

Motorcycle Vacuum brake bleeder

Instructions

Good, the plan is ... to draw the old fluid (and any air/crud) from the brake fluid reservoir through the complete brake cylinder/line/calliper system out of the bleed nipple, on the brake calliper at the front or rear wheel, using suction created by a vacuum in the syringe. Leaving behind nothing but new, clean, brake fluid to make the brakes more efficient.

Ready ? **The first thing** is to locate the bleed nipple nearest to the master cylinder. This nipple will be on the calliper which is directly connected to the brake fluid reservoir by the brake line. If the bleed nipple is dirty or rusty you should clean it first with a small brass (wire) brush and a little WD40. Make sure the WD40 does not get all over the brake pads during this operation.

Using a correctly sized spanner (7 or 8mm normally) undo the nipple by $\frac{1}{4}$ of a turn. If it is seized, apply a little more WD40 and leave to soak in. Sometimes a light tap on the end of the spanner will free it up (note: ring spanners are better than open ended). When you see a bead of fluid appear out of the nipple, close it immediately (hand tight only).

Excellent. **The next job** is to gain access to the brake fluid reservoir, when at the front of the bike keep the handlebars as level as you can to avoid spilling fluid. When you remove the hard top of the reservoir you will see a soft rubber seal, remove this and place it carefully on a clean piece of kitchen/paper towel or newspaper.

And now you are ready to start. Push the silicon tube on to and then loosen the bleed nipple on the brake calliper/slave cylinder (about 1 to 1 $\frac{1}{2}$ turns) you can now draw the fluid out of the calliper, from the reservoir. The tube should be a good/tight fit * on the nipple.

Try to be gentle – draw the fluid through the nipple by creating a vacuum with the syringe smoothly. Don't pull too hard (or fast), if it feels very stiff, open the nipple another $\frac{1}{2}$ turn, if it pulls too fast or lots of bubbles continue to appear, close the nipple $\frac{1}{4}$ turn. Ideally you need a consistent gentle flow of fluid to come out of the calliper which will bring with it any air, water and/or crud that may have accumulated.

Think about the fluid level and remember to keep your eye on the reservoir and top this up with new, fresh brake fluid (Halfords sell it in small bottles which is enough for a bike).

If there is any brown(ish) goop in the bottom of the reservoir, close the nipple, stir it with a match or a cotton-ear-bud and suck it out with the syringe filling with clean fluid as you go, don't use a metal object (such as a screwdriver) and **don't touch the brake lever** as this may force air or crud into the master cylinder and brake line.

* The bleeder comes with three sizes of tube. 3mm, 4mm and 5mm. Some bikes have little nipples that need the smaller tube, most have a diameter of 5mm so the medium or bigger tube fits nicely. Use the smaller tubes with the green joining piece or just the large tube to get best fit.

NOTE:

The only time you need to shut the nipple is when you're finished, i.e. ready to remove the tube, or if you accidentally pull the tube off the nipple (as pushing the tube back on will push air into the calliper).

Motorcycle Vacuum brake bleeder

Instructions (continued)

On some bikes there is a second brake calliper which is linked to the first by a line which passes over the mudguard. Follow the same procedure with the nipple on the second (chained) brake calliper, bleeding this one after the first is finished.

On some calipers there are two bleed nipples, again follow the procedure above and bleed the one which is nearest to the master cylinder first.

When the fluid emerging from the nipple is nice and clean and bubble free, fill the reservoir to about ½ full (normally just over ½) and clean the rubber seal (from the lid), both sides, with kitchen/paper towel just before you replace it. You should see a small bubble of air in the sight glass or the fluid level should be just below the max line (depending upon which type of reservoir you have). Tighten the nipple (don't over tighten – it's only a small thread) and remove the tube.

Squeeze/push the brake lever/pedal repeatedly, pumping the brakes, until they are tight and put a cable tie/elastic band on the lever leaving it compressed for about 10 mins (or longer). Check the fluid level (small bubble or just below max line) and you are done.

When the cable tie is released the wheel should freely spin, you might just feel/hear the brake pads touching the disks, however if they are still stopping the wheel (ie it's difficult to spin with your hand) your pistons/seals will need cleaning/replacing. If the wheel turns easily for part of a rotation and stops/goes tight before getting loose again, then you may have a warped disk which needs to be checked and/or replaced.

Lastly, squish out the old brake fluid into a suitable container (I use an old jam jar) and dispose of it correctly (ie. *"don't" pour it down the sink, chuck it in a hedge or use it again*). Push several syringes of air through the tube to clear out any fluid and leave the syringe half way up (as when the fluid dries it can stick if you leave it near the bottom).

The fluid will degrade the rubber seal and plastic body of the syringe over time (couple of years) cleaning it with a little WD40 on a bit of kitchen/paper towel will make it last longer. Brake fluid will also damage painted surfaces and plastic on your bike, so make sure it is all wiped off and use a little WD40 (or similar) on a rag/paper towel to clean up the area afterwards.

Thanks for purchasing our brake bleeding kit, I hope you find it to be a **great tool** and easy to use. If you need any more info or are having problems with the kit, please call :

Mike @ 01506 636314 (International +44 1506 636314)

eMail : sales@bikerschoice.co.uk

bikerschoice.co.uk is a trading name of ;

S+AS Limited

6 The Walled Garden

Wallhouse

Torphichen

West Lothian

EH48 4NQ

Scotland. UK

S+AS Limited is a UK, VAT Registered company