



How to change front coil  
springs on **VW Passat**  
**Saloon (3C2)** –  
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:

VW Passat Saloon (3C2) 2.0 FSI, VW Passat Saloon (3C2) 1.9 TDI, VW Passat Saloon (3C2) 2.0 FSI 4motion, VW Passat Saloon (3C2) 1.4 TSI, VW Passat Saloon (3C2) 1.8 TSI, VW Passat Saloon (3C2) 1.6 TDI

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: VW Passat Saloon (362) 2.0 TDI

**REPLACEMENT: COIL SPRINGS – VW PASSAT SALOON (3C2). LIST OF THE TOOLS YOU'LL NEED:**



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Torque wrench
- Combination spanner #10
- Combination spanner #18
- Drive socket # 13
- Drive socket # 16
- Drive socket # 18
- Drive socket # 21
- Drive socket # 22
- Drive socket # 27
- XZN socket bit # 6
- XZN socket bit # 14
- HEX bit No.H7
- Wheel impact socket #17
- Ratchet wrench
- Pin punch
- Flat chisel
- Hammer
- Tap wrench
- Crow bar
- Hydraulic strut spring compressor
- Hydraulic transmission jack
- Fender cover
- Wheel chock

**Buy tools**

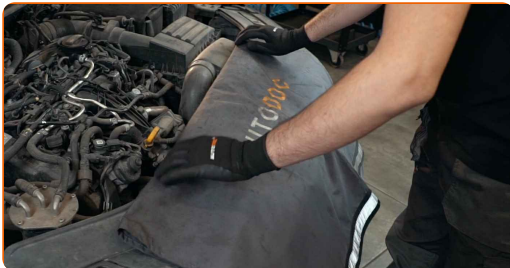
Replacement: coil springs – VW Passat Saloon (3C2). AUTODOC experts recommend:

- Both coil springs of the front suspension should be replaced simultaneously.
- The replacement procedure is identical for the left and right coil springs of the front suspension.
- Please note: all work on the car – VW Passat Saloon (3C2) – should be done with the engine switched off.

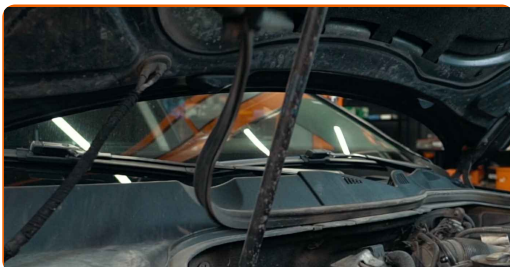
## CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

**1** Open the bonnet.

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



**3** Remove the cowl grille seal.



**4** Remove the clips of the plastic cowl grille.



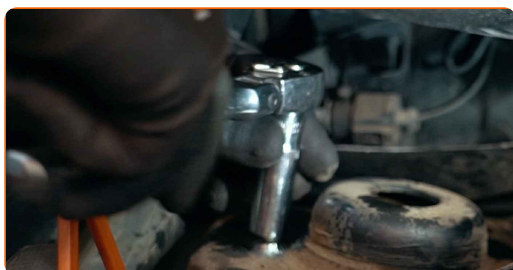
**5** Raise the wiper plastic cowl grille.



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



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



**8** Secure the wheels with chocks.

9

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



10

Raise the front of the car and secure on supports.

11

Unscrew the wheel bolts.



**AUTODOC recommends:**

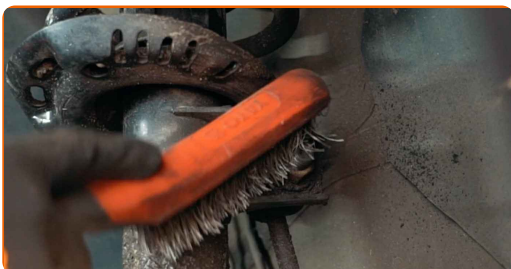
- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts. VW Passat Saloon (3C2)

12

Remove the wheel.



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



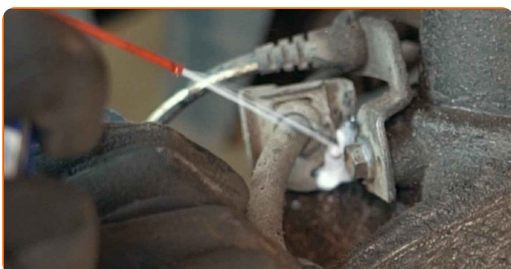
- 14** Unscrew the fastener connecting the stabilizer link to the shock strut. Use a drive socket #18. Use a ratchet wrench.



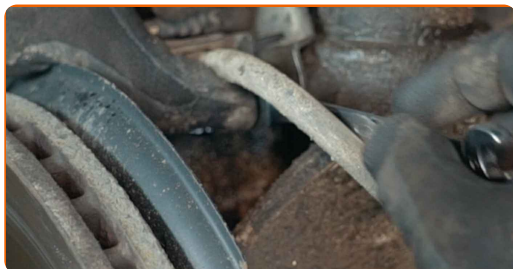
- 15** Remove the stabilizer rod.



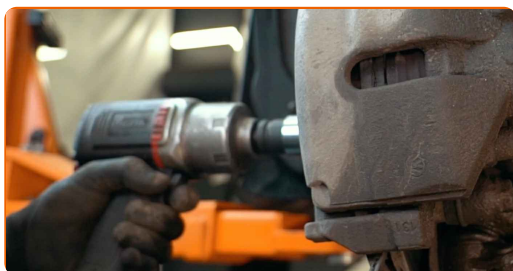
- 16** Clean the brake hose bracket fasteners. Use a wire brush. Use WD-40 spray.



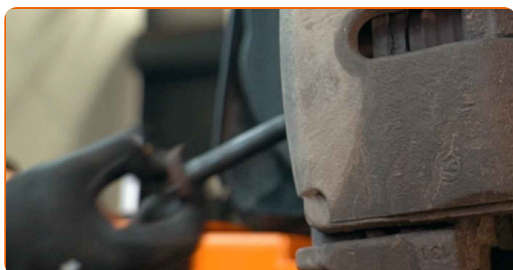
**17** Unscrew the brake hose fastening bracket from the shock strut. Use a combination spanner #10.



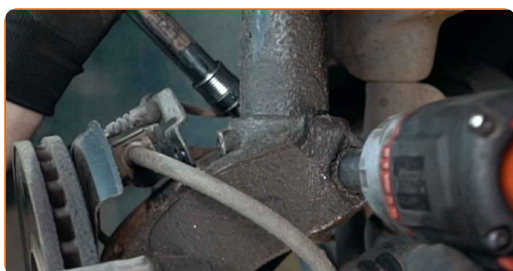
**18** Loosen the fastener of the driveshaft. Use a drive socket #27. Use a ratchet wrench.



**19** Remove the fastening bolt.



**20** Unscrew the lower fastener connecting the shock strut to the steering knuckle. Use a drive socket #18. Use XZN #14. Use a ratchet wrench.

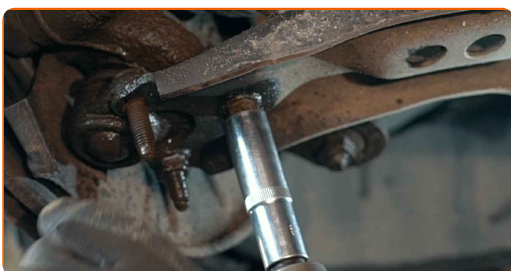




**21** Clean the fasteners connecting the ball joint to the suspension control arm. Use a wire brush. Use WD-40 spray.



**22** Unscrew the fastener connecting the ball joint to the suspension control arm. Use a drive socket #16. Use a ratchet wrench.



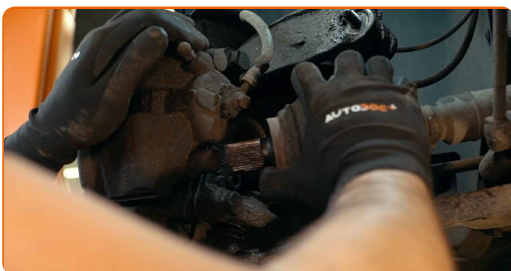
**23** Disconnect the ball joint from the arm. Use a crowbar.



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



**25** Detach the driveshaft from the steering knuckle. Use a pin punch. Use a hammer.



**26** Remove the fastening bolt.



**27** Release the lower fastener connecting the shock strut to the steering knuckle. Use a flat metal-working chisel. Use a hammer.



**28** Disconnect the steering knuckle from the shock absorber strut.



**29** Unscrew the upper fasteners of the shock strut.



**AUTODOC recommends:**

- VW Passat Saloon (3C2) – To avoid injury, hold the suspension strut while unscrewing the fastening bolts.

30

Remove the suspension strut.



31

Set the shock absorber strut on the spring compressor tool.



Replacement: coil springs – VW Passat Saloon (3C2). 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.

32

Compress the spring.



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



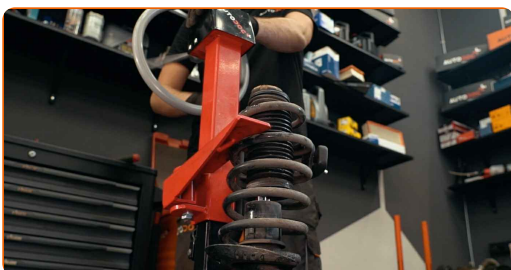
**34** Remove the strut piston rod nut. Use a drive socket #22. Use HEX No.H7. Use a ratchet wrench.



**35** Remove the top strut mount.



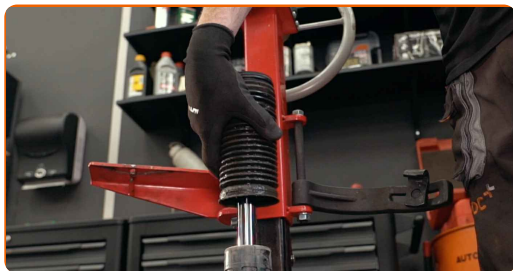
**36** Release the coil spring.



**37** Remove the spring.



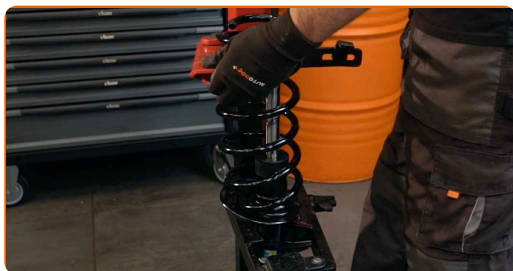
**38** Remove the shock absorber dust cap and the bump stop.



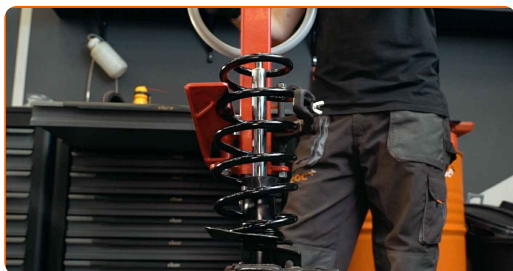
**AUTODOC recommends:**

- Replacement: coil springs – VW Passat Saloon (3C2). Carefully inspect the mount, the boot, and the bump stop of the shock absorber. Replace if necessary.

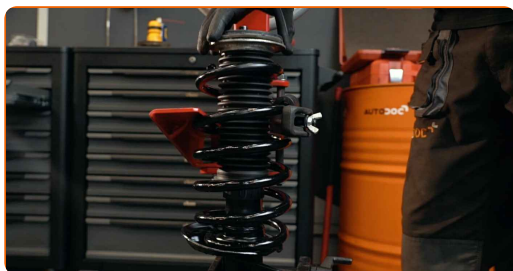
**39** Install the spring on the shock absorber.



**40** Compress the spring.



**41** Install the boot and a bump stop onto the shock absorber.



**42** Install the upper strut mount and the strut mount bearing.



**43** Tighten the shock strut piston rod nut. Use a drive socket #21. Use HEX No.H7. Use a torque wrench. Tighten it to 60 Nm torque.



Replacement: coil springs – VW Passat Saloon (3C2). Professionals recommend:

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

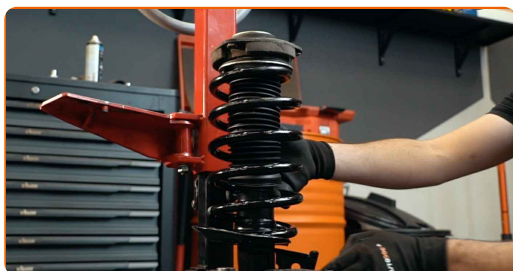
**44** Treat the shock strut rod. Use copper grease.



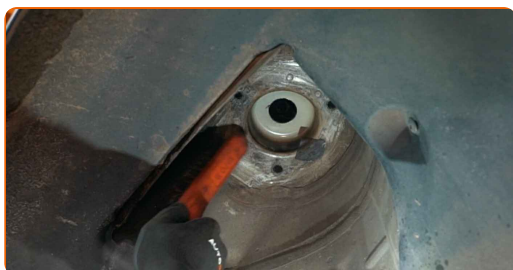
**45** Decompress the spring.



**46** Remove the assembled shock strut.



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



**48** Install the shock strut into the wheel arch.



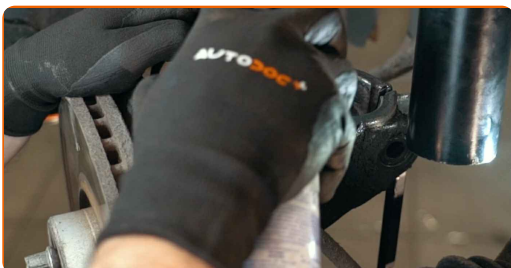
**49** Secure the upper fasteners of the shock strut. Do not tighten it.

**AUTODOC recommends:**

- VW Passat Saloon (3C2) – To avoid injury, hold the suspension strut while screwing in the fastening bolts.

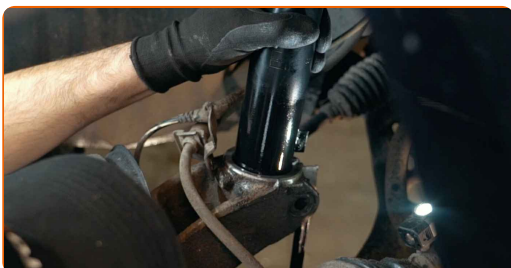
**50**

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



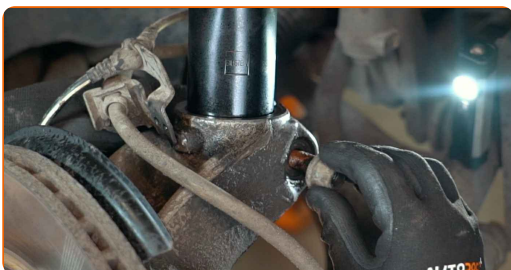
**51**

Fix the shock absorber strut on the steering knuckle.



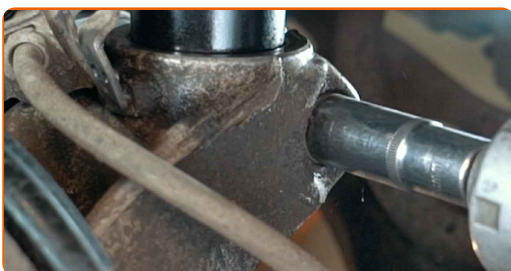
**52**

Install the fastening bolt.



**53**

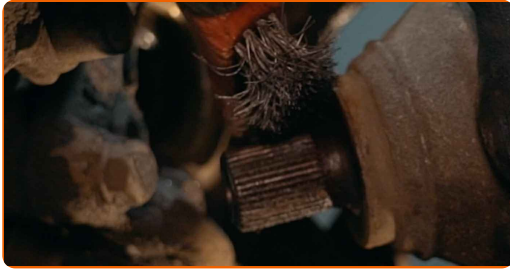
Screw in the fastener that connects the shock strut to the steering knuckle. Use a drive socket #18. Use XZN #14. Use a ratchet wrench.





54

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



55

Remove the support from under the steering knuckle.

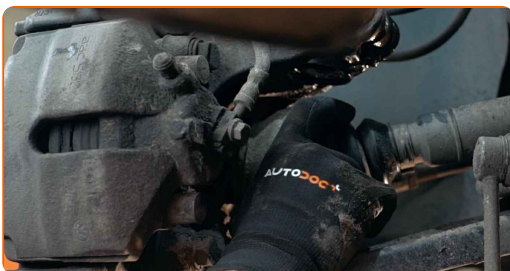


**AUTODOC recommends:**

- Replacement: coil springs – VW Passat Saloon (3C2). Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

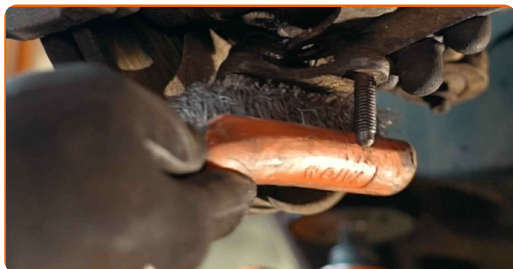
56

Install the drive shaft.



57

Clean the ball joint mounting seat. Use a wire brush. Use WD-40 spray.



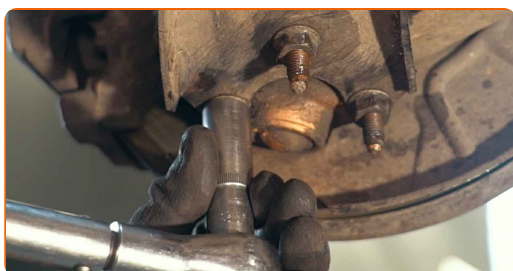
58

Attach the ball joint to the control arm.



59

Tighten the fasteners connecting the ball joint to the control arm. Use a drive socket #16. Use a torque wrench. Tighten it to 60 Nm torque.



60

Tighten the brake hose fastening bracket to the shock strut. Use a combination spanner #10.



- 61** Tighten the lower fastening of the shock absorber. Use a drive socket #18. Use XZN #14. Use a ratchet wrench. Use a torque wrench. Tighten it to 70 Nm torque.+90°



**AUTODOC recommends:**

- Important! Be sure to use new fasteners.

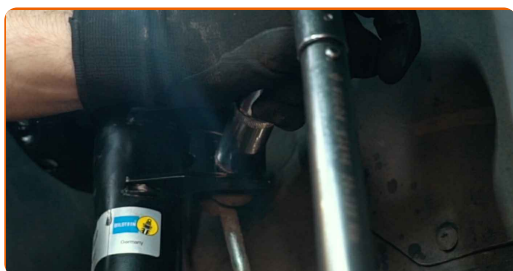
- 62** Clean the mounting seats of the stabiliser link. Use a wire brush. Use WD-40 spray.



- 63** Install the transverse stabilizer link.



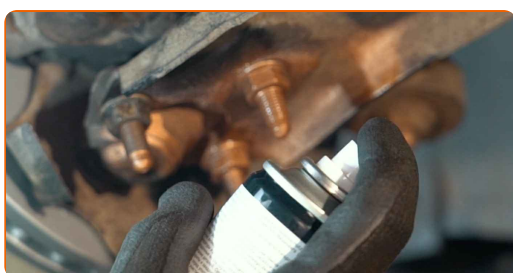
- 64 Tighten the fastener connecting the stabilizer link to the shock strut. Use a combination spanner #18. Use a drive socket #18. Use XZN #6. Use a torque wrench. Tighten it to 55 Nm torque.



- 65 Install and tighten the drive shaft bolt. Use a drive socket #27. Use a ratchet wrench.



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



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



68

Clean the brake disk surface. Use a brake cleaner.



**AUTODOC recommends:**

- Replacement: coil springs – VW Passat Saloon (3C2). After applying the spray, wait a few minutes.

69

Install the wheel.



**AUTODOC recommends:**

- Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. VW Passat Saloon (3C2)

70

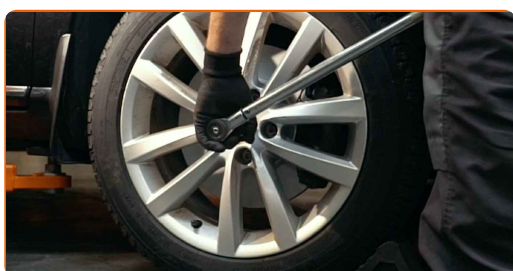
Screw in the wheel bolts. Use wheel impact socket #17.



**71** Lower the car.



**72** Tighten the bolt connecting the drive shaft to the wheel hub. Use a drive socket #27. Use a torque wrench. Tighten it to 70 Nm torque.+90°



**AUTODOC recommends:**

- Important! Be sure to use new fasteners.

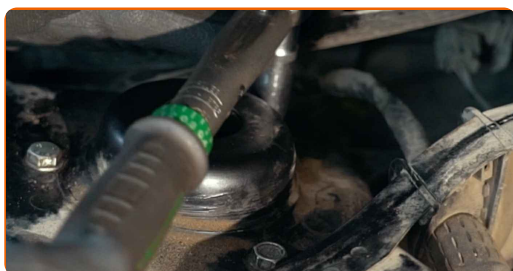
**73** Tighten the wheel bolts using a criss-cross pattern. Use wheel impact socket #17. Use a torque wrench. Tighten it to 120 Nm torque.



**74** Remove the jacks and chocks.



- 75 Tighten the upper fasteners of the shock strut. Use a drive socket #13. Use a torque wrench. Tighten it to 15 Nm torque.+90°



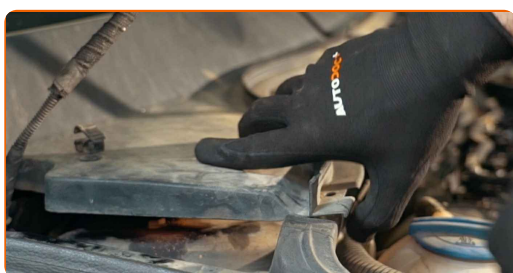
**AUTODOC recommends:**

- Important! Be sure to use new fasteners.

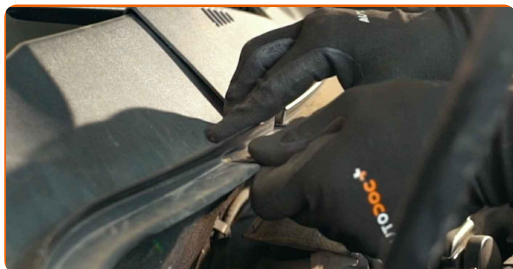
- 76 Treat the fasteners of the shock strut mount. Use copper grease.



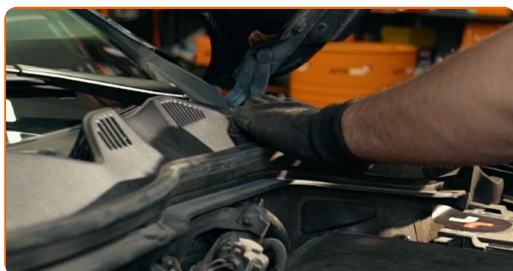
- 77 Install and secure the cowl grille.



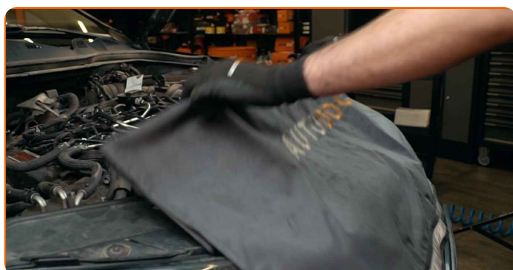
**78** Install the fasteners of the wiper plastic cowl grille.



**79** Install the cowl grille seal.



**80** Remove the fender protection cover.



**81** Close the hood.

**WELL DONE!** 

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