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How to change front strut mount on **BMW 5 Touring (E61)** – replacement guide







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 5 Touring (E61) 525i 2.5, BMW 5 Touring (E61) 545i 4.4, BMW 5 Touring (E61) 530d 3.0, BMW 5 Touring (E61) 525d 2.5, BMW 5 Touring (E61) 535d 3.0, BMW 5 Touring (E61) 530i 3.0, BMW 5 Touring (E61) 523i 2.5, BMW 5 Touring (E61) 550i 4.8, BMW 5 Touring (E61) 530xd 3.0, BMW 5 Touring (E61) 525xi 2.5, BMW 5 Touring (E61) 530xi 3.0, BMW 5 Touring (E61) 520d 2.0, BMW 5 Touring (E61) 525d 3.0, BMW 5 Touring (E61) 525xi 3.0, (+ 6)

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 5 TOURING (E61). 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 5 Touring (E61). 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 5 Touring (E61) 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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4 Unscrew the wheel bolts.



AUTODOC recommends:

- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts.
 BMW 5 Touring (E61)
- 5 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 5 Touring (E61). 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 5 Touring (E61) 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 5 Touring (E61). 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.
- Compress the spring. 29

31



Treat the shock strut rod. Use a wire brush. Use WD-40 spray. 30



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 5 Touring (E61). 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.

35



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 5 Touring (E61). Tip:

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

36 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 5 Touring (E61) – To avoid injury, hold the suspension strut while screwing in the fastening bolts.

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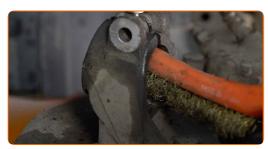


Tighten the upper fastener of the shock absorber strut mount. Use a combination spanner #13. Use a drive socket #13. Use a torque wrench. Tighten it to 34 Nm torque.



AUTODOC recommends:

- To avoid injuries, hold the shock strut when screwing the fastening bolts in.
- Remove the fender protection cover.
- Close the hood.
- Raise the front of the car and secure on supports.
- Treat the shock strut mounting seat on the steering knuckle. Use a wire brush. Use WD-40 spray.



Fix the shock absorber strut on the steering knuckle. Use a flat metal-working chisel. Use a hammer.



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- 46 Install the fastening bolt.
- 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 81 Nm torque.



Connect the ABS sensor wiring.



- Install the rear fastener of the control arm.
- Screw the rear fastener connecting the control arm to the subframe. Use a combination spanner #18 (2 pieces).



51 Install the transverse stabilizer link.

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Tighten the fastener connecting the stabilizer link to the shock strut. Use a combination spanner #15. Use a drive socket #17. Use a torque wrench. Tighten it to 58 Nm torque.



Treat the shock strut fasteners. Use copper grease.



- Connect the tie rod end to the steering knuckle.
- Tighten the fastening nut connecting the tie rod end to the steering knuckle. Use a combination spanner #22. Use Torx T45. Use a torque wrench. Tighten it to 165 Nm torque.



AUTODOC recommends:

• Important! Be sure to use new fasteners.

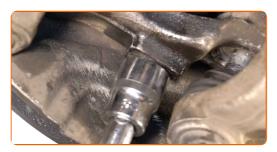
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Prop up the steering knuckle. Use a hydraulic transmission jack.



Tighten the front fastener connecting the control arm to the subframe. Use a combination spanner #18. Use a torque wrench. Tighten it to 68 Nm torque.+90°



AUTODOC recommends:

- Important! Be sure to use new fasteners.
- Tighten the rear fastener of the control arm. Use a combination spanner #18 (2 pieces). Use a torque wrench. Tighten it to 68 Nm torque.+90°

AUTODOC recommends:

- Important! Be sure to use new fasteners.
- Treat all joints of the arm. Use copper grease.

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Remove the support from under the steering knuckle.



AUTODOC recommends:

- Replacement: strut mount BMW 5 Touring (E61). Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.
- Treat the surface where the brake disc contacts the wheel rim. Use copper grease.



62 Clean the brake disk surface. Use a brake cleaner.



AUTODOC recommends:

• Replacement: strut mount – BMW 5 Touring (E61). After applying the spray, wait a few minutes.

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63 Install the wheel.



AUTODOC recommends:

- Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. BMW 5 Touring (E61)
- Screw in the wheel bolts. Use wheel impact socket #17.



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 120 nm torque.



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Remove the jacks and chocks.



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