

SW20 Reverse Clutch Bleed

By Matts_SW20

It's always been a highly debated topic on which is the best method to bleed the clutch on an MR2 as it can be a pain at the best of times. I did research into methods and found that the cheapest and best was to force fluid back through the slave up into the master cylinder in the process pushing the air bubbles out.

I did try the normal one man 'one-way valve' bleed kit but I sat in the driver's seat pushing the peddle with no noticeable result. I also tried pressurising the master cylinder via the small hole in the lid but this was too fiddly and needed at least 2 people for any noticeable result.

The problem with an MR2 is that the bleed valve is towards the bottom of the system, because air rises this is what makes it difficult to expel all the air pockets.

For best results it seems to be the consensus that a vacuum bleed kit should be used but if like me you don't have a disposable \$200 for a quality kit then I find this method seems to work more than fine.

Tools Needed:

- 10mm Ring Spanner or Flare Spanner**
- Oil Syringe (commonly used for mixing 2 stroke)**
- DOT3 Brake Fluid**
- Rags**
- Safety Glasses/gloves in case fluid drops while you're under the car, it really is nasty stuff**

The process:

- 1. Open the bleed valve for the clutch which is on the passenger side just in front of the gearbox which is between the firewall and gearbox, it should look like this:**



For the moment ignore the syringe I have attached to the bleed valve but that's what you need to undo.

WARNING! Do not go any further if you don't have a 10mm flare spanner or ring spanner



If you do this with an open ended spanner you risk rounding off the bleed valve and you'll drown yourself in tears.

Attach a tube similar to that in the picture and pump the clutch to expel all the existing fluid in the system.

2. Install any new parts that are required and make sure the master cylinder is empty; I took the float out as a personal preference. Load the area under the master cylinder with rags to collect any overflow.
3. Get your trusty syringe purchased from supercrap auto or similar:



4. Fill the syringe about $\frac{3}{4}$ full of brake fluid and ensure that no air is left in the top of the syringe or tube that's attached otherwise you'll pump air through which is what we're trying to avoid.



5. Refer to picture one, place your ring spanner on the bleed valve then carefully attach your now full syringe just like I have in the first picture (although there is no fluid in mine).

Open the bleed valve and slowly inject the fluid through the system, you should hear it pushing air bubbles out. After you have expelled most of the syringe tighten the bleed valve and go check the master cylinder.

6. Some fluid may have overflowed but that's okay, you have those rags there to soak it all up. The system should now be pretty much all bled, however if like me you're overprotective then you can use your syringe to take some fluid from the master (don't take all of it) and fill up the syringe again and repeat step 4 and 5. This should ensure there is no air in the system.

Note that using this method it's actually rather fast and you don't need to pump the peddle like a pleb or ask a mate for help, however one is always handy. If you found anything that needs editing in this guide please send me a PM I'm open to improving the method if needed. Happy bleeding.