





### 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 3 Coupe (E46) 323Ci 2.5, BMW 3 Coupe (E46) 328Ci 2.8, BMW 3 Coupe (E46) 320Ci 2.0, BMW 3 Coupe (E46) 318Ci 1.9, BMW 3 Coupe (E46) 330xi 3.0, BMW 3 Coupe (E46) 320Ci 2.2, BMW 3 Coupe (E46) 325Ci 2.5, BMW 3 Coupe (E46) 316Ci 1.6, BMW 3 Coupe (E46) 318Ci 2.0, BMW 3 Coupe (E46) 330Cd 3.0, BMW 3 Coupe (E46) 330Ci 3.0

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: STRUT MOUNT – BMW 3 COUPE (E46). LIST OF THE TOOLS YOU'LL 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
- Wheel chock
- Fender cover

**Buy tools** 

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# Replacement: strut mount – BMW 3 Coupe (E46). AUTODOC experts recommend:

- The replacement procedure is identical for the mounts of the left and right shock struts of the front suspension.
- All mounts of the front shock struts should be replaced simultaneously.
- Be sure to replace all self-locking nuts and bolts during installation.
- Please note: all work on the car BMW 3 Coupe (E46) 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.



2

Raise the front of the car and secure on supports.

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4 Unscrew the wheel bolts.



## AUTODOC recommends:

- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts.
   BMW 3 Coupe (E46)
- 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.
- Unscrew the rear fastener connecting the control arm to the subframe. Use a combination spanner #18 (2 pieces).



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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.
- Disconnect the steering knuckle from the shock absorber strut.



Replacement: strut mount – BMW 3 Coupe (E46). AUTODOC recommends:

• Make sure that the steering knuckle is supported.

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- 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:

- BMW 3 Coupe (E46) To avoid injury, hold the suspension strut while unscrewing the fastening bolts.
- Remove the suspension strut.



Set the shock absorber strut on the spring compressor tool.

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# Replacement: strut mount – BMW 3 Coupe (E46). Tip from AUTODOC:

- 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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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.



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Remove the top strut mount. Use a flat screwdriver.



# Replacement: strut mount – BMW 3 Coupe (E46). Tip from AUTODOC experts:

- Examine the shock absorber dust cap and the bump stop. Replace them if necessary.
- Clean the mounting seat of the shock strut mount. Use a wire brush. Use WD-40 spray.
- Install a new top shock strut mount.

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Tighten the shock strut piston rod nut. Use a drive socket #21. Use a torque wrench. Tighten it to 64 Nm torque.



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# Replacement: strut mount – BMW 3 Coupe (E46). Tip:

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

Decompress the spring.



- Remove the assembled shock strut.
- Install the shock strut into the wheel arch.



Screw the top fastening of the shock strut mount.



## **AUTODOC** recommends:

• BMW 3 Coupe (E46) – To avoid injury, hold the suspension strut while screwing in the fastening bolts.

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