Open TPU – The Collectors and the Control Coil.

by wattsup – October 28th, 2007

Well after the release of my Open TPU (OTPU) Doc Version 1.0, I have been looking more and more at the collectors as well as Coil #3 that is designated as the control coil.

OK, if I look at EM's photo that is so clear that I am just flabbergasted when comparing the photos I managed to grab off of the SM video, I can see there may be two wires going to Collector #1. This got me thinking as to the logic of having either one or two collectors. In my view, having two collectors would be more logical since this will permit to capture both positive and negative charges throughout the collector system, whereas with only one collector line, the charges would have to migrate to specific ends of each collector. You can see in the following diagrams what I mean.

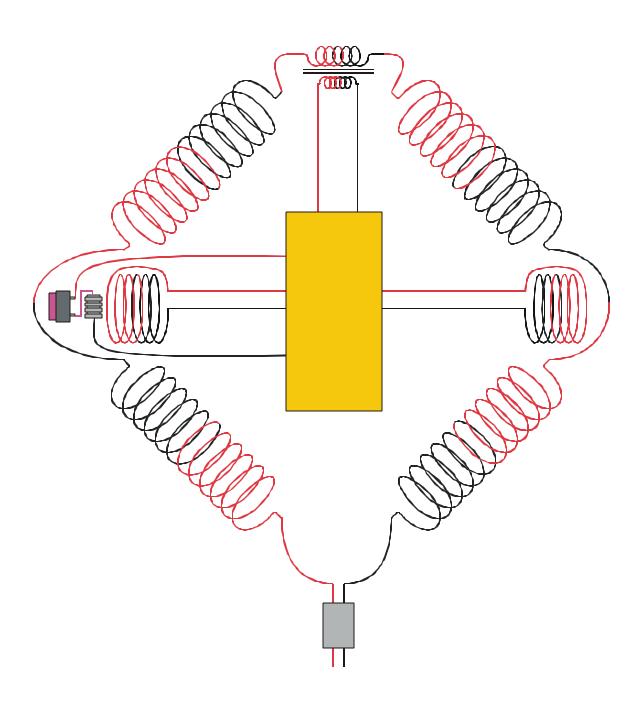
Also, I am puzzled by the number of wires going to Coil #3 and can see a bulky form in the center of the vertically mounted control coil. This leads me to conclude that the coil #3 is not a Control Coil but simply a power transformer where the primary is connected to each of the collector ends. The secondary side of the transformer may be leading to the circuit board to keep the system energized. The primary can also be considered a tank since it will accumulate charge from which the load can also feed. This transformer should be valued at the full voltage production of the OTPU with a secondary designed to supply only the up to the maximum power requirements of the Circuit Board and Coil #1 and #2 pulsing.

General OTPU System Operation

- 1) Magnets are placed onto Coils #1 and #2. This propagates a magneto-static field over the top ring.
- 2) SM pushes a button to start the pulsing process.
- 3) Coils are pulsed to form an on/off magnetic field that creates flux lines that push the top ring static into the collectors.
- 4) Gain is obtained by each on condition, plus at each off condition, when the coil field collapses, the retreating fields attracts more gain.
- 5) The primary of the control coil gets energized as energy increases in the collectors, and a proportional energy is then transferred to the secondary side that provides a proportionally increasing amount of energy to the circuit board.
- 6) When the circuit has enough power coming from the control coil secondary, it shuts off the power coming from the battery and powers all circuit functions.
- 7) The pulsing of Coils #1 and #2 should be made via a charging and discharging capacitor. There are capacitors available that have minimal power loss and if this capacitor is also a variable type, this adjustment will ensure proper matching of the discharge to the field effect desired.
- 8) As power increases in the collectors, there must be a limiting component to the amount of secondary voltage supplied to the circuit board.

Please refer to the diagrams on page 2 and 3.

OTPU with one collector



OTPU with two collectors am