

# Secrets to a Easy Robot and Field Inspection

Actually, they aren't really secrets. Experience from past seasons and the first three Virginia FTC Qualifiers has identified the most common problems found during SkyStone Robot and Field Inspections. To streamline your upcoming inspections, check the following items:

## Robot Inspection

1. **TEAM NUMBERS** – Team numbers must be at least 2 ½ inches high and with a minimum ½ inch stroke width. Arial 250 pt font will satisfy these requirements. The numbers must be displayed on to be visible from two sides 180° apart. Make sure your numbers are large enough, placed correctly, and durable. <RG05>
2. **ALLIANCE MARKERS** – Instead of alliance flags, this season teams are required to provide and display Alliance Markers visible next to the team numbers and within 3 inches of the numbers. A solid red square 2 1/2" on a side or a solid blue circle with 2 1/2" diameter is required on each side. They must be distinguishable from the robot itself, so if your robot is red or blue outline the marker in white to make it more noticeable. Make sure they attach securely but can be changed according to your alliance color. If removable, put your team # on the back in case you leave them somewhere and want to get them back. <RG06>
3. **POWER SWITCH** – Each robot requires a specific type of Power Switch wired between the battery and all other devices. This switch must be mounted so it is easily visible and accessible from above in case a referee needs to turn off your robot if is going crazy during a match. <RE01>
4. **WIRE MANAGEMENT** – Make sure loose wire loops are not located on the exterior of the robot. Other robots can accidentally get entangled in them and disconnect your devices in the middle of a match.
5. **TEAM SCORING ELEMENT (Capstone)** – Team scoring elements, if used, must meet size and material requirements. Particularly, they **may not** be made from actual game pieces from this year's game. <TE01-05>

## Field Inspections

1. **ANDROID SOFTWARE UPDATES** – Make sure you connect your phones to the internet to install any Android software updates. The minimum versions indicated in the manual are required to make sure the FTC software operates correctly. <RS03>
2. **FTC SOFTWARE CORRECT AND MATCHING** – Make sure your phones have the same version of the FTC software installed, version 5.2 or 5.3 and that neither phone has both Robot Controller and Driver Station application both installed. Connect to the Play Store to update the software. Sometimes the store thinks your software does not need to be updated when in fact it does. Uninstall the app and then the store will download the current version. <RS06>
3. **PHONE NAMES** – Make sure your phones have correct names, following the guidelines in the rules. <RS01>
4. **BACKUP OPMODE CODE** – If you use Blocks or On-Bot Java, make sure you bring a backup of your code, in case a phone failure causes it to be lost.
5. **DISCONNECT YOU COMPUTERS FROM YOUR PHONES** – If you use Blocks or On-Bot Java, make sure you drop your connection between your RC Phone and your computer before going to Queuing. Otherwise, you may encounter severe lagging and unexpected behavior during your matches as your Robot Controller tries to process requests from both your Driver Station and your computer.

Good luck and we will see you at the Inspection Tables and on the Field!

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