

B.Y.O.C. Large Beaver build instructions.

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Parts Checklist

Resistors:

- 1 150ohm (brown/green/brown/gold)
- 2 820ohm (gray/red/brown/gold)
- 1 1k (brown/black/red/gold)
- 1 2.7k (red/purple/red/gold)
- 1 3.3k (orange/orange/red/gold)
- 1 4.7k (yellow/purple/red/gold)
- 2 8.2k (gray/red/red/gold)
- 2 12k (brown/red/orange/gold)
- 2 22k (red/red/orange/gold)
- 2 39k (orange/white/orange/gold)
- 2 82k (gray/red/orange/gold)
- 1 100k (brown/black/yellow/gold)
- 4 390k (orange/white/yellow/gold)
- 1 1m (brown/black/green/gold)
- 2 100kA pot (volume and sustain)
- 1 100kB pot (tone)

Capacitors:

- 6 0.1uf film (104)
- 2 0.05uf film (503)
- 1 0.01uf film (103)
- 1 0.0039 film (392)
- 2 560pf ceramic disc (561)

Diodes:

- 4 1N914 (small orange with black stripe)
- 1 Red T 1 3/4 (5mm)LED

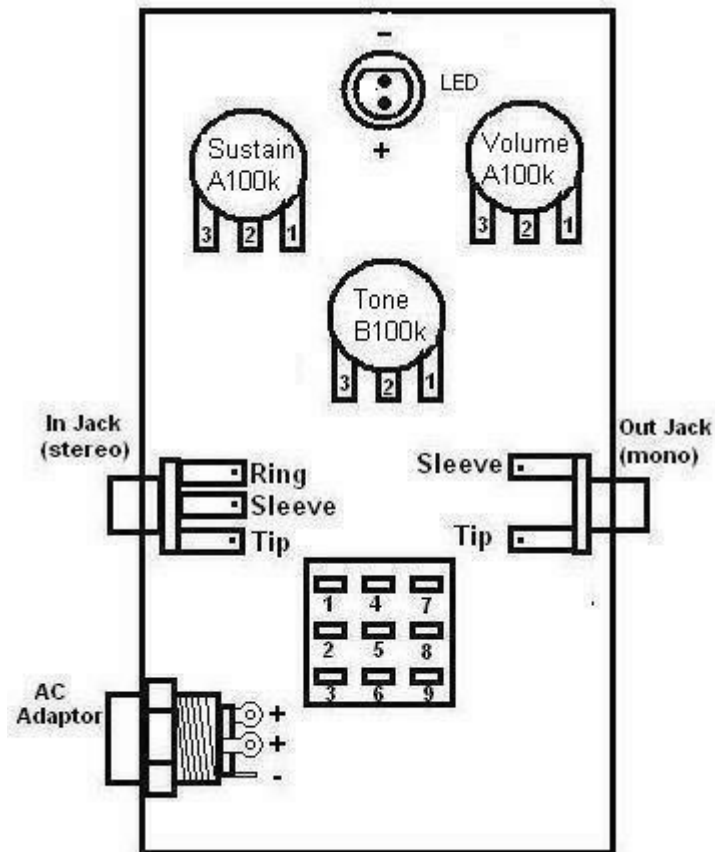
Transistors:

- 4 2N5088

Hardware:

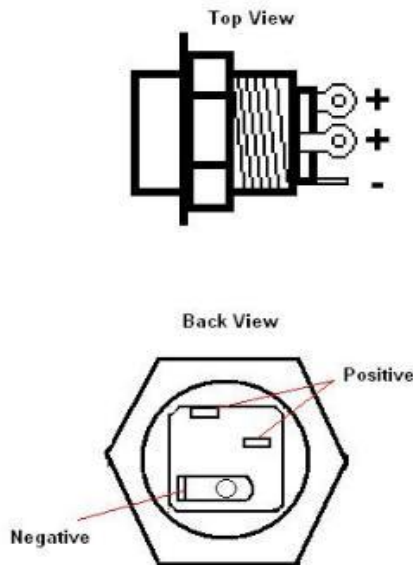
- 1 LED bezel(not included in newer kits. The LED will be PCB mounted)
- 3 self adhesive nylon standoffs
- 3 knobs
- 1 heavy duty battery snap
- 1 3PDT footswitch
- 1 1/4" mono jack
- 1 1/4" stereo jack
- 1 AC adaptor jack
- 1 125b size enclosure
- 1 circuit board
- hook-up wire

Assembly



1. Install the jacks first. If you are looking down inside the enclosure, the mono jack goes on the right side and the stereo jack goes on the left. Place the washer on the outside of the enclosure. Use a 1/2" wrench to tighten.
2. Install the AC adaptor jack. The bolt goes on the inside. Use a 3/4" or 14mm wrench to tighten.

AC Adaptor

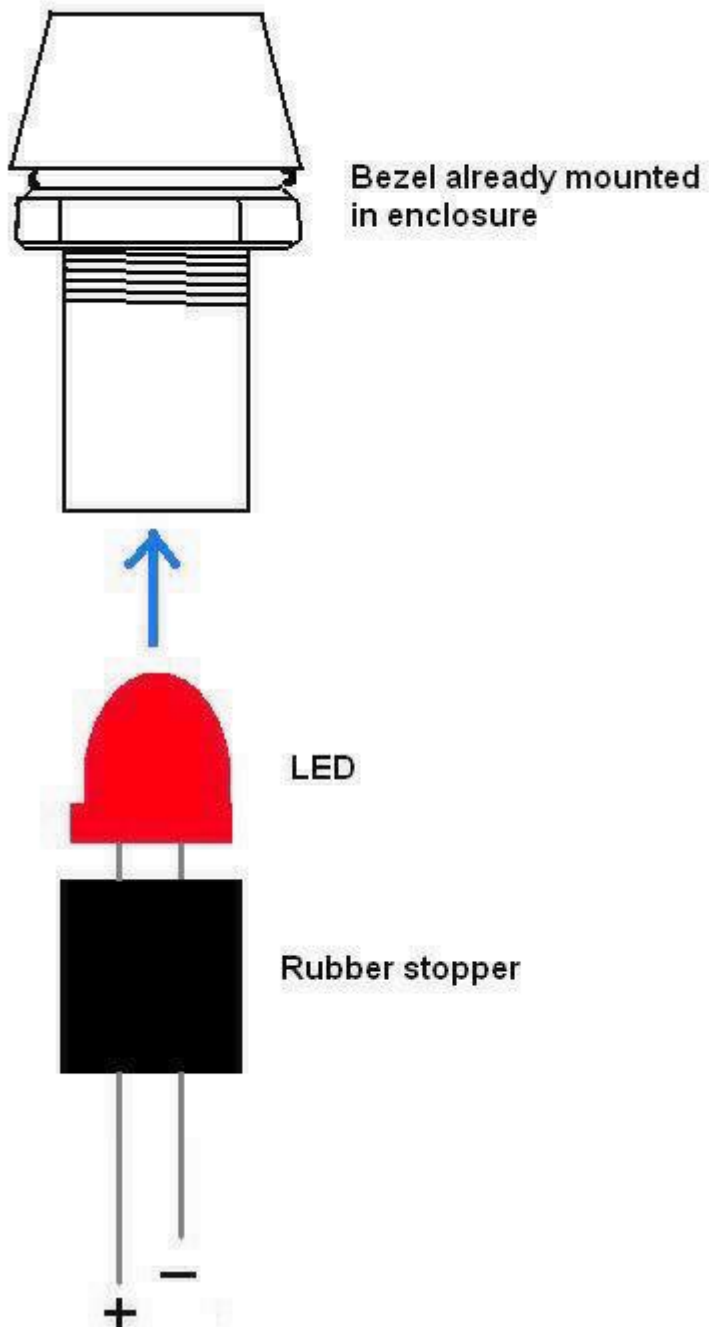


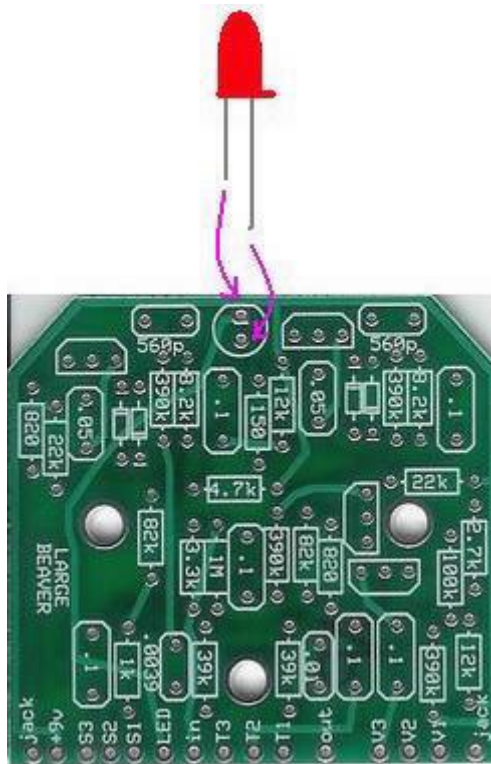
This is a “disconnect” ac adaptor jack. That means that when you have a battery connected and you plug in the adaptor, it will disconnect the battery. That is why there are 2 positive terminals. They are both connected when there is no plug in the jack, but when the plug is inserted only one of the terminals (the uppermost terminal in the “back view”) is connected to the sleeve of the adaptor. The advantage of this is that you can leave batteries in your pedals as a back up power source if you are a “working” musician and they will stay fresh even when you have the input jack plugged in as long as you keep the adaptor plugged in.

3. Install the bezel. The washer and bolt go on the inside. Use a 10mm wrench to tighten. Newer kits will not have a bezel. The LED will be PCB mounted..
4. Install the potentiometers so that the solder lugs are pointing down towards the footswitch side of the enclosure. Use a 10mm wrench to tighten but only snug. Do not over tighten the pots.
5. Install the footswitch. The first bolt and metal washer go inside. The plastic washer and second bolt go on the outside. It does not matter which side you designate as the "leading edge" of the footswitch as long as you orientate it so that the flat sides of the solder lugs are aligned in horizontal rows, not vertical columns. Use a 14mm wrench to tighten.

Installing the LED (light emitting diode)

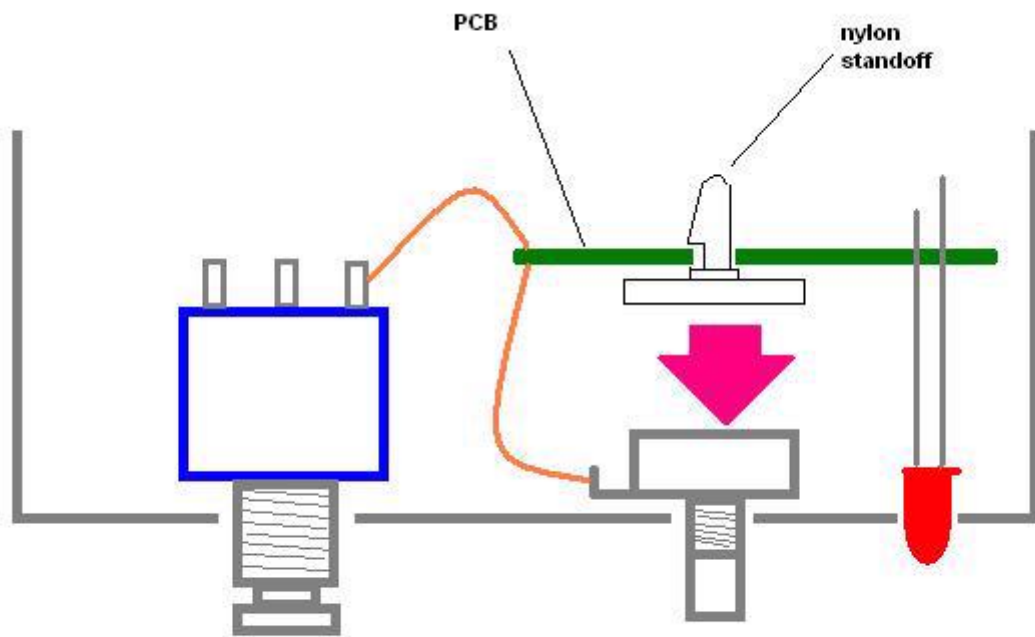
So many people make the mistake of inserting the LED in through the top of the bezel. You insert the LED in through the bottom (newer kits will not have a bezel).





You will install the LED at the same time you mount the circuit board.

1. Insert the LED into its slot on the underside or “solder side” of the circuit board, but DO NOT SOLDER it yet. Make sure the anode (the long leg) goes in the round solder pad and the cathode (the short leg) goes in the square solder pad. This is opposite of how a PCB mounted LED should be installed. This is unique only to the Tonebender kit.
2. Once you have the LED in place, bend the leads a little bit so that it will not fall out when you turn the PCB over.
3. Install the nylon circuit board standoffs into the mounting holes.
4. Remove the paper backings on the standoff to expose the self-adhesive tape.
5. Insert the LED bulb into the LED hole in the enclosure.
6. Secure the Standoffs to the back of the potentiometers.
7. Your LED should still be free to move up and down slightly. You probably do not want your LED sticking all the way out of the hole. So pull up on the LED legs till you have it properly positioned and then solder.
8. Clip off the excess LED leg wire.



If you have any problems or questions, visit www.buildyourownclone.com/board for tech support.

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