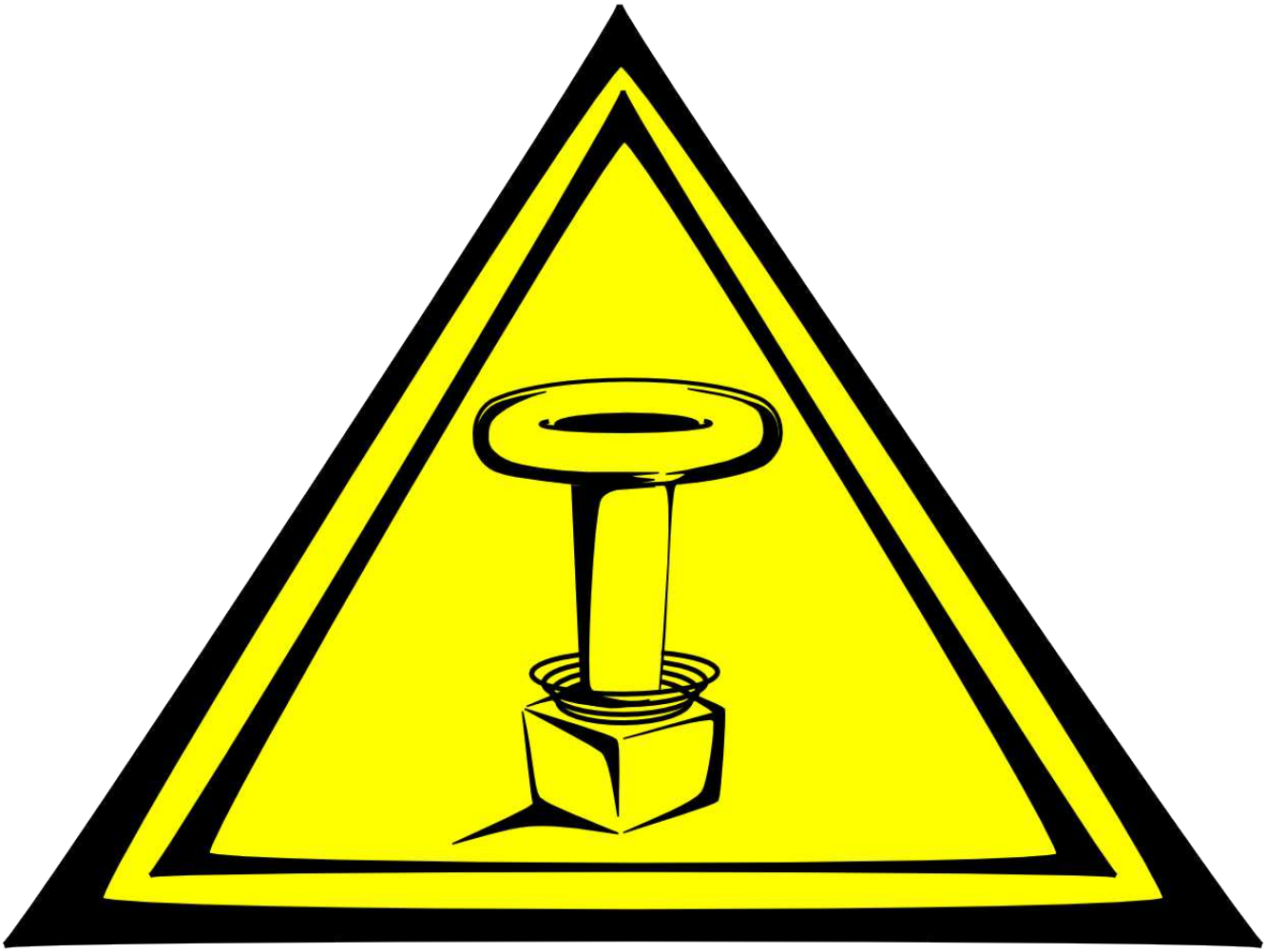
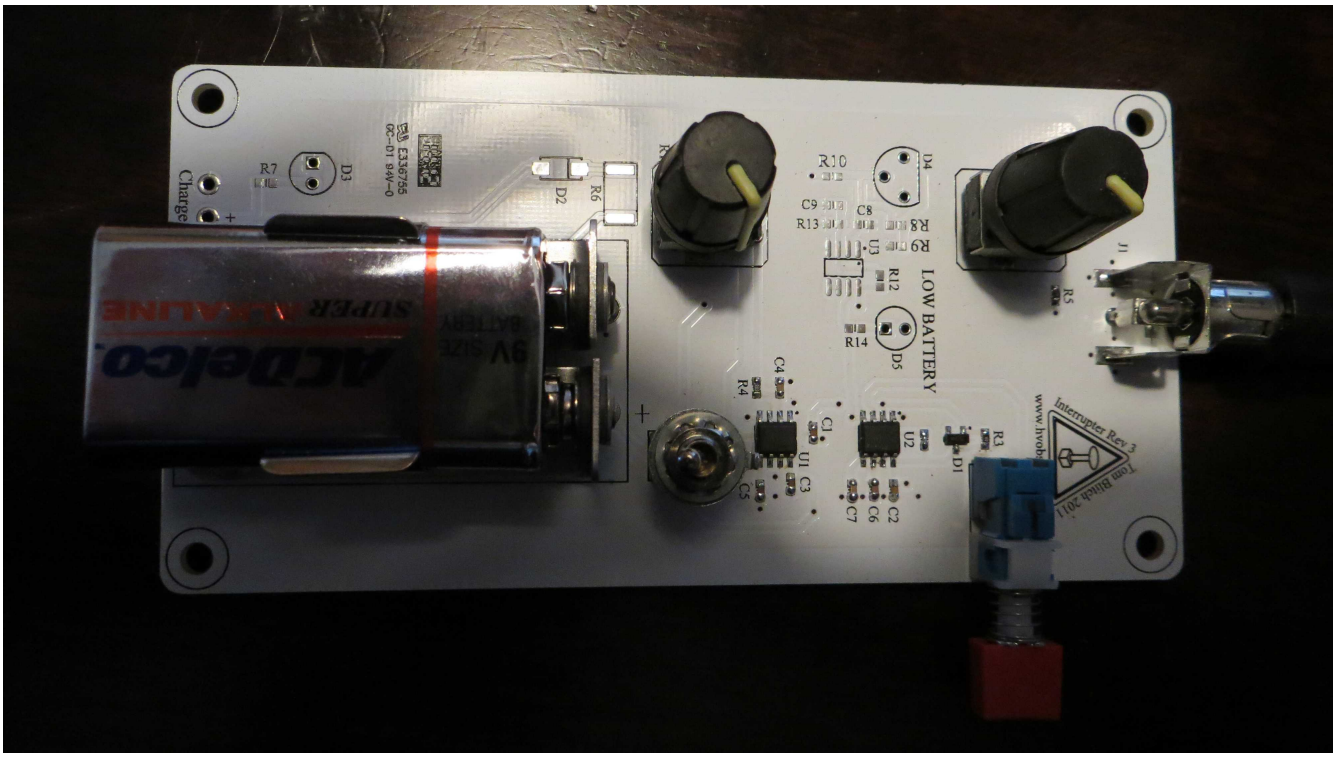
Digital Obsession



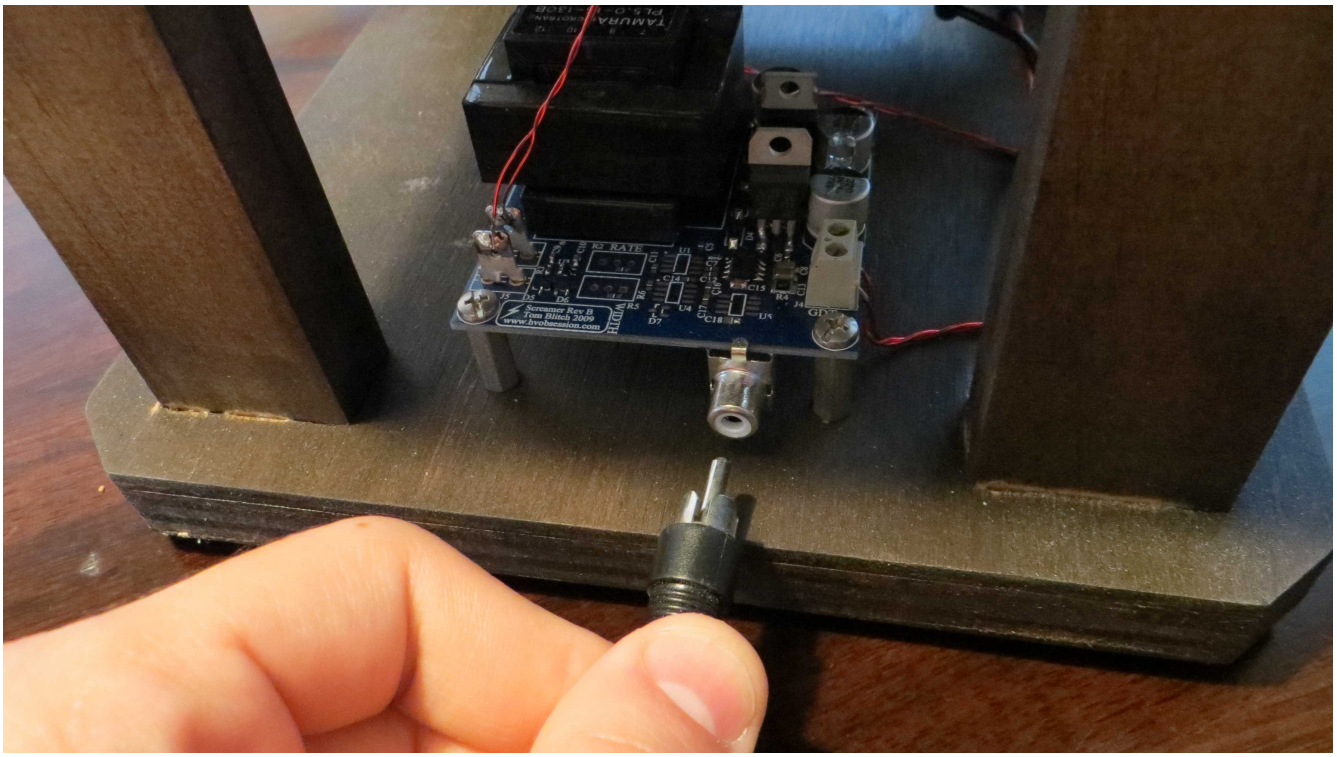
Screamer Basic Operating Instructions

STEP1



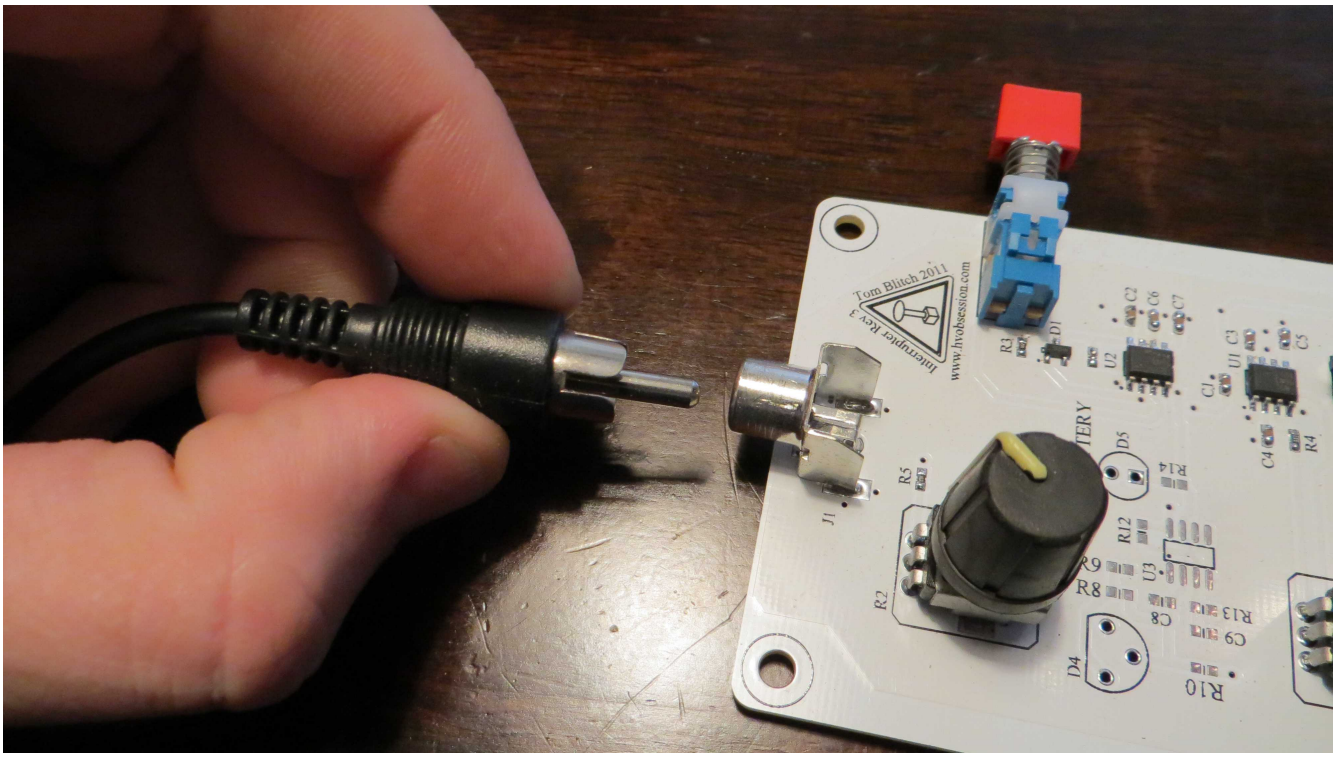
Insert fresh 9V battery into controller.

STEP2



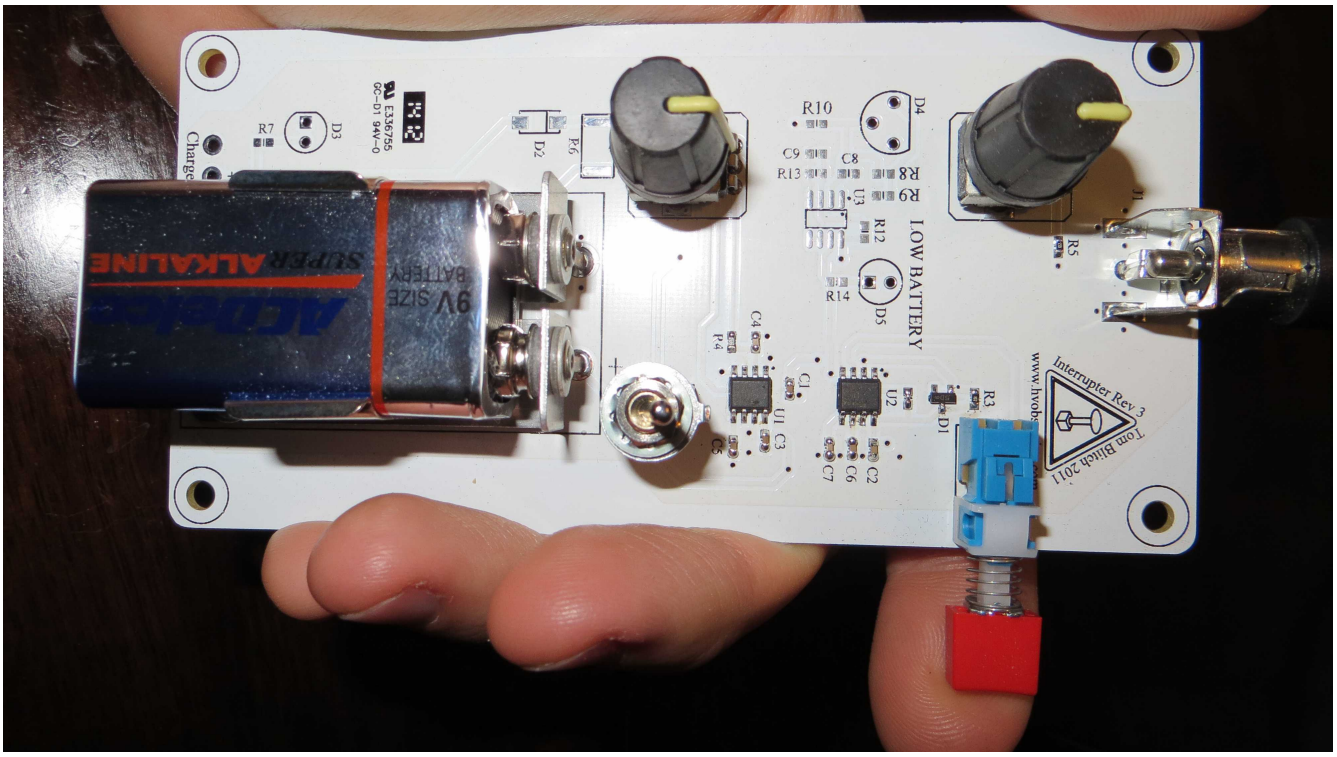
Plug RCA cable (not supplied) 6 feet or longer into RCA Jack on Screamer™Tesla Coil.

STEP3



Plug other end of RCA cable into RCA Jack on controller.

STEP4

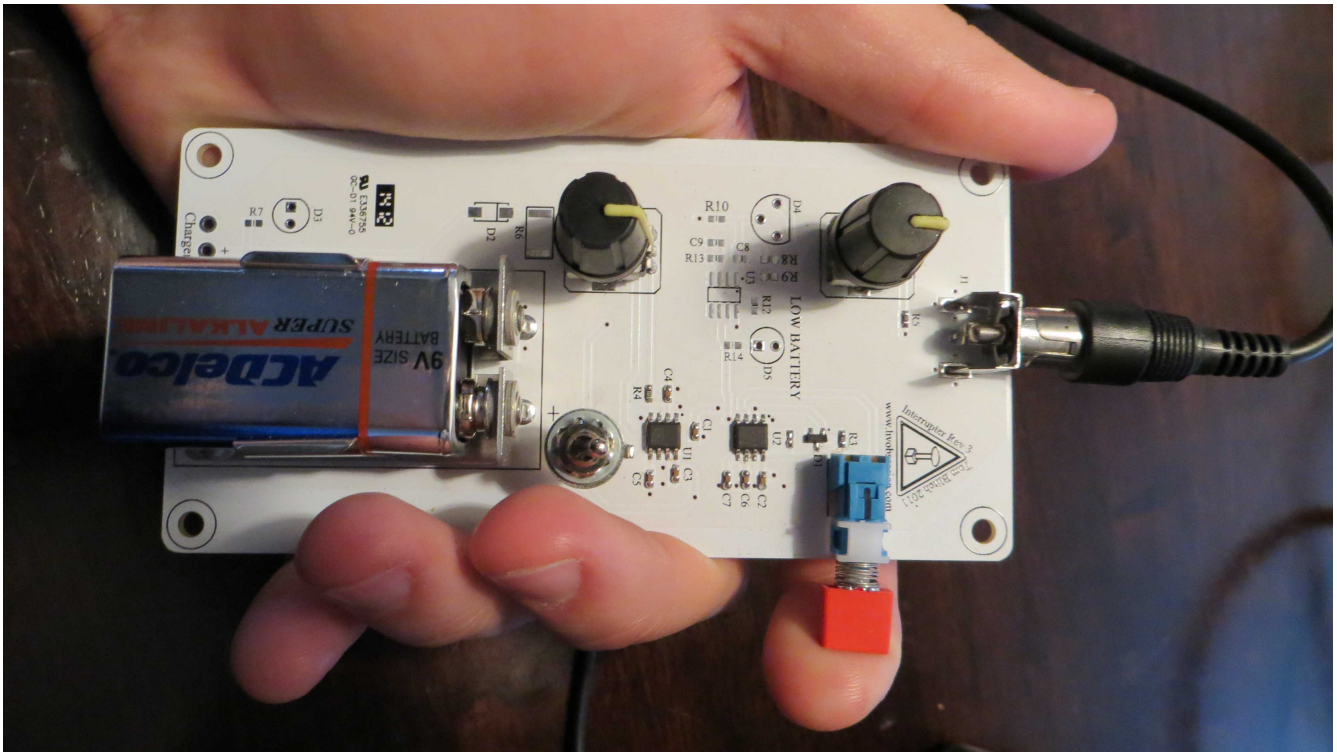


Rotate both knobs so they are both at midpoint (towards RCA jack)

STEP5

Plug Screamer into 120VAC outlet only. Must have be three prong type.

STEP6



Turn on controller (ignore this if yours doesn't have a switch) and when you are ready, press the trigger to activate the coil.

Things to remember

The best way to hold the controller is shown in step 6. This will keep your hands off anything metal on the bottom which can give harmless but annoying static shocks.

The coil should not be run with both knobs fully clockwise. This causes unnecessary strain on parts. The best way is to start with the top knob turned clock wise starting from mid point and stop when sparks no longer get any longer but only grow thicker. Then adjust bottom knob to desired break rate. I now add limiting resistors to the controllers for safer operation so that the optimal pulse width is achieved at midpoint.

It is not recommended to let the coil constantly arc to ground. This causes unnecessary strain on the transistors. They are rated for 280 amps pulsed current. Under normal operation the Screamer coil pulses no more than 200 amps per controller pulse. Occasional arcs to ground are fine granted they are at a maximum or near maximum distance.

Never place anything metal of top the toroid. A screwdriver or small object is fine but larger objects de-tune the coil causing current to get trapped in the primary instead of transferring to the secondary. This also causes lots of extra stress.

Screamer Electrical Specifications

Approximately 400 Watts
Primary Feedback Design
161KHz operation
HGTG20N60A4 IGBT's
Full Bridge Design
50 nF Primary Capacitance
~18.5uH Primary Inductance

Controller Reference