





#### **VIDEO TUTORIAL**



# (i) Important!

This replacement procedure can be used for:

BMW 3 Touring (E91) 325i 3.0, BMW 3 Touring (E91) 318d 2.0, BMW 3 Saloon (E90) 318d 2.0, BMW X1 (E84) xDrive 28 i, BMW 3 Touring (E91) 318i 2.0, BMW 3 Touring (E91) 316d 2.0, BMW 3 Saloon (E90) 320d xDrive 2.0, BMW X1 (E84) sDrive 20 i, BMW X1 (E84) xDrive 20 i, BMW 1 Coupe (E82) 118d 2.0, BMW 3 Coupe (E92) 318i 2.0, BMW 3 Convertible (E93) 318i 2.0, BMW 1 Hatchback (E81) 120d 2.0, BMW 3 Saloon (E90) 320i 2.0, BMW 3 Saloon (E90) 325i 2.5, (+71)

The steps may slightly vary depending on the car design.

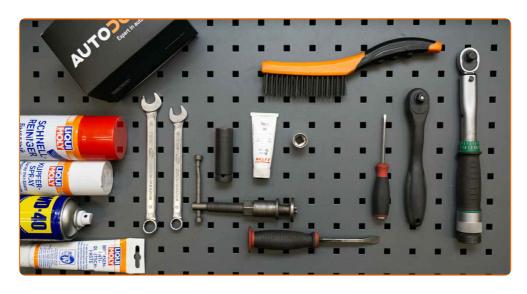
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# REPLACEMENT: BRAKE PADS – BMW E90. TOOLS YOU MIGHT NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Anti-squeal paste
- Copper grease
- Combination spanner #13
- Combination spanner #15

- Drive socket # 13
- Wheel impact socket #17
- Torque wrench
- Brake caliper wind back tool
- Flat Screwdriver
- Crow bar
- Wheel chock

**BUY TOOLS** 

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## Replacement: brake pads – BMW E90. AUTODOC recommends:

- Perform the replacement of brake pads in complete set for each axis. This
  provides effective braking.
- The replacement procedure is identical for all brake pads on the same axle.
- 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.



3

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



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



#### **AUTODOC** recommends:

- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts.
   BMW E90
- Remove the wheel.



- Clean the brake caliper fasteners. Use a wire brush. Use WD-40 spray.
- Unscrew the brake caliper fastening. Use a combination spanner #13. Use a combination spanner #15.



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Spread the brake pads. Use a crowbar.



10 Remove the brake caliper.



#### Replacement: brake pads – BMW E90. AUTODOC experts 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.

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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 from dirt and dust. Use a wire brush. Use a brake cleaner.



#### AUTODOC recommends:

- Replacement: brake pads BMW E90. After applying the spray, wait a few minutes.
- 14 Install the brake pads retaining clips.

13



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Treat the brake pads in the area where their surface comes into contact with the brake caliper bracket. Use antisqueal paste.



### Replacement: brake pads – BMW E90. AUTODOC recommends:

• Make sure the disc surface is clean before installing the pads.

16 Install new brake pads.

17



# Replacement: brake pads – BMW E90. Tip:

• Make sure the pads are installed with linings facing the disc.

Treat the brake caliper piston. Use a brake cleaner.



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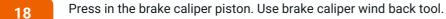






#### **AUTODOC** recommends:

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





Install the brake caliper and fix it. Use a combination spanner #15. Use a drive socket #13. Use a torque wrench. Tighten it to 35 Nm torque.



Treat the surface where the brake disc contacts the wheel rim. Use copper grease.



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Clean the brake disk surface. Use a brake cleaner.



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# Replacement: brake pads – BMW E90. Tip from AUTODOC experts:

• After applying the spray, wait a few minutes.

22

Install the wheel.



#### **AUTODOC** recommends:

 Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. BMW E90

23

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



24

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.



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# Replacement: brake pads – BMW E90. Tip:

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

25

Remove the jacks and chocks.



# Replacement: brake pads – BMW E90. Tip from AUTODOC experts:

• Check the brake fluid level in the expansion tank and refill if necessary.

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Tighten the brake fluid reservoir cap. Close the hood.



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