## Robot Inspection Checklist – V5

**Team Number:** ___________________  **Division:** ___________________

### Size Inspection
- [ ] Robot fits within starting size restrictions (18" x 18" x 18"). Team ID Plates must be installed for sizing inspection. **R5**

### Overall Inspection
- [ ] Team is only competing with ONE robot. They have no spare or replacement robots. Multiples of subsystem 3 is permitted. **R1**
- [ ] Robot displays colored VEX Team Identification plates on at least (2) opposing sides, with only (1) color visible. **R27**
- [ ] Robot does NOT contain any components which will be intentionally detached on the playing-field. **G5, R5**
- [ ] Robot does NOT contain any components that could entangle or damage the playing-field or other robots. **R4**
- [ ] Robot does NOT contain any sharp edges or corners. **R4**
- [ ] Robot Brain power button is accessible without moving or lifting the robot. **R25**
- [ ] Team testifies that the design, building and programming of the robot was done only by the students on the team. **R2, G2, G6**

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

- [ ] Robot fits within starting size restrictions (18" x 18" x 18"). Team ID Plates must be installed for sizing inspection.  
  - **R5**

## Overall Inspection

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

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