

## HOW TO BLEED DISC BRAKES

**STEP 1.** In order to have consistent brakes, your brake system must be free of compressible fluids. If air or water gets in, the brakes will feel spongy. Additionally, if brake fluid has been overheated, the fluid will start to look like Coca-Cola. The fix is bleeding the brakes.

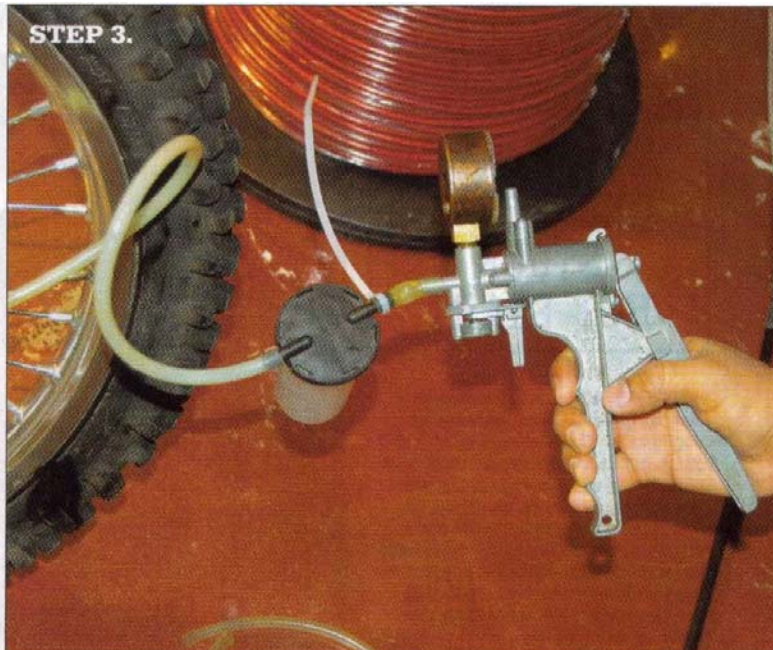
**STEP 2.** Remove the master cylinder cover and inspect it to make sure it seals properly. Inspect the brake line for cracks or damage.

**STEP 3.** Flush the old brake fluid out of the system. The quickest way to do this is with a suction device on the bleeder valve. If you don't have one, use the "Step 5" method. When using suction devices, it's important to remember to establish suction on the bleeder before you crack it open. If suction is not maintained on the bleeder when it's open, the line will suck air back through. With hand-held devices, the bleeder must be closed every time before the device is pumped up.

**STEP 4.** Be sure to keep fluid in the master cylinder. Air bubbles always form in the master cylinder when you pour in fluid. By flicking the lever and turning the bars from side to side, you can coax the tiny bubbles to the surface.

**STEP 5.** The most basic bleeding method is to attach a plastic hose to the bleed valve on the caliper. Get a friend to pump the brake lever a few times to build pressure, and then hold the brakes on as you crack the bleeder valve open. When the valve is cracked open, the release of pressure will allow the brake lever to go to the handlebar and brake fluid to squirt out of the plastic hose. Immediately close the bleeder valve without releasing pressure on the brake lever.

**STEP 6.** Repeat this process over and over, refilling the master cylinder reservoir as you go. Eventually, bubble-free, brand-new brake fluid will come out of the bleeder valve. You know you are done when the brake lever has resistance to travel.



**STEP 7.** Make sure every drop of brake fluid is cleaned from the brake line, caliper and master cylinder. Brake fluid is caustic and messy. To check for leaks, zip-tie the front lever to the grip, or jam the pedal down with a screwdriver to put constant pressure on the system. Then, come back in one hour and inspect for leaks. Finally, remove the zip-tie and go riding! □

