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How to change front wheel bearing on **BMW 3 Compact (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 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) 318ti 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 Saloon (E36) 323i 2.5

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### REPLACEMENT: WHEEL BEARING – BMW 3 COMPACT (E46). 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** 

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#### **AUTODOC** recommends:

- Do not re-use the bearing assembly of your BMW 3 Compact (E46) 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 3 COMPACT (E46). TAKE THE FOLLOWING STEPS:

- 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.
- 4 Unscrew the wheel bolts.



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#### **AUTODOC** recommends:

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





6 Spread the brake pads. Use a crowbar.



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



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



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Remove the brake caliper together with its bracket.



### Replacement: wheel bearing – BMW 3 Compact (E46). 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.

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



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



Remove the brake disc.

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



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



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



16 Remove the fastening nut.



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



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



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



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



21 Install the fastening nut.

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



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



Treat the wheel hub nut. Use copper grease.



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



26 Install the brake disc.

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



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Install the brake caliper together with its bracket.



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



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.

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#### **AUTODOC** recommends:

 Replacement: wheel bearing – BMW 3 Compact (E46). After applying the spray, wait a few minutes.

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Install the wheel.



#### AUTODOC recommends:

• Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. BMW 3 Compact (E46)

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



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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.



Remove the jacks and chocks.



Replacement: wheel bearing – BMW 3 Compact (E46). AUTODOC experts recommend:

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



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