ULTRA-HIGH ENERGY RADIATION PLASMA GENERATOR (REV B)

AFTER YEARS OF RESEARCH AND MUCH TRIAL AND ERROR BOTH GOOD AND BAD, WE HAVE COME UP WITH THIS SIMPLE YET SUPER EFFICIENT CIRCUIT.

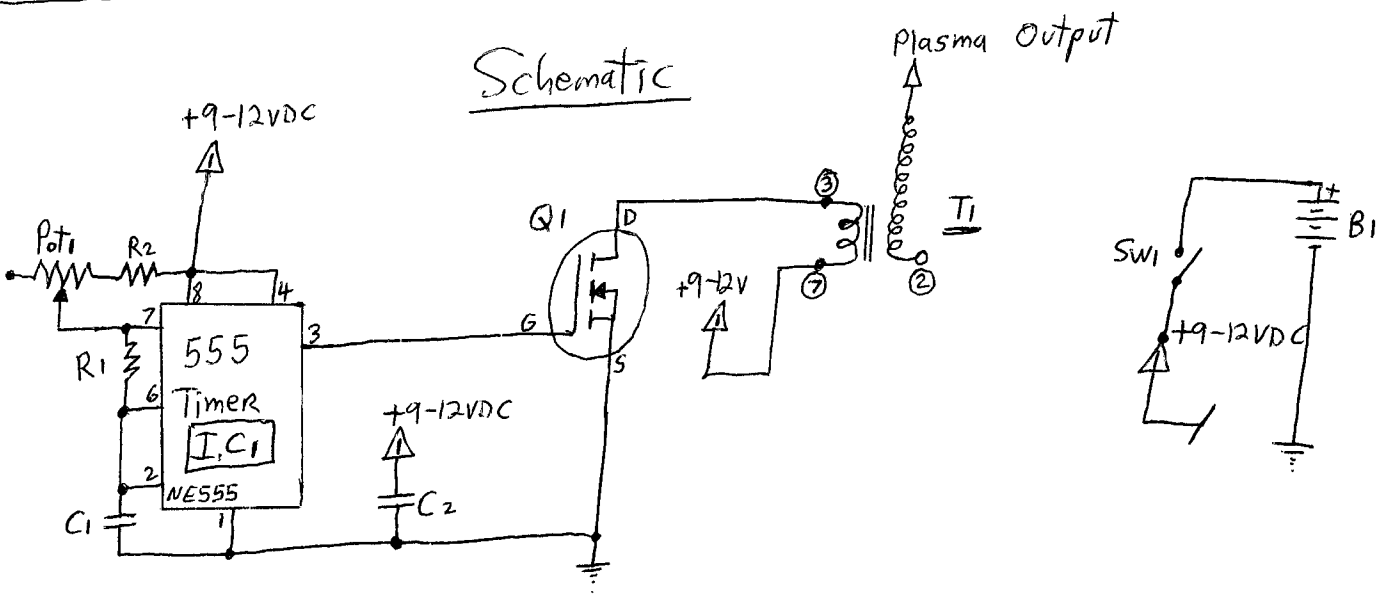
THE CIRCUIT UTILIZES AN EFFECTIVE 555 TIMER CIRCUIT TO GENERATE PULSES AT PIN 3 OF IC1. THE FREQUENCY OF THESE PULSES CAN BE VARIED BY ADJUSTING POT1. THE FREQUENCY RANGE IS SET BY C1 AND POT1 AND IS FROM THE HIGH OR MID HZ TO MID KHZ RANGE. THE PLASMA GENERATOR OPERATES EFFICIENTLY IN THE LOWER-MID KHZ RANGE AROUND ULTRASONIC FREQUENCIES. THE OUTPUT PULSES DRIVE A POWER MOSFET IRF840. THE MOSFET ACTS LIKE A HIGH POWER EFFICIENT SWITCH AT AN EXCELLENT FREQUENCY RANGE. THE HIGH POWER PULSES FROM THE MOSFET ARE FED INTO THE FLYBACK AT PINS 3 AND 7. IF THE UNIT FAILS TO OPERATE TRY SWITCHING THE WIRES ON PINS 3 AND 7. PIN 2 IS THE PLASMA RETURN GROUND...THIS SHOULD NOT BE GROUNDED TO THE MAIN BATTERY GROUND. THE 555 TIMER IS PROTECTED FROM BACK PLASMA BY USE OF C2 BUT WILL NOT PROTECT THE CIRCUIT IF THE PLASMA IS FED INTO THE MAIN POWER PACK OR ANY PART OF THE CIRCUIT.

START BY WIRING THE PARTS DIRECTLY TO THE 555 TIMER IC1. THIS WILL CONSERVE SPACE AND TIME. THEN WIRE THE MOSFET TO THE FLYBACK AND BATTERY PACK. ISOLATE ALL PARTS WITH HOTGLUE OR SILICON GLUE IN A PROJECT BOX.

DO NOT USE THIS DEVICE FOR ILLEGAL PURPOSES.

UH Plasma Gen 99

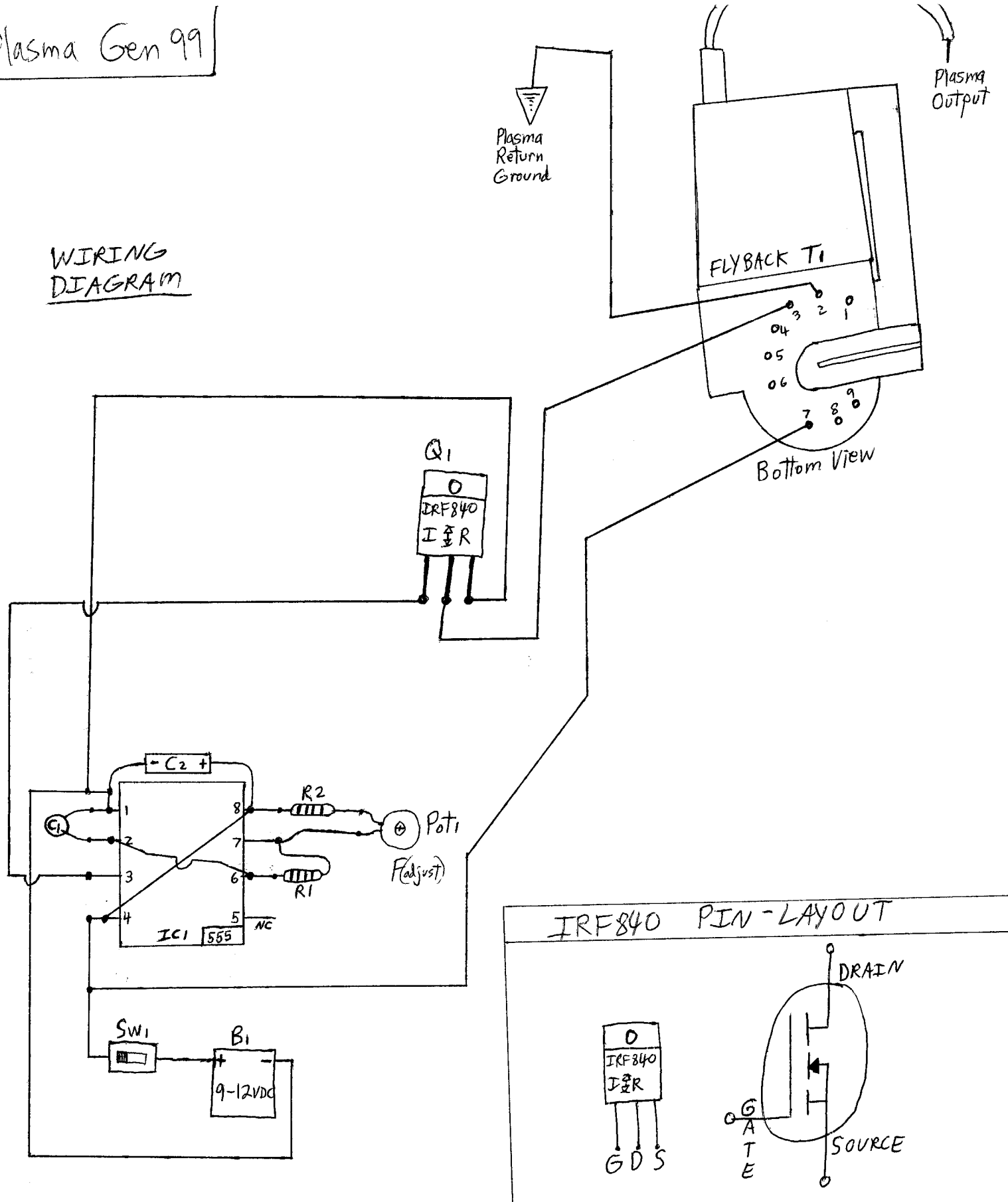
Schematic



Q_1 = IRF840 (MOSFET)
IC_1 = NE555 (TIMER)
Pot_1 = 1MEG ohm Potentiometer
T_1 = Flyback Transformer (Supercom 15210-14160 1AAT)
Sw_1 = Switch
B_1 = 9-12VDC Battery Pack
R_1 = 1k ohm ¼w Resistor
R_2 = 300 ohm " "
C_1 = .01uF Disc Capacitor
C_2 = 25v @ 10-100uF Cap

Simple!

UH Plasma Gen 99



IRF840 PIN-LAYOUT