

# *Bedini Simple Science Fair Motor*

Thanks to [John Bedini](#) for sharing this information,

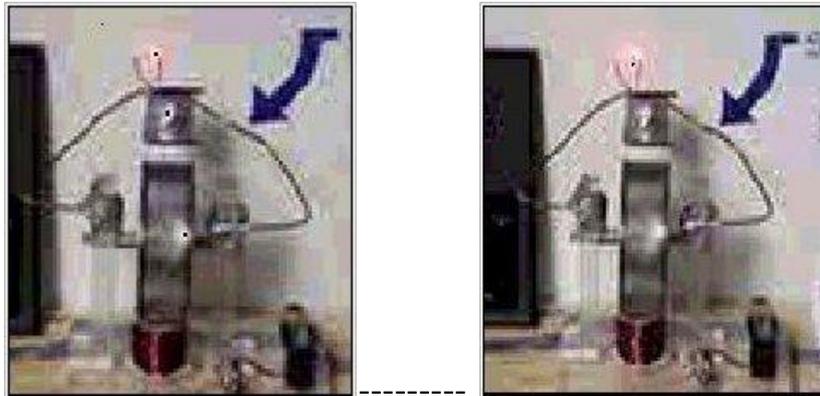
**Here is a device built by a School Girl as a science fair project that appears to be unusually efficient.**

Here is the motor device that a the School Girl talked to John Bedini about, and she built it with a little help on the phone. It not only charges the battery, but also generates power while running at 4000 rpm.

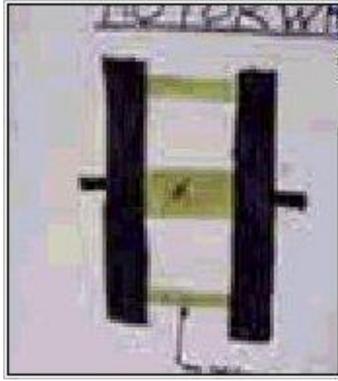
Here is the image of all the since fair awards she took with one of my motors.

This is the all North Pole Motor, The LED represents the extra generated energy. She built this Motor all by herself and took all the first place ribbons plus a special award in science. It used a nine volt battery and ran the full five days of the science fair before they stopped it.

John wonders what is wrong with the world if a School Girl can build one of these and win Sience Fair?



Two stills from the video showing the motor running from a single 9VDC transistor battery and also running a generator that lights the LED on top.



A diagram of the motor showing the magnets between two cylinders which apparently are forced to spin when the coil at the bottom pulses and where the coil at the top generates current to drive the LED.

Looking at the picture, it appears the shaft of the wheel is driven by a slot car type motor that is driven by the battery.

As the wheel rotates, the magnets between the discs induce current in what looks like a coil on the bottom which recharges the battery??? And another coil on top which lights the LED???



Some of the ribbons and awards won by this amazingly simple highly efficient science fair demonstration motor.

If the motor is a 1.5vdc slot car motor, they easily draw from 200 milliamps (300 milliwatts) to 500 milliamps (750 milliwatts). 4000 rpm with this kind of power usage should NORMALLY drain that 9VDC battery in a couple of hours.

John says this circuit ran for 5 days (120 hours!!) on the single 9vdc battery, that is amazing and the girl should be congratulated for demonstrating it to win the science fair awards.

**We hope you build your own motor and prove it for yourself.**

This battery was measured at 8.9 volts by the science teacher before the motor was turned on. These are usually 400 millamps/hour batteries.

The motor was running on 22 millamps at 4000 rpm.

When pulling the generator load the current draw on the battery dropped 8.8 milliamps, down to 13.2 millamps;

**(look for the all North Pole Motor in the notes) this is the same motor that anybody can find in the lab notes on the energy21 web page.**

It's like John has said all along, when these motors are built like he has stated, not changing anything until after you have witnessed the same results, you will have no problem replicating or furthering his designs, John Bedini claims to have a motor in his shop that has been running on the same batteries for 12 years.

John also claims to have been working with these types of motors for a very long time, He has a vision as to how the world needs to be changed. Such must be accomplished through the children because they do not change things, and they are willing to learn. The "***Educated***" focus on what they have "***learned***" and change things to match what they already think they know.

John claims if people would just build these motor circuits the way they are described by the inventor, they would obtain the same results he has claimed, and then they could make other improvements and we could become energy efficient.

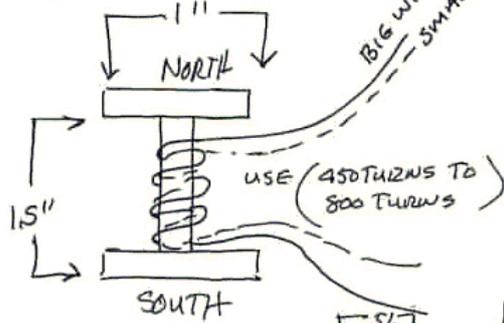
John courteously has sent this cool diagram of the motor the School Girl built and he given permission to post it, it is so clear that I decided not to redraw it. If you choose to build this very simple motor, please share your thoughts and experiences with others/or with John.

# NORTH POLE MOTOR

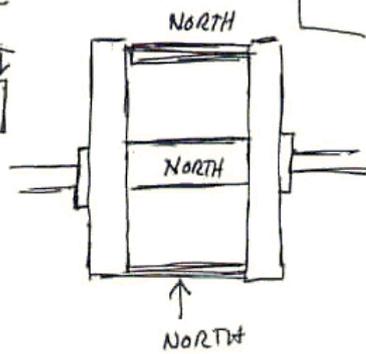
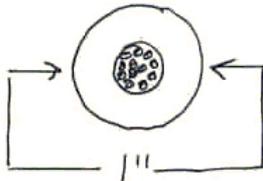
ROLLER SKATE WHEEL WORKS GOOD

## THE COIL

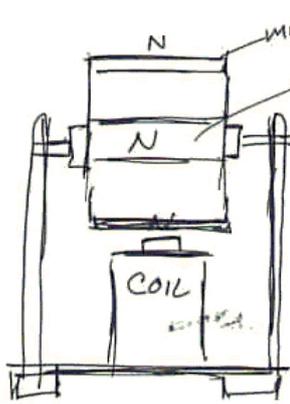
USE 450 TURNS OF BIFILAR WOUND WIRE #23 & #26 WOUND TOGETHER



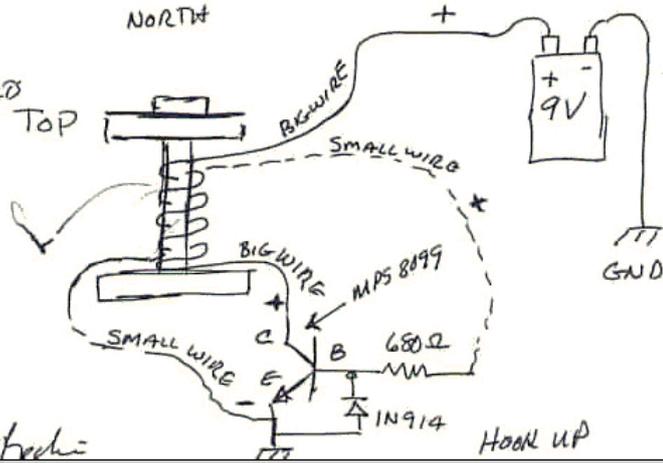
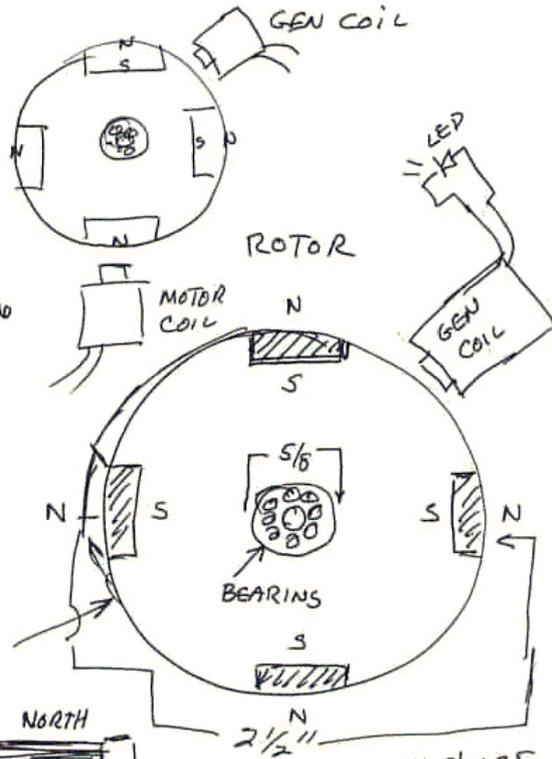
TOP VIEW



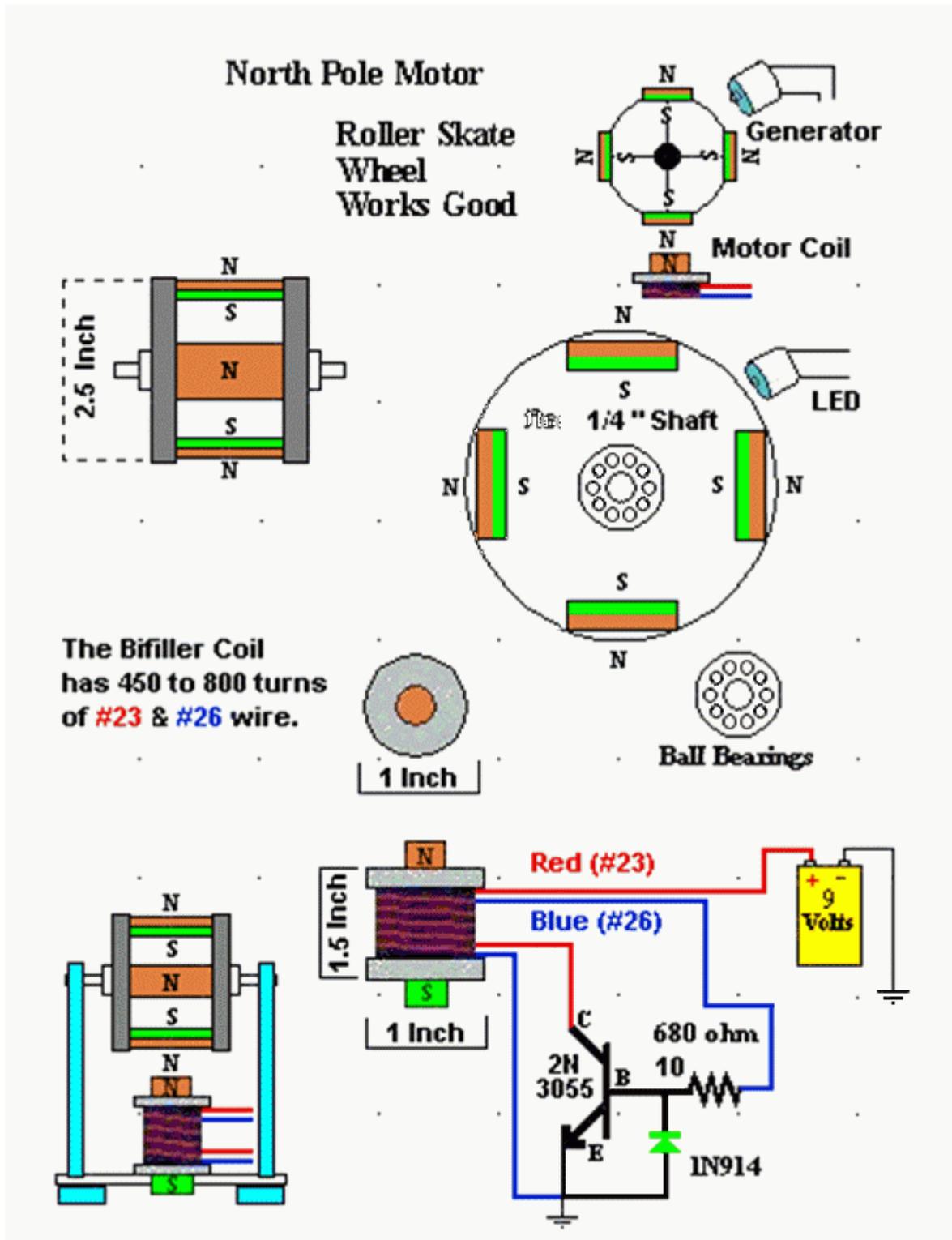
1/4" SHAFT  
OD 5/8"



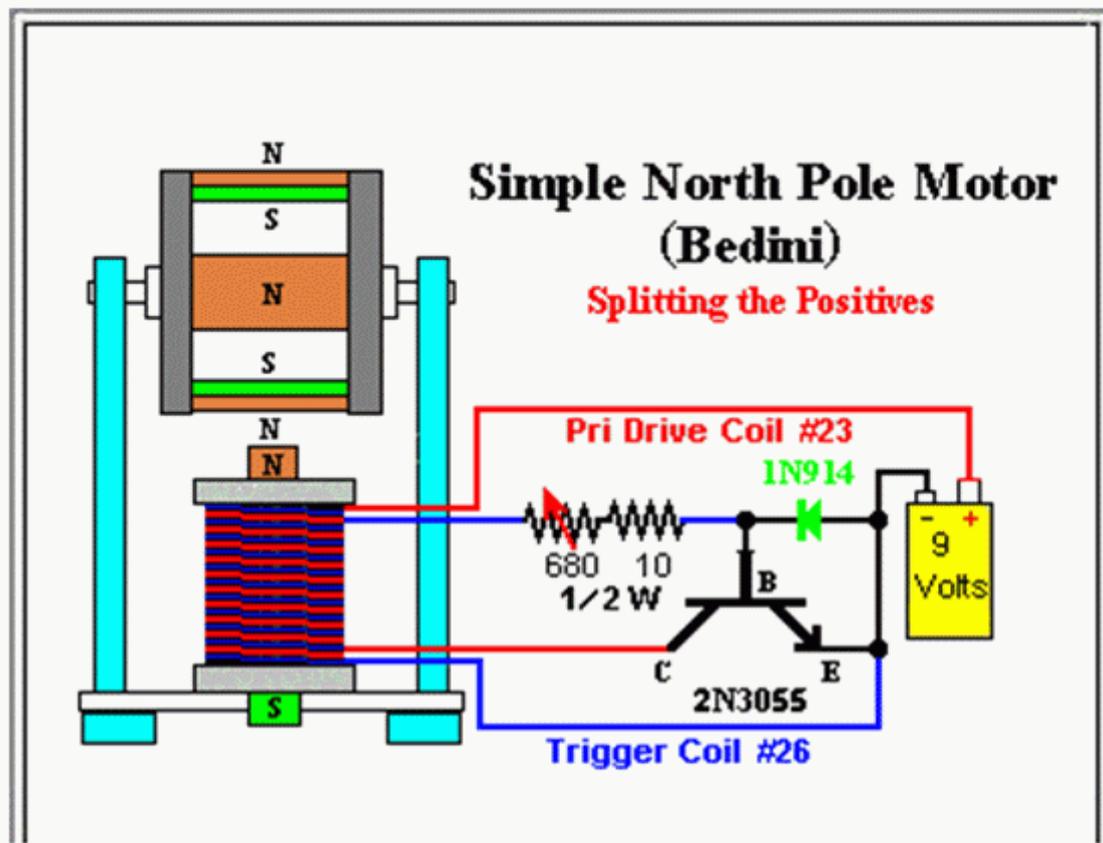
John Kishi



*a better drawing of the above supplied by another web page viewer*



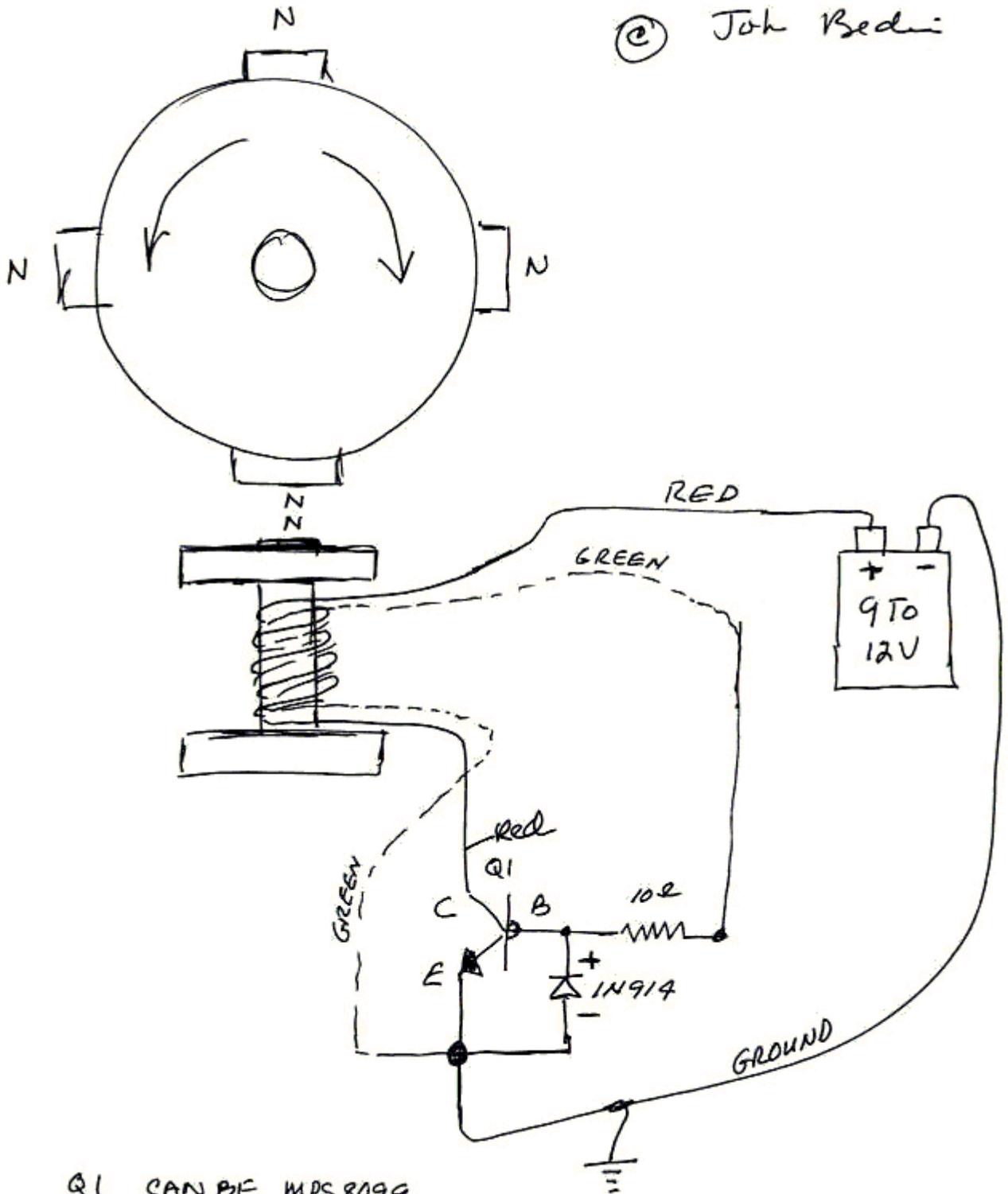
*and another internet user offers the following as their understanding of this device.*



As a **N Magnet** on the Rotor approaches **Coil N**, the **Trigger Coil** sends a **Positive switching "ON" Pulse** to the NPN Base, inducing a timed, similarly charged **Drive Coil** field, which accelerates the similarly charged Poles away from each other.  
 The Primary Circuit **Diode** discharges the **Negative Pulses**.  
 Adjust the 1K to the lowest ma possible.  
 The Motor is not self-starting, but should run indefinitely.

John released the following diagram to show the transistor and arrangement to clarify some aspects of the design

HOO K U P of SIMPLE MOTOR  
© John Bedini



Q1 CAN BE MPS 8099  
2N 3055

**Q1 is an MPS8099 bipolar transistor or a 2N3055 transistor.**

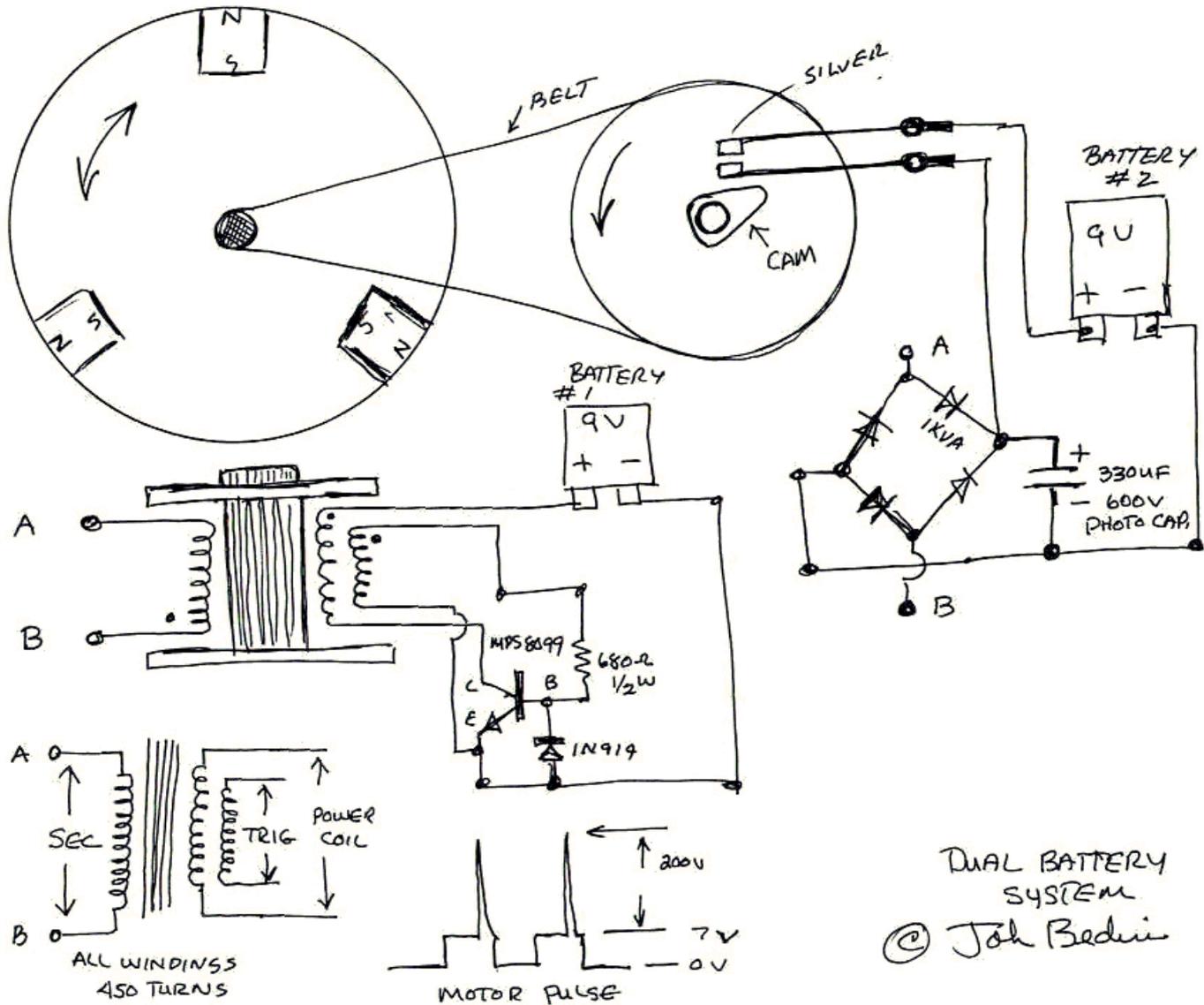
**R is a 10 ohm resistor.**

**D is a 1N914 diode.**

**John also wrote that he cuts welding rods into the length of the coil form, then inserts them into the center hole around which the wire is wrapped to form the coil. This increases the magnetic flux as an 'iron' core transformer.**

**Dual Battery Motor  
courtesy John Bedini**

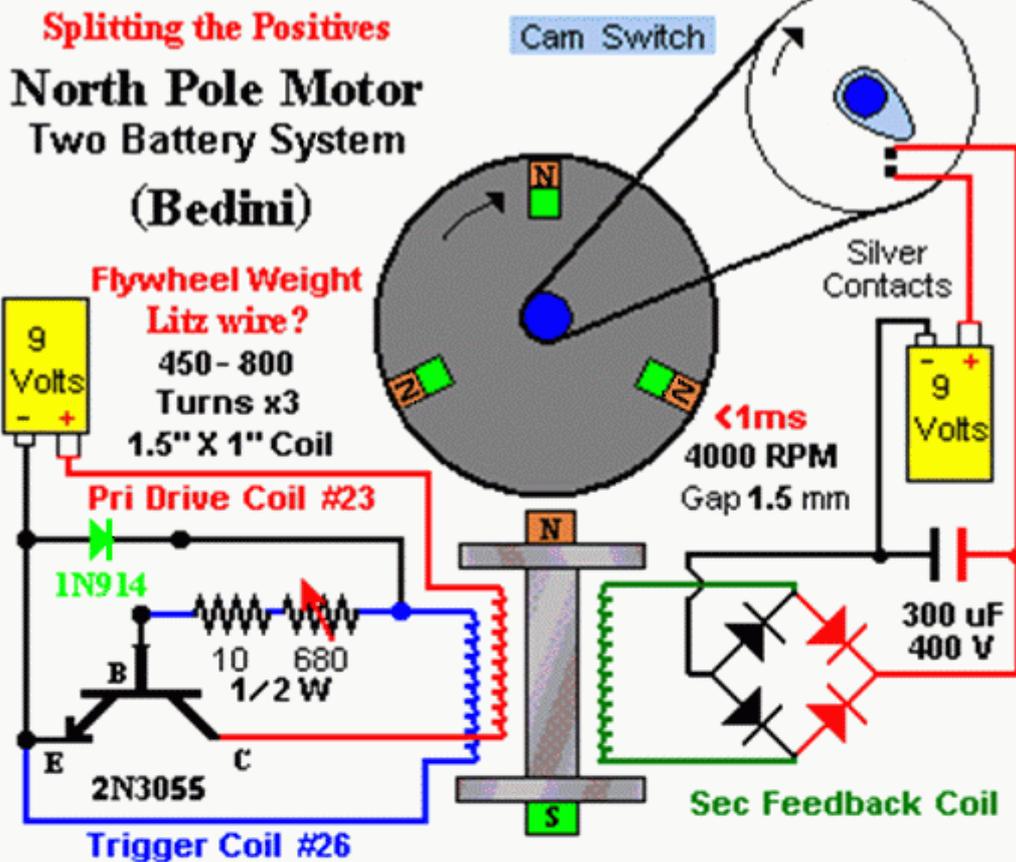
NORTH POLE MOTOR  
 © JOHN BEDINI



DUAL BATTERY SYSTEM  
 © John Bedini

*a better drawing of the above as supplied by this web page's author*

<http://www.fortunecity.com/greenfield/bp/16/student.htm>



$$\text{Magnetic Flux} = \frac{\text{MMF}}{\text{Reluctance}}$$

$$\text{Maxwells} = \frac{\text{gilberts}}{\text{oersteds}}$$

**Magnet** Flux, Magnetic Resonance, Core Permeability, Winding balances  
 Coil **Magnet** Gap to control speed and output

Relational Coil induced Fluxes  $\leq$  **Magnet** Flux

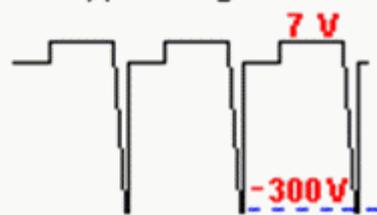
**Magnets'** Distance  $\geq 2 \times$  Flux Field width

Period, Pulse, Flux Saturation, Lag, Collapse

Resistor Interplay of Transistor **"ON"** Timing

Period and Pulsed **"ON"** Timing of the Output

Target Secondary Mutual Inductance @ Pulse Break



Power bled off:

**Make no mistake. You can see by the accompanying oscilloscope depiction that there is a sharp Voltage spike. For those who are unfamiliar with transistors, the transistor in this schematic is acting as Switch 1. The Voltage spike is occurring when the transistor Switch is opened, just like I have portrayed in the beginning section. Consider the potential, pun was intended.**

**Scientific Inquiry Files into John Bedini's Concepts and their Implementation**

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