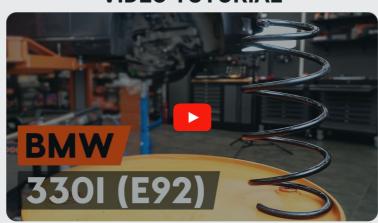






#### **VIDEO TUTORIAL**



## (i) Important!

This replacement procedure can be used for:

BMW 3 Saloon (E90) 318d 2.0, BMW 3 Coupe (E92) 318i 2.0, BMW 3 Saloon (E90) 320i 2.0, BMW 3 Saloon (E90) 325i 2.5, BMW 3 Saloon (E90) 330i 3.0, BMW 3 Saloon (E90) 320d 2.0, BMW 3 Saloon (E90) 318i 2.0, BMW 3 Saloon (E90) 330d 3.0, BMW 3 Saloon (E90) 320si 2.0, BMW 3 Saloon (E90) 335i 3.0, BMW 3 Saloon (E90) 335d 3.0, BMW 3 Coupe (E92) 325i 2.5, BMW 3 Coupe (E92) 330d 3.0, BMW 3 Coupe (E92) 325xi 2.5, BMW 3 Saloon (E90) 325d 3.0, (+ 16)

The steps may slightly vary depending on the car design.

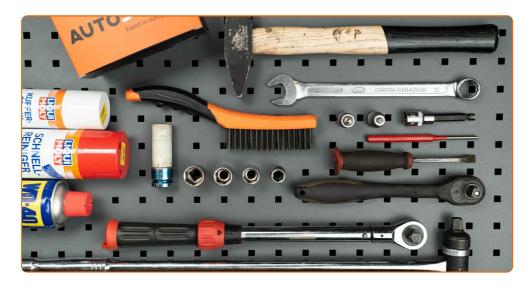
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# REPLACEMENT: COIL SPRINGS – BMW E92. TOOLS YOU MIGHT NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #18
- Combination spanner #21
- Torx bit T30
- HEX bit No.H6
- Drive socket # 13
- Drive socket # 17
- Drive socket # 18
- Drive socket # 21

- Wheel impact socket #17
- Shock absorber socket
- Ratchet wrench
- Torque wrench
- Pin punch
- Tap wrench
- Hammer
- Crow bar
- Hydraulic strut spring compressor
- Hydraulic transmission jack
- Fender cover
- Wheel chock

**BUY TOOLS** 

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#### Replacement: coil springs – BMW E92. Professionals 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.
- Warning! Shut down the engine before starting any work BMW E92.

### CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

1

Open the bonnet.



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



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



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



- Secure the wheels with chocks.
- Loosen the wheel mounting bolts. Use wheel impact socket #17.



Raise the front of the car and secure on supports.



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8 Unscrew the wheel bolts.



#### **AUTODOC** recommends:

• Important! Hold the wheel while unscrewing the fastening bolts. BMW E92

9 Remove the wheel.

10

11



Clean the stabiliser link fasteners. Use a wire brush. Use WD-40 spray.



Unscrew the nut and remove the stabilizer rod from the shock strut. Use a drive socket #17.



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Clean the fastener connecting the ball joint to the steering knuckle. Use a wire brush. Use WD-40 spray.



Unscrew the fastener connecting the ball joint of the front control arm to the steering knuckle. Use a drive socket #21. Use a tap wrench.



Unscrew the end fastening nut to the steering knuckle. Use a combination spanner #18. Use Torx T30. Use a ratchet wrench.



15

Unscrew the fastener connecting the ball joint of the rear control arm to the steering knuckle. Use a combination spanner #21. Use Torx T30. Use a ratchet wrench.



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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.



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



19 Remove the fastening bolt.



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



Disconnect the tie rod end from the steering knuckle.



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



23

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



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Detach the rear control arm from the steering knuckle. Detach the front control arm from the steering knuckle.



Disconnect the steering knuckle from the shock absorber strut. Use a pin punch. Use a hammer.



### Replacement: coil springs – BMW E92. Tip from AUTODOC:

• Make sure that the steering knuckle is supported.

Unscrew the top fastening of the shock strut mount.

26



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#### AUTODOC recommends:

 BMW E92 – To avoid injury, hold the suspension strut while unscrewing the fastening bolts.

27

Remove the suspension strut.



28

Set the shock absorber strut on the spring compressor tool.



# Replacement: coil springs – BMW E92. AUTODOC experts 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.

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