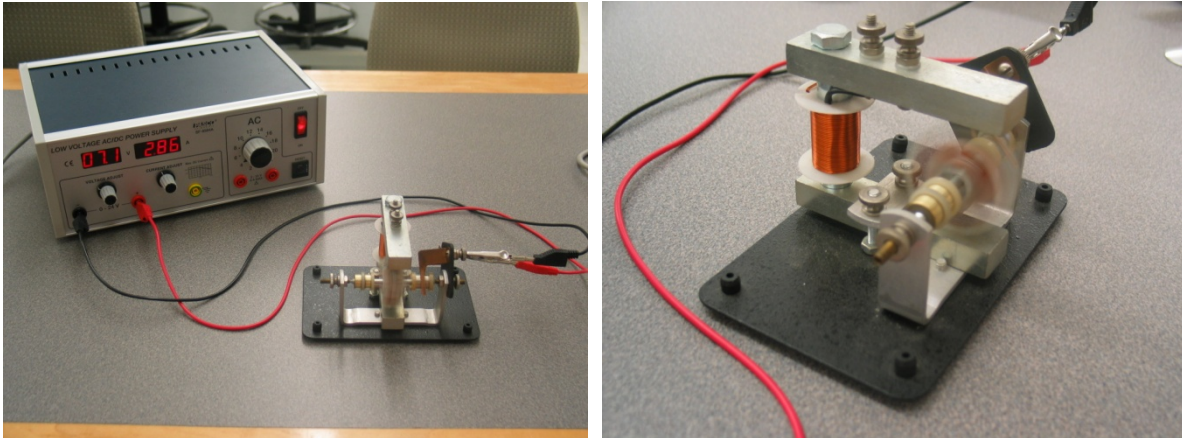


## Electromagnetic Motor



**Purpose:** To show how a motor uses electromagnets in order to rotate.

**Location:** Room 146; shelf M6, low voltage power supply on E5

Connect the terminals of the power supply to the two leads on the motor. Turn the power supply on and apply approximately 4 amps of current. The motor will align itself in the magnet field produced along the upper and lower iron bars. The source of the magnetic field is from the fixed coil adjacent to the moving coils. Once the current is supplied give the motor a tap with your finger and it will begin spinning rapidly. If it does not, a little more current may be necessary. The magnetic field produced by the spinning coils changes directions every 180 degree turn, which allows the motor to keep moving.