



How to change front
suspension strut on
VOLVO XC70 II Estate
(136) – 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:

VOLVO XC70 II Estate (136) 3.2 AWD, VOLVO XC70 II Estate (136) 3.0 T6 AWD, VOLVO XC70 II Estate (136) 2.4 D5 AWD, VOLVO XC70 II Estate (136) 2.0 D3, VOLVO XC70 II Estate (136) 2.4 D / D4 AWD, VOLVO XC70 II Estate (136) 2.4 D

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: VOLVO V70 III (135) 2.0 FlexiFuel

**REPLACEMENT: SUSPENSION STRUT – VOLVO XC70 II
ESTATE (136). TOOLS YOU'LL NEED:**



- Wire brush
- WD-40 spray
- Brake cleaner
- Ceramic grease
- Copper grease
- Torque wrench
- Combination spanner #21
- Drive socket # 13
- Drive socket # 15
- 18-mm strut nut socket
- Shock absorber socket
- HEX bit no.H6
- Wheel impact socket #19
- Ratchet wrench
- Tap wrench
- Hydraulic strut spring compressor
- Clip removal tool
- Ball joint puller
- Crow bar
- Rubber mallet
- Hydraulic transmission jack
- Fender cover
- Wheel chock

Buy tools

Replacement: suspension strut – VOLVO XC70 II Estate (136). 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.
- Please note: all work on the car – VOLVO XC70 II Estate (136) – should be done with the engine switched off.

CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

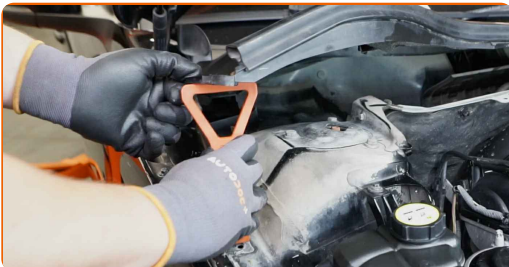
1 Open the bonnet.

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

3 Remove the clips of the plastic cowl grille. Use a clip removal tool.



4 Move the cowl grille aside to access the fasteners of the suspension strut mount.



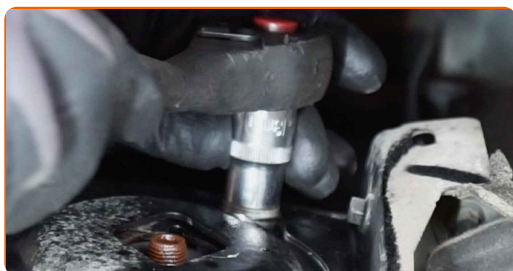
5

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



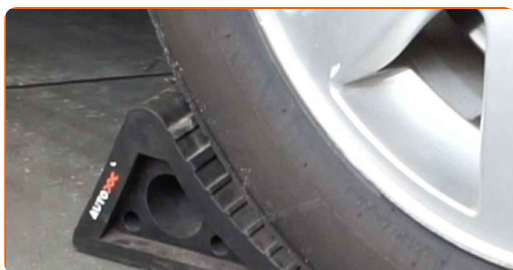
6

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



7

Secure the wheels with chocks.

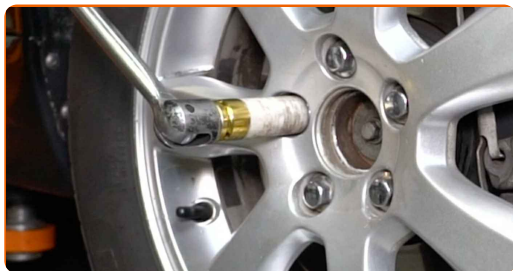


8

Loosen the fastener of the driveshaft. Use a drive socket #13. Use a tap wrench.



9 Loosen the wheel bolts. Use wheel impact socket #19. Use a tap wrench.



10 Raise the car.

Replacement: suspension strut – VOLVO XC70 II Estate (136). Tip:

- If you are using a jack, make sure it rests on a flat surface without any unevenness.
- Be sure to additionally secure the car with jack stands.

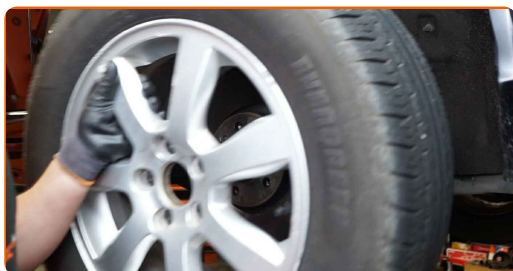
11 Unscrew the wheel bolts.



AUTODOC recommends:

- Important! Hold the wheel while unscrewing the fastening bolts. VOLVO XC70 II Estate (136)

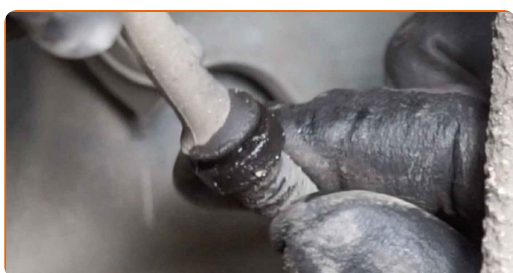
12 Remove the wheel.



13 Detach the brake hose from the shock strut.



14 Disconnect the ABS sensor wiring.



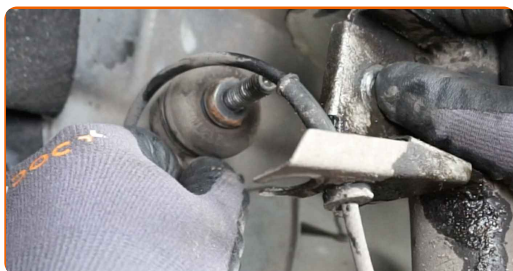
15 Clean the fastener that connects the sway bar link to the suspension strut. Use a wire brush. Use WD-40 spray.



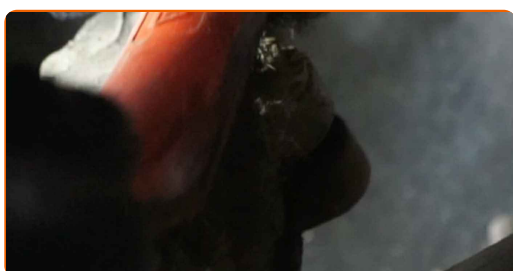
16 Unscrew the fastener connecting the stabilizer link to the shock strut. Use a drive socket #15. Use a ratchet wrench.



17 Disconnect the sway bar link from the suspension strut.



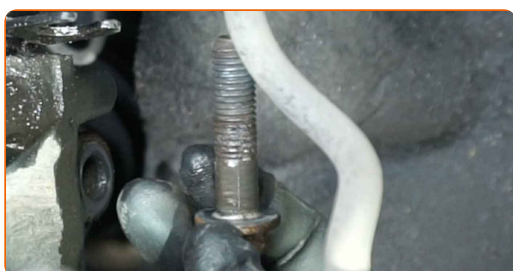
18 Clean the lower fastener connecting the suspension strut to the steering knuckle. Use a wire brush. Use WD-40 spray.



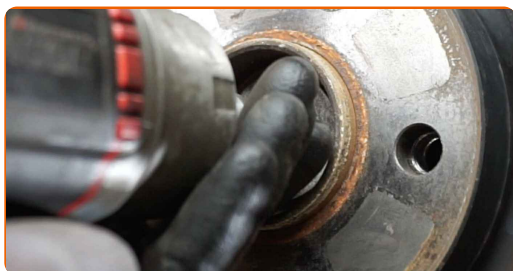
19 Unscrew the lower fastener connecting the shock strut to the steering knuckle. Use a drive socket #15. Use a ratchet wrench.



20 Remove the fastening bolt.



21 Unscrew the fastener connecting the drive shaft to the wheel hub. Use a drive socket #13. Use a ratchet wrench.



22 Remove the fastening bolt.



23 Clean the fastener connecting the ball joint to the steering knuckle. Use a wire brush. Use WD-40 spray.



24 Unscrew the fastener connecting the ball joint to the steering knuckle. Use a combination spanner #21.



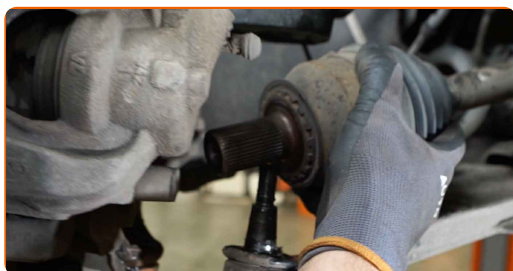
25

Disconnect the ball joint from the steering knuckle. Use a ball joint puller. Use a crowbar.



26

Detach the driveshaft from the steering knuckle.

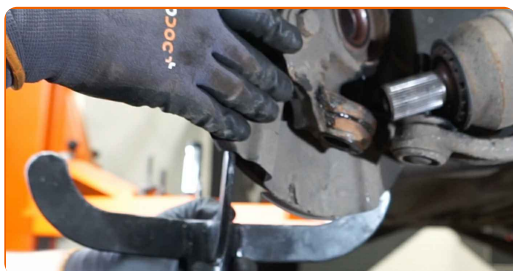


AUTODOC recommends:

- Make sure that the drive shaft is not unloaded (when the car is jacked).

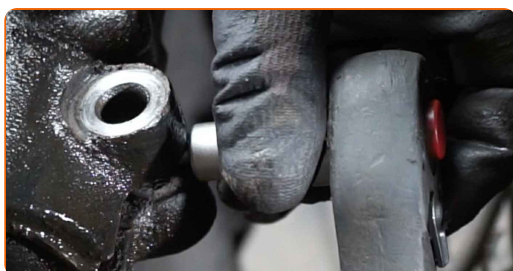
27

Support the steering knuckle. Use a hydraulic transmission jack.



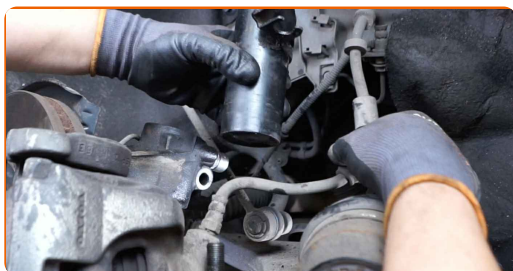
28

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



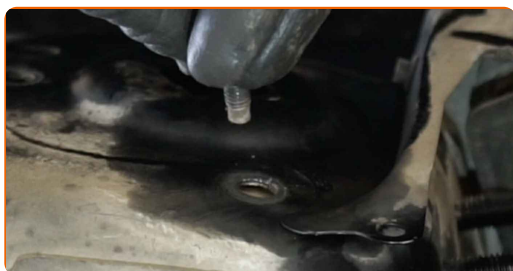
29

Disconnect the steering knuckle from the suspension strut. Use a rubber mallet.



30

Unscrew the upper fasteners of the shock strut.

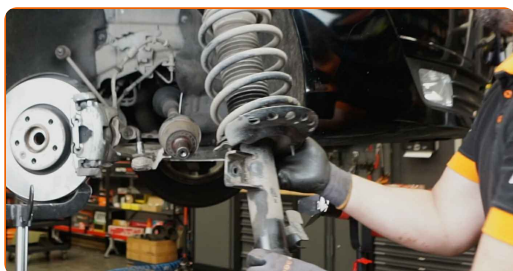


Replacement: suspension strut – VOLVO XC70 II Estate (136). AUTODOC recommends:

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

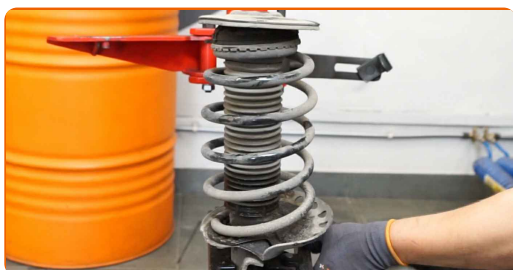
31

Remove the suspension strut.



32

Set the suspension strut on the spring compressor tool.

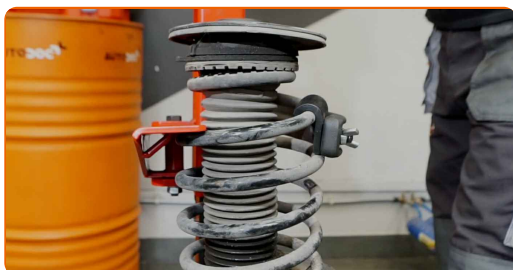


AUTODOC recommends:

- Note that when using a spring compressor, the spring coils need to be securely gripped, applying pressure on both ends.
- Ensure the correct position of the spring in the retainer.
- Make sure that the spring coils fit tightly into the retainers.

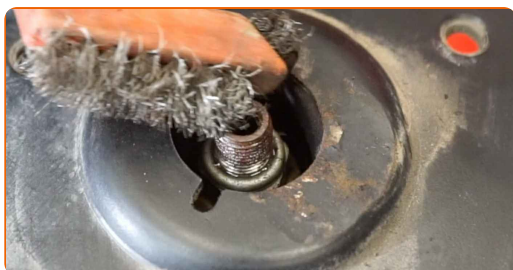
33

Compress the spring.



34

Clean the strut piston rod. Use a wire brush. Use WD-40 spray.

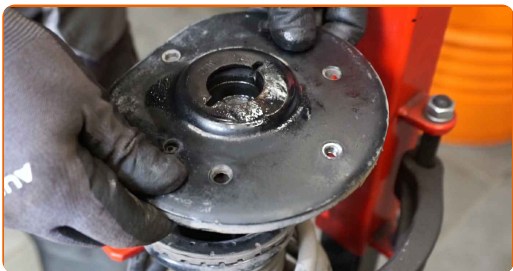


35

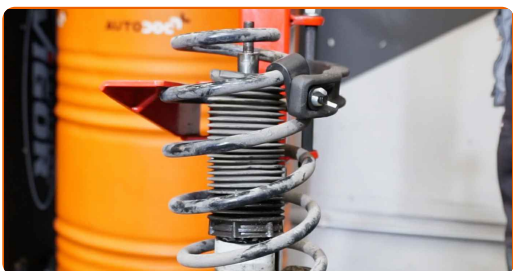
Unscrew the strut piston rod nut. Use a 18-mm strut nut socket. Use HEX No.H6. Use a ratchet wrench.



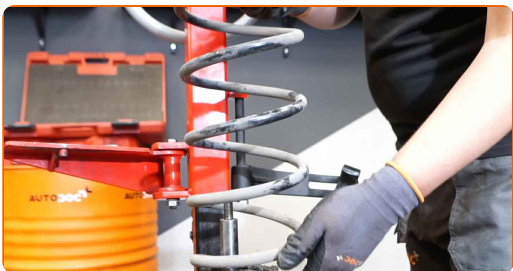
36 Remove the upper strut mount together with the bump stop.



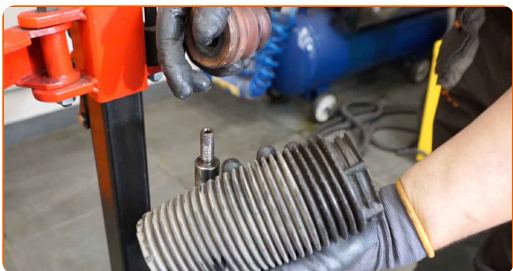
37 Release the coil spring.



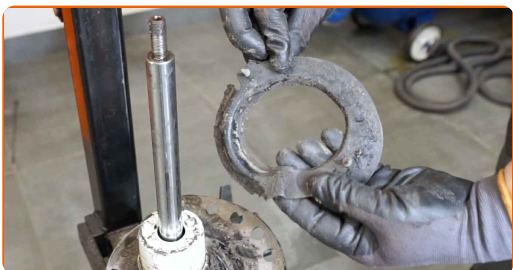
38 Remove the spring.



39 Remove the dust boot.



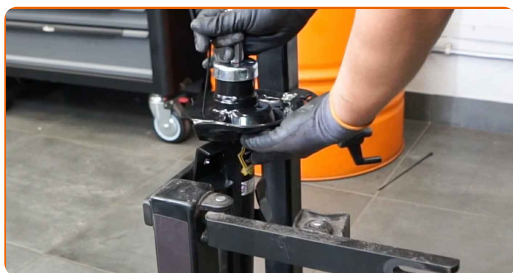
40 Remove the rubber spring spacer.



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



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



Replacement: suspension strut – VOLVO XC70 II Estate (136). Professionals recommend:

- Before installing a new shock absorber you should pump it 3–5 times by hand.

43 Install the rubber spring spacer.



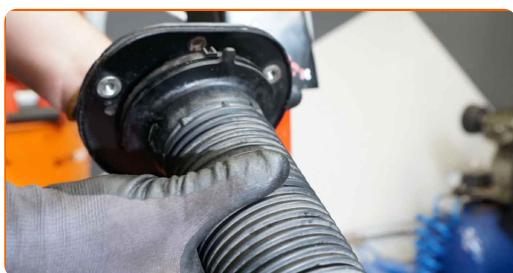
44 Install the spring on the shock absorber.



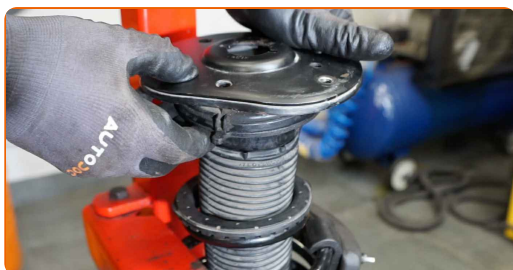
45 Compress the spring.



46 Install the dust boot.



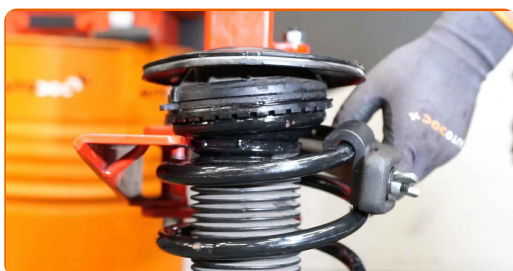
47 Install the upper strut mount together with the bump stop.



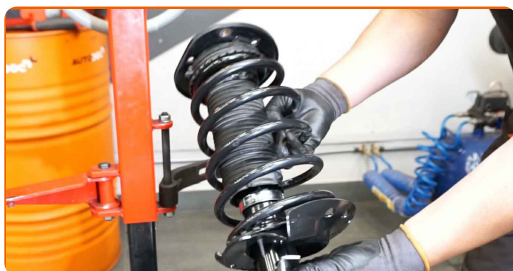
48 Tighten the nut of the suspension strut piston rod. Use a 18-mm strut nut socket. Use HEX No.H6. Use a torque wrench. Tighten it to 50 Nm torque.



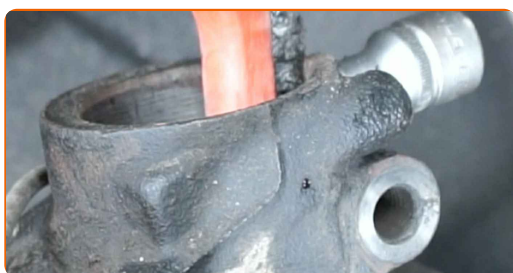
49 Decompress the spring.



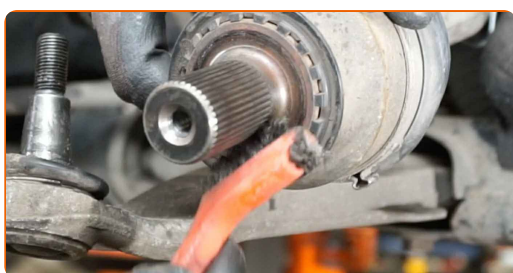
50 Remove the assembled shock strut.



51 Clean the mounting seats of the shock strut. Use a wire brush.

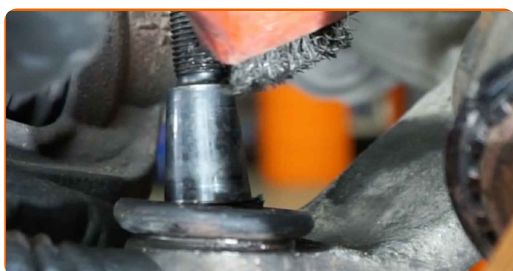


52 Clean the splines of the drive shaft CV joint. Use a wire brush.

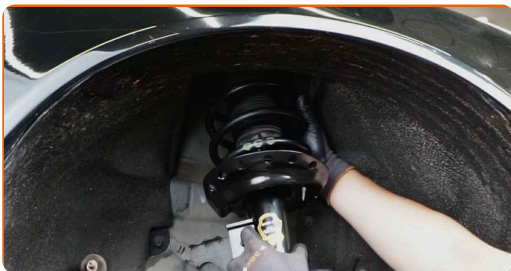


53 Treat the splines of the driveshaft CV joint. Use copper grease.

54 Clean the fastener connecting the ball joint to the steering knuckle. Use a wire brush. Use WD-40 spray.



55 Install the suspension strut into the wheel arch.



AUTODOC recommends:

- Make sure that the suspension strut is installed in the correct position, according to the markings.

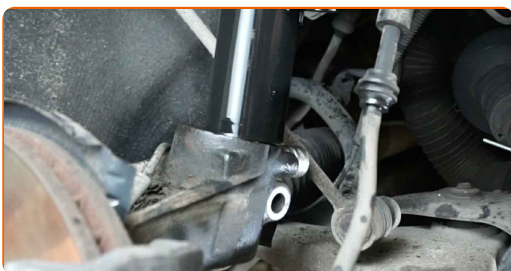
56 Secure the upper fasteners of the shock strut. Do not tighten it.



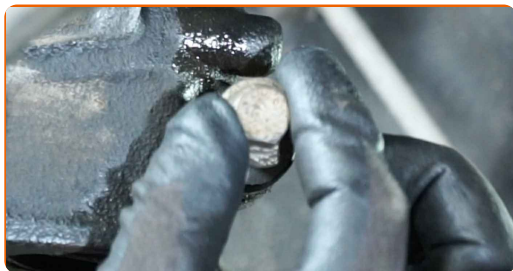
AUTODOC recommends:

- VOLVO XC70 II Estate (136) – To avoid injury, hold the suspension strut while screwing in the fastening bolts.

57 Fasten the suspension strut on the steering knuckle.



58 Install the fastening bolt.

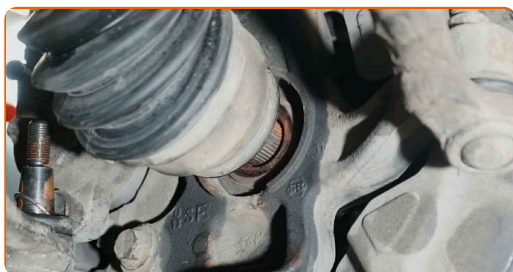


59 Remove the support from under the steering knuckle.

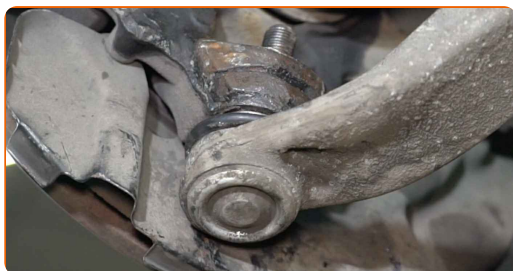
Replacement: suspension strut – VOLVO XC70 II Estate (136). Tip:

- Lower the hydraulic transmission jack smoothly, without jerks, to avoid damaging assemblies and mechanisms.

60 Install the drive shaft.

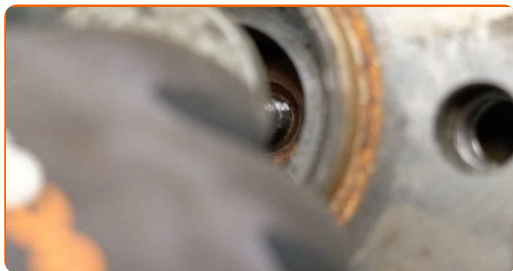


61 Connect the ball joint to the steering knuckle. Use a crowbar.

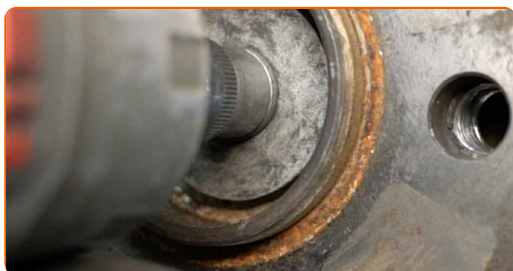


62 Screw the fastener connecting the ball joint to the steering knuckle.

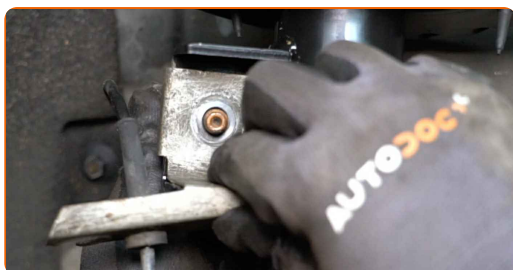
63 Install the fastening bolt.



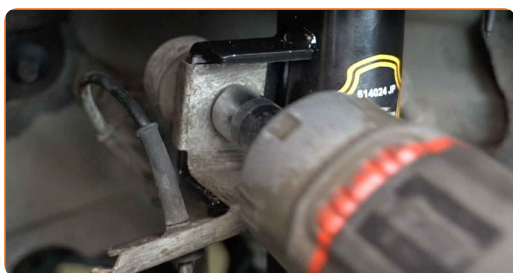
64 Screw in the fastener of the CV axle. Use a drive socket #13. Use a ratchet wrench.



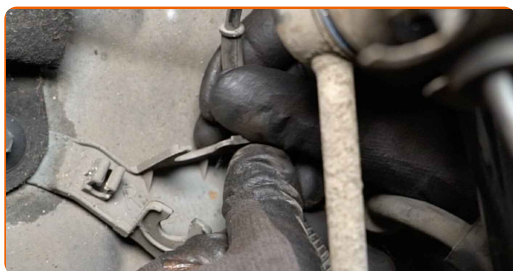
65 Reconnect the sway bar link to the suspension strut.



66 Screw in the fastener connecting the sway bar link to the suspension strut. Use a drive socket #15. Use a ratchet wrench.

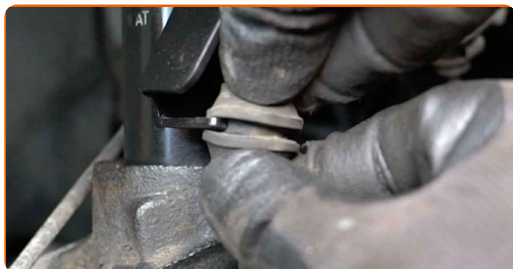


67 Connect the ABS sensor wiring.



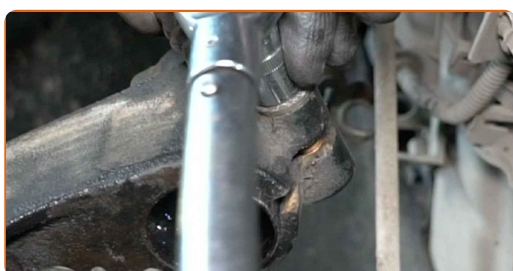
68

Attach the brake hose to the suspension strut.



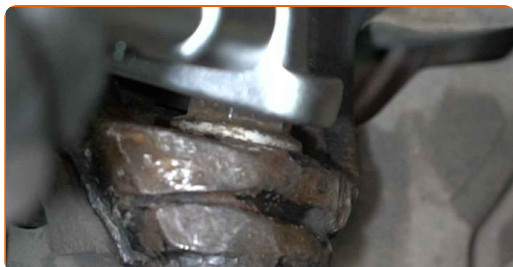
69

Tighten the lower fasteners of the suspension strut. Use a drive socket #15. Use a torque wrench. Tighten it to 110 Nm torque.



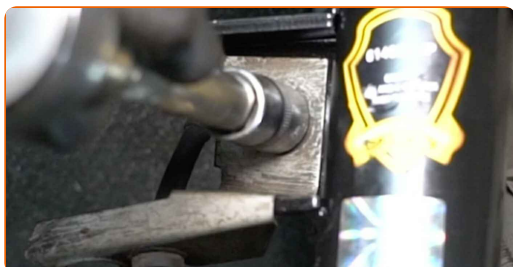
70

Tighten the fastener connecting the ball joint to the steering knuckle. Use a combination spanner #21. Use a torque wrench. Tighten it to 110 Nm torque.



71

Tighten the fastener connecting the stabilizer link to the shock strut. Use a drive socket #15. Use a torque wrench. Tighten it to 55 Nm torque.



72 Clean the wheel rim mounting seat. Use a wire brush.

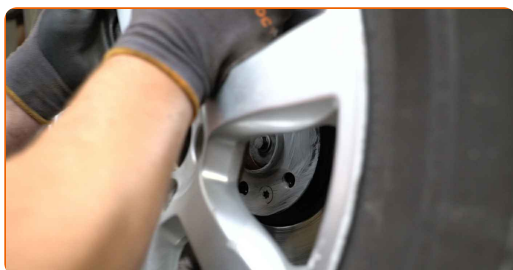


73 Treat the surface where the brake disc contacts the wheel rim. Use ceramic grease.

74 Clean the brake disk surface. Use a brake cleaner.



75 Install the wheel.

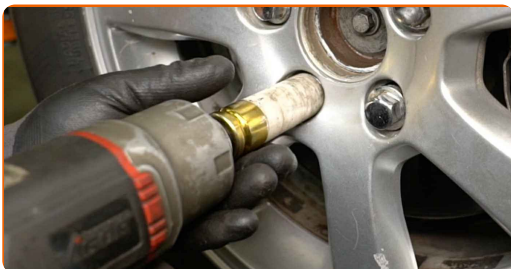


Replacement: suspension strut – VOLVO XC70 II Estate (136). Tip from AUTODOC experts:

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

76

Screw in the wheel bolts. Use wheel impact socket #19. Use a ratchet wrench.

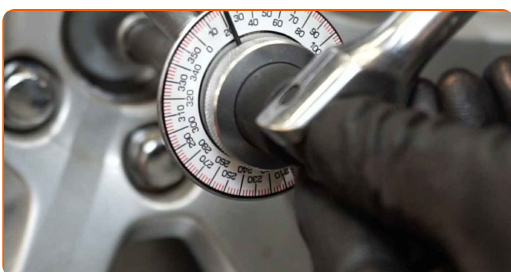


77

Lower the car.

78

Tighten the CV axle fastener. Use a drive socket #13. Use a torque wrench. Tighten it to 35 Nm torque.+90°

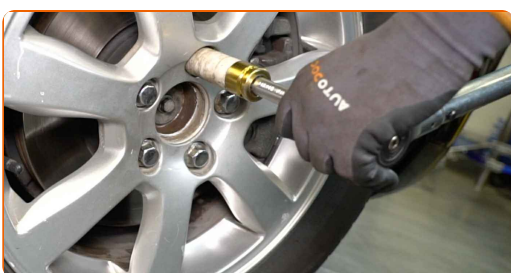


AUTODOC recommends:

- Important! Be sure to use new fasteners.

79

Tighten the wheel bolts using a criss-cross pattern. Use wheel impact socket #19. Use a torque wrench. Tighten it to 140 Nm torque.



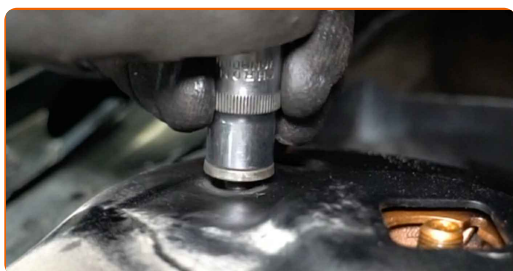
80

Remove the jacks and chocks.



81

Tighten the upper fasteners of the shock strut. Use a drive socket #13. Use a torque wrench. Tighten it to 24 Nm torque.



82

Install and secure the cowl grille.



83

Remove the fender protection cover.

84

Close the bonnet.

WELL DONE! 

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