

# MICROSMT PNP-V3 assemble manual

Ver 2.0

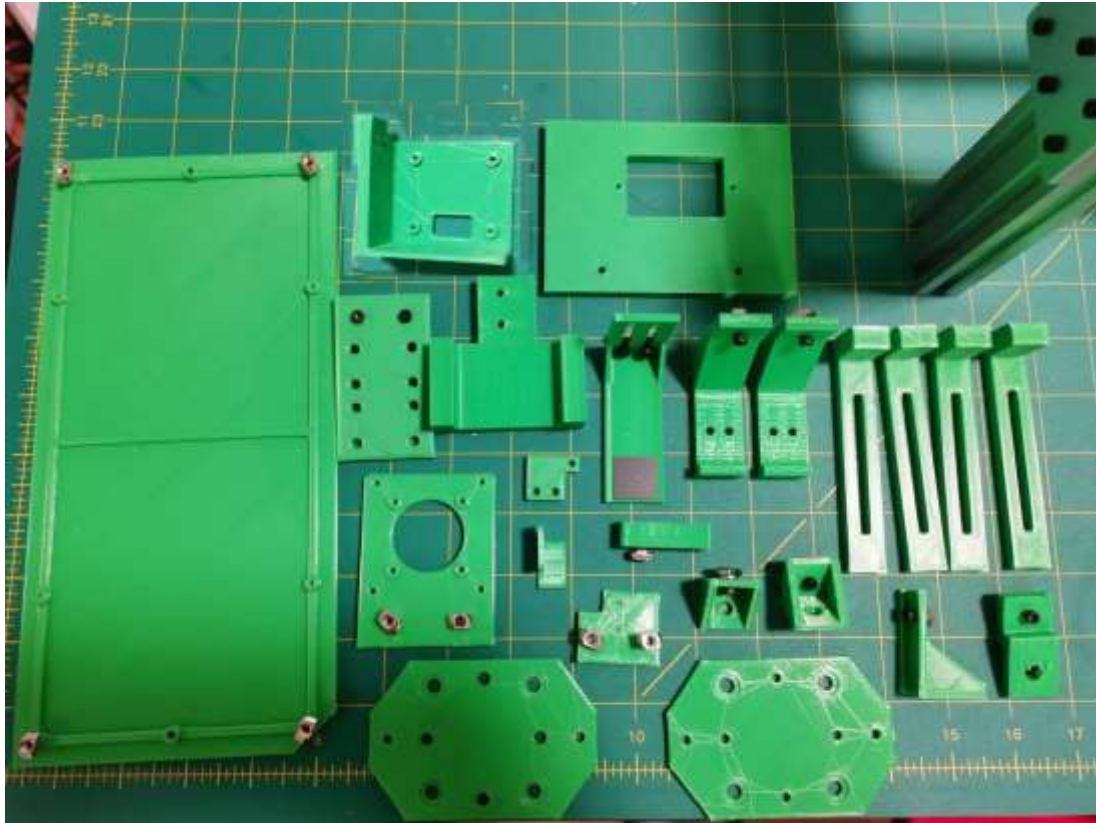
2023-09-04

Please download and read the other two documents at the same time

[microsmt\\_PNP\\_V3\\_frame Installation diagram.pdf](#)

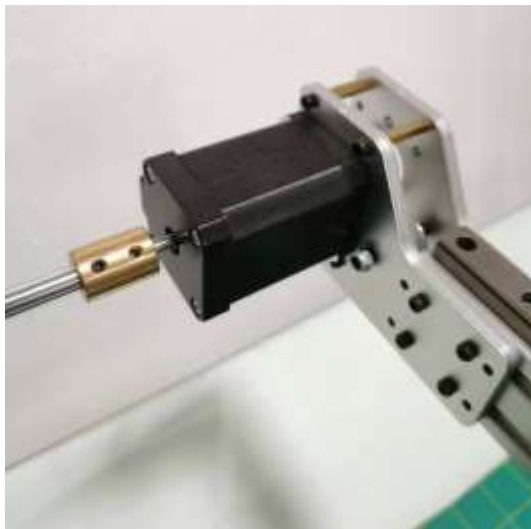
[microsmt\\_pnpboard\\_v1.7\\_manual.pdf](#)

STEP 1: Print all green 3D parts



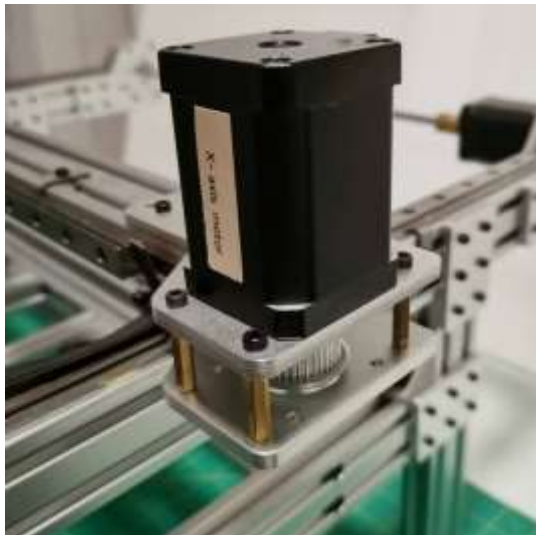
Note: total of 19 accessories need to be printed. Please refer to the 3D drawing folder.

STEP 2: Installing Y-axis stepper motor





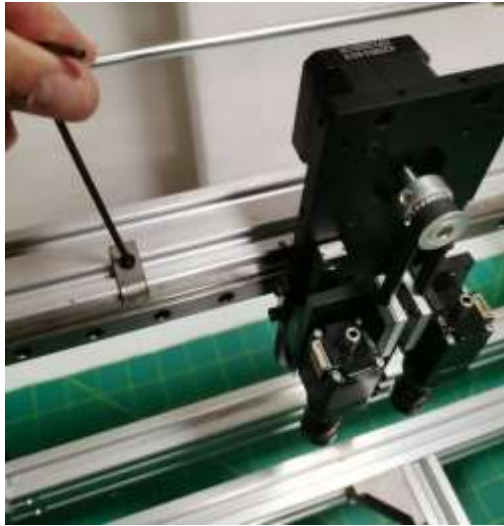
STEP 3: Installing X-axis stepper motor



STEP 4: Installing mounter head

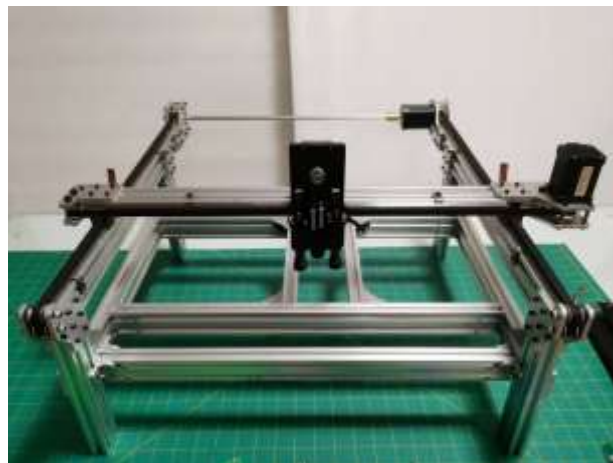
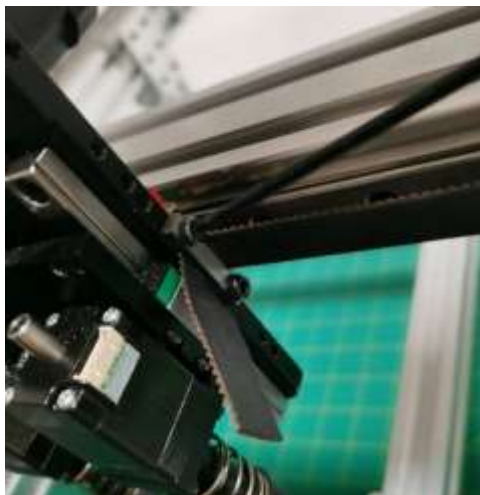
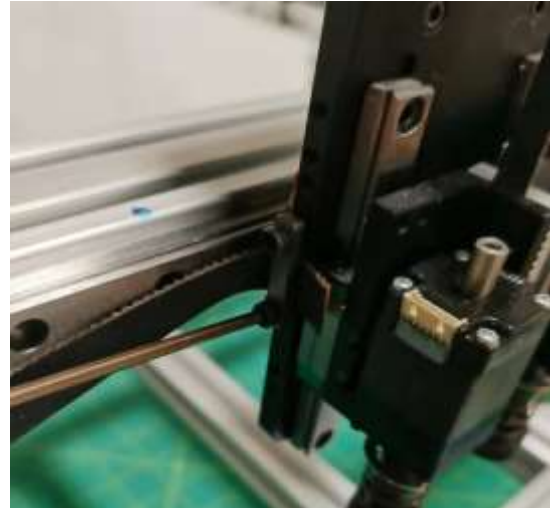
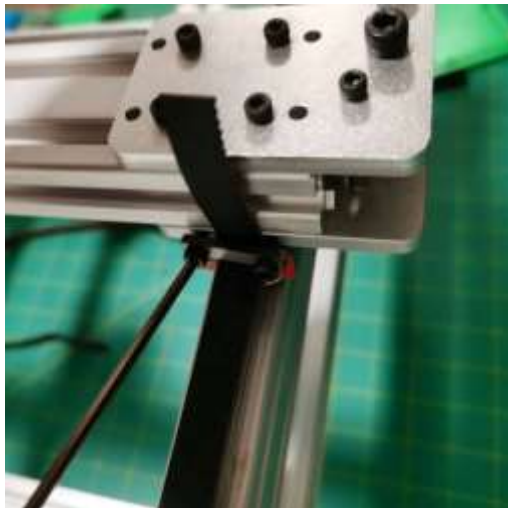
Note: use stainless steel sheet to center the guide rail.





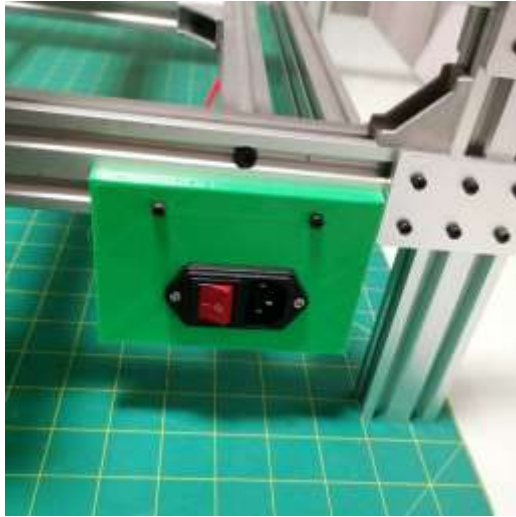
STEP 5 : Installing belt

Note: The belt must be tensioned, otherwise the accuracy will be affected





**STEP 6 : Installing the AC power socket**

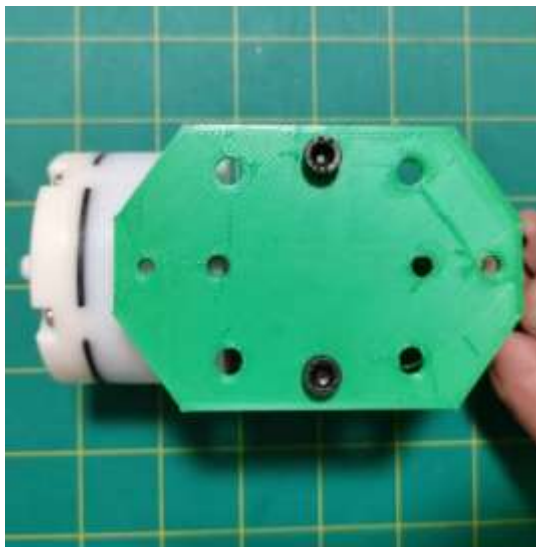


**STEP 7 : Installing 24V switching power supply**



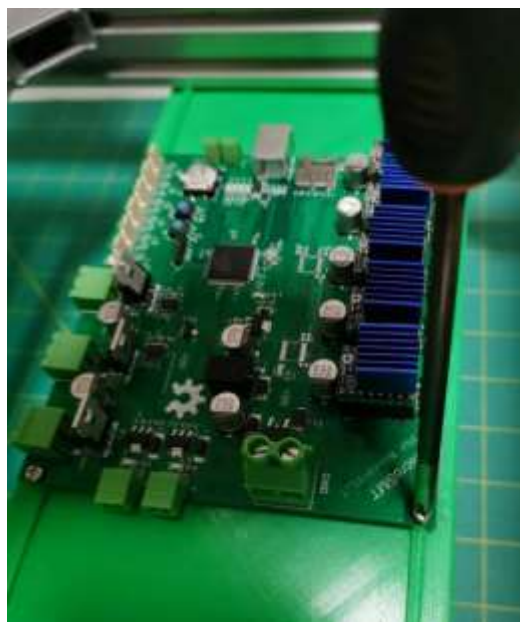


STEP 8 : Installing Vacuum pump



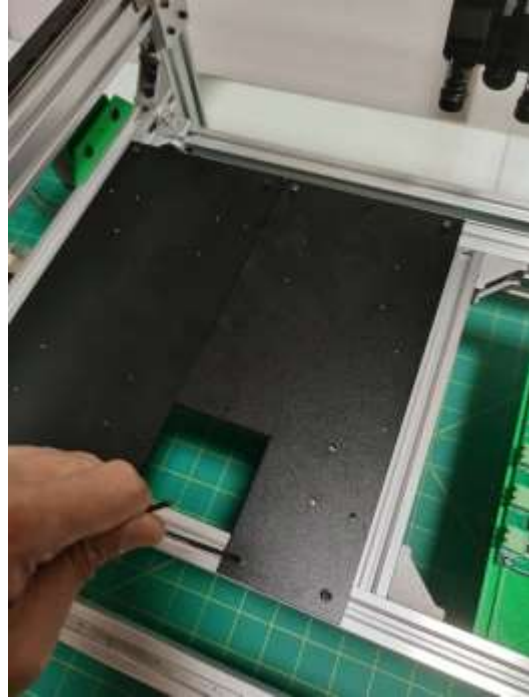


STEP 9 : Installing motherboard

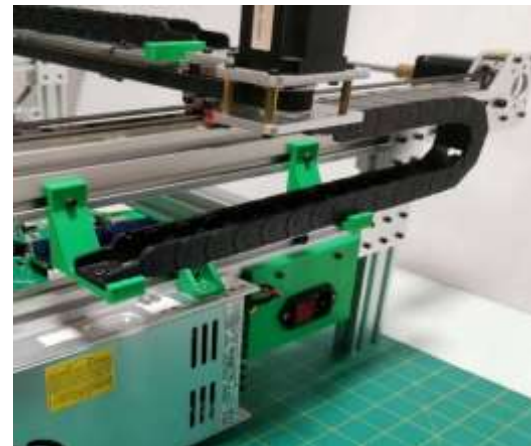




STEP 10 : Installing aluminum alloy platform



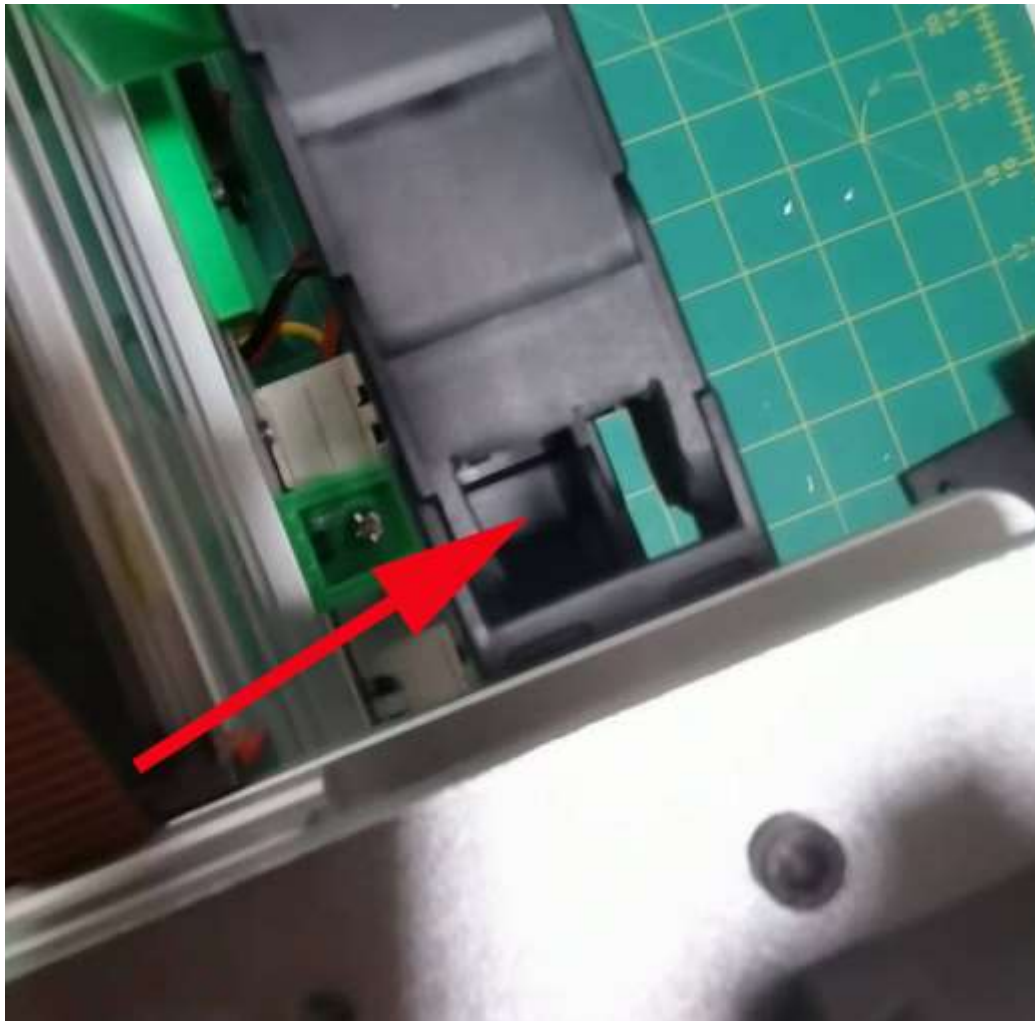
STEP 11 : Installing Y-axis tank chain



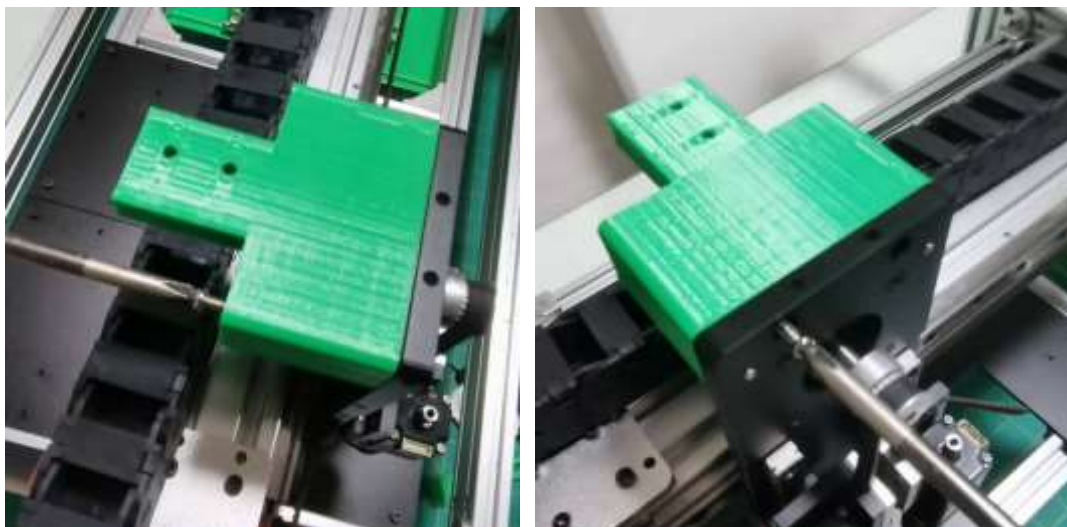


Note: 1:Here, part of the plastic should be cut to form a hole, because the X axis wire will enter the Y axis tank chain from here.

2:The length of tank chain can be adjusted according to actual needs.



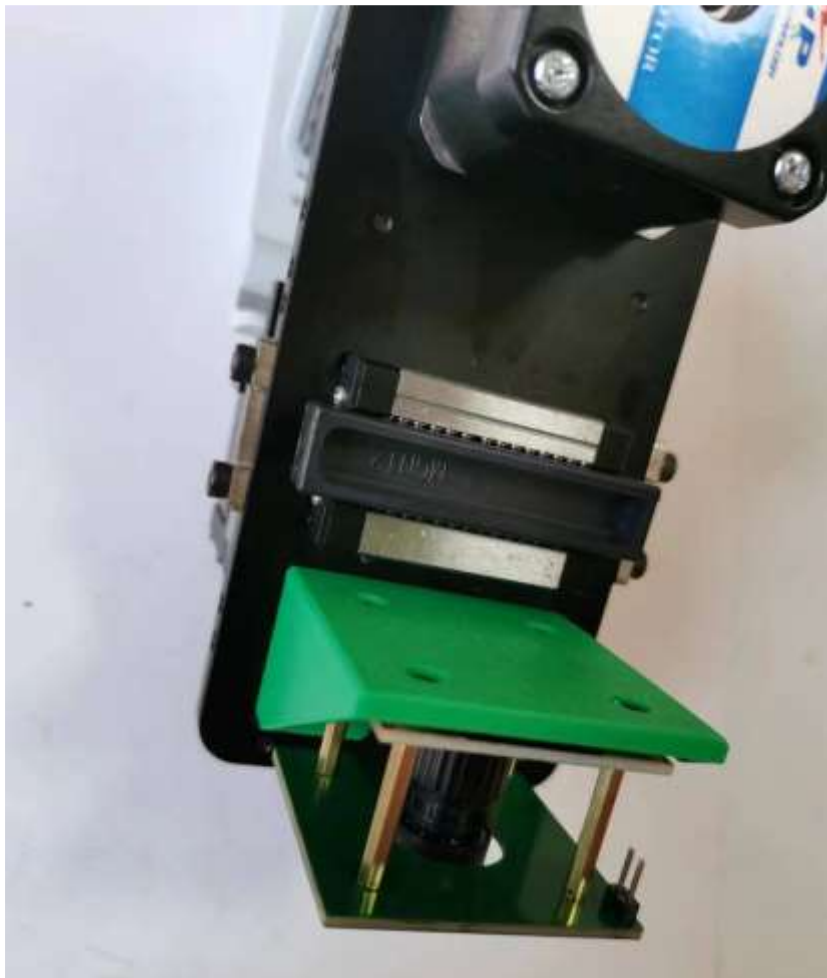
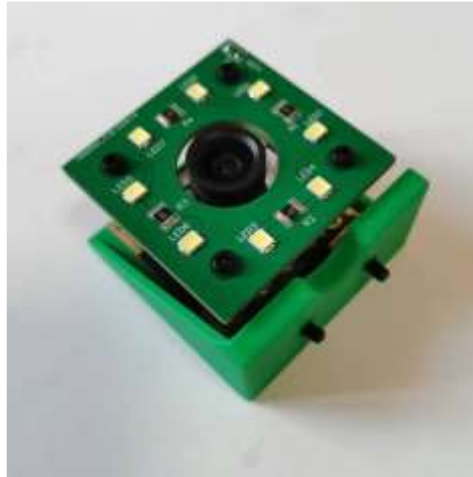
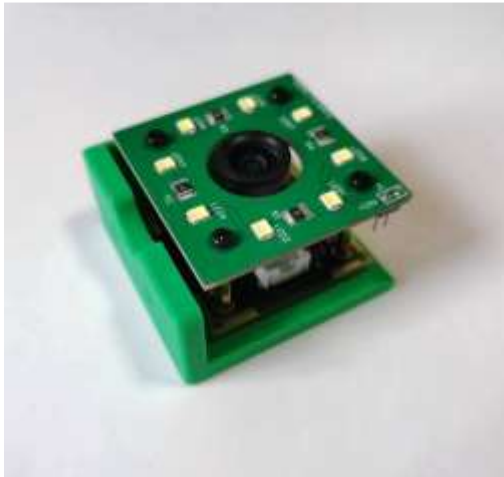
STEP 12 : Installing the Z-axis motor cover plate



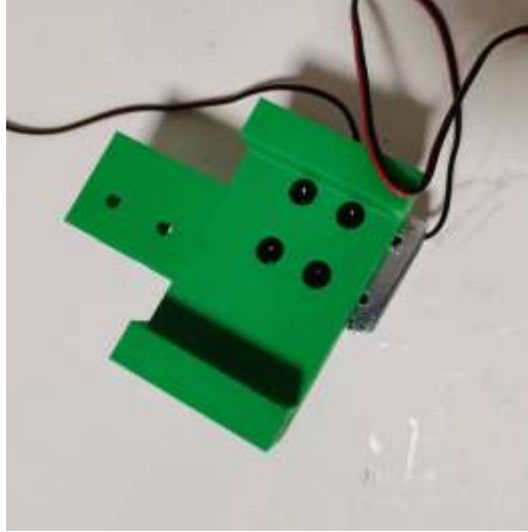
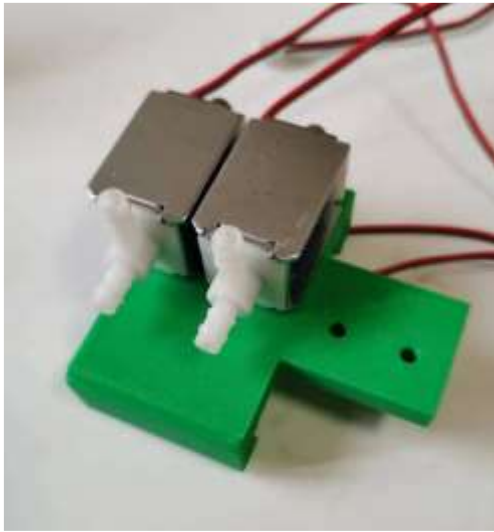
**STEP 13: Installing the top camera**

**Note:** 1: the camera must be installed horizontally, otherwise the accuracy will be affected.

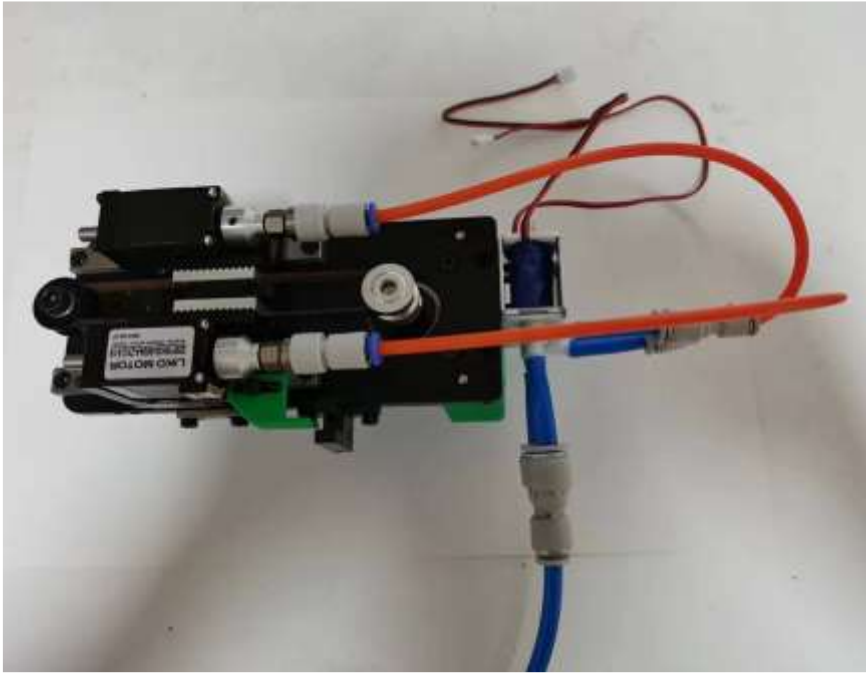
2: Manually rotate the lens to change the focus.



STEP 14: Installing the solenoid valve

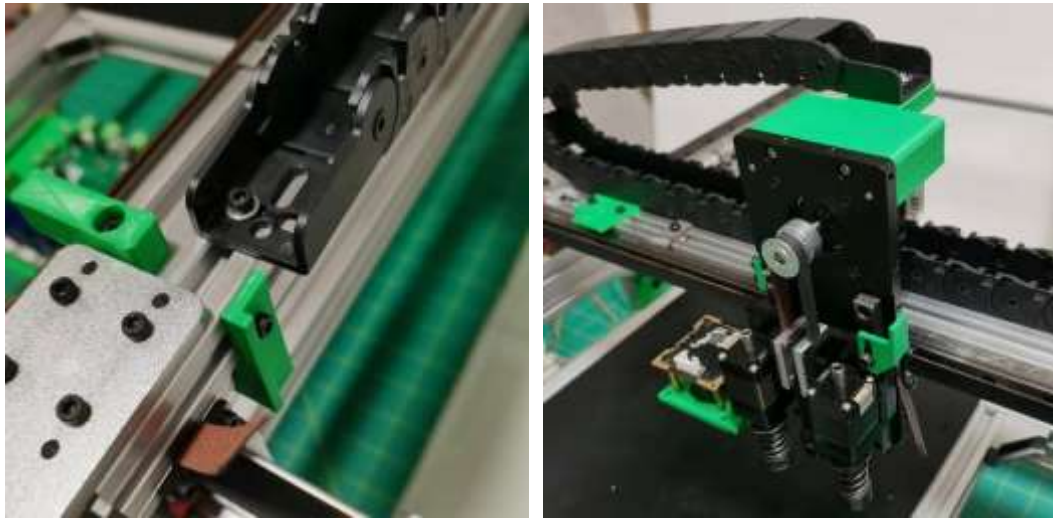




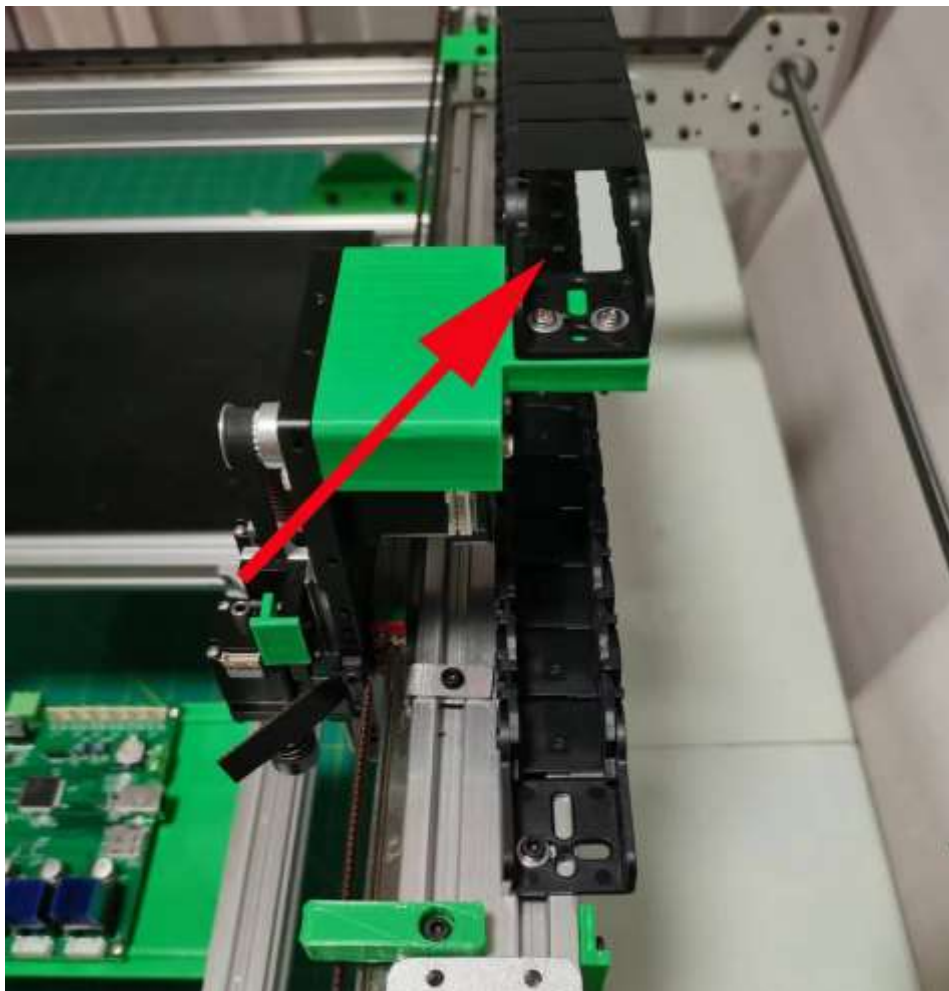




**STEP 15 : Installing the X-axis tank chain**



**Note:** 1.turn this connector upside down. The wire will come out of this hole  
2. The length of tank chain can be adjusted according to actual needs.

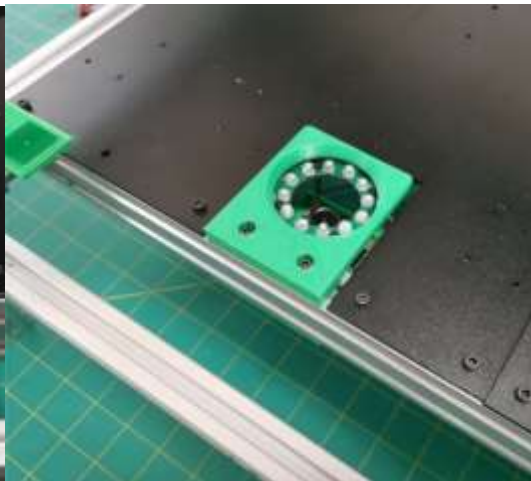
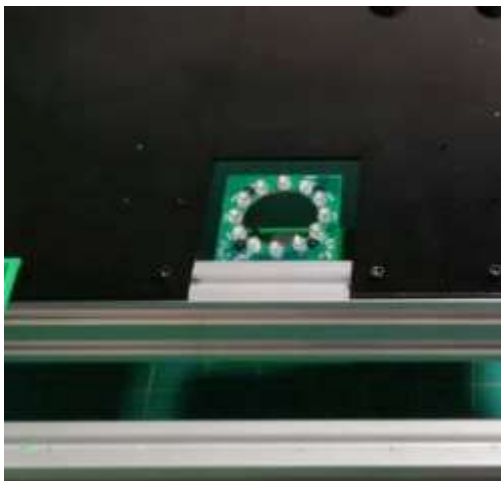
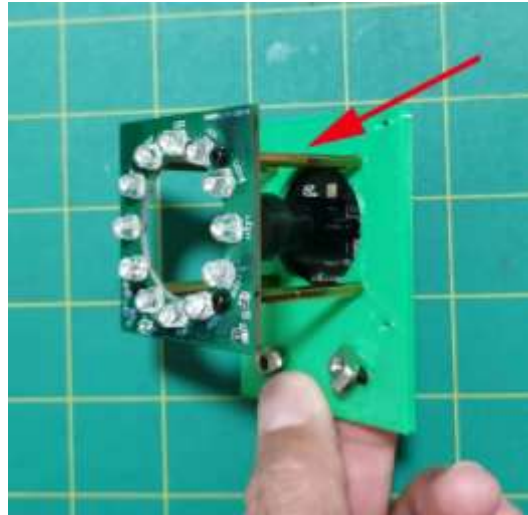
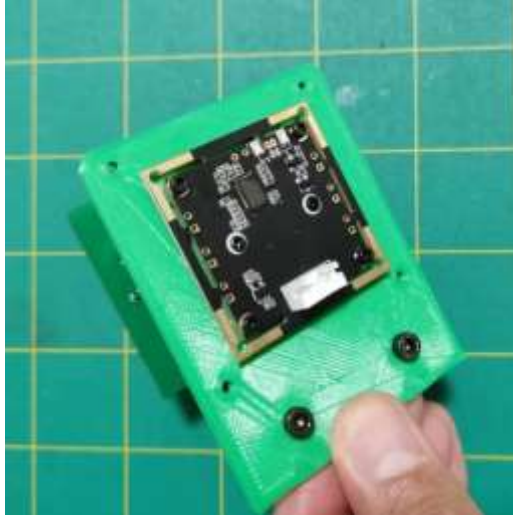




#### STEP 16 : Installing the bottom camera

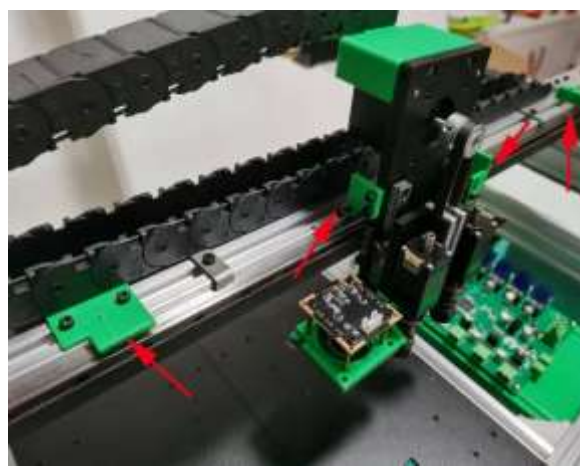
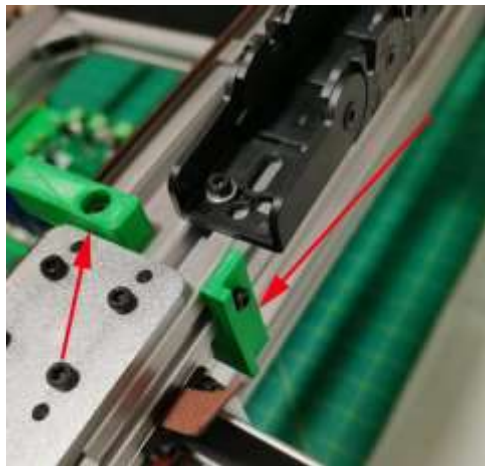
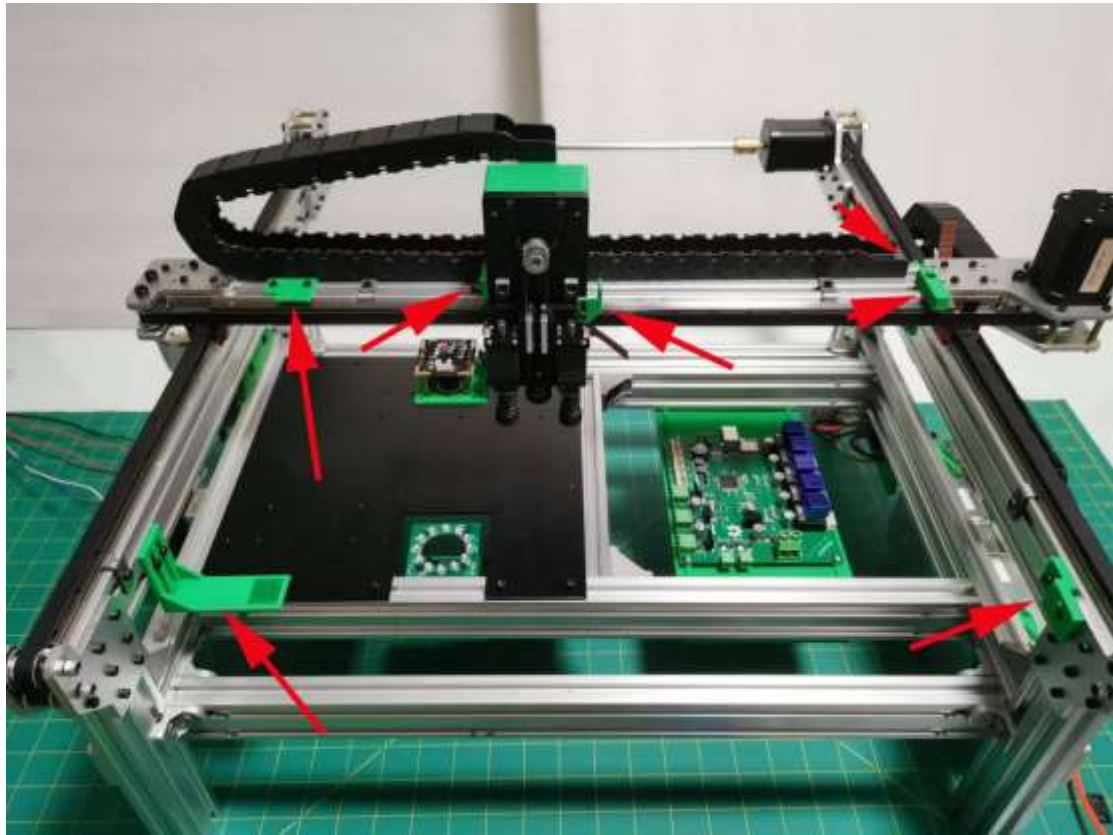
Note: 1: The camera must be installed horizontally, otherwise the accuracy will be affected

2: The total length of copper column is 37mm, which is connected by two sections.

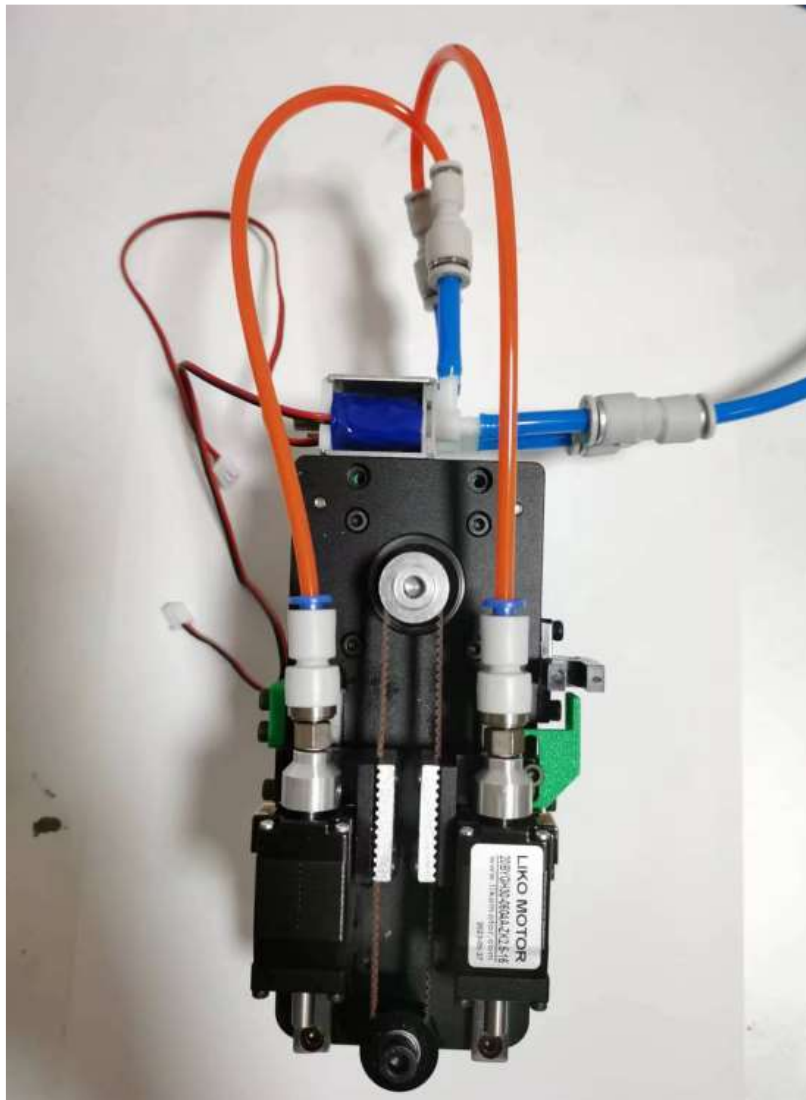
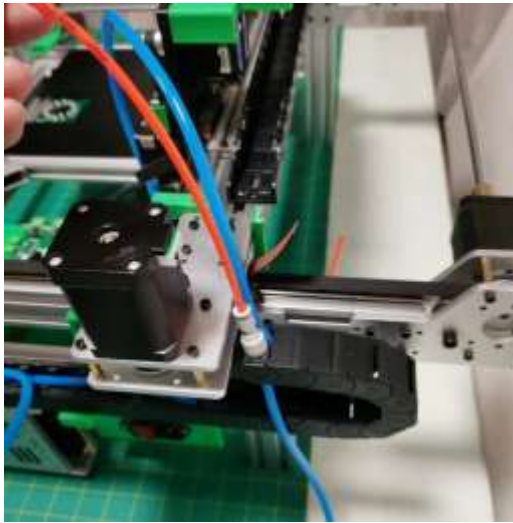


## STEP 17 : Install the remaining 3D printing accessories

**Note: 1: The height of Zero shall be the same as that of PCB.**



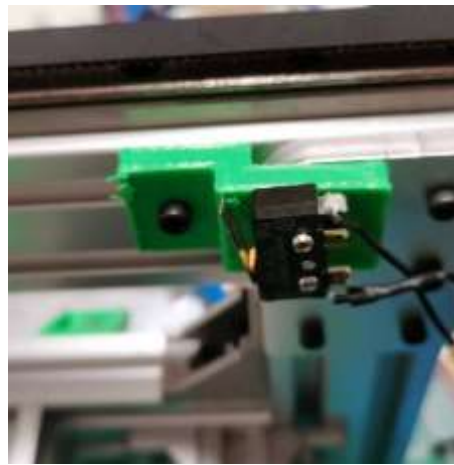
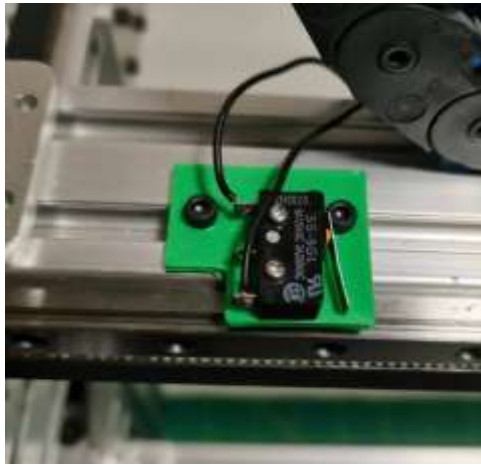
**STEP 18 : Connect and position air line**





#### STEP 19 : install endstop switch

Note: know the principle of endstop switch and connection mode, please refer to the document [microsmt\\_pnpboard\\_v1.7\\_manual.pdf](#).



#### STEP 20 : install cable

Note: X-axis endstop cable need not put in X-axis tank chain.

Y-axis endstop cable need not put in all tank chain.

X-axis stepper motor cable need not put in X-axis tank chain.

Y-axis stepper motor cable need not put in all tank chain.

