

VIDEO TUTORIAL



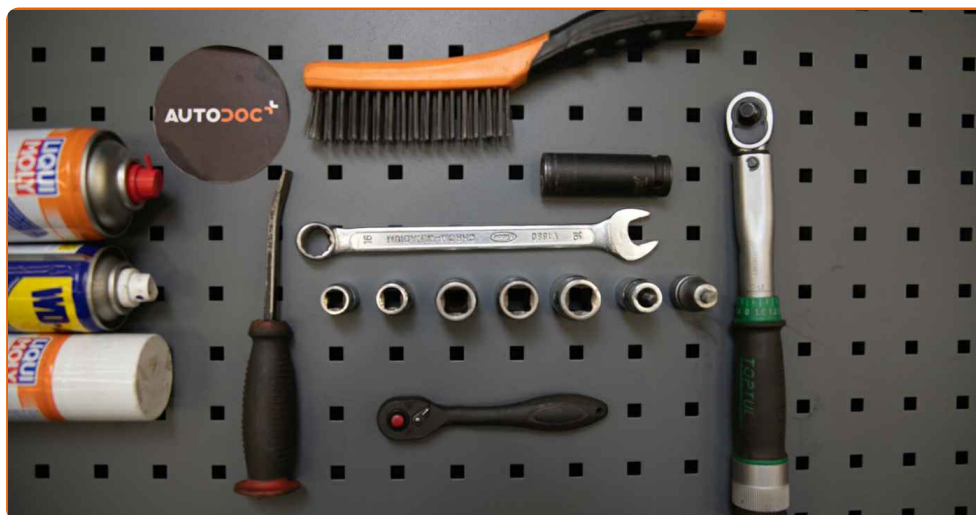
Important!

This replacement procedure can be used for:

BMW 3 Touring (E91) 325i 3.0, BMW 3 Touring (E91) 318d 2.0, BMW 5 Saloon (E39) 520i 2.0, BMW 5 Saloon (E39) 525tds 2.5, BMW 5 Saloon (E39) 523i 2.5, BMW 5 Saloon (E39) 528i 2.8, BMW 3 Saloon (E90) 318d 2.0, BMW 5 Touring (E39) 520i 2.0, BMW 5 Touring (E39) 523i 2.5, BMW 5 Saloon (E39) 525td 2.5, BMW 3 Saloon (E46) 318i 1.9, BMW 3 Saloon (E46) 328i 2.8, BMW 3 Saloon (E46) 320d 2.0, BMW 5 Touring (E39) 528i 2.8, BMW 3 Saloon (E46) 323i 2.5, (+ 254)

The steps may slightly vary depending on the car design.

REPLACEMENT: STRUT MOUNT – BMW X3 E83. TOOLS YOU MIGHT NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Torque wrench
- Combination spanner #16
- Drive socket # 13
- Drive socket # 16
- Drive socket # 18
- Drive socket # 19
- Drive socket # 21
- HEX bit No.H6
- Shock absorber socket
- Wheel impact socket #17
- Ratchet wrench
- Crow bar
- Hydraulic strut spring compressor
- Hydraulic transmission jack
- Fender cover
- Wheel chock

BUY TOOLS

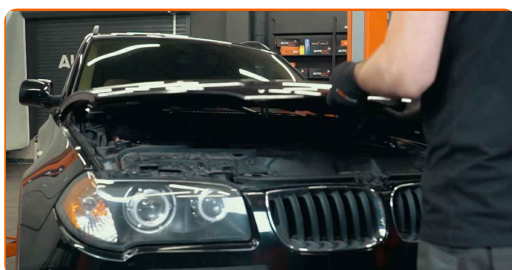
Replacement: strut mount – BMW X3 E83. AUTODOC experts recommend:

- The replacement procedure is identical for the mounts of the left and right shock struts of the front suspension.
- All mounts of the front shock struts should be replaced simultaneously.
- Please note: all work on the car – BMW X3 E83 – should be done with the engine switched off.

CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

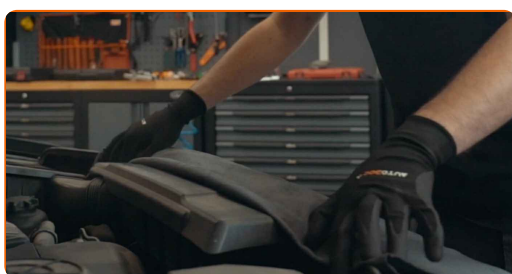
1

Open the bonnet.



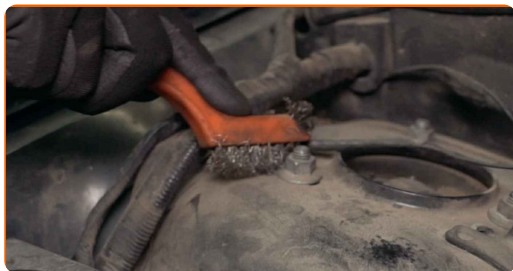
2

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



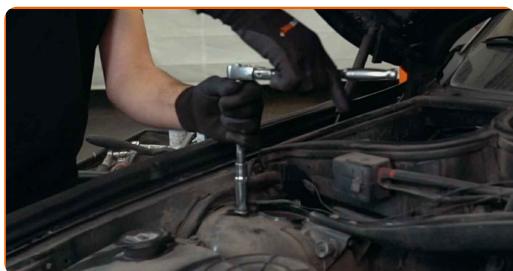
3

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



4

Loosen the upper fasteners of the suspension strut. Use a drive socket #13. 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.

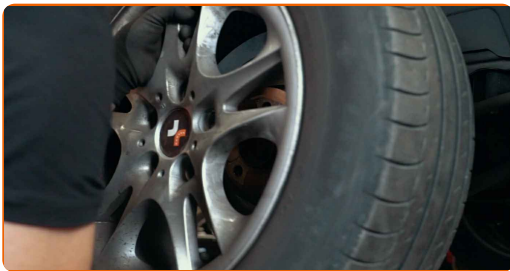


AUTODOC recommends:

- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts.
BMW X3 E83

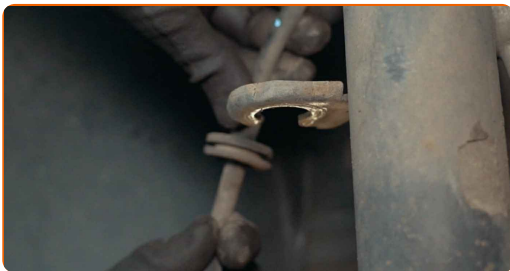
9

Remove the wheel.



10

Disconnect the brake hose.

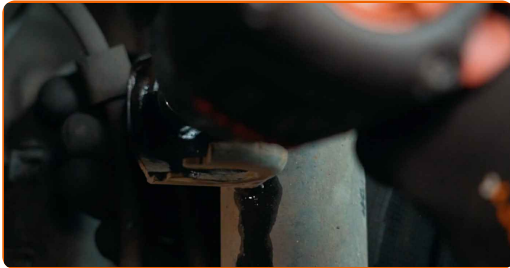


11

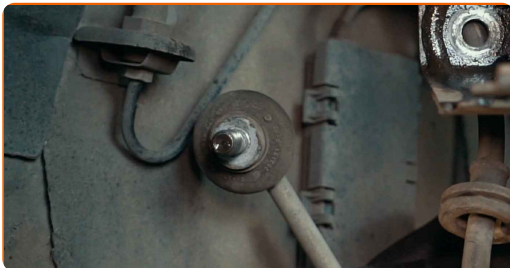
Clean the stabiliser link fasteners. Use a wire brush. Use WD-40 spray.



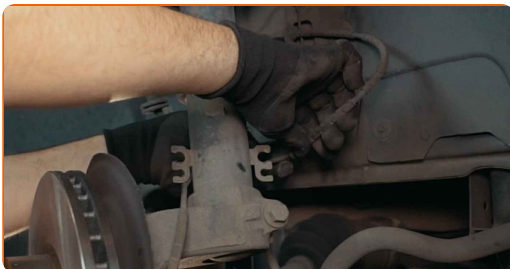
- 12** Unscrew the fastener connecting the stabilizer link to the shock strut. Use a drive socket #16. Use a ratchet wrench.



- 13** Remove the stabilizer rod.



- 14** Disconnect the ABS sensor wiring.

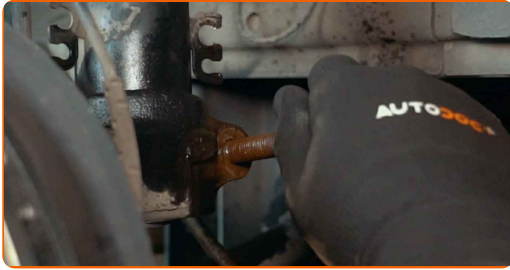


- 15** Clean the lower fastener connecting the suspension strut to the steering knuckle. Use a wire brush. Use WD-40 spray.

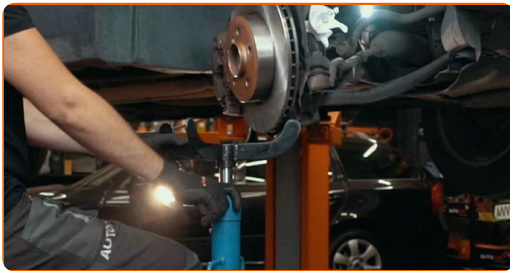
- 16** Unscrew the lower fastener connecting the shock strut to the steering knuckle. Use a combination spanner #16. Use a drive socket #18. Use a ratchet wrench.



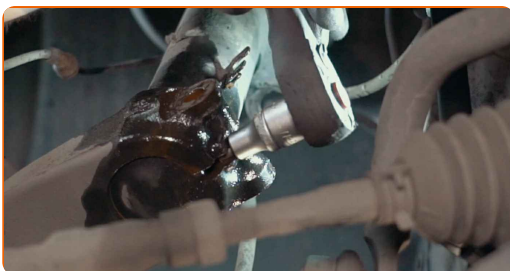
17 Remove the fastening bolt.



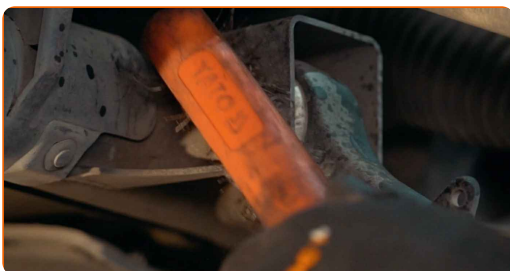
18 Prop up the steering knuckle. Use a hydraulic transmission jack.



19 Release the lower fastener connecting the shock strut to the steering knuckle. Use a special drive socket to remove the shock absorber. Use a ratchet wrench.



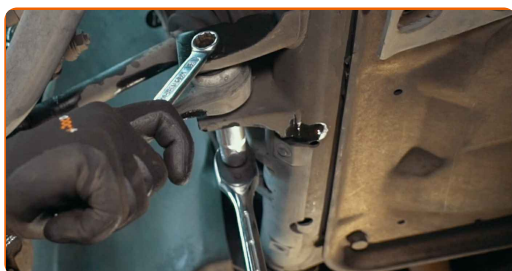
20 Clean all joints of the arm. Use a wire brush. Use WD-40 spray.



AUTODOC recommends:

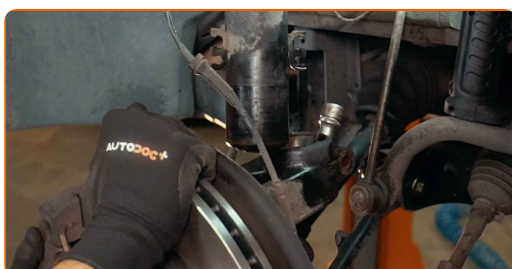
- Replacement: strut mount – BMW X3 E83. After applying the spray, wait a few minutes.

- 21** Unscrew the fastener connecting the control arm to the subframe. Use a combination spanner #16. Use a drive socket #18. Use a ratchet wrench.



- 22** Lower the hydraulic transmission jack by 10-15 cm.

- 23** Disconnect the steering knuckle from the shock absorber strut.

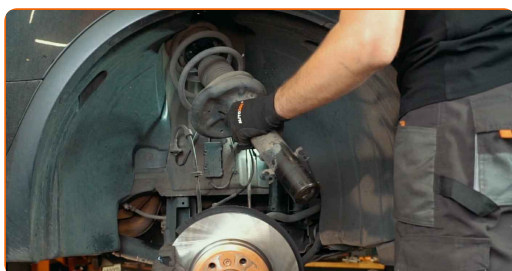


- 24** Unscrew the upper fasteners of the shock strut.

AUTODOC recommends:

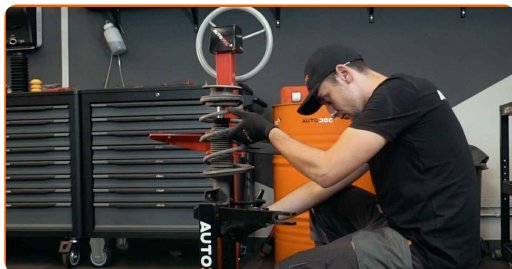
- BMW X3 E83 – To avoid injury, hold the suspension strut while unscrewing the fastening bolts.

- 25** Remove the suspension strut.



26

Set the shock absorber strut on the spring compressor tool.



Replacement: strut mount – BMW X3 E83. 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.

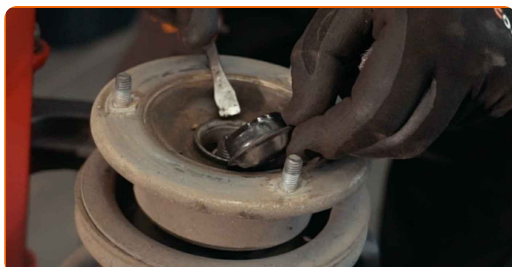
27

Compress the spring.



28

Remove the shock strut mount cap. Use a crowbar.



29

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



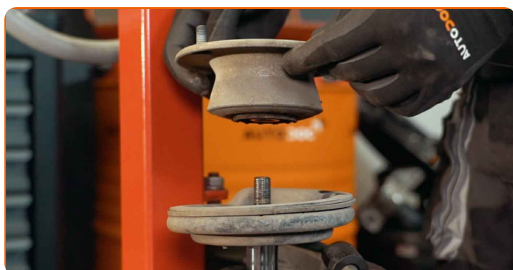
30

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



31

Remove the top strut mount.



Replacement: strut mount – BMW X3 E83. AUTODOC recommends:

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