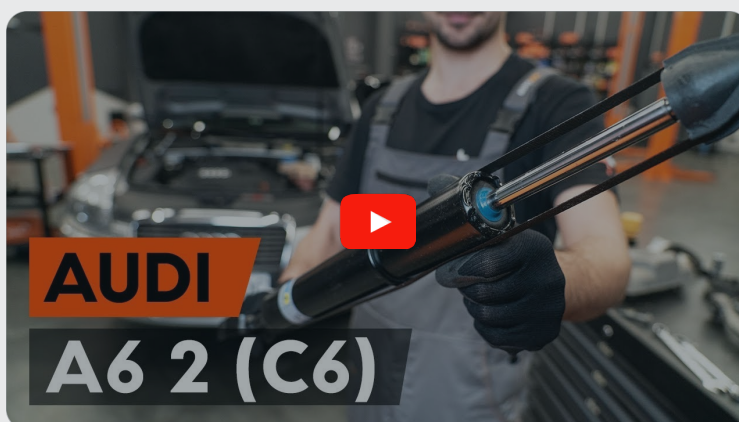




How to change front
suspension strut on **AUDI**
A6 Avant (4F5, C6) –
replacement guide

SIMILAR VIDEO TUTORIAL



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

ⓘ Important!

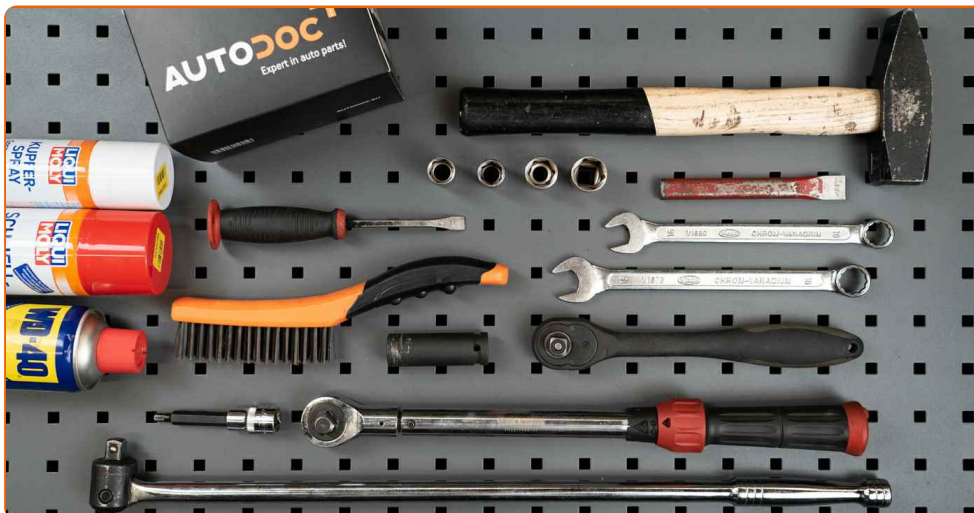
This replacement procedure can be used for:

AUDI A6 Avant (4F5, C6) 3.0 TFSI quattro, AUDI A6 Avant (4F5, C6) 2.0 TDI, AUDI A6 Avant (4F5, C6) 2.7 TDI, AUDI A6 Avant (4F5, C6) 3.0 TDI quattro, AUDI A6 Avant (4F5, C6) 3.2 FSI, AUDI A6 Avant (4F5, C6) 3.2 FSI quattro, AUDI A6 Avant (4F5, C6) 4.2 quattro, AUDI A6 Avant (4F5, C6) 2.4, AUDI A6 Avant (4F5, C6) 2.4 quattro, AUDI A6 Avant (4F5, C6) 2.7 TDI quattro, AUDI A6 Avant (4F5, C6) 2.0 TFSI, AUDI A6 Avant (4F5, C6) S6 quattro, AUDI A6 Avant (4F5, C6) 4.2 FSI quattro, AUDI A6 Avant (4F5, C6) 2.8 FSI, AUDI A6 Avant (4F5, C6) 3.0 quattro, (+ 2)

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: AUDI A6 Saloon (4F2, C6) 2.0 TDI

REPLACEMENT: SUSPENSION STRUT – AUDI A6 AVANT (4F5, C6). TOOLS YOU'LL NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #16
- Combination spanner #18
- Drive socket # 15
- Drive socket # 16
- Drive socket # 18
- Drive socket # 21
- HEX bit no.H6.
- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Hammer
- Flat chisel
- Crow bar
- Hydraulic strut spring compressor
- Hydraulic transmission jack
- Fender cover
- Wheel chock

Buy tools

Replacement: suspension strut – AUDI A6 Avant (4F5, C6). AUTODOC recommends:

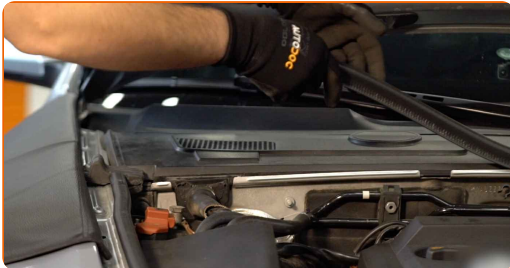
- Both shock struts of the front suspension should be replaced simultaneously.
- The replacement procedure is identical for the left and right shock struts of the front suspension.
- All work should be done with the engine stopped.

REPLACEMENT: SUSPENSION STRUT – AUDI A6 AVANT (4F5, C6). TAKE THE FOLLOWING STEPS:

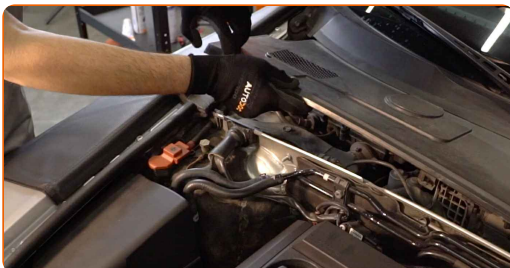
1 Open the bonnet.

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

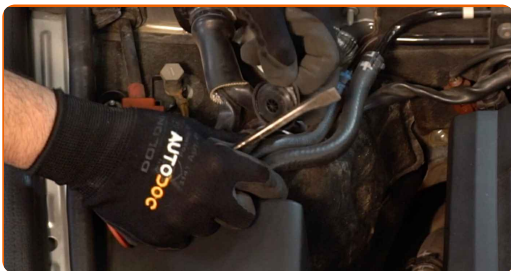
3 Remove the cowl grille seal.



4 Raise up and remove the cowl grille.



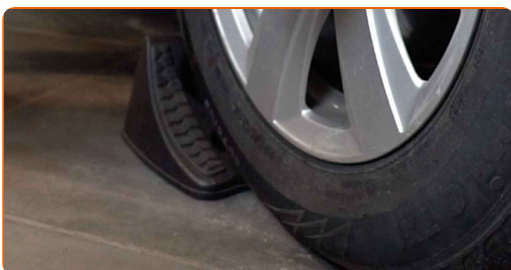
5 Remove the shock strut mount cap. Use a crowbar.



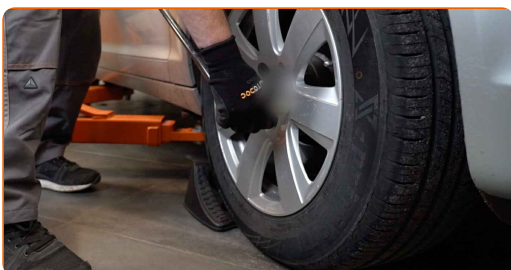
6 Loosen the upper fastener of the shock strut mount. Use a drive socket #15. Use a ratchet wrench.



7 Secure the wheels with chocks.



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



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

10

Unscrew the wheel bolts.



Replacement: suspension strut – AUDI A6 Avant (4F5, C6). Professionals recommend:

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

11

Remove the wheel.

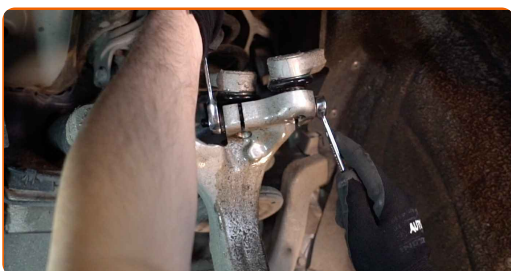


12

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



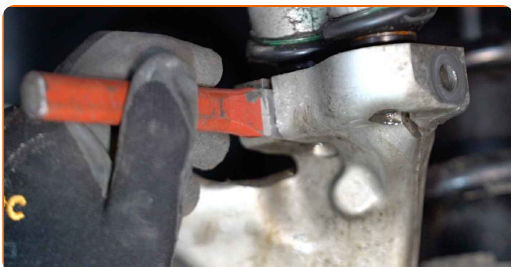
13 Unscrew the upper control arm fasteners (2 pieces). Use a combination spanner #18 (2 pieces). Use a drive socket #18.



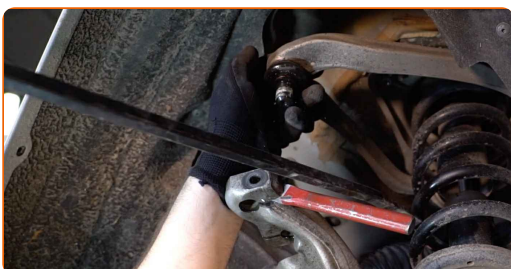
14 Remove the fastening bolt.



15 Release the fastener that connects the control arm ball joint to the steering knuckle. Use a flat metal-working chisel. Use a hammer.



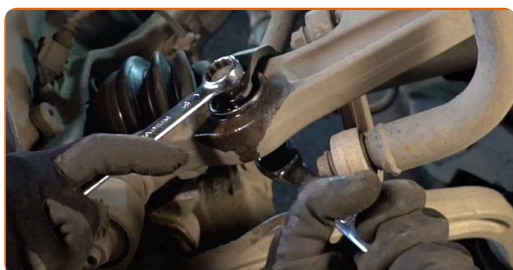
16 Detach the upper control arm from the steering knuckle. Use a crowbar.



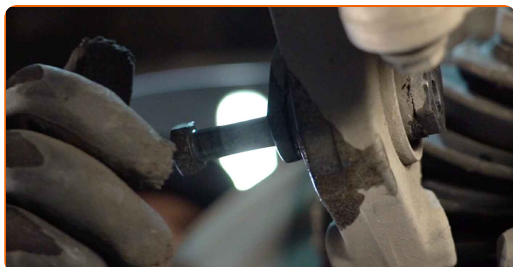
- 17** Clean the fastening bolt that connects the shock absorber fork with the lower control arm. Use a wire brush. Use WD-40 spray.



- 18** Unscrew the fastener connecting the shock strut to the suspension control arm. Use a combination spanner #18 (2 pieces).



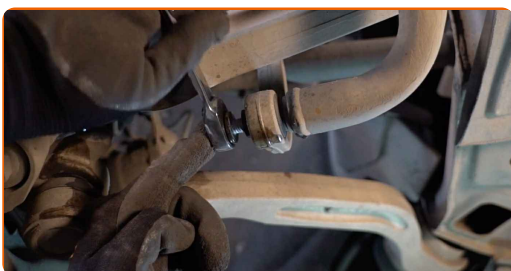
- 19** Remove the fastening bolt.



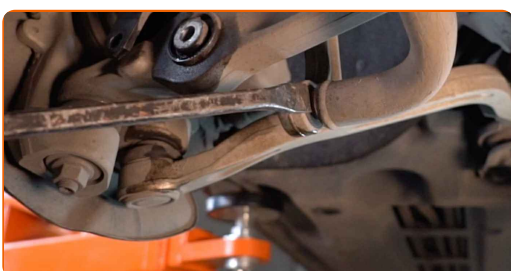
- 20** Clean the stabiliser link fasteners. Use a wire brush. Use WD-40 spray.



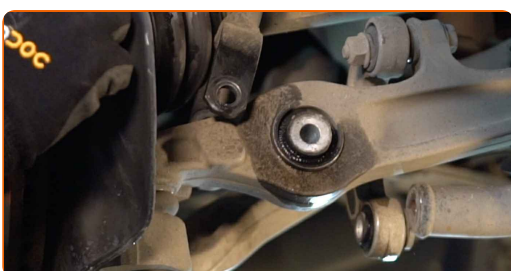
- 21** Unscrew the fasteners connecting the stabiliser link to the stabiliser bar. Use a combination spanner #16. Use a drive socket #16. Use a ratchet wrench.



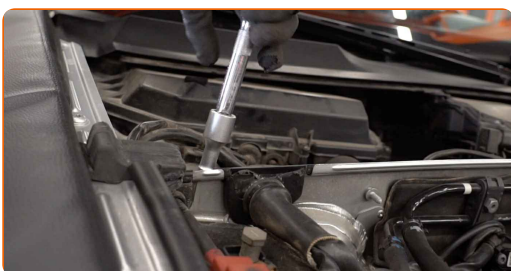
- 22** Remove the stabilizer rod. Use a crowbar.



- 23** Detach the fastener that connects the shock strut to the control arm. Use a crowbar.



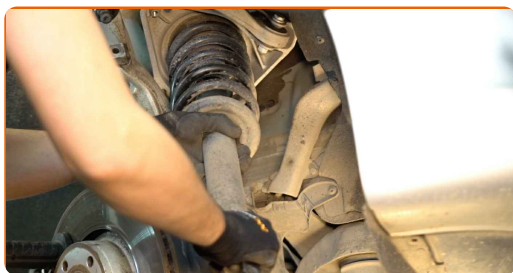
- 24** Unscrew the top fastening of the shock strut mount. Use a drive socket #15.



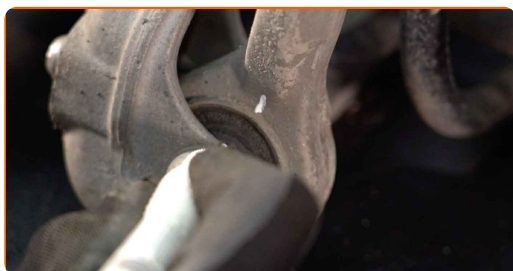
AUTODOC recommends:

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

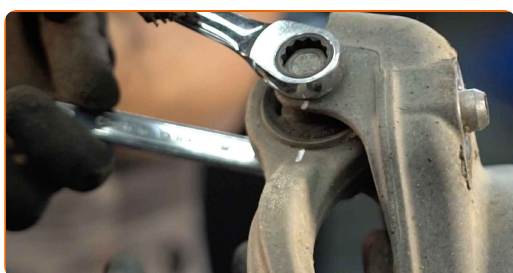
25 Remove the suspension strut.



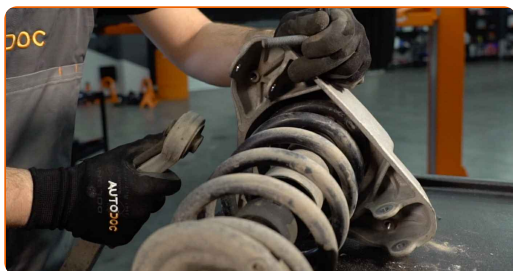
26 Make marks on the control arms and the shock strut mount.



27 Unscrew the fasteners connecting the control arms to the shock strut mount. Use a combination spanner #18 (2 pieces).



28 Remove the control arms.



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



Replacement: suspension strut – AUDI A6 Avant (4F5, C6). Tip:

- 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.

30

Compress the spring.



31

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



32

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



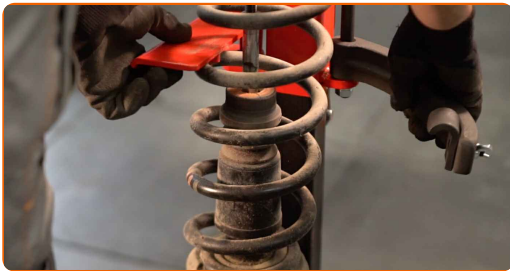
33

Remove the top strut mount. Use a crowbar.



34

Release the coil spring.



35

Remove the spring. Remove the shock absorber dust cap and the bump stop.

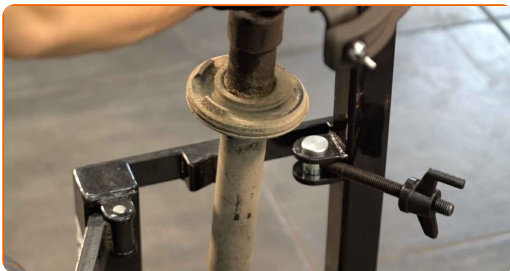


AUTODOC recommends:

- Replacement: suspension strut – AUDI A6 Avant (4F5, C6). Carefully inspect the mount, the boot, and the bump stop of the shock absorber. Replace if necessary.

36

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

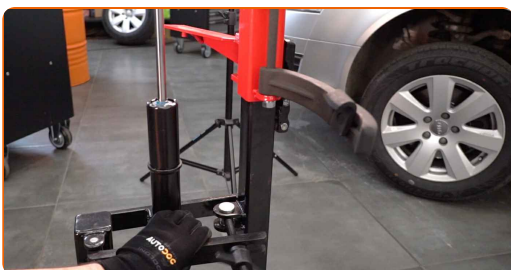


Replacement: suspension strut – AUDI A6 Avant (4F5, C6). Tip from AUTODOC experts:

- Before installing a new shock absorber you should pump it manually 3-5 times.

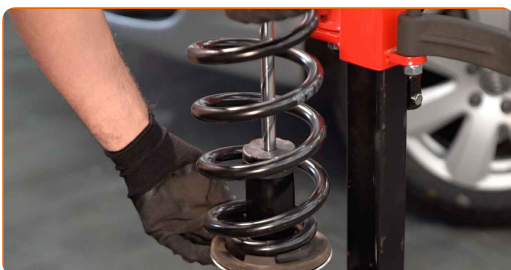
37

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



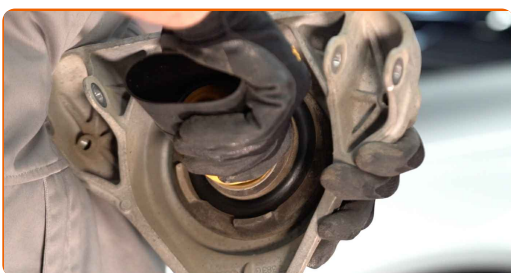
38

Install the spring on the shock absorber.



39

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



40

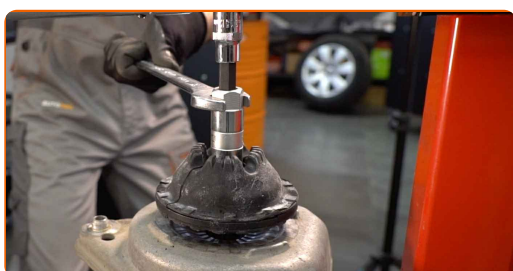
Install the upper strut mount and the strut mount bearing.



41 Compress the spring.



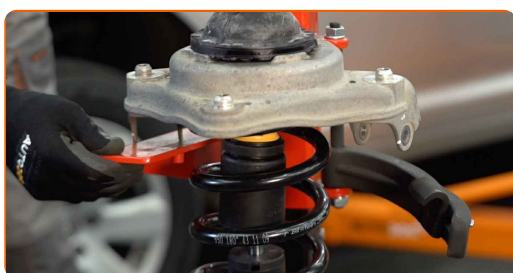
42 Tighten the shock strut piston rod nut. Use HEX No.H6. Use a drive socket #21. Use a torque wrench. Tighten it to 50 nm torque.



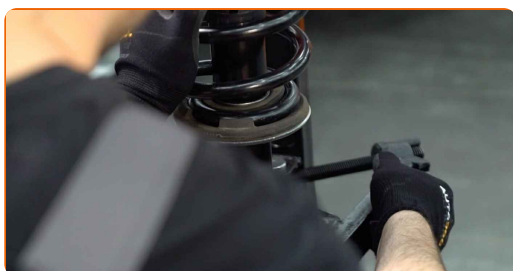
AUTODOC recommends:

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

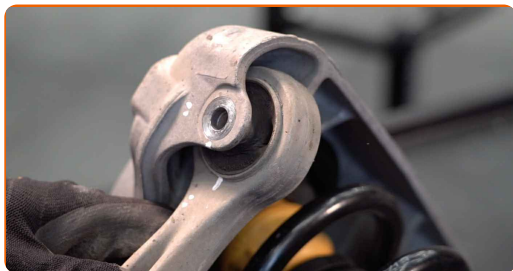
43 Decompress the spring.



44 Remove the assembled shock strut.



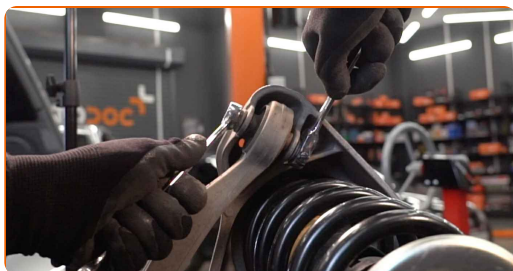
45 Install the control arms.



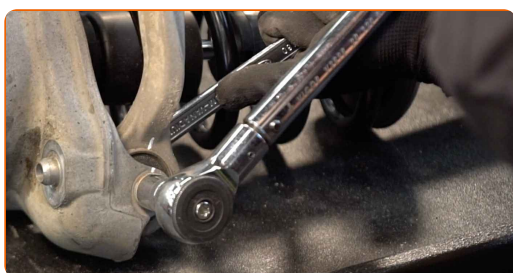
Replacement: suspension strut – AUDI A6 Avant (4F5, C6). AUTODOC recommends:

- Position the control arm according to its mounting holes.

46 Screw in the fasteners connecting the control arms to the shock strut mount. Use a combination spanner #18 (2 pieces).



47 Tighten the fastener connecting the control arms to the shock strut mount. Use a combination spanner #18. Use a drive socket #18. Use a torque wrench. Tighten it to 50 Nm torque.+90°



AUTODOC recommends:

- Important! Be sure to use new fasteners.

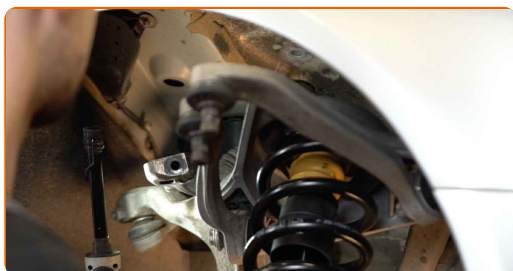
48

Treat the shock strut rod. Use copper grease.



49

Install the shock strut into the wheel arch.



50

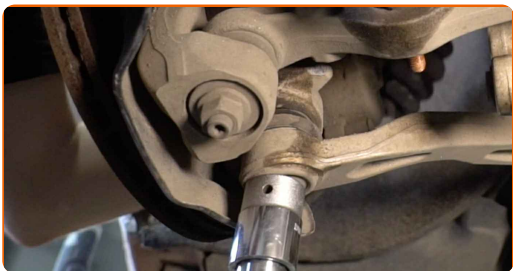
Screw the top fastening of the shock strut mount. Do not tighten it.



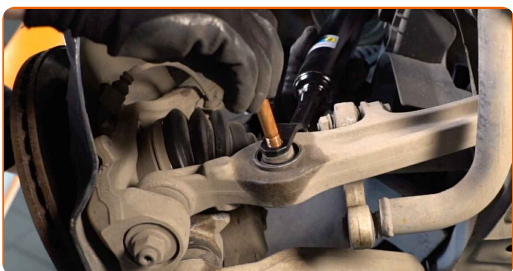
Replacement: suspension strut – AUDI A6 Avant (4F5, C6). Tip from AUTODOC experts:

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

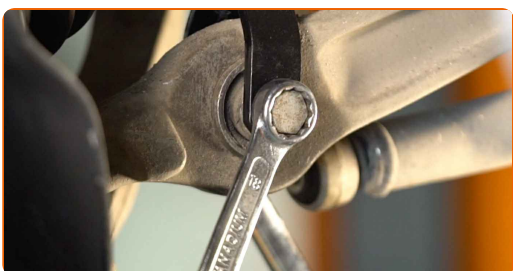
51 Support the arm. Use a hydraulic transmission jack.



52 Install the fastening bolt.



53 Tighten the fastener connecting the shock strut to the suspension control arm. Use a combination spanner #18 (2 pieces). Use a torque wrench. Tighten it to 90 Nm torque.+90°



AUTODOC recommends:

- Important! Be sure to use new fasteners.

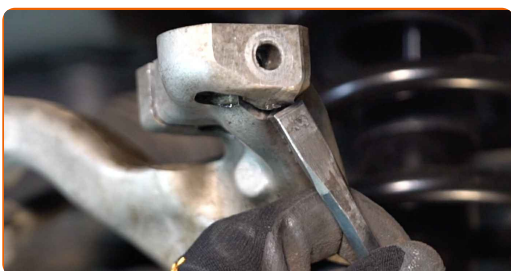
54

Clean the mounting seats and the thread of the suspension arm. Use a wire brush. Use WD-40 spray.



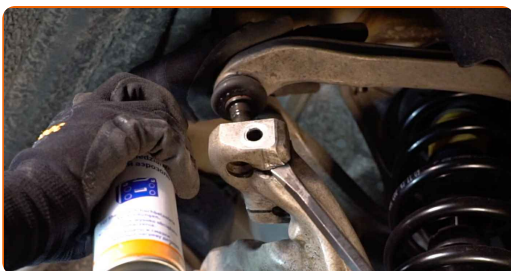
55

Release the fastener that connects the control arm ball joint to the steering knuckle. Use a flat metal-working chisel. Use a hammer.



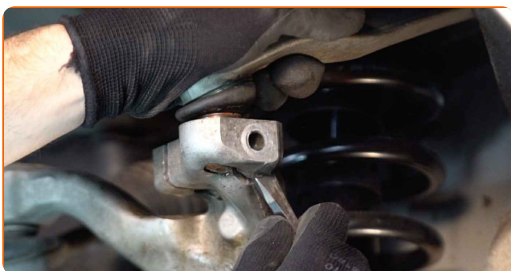
56

Treat all joints of the arm. Use copper grease.



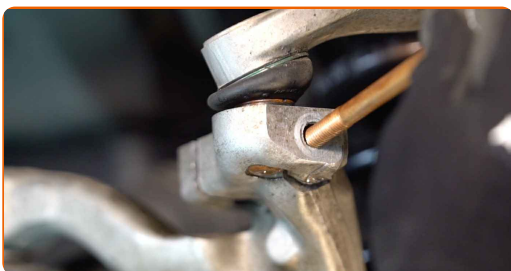
57

Attach the upper control arm to the steering knuckle.



58

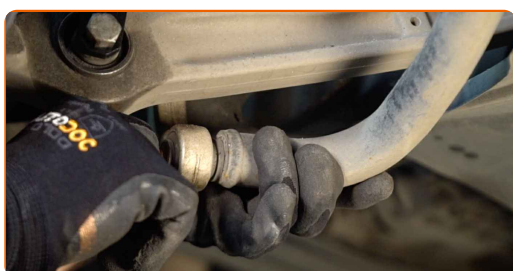
Install the fastening bolt.



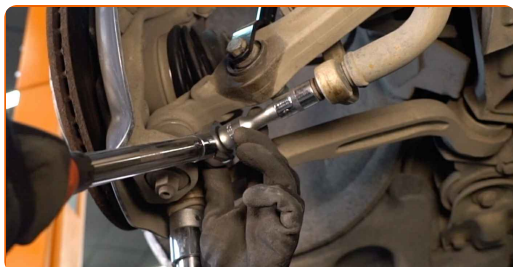
- 59** Tighten the upper control arm fasteners (2 pieces). Use a combination spanner #18. Use a drive socket #18. Use a torque wrench. Tighten it to 45 nm torque.



- 60** Install the transverse stabilizer link.



- 61** Tighten the fastener connecting the stabilizer link to the stabilizer bar. Use a drive socket #16. Use a torque wrench. Tighten it to 40 Nm torque.+90°

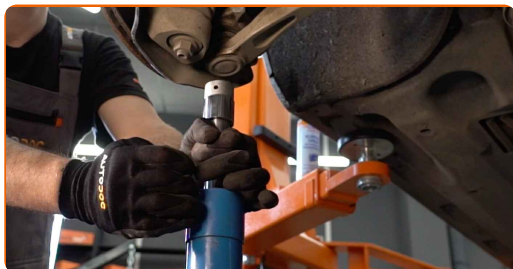


AUTODOC recommends:

- Important! Be sure to use new fasteners.

62

Remove the support from under the arm.

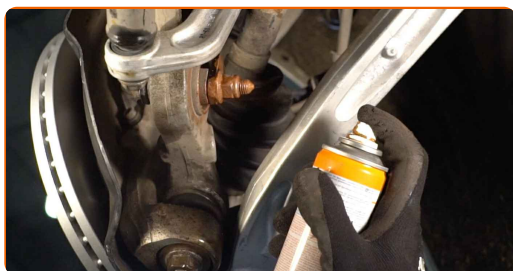


AUTODOC recommends:

- Replacement: suspension strut – AUDI A6 Avant (4F5, C6). Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

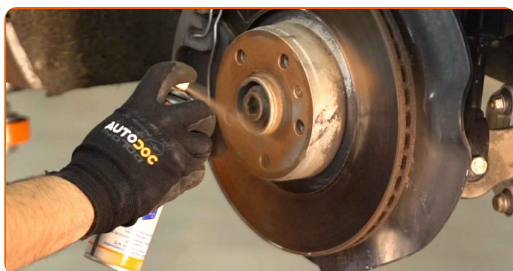
63

Treat all joints of the arm. Treat the shock strut fasteners. Use copper grease.



64

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



65

Clean the brake disk surface. Use a brake cleaner.



AUTODOC recommends:

- Replacement: suspension strut – AUDI A6 Avant (4F5, C6). After applying the spray, wait a few minutes.

66

Install the wheel.



Replacement: suspension strut – AUDI A6 Avant (4F5, C6). Tip from AUTODOC experts:

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

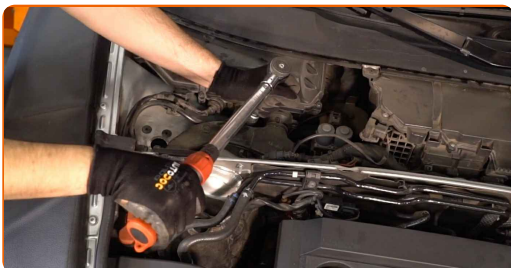
67

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



68 Lower the car.

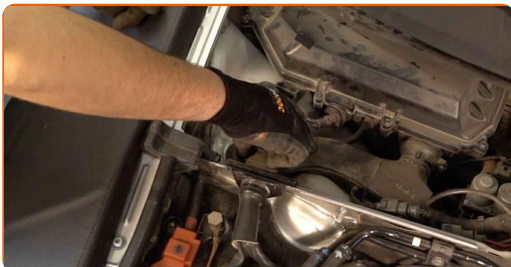
69 Tighten the upper fastener of the shock absorber strut mount. Use a drive socket #15. Use a torque wrench. Tighten it to 50 Nm torque. +90°



AUTODOC recommends:

- Important! Be sure to use new fasteners.

70 Install the shock strut mount cap.



71 Install and secure the cowl grille.



72 Install the cowl grille seal.



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



74 Remove the jacks and chocks.



75 Remove the fender protection cover.

76 Close the hood.

WELL DONE! 

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