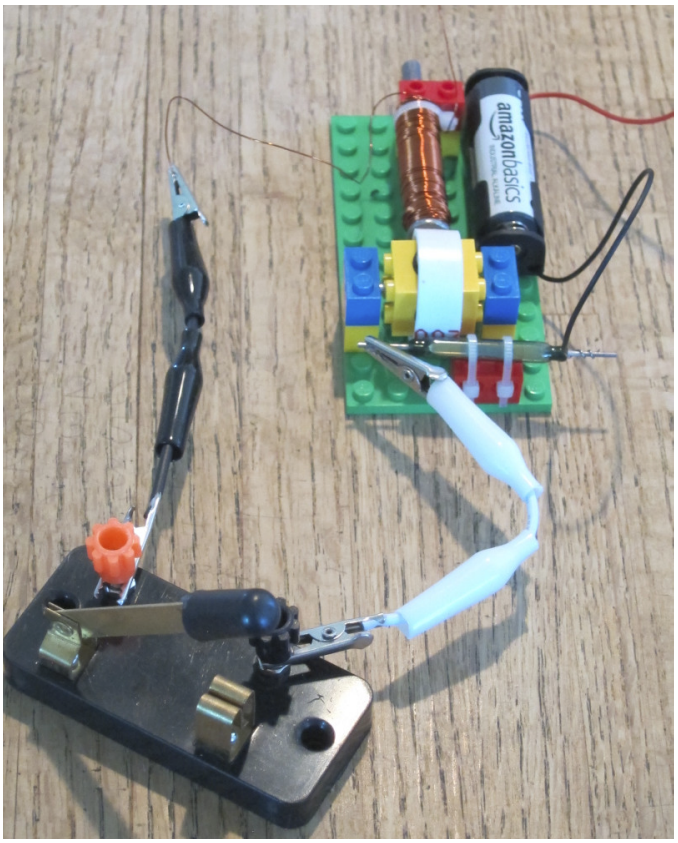
Motor Kit

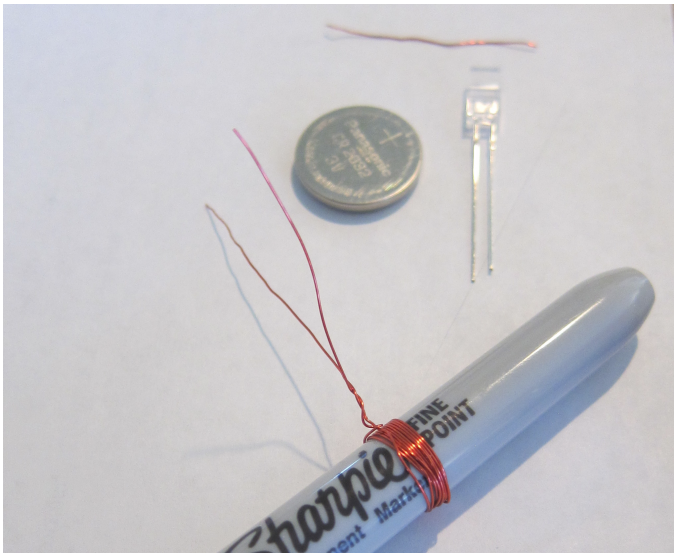
The kit is assembled using the online instructions
Added instructions:
- Take the stack of magnets, mark the top one N, slide it off and mark the next one N, etc, so that all are properly marked the same.
- After joining the 2 rotor blocks, tape the 4 sticky pads to the center of the rotor faces.
- Stick the magnet on, with N sides showing.
- When mounting the battery holder, it is easiest to peel off the protective plastic if you make a slice somewhere in the middle.

I added a switch and alligator leads which we have. Tools used: exacto knife to strip the wires, easier than sandpaper.

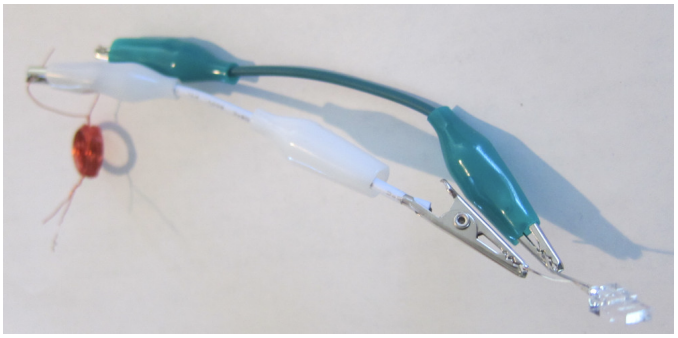
Runs fine.



See if we can generate electicity:
Get an LED, optionally test it with a pill battery. Wind a small coil (I did 30 turns). Twist ends together, and clean them with the knife. Small piece of wire holds the coil together after you slide it off the pen

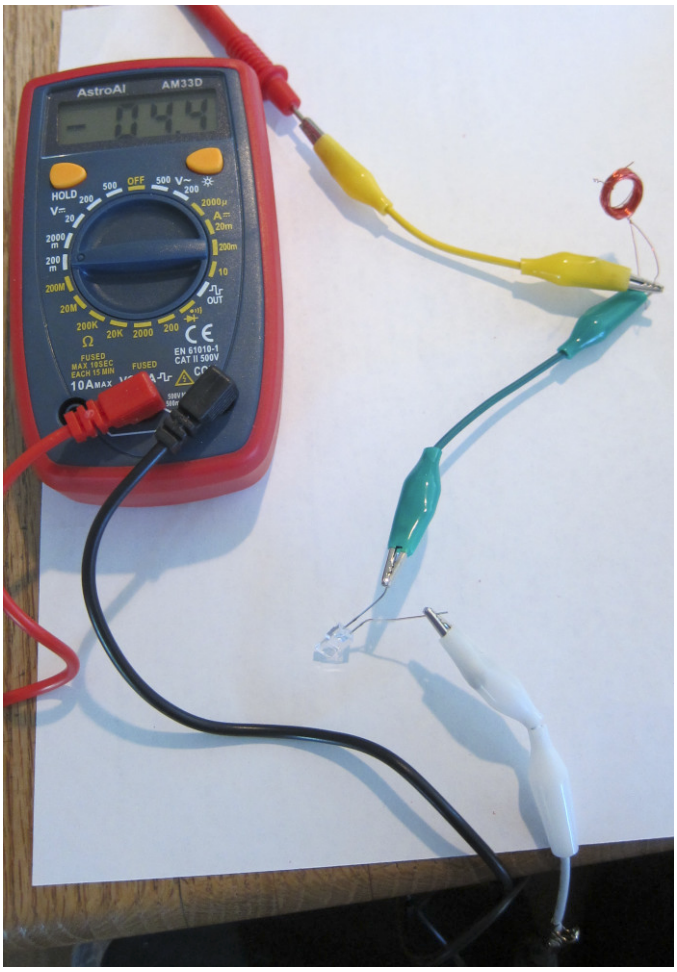


Make a circuit with the coil and the LED. Turn on the motor, and hold the coil close to the rotator, intecepting the changing magnetic fields. LED doe not light up. **Why not**?

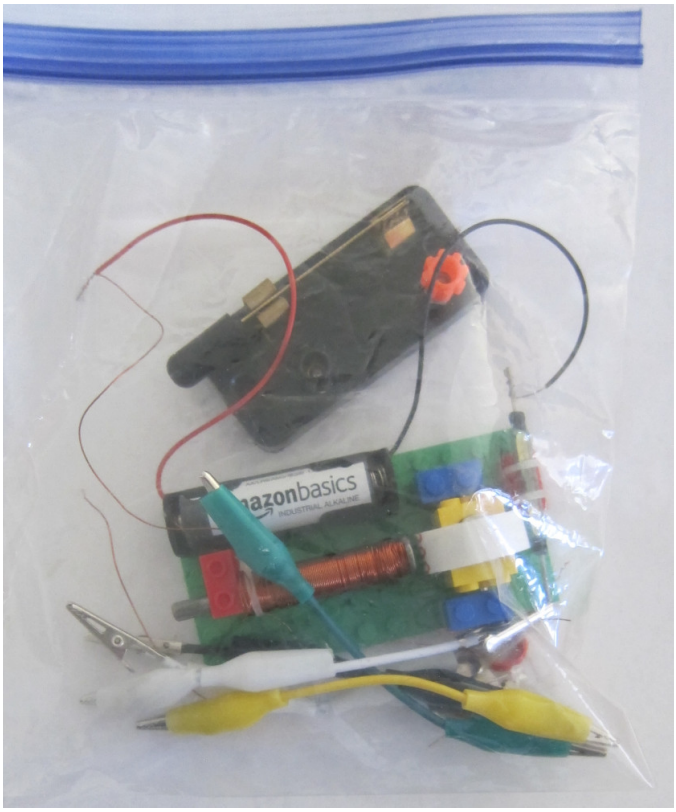


We will measure if any voltage is generated. The coil sees magnetic fields that come and go, generating **alternating current**. The meter does not have a sensitive AC setting, so we use the LED as a diode, to convert AC to DC, and set the meter to the most sensitive DC setting.

- Look at the meter. Does it read zero?
- Cover the LED with your hand. Does the reading change?
  Why?
- Run the motor, hold the coil close to the rotor.
  What does the meter read?
  Is it more than 3V (the LED needs ~3V)



My baggy has the kit, one AA battery, 3 alligator leads, some wire and an LED



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