

MICROSMT PNP-V3 assemble manual

Ver 1.0

2022-11-10

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

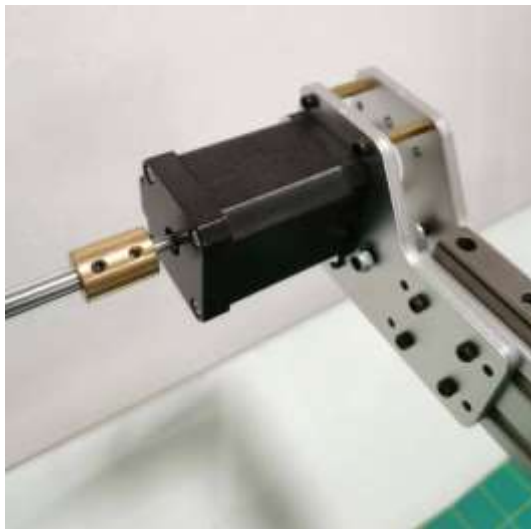
[microsmt_PNP_V3_frame Installation diagram.pdf](#)

[microsmt_pnpboard_v1.7_manual.pdf](#)

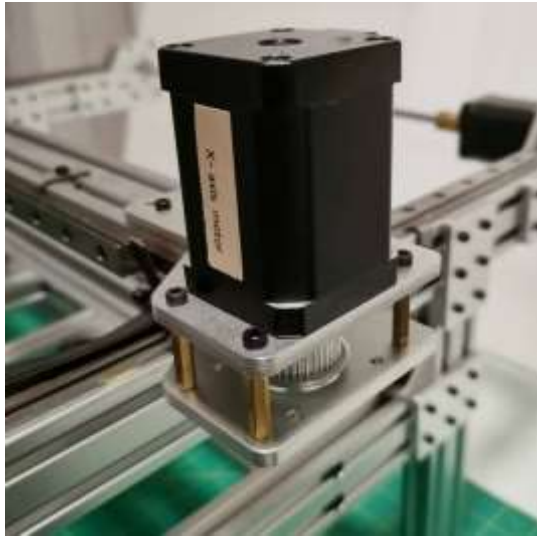
STEP 1: Print all green 3D parts



STEP 2: Installing Y-axis stepper motor

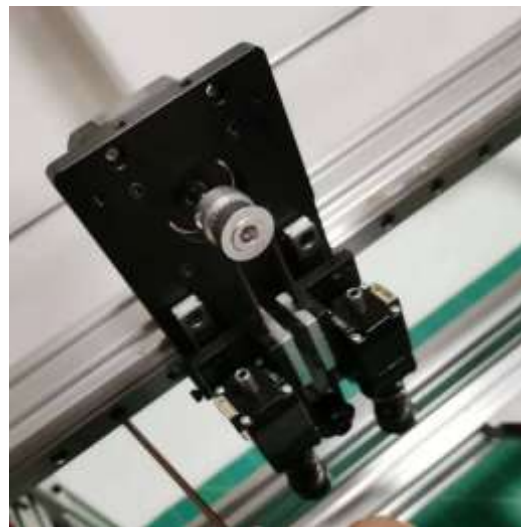
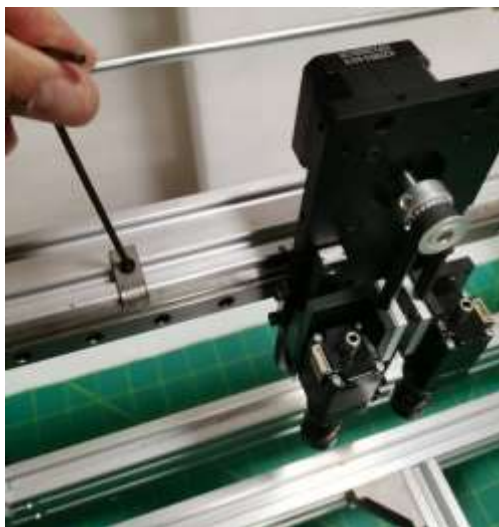


STEP 3: Installing X-axis stepper motor



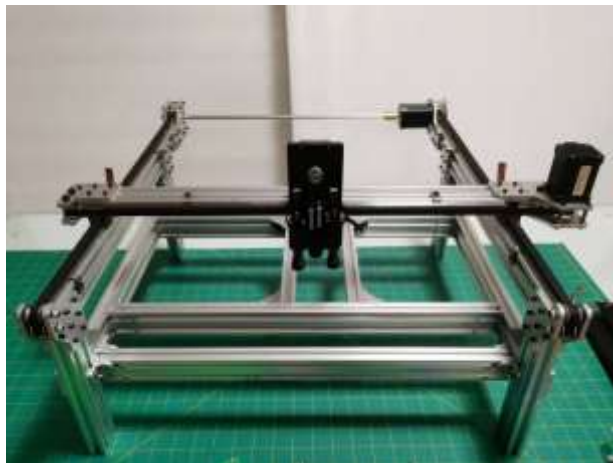
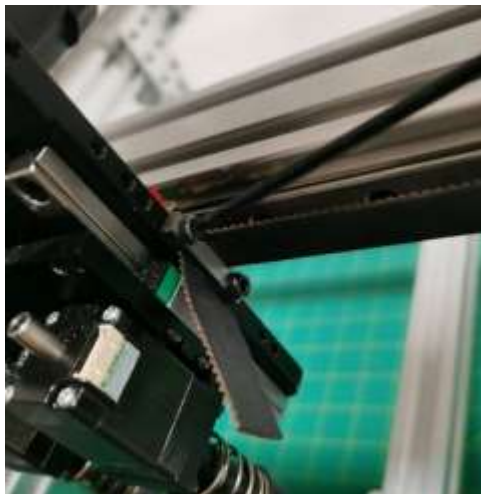
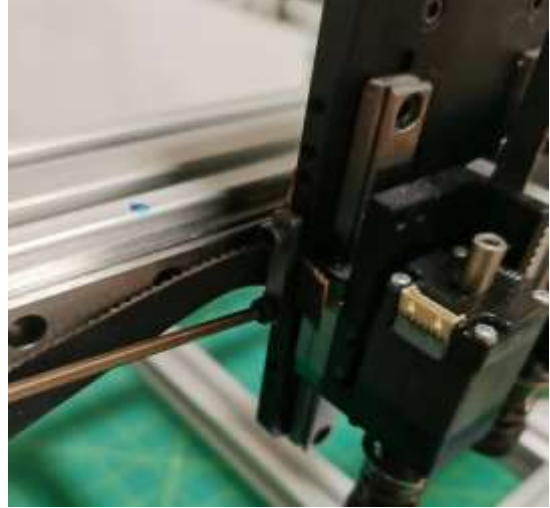
STEP 4: Installing mounter head

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



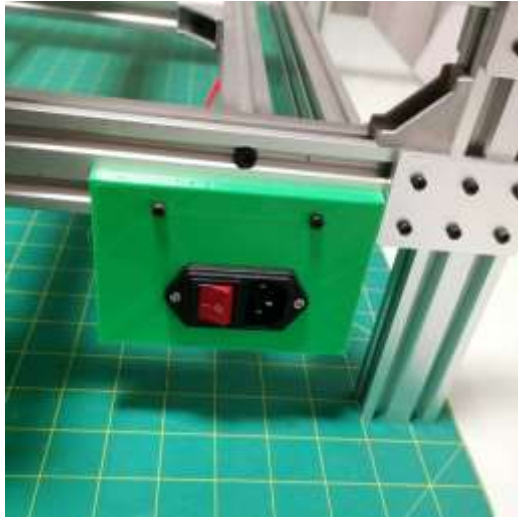
STEP 5 : Installing belt

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



STEP 6 : Installing the AC power socket

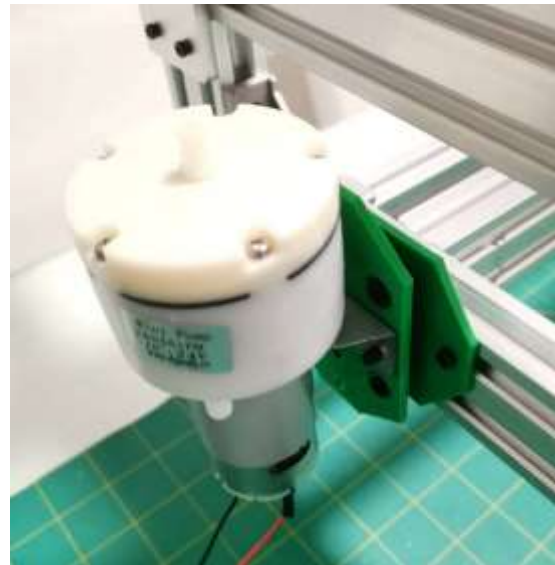
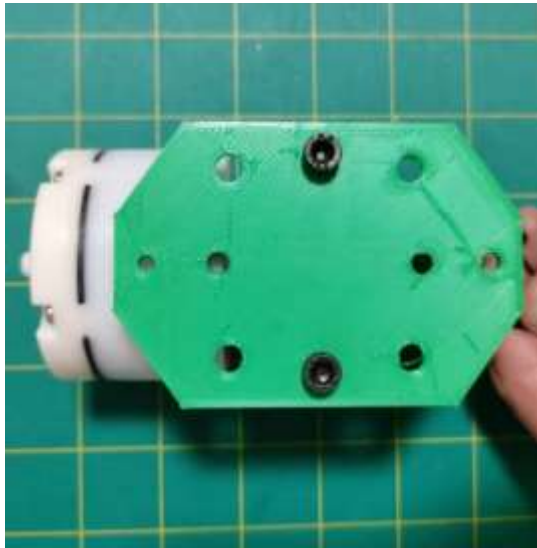




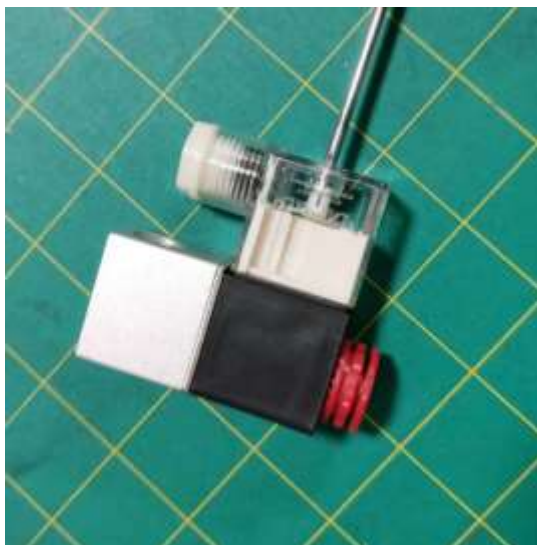
STEP 7 : Installing 24V switching power supply

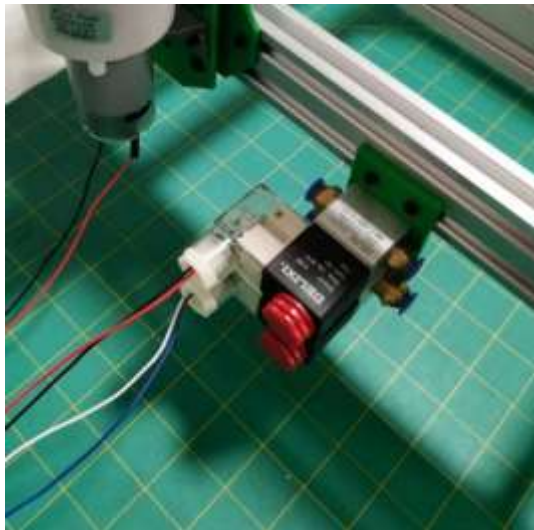


STEP 8 : Installing Vacuum pump

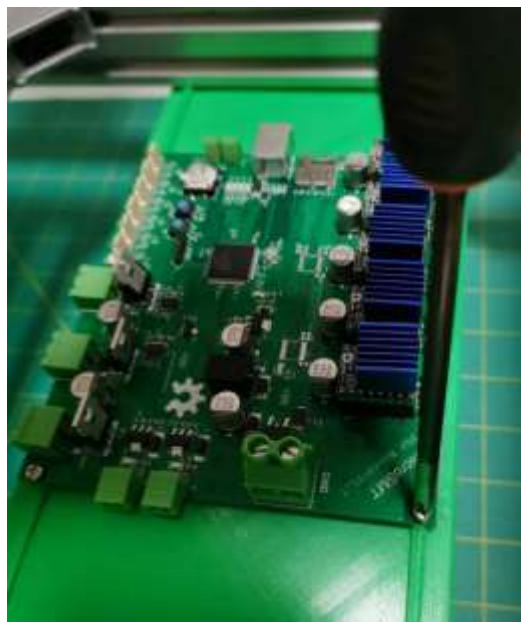


STEP 9 : Installing solenoid valve

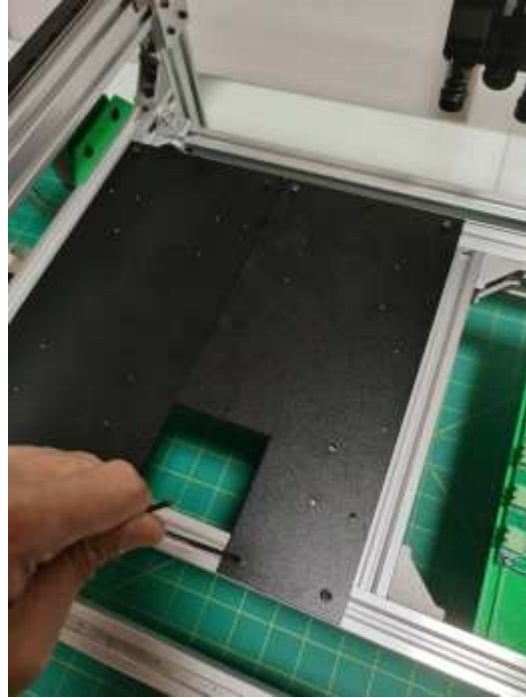




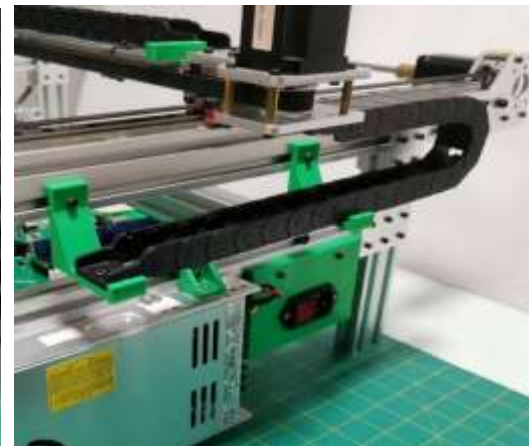
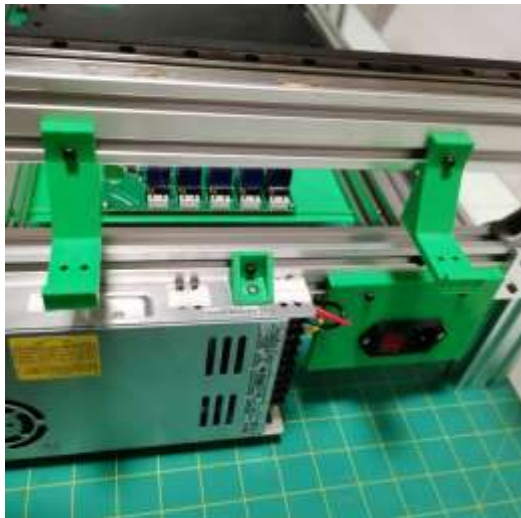
STEP 10 : Installing motherboard



STEP 11 : Installing aluminum alloy platform

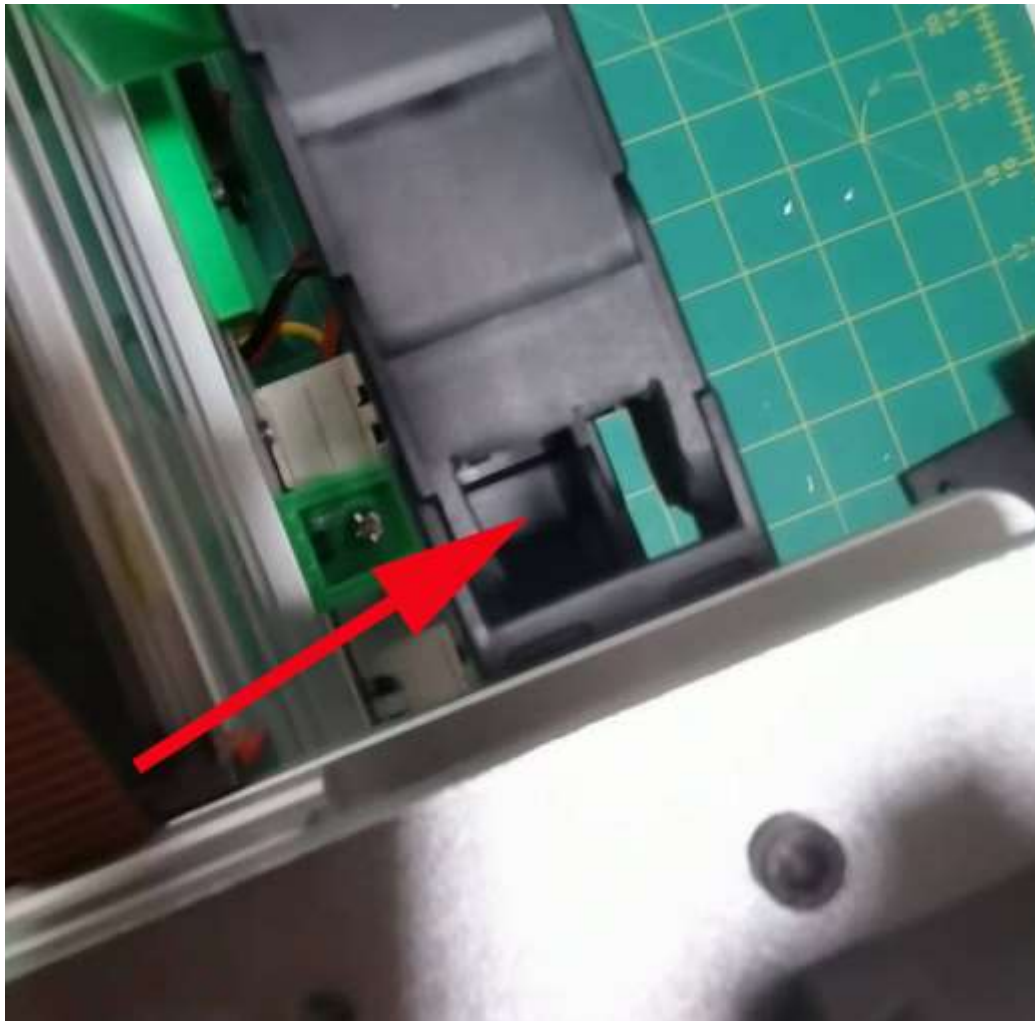


STEP 12 : Installing Y-axis tank chain

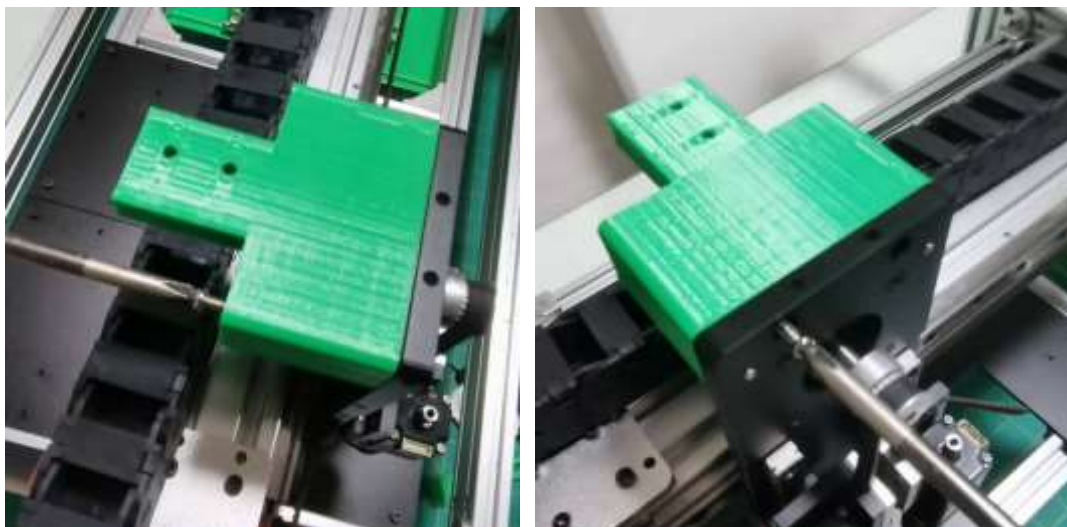


Note: 1:Here, part of the plastic should be cut to form a hole, because the X axis wire will enter the Y axis tank chain from here.

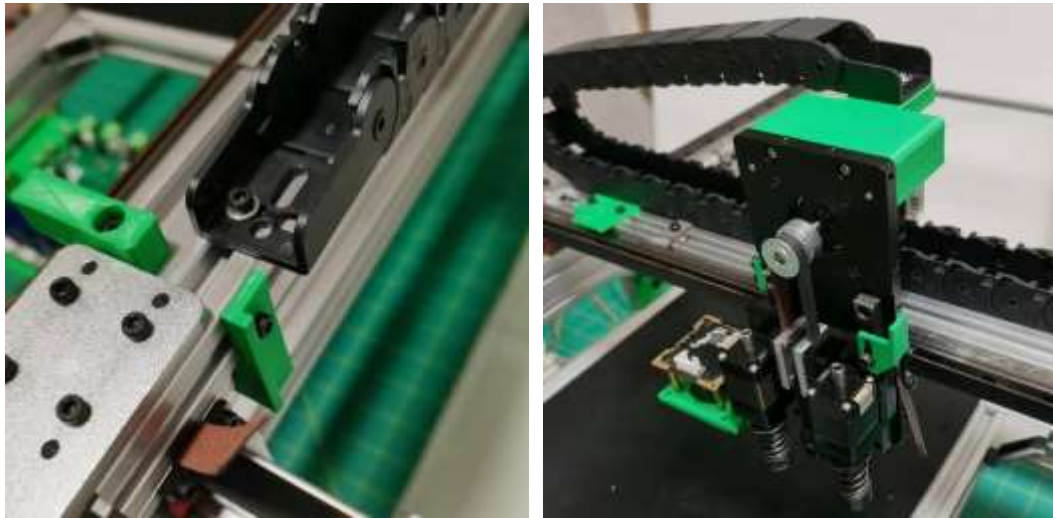
2:The length of tank chain can be adjusted according to actual needs.



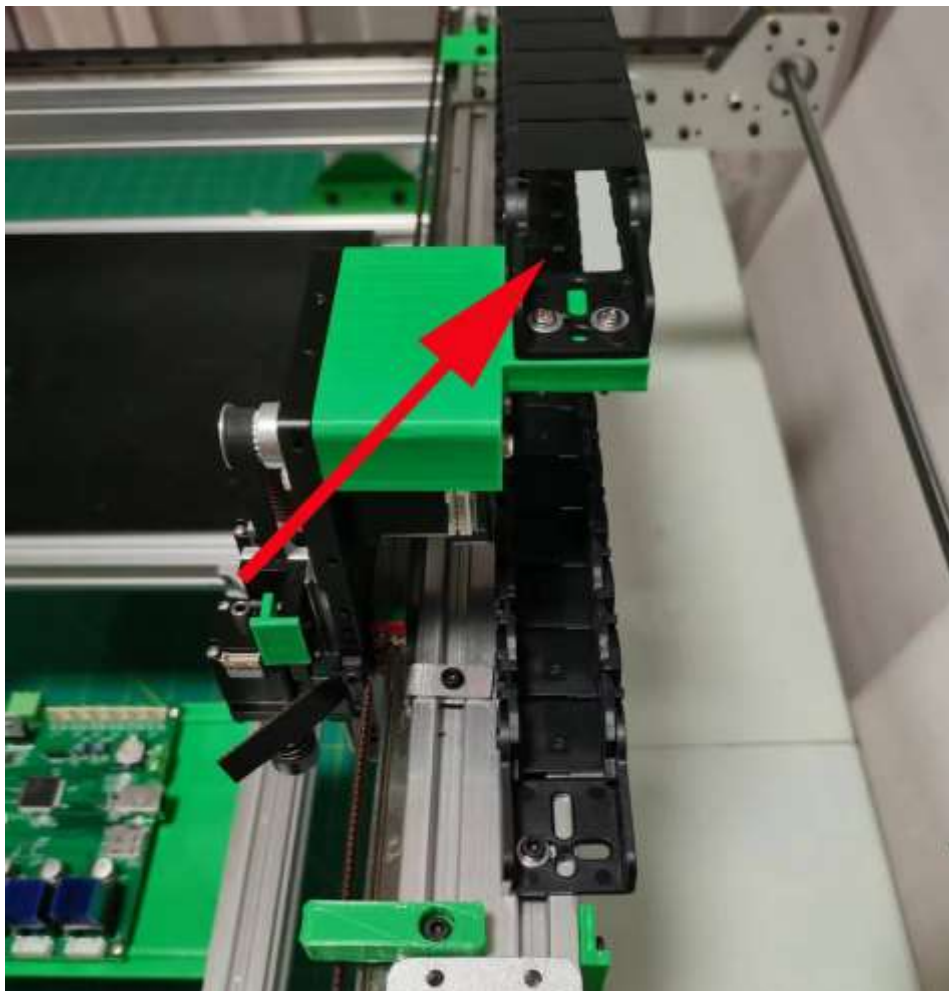
STEP 13 : Installing the Z-axis motor cover plate



STEP 14 : Installing the X-axis tank chain

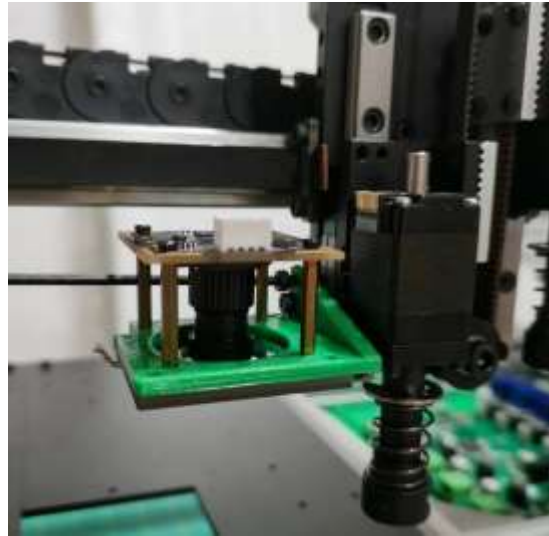


Note: 1.turn this connector upside down. The wire will come out of this hole
2. The length of tank chain can be adjusted according to actual needs.



STEP 15 : Installing the top camera

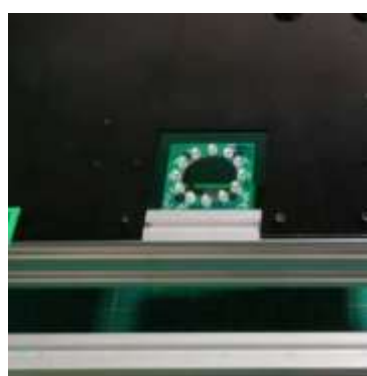
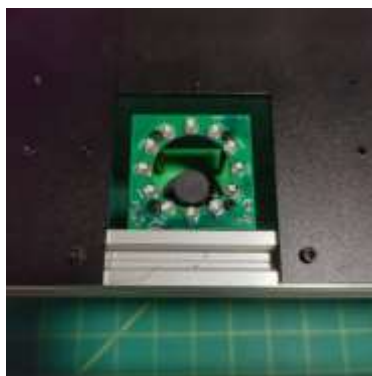
Note: The camera must be installed horizontally, otherwise the accuracy will be affected



STEP 16 : Installing the bottom camera

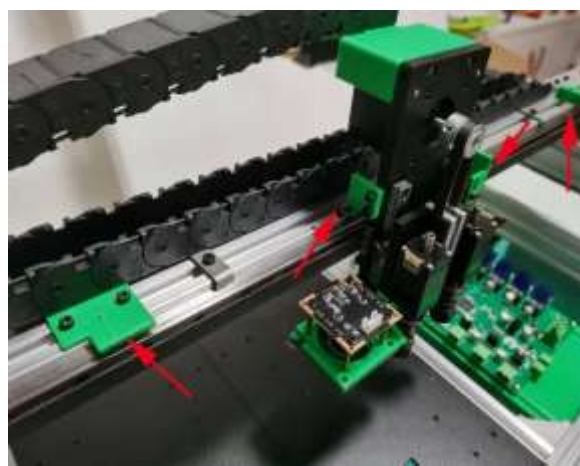
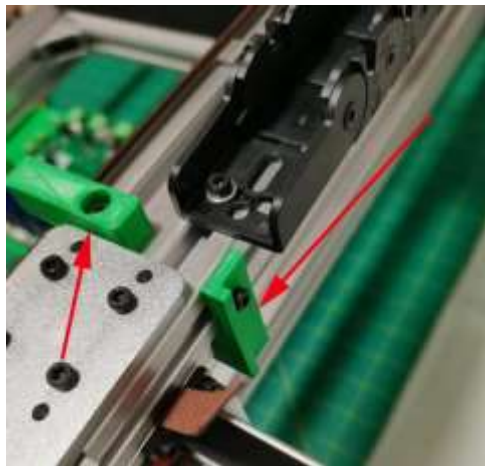
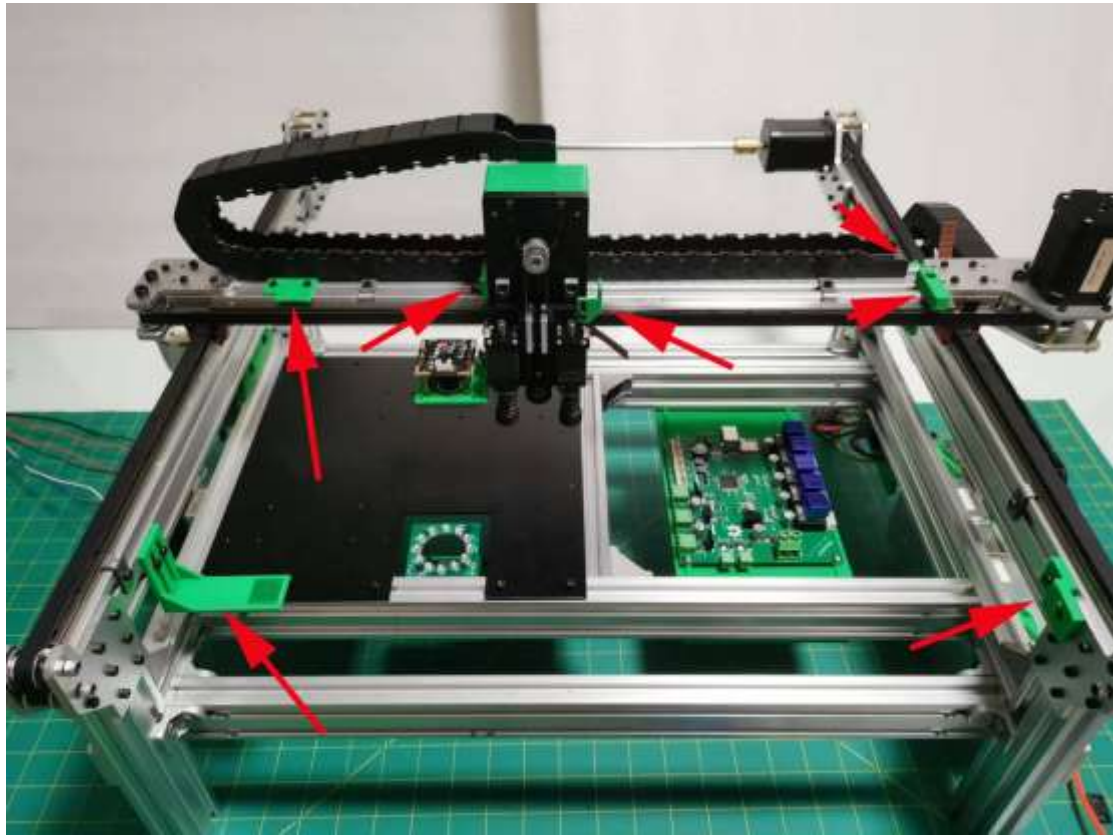
Note: 1: The camera must be installed horizontally, otherwise the accuracy will be affected

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

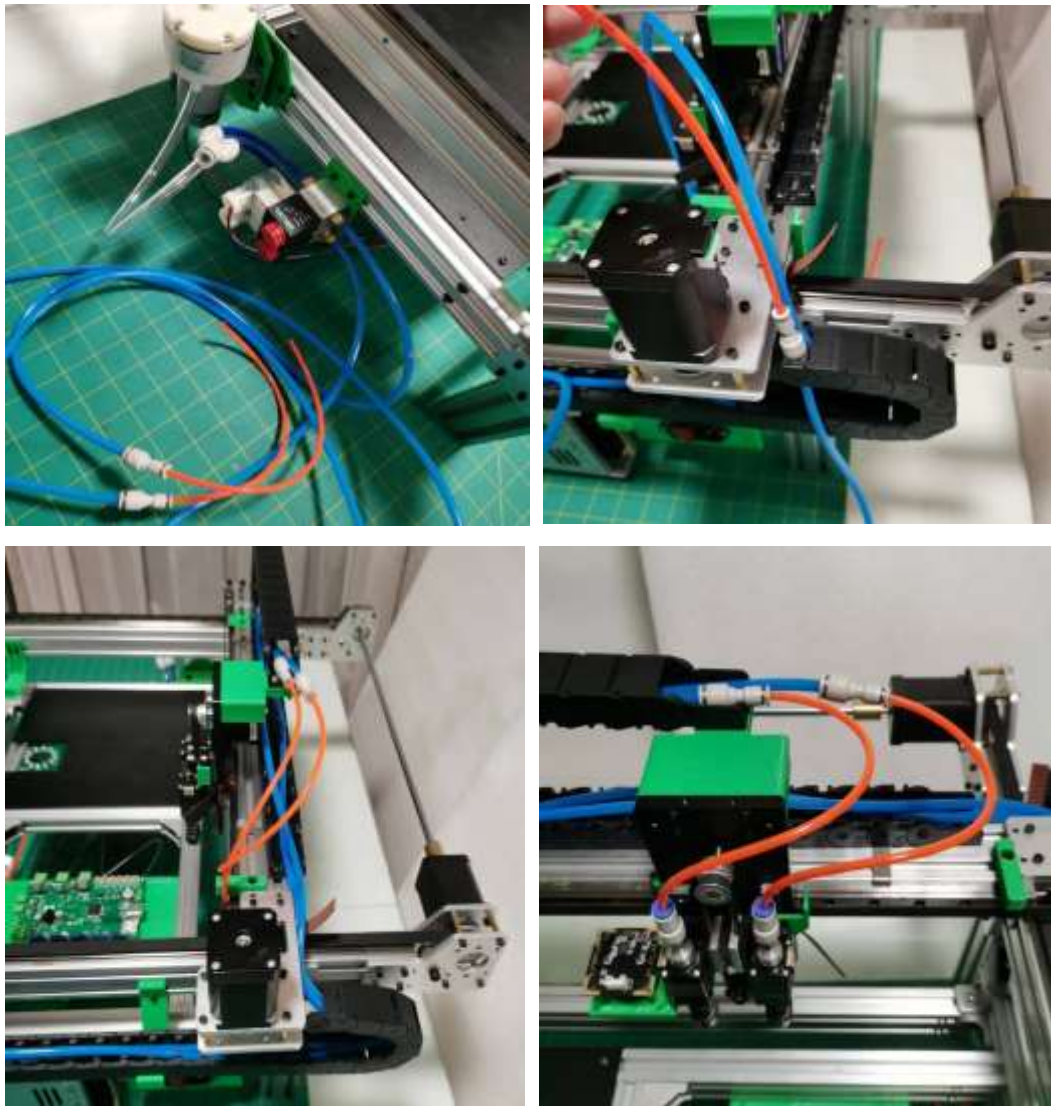


STEP 17 : Install the remaining 3D printing accessories

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.

