# **AUTODOC CLUB**

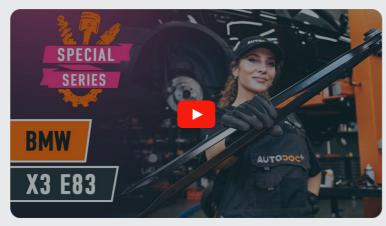
How to change rear suspension lower control arm on **BMW 3 Touring** (**E46**) – replacement guide







#### 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 3 Touring (E46) 320i 2.0, BMW 3 Touring (E46) 318i 1.9, BMW 3 Touring (E46) 328i 2.8, BMW 3 Touring (E46) 320d 2.0, BMW 3 Touring (E46) 330d 2.9, BMW 3 Touring (E46) 330xd 2.9, BMW 3 Touring (E46) 330xi 3.0, BMW 3 Touring (E46) 320i 2.2, BMW 3 Touring (E46) 325i 2.5, BMW 3 Touring (E46) 325xi 2.5, BMW 3 Touring (E46) 318i 2.0, BMW 3 Touring (E46) 316i 1.8, BMW 3 Touring (E46) 318d 2.0, BMW 3 Touring (E46) 330d 3.0, (+ 2)

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 X3 (E83) 2.5 i

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## REPLACEMENT: REAR SUSPENSION LOWER CONTROL ARM – BMW 3 TOURING (E46). TOOLS YOU NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Torque wrench
- Combination spanner #18
- Drive socket # 18

- Wheel impact socket #17
- Ratchet wrench
- Pin punch
- Hammer
- Crow bar
- Hydraulic transmission jack
- Wheel chock

**Buy tools** 

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### Replacement: rear suspension lower control arm – BMW 3 Touring (E46). AUTODOC experts recommend:

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

# REPLACEMENT: REAR SUSPENSION LOWER CONTROL ARM – BMW 3 TOURING (E46). USE THE FOLLOWING PROCEDURE:

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



Raise the rear of the car and secure on supports.



Unscrew the wheel bolts.



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#### **AUTODOC** recommends:

Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts.
 BMW 3 Touring (E46)

Remove the wheel.



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



Make a mark on the camber adjustment bolt.



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



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Clean all joints of the arm. Use a wire brush.



Remove the fastening bolt. Use a drive socket #18. Use a crowbar.



Unscrew the fastener connecting the control arm to the subframe. Use a drive socket #18. Use a crowbar.



Support the rear knuckle. Use a hydraulic transmission jack.



Remove the fastening bolts. Use a pin punch. Use a hammer. Use a crowbar. Use a combination spanner #18.



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14 Remove the arm.



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



16 Install a new arm.



#### **AUTODOC** recommends:

- Replacement: rear suspension lower control arm BMW 3 Touring (E46). Use only new bolts and nuts for installation.
- Do not damage the ball joint cover.

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Install the control arm fasteners. Use a combination spanner #18. Use a crowbar.



Adjust the position of the alignment bolt according to the mark.



Screw in the fasteners connecting the control arm to the rear knuckle. Use a combination spanner #18. Use a drive socket #18. Use a ratchet wrench.



Raise the hydraulic transmission jack by 10-15 cm.

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



Tighten the fastener connecting the control arm to the subframe. Use a drive socket #18. Use a torque wrench. Tighten it to 77 Nm torque.



Remove the support from under the rear knuckle.



#### **AUTODOC** recommends:

 Replacement: rear suspension lower control arm – BMW 3 Touring (E46). Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

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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.



#### AUTODOC recommends:

 Replacement: rear suspension lower control arm – BMW 3 Touring (E46). After applying the spray, wait a few minutes.

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28 Install the wheel.



#### **AUTODOC** recommends:

- Important! Hold the wheel while screwing in the fastening bolts. BMW 3 Touring (E46)
- 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 140 Nm torque.



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Remove the jacks and chocks.





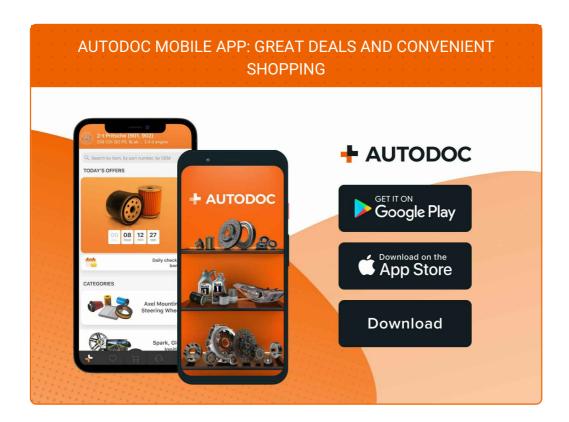


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