



How to change front  
lower arm on **BMW 3  
Compact (E46)** –  
replacement guide

### SIMILAR VIDEO TUTORIAL



This video shows the replacement procedure of a similar car part on another vehicle

#### **Important!**

This replacement procedure can be used for:

BMW 3 Compact (E46) 316ti 1.8, BMW 3 Compact (E46) 325ti 2.5, BMW 3 Compact (E46) 318ti 2.0, BMW 3 Compact (E46) 320td 2.0, BMW 3 Compact (E46) 318td 2.0, BMW 3 Compact (E46) 316ti 1.6, BMW 3 Compact (E46) 318Ti 2.0

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 Convertible (E46) 318Ci 2.0

**REPLACEMENT: FRONT LOWER ARM – BMW 3 COMPACT (E46). LIST OF THE TOOLS YOU'LL NEED:**



- Wire brush
- WD-40 spray
- Copper grease
- Combination spanner #18
- Combination spanner #19
- Combination spanner #21
- Drive socket # 13
- Drive socket # 18
- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Ball joint puller
- 3-Arm Gear Puller
- Phillips screwdriver
- Crow bar
- Rubber mallet
- Vice
- Hydraulic transmission jack
- Wheel chock

**Buy tools**

Replacement: front lower arm – BMW 3 Compact (E46). Professionals recommend:

- The replacement procedure is identical for the left and right lower control arms.
- Replacement of the independent suspension lower arm in some cars requires a part of the outlet piping of the additional heater to be removed.
- All work should be done with the engine stopped.

**REPLACEMENT: FRONT LOWER ARM – BMW 3 COMPACT (E46).  
RECOMMENDED SEQUENCE OF STEPS:**

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.

**4** Unscrew the wheel bolts.



**AUTODOC recommends:**

- Important! Hold the wheel while unscrewing the fastening bolts. BMW 3 Compact (E46)

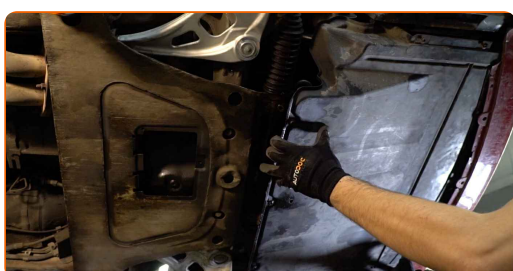
**5** Remove the wheel.



**6** Unscrew the fasteners of the lower sound insulation. Use a Phillips screwdriver.



**7** Remove the lower sound insulation.

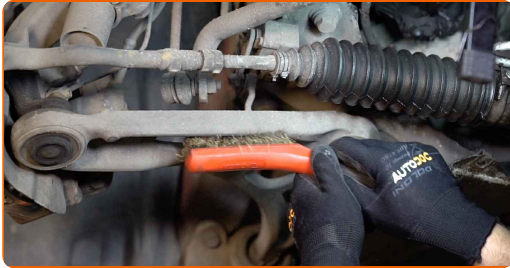


Please note!

- Some cars are not equipped with the lower sound insulation.

8

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



Replacement: front lower arm – BMW 3 Compact (E46). Tip:

- After applying the spray, wait a few minutes.
- Wear protective goggles.

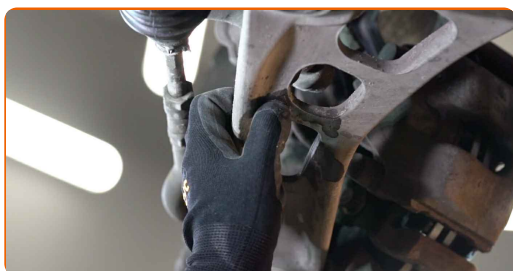
9

Loosen the fastener connecting the ball joint to the steering knuckle. Use a combination spanner #19.



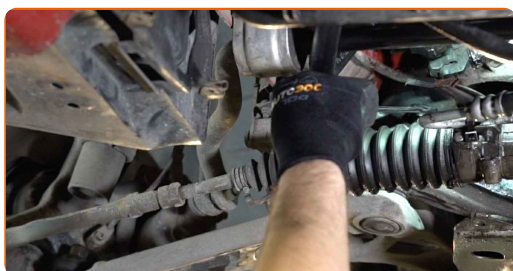
**10**

Detach the fastener connecting the suspension level sensor to the suspension control arm. Use a drive socket #13. Use a ratchet wrench.



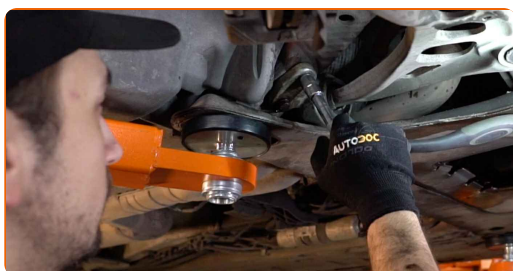
**11**

Unscrew the arm fastening from the subframe. Use a combination spanner #21.



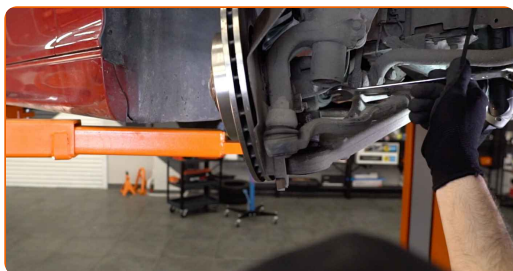
**12**

Unscrew the rear arm fastening. Use a drive socket #18. Use a combination spanner #18. Use a ratchet wrench.



**13**

Unscrew the ball joint fastening to the steering knuckle. Use a combination spanner #19.



**14**

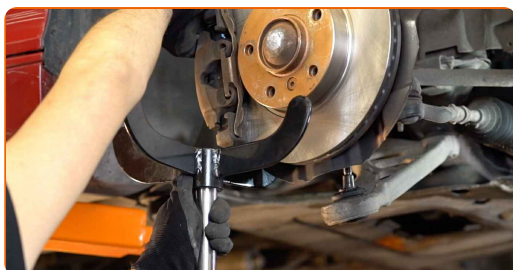
Disconnect the ball joint from the steering knuckle. Use a ball joint puller.

**15**

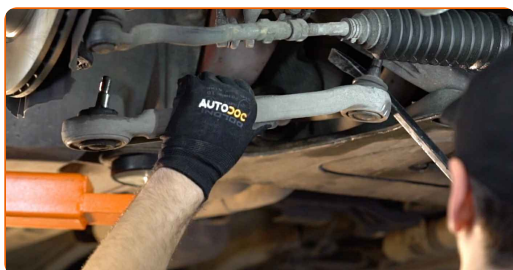
Disconnect the lower arm from the steering knuckle.

**16**

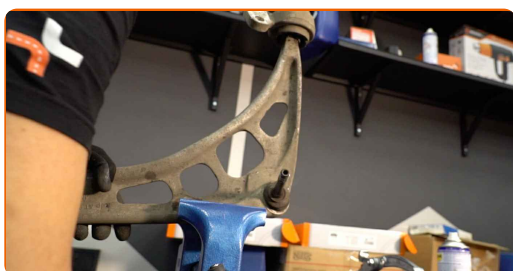
Prop up the steering knuckle. Use a hydraulic transmission jack.

**17**

Remove the arm. Use a crowbar.

**18**

Grip the suspension control arm in a vice.





**19** Treat the control arm bush. Use WD-40 spray.



**20** Remove the control arm bush. Use 3-Arm Gear Puller.



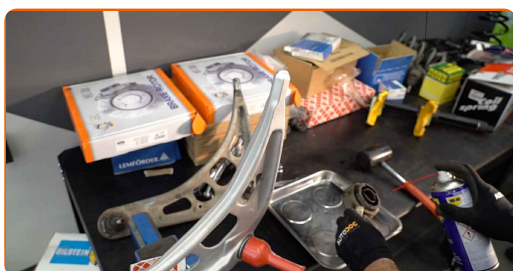
**21** Loosen the vice and remove the control arm.



**22** Grip the new control arm in a vice.

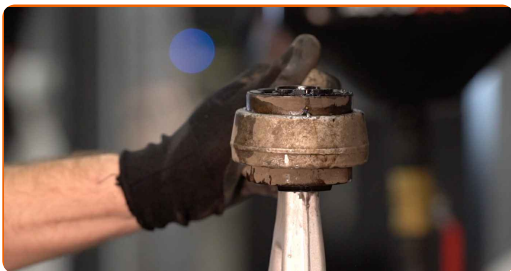


**23** Treat the mounting seat of the control arm bush. Use WD-40 spray.

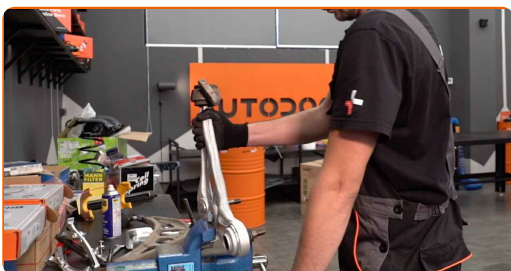


**24**

Install the control arm bush to its mounting seat. Use a rubber mallet.

**25**

Loosen the vice and remove the control arm.

**26**

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

**27**

Install a new arm.

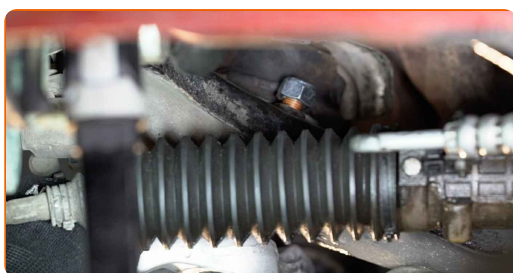


Replacement: front lower arm – BMW 3 Compact (E46). Tip from AUTODOC experts:

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

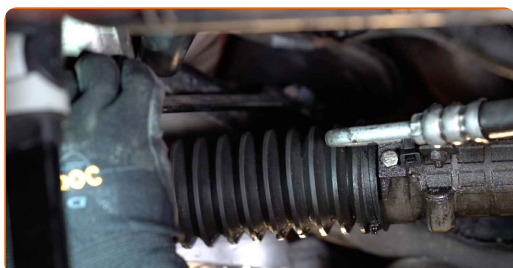
28

Install the control arm fasteners.



29

Screw the fastener connecting the control arm to the subframe. Use a combination spanner #21.

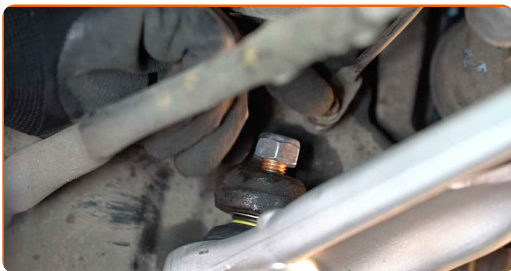


30

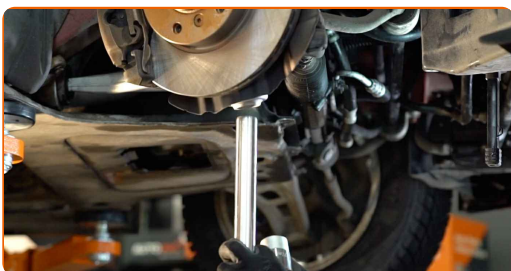
Screw the rear arm fastener. Use a drive socket #18. Use a combination spanner #18. Use a ratchet wrench.



**31** Insert the ball joint into the steering knuckle and fix it with a new nut.



**32** Remove the support from under the steering knuckle.



**AUTODOC recommends:**

- Replacement: front lower arm – BMW 3 Compact (E46). Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

**33** Support the arm. Use a hydraulic transmission jack.



- 34** Tighten the arm fastening to the subframe. Use a combination spanner #21. Use a torque wrench. Tighten it to 90 nm torque.



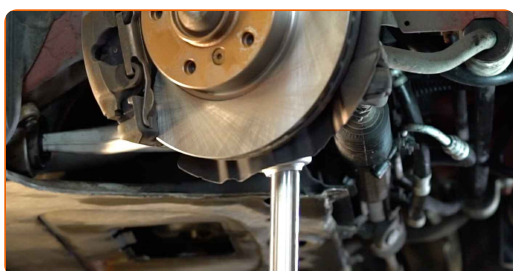
- 35** Lower the hydraulic transmission jack by 10-15 cm.



Replacement: front lower arm – BMW 3 Compact (E46). AUTODOC recommends:

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

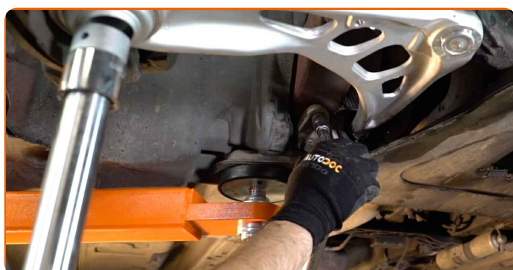
- 36** Support the arm. Use a hydraulic transmission jack.



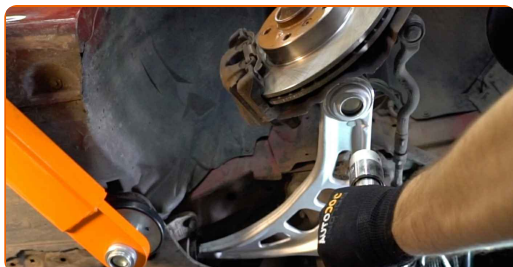
- 37** Tighten the ball joint fastening nut. Use a combination spanner #19. Use a torque wrench. Tighten it to 65 nm torque.



- 38** Tighten the rear fastener of the control arm. Use a drive socket #18. Use a combination spanner #18. Use a torque wrench. Tighten it to 59 nm torque.



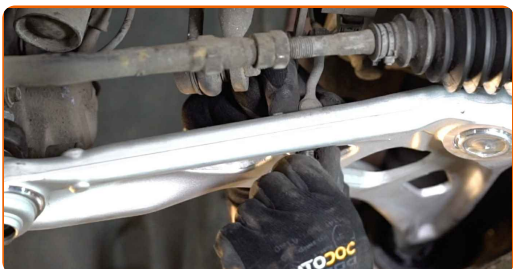
- 39** Remove the support from under the arm.



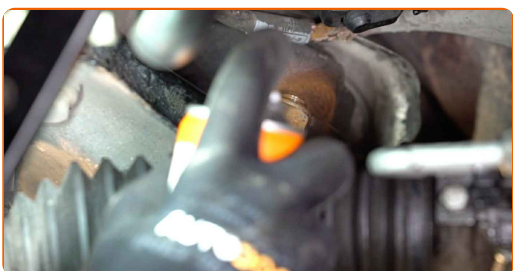
**AUTODOC recommends:**

- BMW 3 Compact (E46) – Do not lower the transmission jack sharply to avoid damaging components and mechanisms of the car.

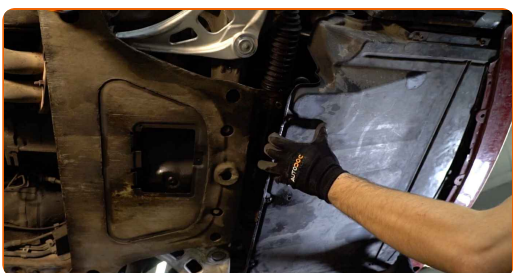
- 40** Attach the fastener connecting the suspension level sensor to the suspension control arm. Use a drive socket #13. Use a ratchet wrench.



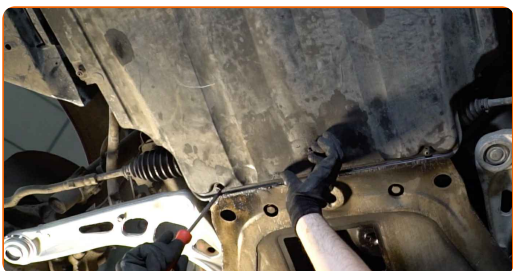
- 41** Treat all joints of the arm. Use copper grease.



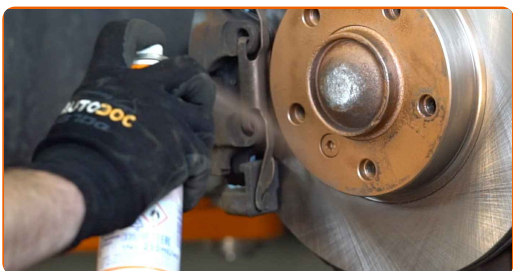
- 42** Install the lower sound insulation.



- 43** Screw in the fasteners of the lower sound insulation. Use a Phillips screwdriver.



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



**45** Install the wheel.



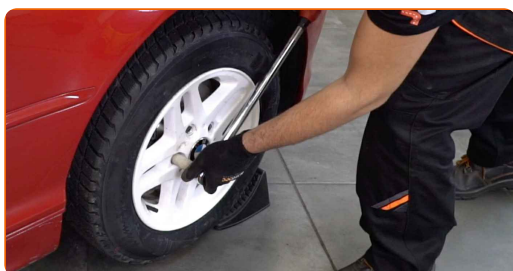
Replacement: front lower arm – BMW 3 Compact (E46). Tip from AUTODOC experts:

- To avoid injury, hold up the wheel when screwing in the fastening bolts.

**46** Screw in the wheel bolts. Use wheel impact socket #17.



**47** Lower the car and working in a cross order, tighten the wheel bolts. Use a torque wrench. Tighten it to 120 nm torque.





48

Remove the jacks and chocks.



**WELL DONE!** 

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