***The GAP Generator** with no moving parts*

Wire & Resistance:

The resistance of a long wire is greater than the resistance of a short wire because electrons collide with more ions as they pass through. The resistance of a thin wire is greater than the resistance of a thick wire because a thin wire has fewer electrons to carry the current.

Resistance:

There is a resistance to the flow of an electric current through most conductors.
The resistance in a wire increases as:
the length of the wire increases
the thickness of the wire decreases

An electric current flows when electrons move through a conductor, such as a metal wire. The moving electrons can collide with the ions in the metal. This makes it more difficult for the current to flow, and causes resistance.

The resistance of a long wire is greater than the resistance of a short wire because electrons collide with more ions as they pass through. The relationship between resistance and wire length is proportional.

The resistance of a thin wire is greater than the resistance of a thick wire because a thin wire has fewer electrons to carry the current. The relationship between resistance and the area of the cross section of a wire is inversely proportional.

When resistance is increased in a circuit, for example by adding more electrical components, the current decreases as a result.

Using Ohm's Law Calculator, The GAP Generator blows the laws of physics all to pieces. Inverts DC to AC, then rectifies it back to DC, and picks up coil output as well. All unusual and probably not considered hen setting up Ohm's Law.

Ohm's Law:

Ohm's Law states that the current through a conductor between two points is directly proportional to the voltage. This is true for many materials, over a wide range of voltages and currents, and the resistance and conductance of electronic components made from these materials remains constant. **Ohm's Law is true for circuits that contain only resistive elements** (no capacitors or inductors), **regardless whether the driving voltage or current is constant (DC) or time-varying (AC).** It can be expressed using a number of equations, usually all three together, as shown below.

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$$V = I \times R$$

$$R = \frac{V}{I}$$

$$I = \frac{V}{R}$$

Where:

V is voltage in Volts
R is resistance in Ohms
I is current in Amperes

The GAP Generator does not conform to Ohm's Law. Total resistance for **GAP** is:

9.4 element 1
9.4 element 2
2.4 lite 1
2.4 lite 2
30.0 coil
53.6 ohms total. *R in photo to the left. Do the math using the volt & amp meters. Especially battery volts & amps.*

Ohm's Law may be outdated.

Check all places where I check input and output and see if it matches Ohm's Law.

2. I think the only place will be trying to check input at the batteries, which is the normal way input would be checked. But the 7.5 amp fast acting fuse does not blow and that blows Ohm's Law out of the water.

Useful info in spreadsheet data: *Some abnormal things about The GAP Generator:*

> *1. Inverting DC to AC and then rectifying it back to DC.*
> *2. AC is at 12.5 hertz instead of 60 or 50 hertz.*
> *3. DC amps at the batteries lots higher than the rated fuse limits.*
> *4. Input measurements cannot be made at normal location and conform to Ohm's Law.*

Try to think of more peculiar things.

After reading this article I think a coil with a 2.25 inch diameter core and 18 AWG would work even better. Give more output etc. This will create a lot stronger electromagnet. Essex has any size. Maybe use 14 AWG.

What do I see when I look at The GAP Generator as it is today? The Model T of the Overunity Industry.

Custom Inductive Loads and Power Factor Loads: ***// Read this.***
Inductive Loads, also called Lagging Loads or Inductive Load Banks or Inductive Reactive Loads or Power Factor Loads, are AC loads that are predominantly inductive in nature so that the alternating current lags behind the alternating voltage when the current flows into the load.

Any devices or equipment that have coils in them are inductive in nature. Examples of inductive load are motors, solenoids, conductor coils, compressors, speakers, relays, transformers, inductors, power generators, etc. Inductive load banks design and built by **CWS** are used primarily to simulate the above equipment to test other components such as AC Power supplies, switches and relays that connect to the them. **CWS** specializes in the custom designs of Inductive loads for various applications. *// An electromagnet is a conductor coil. The GAP Generator coil is, copper wire wound around a core, which is made of low carbon steel, making it an electromagnet. The only difference in The GAP Generator and an electromagnet is the constant switching of polarity in the coil of The GAP Generator.*

In any coils, the coiling creates an inductance and copper wires or aluminum wires used in the windings itself has DC resistance. The inductance creates the inductive loads (also called reactive load) and the DC resistance of the winding itself creates the resistive load. A purely inductive load will provide a power factor of zero. A purely resistive load will provide a power factor of one. A combination of inductive and resistive loads will give the device such as motors, etc a PF of between 0 to 1. Most equipment has a power factor of 0.7 to 0.8

Power Factor (PF) is defined as the cosine of angle between the inductive portion (jwl) and the resistive portion (Rs) of a coil. This angle is also called Phase Angle. In real world, Power Factor is the ratio of real power over the available power from a AC system. Real Power (in KW) is the available power to do the work, and Available Power (in KVA) is the total delivered power. The difference between Real Power and Available Power is the Reactive Power. Reactive Power (in KVAR) is the power needed to generate the magnetic fields in the inductive equipment No useful work is performed by KVAR.

VERY IMPORTANT:
Inductive loads cause inductive kickback, a significant high voltage which can destroy devices such as switches, relays and other devices connected to it. Since most equipment has a power factor of 0.7 to 0.8, the inductive load banks from **CWS** can be designed with Power Factor from 0.5 to 0.98 with correct alternating current through them so that they can be used to simulate actual inductive loads without having the actual equipment
1.Custom designed Inductive Load for Power Factor of 0.5 to 0.98
2.Custom Inductive Loads are rated up to 100 amps, RMS

3.Custom inductive load can be designed for Single or 3 phase power source from 115Vac up to 1000 Vac rms
4.Custom inductive loads are designed for 50 Hz, 60 Hz, 400 Hz, 1 KHz and up to 200 KHz of frequency.
5.**CWS** custom inductive loads are supplied with or without the required resistor banks to achieve the desired Power Factor.

Links to articles:
CWS: http://www.coilws.com/ https://www.coilws.com/index.php?main_page=index&cPath=1

Current, voltage, and resistance: https://www.bbc.co.uk/bitesize/guides/z9sb2p3/revision/3