QUALITY ASSURANCE RECORD

Model: LulzBot Mini 1.0 3D Printer

Serial Number: _____
Date Completed: _____
Tested by: _____

Configuration:

Electronics: Mini-RAMBo 1.0a
Firmware: Marlin for Mini 2014-Q4
Nozzle: 0.5mm diameter nozzle
Settings:

Stepper Motor	Steps/mm	Max Length	Microstep Mode	Digipot
X	100.5	155	16	175
Y	100.5	155	16	175
Z	1600	155	16	220
E0	833	NA	16	135

General:

❑ Are all the screws and zip ties tight?
❑ Are the current version of parts being used?
❑ Is the Spool Mount properly mounted so it flips up and sits securely?
❑ Is the Finger Clip properly mounted with the taller side on the left?
❑ Are the switches tight? They shouldn't wiggle side to side.
❑ Are all 4 rubber feet installed?
❑ Is the PEI tape free of bubbles and wrinkles?
❑ Is the heat bed adhesive smooth and consistent with no finger prints?

Y Axis:

❑ Does the Y bed move freely back and forth?
❑ Is the belt mounted in the correct orientation?
❑ Is the Y bed tight side to side from motion and twisting?
❑ Are all the screws on the bearing holders tight?
❑ Does the Y belt rub the bottom of the y-idler by the bearings?
❑ Is the Y pulley tight?
❑ Is one of the set screws on the Y pulley aligned with the flat on the motor shaft?
❑ Are both pulley set screws tightened?
❑ Is the level of the Y pulley at the same height as where the belt mounts on the belt holder?
❑ Is the Y belt tight?
❑ Are the four bed leveling washers tight?
❑ Are the belts trimmed far enough to not interfere with the pulley or bearing?

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X Axis:

- ❑ Is the X pulley tight?
- ❑ Is one of the set screws on the X pulley aligned with the flat on the motor shaft?
- ❑ Are both pulley set screws tightened?
- ❑ Is the belt mounted in the correct orientation?
- ❑ Is the belt free from rubbing anywhere during motion?
- ❑ Is the X belt tight?
- ❑ Does the X axis move freely end to end?
- ❑ Are the X bars flush with the right side?
- ❑ Are the set screws that hold the X bars tight?
- ❑ Are the belts trimmed far enough to not interfere with the pulley or bearing?

Z Axis:

- ❑ Do the Z drive rods rotate smoothly with no up and down movement between the bearings?
- ❑ Are the set screws that hold the Z bars tight?
- ❑ Are the coupler set screws tight?
- ❑ Are the drive rods and motor shafts aligned so the couplers are not bent?

Extruder:

- ❑ Can you adjust the extruder springs?
- ❑ Are the V grooves on the extruder gears lined up?
- ❑ Is the extruder mount secure on the X carriage?
- ❑ Is the extrusion fan mounted correctly?
- ❑ Is the extruder blower mounted correctly?
- ❑ Does the idler bearing stick out of the idler block?
- ❑ Is the hobbing aligned to the hole in the extruder?
- ❑ Is the set screw in the small gear tight and on the flat of the motor shaft?
- ❑ Can you feed filament about 100mm from the top of the extruder?
- ❑ Are the gears tight with no back-lash?
- ❑ Do the extruder gears turn smoothly for several rotations?

Electronics:

- ❑ Are all connections to the Mini-Rambo plugged in correctly?
- ❑ Can you plug in USB cable from the outside of the enclosure?
- ❑ Is the case fan plugged in?
- ❑ Are all cables free from contacting any moving parts?

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Test and Verification Results:

- ❑ Verify case fan is running.
- ❑ Verify extruder blower is running.
- ❑ Verify control of the extrusion fan.
- ❑ Nozzle temperature control verified.
- ❑ Nozzle re-tightened during first heat cycle.
- ❑ Extruder control verified.
- ❑ X, Y, and Z min and max stop switches verified.
- ❑ X and Y homing are making contact with bed leveling washer.
- ❑ Bed leveling is functioning properly.
- ❑ Bed temperature control verified.
- ❑ Bearing conditioning complete.
- ❑ X, Y, and Z motion smooth over full range and speeds.
- ❑ Test print (Rocktopus*) successful.
- ❑ Print head moved to shipping position.

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