





VIDEO TUTORIAL



(i) Important!

This replacement procedure can be used for:

BMW X3 (E83) xDrive 20 d, BMW X3 (E83) xDrive 30 d, BMW X3 (E83) xDrive 30 i, BMW X3 (E83) 3.0 i xDrive, BMW X3 (E83) 3.0 d, BMW X3 (E83) 2.0 d, BMW X3 (E83) 2.0 i, BMW X3 (E83) 3.0 si, BMW X3 (E83) 2.5 si, BMW X3 (E83) 3.0 sd, BMW X3 (E83) xDrive 20 i, BMW X3 (E83) xDrive 25 i, BMW X3 (E83) xDrive 18 d, BMW X3 (E83) xDrive 35 d, BMW X3 (E83) 2.5 i, (+3)

The steps may slightly vary depending on the car design.

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REPLACEMENT: SUSPENSION STRUT – 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

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Replacement: suspension strut – BMW X3 E83. Tip from AUTODOC:

- 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.
- 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.



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



- Secure the wheels with chocks.
- Loosen the upper fasteners of the suspension strut. Use a drive socket #13. Use a ratchet wrench.



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



Raise the front of the car and secure on supports.



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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.



Disconnect the brake hose.

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



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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.



Disconnect the ABS sensor wiring.



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



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17 Remove the fastening bolt.



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



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.



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



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AUTODOC recommends:

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

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



- Lower the hydraulic transmission jack by 10-15 cm.
- Disconnect the steering knuckle from the shock absorber strut.



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.
- Remove the suspension strut.



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Set the shock absorber strut on the spring compressor tool.



Replacement: suspension strut – 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.

Compress the spring.

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Remove the shock strut mount cap. Use a crowbar.



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



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



Remove the top strut mount.



Release the coil spring.



Remove the spring.



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