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How to change front wheel bearing on **BMW Z4 Coupe (E86)** – 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 Z4 Coupe (E86) M, BMW Z4 Coupe (E86) 3.0 si, BMW Z4 Coupe (E86) 2.5 i

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 (E36) 323i 2.5



# REPLACEMENT: WHEEL BEARING – BMW Z4 COUPE (E86). TOOLS YOU NEED:



- Wire brush
- WD-40 spray
- All-purpose cleaning spray
- Brake cleaner
- Copper grease
- Torque wrench
- Drive socket # 16
- Drive socket # 46
- HEX bit No.H6

- Wheel impact socket #17
- Tap wrench
- Hammer
- Impact screwdriver
- Universal puller
- 3-Arm Gear Puller
- Flat chisel
- Crow bar
- Wheel chock

**Buy tools** 



## AUTODOC recommends:

- Do not re-use the bearing assembly of your BMW Z4 Coupe (E86) car.
- The wheel hub bearing replacement procedure is identical for both wheels on the same axle.
- All work should be done with the engine stopped.

# **REPLACEMENT: WHEEL BEARING – BMW Z4 COUPE (E86). TAKE THE FOLLOWING STEPS:**



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:

• Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts. BMW Z4 Coupe (E86)

5

Remove the wheel.



6

Spread the brake pads. Use a crowbar.



7

Clean the brake caliper bracket fasteners. Use a wire brush. Use WD-40 spray.



8

Unscrew the caliper bracket fastening. Use a drive socket #16. Use a tap wrench.





Remove the brake caliper together with its bracket.



# Replacement: wheel bearing – BMW Z4 Coupe (E86). Tip from AUTODOC experts:

- Tie the caliper to the suspension or to the body with a wire without disconnecting from the brake hose to prevent depressurization of the brake system.
- Make sure that the brake caliper is not hanging on the brake hose.
- Don't press the brake pedal after the brake caliper has been removed. As a result, the piston can fall out from the brake cylinder, and brake fluid leakage and depressurization of the system may occur.
- 10

Clean the brake disc fastener. Use a wire brush. Use WD-40 spray.





Unscrew the brake disc fastening. Use HEX No.H6. Use an impact screwdriver.



12

Remove the brake disc.



13

Remove the wheel hub nut cap. Use a crowbar. Use a hammer.



14

Unstake the wheel hub retaining nut. Use a flat metal-working chisel. Use a hammer.





Unscrew the hub nut. Use a drive socket #46. Use a tap wrench.



16

Remove the fastening nut.



17

Remove the wheel hub together with the bearing. Use 3-Arm Gear Puller.



18

Pull the bearing inner race out of the wheel hub. Use a universal puller.





Clean the hub bearing mounting seat. Use a wire brush. Use all-purpose cleaning spray.



20

Install the new wheel hub with a bearing. Use a drive socket #46. Use a hammer.



21

#### Install the fastening nut.



22

Tighten the wheel hub nut. Use a drive socket #46. Use a torque wrench. Tighten it to 290 Nm torque.





Restake the wheel hub retaining nut. Use a flat metal-working chisel. Use a hammer.



24

Treat the wheel hub nut. Use copper grease.



25

Install the cap of the hub nut. Use a drive socket #46. Use a hammer.



26

Install the brake disc.



27

Tighten the brake disc fastening. Use HEX No.H6. Use a torque wrench. Tighten it to 9 Nm torque.

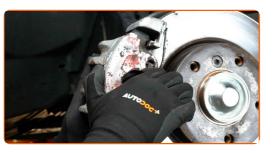


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28

Install the brake caliper together with its bracket.



29

Tighten the brake caliper bracket. Use a drive socket #16. Use a torque wrench. Tighten it to 110 Nm torque.



30

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



31

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



32

Clean the brake disk surface. Use a brake cleaner.





### AUTODOC recommends:

• Replacement: wheel bearing – BMW Z4 Coupe (E86). After applying the spray, wait a few minutes.

33

Install the wheel.



## AUTODOC recommends:

• Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. BMW Z4 Coupe (E86)

34

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.



36

Remove the jacks and chocks.



Replacement: wheel bearing – BMW Z4 Coupe (E86). AUTODOC experts recommend:

• Without starting the engine, press the brake pedal several times until you feel significant resistance.



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### WHEEL BEARING: A WIDE SELECTION

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