



How to change rear  
brake pad wear sensor 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 400 Hybrid (221.095, 221.195),  
 MERCEDES-BENZ S-Class Saloon (W221) S 250 CDI (221.003, 221.103), MERCEDES-BENZ S-Class Saloon (W221) S 350 BlueTec (221.026, 221.126), MERCEDES-BENZ S-Class Saloon (W221) S 350 BlueTEC 4-matic (221.083, 221.183), MERCEDES-BENZ S-Class Saloon (W221) S 350 CGI (221.057, 221.157), MERCEDES-BENZ S-Class Saloon (W221) S 350 CGI 4-matic (221.082, 221.182), MERCEDES-BENZ S-Class Saloon (W221) S 500 CGI (221.073, 221.173), MERCEDES-BENZ S-Class Saloon (W221) S 500 CGI 4-matic (221.094, 221.194), MERCEDES-BENZ S-Class Saloon (W221) S 65 AMG (221.179), MERCEDES-BENZ S-Class Saloon (W221) S 350 CDI, MERCEDES-BENZ S-Class Saloon (W221) S 350 (221.056, 221.156), MERCEDES-BENZ S-Class Saloon (W221) S 500 (221.071, 221.171), MERCEDES-BENZ S-Class Saloon (W221) S 320 CDI (221.022, 221.122), MERCEDES-BENZ S-Class Saloon (W221) S 450 (221.070, 221.170), MERCEDES-BENZ S-Class Saloon (W221) S 450 4-matic (221.084, 221.184), (+ 12)

The steps may slightly vary depending on the car design.

Please note that this tutorial was created based on the replacement procedure for this car part on a car with a similar design.

This tutorial was created based on the replacement procedure for a similar car part on: MERCEDES-BENZ C-Class Saloon (W204) C 220 CDI (204.008)

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



- Wire brush
- Nylon cleaning brush
- WD-40 spray
- Electronic spray
- Brake cleaner
- Anti-squeal paste
- Ceramic grease
- Torque wrench
- Torx bit E10
- HEX bit no.H7
- Wheel impact socket #17
- Ratchet wrench
- Long nose pliers
- Brake caliper wind back tool
- Crow bar
- Wheel chock

**Buy tools**

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

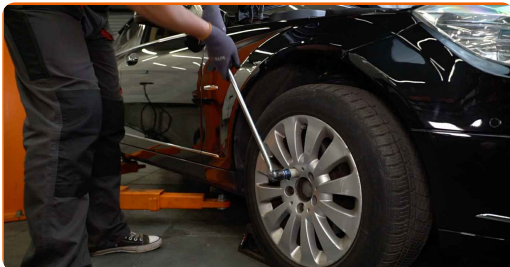
- The replacement procedure is identical for both brake pad wear sensors on the same axle.
- The wear sensors should be replaced together with the brake pads.
- Please note: all work on the car – MERCEDES-BENZ S-Class Saloon (W221) – should be done with the engine switched off.

**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 car.

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

- If you are using a jack, make sure it rests on a flat surface without any unevenness.
- Be sure to additionally secure the car with jack stands.

5

Unscrew the wheel bolts.



AUTODOC recommends:

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

6

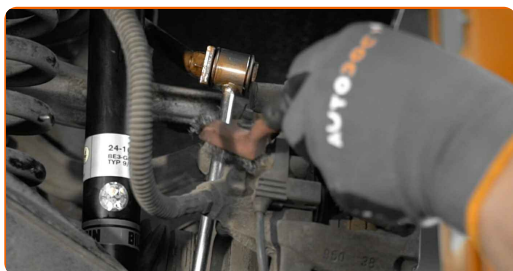
Remove the wheel.



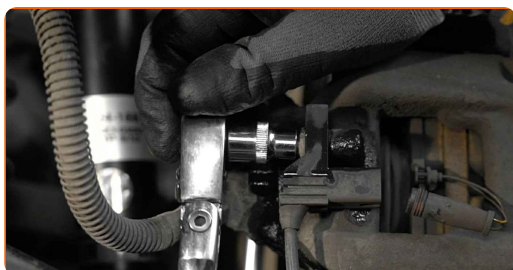
**7** Detach the connector of the brake pad wear sensor. Use long nose pliers.



**8** Clean the fasteners of the brake pad wear sensor wiring harness. Use a wire brush. Use WD-40 spray.



**9** Unscrew the fasteners of the brake pad wear sensor wiring harness. Use Torx E10. Use a ratchet wrench.



**10** Remove the fastening bolt.



**11** Detach the brake pad wear sensor wiring harness.



**12** Detach the brake caliper retaining spring. Use a crowbar.



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



**14** Unscrew the brake caliper fasteners. Use HEX No.H7. Use a ratchet wrench.



**15** Spread the brake pads. Use a crowbar.





**16**

Remove the brake caliper.



**Replacement: brake pad wear sensor – MERCEDES-BENZ S-Class Saloon (W221). Tip:**

- 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.

**17**

Remove the brake pads.



**18**

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

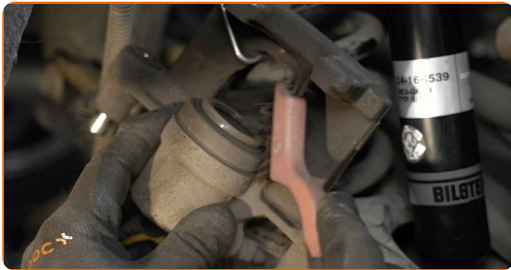


**AUTODOC recommends:**

- After applying the spray, wait a few minutes.
- Check the brake caliper bracket, brake caliper guide pins and boots. Clean them. Replace, if necessary.

**19**

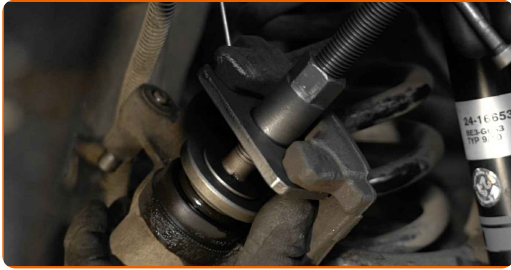
Treat the brake caliper piston. Use a nylon cleaning brush. Use a brake cleaner.



**AUTODOC recommends:**

- Replacement: brake pad wear sensor – MERCEDES-BENZ S-Class Saloon (W221). After applying the spray, wait a few minutes.
- Check the brake caliper bracket, brake caliper guide pins and boots. Clean them. Replace, if necessary.

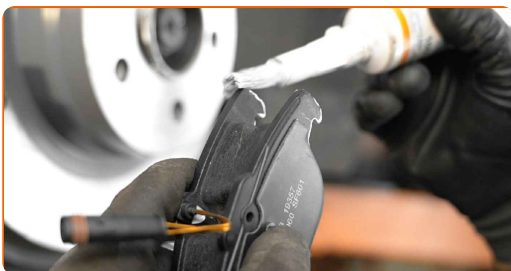
**20** Press in the brake caliper piston. Use brake caliper wind back tool.



**21** Attach the new wear sensor to the new pad.



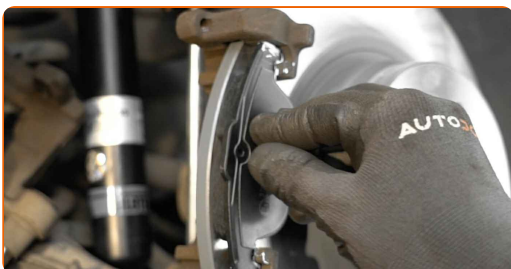
**22** Treat the brake pads in the area where their surface comes into contact with the brake caliper bracket. Use anti-squeal paste.



**AUTODOC recommends:**

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

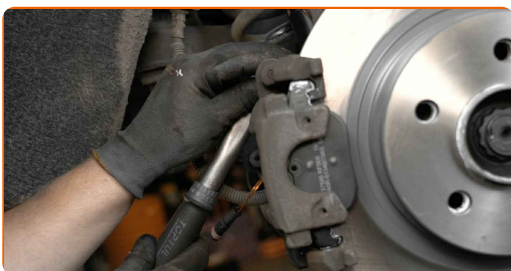
**23** Install the brake pads.



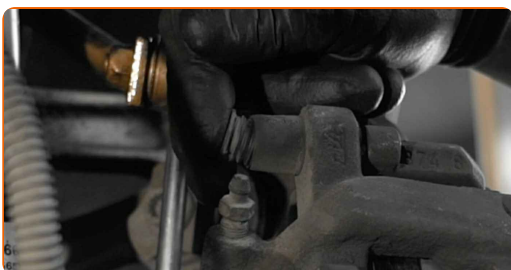
**24** Install the brake caliper and fix it.



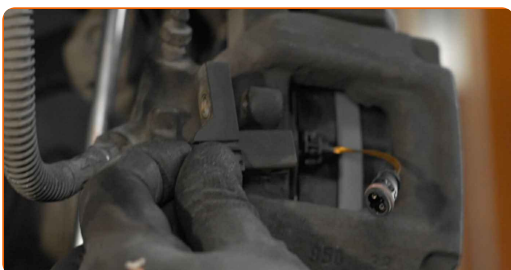
**25** Tighten the brake caliper fasteners. Use HEX No.H7. Use a torque wrench. Tighten it to 25 Nm torque.



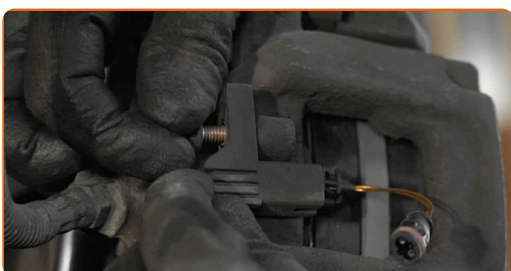
**26** Install the dust boot caps of the brake caliper guide pins.



**27** Attach the brake pad wear sensor wiring harness.



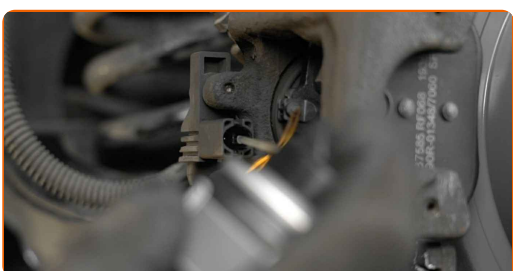
**28** Install the fastening bolt.



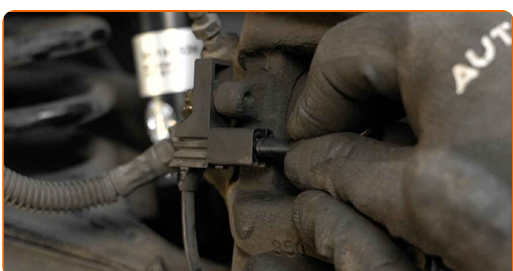
- 29 Tighten the fasteners of the brake pad wear sensor wiring harness. Use Torx E10. Use a torque wrench. Tighten it to 8 Nm torque.



- 30 Treat the brake pad wear sensor plug. Use dielectric grease.



- 31 Attach the connector of the brake pad wear sensor.



- 32 Install the brake caliper retaining spring.



- 33 Clean the wheel rim mounting seat. Use a wire brush.



34

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



35

Clean the brake disk surface. Use a brake cleaner.



**AUTODOC recommends:**

- After applying the spray, wait a few minutes.

36

Install the wheel.



**AUTODOC recommends:**

- Important! Hold the wheel while screwing in the fastening bolts. MERCEDES-BENZ S-Class Saloon (W221)

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



**38** 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.



**39** Remove the jacks and chocks.



**AUTODOC recommends:**

- Without starting the engine, press the brake pedal several times until you feel significant resistance.
- Check the brake fluid level in the expansion tank and refill if necessary.

40

Tighten the brake fluid reservoir cap. Close the hood.

**WELL DONE!** 

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