Build Your Own Clone
Amp Selector and Stereo FX Router
Kit Instructions

Warranty:

BYOC, Inc. guarantees that your kit will be complete and that all parts and components will arrive as described, functioning and free of defect. Soldering, clipping, cutting, stripping, or using any of the components in any way voids this guarantee. BYOC, Inc. guarantees that the instructions for your kit will be free of any major errors that would cause you to permanently damage any components in your kit, but does not guarantee that the instructions will be free of typos or minor errors. BYOC, Inc. does not warranty the completed pedal as a whole functioning unit, nor do we warranty any of the individual parts once they have been used. If you have a component that is used, but feel it was defective prior to you using it, we reserve the right to determine whether or not the component was faulty upon arrival. Please direct all warranty issues to: sales@buildyourownclone.com This would include any missing parts issues.

Return:

BYOC, Inc. accepts returns and exchanges on all products for any reason, as long as they are unused. We do not accept partial kit returns. Returns and exchanges are for the full purchase price less the cost of shipping and/or any promotional pricing. Return shipping is the customer's responsibility. This responsibility not only includes the cost of shipping, but accountability of deliver as well. Please contact sales@buildyourownclone.com to receive a return authorization before mailing.

Tech Support:

BYOC, Inc. makes no promises or guarantees that you will successfully complete your kit in a satisfactory manner. Nor does BYOC, Inc. promise or guarantee that you will receive any technical support. Purchasing a product from BYOC, Inc. does not entitle you to any amount of technical support. BYOC, Inc. does not promise or guarantee that any technical support you may receive will be able to resolve any or all issues you may be experiencing.

That being said, we will do our best to help you as much as we can. Our philosophy at BYOC is that we will help you only as much as you are willing to help yourself. We have a wonderful and friendly DIY discussion forum with an entire section devoted to the technical support and modifications of BYOC kits.
www.byocelectronics.com/board
When posting a tech support thread on the BYOC forum, please post it in the correct lounge, and please title your thread appropriately. If everyone titles their threads "HELP!", then it makes it impossible for the people who are helping you to keep track of your progress. A very brief description of your specific problem will do. It will also make it easier to see if someone else is having or has had the same problem as you. The question you are about to ask may already be answered. Here are a list of things that you should include in the body of your tech support thread:

1. A detailed explanation of what the problem is. (Not just, "It doesn't work, help")
2. Pic of the top side of your PCB.
3. Pic of the underside of your PCB.
4. Pic that clearly shows your footswitch/jack wiring and the wires going to the PCB
5. A pic that clearly shows your wiring going from the PCB to the pots and any other switches(only if your kit has non-PC mounted pots and switches)
6. Is bypass working?
7. Does the LED come on?
8. If you answer yes to 6 and 7, what does the pedal do when it is "on"?
9. Battery or adapter.(if battery, is it good? If adapter, what type?)

Also, please only post pics that are in focus. You're only wasting both parties' time if you post out of focus, low res pics from your cell phone.

Revision Notes:

Rev 2.1 (current) No issues.
Rev 1.2 Corrected rev1.1 issues.
Rev 1.1 C5 is backwards. C7 is not labeled. Added C101 & C102
For Rev 1.0 instructions go to http://buildyourownclone.com/ampselectorrev1.pdf

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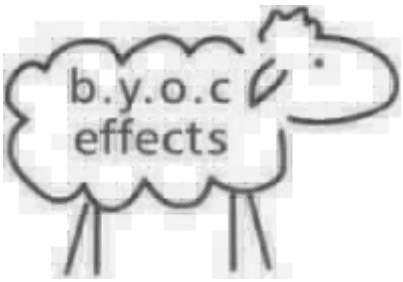


AMP SELECTOR & STEREO FX ROUTER KIT
INSTRUCTION INDEX

Parts Checklist for BYOC
Amp Selector & Stereo FX Router Kit

Resistors:
1 - 470R (Yellow/Purple/Black/Black/Brown)
2 - 4k7 (Yellow/Purple/Black/Black/Brown)
8 - 10k (Brown/Black/Black/Red/brown)
1 - 100k (Brown/Black/Black/Orange/Brown)
1 - 1M (Brown/Black/Black/Yellow/Brown)

Capacitors:
1 - 1n0 or .001µ film (102)
3 - 100n or .1µ film (104)
2 - 10µ aluminum electrolytic
2 - 100µf aluminum electrolytic

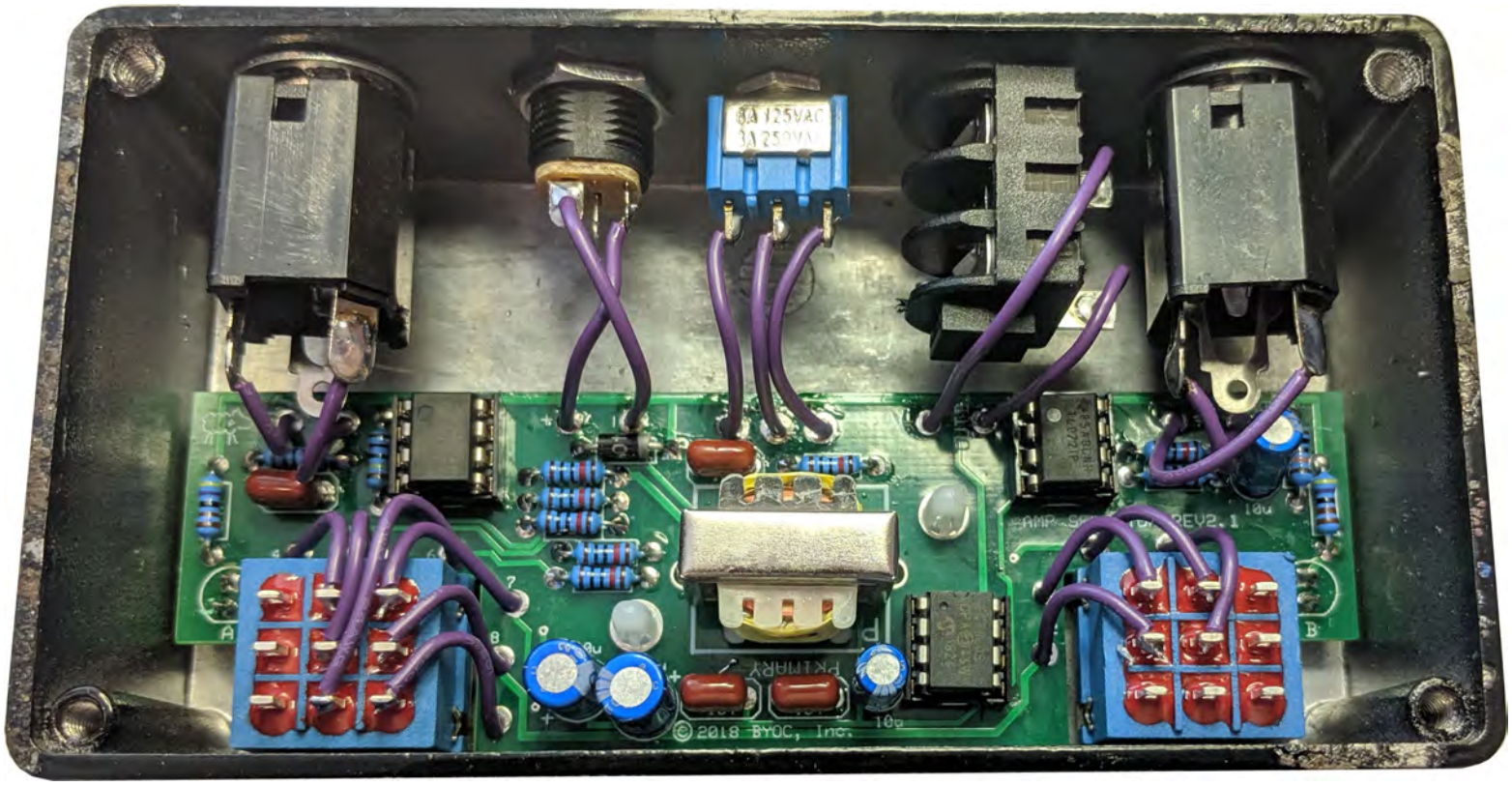
Diodes:

1 - 1N4001 (black plastic with a silver or white stripe)

IC's:
2 - TL072
1 - 7660SCPA
3 - DIP8 IC sockets

Hardware:
1 - Drilled enclosure w/ 4 screws (optional)
1 - BYOC Amp selector PCB
2 - 3PDT footswitches
1 - SPDT On-On Toggle switches
1 - DC Jack (optional
2 - LEDs (optional)
2 - Enclosed ¼" Audio Jacks
1 - Isolated ¼" Audio Jack
2 - Nylon Standoffs
4 - bumpers
hook-up wire

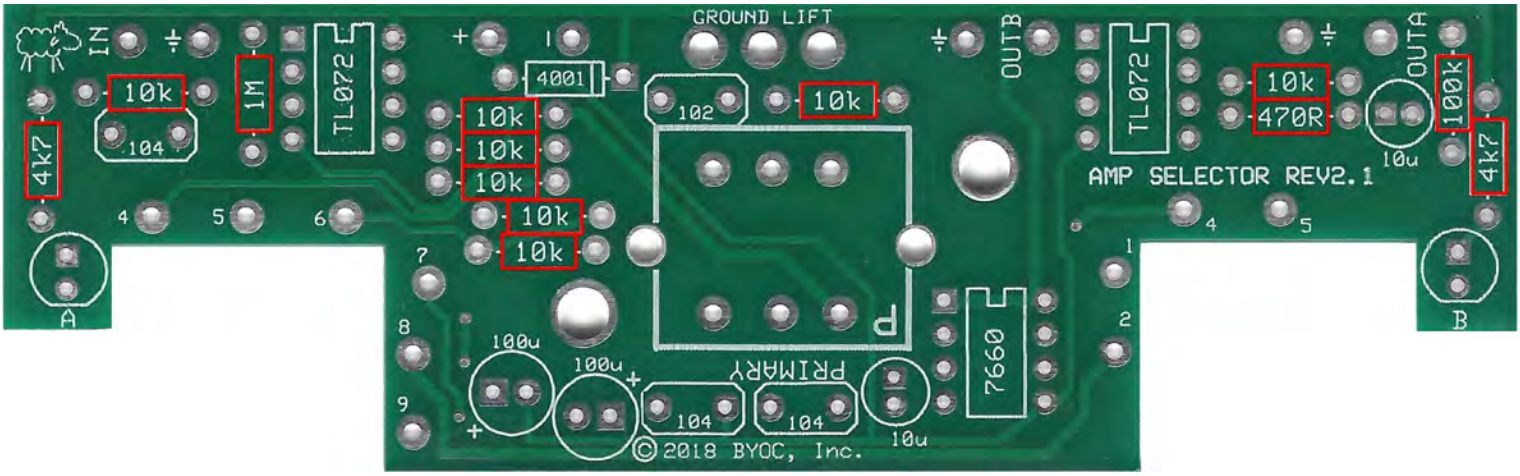
Transformers:
1 – TM018-R



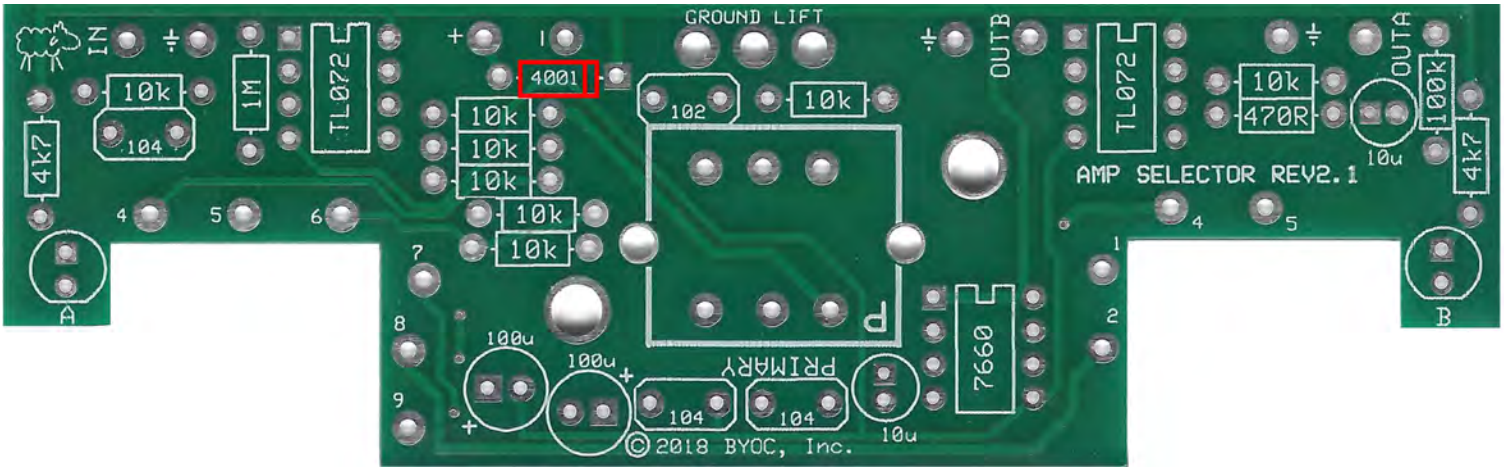
This is what your finished pedal should look like. Your kit may come with different color components, but they will still do the exact same thing.

Populating The Circuit Board

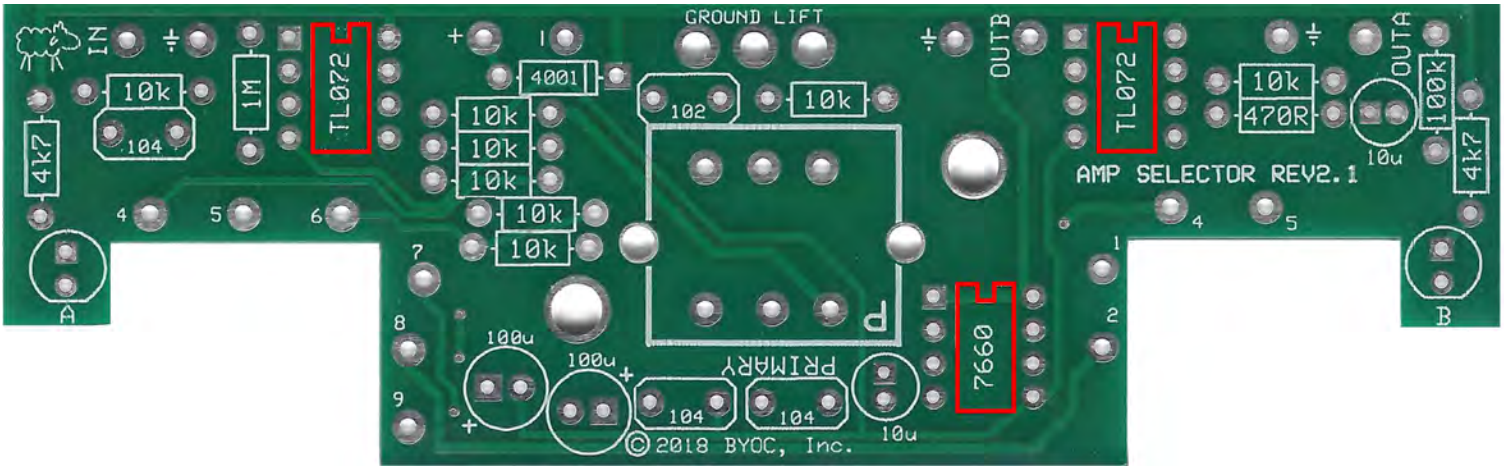
Step 1: Add the Resistors. Resistors are not polarized and can be inserted into the circuit board in either direction.



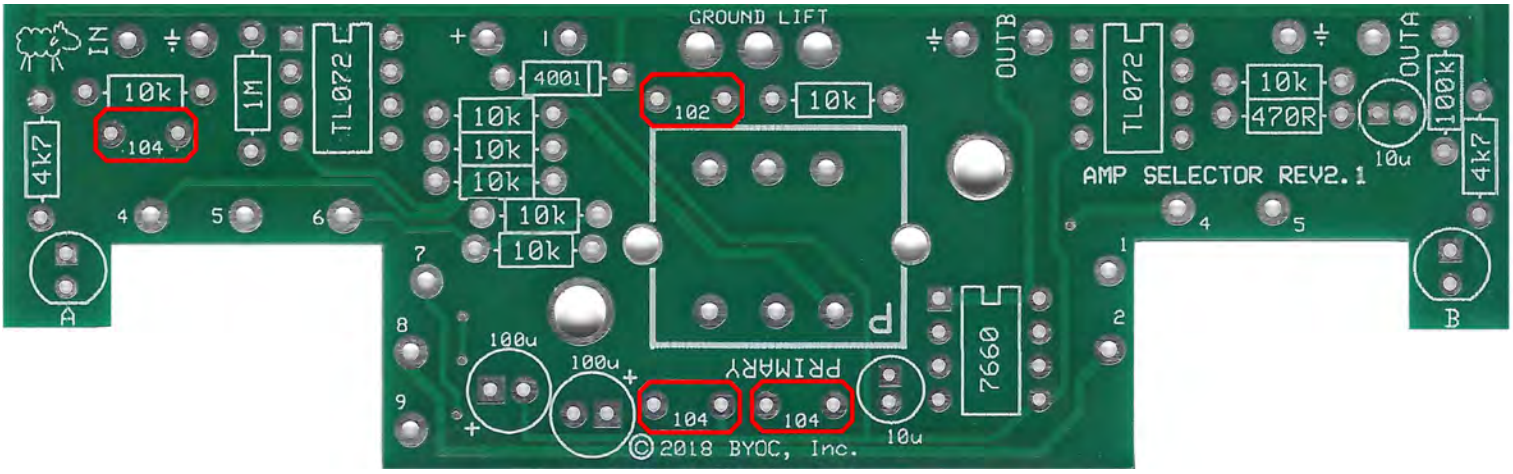
Step 2: Add the diode. The diode will have a white or gray strip on one end. Match this strip up with the picture on the circuit board.



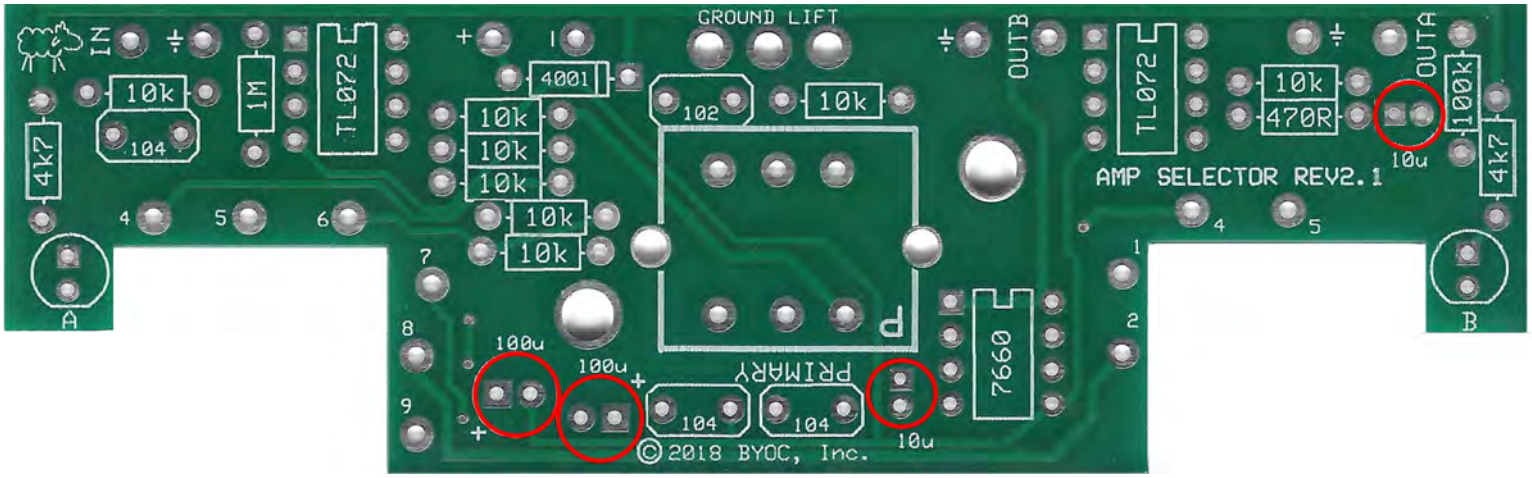
Step 3: Add the IC sockets. DO NOT ADD THE ACTUAL IC's. Only add the sockets. The sockets get solder to the circuit board. The IC's go in the sockets and do not get soldered. Make sure to match the side of the socket with the “U-Shaped” notch to the picture on the circuit board.



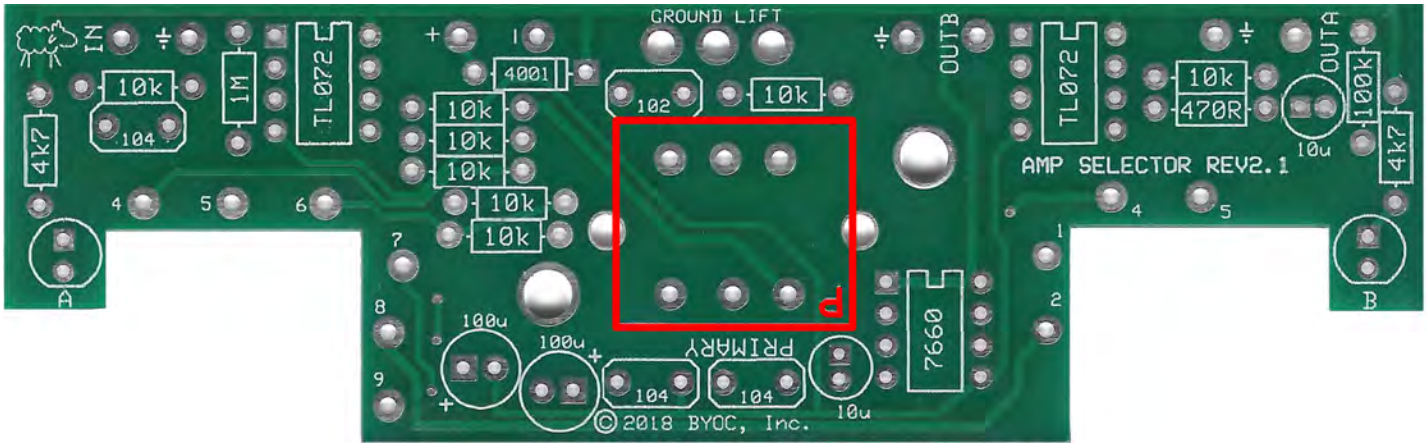
Step 4: Add the film capacitors. These are not polarized and can go into the PCB in either direction.



Step 5: Add the electrolytic capacitors. These are polarized. The positive lead will be the longer lead and will go into the square solder pad. The negative lead will be the shorter lead and will go into the round solder pad. The negative side of will usually also have a stripe running down the side of the capacitor body.

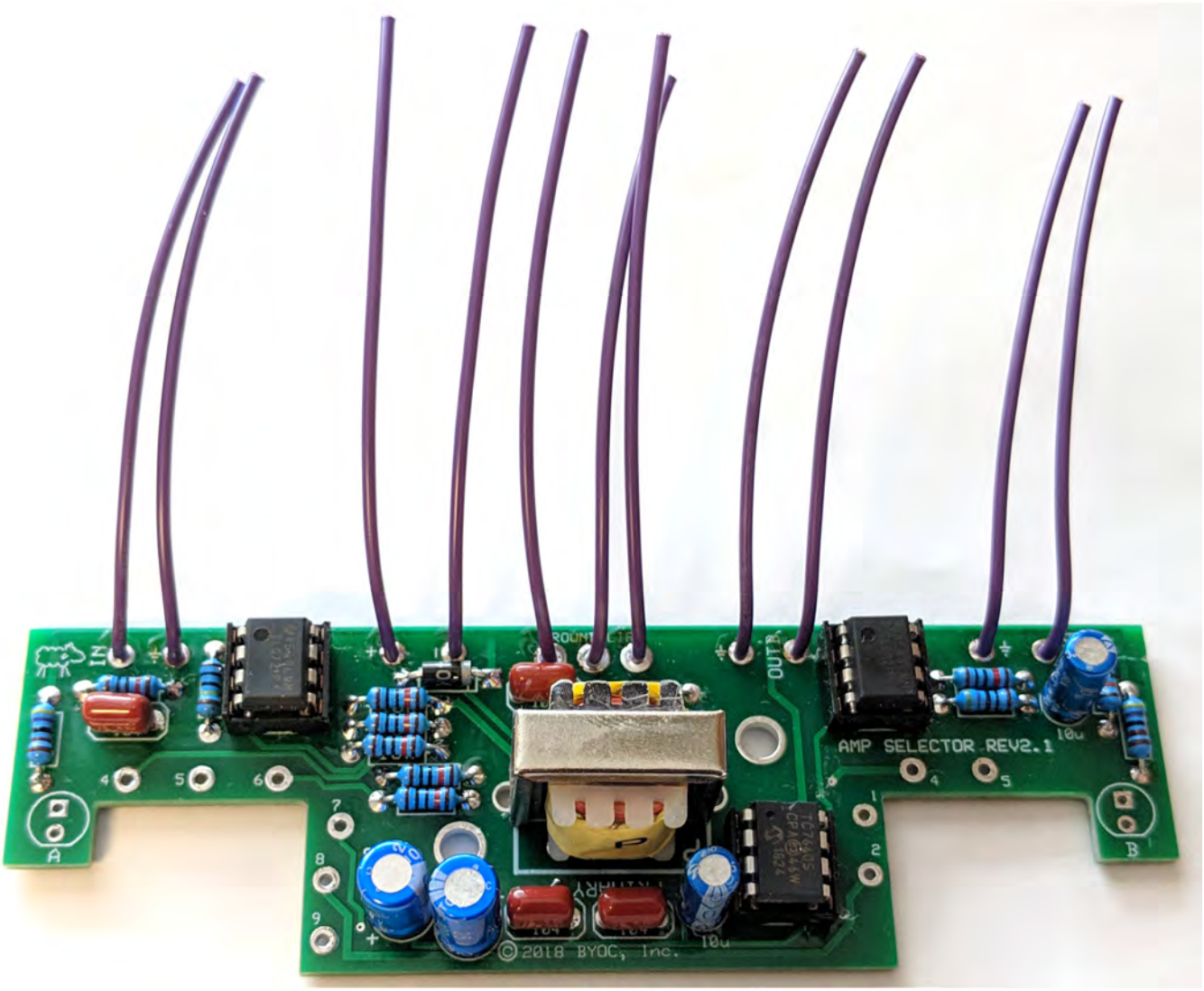


Step 6: Add the transformer. The primary side of the transformer will be marked with a "P". Orient the transformer so that the side with the P matches up with the side of the PCB marked with a P. Note that there are two tabs on the transformer. You should not solder these tabs to the PCB. Simply bend the tabs so that they hold the body of the transformer firmly to the PCB. The tabs are not part of the circuit, so soldering them is just a waste of solder and it will make it more difficult if you need to remove the transformer. However, if you do solder the tabs, it will not harm anything.

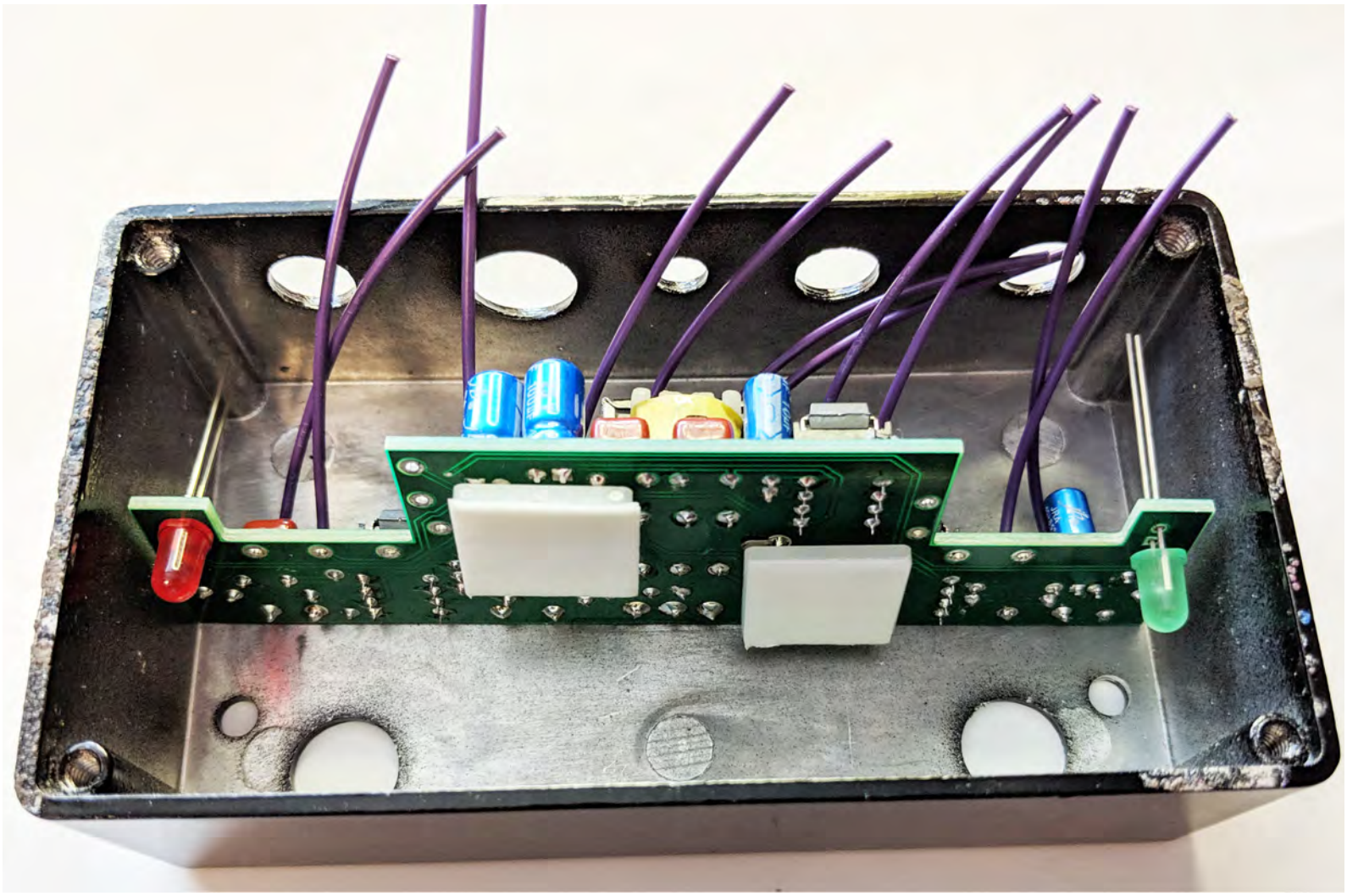


Main PCB Assembly

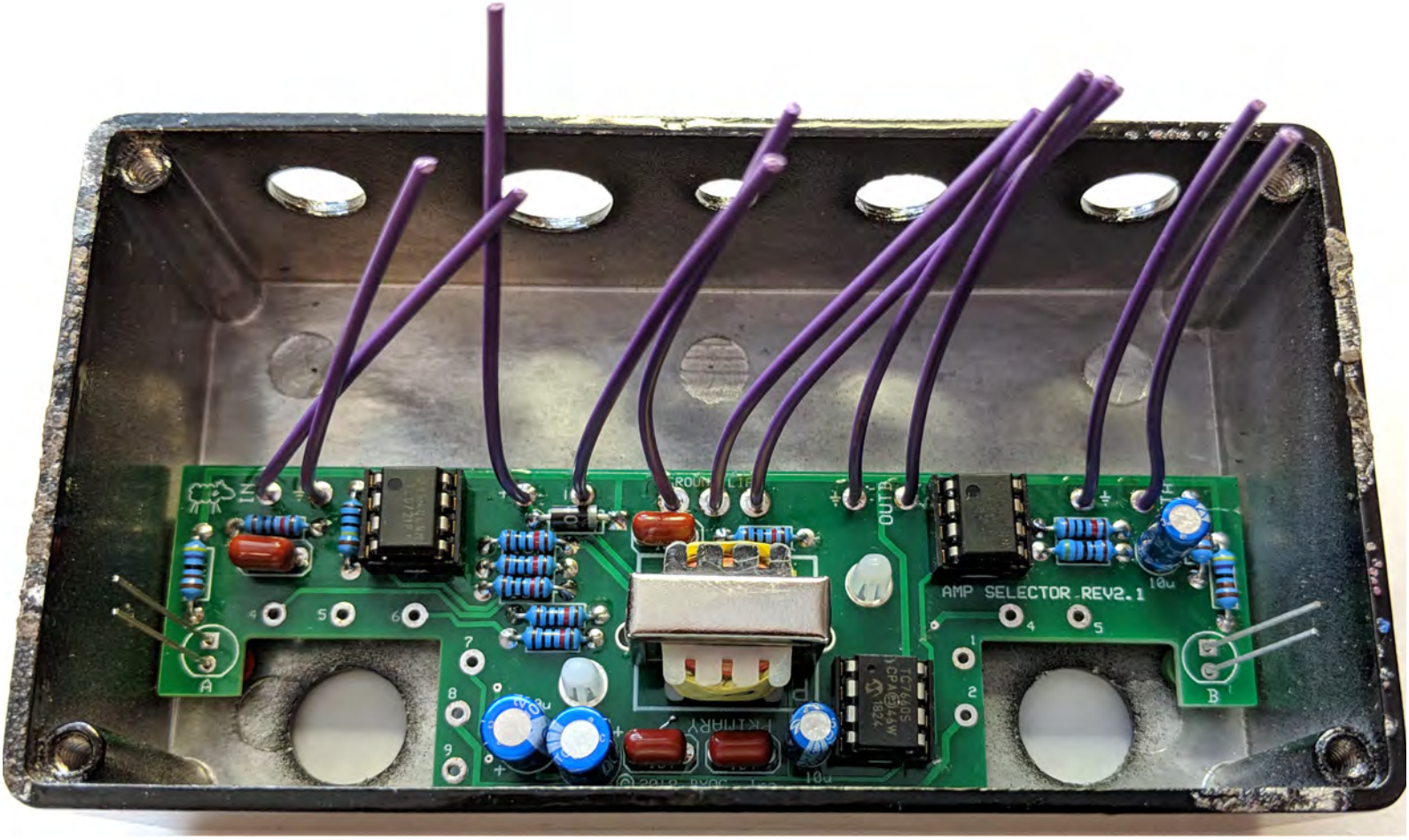
Step 1: Cut 11 pieces of 2.5 inch wire and solder them to the board. This will allow you to wire the hardware a bit easier later.

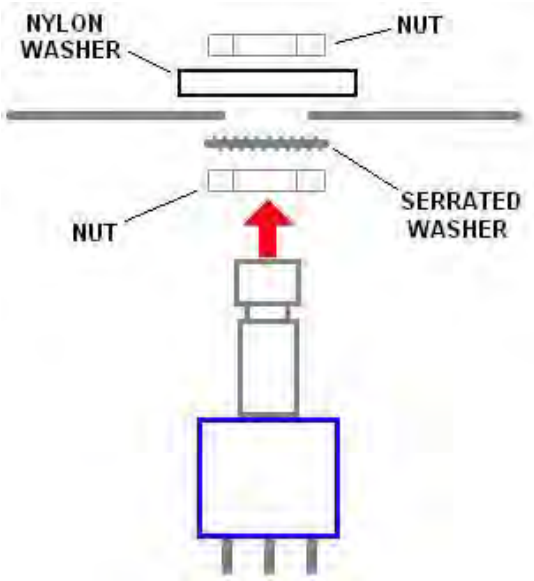


Step 2: Add the standoffs and LEDs to the board. The standoffs will snap into the holes, so push them until you hear them click. DO NOT SOLDER THE LED YET. You will solder them in the next step. Remove the paper backing of the standoffs to reveal the adhesive.

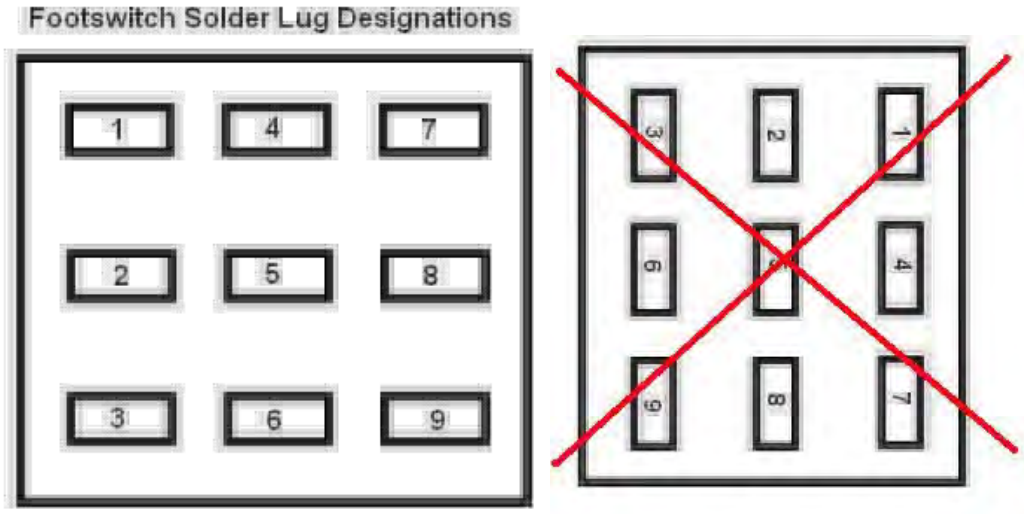


Step 3: Using the LEDs as your guides, place the PCB into the enclosure so that the bottom edge of the PCB is against the wall of the enclosure. If your LEDs are lined up, the rest of the board will be lined up too. At this point, apply a little pressure to the standoffs so they stick to the inside of the enclosure. Your board it now mounted, and you can press the LEDs into their holes, and solder the LEDs.

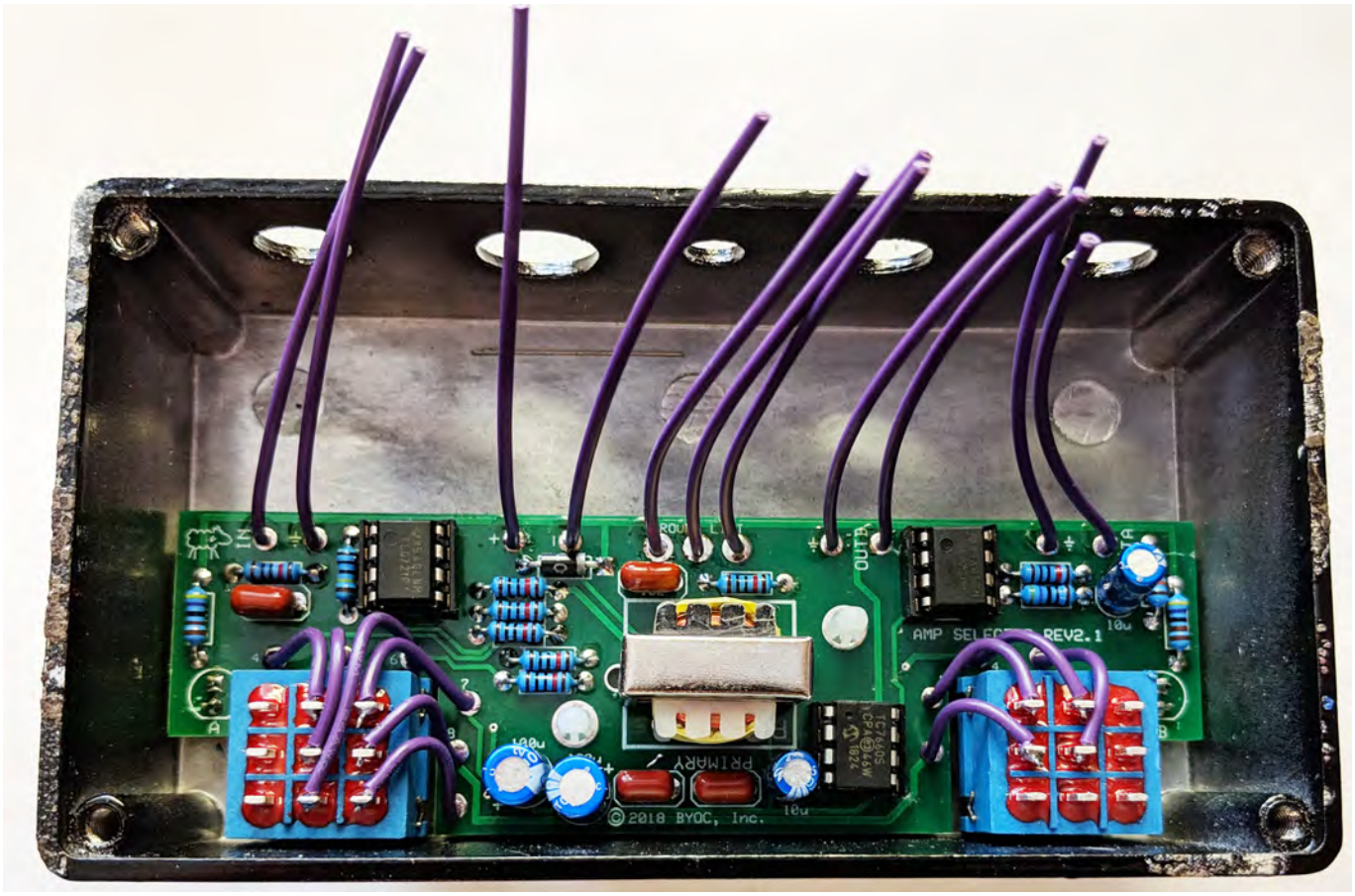


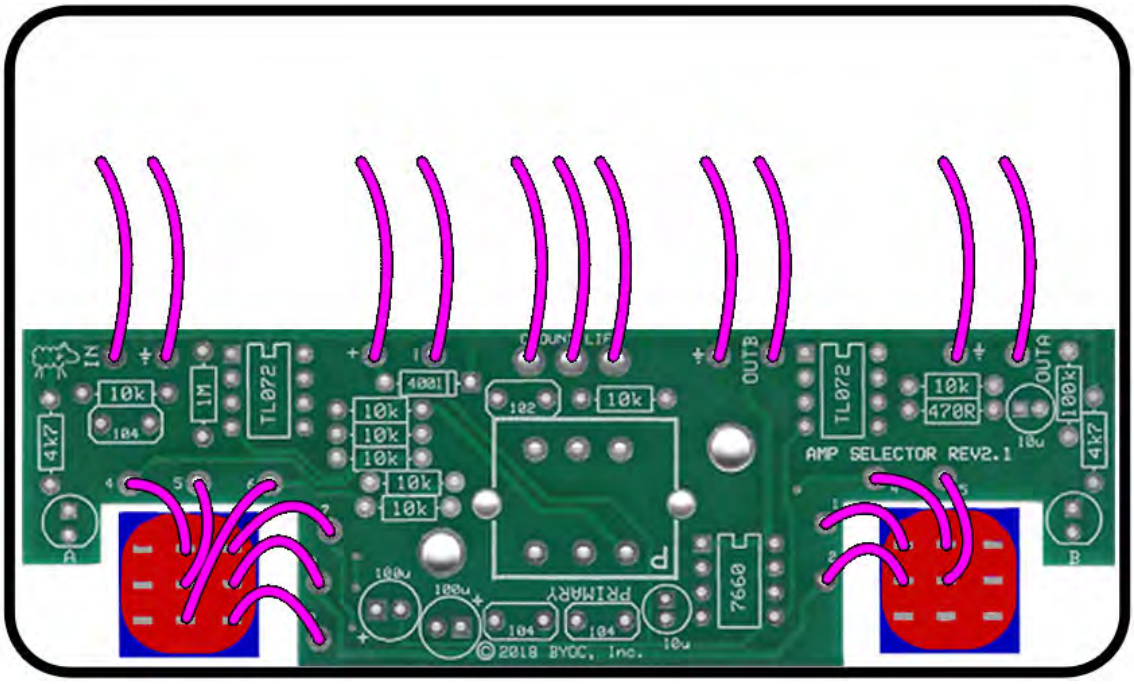


Step 4: Install the footswitches. Orient the footswitches so that the flat sides of the solder lugs are like the diagram below. **NOTE: There are no actual number markings on the footswitches. There are two correct ways you can orient the footswitches. They are both 180 degrees of each other. Either way is fine. It does not matter as long as the flat sides of the solder lugs are running horizontal, not vertical.**



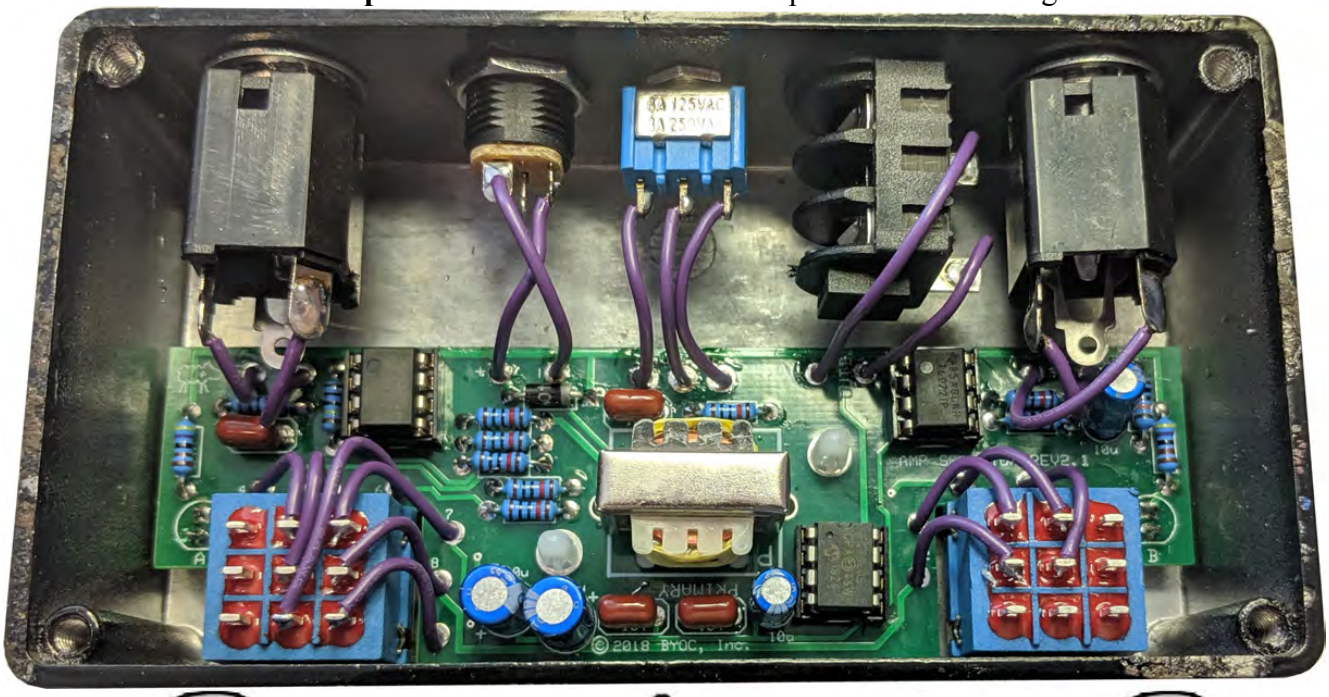
Step 4a: Wire the footswitches to the board. Connect the lug number to the eyelet number.

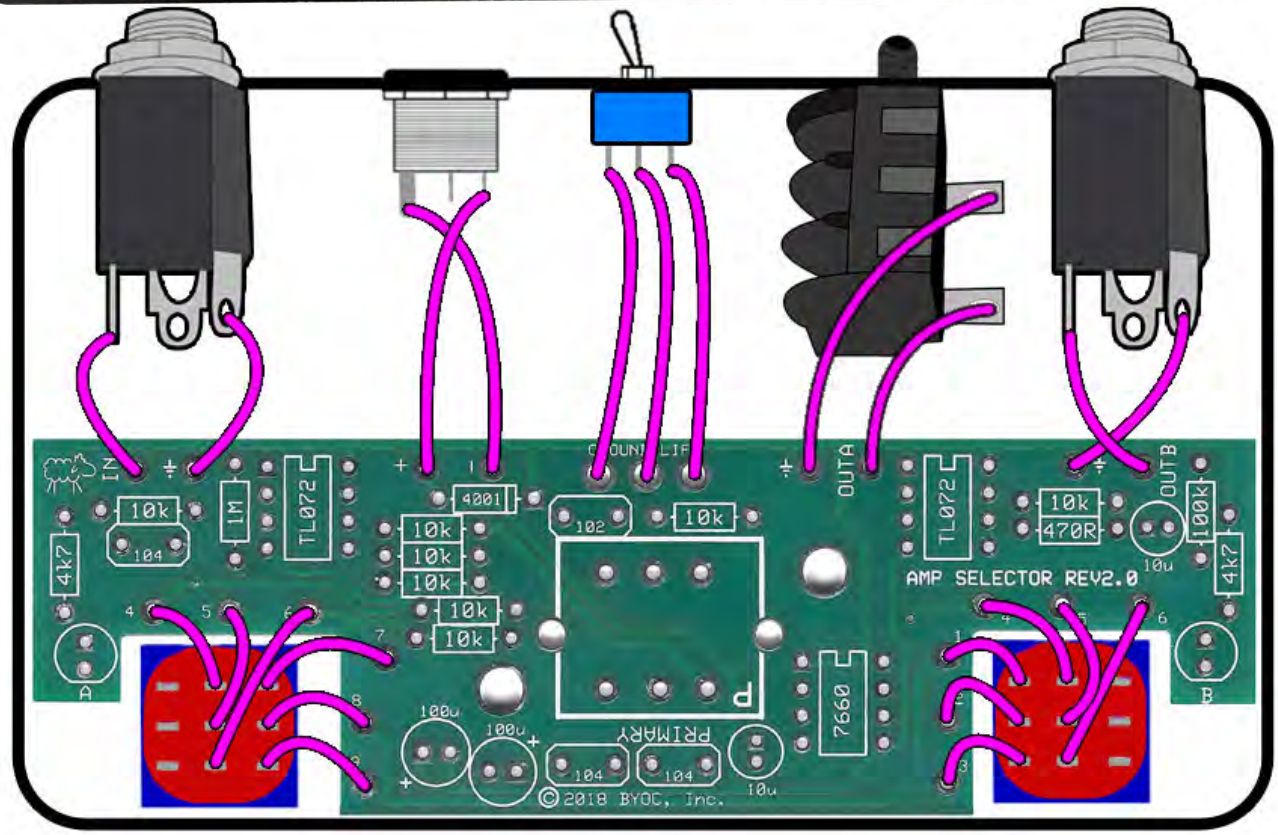


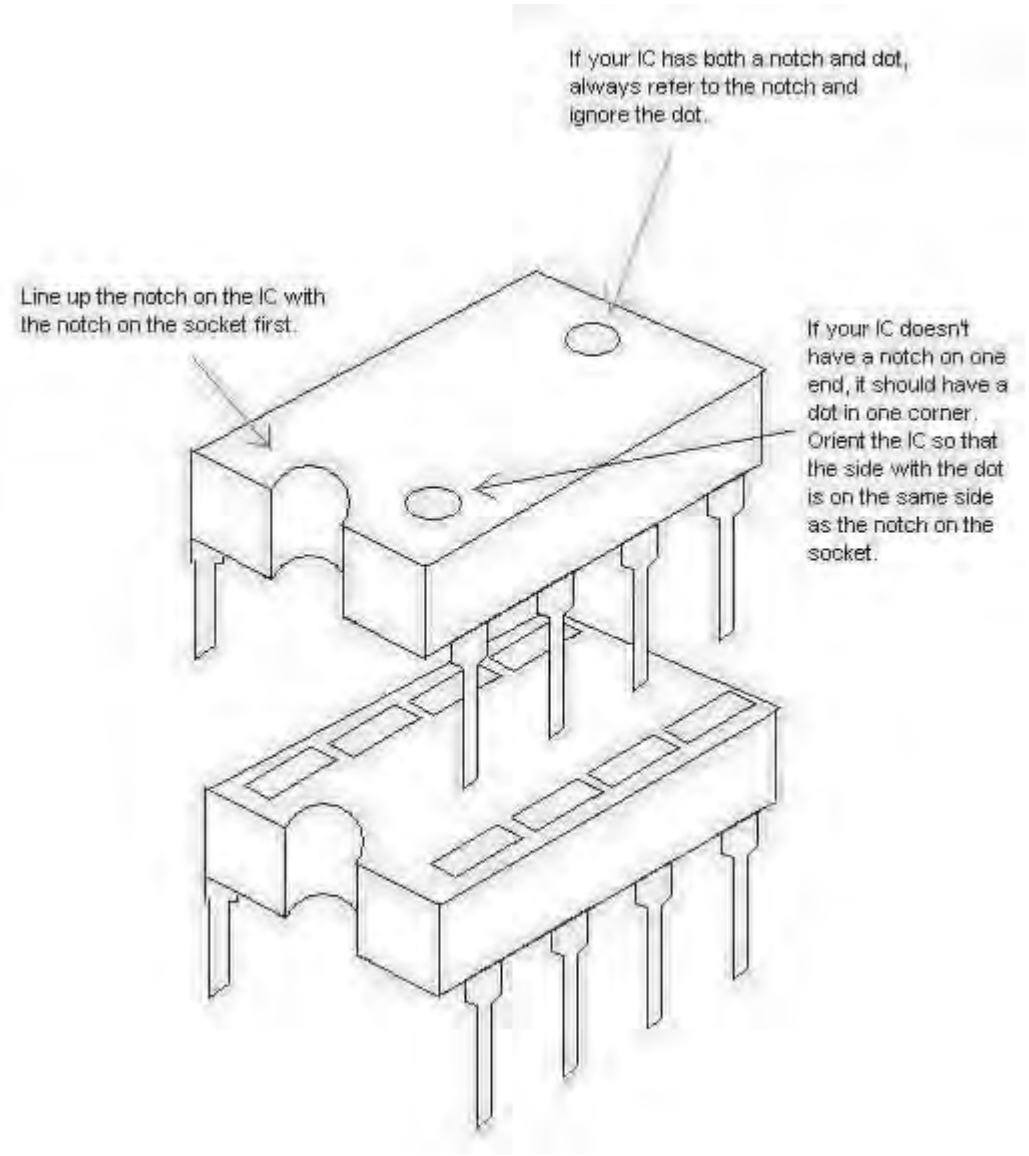


Step 5: Add the hardware. Be mindful of the orientation of the jacks. The green arrows are pointing to the SLEEVE side.

Step 6: Connect the wires to the respective hardware lugs.

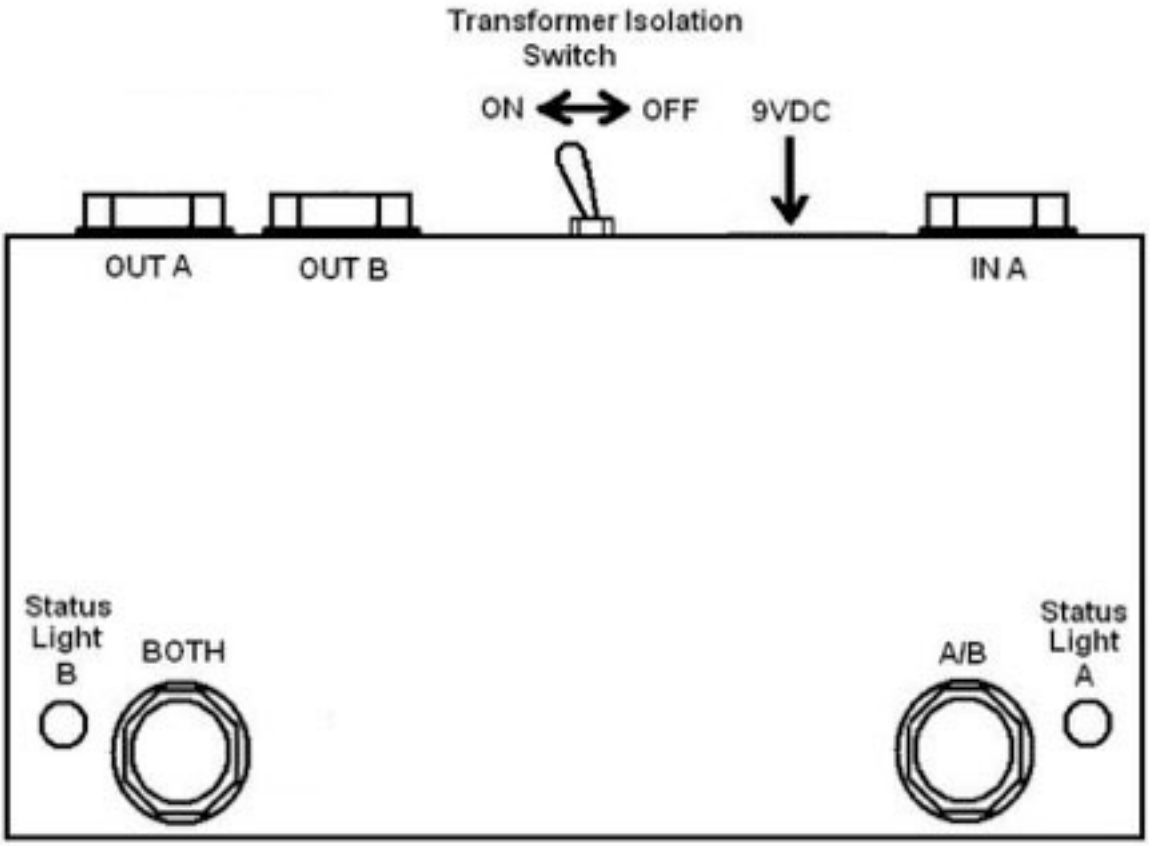




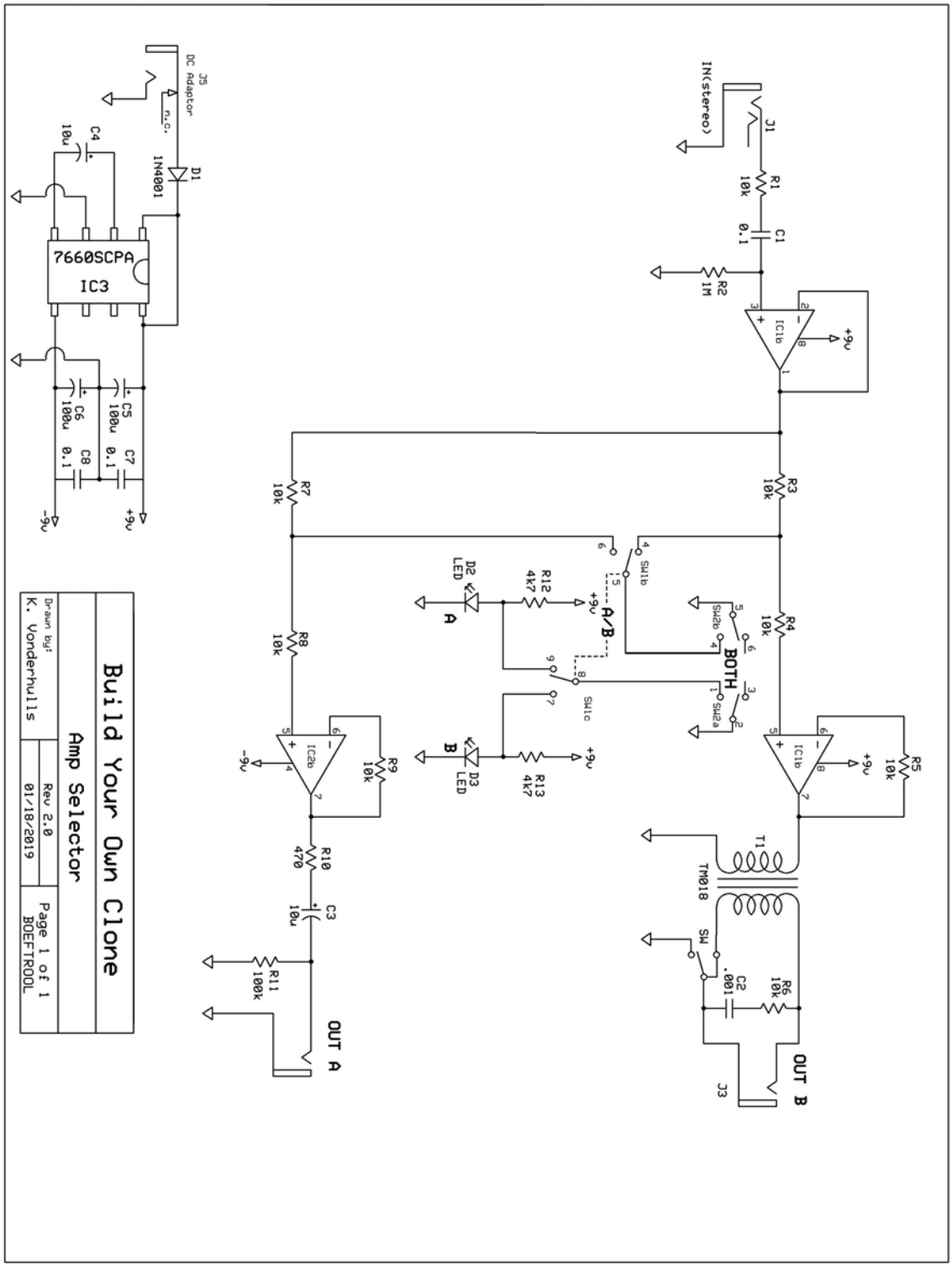


That's it! You're done!

Operating Overview



Power Supply: Standard Guitar FX power supply (9VDC 2.1mm or 2.1mm negative tip)
Current Draw: 12mA
A/B footswitch: Selects between OUT A and OUT B
BOTH footswitch: Turns both OUT A and OUT B on at the same time.
IN: Signal input.
Transformer Isolation Switch : Turns the isolation transformer for OUT B on and off. Toggle left is "ON". Toggle right is "OFF".


Build Your Own Clone
Amp Selector
Drawn by:
K. Vanderhulls
Rev 2.0
01/18/2019
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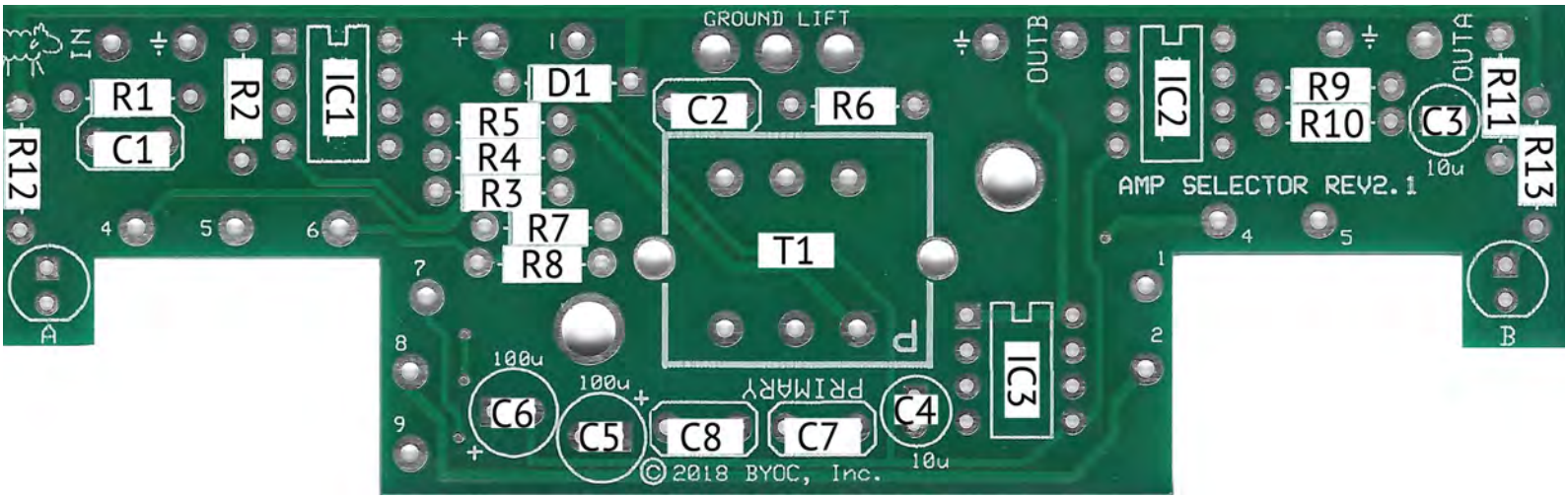
BOEFTROOL
IN(stereo)
J1
R1
10k
C1
0.1
R2
1M
IC1b
+9v
R3
10k
R4
10k
R5
10k
R7
10k
R8
10k
R9
10k
R10
470
C3
10u
R11
100k
OUT A
OUT B
J3
T1
TM018
SW
C2
.001
R6
10k
SW1b
SW1c
SW2b
SW2a
A/B
BOTH
D2
LED
A
R12
4k7
D3
LED
B
R13
4k7
IC2b
-9v
J5
DC Adaptor
n.c.
D1
1N4001
C4
10u
7660SCPA
IC3
C5
100u
C7
0.1
C6
100u
C8
0.1


GROUND LIFT
IN
OUTB
OUTA
R1
C1
R2
IC1
D1
R5
R4
R3
R7
R8
C2
R6
T1
PRIMARY
IC2
R9
R10
C3
10u
R11
R13
R12
AMP SELECTOR REV2.1
A
B
100u
C6
100u
C5
C8
C7
C4
10u
IC3
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PCB Map

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