

[Skip to content](#)

Manuals+

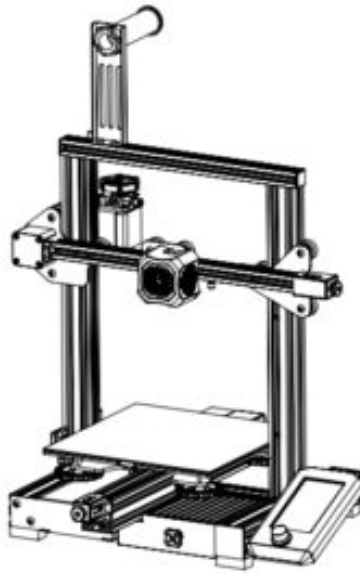
User Manuals Simplified.



Creality Ender-3 3D Printer User Manual

[Home](#) » [Creality](#) » Creality Ender-3 3D Printer User Manual

**CREALITY 3D Printer User Manual
Ender-3 V2**



Contents [[hide](#)]

- 1 Content
- 2 NOTES
- 3 Product introduction
- 4 Equipment parameters
 - 4.1 Basic Parameters
- 5 Spare parts
- 6 1. Installation of Z-axis limit switch kit and Z-axis profiles
- 7 2. Install Z-axis motor kit and t-type screw
- 8 3. Install pneumatic joint, XE-axis kit and synchronous belt
- 9 4. Install extrusion kit, Z-axis passive block
- 10 5. Install X-axis Tensioner
- 11 6. Install Z-axis moving kit
- 12 7. Install the gantry profile, display kit
- 13 8. Install material rack, gantry cover and indication knob
- 14 9. Wire connection
- 15 10. Preheat
 - 15.1 Method 1
 - 15.2 Method 2
- 16 11. Load the filament
- 17 12. Start printing
 - 17.1 Print
- 18 Wiring connection
- 19 Troubleshooting
- 20 Read More About This Manual & Download PDF:
- 21 Related Manuals:

Content

Dear Consumers,

Thank you for choosing our products. For the best experience, please read the instructions before operating the Printer. Our teams will always be ready to render you the best services. Please contact us by phone number or e-mail address provided at the end when you encounter any problem with the Printer.

For a better experience in using our product, you can also learn how to use the Printer in the following ways:

View the accompanied instructions and videos in the TF Card.

Visit our official website www.crealitiy.com to find relevant software/hardware information, contact

details and operation and maintenance instructions.

A Notes

Product introduction

Spare parts

B Assemble the 3D printer

C Use the 3D printer

Start printing

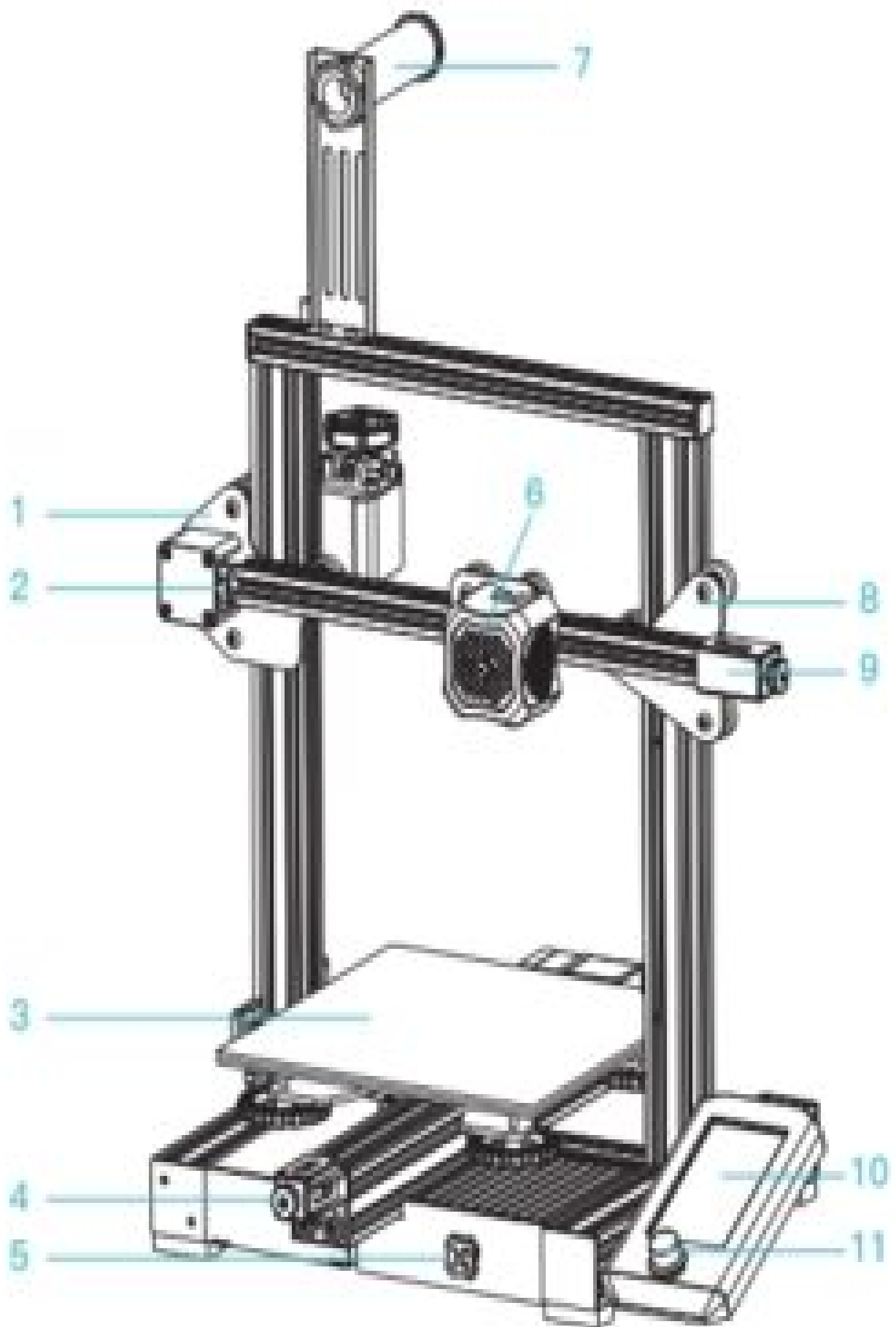
Wire connection

Troubleshooting

NOTES

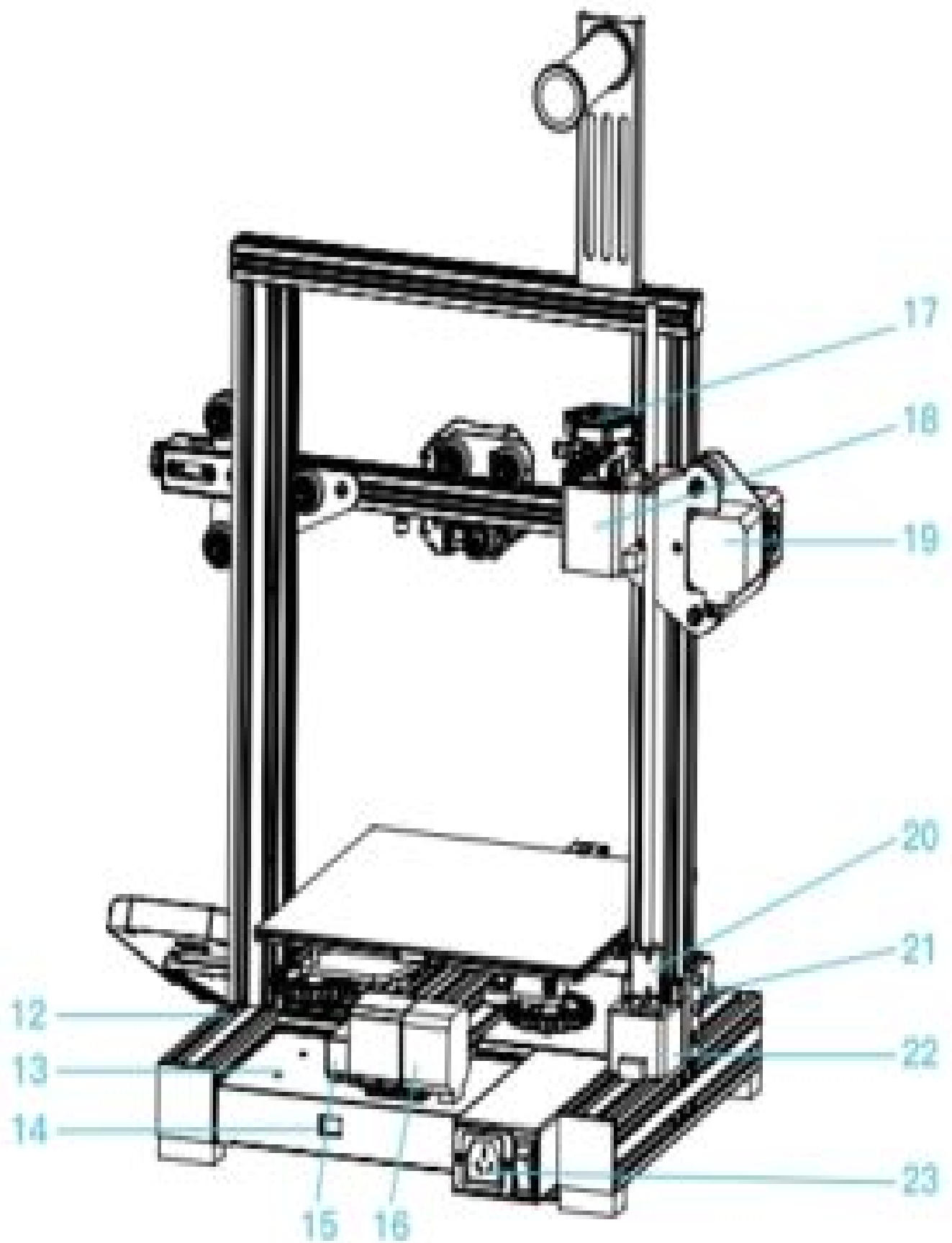
1. Do not use the printer any way other than described herein in order to avoid personal injury or property damage.
2. Do not place the printer near any heat source or flammable or explosive objects. We suggest placing it in a well-ventilated, low-dust environment.
3. Do not expose the printer to violent vibration or any unstable environment, as this may cause poor print quality.
4. Before using experimental or exotic filaments, we suggest using standard filaments such as ABS or PLA to calibrate and test the machine.
5. Do not use any other power cable except the one supplied. Always use a grounded three-prong power outlet.
6. Do not touch the nozzle or printing surface during operation as they may be hot. Keep hands away from machine while in use to avoid burns or personal injury.
7. Do not wear gloves or loose clothing when operating the printer. Such cloths may become tangled in the printers moving parts leading to burns, possible bodily injury, or printer damage.
8. When cleaning debris from the printer hotend, always use the provided tools. Do not touch the nozzle directly when heated. This can cause personal injury.
9. Clean the printer frequently. Always turn the power off when cleaning, and wipe with a dry cloth to remove dust, adhered printing plastics or any other material off the frame, guide rails, or wheels. Use glass cleaner or isopropyl alcohol to clean the print surface before every print for consistent results.
10. Children under 10 years of age should not use the printer without supervision.
11. This machine is equipped with a security protection mechanism. Do not manually move the nozzle and printing platform mechanism manually while booting up, otherwise the device will automatically power off for safety.
12. Users shall comply with related nation and region's laws, regulations and ethical codes where the equipment or produced prints by it is used, and users of our product shall not use aforesaid products to print any end-use products, objects, parts or components or any other physical prints that violate the national or regional laws, regulations and ethical codes where herein referred product and produced prints by it is located.

Product introduction



1. XE-axis kit
2. X-axis limit switch
3. Print platform
4. Y-axis
5. Toolbox

- 6. Extruded kit!
- 7. Material rack and spool holder
- 8. Z-axis passive block
- 9. X-axis tensioner
- 10. Screen
- 11. Knob switch



13. Power supply
14. Voltage regulator
15. Y-axis limit switch
16. Y-axis motor
17. Indication knob!
18. E-axis motor
19. X-axis motor
20. Coupling
21. Z-axis limit switch
22. Z-axis motor
23. Power switch and socket

Equipment parameters

Basic Parameters

Model: Ender-3 V2

Print size: 220*220*250mm

Forming technology: FDM

Number of nozzle: 1

Layer thickness: 0.1mm-0.4mm

Nozzle diameter: Standard

X-/ axis precision: $\pm 0.1\text{mm}$

Filament: $\phi 1.75\text{mm}$ PLA

File format: STL/OBJ/AMF

Working mode: Memory card offline printing or on line printing

Compatible slicing software: 3D Creator Slicer, Repetier-Host, Cura, Simplify3D

Power specification: Input: AC 115-230V 50/60Hz Output: DC 24V

Total power: 350W

Hotbed temperature: $<100^{\circ}\text{C}$

Nozzle temperature: $<250^{\circ}\text{C}$

Resume printing function: Yes

Filament sensor: No

Dual z-axis screws: No

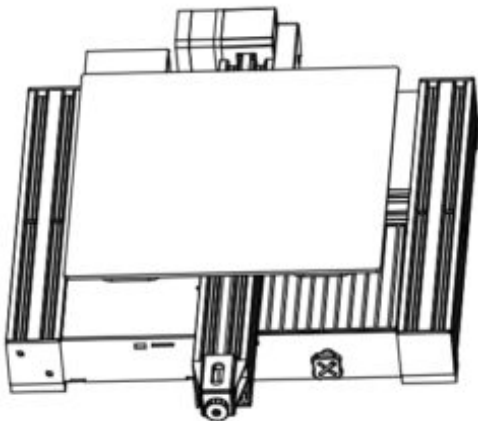
Language switch: English

Computer operating system: Windows XP/Vista/7 /10/MAC/Linux

Print speed: $<180\text{mm/s}$, 30-60mm/s normally

Spare parts

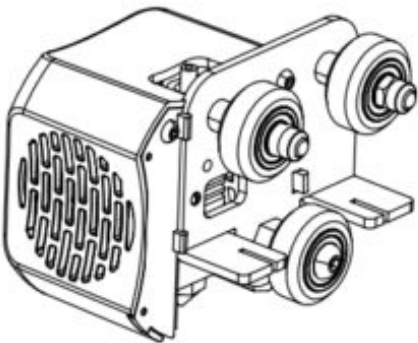
1. Printer base x 1



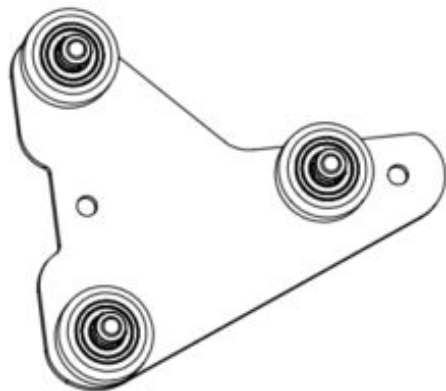
2. Display kit x 1



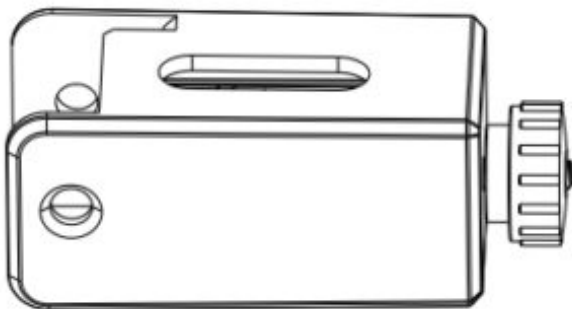
3. Extruded kit x 1



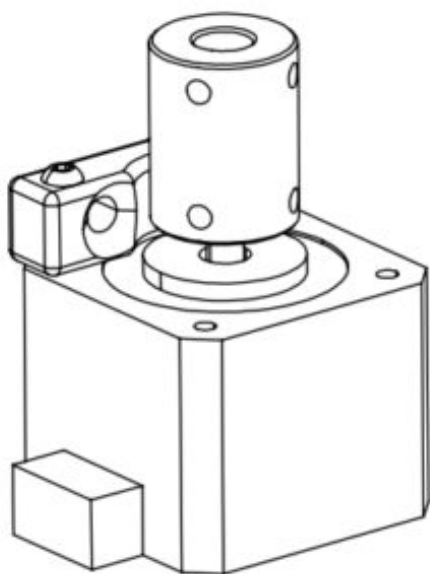
4. Z-axis passive block x 1



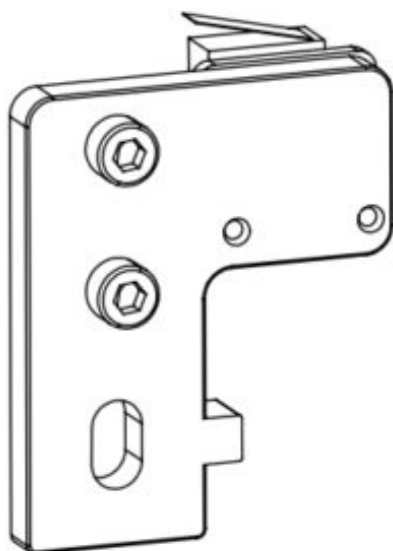
5. X-axis tensioner x 1



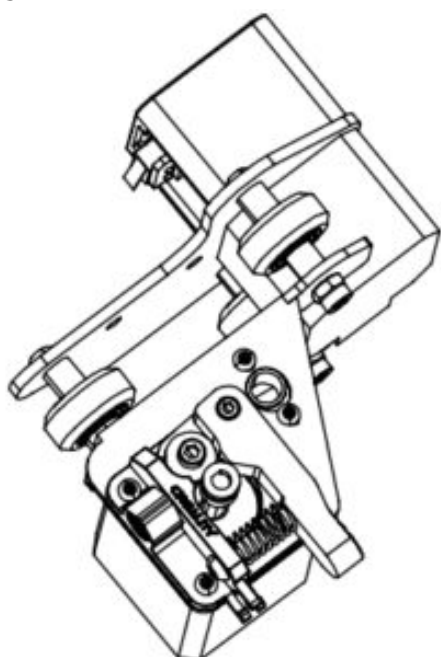
6. Z-axis motor kit x 1



7. Z-axis limit switch kit x 1



8. XE axis kit x 1



9. Z-axis profile(left) x 1



10. Z-axis profile(right) x 1



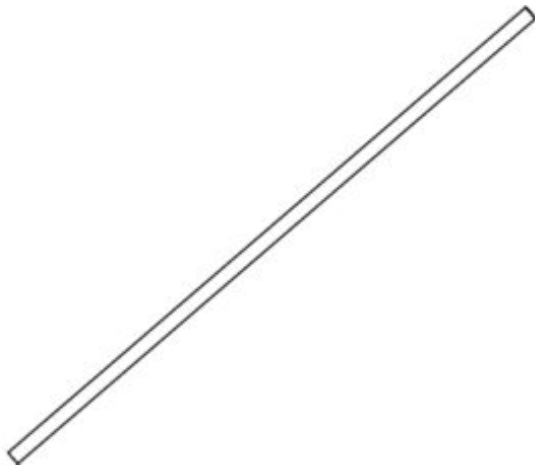
11. Gantry profile x 1



12. X-axis profile x 1

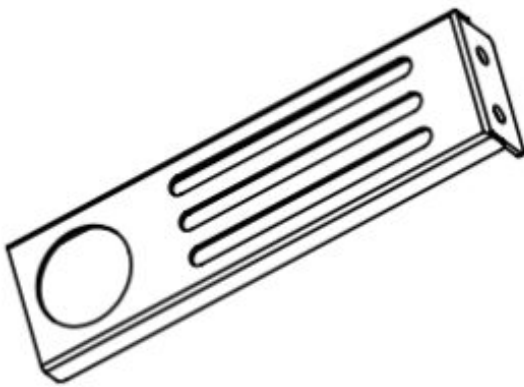


13. T-type screw x 1

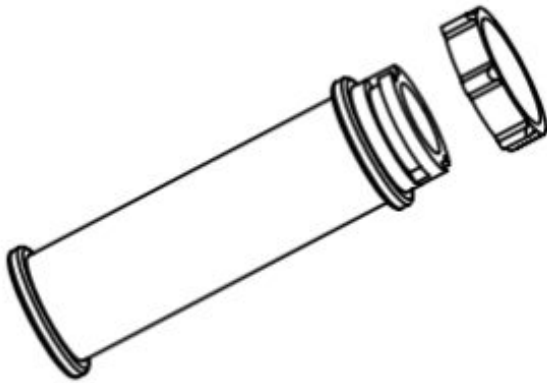


Accessory tool list

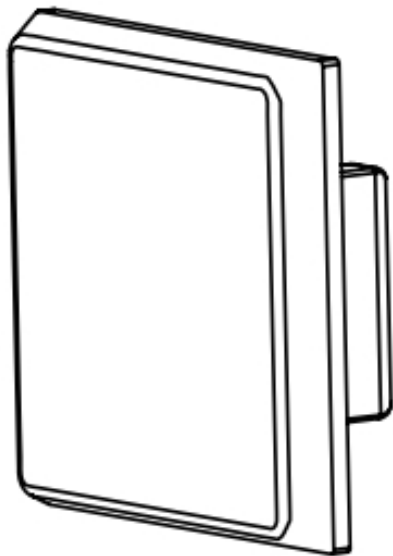
14. Material rack



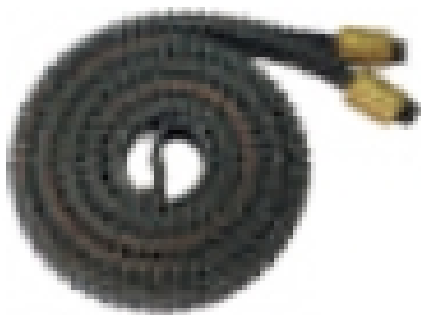
15. Material pipe and nut



16. 2020 profile cover x 2



17. Synchronous belt x 1



18. Metal blade x 1



19. Diagonal pliers x 1



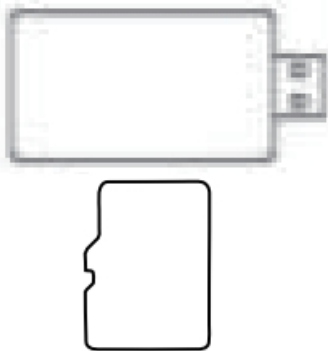
20. Cable tie x 1



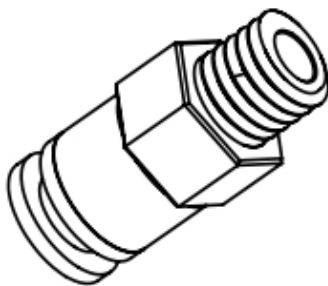
21. Needle x 1



22. Storage card and card reader x 1



23. Pneumatic joint x 2



24. Power cable x 1



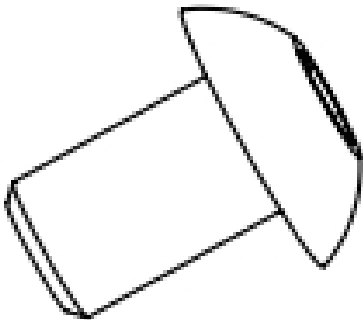
25. Wrenches and screwdrivers x 1



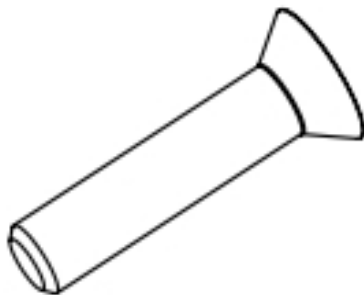
26. Blue line claw x 2



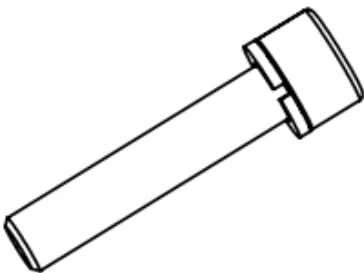
27. Hexagon socket flat round head screw MSX8 x 2



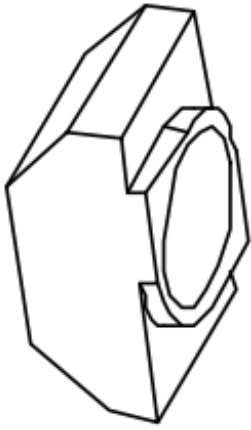
28. Hexagon socket countersunk head screw M4X18 x 2



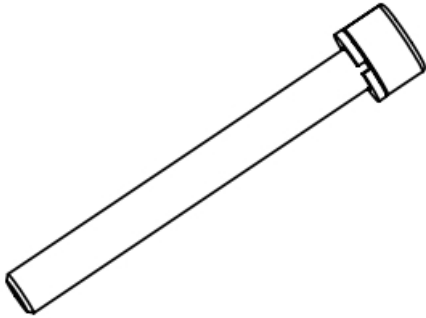
29. Hexagon socket head spring washer combination screw M5X25 x 5



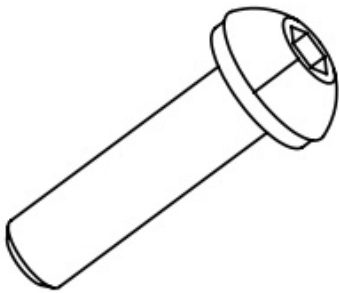
30. MST nuts x2



31. Hexagon socket head spring washer combination screw M5X45 x 5



32. Hexagon socket flat round head spring washer combination screw M4Xl6 x 5



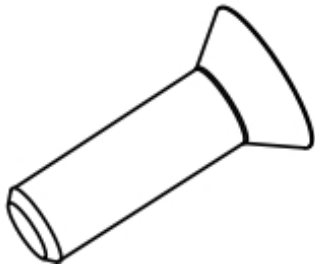
33. Filament xl



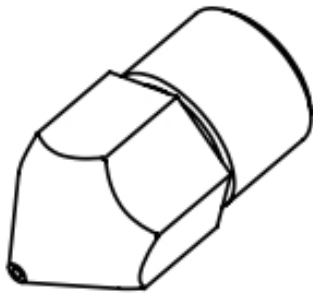
34. Indication knob x 1



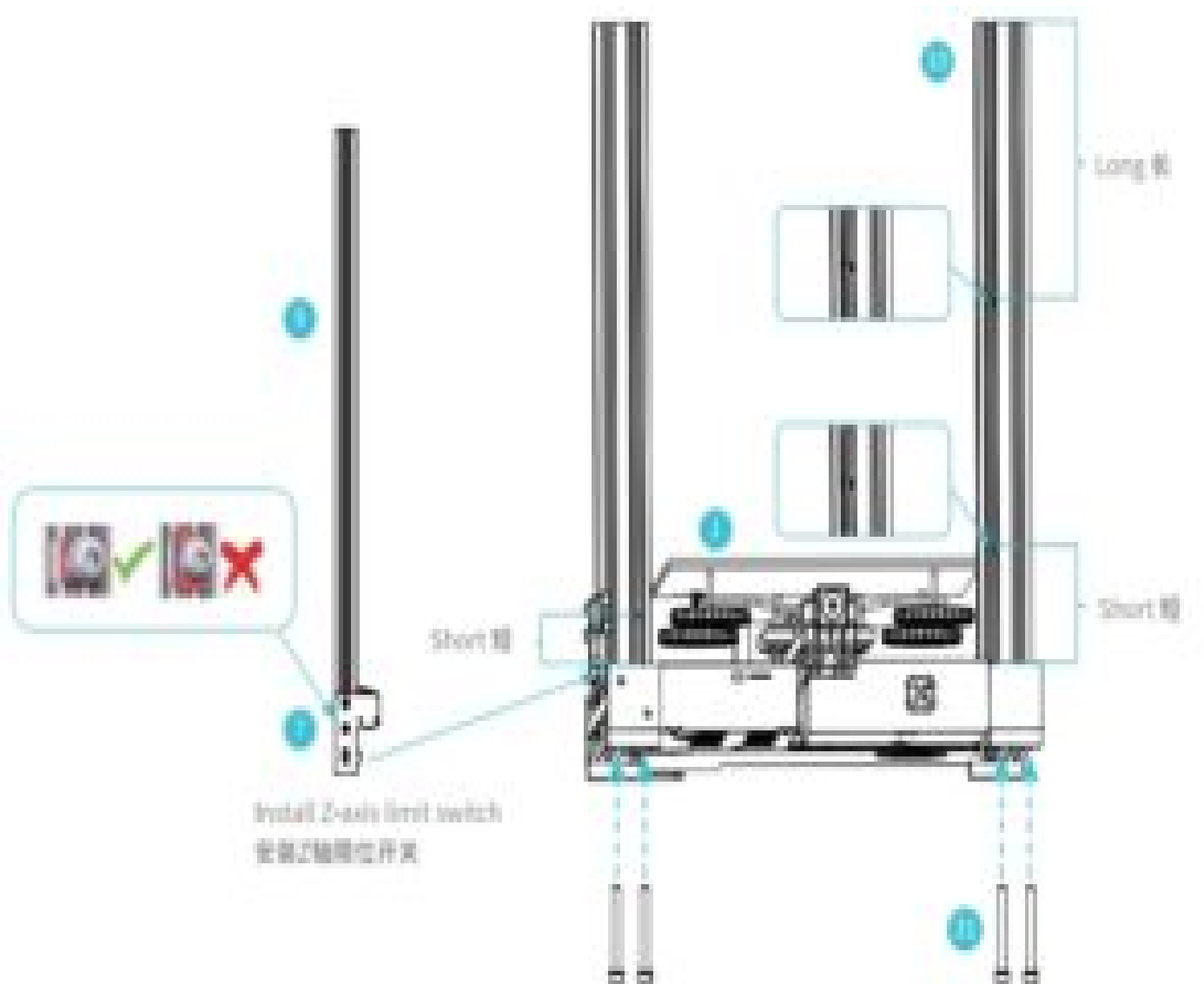
35. Hexagon socket countersunk head screw (black) M4Xl4 x 1



36. Nozzle x l

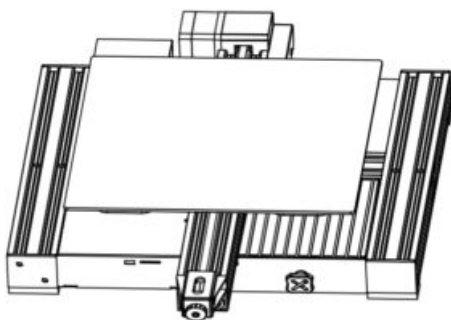


1. Installation of Z-axis limit switch kit and Z-axis profiles



Tip: Step: Put the endstops sensor on Z-axis (left) like the picture above. Then use the four pieces screw MSX45 to fix Z-axis with the base.

1. Printer base x 1



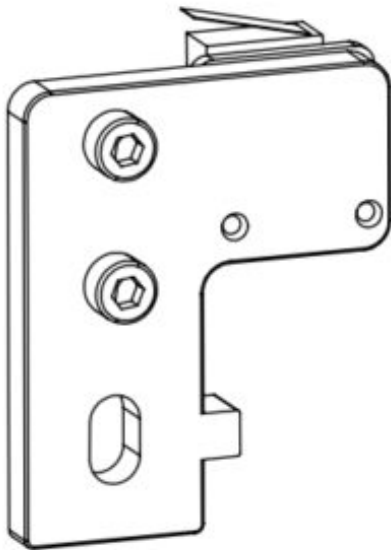
9. Z-axis profile(left) x 1



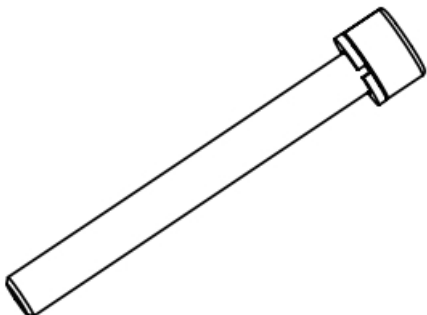
10. Z-axis profile(right) x 1



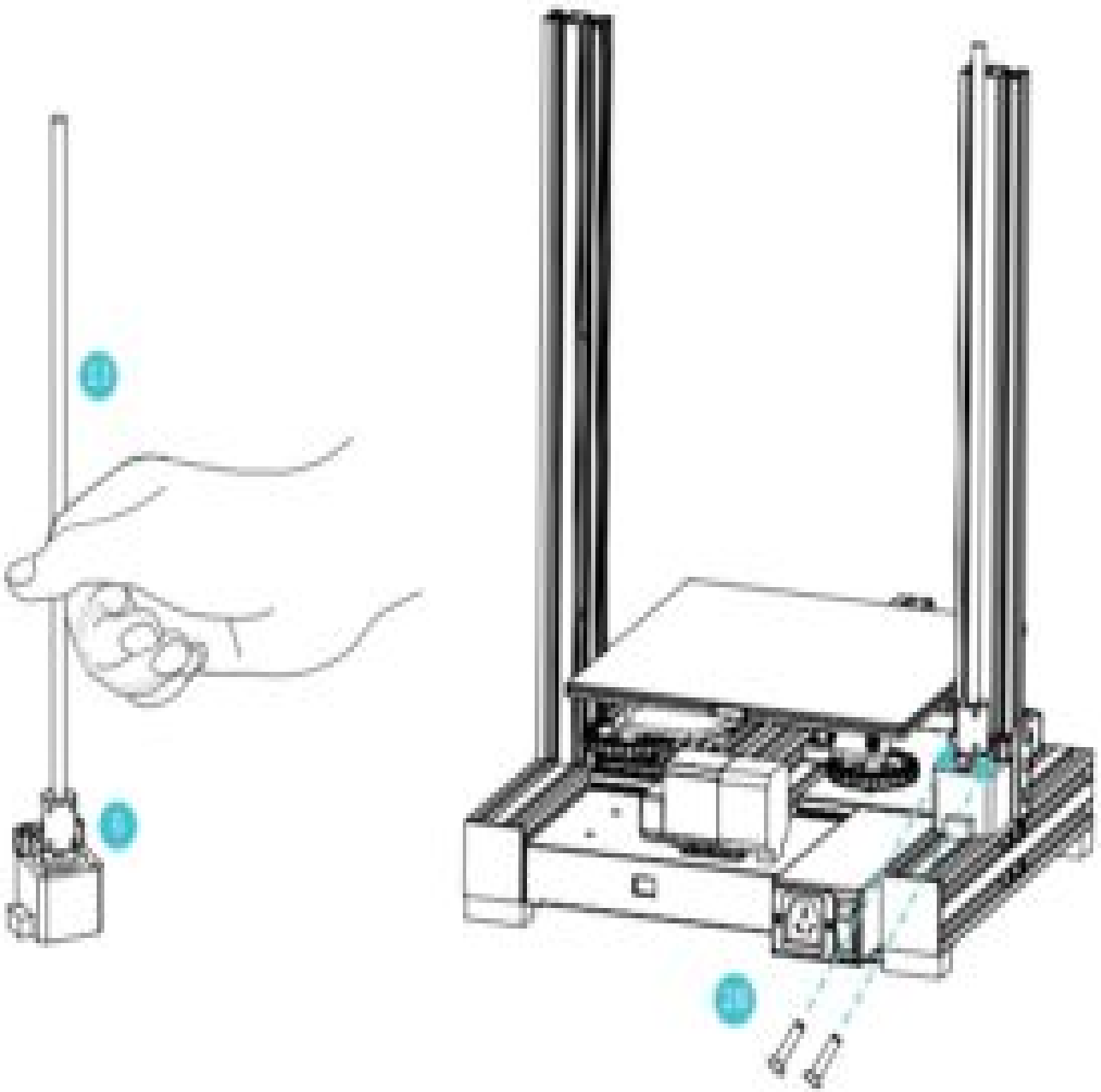
7. Z-axis ~mil switch kit x 1



31. Hexagon socket head spring washer combination screw M5X45 x 4

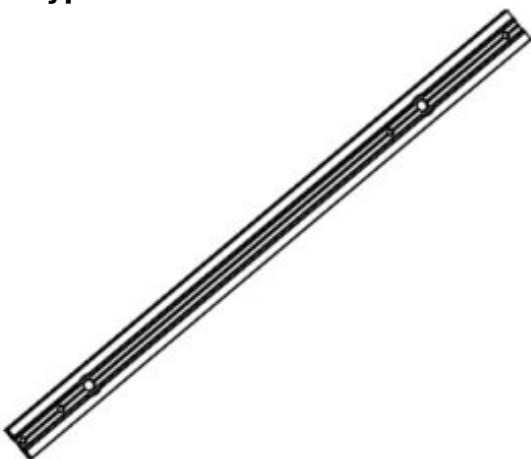


2. Install Z-axis motor kit and t-type screw

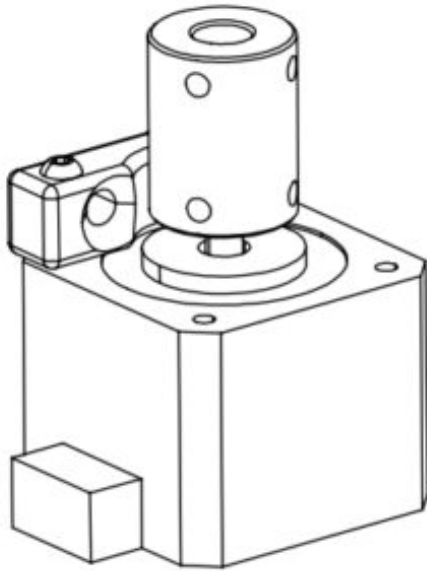


Tip: Steps: Lock the T-shaped screw rod on the Z-axis motor component, and then use two M4X18 screws to slightly lock the Z-axis motor component on the profile (as shown above).

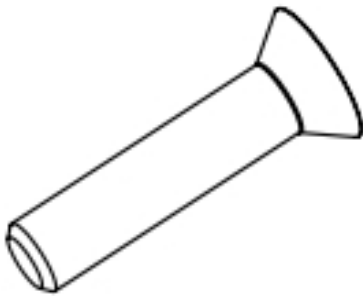
13. Hype screw x 1



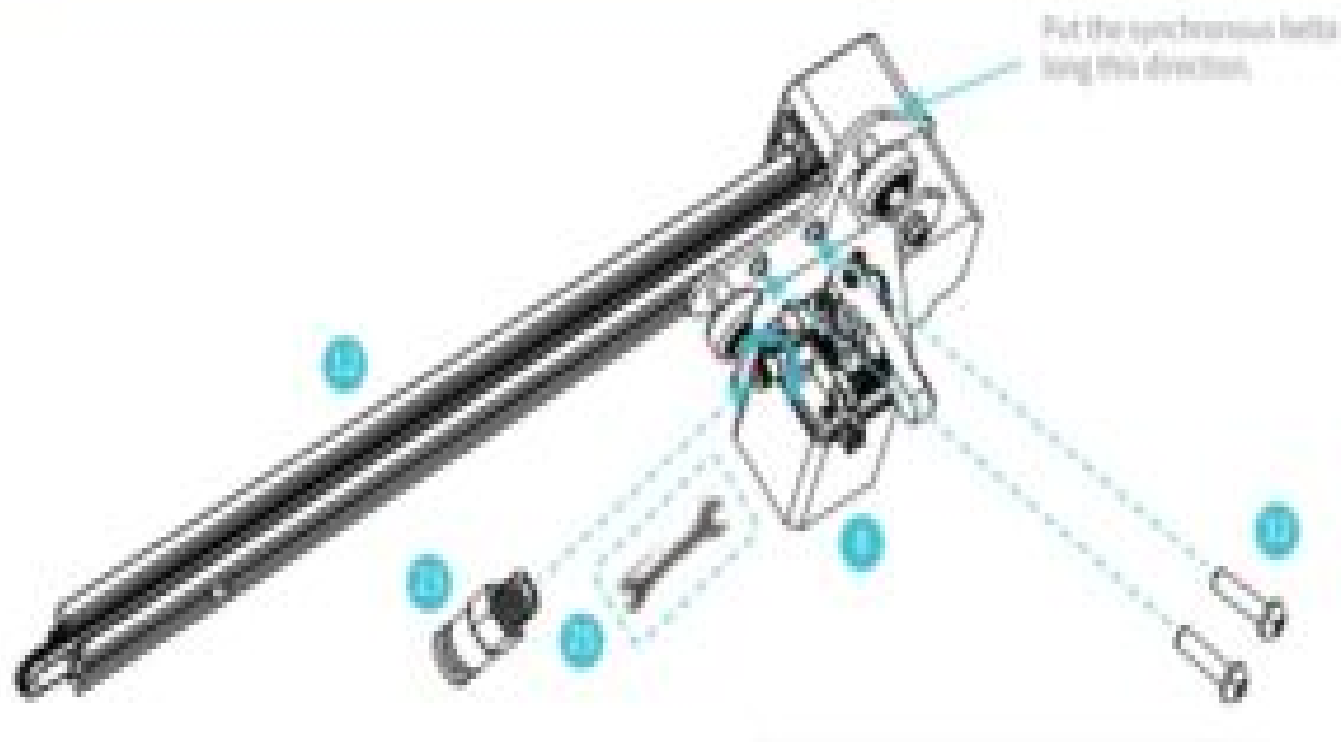
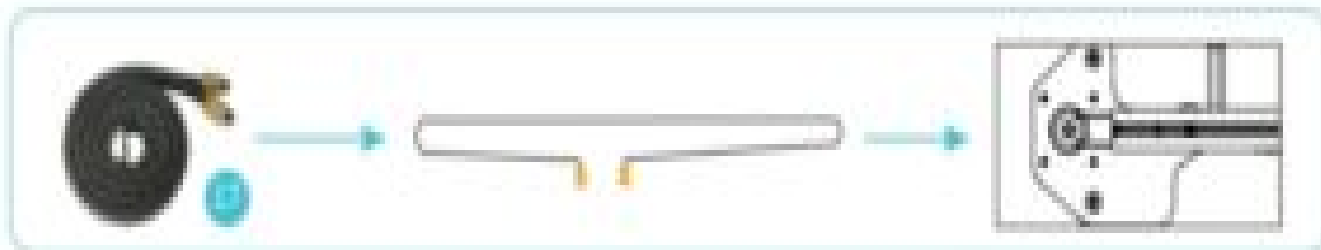
6. Z-axis motor kit x 1



28. Hexagon socket countersunk head screw M4x18 x 2

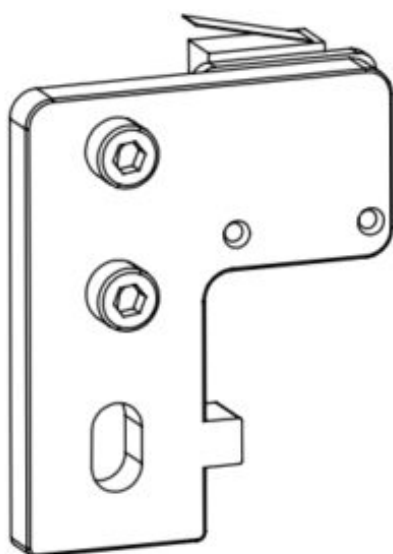


3. Install pneumatic joint, XE-axis kit and synchronous belt



Tip: Step: Tighten the tube connector by open end wrench. And fix the XE axis kit with two pieces M4*16 screw. Put the timing belt through the XE-axis kit with direction same as the picture.

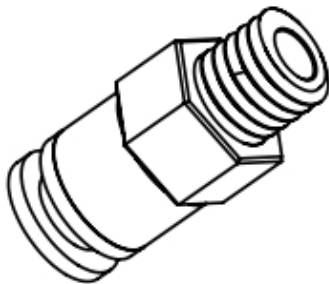
8. XE axis kit x 1



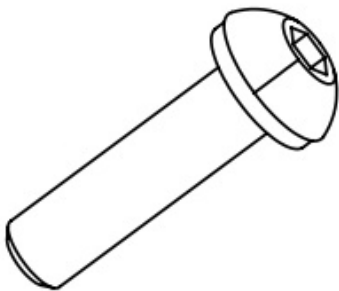
12. X-axis profile x 1



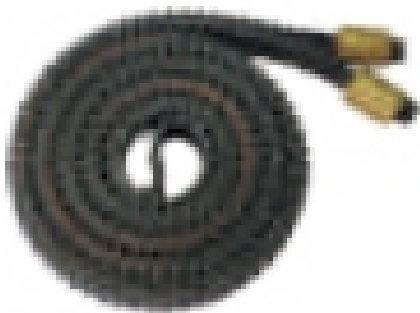
23. Pneumatic joint x 1



32. Hexagon socket flat round head spring washer combination screw M4X16 x 2



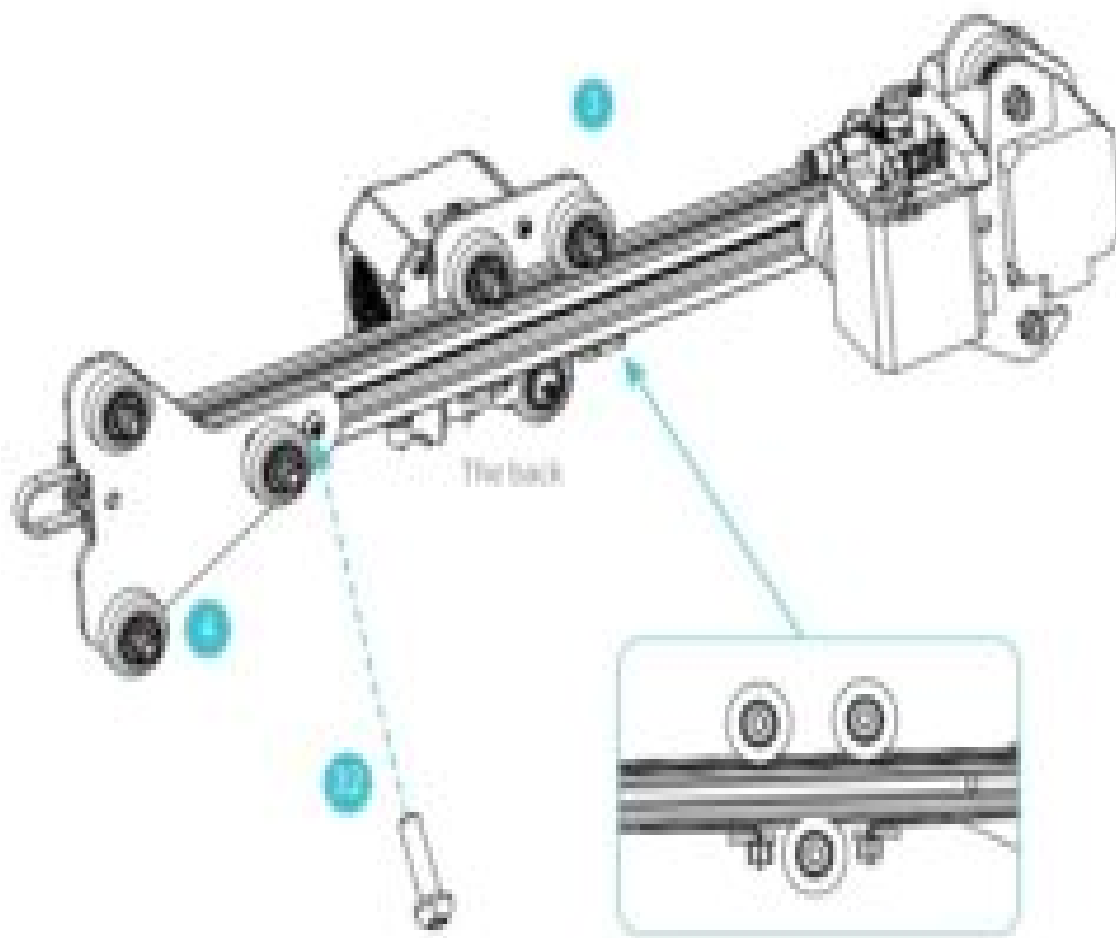
17. Synchronous belt x 1



25. Open-end wrench x 1

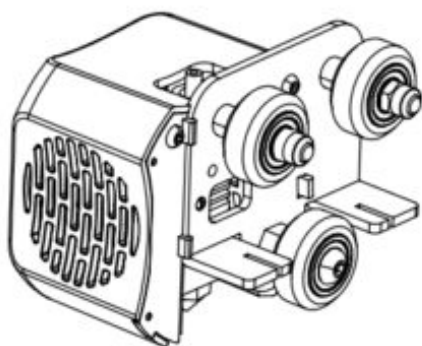


4. Install extrusion kit, Z-axis passive block

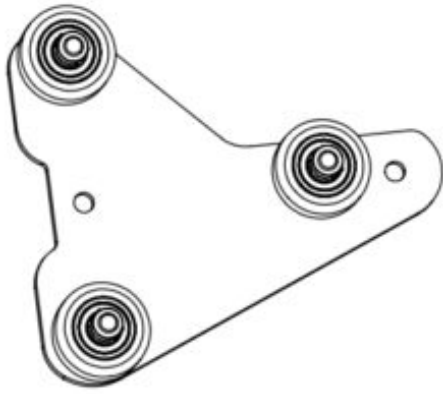


Tip: Steps: Put the synchronous belt into the profile along the v-wheel of the extrusion kit. When pushing it into the middle, as shown in the figure; lock the z-axis passive block with one M4X 16 screw.

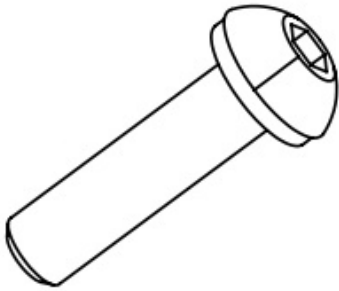
3. Extruded kit x 1



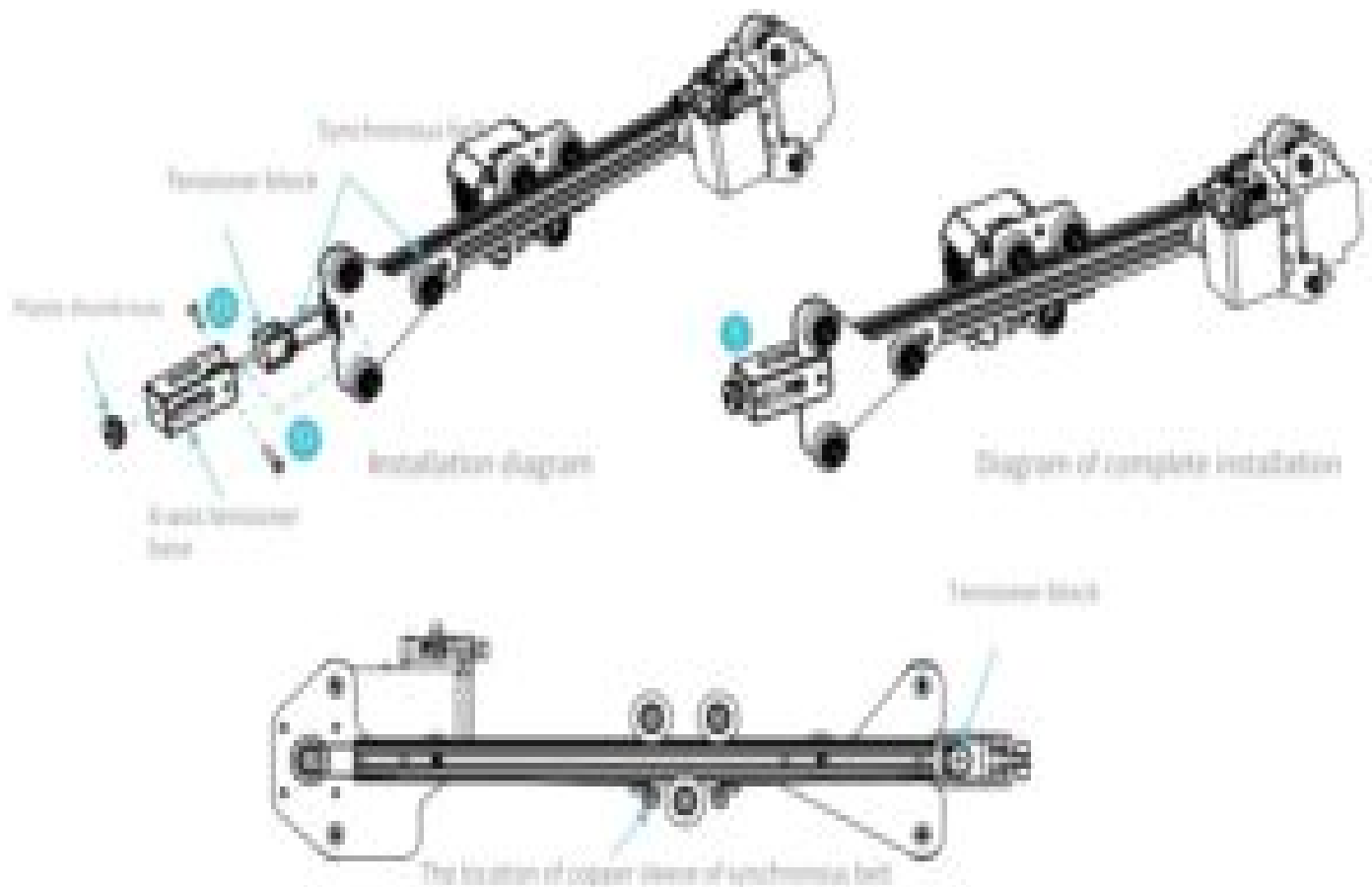
4. Z-axis passive block x 1



32. Hexagon socket flat round head spring washer combination screw M4Xl6 x 1

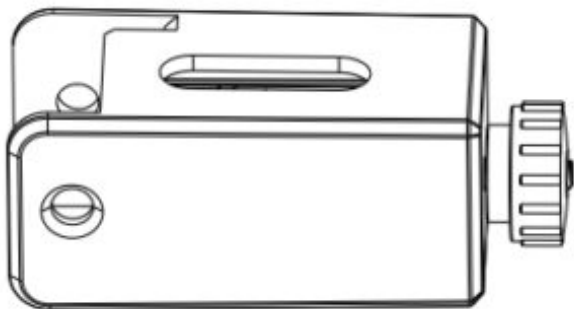


5. Install X-axis Tensioner

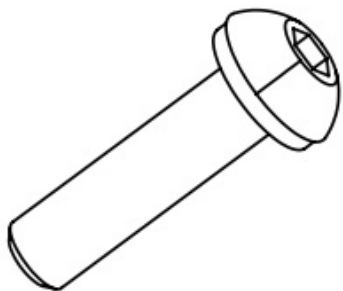


Tip: Steps: Insert the timing belt into the tensioner block, and put it into the X-axis tensioner together with the timing belt, tighten it with a plastic hand screw nut, and then lock it with round head M4Xl6 and countersunk head M4Xl4 screws both sides of the Z axis passive block.

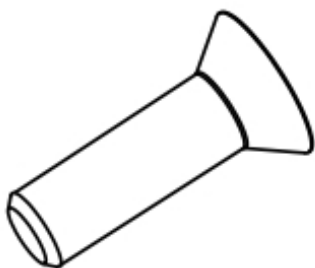
5. X-axis tensioner x 1



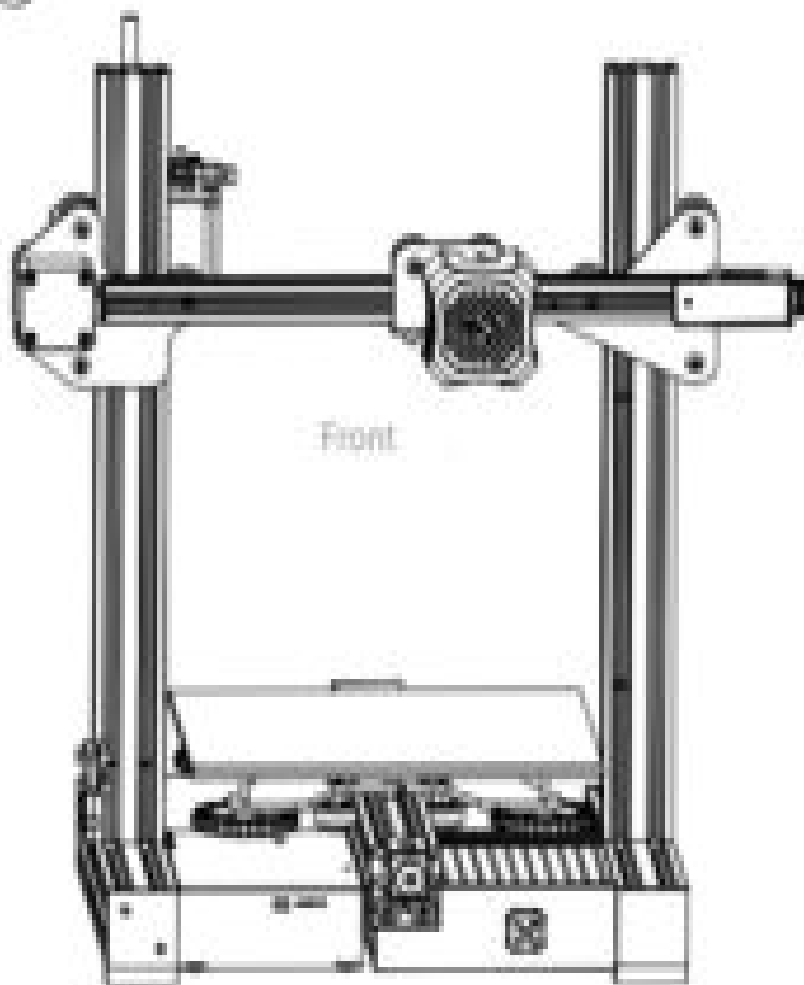
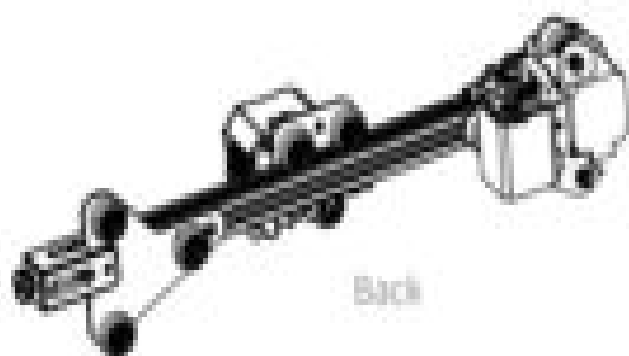
32. Hexagon socket flat round head spring washer combination screw M4Xl6 x 1



35. Hexagon socket countersunk head screw (black) M4Xl4 x 1

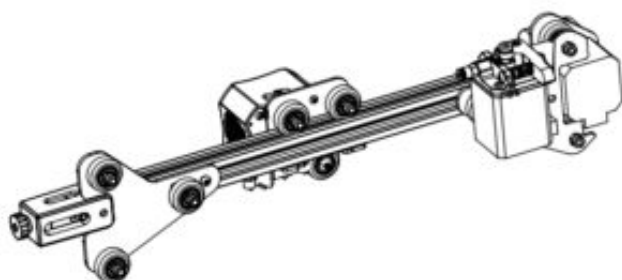


6. Install Z-axis moving kit

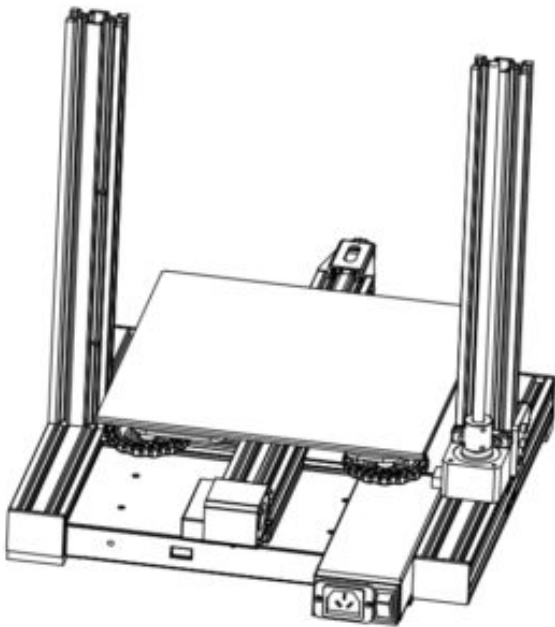


Tip: Steps: Make the Z-axis moving kit insert the two ends of the z-axis profile along V-wheel on both sides. As shown in the figure above.

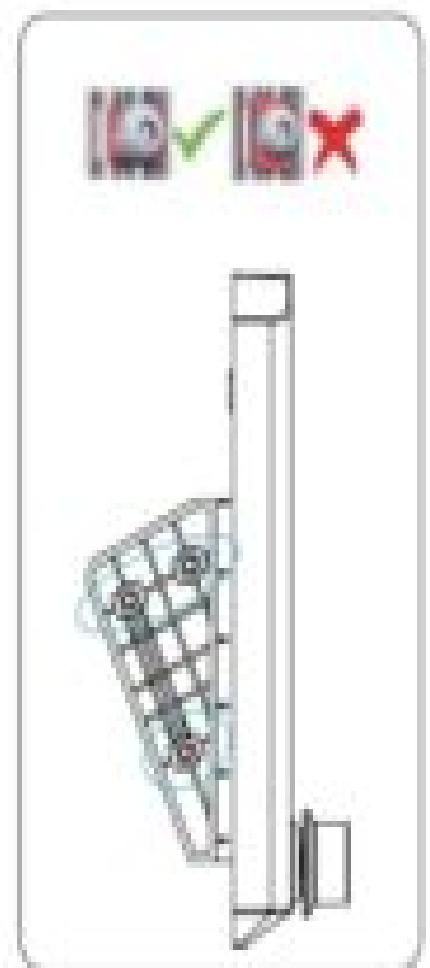
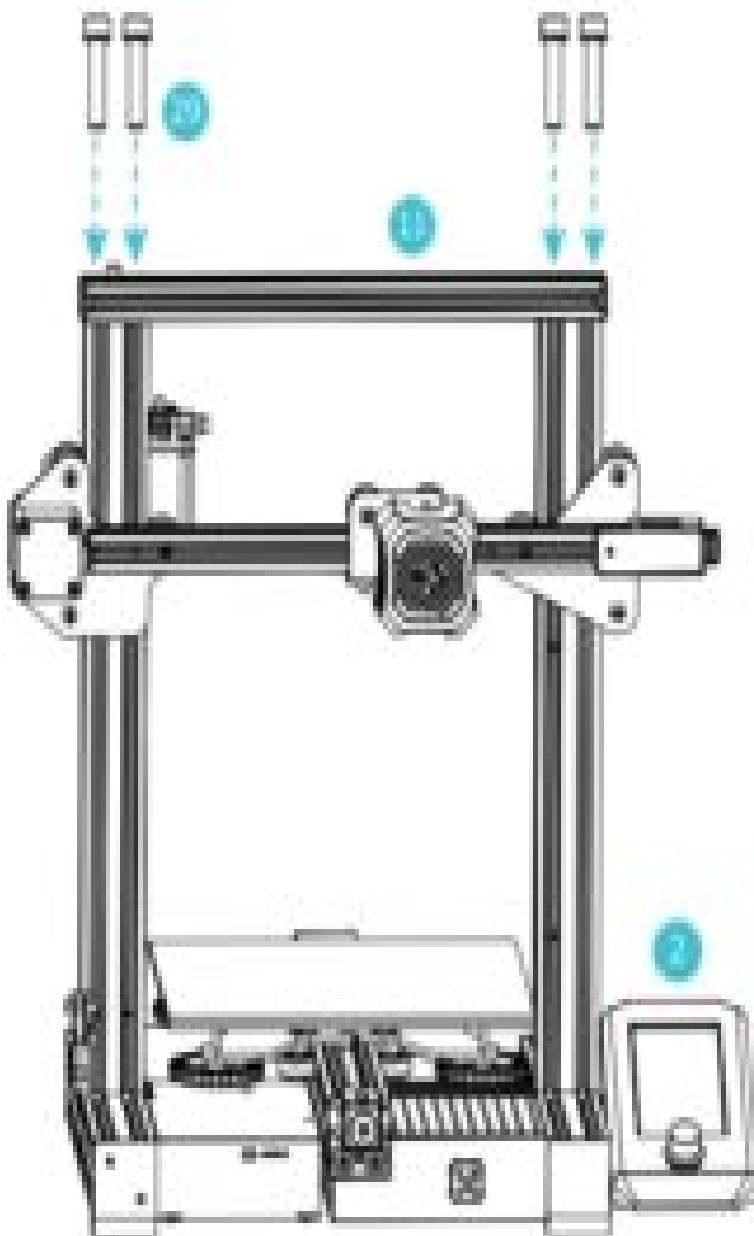
Take the fifth step: assembled component



Take the second step: assembled components



7. Install the gantry profile,display kit

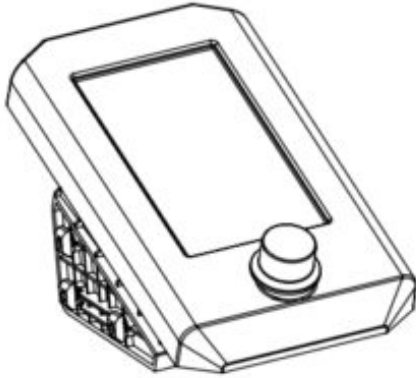


Tip: Step: Install the upper frame of the gantry structure with 4 pieces of MSX25 screw. Use an Allen wrench to lock the screen kit onto the machine with the left side four screws.

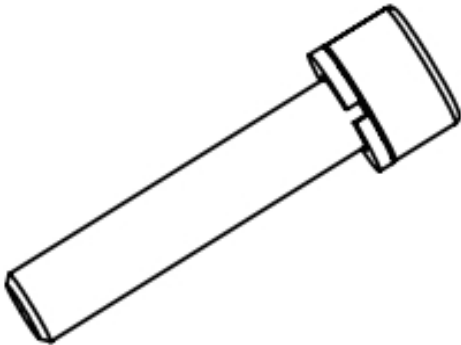
11. Gantry profile x 1



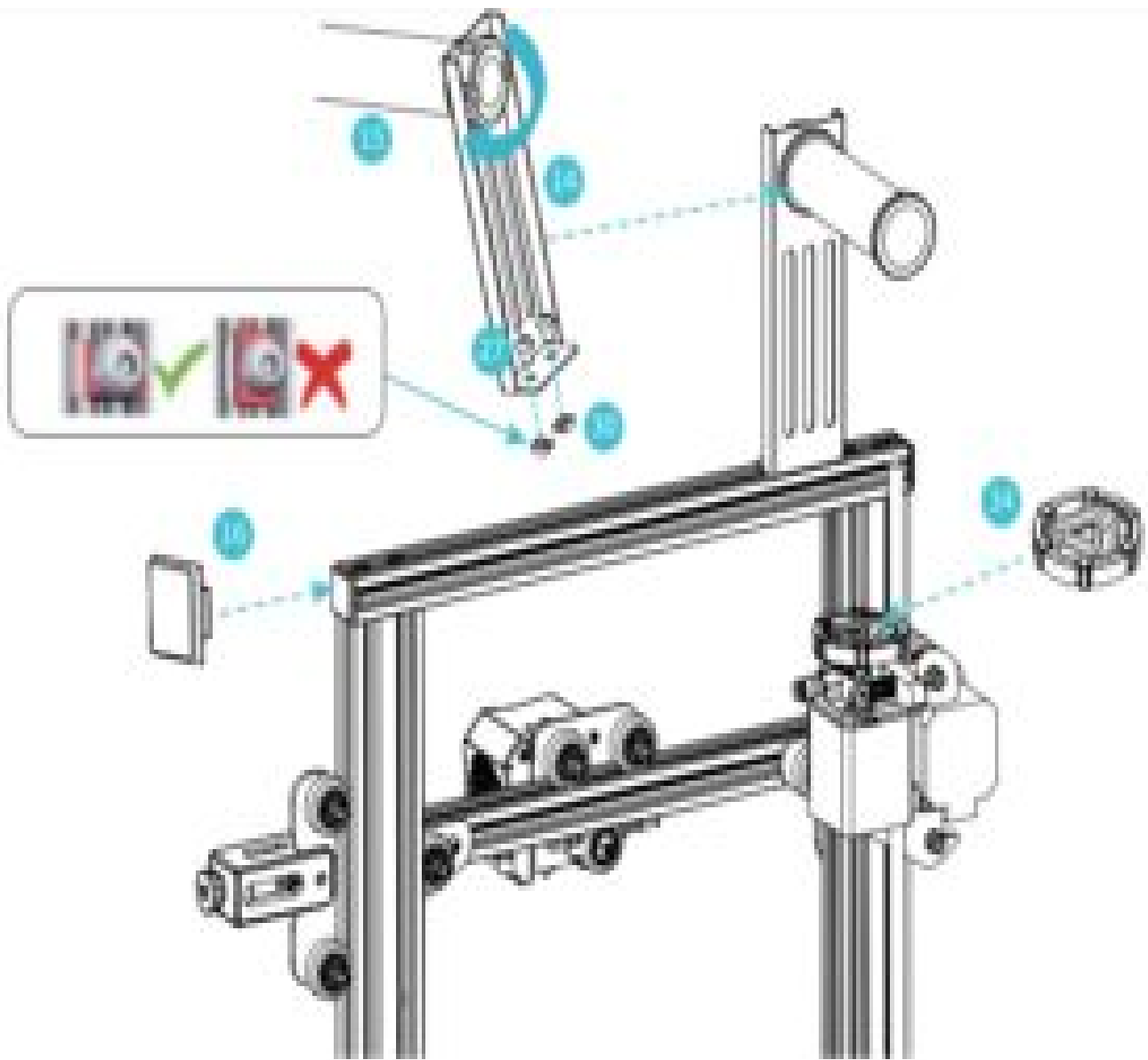
2. Display kit x 1



29. Hexagon socket head spring washer combination screw M5X25 x 4

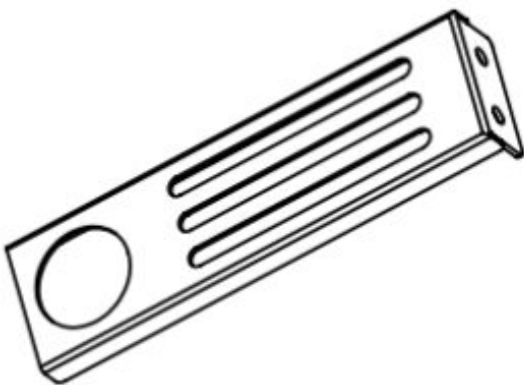


8. Install material rack, gantry cover and indication knob

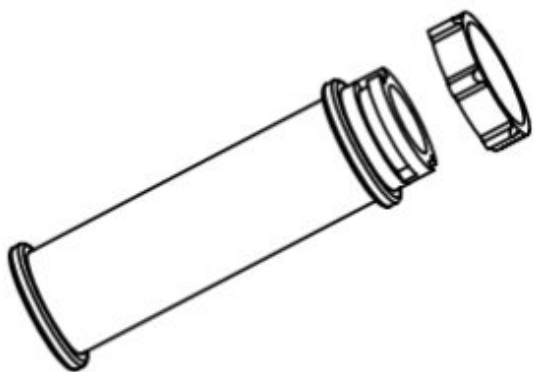


Tip: Steps: Put flat round head M5X8 and MST screws into the material rack(as shown), place the spool holder on the rack and fix on the profile with screws(as shown); Put the indication knob on the motor shaft and then place the 2020 profile cover on both side.

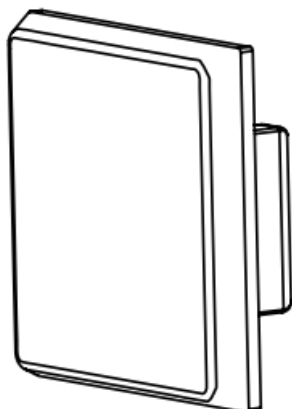
14. Material rack x 1



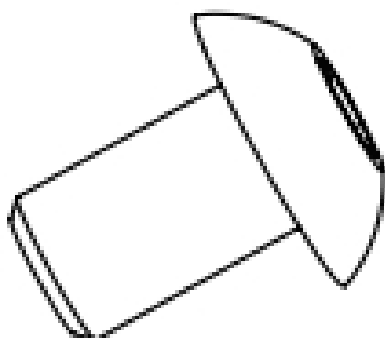
15. Material pipe and nut x 1



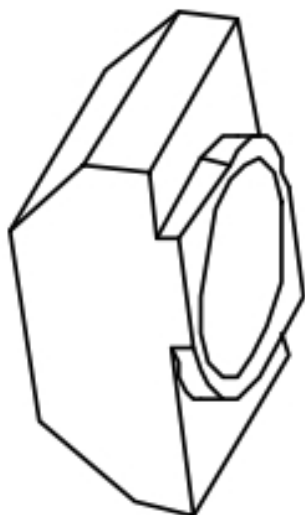
16. 2020 profile cover x 2



27. Hexagon socket flat round head screw M5X8 x 2



30. MST nut x2

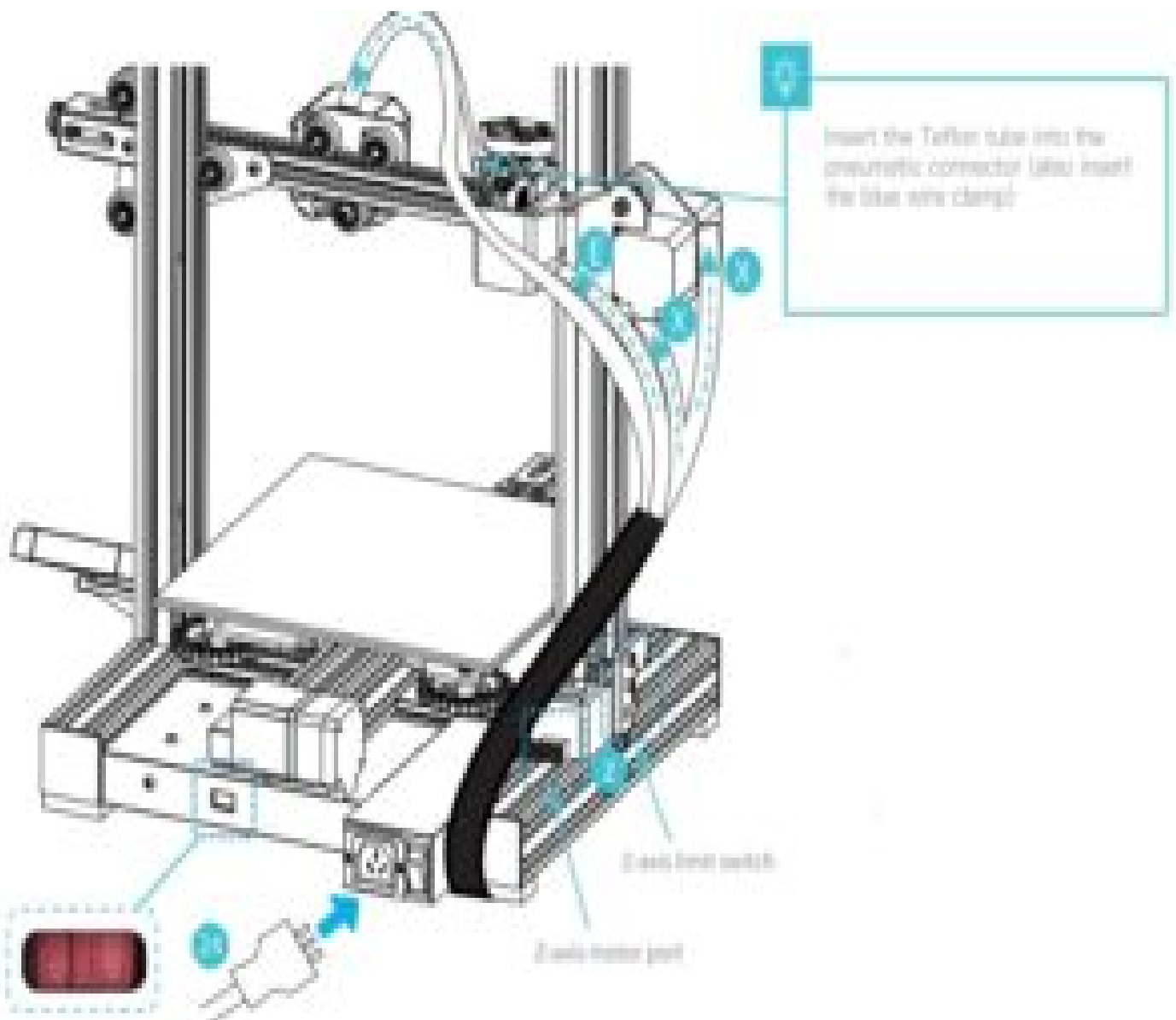


34. Indication knob x 1



9. Wire connection

Connect X, E, Z-axis stepper motors according to the yellow label on the 6pin (4 wires) port
 Connect X, Z-axis limit switches according to the yellow label on the 3pin (2wires) port
 Plug in the power cord (as shown) and toggle the switch to turn on the power



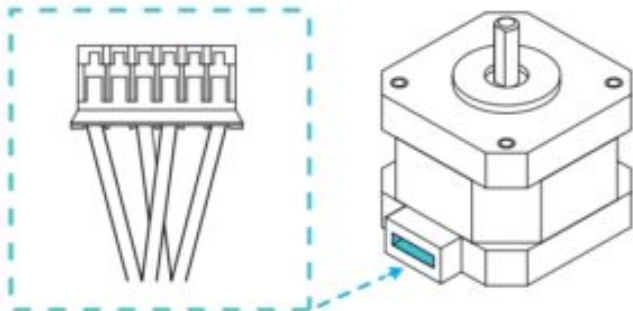
24. Power cable x 1



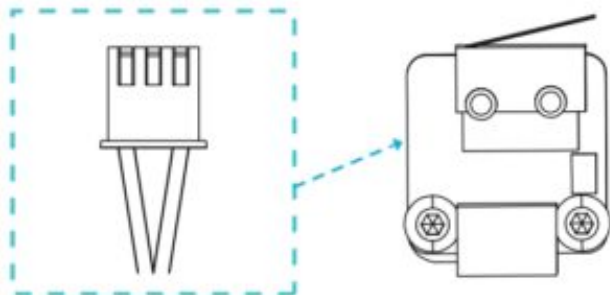
26. Blue wire clip x 1



X, E, Z-axis motor port



X, Z-axis limit switch



10. Preheat

Method 1



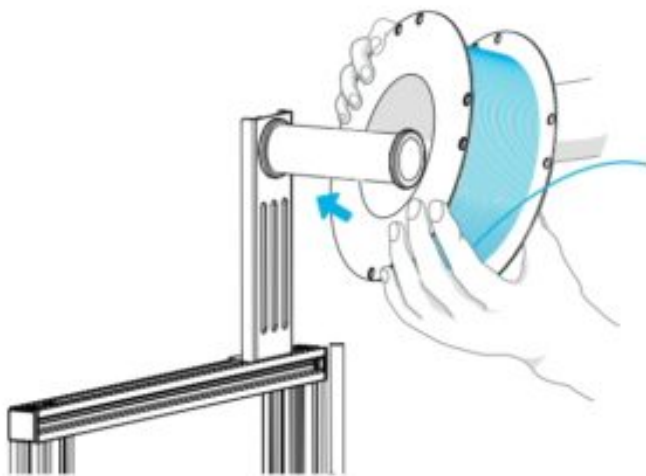
Note: The UI information is only for reference, the actual UI may be different.

Method 2

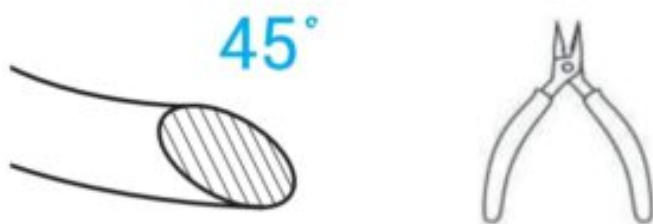


11. Load the filament

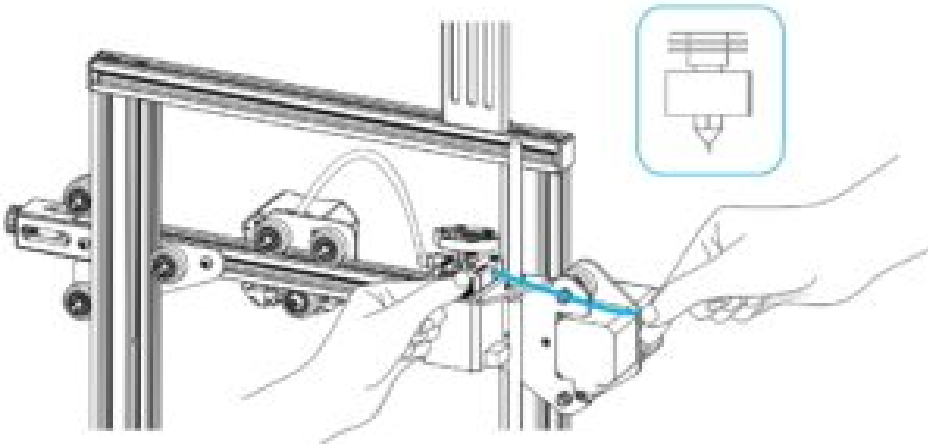
1. When waiting for the temperature to rise, please hang the filaments on the material rack.



NOTE: For better printing, the end of filament is as shown in the figure.



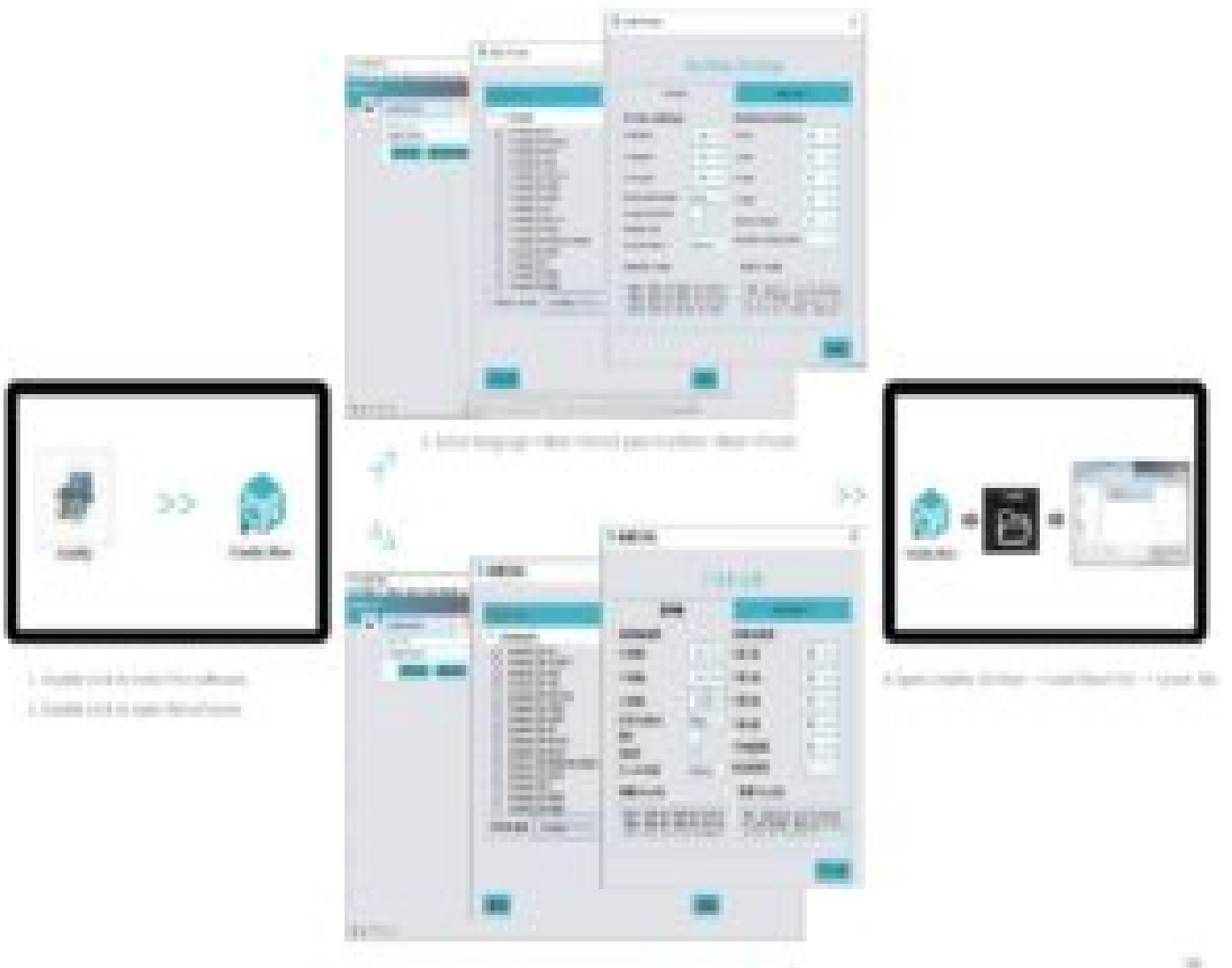
2. Press the extrusion spring and insert the filament until the nozzle along the extrusion. When the temperature is up to the target temperature, the filament will come out of the nozzle, nozzle, and complete loading the filament.



Note: Replace the filament:

1. If no filament in the nozzle, cut the filament at the extrude, put the new filament into the tube, and until the filament arrives on the feeding tube.
2. If filament in the nozzle, heat up the nozzle to $185^{\circ}+$, draw out the filament, and then replace the filament according to step 1.
3. If replace the filament during the printing process, adjust the printing speed to 10%, and then replace the filament according to step 2.

12. Start printing



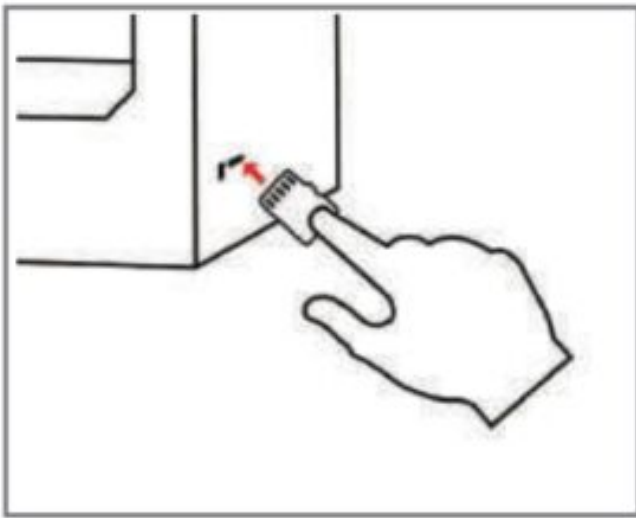
Please level the platform according to the video in storage card. Bad leveling will cause clogging or

break of nozzle.

5. Generate G-code, and save the geode file to TF card.



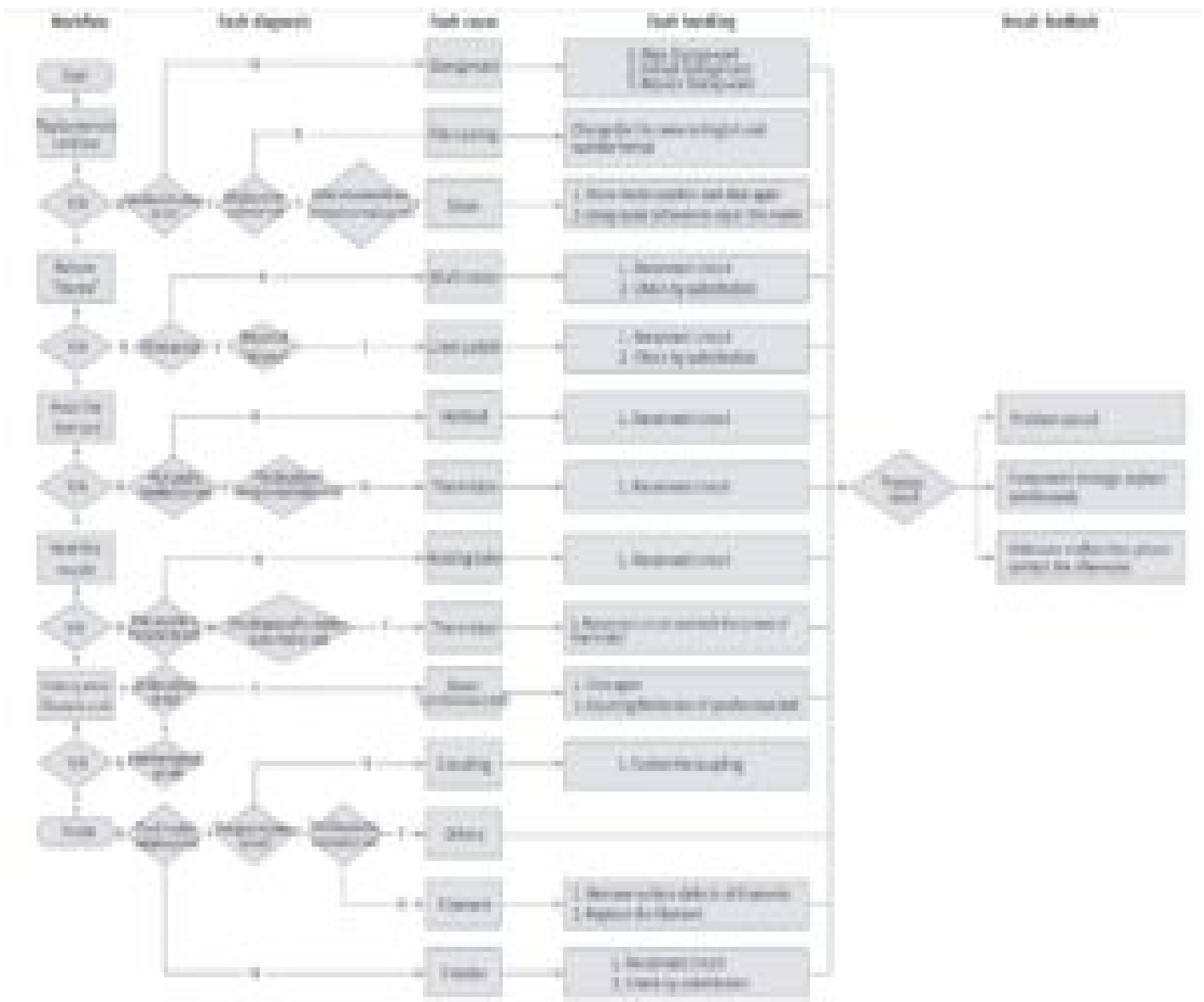
6. Insert the TF card → press the knob → select the menu → the file to be printed.



Warning: File names must be Latin letters or numbers, not Chinese characters or other special symbols.

Tip: Notes: For details on the software instructions, please refer to the slicing software manual in the memory card!

Print



Due to the differences between different machine models, the physical objects and the final images can differ. The final explanation rights shall be reserved by Shenzhen Creality 3D Technology Co., Ltd.

SHENZHEN CREALITY 3D TECHNOLOGY CO., LTD.
 11 F & Room 1201, Block 3, JinChengYuan, Tongsheng Community,
 Dalang, Longhua District, Shenzhen, China, 518109
Official Website: www.creality.com
Tel: +86 755-8523 4565
E-mail: info@creality.com cs@creality.com

Read More About This Manual & Download PDF:

Creality Ender-3 3D Printer User Manual – [Optimized PDF](#)

Creality Ender-3 3D Printer User Manual – [Optimized Searchable PDF](#)

Creality Ender-3 3D Printer User Manual – [Original PDF](#)

Questions about your Manual? Post in the comments!

Related Manuals:

1. [sainSMART Creality Ender-3 V2 3D Printer User Manual](#) sainSMART Creality Ender-3 V2 3D Printer

User Manual - Optimized...

2. **Creality CR-10S Pro V2 3D Printer User Manual** CR-10S Pro V2 3D Printer Notes Do not use the...
3. **Anet 3D Printer User Manual** Anet 3D Printer User Manual - Download [optimized]Anet 3D Printer...
4. **TronHoo T2205 3D Printer User Manual** User Manual Thank you for choosing TronHoo 3D printer. Read...
5. **EZT3D T1 Delta DIY 3D Printer User Manual** EZT3D T1 Manual Shenzhen EnZhuoTe Technology Co.,Ltd
Warning Specifications The...
6. **GEEETECH A10T 3D Printer User Manual** GEEETECH A10T 3D Printer User Manual - Download
[optimized]GEEETECH A10T...