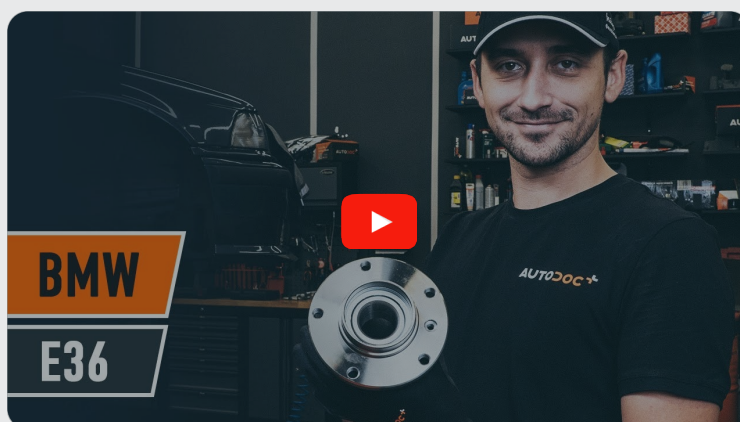




How to change front  
wheel bearing on **BMW 3**  
**Touring (E46)** –  
replacement guide

### SIMILAR VIDEO TUTORIAL



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

#### **Important!**

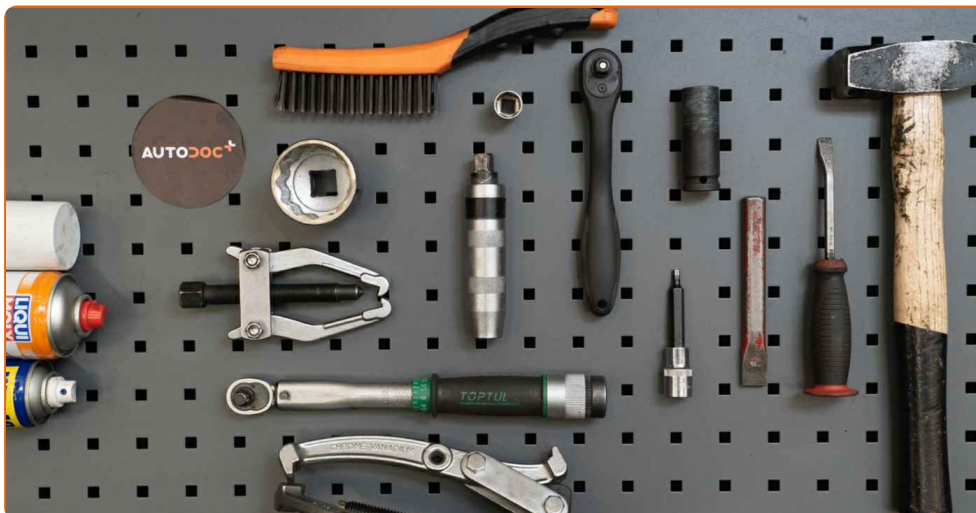
This replacement procedure can be used for:

BMW 3 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) 330i 3.0, BMW 3 Touring (E46) 320i 2.2, BMW 3 Touring (E46) 325i 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, BMW 3 Touring (E46) 323i 2.5, BMW 3 Touring (E46) 325 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 3 TOURING (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**

**AUTODOC recommends:**

- Do not re-use the bearing assembly of your BMW 3 Touring (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 TOURING (E46). TAKE THE FOLLOWING 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:**

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

**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.



9

Remove the brake caliper together with its bracket.



Replacement: wheel bearing – BMW 3 Touring (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.

10

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



11

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.





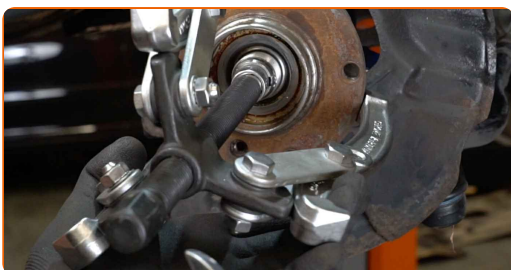
**15** Unscrew the hub nut. Use a drive socket #46. Use a tap wrench.



**16** Remove the fastening nut.



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

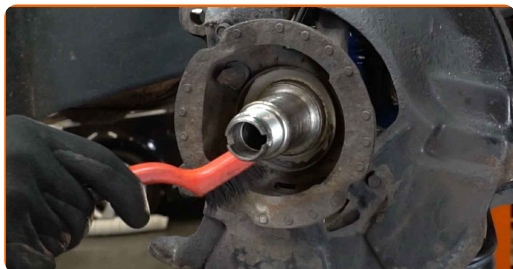


**18** Pull the bearing inner race out of the wheel hub. Use a universal puller.





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



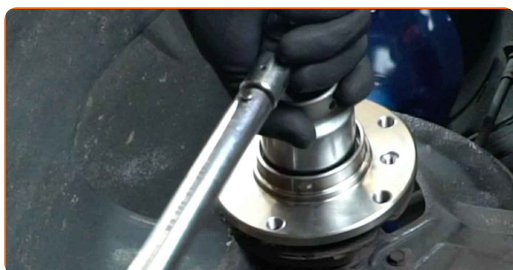
**20** Install the new wheel hub with a bearing. Use a drive socket #46. Use a hammer.



**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.



**23** 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.



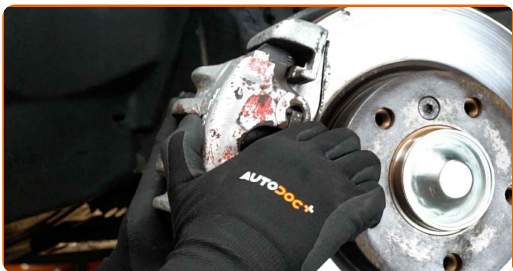
**26** Install the brake disc.



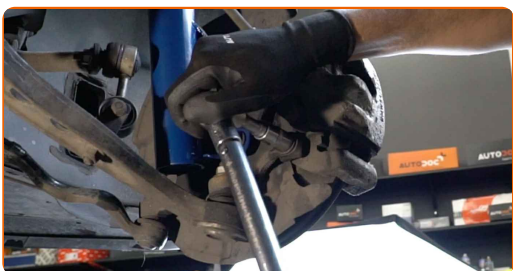
**27** Tighten the brake disc fastening. Use HEX No.H6. Use a torque wrench. Tighten it to 9 Nm torque.



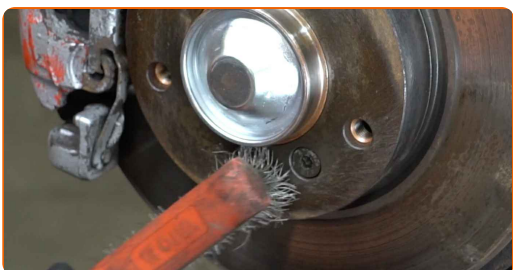
**28** Install the brake caliper together with its bracket.



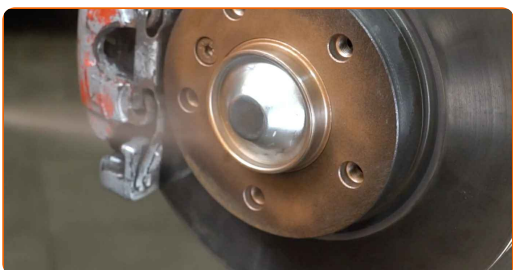
**29** Tighten the brake caliper bracket. Use a drive socket #16. Use a torque wrench. Tighten it to 110 Nm torque.



**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 3 Touring (E46). 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 3 Touring (E46)

**34**

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



- 35** 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 3 Touring (E46). AUTODOC experts recommend:

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

**WELL DONE!** 

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**WHEEL BEARING: A WIDE SELECTION**

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