

## Milestone #10 – Completed Vehicle Powered Inspection

**DUE:** 24 April

### DESCRIPTION:

Perform final wiring and powered testing (if applicable) on your vehicles this week. Your vehicle must be ready by **Friday 24<sup>th</sup> April** at **7:00PM** for a powered inspection. There is no work to be done past 7pm. At this point, the vehicle should be rideable! The inspection will focus primarily on the cleanliness, safety, and craftsmanship of your electrical system. Each inspection item is worth 1 point:

1. Wires are well-constrained and organized, not a “rat’s nest”.
2. Wiring is of a reasonable length such that no vehicle movement causes undue stretching or can tear wiring, not excessive such that it has to be bundled or routed circuitously.
3. All **power and signal** wiring is labeled according to their function (e.g. “Throttle power”, “Reverse”, “Hall sensor A”, “Battery +”, etc). Refer to your wiring diagrams.
4. All exposed connections, wire joints, terminals, etc. are insulated using electrical tape, heat shrink, etc.
5. Switches, buttons, charge ports, etc. are mounted on a panel or otherwise solidly mounted. If your vehicle has status LEDs, they should also be properly mounted. No components may be dangling from wires only.
6. The main power cutoff of the vehicle is accessible externally and abiding by the rules stipulated in the Syllabus: *“The vehicle must have an **easily accessible** master power switch that cuts off all power downstream of the battery. Easily accessible is defined as within arm’s reach of the standard driving posture for the vehicle.”*

The balance of the 10-point inspection (4 points) is made up by a demonstration of vehicle function by you, the builder. You should be able to complete **one lap** around the IDC space under power.

**GRADING: 10/9 A, 8/7 B, 6/5 C, else F**

### FORMAT OF DELIVERABLE:

- 1-2 pages documenting any progress or changes you’ve made on your vehicle this and last week. Pictures and diagrams are encouraged! Some final “press shots” of your vehicle would be a good thing to include.

### OTHER ACTIVITY:

### RESOURCES: