

APPENDIX J OCCRA 2017: ROBOT INSPECTION WORKSHEET

Mechanical:

- APPEND B - cost constraint parts (\$100 @) X _____
- APPEND B - additional materials X _____
- RB14 - Sharp edges and corners removed X _____
- RB8 - No precision machining X _____
- RB8 - No welding X _____
- APPEND C - Allowed motors (list power source) _____.
- RB6 – Min. of .75" floor clearance except at wheels X _____
- RB8 – C-Base Chassis or approved alternative X _____

ALLOWED MOTORS (no limit) and their CONTROLLERS RB5	
DeWalt Drill motors _____	Vic/Talon _____
CIM motors _____	Vic/Talon _____
Keyang or Globe motors _____	Vic _____ or Spike _____
Denso wiper motor or clutched lift-gate motor _____	Vic/Talon _____
Pwr Sliding Motor may sub for Denso _____	Vic/Talon _____
PG27,71,188 AM Gearmotor _____	Vic _____ or Spike _____
BAG motor _____	Vic/Talon _____
Other Motors? If more than 20A rating, must use Victor or Talon _____	
And must be from BaneBot, Robot Space, AndyMark or VEX _____	
Compressor _____	Relay _____

Event # _____
RB7 <ul style="list-style-type: none"> ▪ Max:Size 132" (footprint) x 48"(Height) In start position _____ ▪ Entire robot within starting footprint _____ ▪ Weight (less than 115) _____ ▪ W/pneumatics (Less than 120) _____
Fairness Forms _____
Inspector X _____
Date _____

Electrical:

- RB5 - 1 Victor/Talon controller per CIM, Dewalt, BAG, Valeo/Denso/Sliding Door motor. X _____
- APPEND - Approved – batteries (18-A-Hr.rating) with approved chargers (2/4/6 amp). X _____
- RB3 - Battery terminals insulated/protected on all batteries. X _____
- CURR - Battery hold down strap or device. X _____
- CURR - Loose wires secured/risk of entanglement reduced. X _____
- RB4 - Correct gauge wire (14ga) or better for– motors – (6ga) battery – (22ga) sensors. X _____
- RB4 - Connectors properly installed/crimped/soldered (no bare/exposed wires). X _____
- RB2 - Control box mounted/**accessible**/secured w/cover, Cortex must be visible. X _____
- RB3 – Cortex powered by 7.2V battery; must have 9V back-up battery X _____
- RB5 - Wires strained relieved as they enter the control box using the eye bolt. X _____
- RB2 & 5 – 1 control boxes; no alteration of electrical components mounted in the box(s). X _____
- CURR - All circuits must be fused/breaker protect; No wire attach on battery side of fuse block. X _____
- RB5 - no modifications /controller or joysticks. X _____
- APPEND B - No electric components other than approved or provided. X _____
- RB3 - No grounding to chassis. Test w/meter from ground to frame. X _____
- RB4 – 80-Amp or 120Amp breaker supplied by OCCRA for main; 30A max. for branch circuits. X _____

Pneumatics:

- RB16 - Automotive relay to run the compressor – cannot be direct wired. X _____
- RB16- Only Thomas, AM1.1 pump, or the VIAIR 00090 compressor allowed X _____
- RB16 –Tubing must be 1/8" or 1/4" tubing X _____
- CURR - Air tubing, securely routed. X _____
- RB16 - Bleed off valve accessible for transport. X _____
- RB16 - Pressure gauge and regulator mounted and visible on output stream of system. X _____
- RB16 – Cylinders and pneumatics storage devices, no fabrication, no modification. X _____
- RB16 - Demonstration of 60 PSI max output. X _____

Miscellaneous:

- RB13 - Color Flag 1/2" PVC Pipe mount/clearly visible from all sides. X _____
- RB13 - Team Numbers (4"min.) – size and clearly visible from 3 sides. X _____
- RB7 - No contact surfaces on chassis at angles less than 60 degrees. X _____