

5. ROBOT INSPECTION

Before competing in the Seeding Matches, every machine must pass an inspection for rules compliance. FIRST staff will be on-site all day to inspect your machine. At inspection, teams will be limited to 5 team members to minimize confusion and speed up the process. Questions by FIRST inspectors that arise, will be addressed to students, not sponsoring company representatives. It is recommended prechosen students be prepared to answer questions related to construction requirements.

The following is a typical check list which may be used by the FIRST inspectors at registration during the first day of each competition. Additional items will be audited to assure compliance to all rules specified in Appendix A. **Other key items may be added to the check list as appropriate.**

1998 FIRST COMPETITION INSPECTION CHECK LIST

Team # _____
 Date _____
 Weight _____ Includes battery & RNet
 SPI Cost _____ \geq \$425 installed on robot (verify with BOM/Price list)

- ___ Size - must fit freely in ready-to run condition
- ___ Team name and number on 2 sides - 5" numerals
- ___ Wheels do not damage carpet - carpet check if needed
- ___ Sprockets: no more than 4 from other than SPI or homemade
- ___ Special parts acceptable, e.g. gears, sprockets, casters, etc.
- ___ Sheets & boards (see additional hardware list)
- ___ No sharp objects that could harm people or damage balls
- ___ Springs, surgical tubing use acceptable
- ___ Capacitors from leads to case on drill
- ___ Speed controller switches set to tab side
- ___ Speed controller red wire cut
- ___ Fuse on battery red lead
- ___ 30A circuit breaker on each drill and van door motor
- ___ #10 wire to Receiver power, battery, speed controllers
- ___ #10 wire to drill motors, van door motors
- ___ #16 wire to pumps, window motors, seat motors
- ___ 1 device per relay channel (OK: more than one SpdC/PWM port)
- ___ Motor/pump/valve not wired directly to bus, OK fan
- ___ Sensors/relays wired to Receiver only - no series connections
- ___ Proper use of electrical connectors
- ___ No exposed electrical conductors
- ___ No loose wires, material to entangle

Inspector initials each item when passed. A team robot passes inspection when all items are completed and signed off.

