

BORGEN Tools



INSTRUCTIONS MANUAL BRAKE BLEEDING KIT



SUITABLE FOR **TEKTRO/TRP** BRAKES

Thank you for your purchase!

We hope that you like using our brake bleeding kit.

In the following manual, we would like to share a few tips and tricks for obtaining perfect brake bleeding results with you.

If you have any questions or any problems arise, please write us an email at support@salelab.de, or alternatively contact us via **telephone/WhatsApp on +49 (0) 751 958 770 24**.

We would be delighted to receive your feedback!

Patrick – Borgen Founder



www.forriders.de/pages/anleitung



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Follow these steps to quickly and easily bleed your brake system using the Borgen Bleeding Kit:

To prevent dirt from getting into the system, you should clean the brake lever and the brake calliper in advance. It is also worthwhile preparing a clean surface and a clean area in which to set the tool kit and bleeding accessories. When bleeding the system, brake fluid can quickly start to overflow/leak. For this reason, you should also have a clean cloth close to hand.

Should brake fluid run onto parts of your wheel, you must clean these areas with isopropyl alcohol or white spirit (avoid using brake cleaner and the like to avoid damaging your paintwork). Ideally you should clamp the wheel in an assembly stand. We recommend wearing safety gloves to avoid skin irritation. After bleeding, the syringes, adapter and hoses should be cleaned in order that they can be reused.

PREPARATION

1. Prepare the syringes. To do so, twist the clamp hoses (2) onto the syringes (1) and then push the adapters (3) into the hoses. For TRP brakes, an adapter (4) is pushed onto one of the two hoses. Because the hose should sit all the way onto the adapter, it may be that a little force is required.



2. Ideally clamp the wheel in an assembly stand, or ensure that it is standing securely using a crate.

3. Remove the brake pads to avoid contamination. Under no circumstances should brake fluid be allowed to contaminate the brake pads or the brake discs. The brake pads are generally secured with a splint or a pad-retaining screw. The pad retaining-screw can be simply unscrewed. On some models the screw is secured with a clip. Remove this prior to unscrewing.



The splint must be straightened out with a pair of flat-nose pliers and removed (the splint is reusable, provided it has not been damaged).

4. The pistons in the brake calliper must not be pushed all the way back. To do this you can use the bleed block provided (5), a special tool or a piece of wood.



To avoid damage, under no circumstances should metallic/sharp objects such as a knife or screwdriver be used.

Push the bleed block into the brake calliper as such that the pistons are held in the end position. Now secure the bleed block using the rubber band (6) provided.



IMPORTANT FOR AN OPTIMAL RESULT: Check once more whether the pistons are in the end position. If the pistons cannot be brought to the end position, the system must first be opened at the expansion tank (see step 7).

5. Fill the syringes: now screw the lid from the bottle with the brake fluid (7), and fill the syringe with approx. 20 ml of brake fluid. Before the brake can be bled, the syringe must first be degassed, as otherwise new air will get into the brake system. Next hold the syringe vertically and carefully pull out the plunger to create a vacuum. Then let go of the plunger again, and fine gas bubbles will rise to the top of the syringe. Repeat this process several times. In order to more effectively release the gas



bubbles, tap lightly against the syringe with a screwdriver. The clamp can then be opened and the air bubbles carefully pushed out of the syringe.

BLEEDING

6. Screw the hose with the filled syringe onto the bleed nipple on the brake calliper. To do this, first loosen the bleed screw. The syringe (1) can then be screwed into the adapter (3). In the case of TRP disc brakes, use the syringe with the corresponding adapter (4).



7. Bring the brake lever of the brake to be bled to an almost vertical position, so that the bleed screw is the highest point in the system (if possible), and remove the corresponding wheel. If your brake has lever width adjustment, this must be set to a wide spacing.



Remove the brake screw on the expansion tank at the brake lever using the Torx key (8) or hexagon socket, select the correct adapter for the brake and screw on (compare the adapter and screw as described in the video).



Then connect the hose with the syringe and clamp to the adapter.



8. Now open the clamp on the bottom syringe and open the bleed screw by approx. 1/2- 3/4 turn. Hold the top syringe vertically and slowly actuate the plunger of the lower syringe with the other

hand. When doing this, make sure that approx. 10 ml of brake fluid remains in the bottom syringe, to prevent new air from getting into the system.

9. Slowly pull the **plunger of the syringe on the brake calliper** out again. The oil now flows from the top syringe back into the syringe on the brake calliper.

Now "pump" the oil several times from the bleeding syringe on the brake lever into the brake calliper syringe and back again (repeat the process several times).

IMPORTANT: When air accumulates in the syringe plunger, you must not push this back into the system. Therefore, you should always keep a little residual oil in the syringe.



TIP: For an optimal bleeding result, occasionally pull the brake lever and quickly release it again in order to release air bubbles in the lever. You can also carefully tap the brake line and the brake calliper e.g. with the rubber-coated end of a screwdriver.

You can also change the position of the lever slightly and repeat the bleeding process. This way you can really be sure that you are getting every last bit of air out of the line.



10. Close the bleed screw on the brake calliper as soon as air bubbles stop rising in the syringes. To do so, screw in the bleed screw on the brake calliper (caution: observe the correct tightening torque).



11. After "pumping" 2-3 times on the brake lever, you should once again have an optimal pressure point. You can then remove the syringe on the brake lever.



The mineral oil must now be at the top edge of the screw opening. If the oil level is too low, add a little oil until the mineral oil is filled to the top, at the hole. Now screw the sealing screw back in.



A little mineral oil will leak out as you screw the sealing screw in. Pay particular attention to the tightening torque specified by the manufacturer when screwing in (refer to the brake manual).

IMPORTANT: with TEKTRONIK brakes in particular, brake fluid can leak on account of the design. This is not a major issue, however, you should then be sure to clean all parts with isopropyl alcohol or white spirit (be careful in case of contact with paintwork, e.g. frame components)



AFTER BLEEDING

12. Dispose of any **used mineral oil** from the syringe and hose properly.

13. Check once more that the pressure point is now taut and defined. Then remove the bleed block and insert the brake pads. Next insert the wheel and turn the brake lever back to the desired position. Perform another functional test.

TIP: Do not tighten the brake lever excessively. This way it will not break immediately in the event of a fall, but will instead merely rotate. However, the brake lever should be sufficiently tight that it does not turn as a result of vibrations when cycling. Observe the correct tightening torque

Once the brakes can be pulled properly once again and the pressure point is defined and does not shift, you can hit the trails again!

If you have any questions, you can contact us at any time!

Reach us via email at support@salelab.de or by WhatsApp/telephone at +49 (0) 751 958 770 24

Have fun and ride on! Your Borgen team

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