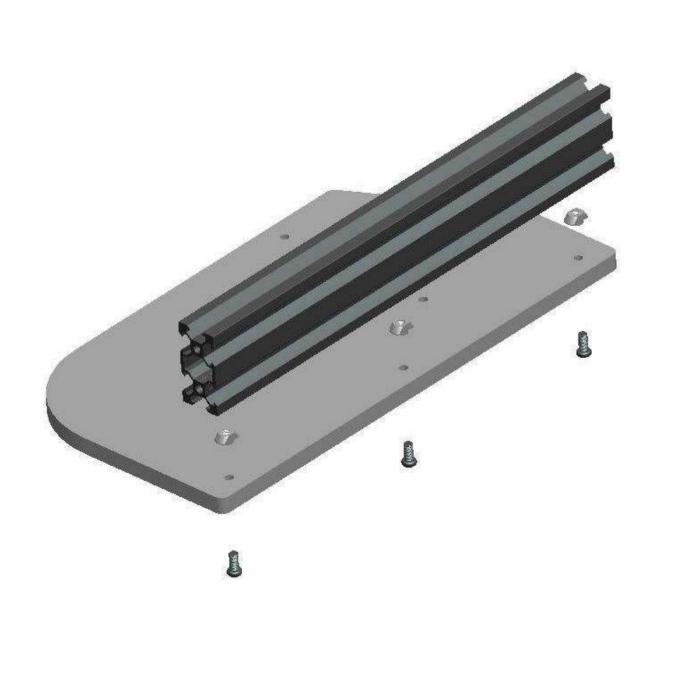
# TRONXY 3D PRINTER X1

# ASSEMBLY GUIDE V.02



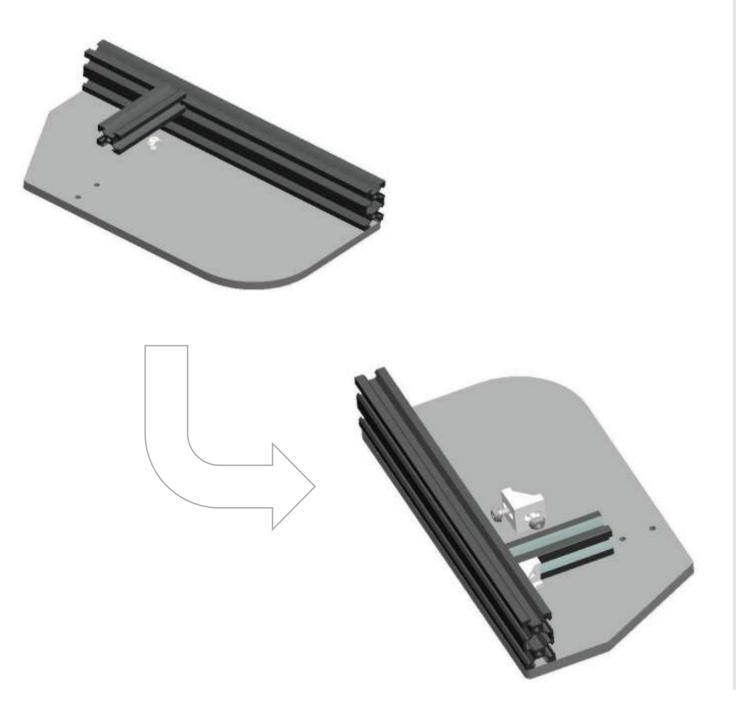
## Step 1 Assemble Base Frame



Parts: 2040 Aluminium profile 250mm – 1pcs Base Plate – 1pcs M4-8mm screw – 3pcs M4 T-Nut – 3pcs

• Put the aluminium profile on the base plate, secure them with 3pcs M4-10mm screws & T-Nut

## Step 2 Assemble Base Frame



#### **Parts:**

2020 Aluminium profile 70mm – 1pcs Corner bracket – 2pcs M4-8mm screw – 5pcs M4 T-Nut – 5pcs

- Put the '2020 aluminium profile 70mm' on the base plate, secure them with 1pcs M4-8mm screws & T-Nut
- Fix the aluminium profiles using 2pcs corner bracket, secure them with M4-8mm screws and M4 T-Nuts.

## Step 3 Install Z Slide rail

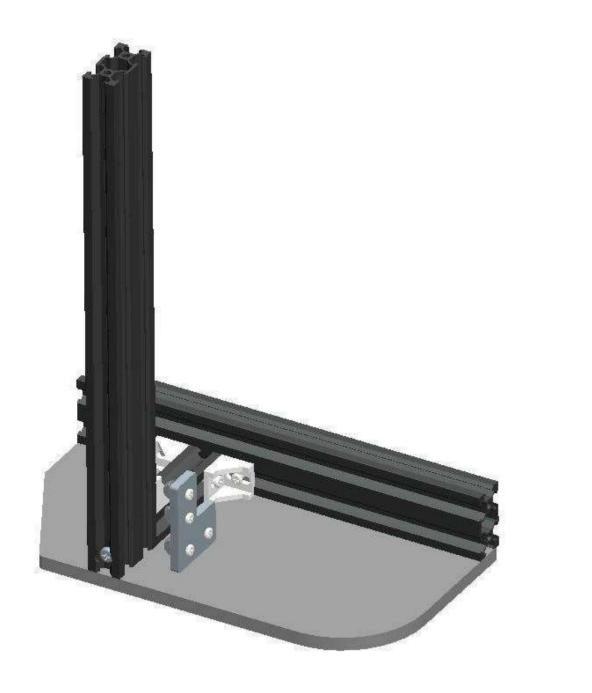


Parts:

2040 Aluminium profile 310mm – 1pcs Corner bracket – 1pcs M5-10mm screw -2pcs M5-40mm screw – 1pcs M4-8mm screw – 2pcs M4 T-Nut – 2pcs

- Place '2040 aluminium profile 310mm' on the base plate , secure them with 2pcs M5-10mm screws.
- Fix the 2pcs aluminium profile with 1pcs corner bracket, secure them with 2pcs M4-8mm screws and M4 T-Nut.
- Use 1pcs M5-40mm screw to make them more stable

## Step 4 Fix the Z slide rail



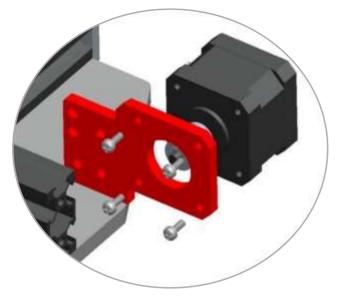
**Parts:** L-shape Acrylic block – 1pcs M4-8mm screw – 4pcs M4 T-Nut – 4pcs

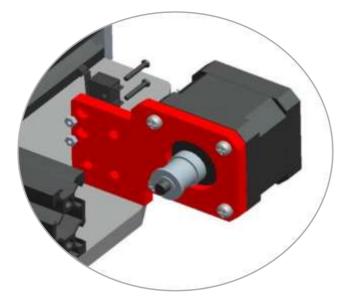
 Place 1pcs L-shape acrylic block on the aluminium profile, secure them with 4pcs M4-8mm screws & T-Nut

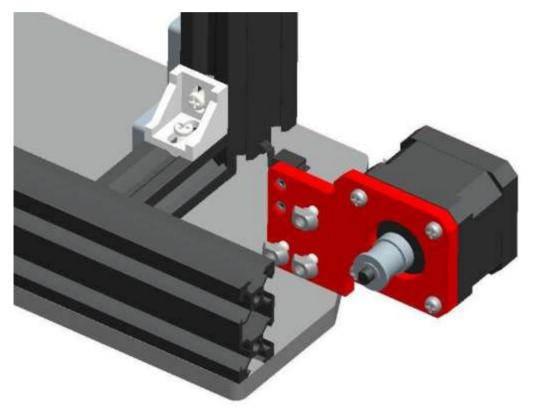
## Step 5 Assemble Y axis Motor

#### Parts: 42 stepper motor – 1pcs GT2-16 Pulley (with grub screw in it)– 1pcs Limit switch – 1pcs Y motor mount (Acrylic) – 1pcs M3-8mm screws – 4pcs M4-8mm screw – 3pcs M4 T-Nut - 3pcs M2-10mm screw – 2pcs M2 Nut – 2pcs

- Insert the GT2-16 pulley to the motor shaft, tighten the grub screw in the pulley. Next assemble the 42 stepper motor and the Y motor mount(Acrylic) with 4pcs M3-8mm screws.
- Secure the limit switch to motor mount using 2pcs M2-10mm screws and nuts.
- secure the motor mount to the back of the Y slide rail using 3pcs M4-8mm screws and T-nuts.



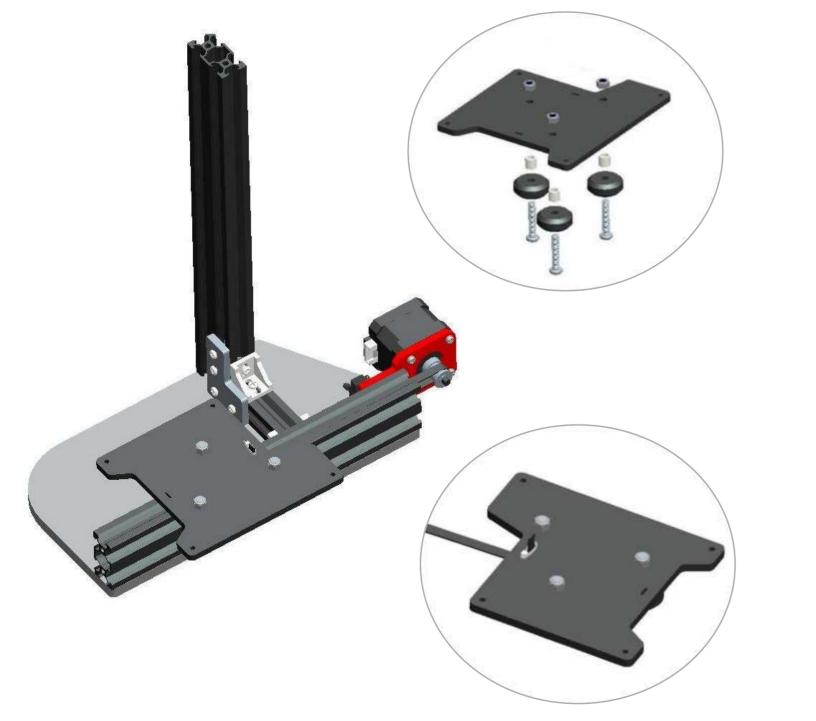




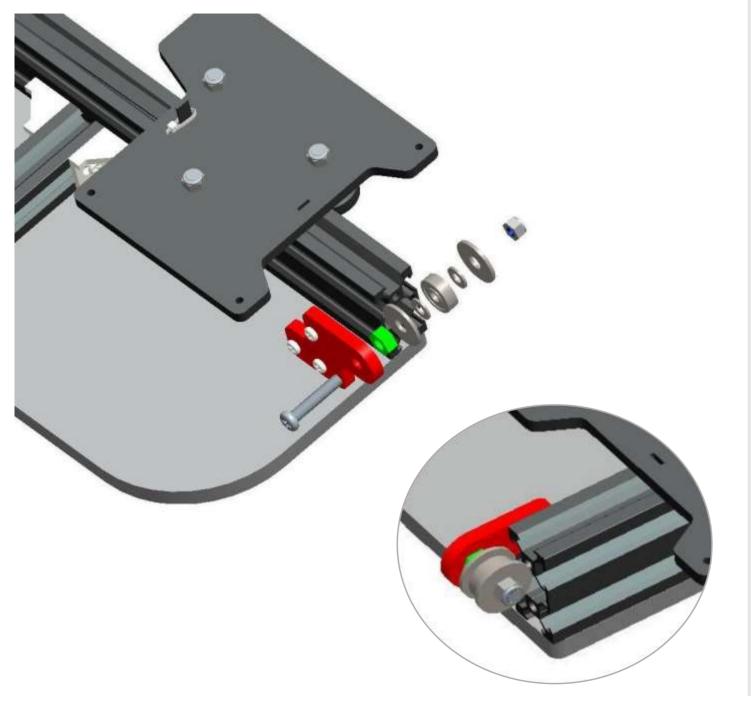
## Step 6 Assemble Bed Frame

Parts: Bed frame (acrylic) – 1pcs Wheel – 3pcs Plastic pillar – 3pcs M5-30mm- 3pcs M5 nut – 3pcs GT2 Timing belt – 1pcs Zip-ties – 1pcs

- Secure the wheels in place using M5-30mm screws and nuts ,using plastic pillar between wheel and bed frame.
- Tighten one end of the timing belt to the bed frame using a zip-ties.
- Next slide the base frame to the 2040 aluminium profile .



## Step 7 Assemble Y-axis Belt Pulley



#### **Parts:**

Y Pulley mount (acrylic) – 1pcs Belt pulley – 1pcs M5-25mm screw – 1pcs M5 Nut – 2pcs M6 washer – 2pcs M5 washer – 2pcs M4-8mm screw – 3pcs M4 T-Nut - 3pcs

- Take 1pcs M5-25mm screw and insert the Pulley mount, secure it with M5 nut, then insert the washers and belt pulley, secure them using M5 nut.
- Secure the Y belt pulley assembly to the front of the Y slide rail using 3pcs M4-8mm screws and nuts.

▲Tighten screws gently to avoid damaging the acrylic.

## Step 8 Install Y axis Timing Belt

Parts: Zip-ties – 1pcs

• Run the other end of timing belt along the aluminium profile, through the Y-GT2-16 Pulley and Belt pulley . Then tighten it to the bed frame using zip-ties as shown in the picture .

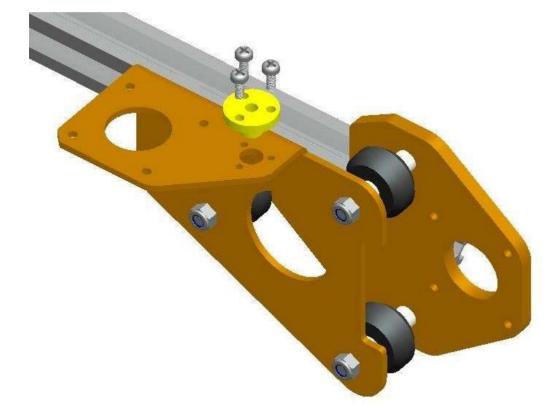


## Step 9 Assemble Z Carriage

Parts: 2020 Aluminium profile 285mm – 1pcs X-motor mount (acrylic) – 1pcs Extruded bracket – 1pcs Brass nut – 1pcs Plastic pillar – 6pcs Wheel – 3pcs M5-40mm screw – 3pcs M5 Locknut – 3pcs M3-8mm screw – 3pcs M4-8mm screw – 2pcs M4 T-Nut - 2pcs

- Insert 3pcs M5-40mm screws to X-motor mount, and then scure it to the aluminium profile using 2pcs M4-8mm screws and T-nuts.
- Put the wheels into M5-40mm screws, using plastic pillars between wheel and acrylic, secure the Extruded bracket using M5 nuts.
- Place the brass nut on the extruded bracket, scure it using 3pcs M3-8mm screws.





#### Step 10 Install Z carriage

#### **Parts:**

42 stepper motor – 1pcs GT2-16 Pulley (with grub screw in it)– 1pcs M3-8mm screws – 4pcs

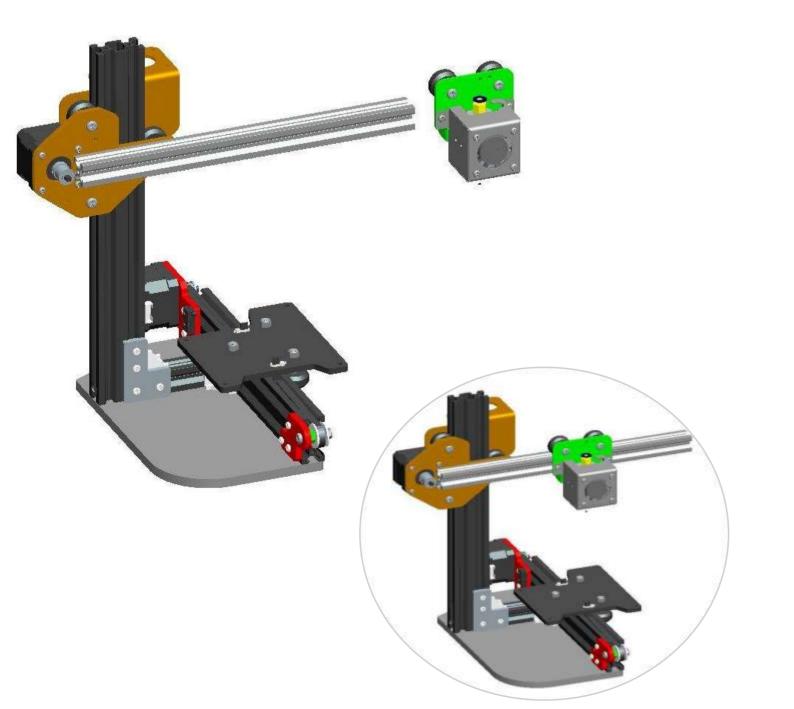
- Carefully insert the X-axis assembly to the Z slide rail
- Insert the GT2-16 pulley to the motor shaft, tighten the grub screw in the pulley, then place the X stepper motor to the motor mount, secure them with 4pcs M3-8mm screws.



## Step 11 Insert Extruder Assembly

**Parts:** Extruder assembly – 1pcs

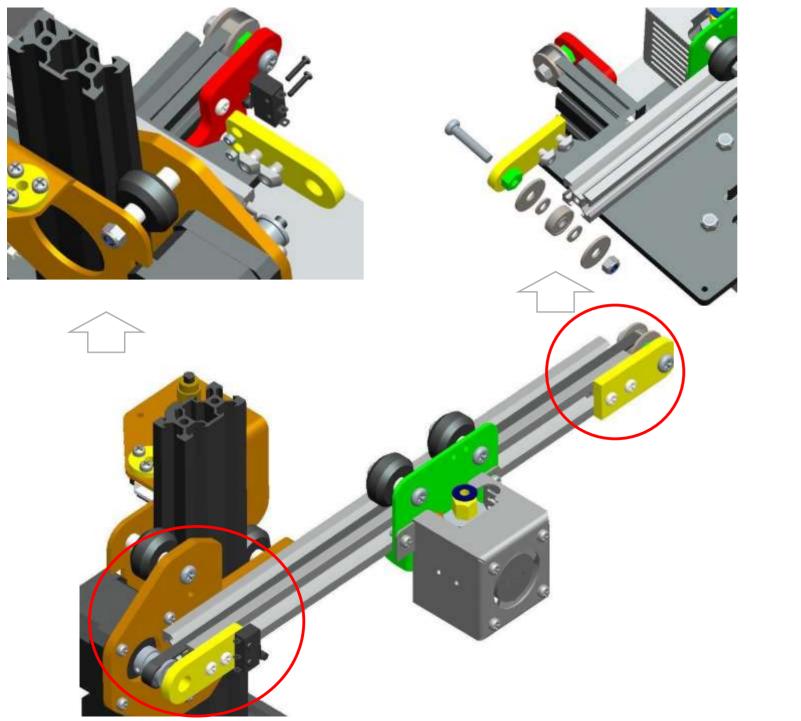
• Carefully insert the extruder assembly to the X slide rail.



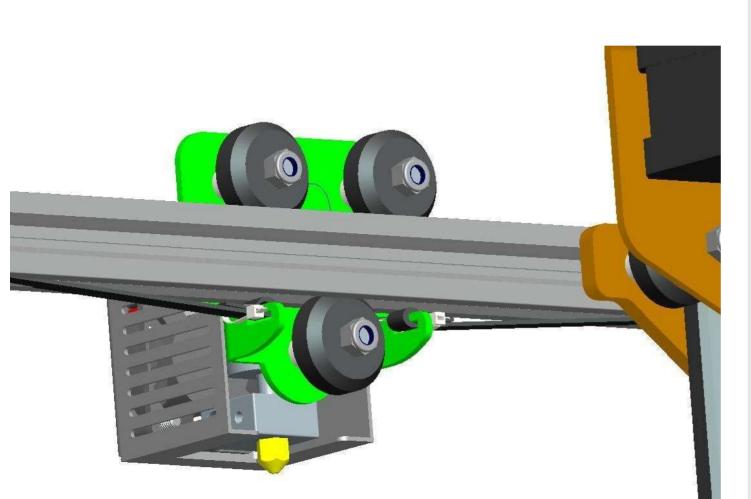
## Step 12 Assemble X axis Endstop & Pulley

Parts: Belt pulley – 1pcs Limit switch – 1pcs X Pulley mount (acrylic) – 1pcs X endstop mount (acrylic) – 1pcs M5-25mm screw – 1pcs M5 Nut – 1pcs M5 Nut – 1pcs M4-8mm screw – 4pcs M5 Locknut – 1pcs M4 T-Nut - 4pcs M6 washer – 2pcs M2-10mm screw – 2pcs M5 washer – 2pcs M2 Nut – 2pcs

- Secure the limit switch to X endstop mount using 2pcs M2-10mm screws and nuts. Then place the X endstop mount to the left end of the X slide rail using 2pcs M4-8mm screw and T-nuts.
- Take 1pcs M5-25mm screw and insert the Pulley mount, secure it with M5 nut, then insert the washers and belt pulley, secure them using M5 locknut.
- Secure the X belt pulley assembly on the right of the X slide rail using 2pcs M4-8mm screws and nuts.



## Step 13 Install X axis Timing Belt



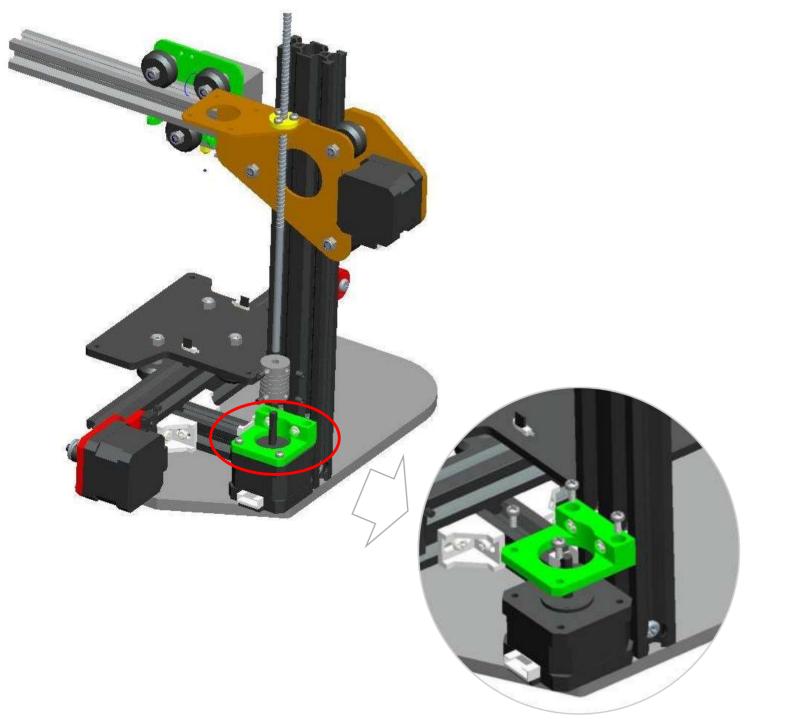
**Parts:** GT2 Timing belt – 1pcs Zip-ties – 2pcs

- Tighten one end of the timing belt to the belt hole using a zip-ties which back of the extruder
- Run the other end of timing belt along the aluminium profile, through the X-GT2-16 Pulley and Belt pulley. Then tighten it to another belt hole using a zip-ties, as shown in the picture.

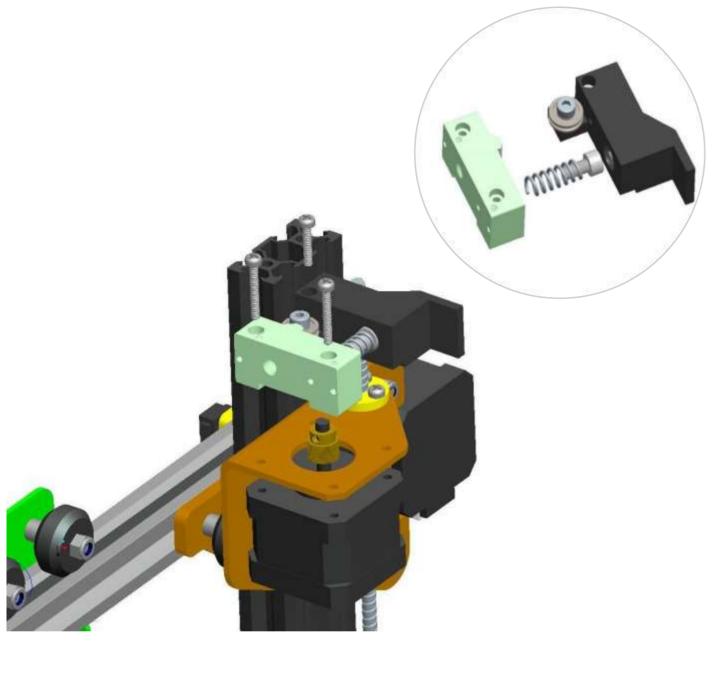
# Step 14 Assemble Z motor

Parts: 42 Stepper motor – 1pcs Z-motor seat – 1pcs Coupling (with grub screw in it) – 1pcs Threaded rod 260mm – 1pcs M3-8mm screw – 4pcs M4-12mm screw – 2pcs M4 T-Nut – 2pcs

- Place 1pcs 42 stepper motor back of the Z slide rail, put the motor seat on the motor and then secure them with 4pcs M3-8mm screws.
- Install them to the Z slide rail using 2pcs M412mm screws and T-Nuts.
- Take 1pcs threaded rod through the brass nut ,then insert to the coupling and tighten up.



# Step 15 Install Filament Feeder

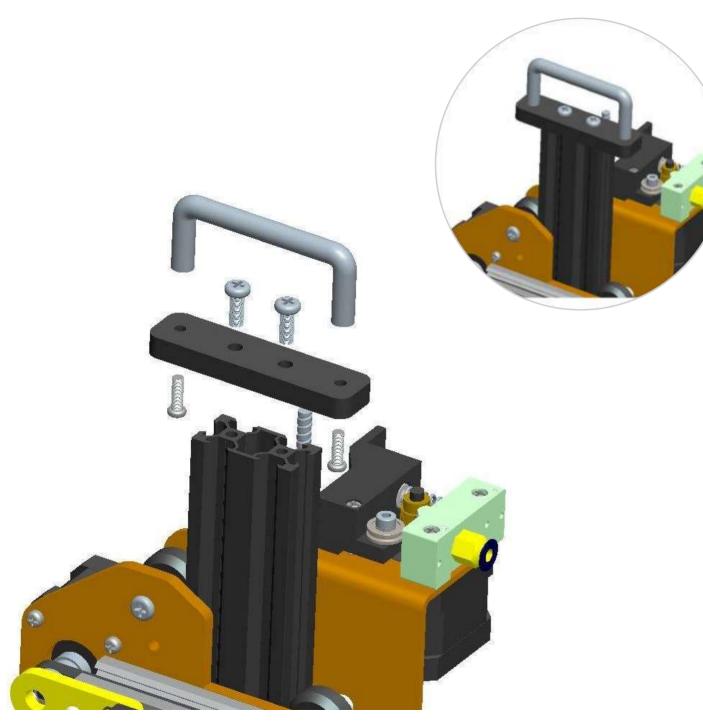


#### Parts:

42 Stepper motor – 1pcs Feeding gear (with grub screw in it)– 1pcs Extrution clip - 1pcs Extrution seat – 1pcs M3-22mm – 2pcs M3-16mm – 1pcs M5-10mm Hex screw – 1pcs Spring – 1pcs

- Insert the feeding gear to the motor shaft and them tighten up.
- Place the Extrution seat and motor to the bracket as shown in the picture, secure them using 2pcs M3-22mm screws.
- Put one M5-10mm hex screw and spring between extrution clip and extrution seat , next secure the extrution clip with motor using M316mm screw.

## Step 16 Install handle

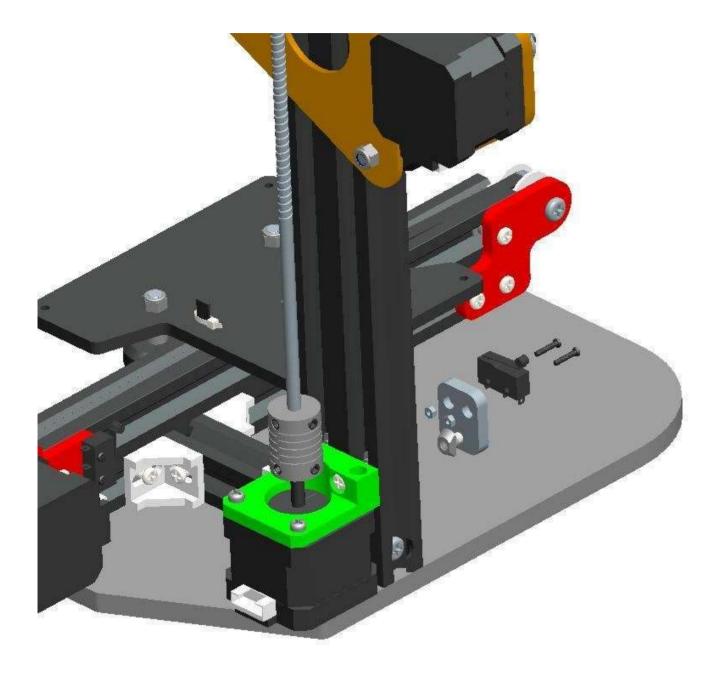


#### **Parts:**

Handle – 1pcs Handle seat (Acrylic) – 1pcs M5-10mm screw – 2pcs M4-12mm screw – 2pcs

- Put the handle seat on the top of Z slide rail, secure them with 2pcs M5-10mm screws .
- Secure the handle to the seat using 2pcs M4-12mm screws .

## Step 17 Install Z endstop

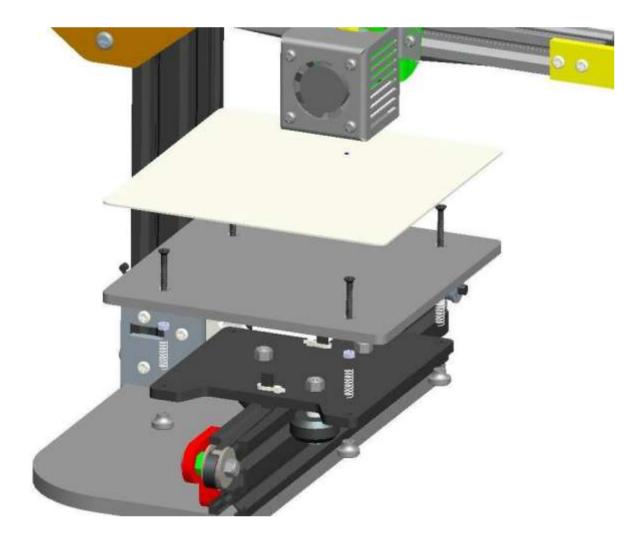


#### Parts:

Limit switch – 1pcs Z endstop mount – 1pcs M4-8mm screw – 1pcs M4 T-Nut – 1pcs M2-10mm screw – 2pcs M2 Nut – 2pcs

- Secure the limit switch to Z endstop mount using 2pcs M2-10mm screws and nuts.
- Place the Z endstop mount to the left Z slide rail, using one M4-8mm screw and T-nut.

## Step 18 Assemble Print bed



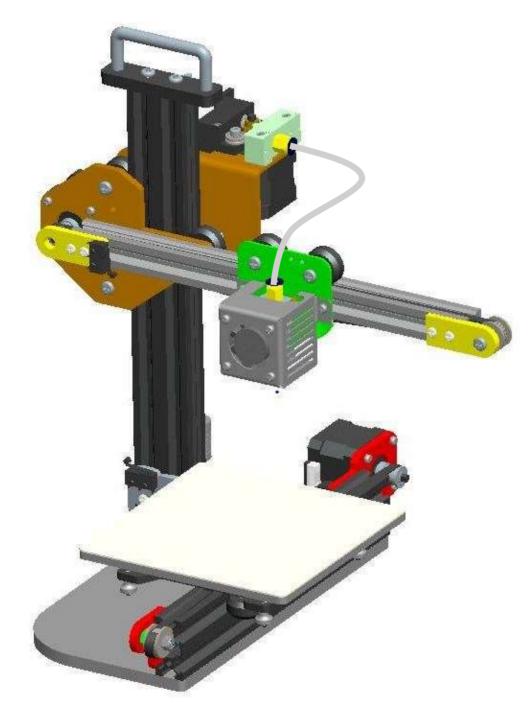
**Parts:** Bed plate – 1pcs M3-30mm screw – 4pcs Thumb nut – 4pcs Spring – 4pcs

 Place the Bed plate on the bed frame use 4pcs springs between them, and then through 4pcs M3-30mm screws, then top 4pcs thumb nuts under the bed frame.

## Step 19 Install Teflon hose

**Parts:** Teflon hose – 1pcs Connector – 1pcs

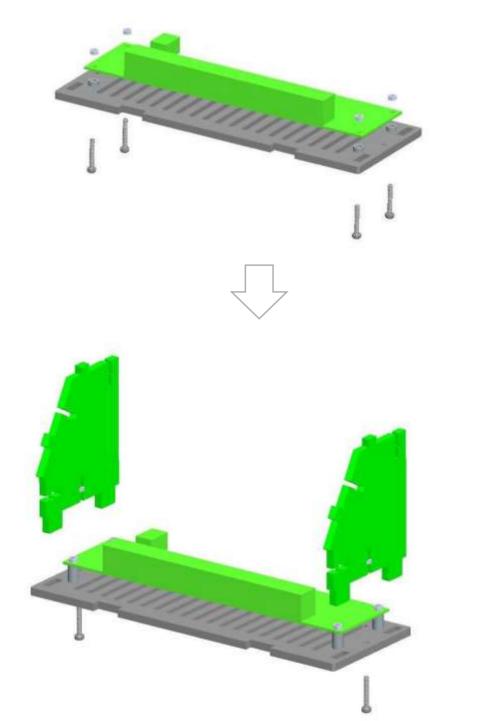
 Install a connector to the filament feeder , and then insert a teflon hose between feeder and extruder .



## Step 20-1 Assemble Electronic Box

Parts: Electronic box bottom plate (acrylic) – 1pcs Electronic box side plate – 2pcs Mainboard– 1pcs M3-20mm screws – 6pcs M3 nuts – 6pcs Plastic pillar – 4pcs

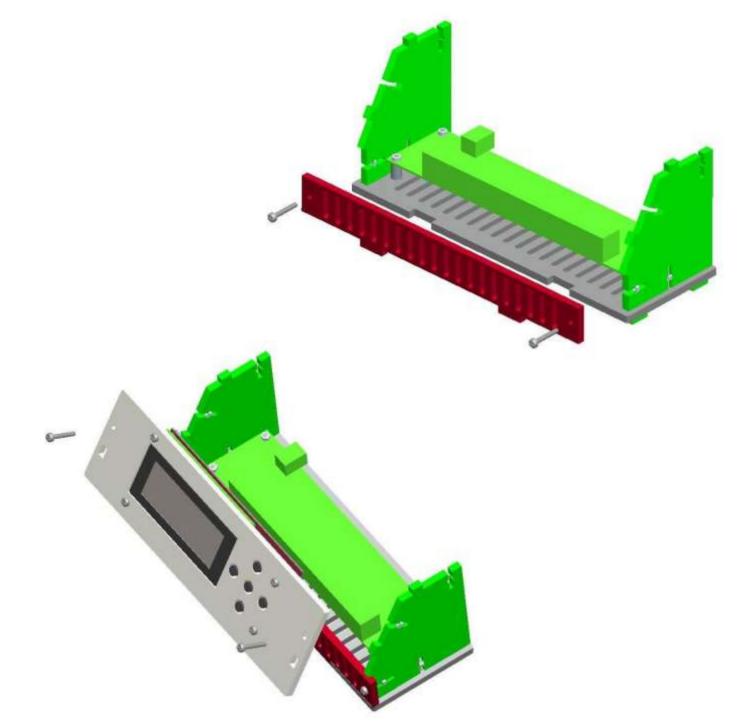
- Place the mainboard on the bottom plate using M3-20mm and nuts , insert the plactic pillar between them.
- Assemble the side plates to the bottom plate as picture , secure them using M3-20mm screw&nut



## Step 20-2 Assemble Electronic Box

Parts: Electronic box front plate – 1pcs LCD display assembly – 1pcs M3-20mm screws – 4pcs M3 nuts – 4pcs

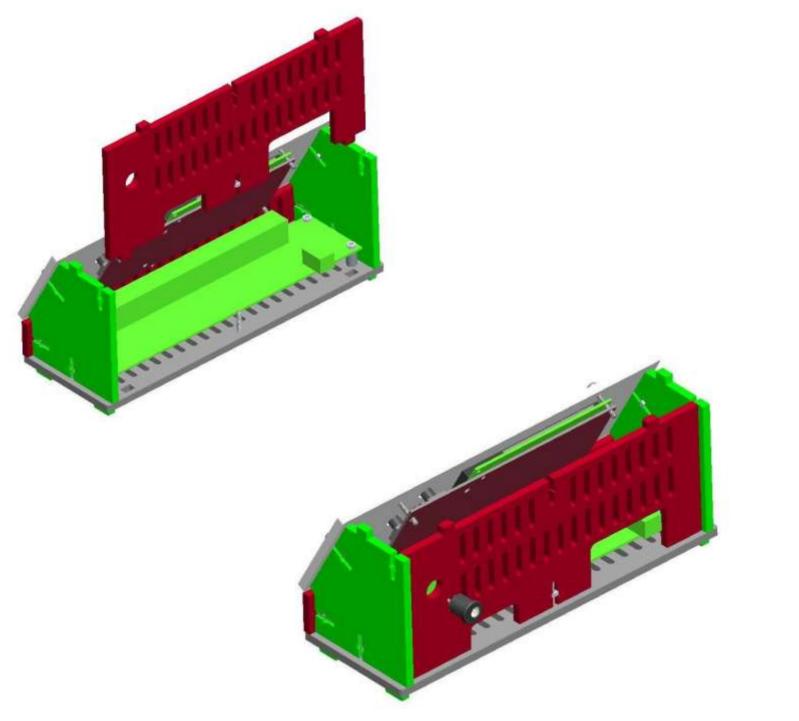
- Assemble the front plate using M3-20mm screws and M3 nuts.
- Place the LCD display assembly to the box , using 2pcs M3-20mm screws and nuts.



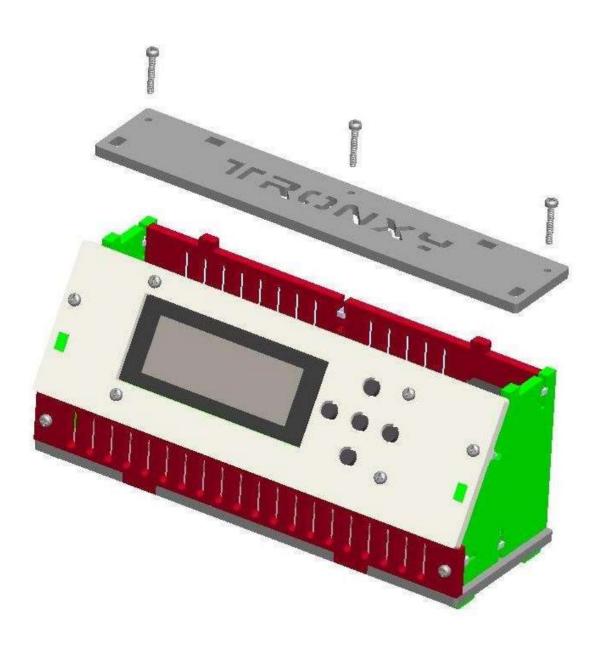
## Step 20-3 Assemble Electronic Box

Parts: Electronic box Back plate (left) – 1pcs DC power jack – 1pcs M3-20mm screws – 1pcs M3 nuts – 1pcs

- Assemble the back plate to the bottom plate as picture , secure them using M3-20mm screw&nut.
- Insert the DC power jack to the back plate.



## Step 20-4 Assemble Electronic Box



Parts:

Electronic box top plate – 1pcs M3-20mm screws – 3pcs M3 nuts – 3pcs

• Cover the top plate using M3-20mm screws and M3 nuts.

## Step 23 Control Board Wiring Diagram

**Parts:** Mainboard – 1pcs

- The method of connecting wire is as picture
- ▲ There is only 1pcs cooler fan , please connect to 'CFAN' on board
- There do not have heatbed and the thermistor, so there's no connection on 'Hotbed' and 'BTEMP'.

