DMYCO 3D PRINTER

DMY3DP-001

INSTALLATION GUIDE V0.1

Classification Of Screws

M3 nuts 60pcs

M3*20mm screws
58pcs

M2.5*10mm black
screws 2pcs

M8 nuts 12pcs

M3*10mm screws
17pcs

M3*30mm screws
7pcs

M8 Cushion ring
12pcs

M3*14mm screws
4pcs

Plastic Pillars 4pcs

Classification Of Screws

M3*30mm screws 4pcs

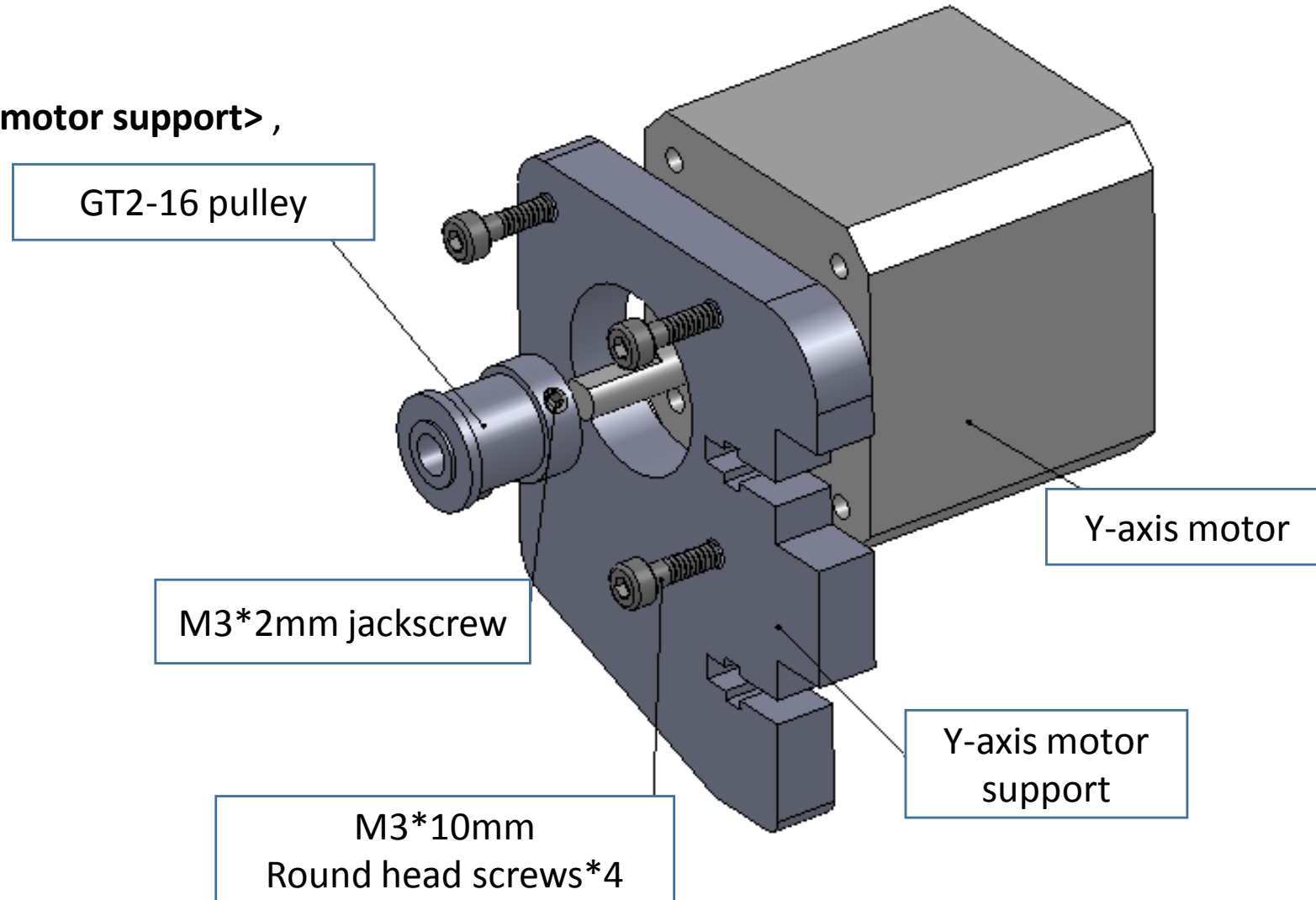M4*15mm screws
12pcs

Wing nuts*4

Compression springs*4

M3*20mm screws
4pcs

Step 1 Assemble Y-axis Motor

◆ Fit the **GT2-16 pulley** on the motor, Locking with **M3*2mm jackscrew**.

◆ As the picture, Put Y-axis motor on **<Y-axis motor support>** , locking with Four **M3*10mm screws**.

GT2-16 pulley

M3*2mm jackscrew

Y-axis motor

Y-axis motor support

M3*10mm
Round head screws*4

Step 2 Assemble Y-axis Limit switch

◆ Put the **Y-axis limit switch** and the **holder** together ,locking
with two **M3*20mm screws & nuts**. As picture

M3*20mm screws

Y-axis limit switch
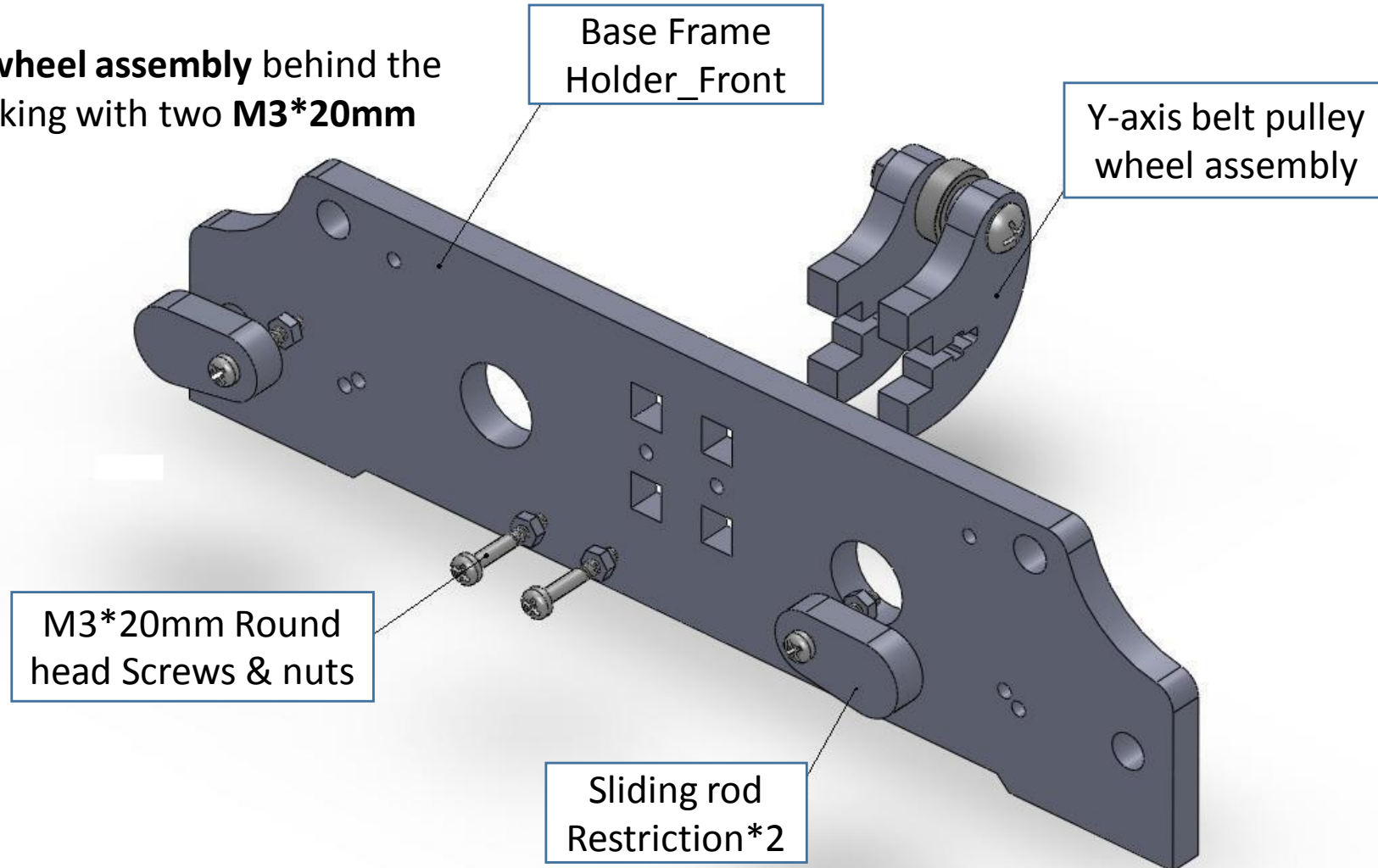
Y-axis limit
switch holder
(Acrylic)

M3 nuts
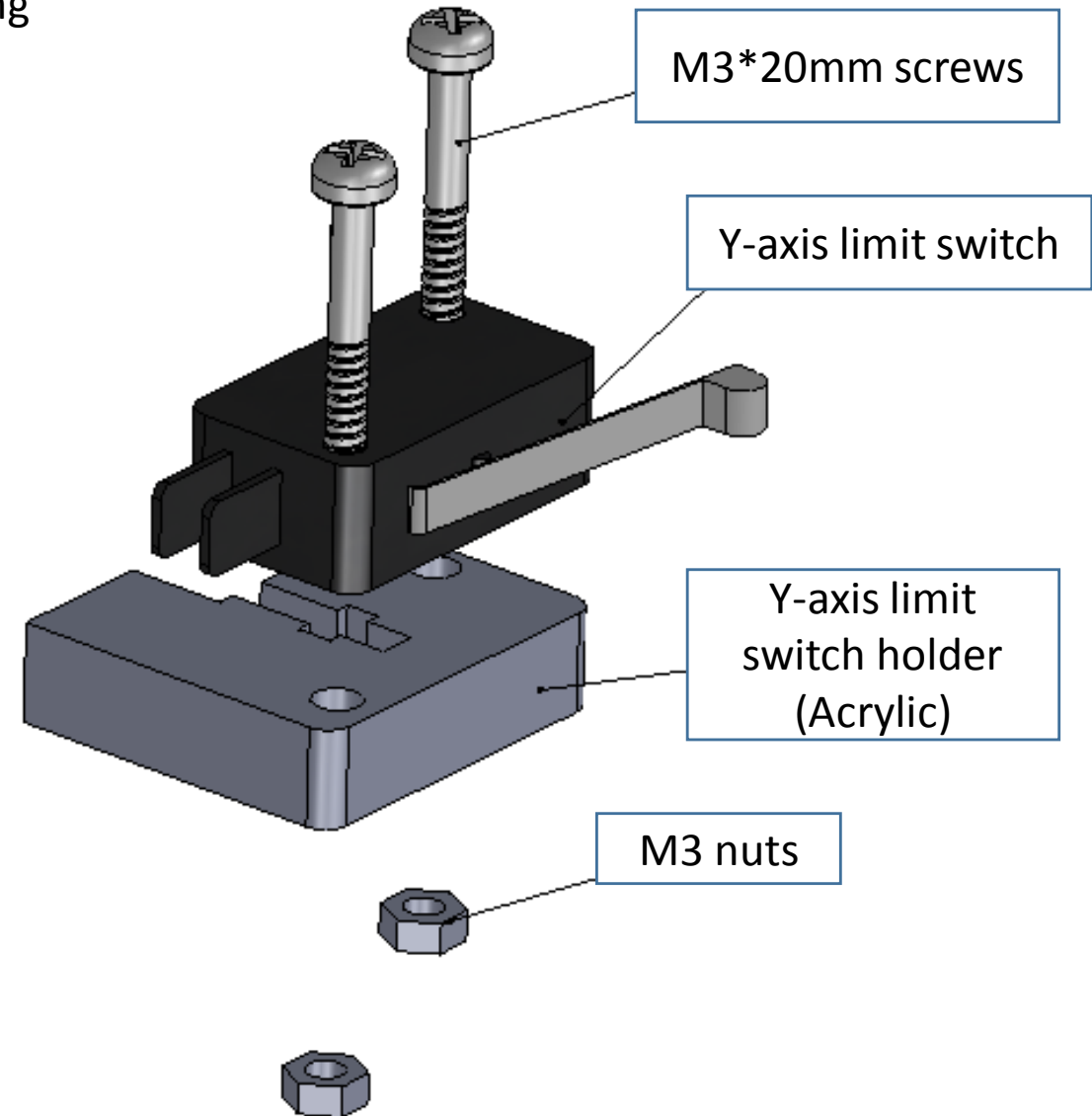
Step 3 Assemble Base Frame Holder_Back

◆ As the picture, put two of the **Sliding rod Restriction** in front of the **base frame holder (back)**. locking with two **M3*20mm screws & nuts**.

◆ Put the limit switch and holder assembly on the base frame holder, locking with one **M3*20mm screw & nut.**

◆ Put **Y-axis motor holder** on base frame holder ,locking with one **M3*20mm screw & nut**.

◆ Put **Y-axis motor assembly** on base frame holder, locking with three **M3*20mm screws & nuts**.

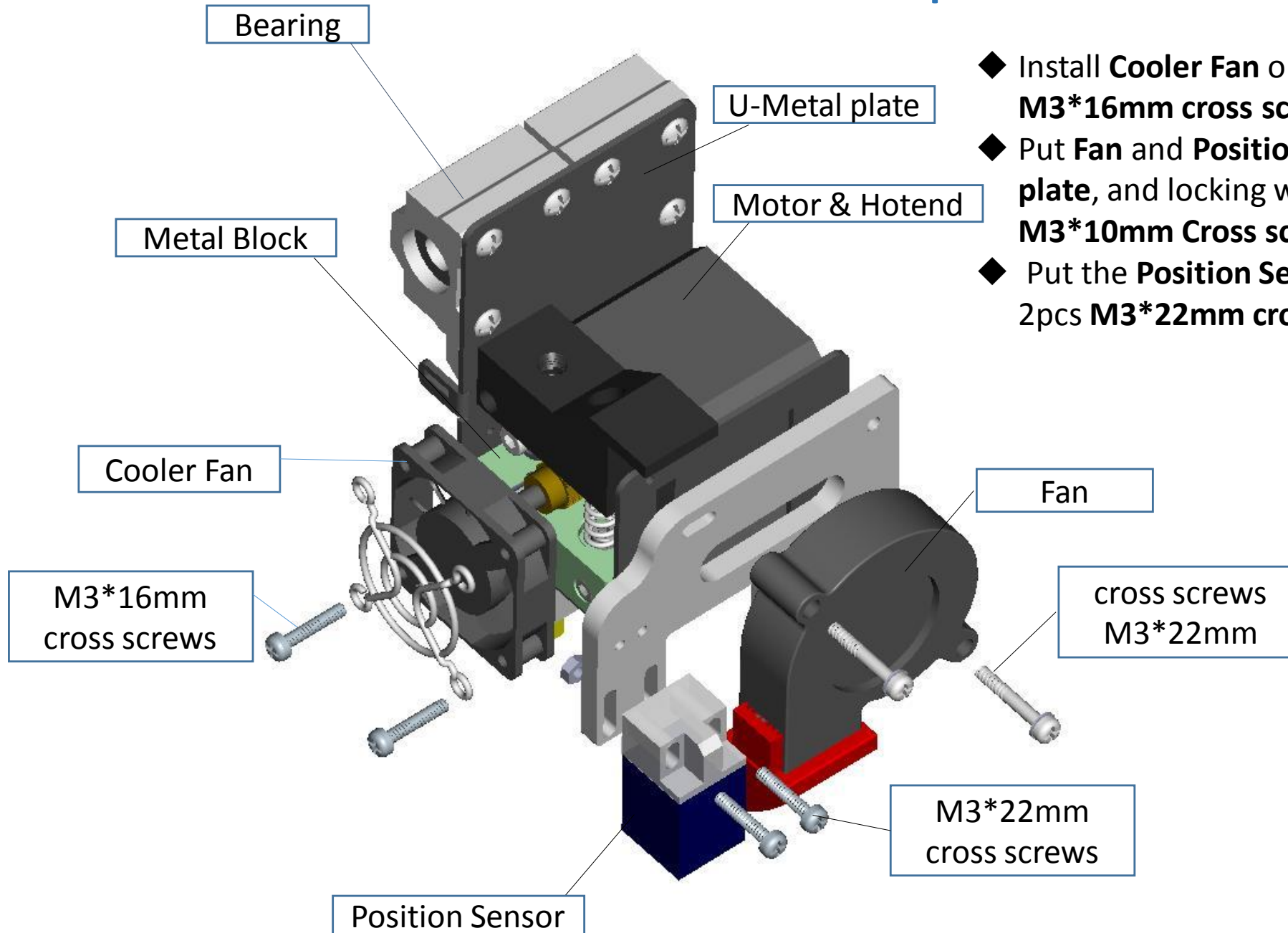

Sliding rod Restriction*2

M3*20mm screws

M3 nuts

Y-axis limit switch assembly

Y-axis motor assembly

Base frame holder_Back

Y-axis motor holder
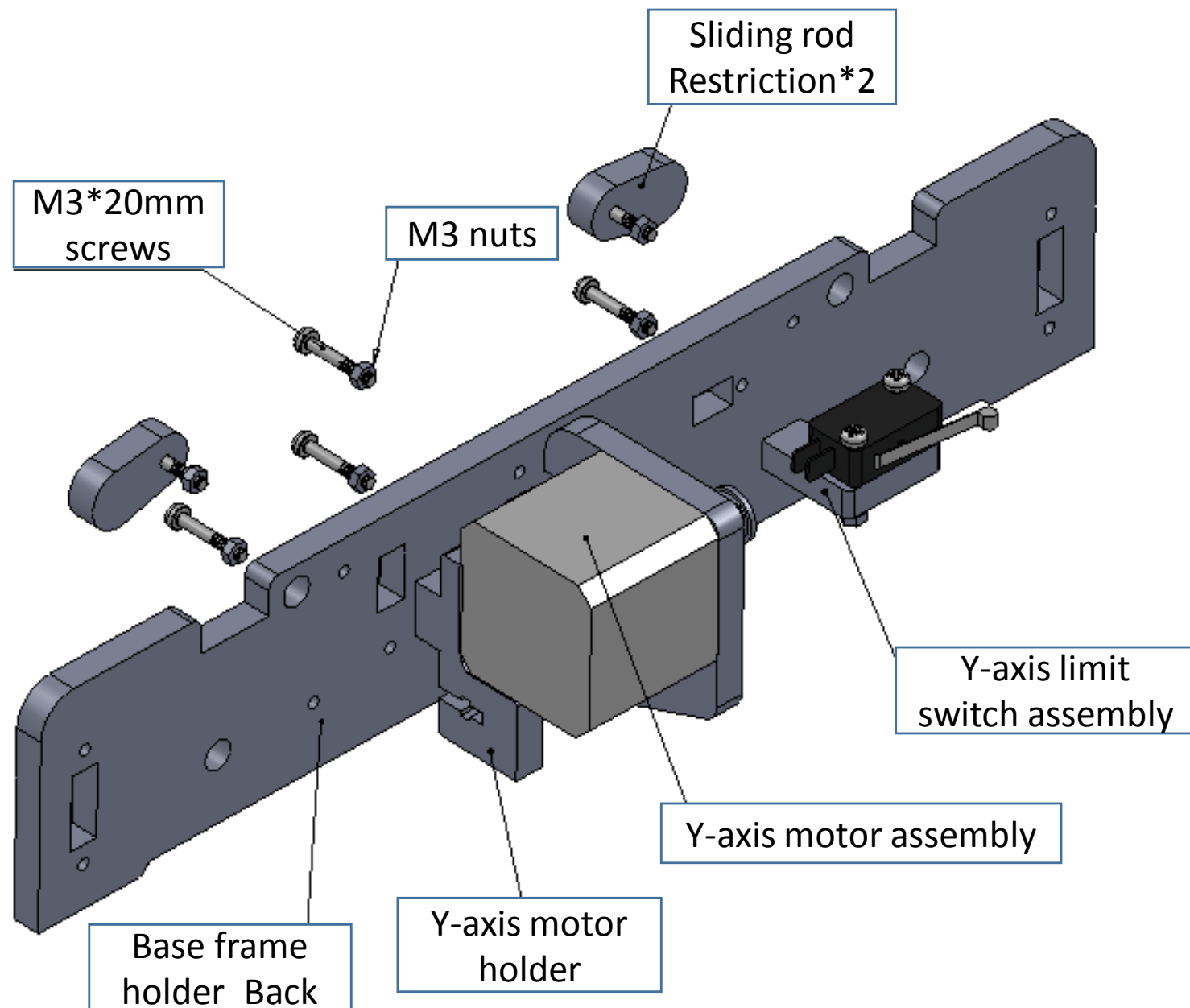
Step 4 Assemble Base Frame Holder_Front

◆ As the picture, put two of the **Sliding rod Restriction** in front of the **base frame holder _front**. locking with two **M3*20mm Round head screws & nuts**.

◆ Put **Y-axis belt pulley wheel assembly** behind the base frame holder, Locking with two **M3*20mm screws & nuts**.

Base Frame Holder_Front

Y-axis belt pulley wheel assembly

M3*20mm Round head Screws & nuts

Sliding rod Restriction*2

Step 5 Assemble Extruder (with Auto leveling)

Bearing

U-Metal plate

Metal Block

Motor & Hotend

Cooler Fan

M3*16mm cross screws

Fan

cross screws M3*22mm

M3*22mm cross screws

Position Sensor

◆ Install **Cooler Fan** on the **Metal Block** use 2pcs **M3*16mm cross screws** .

◆ Put **Fan** and **Position Sensor Holder** to the **U-Metal plate**, and locking with 2pcs **M3*20mm** and 1pcs **M3*10mm Cross screws** ,as picture

◆ Put the **Position Sensor** on the holder ,locking with 2pcs **M3*22mm cross screws**.

Step 6 Assemble Z-axis motor

◆ Put two **Z-axis motor support(side)** in two sides of the motor, Cover the **Z-axis motor support(top)** on the top, locking with **M3*20mm screws & nuts**.

◆ The cable of Z-axis motor is back of the Z-axis motor support. Locking **Z-axis motor** with four **M3*10mm screws**.

◆ Put the **coupling** on the motor, locking with the jackscrews.

◆ Another Z-axis motor is the same assembly.

Note: There are 2pcs Z axis motors . See the hole , the right motor put the hole on the right , the left motor put the hole on the left . (The picture shows the right motor)


coupling

Z-axis motor support(top)

M3*20mm screws

M3*10mm screws

Z-axis motor support(side)
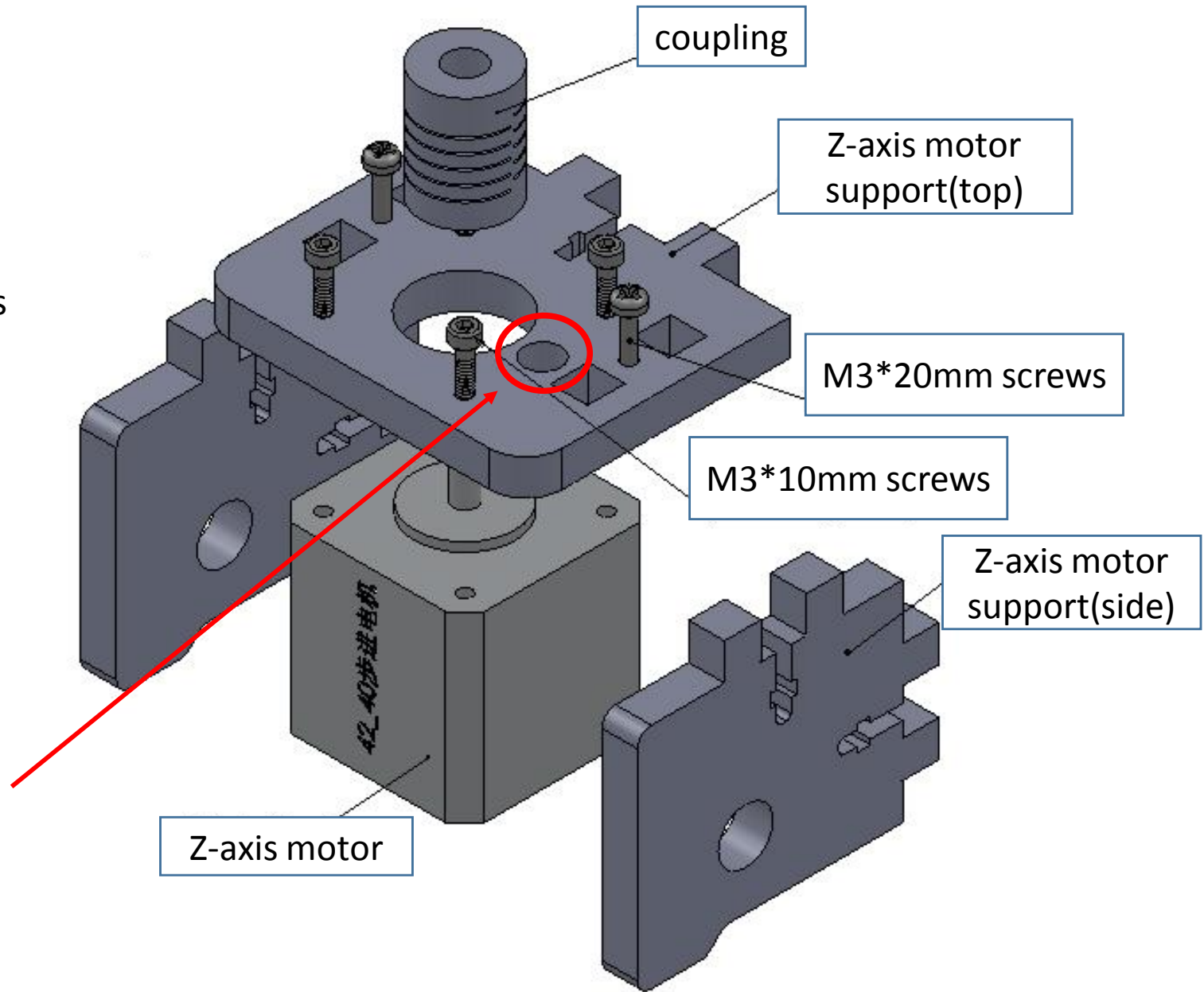
Z-axis motor

◆ As the picture, Put the two **Z-axis motors assembly** on the left and right side of the **Bottom plate**, locking with three **M3*20mm screws & nuts**.

M3*20mm screws

Z-axis motor assembly

The hole is on the left

Bottom plate

The hole is on the right

M3 nuts
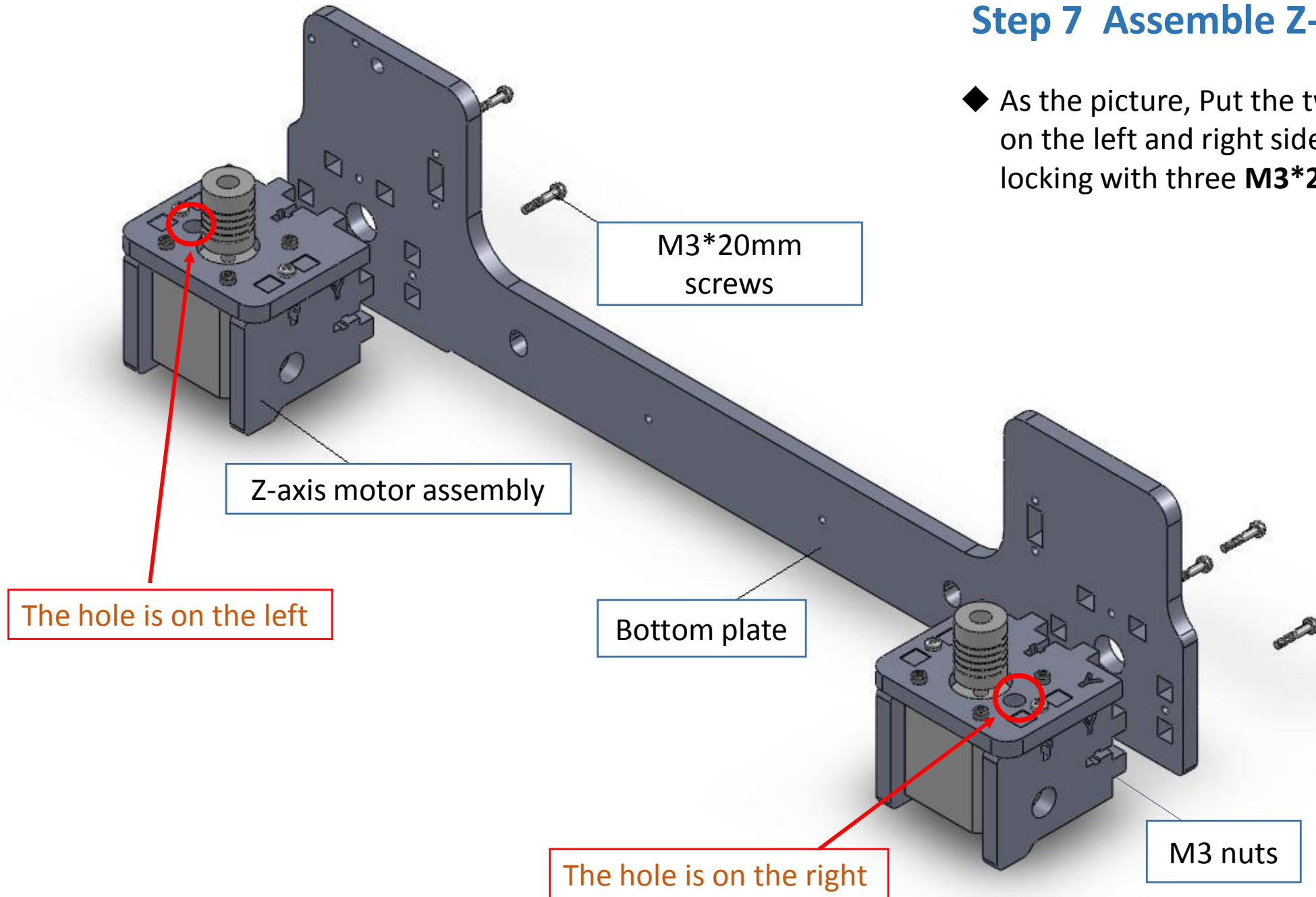
Step 8 Assemble Side plate

◆ As the picture, Put the two **Side plate** on the
left and right side of the **Bottom plate** ,
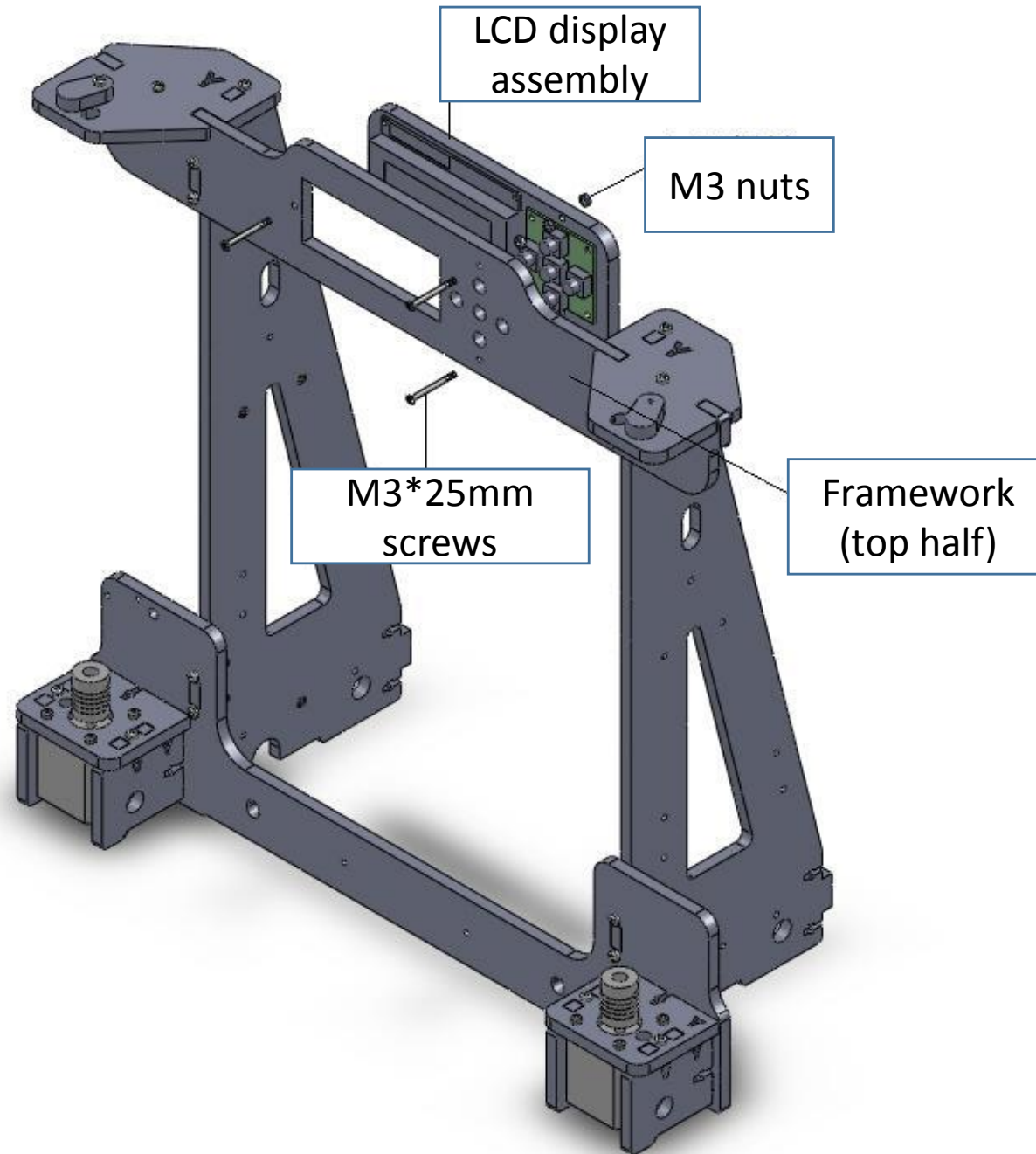locking with four **M3*20mm screws & nuts**.

Side plate
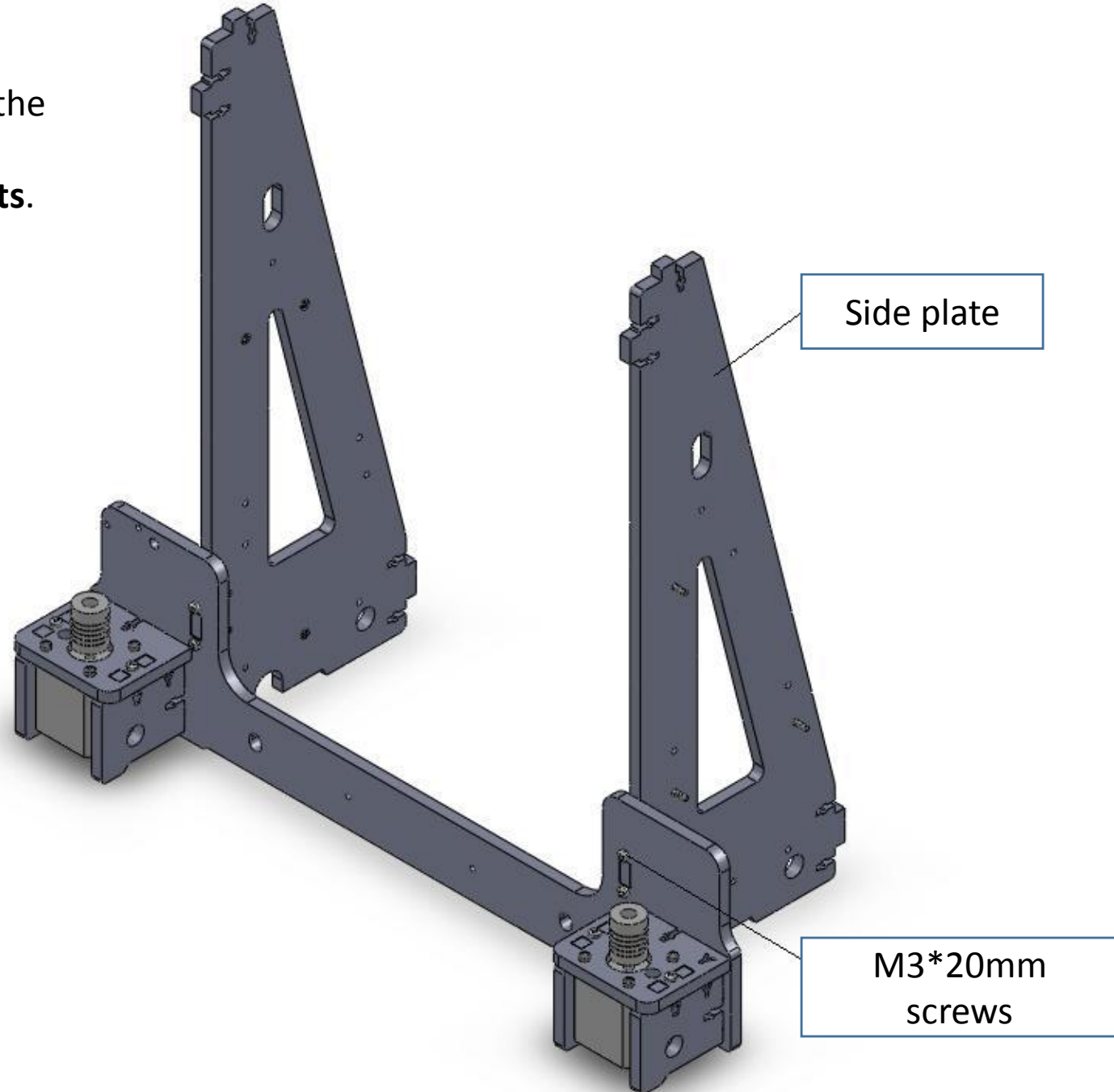
M3*20mm
screws

Step 9 Assemble Top plate & Junction Plate

◆ As the picture, Put the **Top plate** on **Side Plate**, locking with four **M3*20mm screws & nuts**.

◆ Put the two **Junction Plate** on the top of the **Side plate** ,locking with four **M3*20 screws & nuts.**

◆ Put two **sliding rod restriction** on the top of left and right sides. Locking with one **M3*20mm screw & nut** each.

Sliding rod restriction

Junction Plate

Top plate

M3*20mm screws
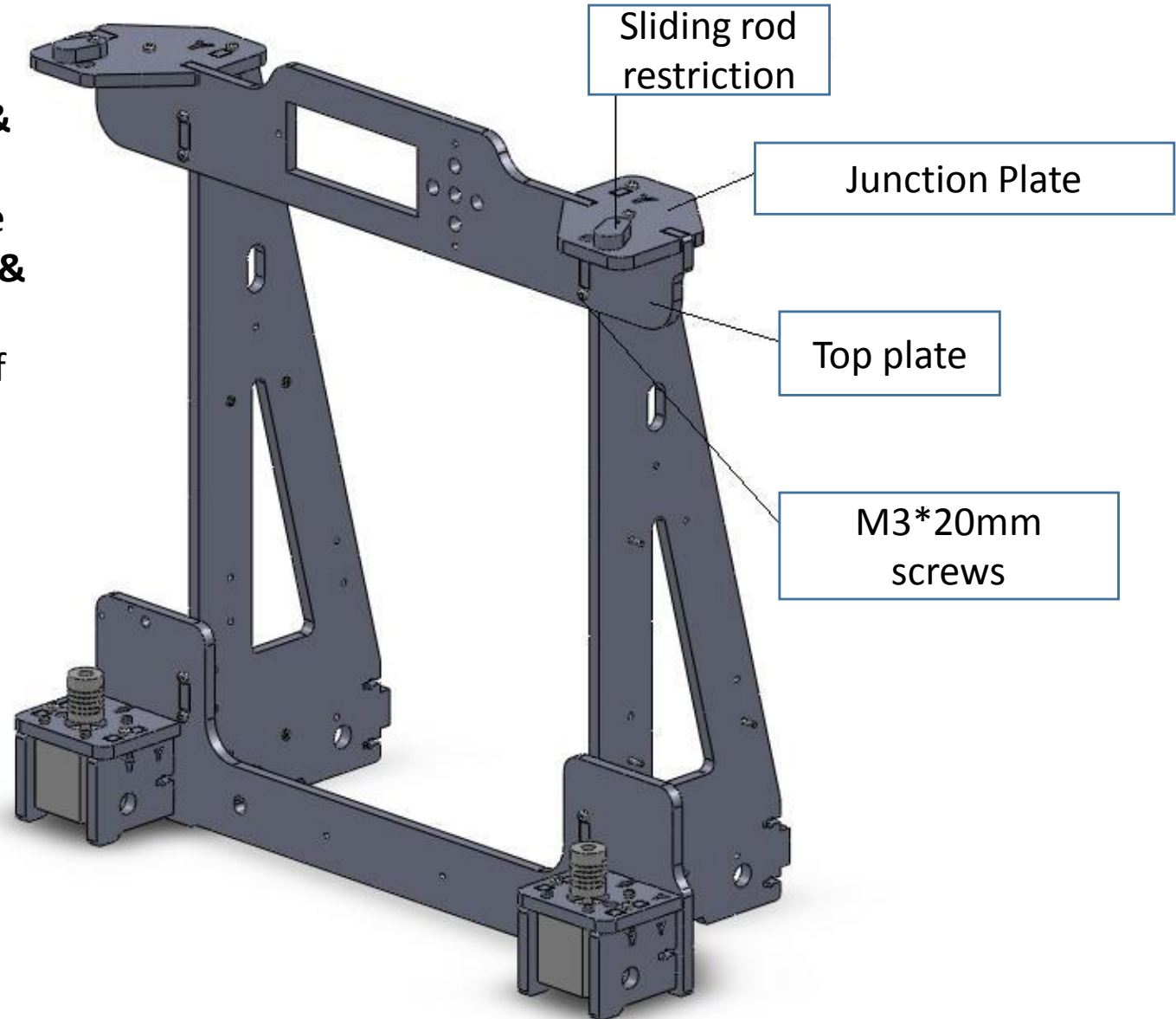
Step 10 Install LCD display

◆ Put the **LCD display** on the top of the **Top plate** ,locking with three **M3*25mm screws &nuts**

LCD display assembly

M3 nuts

M3*25mm screws

Framework (top half)

Step 11 Install Power supply

◆ Put **Power supply** on the right of the **side plate** , locking with three **M3*14mm screws and nuts.**


Side plate

Power supply

M3*14mm screw
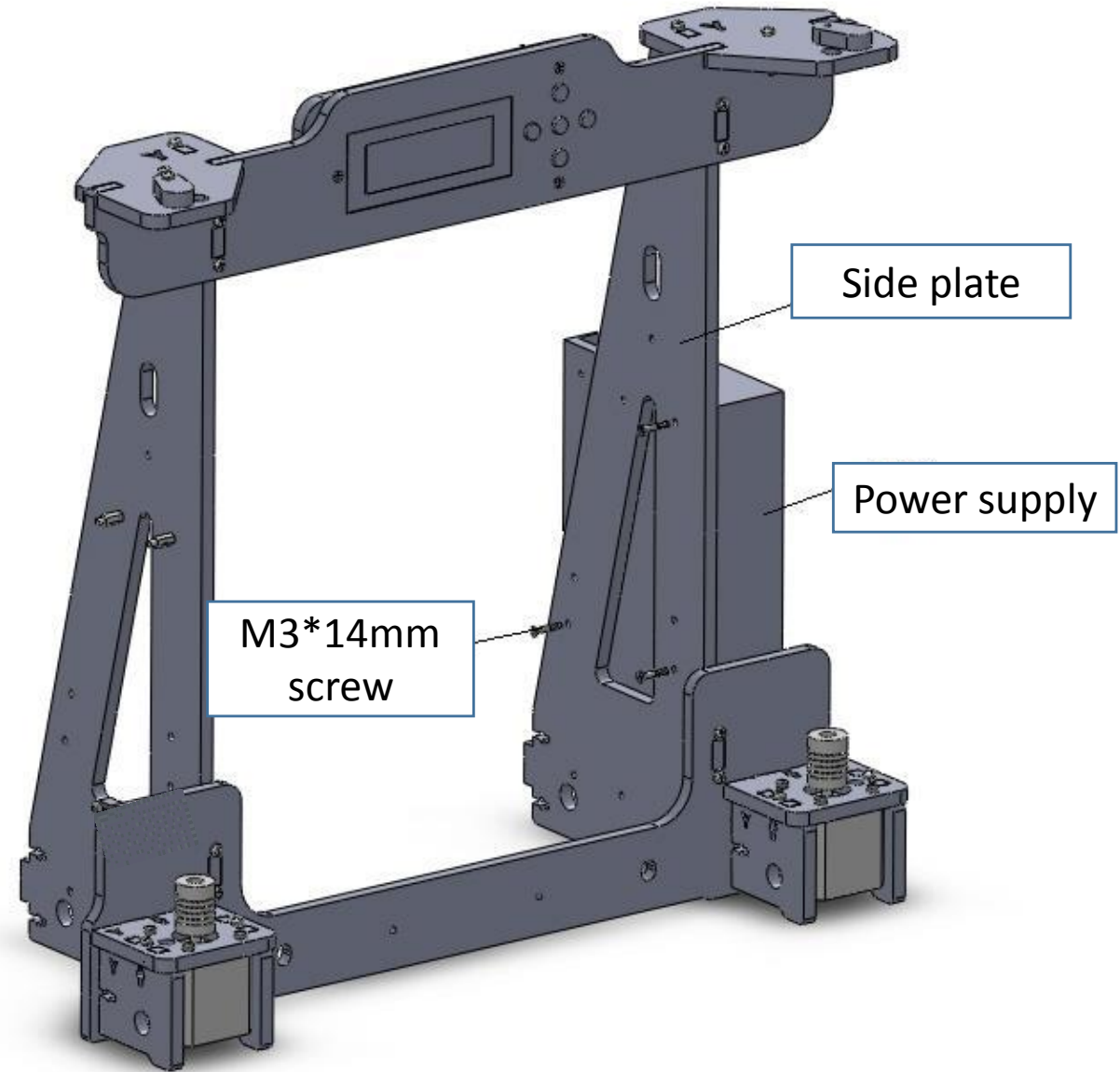
Step 12 Install PCBA Control Board

◆ Install **Control Board** as picture **,** locking with
Four **M3*30mm screws + 4pcs Plastic pillars +
4pcs M3 nuts**

Plastic Pillars*4

M3 Nuts*8

M3*30mm
Screws *4

Control Board
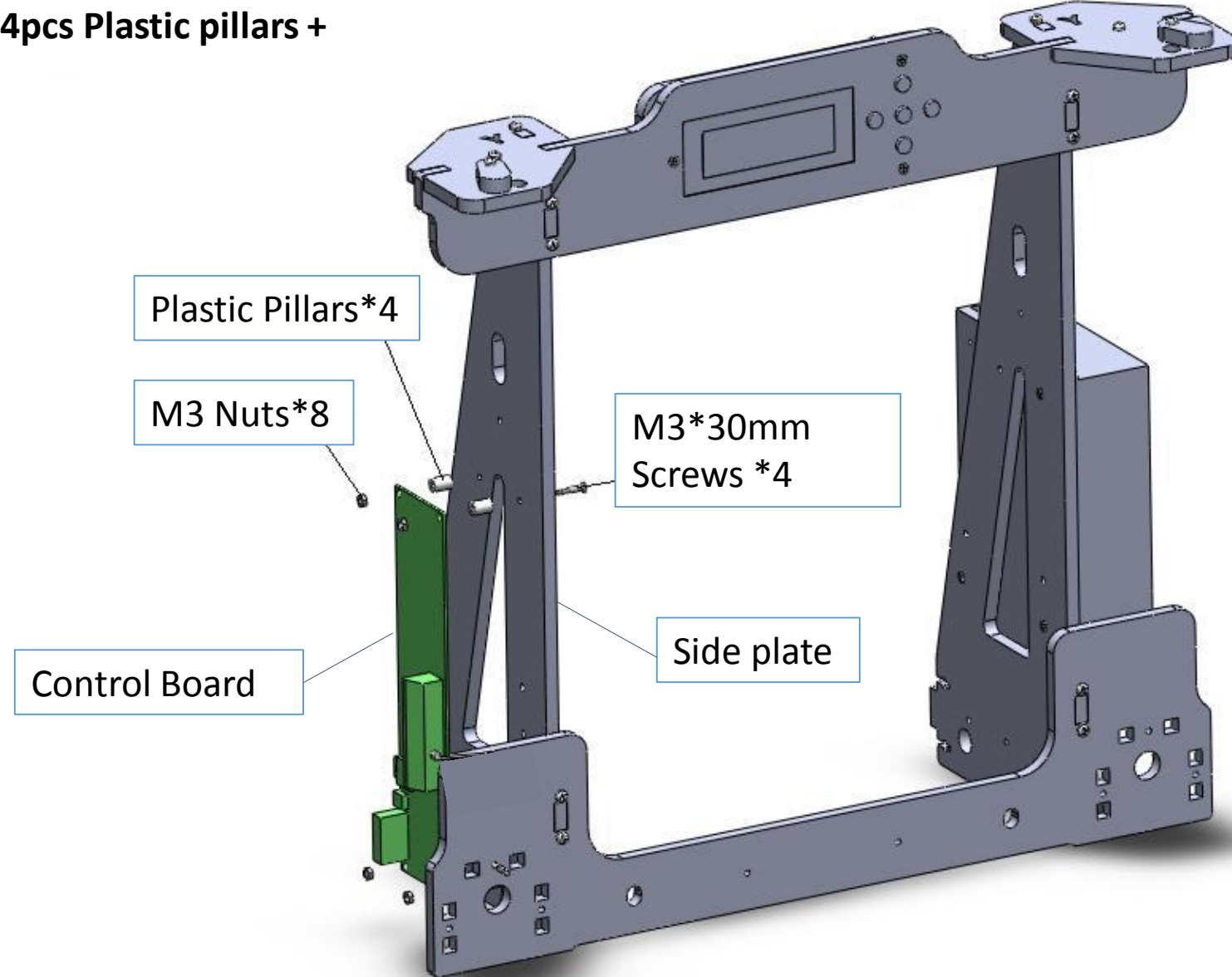
Side plate

Step 13 Install Base frame holder_Back

◆ Put the **Base frame holder_back** back of **Side plate**, locking with four **M3*20mm screw**



M3*16mm screws*4

Base frame holder_back
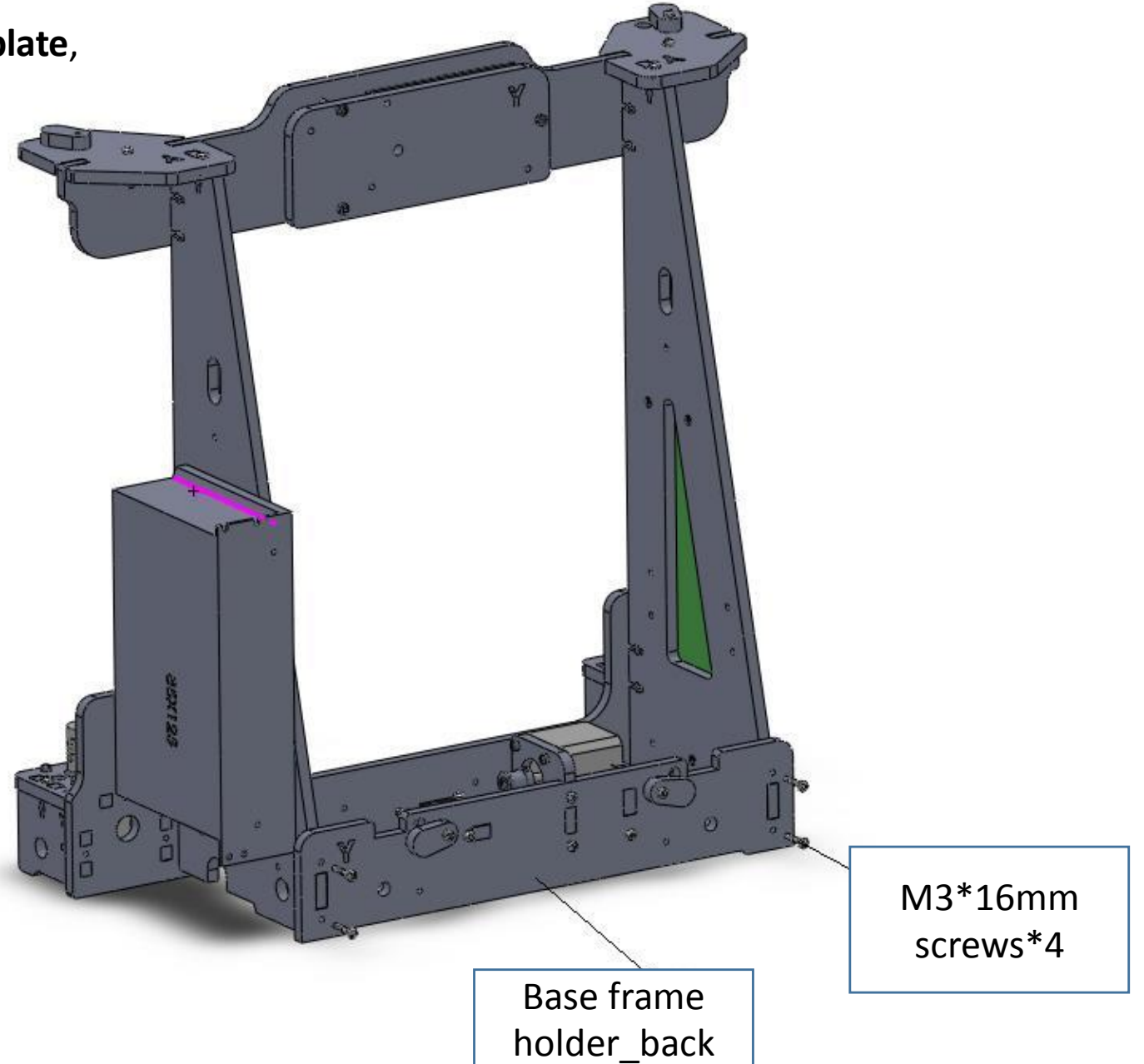
Step 14 Install Base Frame Holder_Front

◆ Through the **Frame Holder_Front** & **Back** by two
**M8*400mm screw arbors**, locking with twelve
M8 Nuts & cushion ring.

M8 nuts

M8 cushion ring

M8*400mm
screw arbors

Base frame
holder_front
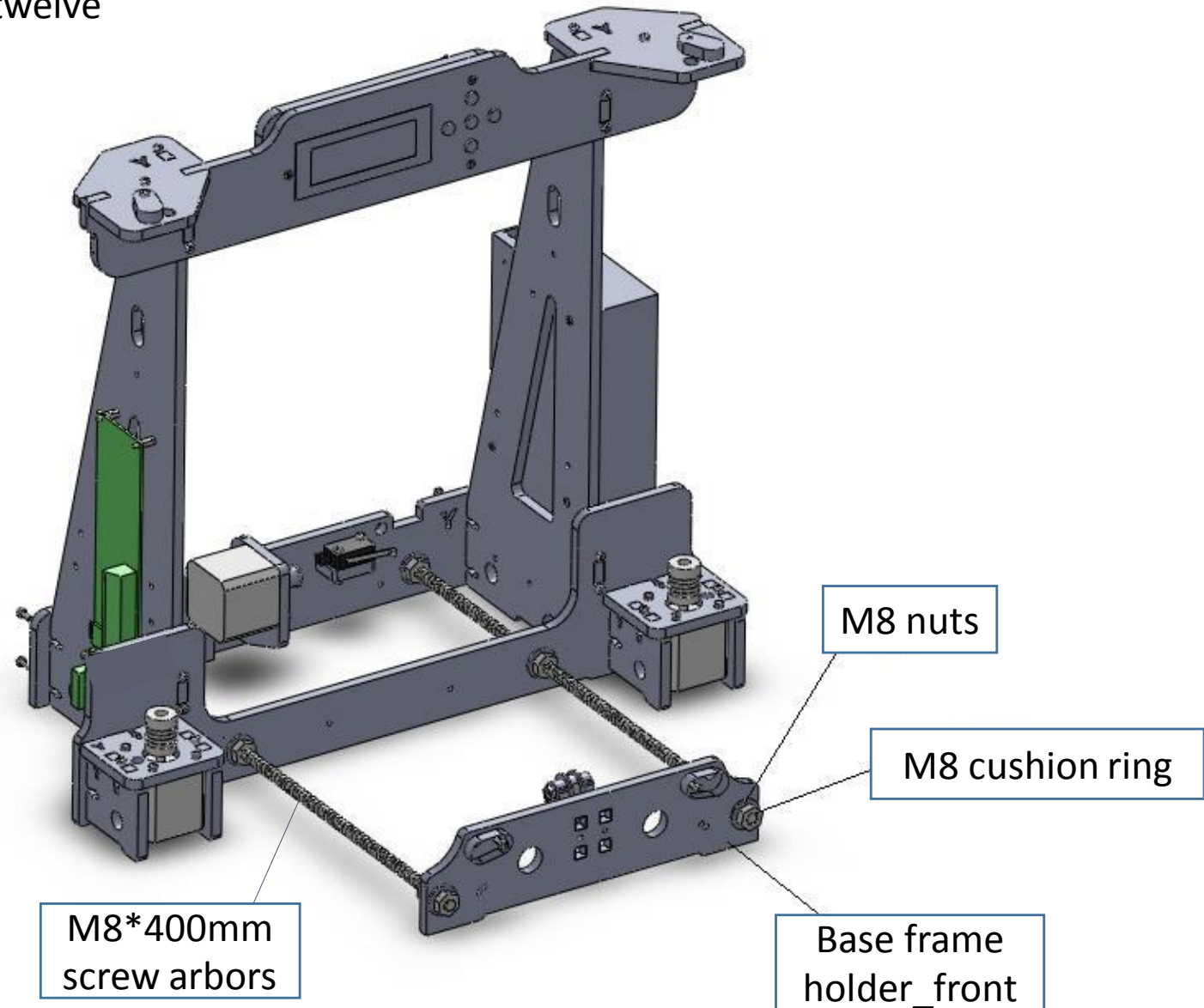
Step 15 Assemble Bed frame

◆ Place three **bearings** under the **bed frame**, locking with twelve **M4*15 screws**.

Bearing*3

M4*15mm
screws *12
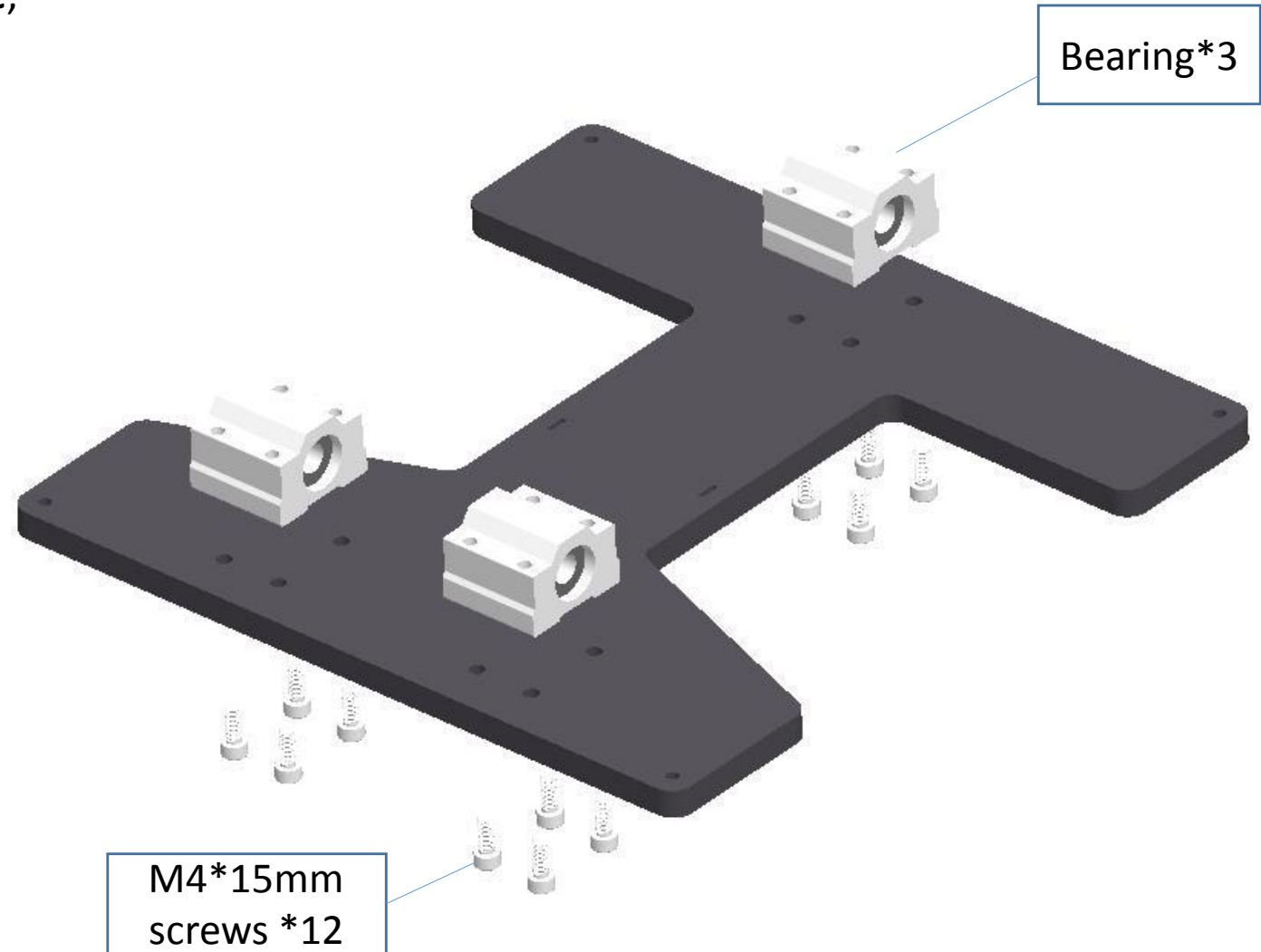
Step 16 Assemble Bed frame

◆ Place three **bearings** under the **bed frame**, locking with twelve **M4*15 screws**.

◆ Through the bed frame on the base by two of **M8*380mm Sliding rod**. Fix both end by Sliding rod restriction

◆ Tighten one end of the timing belt to the bed frame using a zip-ties. the other end through the Y-axis motor and belt pulley wheel on the base frame holder , Then tighten it to the bed frame using zip-ties as shown in the picture .
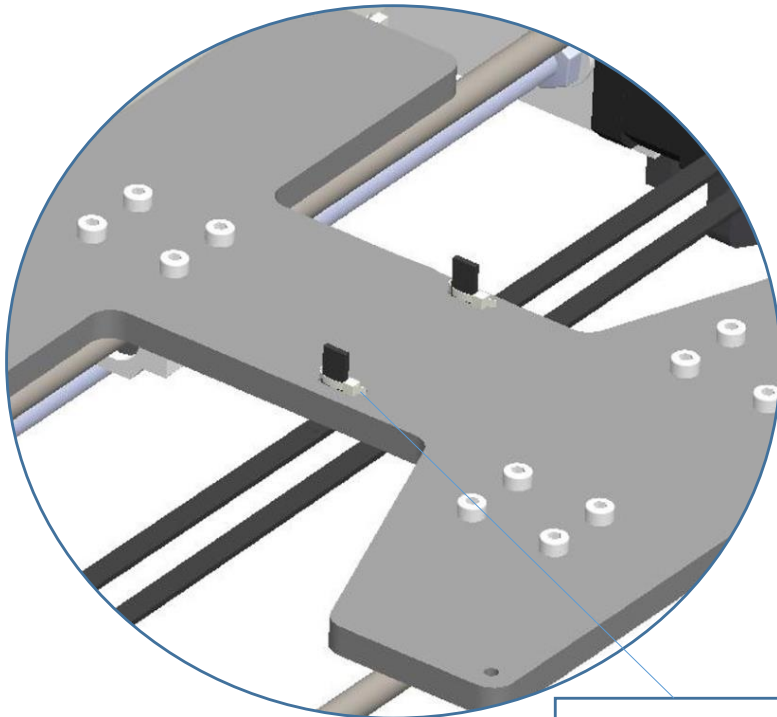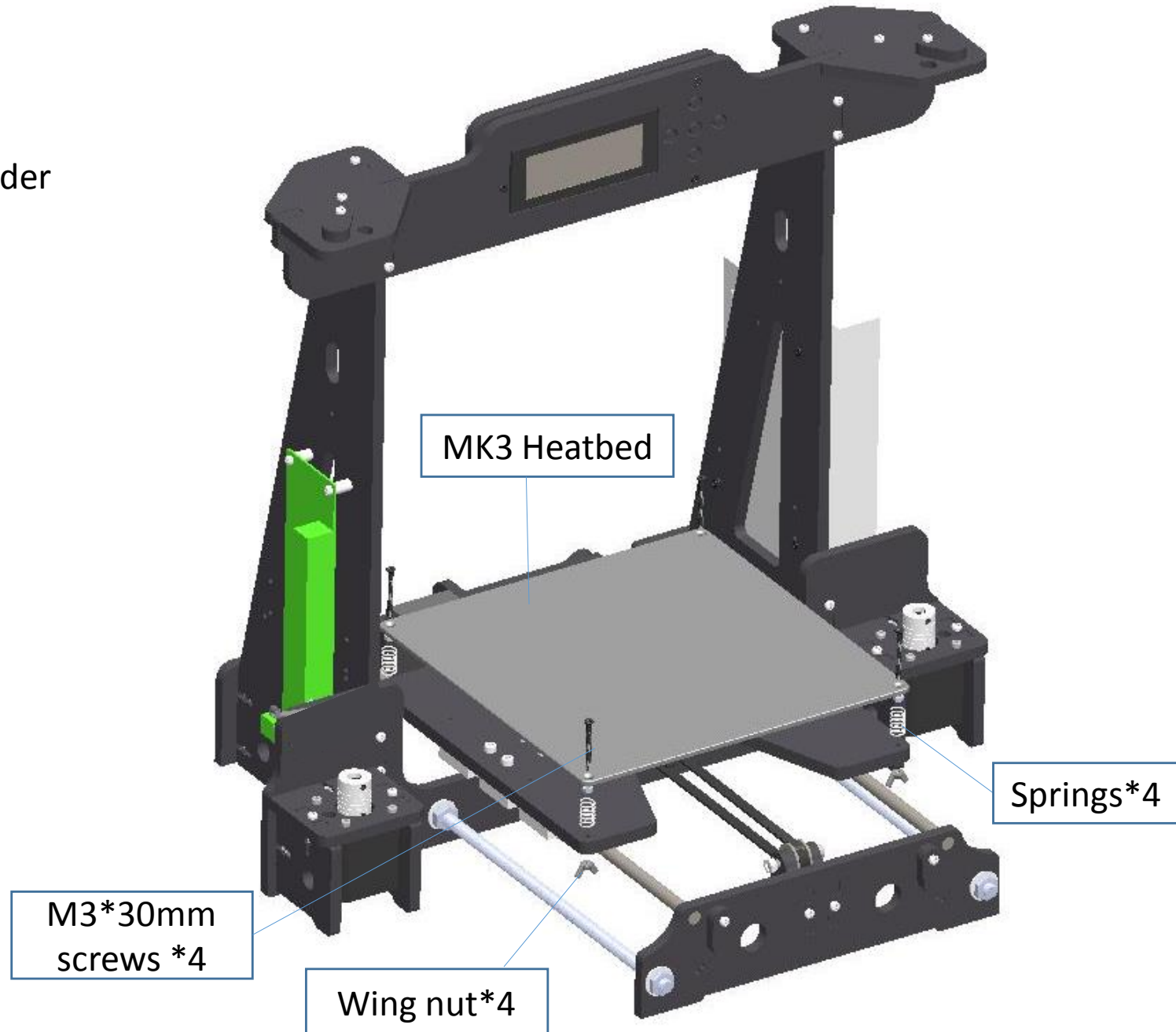

Nylon cable ties
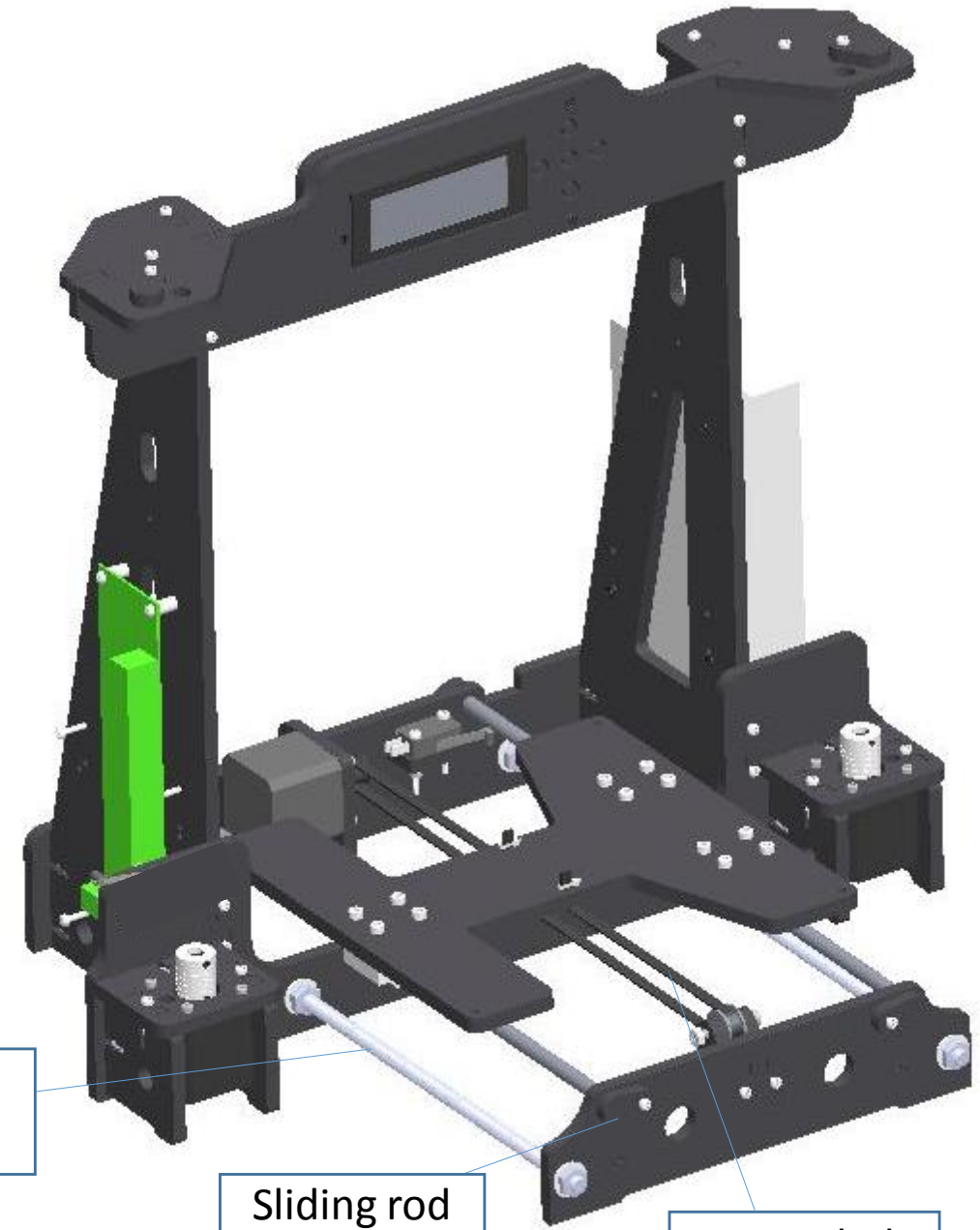
M8*380mm sliding rod*2

Sliding rod Restriction

Timing belt

Step 17 Assemble Heatbed

- Place the MK3 heatbed on the bed frame use 4pcs springs between them, and then through 4pcs M3-30mm screws, top 4pcs wing nuts under the bed frame.


MK3 Heatbed

Springs*4

M3*30mm screws *4

Wing nut*4

Step 18 Assemble X-axis

◆ Through the X-axis **motor mount** & **Pulley mount** and **Extruder assembly** using two **M8*443mm sliding rods**, as the picture.

◆ Put **X-axis limit switch** on the X-axis motor mount, locking with two **M2.5*10mm screws** (small black screw)

Extruder assembly

M8*443mm sliding rod

X-axis motor mount

X-axis limit switch
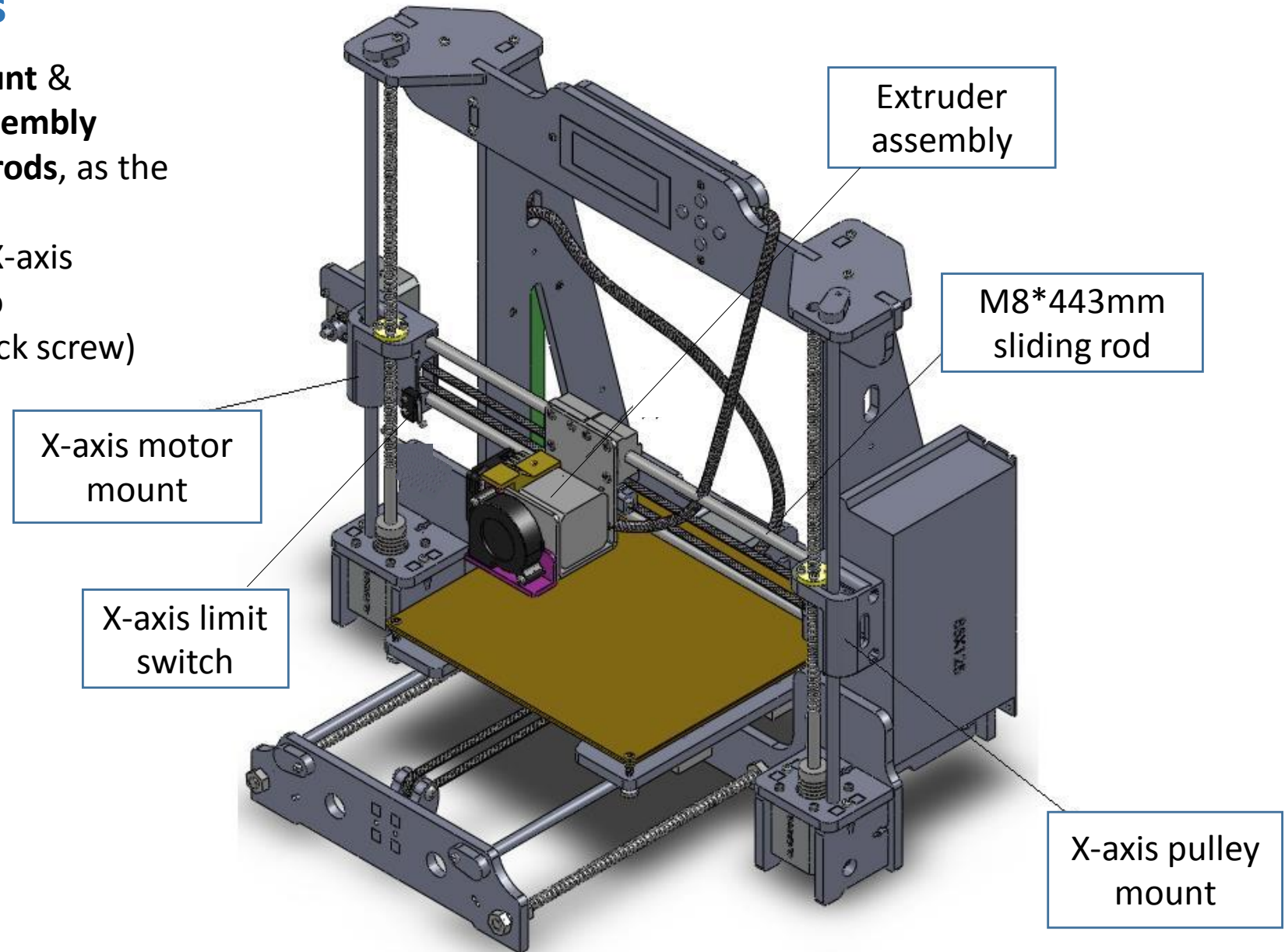
X-axis pulley mount

Step 19 Instal X-axis Timing Belt

◆ Tighten one end of the **Timing Belt** to the **Belt clip** with **Nylon cable ties**. The other end through the X-axis pulley & motor , then tighten another end of the belt to the another **Belt clip** with **Nylon cable ties** . as picture below

X-axis timing belt

Nylon cable ties

Belt clip
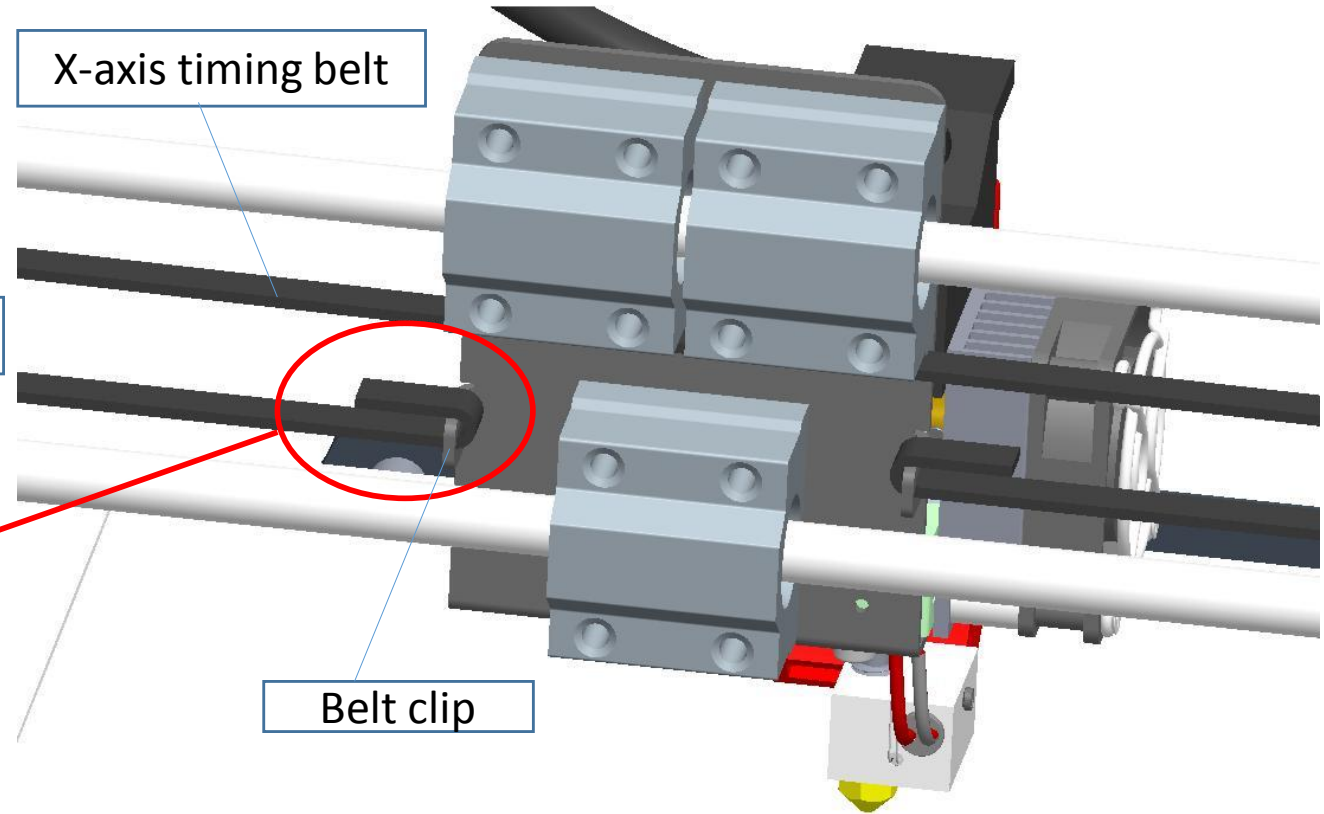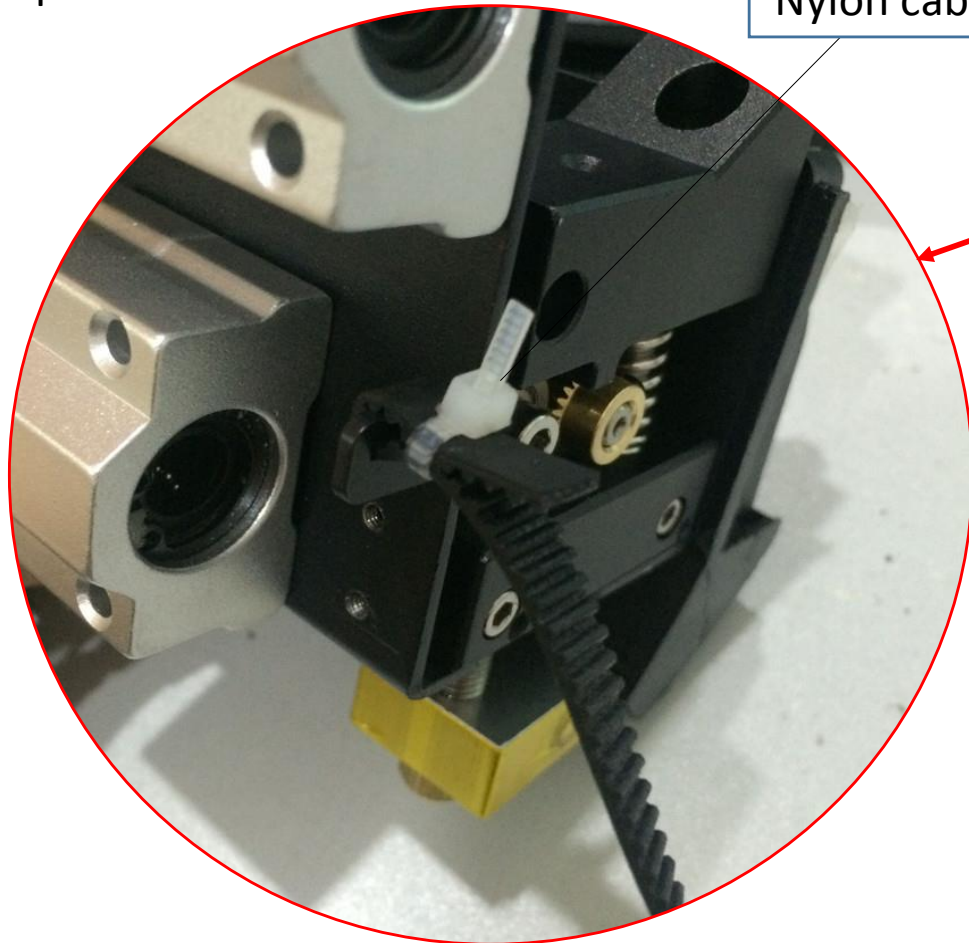
Step 20 Control Board Wiring Diagram

◆ The method of connecting wire is as picture

!NOTE!: The wires connected to POWER SUPPLY and HETBED must be AWG14 or thicker one.

X STOP

Y STOP
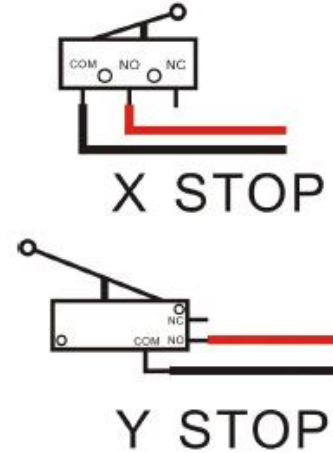
PS: For auto level 3D printer, there only 2pcs limit switches , one for X-axis and one for Y-axis, the Position sensor is for Z stop and auto leveling .

Micro SD Card

USB Cable

LCD 2004+Keypad

X-Axial Stepping Motor

Y-Axial Stepping Motor

Z-Axial Stepping Motor (*2)

Extruder Stepping Motor

Power Supply

Hot BED

Extruder Heater

FAN

Cooler Fan

X-Axial Limit switch

Y-Axial Limit switch

Potion Sensor for Auto level
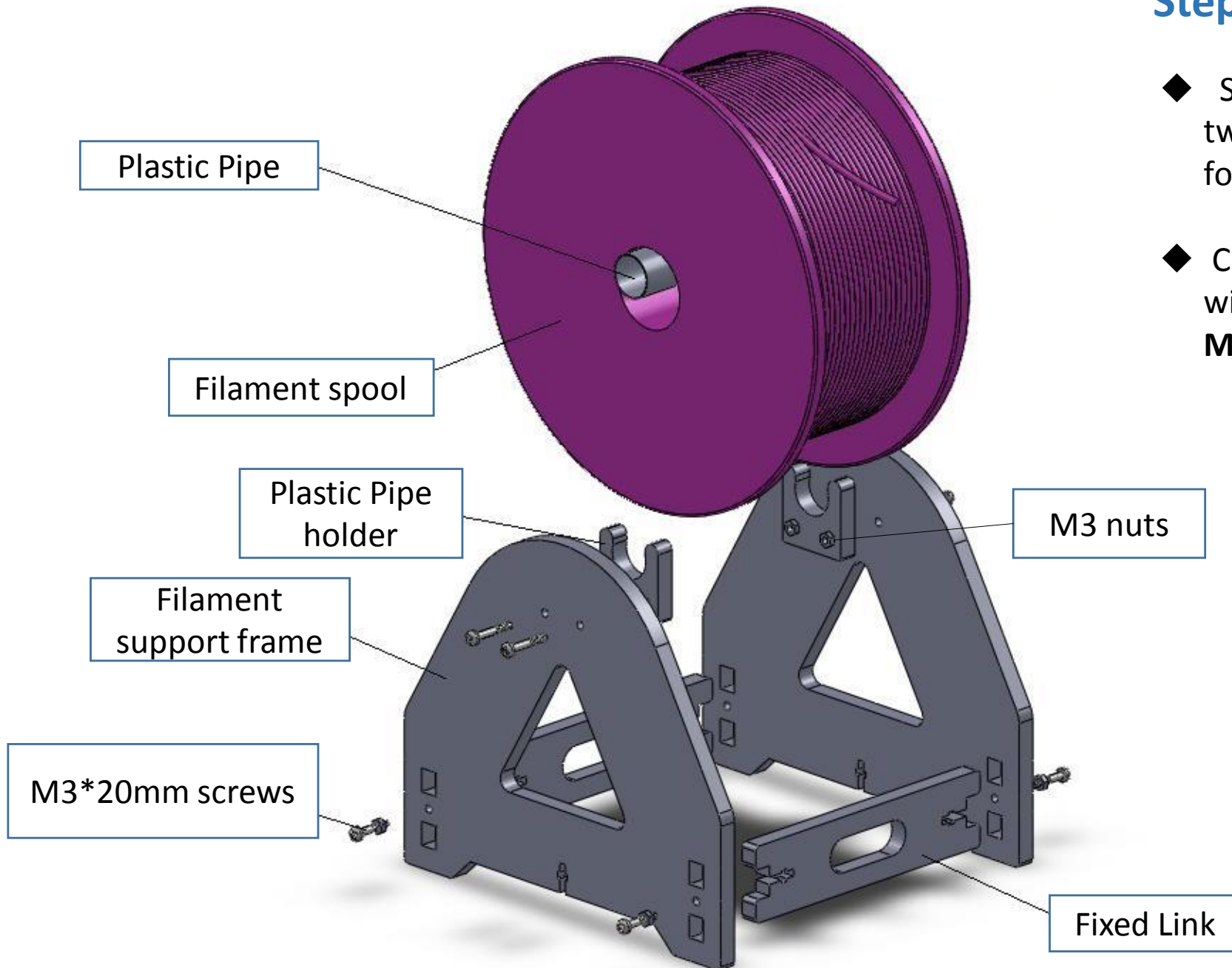
Bed Thermistor

Extruder Thermistor

Step 21 AC Power Connector Wiring Diagram

◆ Connect Power cable as the picture (Right)

Note: There are different voltages in different country. Please select the appropriate voltage by switch before power on. As the picture below.
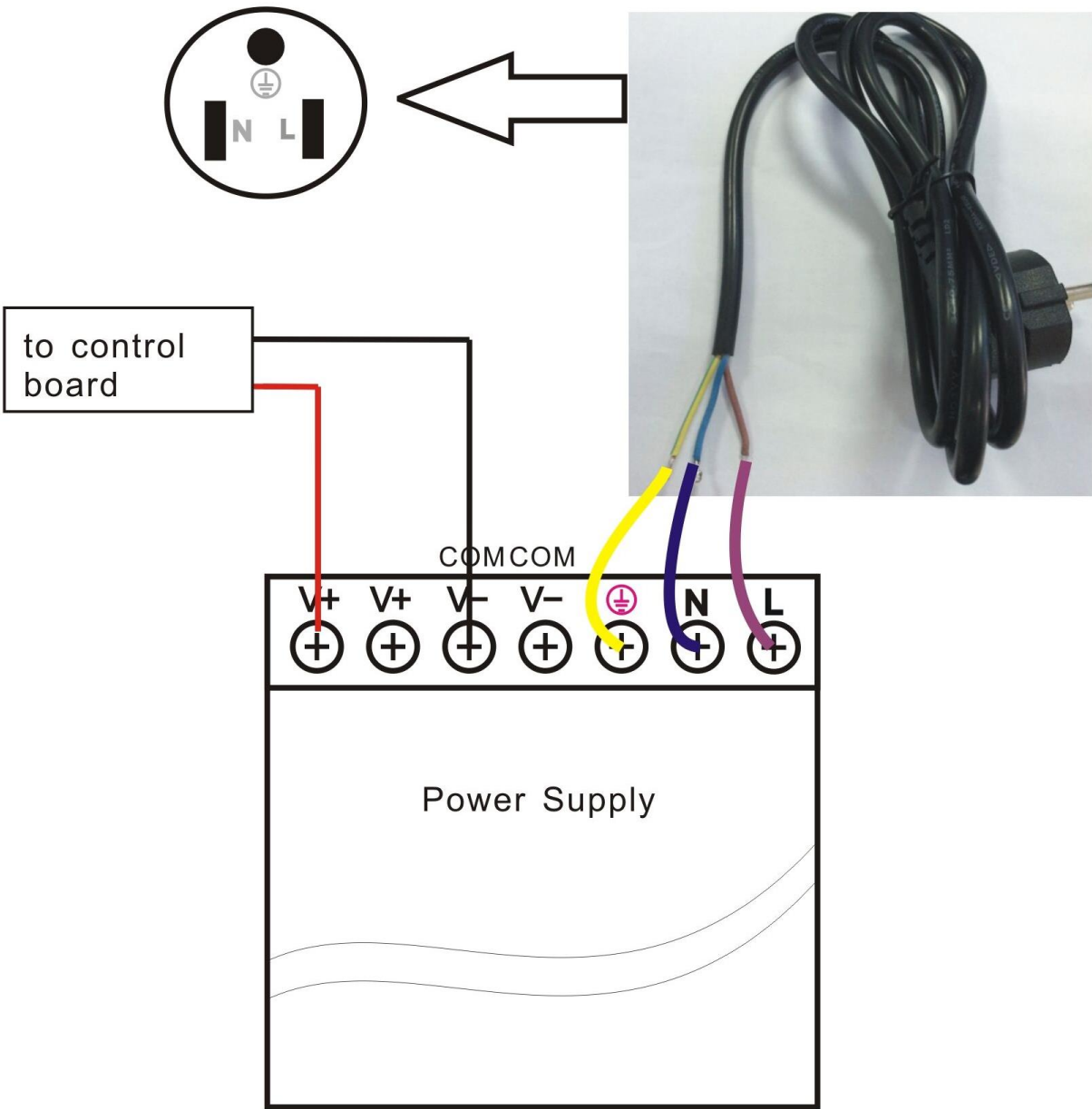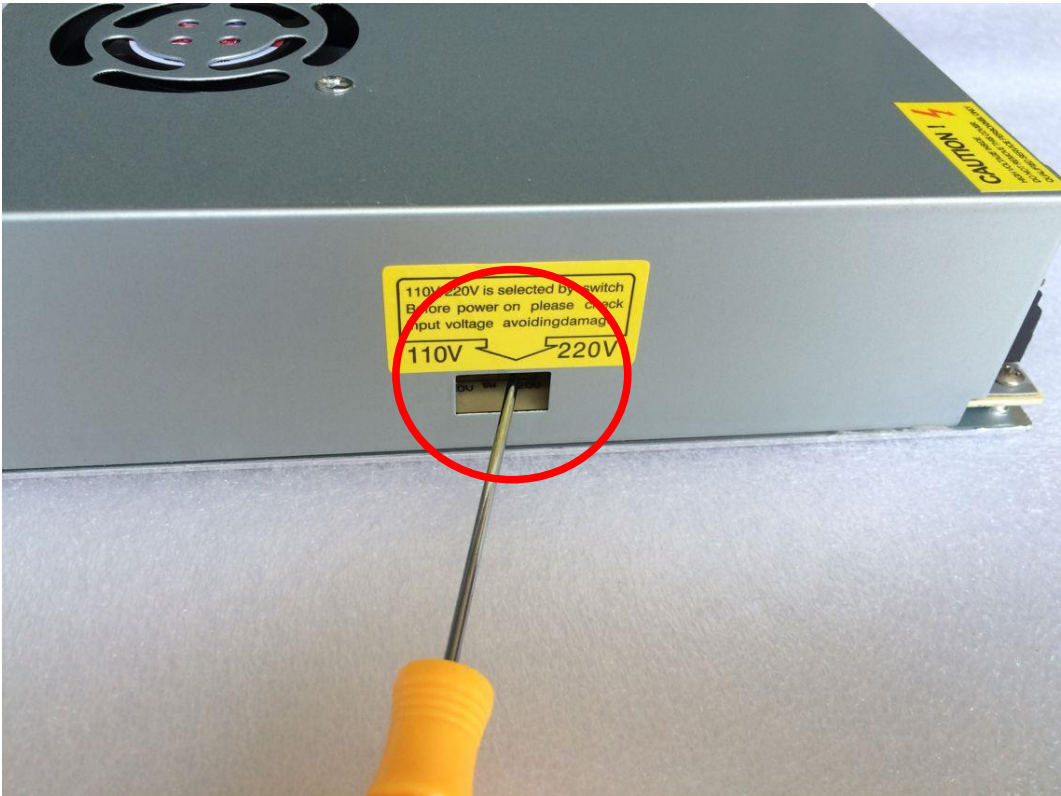
Step 22 Assemble Filament Feeder

◆ Separately put two **Plastic Pipe holder** on two **Filament support frame**, locking with four **M3*20mm head screws & nuts.**

◆ Connect the two **Filament support frames** with two **Fixed links** , locking with four **M3*20mm screws & nuts**

Plastic Pipe

Filament spool

Plastic Pipe holder

Filament support frame

M3*20mm screws

M3 nuts

Fixed Link

Installation Finished