



How to change front coil springs on **VW Golf Plus / Crossgolf (5M1, 521)** – 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 Golf Plus / Crossgolf (5M1, 521) 2.0 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 Golf VI Hatchback (5K1) 2.0 GTi

REPLACEMENT: COIL SPRINGS – VW GOLF PLUS /  
CROSSGOLF (5M1, 521). LIST OF THE TOOLS YOU'LL  
NEED:



- Wire brush
- WD-40 spray
- Copper grease
- Combination spanner #16
- Combination spanner #18
- Drive socket # 13
- Drive socket # 16
- Drive socket # 18
- Drive socket # 21
- 12-point socket # 24
- HEX bit No.H6
- XZN socket bit # 6
- Shock absorber socket
- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Flat chisel
- Hammer
- Tap wrench
- Crow bar
- Hydraulic strut spring compressor
- Hydraulic transmission jack
- Wheel chock

**Buy tools**

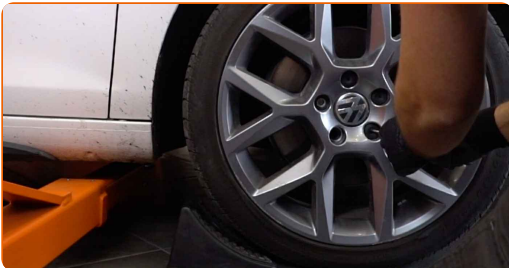
Replacement: coil springs – VW Golf Plus / Crossgolf (5M1, 521). Tip from AUTODOC:

- 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 Golf Plus / Crossgolf (5M1, 521) – should be done with the engine switched off.

## CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

**1** Open the bonnet.

**2** Secure the wheels with chocks.



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



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



5 Unscrew the wheel bolts.



**AUTODOC recommends:**

- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts. VW Golf Plus / Crossgolf (5M1, 521)

6 Remove the wheel.



7 Remove the hub bearing protection cap.



Please note!

- Some cars are not equipped with wheel hub caps.

8

Install the wheel.

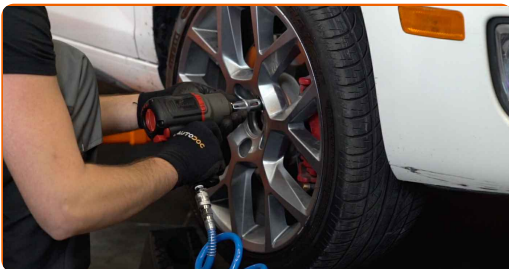


AUTODOC recommends:

- Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. VW Golf Plus / Crossgolf (5M1, 521)

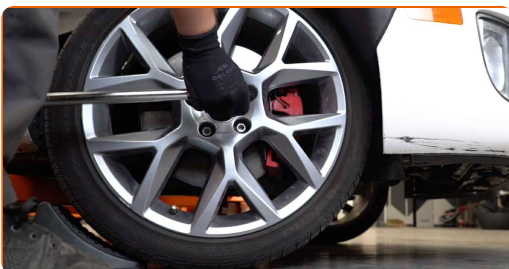
9

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

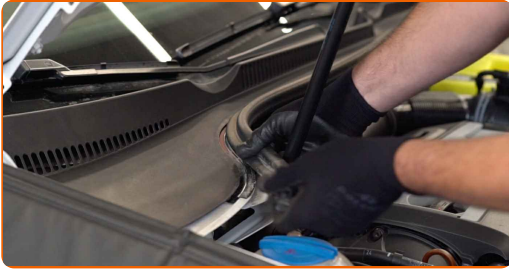


10

Loosen the wheel hub bolt. Use drive 12-point socket #24. Use a tap wrench.



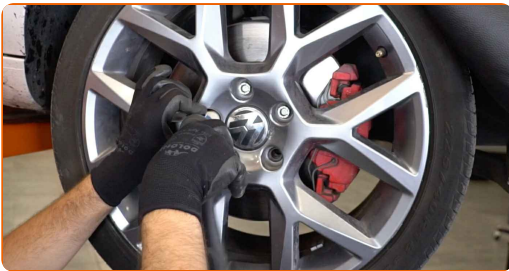
11 Remove the cowl grille seal. Raise the wiper plastic cowl grille.



12 Loosen the upper fastener of the shock strut mount. Use a drive socket #13. Use a ratchet wrench.



13 Unscrew the wheel bolts.



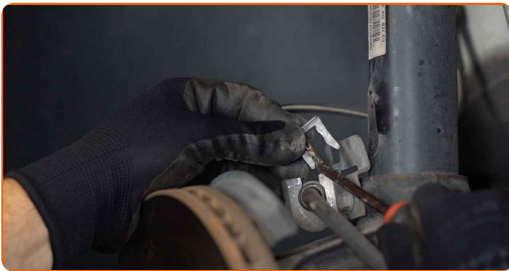
**AUTODOC recommends:**

- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts. VW Golf Plus / Crossgolf (5M1, 521)

14 Remove the wheel.



15 Disconnect the wiring and the brake hose from the bracket on the shock strut. Use a crowbar.



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



17 Unscrew the nut and remove the stabilizer rod from the shock strut. Use a combination spanner #16. Use XZN #6. Use a ratchet wrench.





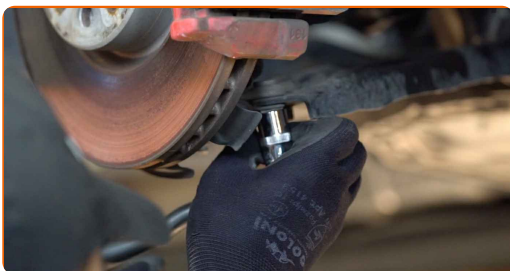
18

Unscrew the fastener connecting the drive shaft to the wheel hub. Use drive 12-point socket #24.



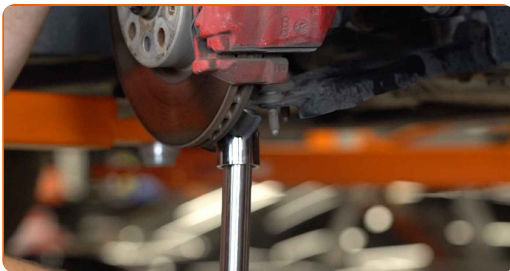
19

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



20

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



21

Disconnect the spherical joint from the arm. Use a crowbar.



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



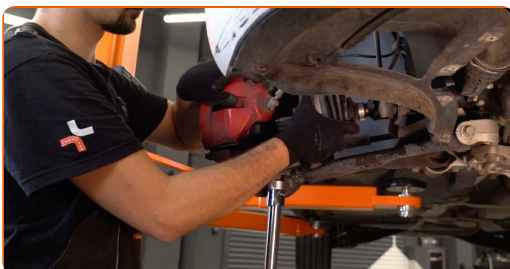
- 23 Lower the hydraulic transmission jack by 10-15 cm.



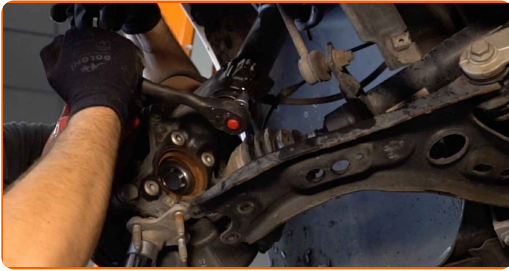
**AUTODOC recommends:**

- Replacement: coil springs – VW Golf Plus / Crossgolf (5M1, 521). Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

- 24 Remove the drive shaft from the wheel hub.



- 25 Release the lower fastener connecting the shock strut to the steering knuckle. Use a special drive socket to remove the shock absorber. Use a ratchet wrench.



- 26 Disconnect the steering knuckle from the shock absorber strut. Use a flat metal-working chisel. Use a hammer.



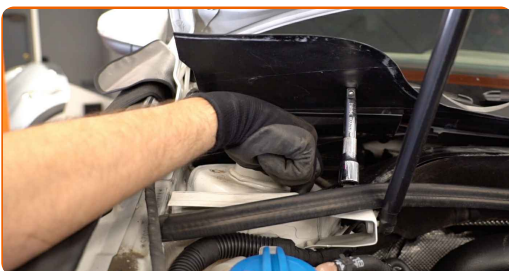
- 27 Prop up the steering knuckle. Use a hydraulic transmission jack.



Replacement: coil springs – VW Golf Plus / Crossgolf (5M1, 521). Tip from AUTODOC experts:

- Make sure that the steering knuckle is not released from load.

- 28 Unscrew the upper fastening of the shock absorber strut.



**AUTODOC recommends:**

- VW Golf Plus / Crossgolf (5M1, 521) – To avoid injury, hold the suspension strut while unscrewing the fastening bolts.

29

Remove the suspension strut.



30

Set the shock absorber strut on the spring compressor tool.



**Replacement: coil springs – VW Golf Plus / Crossgolf (5M1, 521).**  
**Professionals 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.

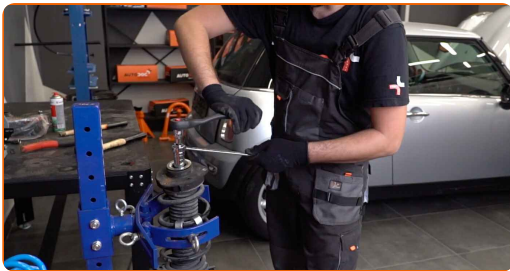
31 Compress the spring.



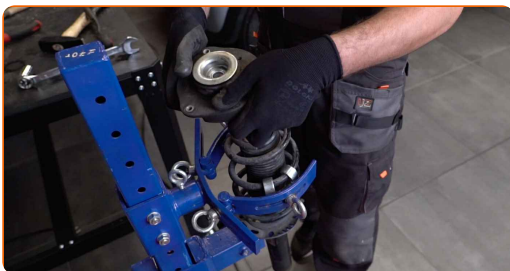
32 Clean the shock absorber rod fastener. Use a wire brush. Use WD-40 spray.



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



34 Remove the shock absorber mount, boot and bump stop.



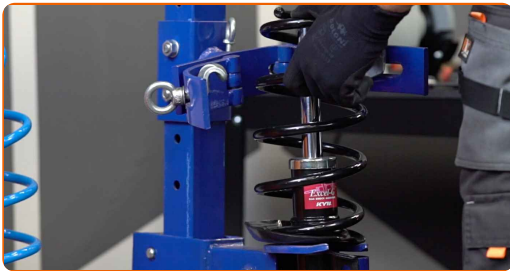
35 Release the coil spring.



36 Remove the spring.



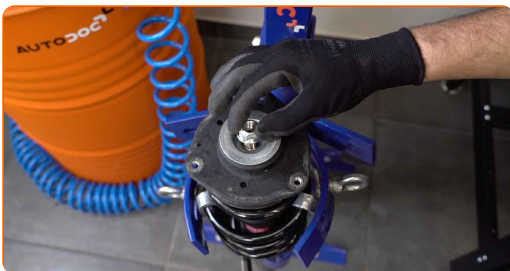
37 Install the spring on the shock absorber.



38 Compress the spring.



39 Install the mount, the boot and the bump stop on the shock absorber.



40 Tighten the shock strut piston rod nut. Use a drive socket #21. Use HEX No.H6. Use a torque wrench. Tighten it to 60 Nm torque.



Replacement: coil springs – VW Golf Plus / Crossgolf (5M1, 521). Tip from AUTODOC:

- Ensure the correct position of the spring in the retainer.

41

Decompress the spring.



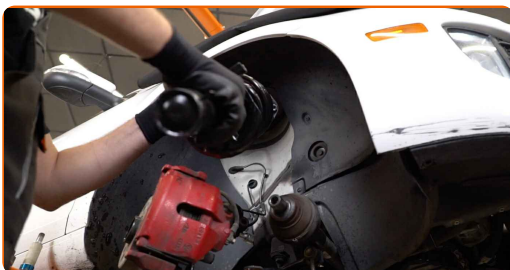
42

Remove the assembled shock strut.



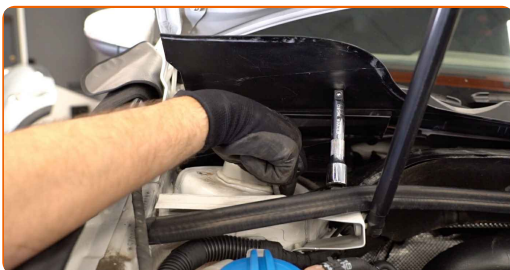
43

Install the shock strut into the wheel arch.



44

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



AUTODOC recommends:

- VW Golf Plus / Crossgolf (5M1, 521) – To avoid injury, hold the suspension strut while screwing in the fastening bolts.

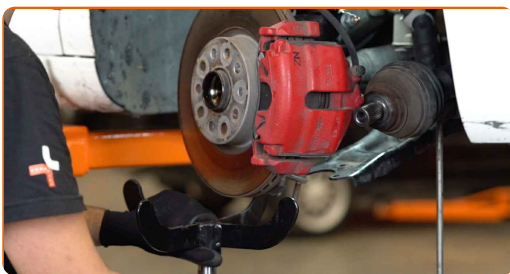
- 45** Install and tighten a new bolt of the steering knuckle. Use a drive socket #18. Use a combination spanner #18. Use a torque wrench. Tighten it to 70 Nm torque.+90°



AUTODOC recommends:

- Important! Be sure to use new fasteners.

- 46** Remove the support from under the steering knuckle.



- 47** Mount the drive shaft into the wheel hub.





48 Attach the ball joint to the control arm.



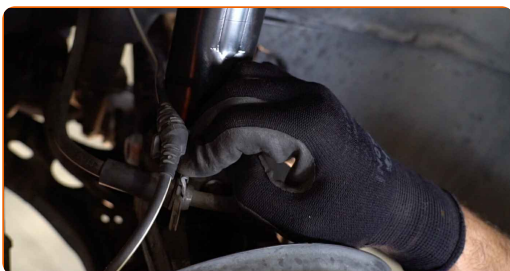
49 Tighten the ball joint fastening nut. Use a drive socket #16. Use a torque wrench. Tighten it to 60 Nm torque.



50 Secure the stabilizer link on the suspension strut. Use a combination spanner #16. Use XZN #6. Use a torque wrench. Tighten it to 65 Nm torque.



51 Connect the fastener of the ABS sensor cable to the shock absorber strut. Fasten the brake hose on the strut.



52

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



53

Install the wheel.

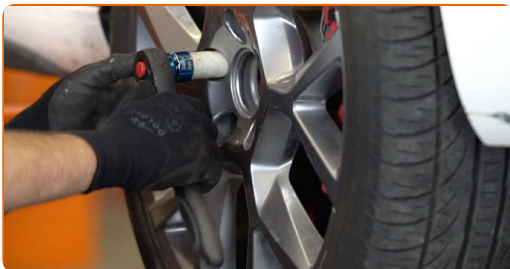


**AUTODOC recommends:**

- Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. VW Golf Plus / Crossgolf (5M1, 521)

54

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



55

Lower the car.

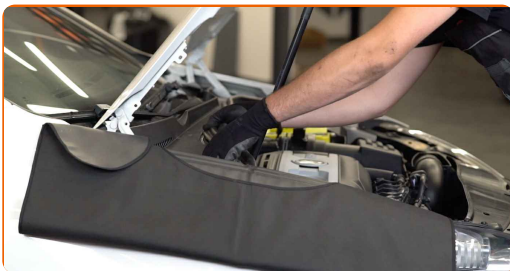
**56** Tighten the shock strut top mount. Use a drive socket #13. Use a torque wrench. Tighten it to 15 Nm torque.+90°



**AUTODOC recommends:**

- Important! Be sure to use new fasteners.

**57** Install and secure the cowl grille.



**58** Tighten the bolt connecting the drive shaft to the wheel hub. Use drive 12-point socket #24. Use a torque wrench. Tighten it to 70 Nm torque.+90°

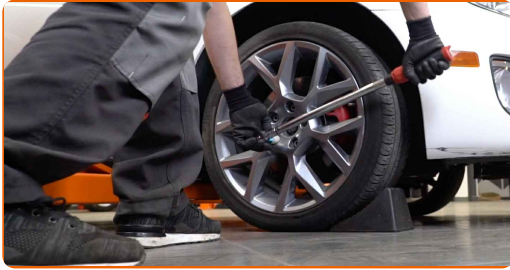


**AUTODOC recommends:**

- Important! Be sure to use new fasteners.

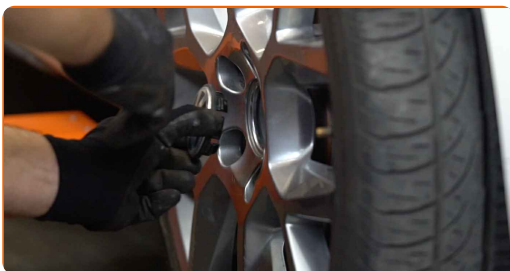
59

Install the hub bearing protection cap.



60

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



61

Remove the jacks and chocks.

62

Close the hood.

**WELL DONE!** 👍

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