

# Robot Inspection Checklist



Team Number: \_\_\_\_\_ Division: \_\_\_\_\_

## Size Inspection

<input type="checkbox"/> Robot fits within starting size restrictions (18"x18"x18" / 457.2mm x 457.2mm x 457.2mm) with License Plates installed, <b>in all potential starting configurations.</b>	<R4>
<input type="checkbox"/> Robot can only expand horizontally in a single direction and does not exceed an overall footprint of 24"x18" while expanded.	<R5> <SG2>

## Overall Inspection

<input type="checkbox"/> Team is only competing with ONE robot. They have no spare or replacement robots. Multiples of subsystem 3 are permitted.	<R1>
<input type="checkbox"/> Robot displays colored Robot License Plates on at least two (2) opposing sides, with only one (1) color visible and the team number displayed legibly in white text.	<R10>
<input type="checkbox"/> Robot does not have components that are intentionally detachable, pose an unnecessary risk of entanglement, or pose a risk of potential damage to the field elements or other robots.	<G6> <R6>
<input type="checkbox"/> Robot Brain power button is accessible without moving or lifting the robot	<R26>
<input type="checkbox"/> Team testifies that the designing, building, and programming of the robot was done only by the students on the team.	<R2> <G2> <G4>

## VEX Parts Inspection

<input type="checkbox"/> ALL robot components are OFFICIAL VEX V5 components as sold on VEXrobotics.com or materials used as color filters; minimal grease or lubricant; minimal anti-static compound; hot glue for cable connections; unlimited amount of rope/string with a thickness/diameter no larger than 1/4" (6.35mm); rubber bands and zip ties that are identical to those included in the V5 product line; cable protection materials and tape for connections and labeling; and certain non-VEX screws, nuts, and washers.	<R7> <R8> <R20> <R21> <R22>
<input type="checkbox"/> Robot does not use VEX products not intended for use as a robot component or any VEX packaging.	<R7>
<input type="checkbox"/> NO method of attachment NOT provided by the VEX Design System is used (welding, gluing, etc.).	<R16>
<input type="checkbox"/> All functional non-shattering plastic (0.070" or thinner) on the robot fits within the space of a single sheet of material not larger than 12"x24".	<R19>
<input type="checkbox"/> ALL components on the robot NOT meeting VRC inspection criteria are NON-FUNCTIONAL decorations that do not imitate game or field objects as a distraction for the V5 Vision Sensor.	<R9>
<input type="checkbox"/> Robot has only (1) VEX V5 Robot Brain and no additional microcontrollers.	<R12>
<input type="checkbox"/> Robot utilizes the VEXnet wireless communication system and no other wireless communication during matches.	<R17>
<input type="checkbox"/> Total power of motors is limited to 88W equivalence. Quantity of 11W _____ × 11 = _____ Quantity of 5.5W _____ × 5.5 = _____ Total power = _____ (sum of above)	<R13>
<input type="checkbox"/> Robot uses a maximum of two (2) VEX pneumatic air reservoirs (maximum 100 psi per air reservoir) and the compressed air contained inside a pneumatic sub-system is only being used to actuate legal pneumatic devices.	<R23>
<input type="checkbox"/> Robot uses only one (1) V5 Robot Battery.	<R14>
<input type="checkbox"/> Robot is controlled by no more than two (2) V5 Controllers.	<R24>
<input type="checkbox"/> NO VEX electrical or pneumatic components have been modified from their original state.	<R15>
<input type="checkbox"/> None of the electronics are from the V5 Beta, VEXplorer, VEXpro, VEX-RCR, VEX IQ, VEX Cortex, or VEX Robotics by Hexbug. This includes the EXP Brain, EXP Controller, EXP battery, and VEX 2-wire Motors.	<R7> <R13>
<input type="checkbox"/> If any custom cables are used, they are made only with official V5 Cable Stock.	<R25>
<input type="checkbox"/> Robot Brain has the latest firmware listed on VEX.com/firmware. If an event uses the Smart Field Control System, the robot brain must be named with the team number & letter (with no spaces).	<R15>
<input type="checkbox"/> The Robot correctly responds to enable/disable tests (ignores input from the controller during autonomous, etc.).	<R27>

## Team Verification

Initial

<input type="checkbox"/> Team has fully read and understands the game manual and Q&As, including but not limited to G1-G4, R1, R2, R28, and T1.	
<input type="checkbox"/> Team and coach have fully read and understand the Code of Conduct and Student-Centered Policy.	

Final Inspection **Pass**

*(Circle when passed)*

Inspector Signature: \_\_\_\_\_

Student team member accepts these Inspection results and certifies that this robot was designed, built, and programmed by qualified students on this team with little to no assistance from the adult mentor(s):

Team Member Signature: \_\_\_\_\_ Coach Signature: \_\_\_\_\_