Test/Acceptance Record

Model: LulzBot TAZ 6 3D Printer

Serial Number: _____

Heat Bed Batch #: _____

Date Completed: _____

Completed by: _____

Configuration:

Electronics: RAMBo 1.3L
Firmware: Marlin Version 1.0.2.20
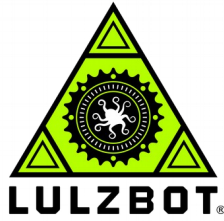Nozzle: LulzBot v2 Hot End with 0.50mm nozzle
Settings:

Part	Steps/mm	Max length	Micro step	Digipot
X Motor	100.5	298	16	175
Y Motor	100.5	275	16	175
Z Motor	1600	250	16	240
E0		NA	16	135

Z Offset: _____

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General

❑ Are all the screws and zip ties tight?
❑ Are the X and Y axis square to each other?
❑ Are the gaps at the ends of the extrusion closed?
❑ Are all the parts flush and straight to the edges with clean lines?
❑ Is the t-nut for the second extruder installed correctly?
❑ Does the SD card slide in and out of the slot freely?
❑ Are the current version of parts being used?
❑ Verify that the following are mounted correctly:
   1. Filament guide tube, tube on back side of mount
   2. Spool Arm, correct height
   3. Idler retainer, taller side on left
❑ Are the switches tight? They shouldn't wiggle side to side.
❑ Are all 11 rubber feet installed?
❑ Is the PEI print surface free of bubbles and wrinkles?
❑ Is the heat bed adhesive smooth and consistent?
❑ Does filament slide through the filament guide tube?

Y-Axis

❑ Does the print bed move freely back and forth?
❑ Is the Y-axis 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 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 all the Y mounting brackets flush and tight?
❑ Are the belts trimmed far enough to not interfere with the pulley or bearing?
❑ Are the plastic parts flush to the top of the y end plate?

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X-Axis

- ❑ 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 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 outside for the X-end idler (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?
- ❑ Is the X-axis level and parallel to the bed?

Z-Axis

- ❑ Do the lead screws rotate smoothly with no up and down movement between the bearings?
- ❑ Are the four Z coupler set screws tight and aligned with flats on the drive rods and motors?
- ❑ Are the Z smooth rods flush with the top plate?

Tool Head

- ❑ Can you adjust the extruder springs?
- ❑ Are the herringbone grooves on the extruder gears lined up?
- ❑ Is the extruder mount secure on the X carriage?
- ❑ Are the extrusion fans mounted correctly?
- ❑ Is the heat sink fan 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?

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Electronics

- ❑ Are the screws that fasten the control box to the frame tight?
- ❑ Can you plug in USB cable from the outside of the enclosure?
- ❑ Is the plug cover for second extruder installed with the strap attached to the lower right screw?
- ❑ Has the protective plastic been removed from LCD?
- ❑ Has the protective cover been removed from the clear polycarb LCD cover?
- ❑ Is the LCD secured in place firmly?
- ❑ Is the LCD knob tightly secured to the LCD?
- ❑ Have you verified that the firmware is correct using checksum?

Test and Verification Results:

- ❑ LCD functions normally.
- ❑ Belts aligned on bearings and properly tensioned.
- ❑ Verify case fan is spinning freely.
- ❑ Verify the heat sink fan is running.
- ❑ Verify you can run the extrusion fans.
- ❑ Hexagon Hot End temperature control verified.
- ❑ Extruder calibration verified. Check that EEPROM values are correct.
- ❑ Z offset calibrated and verified.
- ❑ Bed level consistent across bed.
- ❑ X, Y and Z stop switches verified.
- ❑ Flat of the nozzle contacts all four bed corners.
- ❑ Wipe sequence is in center of wiper pad
- ❑ Bed temperature control verified.
- ❑ Cables secure and free of interference/contact with table motion.
- ❑ Cable connectors fully engaged and oriented correctly.
- ❑ Bearing conditioning (burn in) complete.
- ❑ X, Y and Z motion smooth over range and speeds.
- ❑ Test print (Octopus) successful.
- ❑ Loctite® applied to all pulley and coupler set screws.

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