



# Robot Inspection Checklist – V5



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

## Size Inspection

<input type="checkbox"/> Robot fits within starting size restrictions (18" x 18" x 18"). Team ID Plates must be installed for sizing inspection.	R5
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## Overall Inspection

<input type="checkbox"/> Team is only competing with ONE robot. They have no spare or replacement robots. Multiples of subsystem 3 is permitted.	R1
<input type="checkbox"/> Robot displays colored VEX Team Identification plates on at least (2) opposing sides, with only (1) color visible.	R27
<input type="checkbox"/> Robot does NOT contain any components which will be intentionally detached on the playing-field.	G5, R5
<input type="checkbox"/> Robot does NOT contain any components that could entangle or damage the playing-field or other robots.	R4
<input type="checkbox"/> Robot does NOT contain any sharp edges or corners.	R4
<input type="checkbox"/> Robot Brain power button is accessible without moving or lifting the robot.	R25
<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, G6

## VEX Parts Inspection

<input type="checkbox"/> ALL Robot components are (or are IDENTICAL to) OFFICIAL VEX Products 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 1/8 <sup>th</sup> inch braided nylon rope, cable protection materials and tape for connections and labeling.	R6, R7, R8 R11, R12
<input type="checkbox"/> Robot does not use VEX products not intended for use as a robot component or any VEX packaging.	R6
<input type="checkbox"/> ALL Components on the Robot NOT meeting VRC Inspection Criteria are NON-FUNCTIONAL decorations	R13
<input type="checkbox"/> Any non-shattering plastic on the robot was cut from a single sheet of 0.070" material not larger than 12"x24".	R10
<input type="checkbox"/> Robot has only (1) VEX V5 Robot Brain	R16
<input type="checkbox"/> Robot utilizes the VEXnet wireless communication system.	R17
<input type="checkbox"/> None of the electronics are from the VEXplorer, VEXpro, VEX-RCR, VEX IQ, or VEX Robotics by Hexbug.	R17
<input type="checkbox"/> Total number of Smart Motors is not more than eight (8) without use of pneumatics or six (6) with use of pneumatics.	R18
<input type="checkbox"/> Robot contains no VEX 2-wire Motors.	R18
<input type="checkbox"/> Robot uses one (1) V5 Robot Battery Li-Ion 1100mAh.	R20
<input type="checkbox"/> Robot is controlled by no more than (2) V5 Controllers.	R21
<input type="checkbox"/> NO VEX electrical components have been modified from their original state.	R22
<input type="checkbox"/> NO Method of attachment NOT provided by the VEX Design System is used. (Welding, Gluing, etc.)	R23
<input type="checkbox"/> Robot uses a maximum of two (2) VEX pneumatic air reservoirs. (Maximum 100 psi per air reservoir)	R26
<input type="checkbox"/> Robot contains no Components obtained from the V5 beta program.	R6
<input type="checkbox"/> If any custom cables are used, they are made only with official V5 Cable Stock.	R24
<input type="checkbox"/> Any NON-FUNCTIONAL decorations do not imitate Game or Field objects as a distraction for the V5 Vision Sensor.	R13
<input type="checkbox"/> Robot Brain has the latest firmware listed on VEX.com/firmware	R22
<input type="checkbox"/> If Vision sensor is used, it has been calibrated & tested on competition fields (this is not required to pass inspection)	Optional

**Final Inspection** (Circle when passed)  Pass

**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:** \_\_\_\_\_



# Robot Inspection Checklist – Cortex



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

## Size Inspection

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| <input type="checkbox"/> Robot fits within starting size restrictions (18" x 18" x 18"). Team ID Plates must be installed for sizing inspection. | R5 |
|--|----|

## Overall Inspection

<input type="checkbox"/> Team is only competing with ONE robot. They have no spare or replacement robots. Multiples of subsystem 3 is permitted.	R1
<input type="checkbox"/> Robot displays colored VEX Team Identification plates on at least (2) opposing sides, with only (1) color visible.	R27
<input type="checkbox"/> Robot does NOT contain any components which will be intentionally detached on the playing-field.	G5, R5
<input type="checkbox"/> Robot does NOT contain any components that could entangle or damage the playing-field or other robots.	R4
<input type="checkbox"/> Robot does NOT contain any sharp edges or corners.	R4
<input type="checkbox"/> Robot on/off switch is accessible & Microcontroller lights are visible without moving or lifting the robot.	R25
<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, G6

## VEX Parts Inspection

<input type="checkbox"/> ALL Robot components are (or are IDENTICAL to) OFFICIAL VEX Products 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 1/8 <sup>th</sup> inch braided nylon rope, cable protection materials and tape for connections and labeling.	R6, R7, R8 R11, R12
<input type="checkbox"/> Robot does not use VEX products not intended for use as a robot component or any VEX packaging	R6
<input type="checkbox"/> ALL Components on the Robot NOT meeting VRC Inspection Criteria are NON-FUNCTIONAL decorations	R13
<input type="checkbox"/> Any non-shattering plastic on the robot was cut from a single sheet of 0.070" material not larger than 12"x24"	R10
<input type="checkbox"/> Robot has only (1) VEX EDR Microcontroller.	R16
<input type="checkbox"/> Robot utilizes the VEXnet wireless communication system	R17
<input type="checkbox"/> None of the electronics are from the VEXplorer, VEXpro, VEX-RCR, VEX IQ, or VEX Robotics by Hexbug	R17
<input type="checkbox"/> Total number of Servos and Motors is not more than (12) without use of pneumatics or (10) with use of pneumatics	R18
<input type="checkbox"/> Robot uses (1) VEX 7.2V (Robot) Power Pack as the primary power source	R20
<input type="checkbox"/> If the Robot has a Power Expander, it has a 2nd 7.2V (Robot) Power Pack	R20
<input type="checkbox"/> Robot uses a maximum of (1) VEX Power Expander	R20
<input type="checkbox"/> Robot has a charged 9V Backup Battery connected	R20
<input type="checkbox"/> Robot is not controlled by more than (2) VEX hand-held transmitters	R21
<input type="checkbox"/> NO VEX electrical components have been modified from their original state	R22
<input type="checkbox"/> NO Method of attachment NOT provided by the VEX Design System is used (Welding, Gluing, etc.)	R23
<input type="checkbox"/> Robot uses a maximum of two (2) VEX pneumatic air reservoirs (Maximum 100 psi per air reservoir)	R26
<input type="checkbox"/> Any NON-FUNCTIONAL decorations do not imitate Game or Field objects as a distraction for the V5 Vision Sensor.	R13

**Final Inspection** (Circle when passed): Pass

**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:** \_\_\_\_\_