



How to change front
suspension strut on **Audi**
A6 C5 Avant –
replacement guide

VIDEO TUTORIAL



Important!

This replacement procedure can be used for:

AUDI A6 Saloon (4B2, C5) 1.8 T quattro, AUDI A6 Saloon (4B2, C5) 2.4, AUDI A6 Saloon (4B2, C5) 2.4 quattro, AUDI A6 Saloon (4B2, C5) 1.9 TDI, AUDI A6 Saloon (4B2, C5) 2.5 TDI, AUDI A6 Saloon (4B2, C5) 2.8, AUDI A6 Saloon (4B2, C5) 2.8 quattro, AUDI A6 Saloon (4B2, C5) 2.5 TDI quattro, AUDI A6 Avant (4B5, C5) 1.9 TDI, AUDI A6 Avant (4B5, C5) 1.8, AUDI A6 Avant (4B5, C5) 2.8 quattro, AUDI A6 Avant (4B5, C5) 1.8 T, AUDI A6 Avant (4B5, C5) 2.8, AUDI A6 Avant (4B5, C5) 1.8 T quattro, AUDI A6 Avant (4B5, C5) 2.4 quattro, (+ 16)

The steps may slightly vary depending on the car design.

**REPLACEMENT: SUSPENSION STRUT – AUDI A6 C5
AVANT. TOOLS YOU MIGHT NEED:**



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Torque wrench
- Combination spanner #16
- Combination spanner #18
- Drive socket # 13
- Drive socket # 16
- Drive socket # 18
- Drive socket # 19
- Drive socket # 27
- HEX bit No.H6
- HEX bit No.H8
- Wheel impact socket #17
- Ratchet wrench
- Flat chisel
- Hammer
- Tap wrench
- Hydraulic strut spring compressor
- Crow bar
- Hydraulic transmission jack
- Fender cover
- Wheel chock

BUY TOOLS

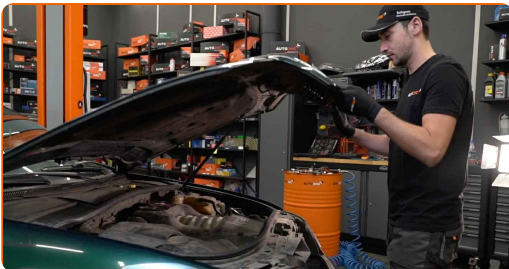
Replacement: suspension strut – Audi A6 C5 Avant. AUTODOC experts recommend:

- 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 – Audi A6 C5 Avant – should be done with the engine switched off.

CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

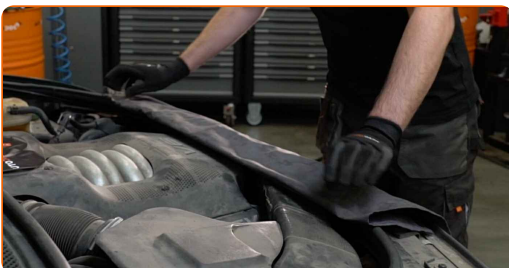
1

Open the hood.



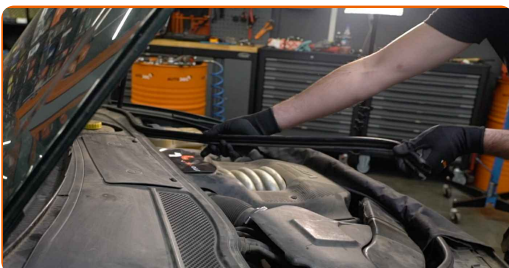
2

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



3

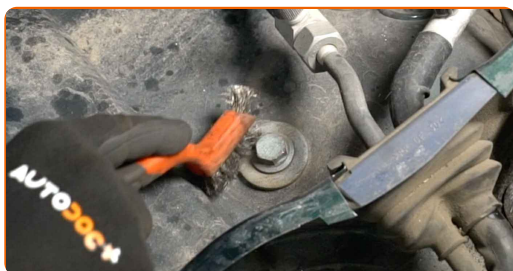
Remove the cowl grille seal.



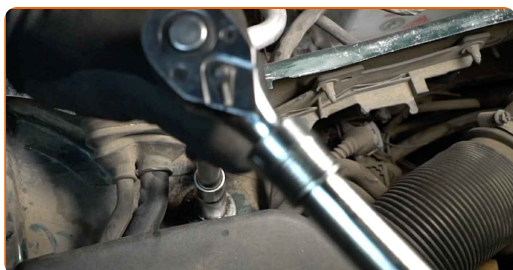
4 Raise up and remove the cowl grille.



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

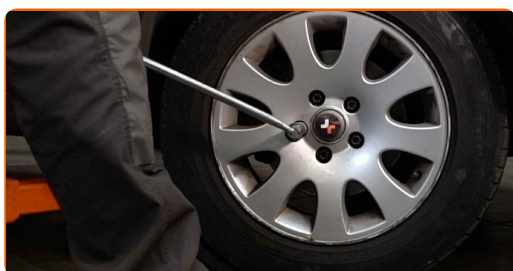


6 Loosen the upper fasteners of the suspension strut. Use a drive socket #16. Use a ratchet wrench.



7 Secure the wheels with chocks.

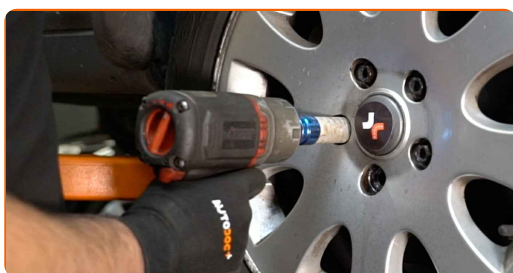
8 Loosen the wheel mounting bolts. Use wheel impact socket #17.



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



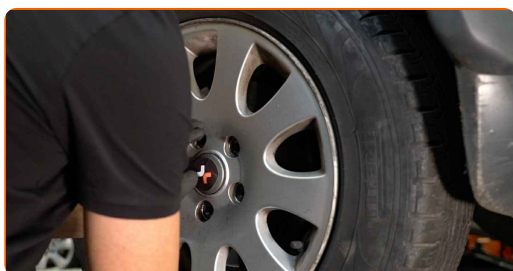
10 Unscrew the wheel bolts.



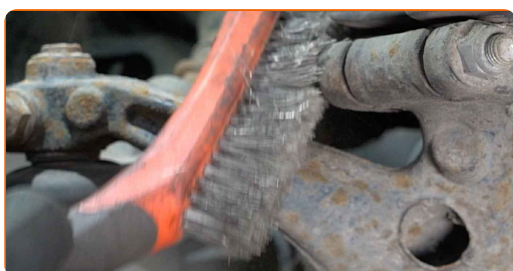
AUTODOC recommends:

- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts.
Audi A6 C5 Avant

11 Remove the wheel.

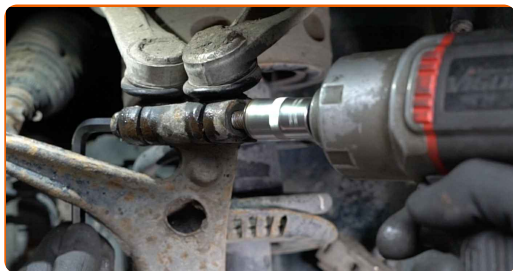


12 Clean all joints of the arm. Clean the fastener connecting the tie rod end to the steering knuckle. Use a wire brush. Use WD-40 spray.



13

Unscrew the upper arm fastenings. Use a drive socket #16. Use HEX No.H8. Use a ratchet wrench.



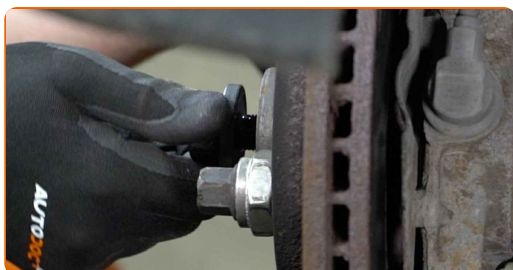
14

Loosen the fastener of the driveshaft. Use a drive socket #27. Use a ratchet wrench.



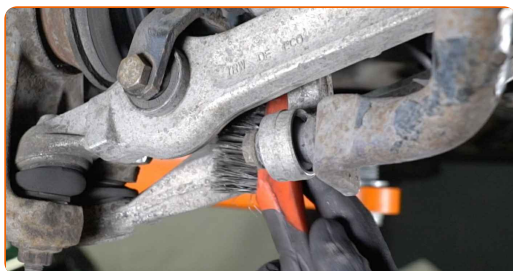
15

Remove the fastening bolt.



16

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



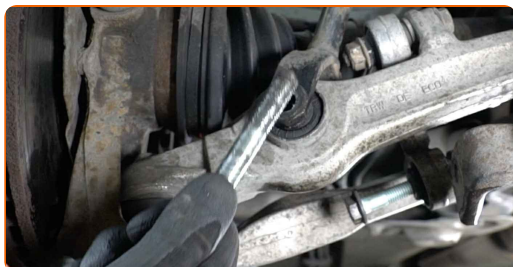
- 17** Unscrew the lower fastener connecting the shock strut to the steering knuckle. Use a combination spanner #18. Use a drive socket #18. Use a ratchet wrench.



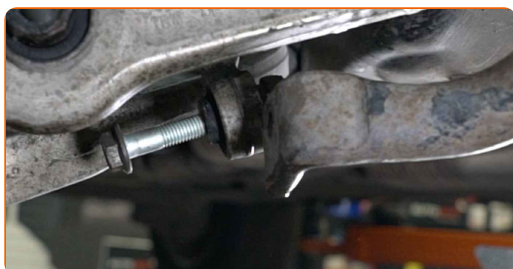
- 18** Unscrew the fastener connecting the stabilizer link to the stabilizer bar. Use a combination spanner #16. Use a drive socket #16. Use a ratchet wrench.



- 19** Remove the fastening bolt.

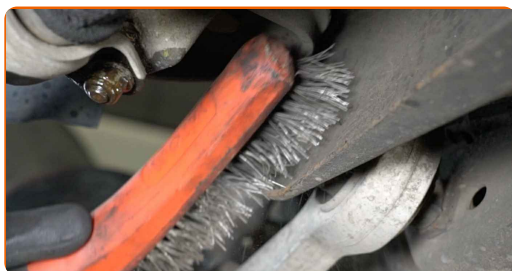


- 20** Remove the stabiliser link.



21

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

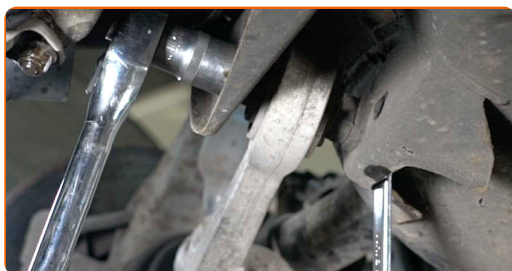


AUTODOC recommends:

- Replacement: suspension strut – Audi A6 C5 Avant. After applying the spray, wait a few minutes.

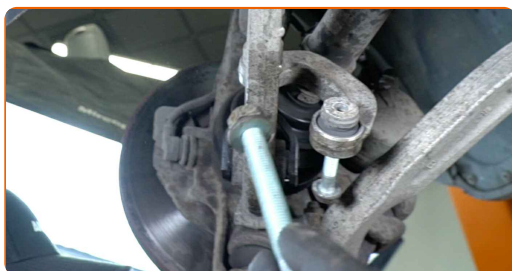
22

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

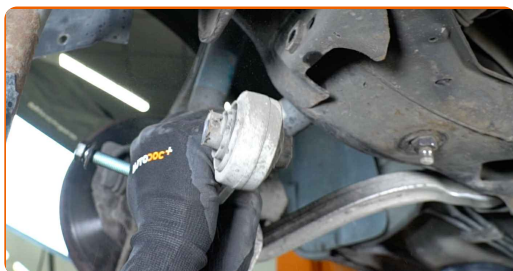


23

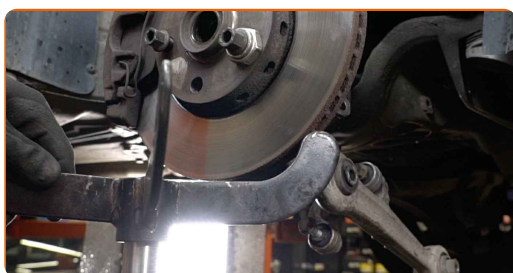
Remove the fastening bolt. Use a crowbar.



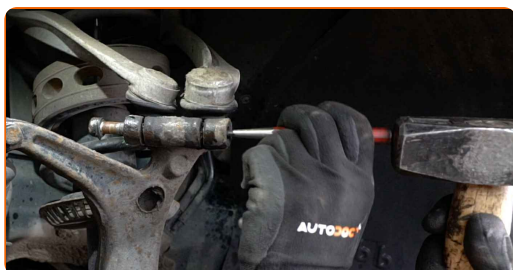
24 Detach the control arm.



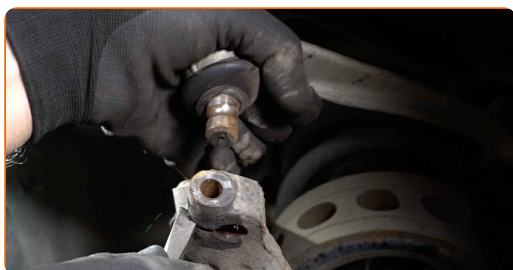
25 Prop up the steering knuckle. Use a hydraulic transmission jack.



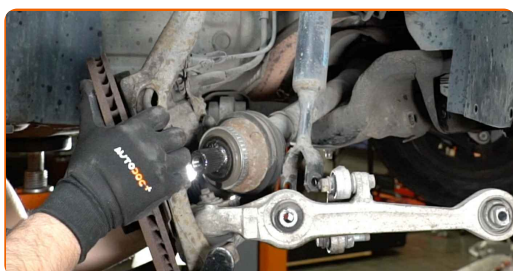
26 Remove the fastening bolt. Use a pin punch. Use a hammer.



27 Remove the control arms. Use a flat metal-working chisel. Use a hammer.

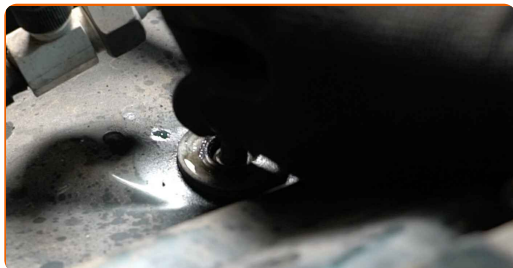


28 Detach the driveshaft from the steering knuckle.



29 Detach the bottom part of the shock strut. Use a crowbar.

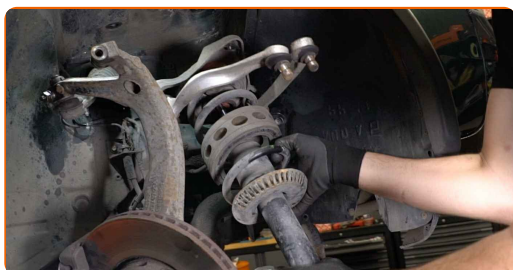
30 Unscrew the upper fasteners of the shock strut.



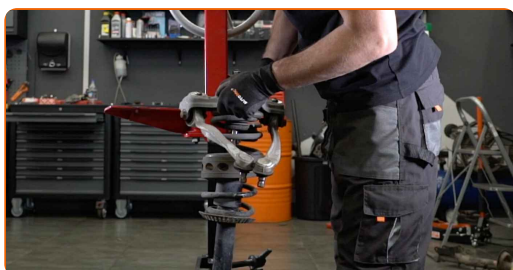
AUTODOC recommends:

- Important! Hold the suspension strut while unscrewing the fastening bolts. Audi A6 C5 Avant

31 Remove the suspension strut.



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

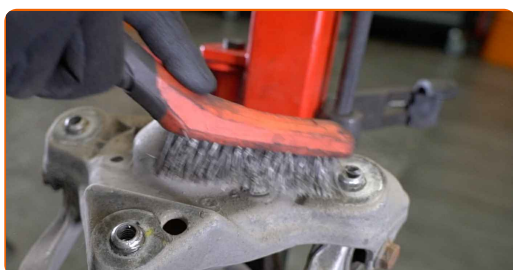


AUTODOC recommends:

- 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.

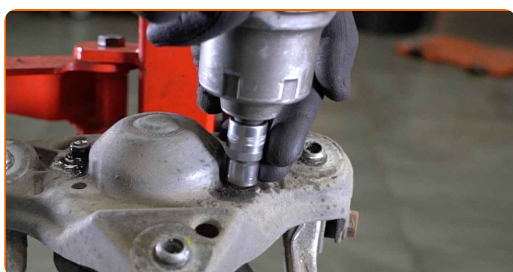
33

Clean the upper fastener of the suspension strut mount. Use a wire brush. Use WD-40 spray.



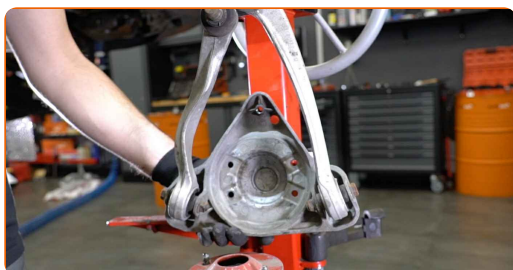
34

Unscrew the top fastening of the shock strut mount. Use a drive socket #13. Use a ratchet wrench.



35

Remove the upper strut mount together with the suspension arms.

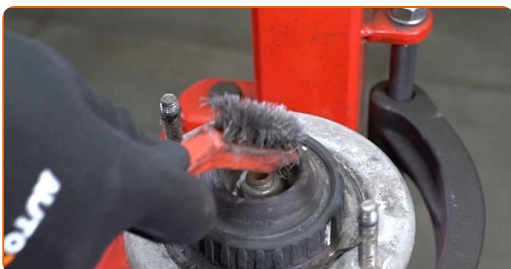


36 Compress the spring.

37 Make marks on the upper strut mount and the spring.



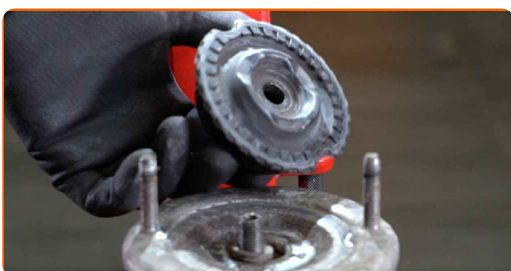
38 Treat the shock strut rod. Use a wire brush. Use WD-40 spray.



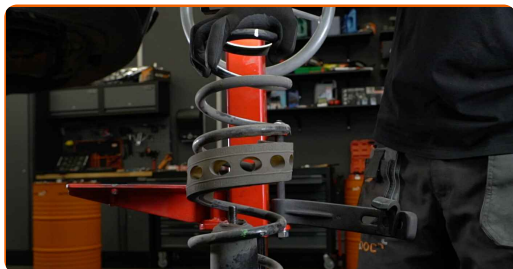
39 Unscrew the strut piston rod nut. Use a drive socket #18. Use HEX No.H6. Use a ratchet wrench.



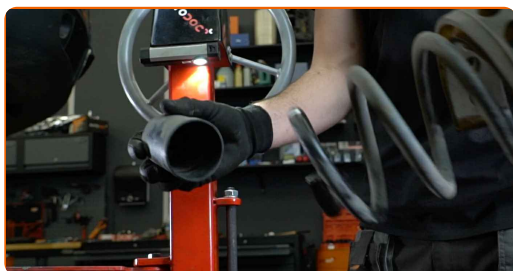
40 Remove the top strut mount. Use a crowbar.



41 Remove the spring.



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



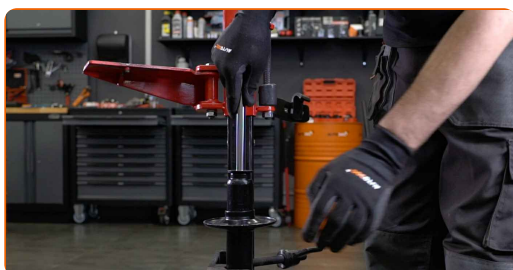
AUTODOC recommends:

- Replacement: suspension strut – Audi A6 C5 Avant. Carefully inspect the mount, the boot, and the bump stop of the shock absorber. Replace if necessary.

43 Remove the suspension strut.



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

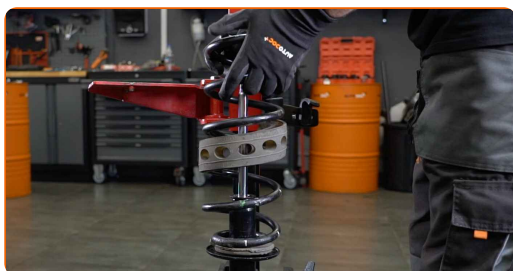


Replacement: suspension strut – Audi A6 C5 Avant. Tip from AUTODOC experts:

- 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.

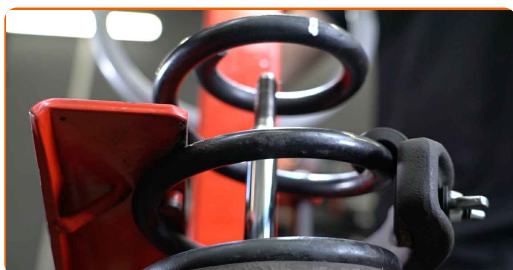
45

Install the spring on the shock absorber.



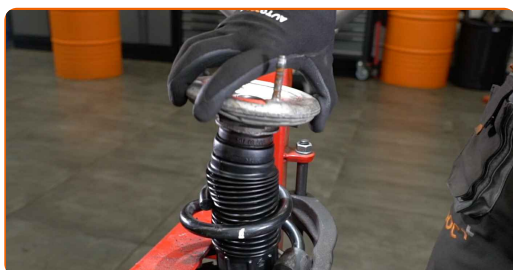
46

Compress the spring.

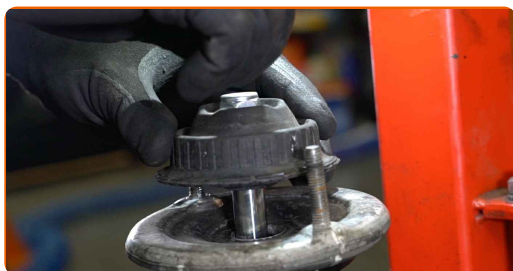


47

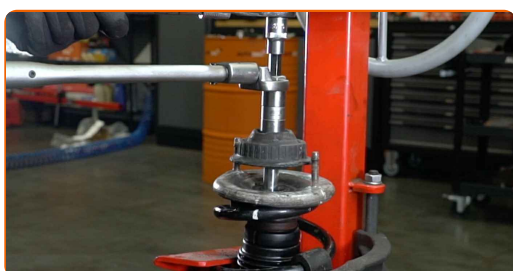
Install the dust sleeve and the bump stop on the new shock absorber.



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



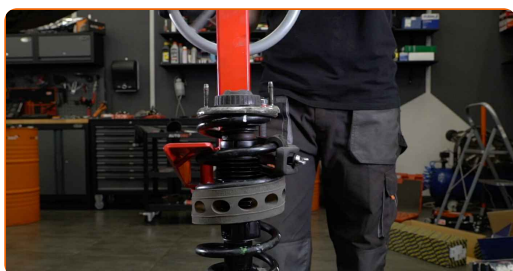
49 Tighten the shock strut piston rod nut. Use a drive socket #19. Use HEX No.H6. Use a torque wrench. Tighten it to 60 Nm torque.



Replacement: suspension strut – Audi A6 C5 Avant. AUTODOC experts recommend:

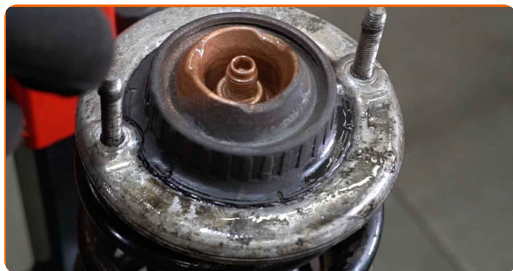
- Check to make sure the spring is positioned correctly. Avoid its misalignment.

50 Decompress the spring.



51

Treat the shock strut rod. Use copper grease.



52

Install the upper strut mount together with the suspension arms.

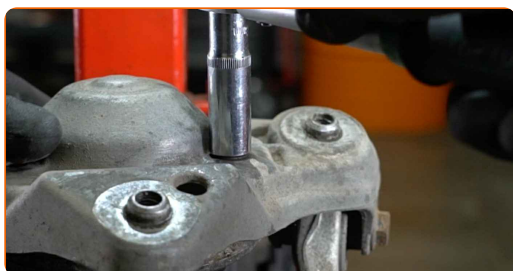


Replacement: suspension strut – Audi A6 C5 Avant. Tip from AUTODOC experts:

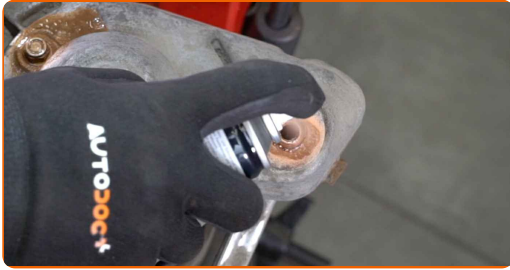
- Adjust the position of the upper strut mount and the spring according to the marks.

53

Tighten the upper fastener of the shock absorber strut mount. Use a drive socket #13. Use a torque wrench. Tighten it to 20 nm torque.



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



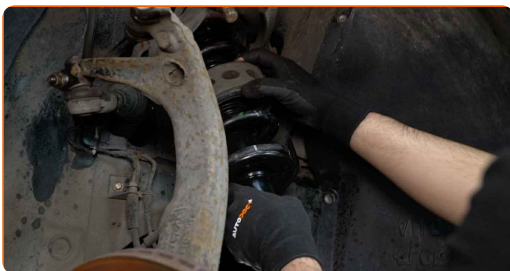
55 Remove the assembled shock strut.



56 Clean the mounting seats of the shock strut. Use a wire brush. Use WD-40 spray.



57 Install the shock strut into the wheel arch.



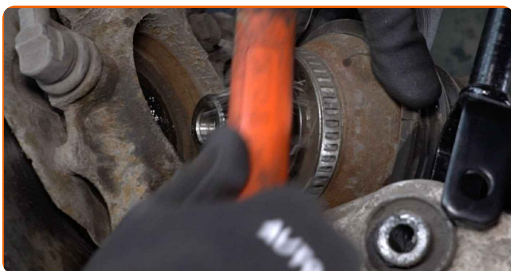
58 Secure the upper fasteners of the shock strut. Do not tighten it. Use a drive socket #16. Use a ratchet wrench.



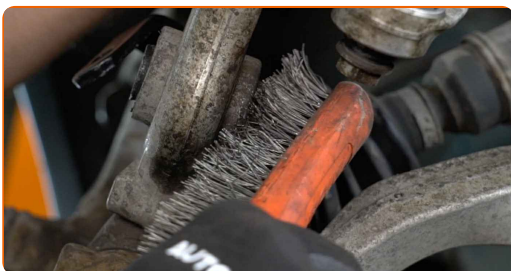
AUTODOC recommends:

- Audi A6 C5 Avant – To avoid injury, hold the suspension strut while screwing in the fastening bolts.

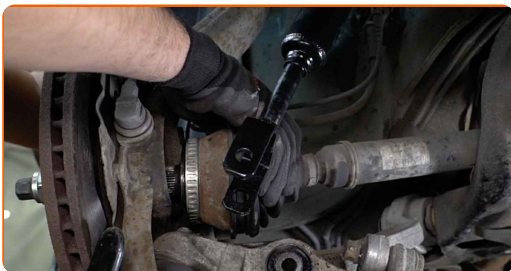
59 Clean the splines of the drive shaft CV joint. Use a wire brush. Use WD-40 spray.



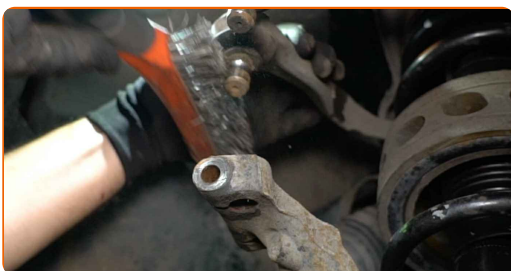
60 Clean the mounting seats of the shock strut. Use a wire brush. Use WD-40 spray.



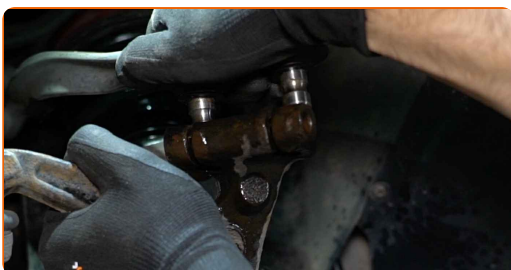
61 Install the drive shaft.



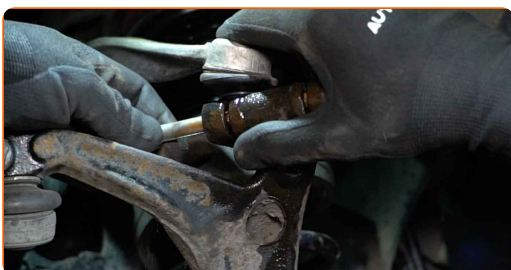
62 Clean the control arm fasteners. Use a wire brush. Use WD-40 spray.



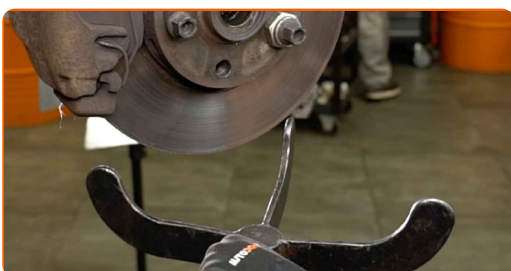
63 Install the control arms.



64 Install the fastening bolt.



65 Remove the support from under the steering knuckle.

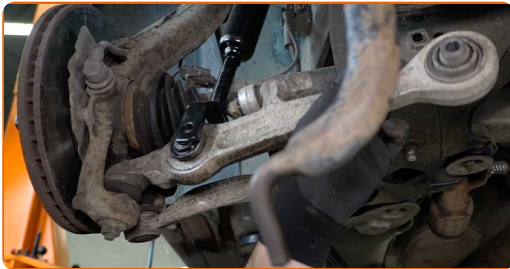


AUTODOC recommends:

- Audi A6 C5 Avant – Do not lower the transmission jack sharply to avoid damaging components and mechanisms of the car.

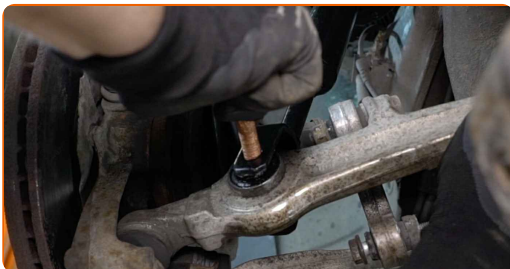
66

Attach the bottom part of the shock strut.



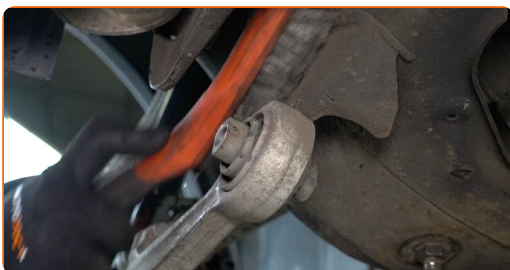
67

Install the fastening bolt.



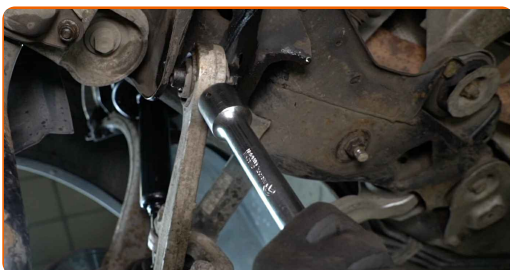
68

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

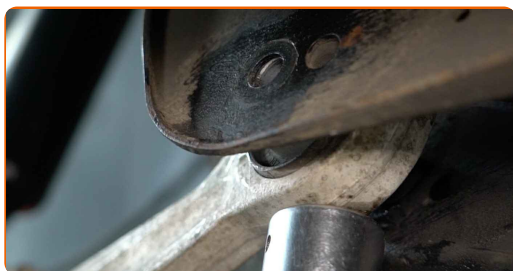


69

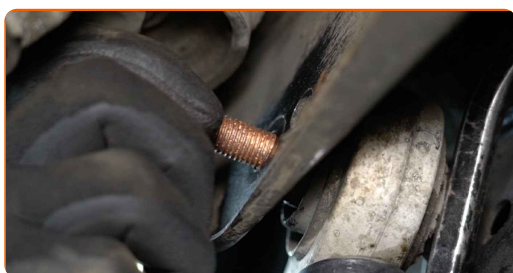
Support the arm. Use a hydraulic transmission jack.



70 Attach the control arm.



71 Install the fastening bolt.

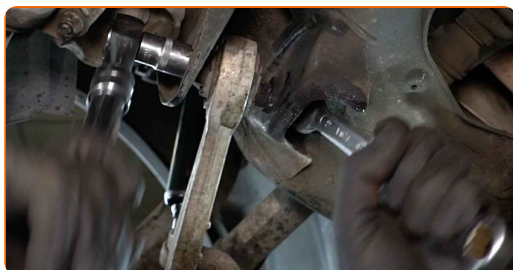


72 Remove the support from under the arm.

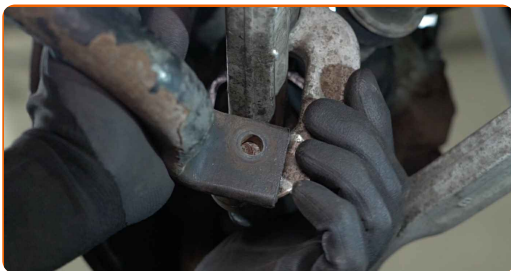
AUTODOC recommends:

- Replacement: suspension strut – Audi A6 C5 Avant. Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

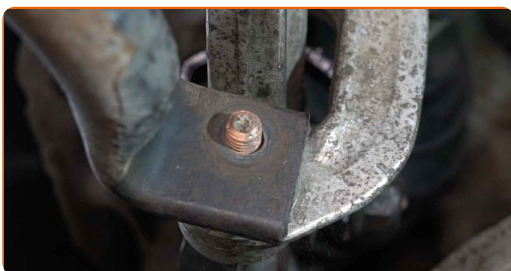
73 Screw the fastener connecting the control arm to the subframe. Use a combination spanner #18. Use a drive socket #18. Use a ratchet wrench.



74 Install the transverse stabilizer link.



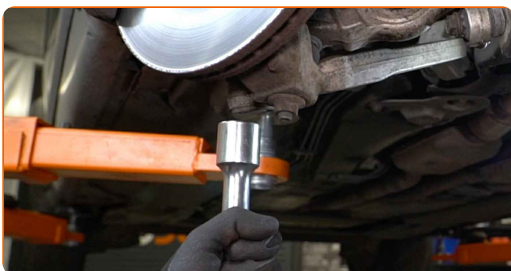
75 Install the fastening bolt.



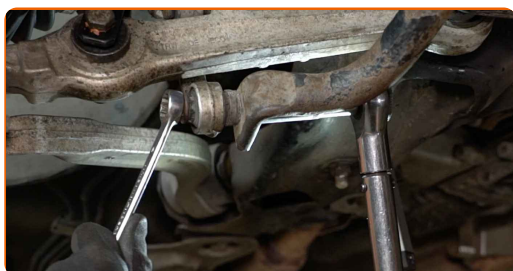
76 Tighten the stabiliser link fastener. Use a combination spanner #16. Use a drive socket #16. Use a ratchet wrench.



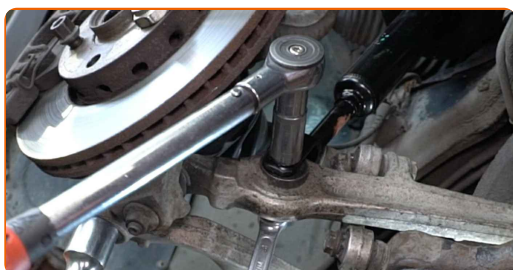
77 Prop up the steering knuckle. Use a hydraulic transmission jack.



- 78** Tighten the fastener connecting the stabilizer link to the stabilizer bar. Use a combination spanner #16. Use a drive socket #16. Use a torque wrench. Tighten it to 61 Nm torque.



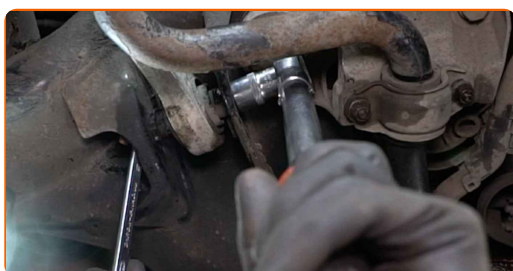
- 79** Tighten the lower fastening of the shock absorber. Use a combination spanner #18. Use a drive socket #18. Use a torque wrench. Tighten it to 90 Nm torque.+90°



AUTODOC recommends:

- Important! Be sure to use new fasteners.

- 80** Tighten the fastener connecting the control arm to the subframe. Use a combination spanner #18. Use a torque wrench. Tighten it to 70 Nm torque.+180°



AUTODOC recommends:

- Important! Be sure to use new fasteners.

81 Tighten the upper arm fastenings. Use a drive socket #16. Use HEX No.H8. Use a torque wrench. Tighten it to 40 Nm torque.



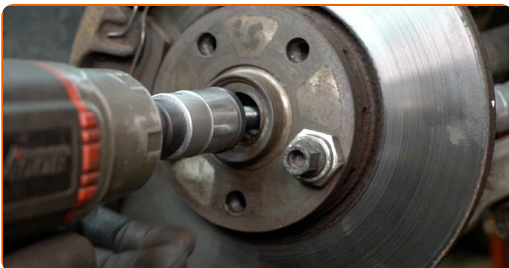
82 Remove the support from under the steering knuckle.



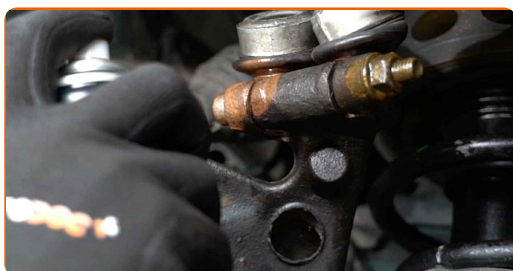
AUTODOC recommends:

- Audi A6 C5 Avant – Do not lower the transmission jack sharply to avoid damaging components and mechanisms of the car.

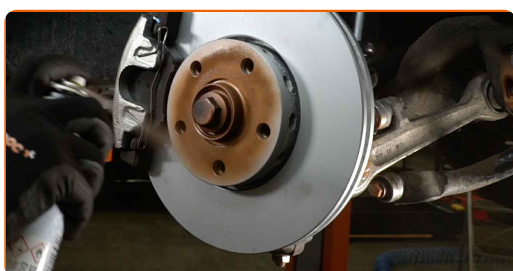
83 Install and tighten the drive shaft bolt. Use a drive socket #27.



- 84 Treat the steering knuckle fasteners. Treat the shock strut fasteners. Treat all joints of the stabiliser link. Treat all joints of the arm. Use copper grease.



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



- 86 Clean the brake disk surface. Use a brake cleaner.



AUTODOC recommends:

- Replacement: suspension strut – Audi A6 C5 Avant. After applying the spray, wait a few minutes.

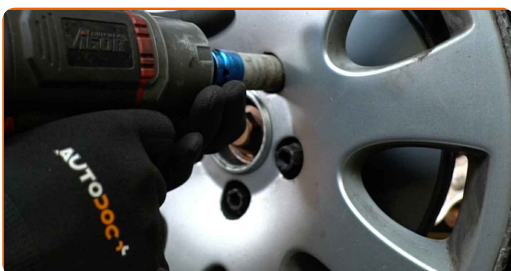
87 Install the wheel.



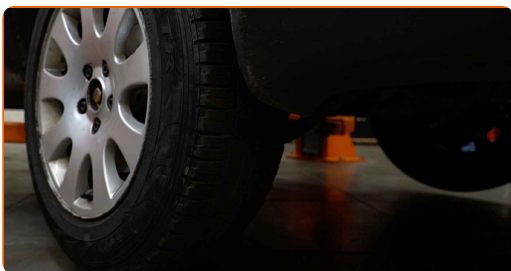
AUTODOC recommends:

- Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. Audi A6 C5 Avant

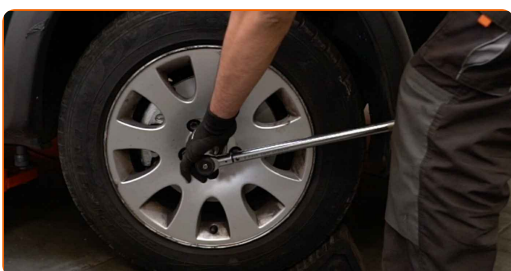
88 Screw in the wheel bolts. Use wheel impact socket #17.



89 Lower the car.



90 Tighten the bolt connecting the drive shaft to the wheel hub. Use a drive socket #27. Use a torque wrench. Tighten it to 115 Nm torque. +180°



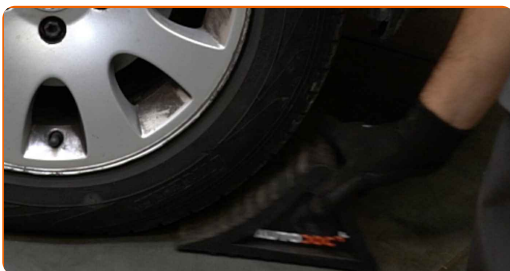
AUTODOC recommends:

- Important! Be sure to use new fasteners.

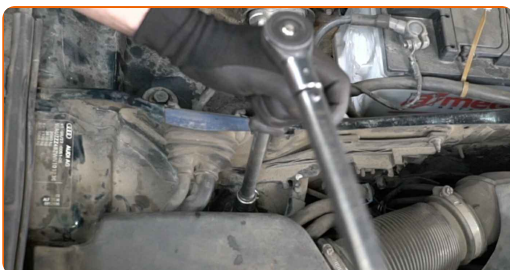
91 Tighten the wheel bolts using a criss-cross pattern. Use wheel impact socket #17. Use a torque wrench. Tighten it to 120 Nm torque.



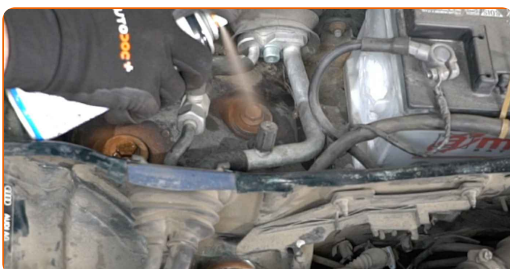
92 Remove the jacks and chocks.



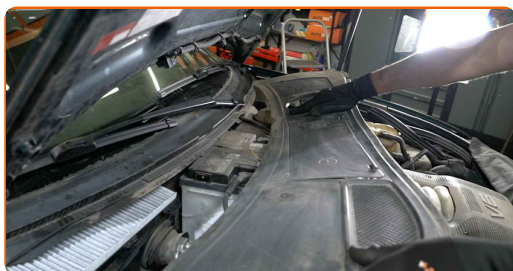
93 Tighten the upper fasteners of the shock strut. Use a drive socket #16. Use a torque wrench. Tighten it to 75 Nm torque.



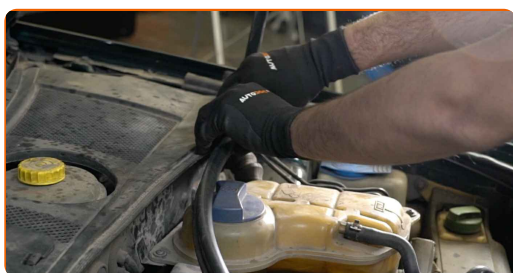
94 Treat the fasteners of the shock strut mount. Use copper grease.



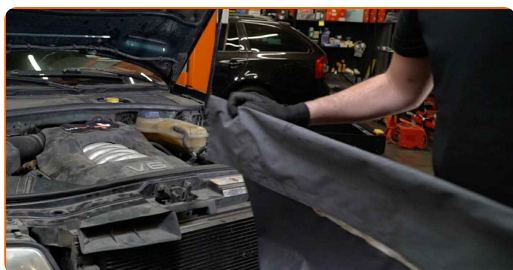
95 Install and secure the cowl grille.



96 Install the cowl grille seal.



97 Remove the fender protection cover.



98 Close the hood.



WELL DONE! 

VIEW MORE TUTORIALS

AUTODOC – TOP QUALITY AND AFFORDABLE CAR PARTS ONLINE

AUTODOC MOBILE APP: GREAT DEALS AND CONVENIENT SHOPPING



+ AUTODOC

GET IT ON  **Google Play**

 **Download on the App Store**

Download

A GREAT SELECTION OF SPARE PARTS FOR YOUR CAR

BUY SPARE PARTS FOR AUDI

SHOCK ABSORBERS: A WIDE SELECTION

CHOOSE CAR PARTS FOR AUDI A6 C5 AVANT

SHOCK ABSORBERS FOR AUDI: BUY NOW

SHOCK ABSORBERS FOR AUDI A6 C5 AVANT: THE BEST DEALS & OFFERS

DISCLAIMER:

The document contains only general recommendations that may be useful for you when you perform repair or replacement work. AUTODOC shall not be liable for any loss, injury, damage of property occurring in the repair or replacement process due to incorrect use or misinterpretation of the provided information.

AUTODOC shall not be liable for any possible mistakes and uncertainties in this guide. The information provided is for information purposes only and cannot replace advice from specialists.

AUTODOC shall not be liable for incorrect or hazardous usage of equipment, tools and car parts. AUTODOC strongly recommends to be careful and observe the safety rules when performing repair or replacement works. Remember: usage of low quality auto parts does not guarantee you the appropriate level of road safety.

© Copyright 2022 – All the contents of this website, in particular texts, photographs and graphics, are protected by copyright. All rights, including reproduction, publication, editing and translation rights, are reserved by AUTODOC GmbH.