



How to change front  
lower arm on **BMW Z4  
Roadster (E85)** –  
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 Z4 Roadster (E85) 3.0 si, BMW Z4 Roadster (E85) 3.0 i, BMW Z4 Roadster (E85) 2.5 i, BMW Z4 Roadster (E85) 2.2 i, BMW Z4 Roadster (E85) 2.0 i, BMW Z4 Roadster (E85) 2.5 si, BMW Z4 Roadster (E85) M

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 Z4 ROADSTER (E85). 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 Z4 Roadster (E85). 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 Z4 ROADSTER (E85). 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 Z4 Roadster (E85)

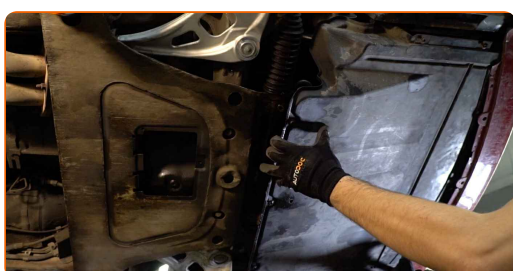
**5** Remove the wheel.



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



**7** Remove the lower sound insulation.

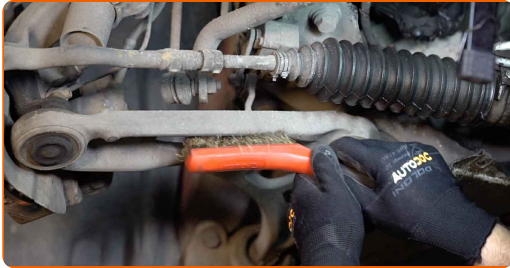


Please note!

- 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 Z4 Roadster (E85). Tip:

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

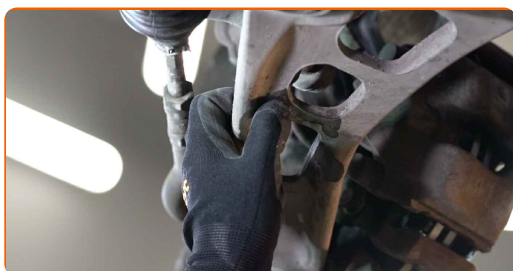
9

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



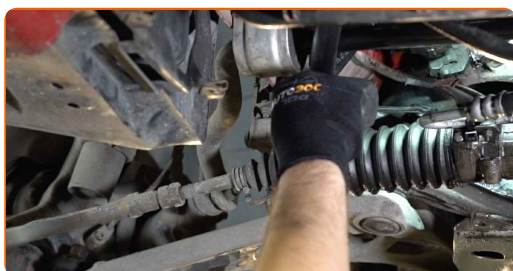
**10**

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



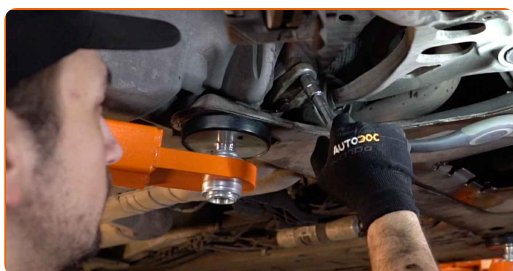
**11**

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



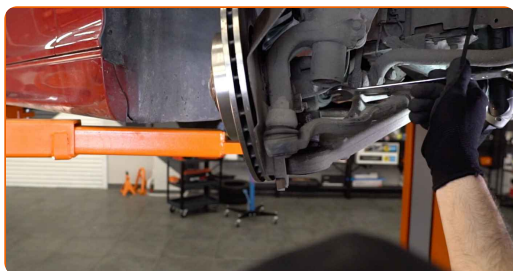
**12**

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**

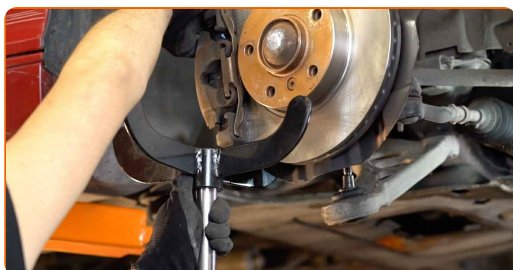
Disconnect the ball joint from the steering knuckle. Use a ball joint puller.

**15**

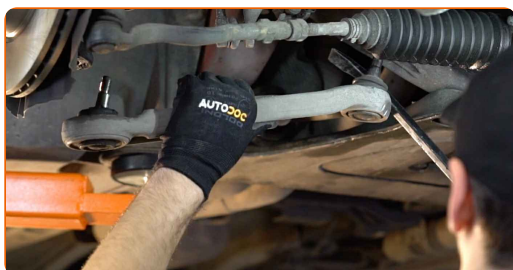
Disconnect the lower arm from the steering knuckle.

**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.



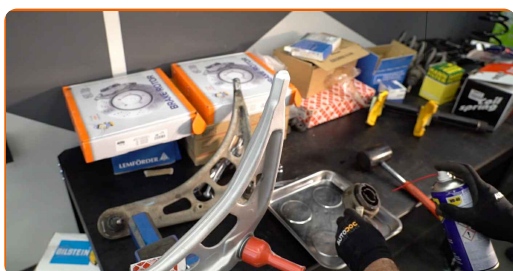
**21** Loosen the vice and remove the control arm.



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

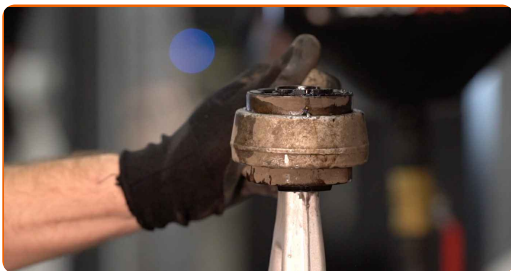


**23** Treat the mounting seat of the control arm bush. Use WD-40 spray.

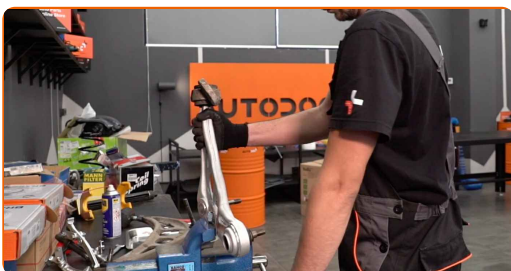


**24**

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.

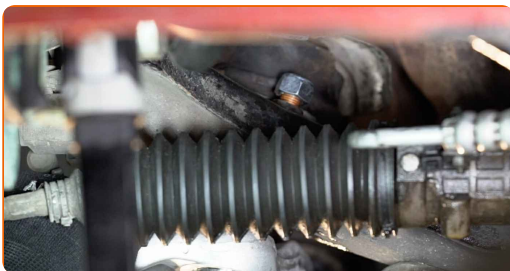


Replacement: front lower arm – BMW Z4 Roadster (E85). Tip from AUTODOC experts:

- 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.

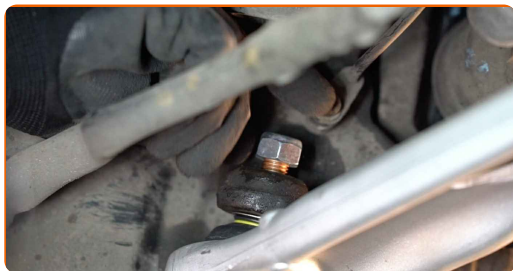


30

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 Z4 Roadster (E85). 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 Z4 Roadster (E85). 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.

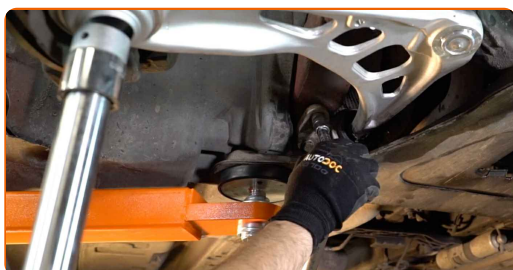




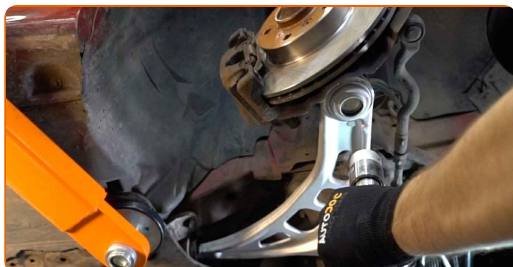
- 37** Tighten the ball joint fastening nut. Use a combination spanner #19. Use a torque wrench. Tighten it to 65 nm torque.



- 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.

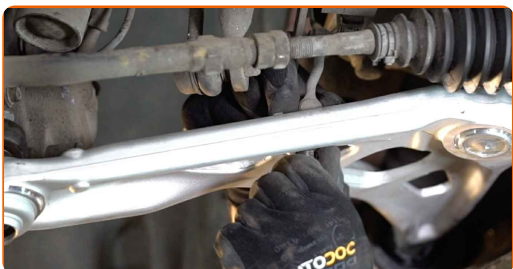


**AUTODOC recommends:**

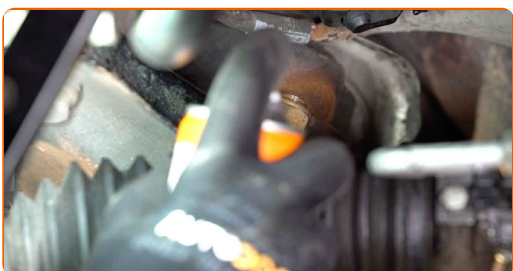
- BMW Z4 Roadster (E85) – Do not lower the transmission jack sharply to avoid damaging components and mechanisms of the car.



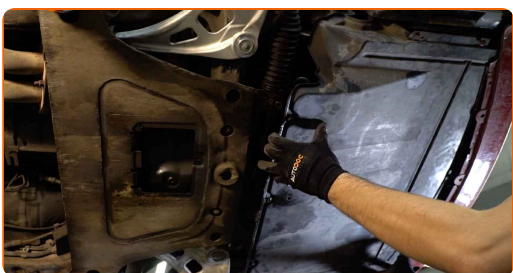
- 40 Attach the fastener connecting the suspension level sensor to the suspension control arm. Use a drive socket #13. Use a ratchet wrench.



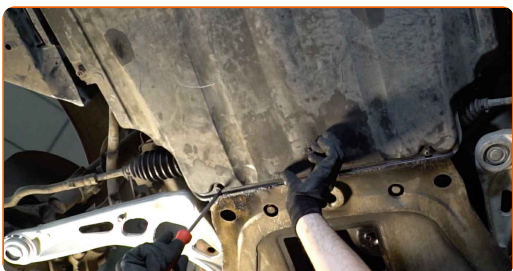
- 41 Treat all joints of the arm. Use copper grease.



- 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.



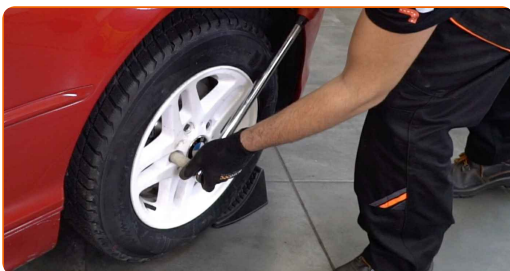
Replacement: front lower arm – BMW Z4 Roadster (E85). Tip from AUTODOC experts:

- 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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