

FELIX Tec 4.0 to Tec 4.1 Upgrade Kit

For Both Single and Dual head 3D printers



Upgrade manual

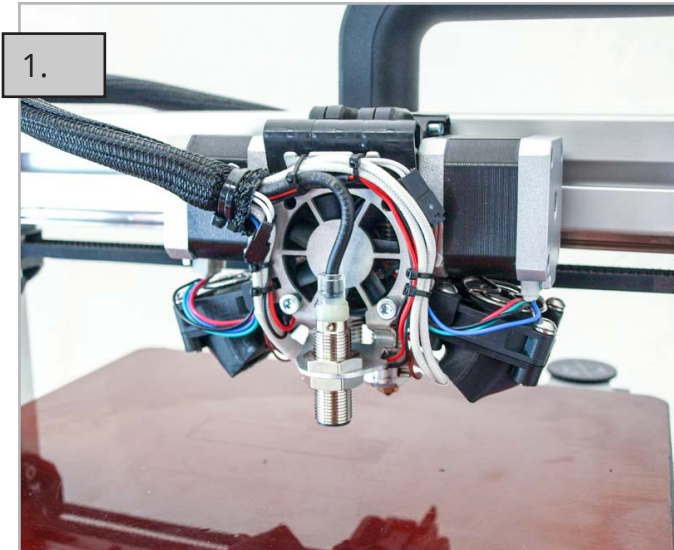
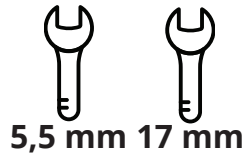
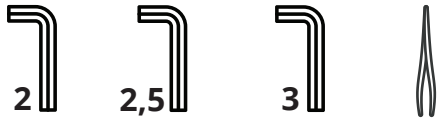


v 1.0

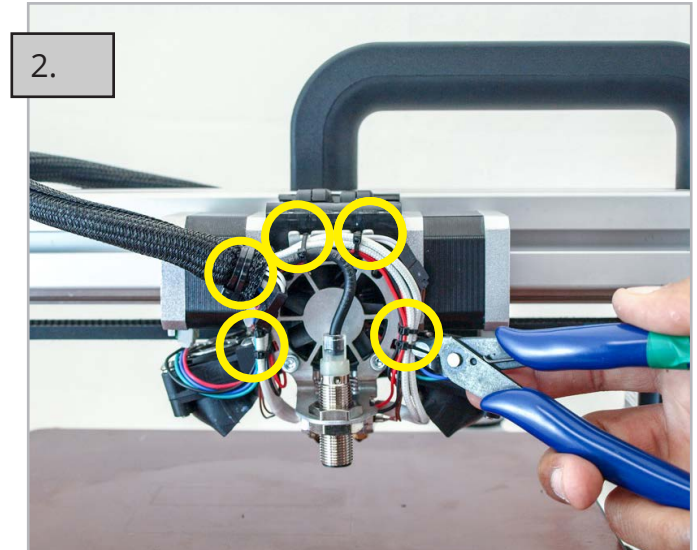
Chapter: Preparing Upgrade

🕒 10 Minutes

Tools:

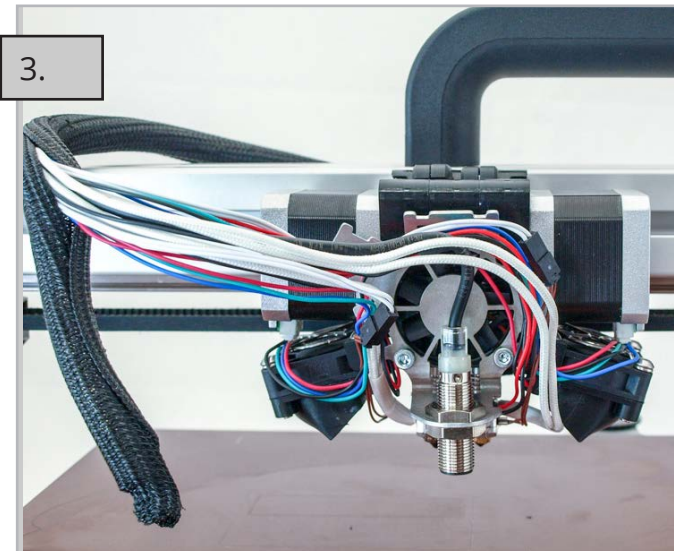


Remove front cover

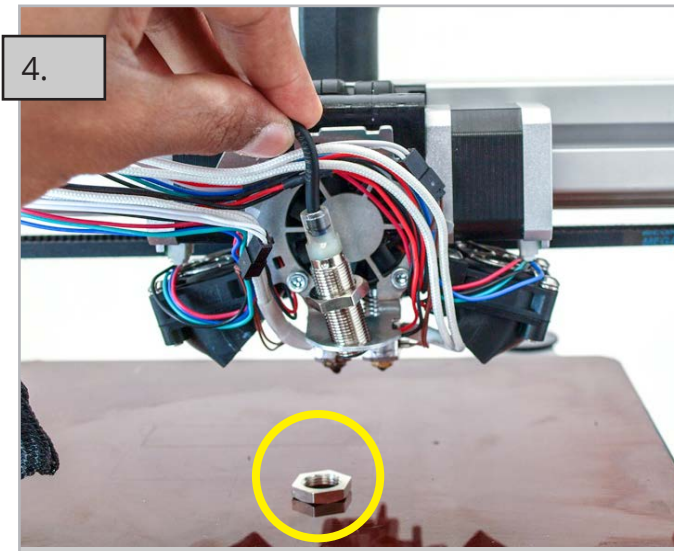


Remove cable ties

Tools:



Remove sleeve from cables.

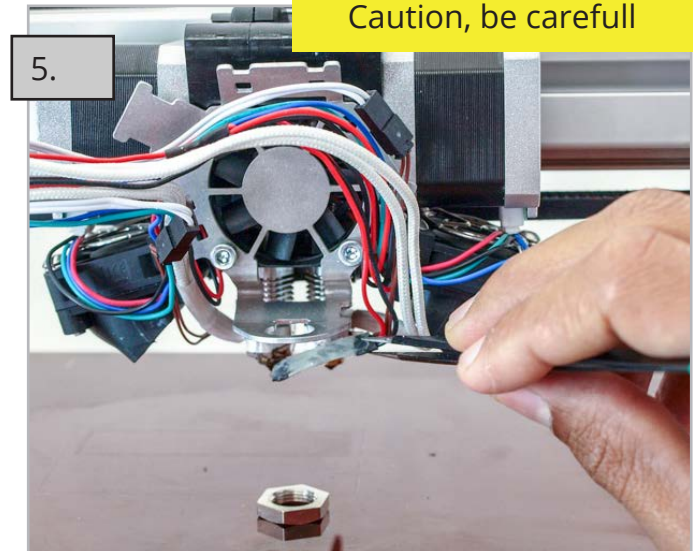


Remove Z-sensor by removing nut.

Tools:



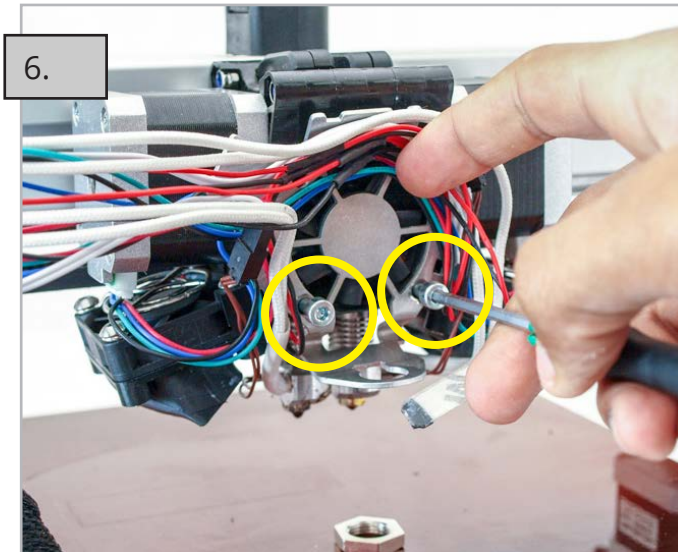
17 mm



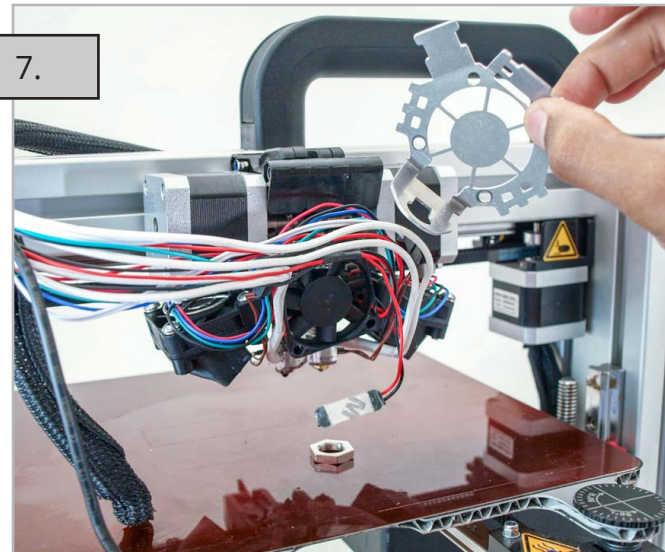
Remove LED Strip carefully with tweezers.

Tools:

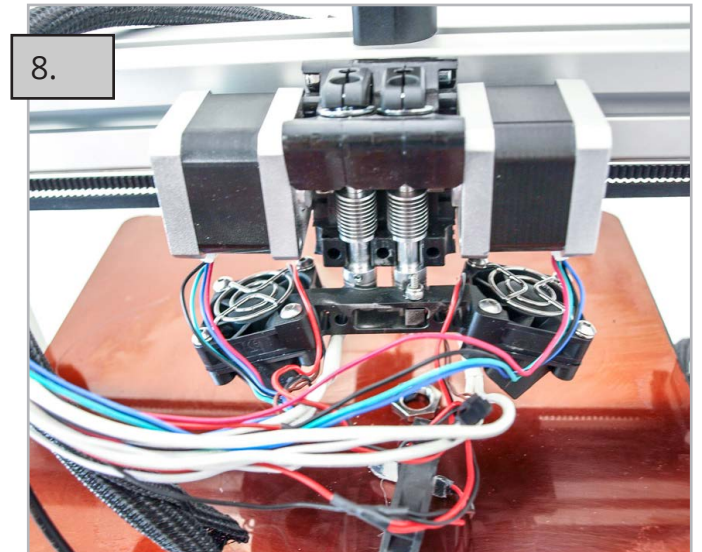




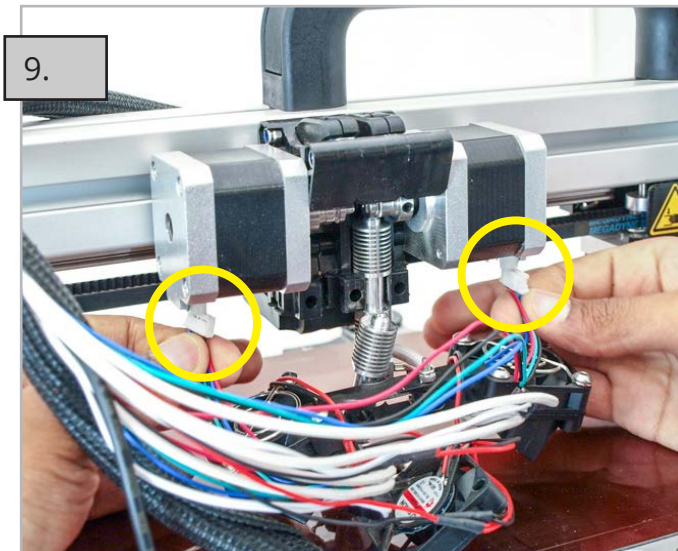
6. (2x) Remove M4 x 40 bolt. Tools:



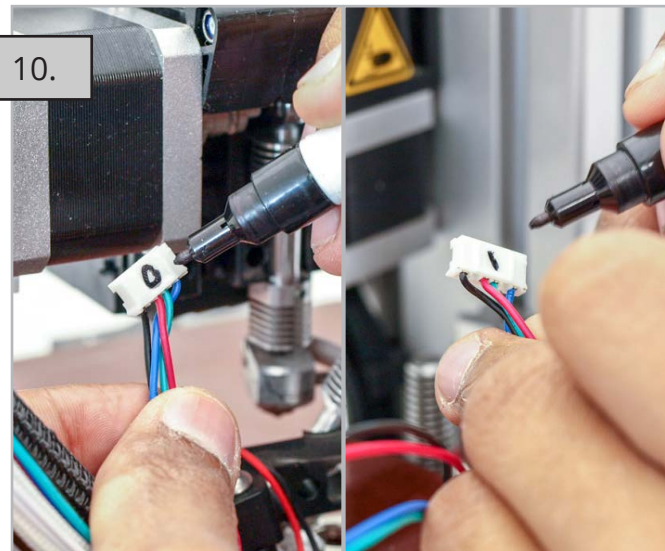
7. Remove Front Bracket



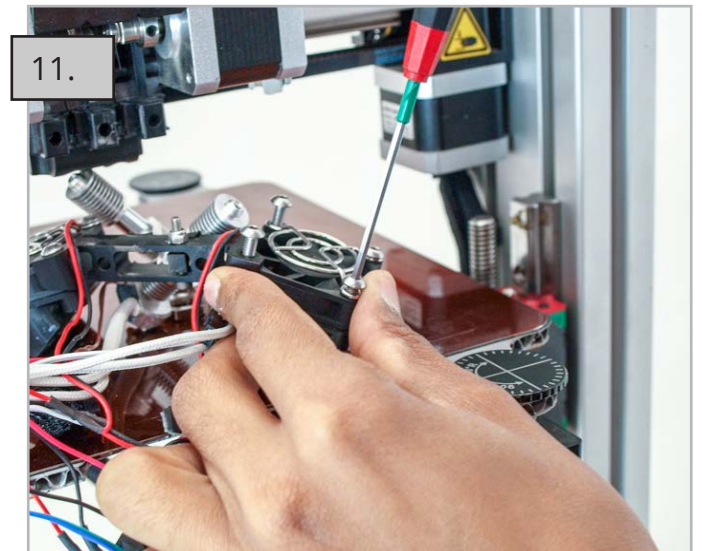
8. Lower extruder / fan bracket



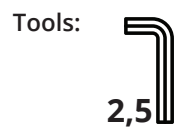
9. Unplug motor cables

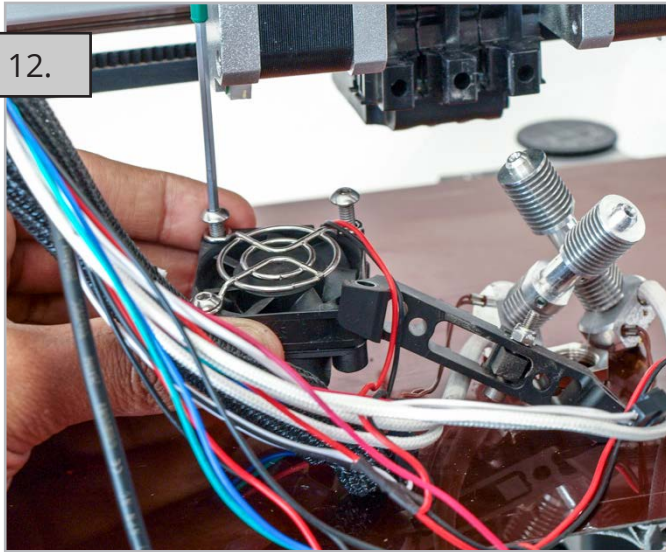


10. Write on each cable the corresponding motor number.
LEFT: 0 RIGHT: 1



11. Disassemble RIGHT fan assembly.
Remove finger guard and fan duct.





12. Disassemble LEFT fan assembly.
Remove finger guard and fan duct.

Tools:  2,5





13. TOP: old bracket
BOTTOM: new bracket

Place bolt and nut in new bracket.

Note: do NOT use old mover in combination with new bracket.



14. Assembly of NEW mover and bracket including M3 x 20 bolt.

Tools:  5,5 mm  2,5

Chapter: Assembly

🕒 10 Minutes

Tools:



Glue



2



3



Calibration
Card

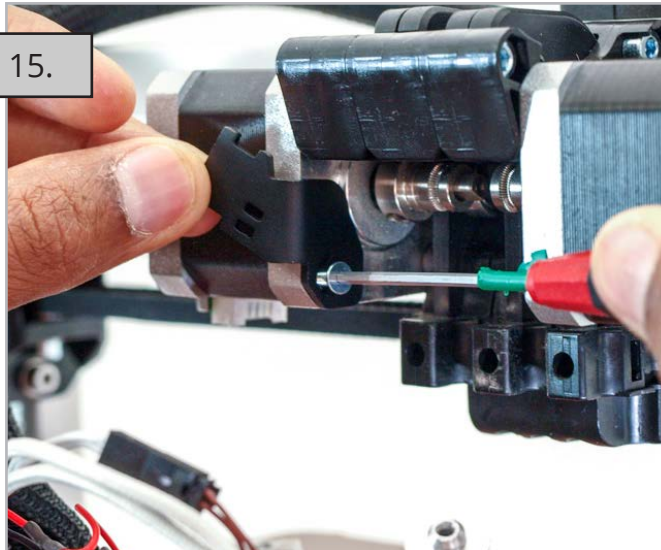


7 mm



17 mm

15.



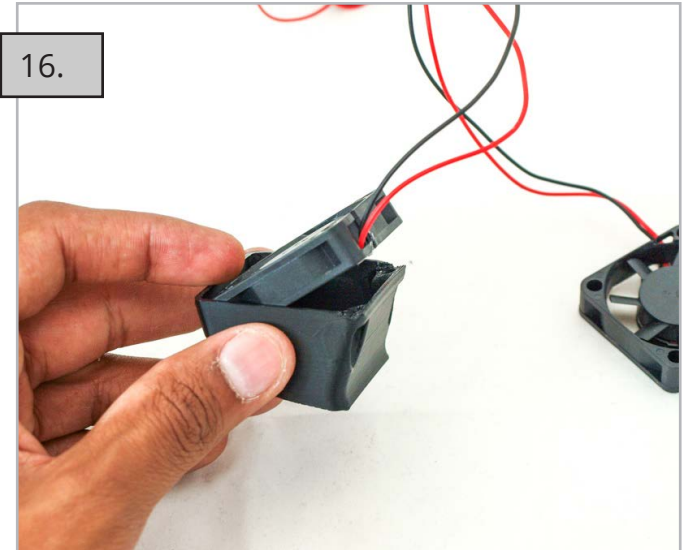
place bracket with M3 x 6

Tools:



2

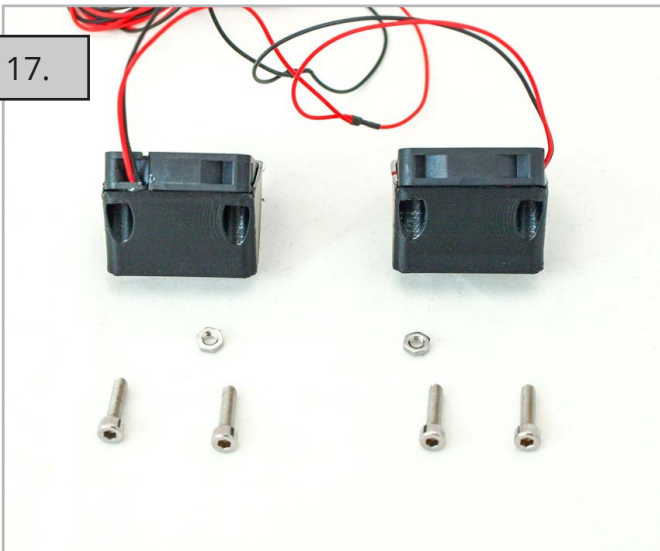
16.



(2x) Slide Dual fan into fan duct.

Note: sticker on fan should face inwards.

17.

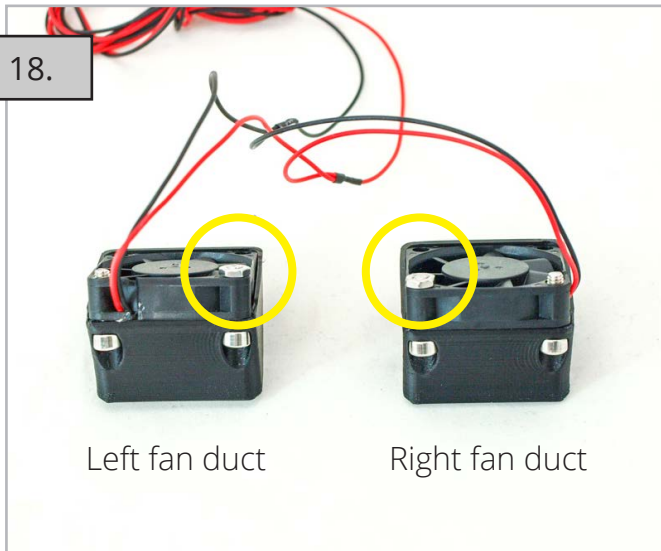


Parts needed for fan duct assembly.

Bolts: (4x) M4 x 16

Nut: (2x) M4

18.



(2x) Assemble fan ducts.

Make sure the nut is on the correct bolt and check the orientation of the wires.

Tools:

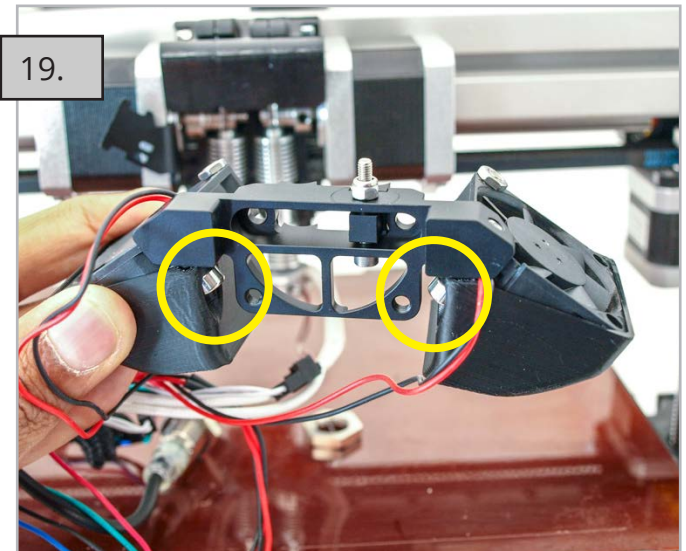


7 mm



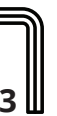
3

19.

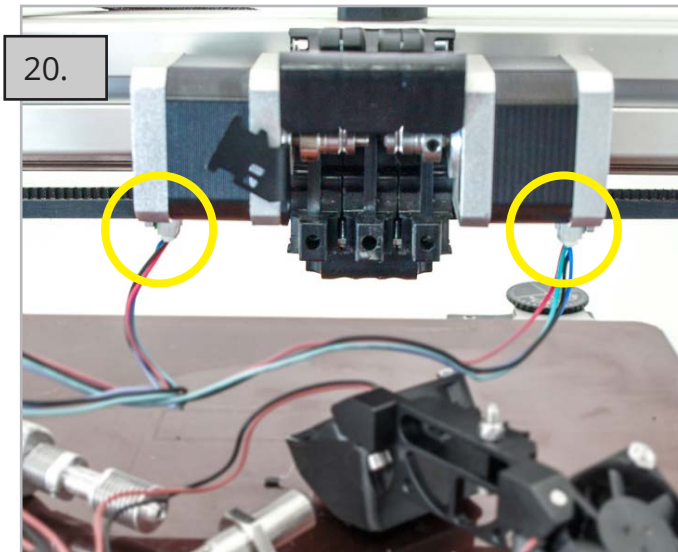


Mount both fan duct assemblies to bracket. Double check wire orientation.

Tools:

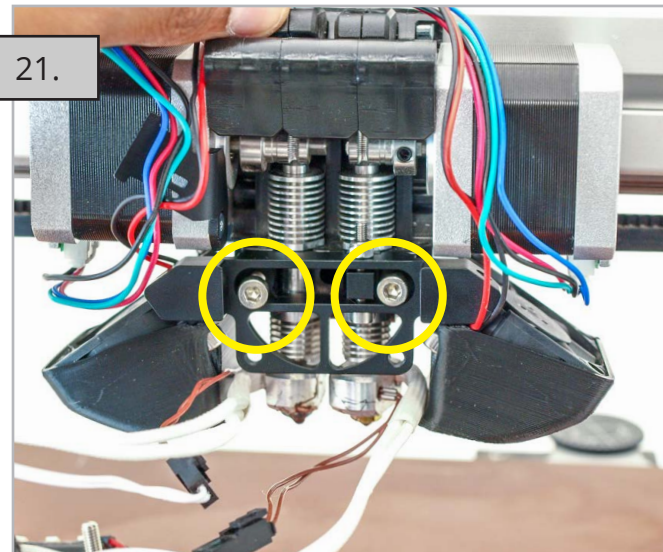


3



20.

Connect motor cables.
LEFT: 0 RIGHT: 1



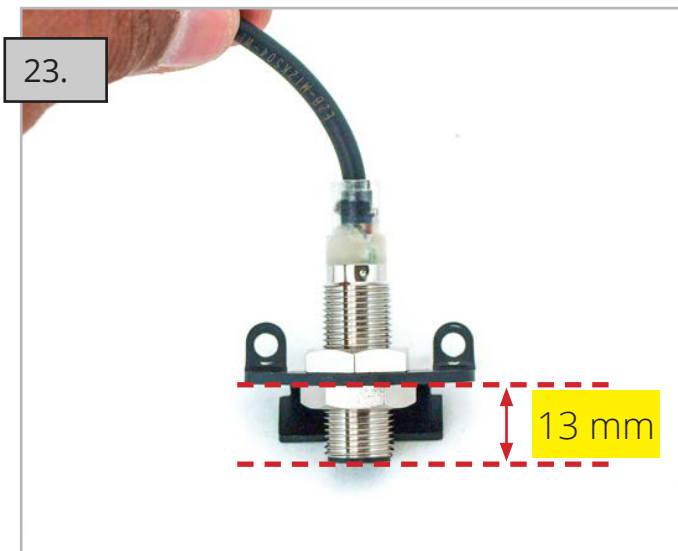
21.

Place hot-end(s) in their sockets. Mount fan assembly after that. Lock tightly with M4 x 20 bolts.



22.

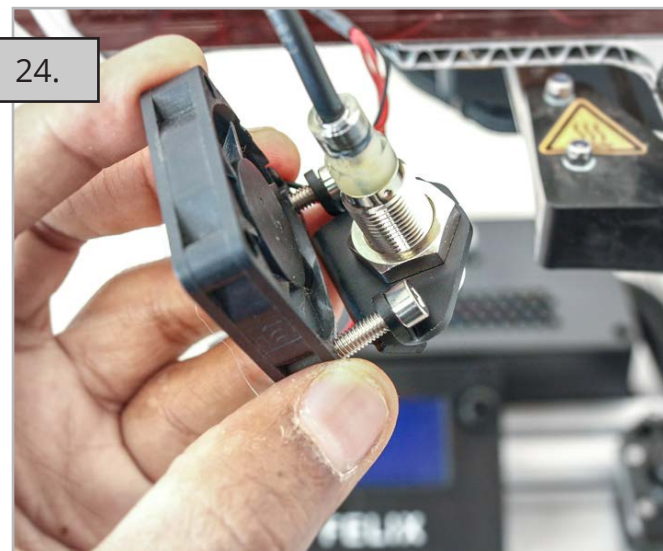
Parts needed to assemble the z-sensor bracket.



23.

Assemble z-sensor bracket as shown in the image.

The distance between bottom side of bracket and bottom of the sensor should be +/- 13 mm.



24.

Mount front fan to z-sensor bracket with (2x) M4 x 16

Tools:

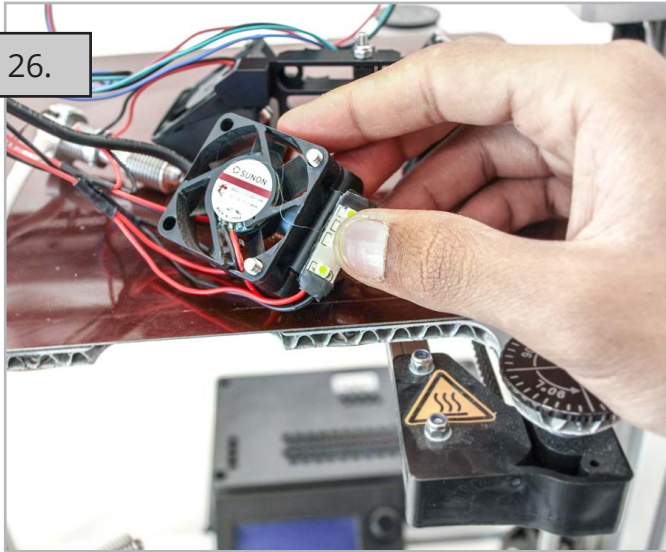


25.

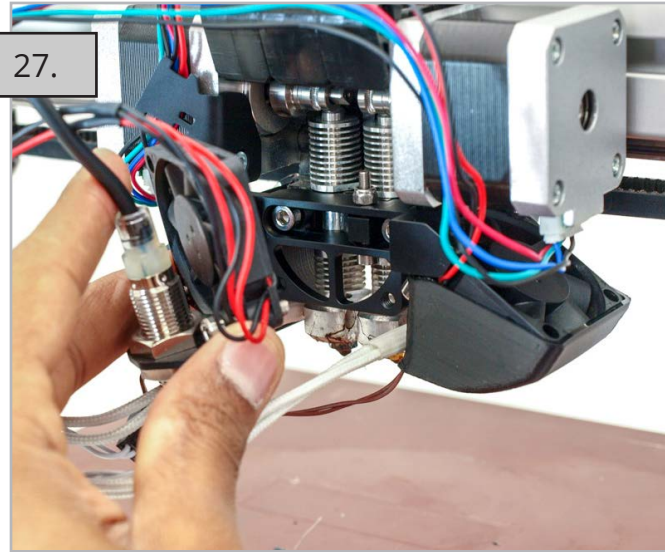
Place a thin layer of glue onto the LED strip. Use heat resistant glue up to at least 90°C

Tools: Glue

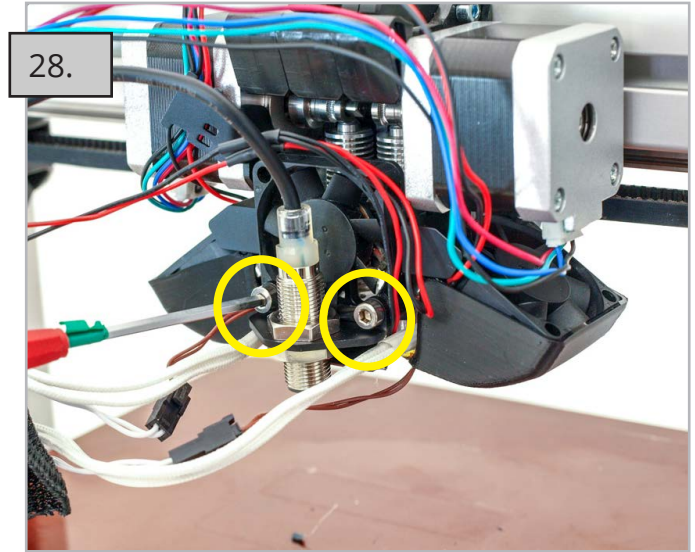
We use: Loctite 401



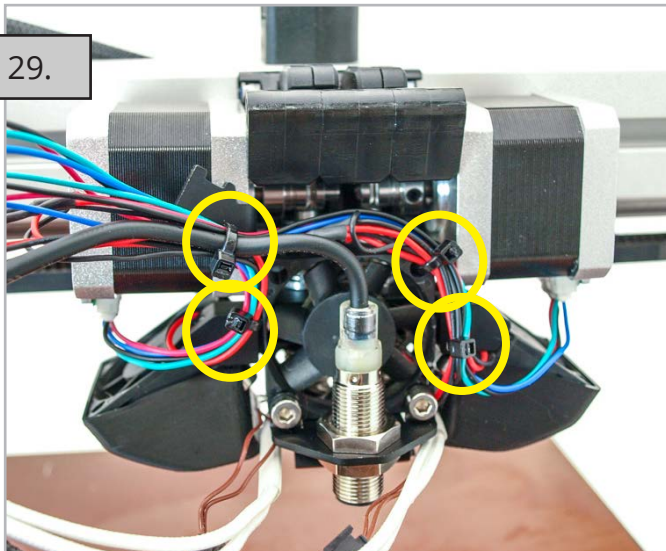
Place LED Strip onto bracket.



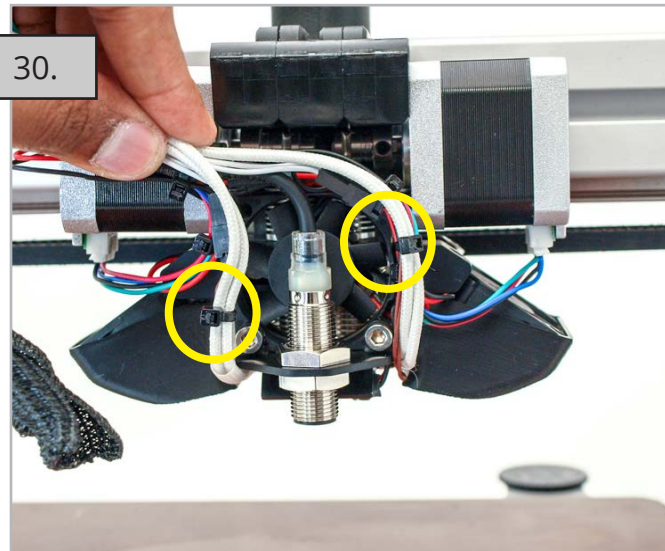
Place Z-sensor assembly onto extruder.



Connect Z-sensor assembly by tightening bolts. Tools:



(4x) Lock cables with cable ties.

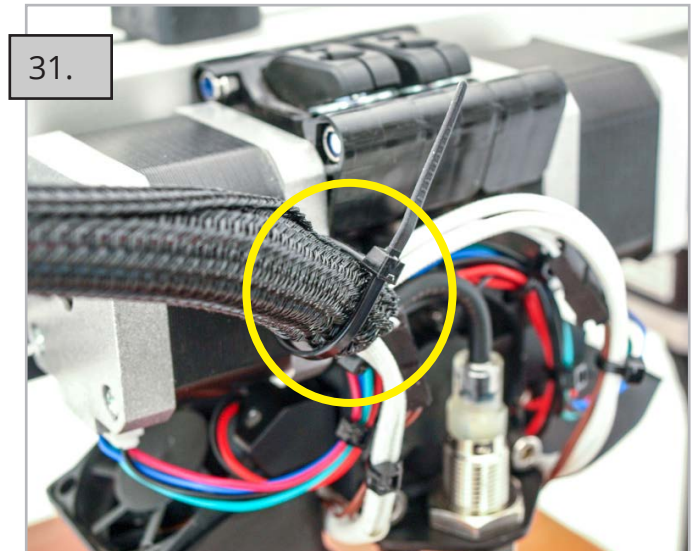


Bundle heater + thermistor with cable ties. Note: do NOT bundle them with the other cables for easier maintenance in the future.

Tools:



Cut off end of cable ties.

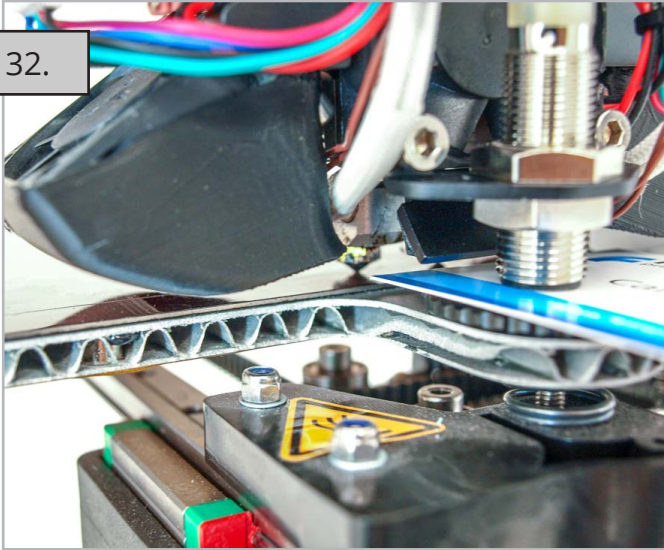


Place back sleeve and tighten with cable tie. Tools:



Cut off end of cable tie.

32.



Move Z-sensor right above front adjustment wheel. A folded Calibration Card should fit between sensor and wheel while nozzles touch the plate.

Tools:

Calibration Card

You have completed the upgrade from FELIX Tec 4.0 to Tec 4.1.

Please proceed with all the calibration steps which are explained in the Quick Start Manual.

Are you experiencing issues or do you have any questions?

Please check www.felixprinters.com/support for more information or contact us at support@felixprinters.com