





#### SIMILAR VIDEO TUTORIAL



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

### (i) Important!

This replacement procedure can be used for: BMW 1 Convertible (E88) 120i 2.0, BMW 1 Convertible (E88) 125i 3.0, BMW 1 Convertible (E88) 118i 2.0, BMW 1 Convertible (E88) 120d 2.0, BMW 1 Convertible (E88) 118d 2.0, BMW 1 Convertible (E88) 123d 2.0

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: BMW 3 Saloon (E90) 318i 2.0

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# REPLACEMENT: SUSPENSION STRUT – BMW 1 CONVERTIBLE (E88). TOOLS YOU MIGHT NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #13
- Combination spanner #15
- Combination spanner #18
- Combination spanner #22
- Drive socket # 13
- Drive socket # 17
- Drive socket # 18
- Drive socket # 21

- Torx bit T45
- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Flat chisel
- Hammer
- Flat Screwdriver
- Hydraulic strut spring compressor
- Hydraulic transmission jack
- Fender cover
- Wheel chock

**Buy tools** 

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## Replacement: suspension strut – BMW 1 Convertible (E88). 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.
- Please note: all work on the car BMW 1 Convertible (E88) should be done
  with the engine switched off.

#### CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

1

Secure the wheels with chocks.



2

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



3

Raise the front of the car and secure on supports.

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Unscrew the wheel bolts.

4



#### AUTODOC recommends:

- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts.
   BMW 1 Convertible (E88)
- Remove the wheel.



- 6 Clean the stabiliser link fasteners. Use a wire brush. Use WD-40 spray.
- Unscrew the fastener connecting the stabilizer link to the shock strut. Use a combination spanner #15. Use a drive socket #17. Use a ratchet wrench.



Remove the stabilizer rod.

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Disconnect the ABS sensor wiring. Use a flat screwdriver.



- Clean the fastener connecting the tie rod end to the steering knuckle. Use a wire brush. Use WD-40 spray.
- Unscrew the end fastening nut to the steering knuckle. Use a combination spanner #22. Use Torx T45. Use a ratchet wrench.



Disconnect the tie rod end from the steering knuckle.



- Clean the fasteners connecting the control arm to the subframe. Use a wire brush. Use WD-40 spray.
- Loosen the front fastener of the control arm. Use a combination spanner #18.



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Unscrew the rear fastener connecting the control arm to the subframe. Use a combination spanner #18 (2 pieces).



Remove the rear fastener of the control arm.



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



- 19 Remove the fastening bolt.
- Release the lower fastener connecting the shock strut to the steering knuckle. Use a flat metal-working chisel. Use a hammer.



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Disconnect the steering knuckle from the shock absorber strut.



### Replacement: suspension strut – BMW 1 Convertible (E88). Tip from AUTODOC experts:

- Make sure that the steering knuckle is supported.
- Lower the car.
- Open the bonnet.
- Use a fender protection cover to prevent damaging paintwork and plastic parts of the car.
- Clean the fasteners of the shock strut upper mount. Use a wire brush. Use WD-40 spray.
- Unscrew the top fastening of the shock strut mount. Use a combination spanner #13. Use a drive socket #13. Use a ratchet wrench.



#### **AUTODOC** recommends:

 Important! Hold the suspension strut while unscrewing the fastening bolts. BMW 1 Convertible (E88)

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Remove the suspension strut.



Set the shock absorber strut on the spring compressor tool.

Replacement: suspension strut – BMW 1 Convertible (E88). 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.

Compress the spring.

30



Remove the shock strut mount cap. Use a flat screwdriver.



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



Remove the strut piston rod nut. Use a drive socket #21. Use a ratchet wrench.



Remove the top strut mount. Use a flat screwdriver.



- Release the coil spring.
- Remove the spring.



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Remove the shock absorber dust cap and the bump stop.



#### **AUTODOC** recommends:

- Replacement: suspension strut BMW 1 Convertible (E88). Carefully inspect the mount, the boot, and the bump stop of the shock absorber. Replace if necessary.
- Remove the old shock absorber from the hydraulic coil spring compressor.
- Remove the rubber spring spacer. Use a flat screwdriver.



Replacement: suspension strut – BMW 1 Convertible (E88). AUTODOC experts recommend:

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

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