





#### SIMILAR VIDEO TUTORIAL



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

# i Important!

This replacement procedure can be used for: BMW 3 Touring (E91) 316d 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

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# REPLACEMENT: BRAKE PADS – BMW 3 TOURING (E91). LIST OF THE TOOLS YOU'LL NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Anti-squeal paste
- Copper grease
- HEX bit no.H7.
- 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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#### Replacement: brake pads – BMW 3 Touring (E91). Tip from AUTODOC experts:

- 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 3 Touring (E91) should be done with the engine switched off.

#### CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

- Open the bonnet. Unscrew the brake fluid reservoir cap.
- 2 Secure the wheels with chocks.
- Loosen the wheel mounting bolts. Use wheel impact socket #17.



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



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#### **AUTODOC** recommends:

Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts.
 BMW 3 Touring (E91)





Detach the brake caliper retaining spring. Use a flat screwdriver.



Remove the dust boot caps of the brake caliper guide pins. Use a flat screwdriver.



Spread the brake pads. Use a crowbar.



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- Clean the brake caliper fasteners. Use a wire brush. Use WD-40 spray.
- Unscrew the brake caliper fastening. Use HEX No.H7. Use a ratchet wrench.



Remove the brake caliper.



#### Replacement: brake pads – BMW 3 Touring (E91). 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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13 Remove the brake pads.

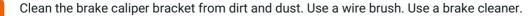
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#### Replacement: brake pads – BMW 3 Touring (E91). Tip:

 Measure the brake disc thickness. Upon reaching the wear limit the part must be replaced.





#### AUTODOC recommends:

 Replacement: brake pads – BMW 3 Touring (E91). After applying the spray, wait a few minutes.

Treat the brake caliper piston. Use a brake cleaner.



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#### **AUTODOC** recommends:

• After applying the spray, wait a few minutes.





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 3 Touring (E91). Tip:

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

18 Install new brake pads.



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### Replacement: brake pads – BMW 3 Touring (E91). AUTODOC recommends:

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





Install the dust boot caps of the brake caliper guide pins.



Install the brake caliper retaining spring. Use a flat screwdriver.



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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.



#### AUTODOC recommends:

 Replacement: brake pads – BMW 3 Touring (E91). After applying the spray, wait a few minutes.

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Install the wheel.



#### AUTODOC recommends:

• Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. BMW 3 Touring (E91)

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



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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: brake pads – BMW 3 Touring (E91). AUTODOC recommends:

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

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Remove the jacks and chocks.



## Replacement: brake pads – BMW 3 Touring (E91). Tip from AUTODOC:

• 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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