



INSTRUCTIONS

Bleed kit



SUITABLE FOR SHIMANO BREAKS

Thank you for your purchase!
We hope you like our bleeding kit.

In the following we want to give you a few tips and tricks for the perfect bleeding result. If you still have questions or problems, please send us an email: SL@salelab.de, call us or write a WhatsApp to +49 (0) 157 34295097.

We are looking forward to your feedback!
Your Borgen support team



Contents overview:

- | | |
|--------------------|---------------------|
| 1. syringes | 6. bleed block |
| 2. hose with clamp | 7. retaining rubber |
| 3. funnel | 8. velcro tape |
| 4. adapter | 9. hexagon socket |
| 5. adapter funnel | 10. mineral oil |

**You can also watch our video instructions online
look at:**

www.borgen-outdoor.de



How to succeed at bleeding with the Borgen bleeding kit quickly and simple:

To make sure that there's no dirt in the system you should clean the **brake handle and brake calliper**.

It is also beneficial to have a clean underlay for placing the tools and the bleeding utensils.

While bleeding it can quickly come to an overflow / leakage of mineral oil. Therefore, you should always have a clean cloth ready to hand.

If mineral oil drops on parts of your bike please clean it with isopropyl alcohol or spiritus (no brake cleaner or similar use since it could damage the lacquer of your bike).

It's best to put the bike in a repair stand. We recommend wearing protective gloves to avoid skin irritation.

After bleeding clean the syringes, adapters, funnel and hoses, to be able to reuse them.

TIP: Check the **brake pads** before bleeding. The pressure point of the brake pads tend to change heavily when the brake pads are almost completely worn out. If your brake pads are worn out, replace them first and then check the pressure point again.

Preparation

1. clamp the wheel in a mounting **stand or use a box** to ensure that it stands securely. Bring the brake lever of the brake to be bled into an almost horizontal position so that the bleed screw is as high as possible in the system and remove the wheel.

If your brake **has a grip** width adjustment, it must be screwed completely clockwise to the outside (largest possible distance between brake lever and handlebars).

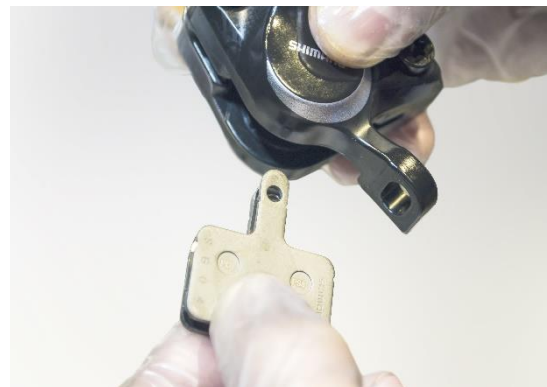
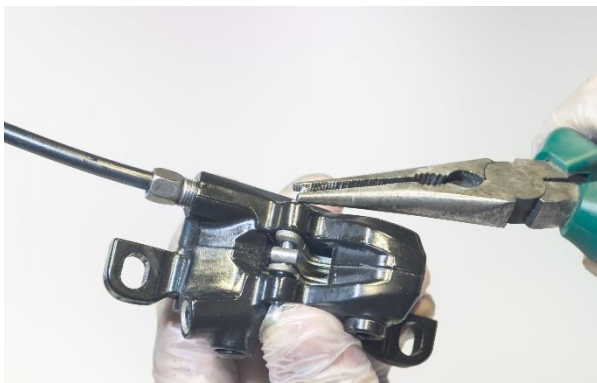
If your brake also has a "**Free Stroke**" adjustment, it must be screwed in completely (also clockwise).



2. Remove the brake pads to avoid contamination. Under **no circumstances should oil get on the brake pads** or the brake disc. The brake pads are usually secured with a split pin or pad retaining screw. The pad retaining screw can be easily unscrewed.

On some models the screw is secured by a clip. Remove this before unscrewing. The cotter pin must be straightened and pulled out with flat nose pliers (cotter pin is reusable as long as it has not been damaged).

Attention: The brake calliper was only unscrewed for the easier explanation. When bleeding the brake calliper can remain screwed to the mounting/frame.



3. The pistons in the brake calliper must now be **pushed back completely**. Use the **bleed block** (6) or a piece of wood provided for this purpose.

To avoid damage, never use metallic/sharp objects such as a knife or screwdriver.

4. Now push the bleed block or Shimano transport lock **into the brake calliper** so that the pistons are held in the end position.

Now secure the bleed block with the rubber provided. Some Shimano models require a special bleed block, here you can also simply use a 10mm Allen key and fix it with the **rubber** (7).





Important for an optimum result: Check again that the pistons are in the **end position**. If the pistons cannot be brought into the end position, the system on the expansion tank must first be opened. (See step 7)

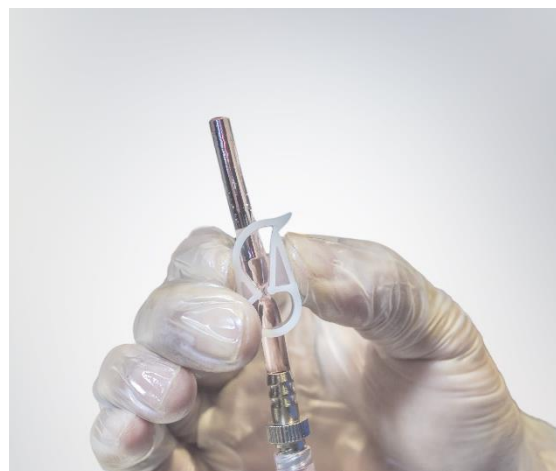
5. Prepare syringes and funnel. Turn the adapter (4) onto the syringe (1) and then put the hose with clamp (2) onto the adapter.

Since the hose should sit snugly on the adapter, it **may well be that some pressure** is required.



Now unscrew the cap completely from the bottle with the mineral oil (10) and fill the syringe with approx. 25 ml mineral oil. Close the clamp and make sure that there is no air in the syringe.

Now check the **funnel** (3) for dirt. The enclosed **adapter** (5) for extending the funnel is only required for brakes with a difficult to access bleed screw (e.g. Shimano Ultegra).

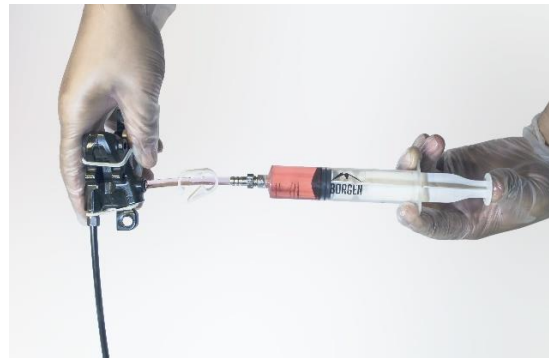


Bleeding

6. Press the hose with the filled syringe onto the bleeding nipple on the brake calliper. On most Shimano models the bleed nipple is protected by a rubber cover. Simply pull this off the nipple. Now press the hose onto the nipple. Since the hose must sit snugly, a little pressure is needed to unplug it.



To prevent the hose from slipping off the nipple again during the bleeding process, attach the syringe to the frame or fork with the Velcro tape (8) included in the scope of delivery. The tip piston for pulling must point upwards.



7. Remove the bleed screw on the reservoir on the brake lever.

Caution! (The screw is provided with a sealing/O-ring). When unscrewing, this sealing ring can get caught on the seal seat of the expansion tank. Then remove the sealing ring. Check for damage and put it back on the vent screw.

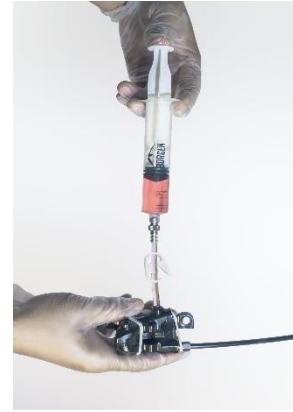


Now unscrew the funnel (do not insert the funnel plug into the funnel). It is sufficient to tighten it slightly by hand. Then fill the funnel approx. 1 cm high with mineral oil from the dosing bottle.



8. Open the hexagon head screw at the bleeding nipple of the brake calliper by a quarter turn with a 7 mm open-end wrench. On some models the bleed nipple is opened by a hexagon socket. Simply refer to the manual of your brake.

Now slowly press the piston on the bleeding syringe. The funnel will now fill with mineral oil. You will now see small **air bubbles** rising in the funnel. Be careful not to empty the syringe completely and prevent new air from being forced into the system.



Tip: If foreign bodies such as metal chips or dirt particles are visible in the oil or the colour is not pink/red, seal the funnel with funnel plug and unscrew it. Dispose of old mineral oil properly and clean the funnel. Screw the funnel back on, remove the funnel plug and pour fresh mineral oil into the funnel.

9. Slowly pull out the piston of the syringe on the brake calliper. The oil now flows from the funnel back into the syringe on the brake calliper. Now "**pump**" the oil several times from the bleeding syringe into the funnel and back again (repeat the procedure several times).

Important: As soon as air collects in the piston of the sprayer, do not press it back into the system. Therefore, always keep some residual oil in the syringe.



Tip: For an optimum bleeding result, pull the brake lever in between and release it again quickly to release air bubbles in the lever. Also carefully tap the brake line and the brake calliper, e.g. with the rubberised back of a screwdriver.

You can also easily change the position of the lever and repeat the bleeding process. This way you can be really sure to get that last bit of air out of the pipe.



10. Close the vent screw as soon as no more air bubbles rise in the funnel or syringe. To do this, close the breather screw on the brake calliper. (Attention: Observe correct tightening torque - guide value: 4-6 Nm)

Loosen the Velcro strips and carefully pull the hose off the nipple. Clean the brake calliper with a clean cloth and put the rubber cover back over the nipple.



11. After 2-3 times pulling "pumping" on the brake lever, you should again have an optimal pressure point. Then you can close the funnel with the funnel stopper and carefully unscrew the funnel.

The mineral oil must now be up to the top of the screw hole. If oil is missing, dribble a little oil until the mineral oil is at the top of the hole.

Now screw in the screw plug with sealing ring / O-ring again.

This will cause a little mineral oil to escape when screwing in. When screwing in, pay particular attention to the manufacturer's tightening torque (see brake manual) - guideline value: 0.3-0.5 Nm.



Tip: To avoid overtightening the screw without a torque wrench, clamp the hexagon socket only with 2 fingers (thumb and index finger) and tighten the screw very carefully.

After Bleeding

12. Dispose of old mineral oil from funnel and hose properly. Next, clean the brake lever, brake caliper and all parts that have come into contact with the oil with isopropyl alcohol or spirit.

(Here carefully in contact with paint, for example, frame parts)



13. Check again whether the pressure point is now tight and defined. Then remove bleed block and insert brake pads. Then insert the wheel and turn the brake lever back to the desired position. Check the function again.

As soon as the brake pulls properly again and the pressure point is defined and does not move, you can get back on the trails!

Tip: Do not overtighten the brake lever. In this way it will not break directly in a fall but will only twist. However, the brake lever should be tight enough so that it does not twist during the ride due to vibrations. Observe the correct tightening torque.

We are a small but excellent team and may not have our own call centre, but we compensate for this with even more passion.

If you have any questions, you can *always!* contact us.

Either by e-mail: SL@salelab.de or by WhatsApp/call +49(0)157 34295097

Have fun and RIDE ON!

Your Borgen Team

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