



Internal Safety/Technical Inspection Checklist

School	Robot Name	Weight	Pass	Fail	Time	Inspector

- A. Team Safety Plan available for inspection
- B. Bill(s) of Materials available for inspection

Internal Inspection (check if OK)

Safety Covers and Restraints:

- 1. Safety covers are on all sharp points, edges and corners
- 2. All covers are positively secured by a positive retention method (not tape or friction)
- 3. Restraints are used to constrain any pinch/motion hazards
- 4. All restraints are positively secured by a positive retention method (not tape or friction)

General Internal Inspection:

- 1. All master switches mechanically shut off all power from the primary batteries
- 2. All master switches are fully-enclosed and 2-position (on/off)
- 3. Access to the master switch requires no parts be removed from the Bot
- 4. Access to the master switch does not require being in the path of any weapons
- 5. Access to any secondary switches is outside the path of any weapons
- 6. The batteries are an allowed type (SLA, NiCad, NiMh, Li-Ion)
- 7. The batteries are mounted securely and located within the chassis frame
- 8. All battery terminals and connections to the master switch(es) are insulated
- 9. All wiring is properly installed and insulated
- 10. All primary electrical terminals are covered/insulated
- 11. The maximum system voltage does not exceed 28 volts
- 12. There is no use of disallowed construction materials

Radio Control Equipment:

- 1. Uses an IFI Robotics or FM R/C or allowed custom controller
- 2. R/C equipment uses allowed frequencies
- 3. No more than 2 frequencies used
- 4. At least 2 sets of crystals at different frequencies
- 5. Any custom controller complies with appropriate regulations (no interference)

If Bot Has One or More Weapon Systems

- ☒ 1. The weapon type is not disallowed by the Tech Regulations
- ☒ 2. When Deactivated, no weapon poses any hazard to people near the Bot
- ☒ 3. Weapons/Flywheels are properly attached
- ☒ 4. Any tether length does not exceed 4 feet
- ☒ 5. Any deactivated Large Spring force is less than 5 pounds
- ☒ 6. Any modular weapon can be changed in 30 minutes

If Bot Has a Pneumatic System

- ☒ 1. Maximum tank capacity within 8 cu. f
- ☒ 2. Tanks have pressure-reliefs or blowout plugs
- ☒ 3. Tanks are mounted securely within the chassis frame
- ☒ 4. Tanks are properly rated and tested
- ☒ 5. Shut-off valve meets requirements
- ☒ 6. Pressure gauge(s) and/or test port(s) are OK
- ☒ 7. Pressure regulator has a lock-down mechanism
- ☒ 8. All pneumatic components are secured adequately
- ☒ 9. All pneumatic components are properly rated
- ☒ 10. No damage to any pneumatic components
- ☒ 11. Pressure purge valve meets requirements
- ☒ 12. Purge and shut-off access is outside weapons paths
- ☒ 13. No heat source close to pneumatic system
- ☒ 14. Access for filling is safe and stable

If Bot Has a Hydraulic System

- ☒ 1. All hydraulic components have the proper ratings
- ☒ 2. All hydraulics are mounted securely within the chassis frame
- ☒ 3. No damage to any hydraulic component
- ☒ 4. Hydraulic system has appropriate pressure-reliefs
- ☒ 5. Gauges or test ports are located where needed
- ☒ 6. Hydraulic hoses are properly supported
- ☒ 7. Hydraulic fluid will not spill out of an inverted Bot

Special Configurations

- ☒ 1. MultiBot meets all specific requirements
- ☒ 2. StompBot complies with "walking" requirements
- ☒ 3. Any lighting/sound system can be deactivated

If the Combat System Uses External Equipment

- ☒ 1. Equipment setup/removal takes less than 2 minutes
- ☒ 2. Equipment does not interfere with arena operations

Ver-1.2 Checklist Item B added