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How to change front lower arm on **BMW 7 (E65, E66, E67)** – 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 7 (E65, E66, E67) 730d 3.0, BMW 7 (E65, E66, E67) 735i / Li 3.6, BMW 7 (E65, E66, E67) 745i / Li 4.4, BMW 7 (E65, E66, E67) 740d 3.9, BMW 7 (E65, E66, E67) 760i / Li 6.0, BMW 7 (E65, E66, E67) 730i / Li 3.0, BMW 7 (E65, E66, E67) 740i / Li 4.0, BMW 7 (E65, E66, E67) 750i / Li 4.8, BMW 7 (E65, E66, E67) 730Ld 3.0, BMW 7 (E65, E66, E67) 745d 4.4, BMW 7 (E65, E66, E67) 735i 4.0, BMW 7 (E65, E66, E67) 730i , Li 3.0, BMW 7 (E65, E66, E67) 760 6.0

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 5 Saloon (E60) 525d 2.5

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## REPLACEMENT: FRONT LOWER ARM – BMW 7 (E65, E66, E67). TOOLS YOU MIGHT NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #9
- Combination spanner #10
- Combination spanner #16
- Combination spanner #18
- Drive socket # 10
- Drive socket # 16

- Drive socket # 18
- Drive socket # 21
- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Flat chisel
- Hammer
- Ball joint puller
- Hydraulic transmission jack
- Wheel chock

**Buy tools** 

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## Replacement: front lower arm – BMW 7 (E65, E66, E67). AUTODOC recommends:

- The replacement procedure is identical for the left and right lower control arms.
- All work should be done with the engine stopped.

# REPLACEMENT: FRONT LOWER ARM – BMW 7 (E65, E66, E67). RECOMMENDED SEQUENCE OF STEPS:

1

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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4 Unscrew the wheel bolts.



### Replacement: front lower arm – BMW 7 (E65, E66, E67). Tip:

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

Remove the wheel.

6



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



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7 Unscrew the fastener connecting the stabilizer link to the shock strut. Use a drive socket #16. Use a ratchet wrench.



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 drive socket #21. Use a ratchet wrench.



Disconnect the tie rod end from the steering knuckle.

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



Unscrew the fasteners of the headlight levelling sensor. Use a combination spanner #9. Use a combination spanner #10.



Disconnect the headlight levelling sensor.

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



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Unscrew the ball joint fastening to the steering knuckle. Use a drive socket #21. Use a ratchet wrench.



Unscrew the front arm fastener. Use a combination spanner #18. Use a drive socket #18. Use a ratchet wrench.



Disconnect the ball joint from the steering knuckle. Use a ball joint puller.



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Unscrew the rear fastener connecting the control arm to the subframe. Use a combination spanner #18. Use a drive socket #18. Use a ratchet wrench.



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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.



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



Remove the fastening bolt.

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Unscrew the fastener of the stabiliser link bracket. Use a drive socket #16. Use a ratchet wrench.



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



Lower the hydraulic transmission jack by 10-15 cm.



#### **AUTODOC** recommends:

- Replacement: front lower arm BMW 7 (E65, E66, E67). Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.
- Disconnect the lower arm from the steering knuckle.



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Remove the fastening bolt.



Remove the arm.



Clean the mounting seats and the thread of the suspension arm. Use a wire brush. Use WD-40 spray.



29 Install a new arm.



#### **AUTODOC** recommends:

- During the installation process, use only new bolts and nuts.
- Do not damage the ball joint cover.

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Connect the lower arm to the steering knuckle.



Raise the hydraulic transmission jack by 10-15 cm.



Treat the shock strut mounting seat on the steering knuckle. Use a wire brush. Use WD-40 spray.



Screw in the fastener of the stabiliser link bracket. Use a drive socket #16. Use a ratchet wrench.



34 Install the fastening bolt.



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Screw in the fastener that connects the shock strut to the steering knuckle. Use a combination spanner #18. Use a drive socket #18. Use a ratchet wrench.



Install the fastening bolt.

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37 Screw the front arm fastener. Use a combination spanner #18.



Remove the support from under the steering knuckle.



#### AUTODOC recommends:

 Lower the hydraulic transmission jack smoothly, without jerks, to avoid damaging assemblies and mechanisms.

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Clean the mounting seats of the tie rod end. Use a wire brush. Use WD-40 spray.



Connect the tie rod end to the steering knuckle.



Screw on the fastening nut that connects the tie rod end to the steering knuckle. Use a drive socket #21. Use a ratchet wrench.



- Connect the ball joint to the steering knuckle.
- Screw the fasteners of the ball joint. Use a drive socket #21. Use a ratchet wrench.



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Clean the mounting seats of the stabiliser link. Use a wire brush. Use WD-40 spray.



Tighten the stabiliser link fastener. Use a combination spanner #16.



Reconnect the headlight levelling sensor.

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Screw in the fasteners of the headlight levelling sensor. Use a combination spanner #9. Use a combination spanner #10.



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Tighten the fastener connecting the stabilizer link to the shock strut. Use a drive socket #16. Use a torque wrench. Tighten it to 65 Nm torque.



Tighten the fastener of the stabiliser link bracket. Use a drive socket #16. Use a torque wrench. Tighten it to 65 Nm torque.



Tighten the lower fasteners connecting the shock strut to the steering knuckle. Use a drive socket #18. Use a torque wrench. Tighten it to 81 Nm torque.



Tighten the fasteners of the headlight levelling sensor. Use a drive socket #10. Use a torque wrench. Tighten it to 7 Nm torque.



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Tighten the ball joint fastener. Use a drive socket #21. Use a torque wrench. Tighten it to 165 Nm torque.



Tighten the fastening nut connecting the tie rod end to the steering knuckle. Use a drive socket #21. Use a torque wrench. Tighten it to 165 nm torque.



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 drive socket #18. Use a torque wrench. Tighten it to 100 Nm torque.+90°



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#### **AUTODOC** recommends:

• Important! Be sure to use new fasteners.

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Tighten the rear fastener connecting the control arm to the subframe. Use a combination spanner #18. Use a drive socket #18. Use a torque wrench. Tighten it to 100 Nm torque.+90°



#### **AUTODOC** recommends:

• Important! Be sure to use new fasteners.

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Remove the support from under the steering knuckle.



#### **AUTODOC** recommends:

• BMW 7 (E65, E66, E67) – Do not lower the transmission jack sharply to avoid damaging components and mechanisms of the car.

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Treat all joints of the arm. Use copper grease.



Clean the wheel rim mounting seat. Use a wire brush.



Treat the surface where the brake disc contacts the wheel rim. Use copper grease.



Clean the brake disk surface. Use a brake cleaner.



Replacement: front lower arm – BMW 7 (E65, E66, E67). Tip from AUTODOC experts:

• After applying the spray, wait a few minutes.

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62 Install the wheel.



#### **AUTODOC** recommends:

- Important! Hold the wheel while screwing in the fastening bolts. BMW 7 (E65, E66, E67)
- 63 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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