









# i Important!

This replacement procedure can be used for:

BMW 3 Saloon (E90) 320i 2.0, BMW 3 Saloon (E90) 318d 2.0, BMW 1 Hatchback (E81) 118i 2.0, BMW 1 Hatchback (E81) 120i 2.0, BMW 3 Saloon (E90) 316i 1.6, BMW 3 Saloon (E90) 316d 2.0, BMW 3 Coupe (E92) 316i 1.6, BMW 1 Hatchback (E87) 118i 2.0, BMW 1 Hatchback (E87) 120i 2.0

The steps may slightly vary depending on the car design.

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# REPLACEMENT: BRAKE DISCS – BMW E90. 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** 

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#### **AUTODOC** recommends:

- Replace the brake disks on the car BMW E90 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 E90 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.



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



- Raise the rear of the car and secure on supports.
- Unscrew the wheel bolts.



#### **AUTODOC** recommends:

- Important! Hold the wheel while unscrewing the fastening bolts. BMW E90
- 6 Remove the wheel.



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

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



- Spread the brake pads. Use a crowbar.
- 10 Remove the brake caliper.

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# Replacement: brake discs – BMW E90. 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.

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Remove the brake pads. Use a flat screwdriver.



- Remove the brake pads retaining clips. Use a flat screwdriver.
- 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 ratchet wrench.



- Remove the fastening bolts (2 pieces).
- Remove the caliper bracket.



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- Clean the brake disc fasteners. Use a wire brush. Use WD-40 spray.
- Unscrew the brake disc fastening. Use HEX No.H6. Use a ratchet wrench.



19 Remove the brake disc.



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



21 Install the brake disc.



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



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



#### **AUTODOC** recommends:

- Replacement: brake discs BMW E90. After applying the spray, wait a few minutes.
- Remove the guide pins from the brake caliper.



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

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### Replacement: brake discs – BMW E90. Tip from AUTODOC:

- After applying the spray, wait a few minutes.
- Treat the brake caliper guide pins. Use the brake caliper guide pin grease.
- Screw in the guide pins.



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



Install the brake caliper bracket.



30 Install the fastening bolts (2 pieces).

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



Install the brake pads retaining clips.



Install the brake pads. Use a flat screwdriver.

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Treat the brake caliper piston. Use a brake cleaner.



#### **AUTODOC** recommends:

 Replacement: brake discs – BMW E90. After applying the spray, wait a few minutes.

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