

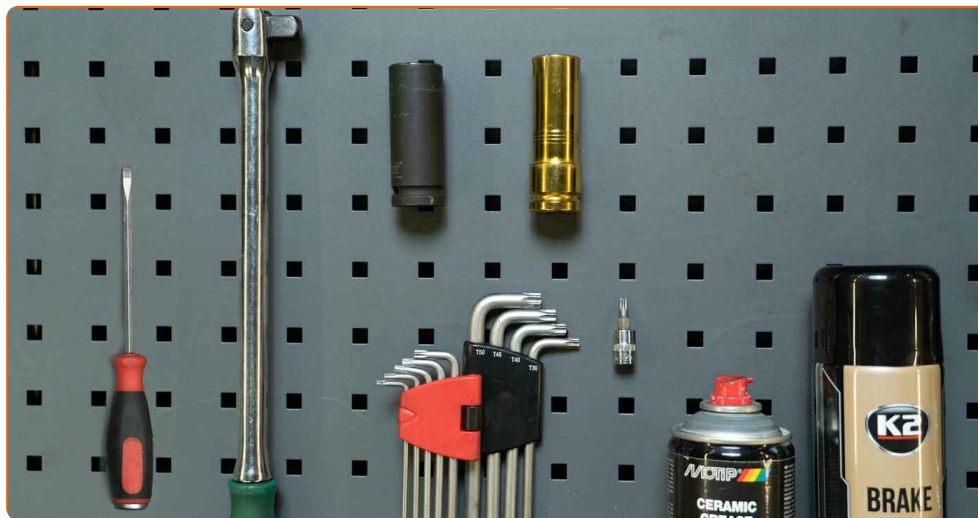


How to change wheel
cylinder on a car –
replacement tutorial

VIDEO TUTORIAL



REQUIRED TOOLS:



- Flat screwdriver
- Tap wrench
- Torx wrench
- Torx bit
- Wheel impact socket
- Impact socket
- Ceramic grease
- Brake cleaner
- Jack

BUY TOOLS

Please note!

- The wheel cylinder is the actuator in the drum brake system
- Cylinder failure is most often caused by corrosion or worn seals

- 1 To gain access to the wheel cylinder, remove the wheel and the brake drum. The replacement requires a car lift or a jack, jack stands and wheel chocks



Important!

- The brake drum can be a separate component or integrated with a wheel bearing

- 2 To remove the part with the built-in bearing, remove the fastener's cap and unscrew the drum



- 3** The brake drum is also held in place by the brake shoes. To remove the drum, the handbrake cable needs to be loosened



Please note!

- It is accessible from inside the vehicle, in the centre console area or from under the car

- 4** Use a deep drive socket to loosen the handbrake cable



Important!

- Please note that loosening the cables alone is not always enough to remove the drum easily
- For example, it can get stuck to the wheel hub surface or the brake adjuster can hold the brake shoes apart

- 5** Some vehicles have an adjuster access hole in the brake drum backing plate. This allows you to quickly access the brake shoe adjuster gear. Rotate it to bring the shoes closer together to make it easier to remove the brake drum



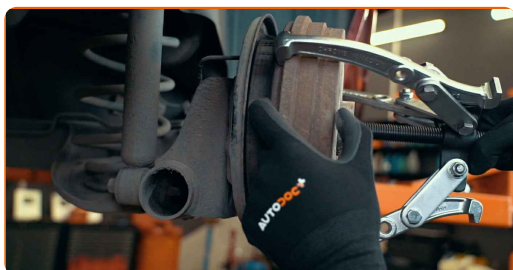
- 6** If there is no adjuster access hole, the procedure can be carried out via the wheel bolt hole



Important!

- However, if the mechanism is heavily corroded, the adjustment cannot be made
- In such cases, a slide hammer or a special puller is used for removal

- 7** If the brake shoes are still holding the brake drum in place, push them through the gap while removing the drum



AUTODOC recommends:

- If the brake shoe fastening components break, you will need a repair kit

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If the drum surface is stuck to the wheel hub, tap its outer surface with a hammer



Please note!

- Some drums have threaded service holes
- Matching bolts are screwed into them to make it easier to remove the drum

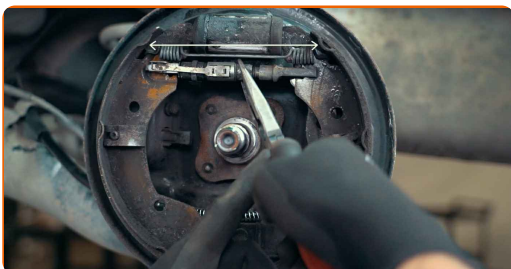
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Check whether the brake adjuster is in working condition, as well as the condition of its lever, the springs, brake shoes, and drum. Install new parts if necessary



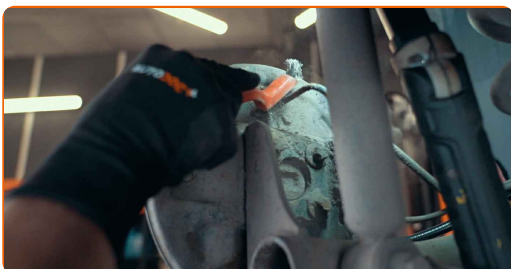
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If all the parts are in good condition, you should only need to spread the brake shoes so that the brake cylinder can be removed



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Clean the working area on the back of the backing plate



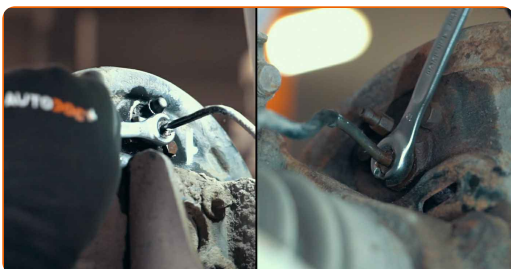
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When unscrewing the pipe, clamp off the nearest flexible connection to avoid a brake fluid leak

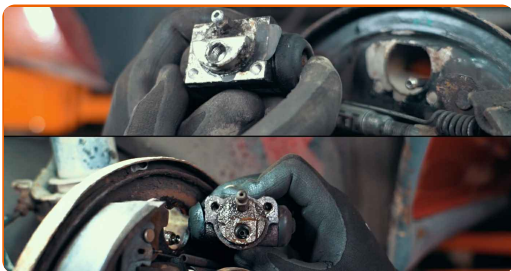


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To prevent the brake pipe from turning, loosen the connection by rotating it gradually



14 Unscrew the wheel cylinder fasteners and remove the cylinder



AUTODOC recommends:

- Check the tapered tip of the brake pipe for dirt and damage

15 Place the cap from the old cylinder on the brake pipe to prevent dirt from entering the brake line



16 Clean the wheel cylinder mounting seat



17 Remove the protective cap from the new cylinder



18

While inserting the brake pipe, place the cylinder into its mounting seat

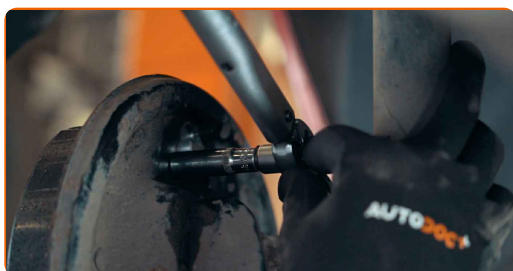


Caution!

- Make sure that the edges of the brake shoes don't damage the wheel cylinder boots

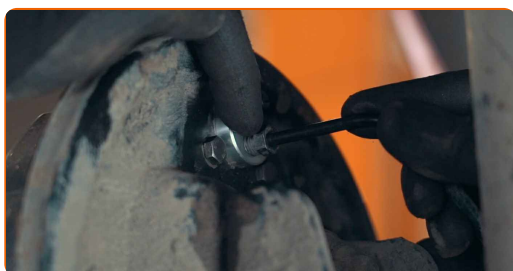
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Tighten all fasteners to the torque recommended by the car manufacturer



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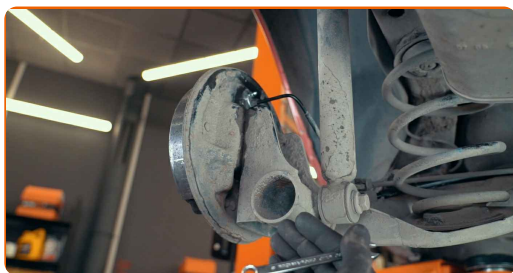
Check that the threaded part of the brake pipe fitting is in line with the thread in the mounting hole



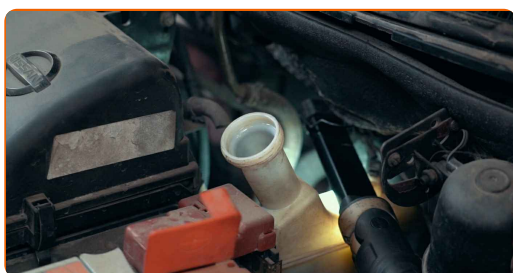
Important!

- The part should be aligned properly when it is installed

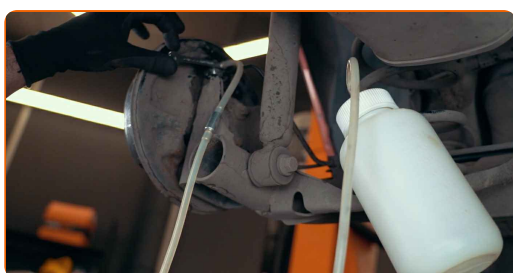
21 Bleed the brake system according to the car manufacturer's instructions



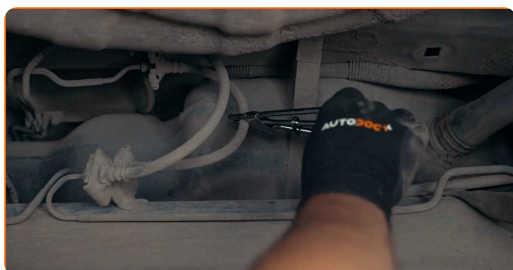
22 Check that the brake fluid level in the reservoir corresponds to the manufacturer's recommendation



23 Loosen the brake bleeder screw and attach the special equipment



24 Remove the clamp from the flexible brake hose



25 The system is bled by pumping the brake pedal Repeat the procedure until there are no air bubbles left in the fluid

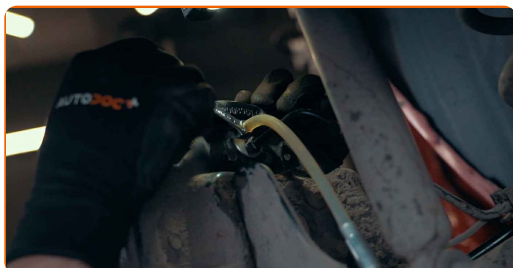


AUTODOC experts recommend:

- Always check and, if necessary, top up the fluid level in the reservoir during bleeding

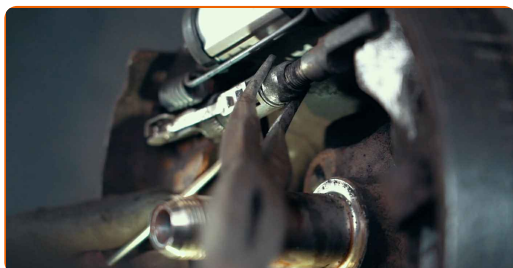
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When the procedure is complete, tighten the bleeder screw and disconnect the bleeding equipment



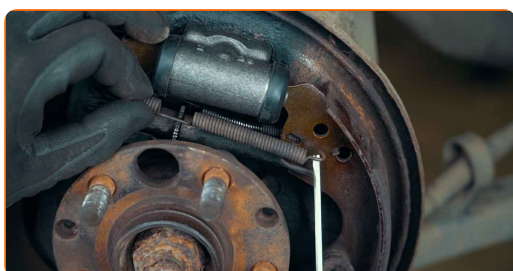
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Reset the brake adjuster to its original position



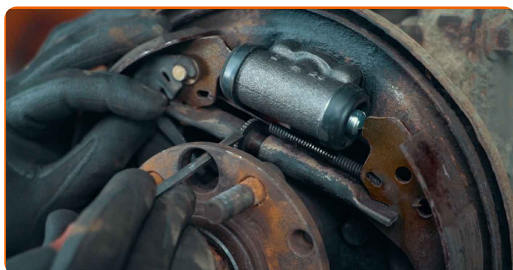
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Reassemble the unit in reverse order



29

Use the adjuster to spread the shoes slightly



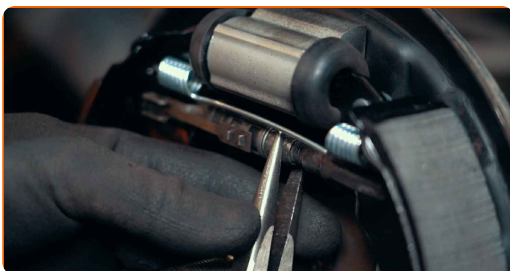
30 Install the brake drum



31 Press the brake pedal and engage and release the parking brake lever several times. This will centre the brake shoes in relation to the circumference of the drum



32 If the drum rotates too freely, spread the shoes even more

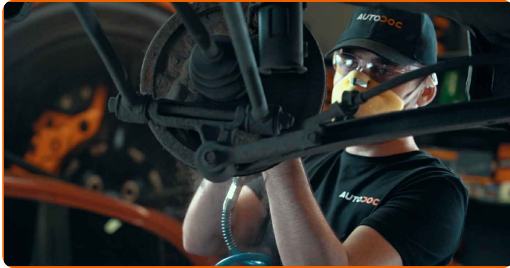


Please note!

- The brake drum should touch the shoes slightly when rotating
- You can check the accuracy of the shoe adjustment by drawing marks with a marker pen

33

Adjust the same mechanism on the other wheel of the axle



AUTODOC recommends:

- If the wheel hub bearing was removed during the replacement, use new drum fasteners

34

Treat the surface that will contact the wheel with an anti-corrosion agent



35

Make sure that there is resistance when the brake pedal is pushed



36

Check the brake fluid level in the reservoir and top it up if necessary



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