

VIDEO TUTORIAL



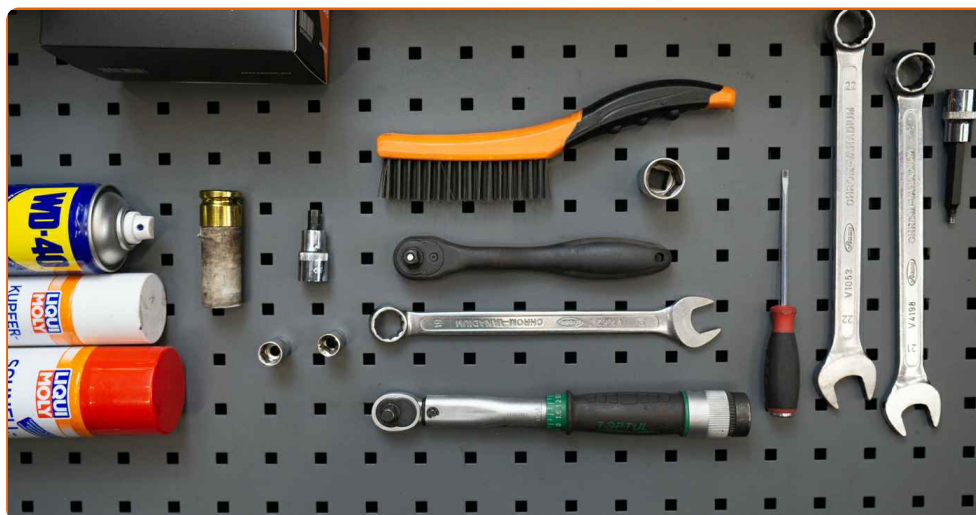
Important!

This replacement procedure can be used for:

BMW X5 (E53) 3.0 d, BMW X5 (E53) 4.6 is, BMW X5 (E53) 3.0 i, BMW X5 (E53) 4.4 i

The steps may slightly vary depending on the car design.

REPLACEMENT: SUSPENSION STRUT – BMW X5 E53. TOOLS YOU MIGHT NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #19
- Combination spanner #21
- Combination spanner #22
- Drive socket # 10
- Drive socket # 13
- Drive socket # 22
- HEX bit no.H5.
- HEX bit no.H7.
- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Flat Screwdriver
- Hydraulic strut spring compressor
- Fender cover
- Wheel chock

BUY TOOLS

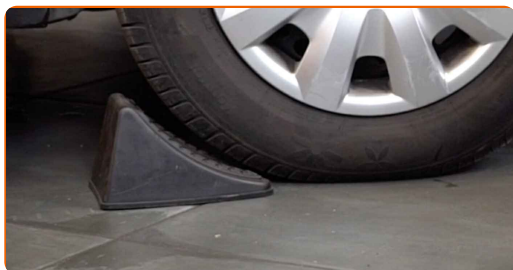
Replacement: suspension strut – BMW X5 E53. AUTODOC experts recommend:

- 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.

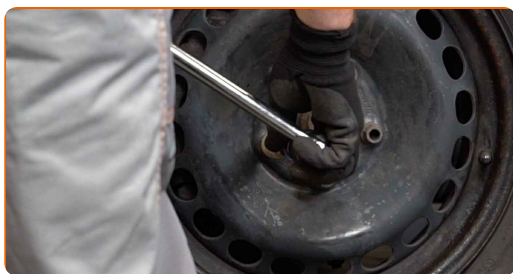
REPLACEMENT: SUSPENSION STRUT – BMW X5 E53. TAKE THE FOLLOWING STEPS:

1

Secure the wheels with chocks.

**2**

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

**3**

Raise the front of the car and secure on supports.

4

Unscrew the wheel bolts.



Replacement: suspension strut – BMW X5 E53. Tip:

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

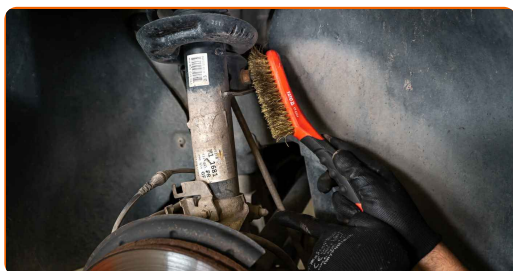
5

Remove the wheel.

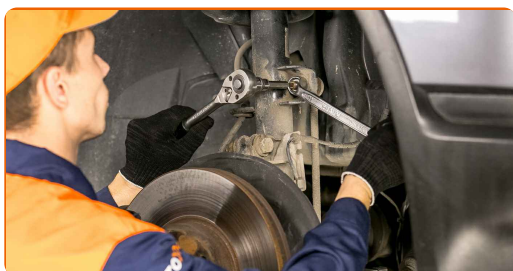


6

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

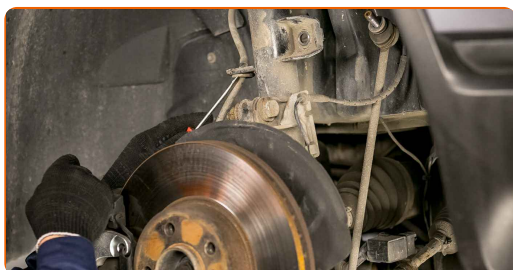


- 7 Unscrew the fastener connecting the stabilizer link to the shock strut. Use a combination spanner #19. Use HEX No.H5. Use a ratchet wrench.



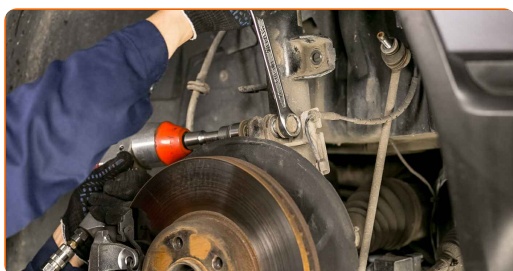
- 8 Remove the stabilizer rod.

- 9 Detach the brake hose from the shock strut. Use a flat screwdriver.

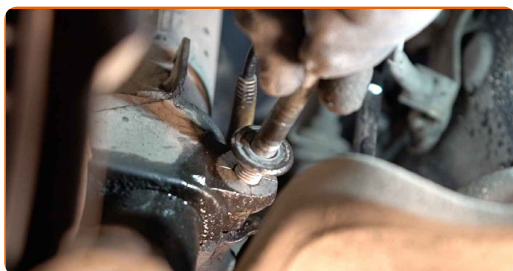


- 10 Clean the fasteners connecting the shock strut to the steering knuckle. Use a wire brush. Use WD-40 spray.

- 11 Unscrew the lower fastener connecting the shock strut to the steering knuckle. Use a combination spanner #22. Use a drive socket #22. Use a ratchet wrench.



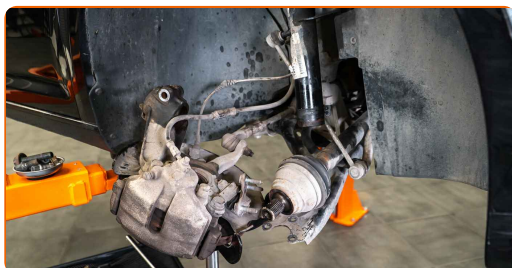
- 12 Remove the fastening bolt.



13 Disconnect the ABS sensor wiring.

14 Remove the fastening bolt.

15 Disconnect the steering knuckle from the shock absorber strut.



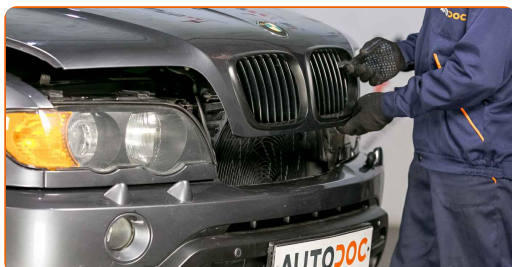
Replacement: suspension strut – BMW X5 E53. AUTODOC recommends:

- Make sure that the steering knuckle is supported.

16 Lower the car.



17 Open the bonnet.



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

19

Unscrew the bolts and remove the windshield washer tank. Use a drive socket #10. Use a ratchet wrench.

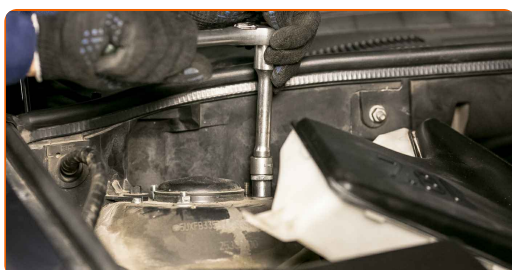


20

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

21

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



AUTODOC recommends:

- Important! Hold the suspension strut while unscrewing the fastening bolts. BMW X5 E53

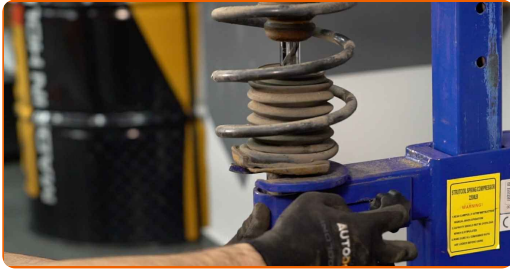
22

Remove the suspension strut.



23

Set the shock absorber strut on the spring compressor tool.



Replacement: suspension strut – BMW X5 E53. Tip from AUTODOC:

- 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.

24

Compress the spring.

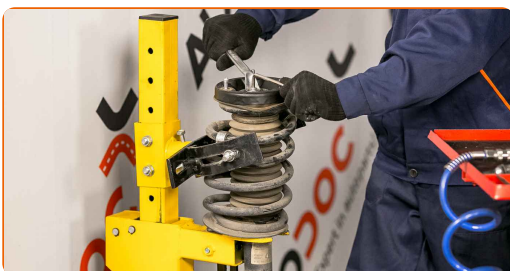


25

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

26

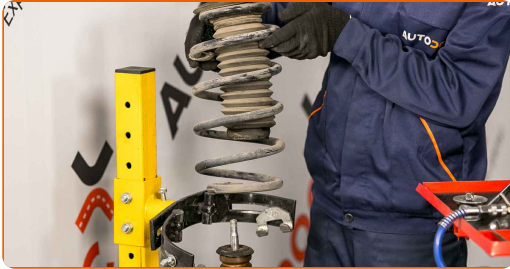
Remove the strut piston rod nut. Use a combination spanner #21. Use HEX No.H7.



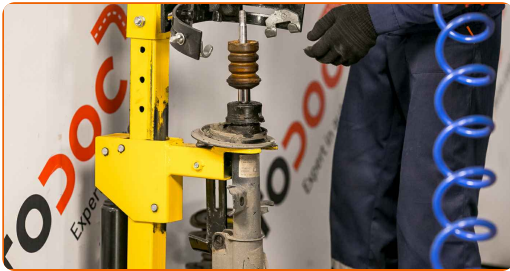
27 Release the coil spring.

28 Remove the top strut mount.

29 Remove the spring.



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



AUTODOC recommends:

- Replacement: suspension strut – BMW X5 E53. Carefully inspect the mount, the boot, and the bump stop of the shock absorber. Replace if necessary.

31 Remove the rubber spring spacer.



32

Remove the old shock absorber from the hydraulic coil spring compressor.



Replacement: suspension strut – BMW X5 E53. Tip from AUTODOC experts:

- Before installing a new shock absorber you should pump it manually 3-5 times.

33

Install the new shock absorber on the hydraulic coil spring compressor.

34

Install the rubber spring spacer.



35

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

