

Bleeding The Brakes on a Yamaha V-Star 1100.

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From the Author:

This guide should give the average motorcycle owner the confidence to attempt bleeding his or her own brake lines. The first thing to keep in mind is that brake bleeding can be an unbearable pain in the butt. The second thing to keep in mind is "Bleed the banjos! Bleed the banjos!" Other than those things... there is really no special tools required. I, personally, don't believe in the pumps and things that you can buy to make the job "easier". The only pump you need is built right into the bike in the form of a master cylinder.

Materials Needed:

- 8mm wrench (this is used to loosen the bleeder valves.)
- Small jar
- About 12" of tubing to fit over the bleeder valve.
- Bottle of DOT 4 Brake fluid (this is the type that is already in your bike)

Here is a brief description of the procedure... I will only be covering the procedure for the front. You should be able to tackle the rear line using this information. Anyhow... here we go...

Preparatory Procedure:

- (1) Protect your painted surfaces from contact with new or used brake fluid. Damage to the finish will result from unprotected surfaces. If you get some brake fluid on the paint... don't worry... just clean it off immediately. If you leave it on... after a while the paint will begin to peel off. That is why we need to be careful regarding this.
- (2) Install the new brake lines using the banjo bolts and washers supplied in the kit. This should be pretty self-explanatory. Match the ends on the new brake lines to the ends on the factory lines. Rule of thumb: Install the lines any way that they will fit. Torque the new banjo bolts to about 15-20 ft/lbs. If you are not installing new lines... skip this step. But you already knew that.
- (3) Remove the master cylinder cover, metal shim, and rubber gasket. Note the position of the cover while you remove it and set them aside.
- (4) During the actual procedure, you will need to add fluid to the system because you will be pumping it out into the jar as you bleed the air out. Add a little bit to the reservoir and we can begin.

Bleeding the Brakes:

- (1) To bleed the banjo bolt at the reservoir, loosen the banjo bolt and squeeze the brake lever. You should see some brake fluid come out. Tighten the banjo bolt. Do this twice or so until brake fluid is coming out. Catch the fluid in a rag or a small container. Refer to figure 1.
- (2) Next, bleed the lines starting with the furthest bleeder from the master cylinder. This would be the left front brake caliper. Fill your small jar with a small amount of brake fluid... about an inch in the bottom should be

- fine. Attach the rubber hose over the end of the bleeder nipple and submerge the other end in the fluid that is in the jar. Refer to figure 2.
- (3) Start bleeding... open the bleeder nipple approx. 1/2 turn by turning it counter-clockwise. Pull the brake lever and hold, tighten the bleeder nipple, and release the lever. You should see a few bubbles in the jar as the new fluid is pushed into the lines and the air is pushed out... thus the bubbles. Repeat until no bubbles are seen in the jar. During the bleeding procedure, monitor the level of fluid in the master cylinder reservoir and make sure it stays full, as you will be drawing fluid into the system from here.
 - (4) Next bleed the right front caliper following the same procedure in step 3.
 - (5) Now you need to bleed the front banjos under the lower triple tree. Bleed the one behind the turn signals first, then the one that the double banjo is connected to. Refer to figure 3.
 - (6) Loosen the banjo bolt, squeeze the brake lever and hold, tighten the banjo bolt. Do this about 3 times until you see no more air coming from the washer area of the banjos. **WARNING:** Brake fluid will come out with the air, so a means to collect the fluid such as a rag will be needed. Also, don't forget to protect your paint. Refer to figure 4.
 - (7) Now you should bleed the left front and right front again... respectively.
 - (8) Now bleed the banjos on the calipers... once or twice should do.
 - (9) You should be able to pump the system up with the brake lever and feel a pressurize brake lever. If it still feels spongy, you still have some air in the system.

Conclusion:

Typically, once I get to this point and I have some pressure in the front system... I leave it because the air will tend to work itself out over the next couple of weeks of riding. I feel that there is no danger to having a small amount of air in the system, although, you will know it is there because the brake lever will feel a bit spongy. If you don't have strong braking power, bleed the brakes again until you have a nice strong brake lever with no sponginess present. You will get the air out! Patience and persistence... bleeding the banjos... these are the two most important aspects of this job. Do not allow yourself to get discouraged if you seem like you can't get the system to bleed. You are basically replacing all the fluid in the system so if you are a beginner, you will want to buy the big jar of fluid.

This is not to be used an official guide to bleeding brakes. Nor is it any guarantee that you will be able to perform this procedure successfully. I can't assume responsibility for any damage you may cause while doing this. This is the procedure that I use and isn't fool proof by any means. There are other ways that may be easier for certain people, but this works fine for me and I have changed our dozens of brake hoses.