



How to change rear
brake caliper on
MERCEDES-BENZ S-
Class Saloon (W221) –
replacement guide

SIMILAR VIDEO TUTORIAL



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

Important!

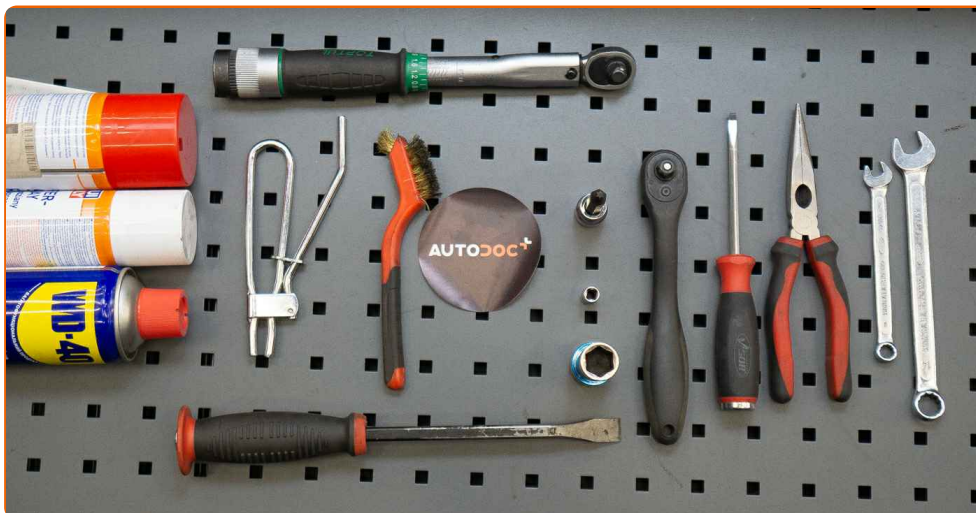
This replacement procedure can be used for:

MERCEDES-BENZ S-Class Saloon (W221) S 350 BlueTec (221.026, 221.126),
 MERCEDES-BENZ S-Class Saloon (W221) S 300 (221.054, 221.154), MERCEDES-
 BENZ S-Class Saloon (W221) S 320 CDI 4-matic (221.080, 221.180), MERCEDES-
 BENZ S-Class Saloon (W221) S 350 CDI 4-matic (221.080, 221.081), MERCEDES-
 BENZ S-Class Saloon (W221) S 350 CDI 4-matic (221.080, 221.180)

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 E-Class Saloon (W211) E 220 CDI (211.006)

REPLACEMENT: BRAKE CALIPER – MERCEDES-BENZ S-CLASS SALOON (W221). TOOLS YOU NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Flare nut spanner №14
- Combination spanner #10
- Drive socket # 8
- Torx bit T40
- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Flat Screwdriver
- Round-nose pliers
- Crow bar
- Brake hose clip
- Brake bleeder kit
- Wheel chock

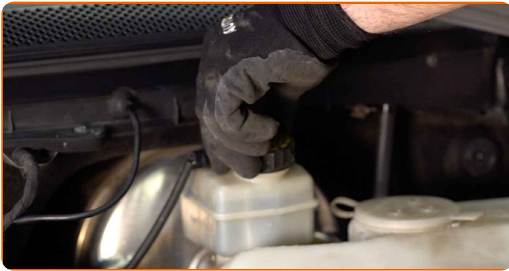
Buy tools

Replacement: brake caliper – MERCEDES-BENZ S-Class Saloon (W221).
AUTODOC experts recommend:

- 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 – MERCEDES-BENZ S-CLASS SALOON (W221). USE THE FOLLOWING PROCEDURE:

1 Open the bonnet. Unscrew the brake fluid reservoir cap.

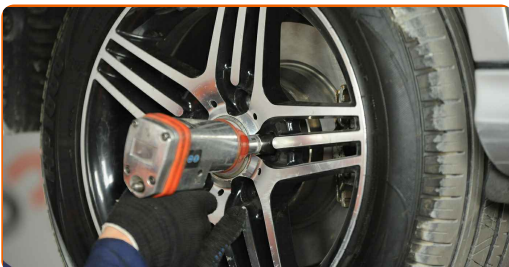


2 Secure the wheels with chocks.

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

4 Raise the rear of the car and secure on supports.

5 Unscrew the wheel bolts.

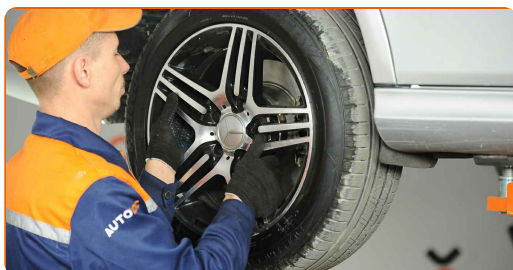


Replacement: brake caliper – MERCEDES-BENZ S-Class Saloon (W221).
AUTODOC recommends:

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

6

Remove the wheel.



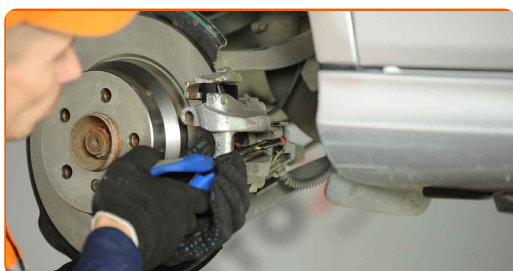
7

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



8

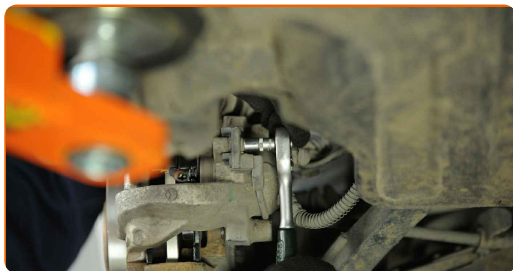
Disconnect the brake pads wear sensor. Use round-nose pliers.



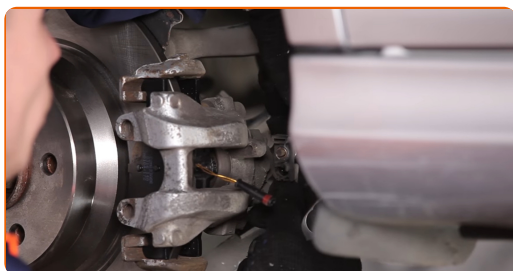
Please note!

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

9 Unscrew the ABS cable holder. Use a drive socket #8. Use a ratchet wrench.

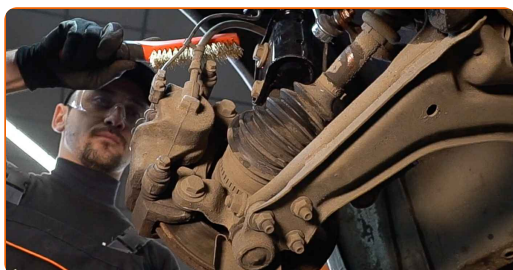


10 Detach the ABS wiring harness bracket.

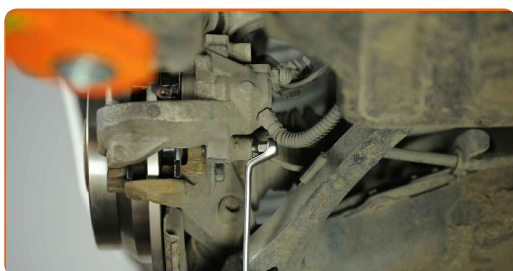


11 Remove the dust boot caps of the brake caliper guide pins.

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



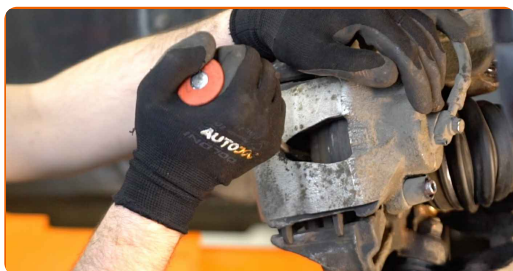
13 Unscrew the brake caliper fastening. Use Torx T40. Use a ratchet wrench.



14 Remove the guide pins from the brake caliper.



15 Spread the brake pads. Use a crowbar.

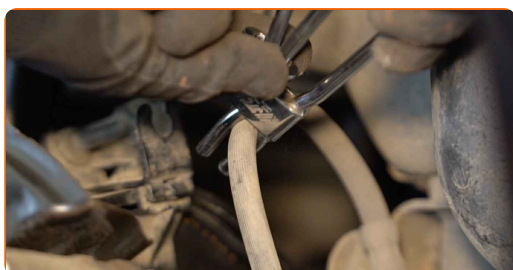


16 Clean the area where the brake hose is connected to the caliper, and the guide pins area. Use a brake cleaner.

AUTODOC recommends:

- Replacement: brake caliper – MERCEDES-BENZ S-Class Saloon (W221). After applying the spray, wait a few minutes.

17 Clamp the brake hose off using a brake hose clamp.



18

Loosen the brake hose fastening. Use a flare nut spanner #14.



19

Remove the brake caliper.



**Replacement: brake caliper – MERCEDES-BENZ S-Class Saloon (W221).
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.

20 Remove the brake pads.



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



22 Disconnect the brake hose.

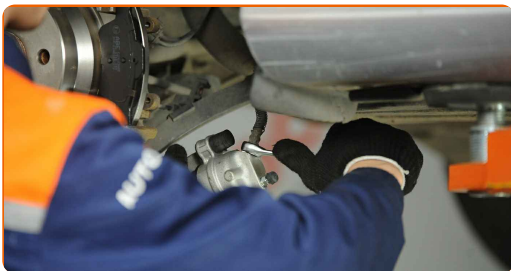


23 Treat the brake hose. Use a brake cleaner.

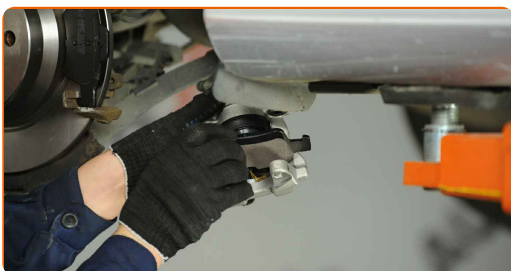
Replacement: brake caliper – MERCEDES-BENZ S-Class Saloon (W221).
AUTODOC experts recommend:

- After applying the spray, wait a few minutes.

24 Install and fix the brake hose into a new caliper. Use a flare nut spanner #14.



25 Install the brake pads.



Replacement: brake caliper – MERCEDES-BENZ S-Class Saloon (W221). Tip:

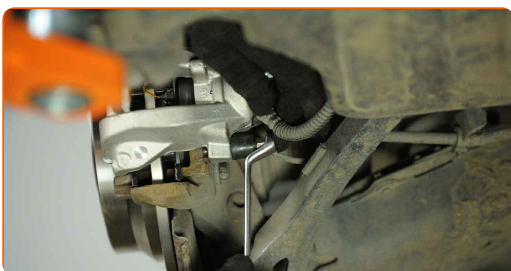
- If going to use the old brake pads, clean them.

26 Install the brake caliper and fix it.



27 Screw in the guide pins.

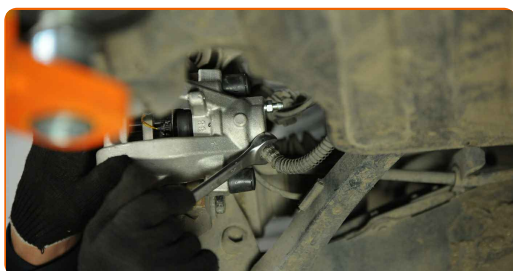
28 Tighten the brake caliper fasteners. Use Torx T40. Use a torque wrench. Tighten it to 28 Nm torque.



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



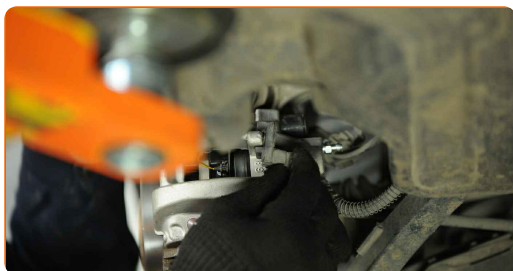
30 Tighten the fastener connecting the brake pipe to the brake caliper. Use a flare nut spanner #14. Use a torque wrench. Tighten it to 18 Nm torque.



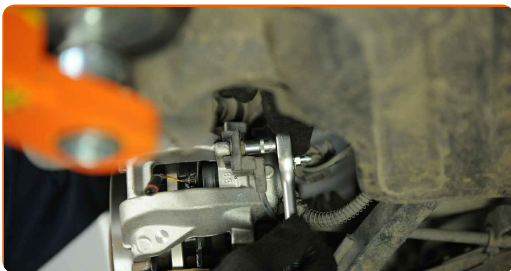
31 Remove the brake hose clamp.



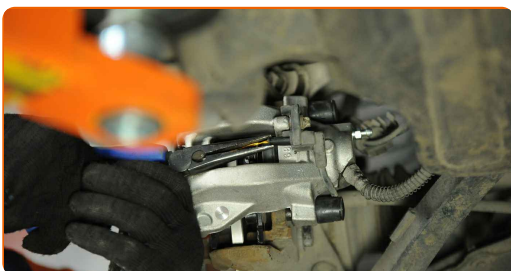
32 Fasten the ABS wiring harness bracket.



33 Tighten the ABS cable holder. Use a drive socket #8. Use a ratchet wrench.



34 Connect the brake pads wear sensor. Use round-nose pliers.

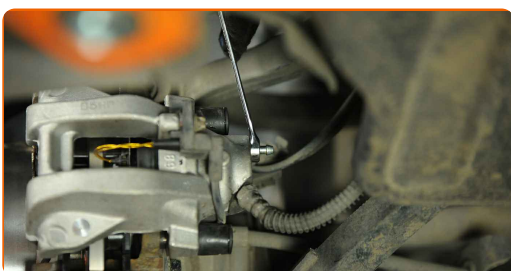


35 Install the brake caliper retaining spring. Use round-nose pliers.



36 Connect the brake bleeder kit to the brake bleeder screw.

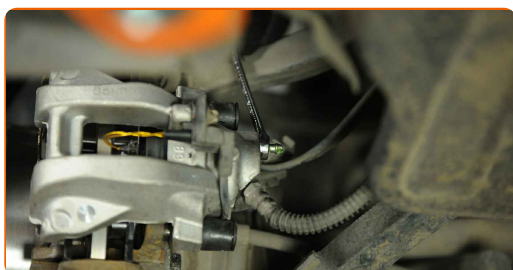
37 Undo the brake bleeder screw. Use a combination spanner #10.



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



- 39 Tighten the brake caliper bleed screw. Use a combination spanner #10. Use a torque wrench. Tighten it to 10 Nm torque.



- 40 Disconnect the brake bleeder kit.

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

AUTODOC recommends:

- After applying the spray, wait a few minutes.

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



- 43 Clean the brake disk surface. Use a brake cleaner.

Replacement: brake caliper – MERCEDES-BENZ S-Class Saloon (W221). Tip from AUTODOC experts:

- After applying the spray, wait a few minutes.

44

Install the wheel.



AUTODOC recommends:

- Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. MERCEDES-BENZ S-Class Saloon (W221)

45

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



46

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.



47

Remove the jacks and chocks.



AUTODOC recommends:

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

48

Tighten the brake fluid reservoir cap. Close the hood.

Replacement: brake caliper – MERCEDES-BENZ S-Class Saloon (W221). Tip from AUTODOC:

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

WELL DONE! 

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BRAKE CALIPER: A WIDE SELECTION

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