

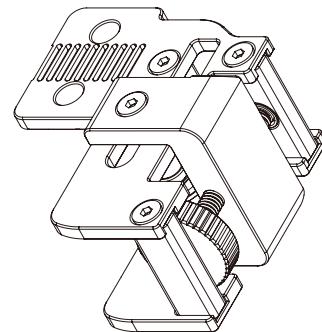


CHAOTICLAB



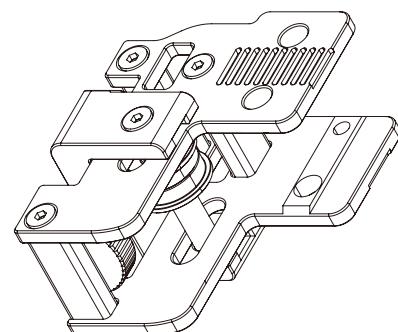
CNC TOOL-FREE TENSIONER
FOR VORON2.4 XY BUILD GUIDE

VERSION 2022-12-17



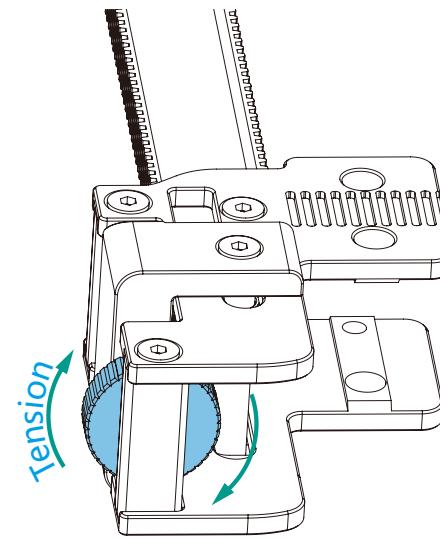
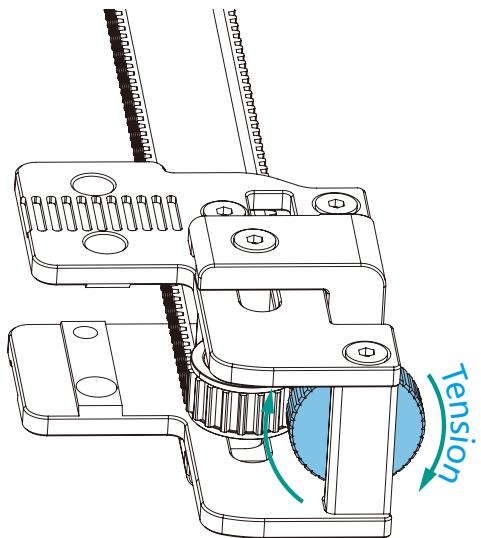
Tool-free Tensioner for Voron 2.4 XY Left Assembly

1 set



Tool-free Tensioner for Voron 2.4 XY Right Assembly

1 set



TENSION

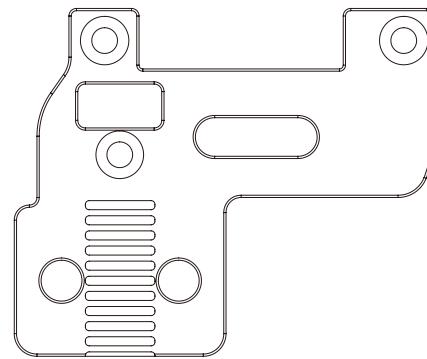
The tensioning direction is as shown in the figure.

Both the left and right tensioners are tensioned when the pulley is turned clockwise.

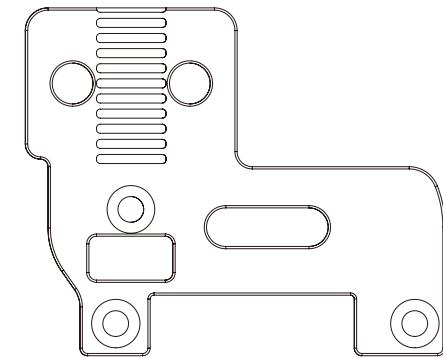
Before installing XY belt, please turn the pulley counterclockwise in advance to loosen the tensioner.

BEFORE START

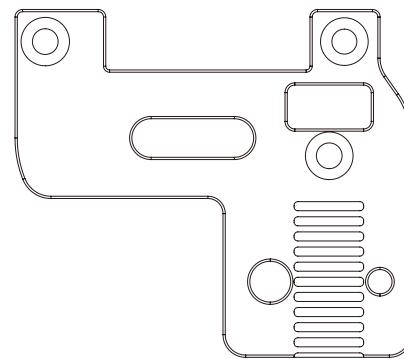
There are parts with similar shapes in the assembly, so please distinguish the left and right parts before starting, as shown in the figure.



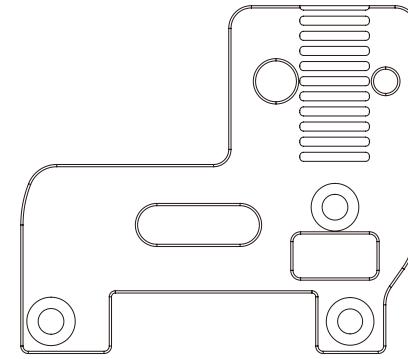
Left Upper



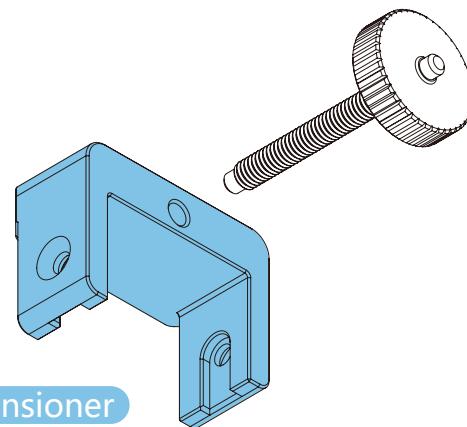
Right Upper



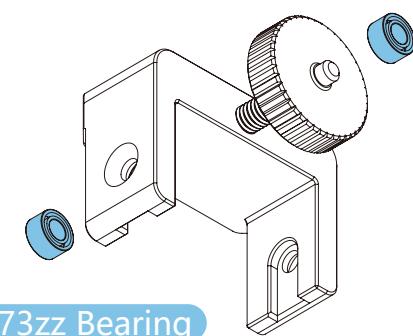
Left Lower



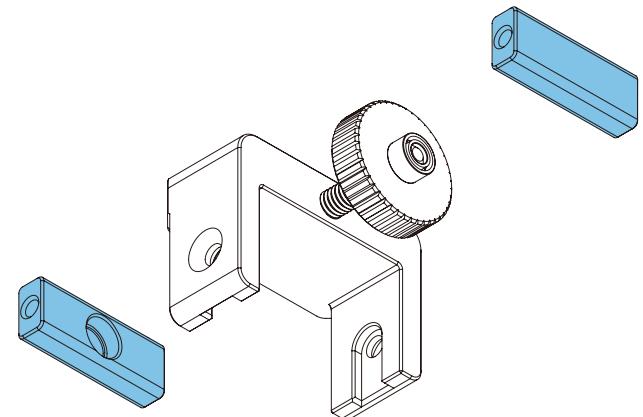
Right Lower



Tensioner



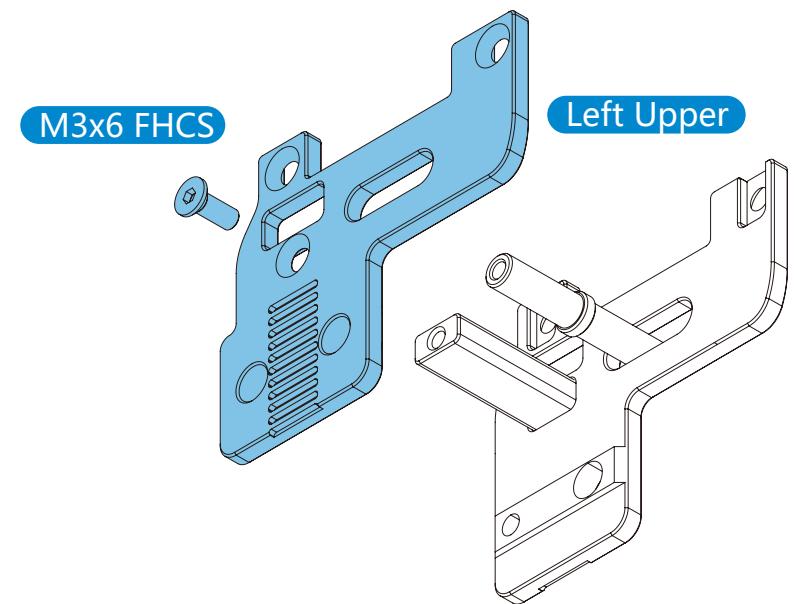
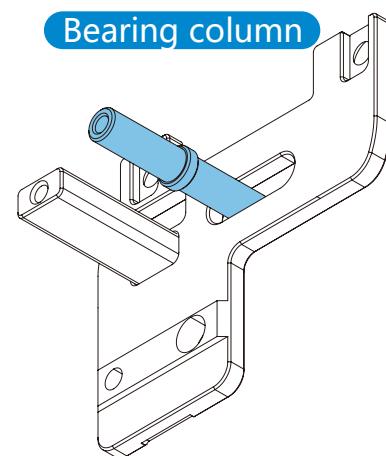
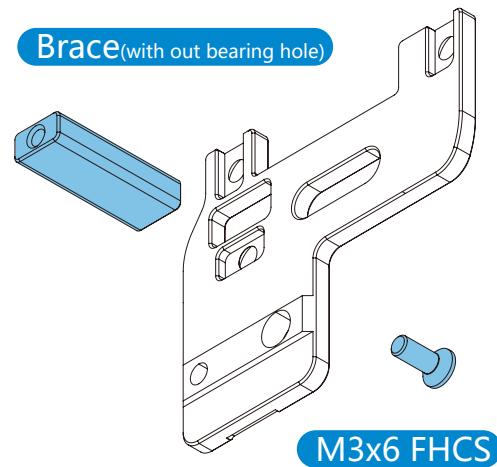
673zz Bearing



Brace (with bearing hole)

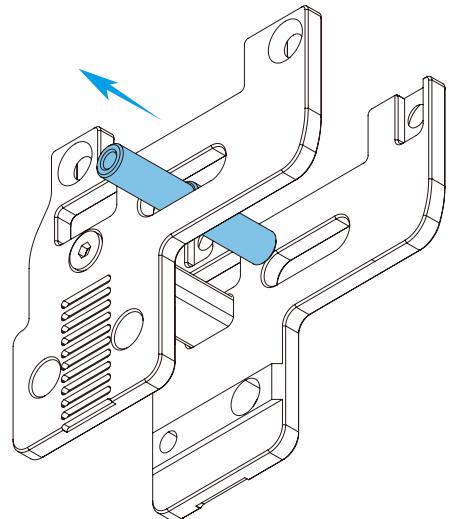
LEFT ASSEMBLY

WWW.CHAOTICLAB.XYZ



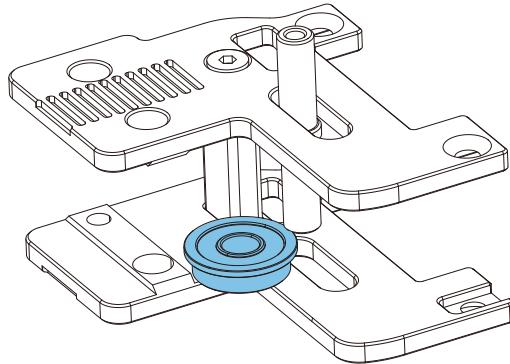
BRACE

This BRACE has no bearing hole.

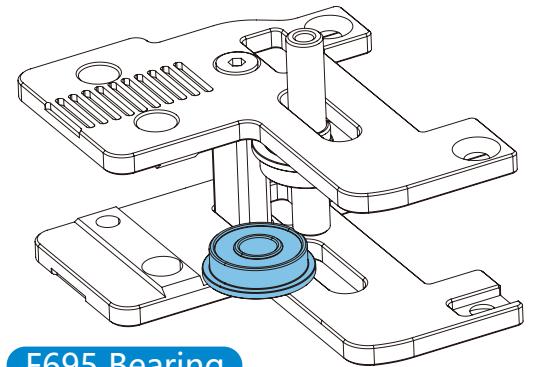


BEARING COLUMN

Move bearingcolumn up to facilitate mounting of F695 and M5 shim.



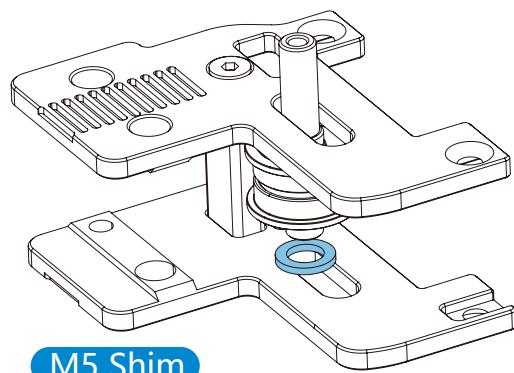
F695 Bearing



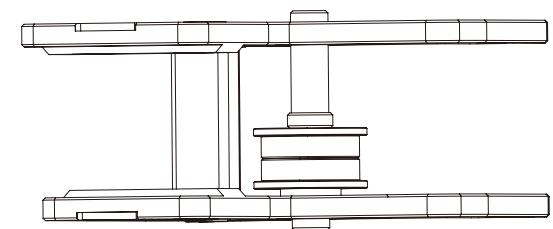
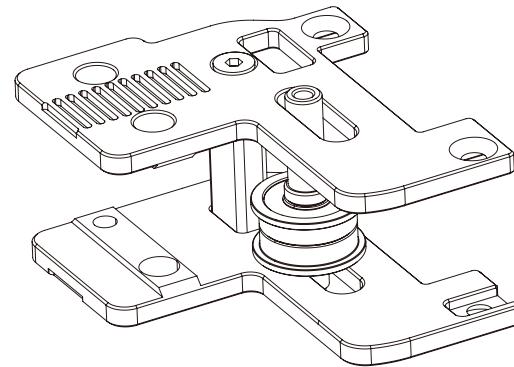
F695 Bearing

LEFT ASSEMBLY

WWW.CHAOTICLAB.XYZ

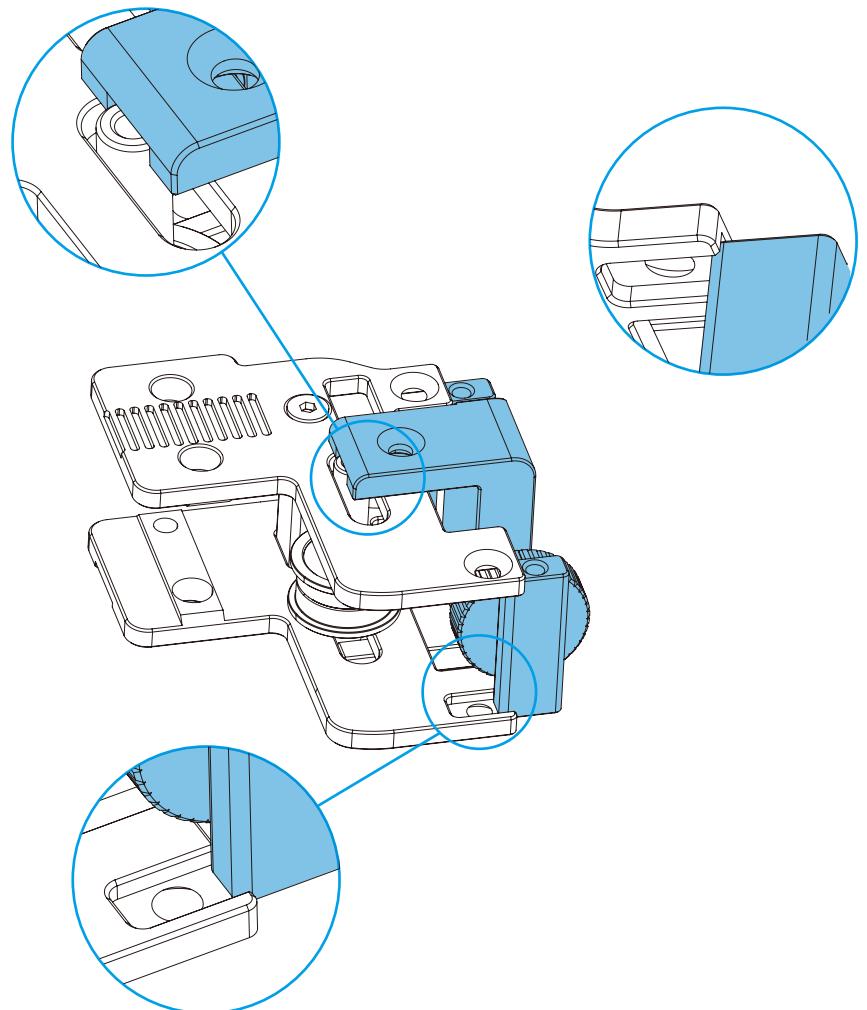
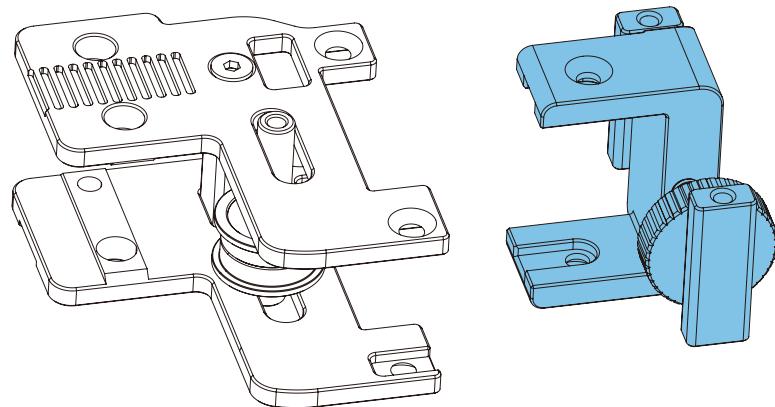


M5 Shim



LEFT ASSEMBLY

WWW.CHAOTICLAB.XYZ

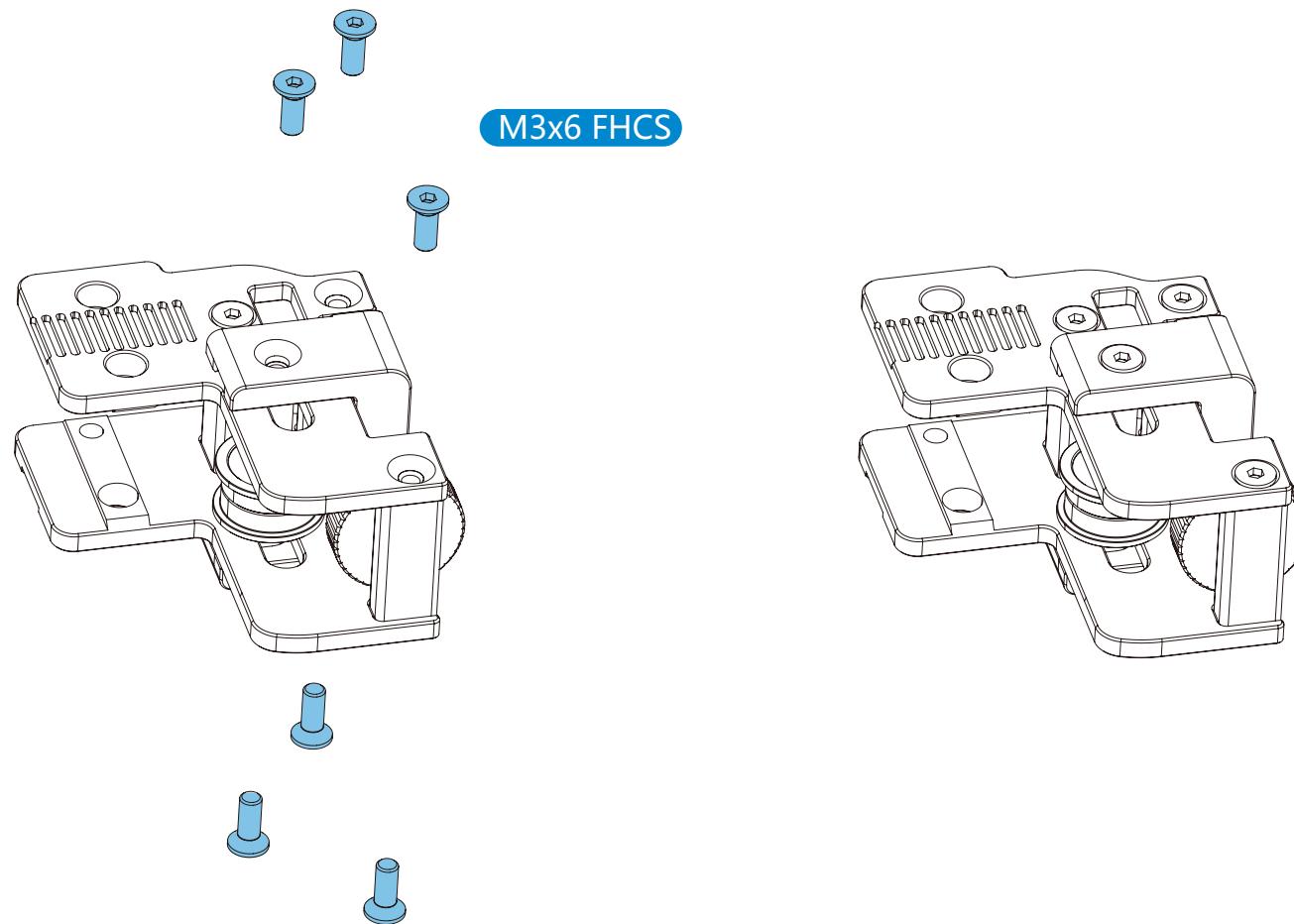


ALIGN

As shown in the image.
When loading the tensioning assembly,
take care to align the notches of both Brace and Bearing Column at the same time.

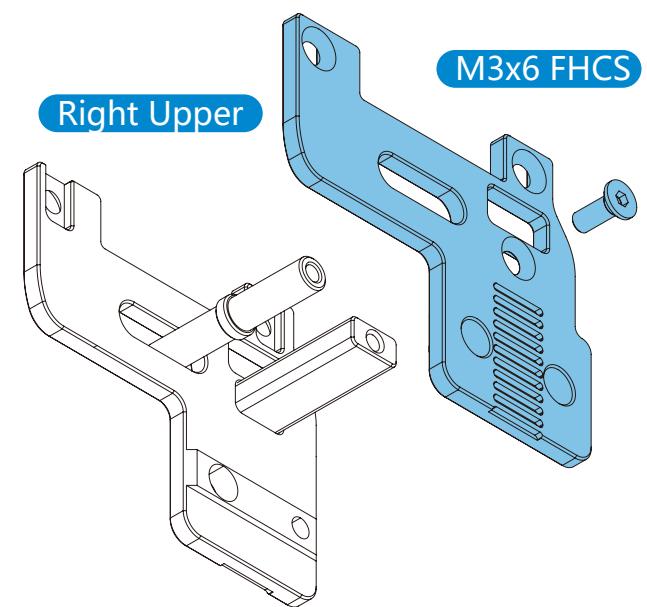
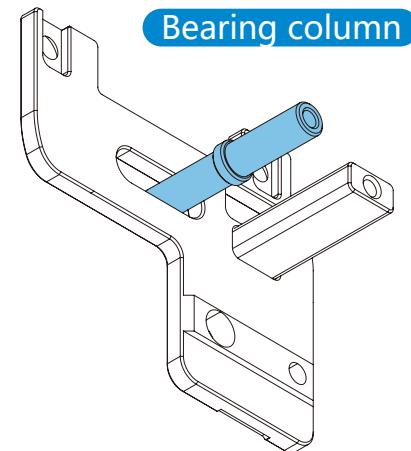
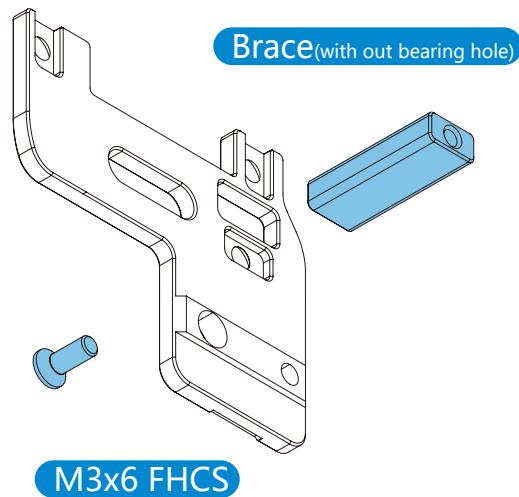
LEFT ASSEMBLY

WWW.CHAOTICLAB.XYZ



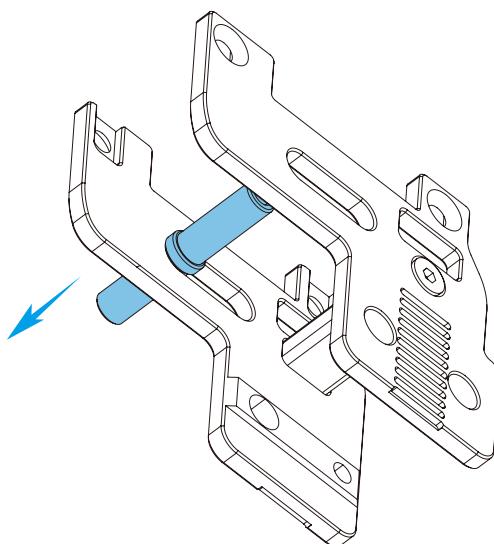
RIGHT ASSEMBLY

WWW.CHAOTICLAB.XYZ



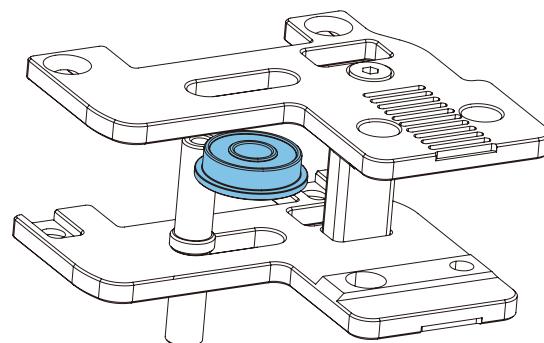
BRACE

This BRACE has no bearing hole.

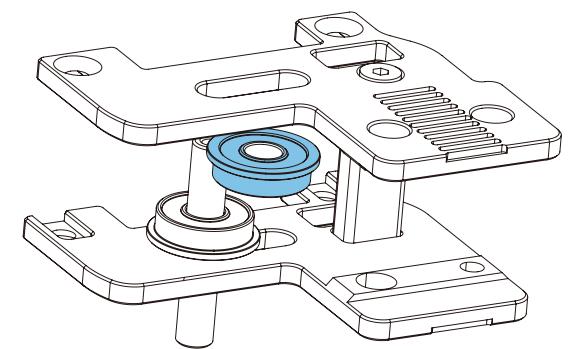


BEARING COLUMN

Move bearing column down to facilitate mounting of F695 and M5 shim.



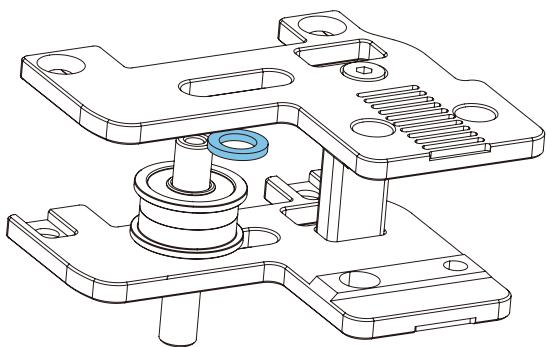
F695 Bearing



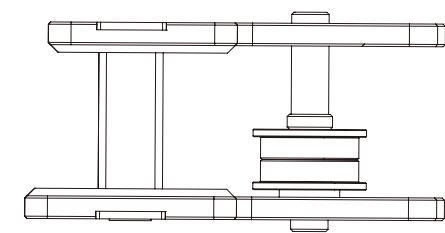
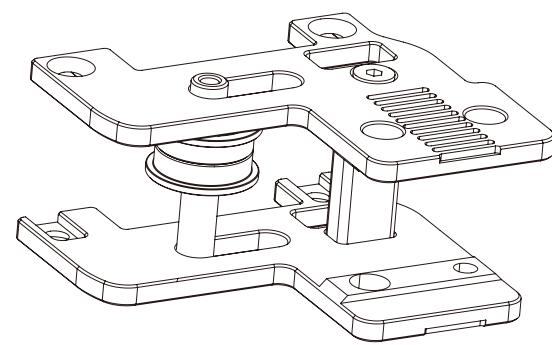
F695 Bearing

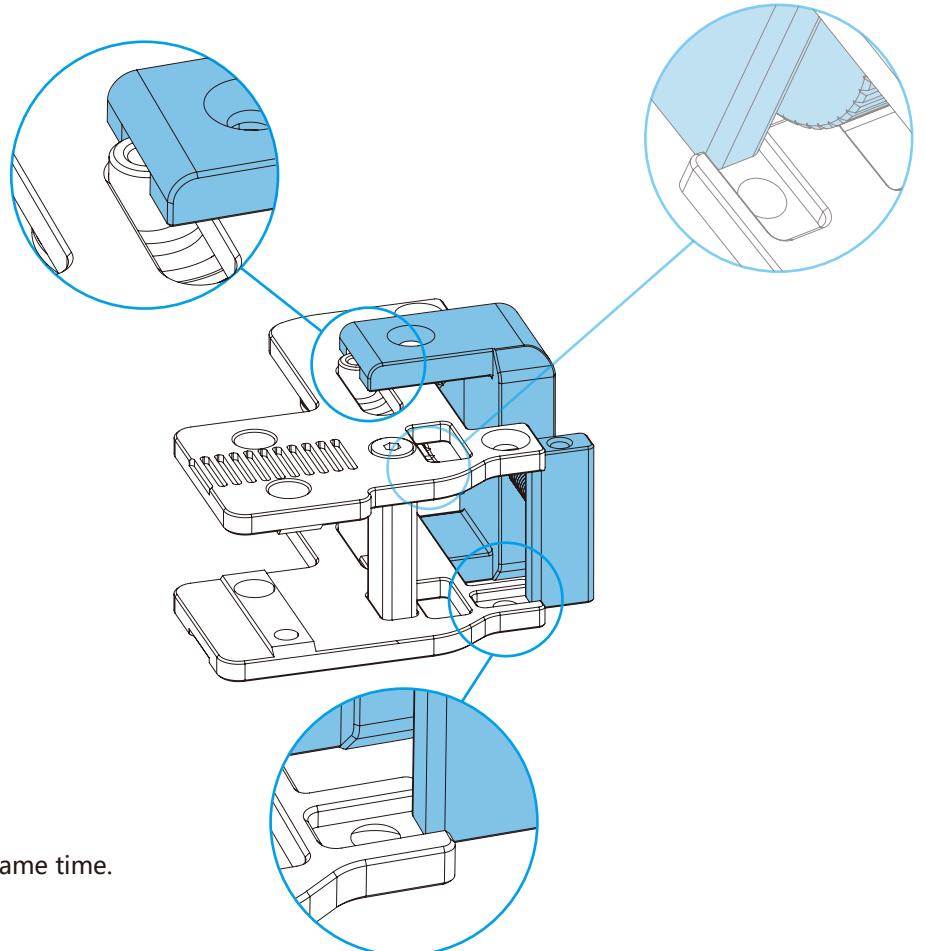
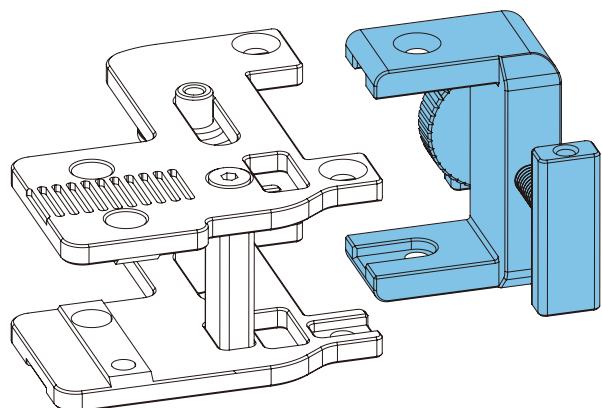
RIGHT ASSEMBLY

WWW.CHAOTICLAB.XYZ



M5 Shim



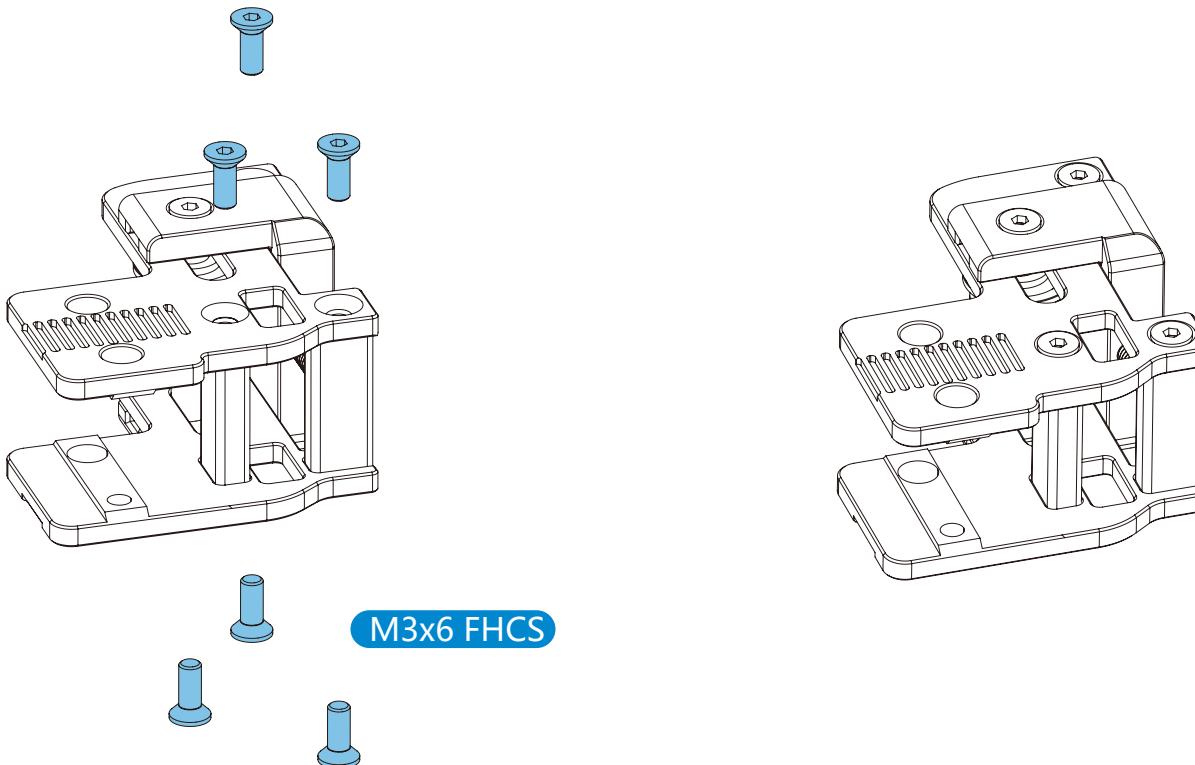


ALIGN

As shown in the image.
When loading the tensioning assembly,
take care to align the notches of both Brace and Bearing Column at the same time.

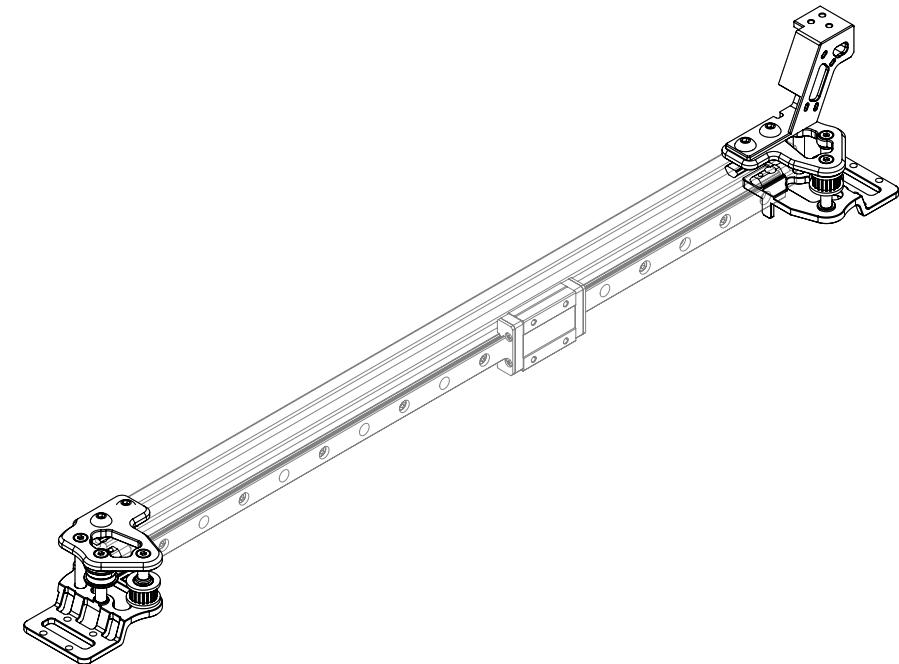
RIGHT ASSEMBLY

WWW.CHAOTICLAB.XYZ



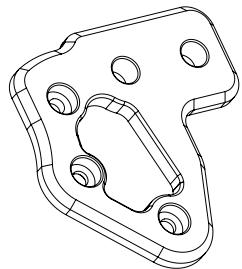


CHAOTICLAB



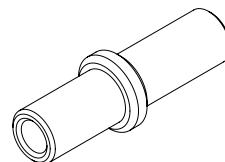
CNC XY-JOINT KIT
FOR VORON 2.4/TRIDENT BUILD GUIDE

VERSION 2023-07-25



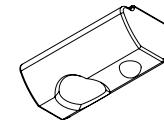
X-Joint Left

1pc



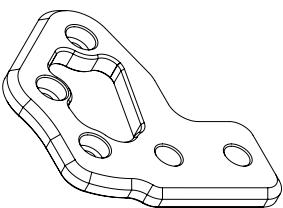
Bearing Column

2pcs (red)



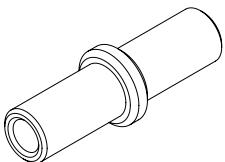
Drop-in T-nut, M5 (2020)

6pcs



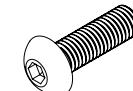
X-Joint Right

1pc



Idler Column

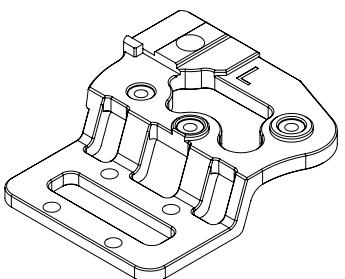
2pcs (black)



Button Head Cap Screw(BHCS)

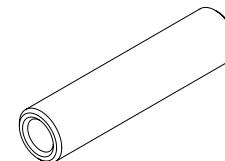
M5x10

6pcs



Y-Joint Left

1pc



Support Column

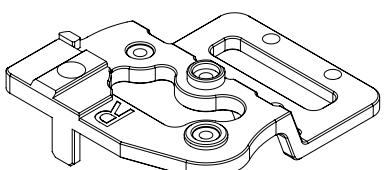
2pcs



Socket Head Cap Screw(SHCS)

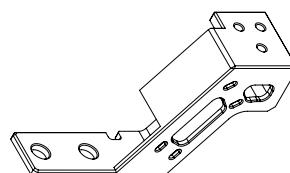
M3x26

6pcs



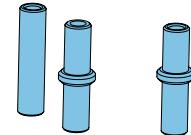
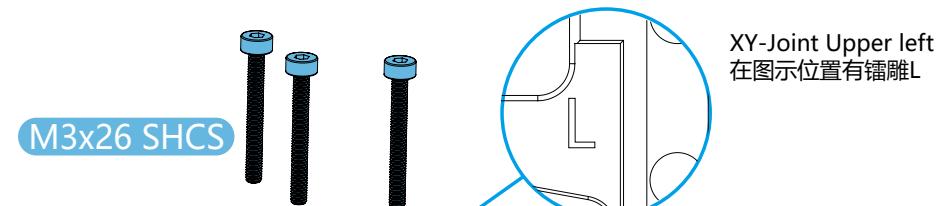
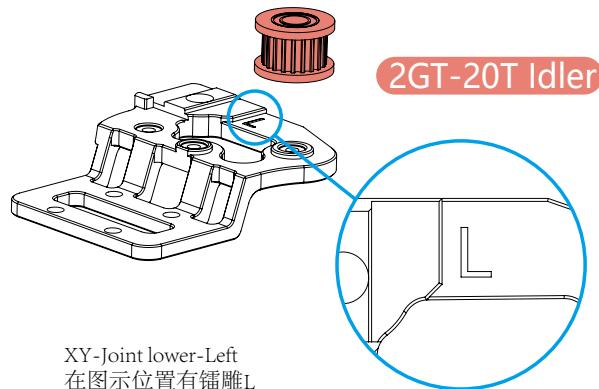
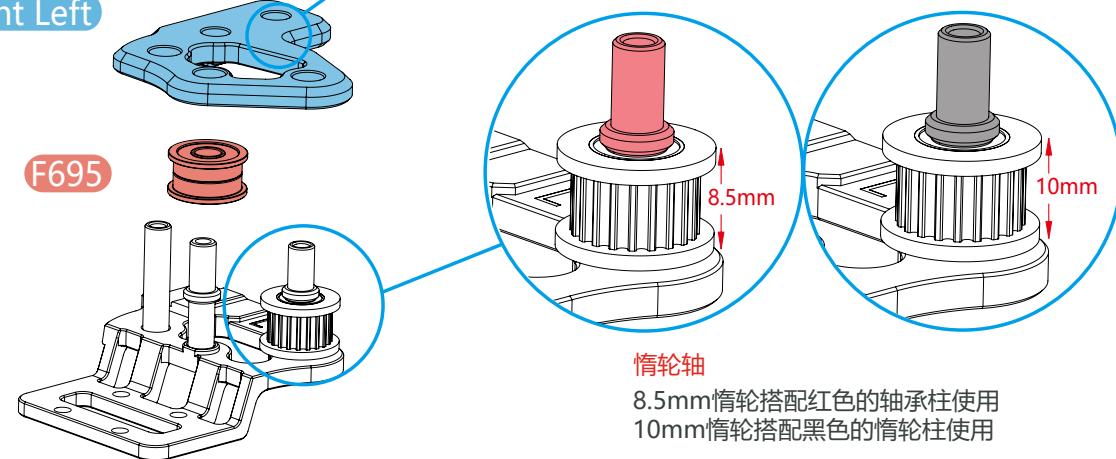
Y-Joint Right

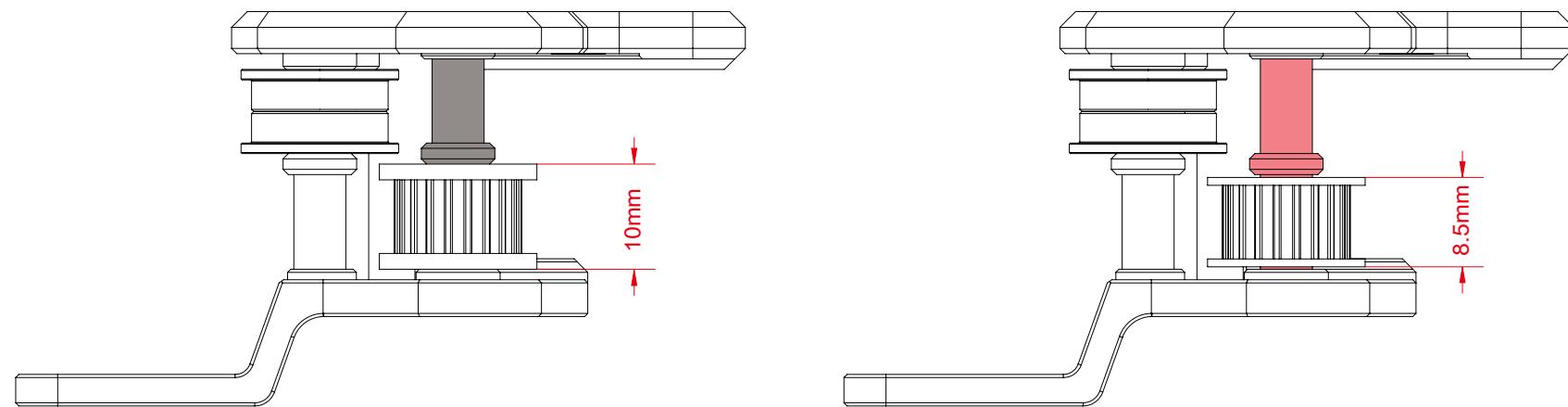
1pc

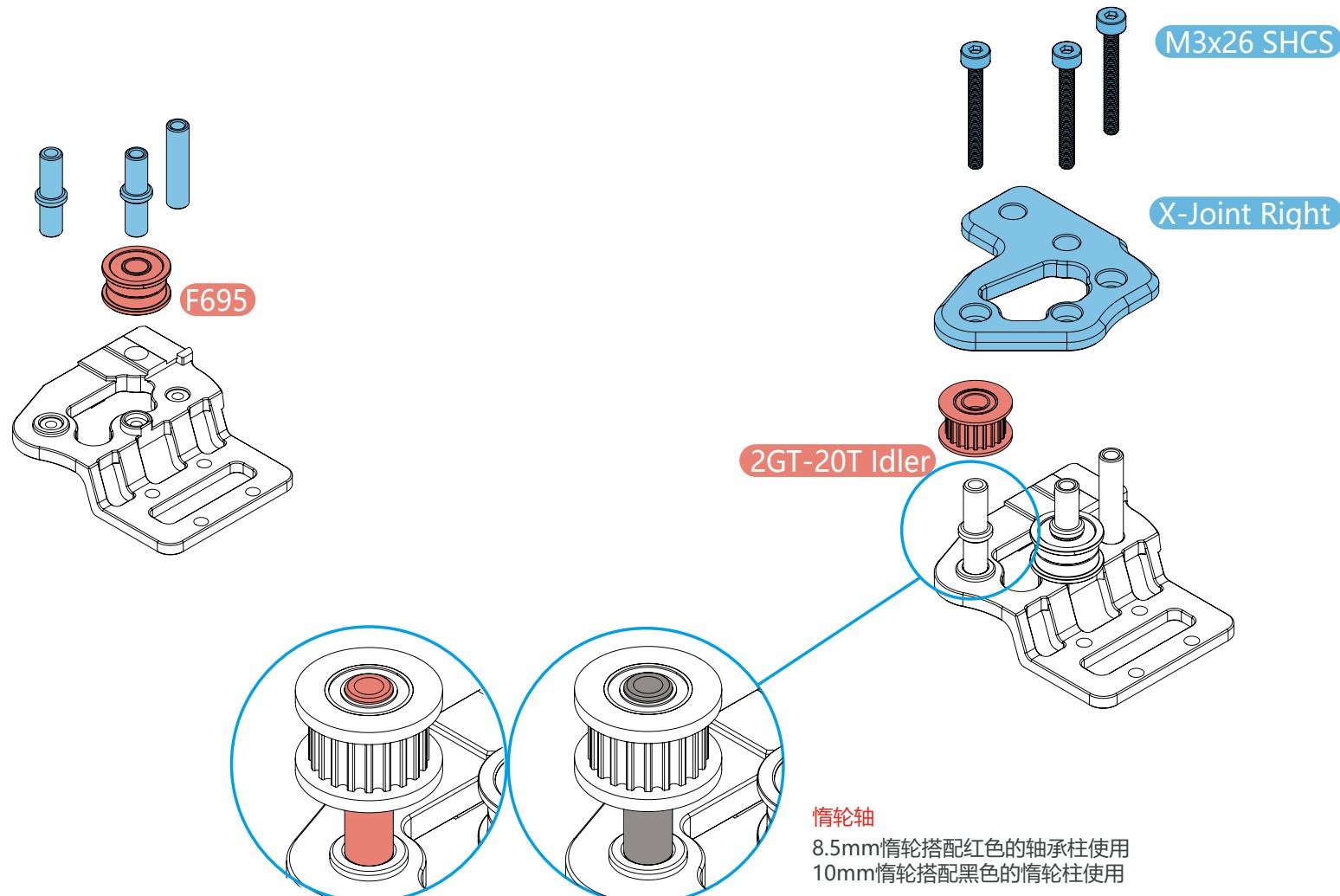


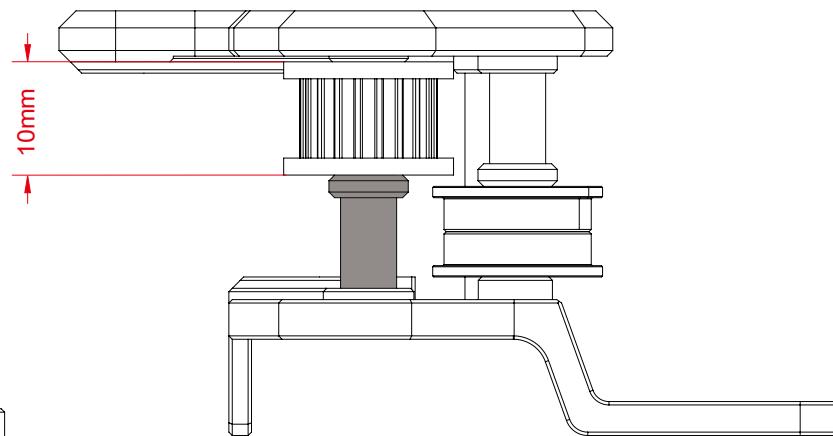
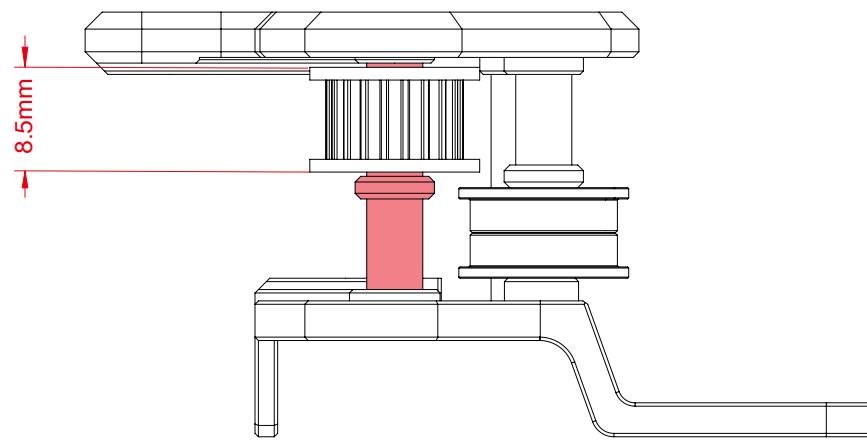
XY Cable Chain Bridge

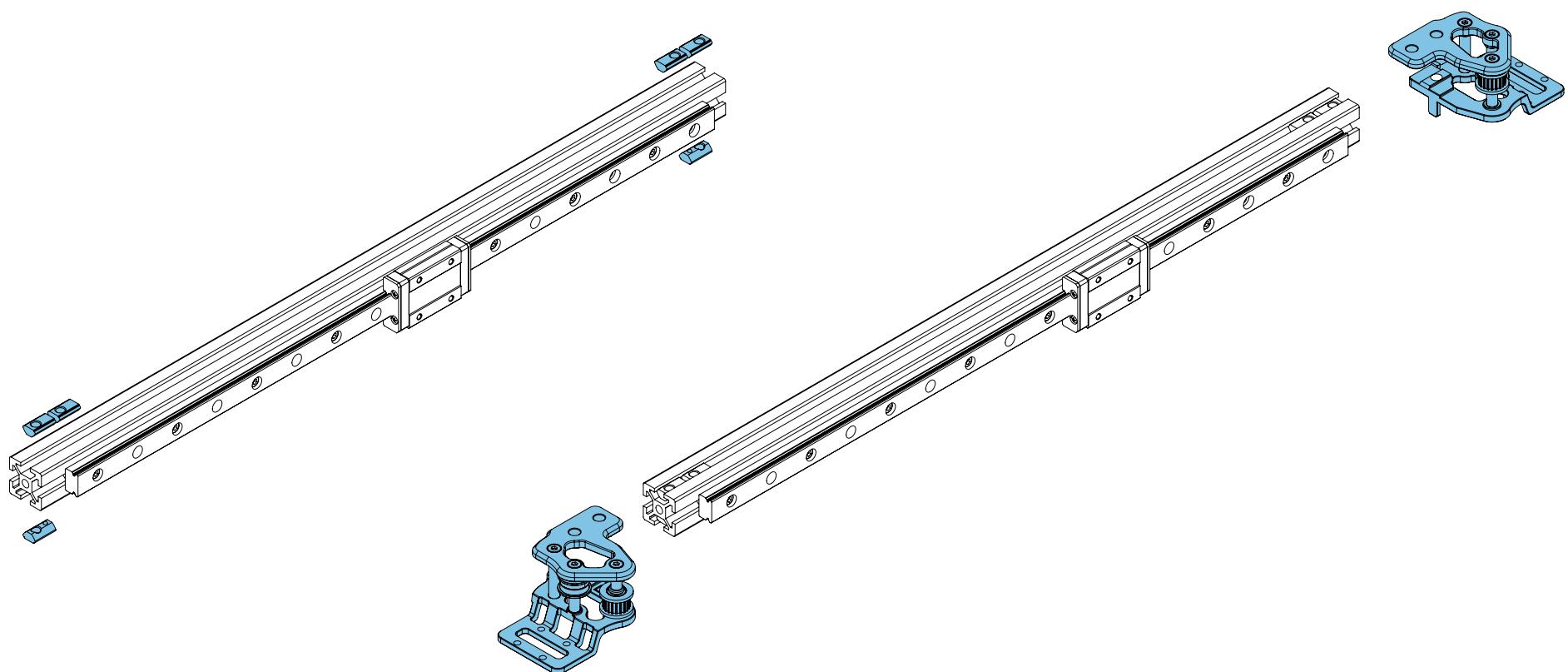
2pcs

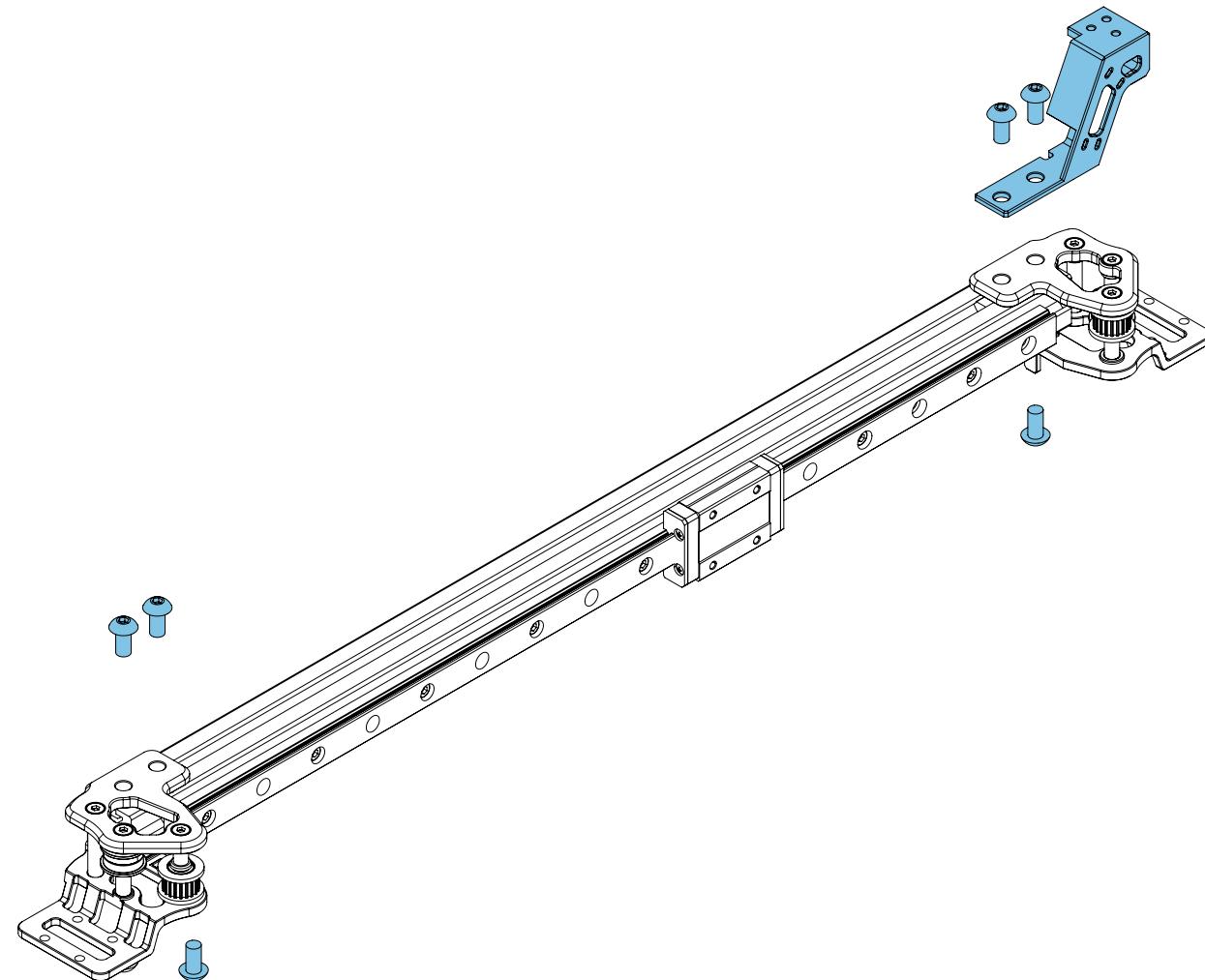
Support Column**Bearing Column****X-Joint Left**

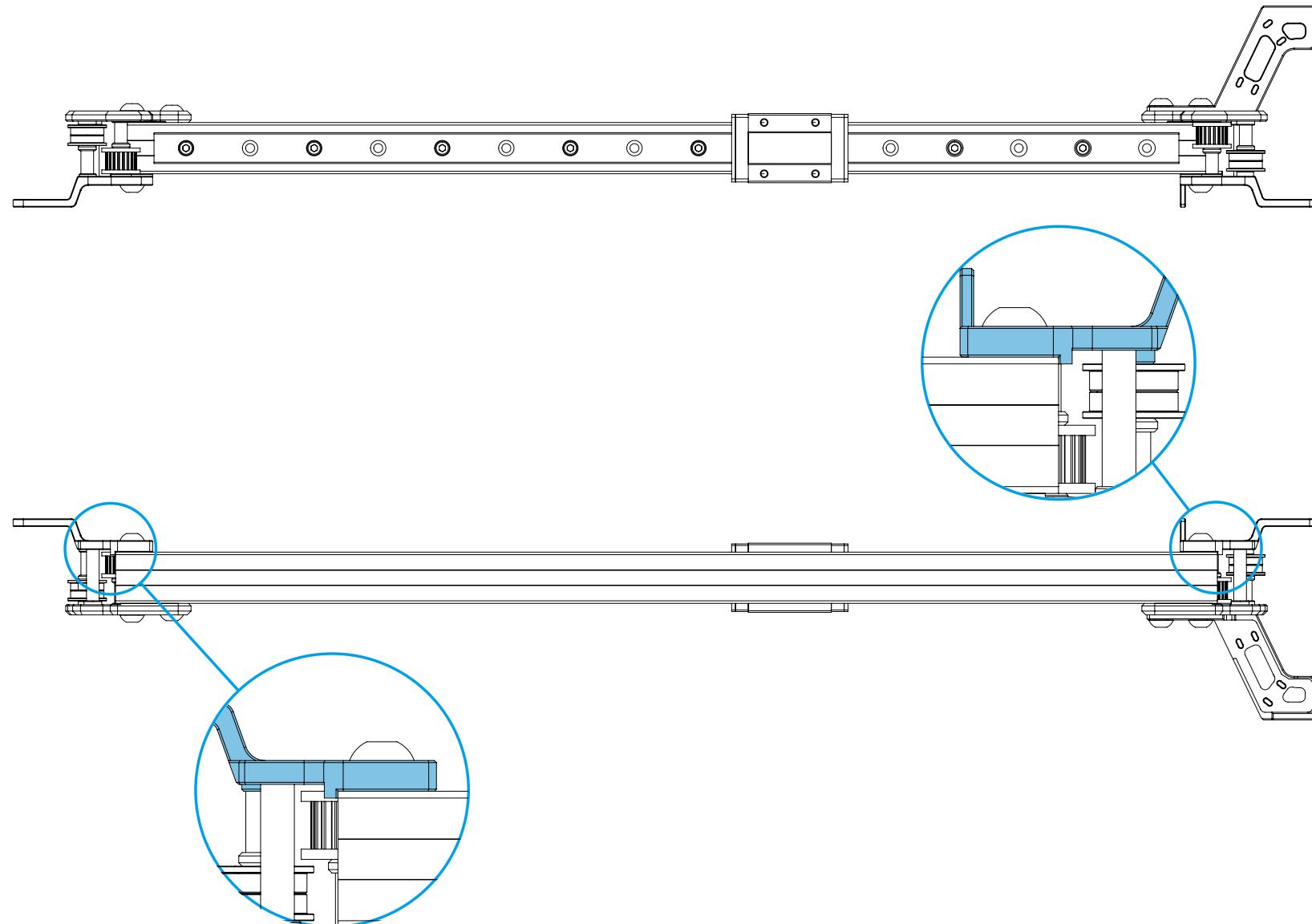












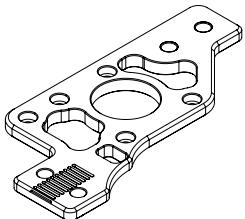


CHAOTICLAB



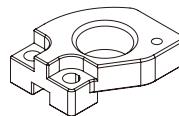
CNC A/B DRIVE KIT
FOR VORON 2.4 BUILD GUIDE

VERSION 2023-07-25



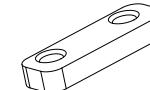
A Drive Frame Upper (Left)

1pc



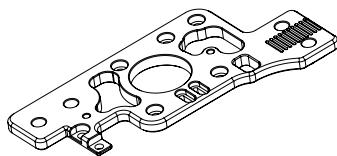
M12 Cable Protector Bracket

1pc



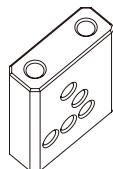
Microswitch Nut

2pcs



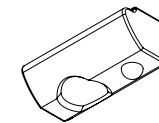
B Drive Frame Upper (Right)

1pc



Universal Drag Chain Bracket

1pc



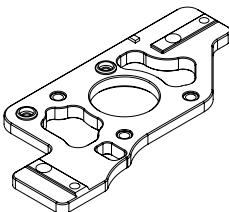
Drop-in T-nut(2020)

M3

2pcs

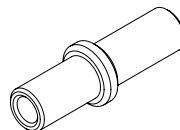
M5

6pcs



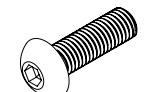
A Drive Frame Lower (Left)

1pc



Bearing Column

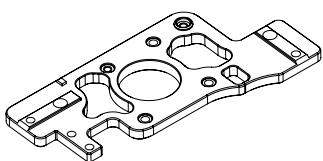
1pc



Button Head Cap Screw(BHCS)

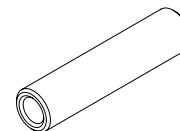
M5x10

6pcs



B Drive Frame Lower (Right)

1pc



Support Column

6pcs



Socket Head Cap Screw(SHCS)

M3x30

6pcs

M3x26

4pcs

M3x14

4pcs

M3x10

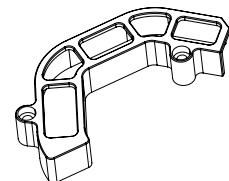
2pcs

M3x6

4pcs

M2x12

2pcs



Cable Cover

1pc

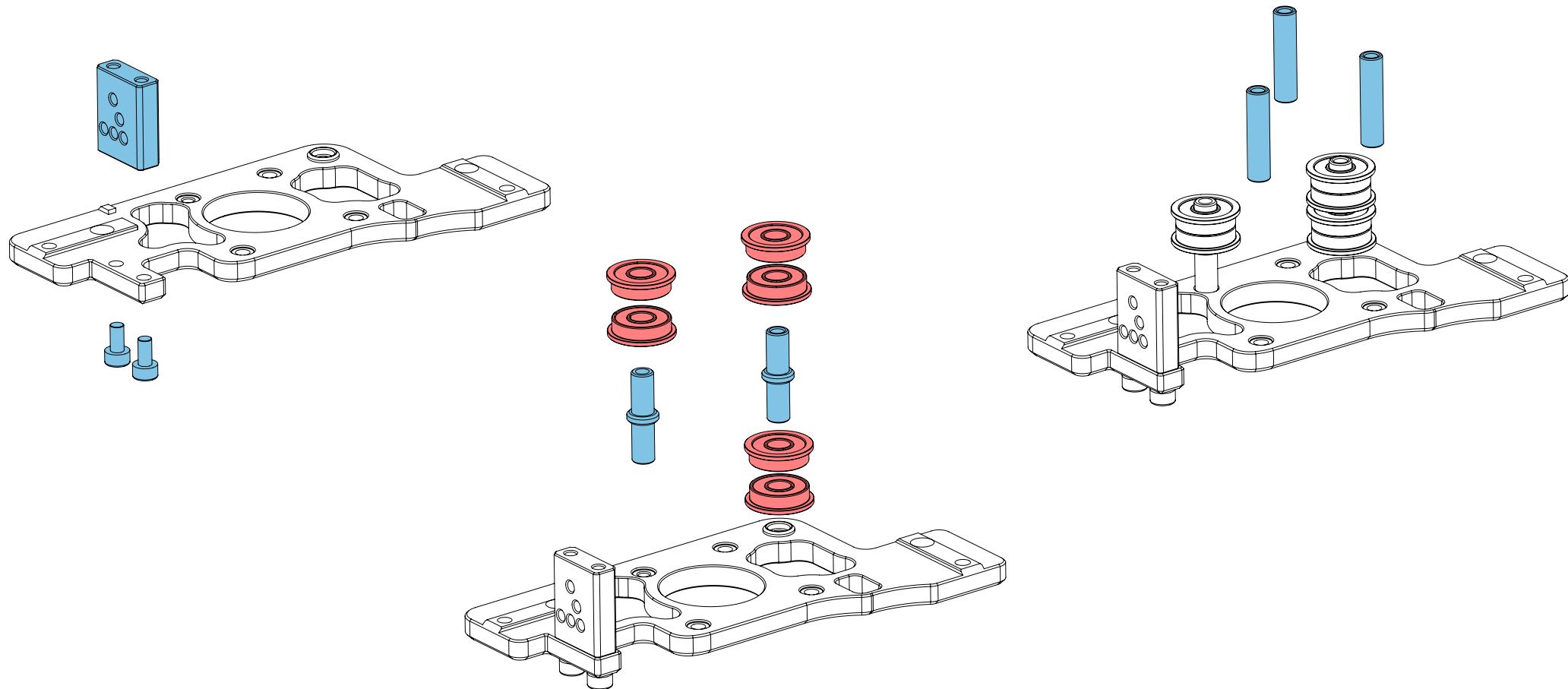


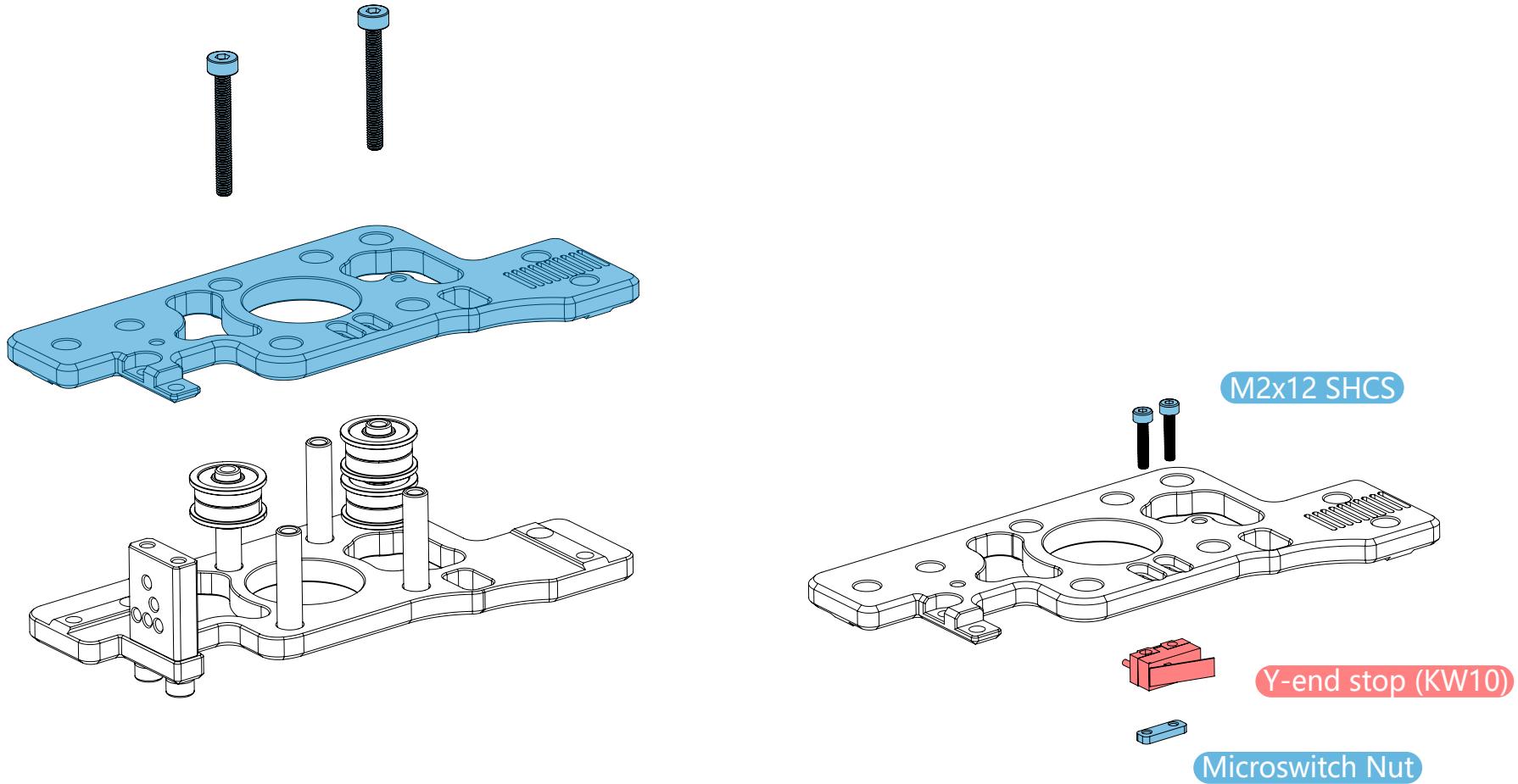
Bending resistant protective wire sleeve

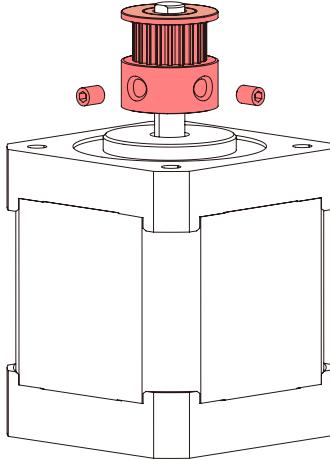
1pc

A Drive(right)

WWW.CHAOTICLAB.COM

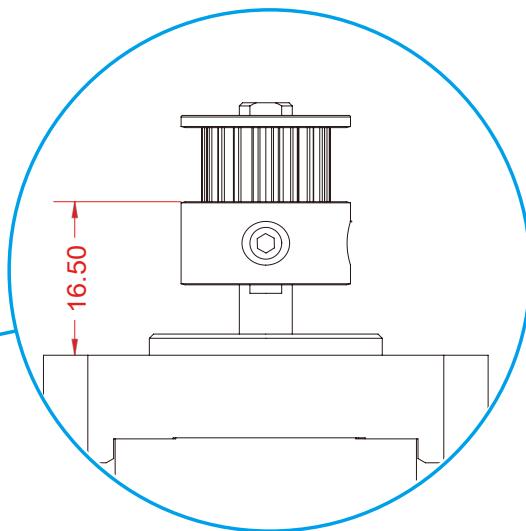
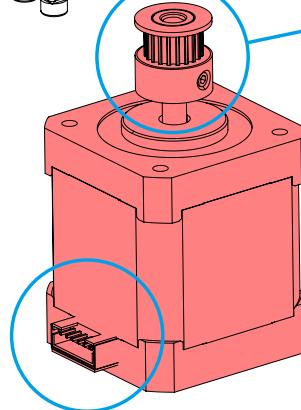
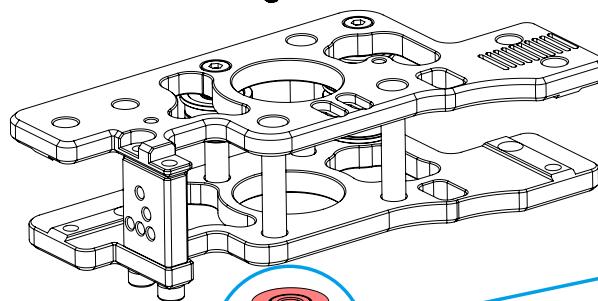
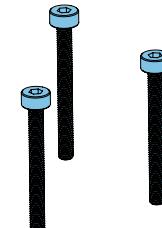






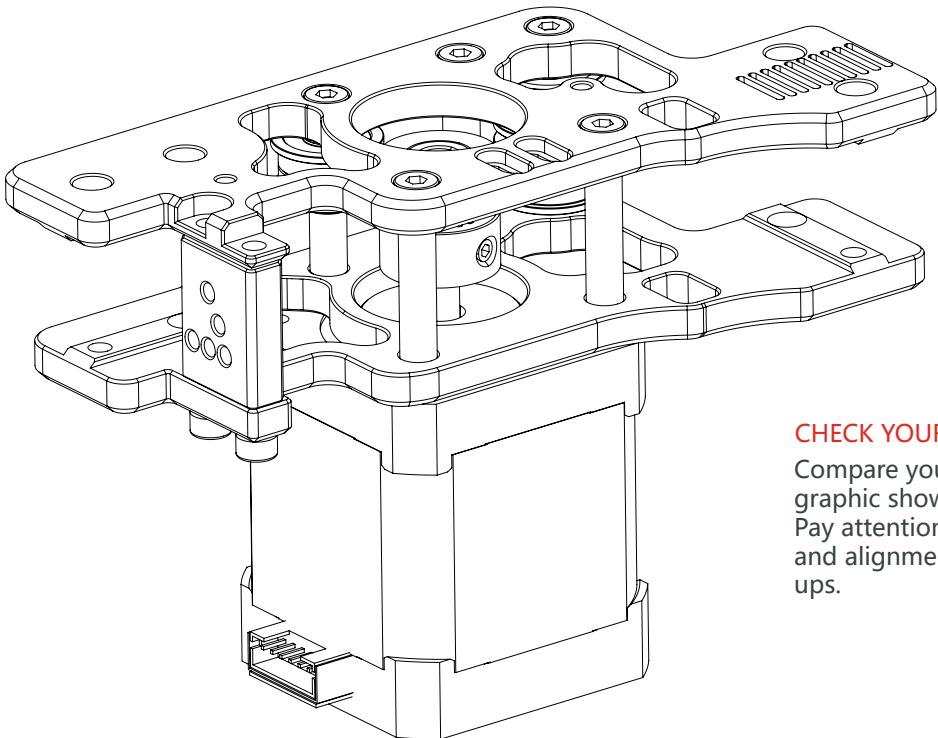
APPLY THREAD LOCKER

Make sure to use thread locker on the set screws.



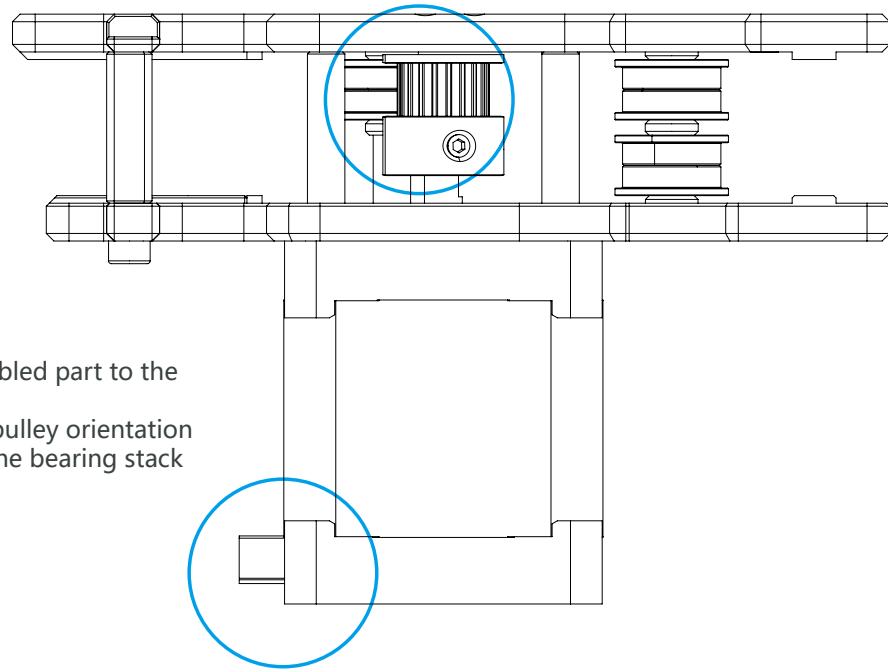
MOTOR ORIENTATION

Pay attention to the orientation of the cable exit.



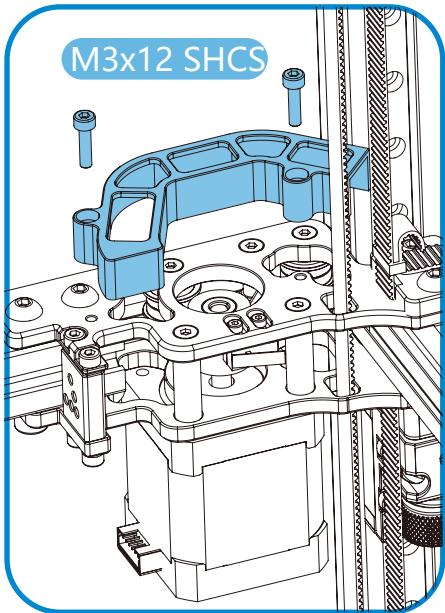
CHECK YOUR WORK

Compare your assembled part to the graphic shown here.
Pay attention to the pulley orientation and alignment with the bearing stack ups.

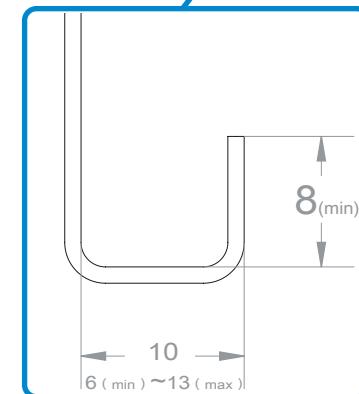
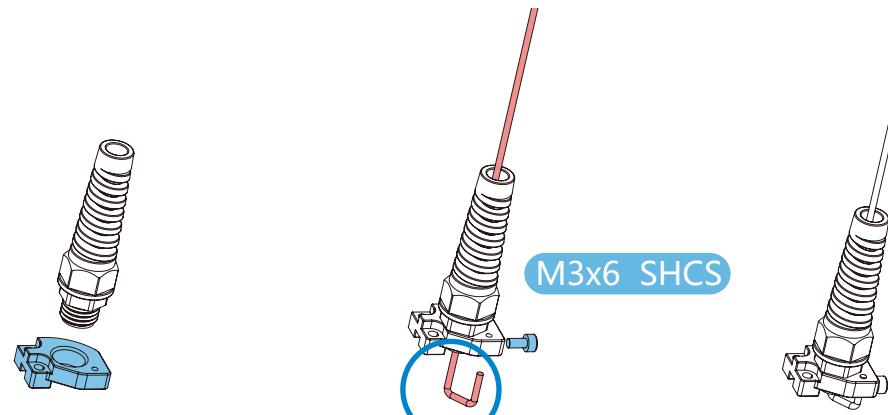


MOTOR ORIENTATION

Pay attention to the orientation of the cable exit.



M12 Cable Protector Bracket

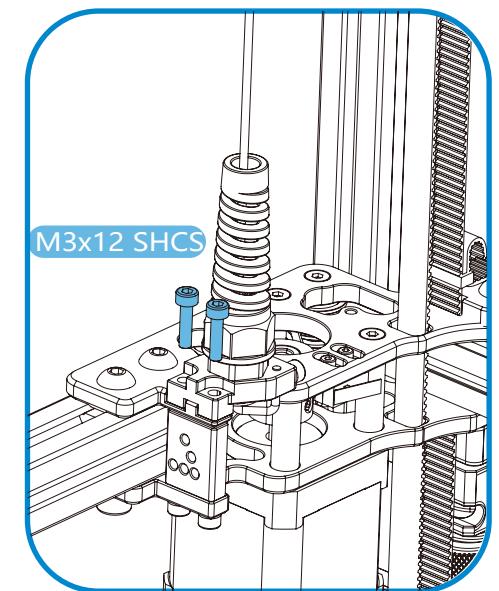


CABLE COVER

Confirm that the wiring is completed before installing this part.

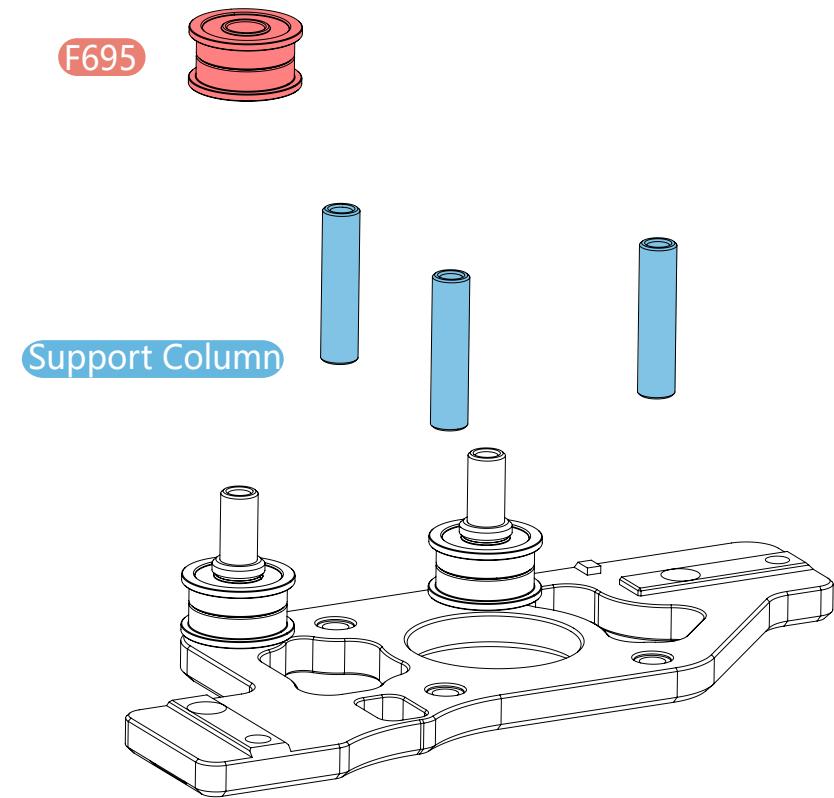
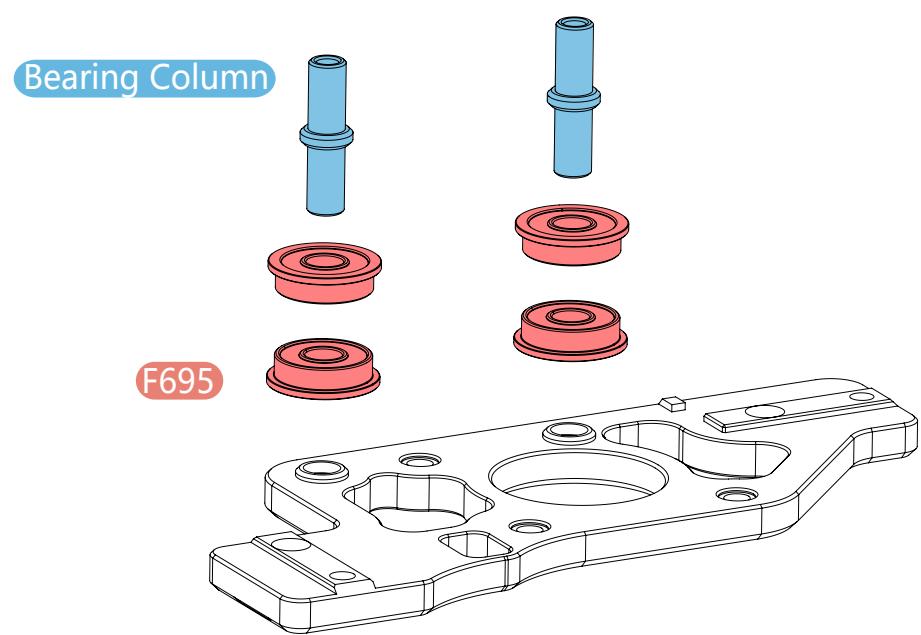
STEEL WIRE

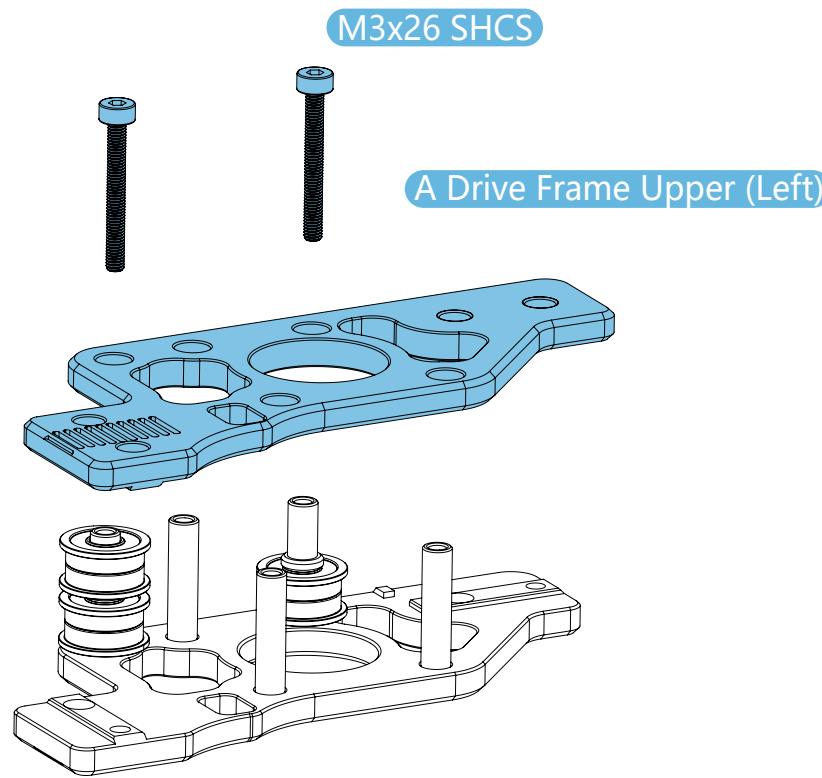
Steel wire diameter not greater than 2mm.

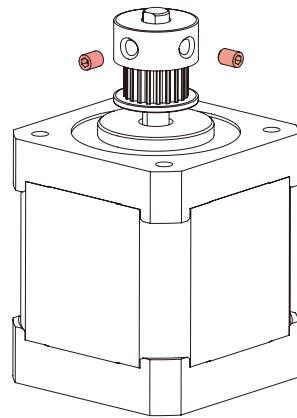


CANBUS

The figure shows the use of CAN bus.

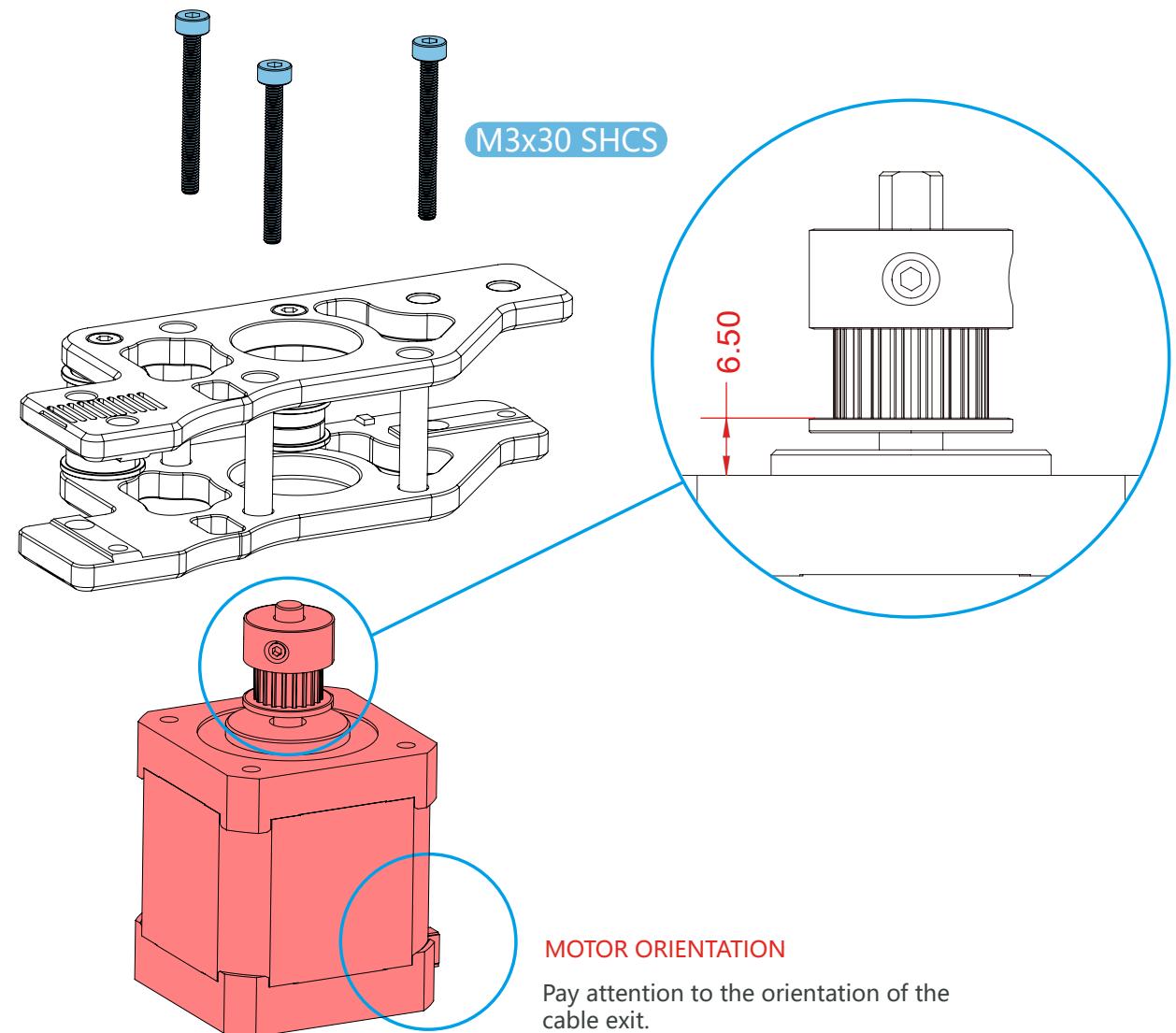


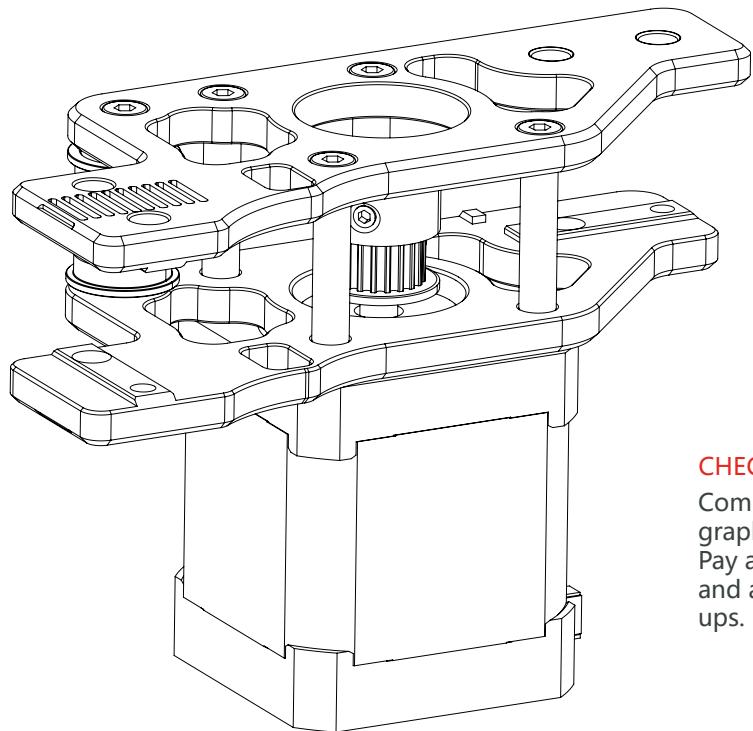




MOTOR ORIENTATION

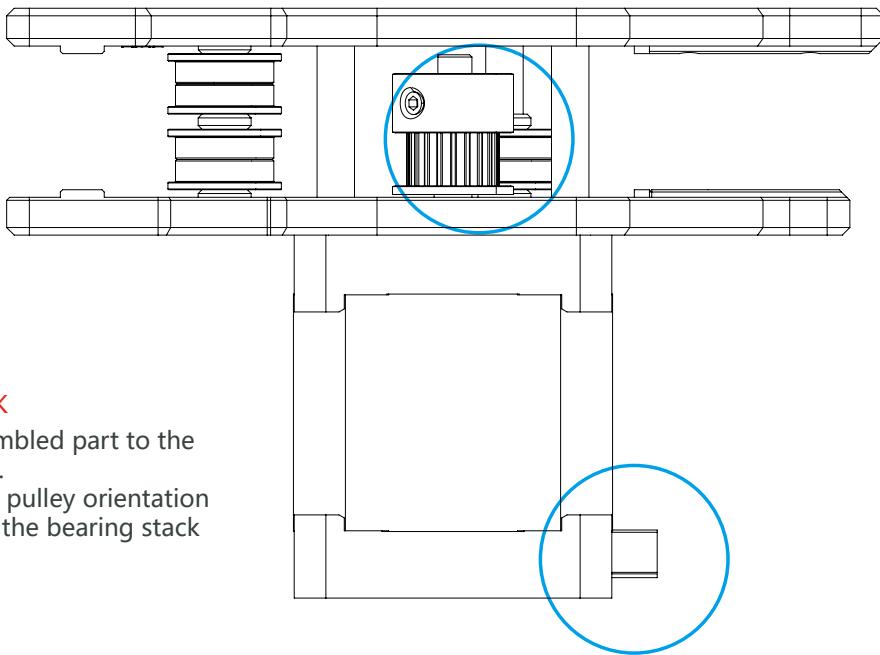
Pay attention to the orientation of the cable exit.





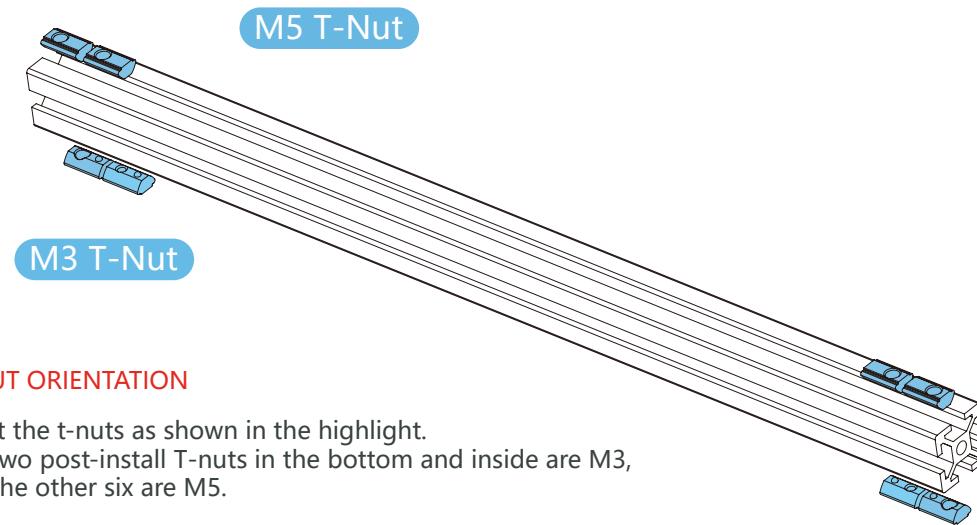
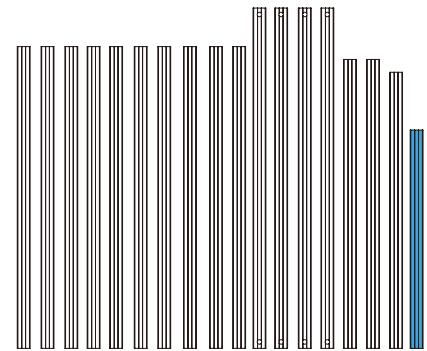
CHECK YOUR WORK

Compare your assembled part to the graphic shown here.
Pay attention to the pulley orientation and alignment with the bearing stack ups.



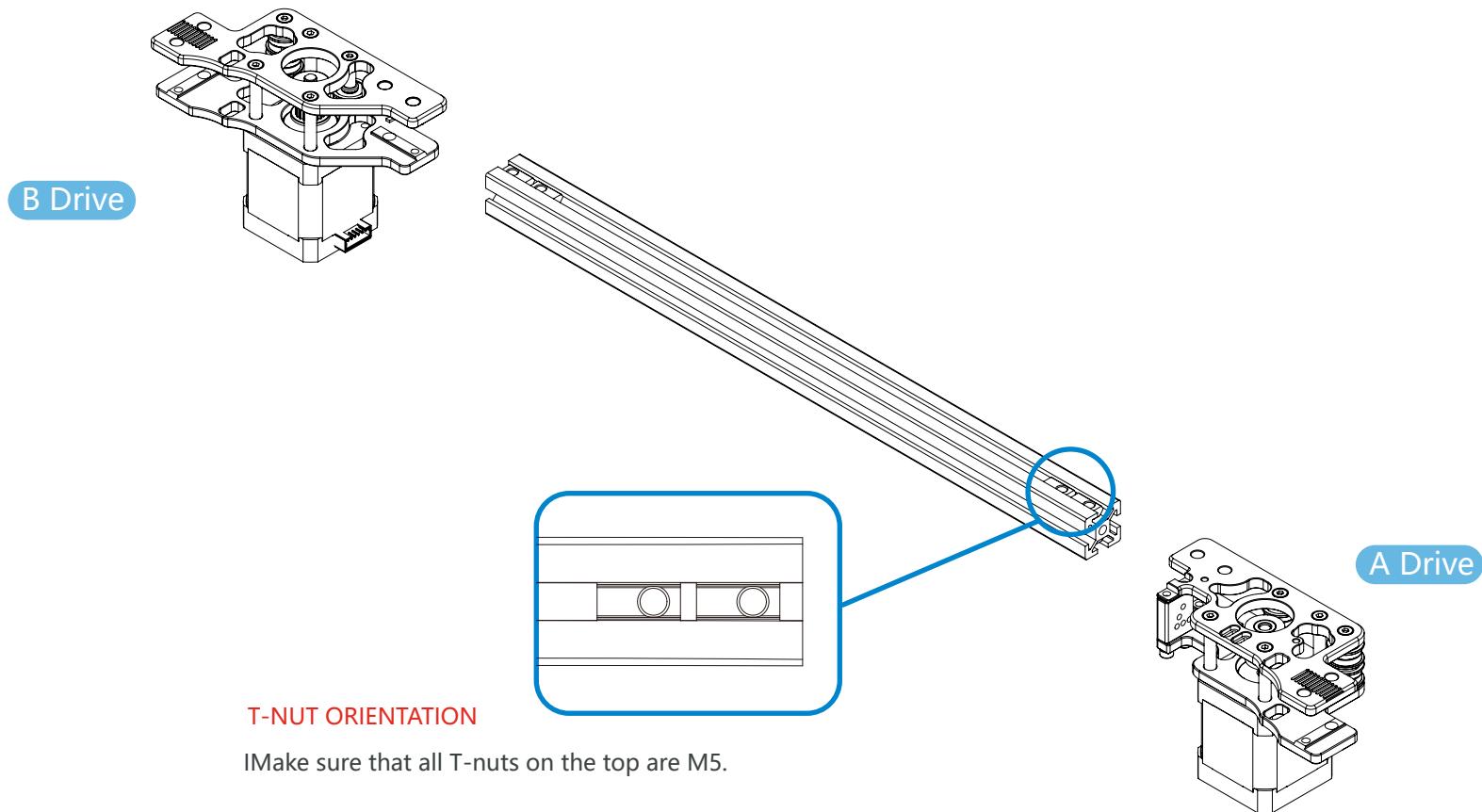
MOTOR ORIENTATION

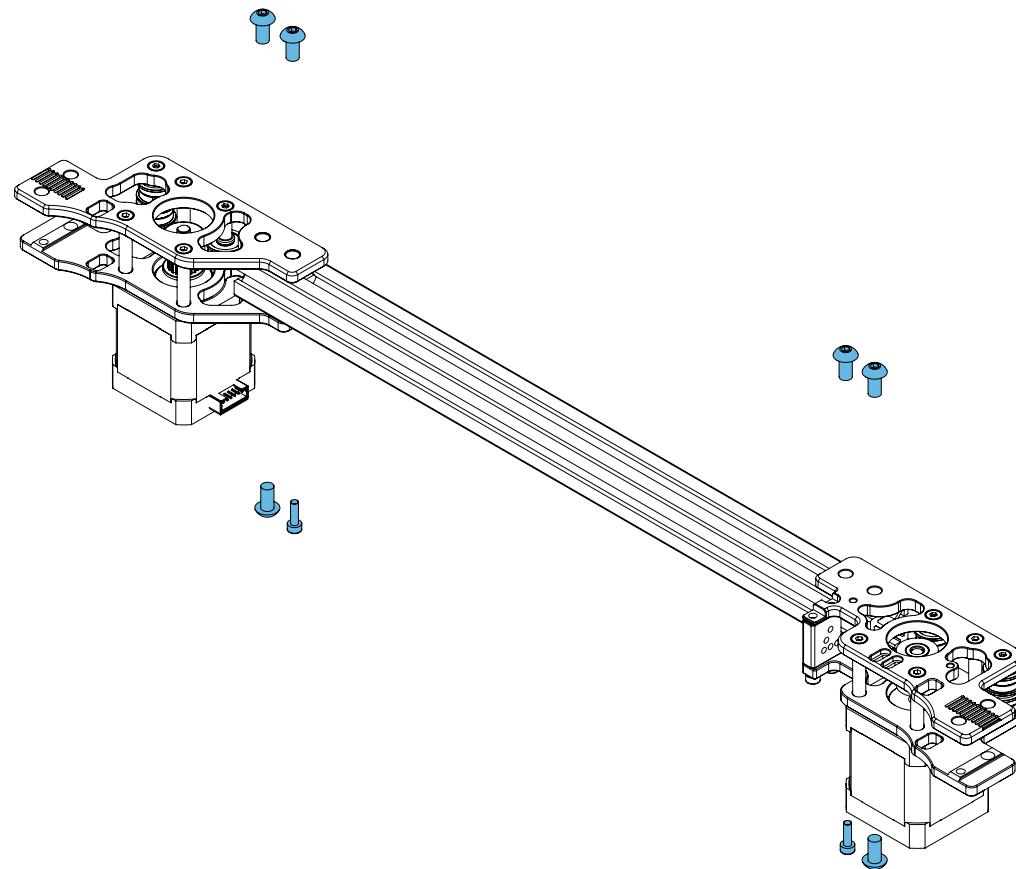
Pay attention to the orientation of the cable exit.

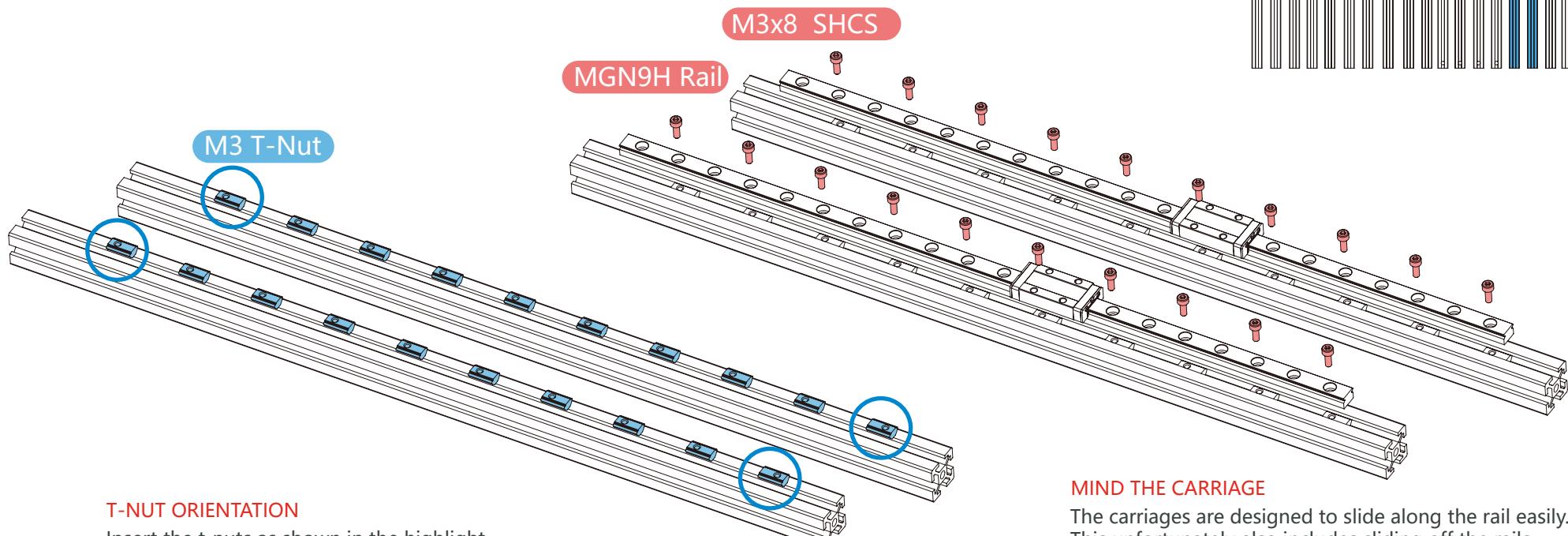


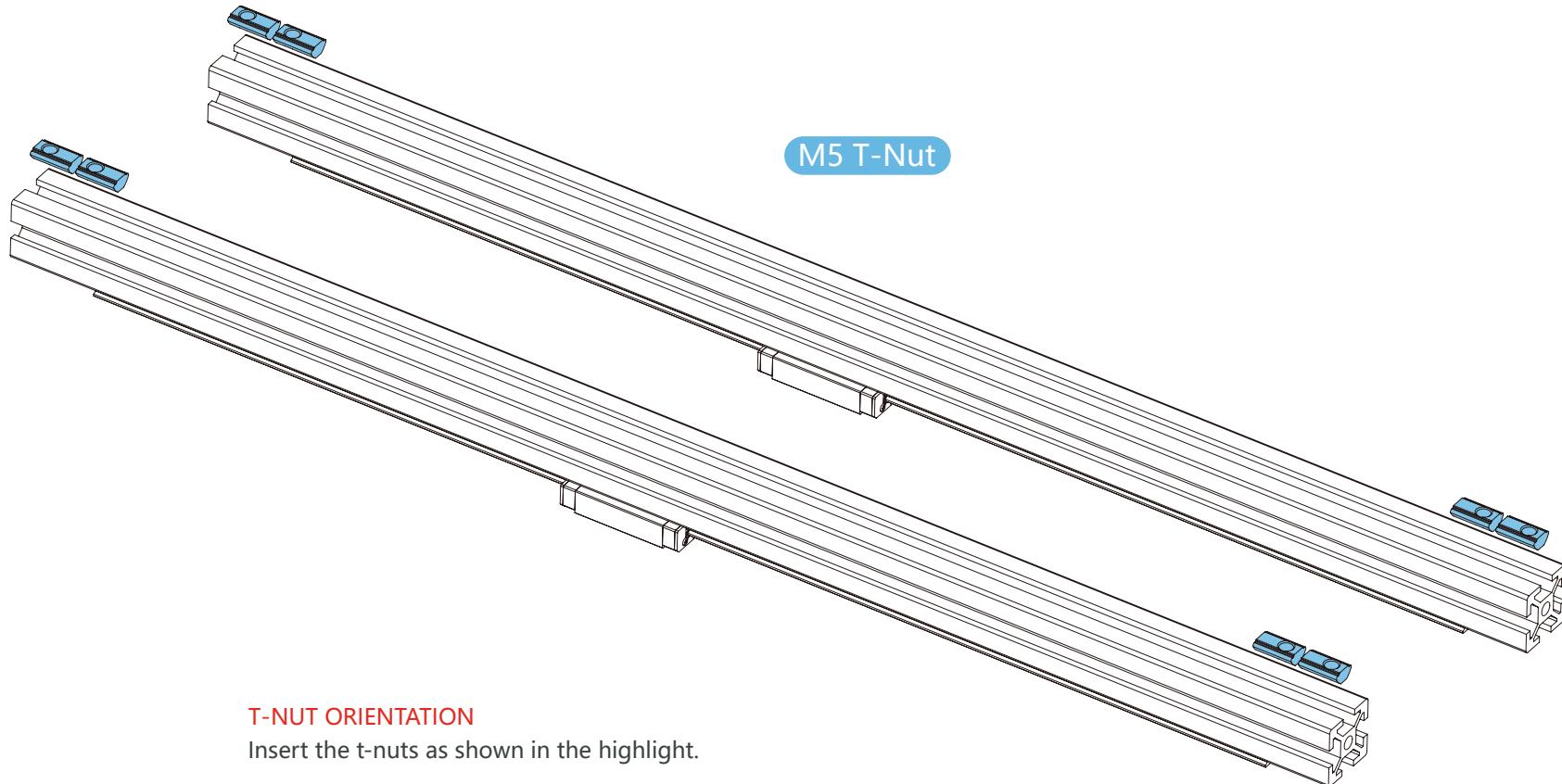
T-NUT ORIENTATION

Insert the t-nuts as shown in the highlight.
The two post-install T-nuts in the bottom and inside are M3,
and the other six are M5.



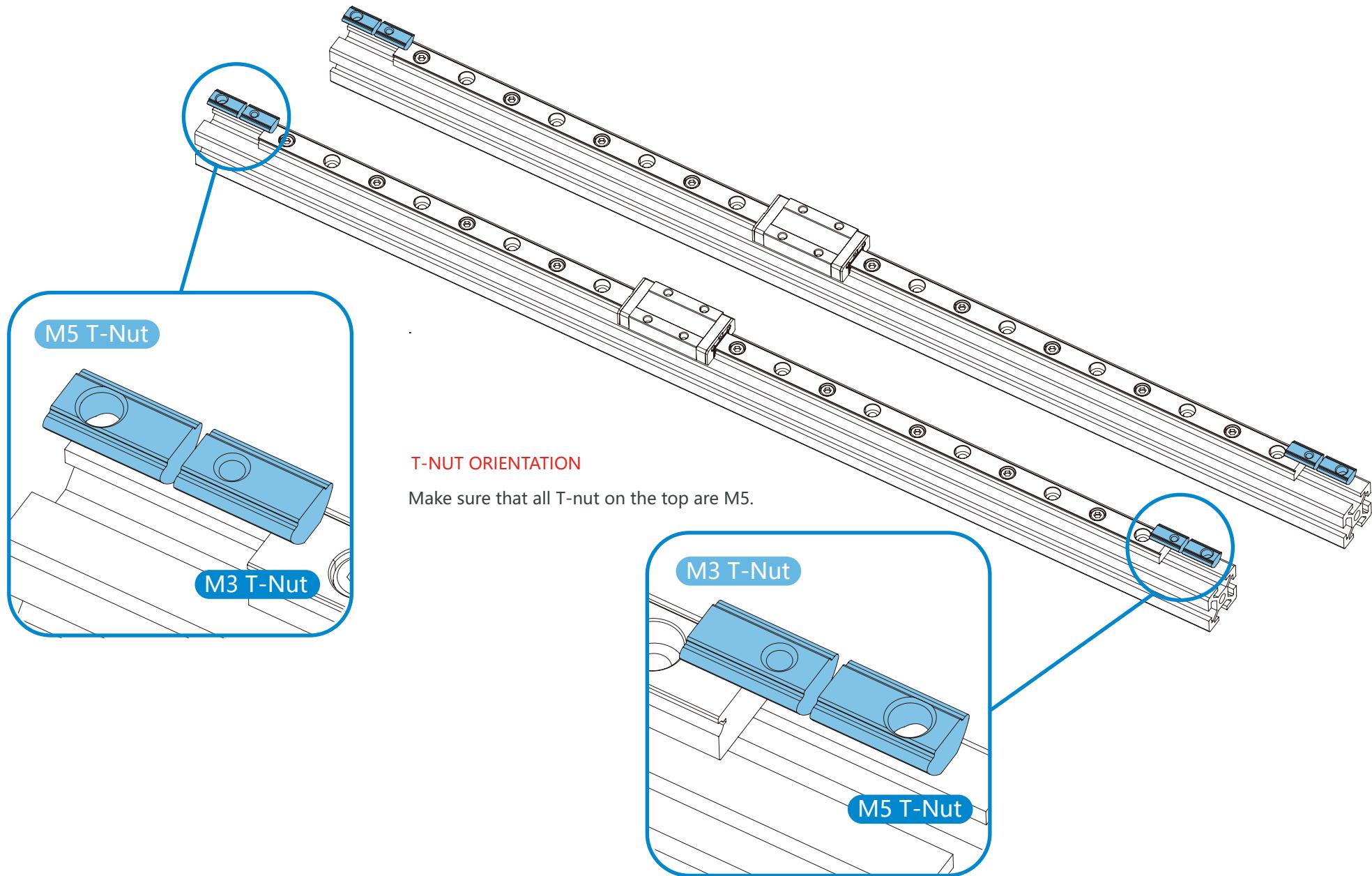


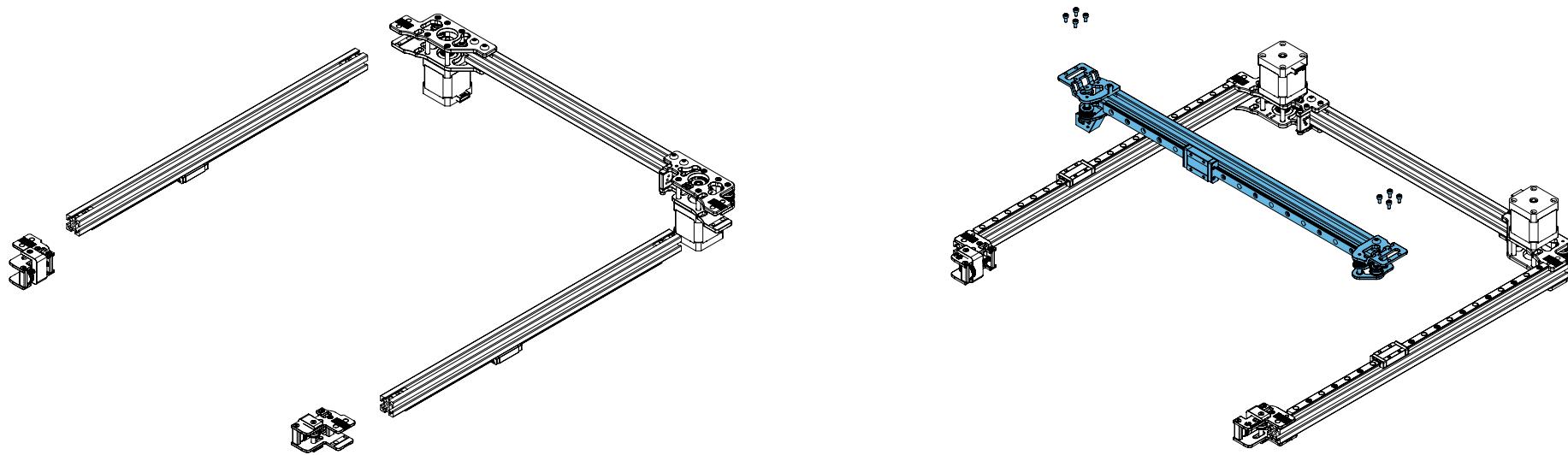




T-NUT ORIENTATION

Insert the t-nuts as shown in the highlight.





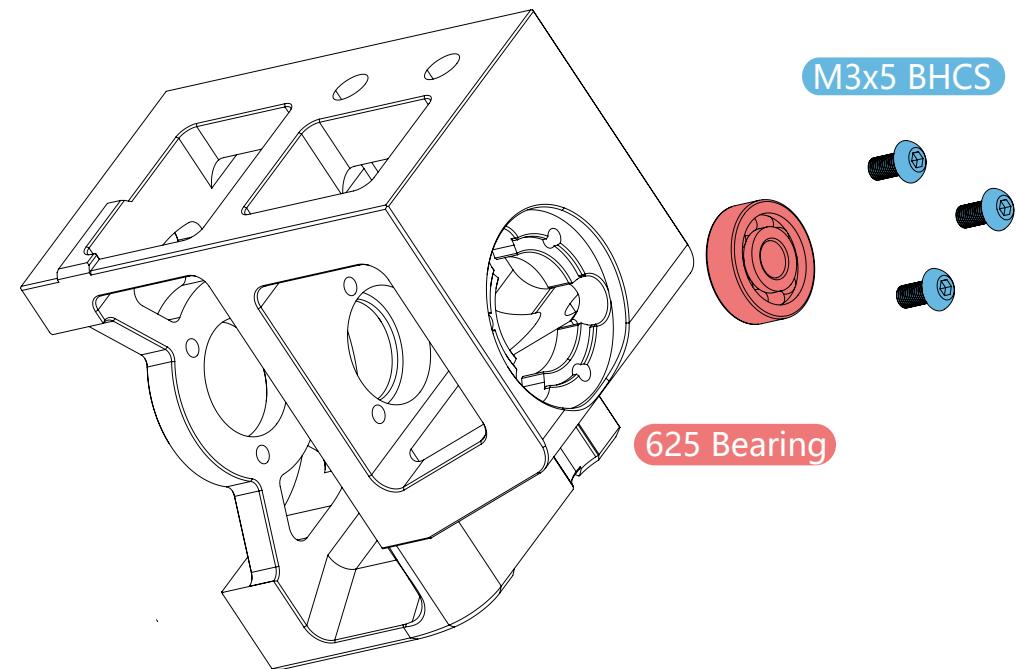
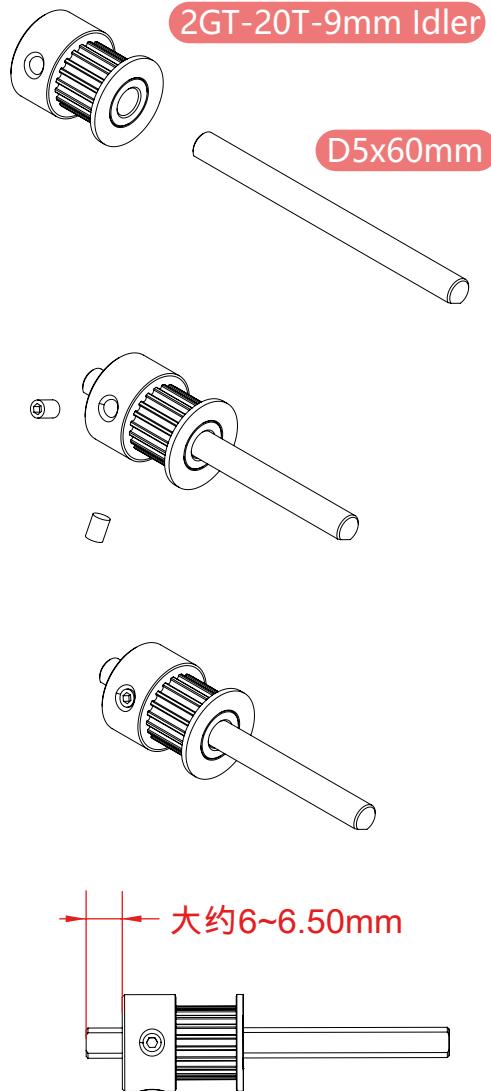


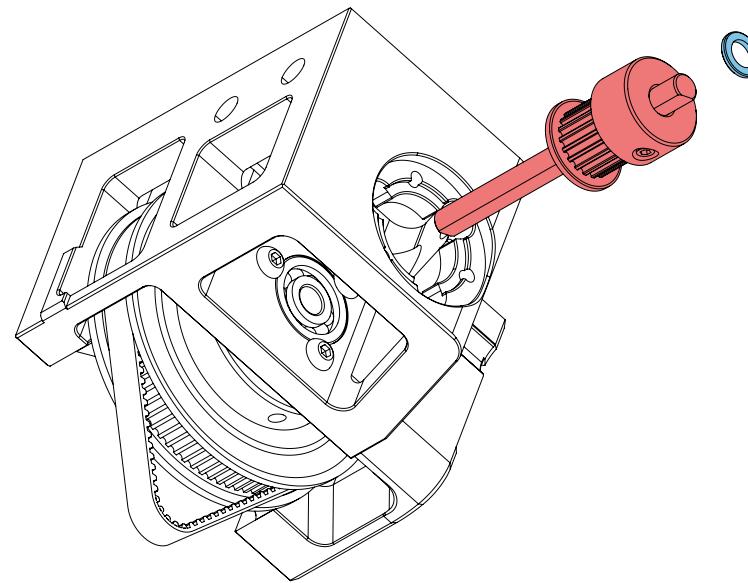
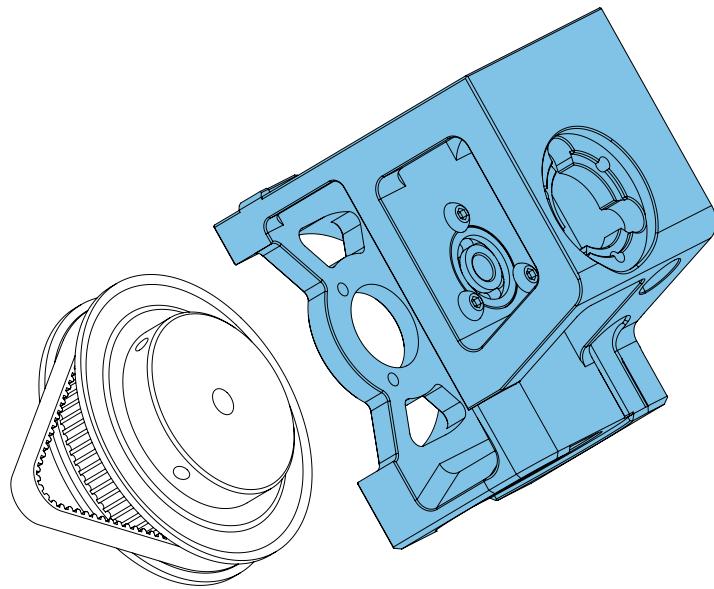
CHAOTICLAB

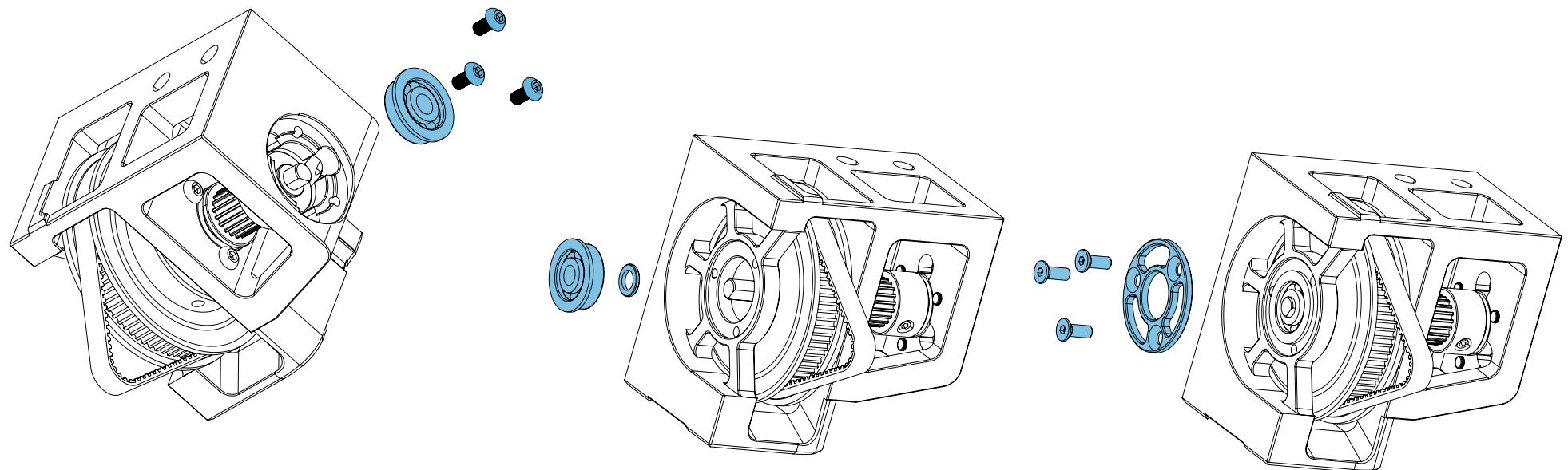


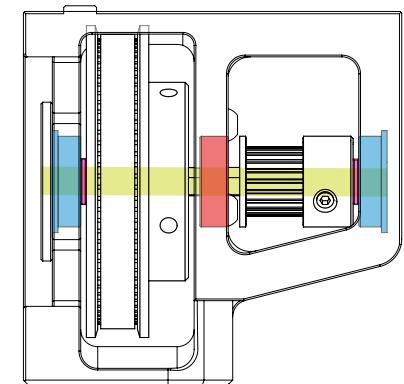
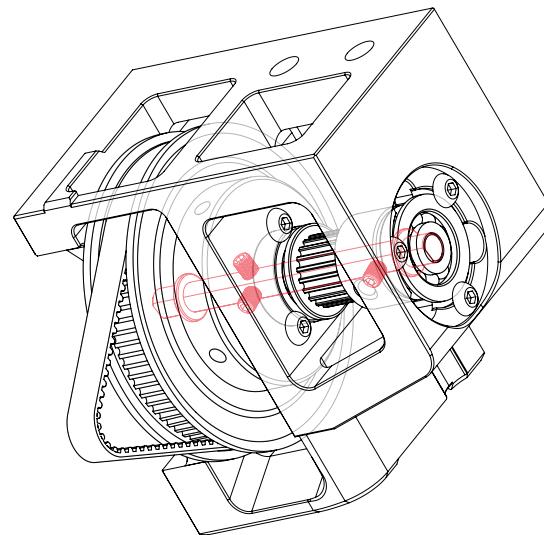
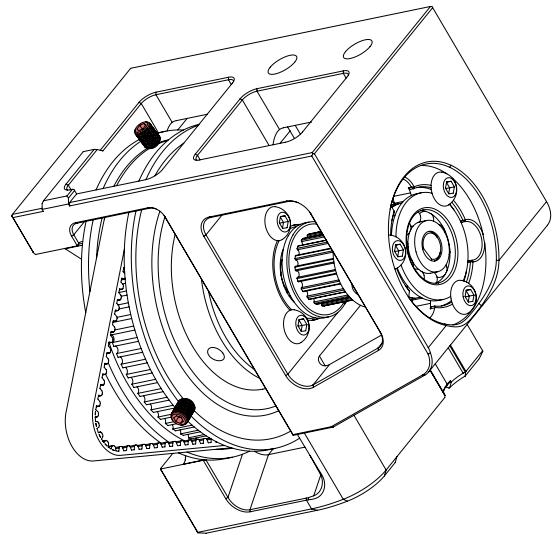
CNC Z DRIVE KIT
FOR VORON 2.4 BUILD GUIDE

VERSION 2023-07-25



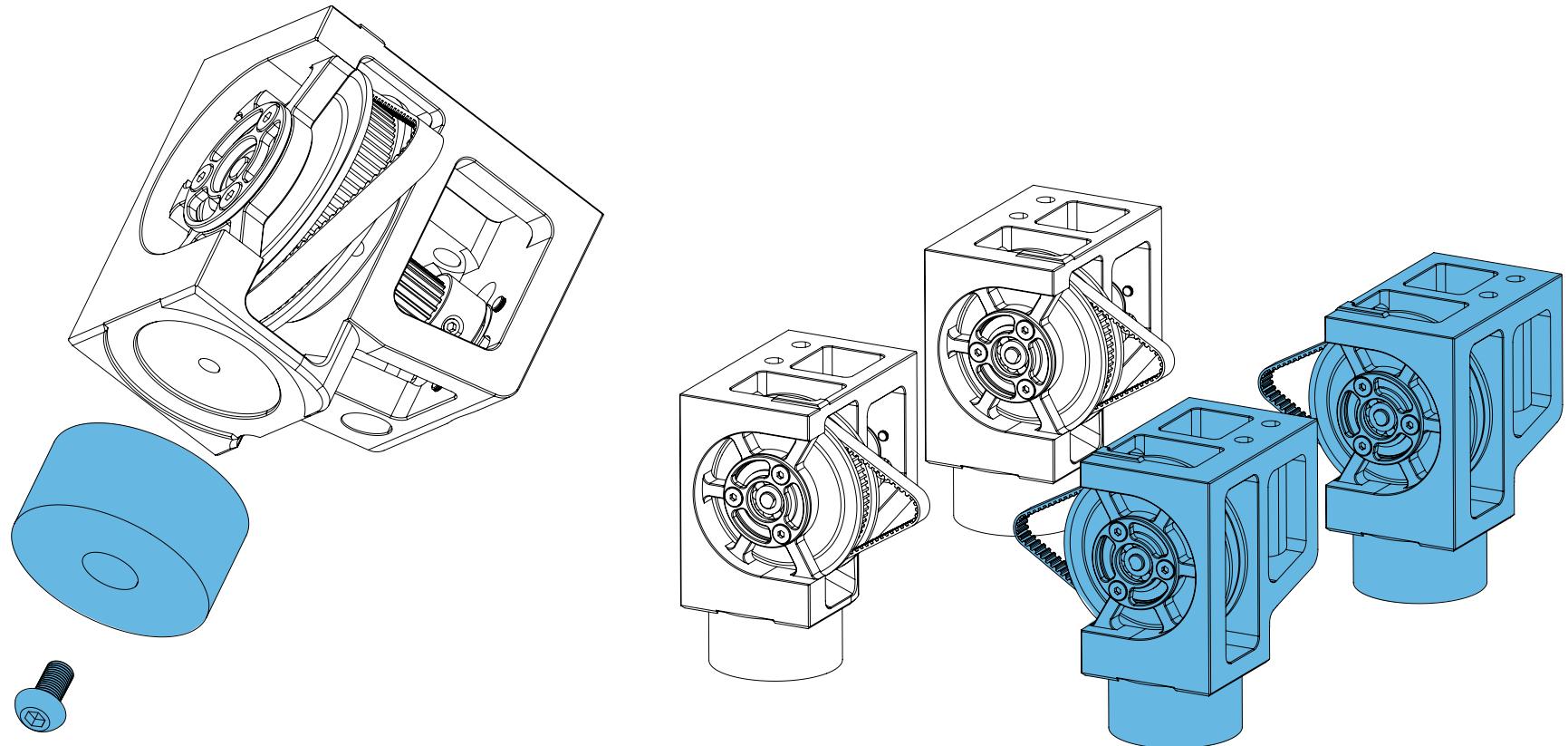




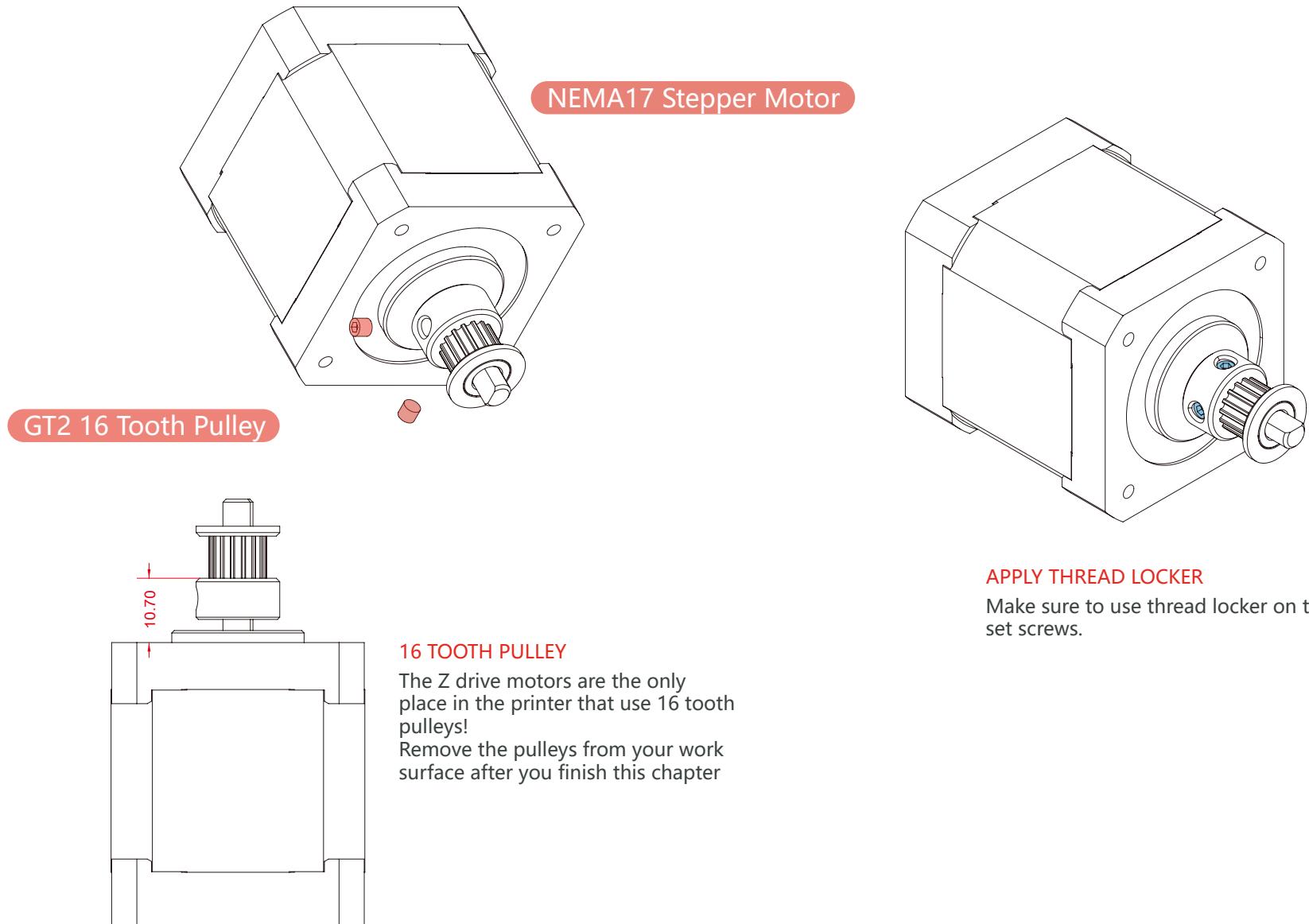


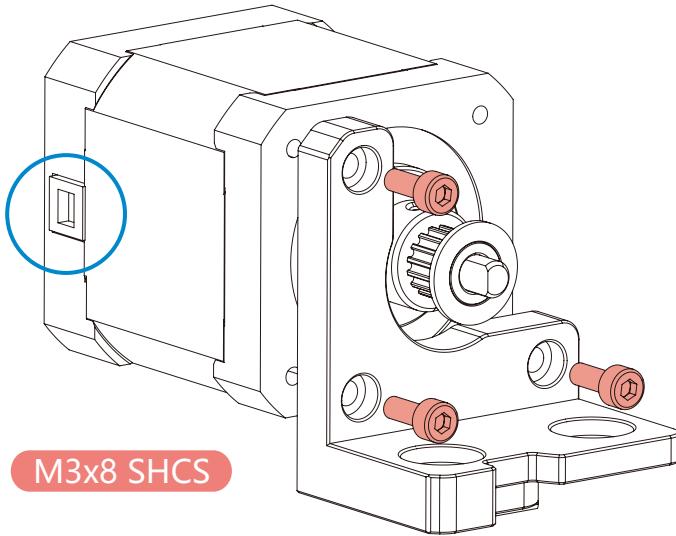
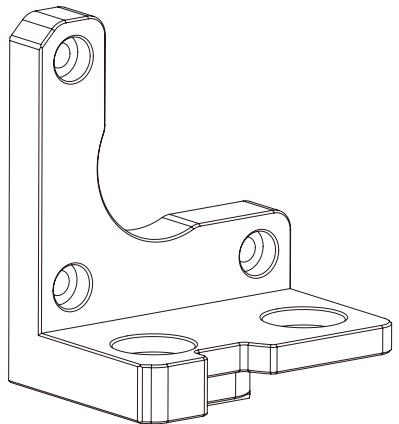
锁紧80T同步轮顶丝时分别向两端
推动两个同步轮这可以保证所有的
同步轮处在正确的位置，确保两个
同步轮都有一颗顶丝锁在轴的D字平面上

D5x60轴
F625 Bearing
625 Bearing
M5x1 垫片



同样的方式安装另外一个相同及两个镜像组件

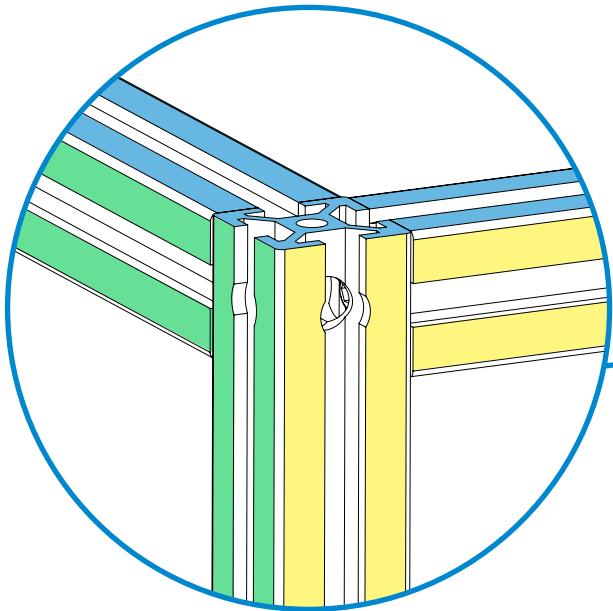




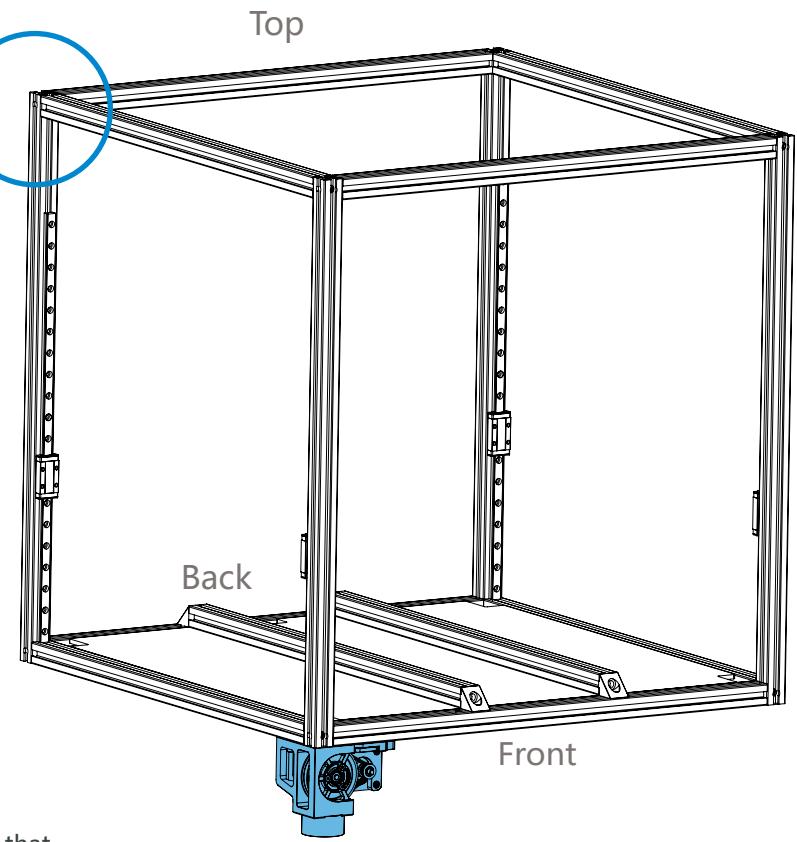
MOTOR ORIENTATION

Pay attention to the orientation
of the cable exit.

If you have not prepared M3x8 SHCS,
you can also use the M3x8 BHCS in the kit instead.

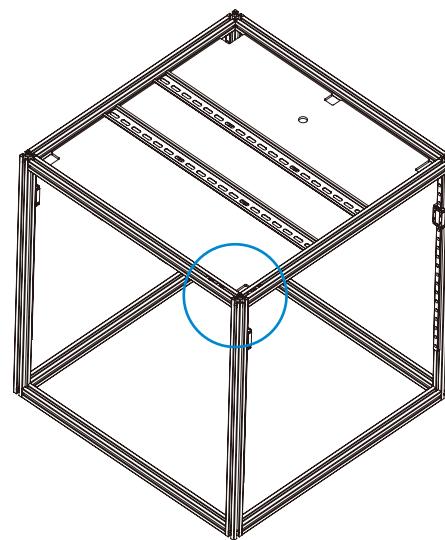
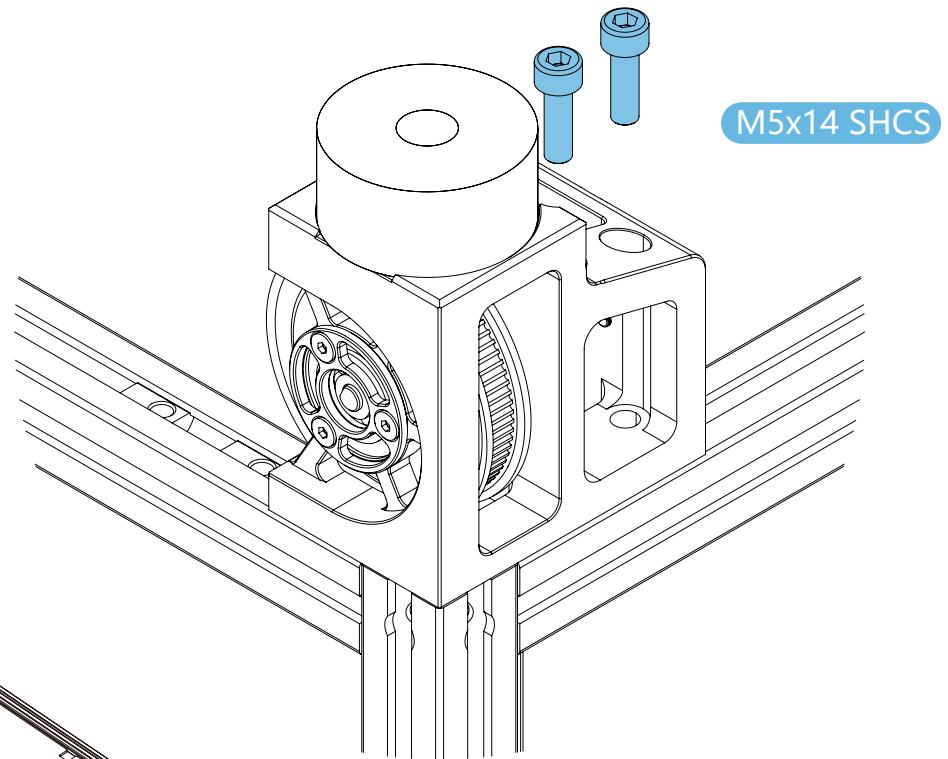
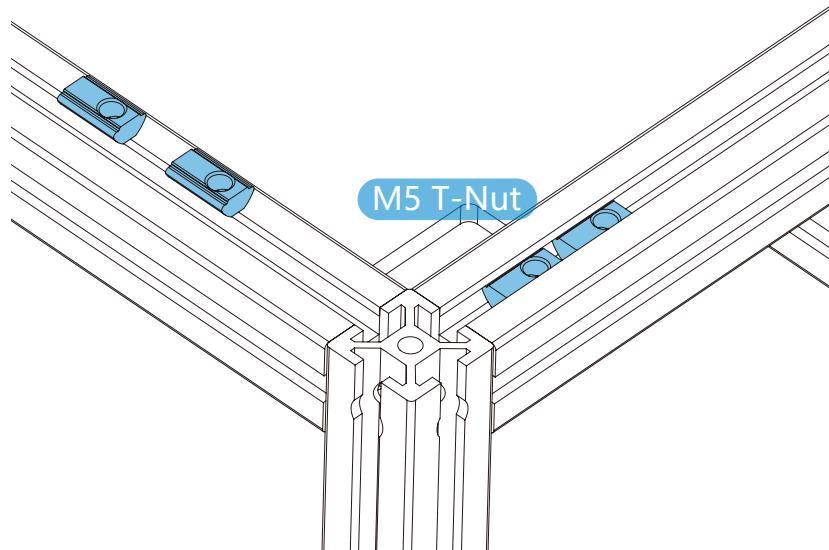


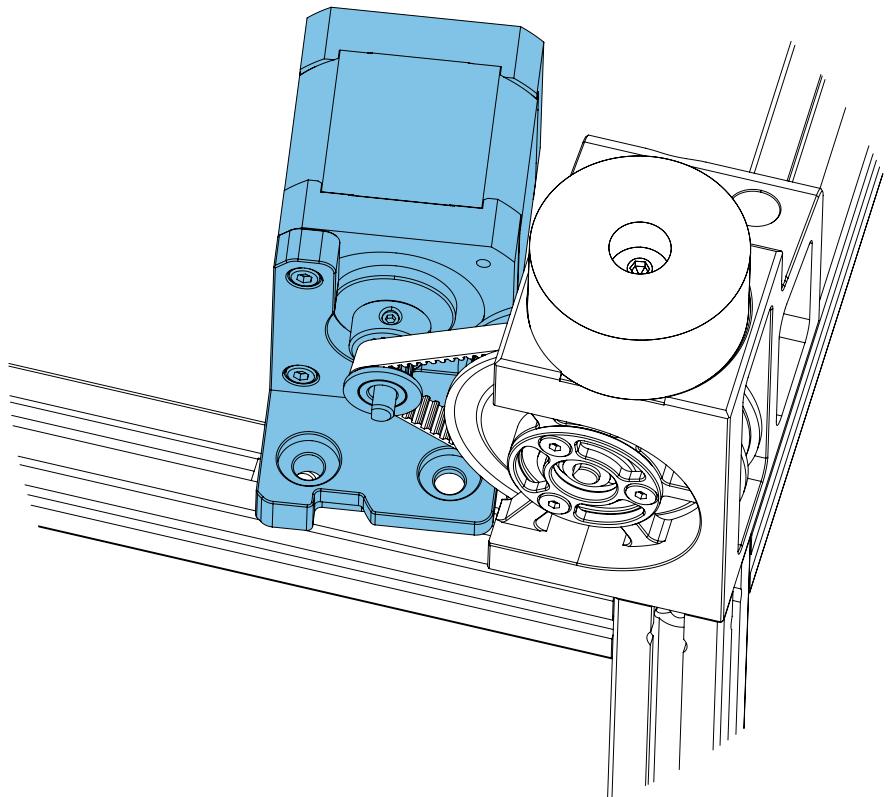
在开始下一步之前请确保型材框架已经正确安装且螺丝锁付可靠
正确的框架应在8个角上如图所示有相同颜色填充处在同一平面上



PICTURE FOR ORIENTATION

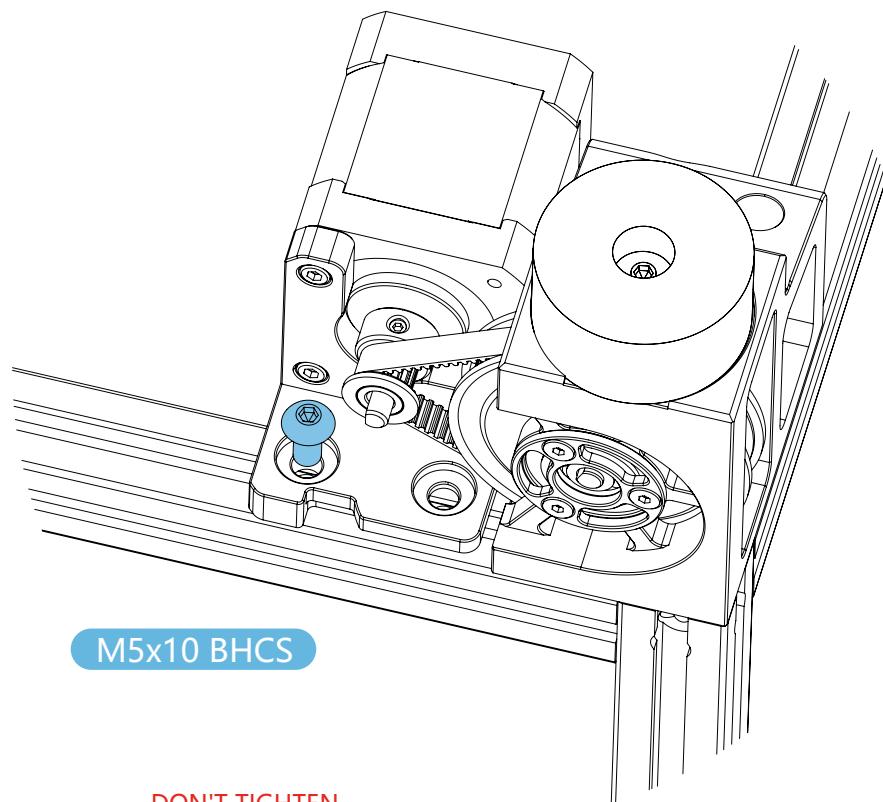
The Z0 drive is the first Z drive that will be added to the printer. The fully assembled Z Drive is highlighted in blue.





SLIDE INTO PLACE

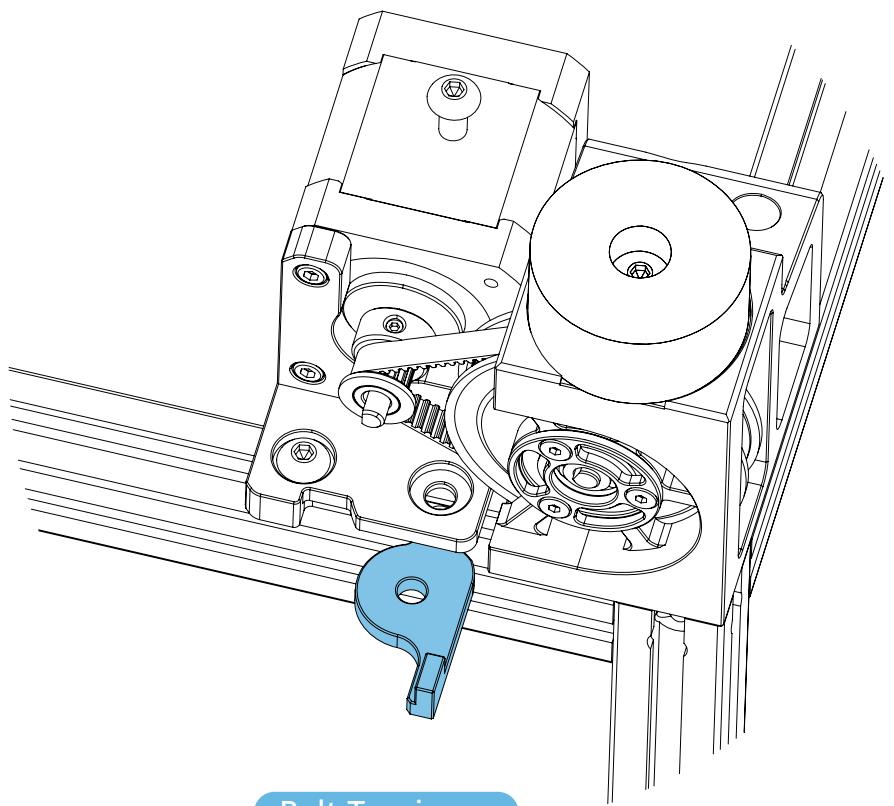
Insert at an angle and slide into place.



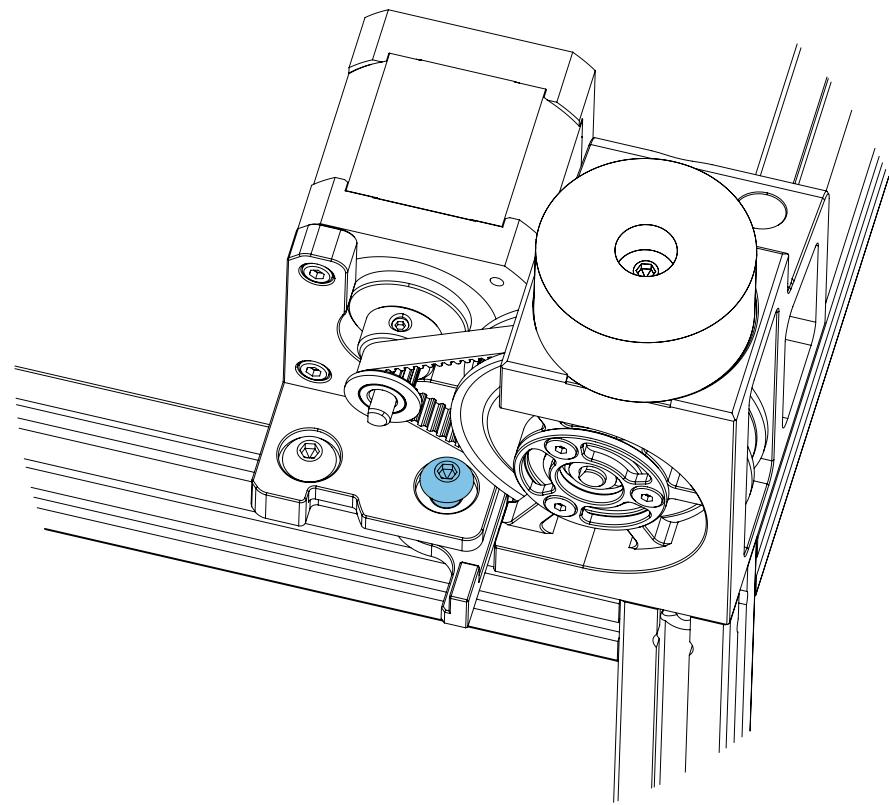
M5x10 BHCS

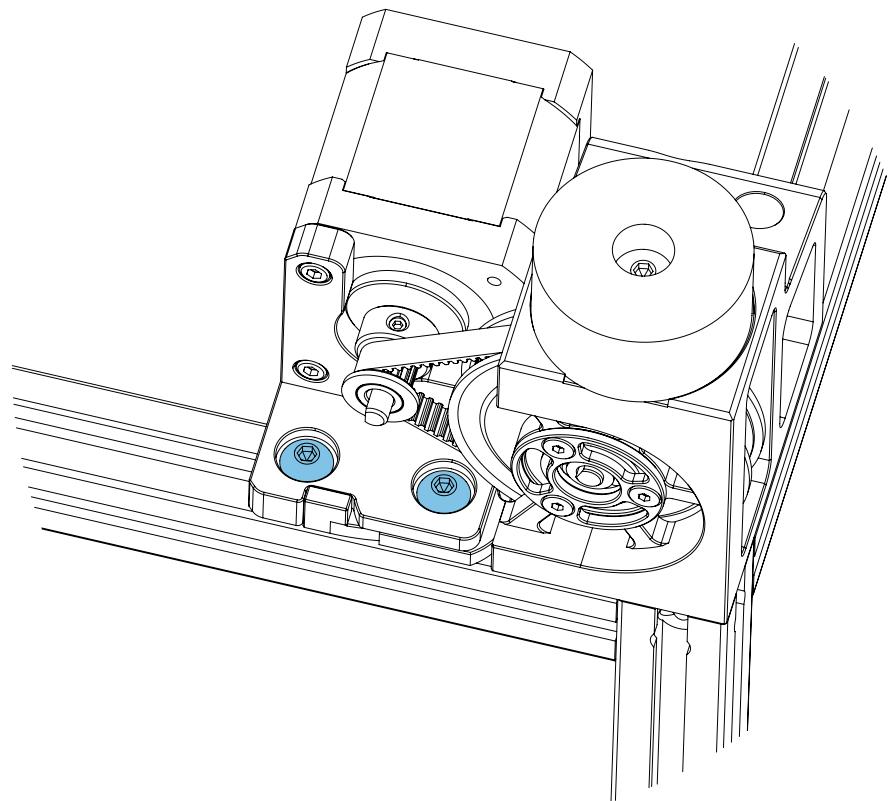
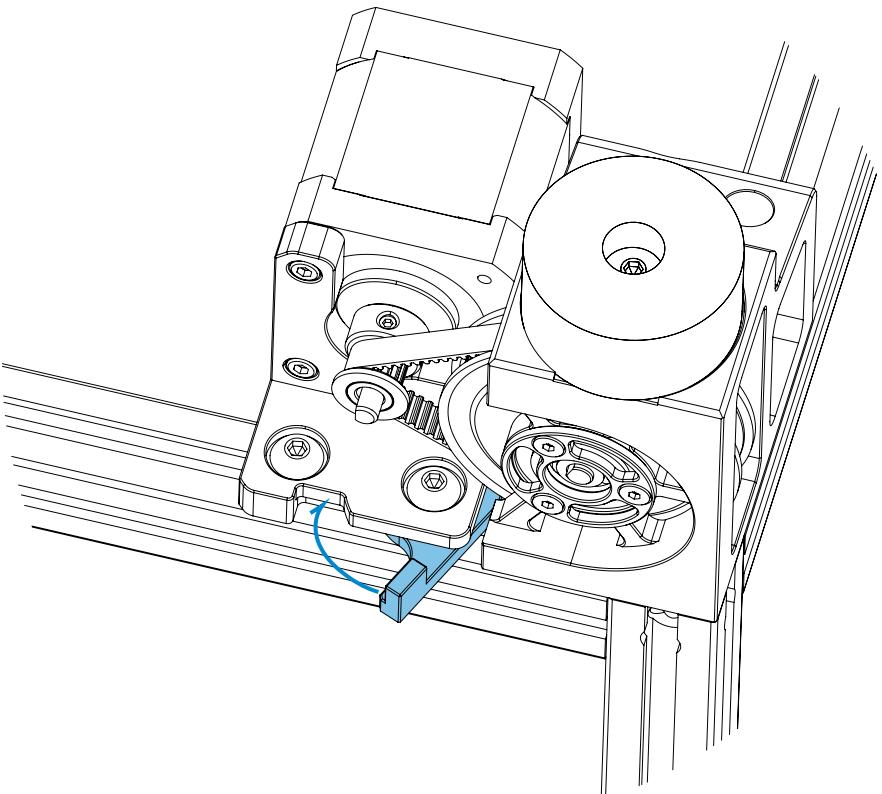
DON'T TIGHTEN

Leave the bolt loose for the next step.



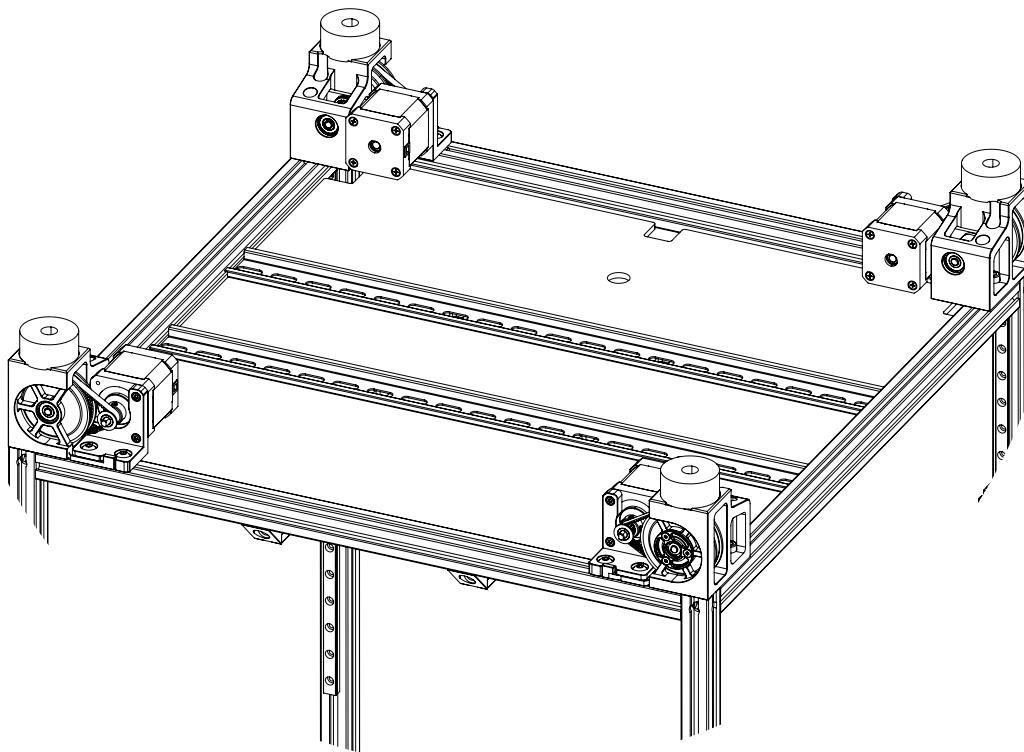
Belt Tensioner





CLOSE THE BELT TENSIONER

Flip the belt tensioner latch closed.

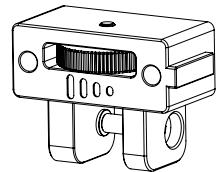


同样方式装入另外一个相同组件及两个镜像组件



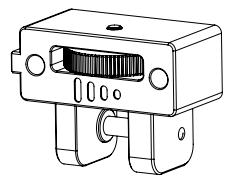
TOOL-FREE TENSIONER KIT FOR VORON 2.4 BUILD GUIDE

VERSION 2023-07-25



Tool-free Tensioner for Z-Axis Assembly

2 sets



Tool-free Tensioner for Z-Axis Mirror Assembly

2 sets

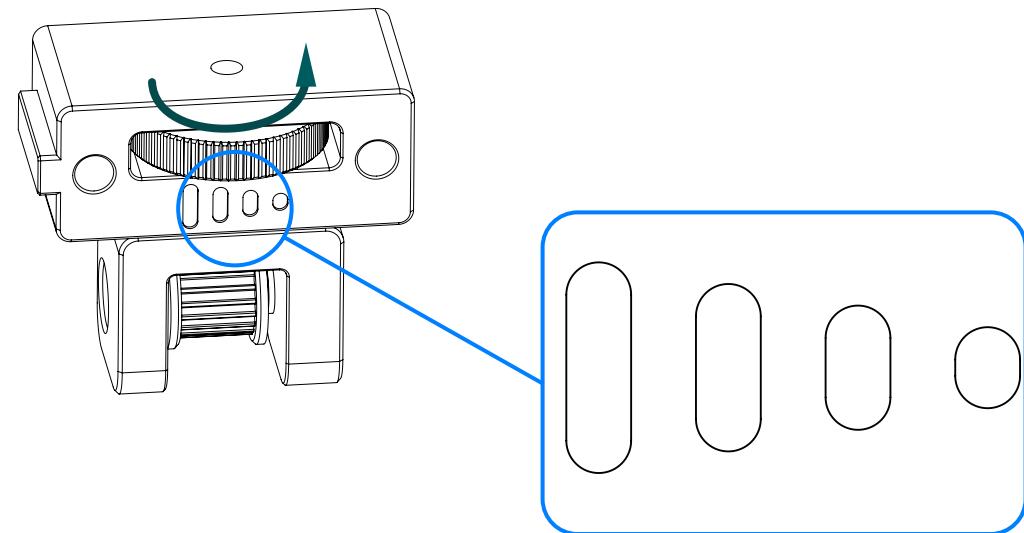


M5x0.5mm Shim

10 pcs

TENSION ADJUSTMENT

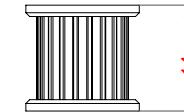
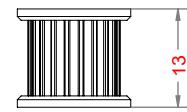
Before installing the belt, rotate the thumbwheel as shown in the figure to loosen the tensioner.



TENSION

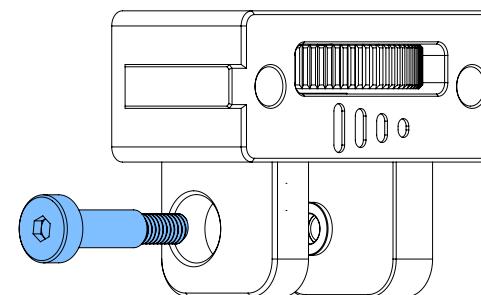
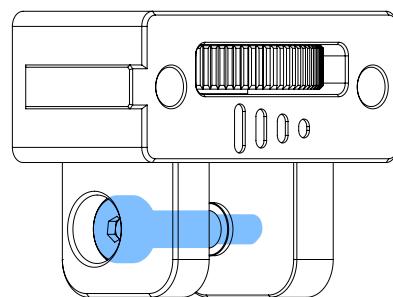
IDLER

Kit compatible with 13mm and 14mm idlers.
Confirm the idler gear size before starting.



REMOVE THE SCREW

Remove the screw at the position shown in the figure.

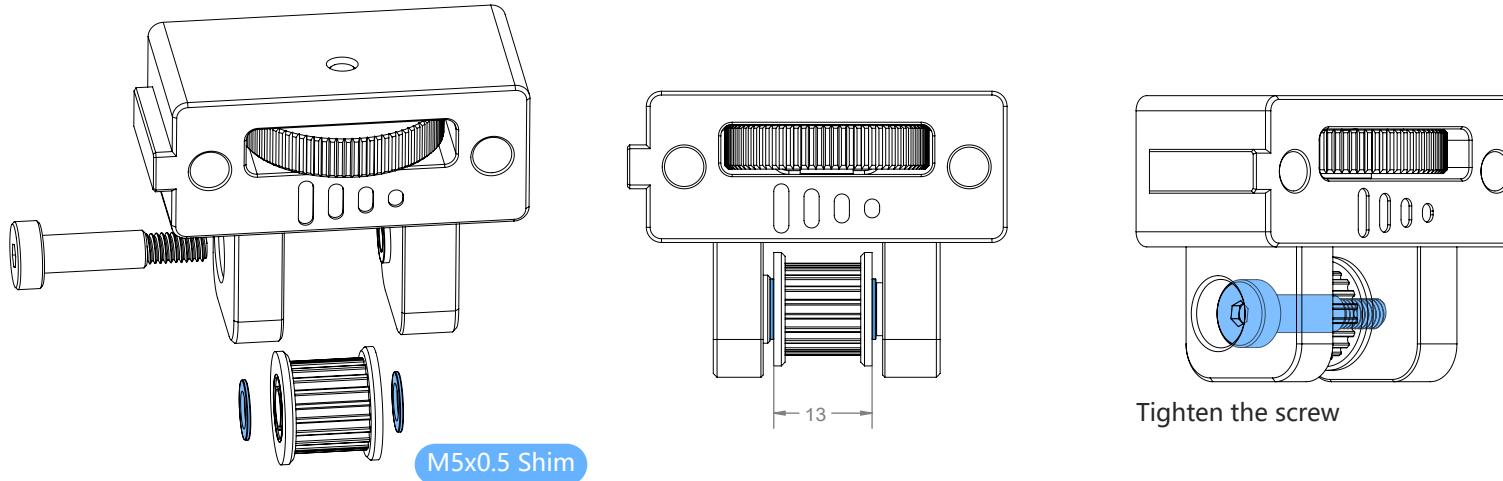


TOOL-FREE TENSIONER FOR Z-AXIS

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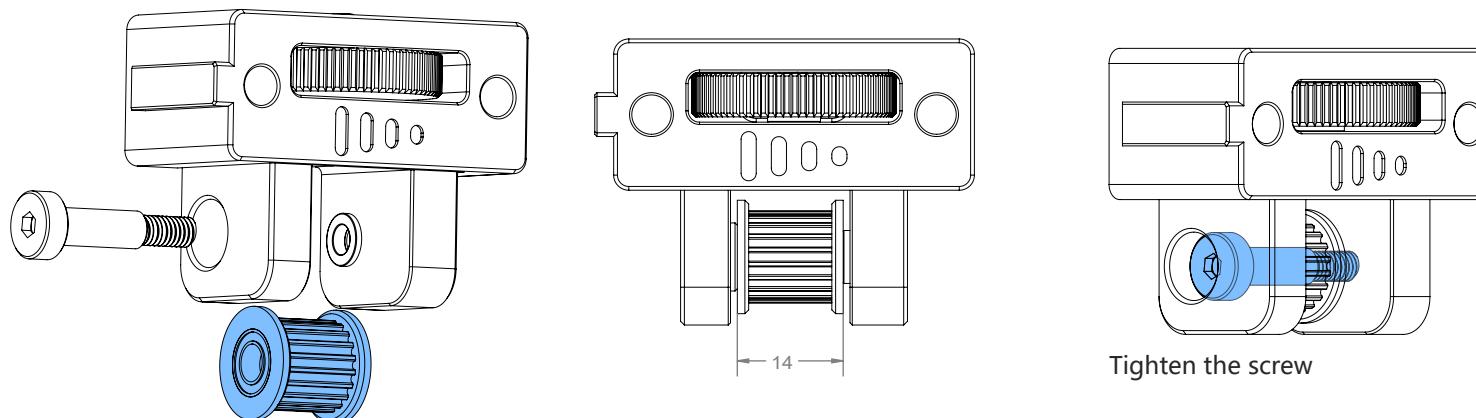
FOR 13MM IDLER

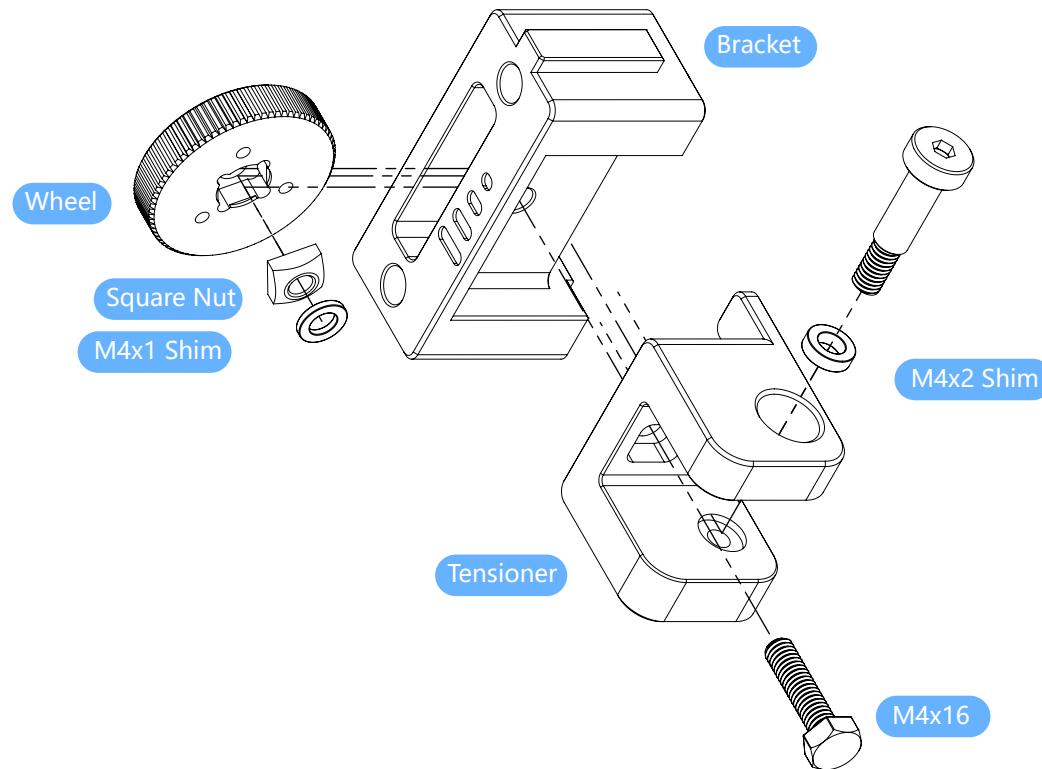
Install the idler gear with shims at bothends when using 13mm idler gear.

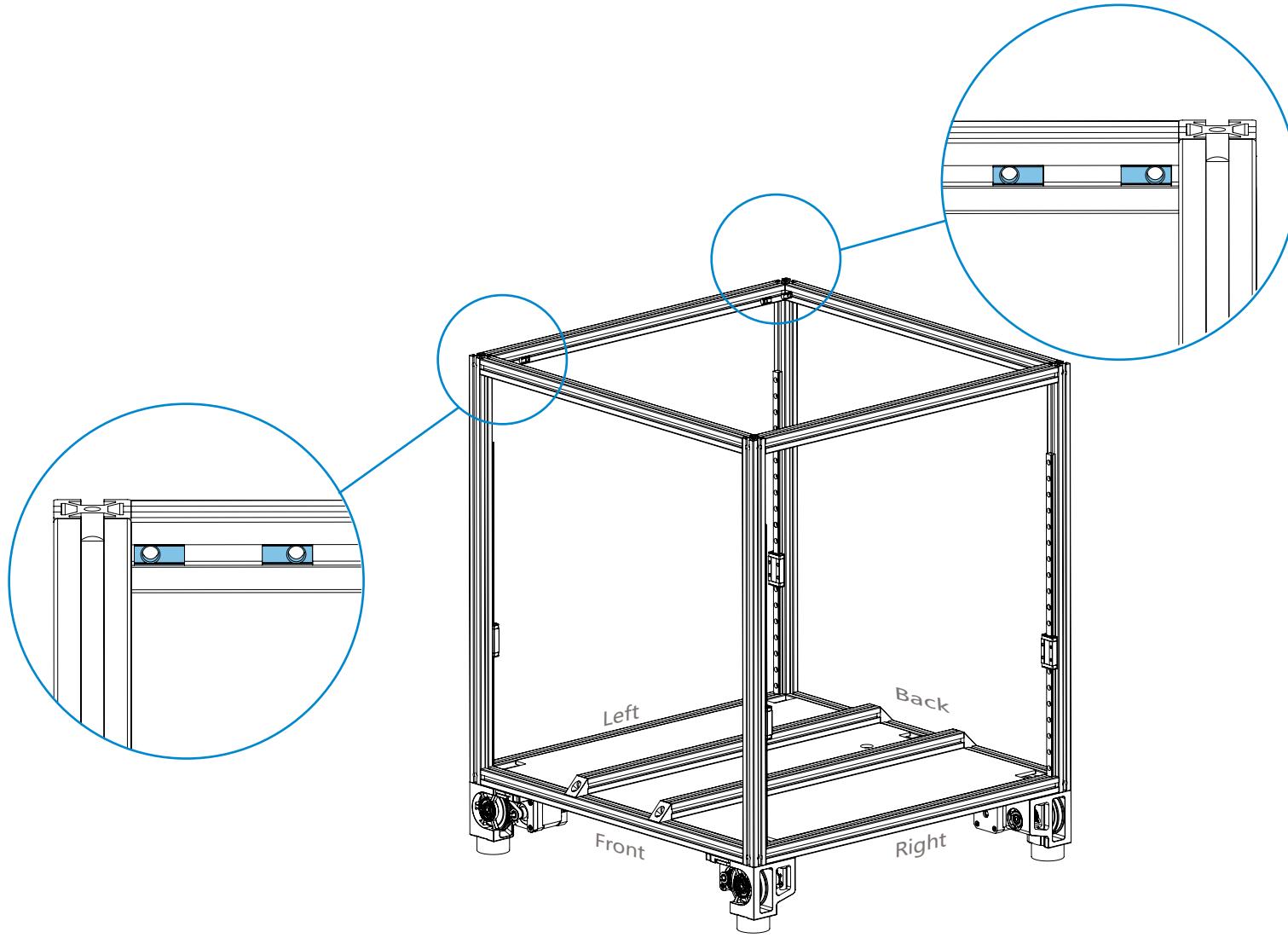


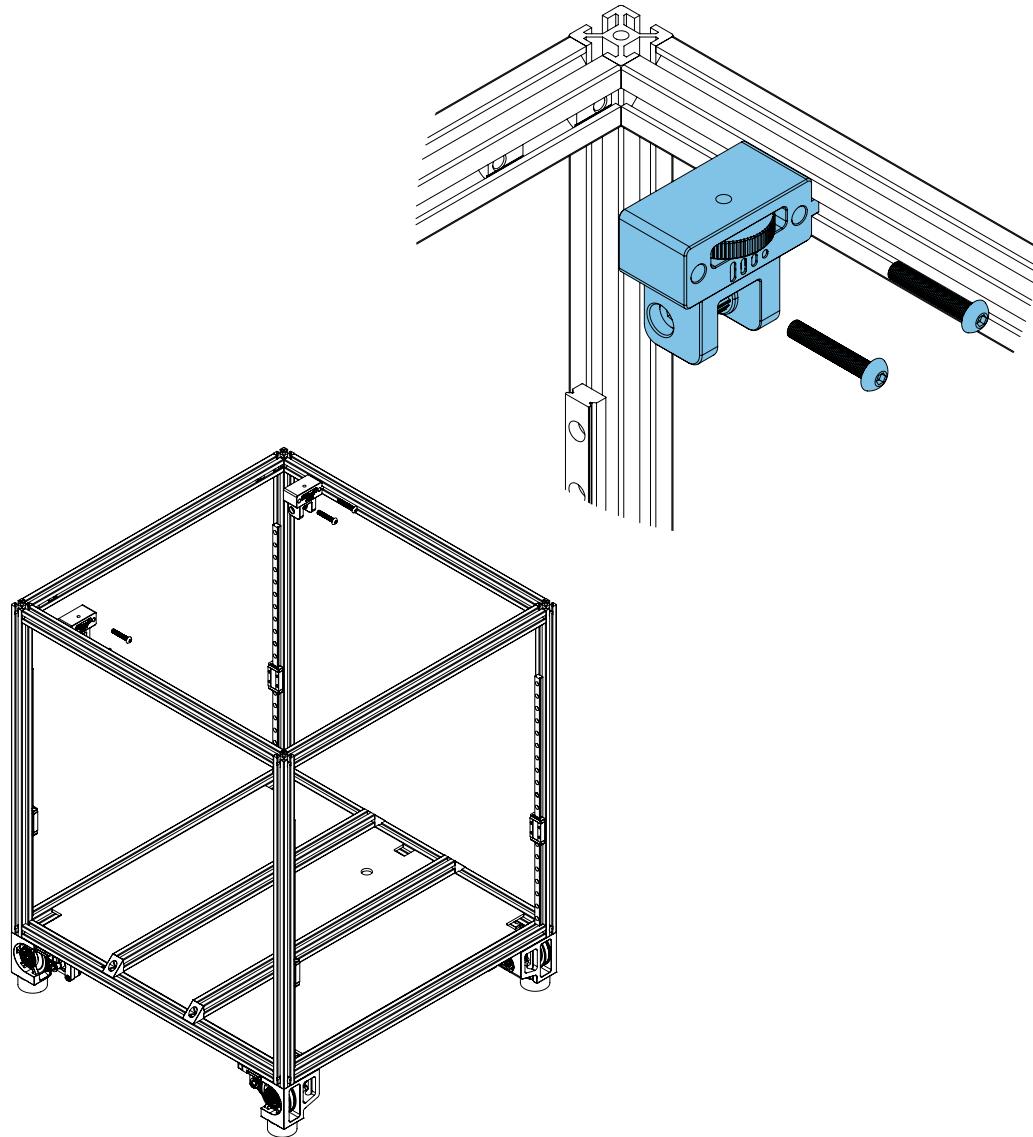
FOR 14MM IDLER

There is no need to add any gasket when using 14mm idler.









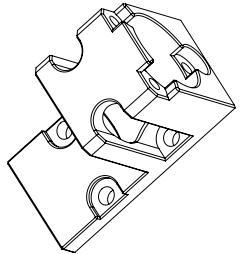


CHAOTICLAB

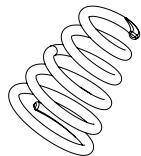


CNC Z JOINT KIT
FOR VORON 2.4 BUILD GUIDE

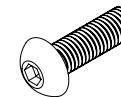
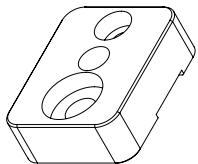
VERSION 2023-07-25

**Z Joint Lower**

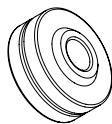
4 pcs

**Conical Spring**

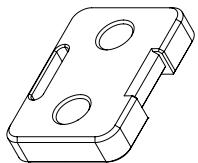
4 pcs

**Button Head Cap Screw(BHCS)**M5x14
M3x612pcs
12pcs**Z Joint Upper**

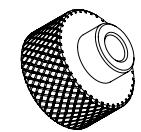
4 pcs

**PB5 Bearing**

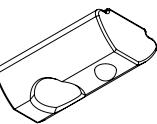
4 pcs

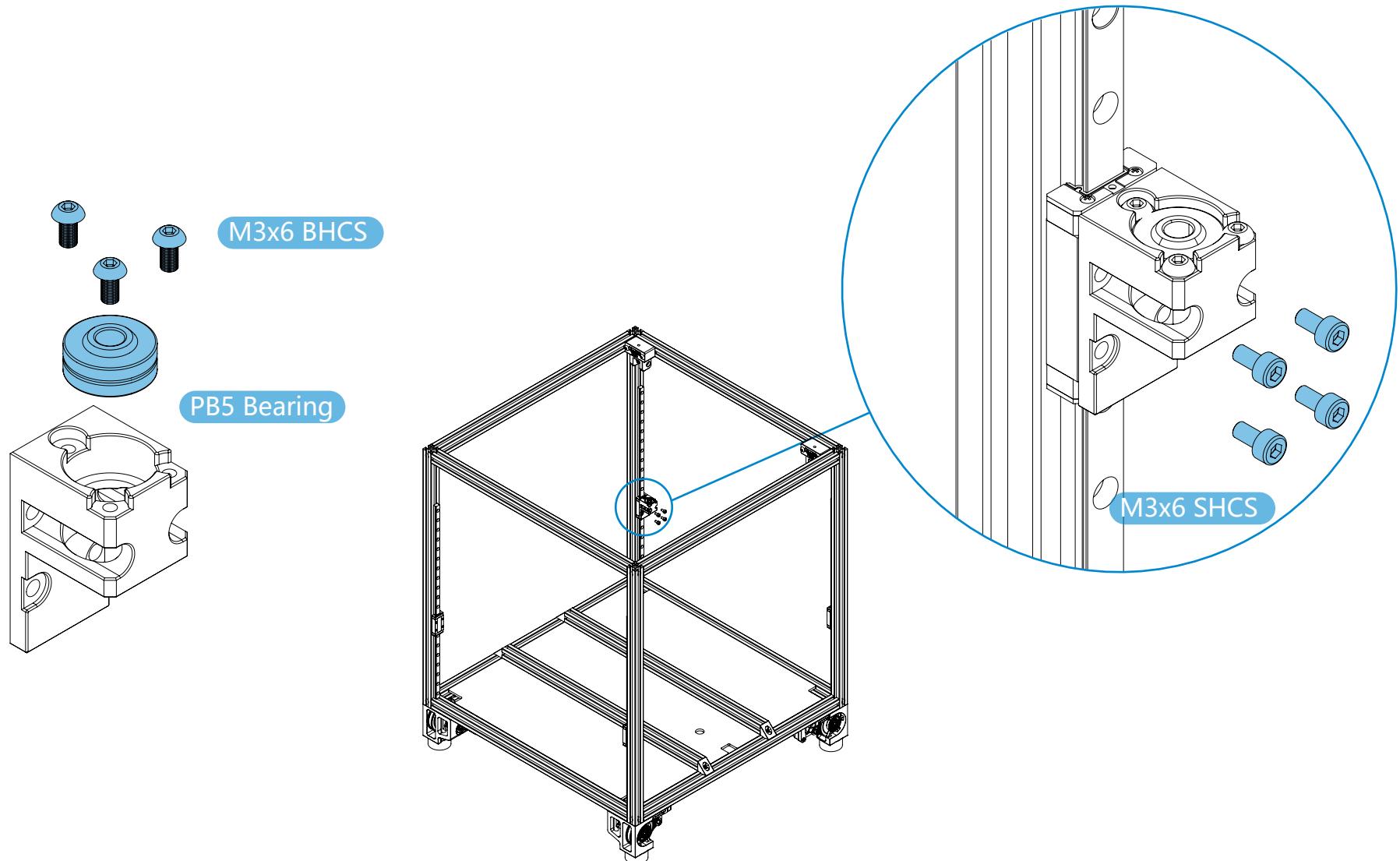
**Socket Head Cap Screw(SHCS)**M3x14
M3x64pcs
16pcs**Z Belt Clip**

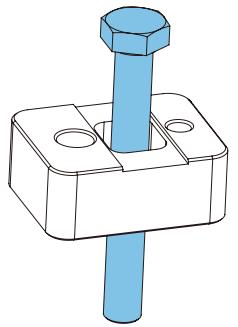
4 pcs

**Hexagon Bolt**M5x40mm
4 pcs**M5 Knurled Nut**

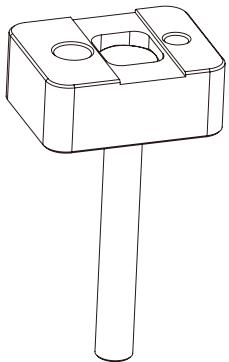
4 pcs

**Drop-in T-nut(2020)**M3
M5
2pcs
6pcs**Stand Off**5x8x4.5mm
4 pcs



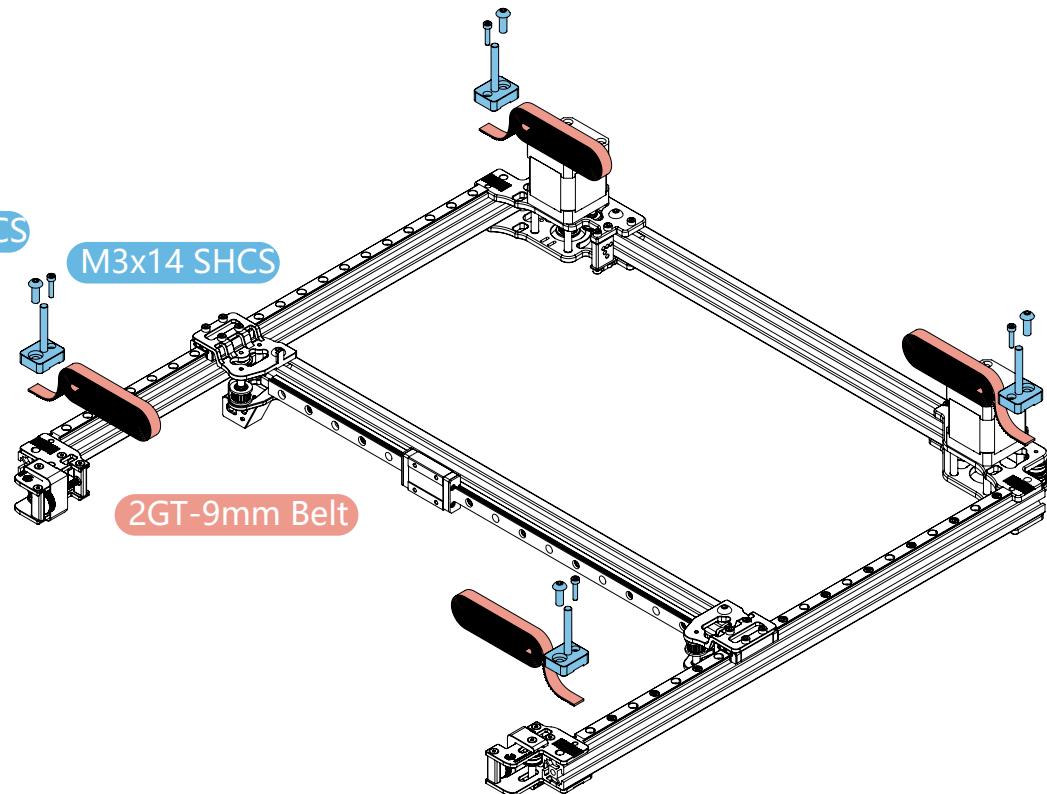


Hex Bolt M5x40



M5x14 BHCS

M3x14 SHCS



2GT-9mm Belt

