES-BENZ C-Class T-modell (S203).  
AUTODOC experts recommend:

- Both coil springs of the front suspension should be replaced simultaneously.
- The replacement procedure is identical for the left and right coil springs of the front suspension.
- Please note: all work on the car – MERCEDES-BENZ C-Class T-modell (S203) – should be done with the engine switched off.

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

**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 strut upper mount. Use a wire brush. Use WD-40 spray.



**4** Loosen the upper fastener of the shock strut mount. Use a combination spanner #21. Use HEX No.H7. Use a ratchet wrench.



**5** Secure the wheels with chocks.



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



**7** Raise the front of the car and secure on supports.

**8** Unscrew the wheel bolts.



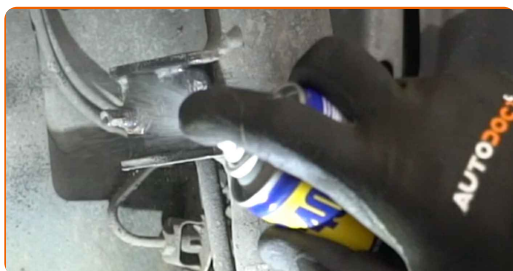
**AUTODOC recommends:**

- Important! Hold the wheel while unscrewing the fastening bolts. MERCEDES-BENZ C-Class T-modell (S203)

**9** Remove the wheel.



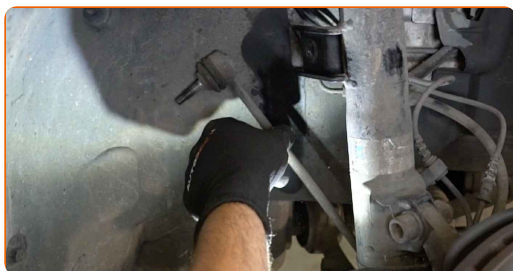
**10** Clean the stabiliser link fasteners. Use a wire brush. Use WD-40 spray.



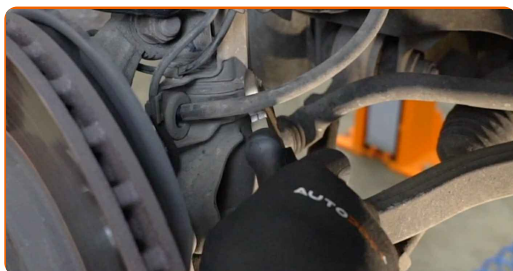
**11** Unscrew the fastener connecting the stabilizer link to the shock strut. Use a drive socket #16. Use a ratchet wrench.



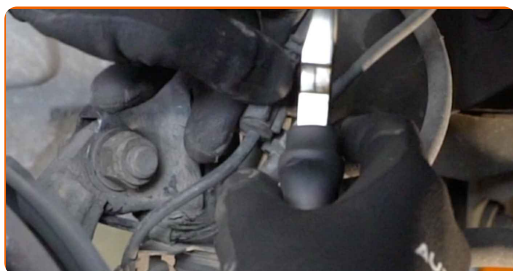
**12** Remove the stabilizer rod.



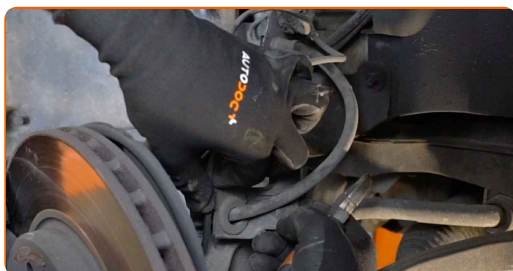
**13** Disconnect the brake hose bracket. Use nippers.



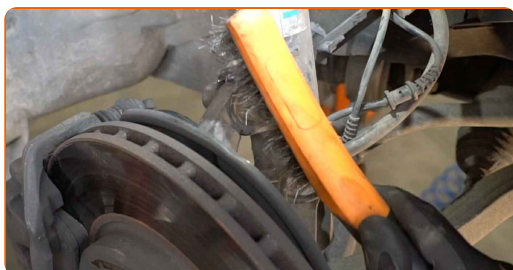
**14** Disconnect the ABS sensor wiring.



**15** Disconnect the brake pad wear sensor wire.



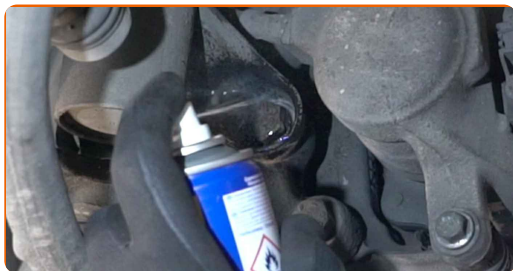
**16** Clean the fasteners connecting the shock strut to the steering knuckle. Use a wire brush. Use WD-40 spray.



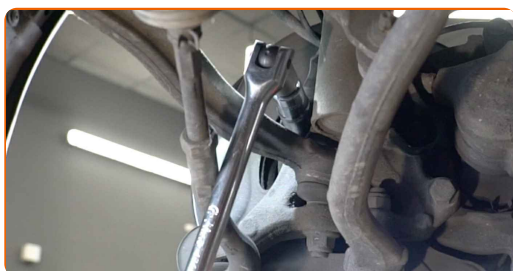
**17** Unscrew the upper fastener connecting the shock strut to the steering knuckle. Use HEX No.H12. Use a drive socket #21. Use a ratchet wrench. Use a tap wrench.



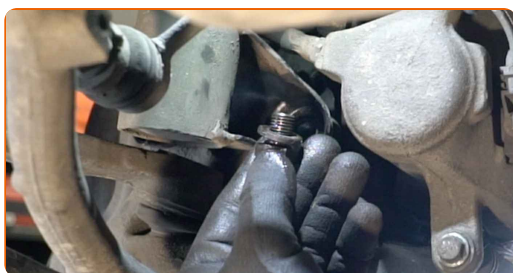
**18** Clean the fasteners connecting the shock strut to the steering knuckle. Use a wire brush. Use WD-40 spray.



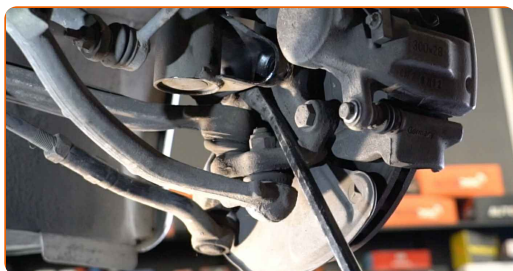
**19** Unscrew the fasteners connecting the suspension strut to the steering knuckle. Use a drive socket #19. Use a tap wrench.



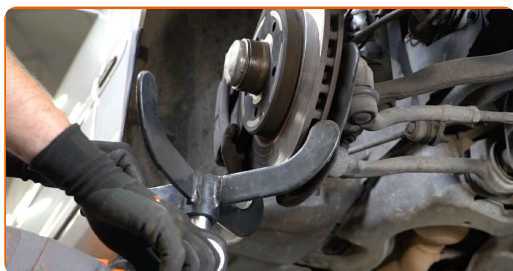
**20** Remove the fastening bolts.



**21** Disconnect the steering knuckle from the shock absorber strut. Use a crowbar.

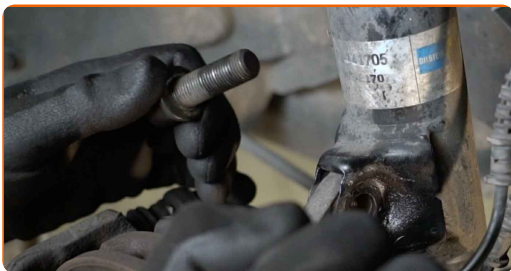


**22** Prop up the steering knuckle. Use a hydraulic transmission jack.





**23** Remove the fastening bolt.



**24** Disconnect the steering knuckle from the shock absorber strut. Use a crowbar.



**25** Unscrew the top fastening of the shock strut mount.



**AUTODOC recommends:**

- MERCEDES-BENZ C-Class T-modell (S203) – To avoid injury, hold the suspension strut while unscrewing the fastening bolts.

**26** Remove the suspension strut.



**27**

Set the shock absorber strut on the spring compressor tool.



**Replacement: coil springs – MERCEDES-BENZ C-Class T-modell (S203). Tip from AUTODOC experts:**

- Note that when using a spring compressor, spring coils need to be securely gripped, compressing the spring on the opposite sides.
- Ensure the correct position of the spring in the retainer.
- Make sure that the spring coils tightly entered the lock handles.

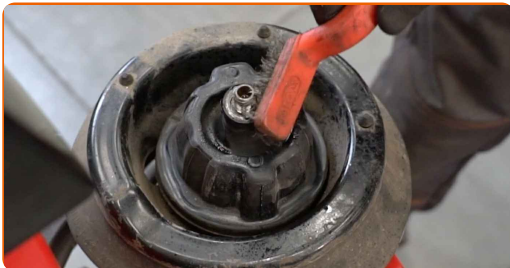
**28**

Compress the spring.



**29**

Treat the shock strut rod. Use a wire brush. Use WD-40 spray.



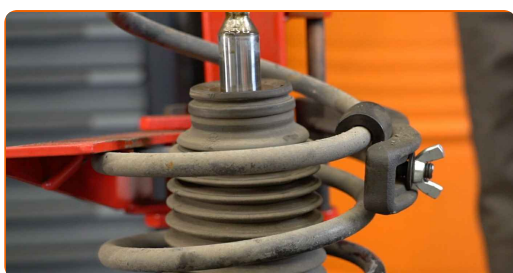
- 30** Remove the strut piston rod nut. Use a 14X2.5-mm strut nut socket. Use a drive socket #21. Use HEX No.H7. Use a ratchet wrench.



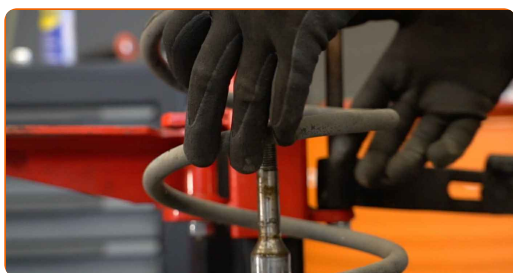
- 31** Remove the top strut mount.



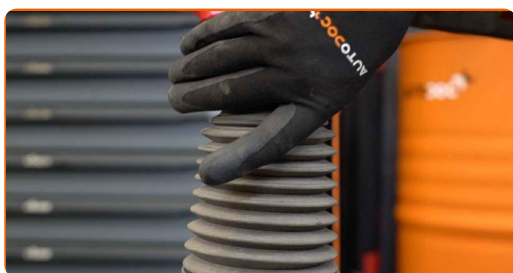
- 32** Release the coil spring.



- 33** Remove the spring.



- 34** Remove the shock absorber dust cap and the bump stop.



**AUTODOC recommends:**

- Replacement: coil springs – MERCEDES-BENZ C-Class T-modell (S203). Carefully inspect the mount, the boot, and the bump stop of the shock absorber. Replace if necessary.

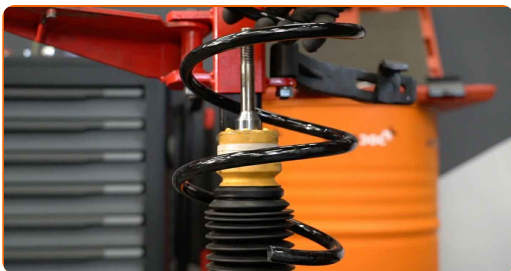
**35**

Install the boot and a bump stop onto the shock absorber.



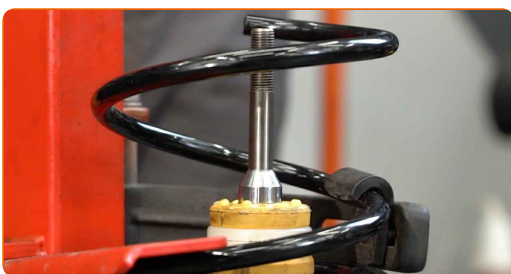
**36**

Install the spring on the shock absorber.



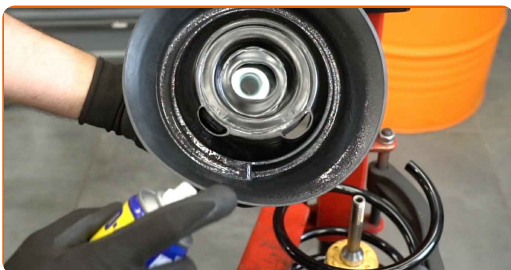
**37**

Compress the spring.

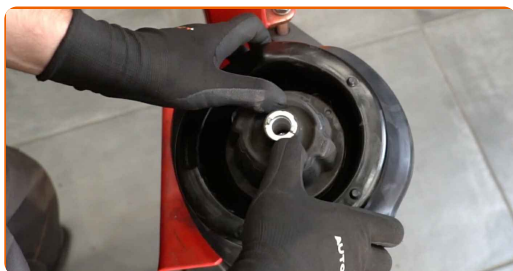


**38**

Treat the upper shock strut mount. Use WD-40 spray.



**39** Install the upper strut mount and the strut mount bearing.



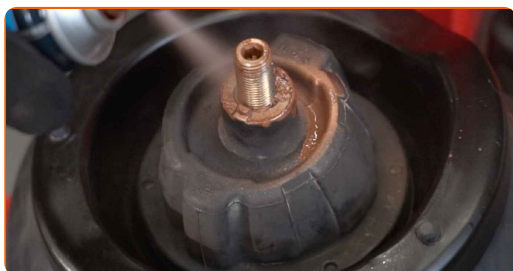
**40** Tighten the shock strut piston rod nut. Use a 14X2.5-mm strut nut socket. Use a drive socket #21. Use HEX No.H6. Use a torque wrench. Tighten it to 20 Nm torque.



**AUTODOC recommends:**

- Replacement: coil springs – MERCEDES-BENZ C-Class T-modell (S203). Be sure to position the filtering element correctly. Avoid misalignment.

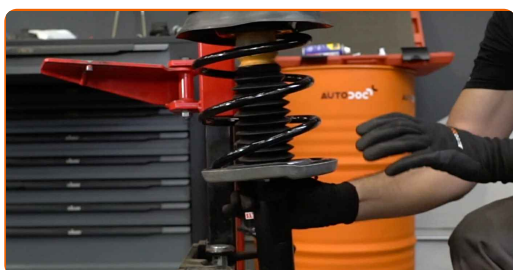
**41** Treat the shock strut rod. Use copper grease.



**42** Decompress the spring.



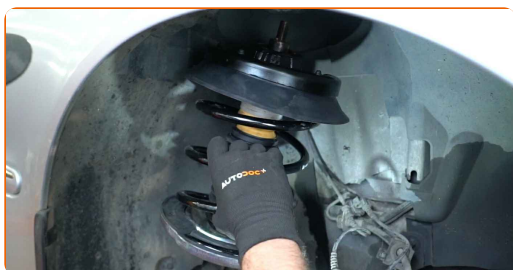
**43** Remove the assembled shock strut.



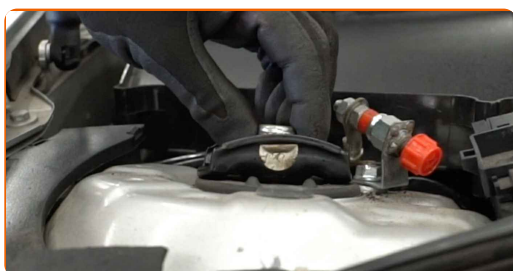
**44** Treat the mounting seats of the shock strut. Use a wire brush. Use WD-40 spray.



**45** Install the shock strut into the wheel arch.



**46** Screw the top fastening of the shock strut mount. Do not tighten it.

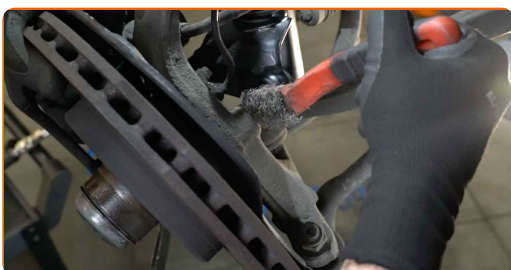


**AUTODOC recommends:**

- MERCEDES-BENZ C-Class T-modell (S203) – To avoid injury, hold the suspension strut while screwing in the fastening bolts.

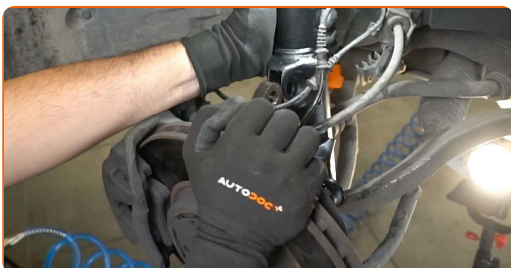
**47**

Treat the mounting seats of the shock strut. Use a wire brush. Use WD-40 spray.



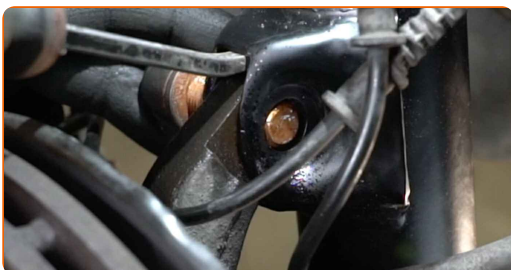
**48**

Fix the shock absorber strut on the steering knuckle. Use a crowbar.



**49**

Install the fastening bolt.

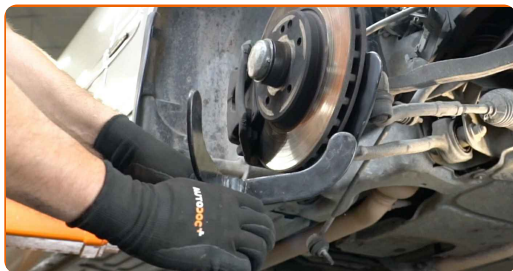


**50**

Screw in the upper fastener connecting the shock strut to the steering knuckle. Use a drive socket #21. Use HEX No.H12. Use a ratchet wrench.



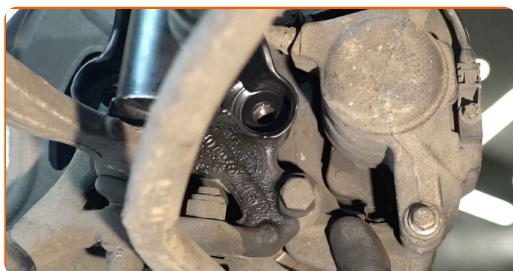
**51** Remove the support from under the steering knuckle.



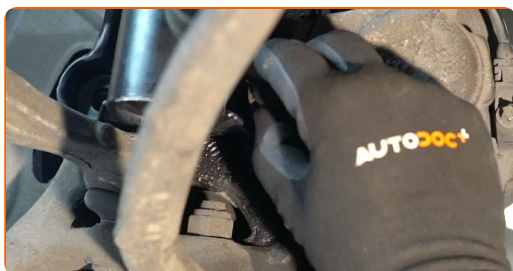
**AUTODOC recommends:**

- Replacement: coil springs – MERCEDES-BENZ C-Class T-modell (S203). Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

**52** Fix the shock absorber strut on the steering knuckle. Use a crowbar.

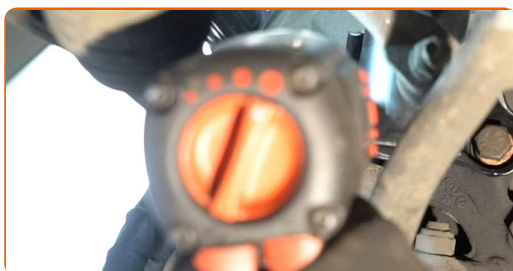


**53** Install the fastening bolts.

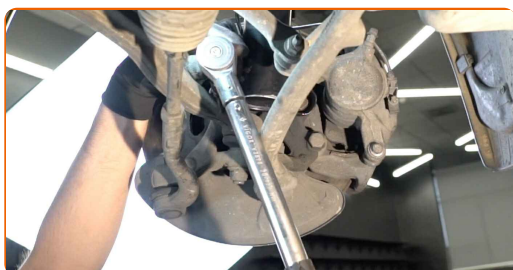




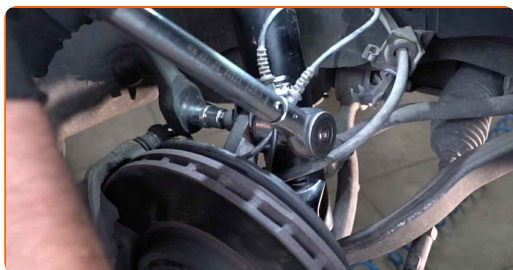
- 54** Screw in the fasteners connecting the suspension strut to the steering knuckle. Use a drive socket #19. Use a ratchet wrench.



- 55** Tighten the lower fasteners connecting the shock strut to the steering knuckle. Use a drive socket #19. Use a torque wrench. Tighten it to 110 Nm torque.



- 56** Tighten the upper fastener connecting the shock strut to the steering knuckle. Use a drive socket #21. Use HEX No.H12. Use a torque wrench. Tighten it to 100 Nm torque.+90°



**AUTODOC recommends:**

- Important! Be sure to use new fasteners.

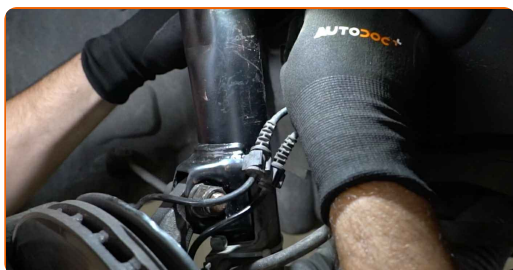
**57** Secure the brake hose bracket. Use nippers.



**58** Connect the ABS sensor wiring.

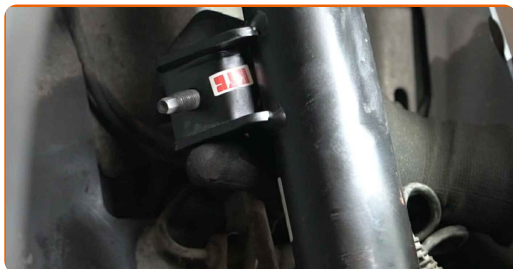


**59** Connect the brake pad wear sensor wire.



**60** Clean the mounting seats of the stabiliser link. Use a wire brush. Use WD-40 spray.

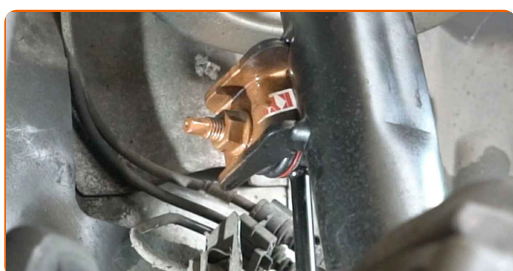
**61** Install the transverse stabilizer link.



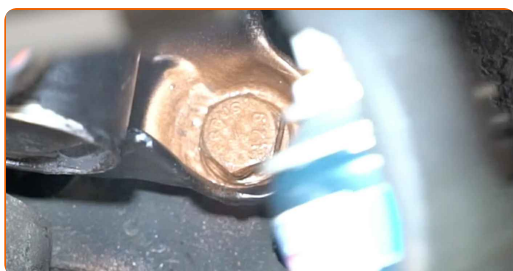
- 62** Tighten the fastener connecting the stabilizer link to the shock strut. Use a drive socket #16. Use a torque wrench. Tighten it to 60 Nm torque.



- 63** Treat all joints of the stabiliser link.



- 64** Treat the shock strut fasteners. Use copper grease.



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



66

Clean the brake disk surface. Use a brake cleaner.



**AUTODOC recommends:**

- Replacement: coil springs – MERCEDES-BENZ C-Class T-modell (S203). After applying the spray, wait a few minutes.

67

Install the wheel.



**AUTODOC recommends:**

- Important! Hold the suspension strut while screwing in the fastening bolts. MERCEDES-BENZ C-Class T-modell (S203)

68

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



- 69** 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.



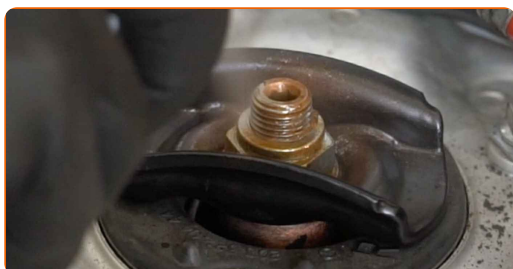
- 70** Remove the jacks and chocks.



- 71** Tighten the upper fastener of the shock absorber strut mount. Use a combination spanner #21. Use HEX No.H6. Use a torque wrench. Tighten it to 60 Nm torque.



- 72** Treat the fasteners of the shock strut mount. Use copper grease.



- 73** Remove the fender protection cover.

74

Close the hood.

**WELL DONE!** 

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