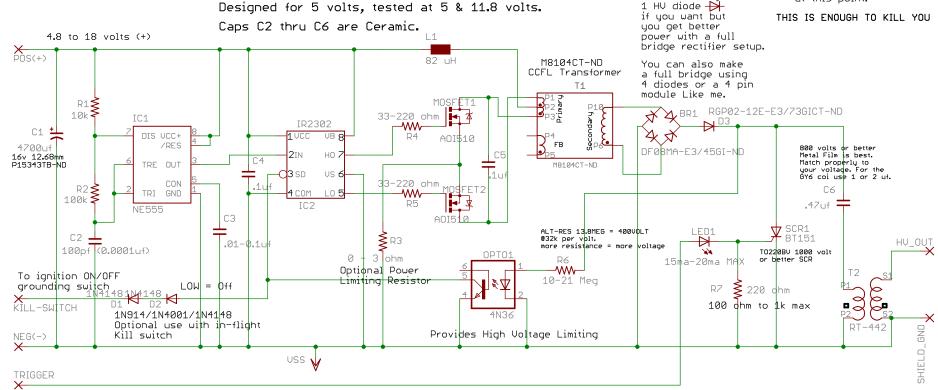
## TESTED ON OCTOBER 25-2013

Multi-use HV Board Model: SPARKY-1 4.6 to 18 Volts \*Circuit is disabled @4.1 volts\*

## WARNING!

1400 volts starting 600 volts running with 500 ma or more at this point.



The operating frequency of the system is determined by the inverter in this case Coiltronics recommends 40khz - 80khz so I ended up with 68khz.

The strike voltage of the CCFL transformer is between 1000 volts and 1340 volts. An aluminum electrolytic cap charges the best but is expensive and large for this voltage. A metal film is best overall for lots of reasons.

I use MOSFET's for the Push-Pull drivers and with as low on resistance that I can afford (Rds).

D1 & D2 is optional if you use the MCU to turn off the ignition.

R4 & R5 develope the Gate voltage, so the higher the resistance, the more they are driven. If you go to high of resistance there will not be enough current to drive the Gate. The IR2302 HO pin is in sync with the IN pin, so use a 50% duty cycle from the 555.

Designed by Ray C. Richter
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Document Number:
Multi-use HV Board - Model: Sparky-1 1.0

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