









#### **VIDEO TUTORIAL**

#### (i) Important!

This replacement procedure can be used for:

BMW 3 (E46) 330 i, BMW 3 (E46) 330 xi, BMW 3 Convertible (E46) 330 Ci, BMW 3 Coupe (E46) 330 Ci, BMW 3 Touring (E46) 330 i, BMW 3 Touring (E46) 330 xi, BMW X5 (E53) 3.0 i

The steps may slightly vary depending on the car design.

WWW.AUTODOC.CO.UK 1–25



### REPLACEMENT: BRAKE PADS – BMW X5 E53. 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 #19
- Ratchet wrench
- Torque wrench
- Brake caliper wind back tool
- Crow bar
- Wheel chock

WWW.AUTODOC.CO.UK 2–25



### Replacement: brake pads – BMW X5 E53. Tip from AUTODOC:

- 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 X5 E53 should be done with the engine switched off.

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

1



Open the bonnet.

WWW.AUTODOC.CO.UK 3–25





Remove the protective cover.

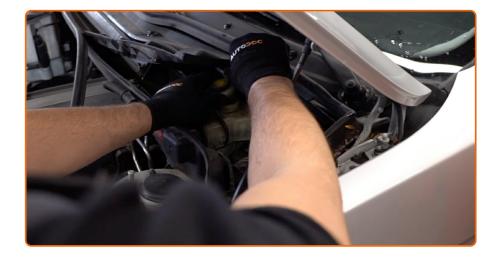
3



Remove the rubber strip.

WWW.AUTODOC.CO.UK 4–25





Unscrew the brake fluid reservoir cap.

5



Secure the wheels with chocks.

WWW.AUTODOC.CO.UK 5–25





Loosen the wheel mounting bolts. Use wheel impact socket #19.

7



Raise the rear of the car and secure on supports.

WWW.AUTODOC.CO.UK 6–25



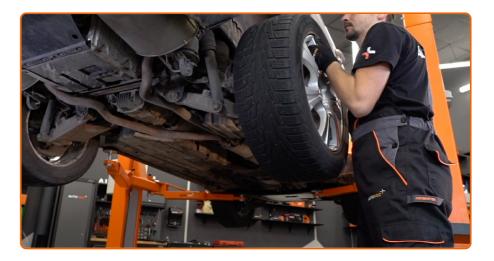


Unscrew the wheel bolts.

#### Replacement: brake pads – BMW X5 E53. Tip:

• To avoid injury, hold up the wheel when unscrewing the bolts.

9



Remove the wheel.

WWW.AUTODOC.CO.UK 7–25





Spread the brake pads. Use a crowbar.

11



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

WWW.AUTODOC.CO.UK 8–25





Unscrew the brake caliper fastening. Use HEX No.H7. Use a ratchet wrench.

13



Detach the brake caliper retaining spring. Use a crowbar.

WWW.AUTODOC.CO.UK 9–25



Remove the brake caliper.

### Replacement: brake pads – BMW X5 E53. 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.

WWW.AUTODOC.CO.UK 10–25





Remove the brake pads. Use a crowbar.

## Replacement: brake pads – BMW X5 E53. AUTODOC recommends:

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

16



Remove the connector of the brake pad wear sensor. Use a crowbar.

WWW.AUTODOC.CO.UK 11–25



#### Please note!

• Some cars are not equipped with the brake pad wear sensor.

**17** 

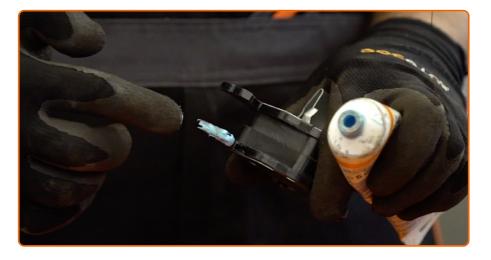


Clean the brake caliper bracket from dirt and dust. Use a wire brush. Use a brake cleaner.

#### **AUTODOC** recommends:

• Replacement: brake pads – BMW X5 E53. After applying the spray, wait a few minutes.

WWW.AUTODOC.CO.UK 12–25



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

19



Treat the back side of the new brake pads. Use anti-squeal paste.

### Replacement: brake pads – BMW X5 E53. Professionals recommend:

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

WWW.AUTODOC.CO.UK 13–25



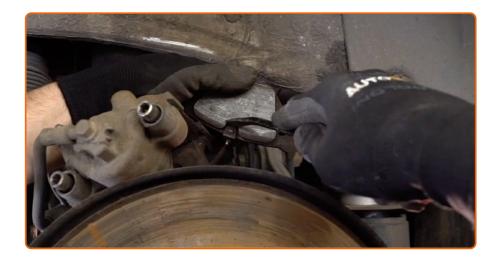


Install new brake pads.

# Replacement: brake pads – BMW X5 E53. Tip from AUTODOC:

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

21



Connect the brake pad wear sensor plug.

WWW.AUTODOC.CO.UK 14–25





Install the brake caliper and fix it. Use HEX No.H7. Use a torque wrench. Tighten it to 35 Nm torque.

23



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

WWW.AUTODOC.CO.UK 15–25



Install the brake caliper retaining spring.

25



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

WWW.AUTODOC.CO.UK 16-25





Install the wheel.

#### AUTODOC recommends:

 Important! Hold the wheel while screwing in the fastening bolts. BMW X5 E53

27



Screw in the wheel bolts. Use wheel impact socket #19.

WWW.AUTODOC.CO.UK 17–25





Lower the car and working in a cross order, tighten the wheel bolts. Use a torque wrench. Tighten it to 120 nm torque.

## Replacement: brake pads – BMW X5 E53. Tip from AUTODOC experts:

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

29



Remove the jacks and chocks.

WWW.AUTODOC.CO.UK 18–25



### Replacement: brake pads – BMW X5 E53. AUTODOC recommends:

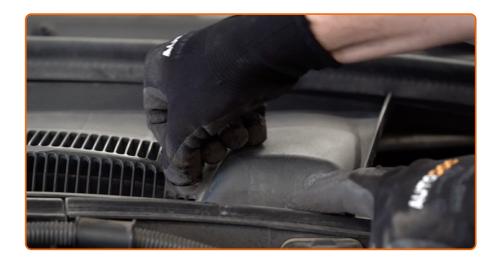
 Check the brake fluid level in the expansion tank and refill if necessary.

30



Tighten the brake fluid reservoir cap.

31



Install the protective cover.

WWW.AUTODOC.CO.UK 19–25





Install the rubber strip.

33



Close the hood.

### Replacement: brake pads – BMW X5 E53. Professionals recommend:

• Slow down smoothly for first 150-200 km after the brake pads replacement. Avoid unneccessary and sharp braking to a stop.

WWW.AUTODOC.CO.UK 20–25



## DID YOU FIND THESE INSTRUCTIONS HELPFUL?

YES

NO

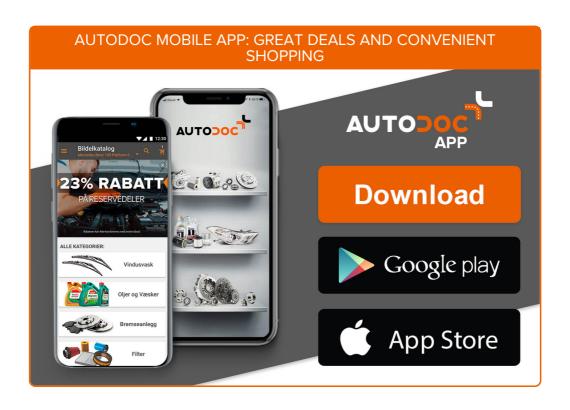


**BECOME A MEMBER OF AUTODOC CLUB!** 

WWW.AUTODOC.CO.UK 21–25



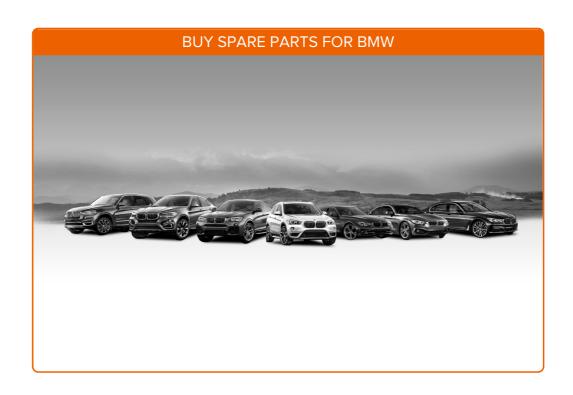
### AUTODOC — TOP QUALITY AND AFFORDABLE CAR PARTS ONLINE





WWW.AUTODOC.CO.UK 22–25

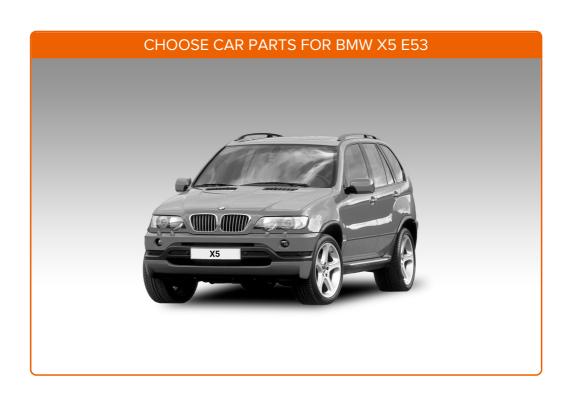






WWW.AUTODOC.CO.UK 23–25







WWW.AUTODOC.CO.UK 24–25





#### i Disclaimer:

The document contains only general recommendations that may be useful for you when you perform repair or replacement work. AutoDoc shall not be liable for any loss, injury, damage of property occurring in the repair or replacement process due to incorrect use or misinterpretation of the provided information.

AutoDoc shall not be liable for any possible mistakes and uncertainties in this guide. The information provided is for information purposes only and cannot replace advice from specialists

AutoDoc shall not be liable for incorrect or hazardous usage of equipment, tools and car parts. AutoDoc strongly recommends to be careful and observe the safety rules when performing repair or replacement works. Remember: usage of low quality auto parts does not guarantee you the appropriate level of road safety.

© Copyright 2018 – All the contents of this website, in particular texts, photographs and graphics, are protected by copyright. All rights, including reproduction, publication, editing and translation rights, are reserved by Autodoc GmbH.

WWW.AUTODOC.CO.UK 25–25