

# Skills Ontario Competition Robot Inspection Sheet

## Instructions

- Teams will be called up to the sizing area beside the court for part 1 of the inspection, then move onto the court for part 2.
- Return passed and completed inspection sheets to the Judge's Area.
- Failed inspections should be referred immediately to the technical chair to determine next steps.

Team Number:

School Board:

## Part 1: Specification Inspection

Volume Calculations:

| Tele-OP Volume Calculation (LxWxH) | Autonomous Volume Calculation (LxWxH) |
|------------------------------------|---------------------------------------|
|                                    |                                       |

☐ Total tele

-op Volume is less than 4ft<sup>3</sup> (6912in<sup>3</sup>)

- ☐ Total tele-op entry fits in the starting zone.
- ☐ Individual Tele-Op bots never exceed the size of the tele-op starting zone.
- ☐ Individual Tele-OP bots are never more than 24" tall.
- ☐ Total Autonomous Volume is less than 1ft<sup>3</sup> (1728in<sup>3</sup>)
- ☐ Autonomous bot never exceeds the size of the autonomous starting zone
- ☐ Autonomous bot is never more than 24" tall.

Electrical:

- ☐ Mandatory Wiring Diagram provided.
- ☐ All batteries are sealed commercial batteries in good physical condition
- ☐ Batteries wired in series should be the same amp hour rating (ex. both 1500 mAh) and batteries in parallel are of same voltage (ex. both 12 volts).
- ☐ Batteries securely mounted
- ☐ Total voltage in any individual circuit does not exceed 24V
- ☐ No circuit **branch** exceeds 256W (Voltage x Fuse Current Rating, easily accessible)
- ☐ All circuits have a fuse or breaker (breakers must have **DC rating**) and all Fuses/ Breakers must be readily accessible.
- ☐ Documentation provided for any class 1 lasers.
- ☐ Class 1 lasers are commercial and not modified
- ☐ No lasers above class 1.

## Pneumatic

- ☐ Mandatory Pressure System Circuit Diagram provided.
- ☐ No Competitor-made or modified air pressure hardware being used.
- ☐ Only commercially manufactured Pressure Tanks (cylinders) can be used.
- ☐ Pressure indicator
- ☐ Pressure in tanks does not exceed 100 psi
- ☐ Over-pressure safety valve
- ☐ Pressure tanks and related gauges and controls are shielded from damage due to collisions.

Specifications Robot Evaluator Signature:

Team Representative Signature:

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## Part 2: Function Inspection

- ☐ Robots can be turned off with a single motion.
- ☐ Demonstrate robot. All functions are safe and in compliance with the scope.
- ☐ Robots never reach over or under any walls during regular operation. (Break the inside vertical plane)
- ☐ Lasso mechanism is controlled and does not go beyond the edge of the steer head platform.
- ☐ Autonomous bots have a 10s delay.

**Pass**

**Fail**

Comments:

Function Robot Evaluator Signature:

Team Representative Signature:

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