



How to change front
suspension strut on **FIAT**
500L (351, 352) –
replacement guide

SIMILAR VIDEO TUTORIAL



This video shows the replacement procedure of a similar car part on another vehicle

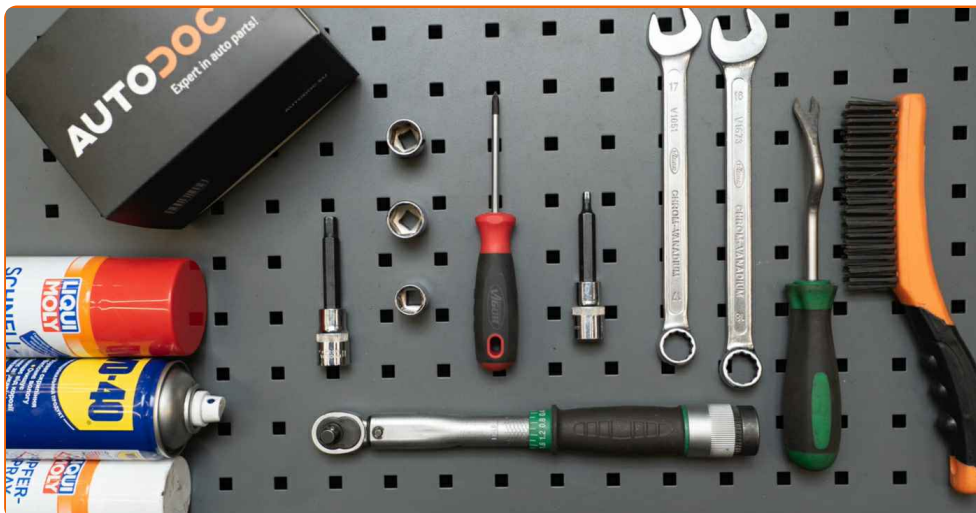
Important!

This replacement procedure can be used for:
FIAT 500L (351, 352) 1.4, FIAT 500L (351, 352) 0.9

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: FIAT GRANDE PUNTO (199) 1.3 D Multijet

REPLACEMENT: SUSPENSION STRUT – FIAT 500L (351, 352). TOOLS YOU MIGHT NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #18
- Drive socket # 15
- Drive socket # 17
- Drive socket # 18
- HEX bit no.H6.
- HEX bit no.H8.
- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Clip removal tool
- Phillips screwdriver
- Round-nose pliers
- Hydraulic strut spring compressor
- Hydraulic transmission jack
- Fender cover
- Wheel chock

Buy tools

Replacement: suspension strut – FIAT 500L (351, 352). AUTODOC recommends:

- 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 – FIAT 500L (351, 352).
RECOMMENDED SEQUENCE OF STEPS:**

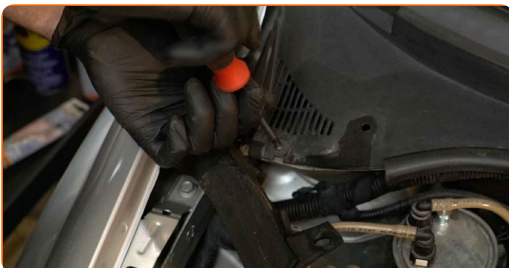
1 Open the bonnet.

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

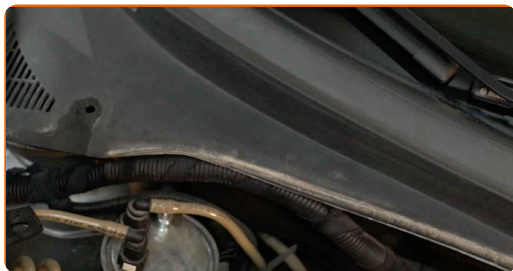
3 Remove the clips of the plastic cowl grille. Use a clip removal tool.



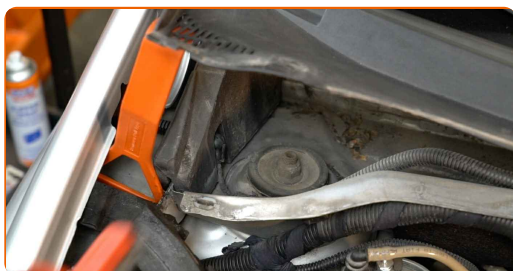
4 Unscrew the fasteners of the cowl grille. Use a Phillips screwdriver.



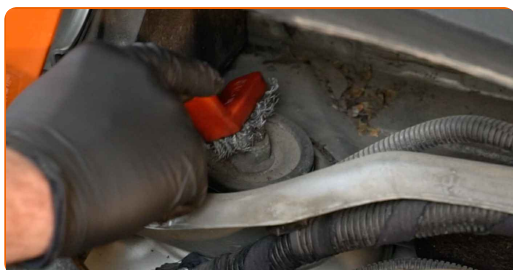
5 Remove the cowl grille seal.



6 Raise the wiper plastic cowl grille.



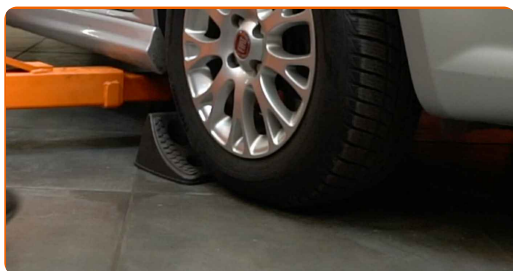
7 Clean the fasteners of the shock strut upper mount. Use a wire brush. Use WD-40 spray.



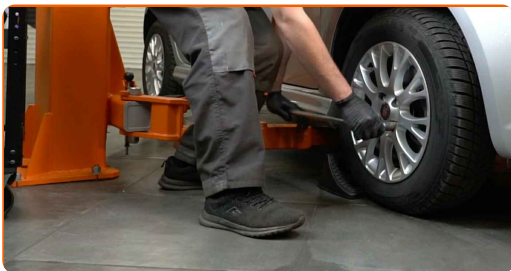
8 Loosen the upper fastener of the shock strut mount. Use a combination spanner #18. Use HEX No.H6. Use a ratchet wrench.



9 Secure the wheels with chocks.

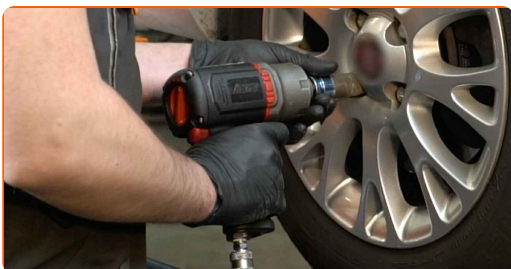


10 Loosen the wheel mounting bolts. Use wheel impact socket #17.



11 Raise the front of the car and secure on supports.

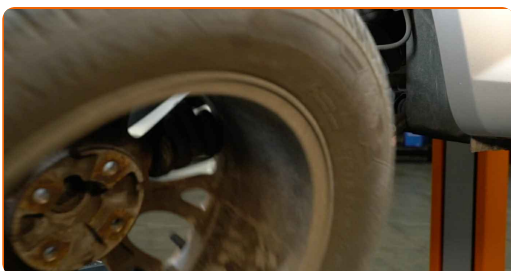
12 Unscrew the wheel bolts.



Replacement: suspension strut – FIAT 500L (351, 352). Tip:

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

13 Remove the wheel.



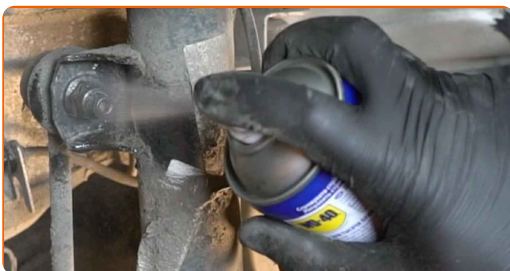
14

Disconnect the wiring and the brake hose from the bracket on the shock strut. Use round-nose pliers.



15

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



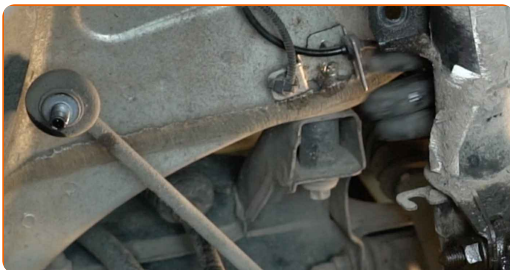
16

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

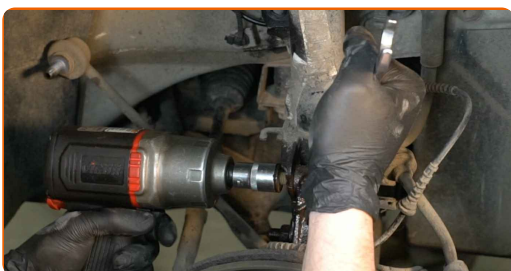


17

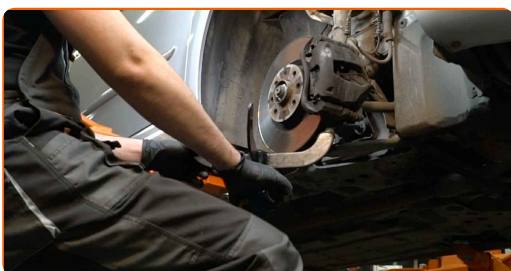
Remove the stabilizer rod.



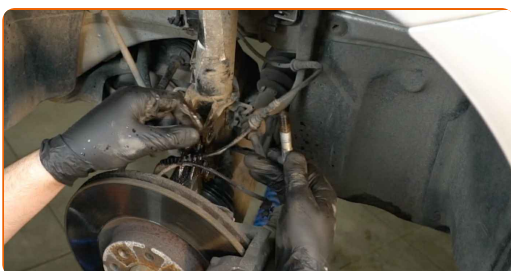
- 18** Unscrew the lower fastener connecting the shock strut to the steering knuckle. Use a combination spanner #18. Use a drive socket #18. Use a ratchet wrench.



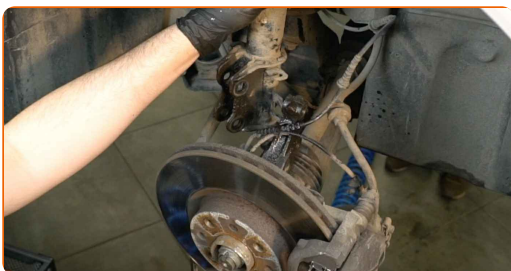
- 19** Prop up the steering knuckle. Use a hydraulic transmission jack.



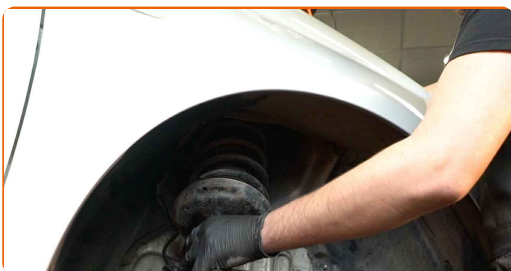
- 20** Remove the fastening bolts.



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



- 22** Unscrew the top fastening of the shock strut mount.



AUTODOC recommends:

- Important! Hold the suspension strut while unscrewing the fastening bolts. FIAT 500L (351, 352)

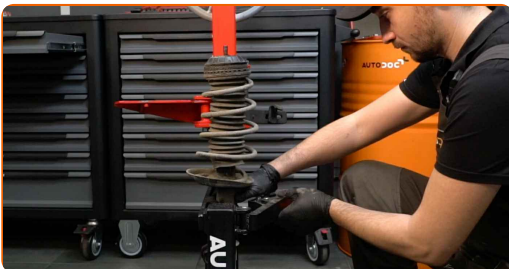
23

Remove the suspension strut.



24

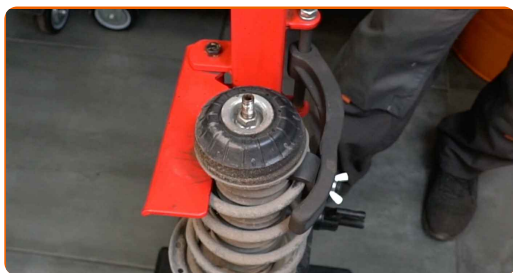
Set the shock absorber strut on the spring compressor tool.



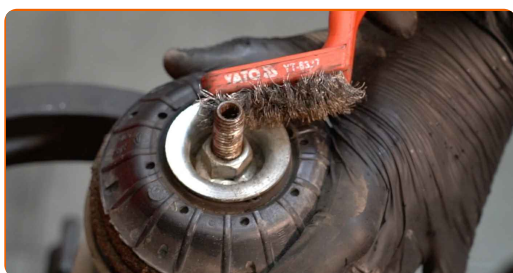
Replacement: suspension strut – FIAT 500L (351, 352). AUTODOC experts recommend:

- 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.

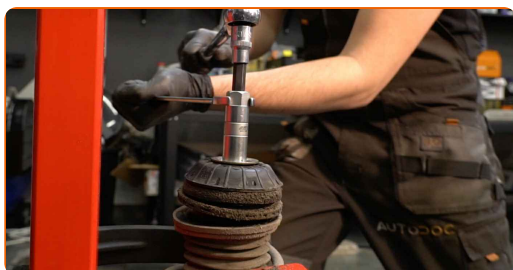
25 Compress the spring.



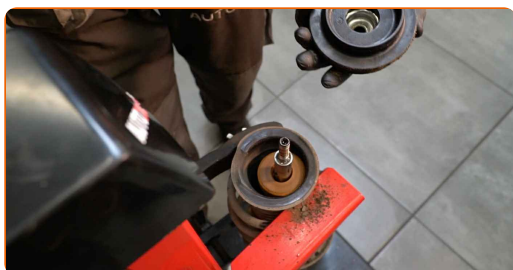
26 Treat the shock strut rod. Use a wire brush. Use WD-40 spray.



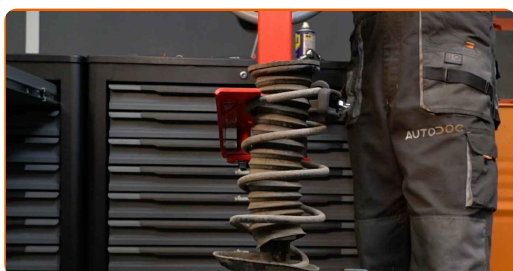
27 Remove the strut piston rod nut. Use HEX No.H6. Use a drive socket #18. Use a ratchet wrench.



28 Remove the top strut mount.

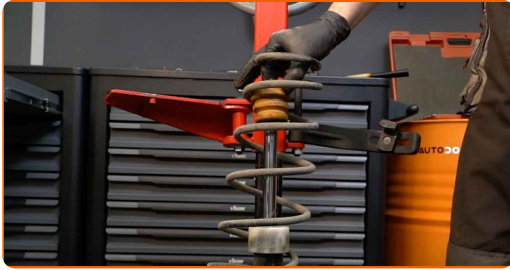


29 Release the coil spring.



30

Remove the shock absorber dust cap and the bump stop.



31

Remove the spring.

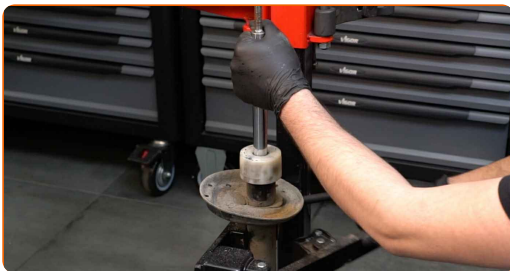


Replacement: suspension strut – FIAT 500L (351, 352). AUTODOC recommends:

- Thoroughly examine the shock absorber mount, dust boot, bump stop. Replace them if necessary.

32

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



Replacement: suspension strut – FIAT 500L (351, 352). 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.



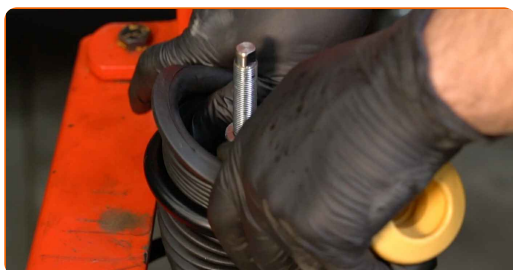
34 Install the spring on the shock absorber.



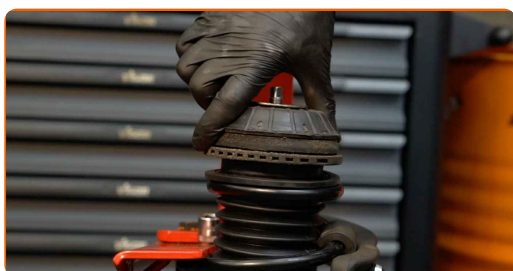
35 Compress the spring.



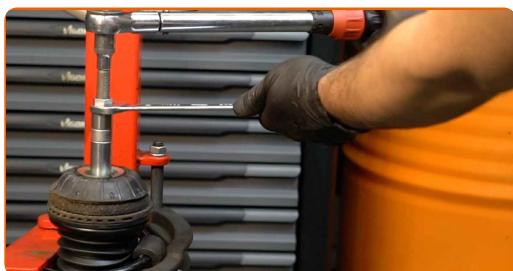
36 Install the dust sleeve and the bump stop on the new shock absorber.



37 Install the upper strut mount and the strut mount bearing.



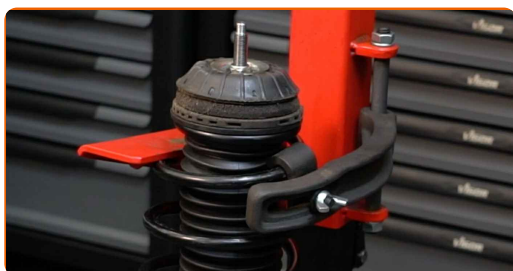
- 38** Tighten the shock strut piston rod nut. Use HEX No.H8. Use a drive socket #17. Use a torque wrench. Tighten it to 44 Nm torque.



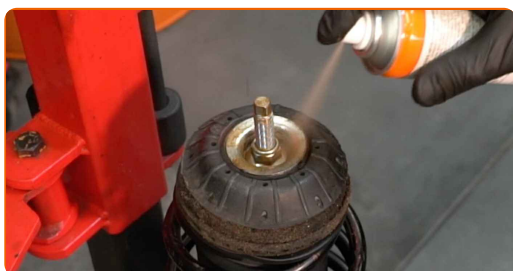
Replacement: suspension strut – FIAT 500L (351, 352). Tip from AUTODOC:

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

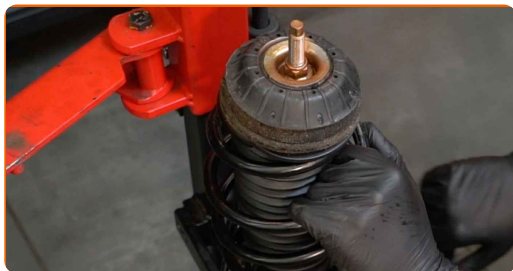
- 39** Decompress the spring.



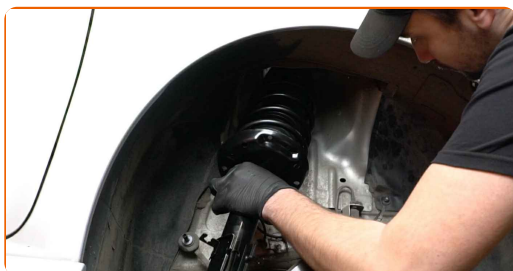
- 40** Treat the shock strut rod. Use copper grease.



41 Remove the assembled shock strut.



42 Install the shock strut into the wheel arch.

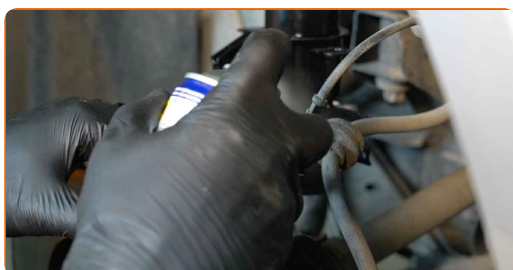


43 Screw the top fastening of the shock strut mount. Do not tighten it.

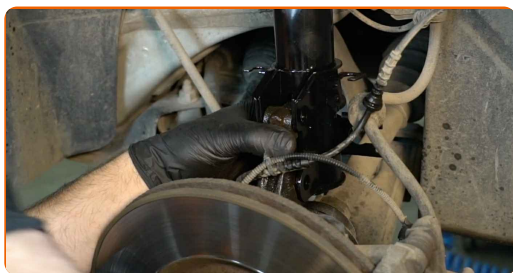
AUTODOC recommends:

- Important! Hold the suspension strut while screwing in the fastening bolts. FIAT 500L (351, 352)

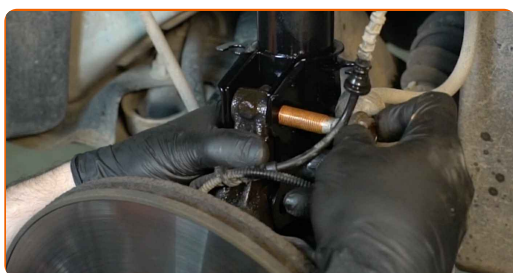
44 Treat the shock strut mounting seat on the steering knuckle. Use a wire brush. Use WD-40 spray.



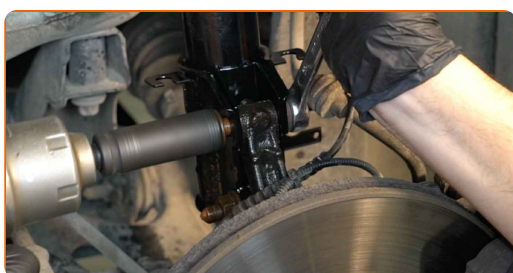
45 Fix the shock absorber strut on the steering knuckle.



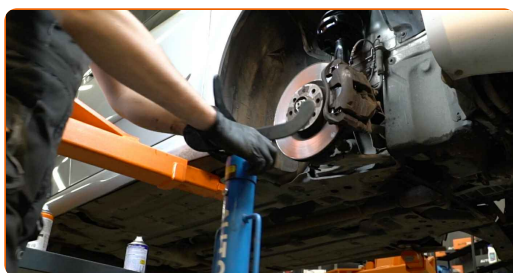
46 Install the fastening bolts.



47 Screw in the fastener that connects the shock strut to the steering knuckle. Use a combination spanner #18. Use a drive socket #18. Use a ratchet wrench.



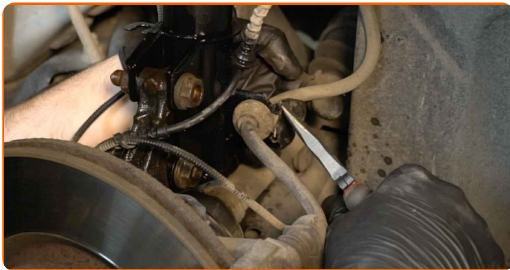
48 Remove the support from under the steering knuckle.



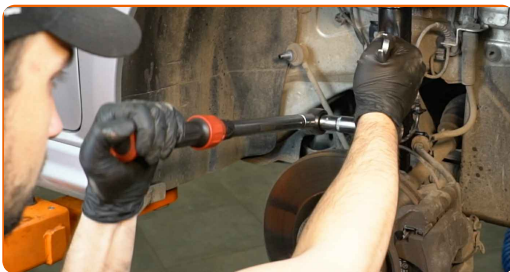
AUTODOC recommends:

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

- 49 Connect the fastener of the ABS sensor cable to the shock absorber strut. Fasten the brake hose on the strut. Use round-nose pliers.



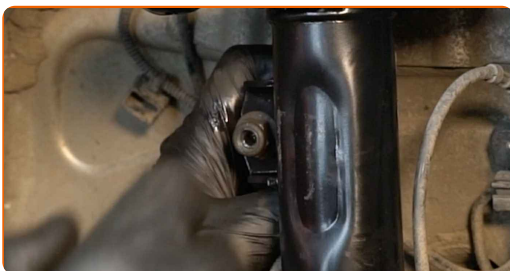
- 50 Tighten the lower fasteners connecting the shock strut to the steering knuckle. Use a combination spanner #18. Use a drive socket #18. Use a torque wrench. Tighten it to 105 Nm torque.+45°



AUTODOC recommends:

- Important! Be sure to use new fasteners.

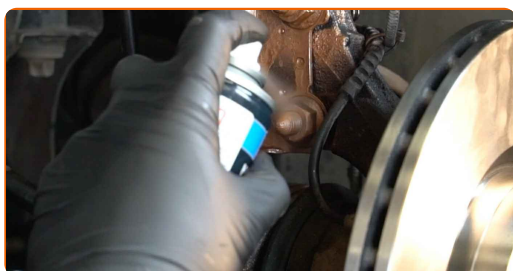
- 51 Install the transverse stabilizer link.



- 52** Tighten the fastener connecting the stabilizer link to the shock strut. Use a drive socket #15. Use a torque wrench. Tighten it to 50 Nm torque.



- 53** Treat the shock strut fasteners. Use copper grease.



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



- 55** Clean the brake disc surface. Use a brake cleaner.

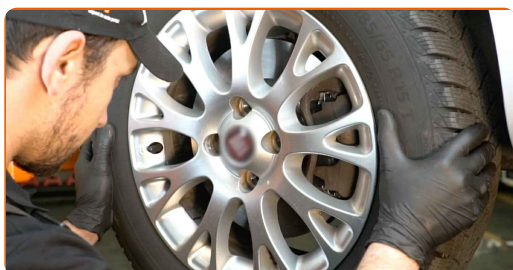


AUTODOC recommends:

- Replacement: suspension strut – FIAT 500L (351, 352). After applying the spray, wait a few minutes.

56

Install the wheel.

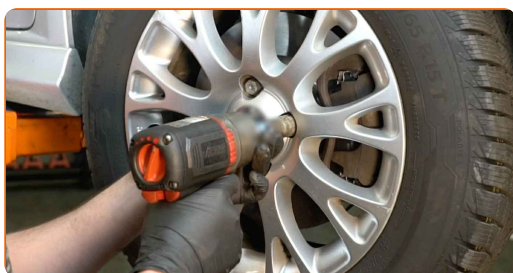


Replacement: suspension strut – FIAT 500L (351, 352). Professionals recommend:

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

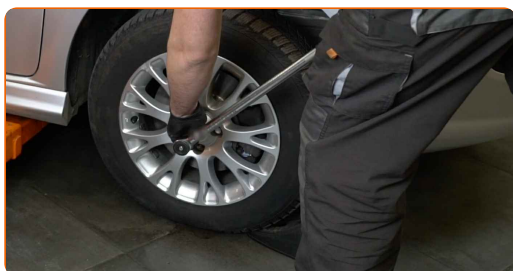
57

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

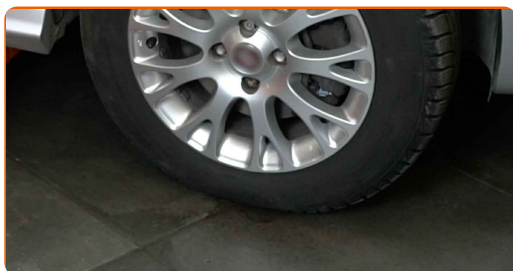


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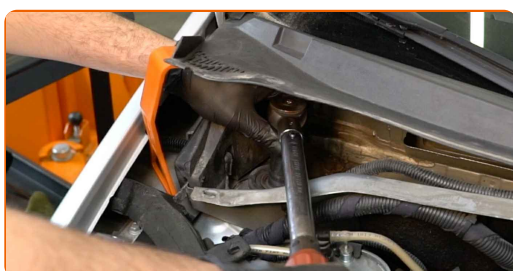
Lower the car and working in a cross order, tighten the wheel bolts. Use wheel impact socket #17. Use a torque wrench. Tighten it to 120 Nm torque.



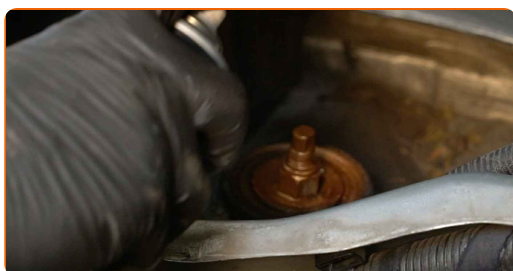
59 Remove the jacks and chocks.



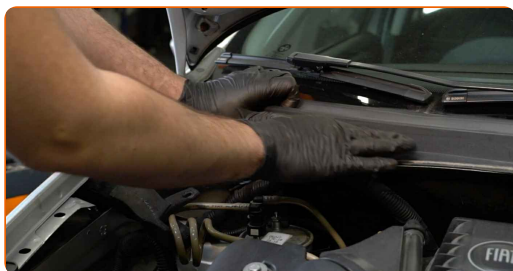
60 Tighten the upper fastener of the shock absorber strut mount. Use a combination spanner #18. Use a drive socket #18. Use a torque wrench. Tighten it to 52 nm torque.



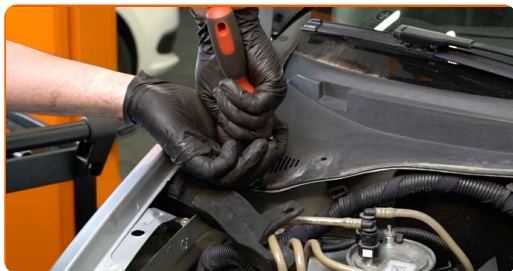
61 Treat the fasteners of the shock strut mount. Use copper grease.



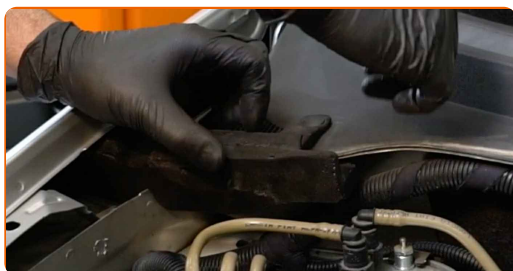
62 Install and secure the cowl grille.



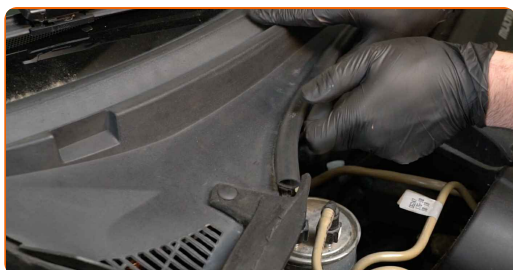
63 Tighten the fasteners of the cowl grille. Use a Phillips screwdriver.



64 Install the fasteners of the wiper plastic cowl grille.



65 Install the cowl grille seal.



66 Remove the fender protection cover.

67 Close the hood.

WELL DONE! 

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