# **+** AUTODOC CLUB

How to change rear brake caliper on **BMW X5 E53** – replacement guide







## **VIDEO TUTORIAL**



## i Important!

This replacement procedure can be used for: BMW X5 (E53) 3.0 d, BMW X5 (E53) 3.0 i

The steps may slightly vary depending on the car design.

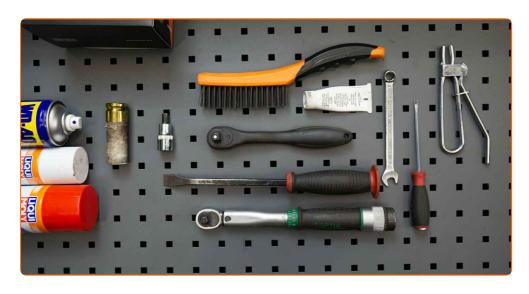
CLUB.AUTODOC.CO.UK 1–17







## REPLACEMENT: BRAKE CALIPER – BMW X5 E53. TOOLS YOU NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Brake caliper guide pins grease
- HEX bit no.H7.
- Flare nut spanner №11
- Wheel impact socket #17

- Ratchet wrench
- Torque wrench
- Flat Screwdriver
- Crow bar
- Brake hose clip
- Brake bleeder kit
- Wheel chock

**BUY TOOLS** 

CLUB.AUTODOC.CO.UK 2-17







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

- The replacement procedure is identical for the left and right brake calipers on the same axle.
- All work should be done with the engine stopped.

## REPLACEMENT: BRAKE CALIPER – BMW X5 E53. USE THE FOLLOWING PROCEDURE:

1

3

Open the bonnet. Unscrew the brake fluid reservoir cap.



Secure the wheels with chocks.



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



CLUB.AUTODOC.CO.UK 3-17







- A 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 X5 E53
- Remove the wheel.



7.1 Detach the brake caliper retaining spring.



CLUB.AUTODOC.CO.UK 4-17







7.2 Use a flat screwdriver.



Disconnect the brake pad wear sensor cable.



#### Please note!

- Some cars are not equipped with the brake pad wear sensor.
- Remove the dust boot caps of the brake caliper guide pins. Use a flat screwdriver.



Clean the area where the brake hose is connected to the caliper, and the guide pins area. Use a brake cleaner.



CLUB.AUTODOC.CO.UK 5-17

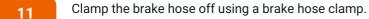






### Replacement: brake caliper – BMW X5 E53. AUTODOC recommends:

• After applying the spray, wait a few minutes.





- Loosen the brake hose fastening. Use a flare nut spanner #11.
- 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 guide pins from the brake caliper.



CLUB.AUTODOC.CO.UK 6-17







Spread the brake pads. Use a crowbar.



17 Remove the brake caliper.



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

- When replacing the brake caliper, it is recommended to check the brake hose for damages and, if necessary, to replace it with a new one.
- When replacing a brake caliper it is recommended to replace brake pads, check the state of the brake discs and replace them with new ones if necessary.
- Check the brake caliper bracket, brake caliper guide pins and boots. Clean them. Replace, if necessary.
- 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.

CLUB.AUTODOC.CO.UK 7–17







18 Remove the brake pads.



- Disconnect the brake pads wear sensor. Use a flat screwdriver.
- Unscrew the brake hose from the brake caliper. Use a flare nut spanner #11.



21 Disconnect the brake hose.



Treat the brake hose. Use a brake cleaner.

#### **AUTODOC** recommends:

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

CLUB.AUTODOC.CO.UK 8-17







23 Install and fix the brake hose into a new caliper.



Tighten the fastener connecting the brake pipe to the brake caliper. Use a flare nut spanner #11. Use a torque wrench. Tighten it to 40 Nm torque.



- Remove the brake hose clamp.
- Connect the brake pads wear sensor.



27 Install the brake pads.

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

• If going to use the old brake pads, clean them.

CLUB.AUTODOC.CO.UK 9-17







28 Install the brake caliper and fix it.



Clean the brake caliper guide pins.



Lubricate guide pins with special brake grease.

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

• If no new guide pins were supplied in a kit with the new brake calipers, use the old pins.

31 Screw in the guide pins.



CLUB.AUTODOC.CO.UK 10-17







Tighten the brake caliper fasteners. Use HEX No.H7. Use a torque wrench. Tighten it to 30 Nm torque.



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



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



- Connect the brake bleeder kit to the brake bleeder screw.
- Undo the brake bleeder screw. Use a flare nut spanner #11.



CLUB.AUTODOC.CO.UK 11-17







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



- Tighten the brake caliper bleed screw. Use a flare nut spanner #11. Use a torque wrench. Tighten it to 13 Nm torque.
- Disconnect the brake bleeder kit.



Clean dirt from the brake hose bolt. Use a brake cleaner.

Replacement: brake caliper – BMW X5 E53. AUTODOC experts recommend:

- After applying the spray, wait a few minutes.
- Connect the brake pad wear sensor cable.



CLUB.AUTODOC.CO.UK 12-17







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



Clean the brake disk surface. Use a brake cleaner.



#### **AUTODOC** recommends:

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

44

Install the wheel.



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

• To avoid injury, hold up the wheel when screwing in the fastening bolts.

CLUB.AUTODOC.CO.UK 13-17







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



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 140 nm torque.



Remove the jacks and chocks.



Replacement: brake caliper – BMW X5 E53. Professionals recommend:

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

CLUB.AUTODOC.CO.UK 14-17

48







Tighten the brake fluid reservoir cap. Close the hood.



### AUTODOC recommends:

• BMW X5 E53 – Press the brake pedal several times with the engine shut down until you feel the resistance built up.



**VIEW MORE TUTORIALS** 

CLUB.AUTODOC.CO.UK 15-17





## AUTODOC — TOP QUALITY AND AFFORDABLE CAR PARTS ONLINE



A GREAT SELECTION OF SPARE PARTS FOR YOUR CAR

**BUY SPARE PARTS FOR BMW** 

**BRAKE CALIPER: A WIDE SELECTION** 

CLUB.AUTODOC.CO.UK 16-17







#### **CHOOSE CAR PARTS FOR BMW X5 E53**

**BRAKE CALIPER FOR BMW: BUY NOW** 

BRAKE CALIPER FOR BMW X5 E53: THE BEST DEALS & OFFERS

## **① 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 2023 – 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.

CLUB.AUTODOC.CO.UK 17–17