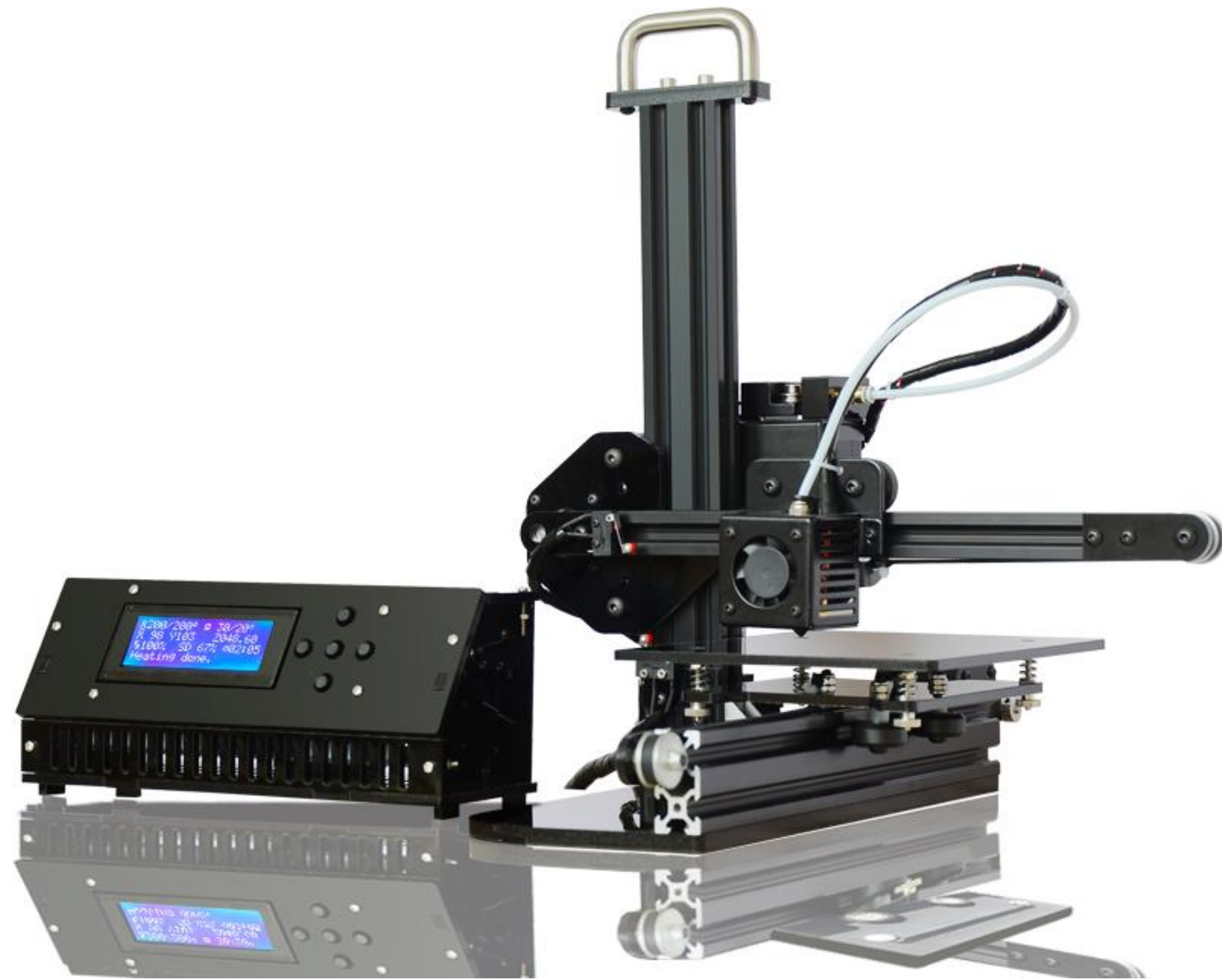


# **TRONXY 3D PRINTER X1**

**ASSEMBLY GUIDE** v.02



## Step 1 Assemble Base Frame

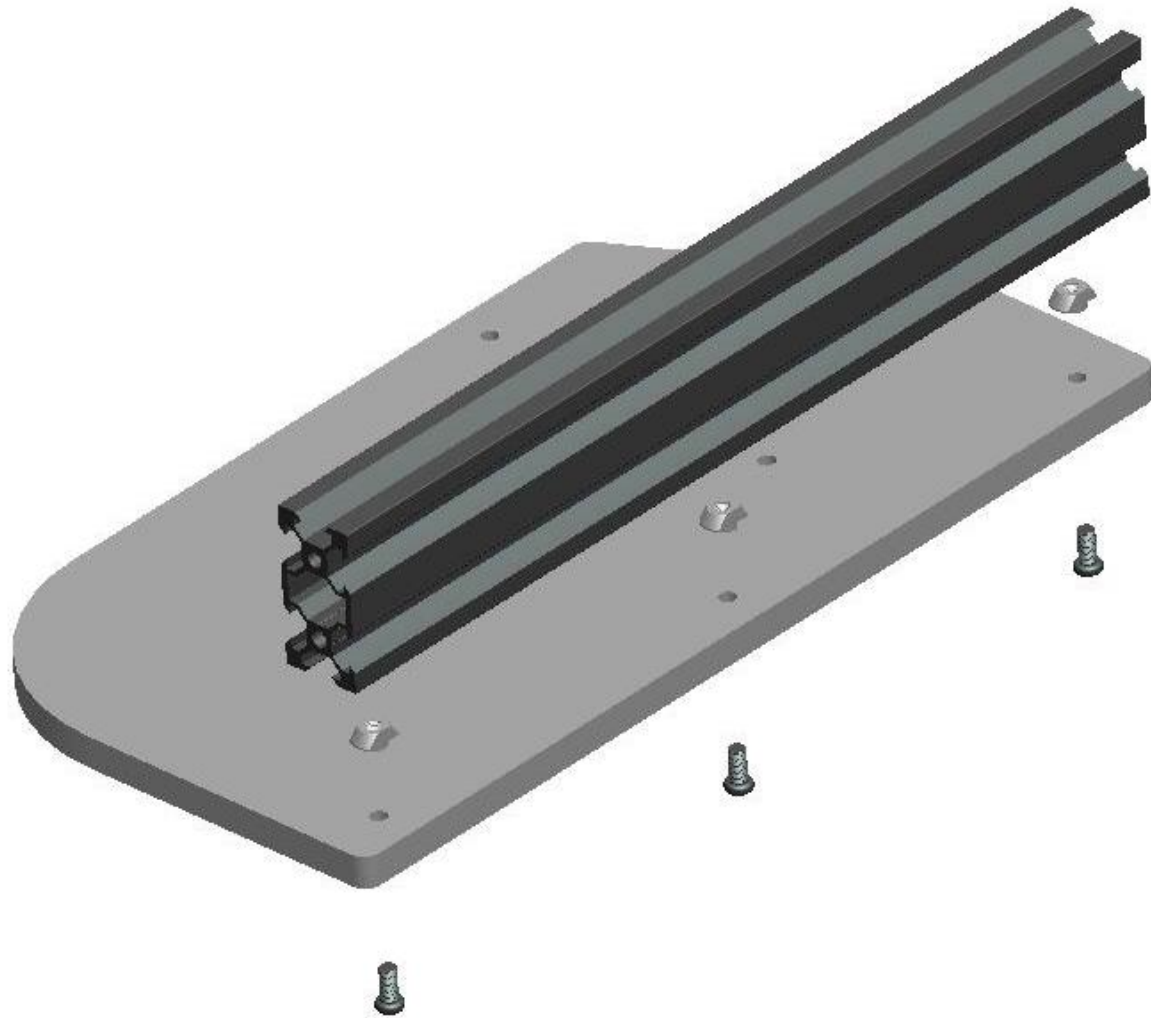
### Parts:

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

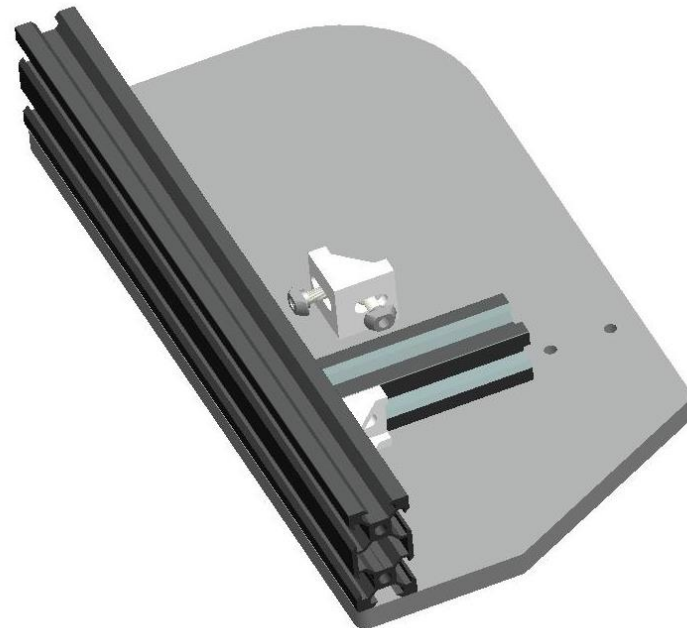
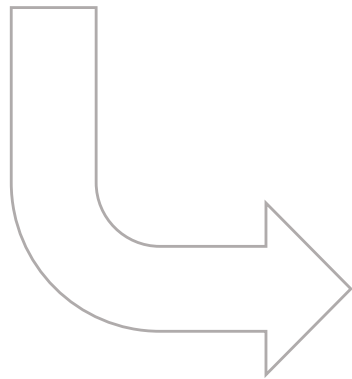
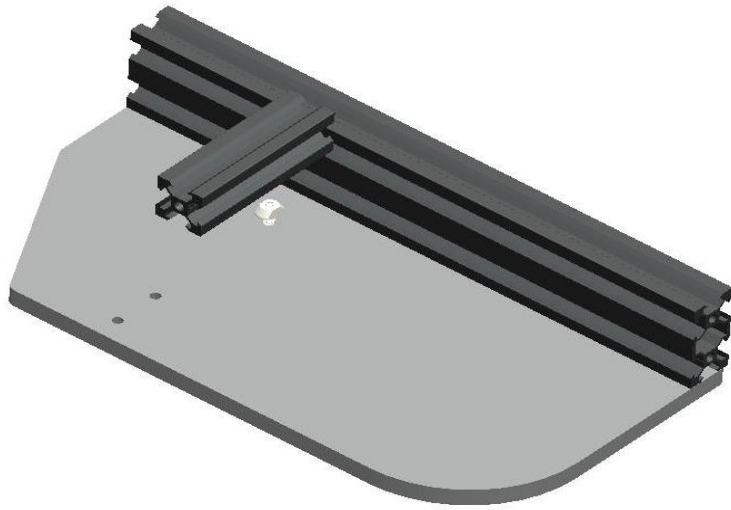
### Parts:

2020 Aluminium profile 70mm – 1pc

Corner bracket – 2pcs

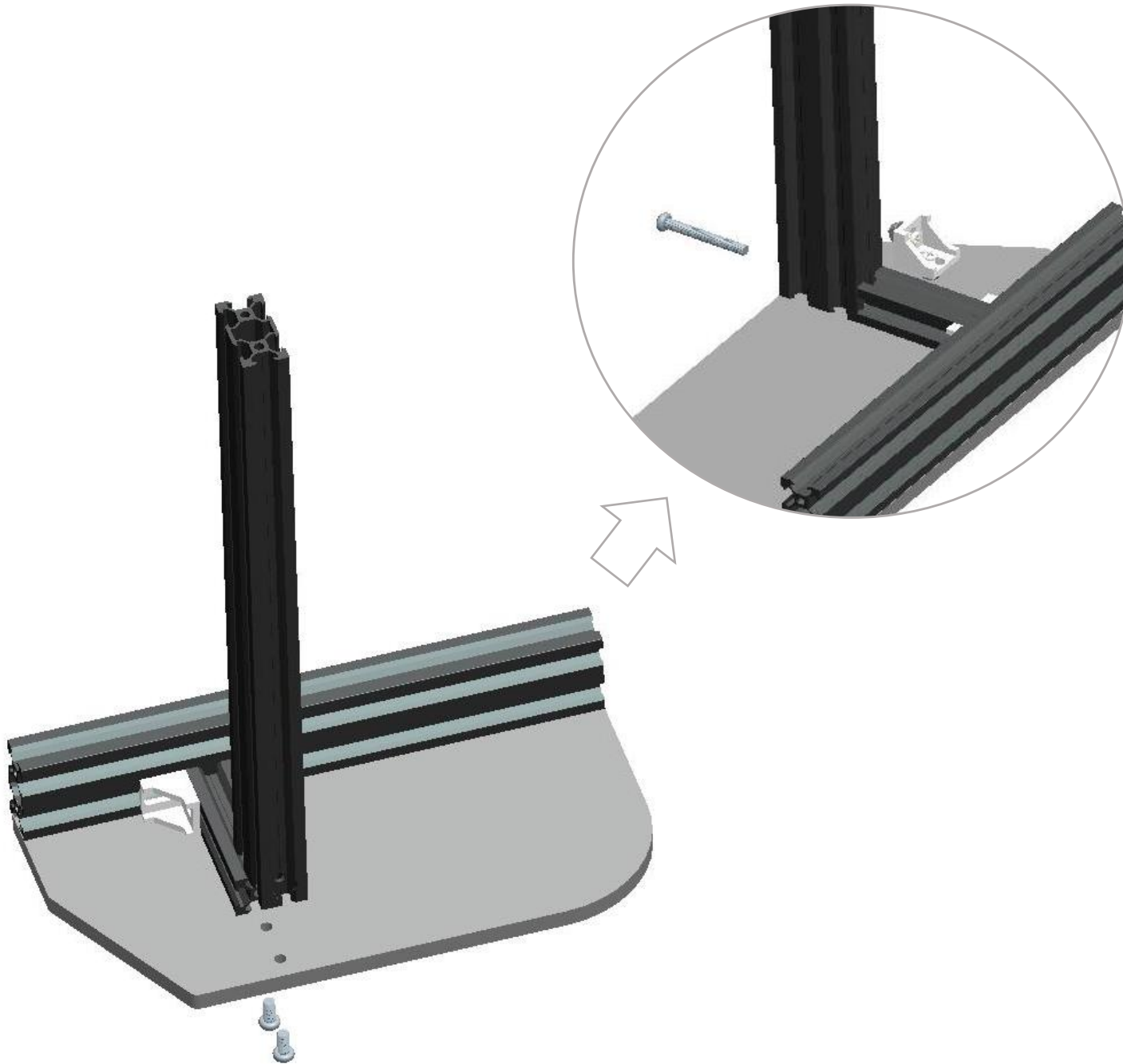
M4-8mm screw – 5pcs

M4 T-Nut – 5pcs



- Put the '2020 aluminium profile 70mm' on the base plate, secure them with 1pc 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

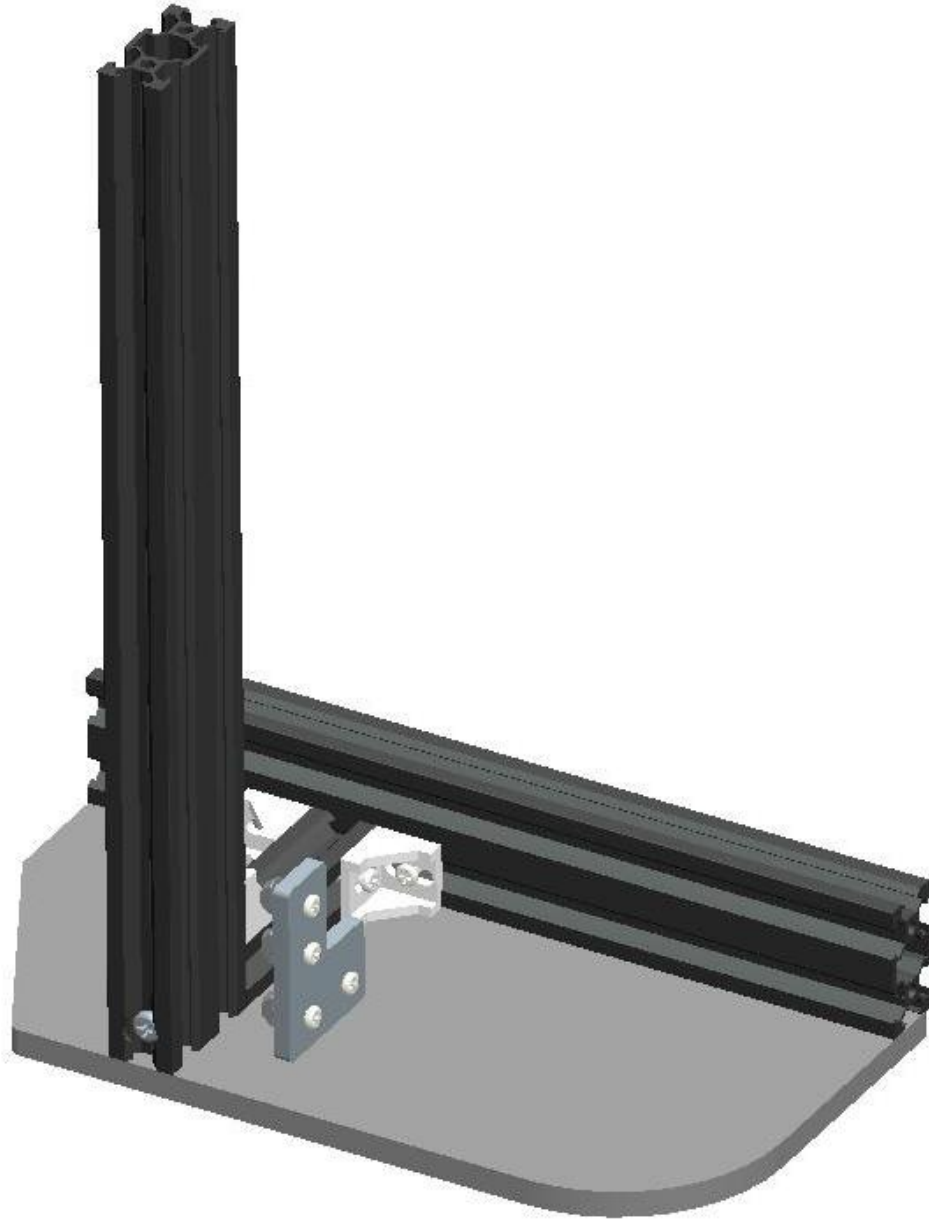
M5-40mm screw – 1pcs

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

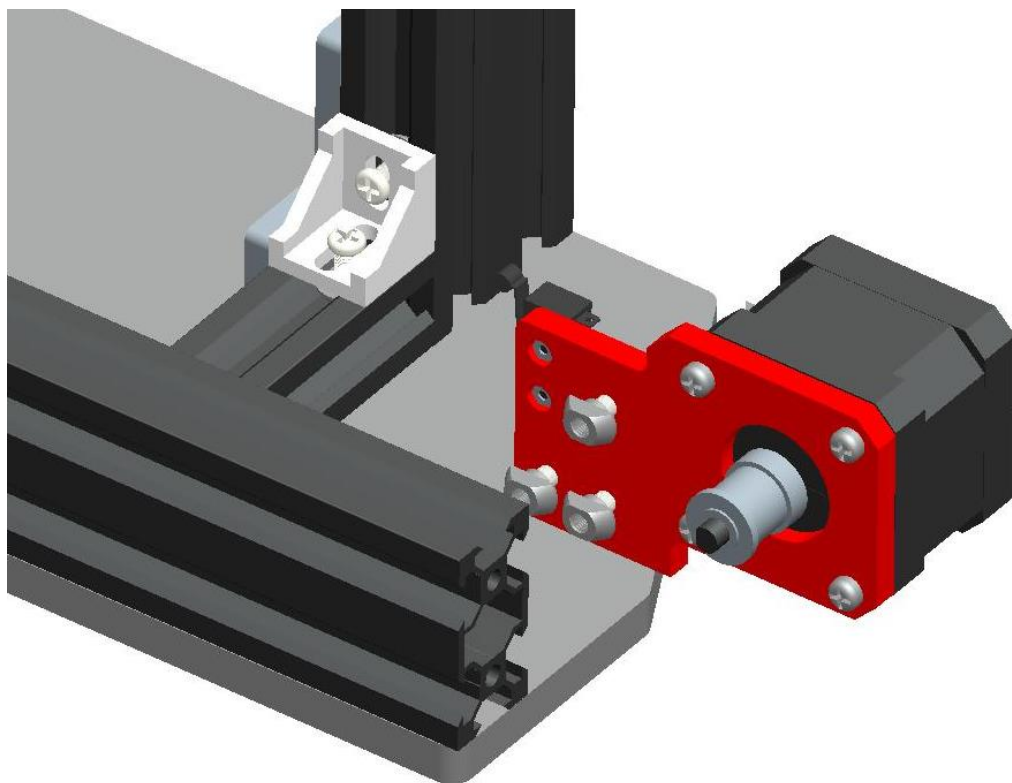
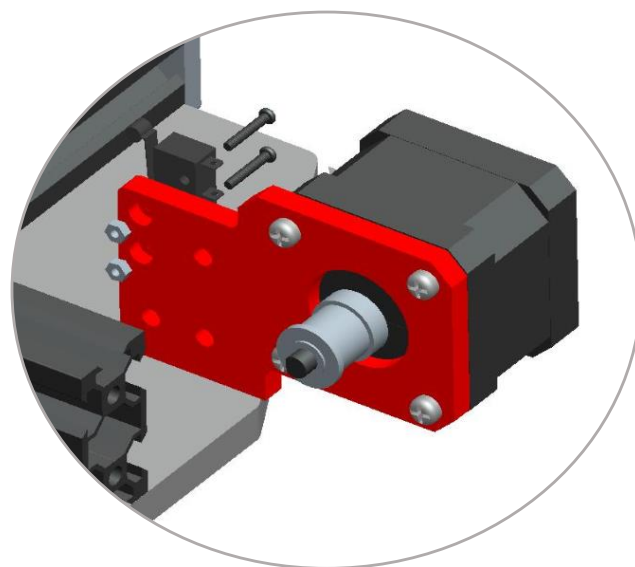
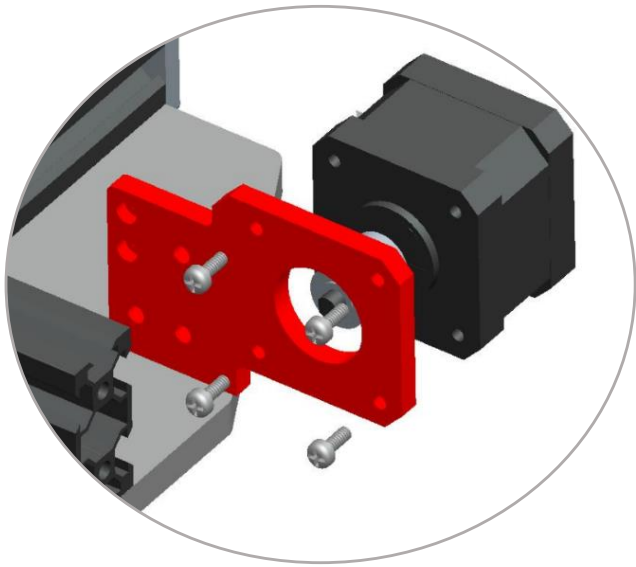
- Place 1pcs L-shape acrylic block on the aluminium profile, secure them with 4pcs M4-8mm screws & T-Nut

## 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

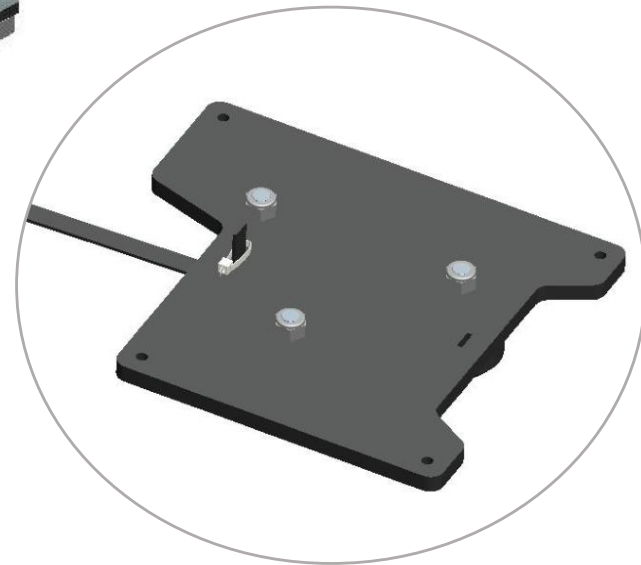
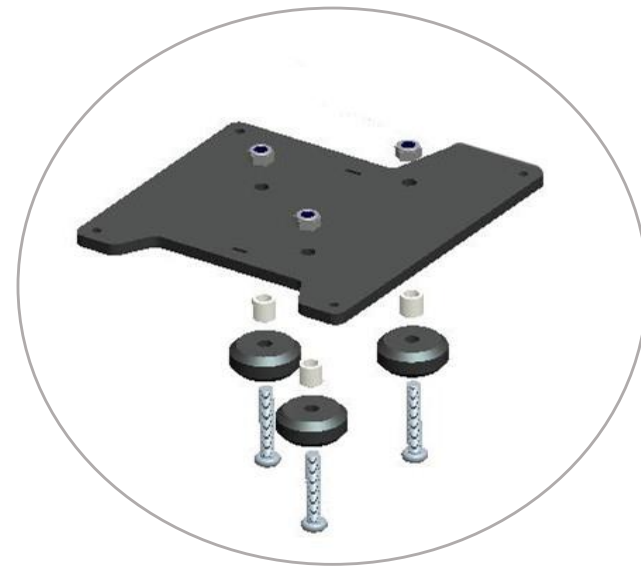
Plastic pillar – 3pcs

M5-30mm- 3pcs

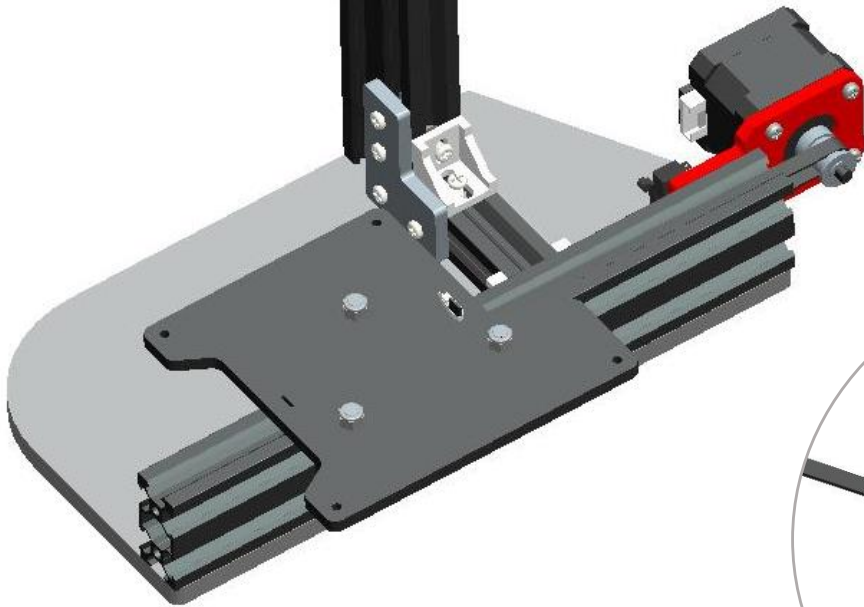
M5 nut – 3pcs

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

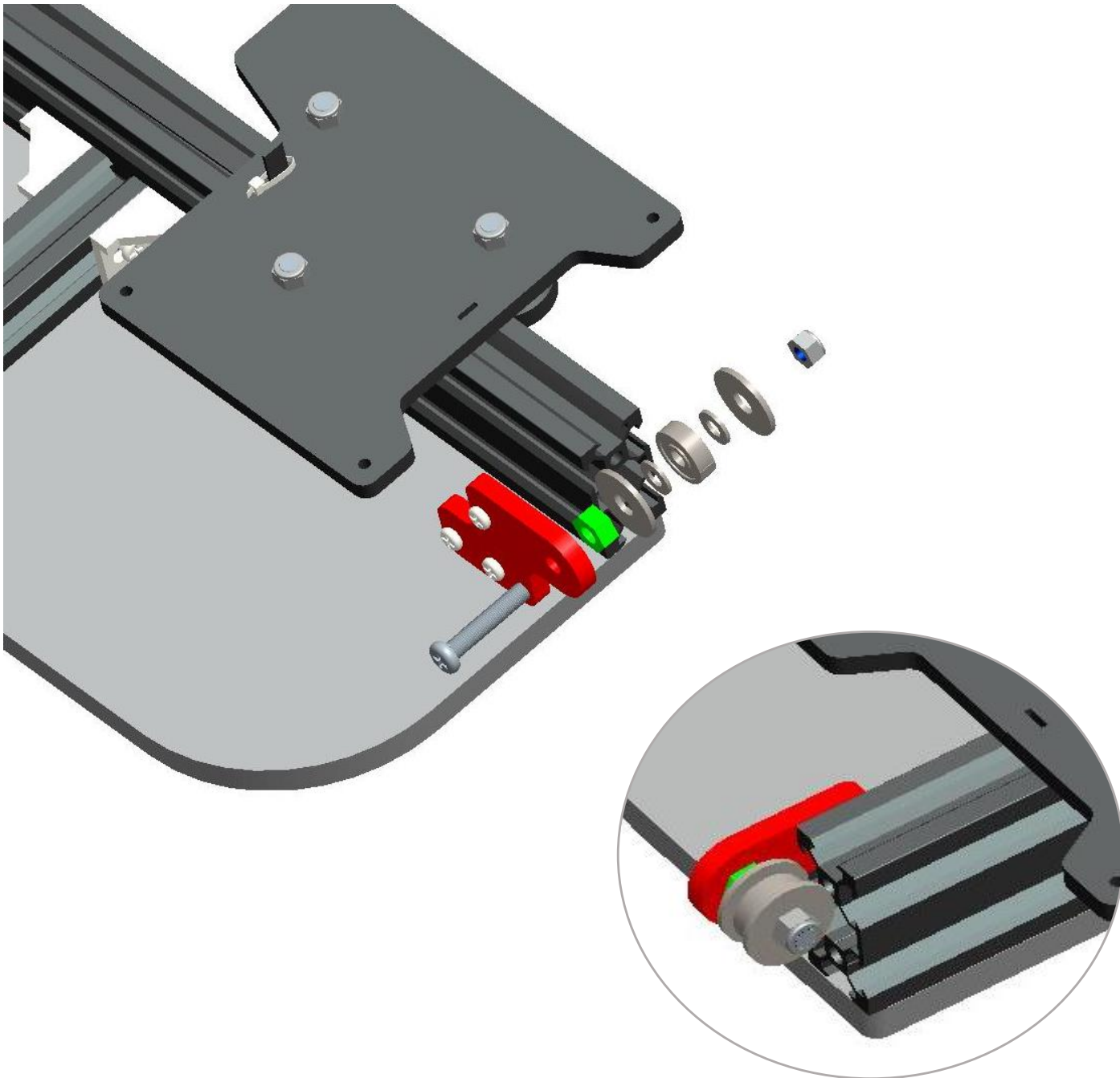
M6 washer – 2pcs

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.

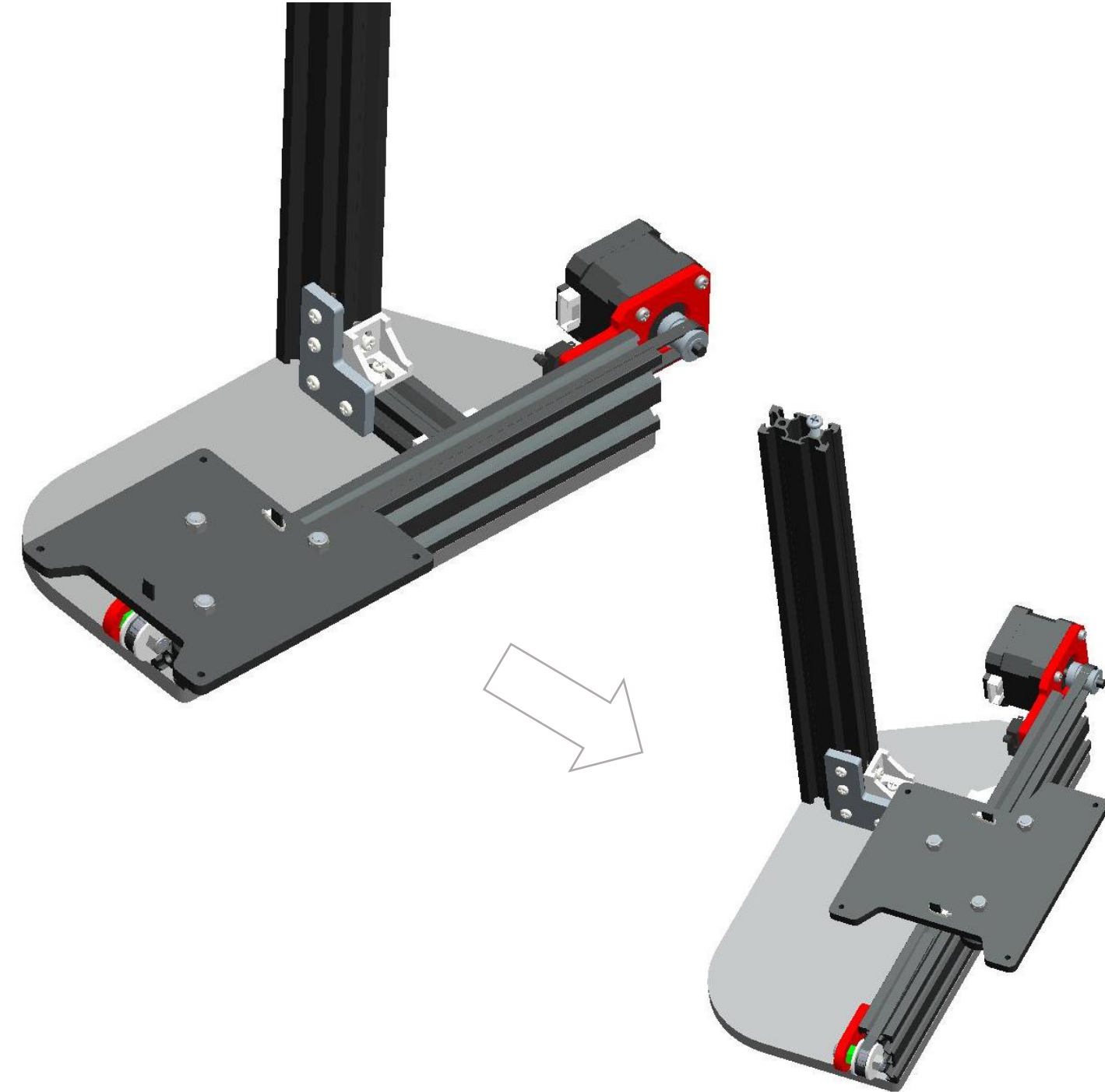


## Step 8 Install Y axis Timing Belt

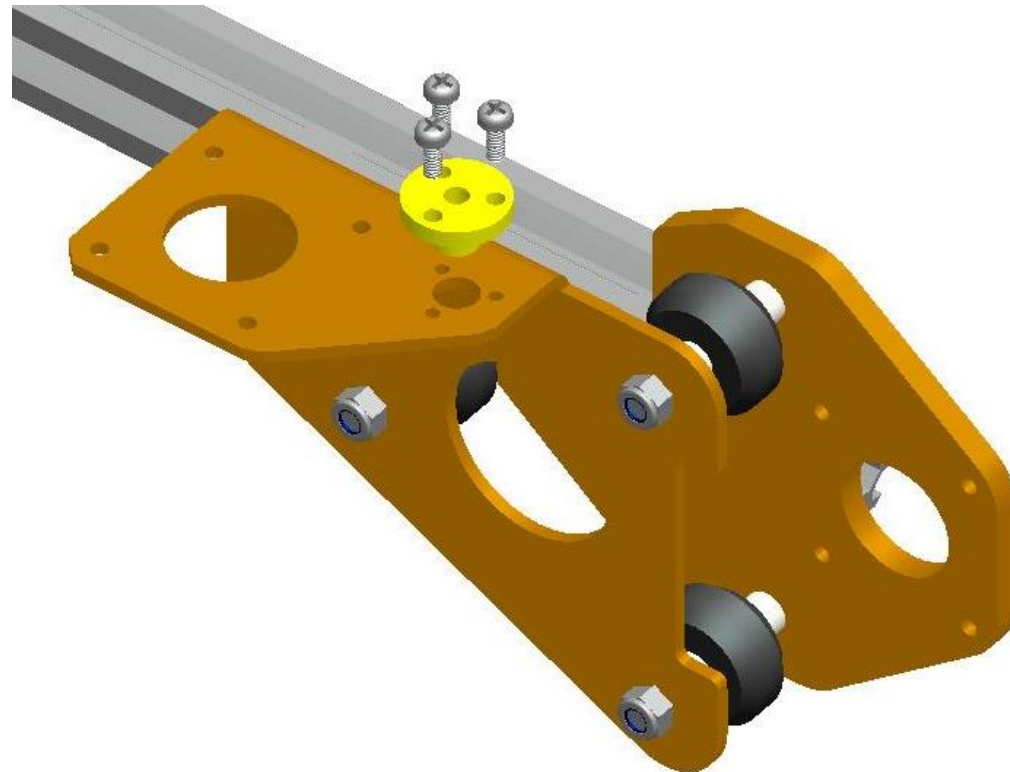
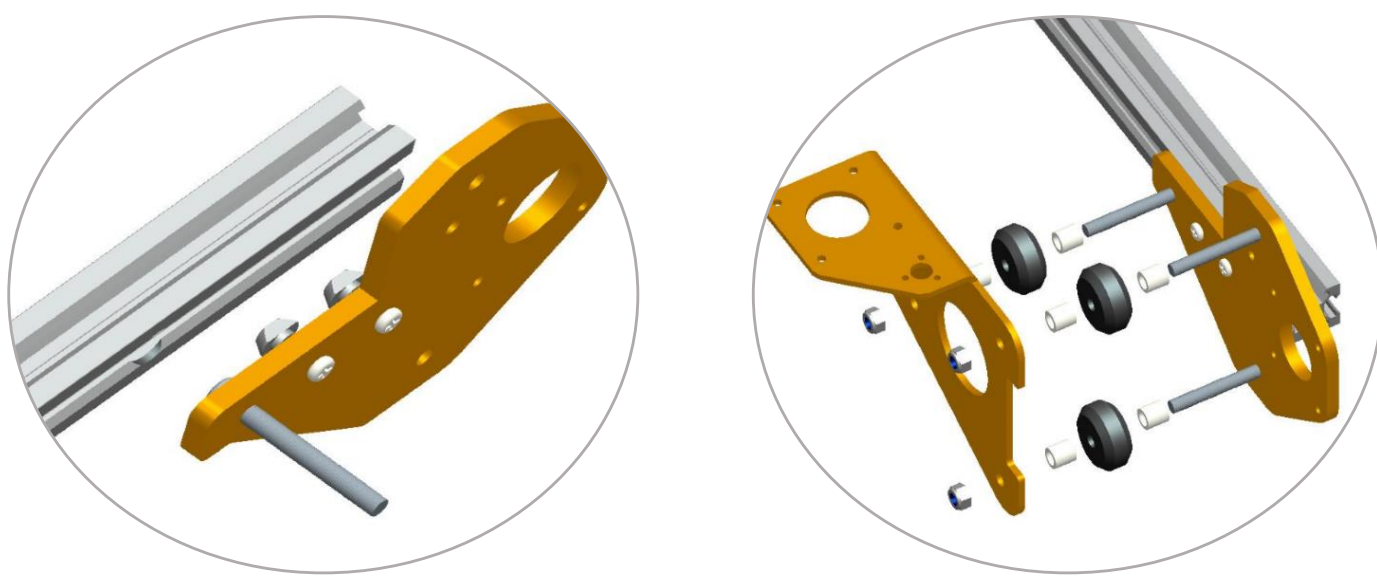
### Parts:

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 .

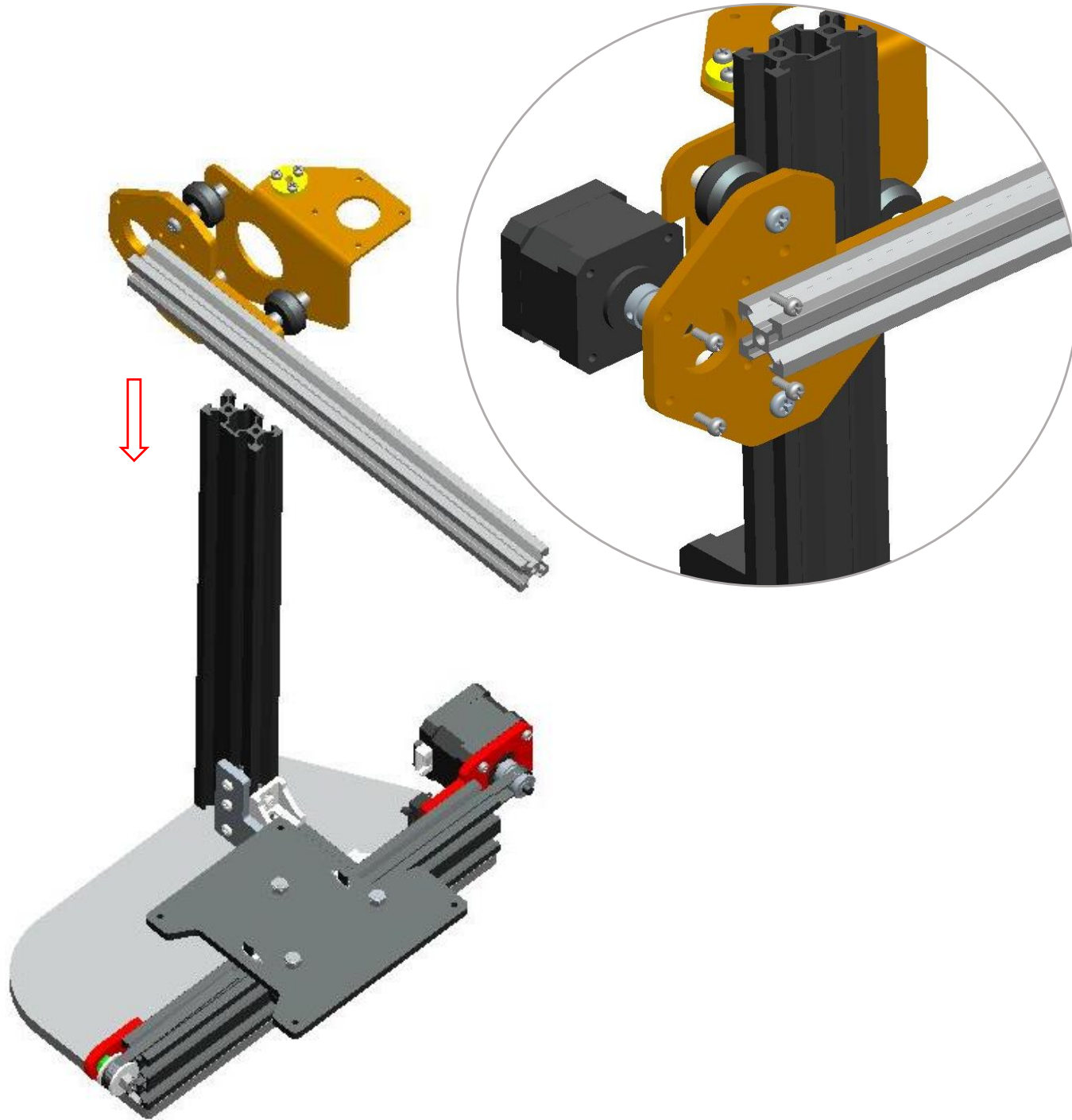
## Step 10 Install Z carriage

### Parts:

42 stepper motor – 1pcs

GT2-16 Pulley (with grub screw in it)– 1pcs

M3-8mm screws – 4pcs

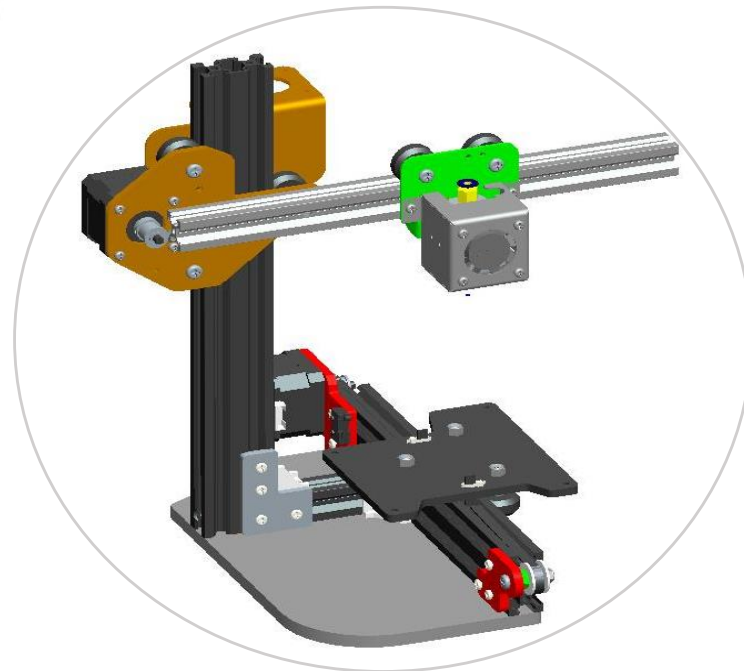
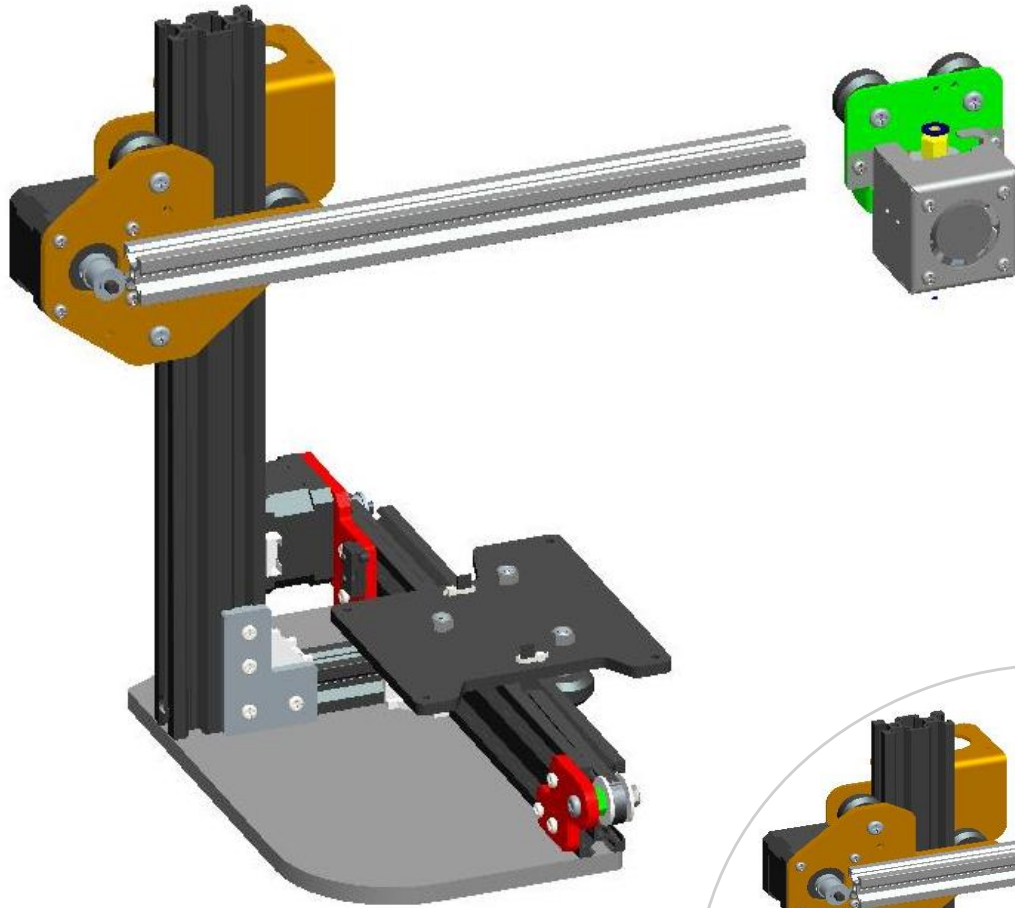


- Carefully insert the X-axis assembly to the Z slide rail
- Insert the GT2-16 pulley to the motor shaft, tighten the grub screw in the pulley, then place the X stepper motor to the motor mount, secure them with 4pcs M3-8mm screws .

## 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 Locknut – 1pcs

M6 washer – 2pcs

M5 washer – 2pcs

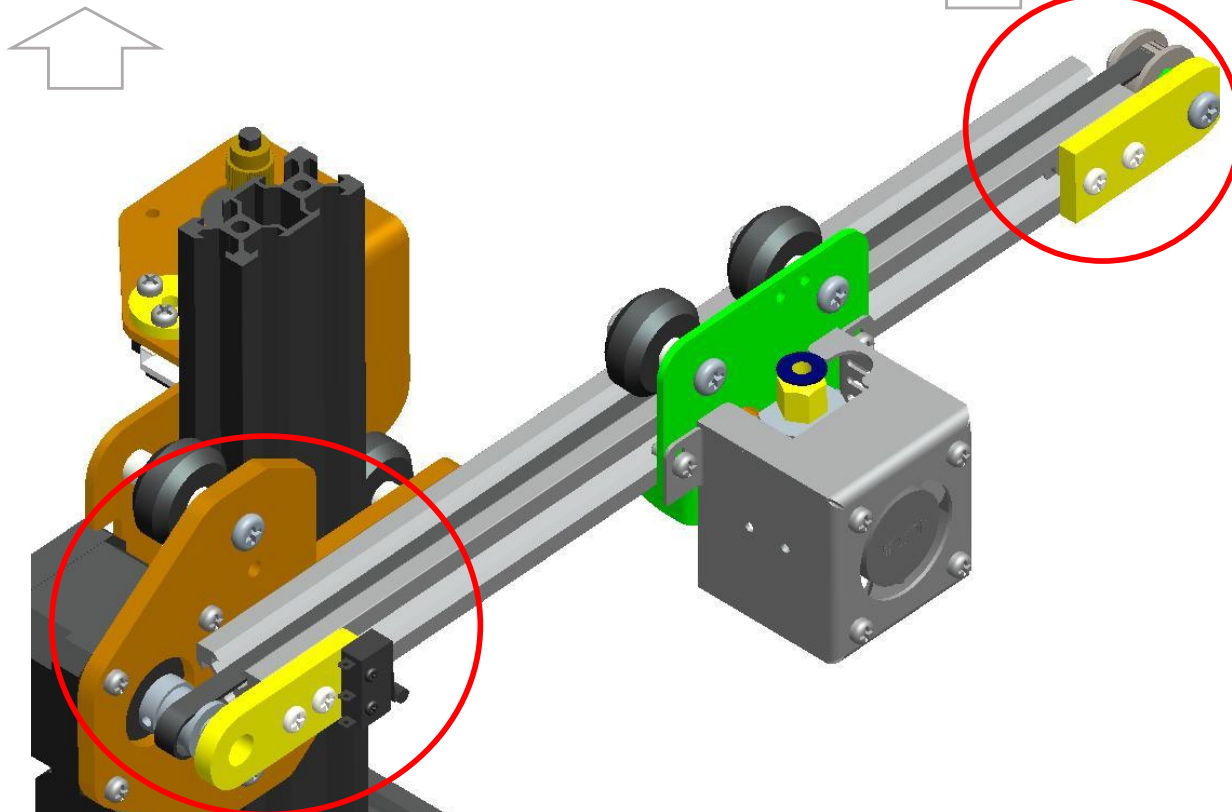
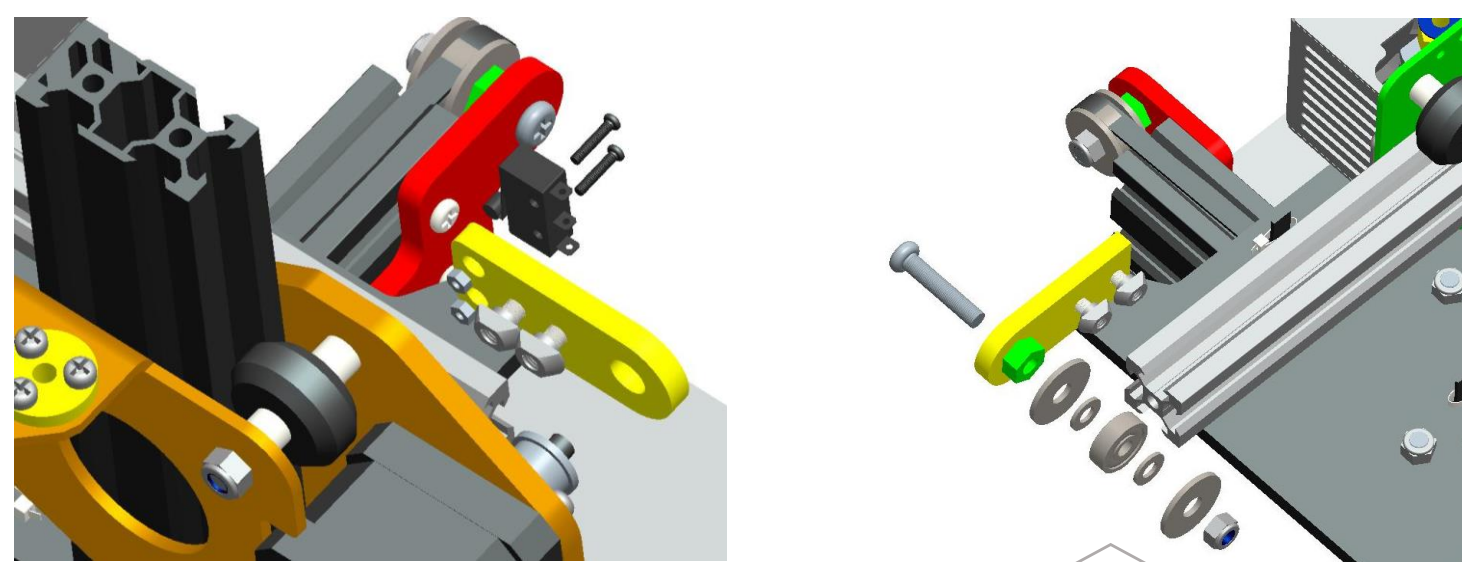
M4-8mm screw – 4pcs

M4 T-Nut - 4pcs

M2-10mm screw – 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.

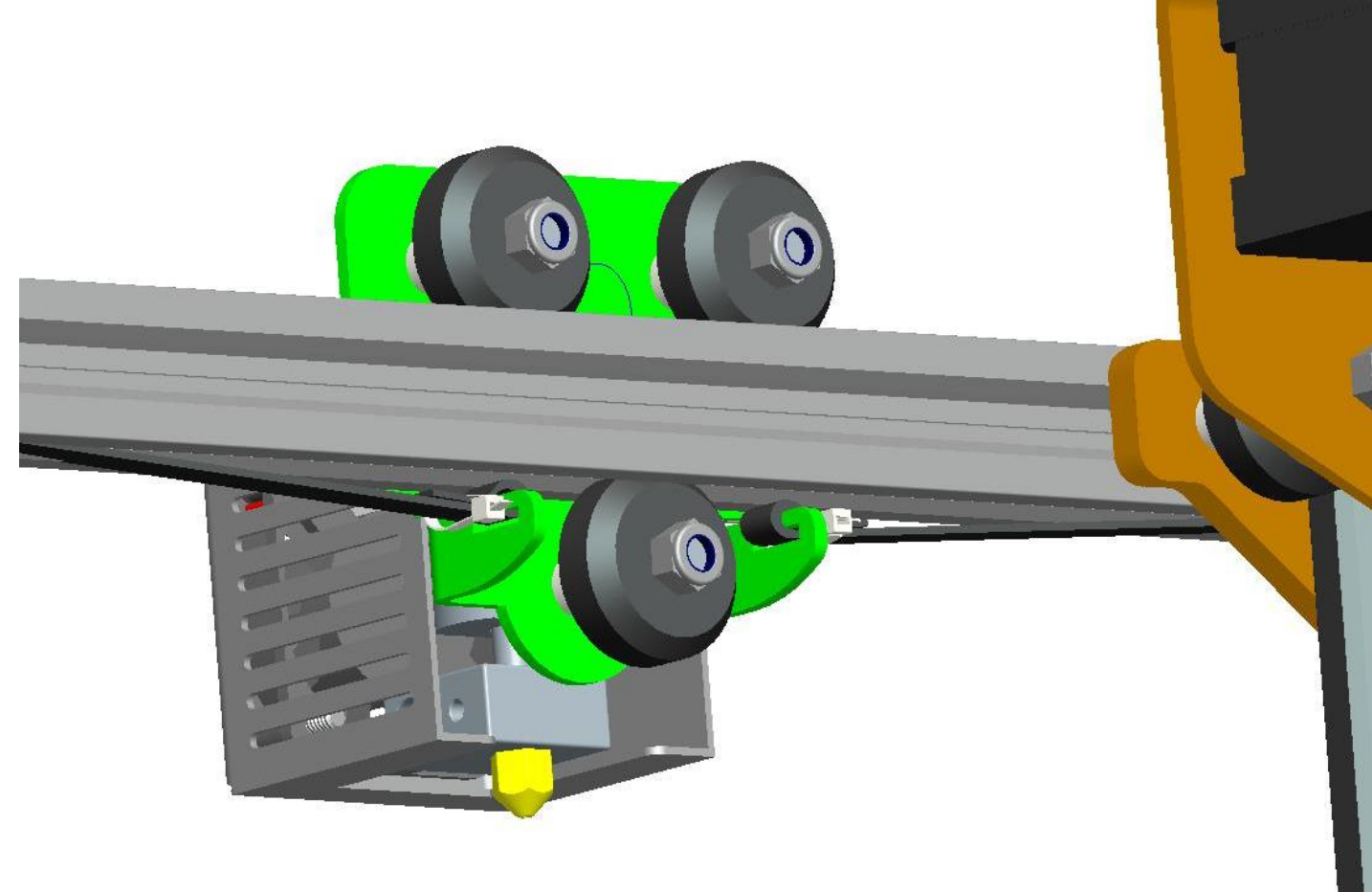


## Step 13 Install X axis Timing Belt

### 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

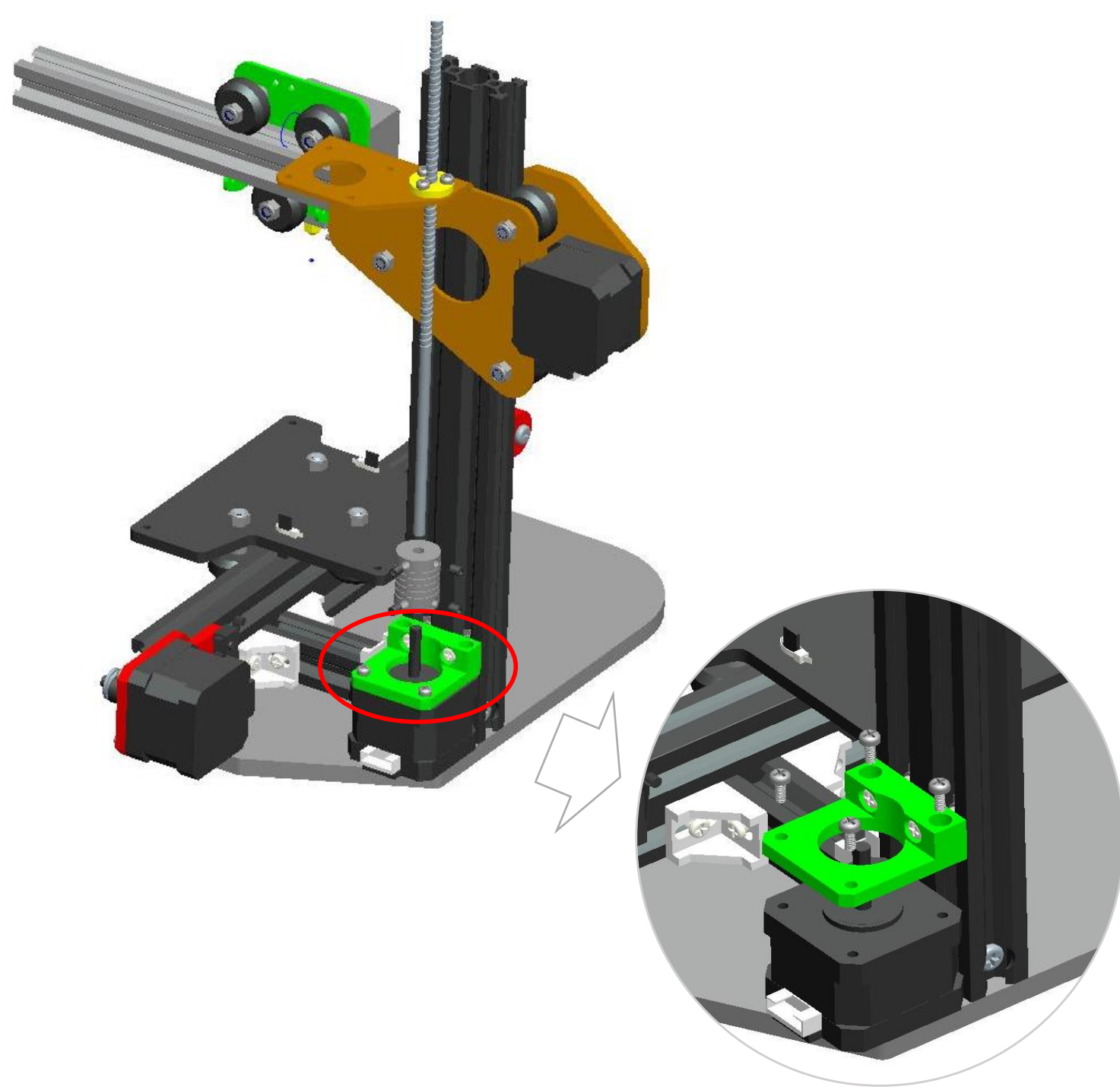
Threaded rod 260mm – 1pcs

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 M4-12mm 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

Extrusion clip - 1pcs

Extrusion seat – 1pcs

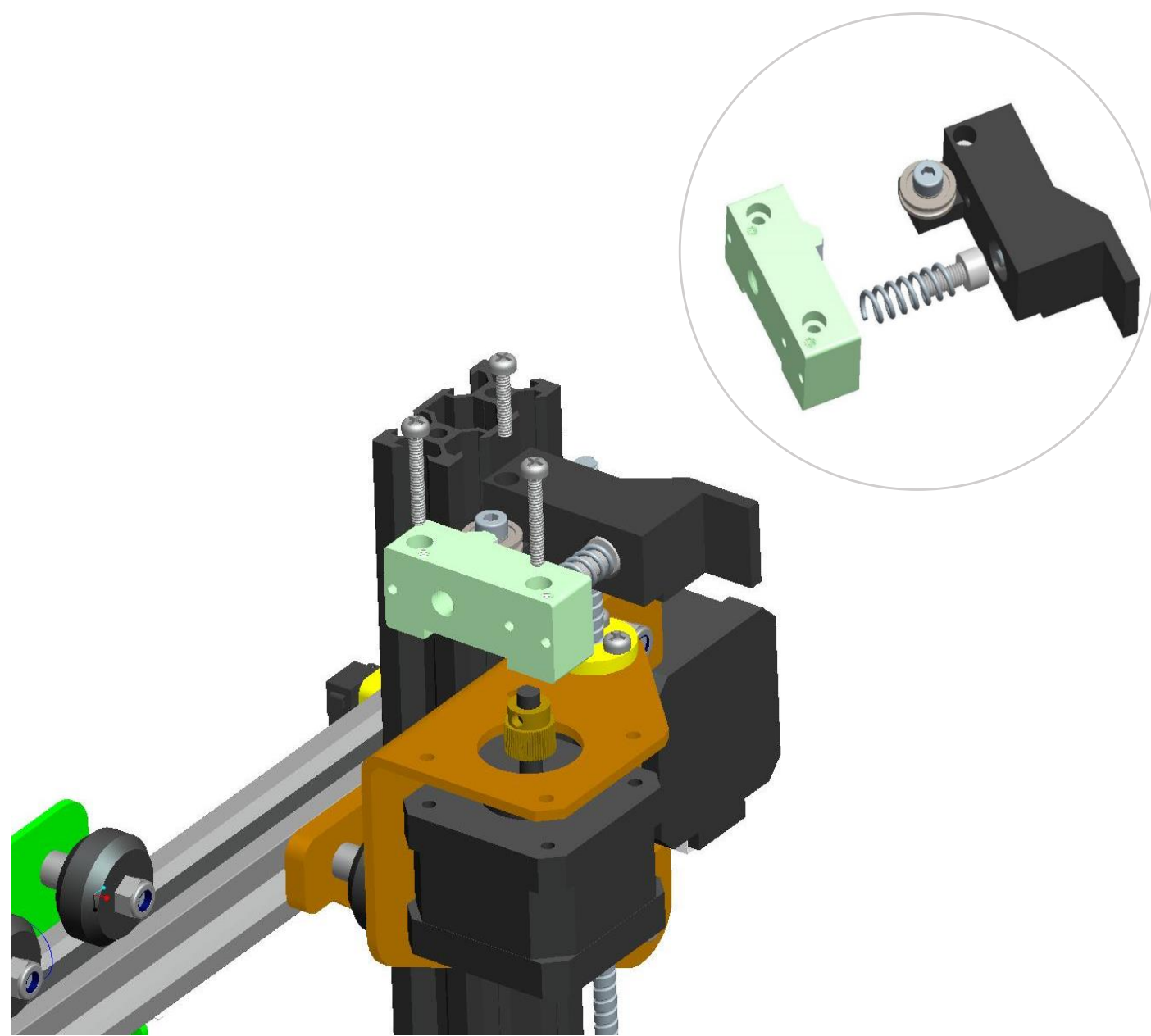
M3-22mm – 2pcs

M3-16mm – 1pcs

M5-10mm Hex screw – 1pcs

Spring – 1pcs

- Insert the feeding gear to the motor shaft and them tighten up .
- Place the Extrusion 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 extrusion clip and extrusion seat , next secure the extrusion clip with motor using M3-16mm screw.



## Step 16 Install handle

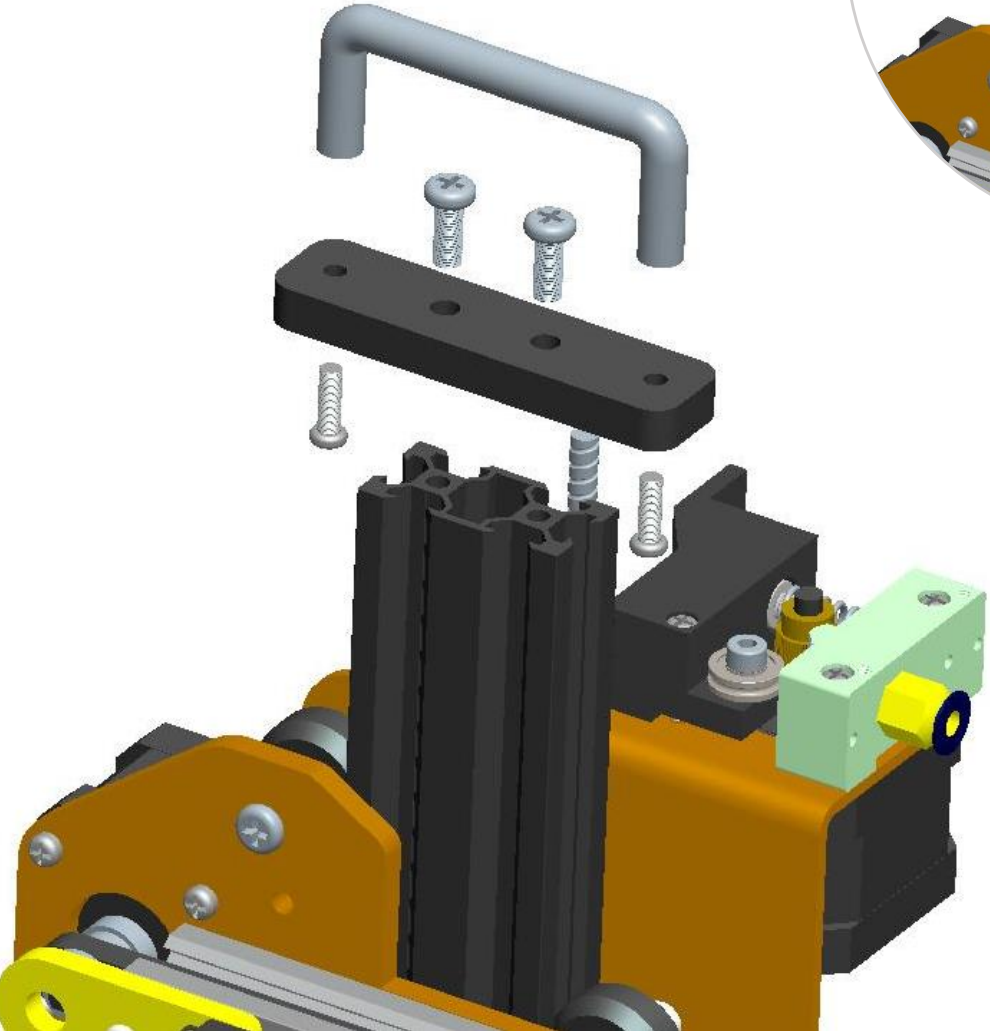
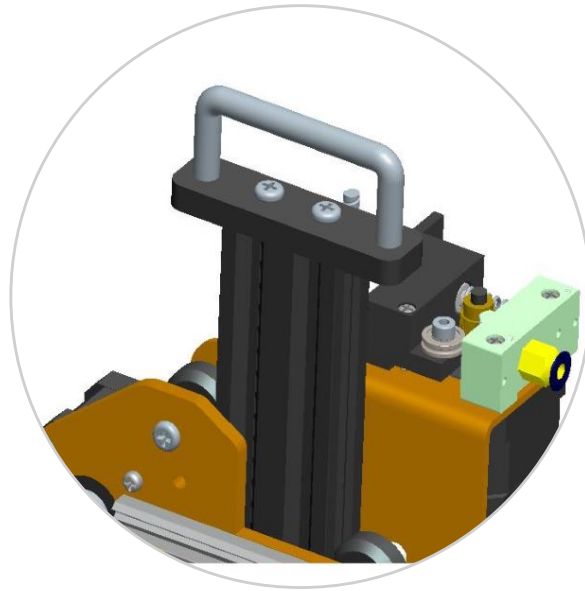
### Parts:

Handle – 1pc

Handle seat (Acrylic) – 1pc

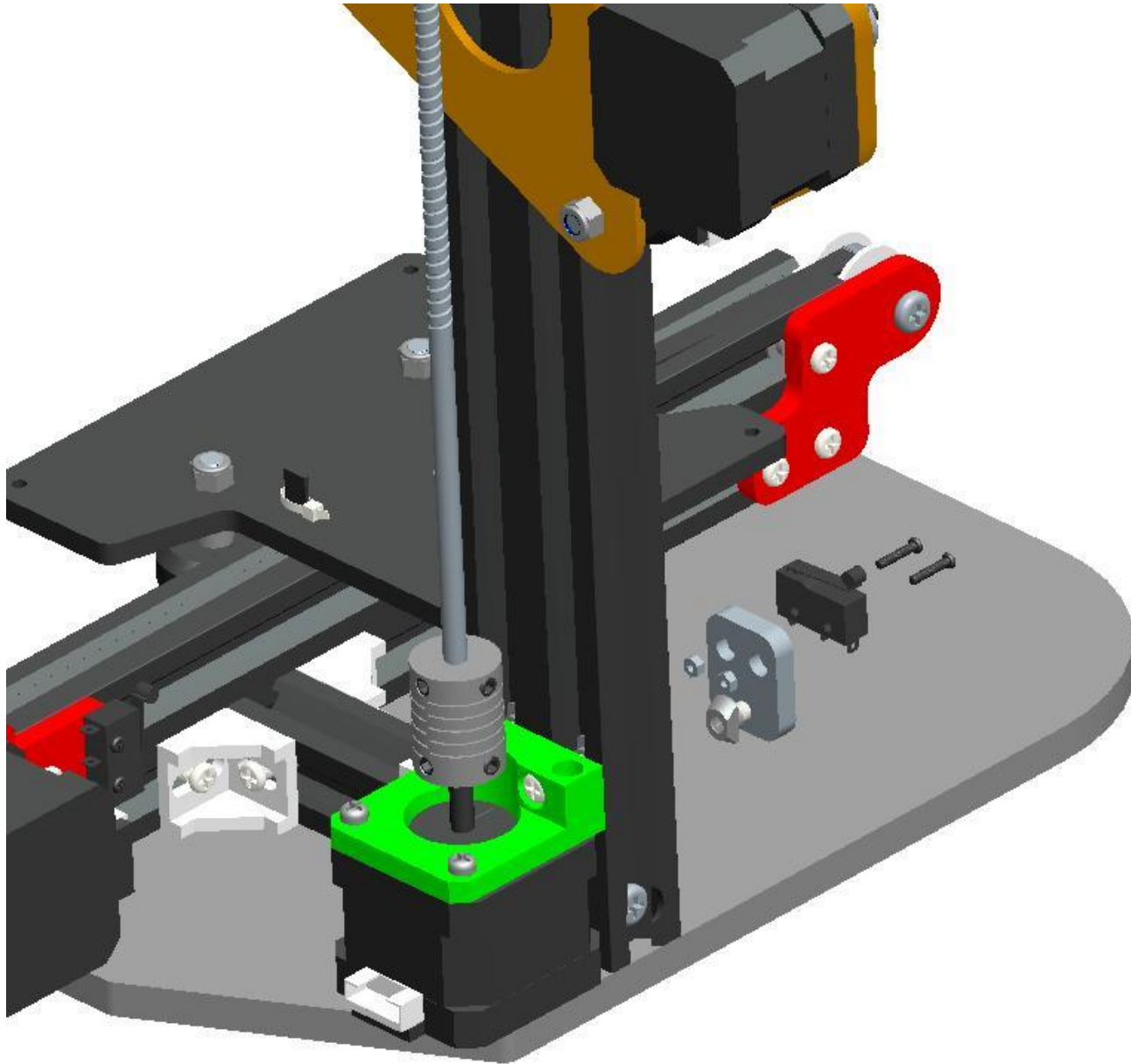
M5-10mm screw – 2pcs

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

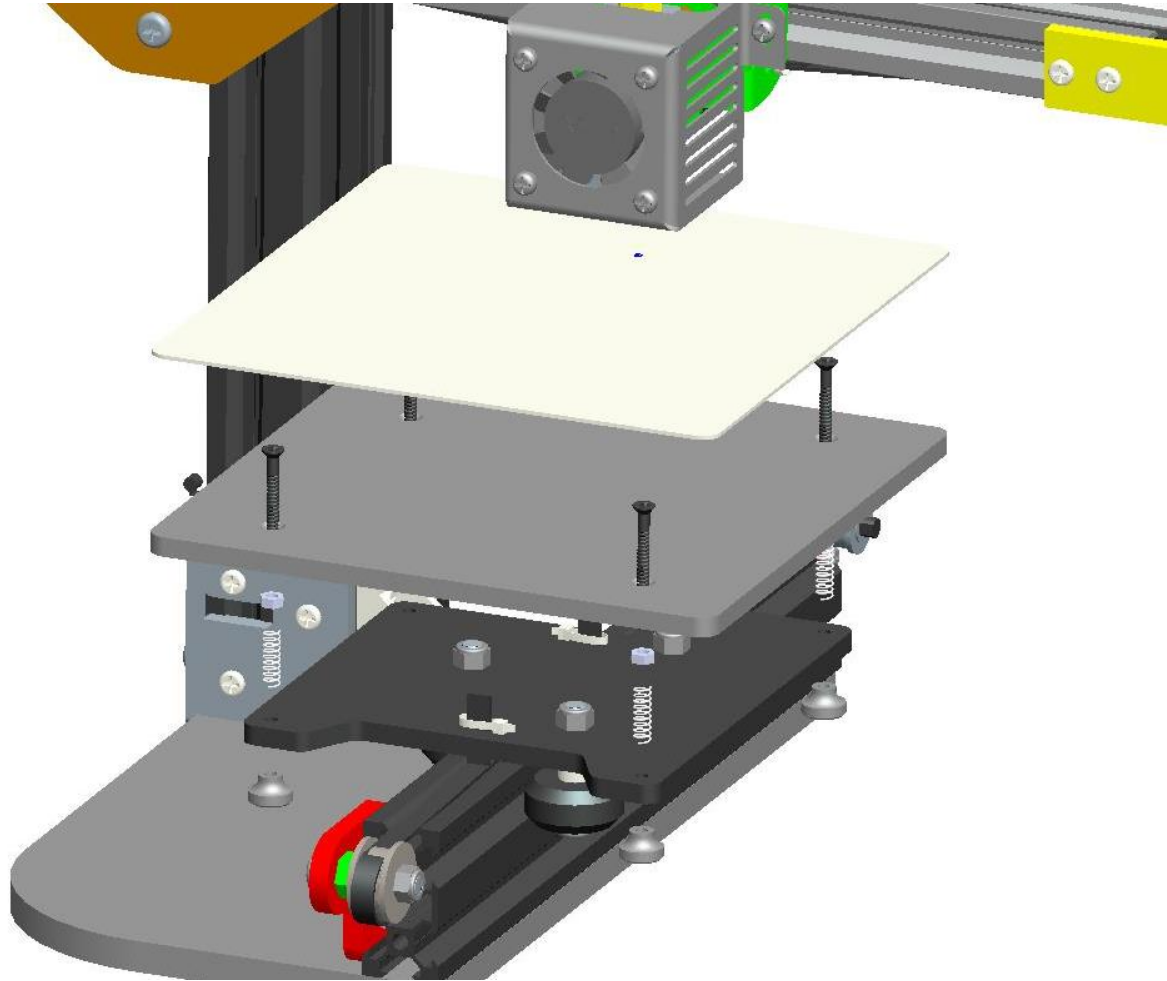
M4 T-Nut – 1pcs

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

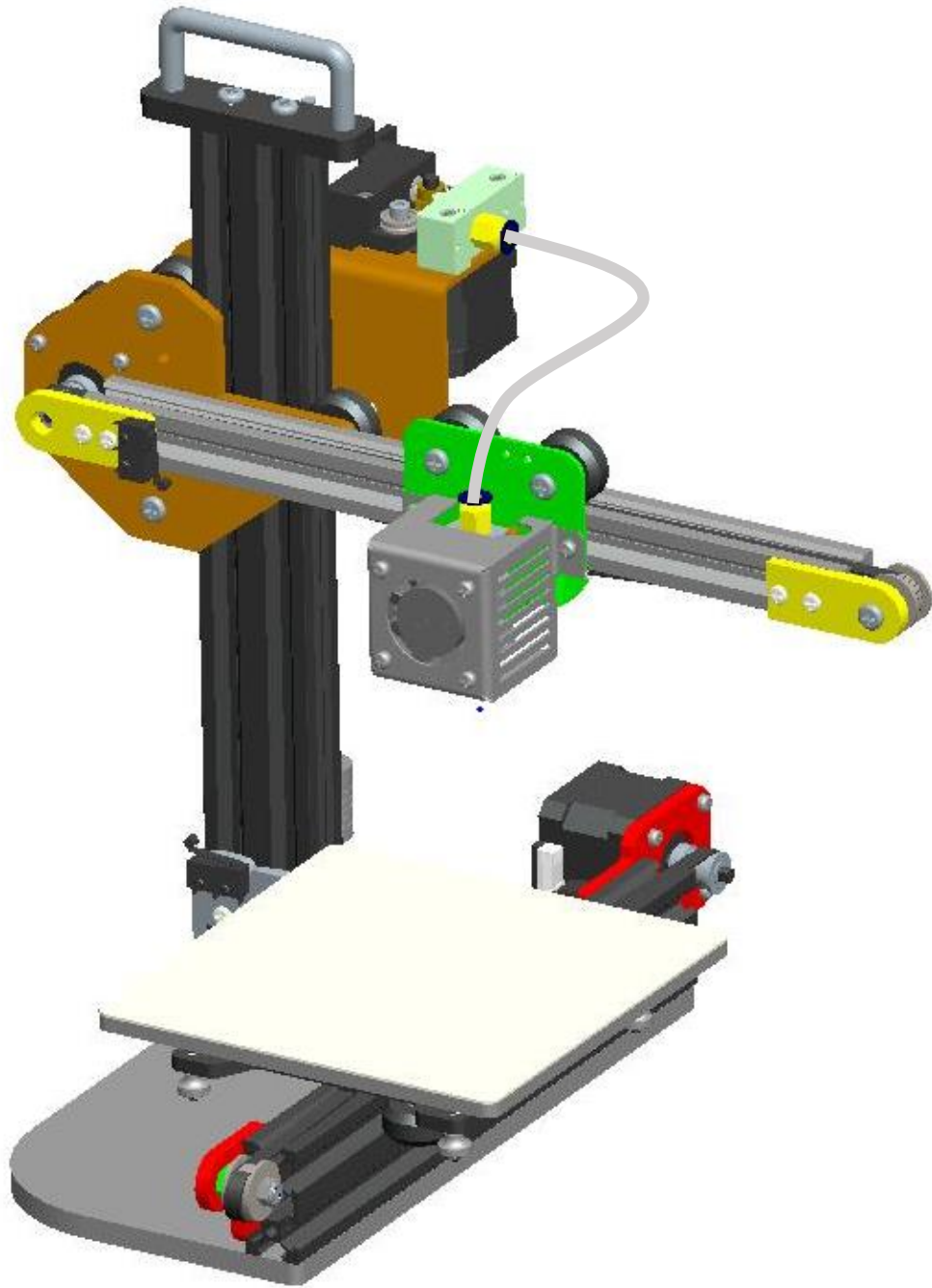
- Place the Bed plate on the bed frame use 4pcs springs between them, and then through 4pcs M3-30mm screws, then top 4pcs thumb nuts under the bed frame.

## 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

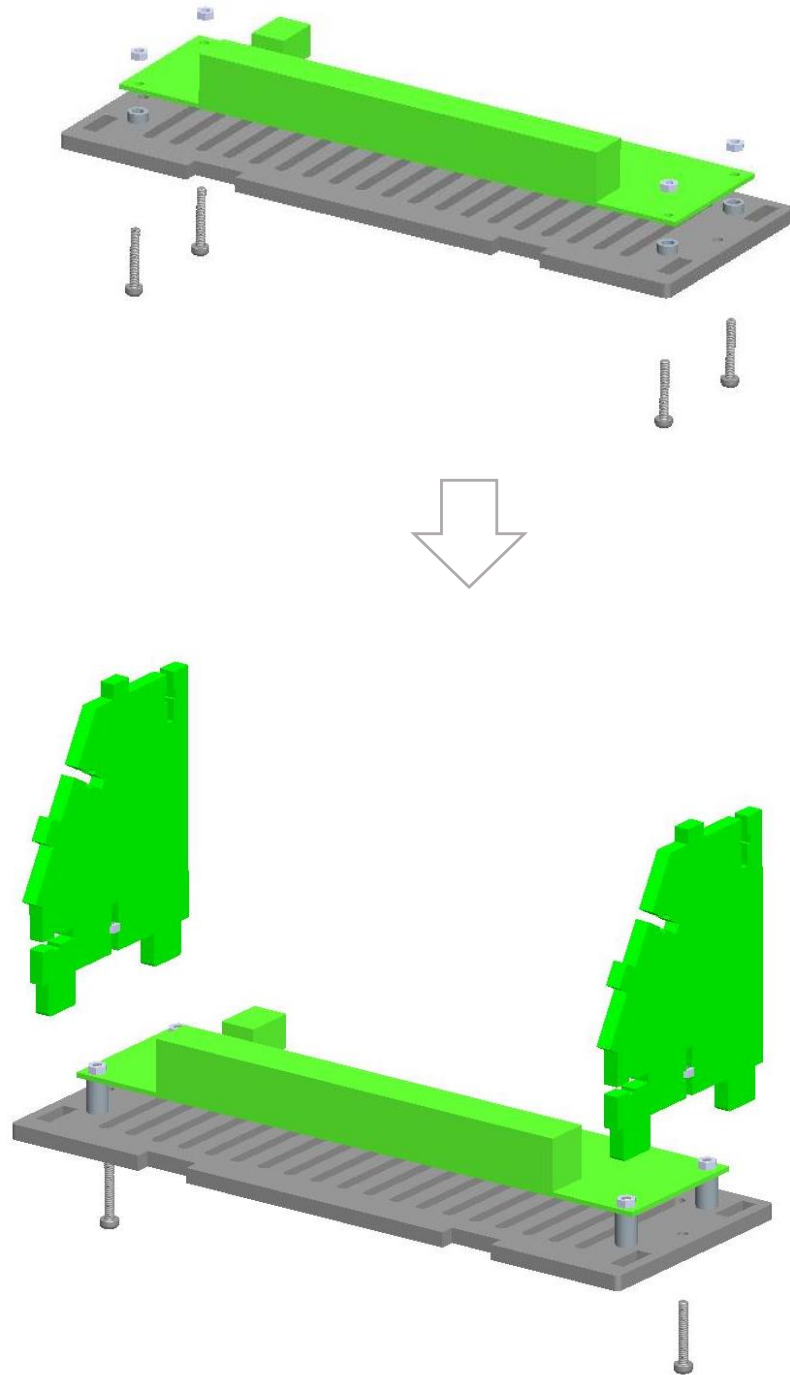
Electronic box side plate – 2pcs

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 plastic 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

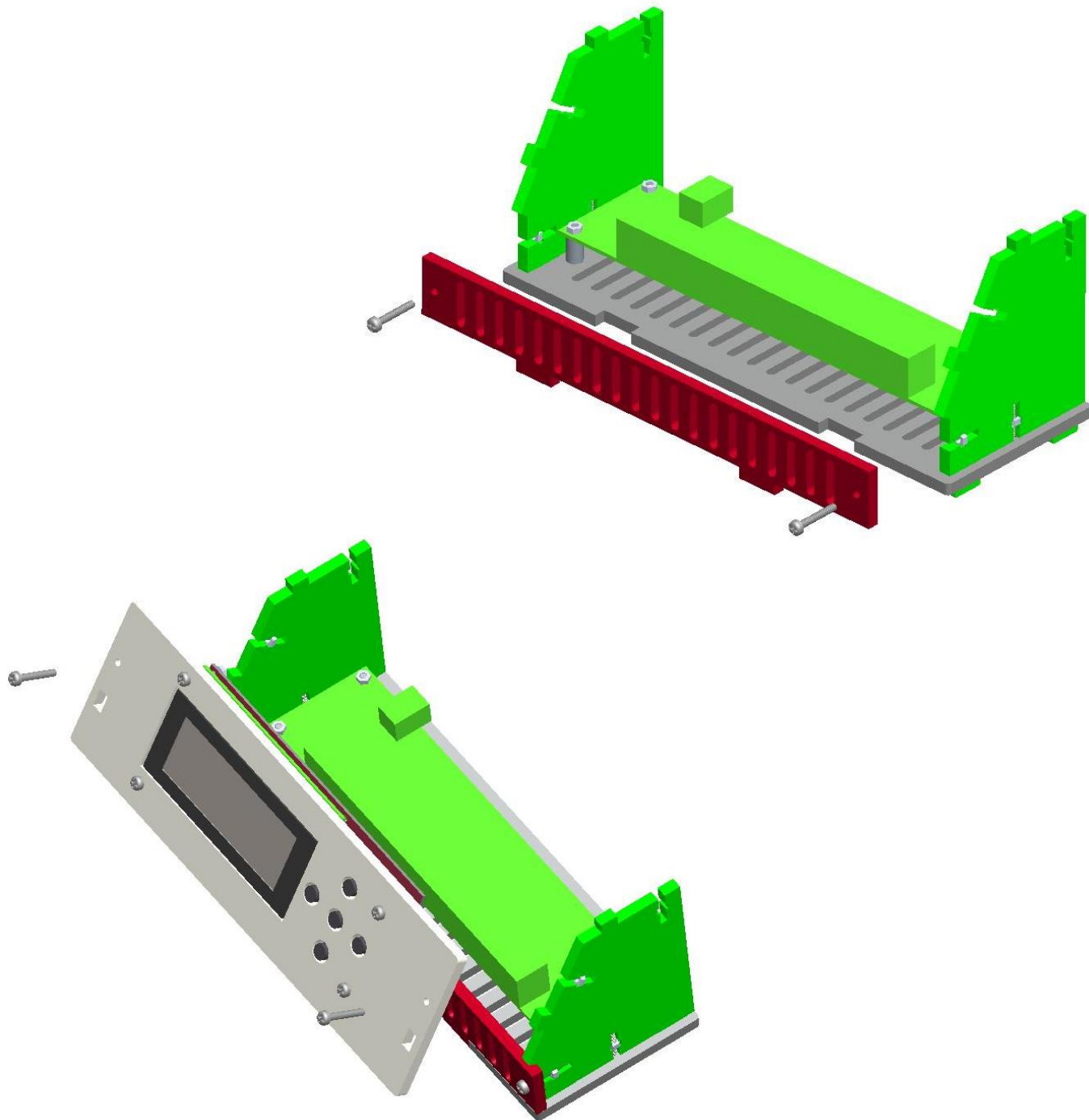
### Parts:

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

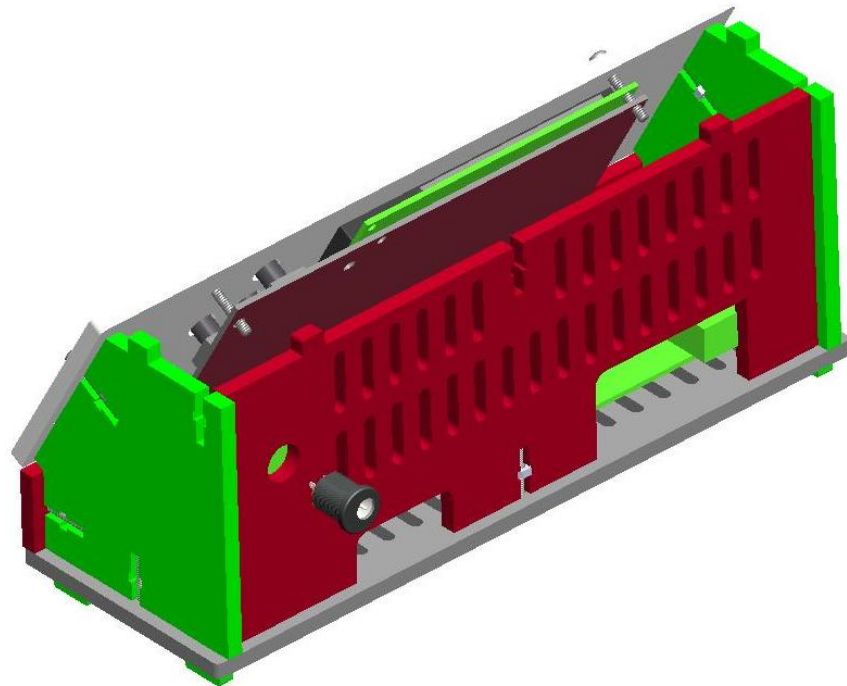
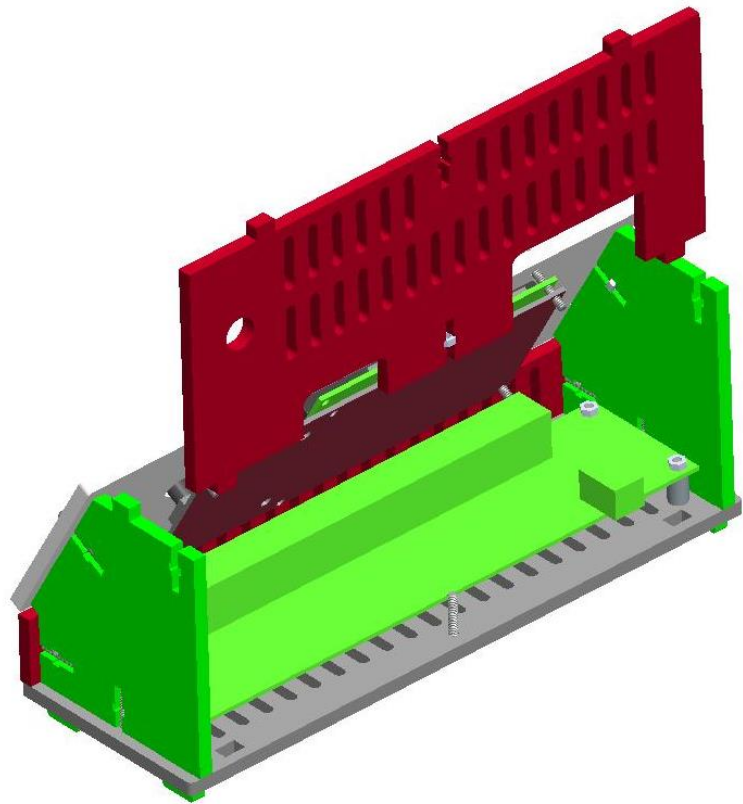
### Parts:

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.



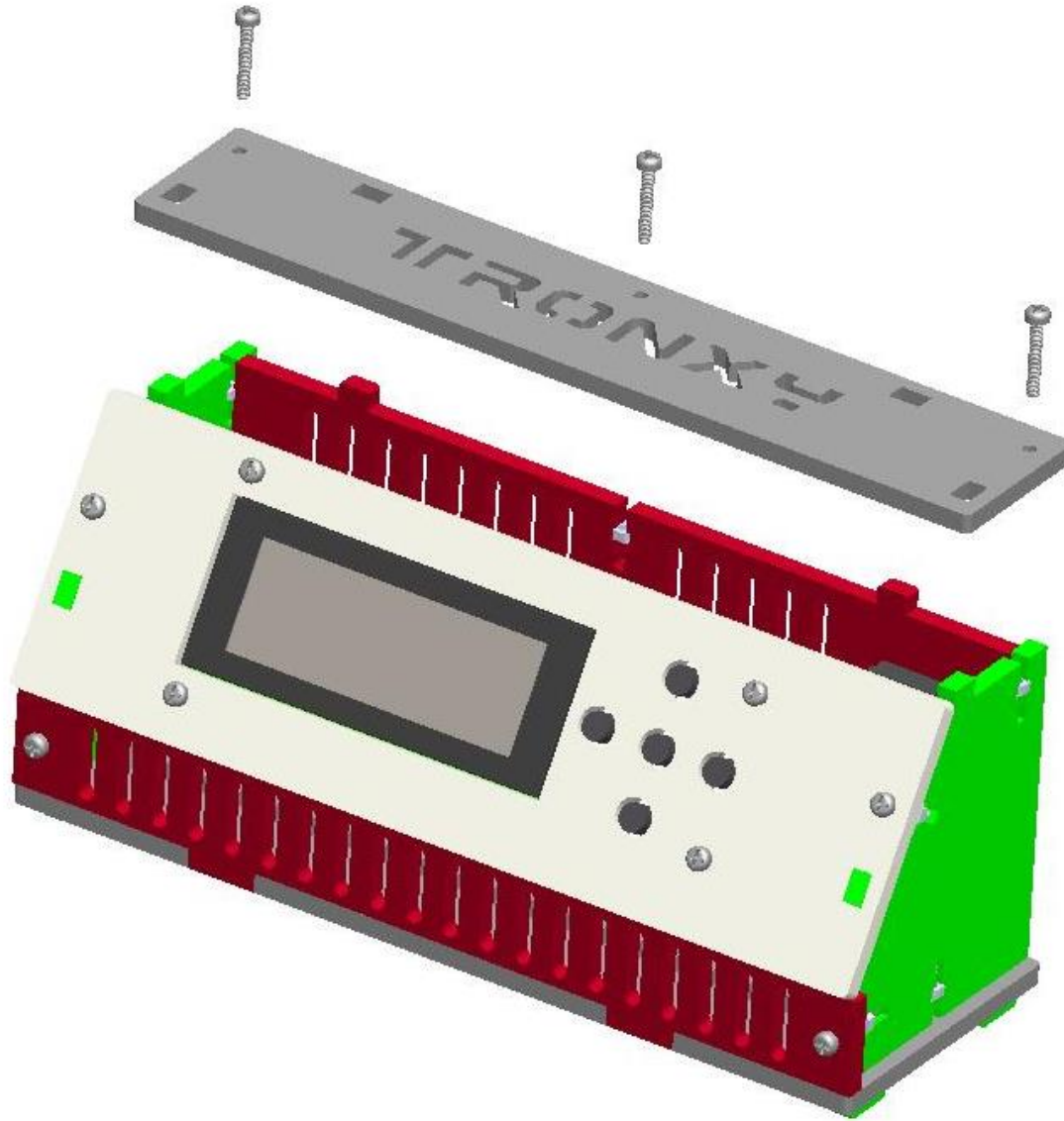
## Step 20-4 Assemble Electronic Box

### Parts:

Electronic box top plate – 1pc

M3-20mm screws – 3pcs

M3 nuts – 3pcs

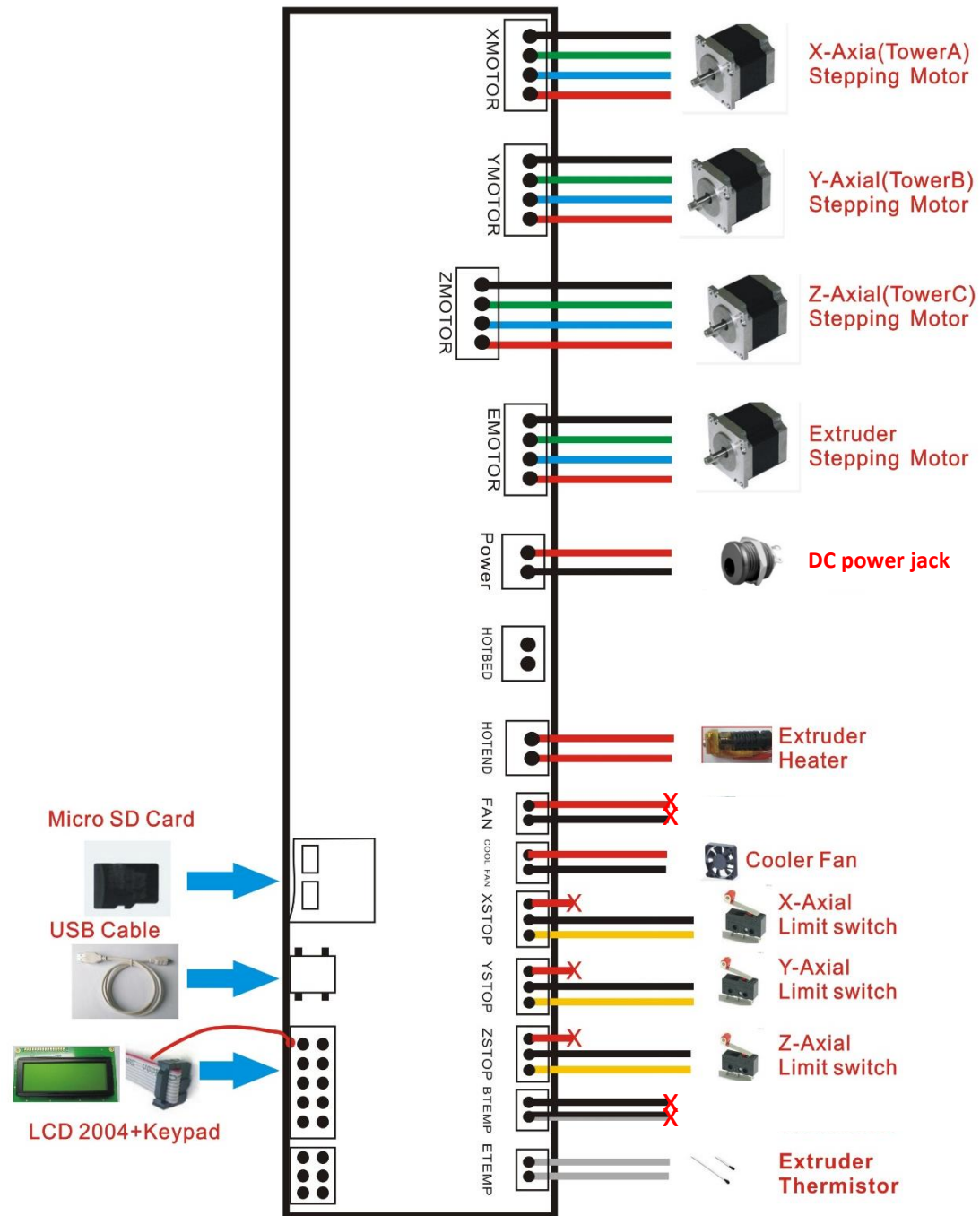


- Cover the top plate using M3-20mm screws and M3 nuts.

## 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'.