

## SIMILAR VIDEO TUTORIAL



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

### **Important!**

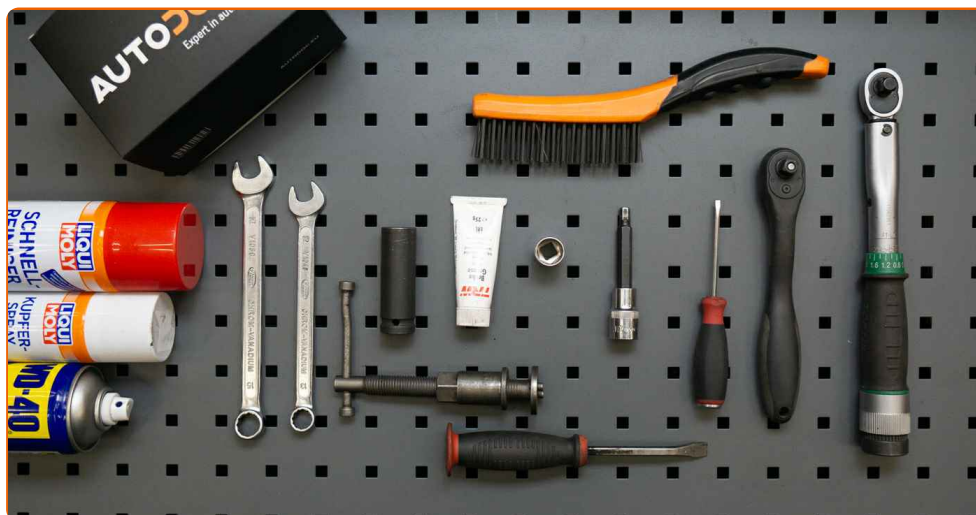
This replacement procedure can be used for:

BMW 1 Hatchback (E81) 118i 2.0, BMW 1 Hatchback (E81) 120i 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: BRAKE DISCS – BMW 1 HATCHBACK (E81). TOOLS YOU MIGHT NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Brake caliper guide pins grease
- Copper grease
- Sealant
- Combination spanner #13
- Combination spanner #15
- Drive socket # 16
- HEX bit No.H6.
- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Brake caliper wind back tool
- Flat Screwdriver
- Crow bar
- Wheel chock

**Buy tools**

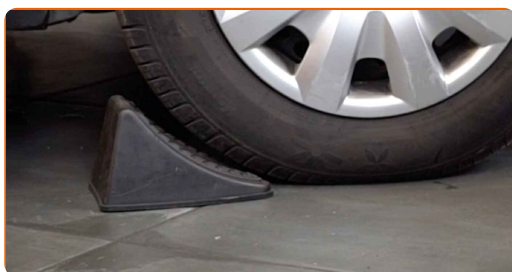
### AUTODOC recommends:

- Replace the brake disks on the car BMW 1 Hatchback (E81) in complete set for each axis. Regardless of the state of components. This will ensure even braking.
- The replacement procedure is identical for both brake disks on the same axle.
- When changing the brake discs, always replace the brake pads.
- Please note: all work on the car – BMW 1 Hatchback (E81) – should be done with the engine switched off.

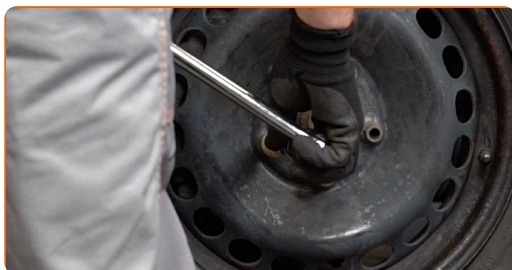
## CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

**1** Open the bonnet. Unscrew the brake fluid reservoir cap.

**2** Secure the wheels with chocks.



**3** Loosen the wheel mounting bolts. Use wheel impact socket #17.



**4** Raise the rear of the car and secure on supports.

5

Unscrew the wheel bolts.

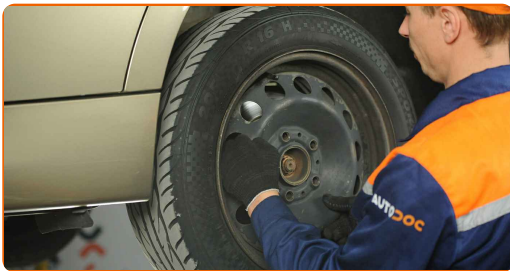


### AUTODOC recommends:

- Important! Hold the wheel while unscrewing the fastening bolts. BMW 1 Hatchback (E81)

6

Remove the wheel.

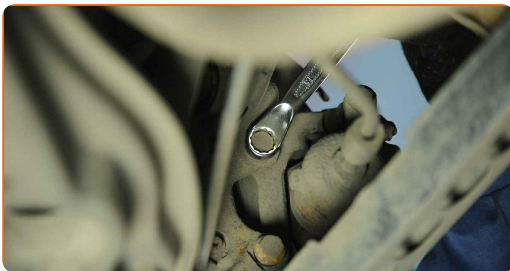


7

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

8

Unscrew the brake caliper fastening. Use a combination spanner #13. Use a combination spanner #15.

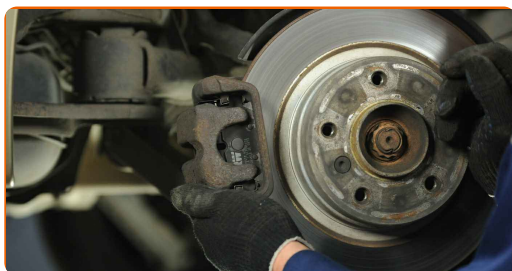


9

Spread the brake pads. Use a crowbar.

10

Remove the brake caliper.

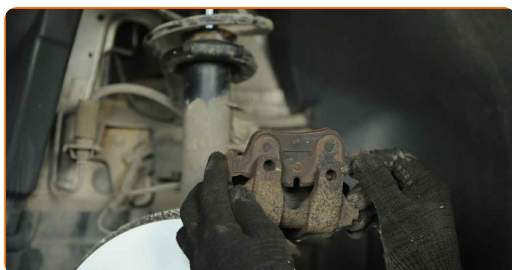


Replacement: brake discs – BMW 1 Hatchback (E81). AUTODOC recommends:

- 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

Remove the brake pads. Use a flat screwdriver.



12

Remove the brake pads retaining clips. Use a flat screwdriver.

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



- 14** Unscrew the caliper bracket fastening. Use a drive socket #16. Use a ratchet wrench.



- 15** Remove the fastening bolts (2 pieces).

- 16** Remove the caliper bracket.



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

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





**19** Remove the brake disc.



**20** Clean the hub. Use a wire brush. Treat the contacting surface. Use copper grease.



**21** Install the brake disc.



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



23

Clean the brake caliper bracket from dirt and dust. Use a wire brush. Use a brake cleaner.

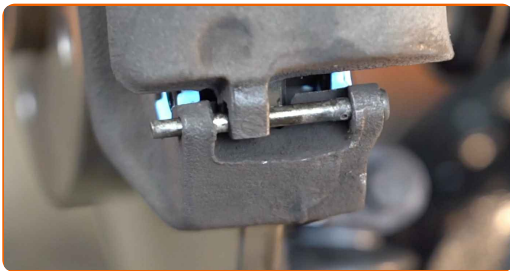


### AUTODOC recommends:

- Replacement: brake discs – BMW 1 Hatchback (E81). After applying the spray, wait a few minutes.

24

Remove the guide pins from the brake caliper.



25

Clean the brake caliper guide pins. Use a brake cleaner.

### Replacement: brake discs – BMW 1 Hatchback (E81). Tip from AUTODOC:

- After applying the spray, wait a few minutes.

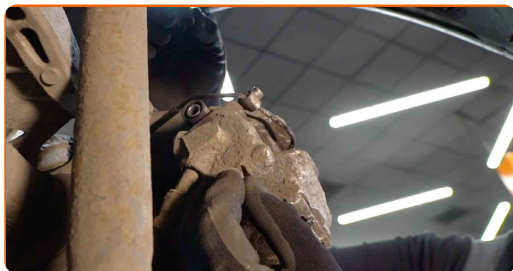
26

Treat the brake caliper guide pins. Use the brake caliper guide pin grease.



27

Screw in the guide pins.



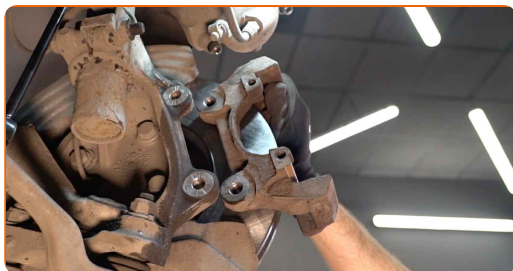
28

Treat the fastening bolts. Use a wire brush. Use a sealant.



29

Install the brake caliper bracket.



30

Install the fastening bolts (2 pieces).

31

Tighten the brake caliper bracket. Use a drive socket #16. Use a torque wrench. Tighten it to 65 Nm torque.



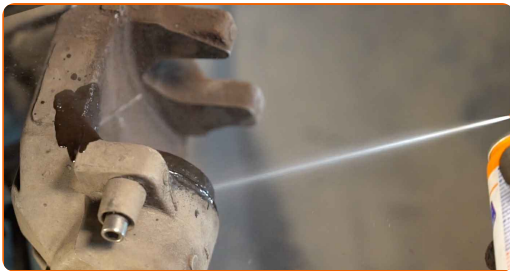
**32** Install the brake pads retaining clips.



**33** Install the brake pads. Use a flat screwdriver.



**34** Treat the brake caliper piston. Use a brake cleaner.



### AUTODOC recommends:

- Replacement: brake discs – BMW 1 Hatchback (E81). After applying the spray, wait a few minutes.

**35** Press in the brake caliper piston. Use brake caliper wind back tool.

