



# Test/Acceptance Record

Model: LulzBot TAZ 6 3D Printer

Serial Number: \_\_\_\_\_

Heat Bed Batch #: \_\_\_\_\_

Date Completed: \_\_\_\_\_

Completed by: \_\_\_\_\_

## Configuration:

Electronics: RAMBo 1.4a

Firmware: Marlin Version 1.0.2.22

Nozzle: LulzBot v2 Hot End with 0.50mm nozzle

Settings:

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

Z Offset: \_\_\_\_\_



Aleph Objects, Inc.  
626 West 66th Street  
Loveland, Colorado 80538 USA

www.alephobjects.com  
www.lulzbot.com  
+1-970-377-1111



# Test/Acceptance Record

## 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.

