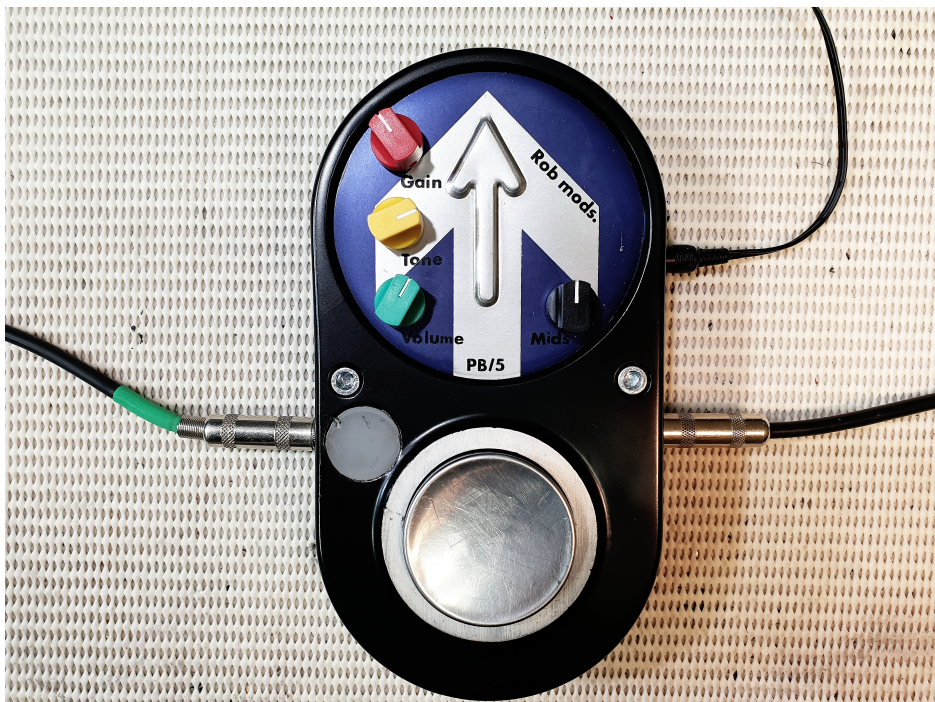
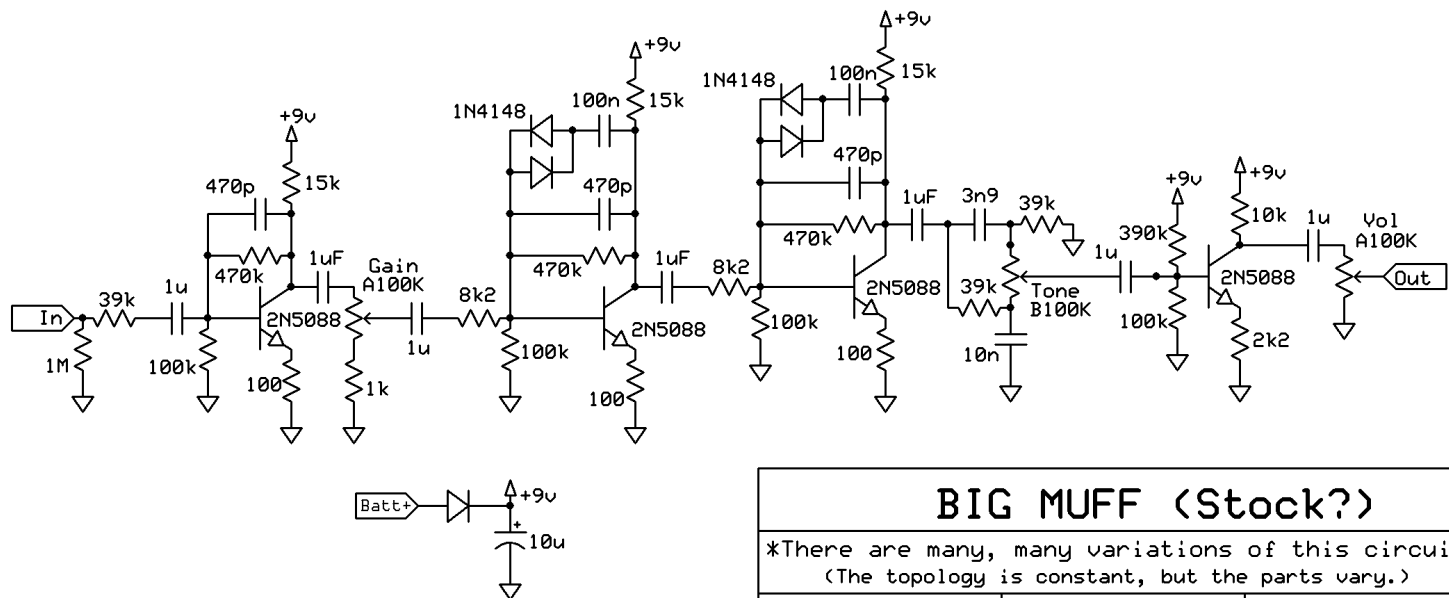


ROB MODS MODDED BIG MUFF PEDAL BUILD



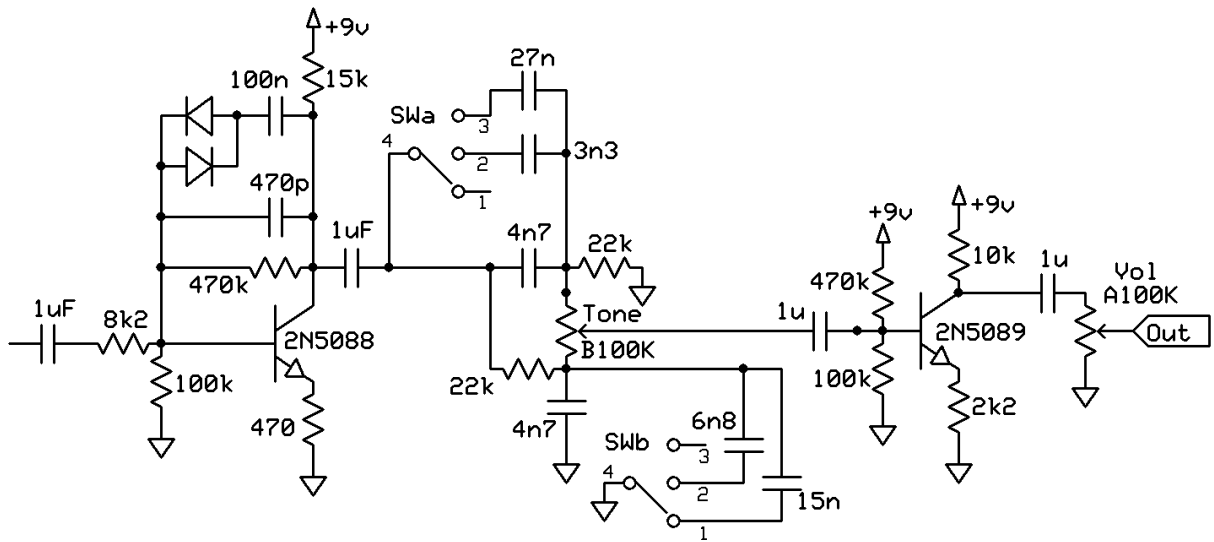
I recently built this pedal into a PB/5 crosswalk button. The circuit is essentially a classic Big Muff Pi Circuit. However it has buffered bypass, germanium diodes and a modified tone filter that gives three mids voicings for the pedal.

Here is a (more or less) standard Big Muff schematic.



With the exception of the opamp version, the topology of the Big Muff has not changed since Electro-Harmonics introduced it in the early 1970's. However the parts list certainly has. There are many variants, and many schematics to be found on line.

For my PB/5 build I decided to use a three-way rotary switch as a mids control. This makes the pedal really versatile.



Rob Mods PB/5	
Modified Big Muff Tone Filter	
3-way Mid Voicing Switch	
Rev 1.0	
26/01/2022	

I used a 4P3T rotary switch, but only two poles are needed. If possible buy a “make-before-break” switch. (AKA “MBB”). If you are modding an existing pedal, you may have to replace a part or two in the original tone filter. The extra caps could be mounted on the switch itself. And be sure to mount the switch using a shakeproof washer.

The Big Muff tone circuit is a basic “tilt filter”. The upper 4n7 and 22k form an RC high pass filter, and the lower 22k and 4n7 form a low pass filter. The signals from these are summed via the tone pot, and the wiper sweeps from one to the other.

With the switch in position **one**, the roll-offs are separated, and as summed, create a mid cut. In position **two**, the filter gives an almost flat response. And in position **three**, you get a broad mid boost since the high and low pass filters overlap to a degree. (The simulation shows the tone control centred.)

