# VEX Robot Inspection Checklist - Cortex

**Team Number:** ____________  **Division:** ____________

## Size Inspection

- Robot fits within starting size restrictions (18" x 18" x 18") without touching walls or ceiling of the sizing tool. Team ID Plates must be installed for sizing inspection.  
  - R4, R28

## Overall Inspection

- Team is only competing with ONE robot. They have no spare or replacement robots.  
  - R1
- Robot displays colored VEX Team Identification plates on at least (2) opposing sides.  
  - R28
- Robot does NOT contain any components which will be intentionally detached on the playing-field.  
  - G5
- Robot does NOT contain any components that could entangle or damage the playing-field or other robots.  
  - R3
- Robot does NOT contain any sharp edges or corners.  
  - R3
- Robot on/off switch is accessible & Microcontroller lights are visible without moving or lifting the robot.  
  - R24

## VEX Parts Inspection

- ALL Robot components are (or are IDENTICAL to) OFFICIAL VEX Products as sold on VEXrobotics.com (No 3D printed functional parts are allowed)  
  - R5, R6, R7
- Robot does not use VEX products not intended for use as a robot component or any VEX packaging.  
  - R5
- ALL Components on the Robot NOT meeting VRC Inspection Criteria are NON-FUNCTIONAL decorations  
  - R12
- Any grease is used only in moderation on components that do not contact the field, objects, or other robots.  
  - R7
- Any non-shattering plastic on the robot was cut from a single sheet of 0.070” material not larger than 12”x24”.  
  - R9
- Robot has only (1) VEX EDR Microcontroller.  
  - R15
- Robot utilizes the VEXnet wireless communication system.  
  - R11
- None of the electronics are from the VEXplorer, VEXpro, VEX-RCR, VEX IQ, or VEX Robotics by Hexbug.  
  - R5
- Total number of Servos and Motors is not more than twelve (12) without use of pneumatics or ten (10) with use of pneumatics.  
  - R17
- Each 2-wire motor is plugged into its own 2-wire port or into a Model 29 motor controller  
  - R17
- Only 1 motor may only be controlled by a single motor controller  
  - R18
- Robot uses a maximum of (1) Y-Cable per each 3-wire Motor Port (cannot "Y" off a 2-wire Motor Port)  
  - R18
- Robot uses (1) VEX 7.2V (Robot) Power Pack as the primary power source.  
  - R19
- Robot uses a maximum of (1) VEX Power Expander, with a 2nd 7.2V (Robot) Power Pack  
  - R19
- Robot has a charged 9V Backup Battery connected  
  - R19
- Team only utilize VEX Battery Chargers for charging VEX 7.2V Battery Packs  
  - R19
- Robot is not controlled by more than (2) VEX hand-held transmitters.  
  - R20
- NO VEX electrical components have been modified from their original state.  
  - R21
- NO Method of attachment NOT provided by the VEX Design System is used. (Welding, Gluing, etc.)  
  - R21
- Robot uses a maximum of two (2) VEX pneumatic air reservoirs. (Maximum 100 psi per air reservoir)  
  - R26

## Field Control Check

- Robot successfully completes the "Field Control Check" Procedure. See Inspection Guidelines.  
  - R22
- Robot enters Autonomous mode when prompted with no driver control for duration of Autonomous.  
  - R21
- The Hand-held Controller(s) ONLY control the robot when robot is in Driver mode.  
  - R21

## Final Inspection (Circle)

- **Pass**
- **Fail**

Student team member accepts these Inspection results and agrees that this robot was designed, built, and programmed by qualified students on this team, with little assistance from the adult mentor(s):

**Team Signature:** ____________  **Inspector Signature:** ____________

VRC Robot Inspection Checklist - Cortex  
5/24/2019