



How to change rear strut
mount on **BMW 6 Coupe**
(E63) – 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:

BMW 6 Coupe (E63) 645Ci 4.4, BMW 6 Coupe (E63) 630i 3.0, BMW 6 Coupe (E63) 650i 4.8, BMW 6 Coupe (E63) 635d 3.0

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: BMW 5 Saloon (E60) 520d 2.0

**REPLACEMENT: STRUT MOUNT – BMW 6 COUPE (E63).
LIST OF THE TOOLS YOU'LL NEED:**



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #18
- Combination spanner #22
- Drive socket # 13
- Drive socket # 18
- Torx bit T40
- HEX bit no.H7.
- Wheel impact socket #17
- Ratchet wrench
- Flat Screwdriver
- Hydraulic transmission jack
- Tap wrench
- Hydraulic strut spring compressor
- Wheel chock

Buy tools

Replacement: strut mount – BMW 6 Coupe (E63). AUTODOC recommends:

- The replacement procedure is identical for the mounts of the left and right shock struts of the rear suspension.
- All mounts of the rear shock struts should be replaced simultaneously.
- All work should be done with the engine stopped.
- Be sure to replace all self-locking nuts and bolts during installation.

**REPLACEMENT: STRUT MOUNT – BMW 6 COUPE (E63).
RECOMMENDED SEQUENCE OF STEPS:**

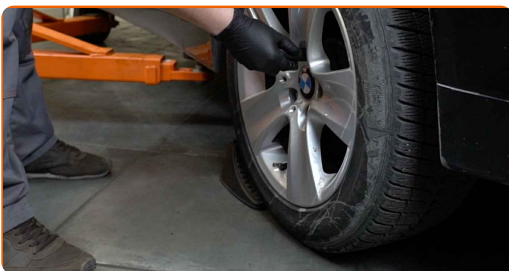
1

Secure the wheels with chocks.



2

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



3

Raise the rear of the car and secure on supports.

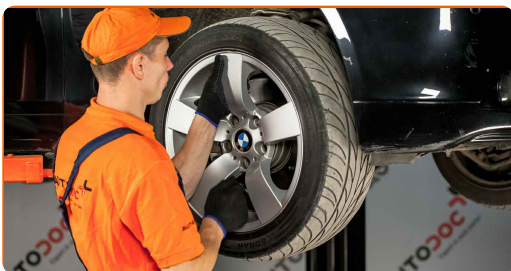
4 Unscrew the wheel bolts.



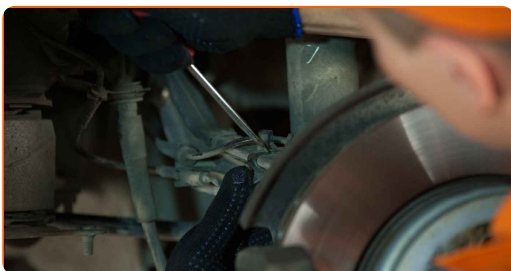
AUTODOC recommends:

- Important! Hold the wheel while unscrewing the fastening bolts. BMW 6 Coupe (E63)

5 Remove the wheel.



6 Disconnect the ABS sensor wiring. Use a flat screwdriver.

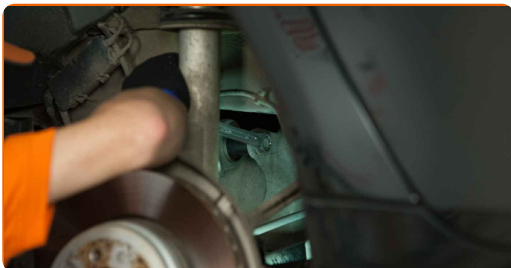


7 Remove the mounting bracket of the ABS sensor wiring from the upper arm. Use a flat screwdriver.



8 Clean all joints of the arm. Use a wire brush. Use WD-40 spray.

9 Unscrew the front arm fastener. Use a combination spanner #18 (2 pieces).

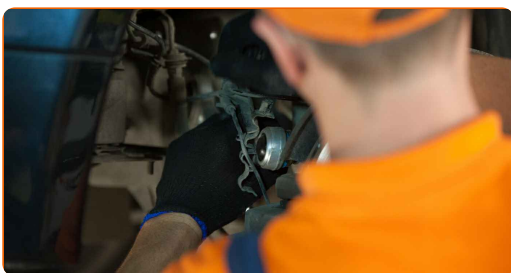


10 Remove the front fastener of the control arm.

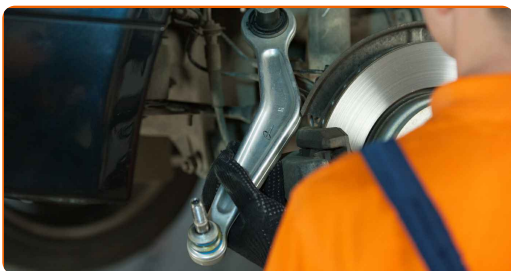
11 Unscrew the fastener connecting the control arm to the rear knuckle. Use a combination spanner #22. Use Torx T40. Use a ratchet wrench.



12 Detach the suspension arm from the rear knuckle.

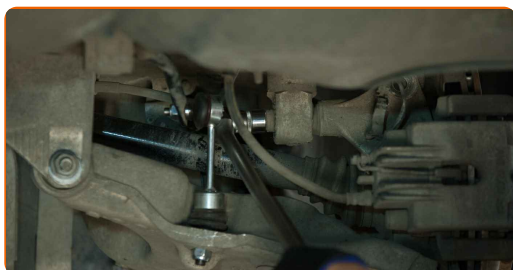


13 Remove the arm.



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

15 Unscrew the lower fastener of the shock absorber strut. Use a combination spanner #18. Use a drive socket #18. Use a tap wrench.



16 Remove the fastening bolt. Use a combination spanner #18. Use a flat screwdriver.

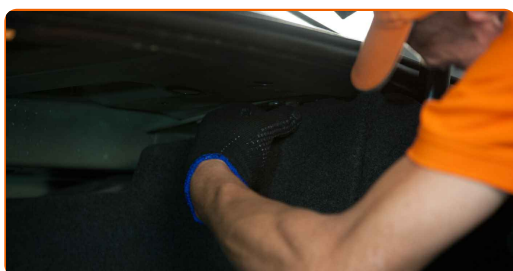
17 Detach the bottom part of the shock strut.



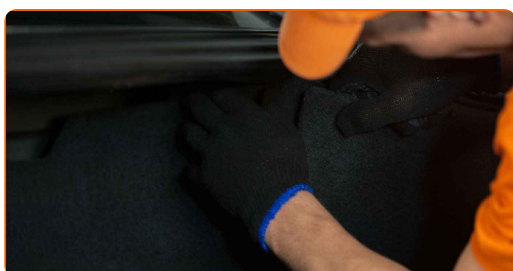
18 Lower the car.

19 Open the boot lid.

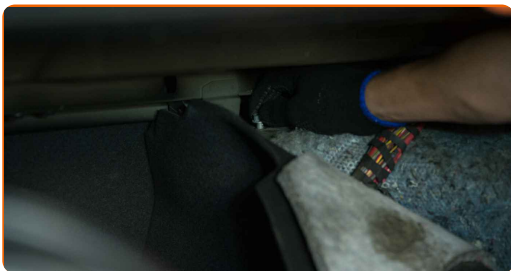
20 Remove the clips of the boot side lining. Use a flat screwdriver.



21 Detach the boot side lining.



22 Remove the suspension strut mount cap.



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

24 Unscrew the top fastening of the shock strut mount. Use a drive socket #13. Use a ratchet wrench.

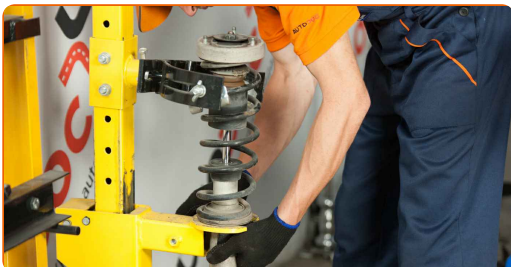


Replacement: strut mount – BMW 6 Coupe (E63). Professionals recommend:

- To avoid injuries, hold the shock strut when undoing the fastening bolts.

25 Remove the suspension strut.

26 Set the shock absorber strut on the spring compressor tool.



Replacement: strut mount – BMW 6 Coupe (E63). Tip from AUTODOC experts:

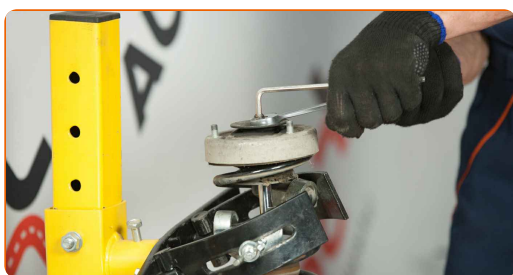
- Note that when using a spring compressor, spring coils need to be securely gripped, compressing the spring on the opposite sides.
- Ensure the correct position of the spring in the retainer.
- Make sure that the spring coils tightly entered the lock handles.

27 Compress the spring.



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

29 Remove the strut piston rod nut. Use a combination spanner #18. Use HEX No.H7.



30 Remove the top strut mount. Use a flat screwdriver.



Replacement: strut mount – BMW 6 Coupe (E63). Tip:

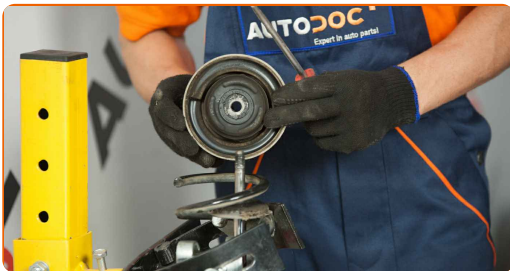
- Examine the shock absorber dust cap and the bump stop. Replace them if necessary.

31

Clean the mounting seat of the shock strut mount. Use a wire brush. Use WD-40 spray.

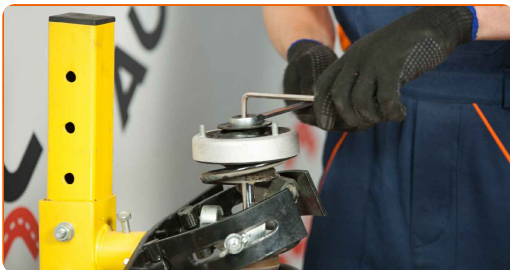
32

Install a new top shock strut mount.



33

Tighten the shock strut piston rod nut. Use a combination spanner #18. Use HEX No.H7. Use a torque wrench. Tighten it to 27 Nm torque.



Replacement: strut mount – BMW 6 Coupe (E63). Tip from AUTODOC experts:

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

34

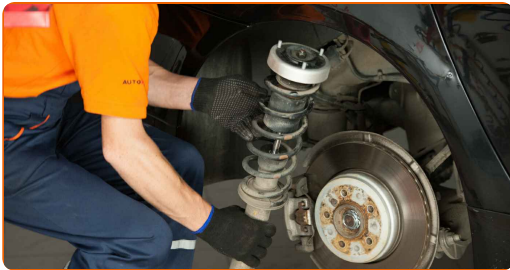
Treat the shock strut rod. Use copper grease.

35 Decompress the spring.



36 Remove the assembled shock strut.

37 Install the shock strut into the wheel arch.



38 Screw the top fastening of the shock strut mount.



AUTODOC recommends:

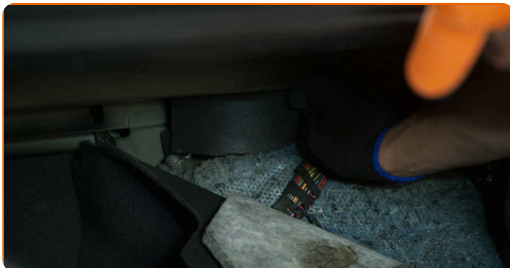
- BMW 6 Coupe (E63) – To avoid injury, hold the suspension strut while screwing in the fastening bolts.

- 39 Tighten the upper fastener of the shock absorber strut mount. Use a drive socket #13. Use a torque wrench. Tighten it to 28 Nm torque.

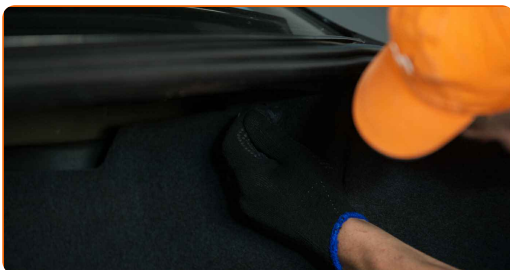


- 40 Install the suspension strut mount cap.

- 41 Attach the side lining of the boot.



- 42 Install the clips of the boot side lining.



- 43 Close the lid of the luggage compartment.

- 44 Raise the rear of the car and secure on supports.

- 45 Attach the bottom part of the shock strut.

- 46 Install the fastening bolt.

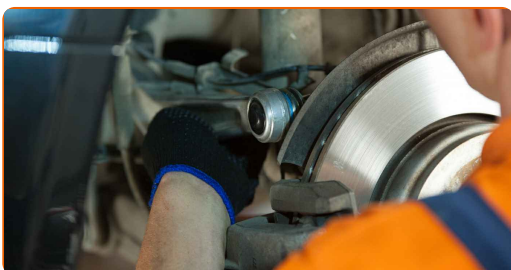


- 47 Tighten the lower fastening of the shock absorber. Use a combination spanner #18. Use a drive socket #18. Use a torque wrench. Tighten it to 100 Nm torque.



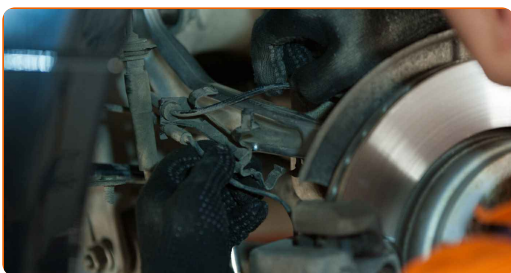
- 48 Reinstall the control arm.

- 49 Attach the suspension arm to the rear knuckle.

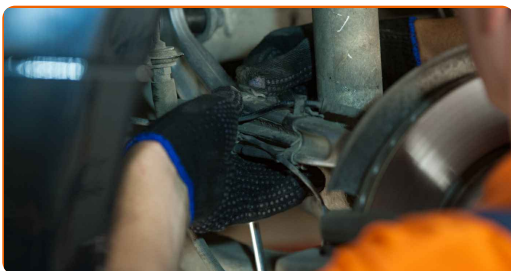


- 50 Install the front fastener of the arm.

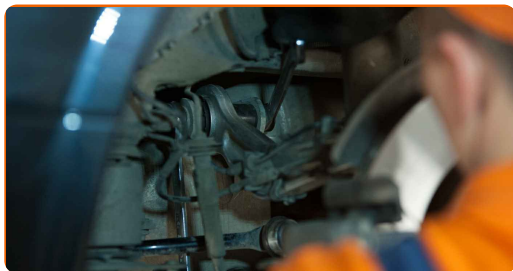
- 51 Install the mounting bracket of the ABS sensor wiring onto the upper arm.



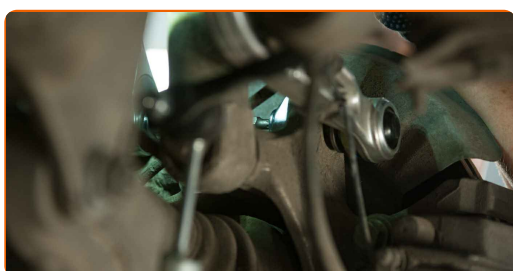
- 52 Connect the ABS sensor wiring.



53 Screw the front arm fastener. Use a combination spanner #18 (2 pieces).



54 Tighten the fastener connecting the suspension arm to the rear knuckle. Use a combination spanner #22. Use Torx T40. Use a torque wrench. Tighten it to 165 Nm torque.



55 Support the stub axle. Use a hydraulic transmission jack.



56 Tighten the front fastener connecting the control arm to the subframe. Use a combination spanner #18 (2 pieces). Use a torque wrench. Tighten it to 100 Nm torque.



57

Remove the support from under the stub axle.



AUTODOC recommends:

- Replacement: strut mount – BMW 6 Coupe (E63). Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

58

Treat all joints of the arm. Treat the shock strut fasteners. Use copper grease.

59

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



60

Clean the brake disk surface. Use a brake cleaner.



AUTODOC recommends:

- Replacement: strut mount – BMW 6 Coupe (E63). After applying the spray, wait a few minutes.

61

Install the wheel.

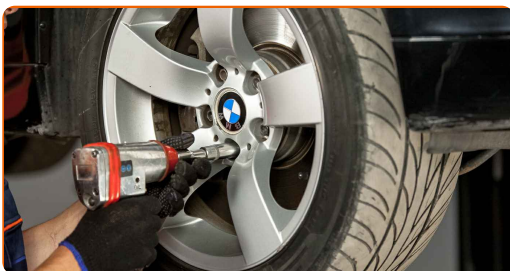


AUTODOC recommends:

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

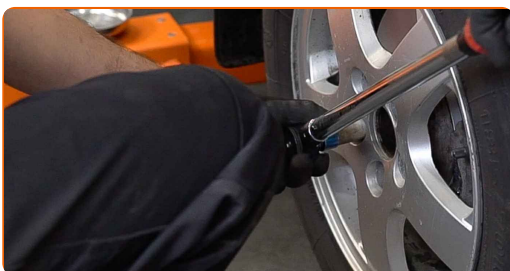
62

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



63

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 120 Nm torque.



64

Remove the jacks and chocks.



WELL DONE! 

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STRUT MOUNT: A WIDE SELECTION

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