Group Action Plan

# Planning

* Design of the vehicle will allow for easy access to and inspection of electrical components between rounds
* All calculations which determine aspects the structure of the robot or check for failure will be checked by at least one other member of the group
* Use extra room in the budget for higher quality bearings and motors
* Use of off the shelf controller to control vehicle to avoid communication failure.
* Calculations for failure at key weak points conducted before machining. (this includes stress analysis of axles, chassis subassembly, roller and roller mounting under load, heat in electrical systems at steady state running at maximum expected power consumption, modal analysis of chassis)

# Manufacturing

* All machined parts will be inspected for adherence to tolerances before integration into robot
* CNC machining will be used instead of manual machining when possible

# Testing

* Motors and battery will be tested for heat production to ensure safety of electrical components
* Assembly will be weighed and measured to ensure strict adherence to competition guidelines
* Robot will be inspected for functionality the day before the competition to ensure all systems are functional
* Test individual electrical subsystems before integrating them together.

# Day of Competition

* Inspections will be carried out in between each round
* Extra parts, especially electrical parts will be on hand