

I MUST SCREAM

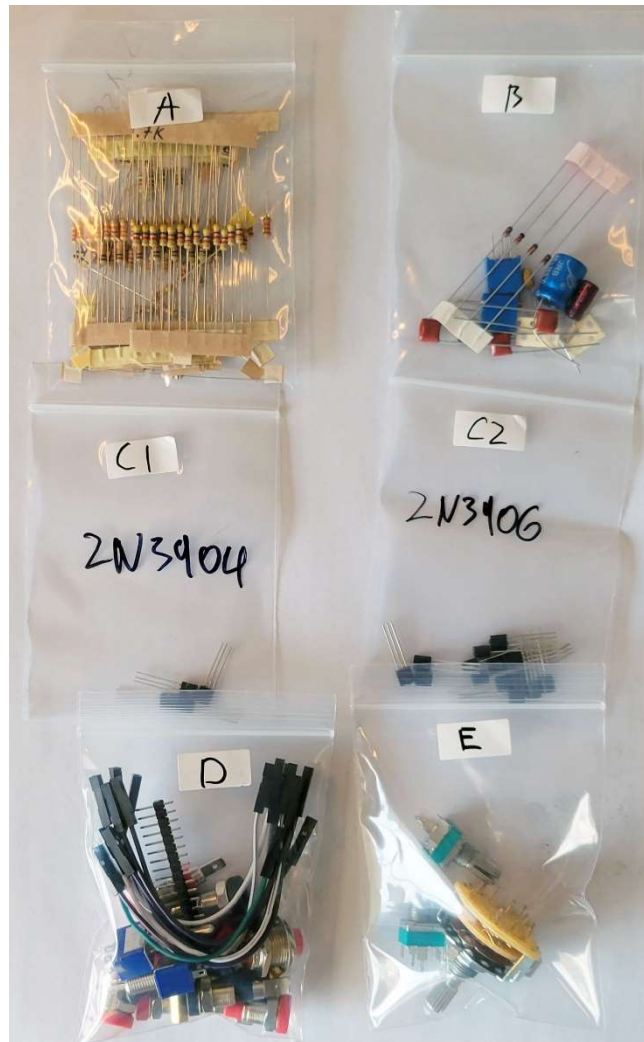
TIMING PULSE GENERATOR MODEL 140

ASSEMBLY GUIDE

imustscream.cc



The kit consists of PCB, Panel, bags of components (A, B, C1, C2, D, E) and knobs.



Bag **(A)** contains: resistors, all numbered by their values

Bag **(B)** contains: Capacitors, J201 Transistor, Trimmers, Diodes

Bag **(C1)** contains: 2N3904 Transistors

Bag **(C2)** contains: 2N3906 Transistors

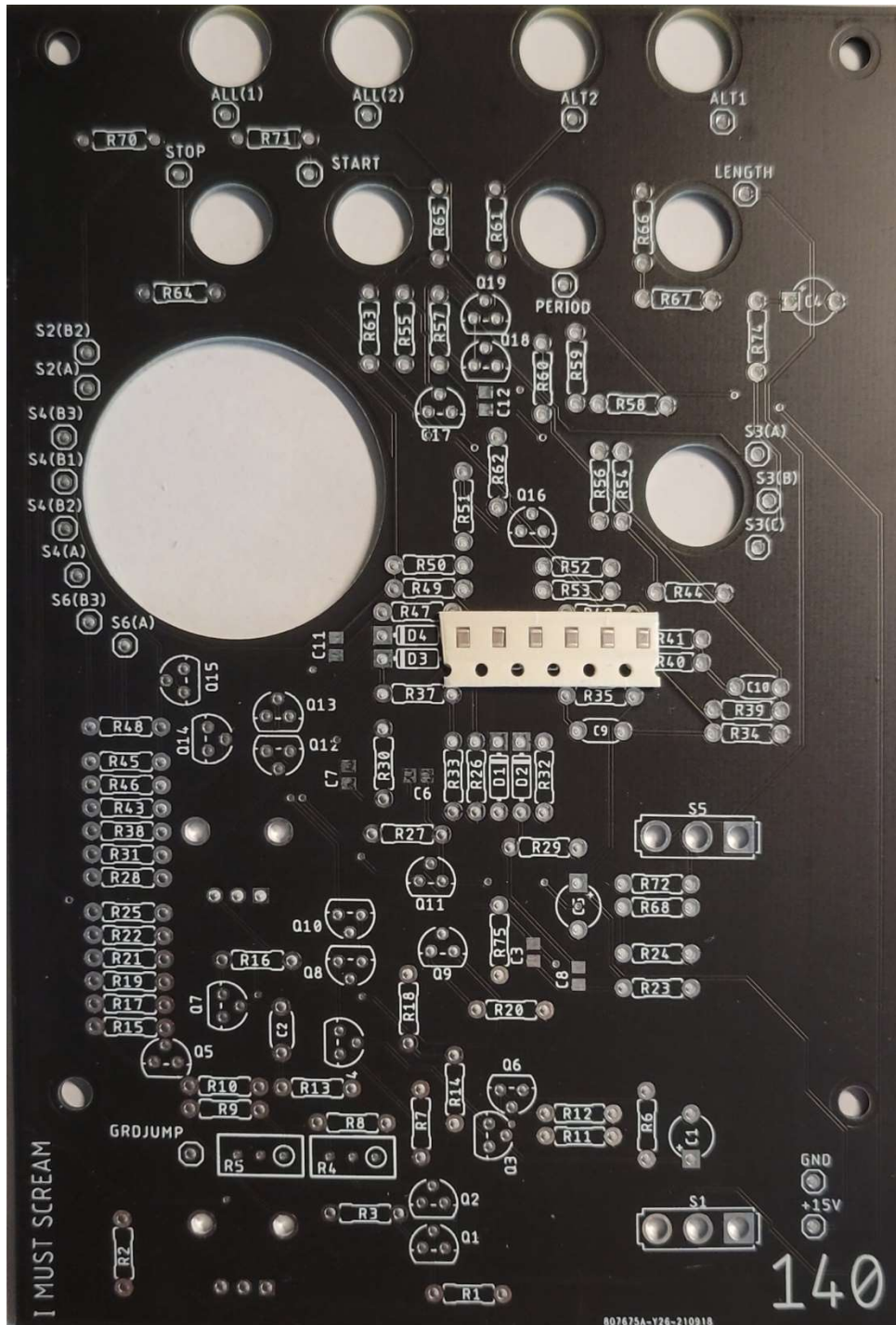
Bag **(D)** contains: Switches, Banana jacks, Standoffs, Wires, Pins, Button

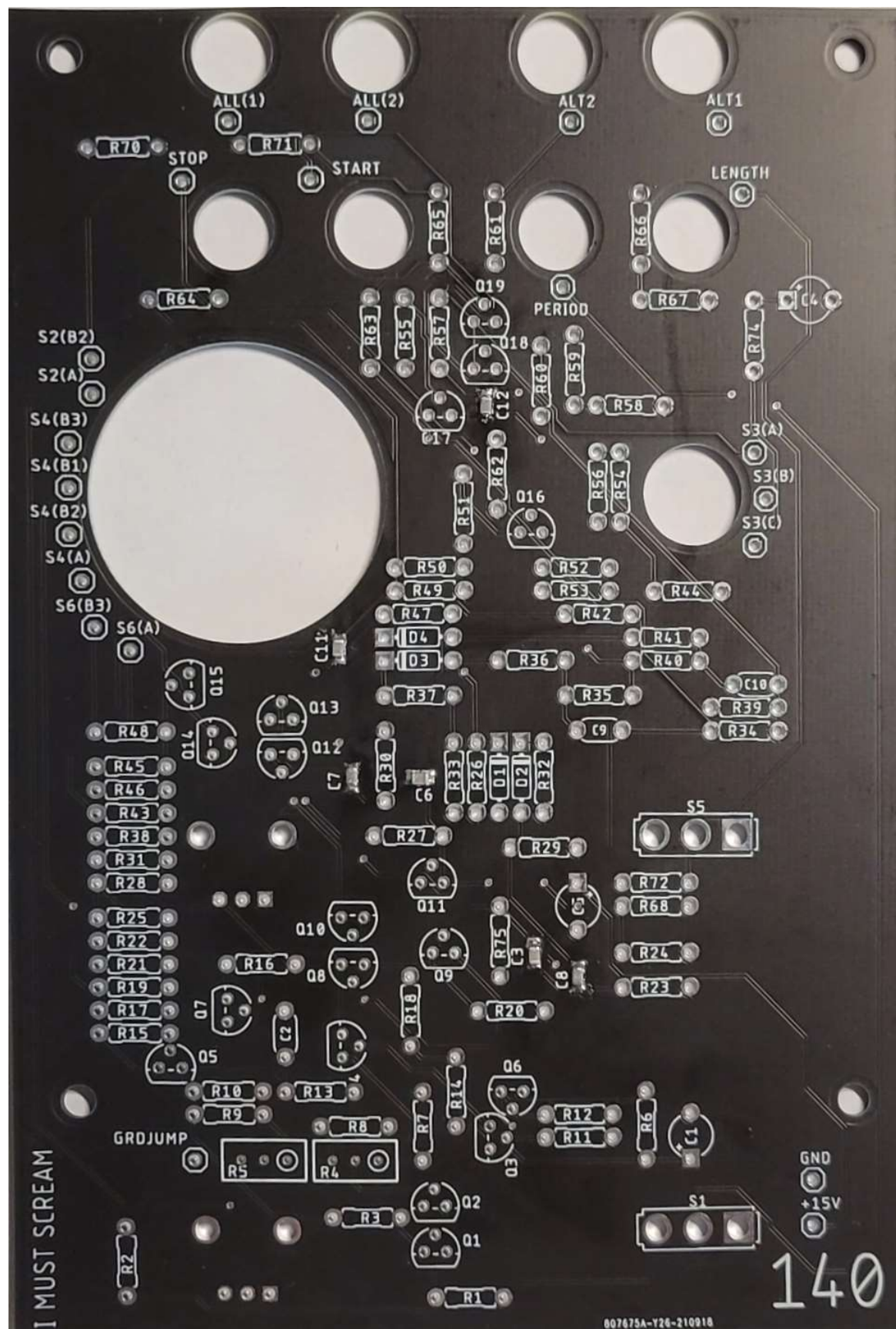
Bag **(E)** contains: Pots, Switch

Please refer to BOM for components placing.

Step 1

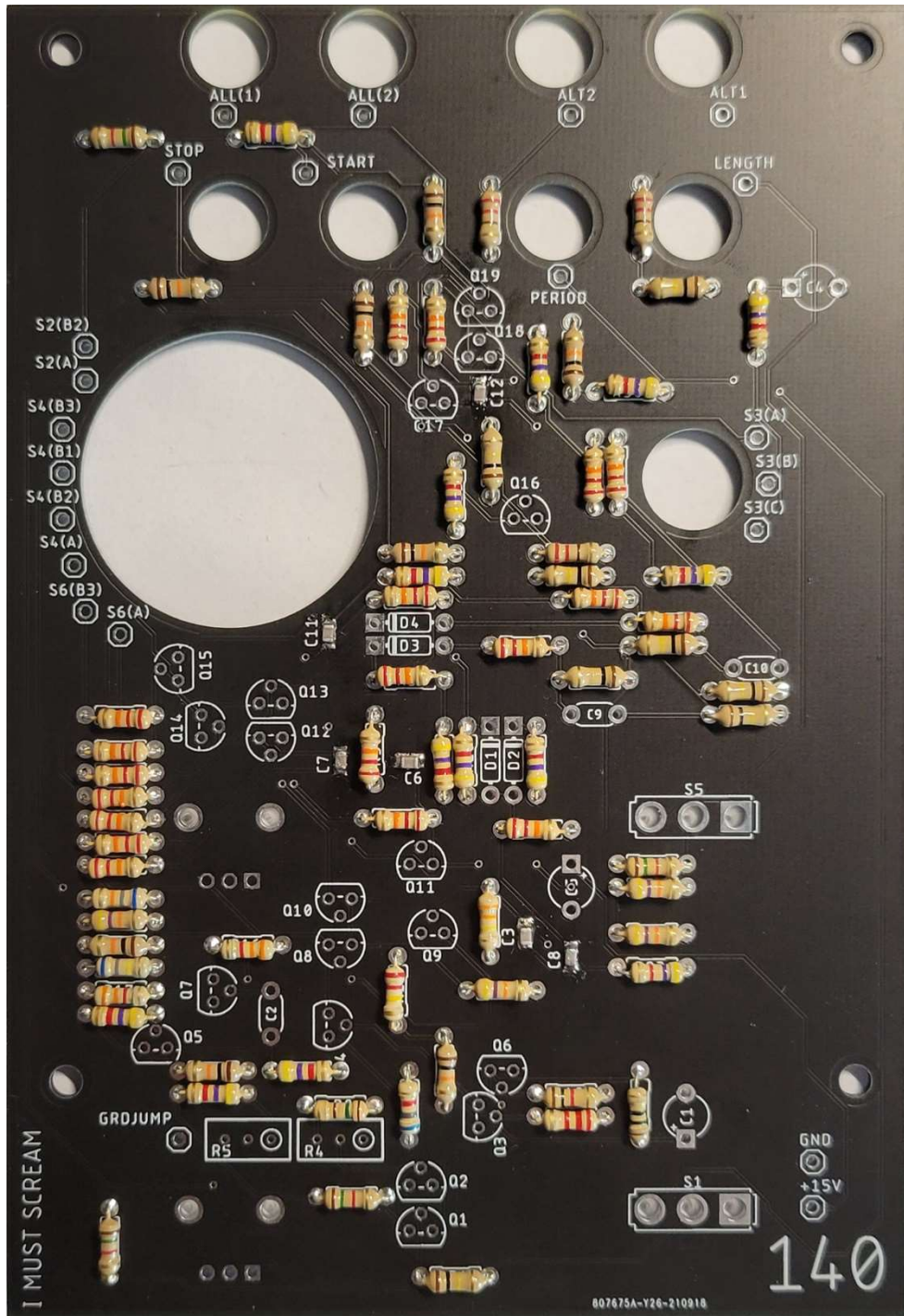
Solder 6 SMD capacitors first.





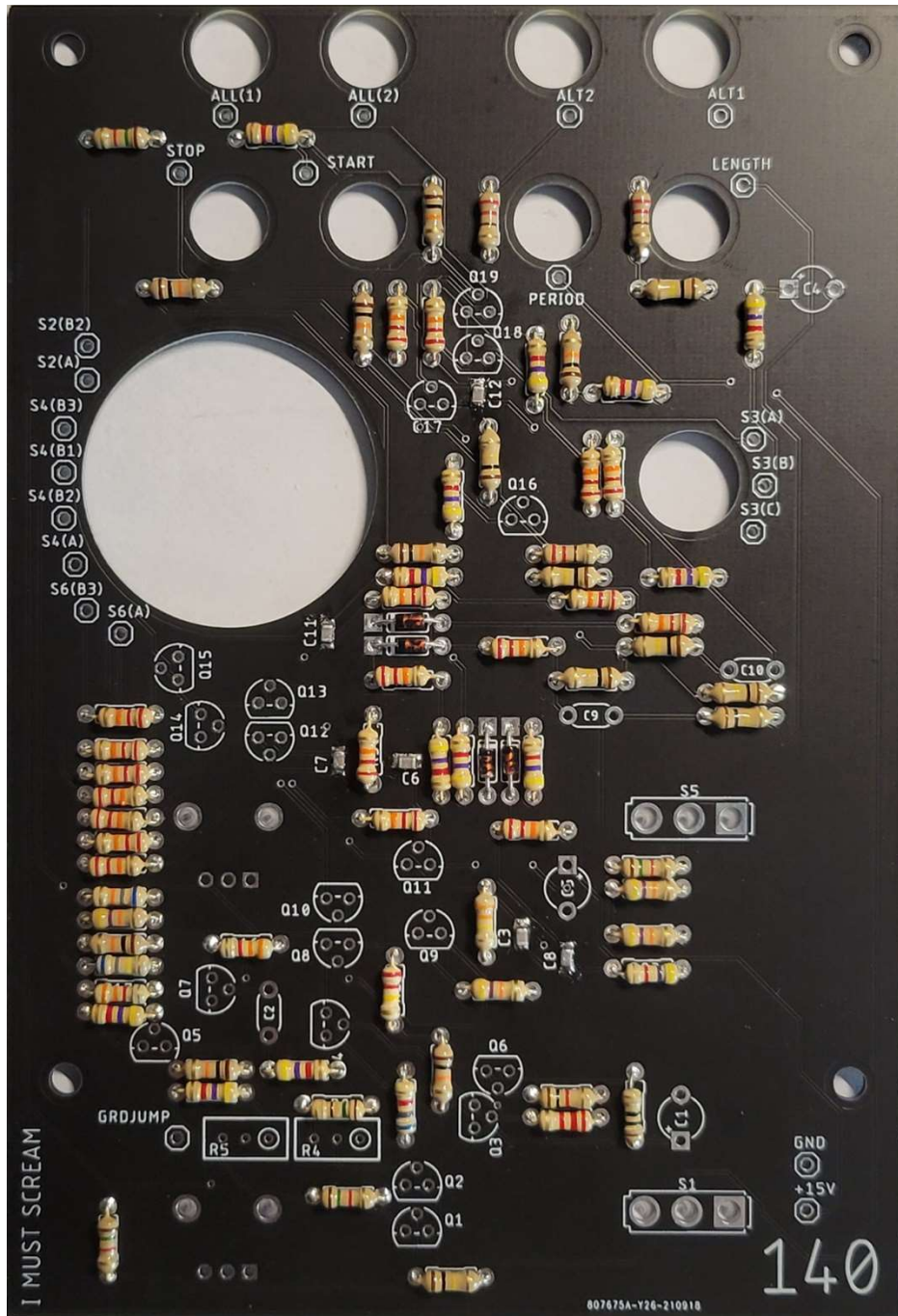
Step 2

Solder all the resistors.



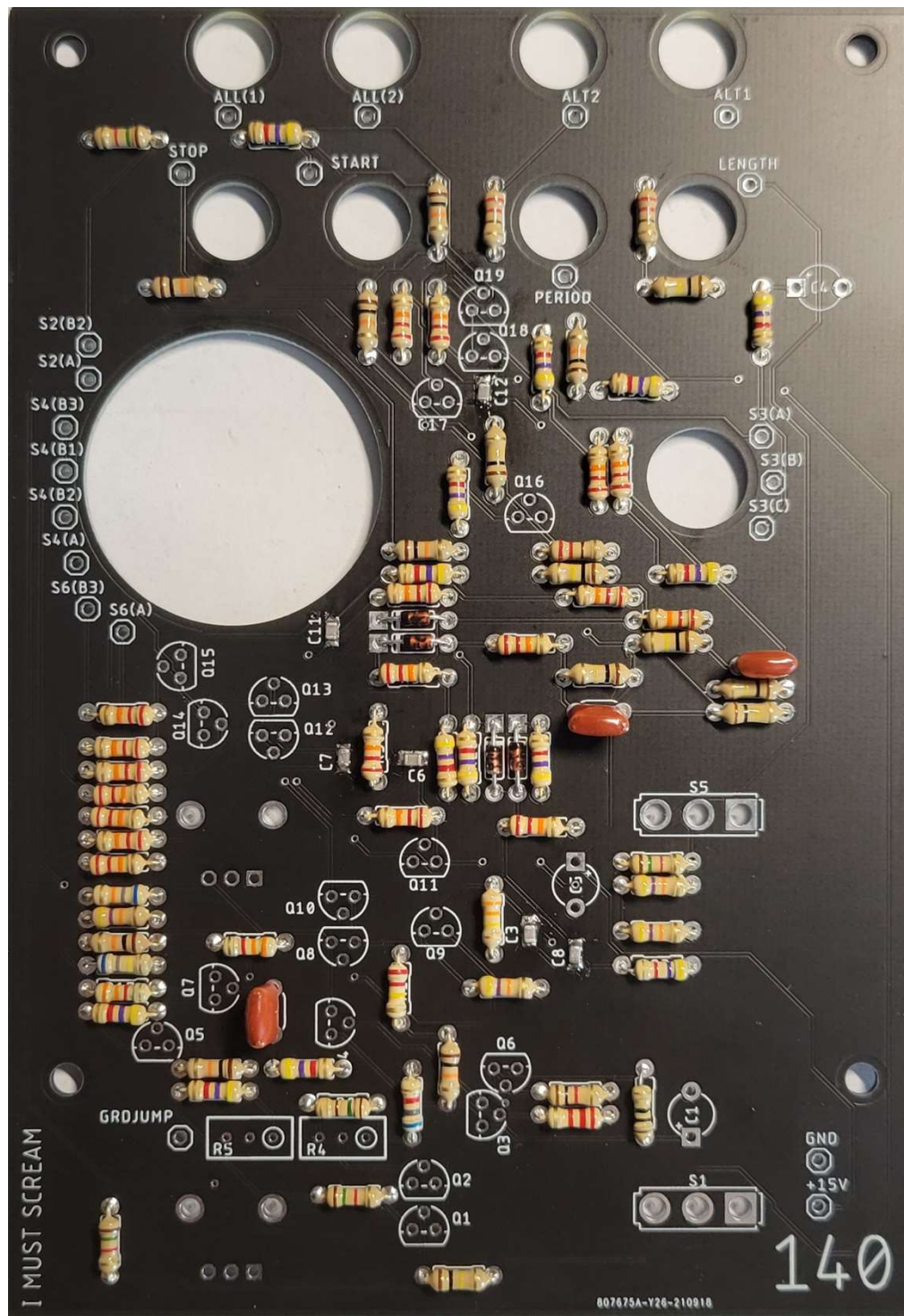
Step 3

Solder all the diodes. Pay attention to the orientation. Black stripe on the diode should match the white stripe on the silkscreen.



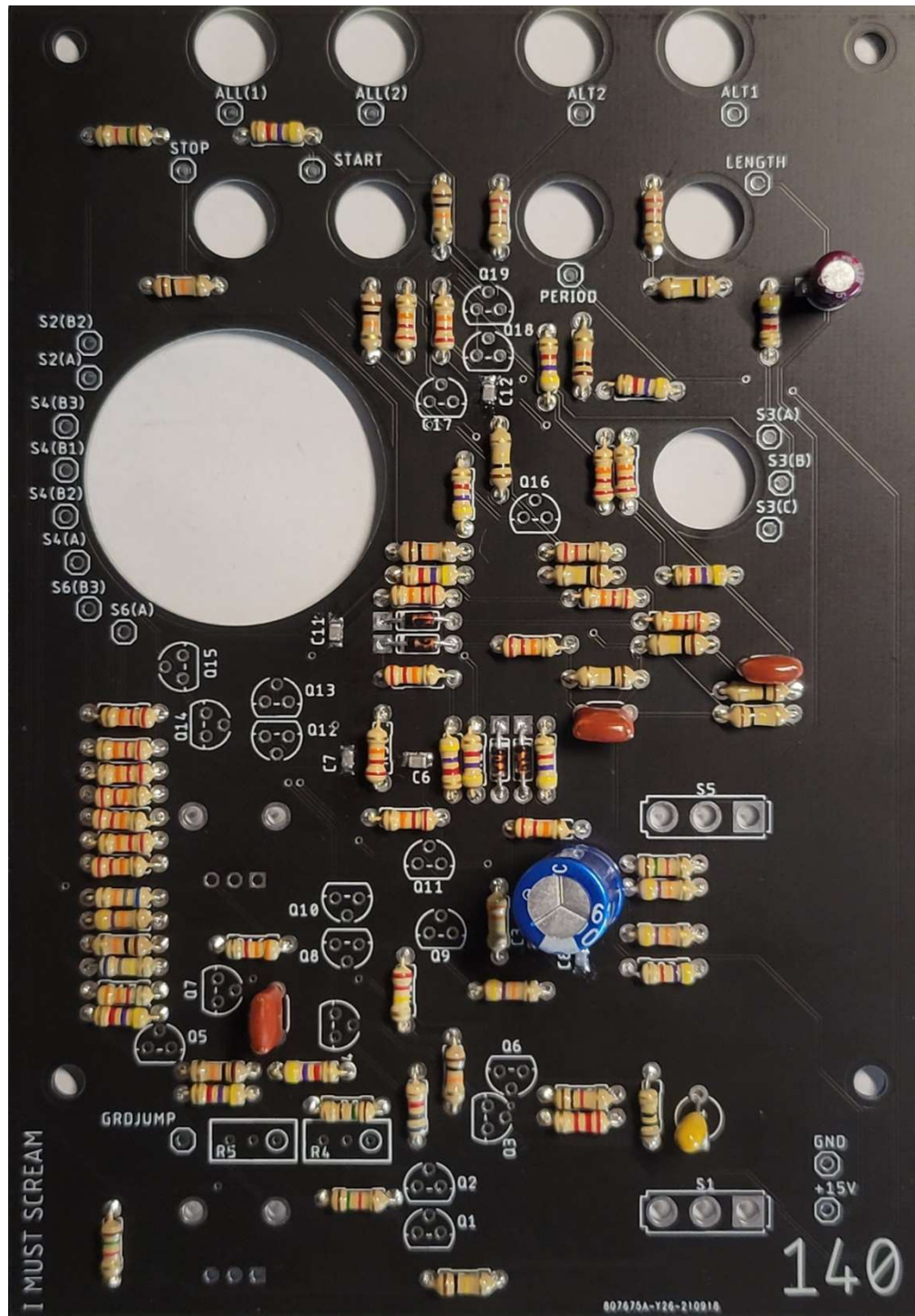
Step 4

Solder 3 unpolarized capacitors: C2, C9, C10. Orientation here doesn't matter.



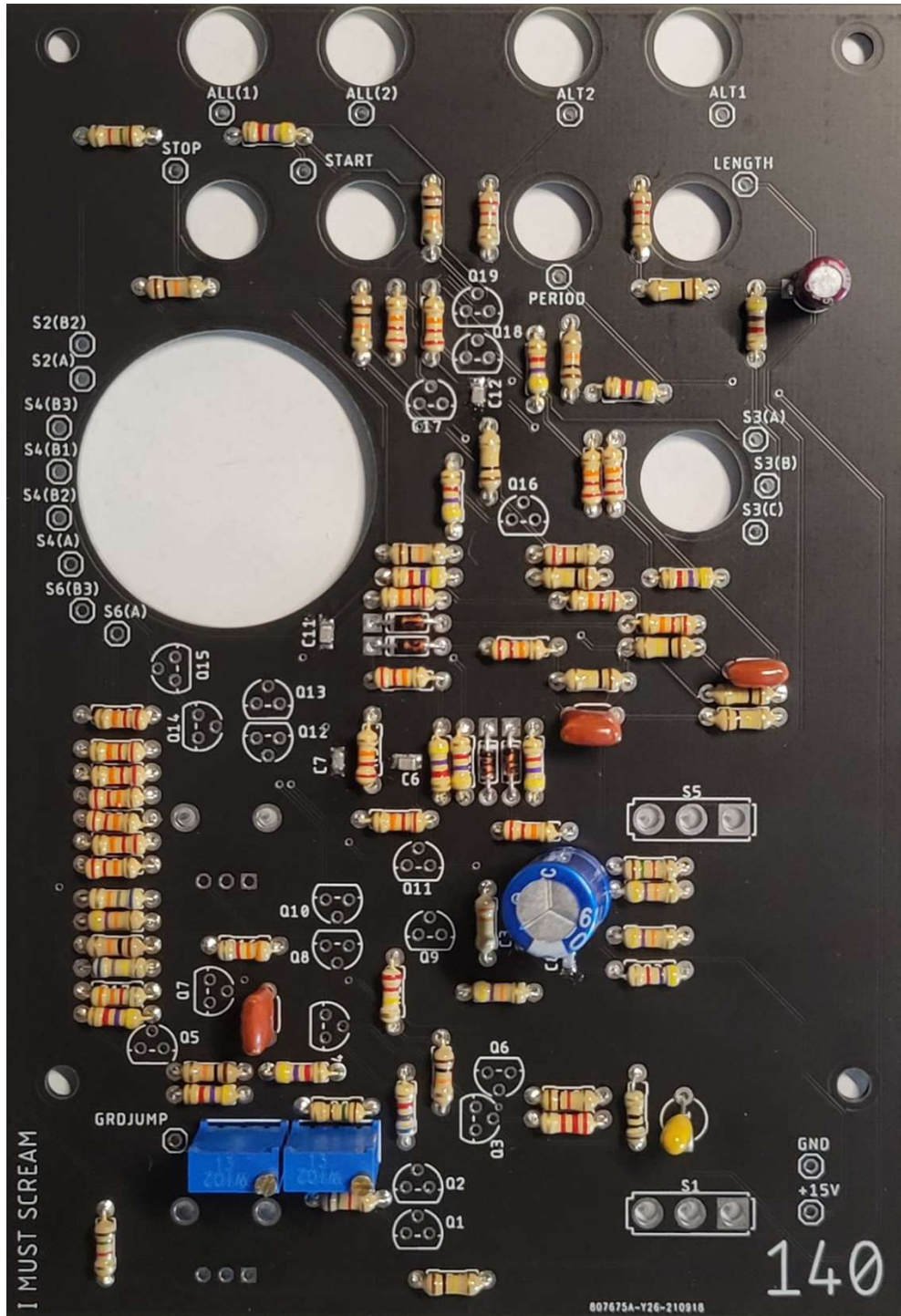
Step 5

Solder 3 **polarized** capacitors: C1(1uF), C4(4.7uF), C5(100uF). Orientation here DOES matter. Refer to silkscreen + sign.



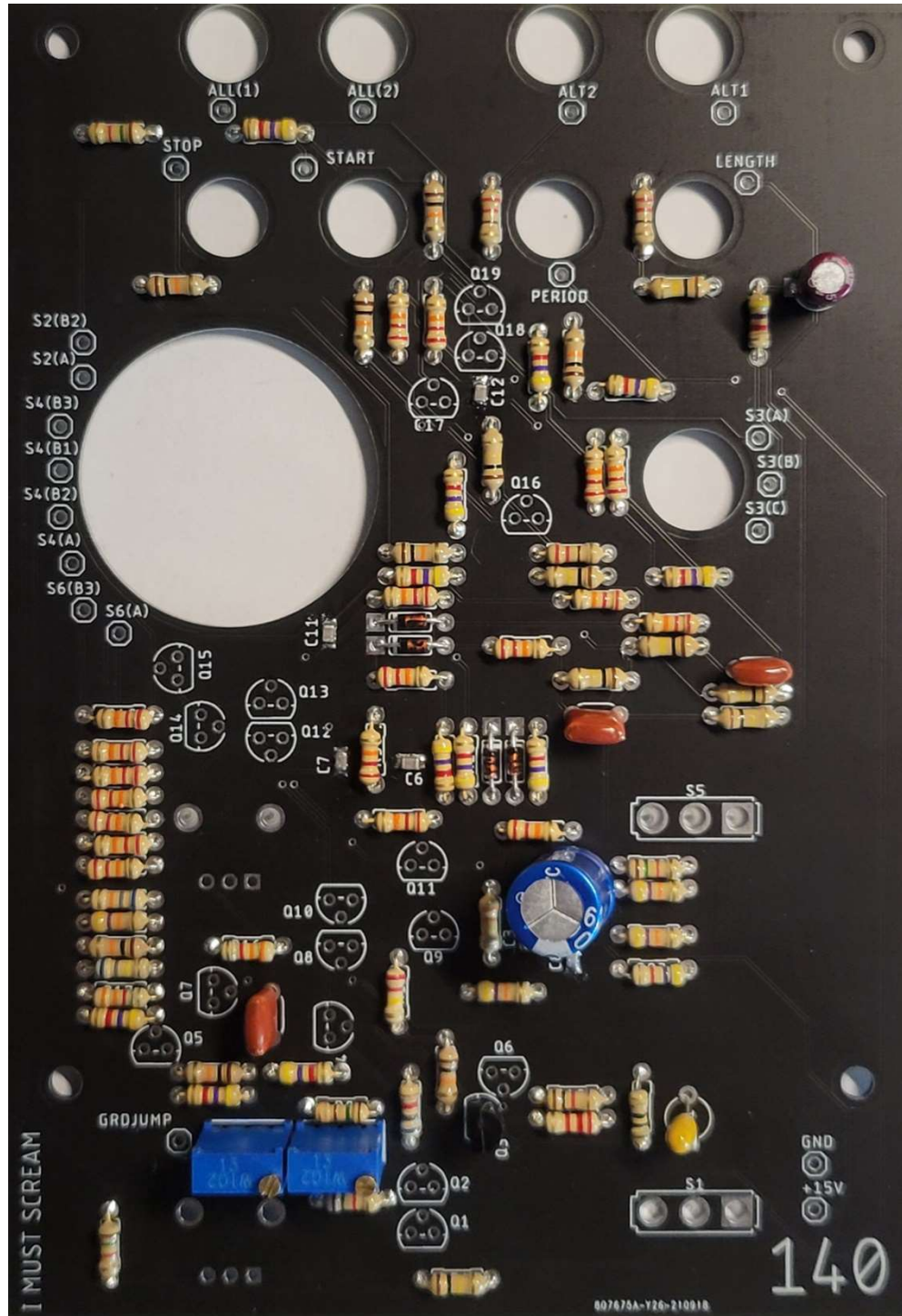
Step 6

Solder trimmers. Pay attention to the orientation. You can refer to the silkscreen or this photo.



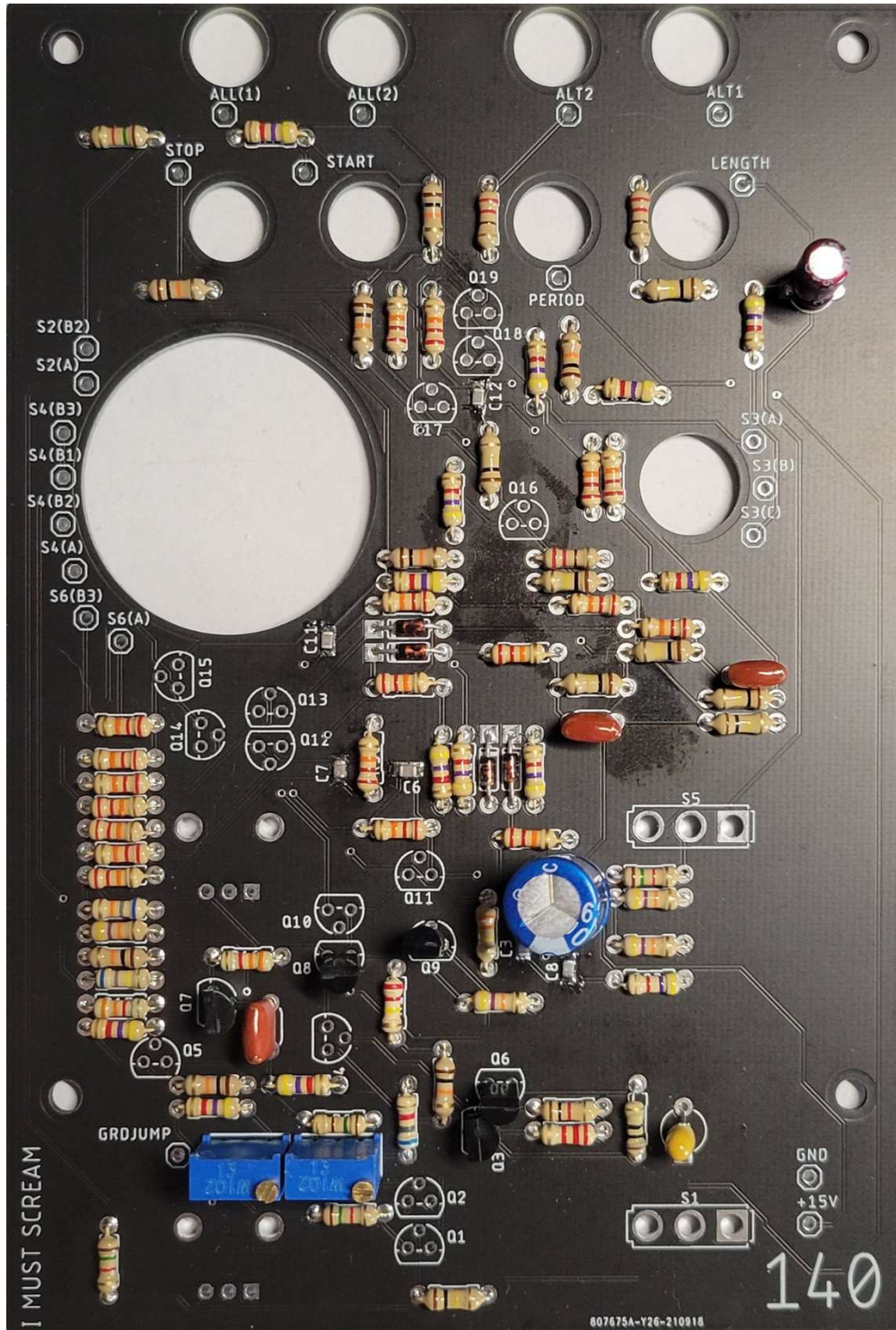
Step 7

Solder **Q3 – J201** Transistor. Pay attention to the orientation. The flat side has to match with the flat side on the silkscreen.



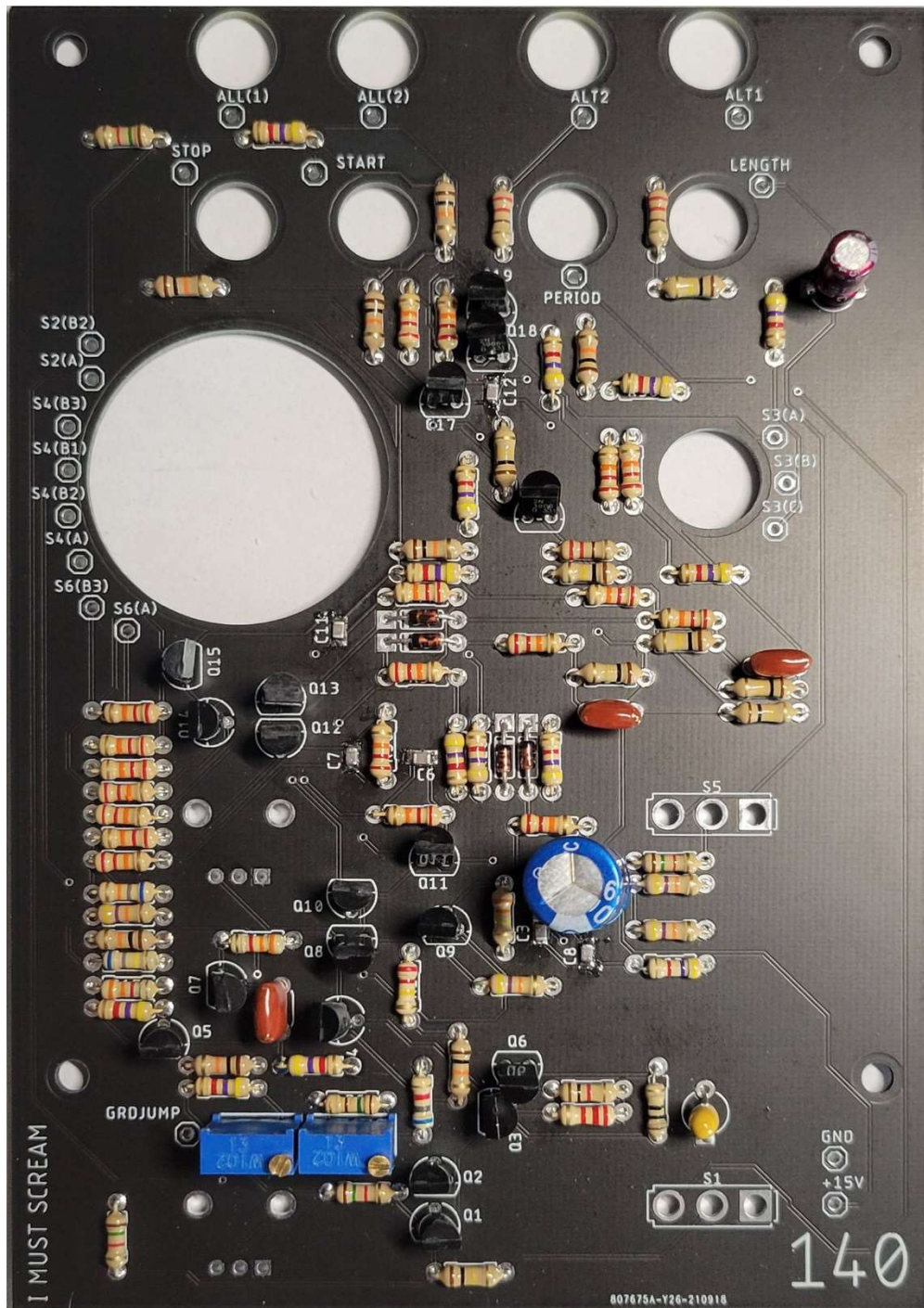
Step 8

Solder 4 **2N3904** transistors. Pay attention to the orientation. The flat side has to match with the flat side on the silkscreen.



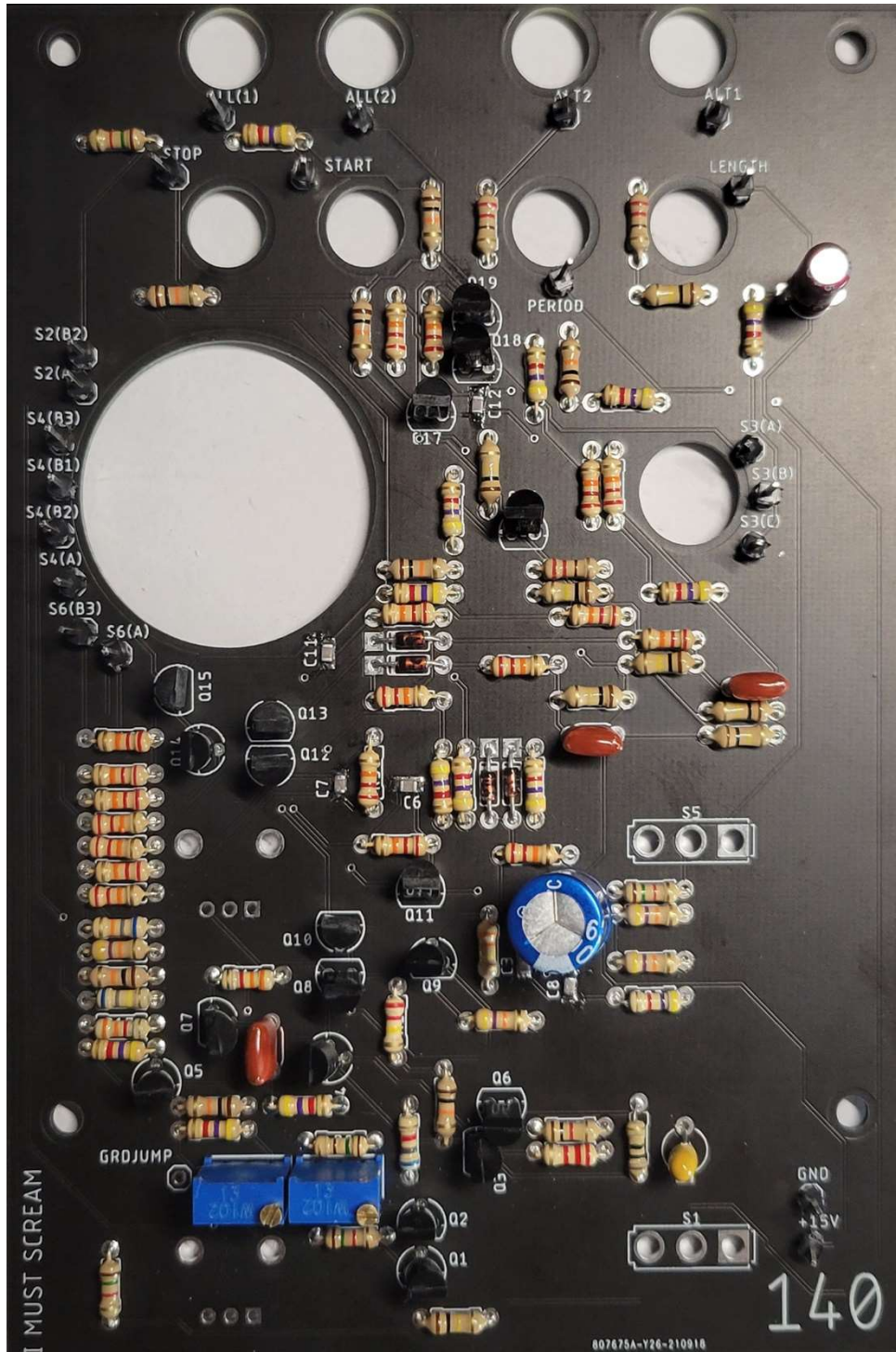
Step 9

Solder 14 **2N3906** transistors. Pay attention to the orientation. The flat side has to match with the flat side on the silkscreen.



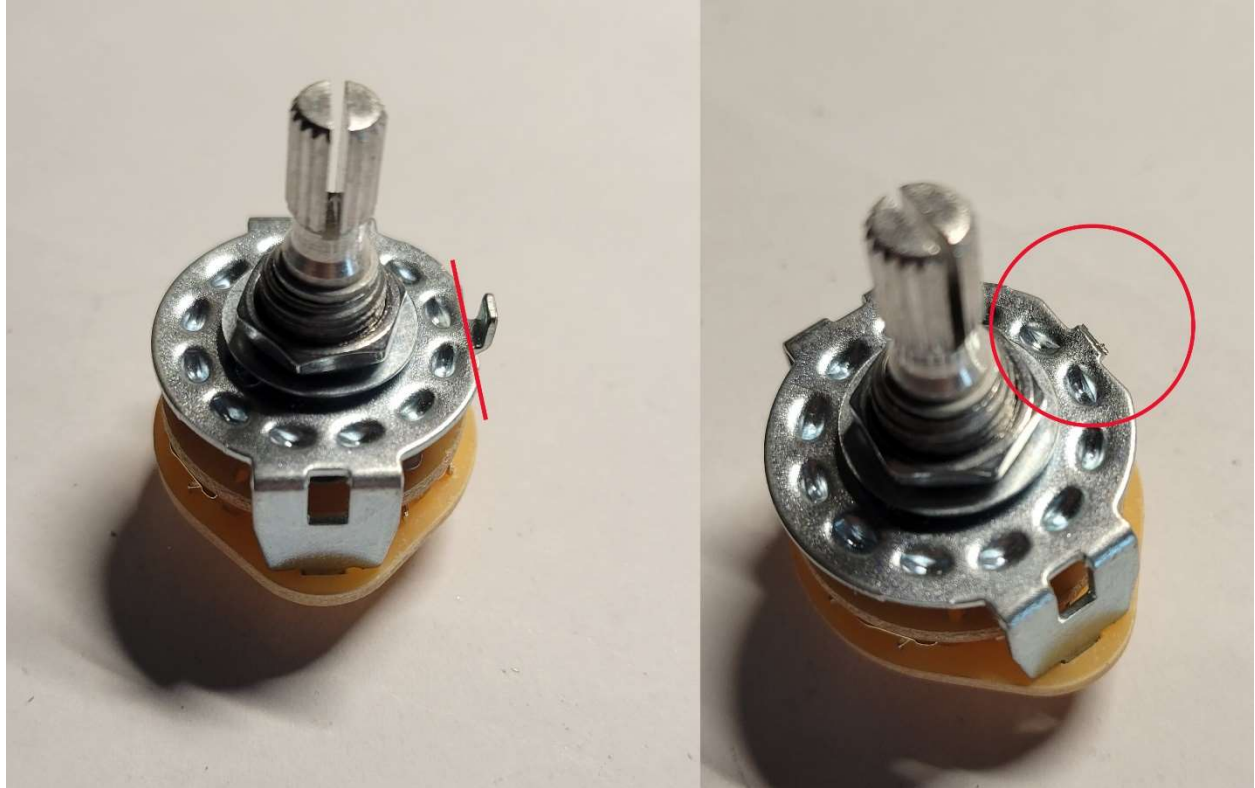
Step 10

Solder all the pins. This step is *(optional)*. Otherwise, you can solder wires directly. However, I strongly recommend using pins.



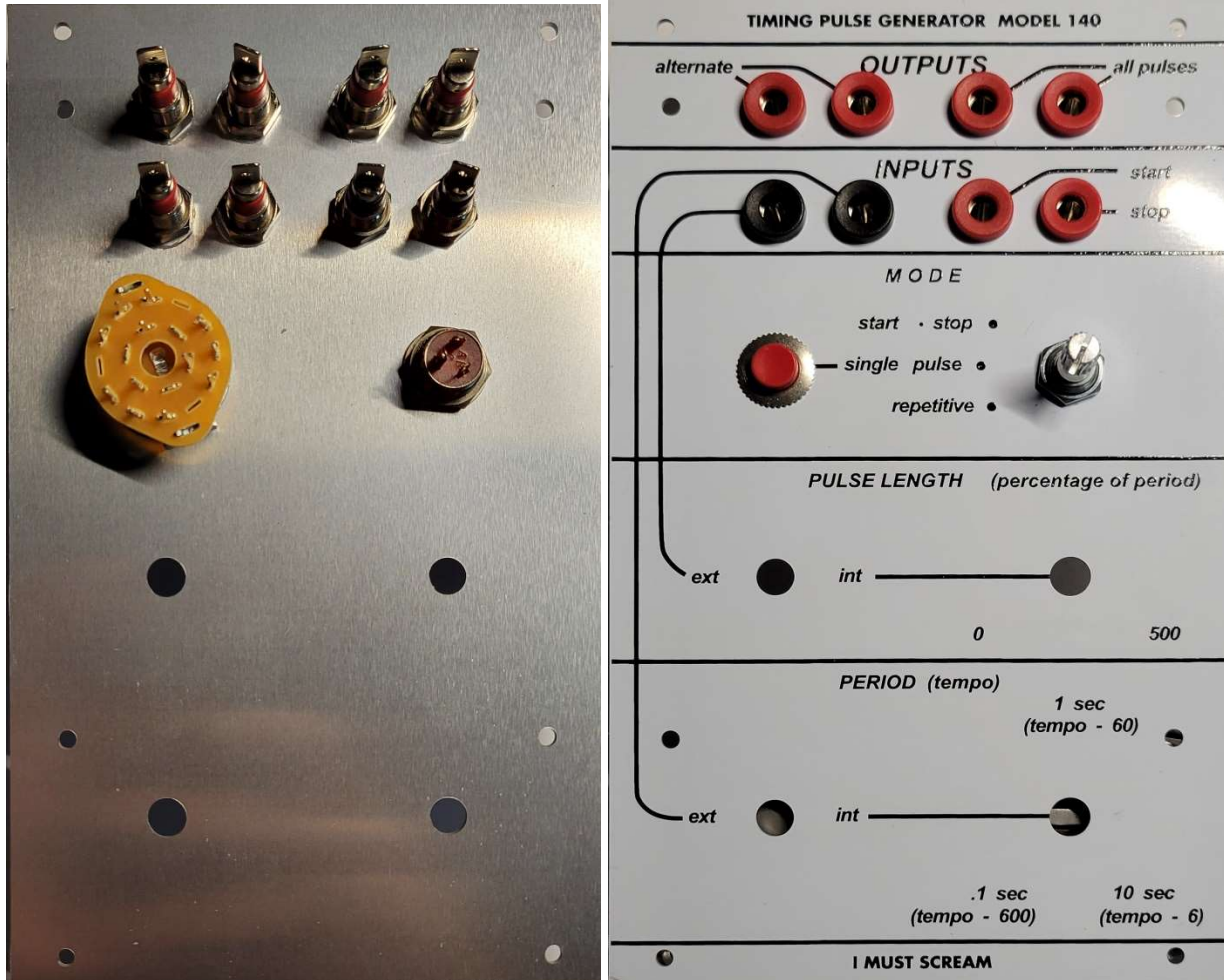
Step 11

Remove the anti-rotational tag using wire cutter.



Step 12

Secure banana jacks, push button and switch on the front panel.



Step 13

Position potentiometers, switches and standoffs. Don't solder yet. Secure them to the front panel, and tighten. Solder **AFTER** tightening.



TIMING PULSE GENERATOR MODEL 140

alternate

OUTPUTS

all pulses

INPUTS

start

stop

MODE

start • stop •

single pulse •

repetitive •

PULSE LENGTH (percentage of period)

ext

int

0

500

PERIOD (tempo)

1 sec
(tempo - 60)

ext

int

.1 sec
(tempo - 600)

10 sec
(tempo - 6)

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Step 14

Cut and strip the wires from the Bag (C). Pay attention that the colors of wires can be different than you see on photos. Use them as you prefer. First, wire the switch. Connect the pins on the PCB to the pins on switch according to the photo.

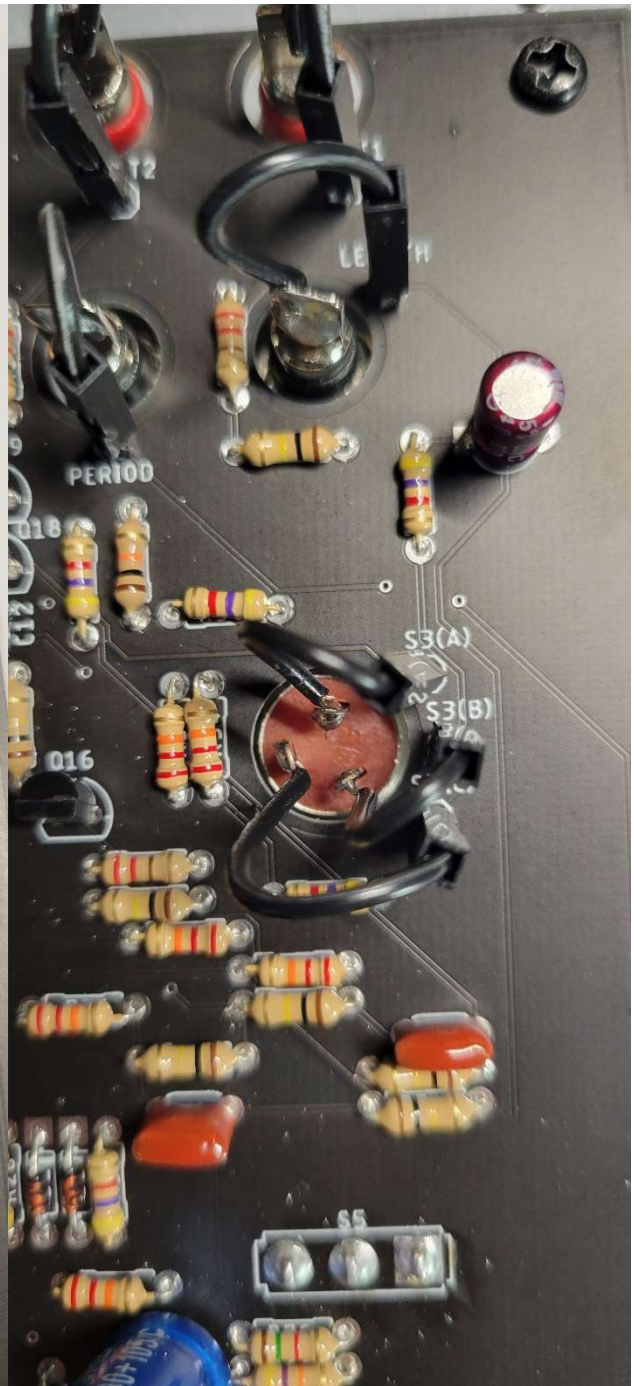
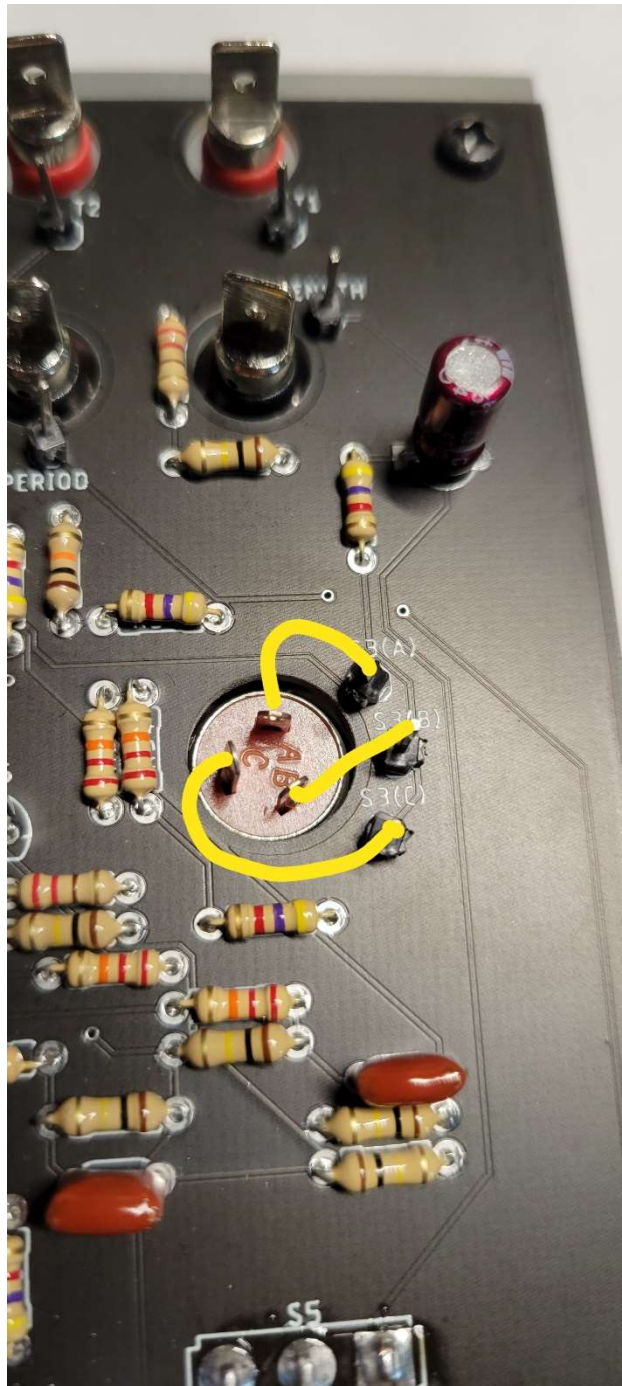




Step 15

Now wire the button. Connect the pins on the PCB to the pins on button according to the letters – A B C.





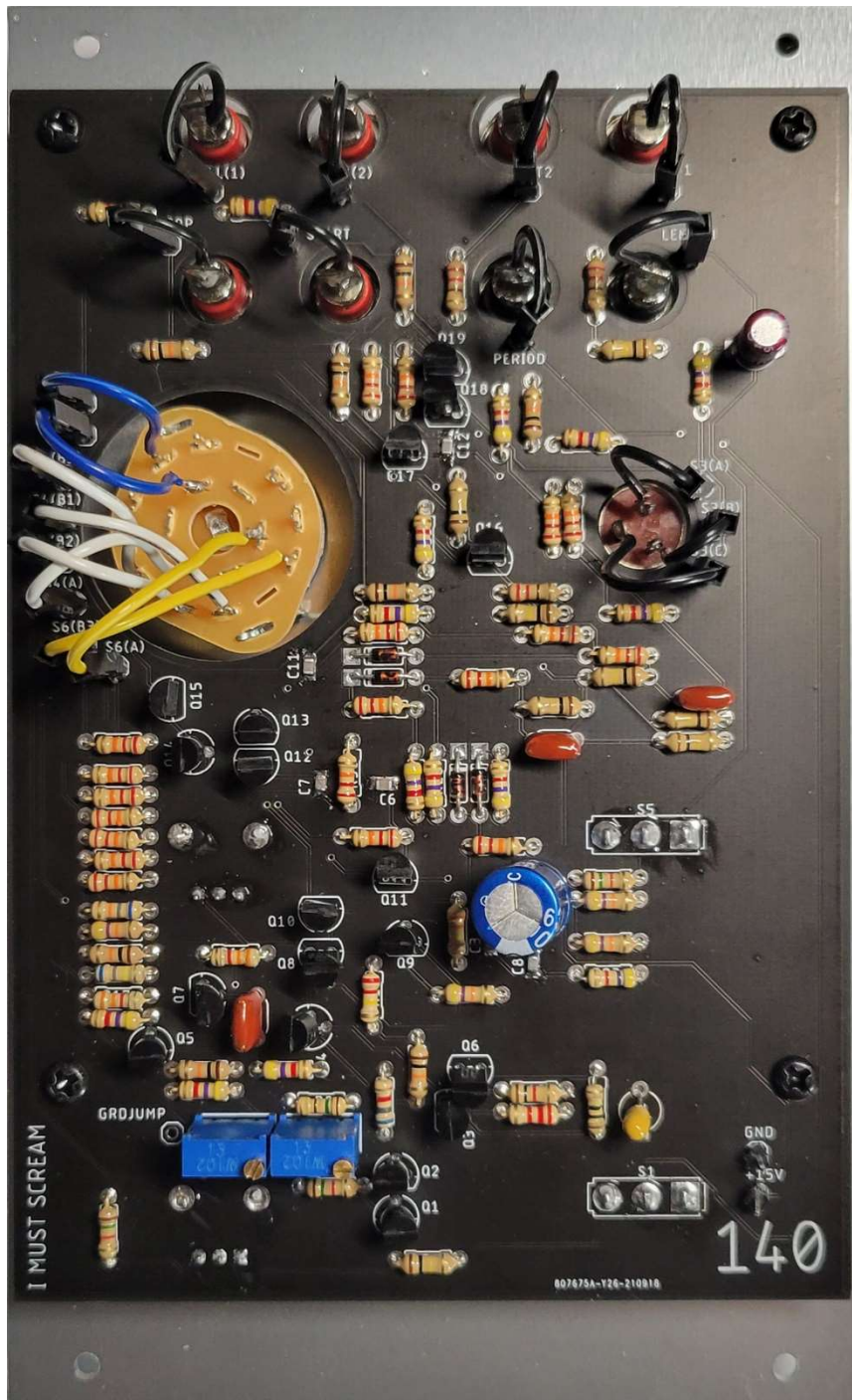
Step 16

Finish by wiring the banana jacks.



Step 17

It's a good time to verify all the wiring you have done. If everything is good – move to the last step.



Step 18

Now you can put knobs on. Congratulations!

