



How to change front coil
springs on **MERCEDES-
BENZ A-Class (W169)** –
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 A-Class (W169) A 170 (169.032, 169.332), MERCEDES-BENZ A-Class (W169) A 150 (169.031, 169.331), MERCEDES-BENZ A-Class (W169) A 200 (169.033, 169.333), MERCEDES-BENZ A-Class (W169) A 160 CDI (169.006, 169.306), MERCEDES-BENZ A-Class (W169) A 180 CDI (169.007, 169.307), MERCEDES-BENZ A-Class (W169) A 200 CDI (169.008, 169.308), MERCEDES-BENZ A-Class (W169) A 200 TURBO (169.034, 169.334)

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 B-Class (W245) B 200 (245.233)

REPLACEMENT: COIL SPRINGS – MERCEDES-BENZ A-CLASS (W169). TOOLS YOU'LL NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #16
- Combination spanner #21
- HEX bit no.H6.
- Drive socket # E12
- Drive socket # 21
- Drive socket # 22
- Wheel impact socket #H12
- Ratchet wrench
- Torque wrench
- Tap wrench
- Crow bar
- Hydraulic strut spring compressor
- Hydraulic transmission jack
- Fender cover
- Wheel chock

Buy tools

Replacement: coil springs – MERCEDES-BENZ A-Class (W169). Tip from AUTODOC experts:

- 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.
- Warning! Shut down the engine before starting any work – MERCEDES-BENZ A-Class (W169).

CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

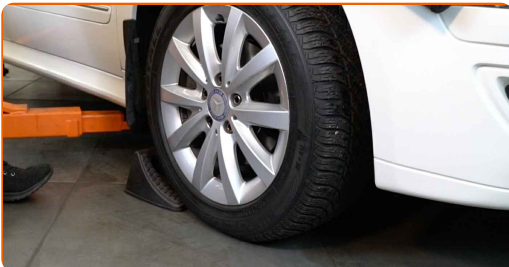
1 Open the bonnet.

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

3 Loosen the upper fastener of the shock strut mount. Use a drive socket #E12. Use a ratchet wrench.



4 Secure the wheels with chocks.



5

Loosen the wheel mounting bolts. Use wheel impact socket #H12.



6

Raise the front of the car and secure on supports.

7

Unscrew the wheel bolts.

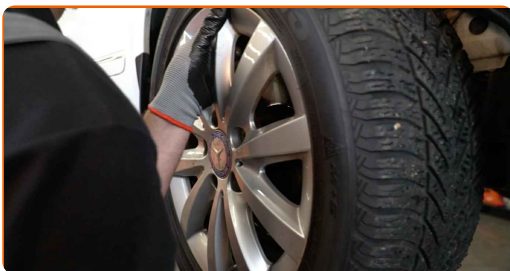


Replacement: coil springs – MERCEDES-BENZ A-Class (W169). AUTODOC recommends:

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

8

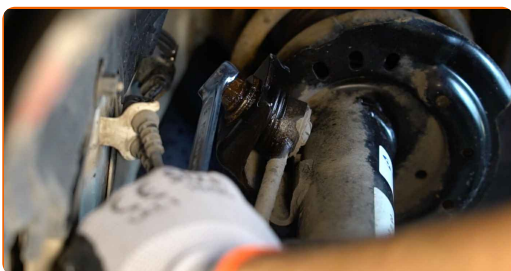
Remove the wheel.



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



10 Unscrew the fastener connecting the stabilizer link to the shock strut. Use a combination spanner #16.



11 Remove the stabilizer rod.



12 Disconnect the ABS sensor wiring. Disconnect the brake pad wear sensor plug.

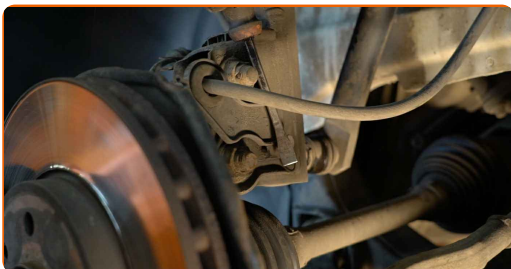


Replacement: coil springs – MERCEDES-BENZ A-Class (W169). Tip:

- Some cars are not equipped with the brake pad wear sensor.

13

Disconnect the brake hose mounting bracket. Use a crowbar.



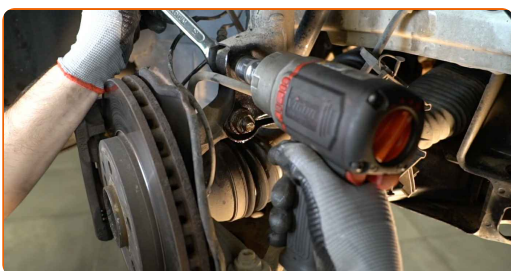
14

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

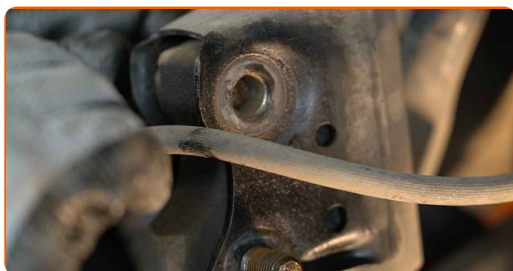


15

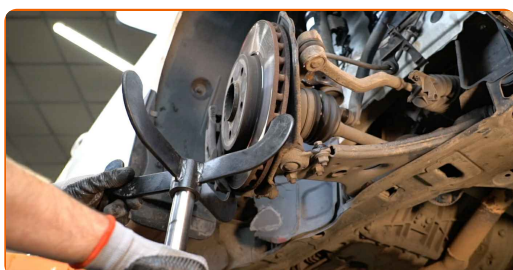
Unscrew the lower fastener connecting the shock strut to the steering knuckle. Use a combination spanner #21. Use a drive socket #21. Use a tap wrench.



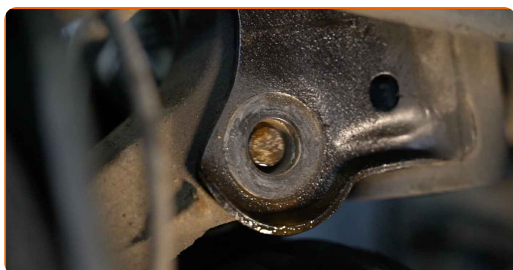
16 Remove the fastening bolt.



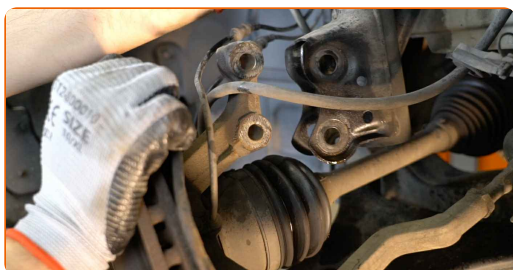
17 Prop up the steering knuckle. Use a hydraulic transmission jack.



18 Remove the fastening bolt.



19 Disconnect the steering knuckle from the shock absorber strut.



20 Unscrew the top fastening of the shock strut mount.

AUTODOC recommends:

- Important! Hold the suspension strut while unscrewing the fastening bolts.
MERCEDES-BENZ A-Class (W169)

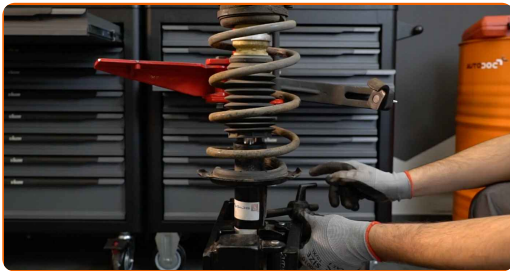
21

Remove the suspension strut.



22

Set the shock absorber strut on the spring compressor tool.



Replacement: coil springs – MERCEDES-BENZ A-Class (W169). Professionals recommend:

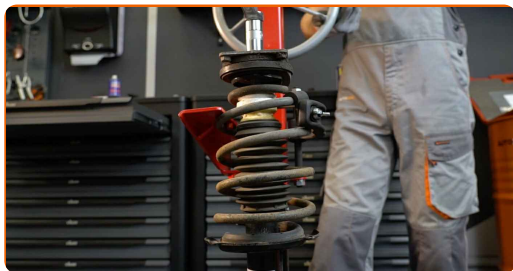
- Note that when using a spring compressor, spring coils need to be securely gripped, compressing the spring on the opposite sides.
- Ensure the correct position of the spring in the retainer.
- Make sure that the spring coils tightly entered the lock handles.

23

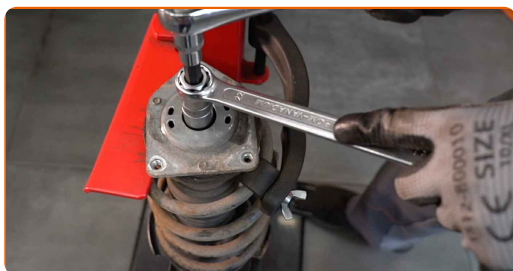
Treat the shock strut rod. Use a wire brush. Use WD-40 spray.



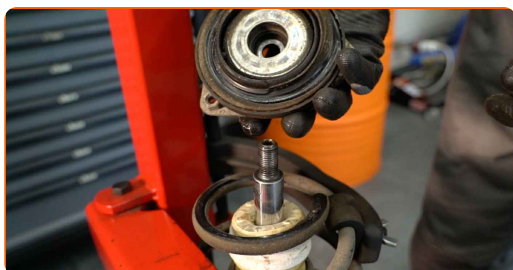
24 Compress the spring.



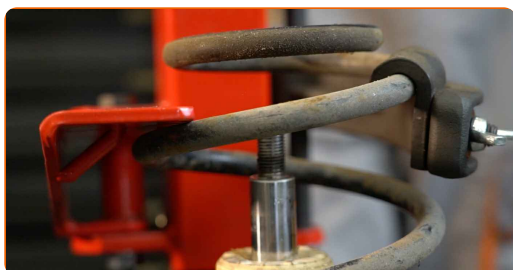
25 Remove the strut piston rod nut. Use HEX No.H6. Use a drive socket #21. Use a ratchet wrench.



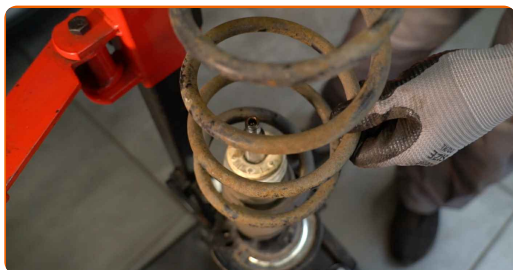
26 Remove the top strut mount.



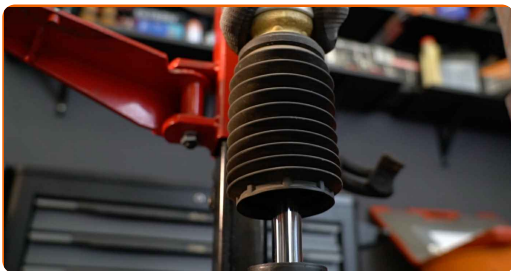
27 Release the coil spring.



28 Remove the spring.



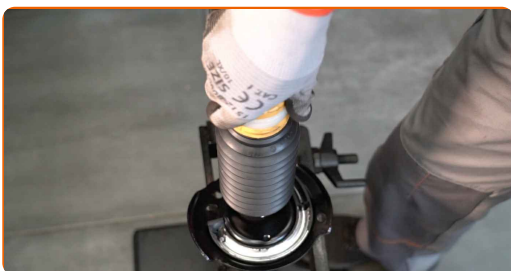
29 Remove the shock absorber dust cap and the bump stop.



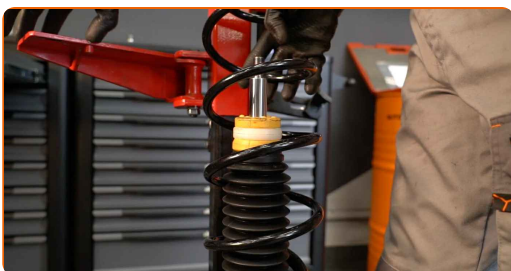
AUTODOC recommends:

- Replacement: coil springs – MERCEDES-BENZ A-Class (W169). Carefully inspect the mount, the boot, and the bump stop of the shock absorber. Replace if necessary.

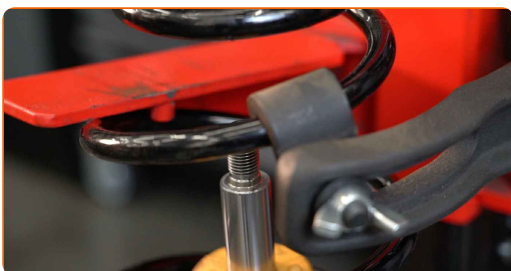
30 Install the dust sleeve and the bump stop on the new shock absorber.



31 Install the spring on the shock absorber.



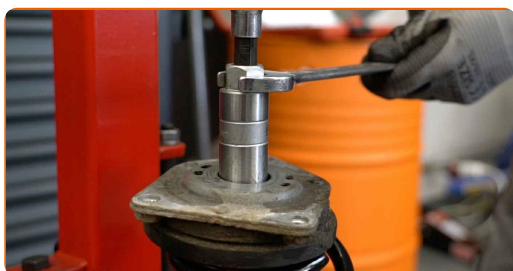
32 Compress the spring.



33 Install the upper strut mount and the strut mount bearing.



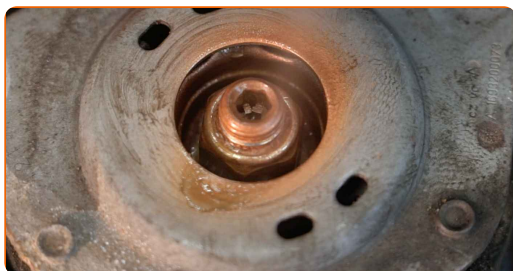
34 Tighten the shock strut piston rod nut. Use a drive socket #22. Use HEX No.H6. Use a torque wrench. Tighten it to 60 Nm torque.



Replacement: coil springs – MERCEDES-BENZ A-Class (W169). Tip from AUTODOC:

- Check to make sure the spring is positioned correctly. Avoid its misalignment.

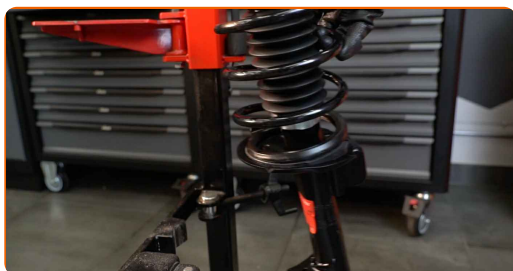
35 Treat the shock strut rod. Use copper grease.



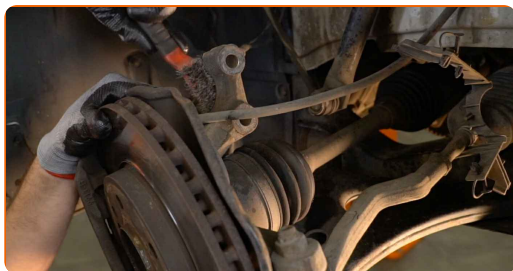
36 Decompress the spring.



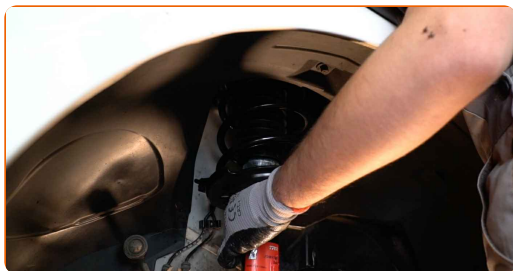
37 Remove the assembled shock strut.



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



39 Install the shock strut into the wheel arch.



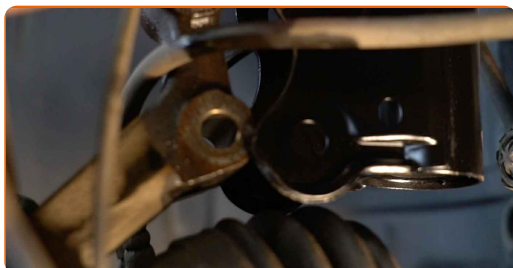
40 Screw the top fastening of the shock strut mount. Do not tighten it.

AUTODOC recommends:

- MERCEDES-BENZ A-Class (W169) – To avoid injury, hold the suspension strut while screwing in the fastening bolts.

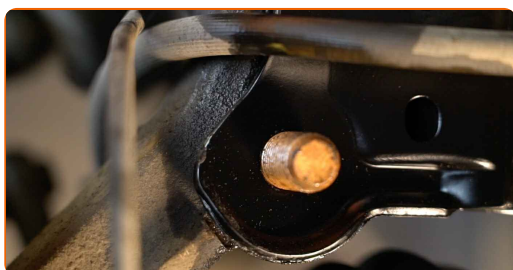
41

Fix the shock absorber strut on the steering knuckle.



42

Install the fastening bolts.



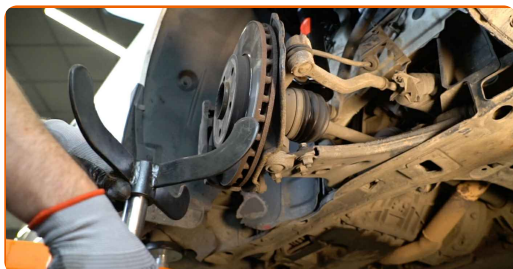
43

Screw in the fastener that connects the shock strut to the steering knuckle. Use a combination spanner #21. Use a drive socket #21. Use a ratchet wrench.



44

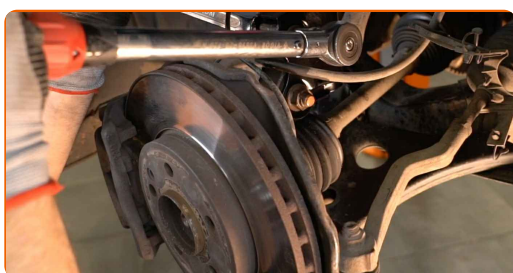
Remove the support from under the steering knuckle.



AUTODOC recommends:

- Replacement: coil springs – MERCEDES-BENZ A-Class (W169). Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

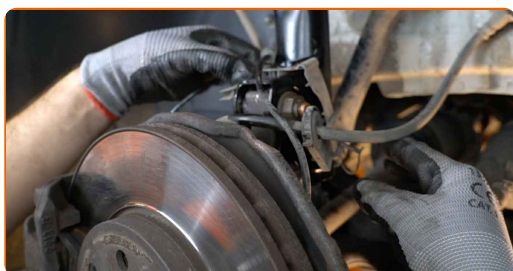
45 Tighten the lower fasteners connecting the shock strut to the steering knuckle. Use a combination spanner #21. Use a drive socket #21. Use a torque wrench. Tighten it to 120 Nm torque.+90°



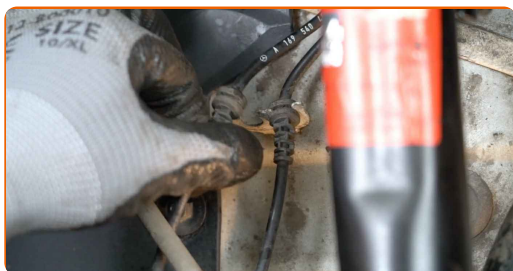
AUTODOC recommends:

- Important! Be sure to use new fasteners.

46 Secure the brake hose fastening bracket.

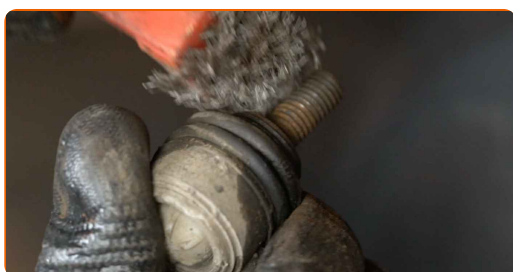


47 Connect the ABS sensor wiring.

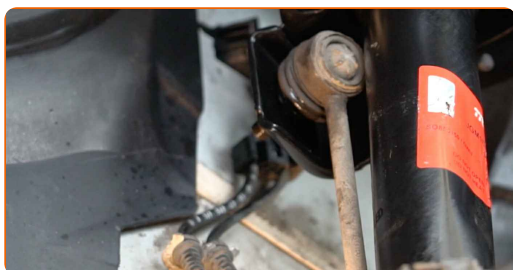


48 Connect the brake pad wear sensor plug.

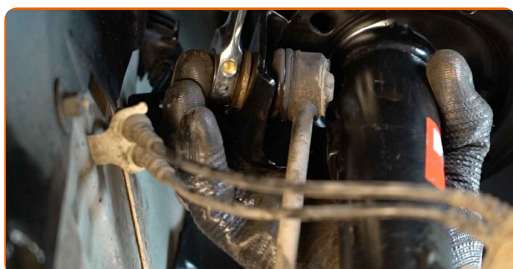
49 Clean the stabiliser link fasteners. Use a wire brush. Use WD-40 spray.



50 Install the transverse stabilizer link.



51 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.



52

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



53

Clean the brake disk surface. Use a brake cleaner.



Replacement: coil springs – MERCEDES-BENZ A-Class (W169). Tip:

- After applying the spray, wait a few minutes.

54

Treat the shock strut fasteners. Use copper grease.



55

Install the wheel.



AUTODOC recommends:

- Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. MERCEDES-BENZ A-Class (W169)

56

Screw in the wheel bolts. Use wheel impact socket #H12.



57

Lower the car and working in a cross order, tighten the wheel bolts. Use wheel impact socket #H12. Use a torque wrench. Tighten it to 130 Nm torque.

58

Tighten the upper fastener of the shock absorber strut mount. Use a drive socket #E12. Use a torque wrench. Tighten it to 20 Nm torque.+45°



AUTODOC recommends:

- Important! Be sure to use new fasteners.

59

Treat the fasteners of the shock strut mount. Use copper grease.

60 Remove the fender protection cover.

61 Close the hood.

62 Remove the jacks and chocks.

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

COIL SPRINGS: A WIDE SELECTION

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.