# **+** AUTODOC CLUB

How to change front brake caliper on **BMW E46** – replacement guide







#### **VIDEO TUTORIAL**



### (i) Important!

This replacement procedure can be used for:

BMW 3 Saloon (E36) 318is 1.8, BMW 3 Coupe (E36) 318is 1.8, BMW 3 Saloon (E36) 320i 2.0, BMW 3 Coupe (E36) 320i 2.0, BMW 3 Saloon (E36) 325i 2.5, BMW 3 Coupe (E36) 325i 2.5, BMW 3 Saloon (E36) 325td 2.5, BMW 3 Saloon (E36) 325tds 2.5, BMW 3 Convertible (E36) 320i 2.0, BMW 3 Convertible (E36) 325i 2.5, BMW 3 Saloon (E36) 318tds 1.7, BMW 3 Touring (E36) 320i 2.0, BMW 3 Touring (E36) 328i 2.8, BMW 3 Touring (E36) 318tds 1.7, BMW 3 Touring (E36) 325tds 2.5, (+70)

The steps may slightly vary depending on the car design.

CLUB.AUTODOC.CO.UK 1–15







## REPLACEMENT: BRAKE CALIPER – BMW E46. LIST OF THE TOOLS YOU'LL NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #9
- Flare nut spanner #14
- HEX bit No.H7.

- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Flat Screwdriver
- Brake bleeder kit
- Crow bar
- Wheel chock

**BUY TOOLS** 

CLUB.AUTODOC.CO.UK 2-15







#### Replacement: brake caliper – BMW E46. 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 E46. TAKE THE FOLLOWING STEPS:

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.

CLUB.AUTODOC.CO.UK 3-15







Raise the front of the car and secure on supports.



5 Unscrew the wheel bolts.



## Replacement: brake caliper – BMW E46. Tip:

- To avoid injury, hold up the wheel when unscrewing the bolts.
- 6 Remove the wheel.



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



CLUB.AUTODOC.CO.UK 4-15







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



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



#### **AUTODOC** recommends:

- Replacement: brake caliper BMW E46. After applying the spray, wait a few minutes.
- Loosen the brake hose fastening. Use a flare nut spanner #14.



11

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

CLUB.AUTODOC.CO.UK 5-15







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



Spread the brake pads. Use a crowbar.



14 Remove the brake caliper.



CLUB.AUTODOC.CO.UK 6-15







#### Replacement: brake caliper – BMW E46. AUTODOC recommends:

- 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.

15

Remove the brake pads.



16

Unscrew the brake hose from the brake caliper. Use a flare nut spanner #14.



CLUB.AUTODOC.CO.UK 7-15







17 Treat the brake hose. Use a brake cleaner.



## Replacement: brake caliper – BMW E46. Tip from AUTODOC:

• After applying the spray, wait a few minutes.

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



19 Install the brake pads.



## Replacement: brake caliper – BMW E46. AUTODOC experts recommend:

- If going to use the old brake pads, clean them.
- Use a wire brush.

CLUB.AUTODOC.CO.UK 8-15







Install the brake caliper and fix it. 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.



Undo the brake bleeder screw. Use a combination spanner #9.



Connect the brake bleeder kit to the brake bleeder screw.



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



CLUB.AUTODOC.CO.UK 9-15







- Disconnect the brake bleeder kit.
- Tighten the brake caliper bleed screw. Use a combination spanner #9. Use a torque wrench. Tighten it to 10 Nm torque.



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



## Replacement: brake caliper – BMW E46. Tip:

- After applying the spray, wait a few minutes.
- Install the brake caliper retaining spring. Use a flat screwdriver.



CLUB.AUTODOC.CO.UK 10-15







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



Clean the brake disk surface. Use a brake cleaner.



Install the wheel.



Replacement: brake caliper – BMW E46. Tip from AUTODOC experts:

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

CLUB.AUTODOC.CO.UK 11-15







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 120 Nm torque.



Remove the jacks and chocks.



#### **AUTODOC** recommends:

• Important! Replacement: brake caliper – BMW E46. Check the brake fluid level in the reservoir and top up if necessary.

CLUB.AUTODOC.CO.UK 12-15







36

Tighten the brake fluid reservoir cap. Close the hood.







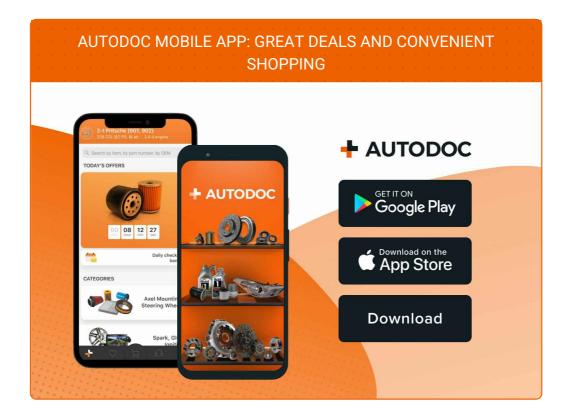
**VIEW MORE TUTORIALS** 

13-15 CLUB.AUTODOC.CO.UK





# 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 14-15







**BRAKE CALIPER FOR BMW: BUY NOW** 

BRAKE CALIPER FOR BMW E46: THE BEST DEALS & OFFERS

## **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 2022 – 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 15-15