2.007 Electric Vehicle Section

Milestone #6 – Continuing Vehicle Construction, Part II

DUE: 19 March

DESCRIPTION:
Continue the fabrication of your vehicle this and next week! **Your vehicle must be ready for a Rolling Frame inspection on Friday, March 23rd, as stipulated in the syllabus**. That's **2** weeks from now.

The vehicle should be mechanically together at the inspection – motors and drivetrain should turn (not necessarily under its own power) and the brakes and steering should work. After Spring Break, you will concentrate more on electrical wiring, debugging, refining, and powered testing.

It is important to keep working now and preparing for fabrication time as your parts ship so you have an idea of what parts need to be made, how they should be made, and in what sequence you should build them. You should be aware of your design well enough to pace yourself through the next few milestones, which will focus exclusively on fabrication. Your Solidworks model should be nearing total completion – while some parts may still be "datasheet dimensions", you should still update them once you have the part in-hand.

Parts order will continue to be aggregated and sent every Monday and Wednesday. If you find yourself in need of metal or plastic stock, some special hardware, frame materials, etc. you should submit an order by emailing charlesg@mit.edu with an email in the following format: **Vendor, Part/item number, Quantity**. McMaster is encouraged if possible – the delivery turnaround is one to two days only. You are encouraged to organize with your classmates for bulk material orders to reduce cost per person. At this point, you should only have minor hardware and materials left to order – these are considered inconsequential towards your budget.

FORMAT OF DELIVERABLE:

- 2-4 pages in your notebook documenting your progress this week.
- A list of the remaining steps you need to take in order to finish your vehicle mechanically – be detailed and specific as to the parts you need to use and what tools/machinery you will need to make them, as well as operations if applicable.

OTHER ACTIVITY: I will personally inspect your vehicle progress on Monday 19 March. If your vehicle does not appear to be approaching mechanical integrity, you must present a completion plan which must include time spent outside of the mandatory lab hours (Regular 2.007 students have to do this also!) and date of anticipated completion.

RESOURCES:
Reading through the vehicle build reports for MIT student vehicles (links found in the STELLAR EV Resources document) will likely be helpful to your design and fabrication process.