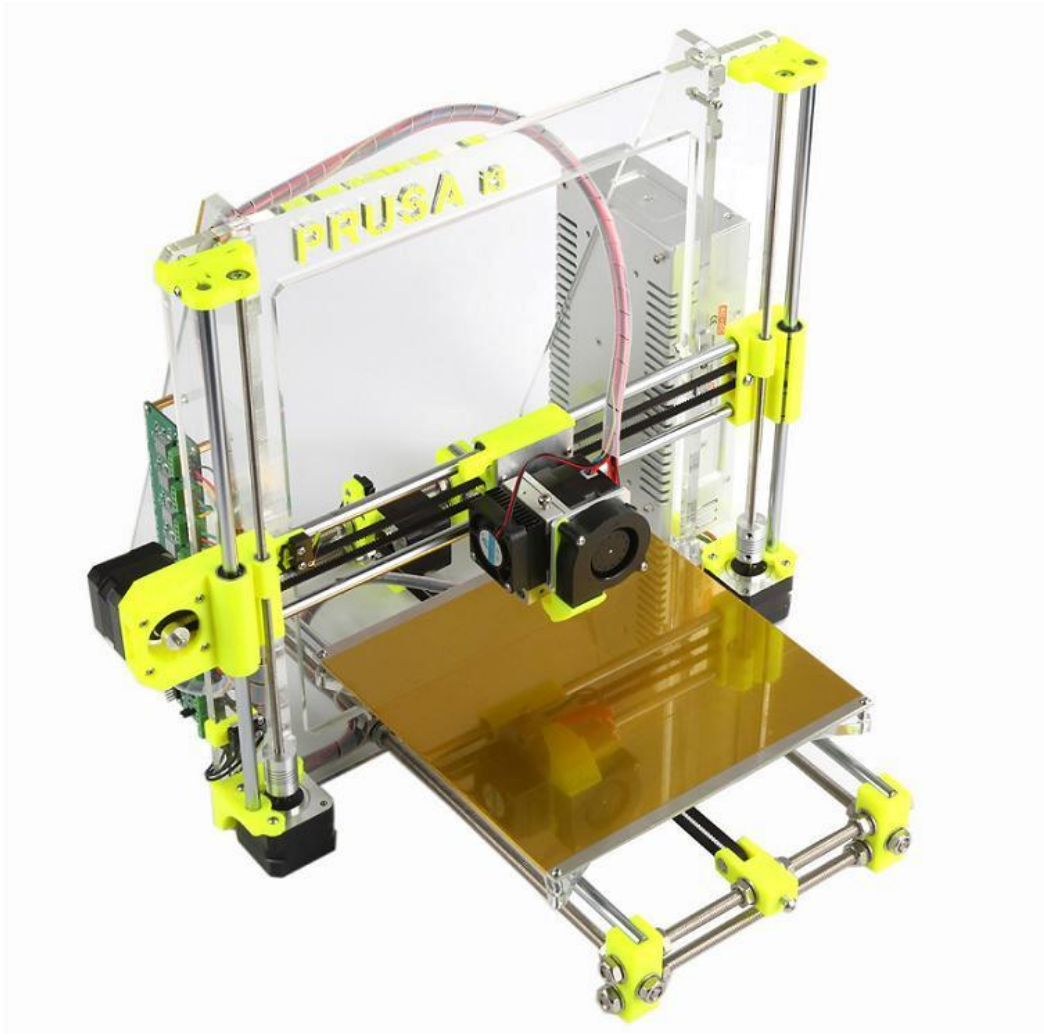


Prusa i3 Assembly Manual

Version 0.9



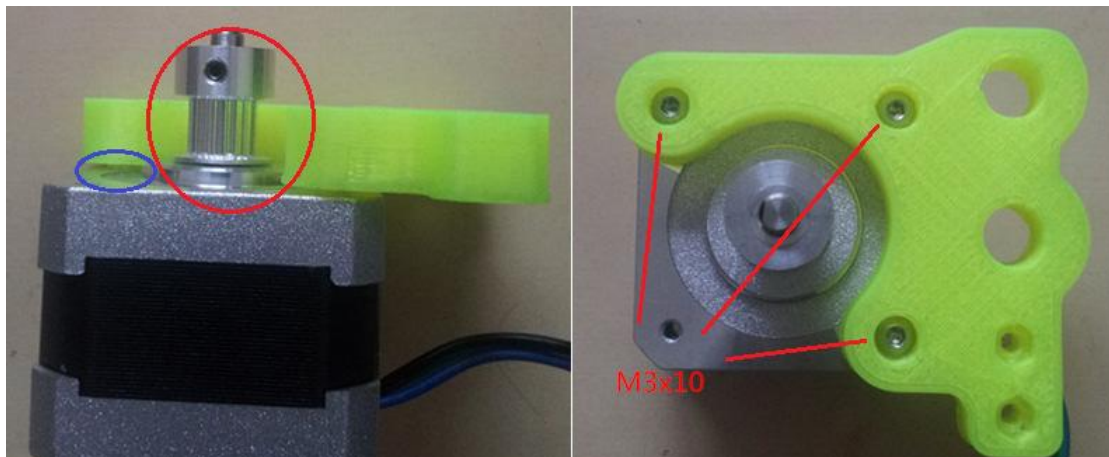
Y-axis Assembly

1. Motor Part of Y-axis

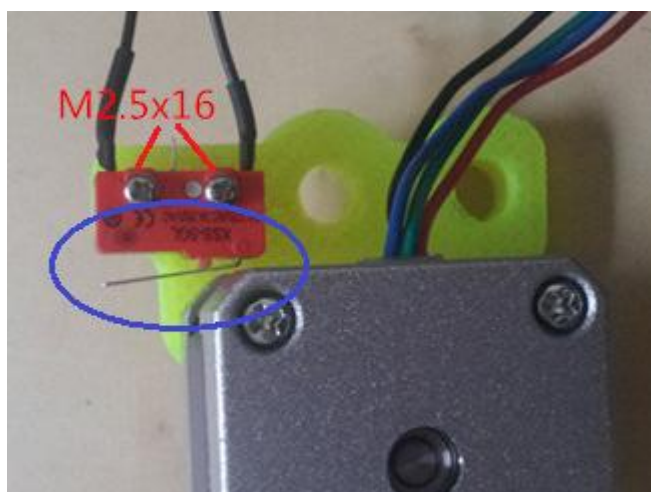
Find out all the components as below, note the distinguish of the motor, 2 motors with plug are Z-axis, and as the same with the other three. Here you should choose the motor without plug.



Assemble all the components as below, separate the blue circling part between motor and motor frame with a nylon pad.



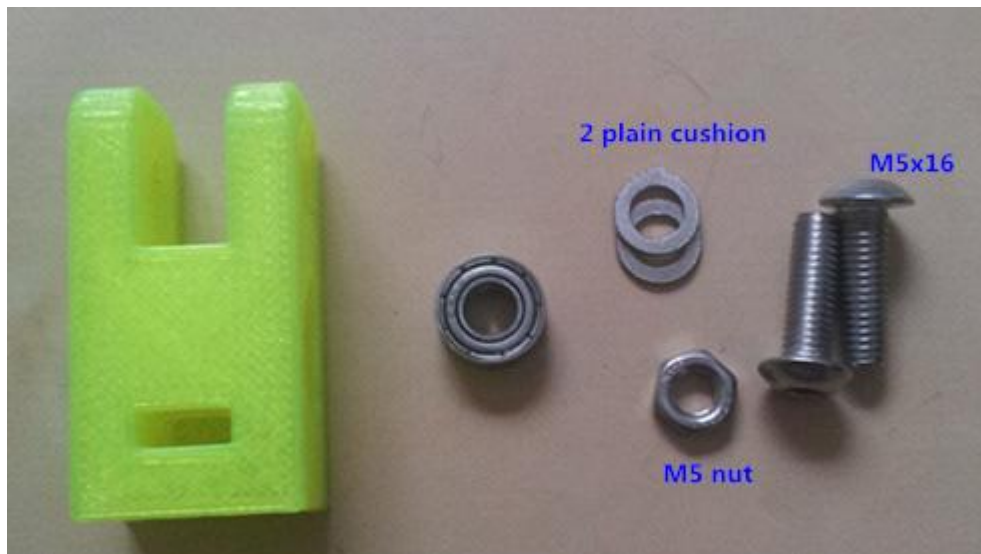
Pay attention to the opening of Endstop as below:



2. Belt Stretching Part of Y-axis

Make your making more easy!

Find out all the components as below:



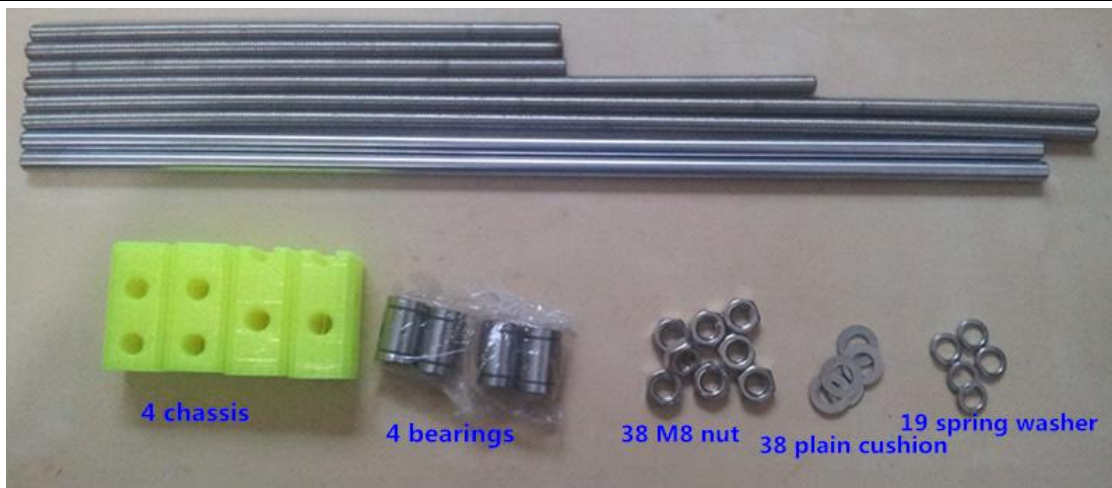
After assembling, don't screw up the screw through axle bearing and leave enough space for the axle bearing to rotate.



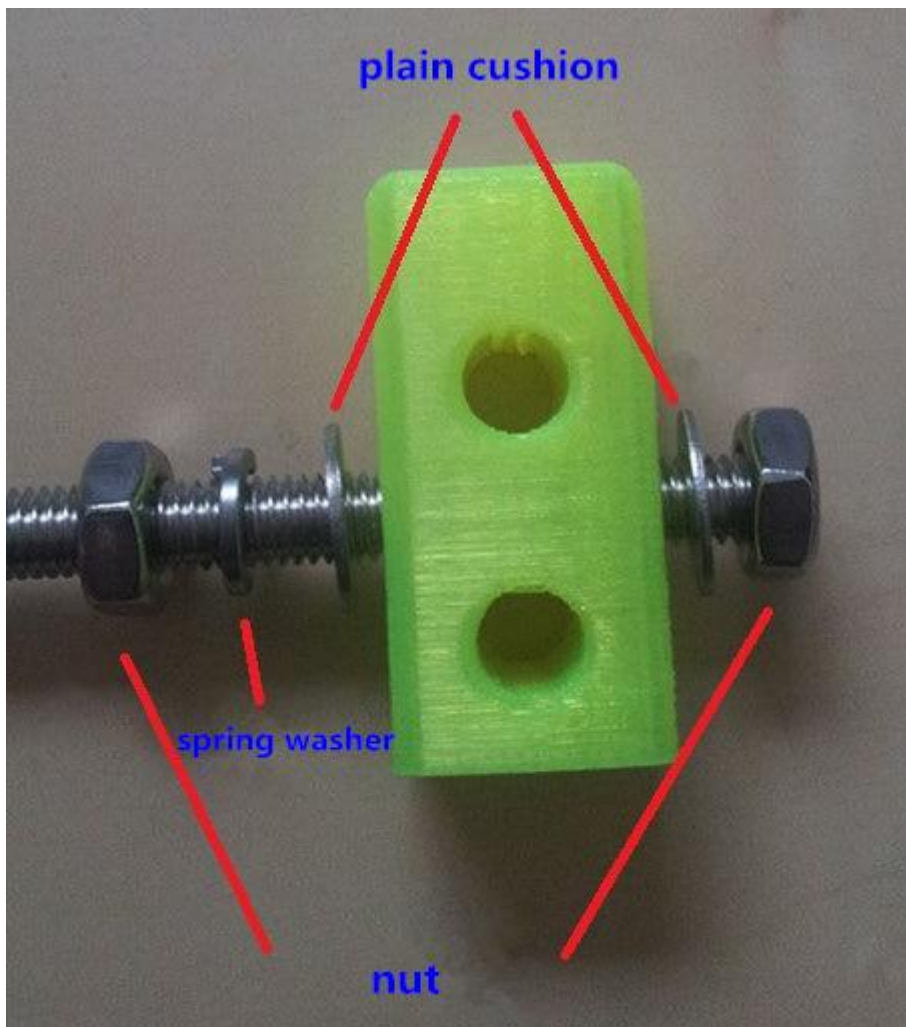
3. Framework Assembly of Y-axis

Find out all the components as below:

Optic axis guide rail: 395mm*2, threaded rod 415 mm*2, threaded rod 205 mm*3, linear bearing *4, screw 306 mm*1.



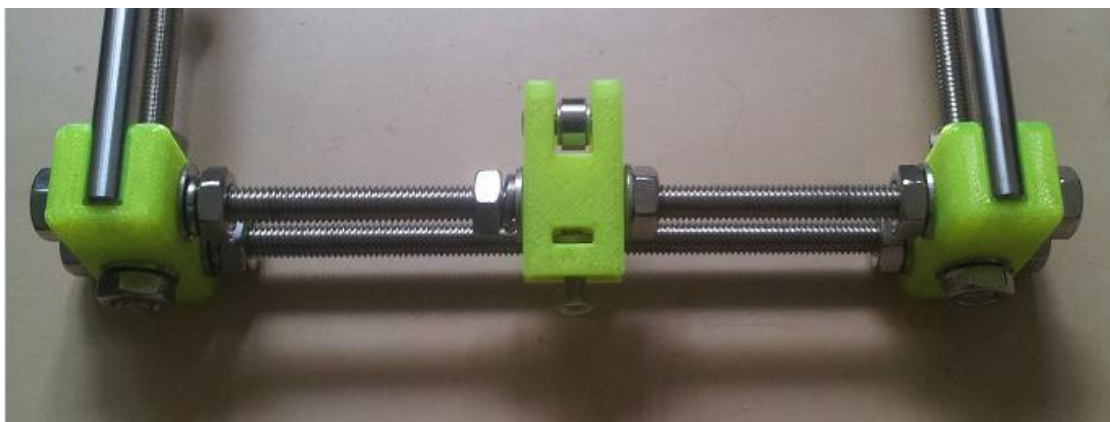
Assemble all the pontes as the following picture:



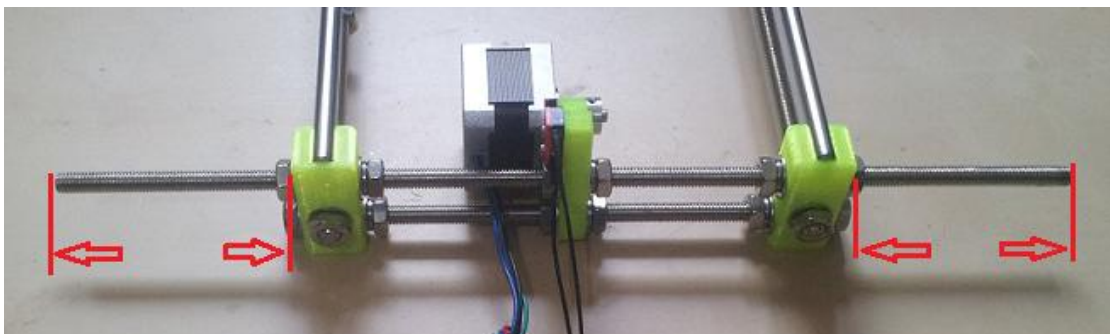
After assembling as below, reserve 2 nuts, 2 plain cushion and 1 spring washer on the threaded rod.



Take out the second assembled component, install the front- end of printer as follow



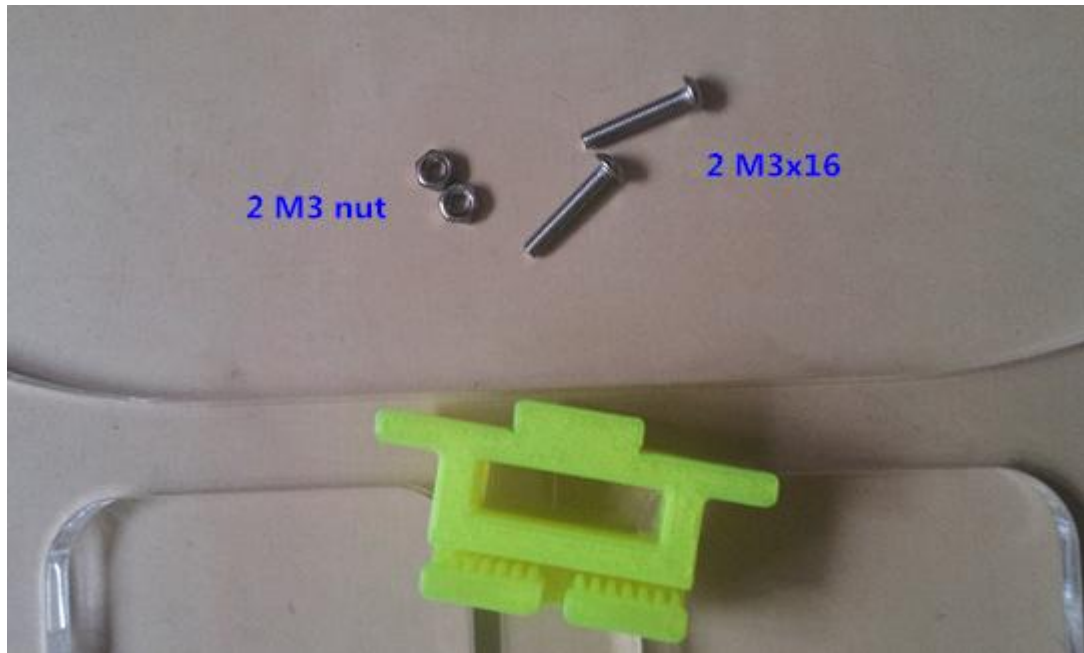
Take out the assembled motor part of Y-axis at the first step and assemble the rear-end of the frame following the picture. The distance of both sides as below should be the same.



The last 4 nuts are used to fixing Acrylic Framework.

4. Heating Plate Assembly

Find out the components as follow



Assemble the Belt Fixed Frame as below (Irrespective of the front and back side)



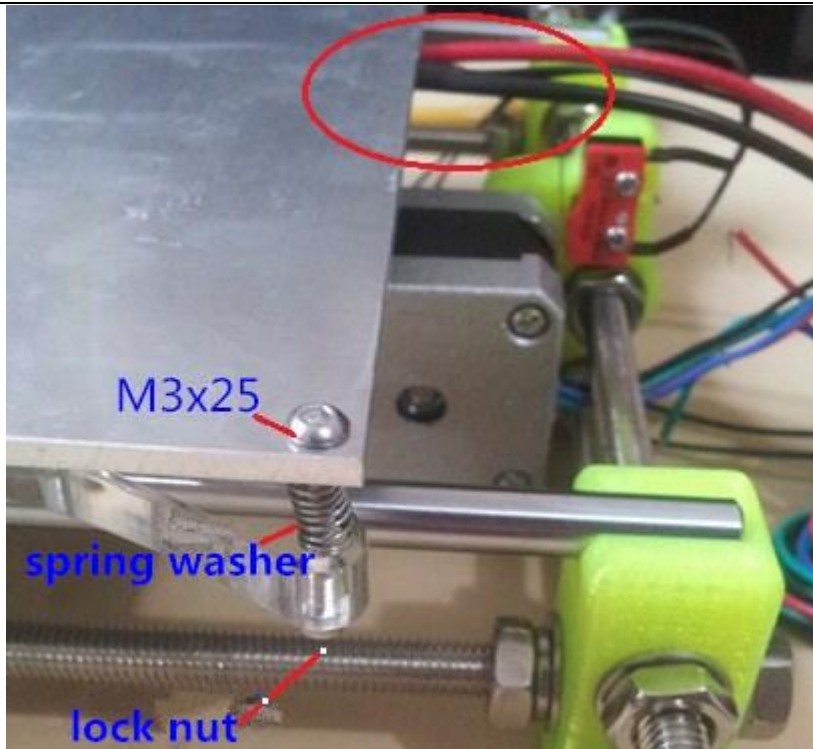
Install it into the chassis after fixing and adjust the breadth of the chassis for 4 bearings to stuck into the groove.



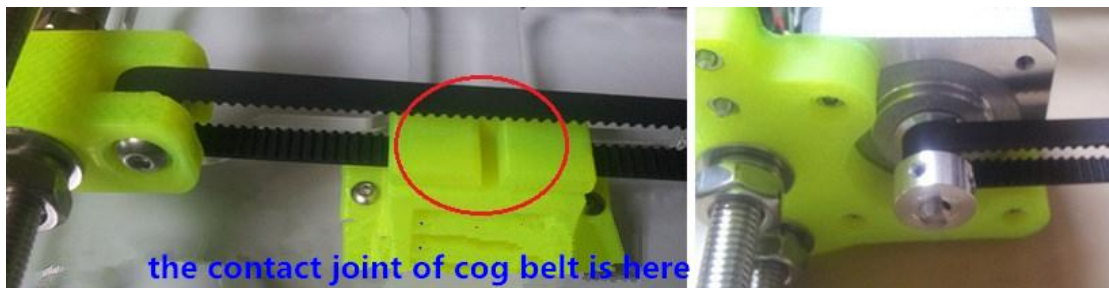
Install the heating plate and find out the components:



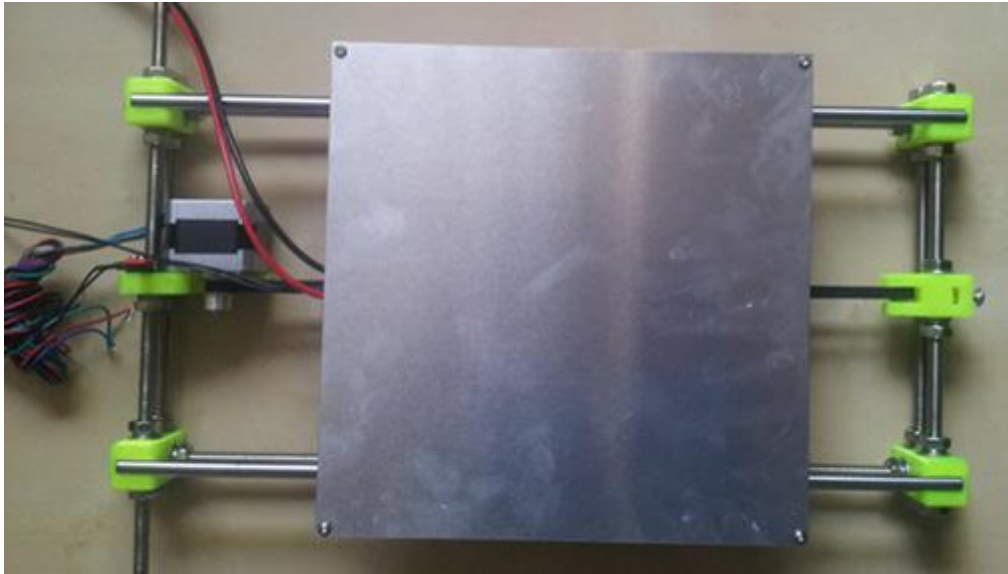
The wire of the heating plate should toward the motor



Install the cog belt as below and stuck the adapter of belt into the belt fixed groove of Y-axis.

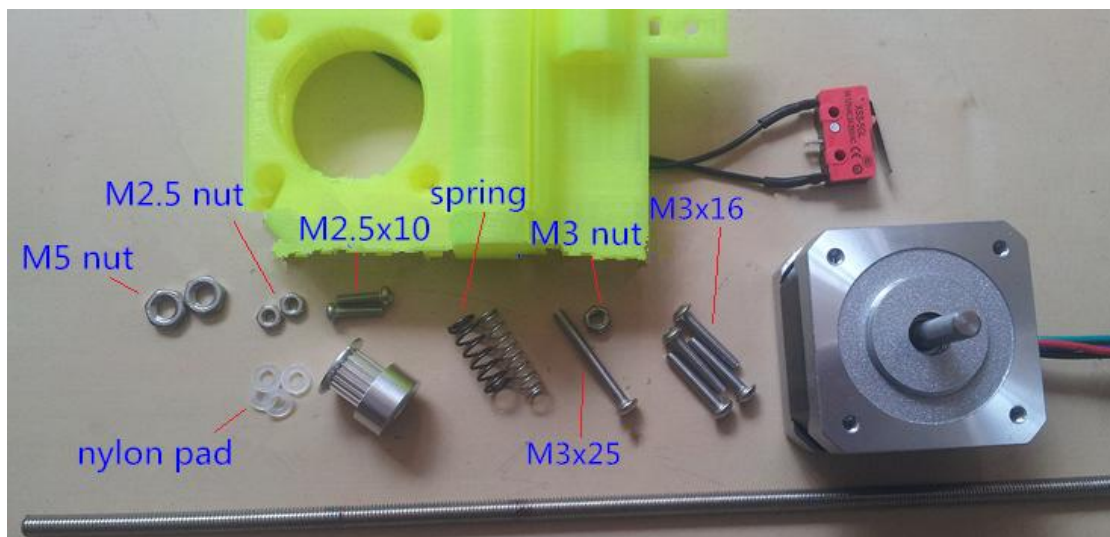


After the installing:



X-axis Assembly

Find all the components and take care that the springs are different, the Endstop is long wire. Basic model as below:

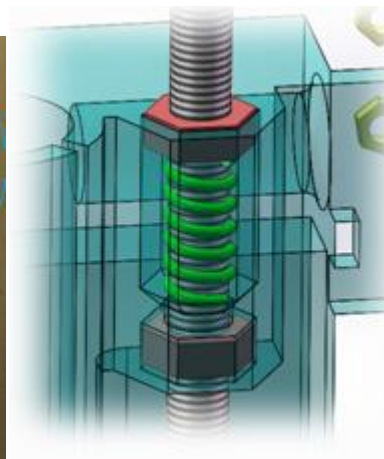
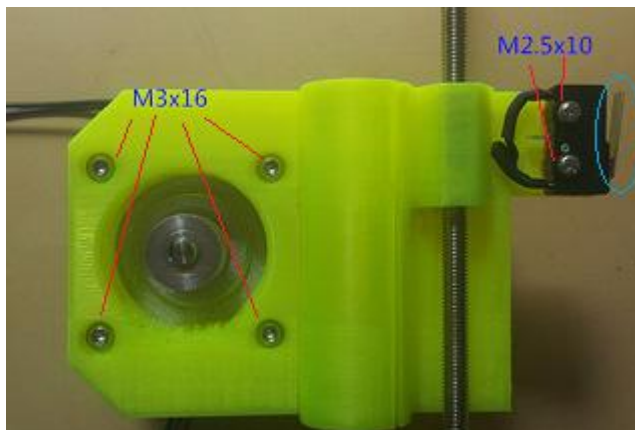


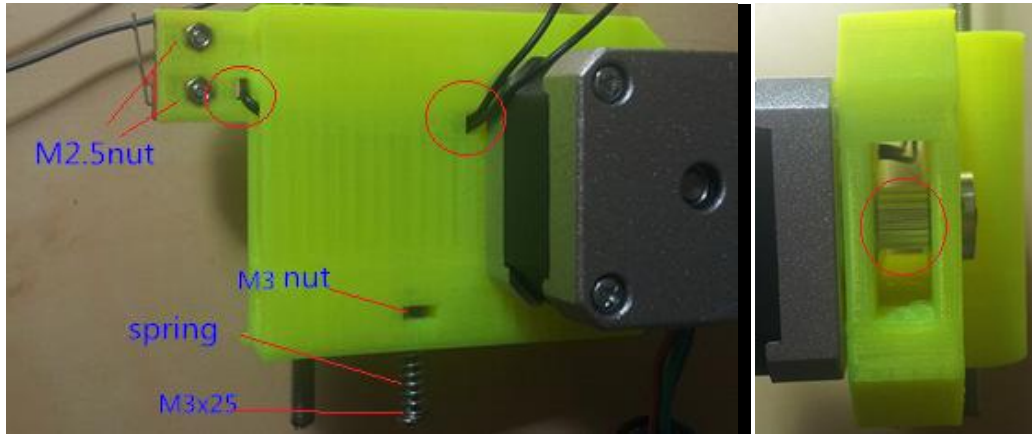
Lead Screw Motor



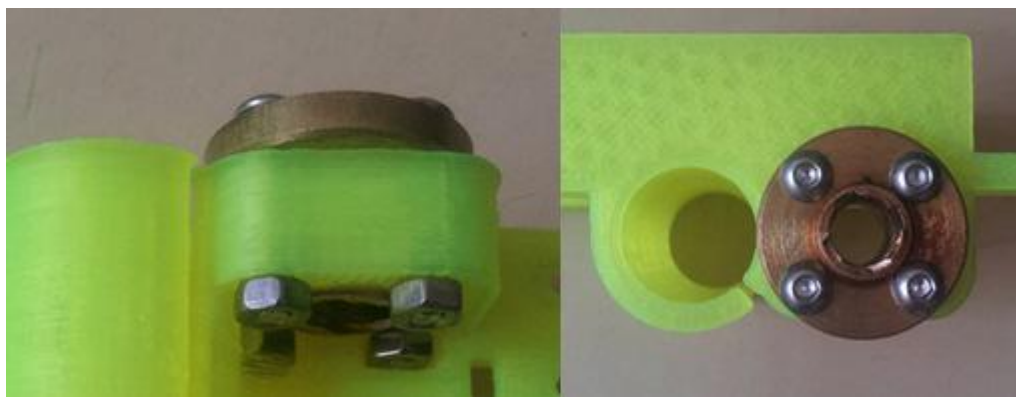
Assembling pictures:

Separate the motor and plastic part with nylon pad, note the shrapnel's direction of Endstop. The right picture is the scenograph of assembled threaded rod. Don't compress the spring washer too much and stuck the under nut piece into the groove. The upper nut piece and the plastic part are in the same level.

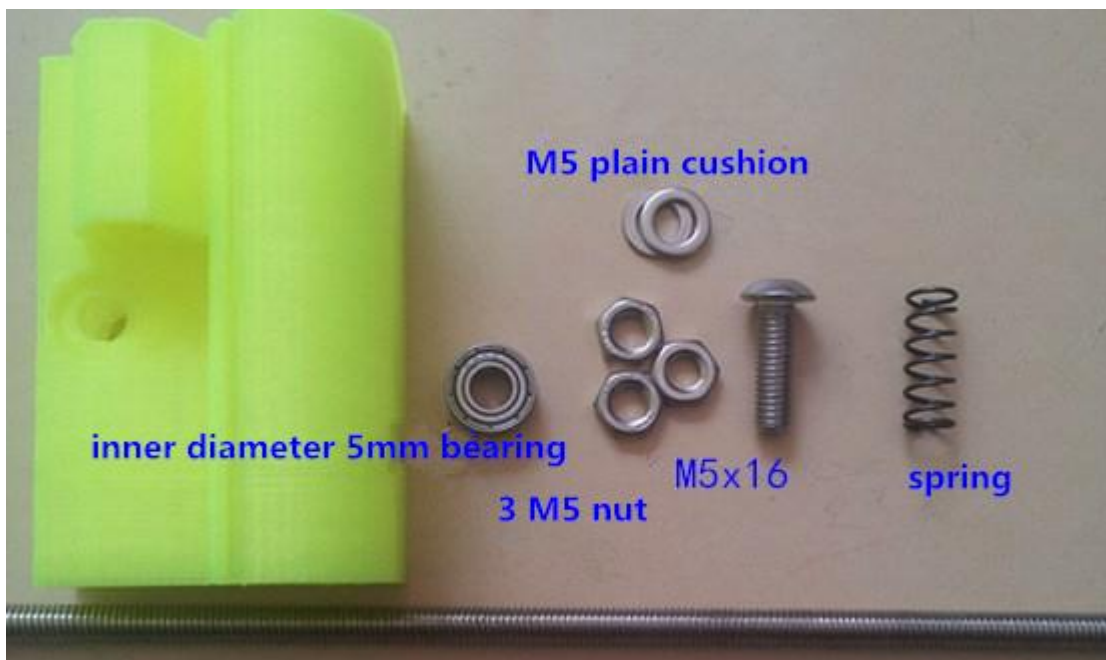




Lead Screw Motor model as below

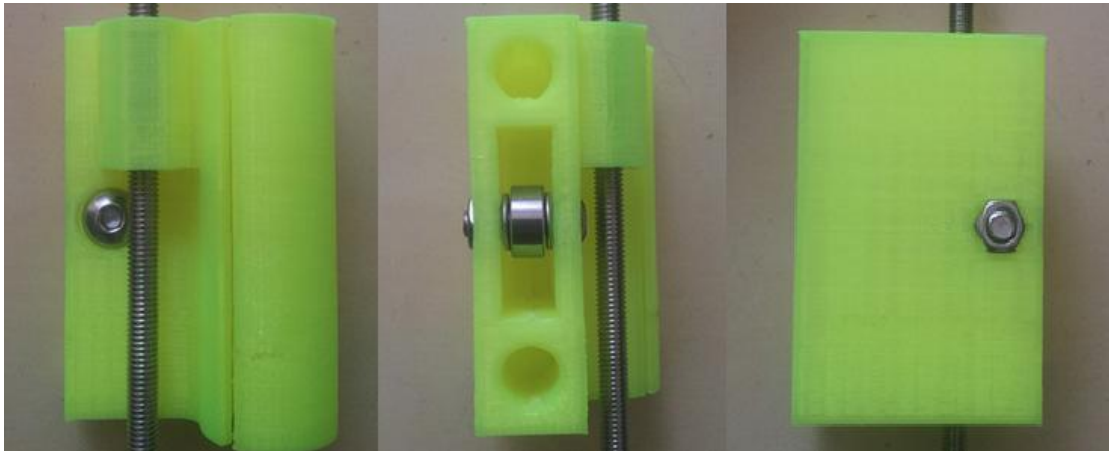


Find out the components of the other side of X-axis as follow:



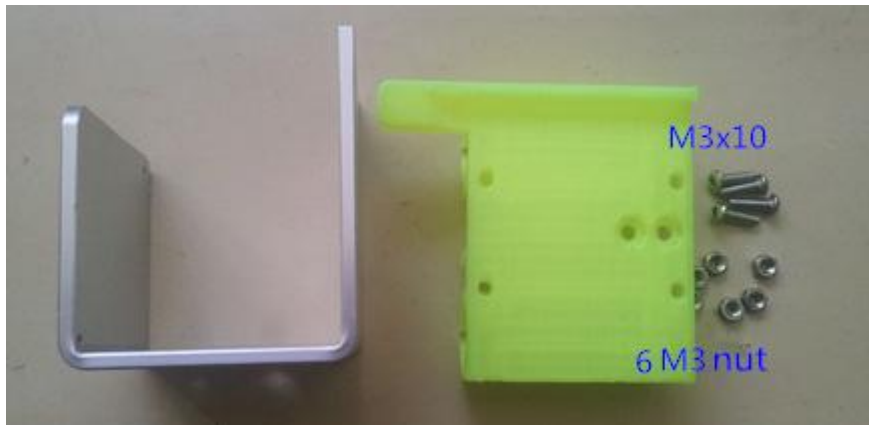


Assemble as below and the threaded rod's assembling can do as before and assemble the Lead Screw following the last step.

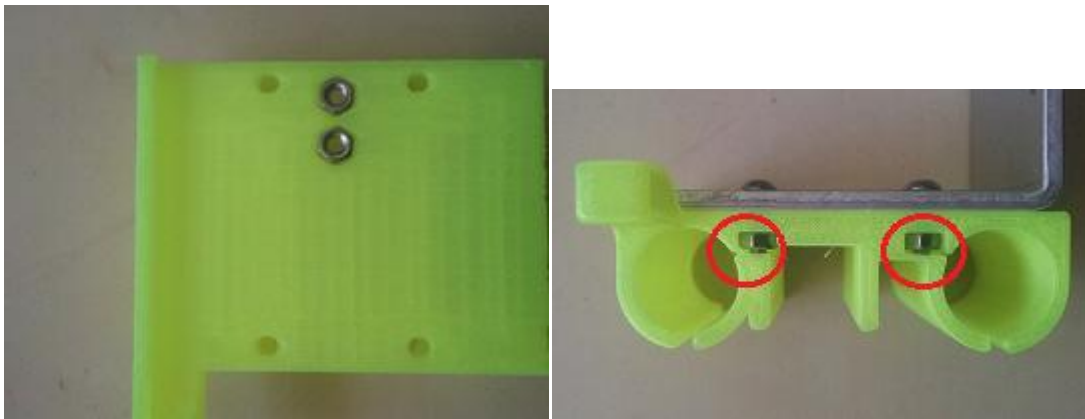


Supporting Structure Assembly of Extruder

Find out these two components



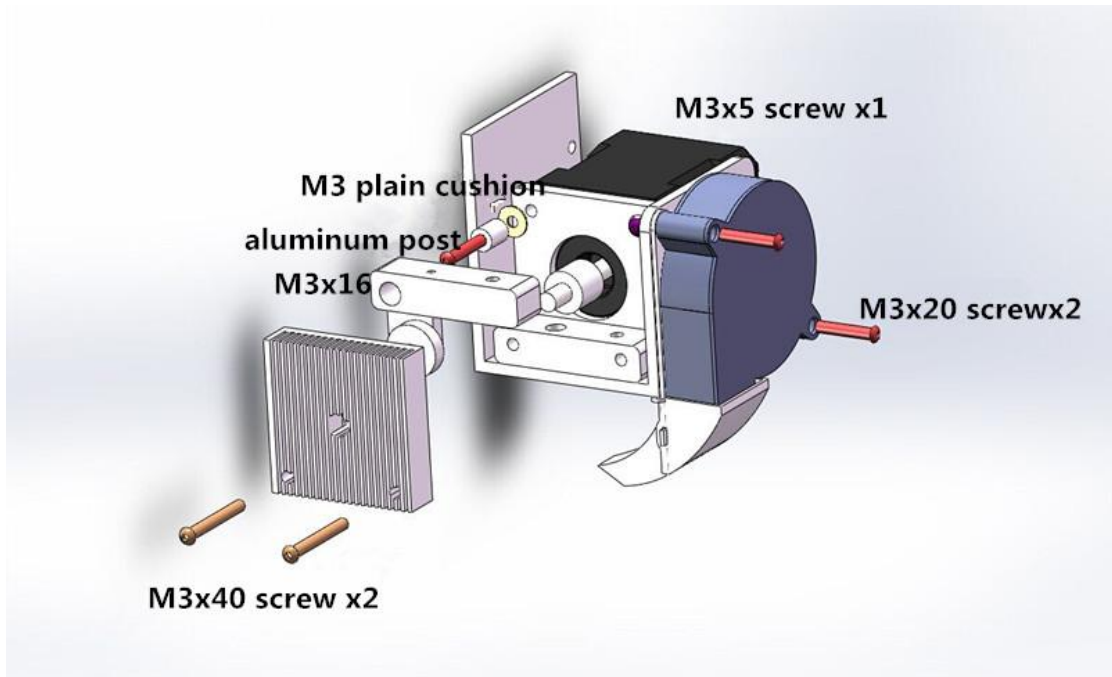
Put in 2 M3 nuts and embed M3 nut into the side groove first.



After installing



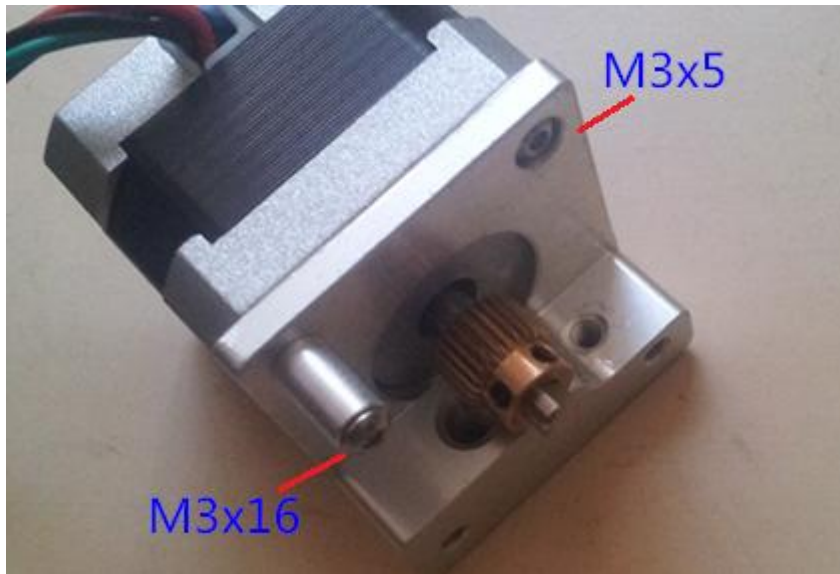
Extruder Assembly



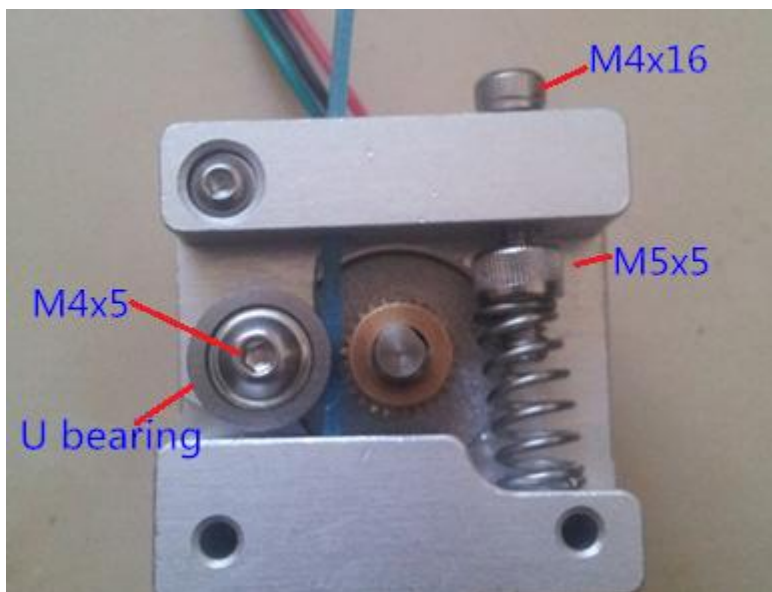
Find out the accessories



Fixed the aluminum block onto the motor at first



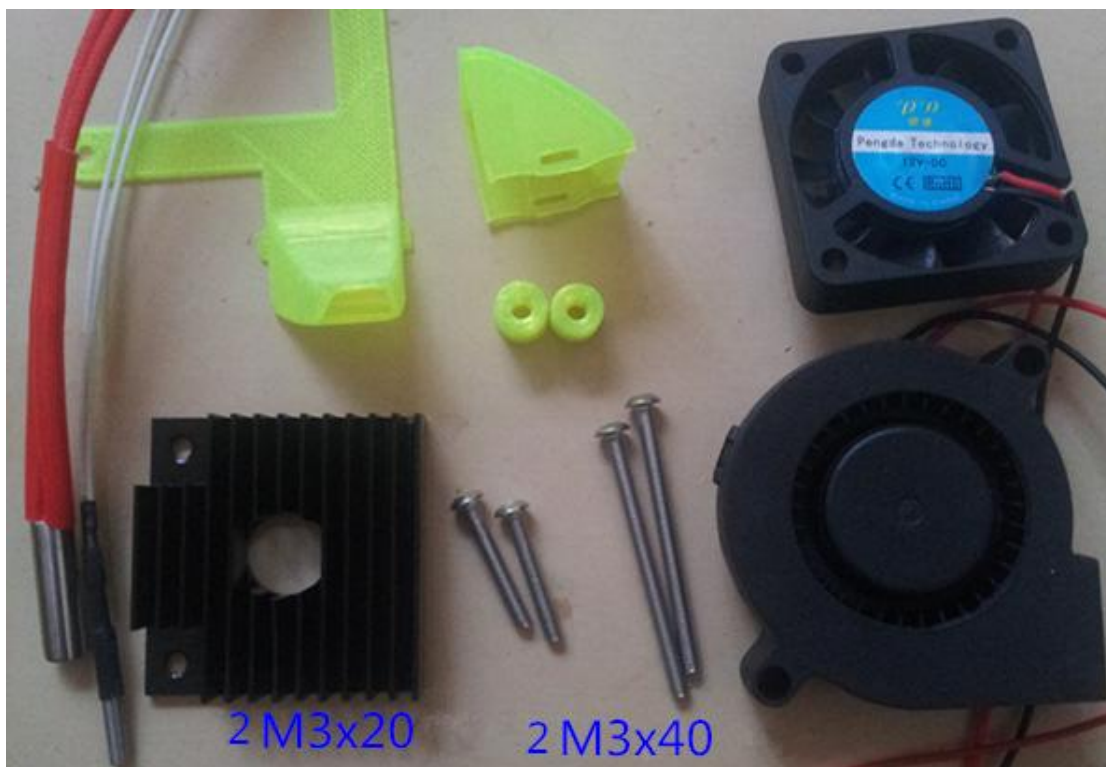
Install the toothed gear, bearing, and the spring washer as follow



Fix to the U-chassis following the picture below, put the pipe through the hole of baseboard to the M6 hole of the Extruder. Pay attention to the direction of the pipe! Don't pull out the plastic pipe! About 15mm outside the pipe and install the heating piece and nozzle lastly.



Find out the accessories

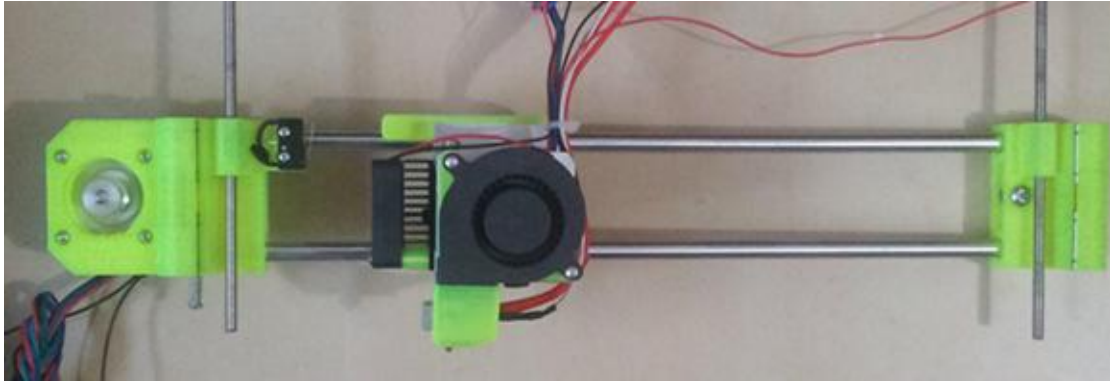


After installing



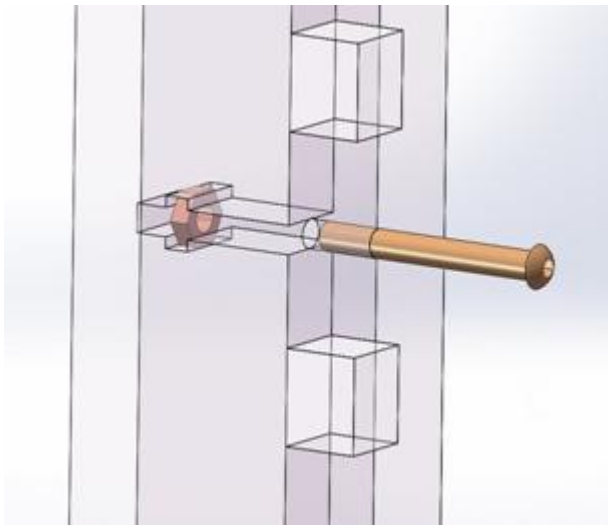
Make your making more easy!

Embed the linear bearing at last, and connect the three modules with M8*342 linear guide-rail as follow

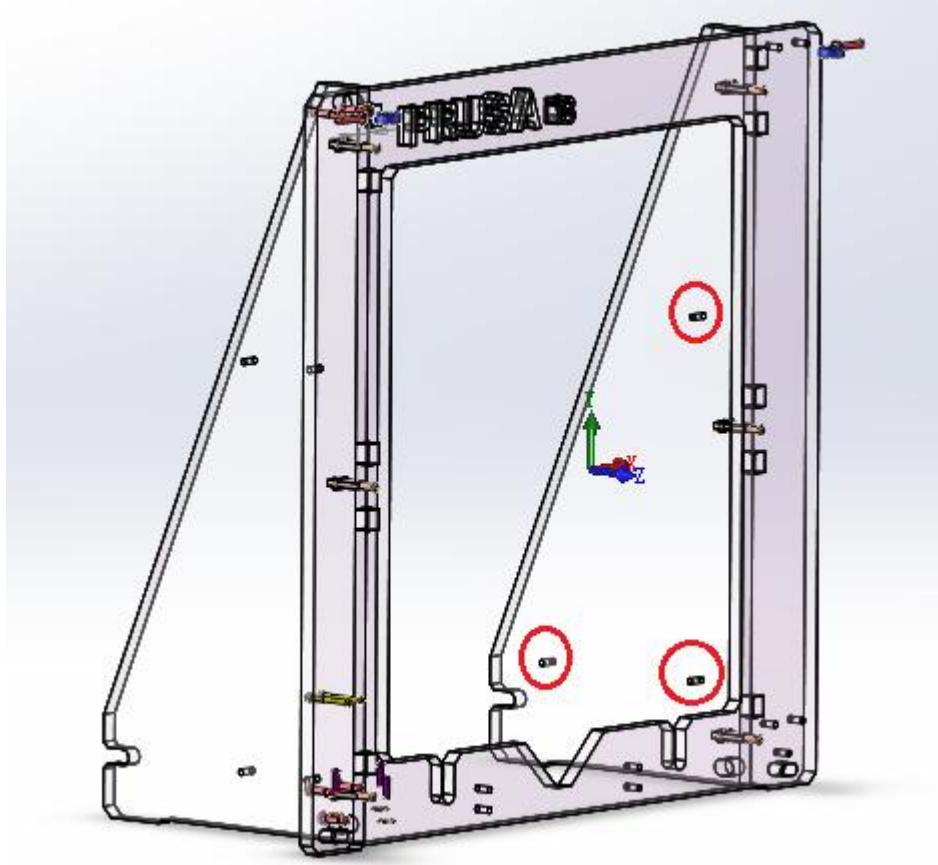


The Frame Assembly of the Printer

Find out the 6 M3*25 screws, 6 M3 nuts, 1 Acrylic framework and 2 pieces of Triangular side panel. Use screw to fix as below.



Use M3*25 screw to connect the Acrylic framework. Pay attention to the red circling part. The part with three holes is on the right side for fixing the power supply and fixed hole of other side is different due to the different control panel.

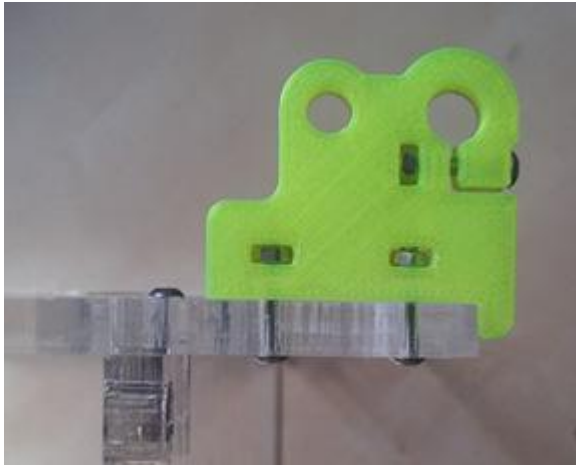


Fixation and Motor Installation of Z-axis

Find out the components



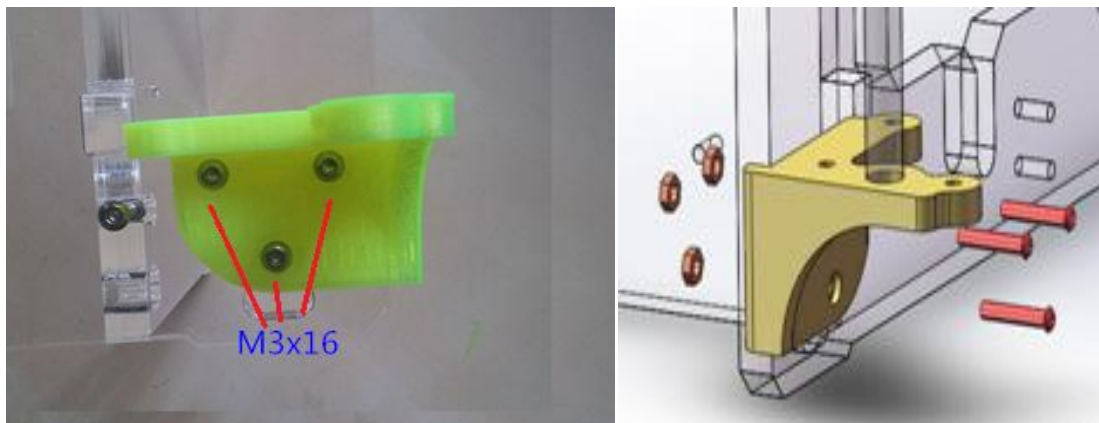
Assemble the printed pieces onto the Acrylic Framework as below



Motor Installation of Z-axis: collect the components and the motor is with a plug.



Assemble the components as the following picture and fix the back side with M3 nut

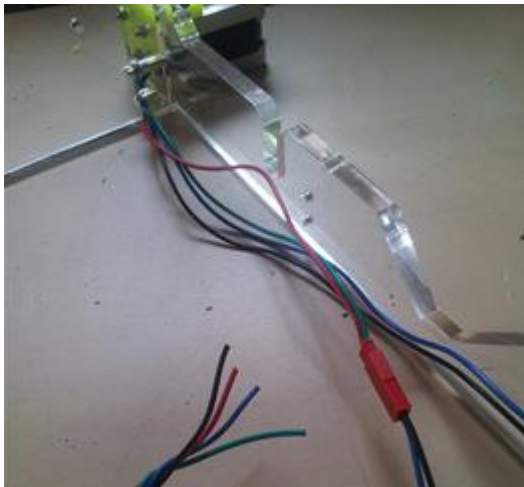


Separate the motor and the plastic part with a nylon pad

Make your making more easy!



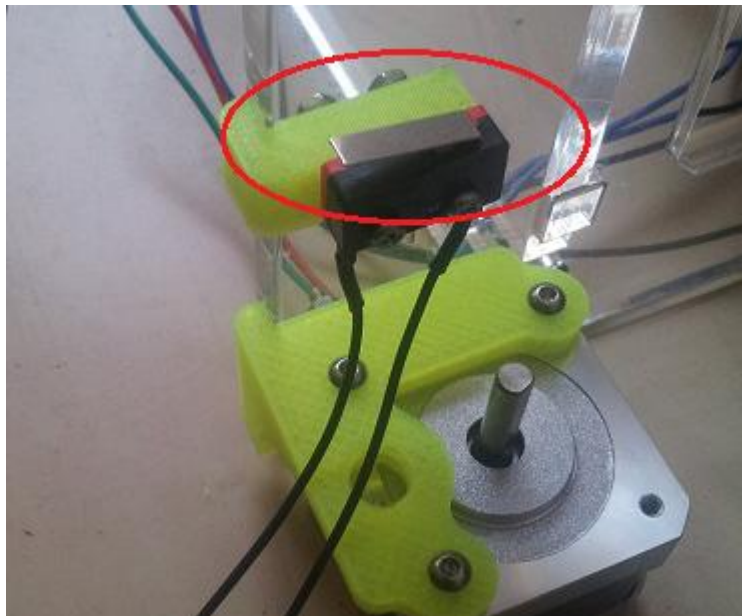
Connect the plug with a the wire through the hole of Acrylic Framework and the rest 4 wires are as a motor.



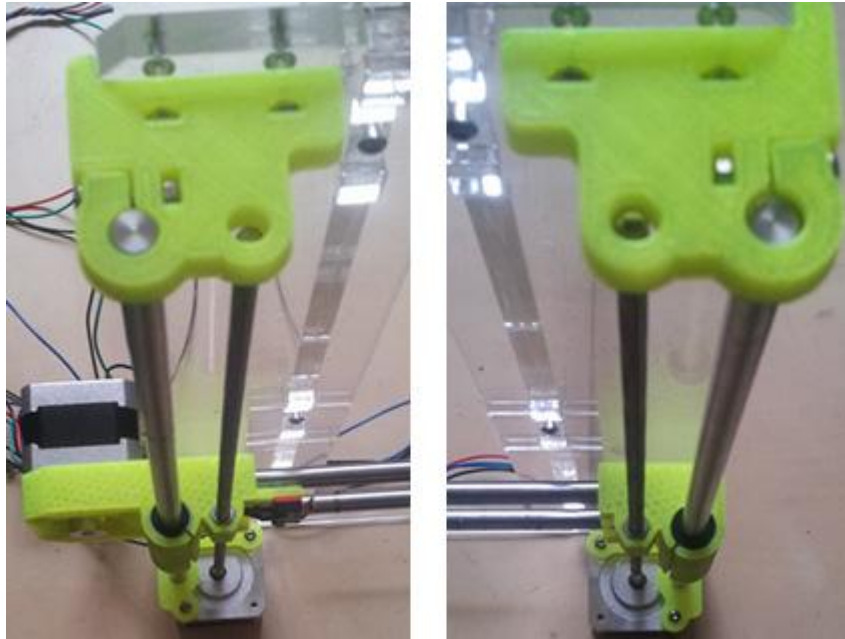
Find out the accessories and the Endstop is the short line



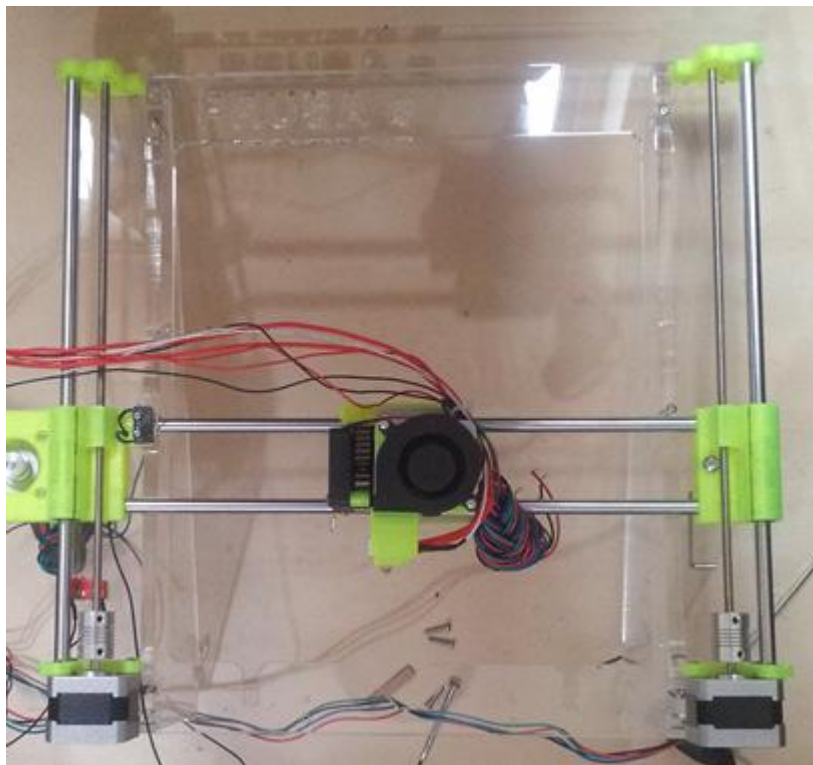
Assemble them to the framework as follow and note the direction of the shrapnel



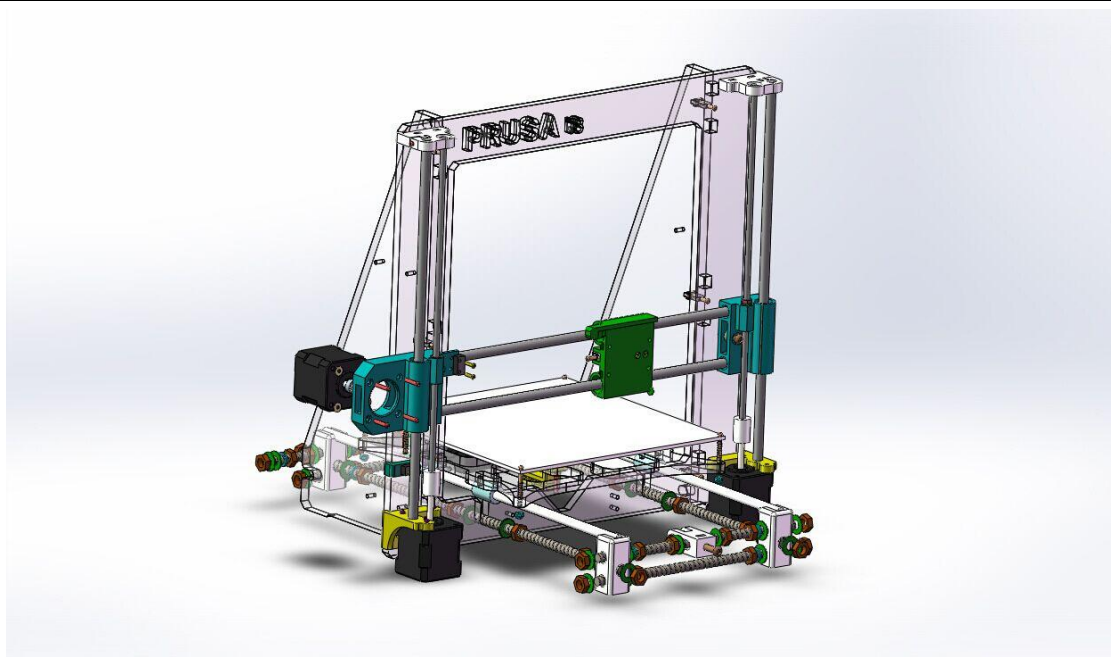
Assemble the guide rail and linear bearing of the Z-axis, assemble 2 bearings at both sides.



After assembling



Assemble Y-axis and Acrylic framework together as follow.



Make the Triangular side panel and threaded rod fixed as below and note that the threaded rod should stuck into the inner side of the groove of the Acrylic framework.



Fix Y-axis threaded rod and frame as follow

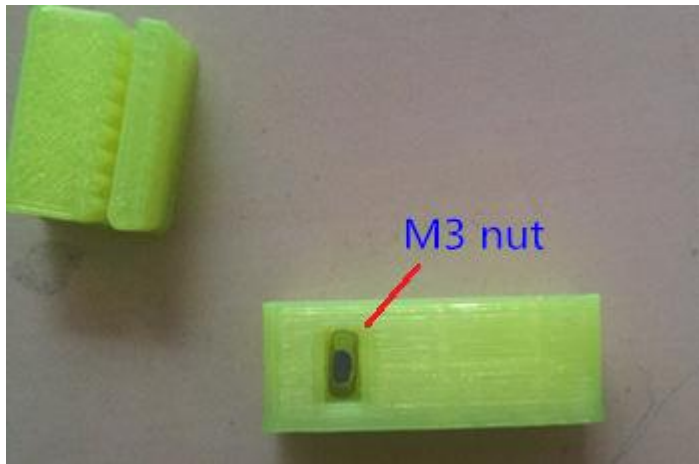


Belt Installation of X-axis

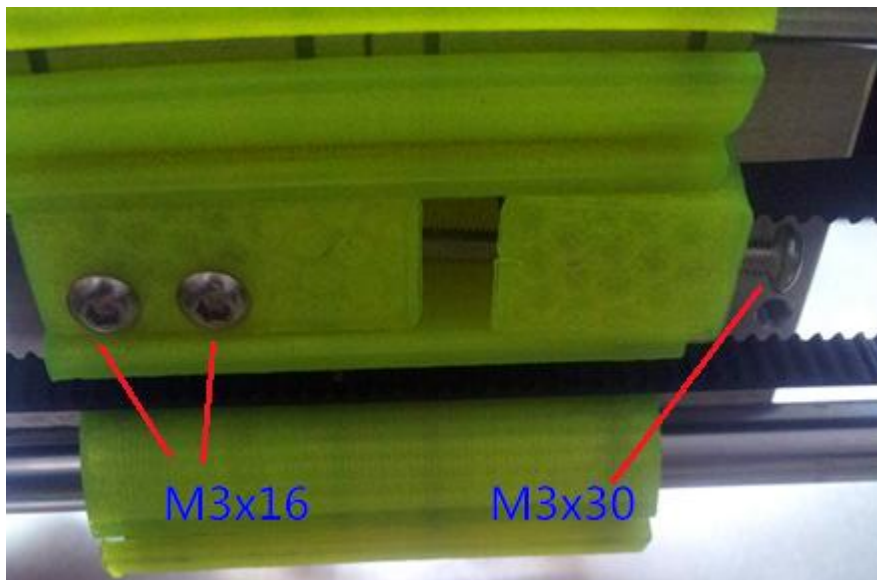
Find out the components



Assemble the fixed belt as the following picture



Tighten the belt with M3x30 screw



Finished