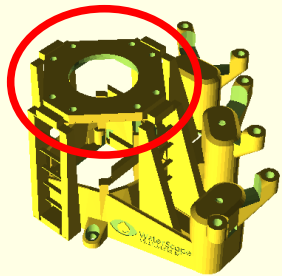


# OpenFlexure Microscope: quality checks

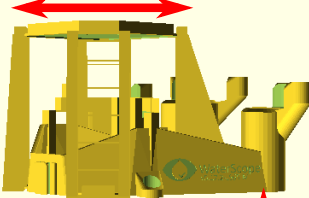
Richard Bowman, Jan 2018



1. Check the XY table printed OK. Some loops of plastic underneath are ok, but the top must be flat.

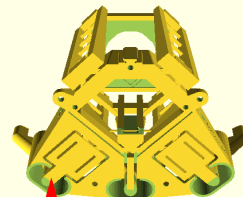


this part moves

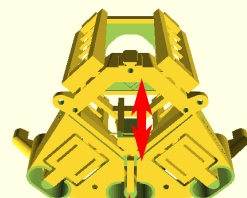


push

2. Check the X and Y actuators move when pushed with a finger, and that the XY table moves with the actuator.

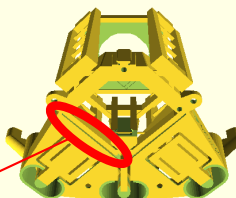


push



push

3. Check the Z actuator moves when pushed with a finger, and that the objective clip moves with the actuator. If it doesn't, it may be that the printer overextruded, so the gaps between the Z struts and the body are not present. This can often be fixed with a craft knife.



4. Check the objective clip is vertical and that the front of the clip is straight. There is often a kink at the very top if it has wobbled during printing.

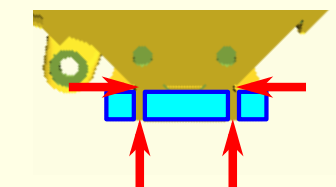
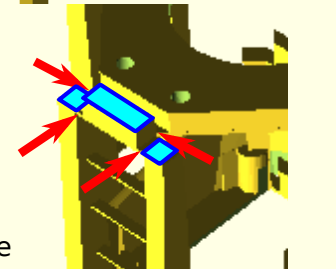
6. Check that the nut traps are large enough to insert an M3 nut. You should be able to push it in using the nut insertion tool, as shown in the instructions. The hole in the nut should line up with the hole in the actuator column.



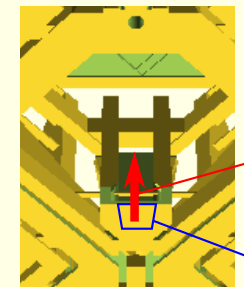
6. Check that the hooks at the top of the actuator columns have printed correctly (this is most easily checked by inserting the band, as shown in instructions).



7. Check that the flexures at the tops of the leg printed correctly. There should be 4 thin sections without a strut either above or below them (red arrows). These are important for the XY table to be able to move. The small strut at the top should be in the middle of the two legs, and its outer edge should line up with the legs (blue rectangles).



6. Check that the optics module fits into the objective clip. It should take some force to insert the module, but not so much that it breaks the plastic - see the instructions for details. You may snap the thin flat part at the bottom to make this easier.



insert optics module  
snap