

2020 OCCRA Soccer Shootout - Appendix D

OCCRA Soccer Shootout - Inspection Sheet Team: _____

	<R1> Only one robot at event; consists at least of a mobile drive base and control box.
	<R2> Team has an inspection form filled out by the team to give to Inspector.
	<R4> No dangerous mechanisms or parts that could cause harm to field, other robots, or people, or cause entanglement. No sharp edges, and a safe amount of ground clearance to not get stuck on the field. ($\frac{3}{4}$ " clearance is suggested, less will be scrutinized).
	<R5> Robot fits within the 28" x 38" x 48" starting size. No part extends past the starting configuration more than 18", and does not extend vertically past the 48" starting limit.
	<R8> Robot does not weigh more than 115lbs, or 120lbs with pneumatics. Weight: _____ (without) _____ (with). Compressor must be on board to allow 120lbs.
	<R9> All parts used were either supplied in the KoP, fabricated from basic stock, or cost less than \$100 per part.
	<R11> All parts manufactured using the approved list of tools.
	<R12.1> Robot has an alliance flag holder securely mounted on, made with $\frac{1}{2}$ " PVC pipe, must be visible from all sides.
	<R12.2> Team numbers visible from all sides with 4" minimum height.
	<R13.1> Robot only uses an approved compressor: The Thomas, the AndyMark 1.1 Pump, or the VIAIR 00090
	<R13.2> Only tubing on the robot is either $\frac{1}{8}$ " or $\frac{1}{4}$ " diameter tubing.
	<R13.3> Pneumatic circuit is controlled with a pressure switch and relay, and has relief valve @ 120psi or lower.
	<R13.4> All working pressure of actuators must be limited to a maximum of 60psi via regulators with a visible gauge. Actuators must be controlled by a relay and solenoid.
	<R13.5> The pressure relief valve must be connected to the accumulator tank(s) and easily accessible.



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	<R14> All motors used are 12V DC rated below 350 watts, available from KoP, AndyMark, VEX, BB, or Robot Space. Every motor has a motor controller.
	<R15> Only power sources: 1x 7.2V VEX battery for Cortex, and 1x 12V 18amp-hr battery for Robot. It is strongly advised that teams have a 9V backup battery.
	<R16> Only Victor SP or SPX, Talon SRX, SPARK, and SPARK Max allowed for controllers, SPIKE or Adafruit DRV8871 for relays
	<R17.1> #6 wire or larger for battery and negative/positive distribution; #16 for all relay controllers to solenoids; #14 or larger for all other wiring on robot.
	<R17.2> Circuit breakers may be 80amp or 120amp. Branch circuits must be protected by breakers rated 30amp or lower.
	<R18> Robot has control box with Cortex, Fuse Block, Relays, Motor Controllers, Fuses/Circuit Breakers. Must be mounted securely with a lid, wires coming from control box should have strain relief.
	<R19> Robot must be controlled using VEX joysticks with VEXnet 2.0 keys.
	<R20> No modifications to pneumatic or electrical components, including controllers.

Inspector Name: _____

Inspector Signature: _____

Student Representative Name: _____

Student Representative Signature: _____

Date: _____

Event #: _____

