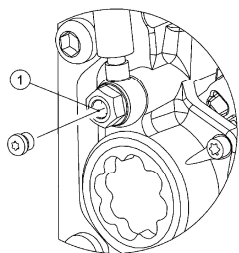




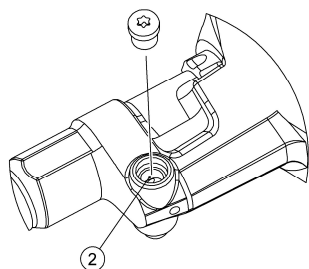
How-to Video

FSA Disc Brake 2-Stage Bleed Procedure Instructions

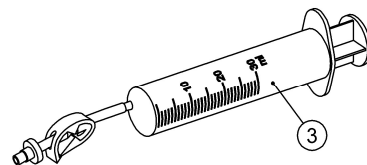
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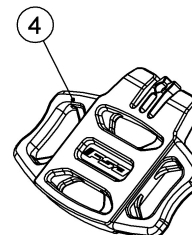
Caliper Bleed Port



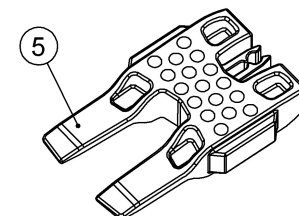
Lever Bleed Port



Bleed Syringe Assembly



Stage 1 Bleed Spacer



Stage 2 Bleed Block

Introduction

Congratulations on your Full Speed Ahead product. Please read these instructions and follow them for correct use. Failure to follow the warnings and instructions could result in damage to product not covered under warranty, damage to bicycle; or cause an accident resulting in injury or death. Since specific tools and experience are necessary for proper installation, it is recommended that the product be installed by a qualified bicycle technician. FSA & Vision assumes no responsibility for damages or injury related to improperly installed components.

Warranty

Full Speed Ahead (FSA) warrants all FSA, Gravity, Vision, Metropolis and RPM products to be free from defects in materials or workmanship for a period of two years after original purchase unless otherwise stated in the full warranty policy. The warranty is non-transferable and valid to the original purchaser of the product only. Any attempt to modify the product in any way such as drilling, grinding, and painting will void the warranty. Disc brakes have a specific warranty. This warranty can be viewed at Fullspeedahead.com. For more information on warranty policy and instructions for completing a warranty claim, check out the Full Warranty Policy found at our website.

⚠ WARNING In the event of an accident do not ride the bicycle until the brakes have been inspected by an experienced mechanic as they may be damaged even if no visible damage is apparent. If there is any visible damage, the brakes should not be used any further and replaced.

⚠ WARNING Always check braking action before every ride. Inspect brake cable for wear, corrosion, and fraying of the cable. If braking action does not feel adequate, or cable wear, corrosion, or fraying is apparent; discontinue use of the bicycle until a new cable has been installed and brake has been adjusted properly by an experienced mechanic.

⚠ WARNING Brakes are a safety item on a bicycle. Improper setup or use can result in a loss of control or an accident leading to severe injury. Be sure to wear safety glasses or goggles to protect your eyes while performing maintenance tasks such as replacing parts.

⚠ WARNING Disc brakes create a large amount of heat during use. Attempting to touch, or do any work on the Disc caliper or rotor without allowing the component to cool may result in serious injury. Always allow the disc brake to cool before attempting.

Specification

Item Number / Model Name DB004 / FSA Bleed Kit

Components

Follow the assembly order in the illustration:

- | | | |
|----------------------|-----------------------------|-----------------------|
| ① Caliper Bleed Port | ③ Bleed Syringe Assembly x2 | ⑤ Stage 2 Bleed Block |
| ② Lever Bleed Port | ④ Stage 1 Bleed Spacer | |

Tools Needed

- | | |
|-----------------------------------|-----------------------------------|
| 1. TORX wrench Set (T8 - T30) | 6. FSA brake Fluid |
| 2. Hex Wrench set (1.5mm - 5mm) | 7. Isopropyl or Denatured Alcohol |
| 3. FSA Bleed Syringes Assembly x2 | 8. Toe Strap or Rubber Band |
| 4. FSA Stage 1 Bleed Spacer | 9. Safety Glasses |
| 5. FSA Stage 2 Bleed Block | 10. Surgical Gloves |

Disc Brake Bleed Procedure

To watch a video of the complete procedure, visit:

<http://www.fullspeedahead.tv/channel/8633151/how-to-disc-brakes>

Stage 1:

1. Fill the syringes and de-gas the fluid by pulling gently on the filled plunger with the lock closed. As bubbles appear, gently, tap and depress the plunger to force them out of the syringe. (Fig. 1)
- ⚠ WARNING** Use only approved FSA Mineral Oil
2. Remove the wheel.
3. Using T10 Torx wrench, remove the pad retaining pin.
4. Remove the pads (x2) and pad spring. (Fig. 2)
5. Insert Stage 1 Bleed Spacer and retaining pin.
6. At the lever, turn the stroke adjust dial to maximum stroke (+) setting. (Fig. 3)
7. Orientate the lever so that the lever bleed port is at the highest point in the system and level to the ground.
8. Remove bleed port screw on the lever and attach the filled and degassed syringe Assembly (Fig. 4). Repeat for the caliper. Make sure that bleed fittings are tightly seated and sealed.
9. Unlock syringes and cycle fluid 10 to 20 times (Fig. 5). Ensure that all air in the system is forced out and into the syringes and the pistons are advanced against the Stage 1 Spacer.
10. Lock the lever syringe and strap lever to the handlebar
11. Pull slightly on caliper syringe plunger to evacuate any remaining air bubbles. Rotate the caliper in all directions and tap gently to release air out of the system. Lightly push or "bump" the plunger to evacuate air. (Fig. 6)

Stage 2:

1. Remove ④ Stage 1 Bleed Spacer and insert ⑤ Stage 2 thick BleedBlock. It may be necessary to wedge the bleed block between the pistons.
2. Loosen lever strap and slowly pressurize the system from the caliper syringe.
3. Lock the caliper syringe and remove from caliper.
4. Replace caliper bleed port screw. Tighten to 3 Nm. (Fig. 7)
5. Unlock lever syringe and gently pull back on the plunger to evacuate any remaining air. Rotate the lever body in all directions and tap gently to release air out of the system. (Fig. 8)
6. Depress syringe plunger to repressurize system.
7. Lock the syringe and remove from the lever.
8. Replace the lever bleed port screw. Tighten to 3Nm.
9. With brake sealed, clean entire system with Isopropylalcohol and a clean rag, including the interior of the caliper piston faces and bleed block. (Fig. 9)
10. Replace brake pads (x2), pad spring, and retaining pin. Tighten retaining pin to 0.6-0.8 Nm.



Fig. 1

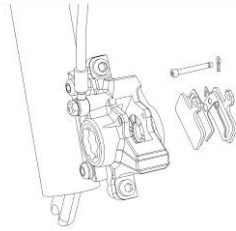


Fig. 2

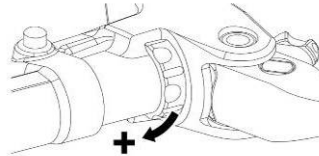


Fig. 3

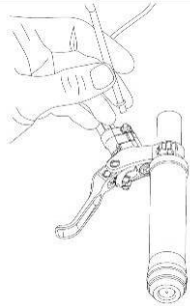


Fig. 4

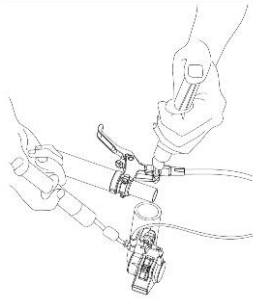


Fig. 5

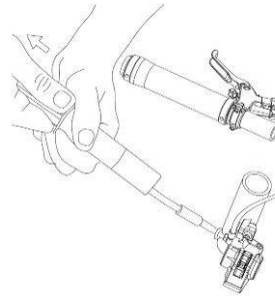


Fig. 6

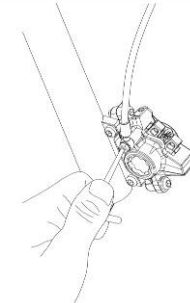


Fig. 7

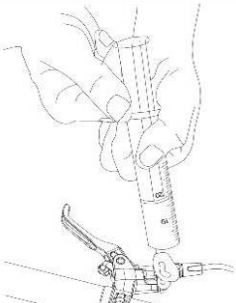


Fig. 8

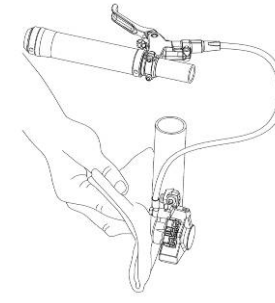


Fig. 9

Contact

If you have questions, please visit our web site technical section: <http://www.fullspeedahead.com/contact> or contact:

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Notes: Specifications of product may be changed or improved for performance. Please refer to website periodically for technical updates and revised instructions. Printed in Taiwan.

