Durability

Evidence of structural integrity; ability to withstand rigors of competition.

Accomplished: Rare faults/Repairs

Exemplary: Sound Construction; No Repairs

* Does my robot stay together during routine handing?
* Does my robot have excessive flex when moving?
* Do my robot wheels remain in contact with the mat?

Mechanical Efficiency

Economic use of parts and time; easy to repair and modify.

Accomplished: Appropriate use of parts and time to modify/repair

Exemplary: Streamlined Use of Parts and time to repair/modify

* Can the batteries be changed and charged easily?
* Can I see the display screen and push the buttons?
* Can I plug and unplug the wires easily?
* Are the wires in the way?
* Can I identify which wire goes to which port?
* Can attachments be changed easily?
* How long does it take to set up my robot in base?

Mechanization

Ability of robot mechanisms to more or act with appropriate speed, strength, and accuracy for intended tasks (propulsion and execution)

Accomplished: Appropriate balance of speed, strength, and accuracy on most tasks

Exemplary: Appropriate Balance of Speed and Strength on Every Task

* Does the robot have the right wheels?
  + Big wheels are faster, can move over obstacles, but can be less accurate
  + Wider wheels have more friction than skinny tires making turning less repeatable
* Where in the Center of Gravity (CG) of the robot?
  + Is the robot top heavy?
  + How will the robots CG change when it picks up loads? What about with attachments?
  + Does the robot avoid tipping on slopes, sharp turns, stops, and in collisions?
* What happens when the robot back up?

