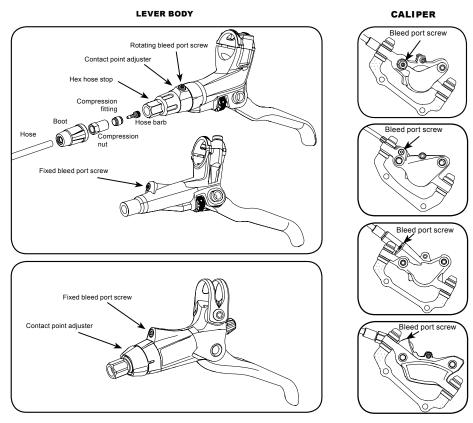


\*NEW

✔ Use a 4mm hex wrench to loosen the bleed port valve 1/4 turn.then gently retighten the bleed port Install the syringe with the bleeding edge,tool attachment into the bleed port. push it into the bleed port until you hear and feel it click in place Rotate the bleeding edge tool attachment counter clockwise one complete rotation to open the system Donot exceed two complete rotations.



# **BLEED GUIDE**

#### INTRODUCTION TO BLEEDING

When bleeding Avid brakes, keep in mind that you are simply forcing bubbles out of the system. Avid recommends that you bleed your brakes at least once a year to ensure optimal performance. If you ride frequently or in aggressive terrain, you should bleed your brakes more often.

#### **PROCEDURE OVERVIEW**

You will perform 3 basic operations when bleeding Avid brakes: 1. Bleed the hose 2. Bleed the caliper 3. Bleed the lever **FLUSH** 

When bleeding brakes, you may notice discoloration of the old fluid as it exits the system into the syringe at the lever. If the fluid is severely discolored, this indicates that the fluid is very old. In this case, bleeding the system twice in order to completely remove the old fluid is recommended.

Following this procedure gives you a perfectly bled, optimally performing brake. Enjoy!

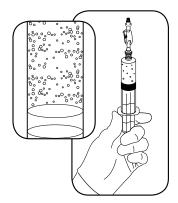
## PREPARE THE SYRINGES

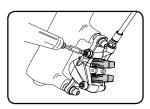
- A. Fill one syringe 1/2 full with Avid High-Performance DOT Fluid and fill the other syringe 1/4 full.
- **B.** Hold each syringe with the tip pointed up and tap the side of the syringe with your finger to bring any air bubbles to the top. Place a lint-free rag around the tip and slowly push the air bubbles out of the syringe.
- C. De-gas the fluid in the 1/2 full syringe. Removing as many of the gas bubbles as you can from the fluid now, before pushing them into the system, will make for a better bleed. Leave the syringe clamp shut and pull on the plunger. Bubbles will appear to form and enlarge. While the plunger is still pulled down, lightly tap the syringe to release the bubbles sticking to the sides and the bottom so that they can rise to the top of the fluid. When the bubbles stop forming and have all risen to the top, release the plunger, open the clamp, and carefully push the air out.

Repeat several times. You will not be able to remove all the bubbles.

#### PREPARE THE CALIPER

- A. Remove the wheel from your bike. Remove the brake pads and spreader clip from the caliper and insert the appropriate Bleed Block. This will helpprevent system overfill and keep DOT fluid from contaminating your brake pads.
- **B.** Use a T10 TORX<sup>®</sup> to remove the caliper bleed port screw from the caliper body or banjo bolt.
- **C.** Make sure the fluid in the 1/2 full syringe is pushed all the way to the tip (no air gap!), then thread it into the caliper bleed port.





# **B** PREPARE THE LEVER



#### Contact Point Adjustment

For models with Contact Point Adjustment and a rotating bleed port screw located on the contact point adjuster:

rotate the adjuster in the direction opposite the arrow until it stops, then rotate the adjuster back just enough to place the bleed screw at its highest point.

For models with Contact Point Adjustment and a fixed bleed port screw: rotate the adjuster in the direction opposite the arrow on the adjuster knob until it stops.

#### On the Lever

- A. Use a T10 TORX to remove the lever bleed port screw.
- B. Make sure the fluid in the 1/4 full syringe is pushed all the way to the tip (no air gap!),
- then thread it into the lever bleed port. It is not necessary to reposition the angle

the brake lever on the handlebar. You may have a small amount of DOT fluid drip from the bleed port screw, this is normal. Just have a lint-free rag handy to wipe off any excess after the syringe is installed.



# BLEED THE SYSTEM

#### **Bleed the Hose**

- A. Hold both syringes upright.
- B. Gently push on the caliper syringe plunger to move fluid from the caliper syringe into the lever syringe until the lever syringe is increased to 1/2 full and the caliper syringe is decreased to 1/4 full. You should see bubbles fill into the lever syringe.
- C. Close the clamp on the lever syringe.
- **D.** Pull the brake lever all the way to the bar with your finger and hold it there until instructed to release the lever in a later step. If you don't want to hold the lever with your finger, have a friend hold it or you can fasten it with a toe strap or rubber bands.

#### **Bleed the Caliper**

E. Pull out on the caliper syringe plunger to create a vacuum, then gently push in on the plunger to pressurize the system. Repeat this procedure several times, until large bubbles stop coming out of the caliper. Do not pull out too hard on the plunger or you will suck air past the plunger seal into

the fluid and create more bubbles that you will have to eliminate.

**F.** Once the large bubbles at the caliper have stopped, apply a small amount of pressure on the syringe plunger and slowly let the pressure extend the brake lever you have been holding with your finger. If you fastened the lever with a toe strap or rubber bands, remove these first but keep the lever pulled in with your the lever pulled in with your finger, then apply pressure on the syringe plunger.

You will feel the pressure at your finger on the lever, just let the fluid extend the lever back to its original position.

G. Close the clamp on the caliper syringe, then remove the syringe from the caliper and re-install the bleed port screw.

Use a lint-free rag to wipe off any excess DOT fluid that spills out as you re-install the bleed port screw.

#### **Bleed the Lever**

- H. Open the syringe clamp on the lever.
- I. Pull out on the lever syringe plunger to create a vacuum, then gently push in on plunger to pressurize the system. Squeeze and release the brake lever ten times, allowing the lever to snap back to its starting position after squeezing (this helps break loose the bubbles). Repeat this procedure several times, until large bubbles stop coming out of the lever.

Do not pull out too hard on the plunger or you will suck air past the plunger seal into the fluid and create more bubbles that you will have to eliminate.

J. Once the large bubbles at the lever have stopped, **apply a small amount of pressure on the syringe plunger.** Remove the syringe and re-install the bleed port screw.

Use a lint-free rag to wipe off any excess DOT fluid that spills out as you re-install the bleed port screw.

#### **Final Touch**

- K. Spray isopropyl alcohol onto a lint-free rag and wipe off the brake lever and caliper to remove any excess DOT fluid you may have missed before.
- L. Remove the Bleed Block from the caliper and re-install the brake pads and spreader clip.
- M. Re-install your wheel according to the manufacturer's instructions.
- N. Empty the syringes into a sealed container and dispose of the fluid properly. Remember, used DOT fluid should be recycled or disposed of in accordance to local and federal regulations.

NEVER pour DOT fluid down a sewage or drainage system or into the ground or a body of water. Do not re-use this fluid.

Do not leave the syringe hose clamps closed, this will damage the clear tubing on the syringes.

## TEST THE SYSTEM

You are almost ready to ride, but first it's a good idea to test your brakes. Pull on the lever extremely hard (as hard as you can imagine yourself pulling the lever while you're riding) several times. Make sure and look around the hose nut on the lever, and the banjo bolt on the caliper for any leaks. Make one last check of all the bolts and fittings. If everything checks out, YOU ARE READY TO RIDE!

