



How to change front
suspension strut on **ALFA
ROMEO Brera (939_)** –
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:

ALFA ROMEO Brera (939_) 2.0 JTDM, ALFA ROMEO Brera (939_) 2.2 JTS (939.DXB11), ALFA ROMEO Brera (939_) 3.2 JTS Q4 (939.DXG22), ALFA ROMEO Brera (939_) 2.4 JTDM 20V, ALFA ROMEO Brera (939_) 3.2 JTS, ALFA ROMEO Brera (939_) 1.8 TBi

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: ALFA ROMEO 159 Sportwagon (939) 2.2 JTS

REPLACEMENT: SUSPENSION STRUT – ALFA ROMEO BRERA (939_). TOOLS YOU NEED:



- Wire brush
- WD-40 spray
- Copper grease
- Combination spanner #6
- Combination spanner #18
- Drive socket # 6
- Drive socket # 16
- Drive socket # 18
- Drive socket # E18
- Drive socket # 21
- HEX bit No.H6.
- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Tap wrench
- Crow bar
- Rubber mallet
- Hydraulic strut spring compressor
- Hydraulic transmission jack
- Fender cover
- Wheel chock

Buy tools

Replacement: suspension strut – ALFA ROMEO Brera (939_). 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.
- Please note: all work on the car – ALFA ROMEO Brera (939_) – should be done with the engine switched off.

CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

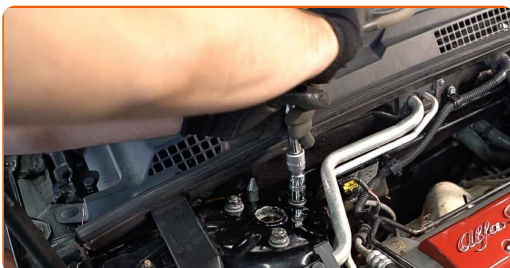
1 Open the bonnet.

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 WD-40 spray.



4 Loosen the upper fastener of the shock strut mount. Use a drive socket #16. 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.



Replacement: suspension strut – ALFA ROMEO Brera (939_). Tip:

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

9

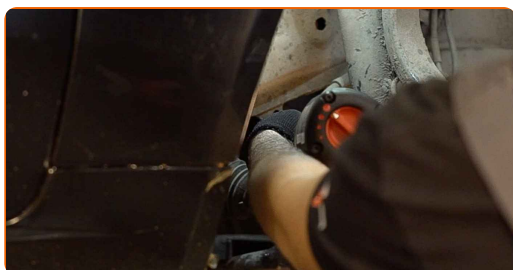
Remove the wheel.

**10**

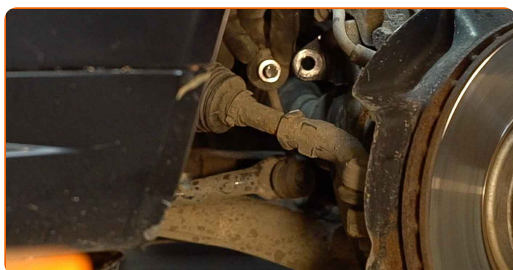
Clean the shock strut fasteners. Use a wire brush. Use WD-40 spray.

**11**

Undo the fastening nut that attaches the stabilizer link to the shock absorber fork. Use a drive socket #18.

**12**

Remove the stabilizer rod.



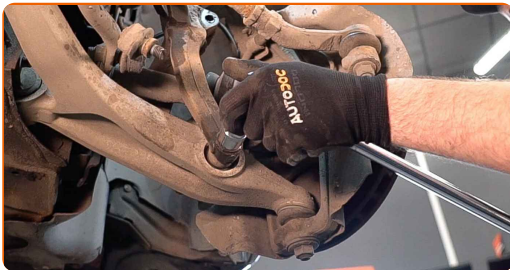
13

Unscrew the fastening bolt that connects the shock strut with the shock absorber fork. Use a drive socket #18. Use a tap wrench.



14

Unscrew the fastening bolt that connects the shock absorber fork with the lower control arm. Use a drive socket #21. Use a tap wrench.



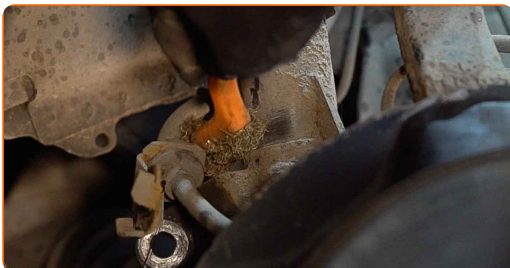
15

Remove the fastening bolt.

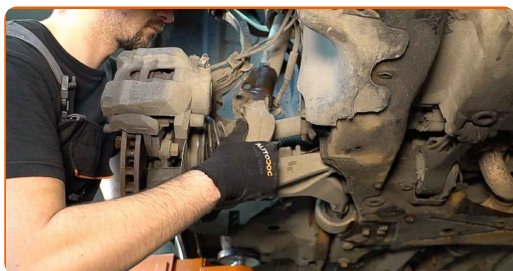


16

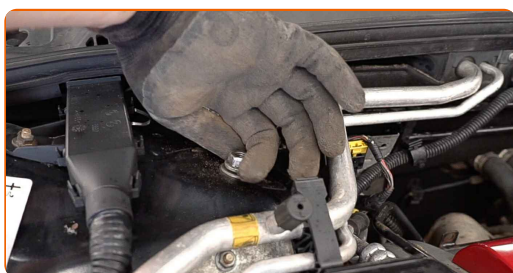
Clean the fastener that attaches the shock absorber fork to the shock strut. Use a wire brush. Use WD-40 spray.



17 Detach the shock absorber fork from the shock strut.



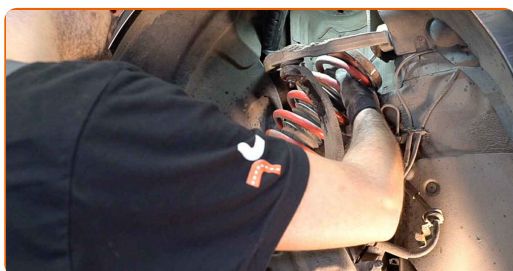
18 Unscrew the top fastening of the shock strut mount.



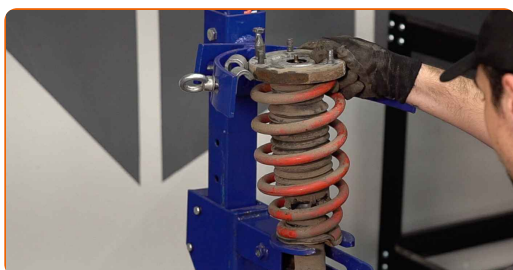
AUTODOC recommends:

- ALFA ROMEO Brera (939_) – To avoid injury, hold the suspension strut while unscrewing the fastening bolts.

19 Remove the suspension strut.



20 Set the shock absorber strut on the spring compressor tool.



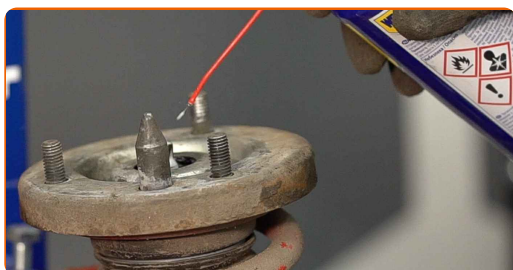
Replacement: suspension strut – ALFA ROMEO Brera (939_). AUTODOC experts recommend:

- 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.

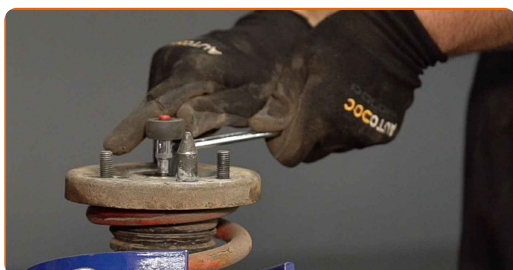
21 Compress the spring.



22 Clean the shock absorber rod. Use a wire brush. Use WD-40 spray.

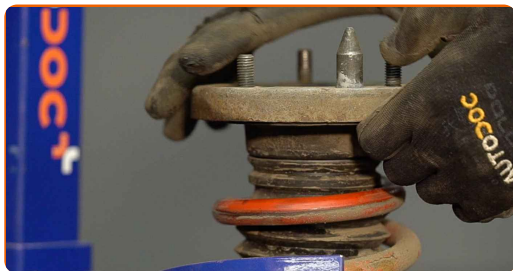


23 Remove the strut piston rod nut. Use a combination spanner #18. Use a drive socket #6. Use a ratchet wrench.

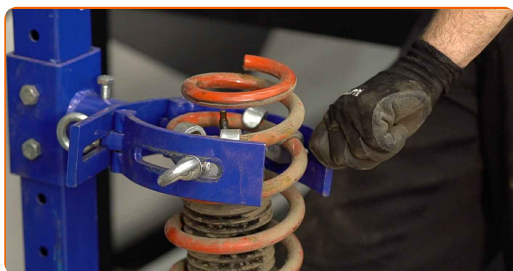


24

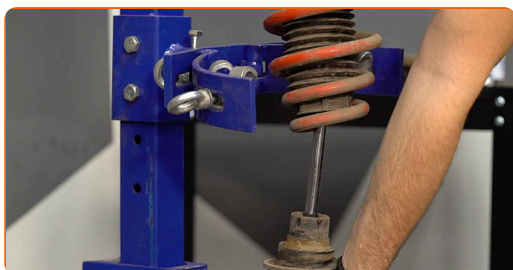
Remove the top strut mount. Use a crowbar.

**25**

Release the coil spring.

**26**

Remove the spring.

**27**

Remove the shock absorber dust cap and the bump stop.

28

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

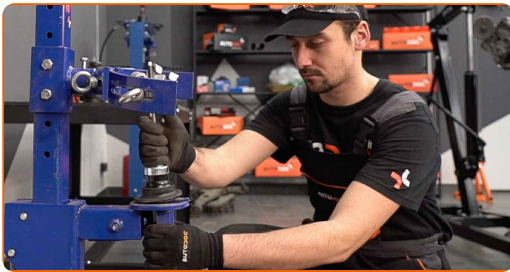


Replacement: suspension strut – ALFA ROMEO Brera (939_). Tip from AUTODOC:

- Thoroughly examine the shock absorber mount, dust boot, bump stop. Replace them if necessary.
- Before installing a new shock absorber you should pump it manually 3-5 times.

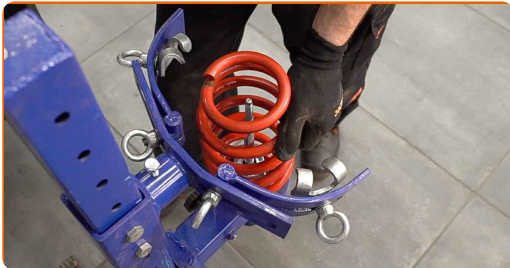
29

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



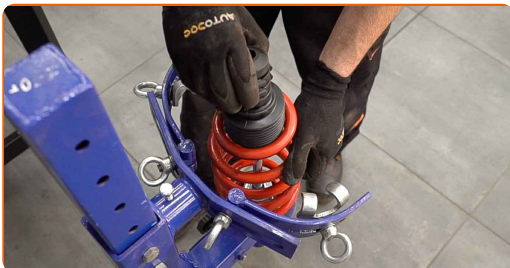
30

Install the spring on the shock absorber.



31

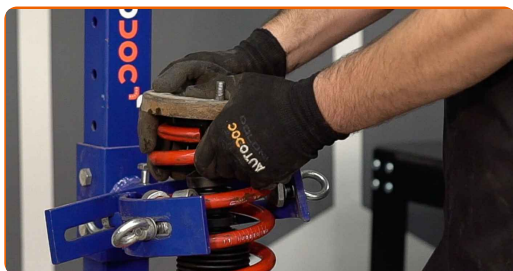
Install the dust sleeve and the bump stop on the new shock absorber.



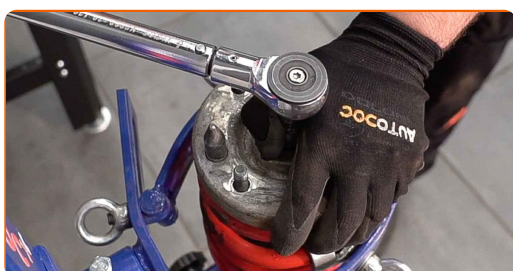
32

Compress the spring.

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



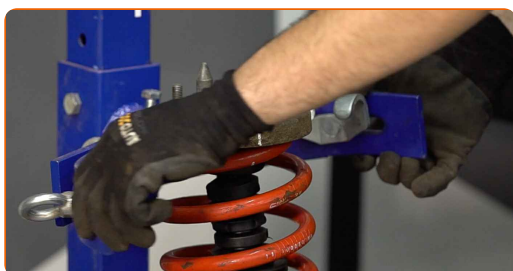
34 Tighten the shock strut piston rod nut. Use a combination spanner #6. Use a combination spanner #18. Use a drive socket #18. Use a torque wrench. Tighten it to 33 Nm torque.



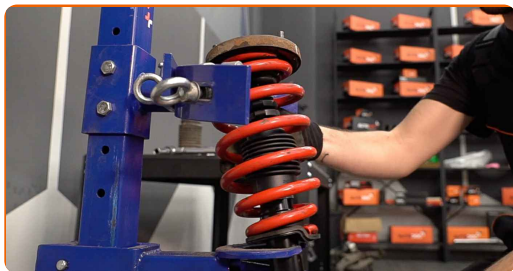
Replacement: suspension strut – ALFA ROMEO Brera (939_). Professionals recommend:

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

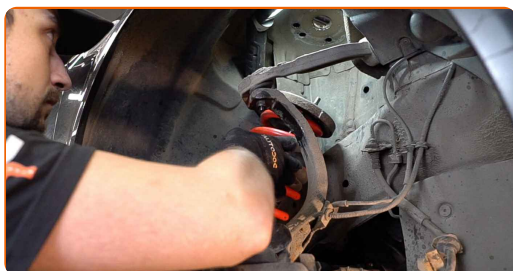
35 Decompress the spring.



36 Remove the assembled shock strut.



37 Install the shock strut into the wheel arch.



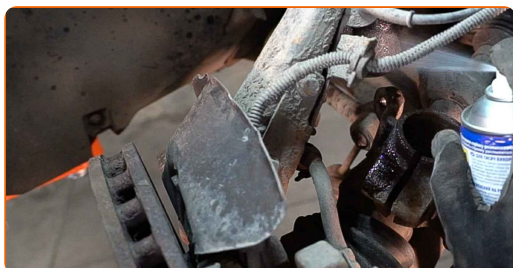
38 Screw the top fastening of the shock strut mount. Do not tighten it.



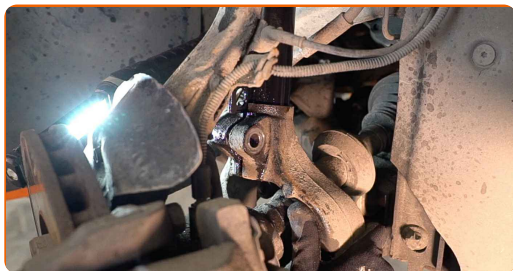
AUTODOC recommends:

- Important! Hold the suspension strut while screwing in the fastening bolts. ALFA ROMEO Brera (939_)

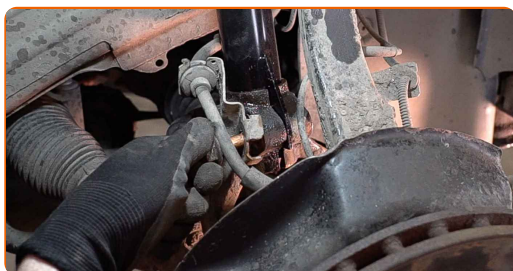
39 Clean the mounting seats of the shock absorber fork. Use a wire brush. Use WD-40 spray.



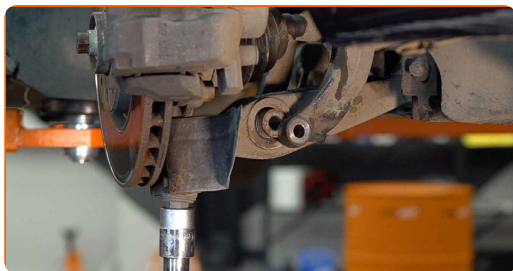
40 Attach the shock absorber fork to the shock strut. Use a rubber mallet.



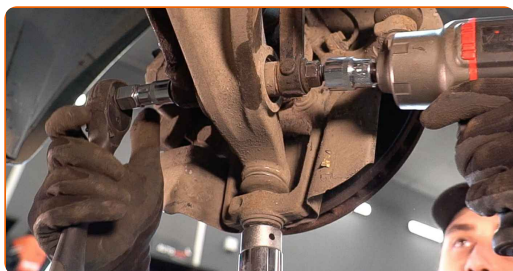
41 Install the fastening bolt.



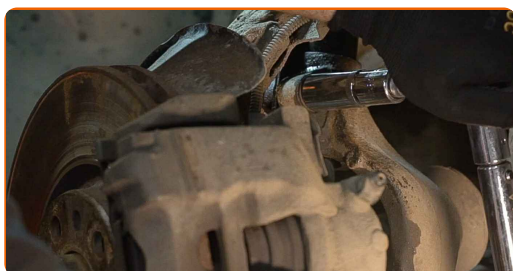
42 Support the arm. Use a hydraulic transmission jack.



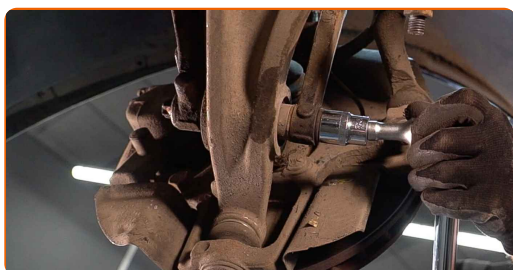
43 Screw in the fastener connecting the shock absorber fork to the lower control arm. Use a drive socket #E18. Use a drive socket #21. Use a tap wrench.



- 44** Tighten the fastening bolt that connects the shock strut with the shock absorber fork. Use a drive socket #18. Use a torque wrench. Tighten it to 77 Nm torque.



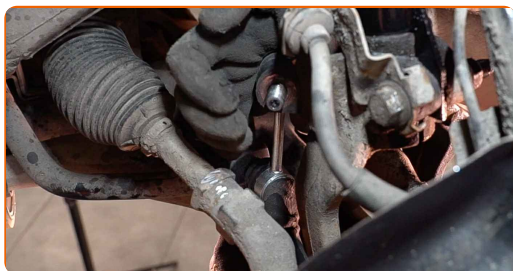
- 45** Tighten the fastening bolt that connects the shock absorber fork to the lower control arm. Use a drive socket #21. Use a torque wrench. Tighten it to 55 Nm torque.+45°



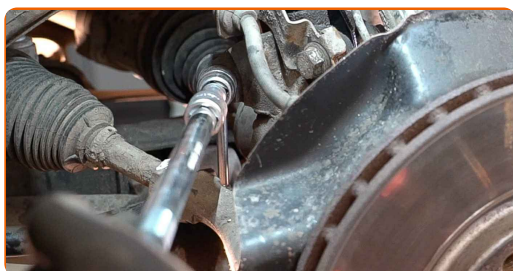
AUTODOC recommends:

- Important! Be sure to use new fasteners.

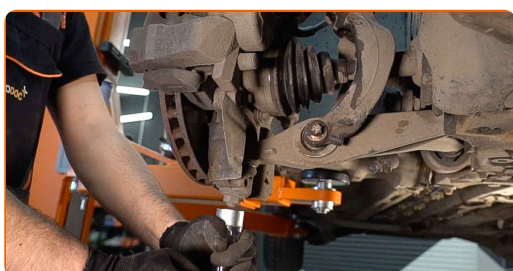
- 46** Install the transverse stabilizer link.



- 47** Tighten the fastener connecting the stabilizer link with the shock absorber fork. Use a combination spanner #18. Use HEX No.H6. Use a torque wrench. Tighten it to 60 Nm torque.



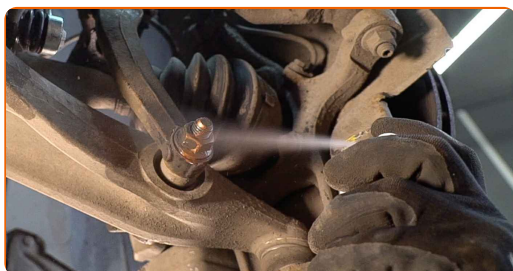
- 48** Remove the support from under the arm.



AUTODOC recommends:

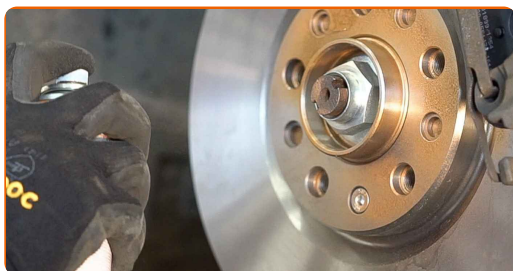
- ALFA ROMEO Brera (939_) – Do not lower the transmission jack sharply to avoid damaging components and mechanisms of the car.

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



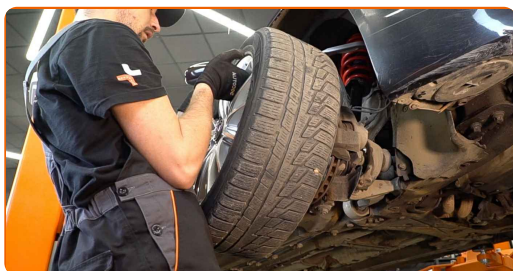
50

Clean the wheel rim mounting seat. Use a wire brush. Treat the contacting surface. Use copper grease.



51

Install the wheel.



Replacement: suspension strut – ALFA ROMEO Brera (939_). Tip from AUTODOC experts:

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

52

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



53

Lower the car.

54

Tighten the upper fastener of the shock absorber strut mount. Use a drive socket #16. Use a torque wrench. Tighten it to 44 Nm torque.



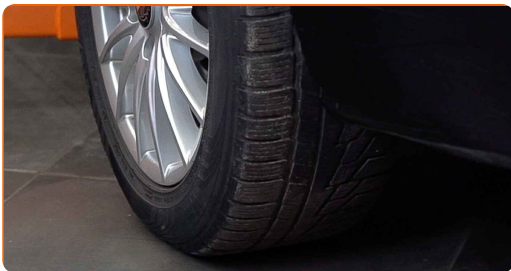
55

Tighten the wheel bolts using a criss-cross pattern. Use a torque wrench. Tighten it to 120 Nm torque.



56

Remove the jacks and chocks.



57

Remove the fender protection cover.

58

Close the hood.

WELL DONE! 

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