

#### **VIDEO TUTORIAL**



# (i) Important!

This replacement procedure can be used for:

BMW 5 Saloon (E39) 520i 2.0, BMW 5 Saloon (E39) 525tds 2.5, BMW 5 Saloon (E39) 523i 2.5, BMW 5 Saloon (E39) 528i 2.8, BMW 5 Touring (E39) 520i 2.0, BMW 5 Touring (E39) 523i 2.5, BMW 5 Saloon (E39) 525td 2.5, BMW 3 Saloon (E46) 318i 1.9, BMW 3 Saloon (E46) 328i 2.8, BMW 3 Saloon (E46) 320d 2.0, BMW 5 Touring (E39) 528i 2.8, BMW 3 Saloon (E46) 323i 2.5, BMW 3 Saloon (E46) 320i 2.0, BMW 5 Saloon (E39) 530d 3.0, BMW 5 Touring (E39) 530d 3.0, (+72)

The steps may slightly vary depending on the car design.

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# REPLACEMENT: STRUT MOUNT – BMW E39. LIST OF THE TOOLS YOU'LL NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #10
- Combination spanner #13
- Combination spanner #18
- Combination spanner #19
- Drive socket # 10
- Drive socket # 13
- Drive socket # 16
- Drive socket # 22

- HEX bit no.H6.
- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Flat Screwdriver
- Flat chisel
- Hammer
- Ball joint puller
- Hydraulic strut spring compressor
- Hydraulic transmission jack
- Fender cover
- Wheel chock

**BUY TOOLS** 

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## Replacement: strut mount – BMW E39. AUTODOC recommends:

- 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 E39 should be done with the engine switched off.

### CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

Secure the wheels with chocks.

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



Raise the front of the car and secure on supports.

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4 Unscrew the wheel bolts.



# Replacement: strut mount – BMW E39. Tip:

- To avoid injury, hold up the wheel when unscrewing the bolts.
- Remove the wheel.



- 6 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 #19.



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Disconnect the tie rod end from the steering knuckle. Use a ball joint puller.



Unscrew the fasteners of the control arm plastic cover. Use a drive socket #10. Use a ratchet wrench.



10 Remove the control arm plastic cover.



- 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 (2 pieces).



Clean the fasteners of the headlight levelling sensor. Use a wire brush. Use WD-40 spray.

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- Disconnect the headlight levelling sensor.
- Unscrew the rear fastener connecting the control arm to the subframe. Use a combination spanner #18. Use a drive socket #16. Use a ratchet wrench.



- Remove the rear fastener of the control arm.
- Unscrew the fastener of the stabiliser link bracket. Use a drive socket #16. Use a ratchet wrench.



19 Remove the fastening bolt.

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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 #16. Use a ratchet wrench.



Remove the fastening bolt.



- Remove the bracket from the shock absorber strut.
- 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.



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#### Replacement: strut mount – BMW E39. AUTODOC experts recommend:

- Make sure that the steering knuckle is supported.
- Install the rear fastener of the control arm.
- Lower the car.
- Open the bonnet.

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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.



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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 E39

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Remove the suspension strut.



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Set the shock absorber strut on the spring compressor tool.

#### Replacement: strut mount – BMW E39. 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.

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Compress the spring.



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



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



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



Remove the top strut mount.



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