

## **INSTRUCTIONS**

Bleed kit



SUITABLE FOR MAGURA 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
- 2. Hose with clamp
- 3. Adapter
- 4. Bleed block
- 5. Retaining rubber
- 6. Velcro
- 7. Torx
- 8. Mineral oil
- 9. Instructions

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**

It's best to put the bike in a work stand or place between some boxes to make sure it stands safely.

Bring the brake lever of the brake you want to bleed in a horizontal position so that the bleed screw is the **highest point of the system!** and disassemble the corresponding wheel.

2. Push the brake pads with transport lock or possibly a piece of plastic outwards. Subsequently remove the brake pads to avoid dirt.

Under all circumstances oil isn't allowed touch the brake pads or the brake disk.



The brake pads are usually secured with a pad retaining screw.

The pad retaining screw can be easily unscrewed (see 3.).





- **3.** The pistons in the brake calliper must now be pushed completely backwards. For this, the supplied Bleed block, or a piece of wood / plastic can be used.
- **4. Vent block** or Magura transport lock should now be pushed in the calliper so that the pistons can be held in the end position.

To avoid damage **never use metallic / pointed objects** like a knife or screwdriver.

Now secure the bleed buck with the included rubber. For some Magura models a special bleed block is needed. Instead of that you can simply use a 10 mm Allen key And secure it with the secure rubber.





IMPORTANT FOR AN OPTIMAL RESULT: Check again whether the Pistons are in the right end position. If the pistons cannot be put in the right end position the system must be opened on the reservoir / EBT screw. (See step 7)

**5. Prepare syringes** (Prepare only one syringe accordingly). **Place the tube with the clamp** on the **syringe**. To achieve that, it is possible that some pressure is needed.

Now screw the cover completely from the bottle with the mineral oil and fill the syringe with approx. 25 ml mineral oil. Close the clamp and make sure that there is no air in the syringe





#### Vent

6. Open the screw of the bleeding opening on brake caliper and screw syringe with threaded adapter into the ventilation opening. Tighten slightly the wrench (max 4Nm)





To make sure that the tube won't slip during the venting process, secure the syringes with the included Velcro at the bike frame. The syringe piston for pulling must face up.



#### THERE ARE 2 PROCEDURES FOR THE BLEEDING:

- → A for brakes with EBT (Easy Bleed Technology) and
- → B without EBT (for older Magura models)

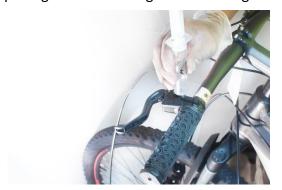
#### **PROCEDURE A**

7-A brakes with EBT

Remove the EBT screw plug (T25 Torx - included) from the brake lever.



Now insert the syringe without the piston and without the M6 socket adapter (3) into the opening. Because of the conical shape of the syringe it can easily put on the EBT opening while still being firm and airtight.



! IMPORTANT !: The included M6 nozzle adapter does not fit the opening of the EBT screw connection. Insert syringe without adapter or tube.

Screwing in the connecting piece might cause damage of the thread!



**8-A** Open the clamp on the tube and **slowly press the piston on the bleed syringe on the brake calliper**. The syringe body on the brake handle will now fill with mineral oil. You can now see that **small air bubbles** rising inside the syringe body at the brake handle.

Make sure you **don't completely empty the syringe** to avoid new air entering the system.



9-A Slowly pull out the piston of the syringe at the brake calliper. The oil now flows from the syringe body at the brake lever back into the syringe at the brake calliper. Now "pump" the oil several times from the bleeding syringe into the syringe body at the brake lever and back again (repeat procedure several times).

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

**10-A** When no more air bubbles are rising, carefully pull out the syringe body by the brake handle. Either hold your thumb on the opening at the bottom when pulling it out or insert the syringe piston back into the syringe body to prevent the oil from running out.

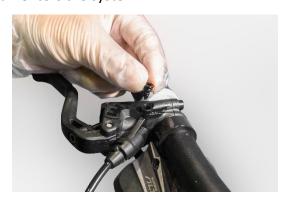
Now screw in the EBT screw - a little mineral oil will escape when screwing in. When screwing in, pay attention to the manufacturer's tightening torque (see brake manual) - guideline value: 0.5 Nm.

TIP: If there are foreign bodies such as metal chips or dirt particles in the oil or if the colour is not blue, dispose old mineral oil properly and clean the syringe. Then fill the cleaned syringe body with mineral oil and put it back into the EBT opening. For this you can attach the hose and reassemble the syringe plunger.

After filling the syringe, disconnect the hose and insert the syringe directly into the EBT opening. Then remove the syringe plunger.

TIP: For an optimal bleeding result, pull the brake lever in between and release it again quickly to release air bubbles in the lever. In addition, carefully tap the brake line and the brake caliper, e.g. with the rubberized back of a screwdriver.

TIP: Before closing, make sure that mineral oil is present up to the edge of the EBT opening. If some mineral oil is missing, press the bottom of the syringe slightly so that the mineral oil is up to the edge and no air enters the system.



**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.

#### **PROCEDURE B**

7-B without EBT (for older Magura models)

On brakes without EBT screw, bleeding takes place via the expansion tank. Important: The brake lever must be set absolutely horizontally.

Now unscrew the two screws of the expansion tank cover (A T7 Torx key is required for this). Then remove the cover with the rubber lip (bellows). Now 2/3 of the oil must be sucked out of the open oil bath.

**Attention:** 1/3 of the oil must remain in the expansion tank so that no air can enter the system.



#### → Step from here applies again for brakes with and without EBT system

**11** Now close the clamp on the hose, unscrew the M6 connecting piece adapter from the brake calliper and screw in the screw plug.

**Attention:** Observe correct tightening torque - standard value 4 Nm





#### After the bleeding process:

**12** Dispose of old mineral oil from syringes and hose properly. Then clean the brake lever, brake calliper and all parts that have

come into contact with the oil with isopropyl alcohol or spirit. (Be careful with contact with paint, e.g. frame parts)



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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. This way, if you fall, it won't break directly, it'll just 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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