



How to change front  
suspension strut on  
**VAUXHALL Nova Saloon**  
**(S83)** – replacement  
guide

### SIMILAR VIDEO TUTORIAL



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

#### **Important!**

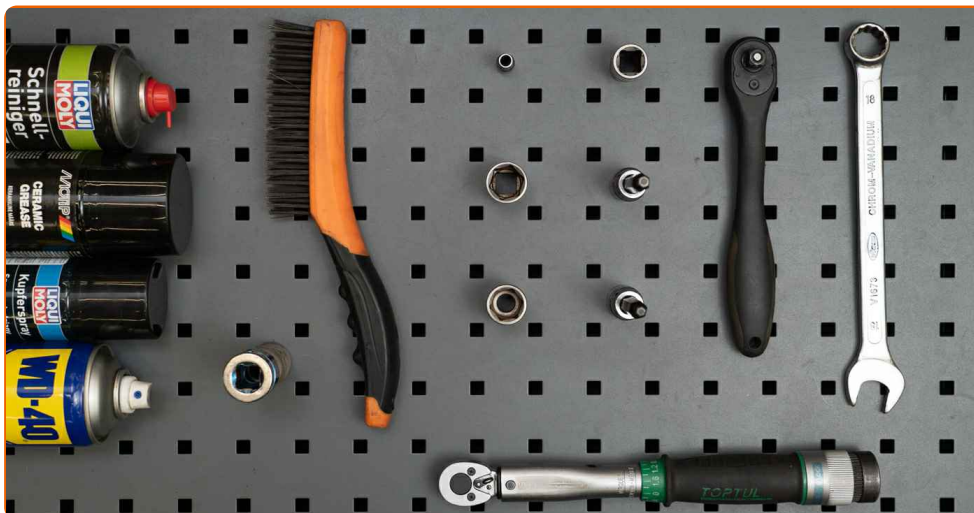
This replacement procedure can be used for:

VAUXHALL Nova Saloon (S83) 1.0, VAUXHALL Nova Saloon (S83) 1.2 S, VAUXHALL Nova Saloon (S83) 1.3 S, VAUXHALL Nova Saloon (S83) 1.4 S, VAUXHALL Nova Saloon (S83) 1.5 TD, VAUXHALL Nova Saloon (S83) 1.4

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: OPEL Corsa B Hatchback (S93) 1.4 i (F08, F68, M68)

**REPLACEMENT: SUSPENSION STRUT – VAUXHALL NOVA SALOON (S83). TOOLS YOU MIGHT NEED:**



- Wire brush
- WD-40 spray
- Brake cleaner
- Ceramic grease
- Copper grease
- Torque wrench
- Combination spanner #18
- Drive socket # 6
- Drive socket # 13
- Drive socket # 18
- Drive socket # 19
- HEX bit no.H5.
- HEX bit no.H6.
- Wheel impact socket #17
- Ratchet wrench
- Hydraulic strut spring compressor
- Hydraulic transmission jack
- Fender cover
- Wheel chock

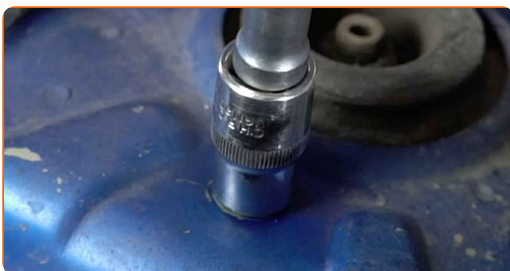
**Buy tools**

Replacement: suspension strut – VAUXHALL Nova Saloon (S83). 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.
- All work should be done with the engine stopped.

**REPLACEMENT: SUSPENSION STRUT – VAUXHALL NOVA SALOON (S83). RECOMMENDED SEQUENCE OF STEPS:**

- 1 Open the bonnet.
- 2 Use a fender protection cover to prevent damaging paintwork and plastic parts of the car.
- 3 Clean the shock strut fasteners. Use a wire brush. Use WD-40 spray.
- 4 Loosen the upper fasteners of the suspension strut. Use a drive socket #13. Use a ratchet wrench.



Replacement: suspension strut – VAUXHALL Nova Saloon (S83). Tip:

- Do not completely unscrew the upper fasteners as they may hold also other suspension components.

**5** Secure the wheels with chocks.



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

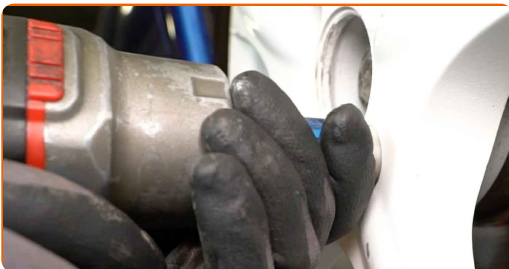


**7** Raise the car.

Replacement: suspension strut – VAUXHALL Nova Saloon (S83). AUTODOC experts recommend:

- If you are using a jack, make sure it rests on a flat surface without any unevenness.
- Be sure to additionally secure the car with jack stands.

**8** Unscrew the wheel bolts.



**AUTODOC recommends:**

- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts.  
VAUXHALL Nova Saloon (S83)

**9**

Remove the wheel.



**10**

Unscrew the ABS sensor wiring bracket. Use a drive socket #6. Use a ratchet wrench.



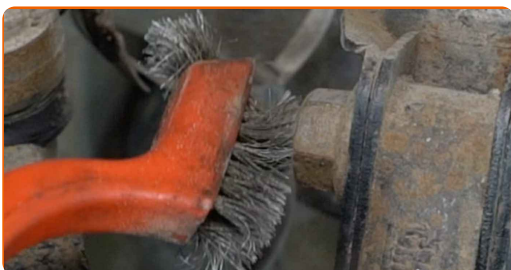
**11**

Disconnect the ABS sensor wiring.



**12**

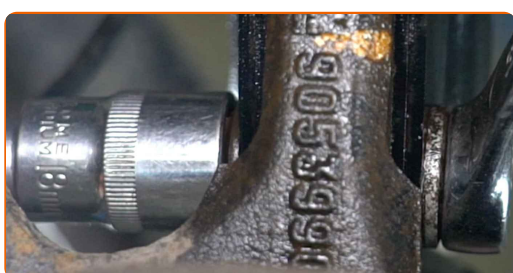
Clean the fasteners connecting the shock strut to the steering knuckle. Use a wire brush. Use WD-40 spray.



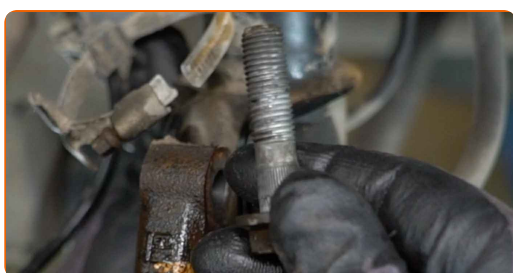
**13** Prop up the steering knuckle. Use a hydraulic transmission jack.



**14** Unscrew the fasteners connecting the suspension strut to the steering knuckle. Use a combination spanner #18. Use a drive socket #18. Use a ratchet wrench.



**15** Remove the fastening bolts.



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

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

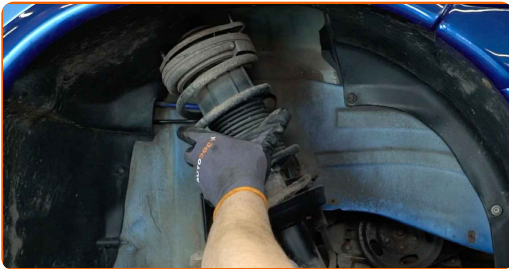


**AUTODOC recommends:**

- VAUXHALL Nova Saloon (S83) – To avoid injury, hold the suspension strut while unscrewing the fastening bolts.

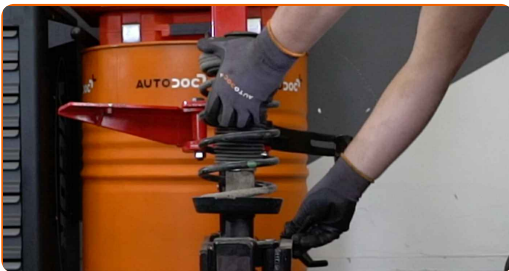
**18**

Remove the suspension strut.



**19**

Set the suspension strut on the spring compressor tool.



**Replacement: suspension strut – VAUXHALL Nova Saloon (S83). 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.



20 Compress the spring.



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



22 Remove the strut piston rod nut. Use HEX No.H6. Use a drive socket #19.



23 Remove the top strut mount.



Replacement: suspension strut – VAUXHALL Nova Saloon (S83). Tip:

- Thoroughly examine the shock absorber mount, dust boot, bump stop. Replace them if necessary.

24

Release the coil spring.



25

Remove the shock absorber dust cap and the bump stop.



26

Remove the spring.



27

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



Replacement: suspension strut – VAUXHALL Nova Saloon (S83). AUTODOC recommends:

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

28

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



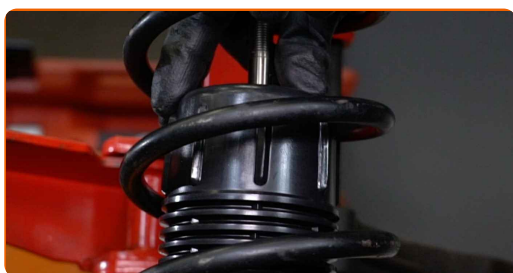
29

Install the spring on the shock absorber.



30

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



31

Compress the spring.



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



**33** Tighten the shock strut piston rod nut. Use HEX No.H5. Use a drive socket #19. Use a torque wrench. Tighten it to 55 nm torque.



**AUTODOC recommends:**

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

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



**35** Decompress the spring.



**36** Remove the assembled shock strut.



**37** Clean the mounting seats of the shock strut.



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



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



**AUTODOC recommends:**

- VAUXHALL Nova Saloon (S83) – To avoid injury, hold the suspension strut while screwing in the fastening bolts.

**40** Fix the shock absorber strut on the steering knuckle.

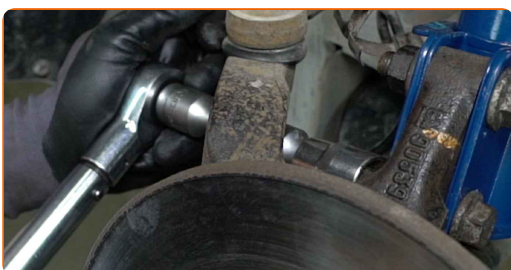
**41** Install the fastening bolts.



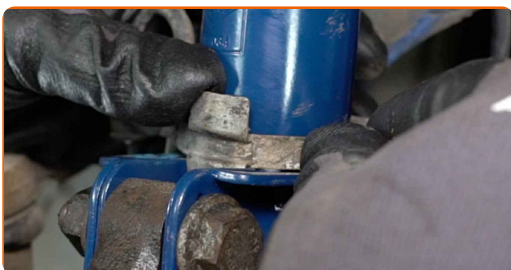
**42** Tighten the lower suspension strut fasteners. Use a combination spanner #18. Use a drive socket #18. Use a ratchet wrench.



**43** Tighten the lower fasteners connecting the shock strut to the steering knuckle. Use a combination spanner #18. Use a drive socket #18. Use a torque wrench. Tighten it to 90 Nm torque.+45°+15°



**44** Connect the ABS sensor wiring.



45

Tighten the ABS sensor wiring bracket. Use a drive socket #6. Use a ratchet wrench.



46

Remove the support from under the steering knuckle.



**AUTODOC recommends:**

- Replacement: suspension strut – VAUXHALL Nova Saloon (S83). Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

47

Treat the surface where the brake disc contacts the wheel rim. Use ceramic grease.



48

Clean the brake disk surface. Use a brake cleaner.



**AUTODOC recommends:**

- Replacement: suspension strut – VAUXHALL Nova Saloon (S83). After applying the spray, wait a few minutes.

49

Install the wheel.



**AUTODOC recommends:**

- Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. VAUXHALL Nova Saloon (S83)

50

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





- 51** Lower the car and working in a cross order, tighten the wheel bolts. Use wheel impact socket #17. Use a torque wrench. Tighten it to 110 Nm torque.



- 52** Remove the jacks and chocks.



- 53** Tighten the upper fasteners of the shock strut. Use a drive socket #13. Use a torque wrench. Tighten it to 30 Nm torque.



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



- 55** Remove the fender protection cover.

56

Close the hood.

**WELL DONE!** 

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