



How to change front  
wheel bearing on **BMW 1  
Hatchback (E81)** –  
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 1 Hatchback (E81) 116i 1.6, BMW 1 Hatchback (E81) 120d 2.0, BMW 1 Hatchback (E81) 130i 3.0, BMW 1 Hatchback (E81) 118i 2.0, BMW 1 Hatchback (E81) 120i 2.0, BMW 1 Hatchback (E81) 118d 2.0, BMW 1 Hatchback (E81) 123d 2.0, BMW 1 Hatchback (E81) 116i 2.0, BMW 1 Hatchback (E81) 116d 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 (E90) 318i 2.0

REPLACEMENT: WHEEL BEARING – BMW 1 HATCHBACK (E81). TOOLS YOU NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Sealant
- Combination spanner #18
- Drive socket # 18
- HEX bit no.H6.
- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Tap wrench
- Crow bar
- Rubber mallet
- Wheel chock

**Buy tools**

## AUTODOC recommends:

- Do not re-use the bearing assembly of your BMW 1 Hatchback (E81) 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 1 HATCHBACK (E81). RECOMMENDED SEQUENCE OF STEPS:

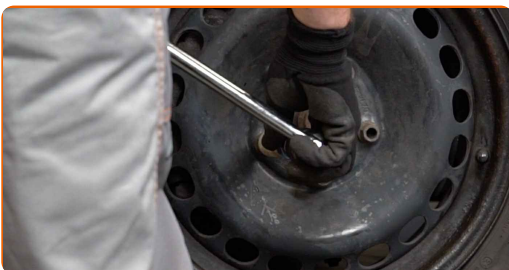
1

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:**

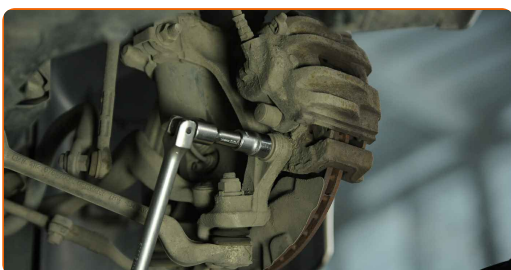
- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts.  
BMW 1 Hatchback (E81)

**5** Remove the wheel.



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

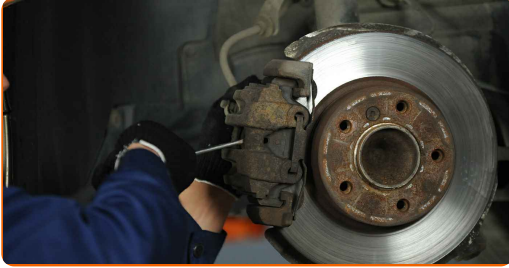
**7** Unscrew the caliper bracket fastening. Use a drive socket #18. Use a tap wrench. Use a ratchet wrench.



**8** Remove the fastening bolts (2 pieces).

9

Spread the brake pads. Use a crowbar.



10

Remove the brake caliper together with its bracket.



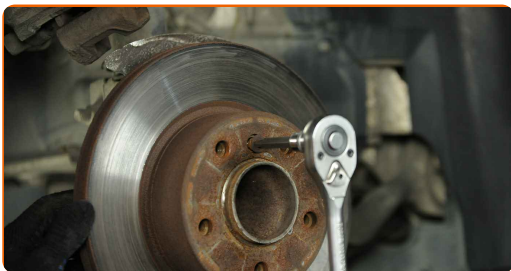
Replacement: wheel bearing – BMW 1 Hatchback (E81). Professionals recommend:

- 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.
- Check the brake caliper bracket, brake caliper guide pins and boots. Clean them. Replace, if necessary.

11

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

**12** Unscrew the brake disc fastening. Use HEX No.H6. Use a ratchet wrench.



**13** Remove the brake disc.



**14** Clean the wheel hub fastener. Use a wire brush. Use WD-40 spray.

**15** Unscrew the wheel hub axle nut. Use a combination spanner #18. Use a drive socket #18. Use a ratchet wrench.



**16** Remove the fastening bolts.

**17** Remove the hub and the bearing together, since they are a sealed unit.



Replacement: wheel bearing – BMW 1 Hatchback (E81). AUTODOC experts recommend:

- If necessary, use a rubber mallet.

18

Clean the hub bearing mounting seat. Use a wire brush. Use WD-40 spray.



19

Treat the fastening bolts. Use a sealant.

20

Install the new wheel hub with a bearing.

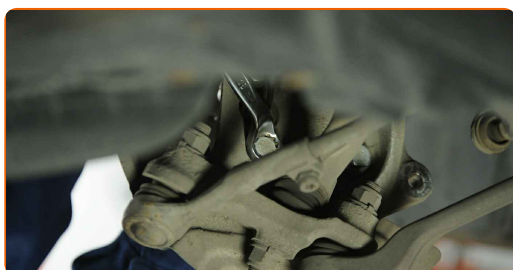


21

Install the fastening bolts.

22

Tighten the hub. Use a combination spanner #18. Use a torque wrench. Tighten it to 110 nm torque.





AUTODOC recommends:

- Important! Be sure to use new fasteners.

23

Treat the hub where it contacts the brake disk. Use copper grease.



24

Install the brake disc.



25

Tighten the brake disc fastening. Use HEX No.H6. Use a torque wrench. Tighten it to 16 Nm torque.

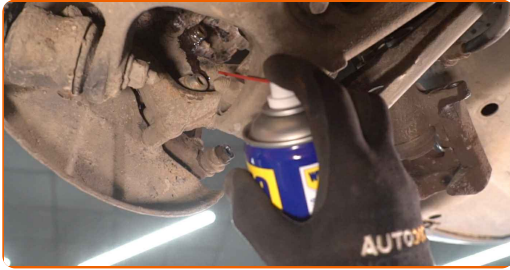


26

Treat the fastening bolts. Use a sealant.

27

Clean the mounting seats of the caliper and its bracket. Use a wire brush. Use WD-40 spray.



28

Install the brake caliper together with its bracket.



29

Install the fastening bolts (2 pieces).

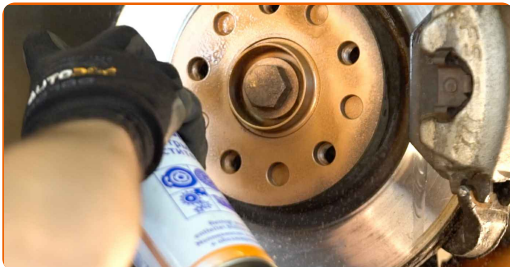
30

Tighten the brake caliper bracket. Use a drive socket #18. Use a torque wrench. Tighten it to 110 Nm torque.



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 1 Hatchback (E81). 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 1 Hatchback (E81)

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.



Replacement: wheel bearing – BMW 1 Hatchback (E81). Professionals recommend:

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

- 36** Remove the jacks and chocks.



**WELL DONE!** 

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**WHEEL BEARING: A WIDE SELECTION**

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