



How to change front  
brake discs on  
**MERCEDES-BENZ V-**  
**Class (W447) –**  
replacement guide

**SIMILAR VIDEO TUTORIAL**



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

** Important!**

This replacement procedure can be used for:

- MERCEDES-BENZ V-Class (W447) V 200 CDI / d (447.811, 447.813, 447.815),
- MERCEDES-BENZ V-Class (W447) V 220 CDI / d (447.811, 447.813, 447.815),
- MERCEDES-BENZ V-Class (W447) V 250 BlueTEC / d (447.811, 447.813, 447.815),
- MERCEDES-BENZ V-Class (W447) V 250 BlueTEC / d 4-matic, MERCEDES-BENZ V-Class (W447) V 200 CDI / d 4-matic, MERCEDES-BENZ V-Class (W447) V 250 (447.813, 447.815), MERCEDES-BENZ V-Class (W447) V 220 CDI / d 4-matic (447811, 447813), MERCEDES-BENZ V-Class (W447) V 300 CDI / d (447811, 447813, 447815)

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: MERCEDES-BENZ VITO Bus (W639) 115 CDI 2.2

**REPLACEMENT: BRAKE DISCS – MERCEDES-BENZ V-CLASS (W447). TOOLS YOU NEED:**



- Wire brush
- Nylon cleaning brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Torque wrench
- Torx bit T30
- HEX bit no.H6.
- Drive socket # 21
- Wheel impact socket #17
- Ratchet wrench
- Flat Screwdriver
- Brake caliper wind back tool
- Round-nose pliers
- Crow bar
- Wheel chock

**Buy tools**

Replacement: brake discs – MERCEDES-BENZ V-Class (W447). AUTODOC experts recommend:

- The replacement procedure is identical for both brake disks on the same axle.
- Replace the brake disks on the car MERCEDES-BENZ V-Class (W447) in complete set for each axis. Regardless of the state of components. This will ensure even braking.
- When changing the brake discs, always replace the brake pads.
- Please note: all work on the car – MERCEDES-BENZ V-Class (W447) – 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.



**4** Raise the front of the car and secure on supports.

**5** Unscrew the wheel bolts.



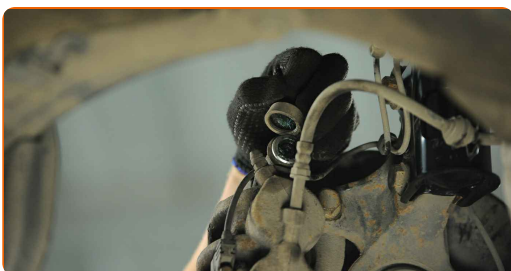
Replacement: brake discs – MERCEDES-BENZ V-Class (W447). Tip:

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

**6** Remove the wheel.

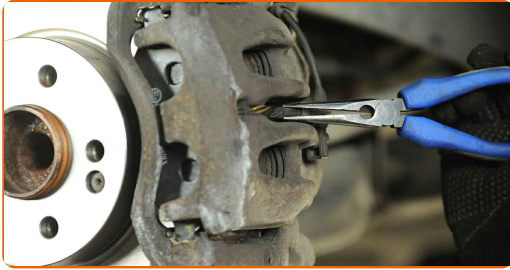


**7** Remove the dust boot caps of the brake caliper guide pins.



8

Disconnect the brake pad wear sensor plug. Use round-nose pliers.

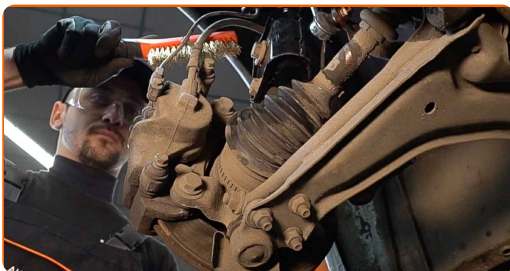


Please note!

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

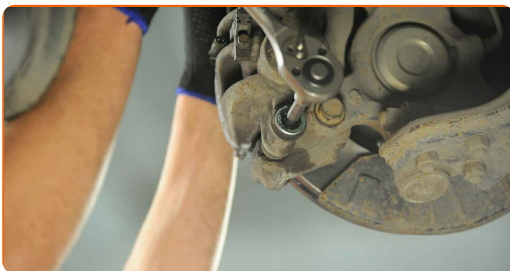
9

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



10

Unscrew the brake caliper fastening. Use HEX No.H6. Use a ratchet wrench.



11

Remove the guide pins from the brake caliper.

**12**

Spread the brake pads. Use a crowbar.

**13**

Remove the brake caliper.

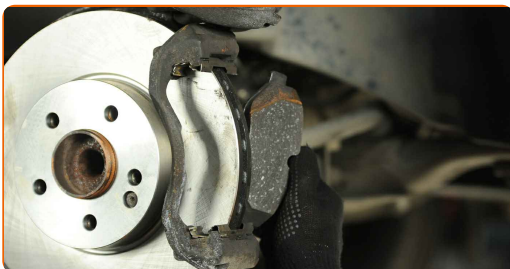


**Replacement: brake discs – MERCEDES-BENZ V-Class (W447). AUTODOC recommends:**

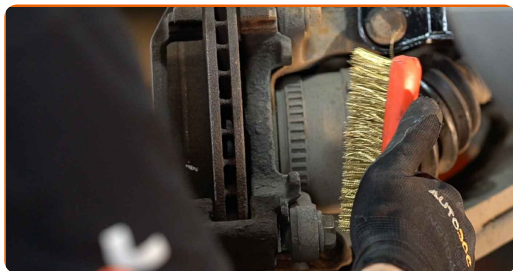
- Tie the caliper to the suspension or to the body with a wire without disconnecting from the brake hose to prevent depressurization of the brake system.
- Make sure that the brake caliper is not hanging on the brake hose.
- Don't press the brake pedal after the brake caliper has been removed. As a result, 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.

**14**

Remove the brake pads.



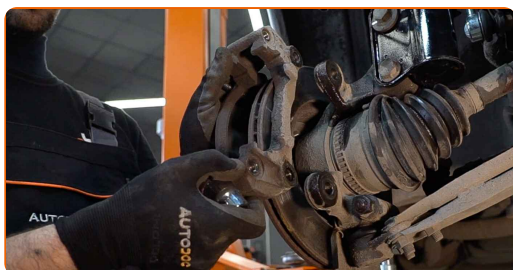
**15** Clean the brake caliper bracket fasteners. Use a wire brush. Use WD-40 spray.



**16** Unscrew the caliper bracket fastening. Use a drive socket #21. Use a ratchet wrench.

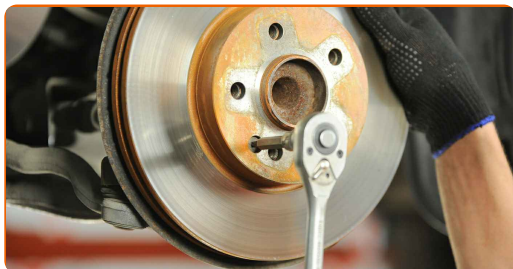


**17** Remove the caliper bracket.



**18** Clean the brake disc fastener. Use a wire brush. Use WD-40 spray.

**19** Unscrew the brake disc fastening. Use Torx T30. Use a ratchet wrench.





**20** Remove the brake disc.



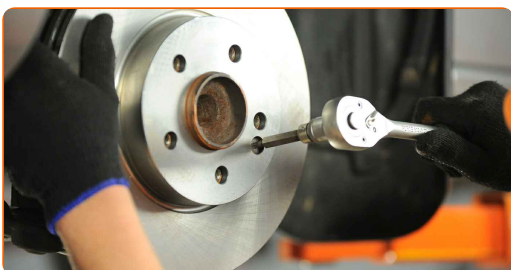
**21** Clean the hub. Use a wire brush. Treat the contacting surface. Use copper grease.



**22** Install the brake disc.

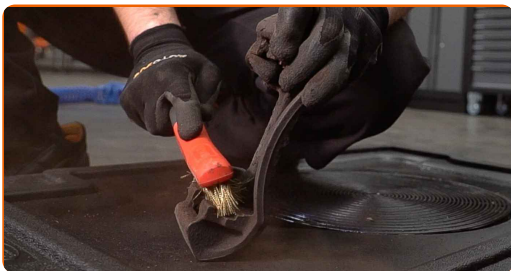


**23** Tighten the brake disc fastening. Use Torx T30. Use a torque wrench. Tighten it to 18 Nm torque.



24

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

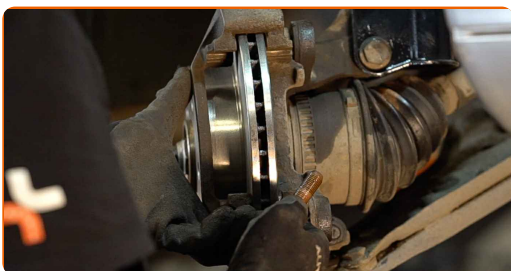


**AUTODOC recommends:**

- After applying the spray, wait a few minutes.

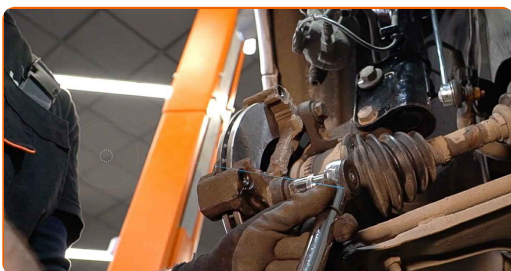
25

Install the brake caliper bracket.



26

Tighten the brake caliper bracket. Use a drive socket #21. Use a torque wrench. Tighten it to 172 Nm torque.



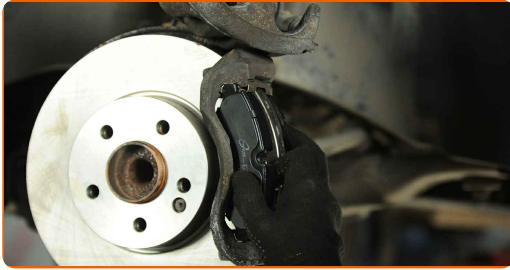
27

Remove the retaining springs of the brake pads. Use a flat screwdriver.

28

Install the retaining springs of the brake pads.

**29** Install the brake pads. Use a flat screwdriver.



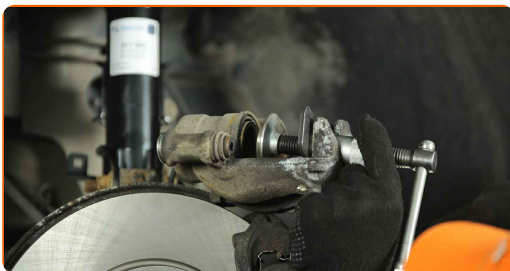
**30** Treat the brake caliper piston. Use a nylon cleaning brush. Use a brake cleaner.



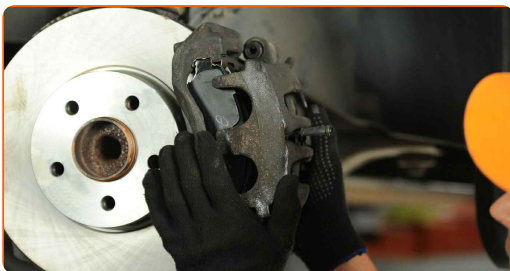
Replacement: brake discs – MERCEDES-BENZ V-Class (W447). Tip:

- After applying the spray, wait a few minutes.

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



**32** Install the brake caliper and fix it.

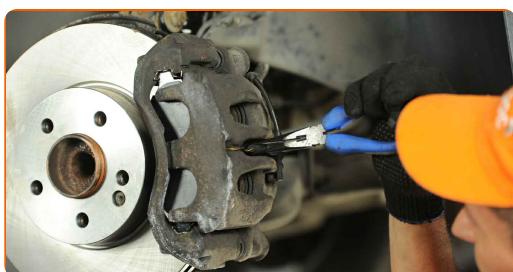


**33** Screw in the guide pins.

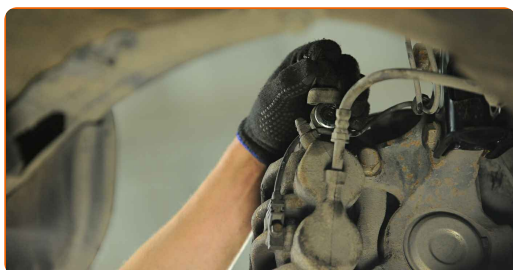
**34** Tighten the brake caliper fasteners. Use HEX No.H6. Use a torque wrench. Tighten it to 35 Nm torque.



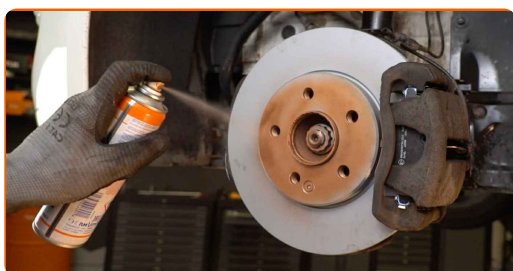
**35** Connect the brake pad wear sensor plug.



**36** Install the dust boot caps of the brake caliper guide pins. Use a flat screwdriver.



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



38

Clean the brake disk surface. Use a brake cleaner.



Replacement: brake discs – MERCEDES-BENZ V-Class (W447). Tip from AUTODOC experts:

- After applying the spray, wait a few minutes.

39

Install the wheel.



AUTODOC recommends:

- Important! Hold the wheel while screwing in the fastening bolts. MERCEDES-BENZ V-Class (W447)

40

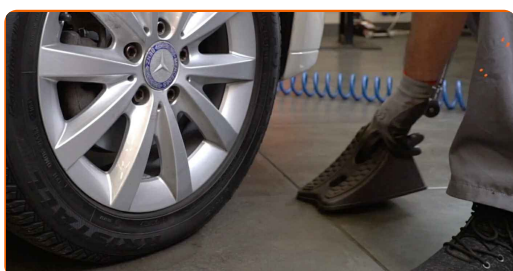
Screw in the wheel bolts. Use wheel impact socket #17.



- 41** 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 130 Nm torque.



- 42** Remove the jacks and chocks.



**Replacement: brake discs – MERCEDES-BENZ V-Class (W447). Tip:**

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

- 43** Tighten the brake fluid reservoir cap. Close the hood.

**AUTODOC recommends:**

- MERCEDES-BENZ V-Class (W447) – Without starting the engine, press the brake pedal several times until it feels firm.

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