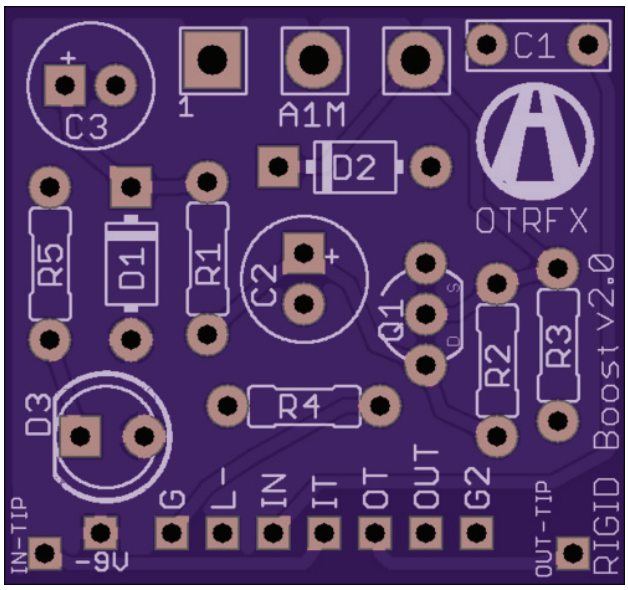
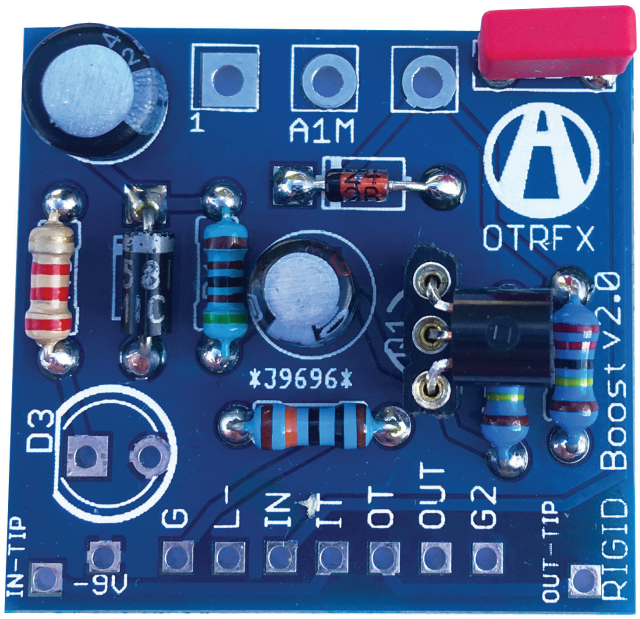
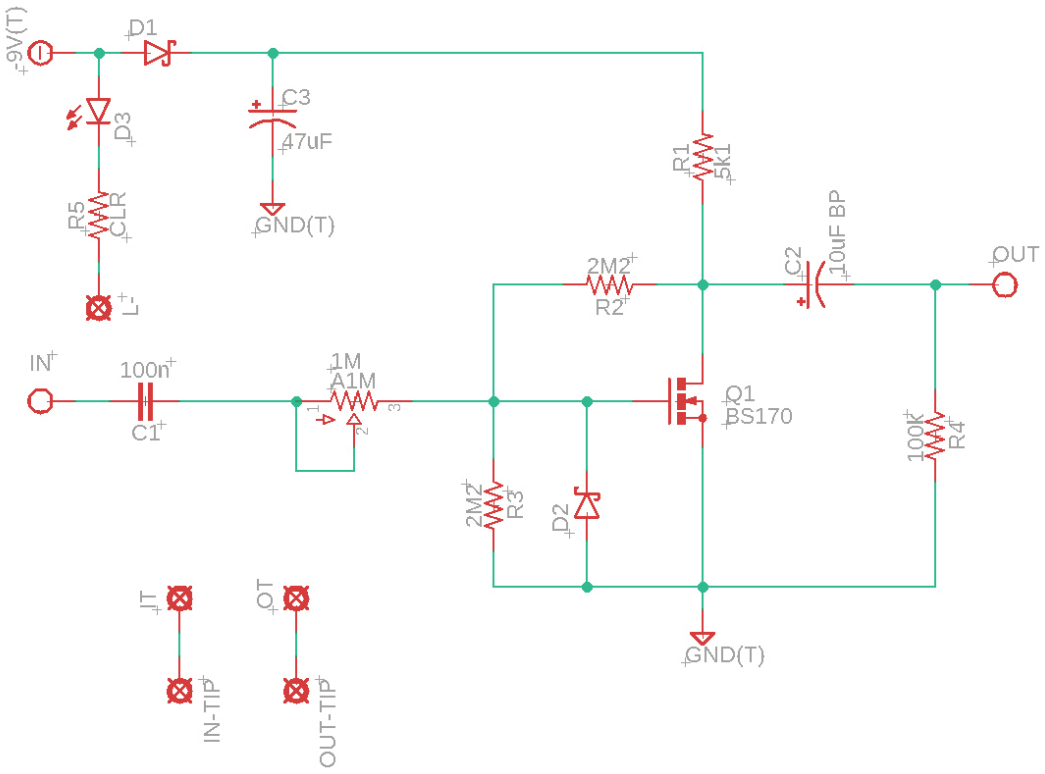
ON THE ROAD EFFECTS

RIGID BOOST (v2.0) Build Guide







ON THE ROAD EFFECTS

RIGID BOOST (v2.0) Build Guide

The RIGID BOOST circuit is based on the Zvex Super Hard-On circuit, a transparent boost pedal with a very high input impedance. At unity gain, you get an added heft and sparkle, but keep cranking it up and you get a massive volume boost that will push your tube amp into glorious overdrive. This rendition of the circuit has been altered to eliminate the 'crackle' as you adjust the boost volume.

Resistors

R1	5.1K
R2	2.2M
R3	2.2M
R4	100K
R5	CLR*

Diodes

D1	1N5819
D2	1N5242
D3	LED

Capacitors

C1	100n	FILM
C	10uF	ELECTRO
C3	47uF	ELECTRO

Potentiometers

BOOST	A1M

Transistors

Q1	BS170

* CLR = Current Limiting Resistor for the LED.
1k - 4.7k depending on brightness desired.

GENERAL INSTRUCTION STEPS:

***Important**: Do the assembly in the following order to avoid unnecessary hardship!*

1. Install/solder all resistors & diodes that lay flat on the PCB.

2. Install/solder any sockets (for IC's, diodes, resistors... anywhere you might want to change a part, value or type).

3. Install/solder any DIP switches (if any).

4. Install/solder all capacitors & transistors.

5. Install/solder the ribbon cable connector and/or any other wiring on the PCB that go to the jacks/stomp switch.

6. Install/solder PCB mounted pots & LED
(***Important**: Use pot dust caps or some other non-conductive material to keep back of pots from touching the back of the pcb).*

7. Attach/solder wiring to the jacks/stomp switch.

Tips:

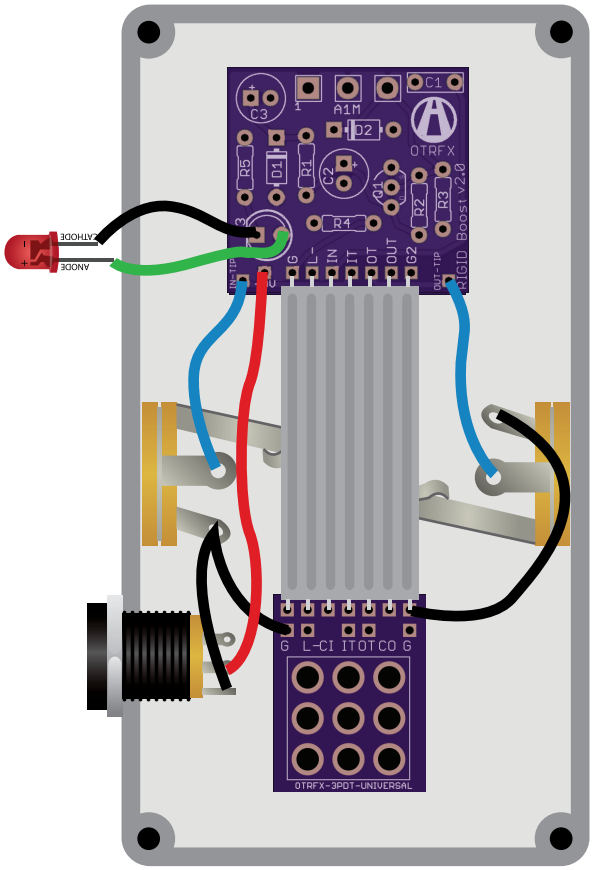
- Check to make sure your wiring is complete before firing up the pedal for the first time, especially the 9v & ground wiring.

- Snip your component leads short after soldering. Your solder joints should look like shiny little Hershey's Kisses when finished.

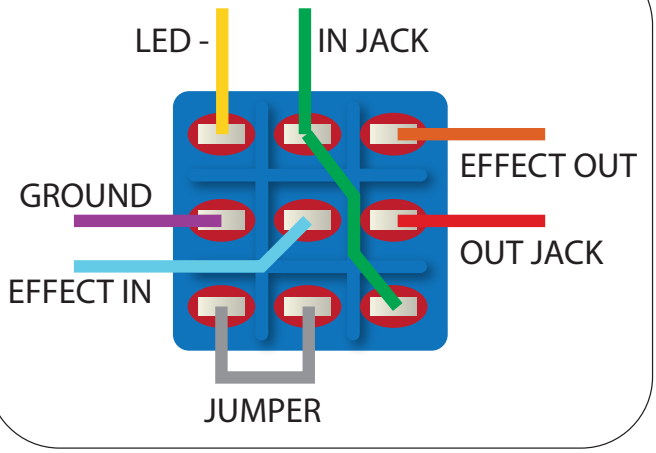
- Socket anything you might want to change, or anything that would be very difficult to remove if faulty (IC's/transistors).

ON THE ROAD EFFECTS

RIGID BOOST (v2.0) Build Guide

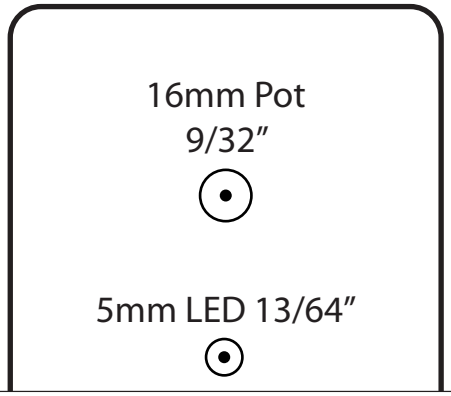


True Bypass Wiring



Pots/LED Drill Holes

1590B Enclosure



RIGID BOOST (v2.0) Build Guide

ADDITIONAL NOTES

- LED: There is an on-board LED current limiting resistor ('CLR' in the parts list). Choose something between 1k to 4.7k or higher. The higher the resistance, the dimmer the LED indicator will be.

- If you don't have a 1 Meg Audio pot (A1M), you can substitue with a 1 Meg Linear pot (B1M). This board was designed to accomodate a PCB mounted pot, but you can wire up a solder lug pot instead, by running wires between the pot and the board.

- Ribbon cable and the OTRFX 3PDT board makes wiring up the pedal a breeze, but you can also wire it the old-fashioned way, using the True Bypass wiring diagram.

RESOURCES:

Parts Ordering:	Website:	Specialties:
Tayda Electronics	taydaelectronics.com	resistors, capacitors, diodes, sockets, LEDs, pots, knobs
Mouser	mouser.com	resistors, capacitors, IC's
Love My Switches	lovemyswitches.com	switches, knobs, enclosures, pre-wired LEDs