Agenda

* Test relay
* Test current sensor

Plan

* When current sensor senses too much current that would kill battery, sends signal to arduino which slows the rate of the engine by controlling throttle/choke servos
* If the current is still high, will activate relay circuit which would turn off the power supply to the tachometer and then stop the firing of the spark plugs, which cuts off the engine

Future Objectives

1. Get new parts and build rectifier (Raiyan - will go to Fastenal)(Wednesday)
   1. Barrel connectors
   2. Lug connectors
2. Voltage sensor (Henry and Edward)(Thursday)
   1. Build a voltage divider to read out V from arduino
   2. Characterize the range in which the arduino can measure voltage
3. Current Sensor (Tamra, Edward)(Thursday)
   1. Characterize current sensor (the mapping between current and analog voltage read)
   2. Verify that it can take the current it’s rated for
   3. Assemble current sensor between rectifier and battery, or motor and rectifier
4. Tachometer Control(Raiyan)(Thursday, depends on Current Sensor)
   1. make sure we can control some killswitch from Arduino
   2. Assemble relay in between battery and tachometer
5. Assemble current sensor between rectifier and battery, or motor and rectifier (Friday)
6. Characterize tach signal (Henry, Raiyan) (Friday)
7. Add data logging for all code (Tamra, Garrett)
   1. RPM
   2. Current
   3. Voltage
8. Test everything at once, find out how long it takes for engine to go from running to stopped (Henry)

Ultimate Goal: Control speed of engine (must use battery load) without fire or breaking parts.

Weekly Deliverable:

* Thursday: Go to fastenal, attempt readout w/ voltage divider, attempt tach readout