

Testing & Fault-Finding

Inspection Checklist

Date: _____

Country: _____

Competitors' Names: _____

Expert: _____ Expert: _____ Expert: _____

Place an "X" in the correct box (Visual Only or Functional) depending on how the task type category.
 Place an "X" in the correct box if the task passed or failed. When a task fails, write the corrective action that should be done to fix the failure (without actually fixing it).

If a task asks for a measured value, place the value in the measurement box and indicate the unit.

Electrical Testing

Task:	Does the Robot Turn On?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		

Task:	Battery Connected to Control Panel?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		

Task:	Control Panel power connected to Titan?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		

Task:	All Wires Labeled?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		

Task:	Battery Voltage is >12VDC?	
Passed:	Yes:	No:
Task Type:	Visual Only:	Functional:
Measurement:		
Corrective action: (if failed)		

Task:	Battery Fuse is good?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		

Task:	Titan Fuses are good?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		

Task:	Emergency Stop is Wired?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		

Task:	VMX LEDs S1, S2, 3.3V are on?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		

Task:	VMX IO Voltage is 5VDC?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Measurement:		
Corrective action: (if failed)		

Task:	Wires are neatly routed and no damage?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		

Mechanical

Task:	No loose screws or nuts?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		

Task:	Wheels, Track, or Rollers show no damage?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		

Task:	Damage to channel or brackets?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		

Task:	Damage to 3D printed parts?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		

Task:	Damage to polycarbonate parts?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		

Task:	Nothing hanging off chassis?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		

Sensors

Task:	Ultrasonic sensor showing correct distance?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		

Task:	Sharp sensor showing correct distance?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		

Task:	Yaw is correct?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		

Task:	Cobra reacts to black or white?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		

Task:	One spin of the wheel gives 1464 encoder counts?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Measurement:		
Corrective action: (if failed)		

Task:	Motors Move?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		
Task:	Camera gives video?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		

Operation

Task:	Robot is enabled when start pushed?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		

Task:	Robot is stops when E-Stop pushed?	
Task Type:	Visual Only:	Functional:
Passed:	Yes:	No:
Corrective action: (if failed)		