

ROBOT INSPECTION TIPS FOR FIRST TEAMS

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1. Robots may participate in the practice rounds on Thursday without passing inspections.
2. Robots CAN'T compete on Friday without having passed all parts of inspection.
3. Start inspections as early as possible so you have time to fix issues and don't get stuck in the rush at the end of Thursday
4. Inspections can be done in several parts
 - a. Weighing in
 - b. Sizing (make sure to put the robot on center of scale)
 - c. Electrical/Pneumatic/mechanical
5. Get through the parts that you can as early as possible, you can come back to pass the rest.
6. Bring a copy of your parts list with prices to the inspection
7. Have students available for inspection, the inspectors will ask them the questions.
8. FIRST will release an inspection checklist before competition, go over it with the students (mock inspection)
9. Bring a charged battery with you as well as your controller and tether, you will be asked to power up the robot.
10. Simple things teams often fail inspections for:
 - a. Make sure battery leads and all 6 gauge connections are well insulated.
 - b. Check for sharp edges by running your hand all around the robot.
 - c. Have pressure gauges to show max storage pressure of 120 psi and working pressure of 60 psi.
 - d. Be able to follow the correct size breakers from the panel to the speed controller/relay it corresponds to (LABEL each to make things much easier)
 - e. The LEDs of the robot controller must be visible.
 - f. Battery should be secure.
 - g. The 120 amp breaker should be easily accessible.
 - h. Make sure the robot does not pose an entanglement threat.