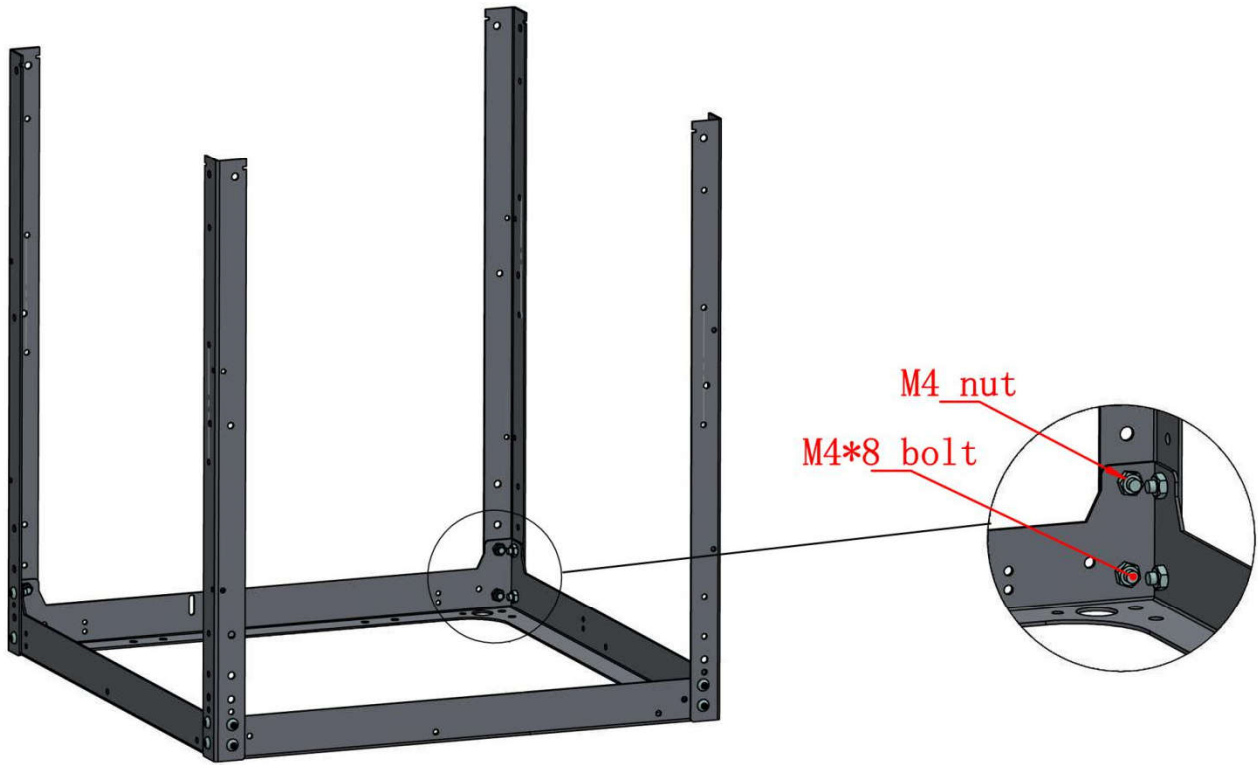


Flyingbear-P905 Installation Manual

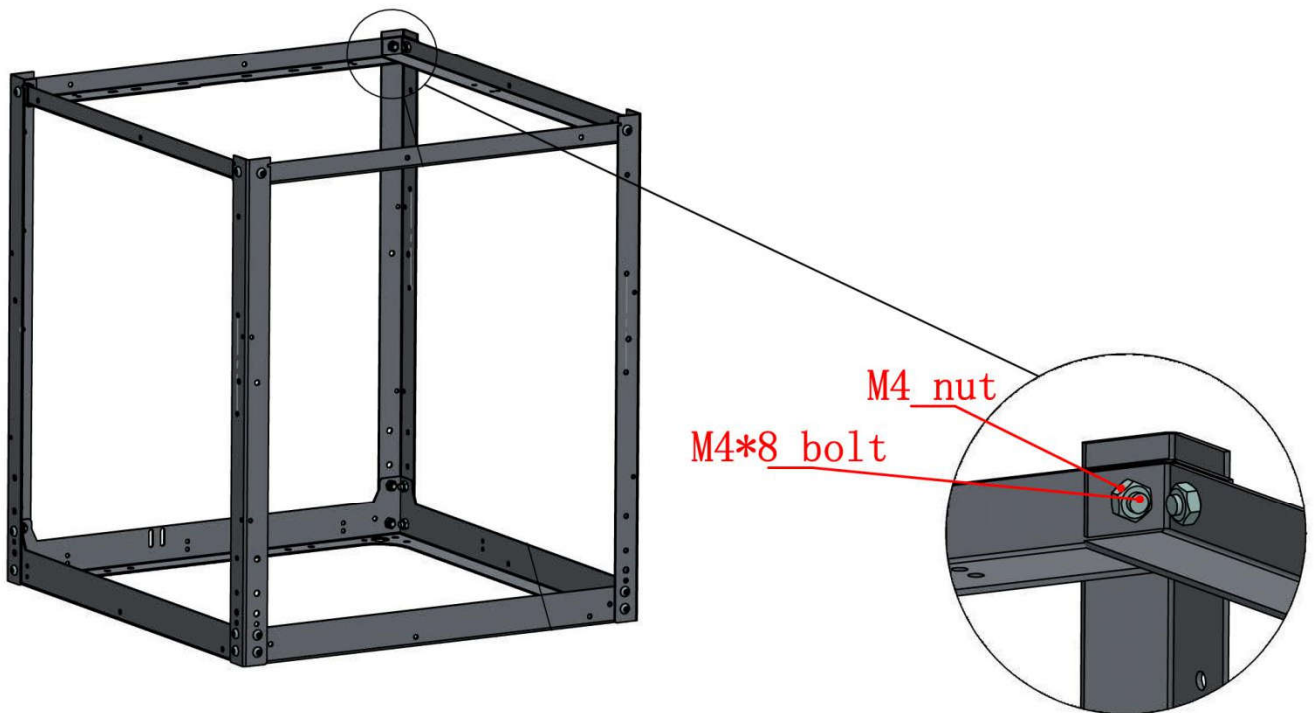
1.Frame installation-----	1
2.Z-axis installation-----	2
3.Hot-bed installation-----	5
4.Drive shaft installation-----	7
5.Y axis motor installation-----	9
6.Idler wheel installation-----	11
7.X-axis installation-----	12
8.Extruder installtion-----	16
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10.Motherboard and LCD installation-----	20
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13.Setting up slicing software-----	23
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1、Frame installation

Step 1 -----

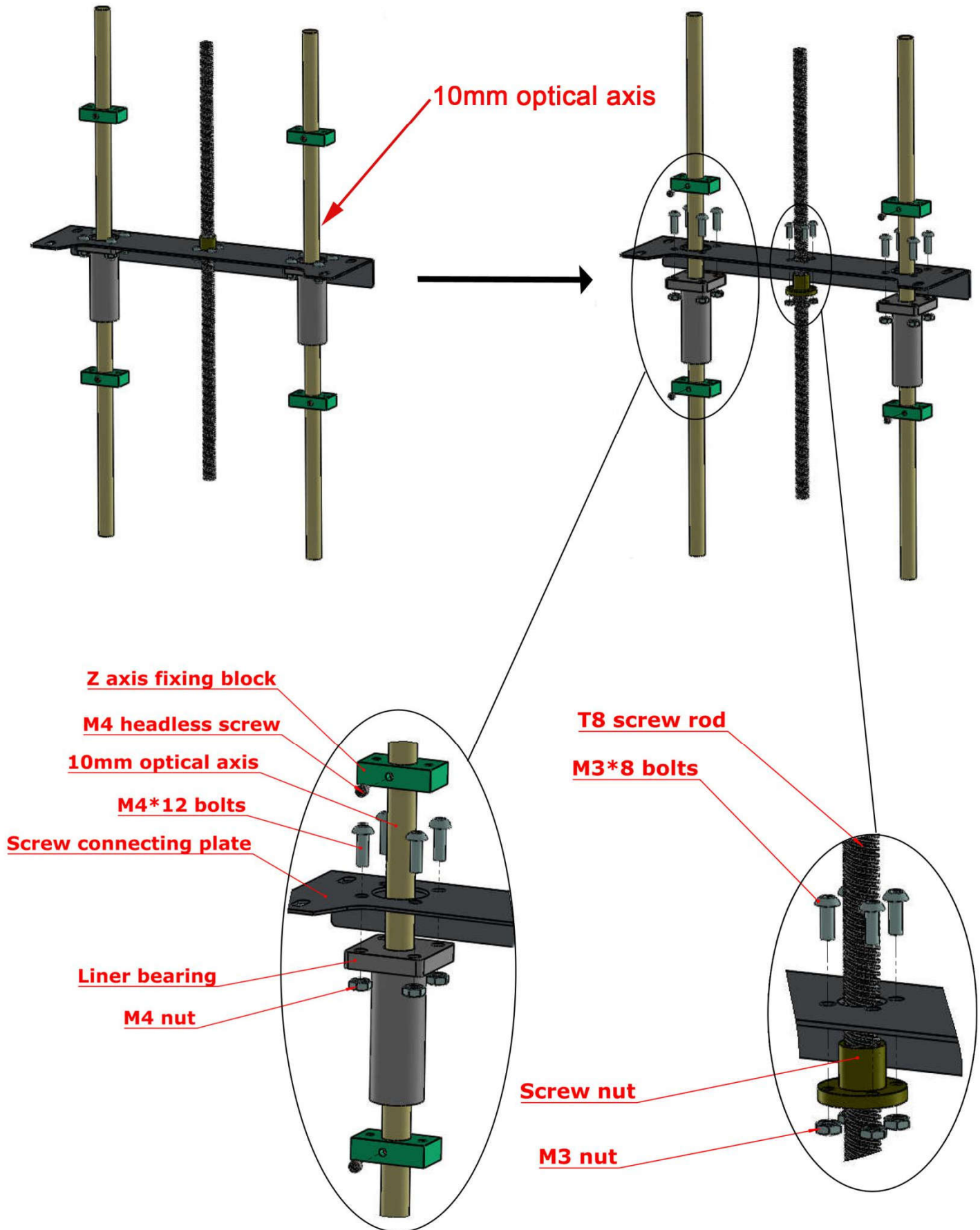


Step 2 -----



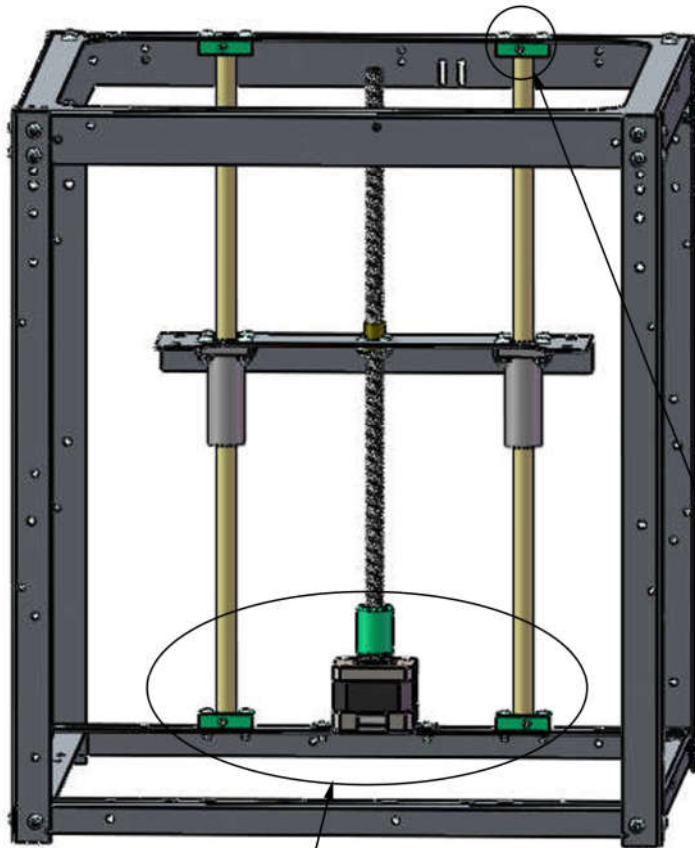
2. Z axis installation

Step 1 -----



2. Z axis installation

Step 2 -----



Coupling

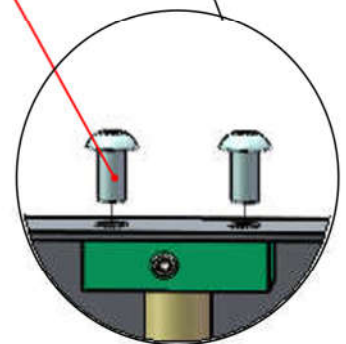
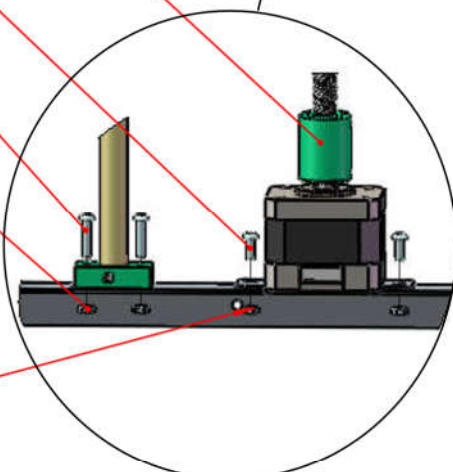
M3*8 bolts

M3*25 bolts

M3 nut

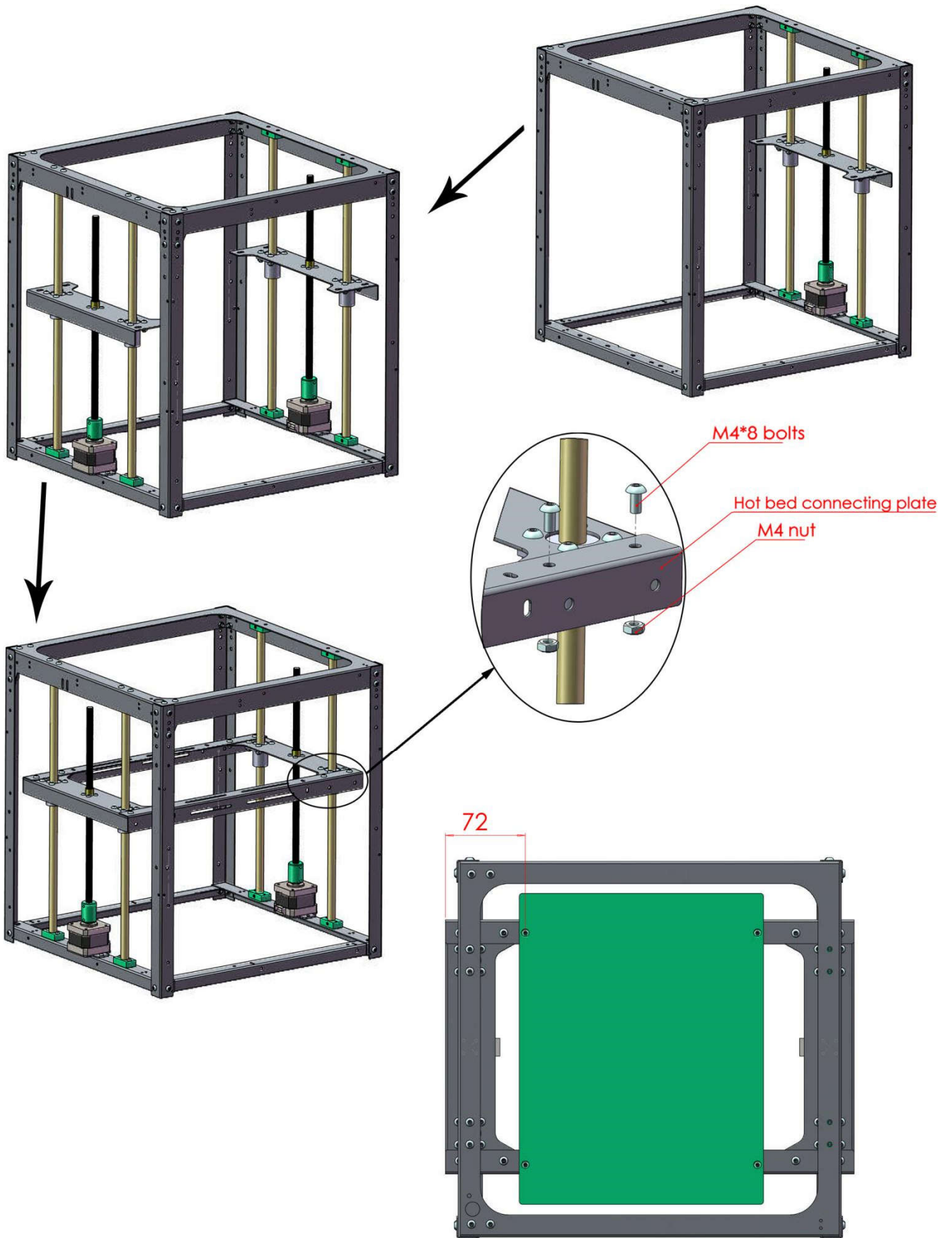
M3 nut

M4*8 bolts



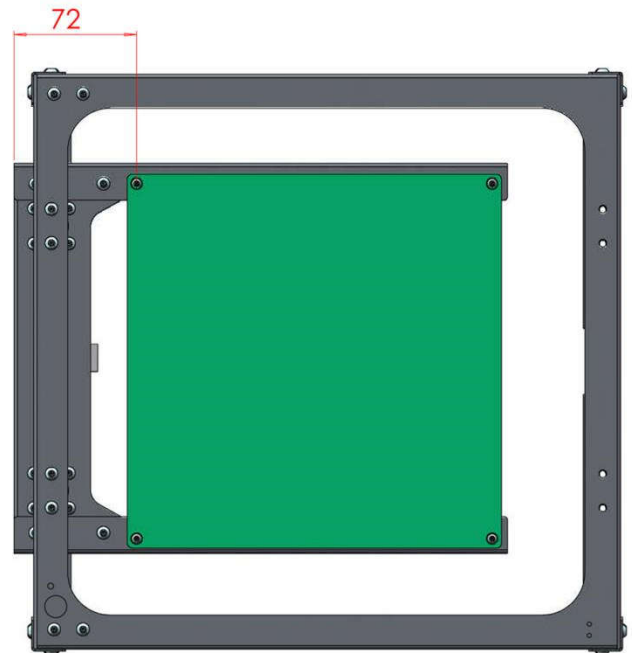
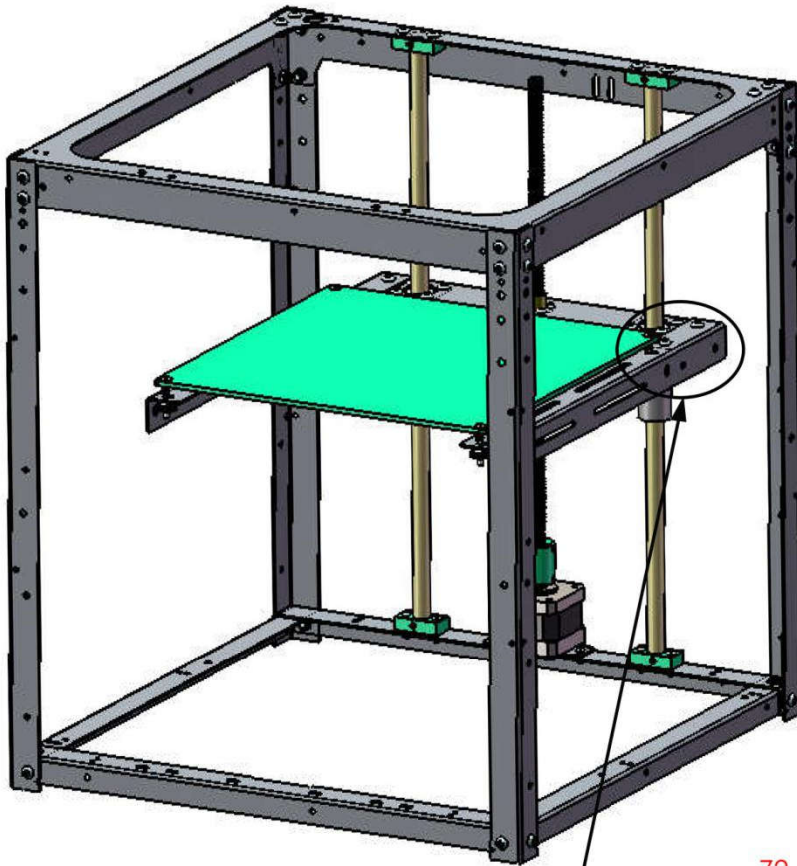
2. Z axis installation

If you are dual Z axis version, you can refer to the installation method

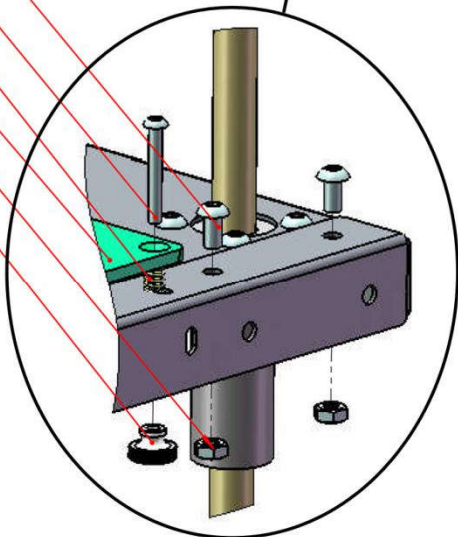


3. Hot bed installation

Step 1 -----

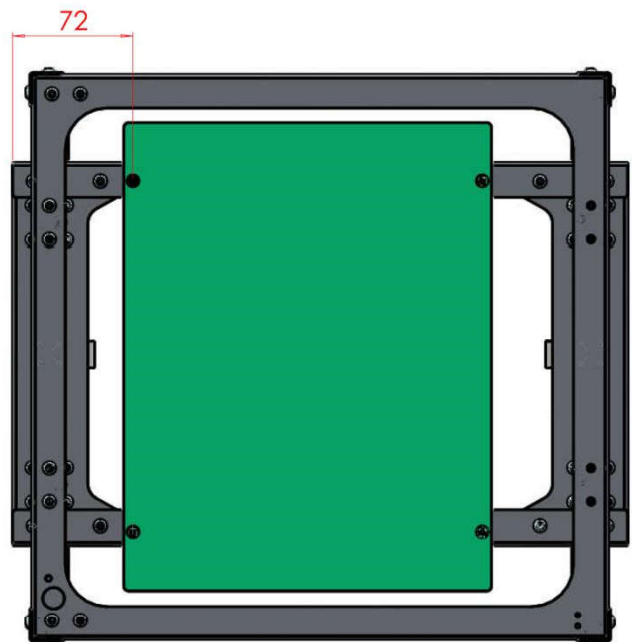
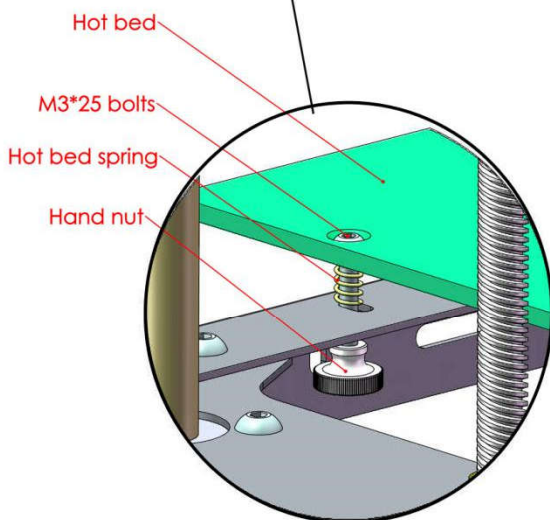
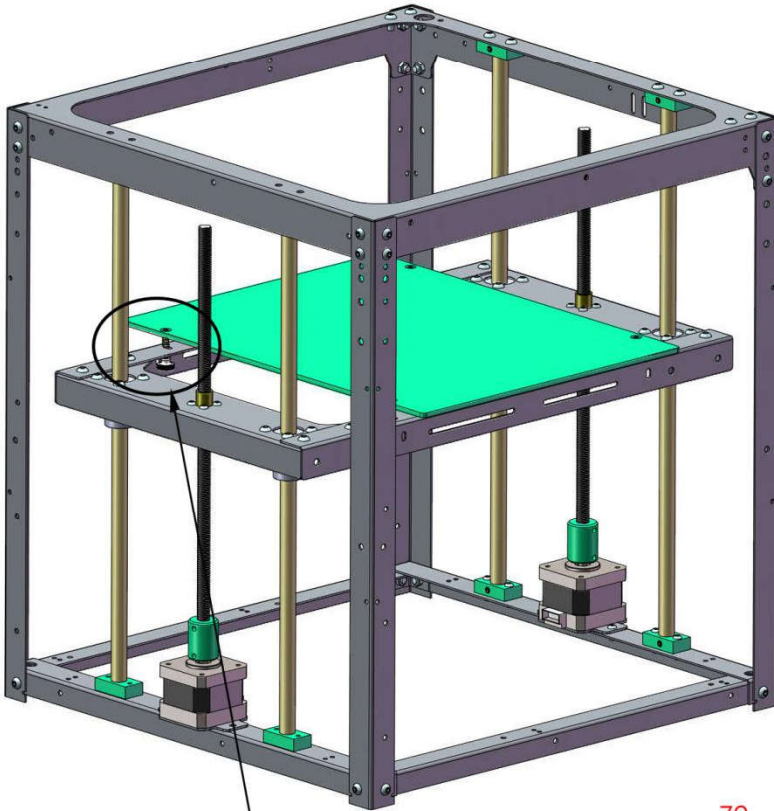


- M4*8 bolts
- M3*25 bolts
- Hot bed spring
- Hot bed
- M3 nut
- Hand nut



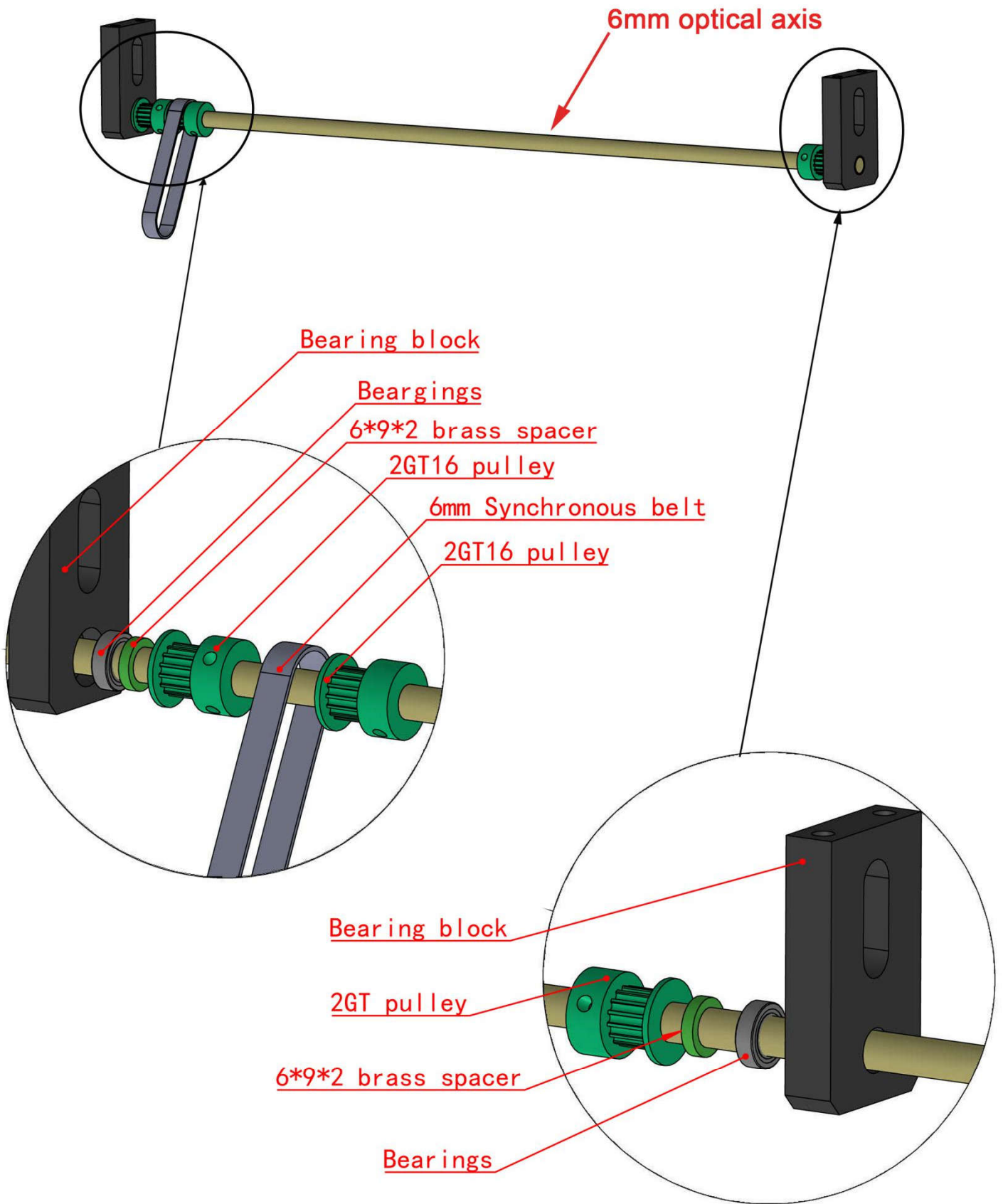
3. Hot bed installation

If you are dual Z axis version, you can refer to the installation method



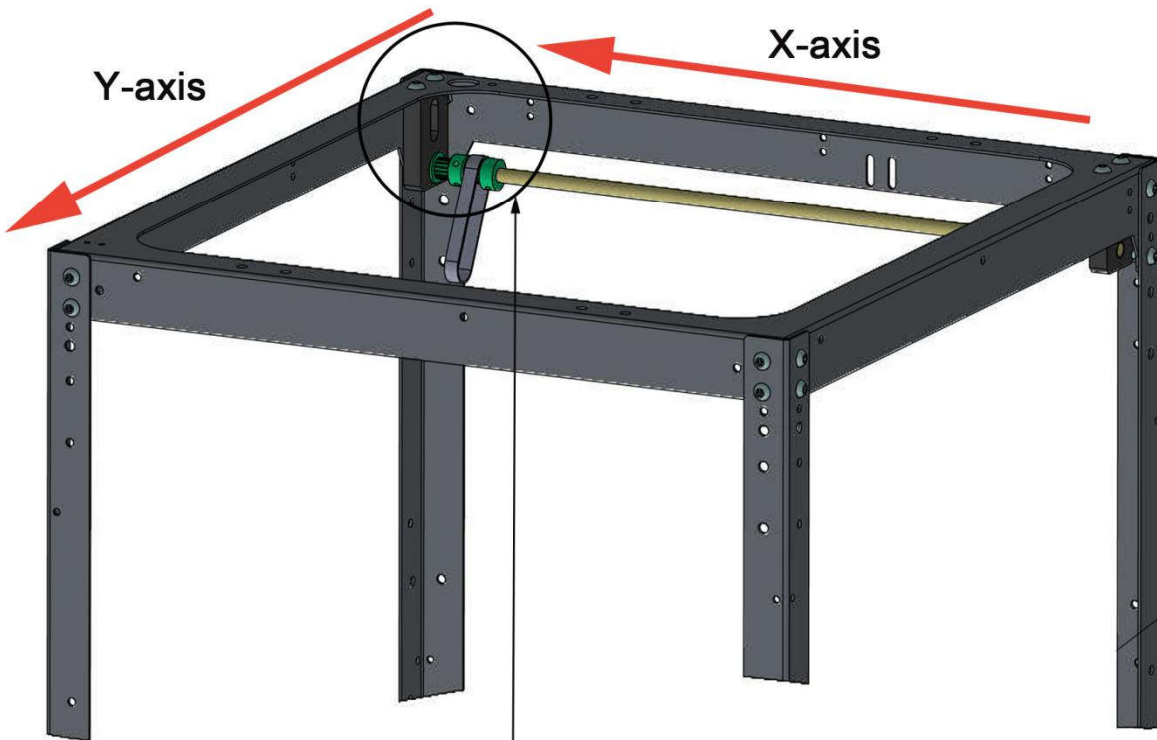
4. Drive shaft installation

Step 1 -----

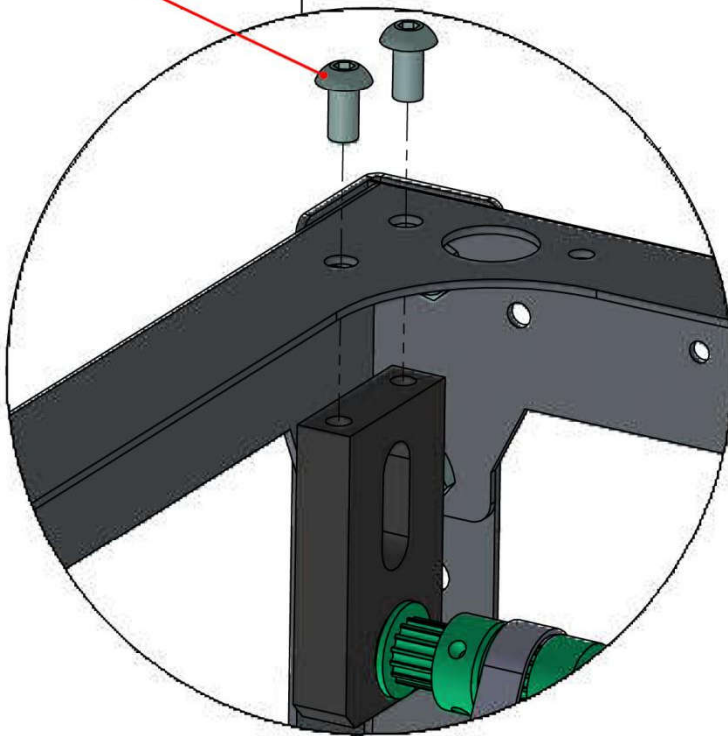


4. Drive shaft installation

Step 2 -----

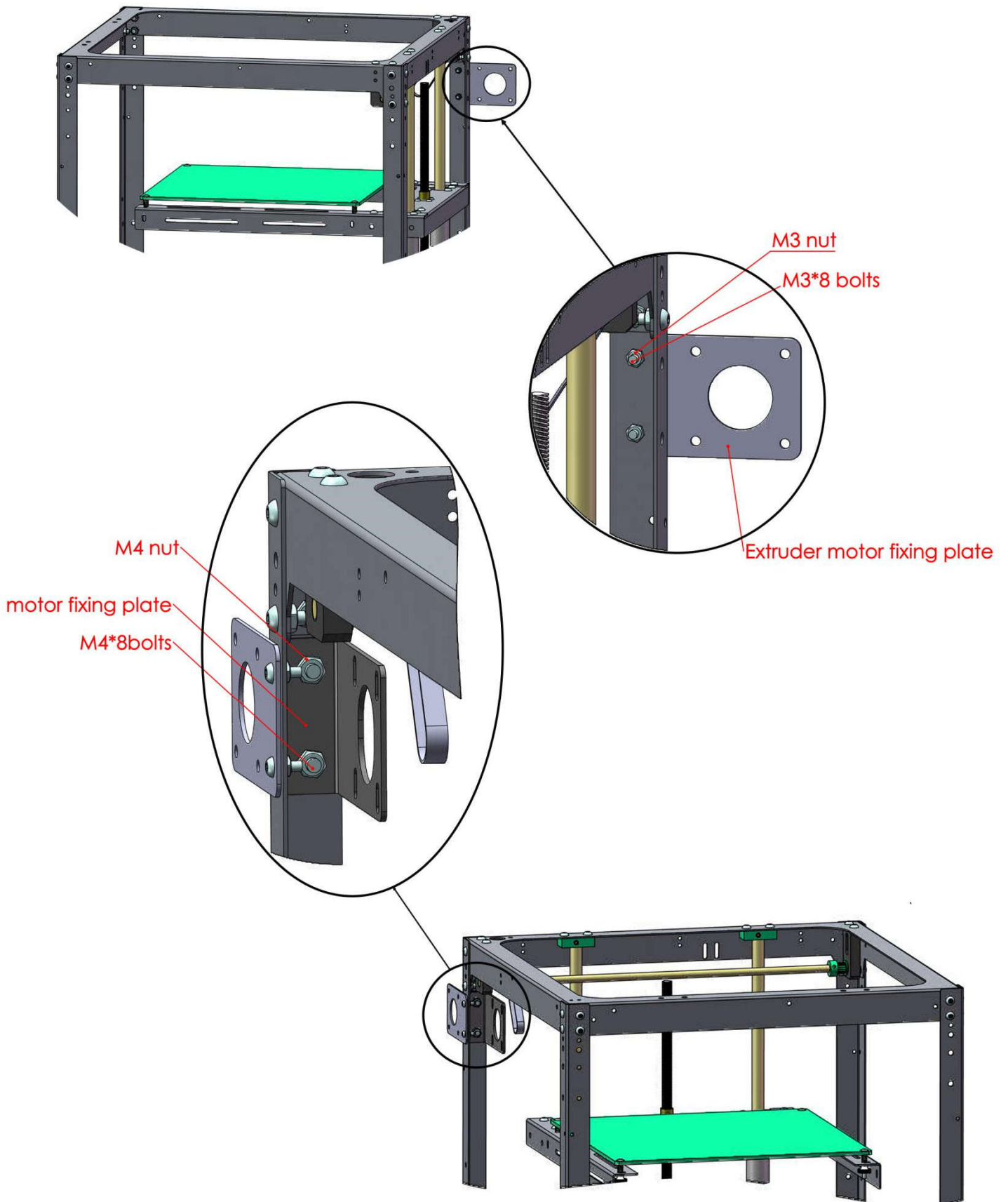


M4*8 bolt



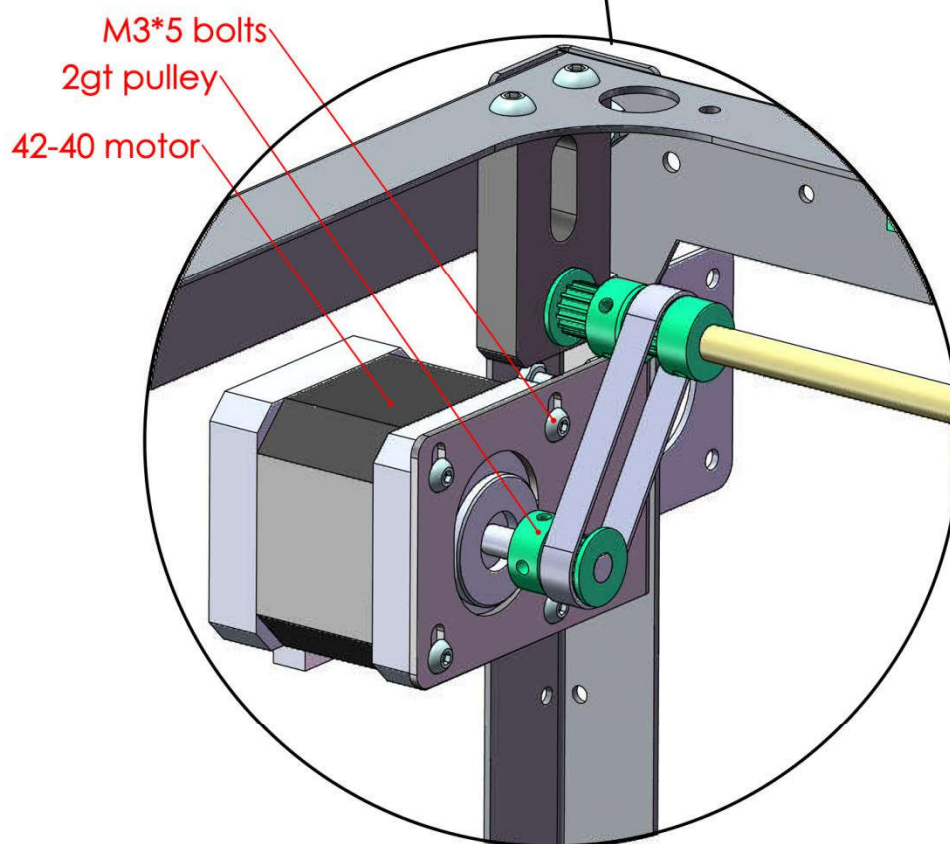
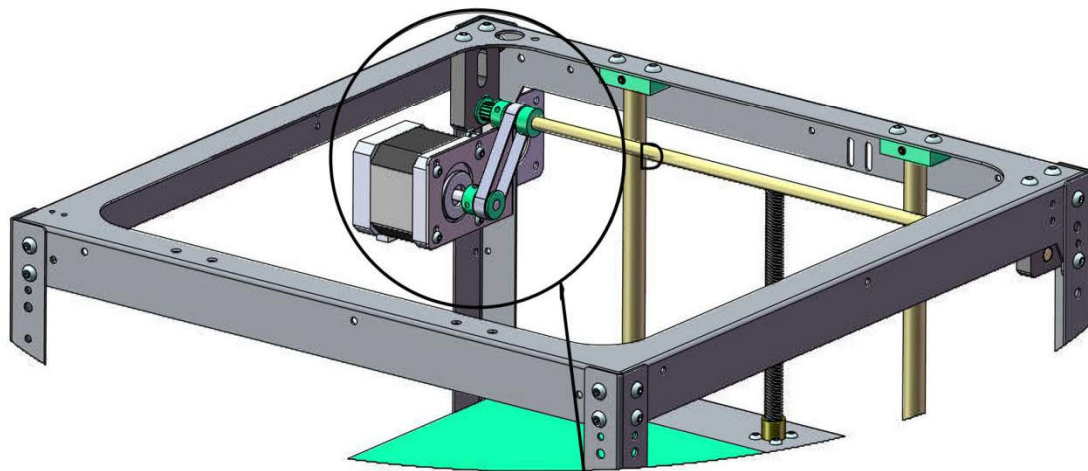
5. Y-axis motor installation

Step 1 -----



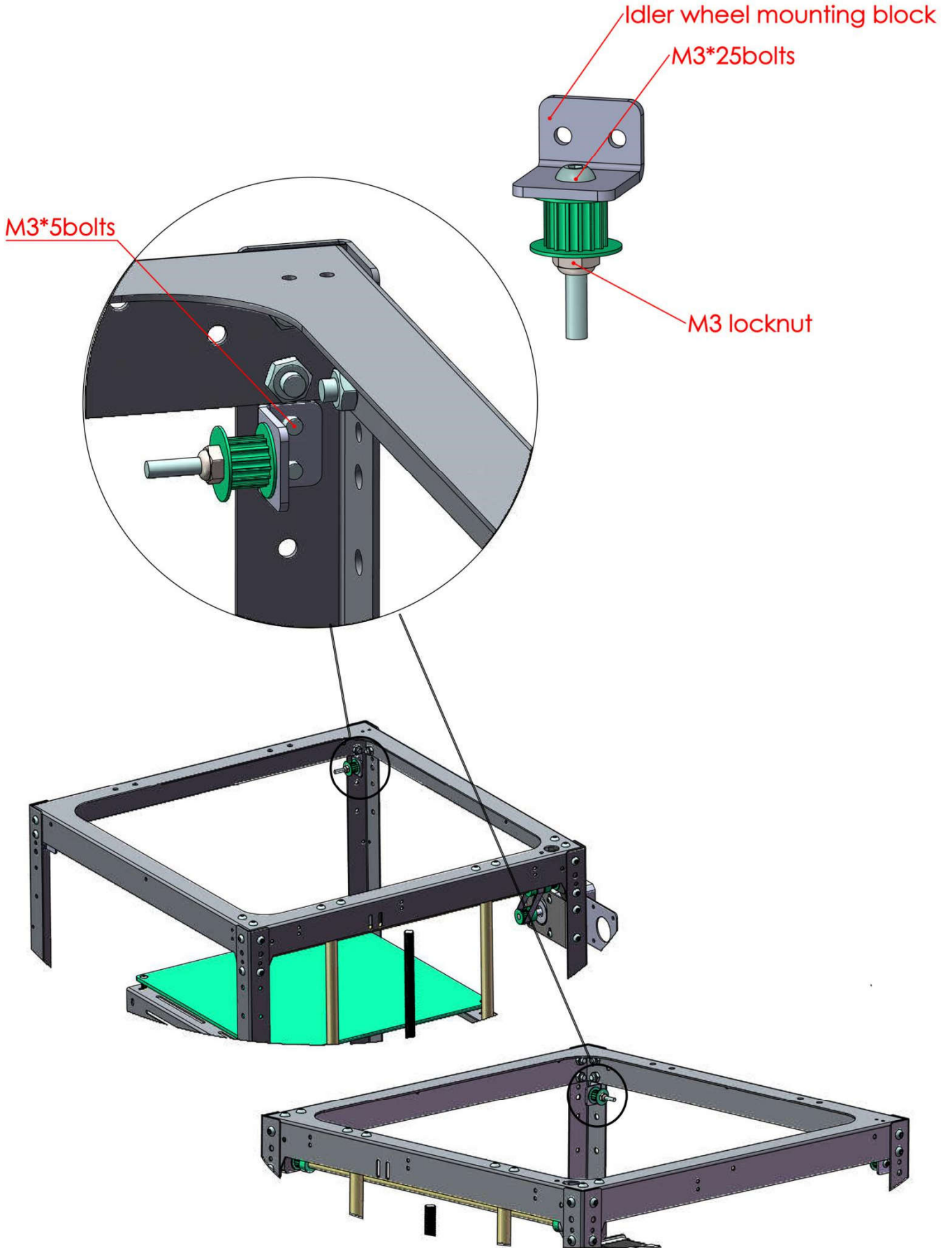
5. Y-axis motor installation

Step 2 -----



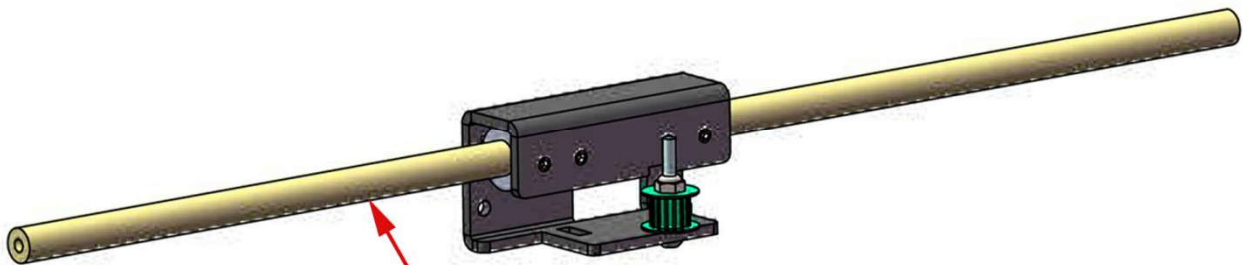
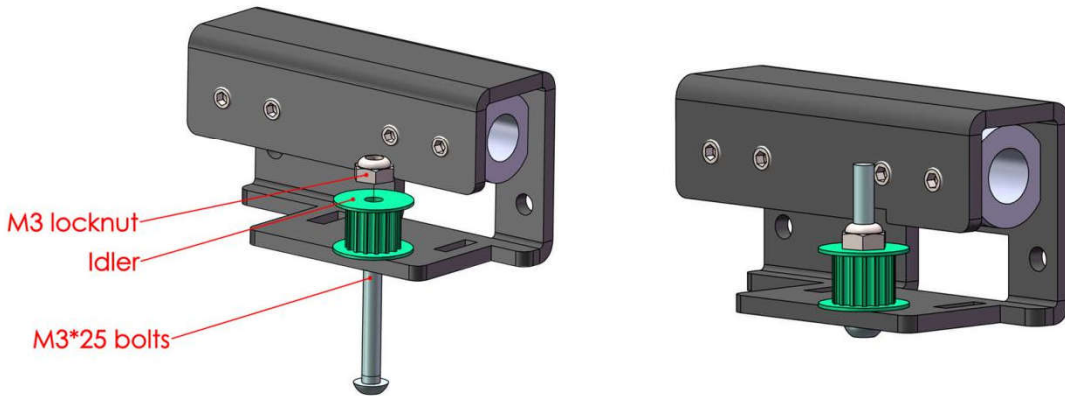
6. Idler wheel installation

Step 1 -----

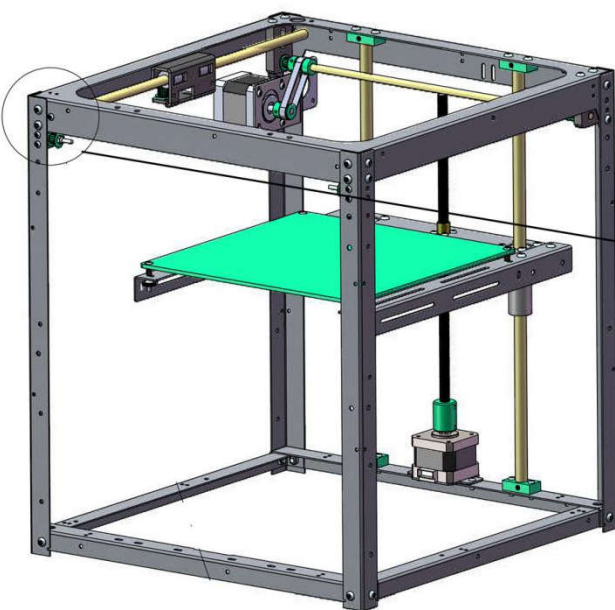


7. X-axis installation

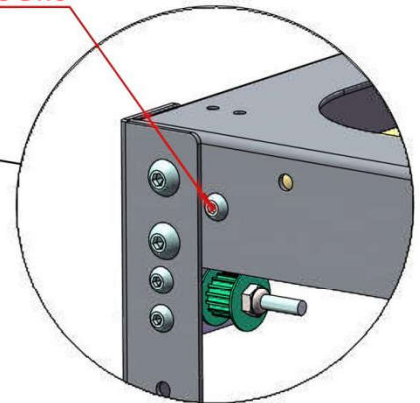
Step 1 -----



8mm optical axis
Length 342mm or 364 mm

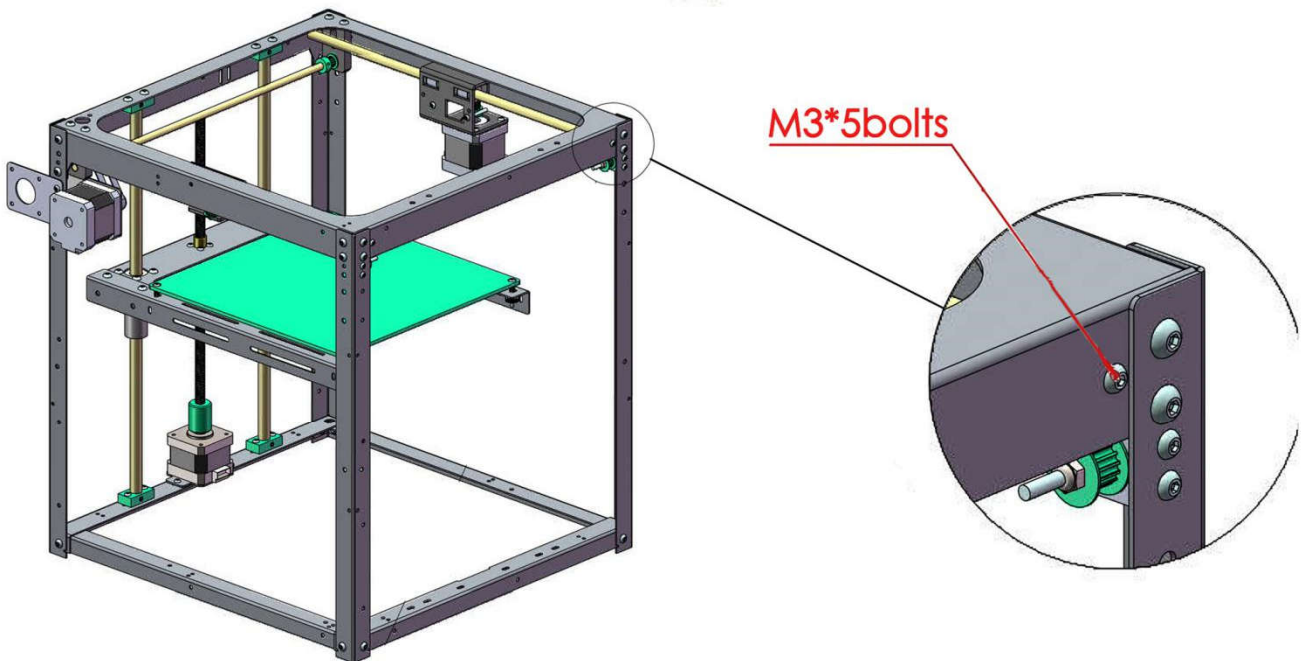
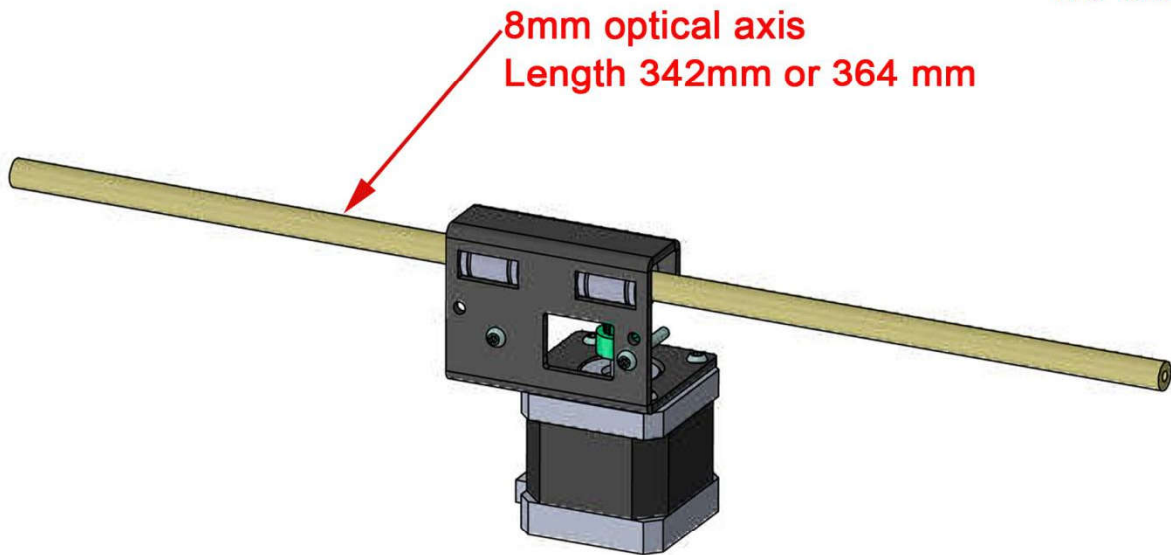
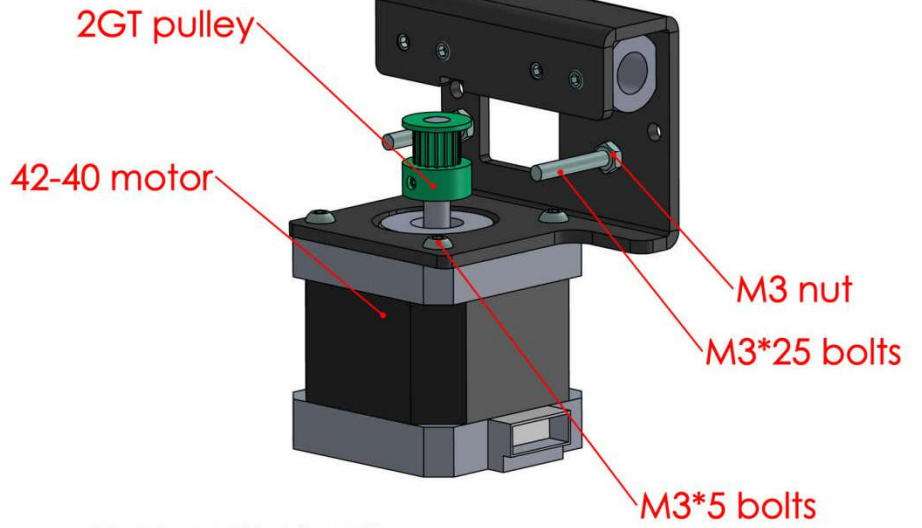
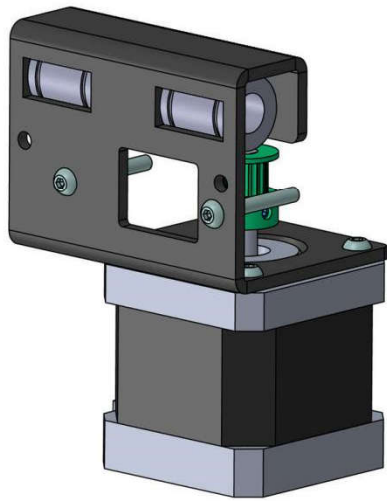


M3*5bolts



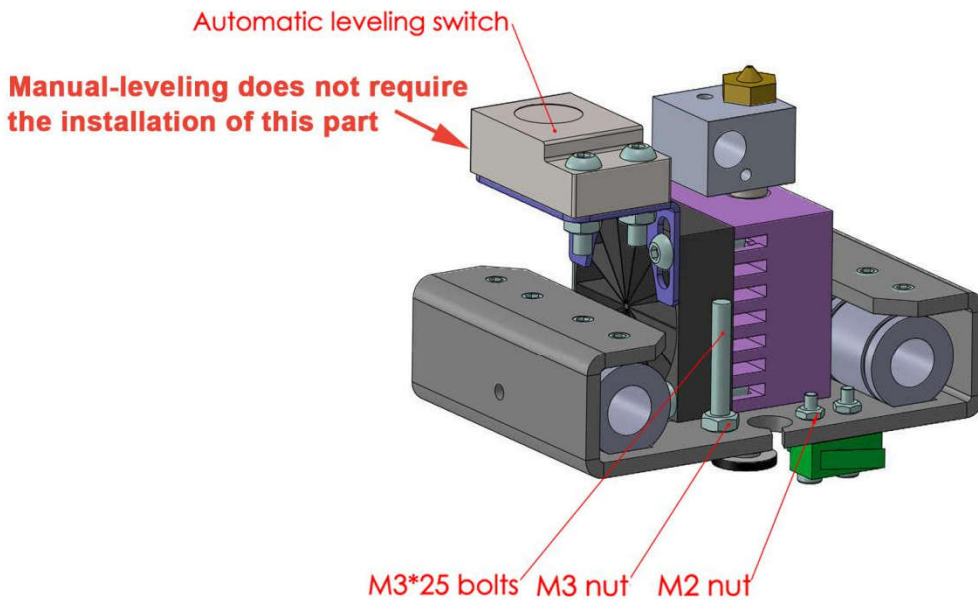
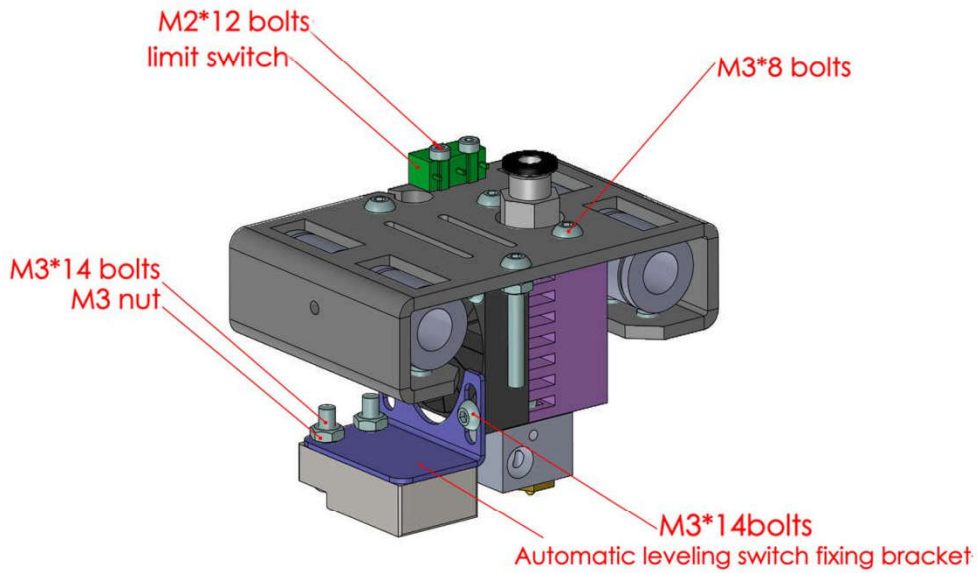
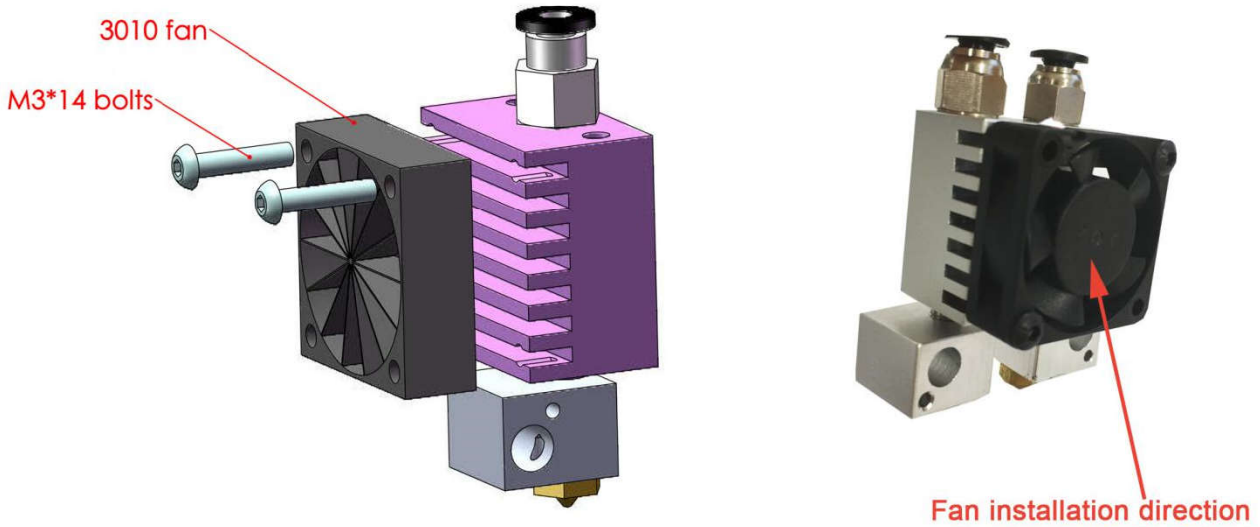
7. X-axis installation

Step 2 -----



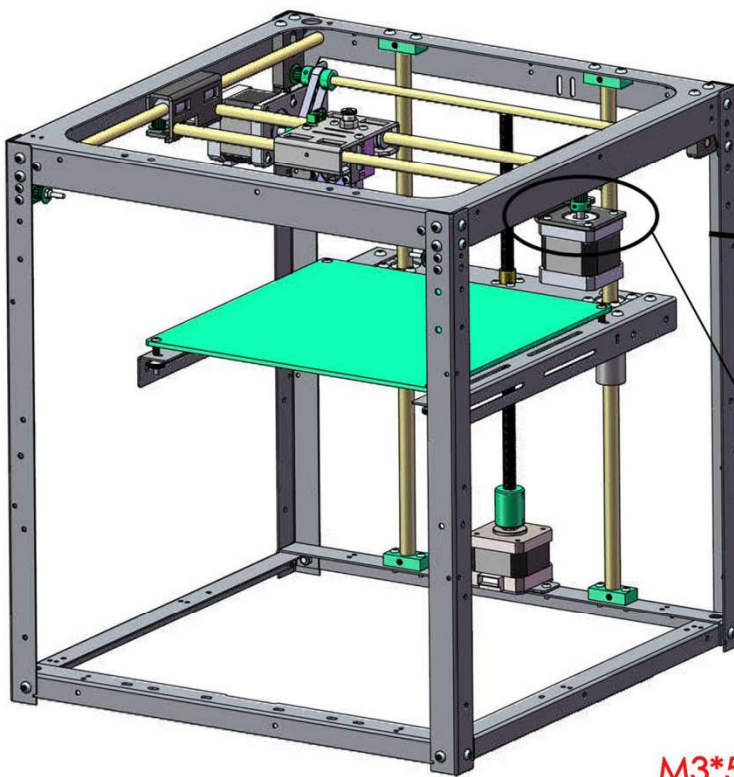
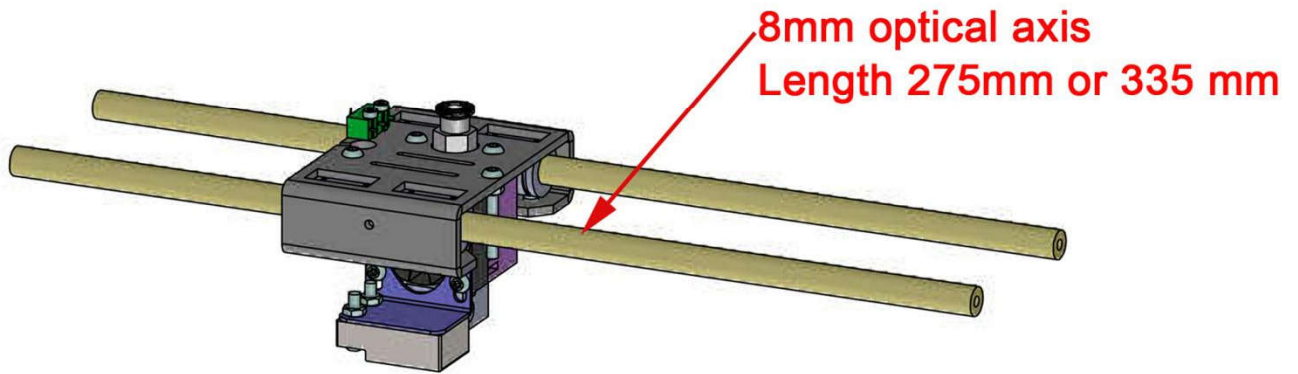
7. X-axis installation

Step 3 -----

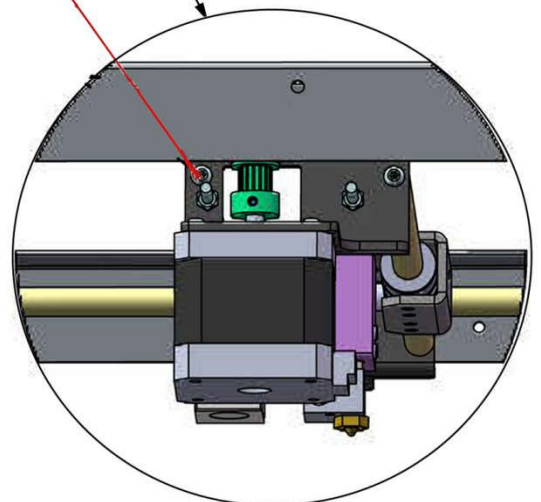


7. X-axis installation

Step 4 -----

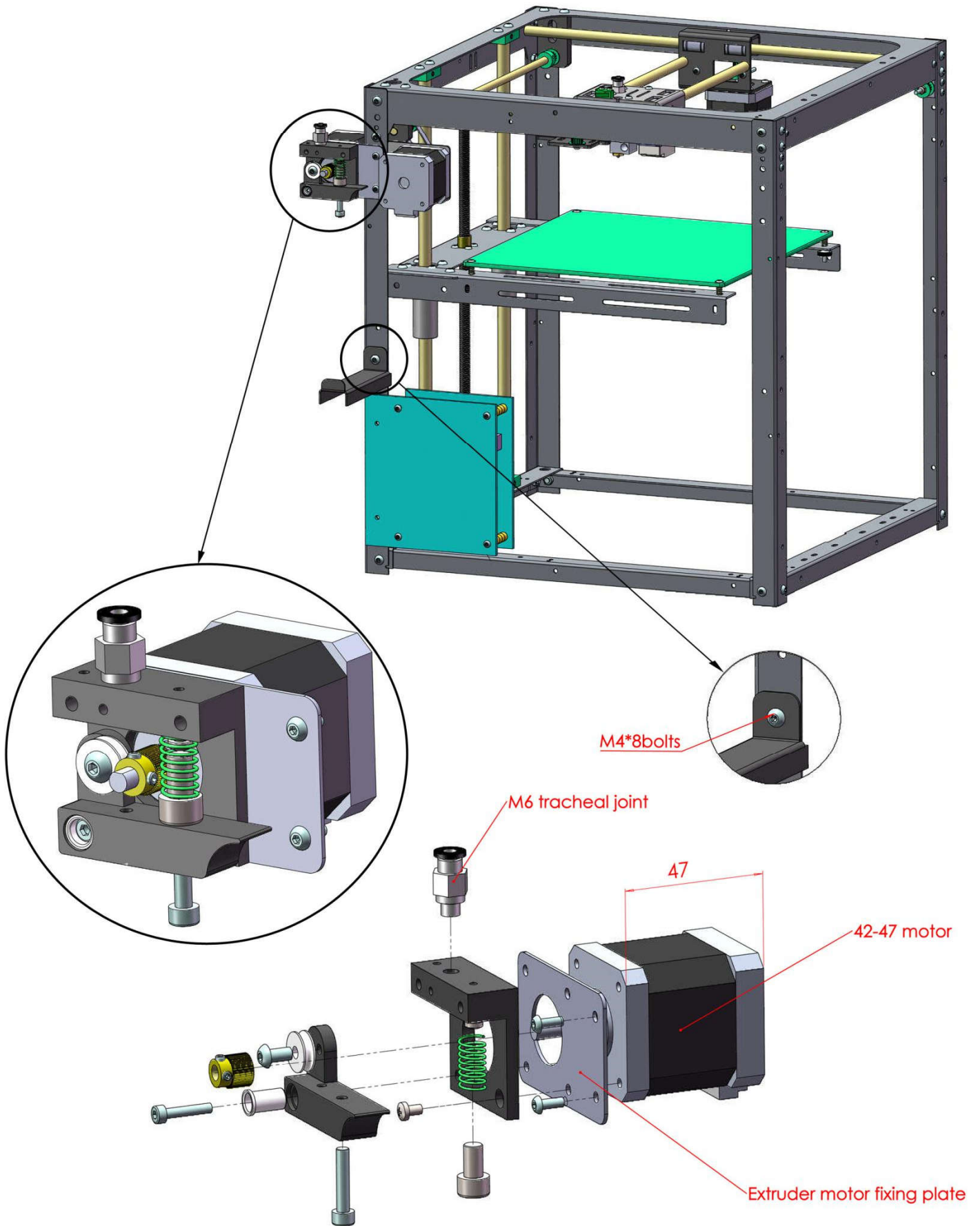


M3*5bolts



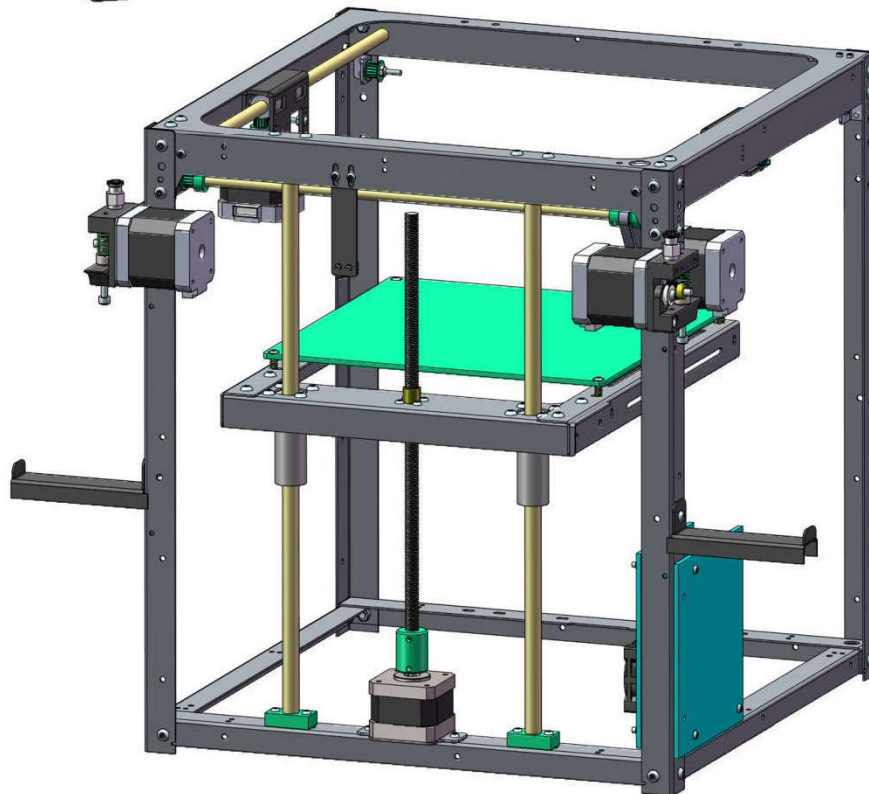
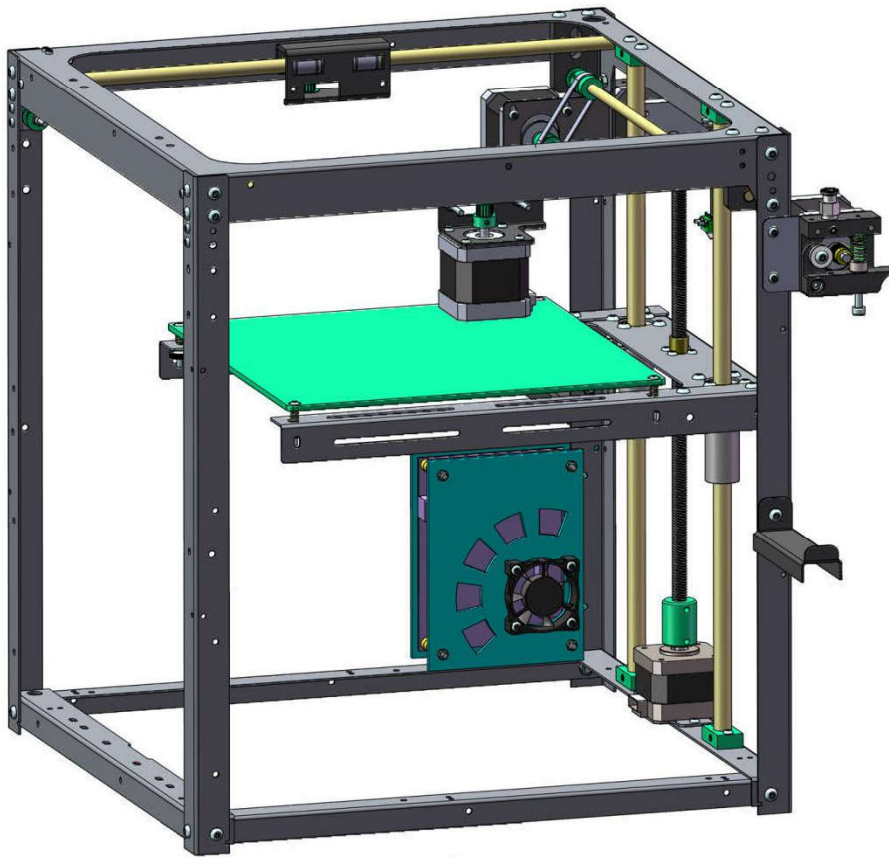
8. Extruder installation

Step 1 -----



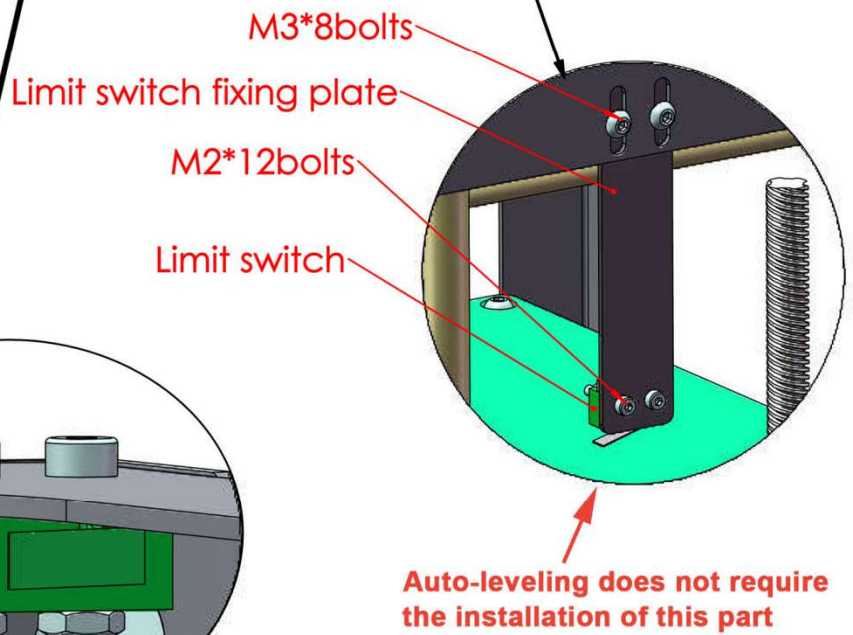
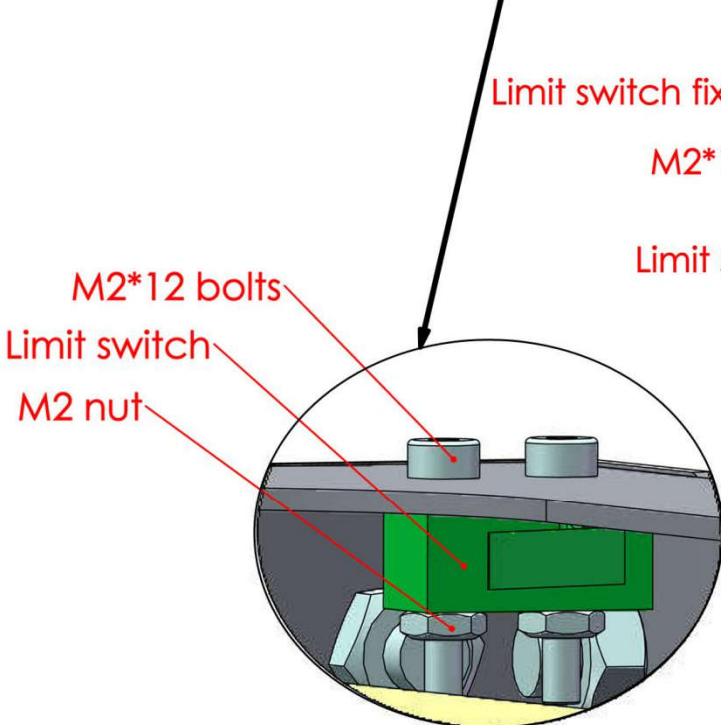
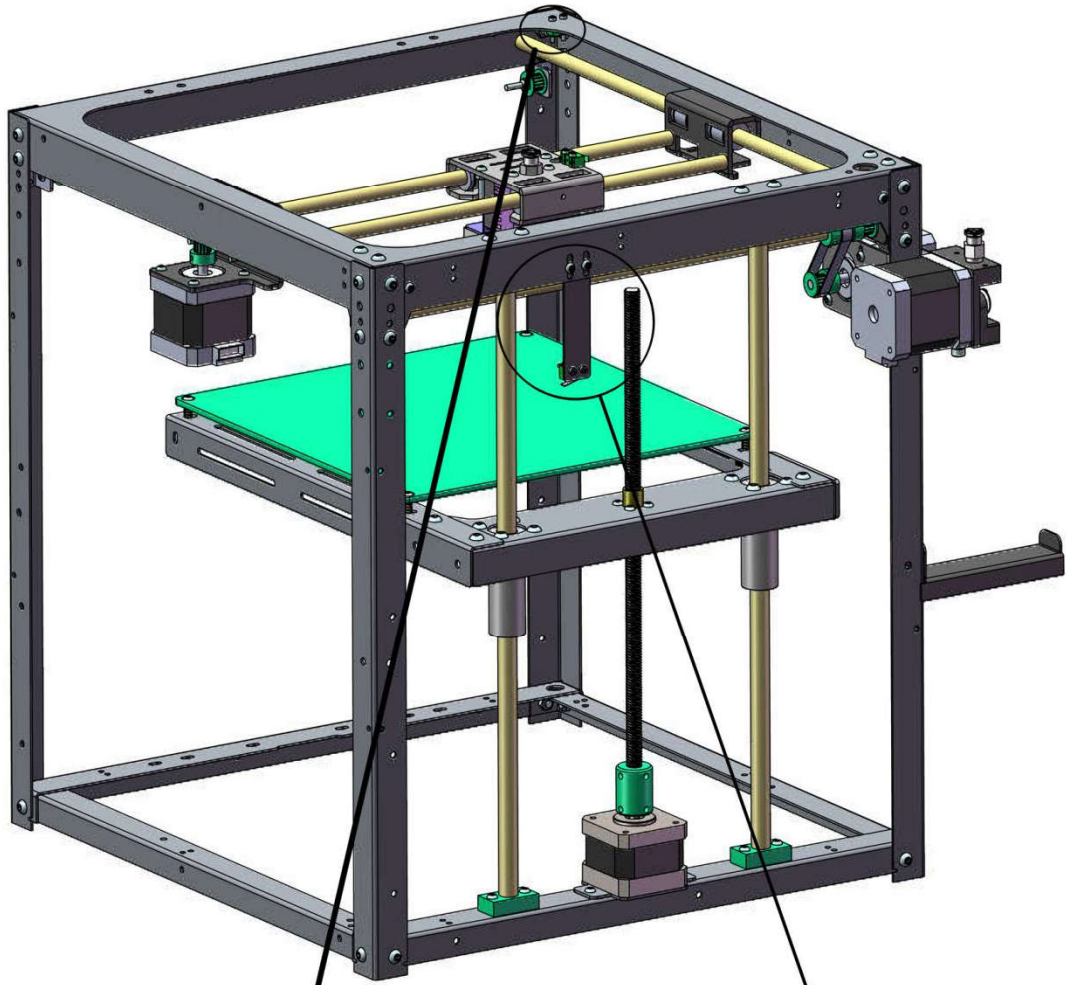
8. Extruder installation

If you are dual Extruder version, you can refer to the installation method



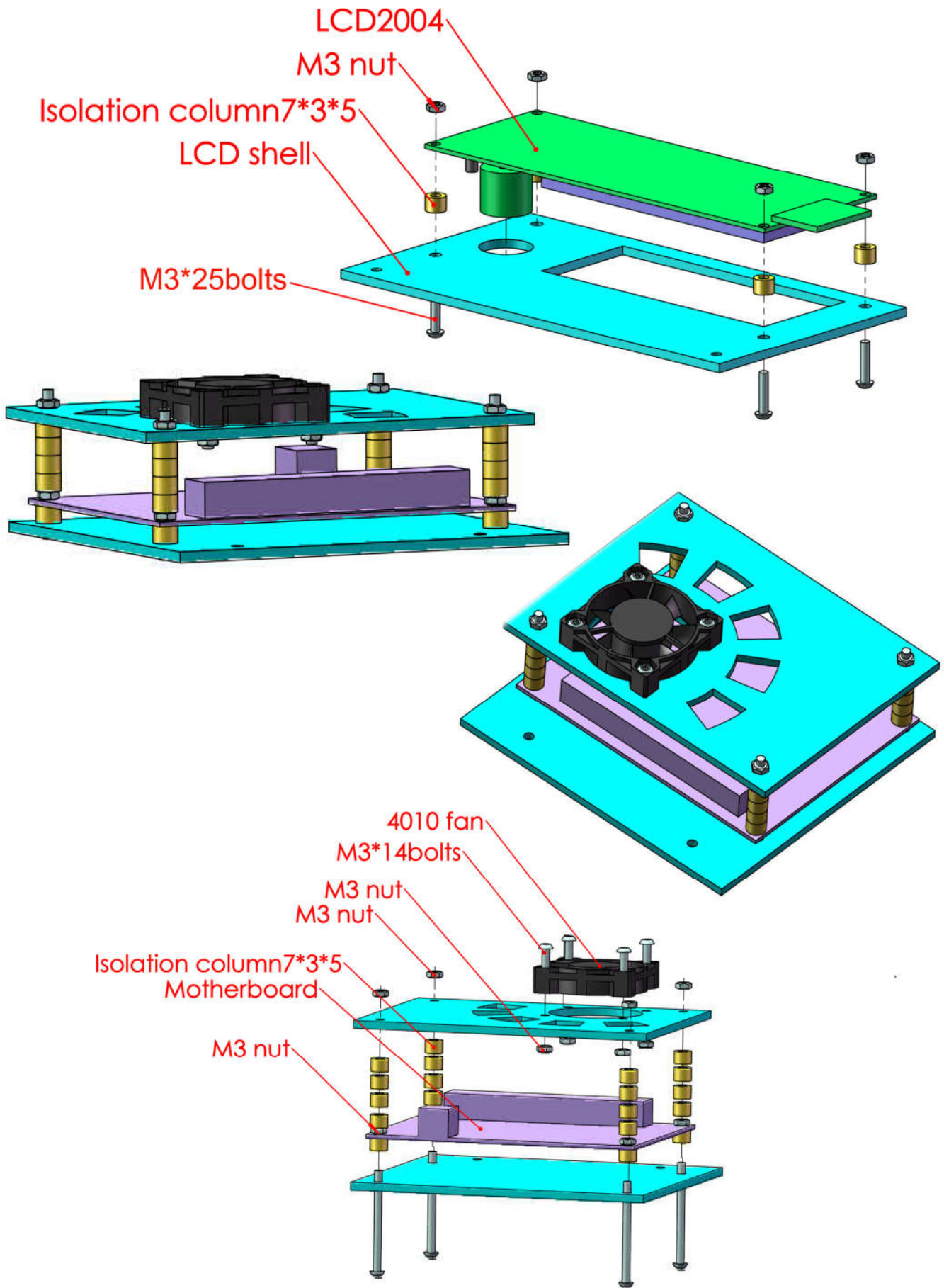
9. Y shaft and Z shaft limit switch installation

Step 1 -----



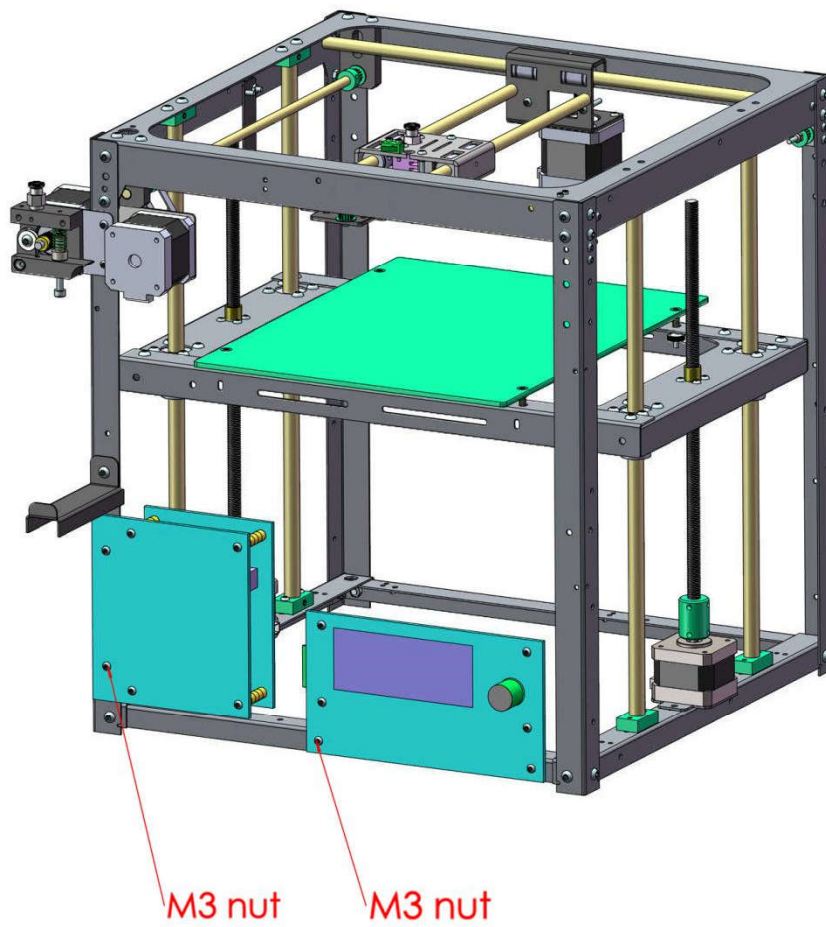
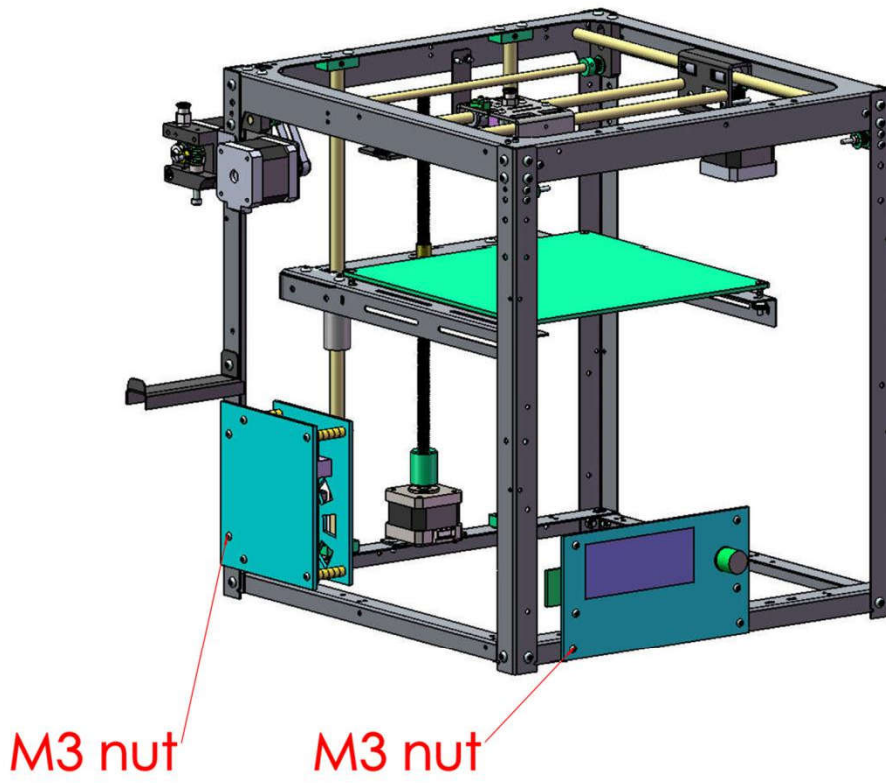
10. Motherboard and LCD installation

Step 1 -----



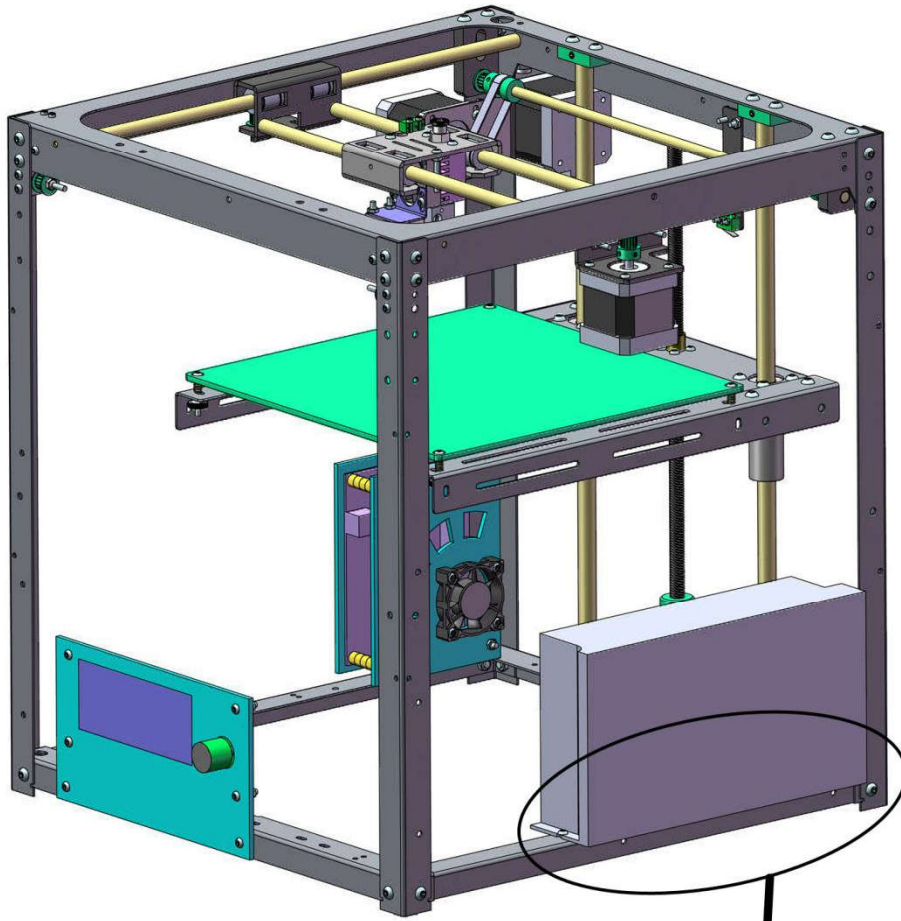
10. Motherboard and LCD installation

Step 2 -----



11. Power supply installation

Step 1 -----

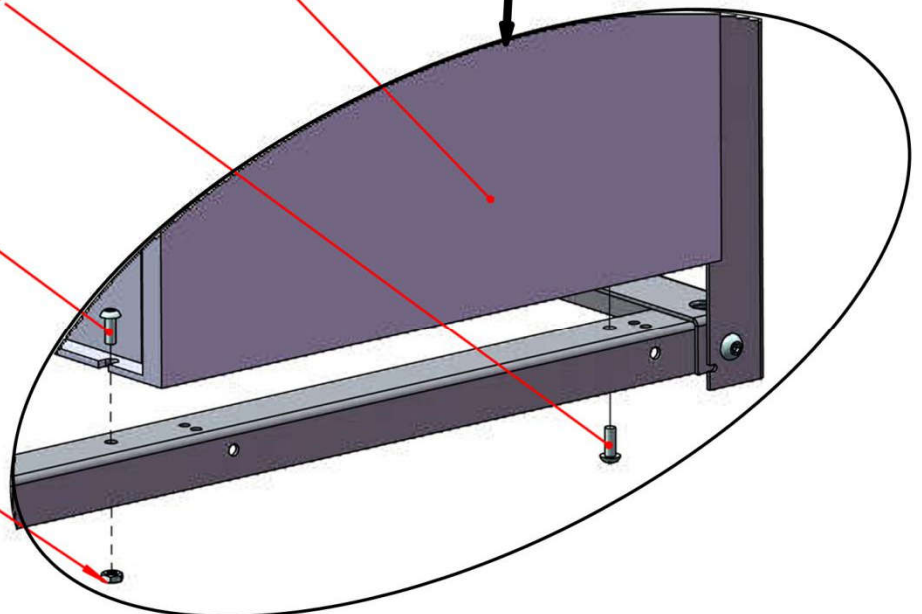


Power supply

M3*5 nut

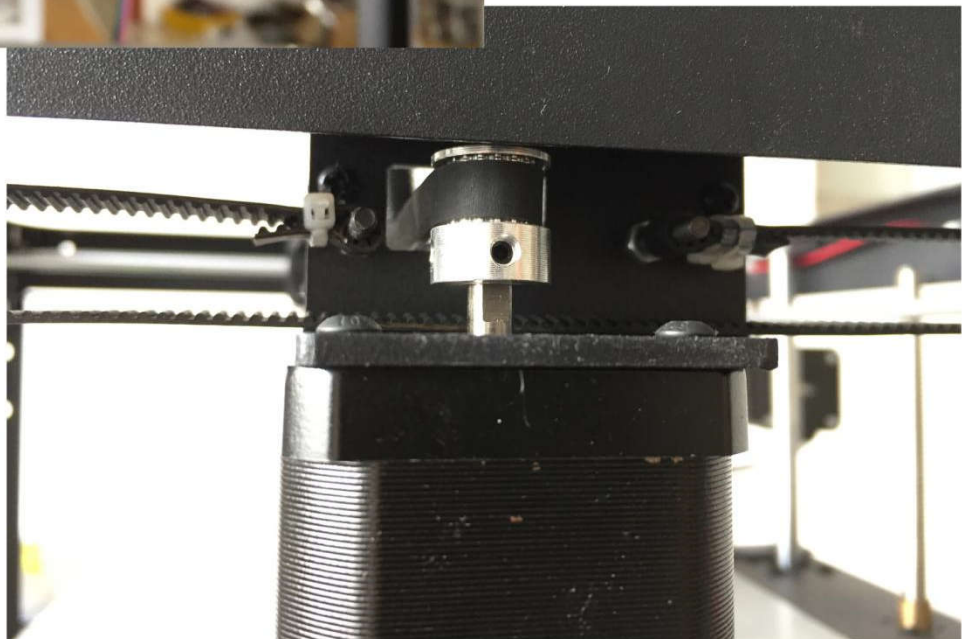
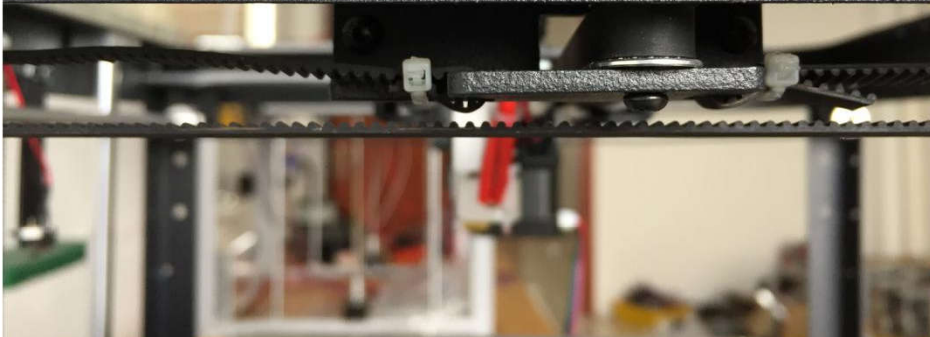
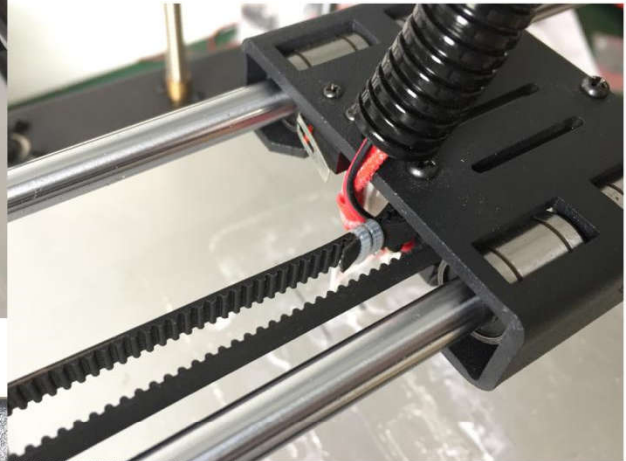
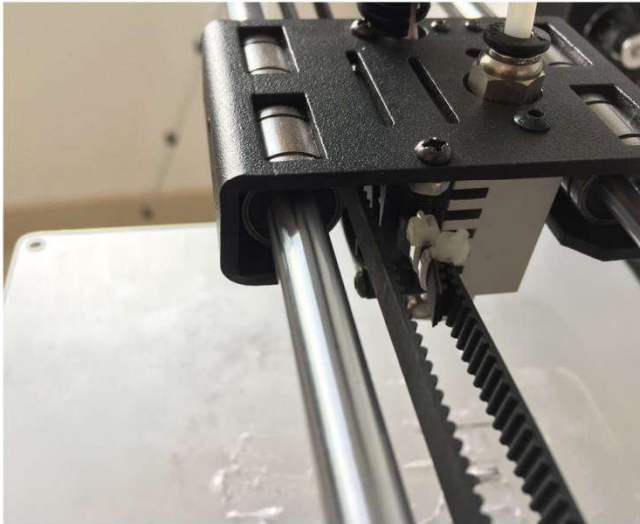
M3*8 bolts

M3 nut



12.Synchronous belt installation

Step 1 -----

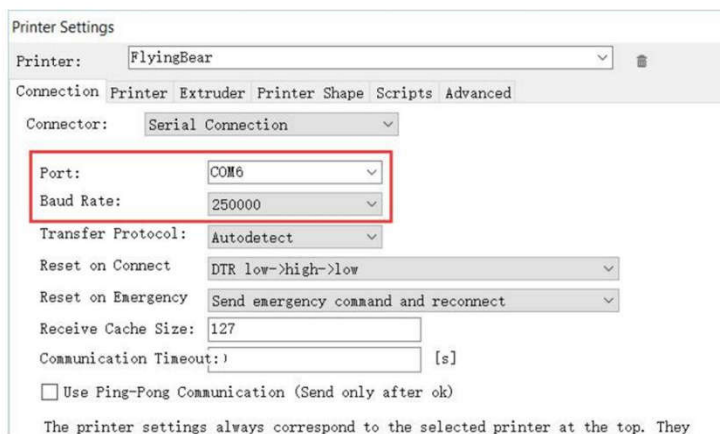
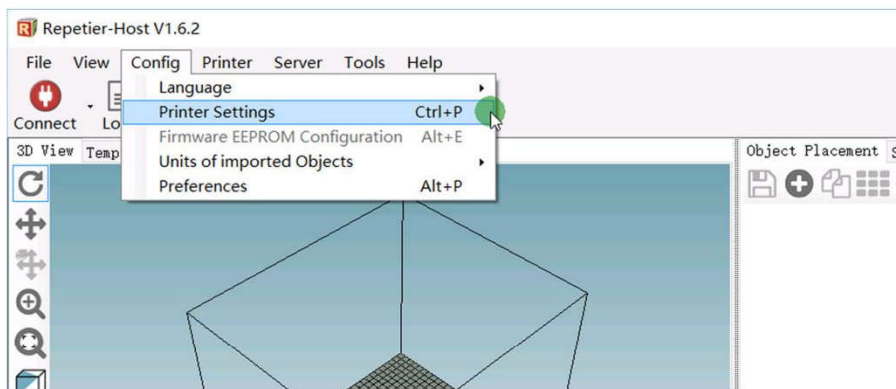


13. Setting up slicing software

3D printers have very many slicing software, such as Cura, simplify3D, and so on, but we only introduce how to use repetier-host.

Software download address: <https://www.repetier.com>

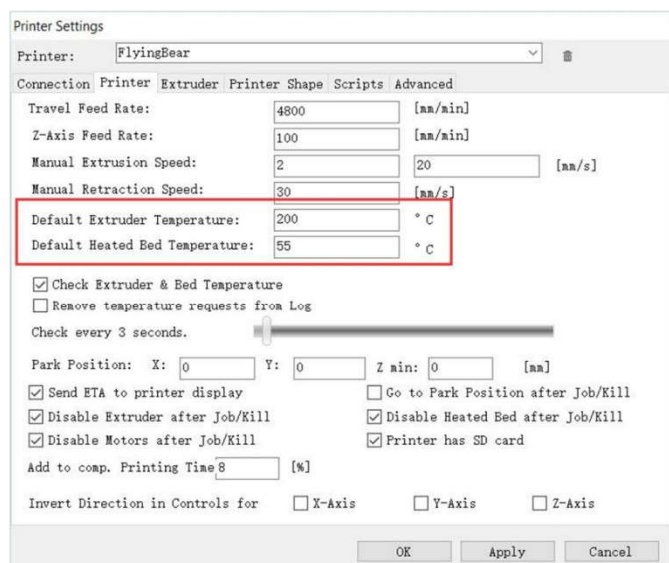
When the software installation is complete, click "printer settings", and then follow the pictures in turn to operate



Port :According to the ports in Device manager (COM&LPT) to choose, **(Notice: Each computer is different,my computer is COM5.)**

Baud Rate: fill in "250000"

Other parameters remain the same.



Reference temperature:

Print PLA

Extruder temperature: 190°C around

Bed temperature: 40°C around

Print ABS

Extruder temperature: 230°C around

Bed temperature: 80~100°C around

Other parameters remain the same.



13. Setting up slicing software

Printer Settings

Printer: default

Connection Printer Extruder Printer Shape Scripts Advanced

Number of Extruder: 2

Max. Extruder Temperature: 280

Max. Bed Temperature: 120

Max. Volume per second: 12 [mm³/s]

Printer has a Mixing Extruder (one nozzle for all colors)

Extruder 1

Name: e1

Diameter: 0.4 [mm] Temperature Offset: 0 [° C]

Color: ██████████

Offset X: 0 Offset Y: 0 [mm]

Extruder 2

Name: e2

Diameter: 0.4 [mm] Temperature Offset: 0 [° C]

Color: ██████████

Offset X: 0 Offset Y: 0 [mm]

OK Apply Cancel

For double nozzles, please fill in 2
Number of Extruder: 1/2

Name: P9.2-0.4

Diameter: default it is 0.4, Please fill in it according to your nozzle's diameter.

Other parameters remain the same.

Printer Settings

Printer: default

Connection Printer Extruder Printer Shape Scripts Advanced

Printer Type: Classic Printer

Home X: Min Home Y: Min Home Z: Min

X Min: 0 X Max: 350 Bed Left: 0

Y Min: 0 Y Max: 300 Bed Front: 0

Print Area Width: 350 mm

Print Area Depth: 300 mm

Print Area Height: 290 mm

The min and max values define the possible range of extruder coordinates. These coordinates can be negative and outside the print bed. Bed left/front define the coordinates where the printbed itself starts. By changing the min/max values you can even move the origin in the center of the print bed, if supported by firmware.

Y Max

E

C

B

OK Apply Cancel

Printer: FlyingbearP905

X Max: 220 (Big size 280)

Y Max: 220

Print Area Width: 220

Print Area Depth: 220

Print Area Height : 200 (Notice: The actual size is 210 ,but due to each customer's installation is different, it is possible to cause the size smaller than 210 .So it's more safe to fill in 200.)

Other parameters remain the same.

Printer: FlyingbearP905 Plus

X Max: 280

Y Max: 242

Print Area Width: 280

Print Area Depth: 242

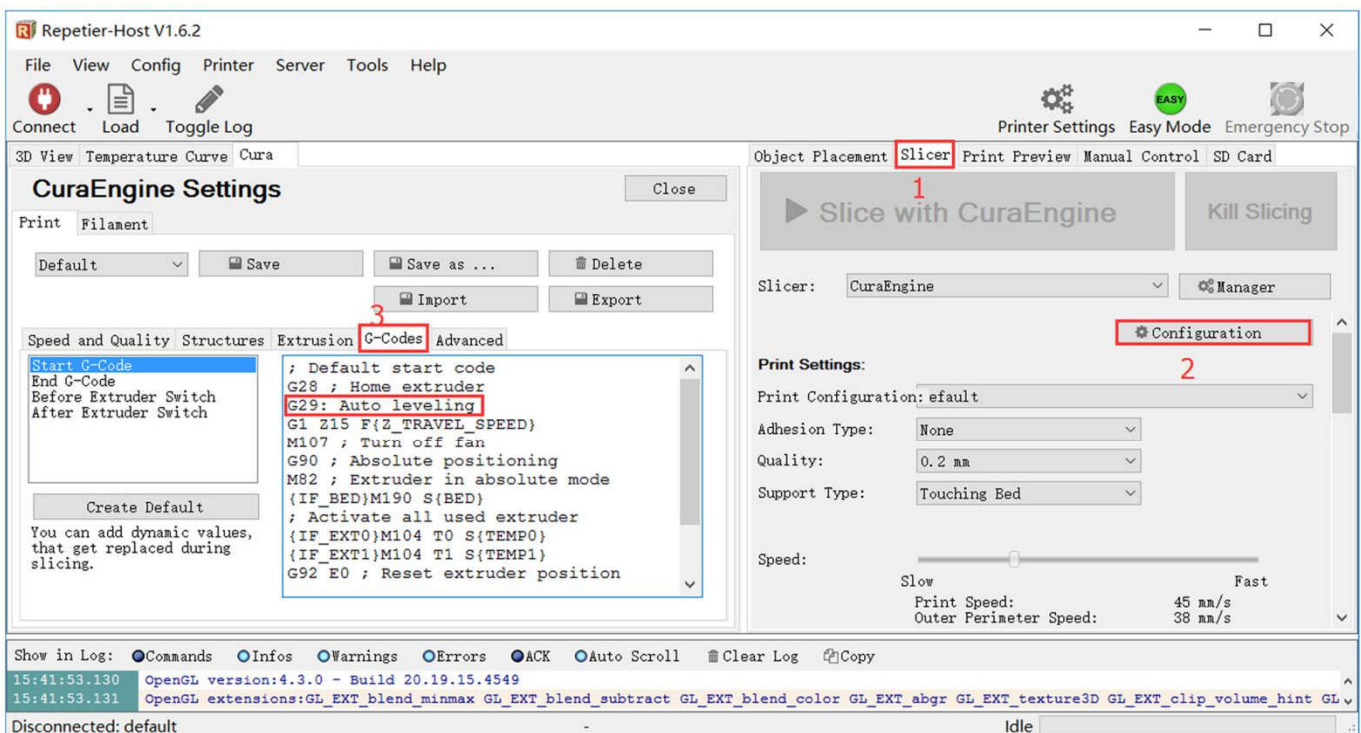
Print Area Height : 350

14. Setting auto leveling sensor

Open the repetier-host and connect to the printer. select "manual control" tab and you should see "G-Code". Write in this field "G28" and press send button, Then send the G1 Z0, the screen will show that the Z axis is "Z=0". Now you can operate the printer by LCD screen, select "prepare/move the axis / 0.1 mm/move z" according to the menu. Move the Z axis, until the distance between nozzle and hot bed reaches the most suitable distance. (the best distance between nozzle and hot bed is probably a piece of A4 paper). Then record the Z axis numerical that LCD displays (This numerical value should be a negative number, let's assume this value is -1.5). And then we send the G code "M851 Z - 1.5", finally send G code "M500" to save your changes



Before slicing, add the auto leveling "G29" code

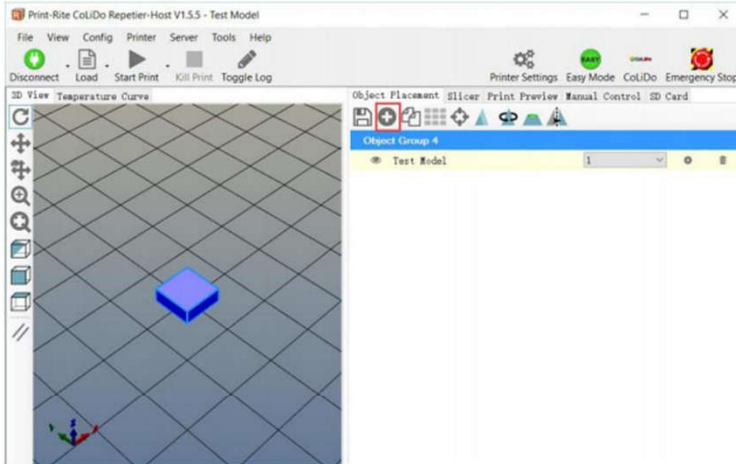


15. First print model

There are two ways to print: use the SD card to print and use the computer to print. It is recommended to use the SD card to print. The computer will be standby or have other abnormal situation to interrupt the printing process when use the computer to print.

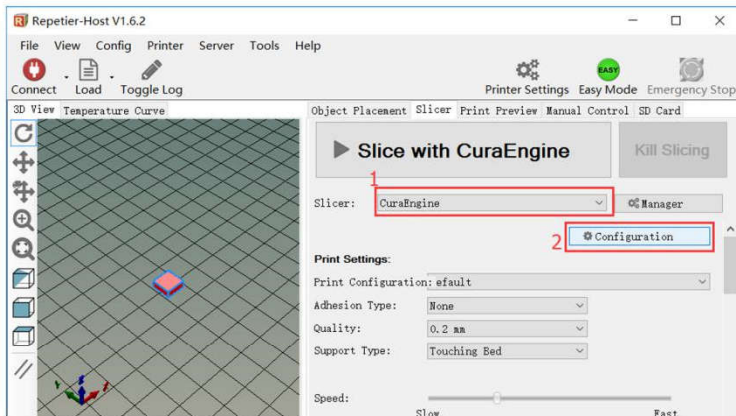
Attention:The hot bed needs to paste the masking tape or painted with the self-adhesive before printing.

Introduction of using SD card to print

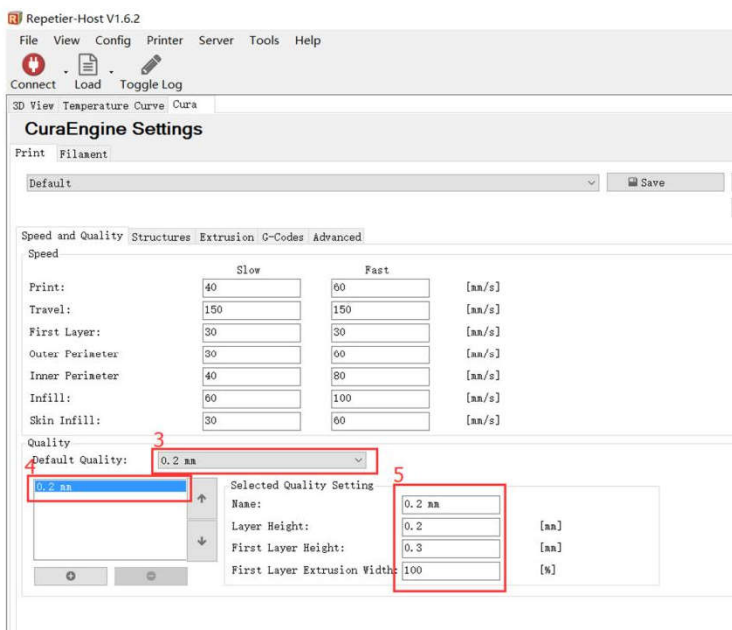


Click the button, load the folder

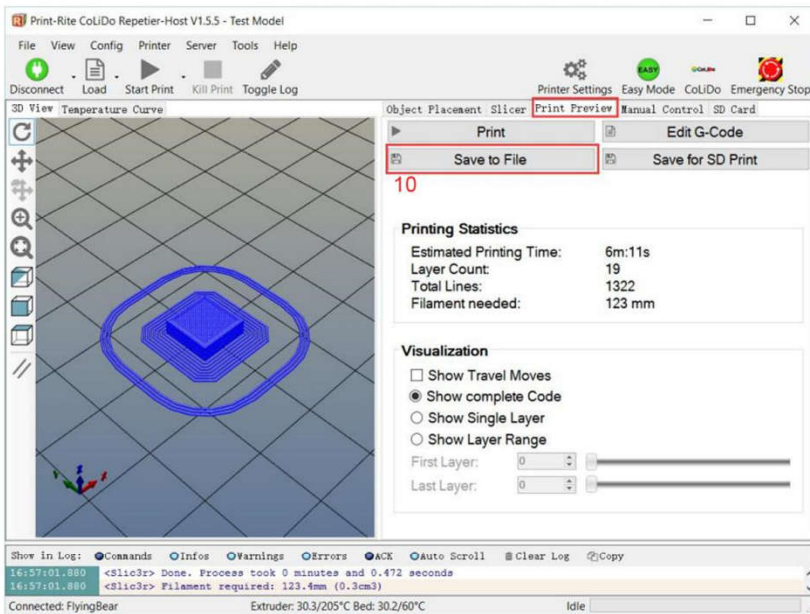
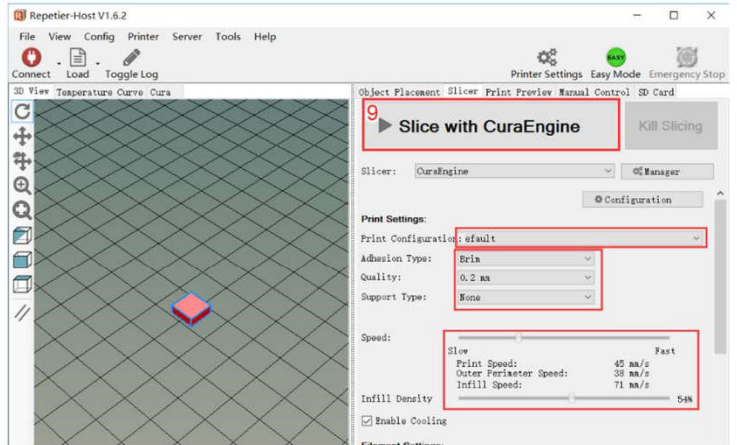
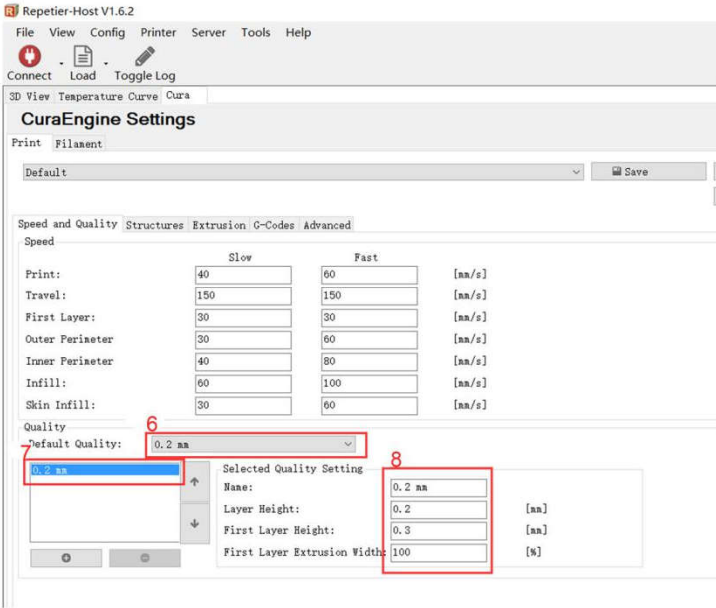
“Test Model” in “FlyingBear-tornado Printer”



Set parameters according to pictures



15. First print model



After slice is done, Click "Save to File" to save the file in SD card.



After insert the SD card into LCD, choose "Prepare" ---- "Auto home"



Choose "Prepare" --- "Preheat PLA" ---- "Preheat PLA"



Choose "Print from SD" ----- "Test Model"

Then wait a moment, after the heating process all finished, it will begin to print.

15、 First print model

Skills of printing vase

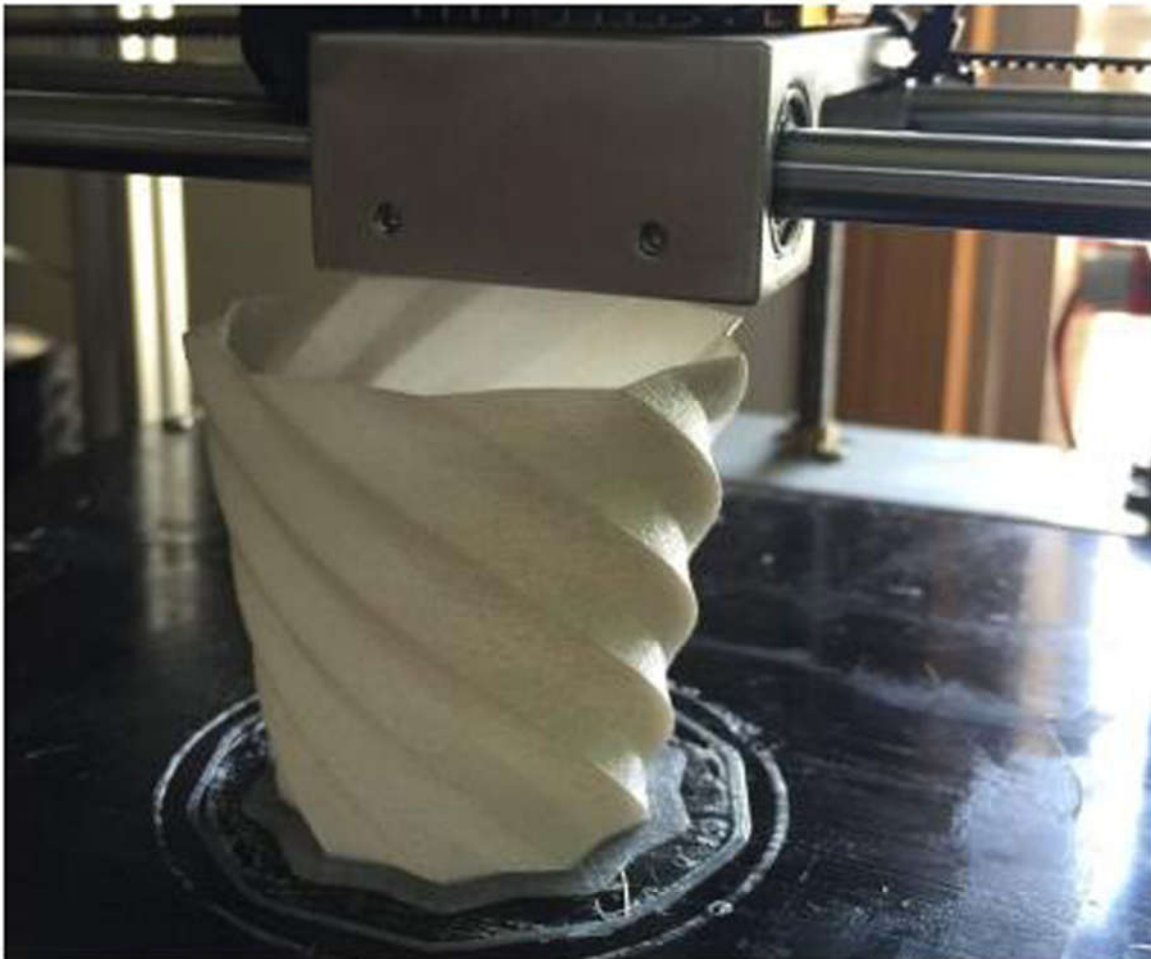
Printing different models need different skills.If you want to print a very fine looking model,you need to continue to explore yourself for a period of time.Next,introduce the skills of printing vase for you.

Step 1.Open the model folder "vase1" in "FlyingBear 3D Printer".

Step 2. Copy the model "vase 1" into the SD card and then start printing.

Step 3.After the start of the print , observe the quality of the model, you can change the "speed" and "flow" to get better print quality.

During the printing



16、Flyingbear-P905 wiring diagram

