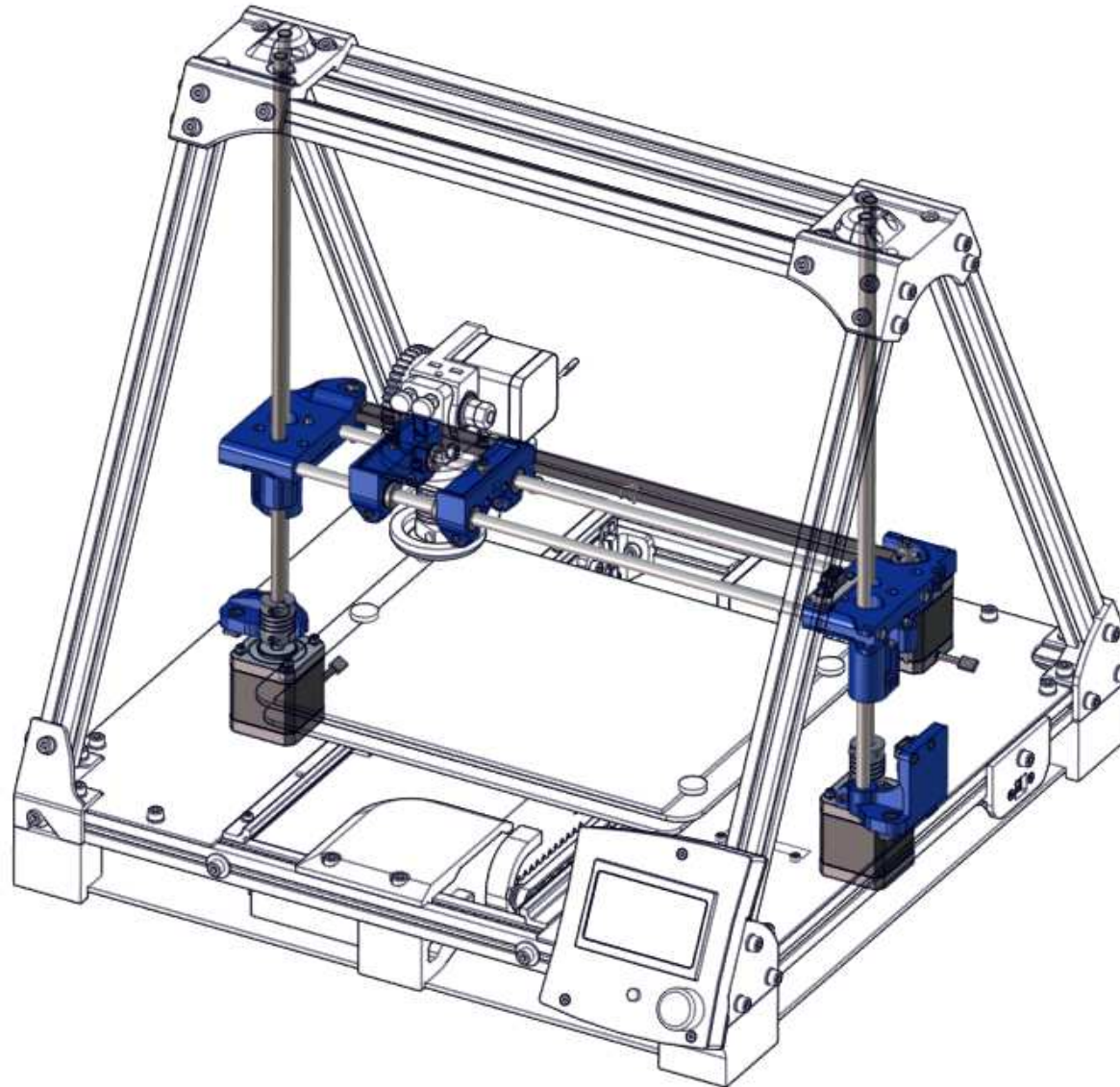


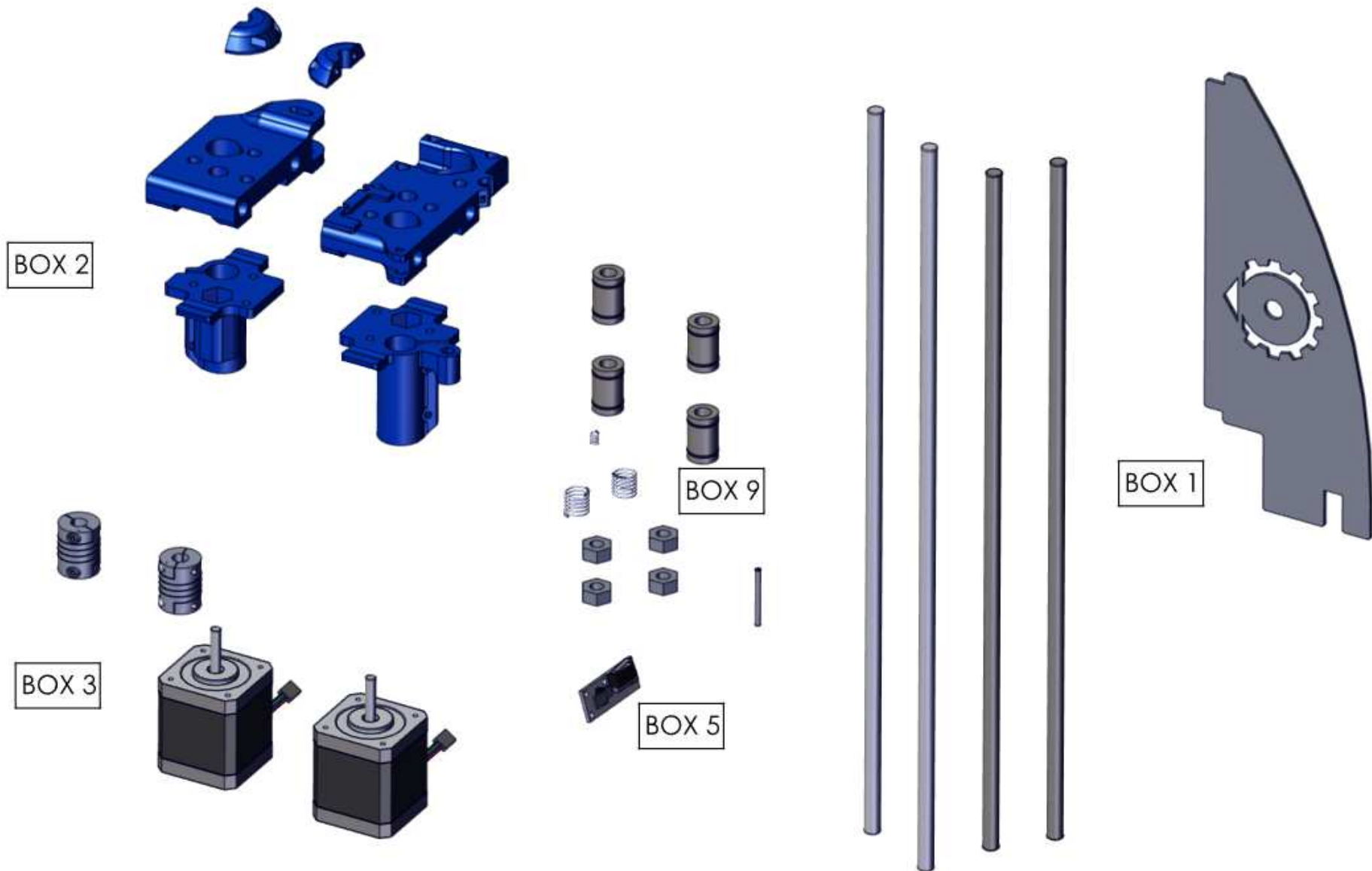
# 3 BCN3D+ ASSEMBLY GUIDE

## Z AXIS ASSEMBLY

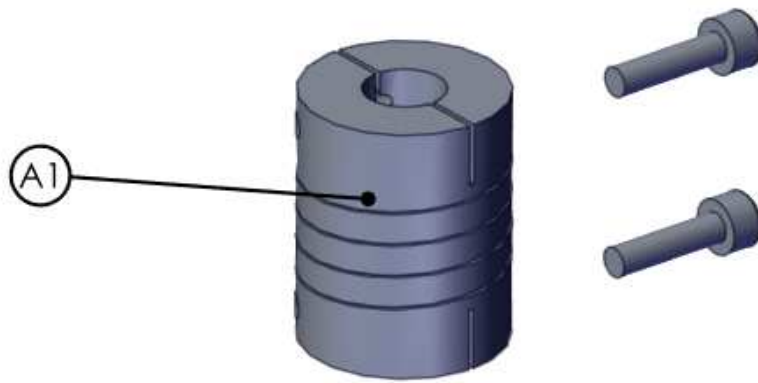


# 3 BCN3D+ ASSEMBLY GUIDE

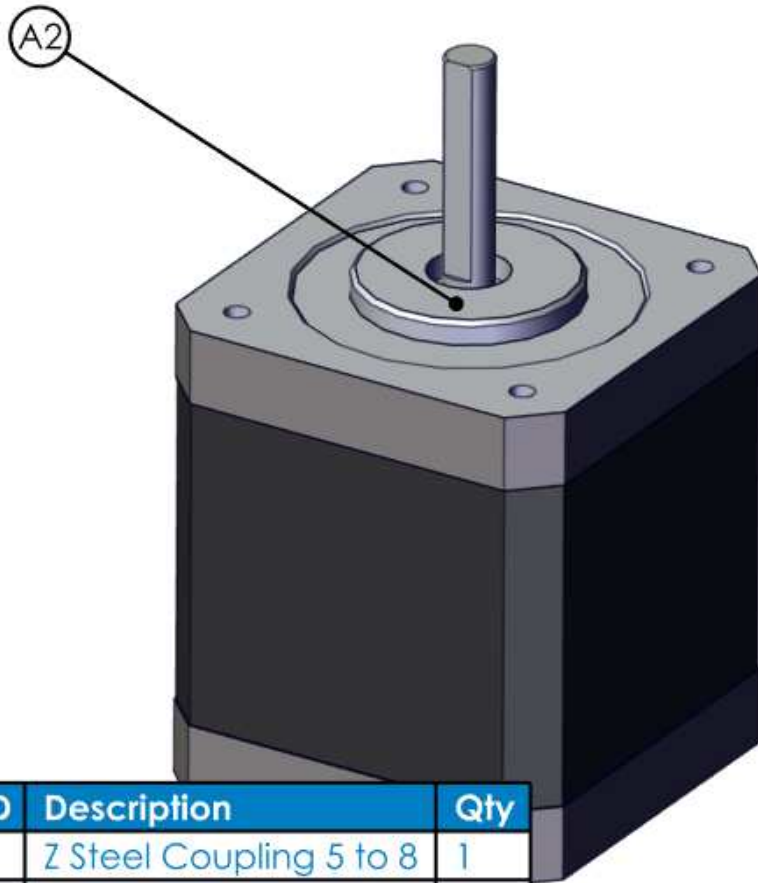
## Z AXIS ASSEMBLY



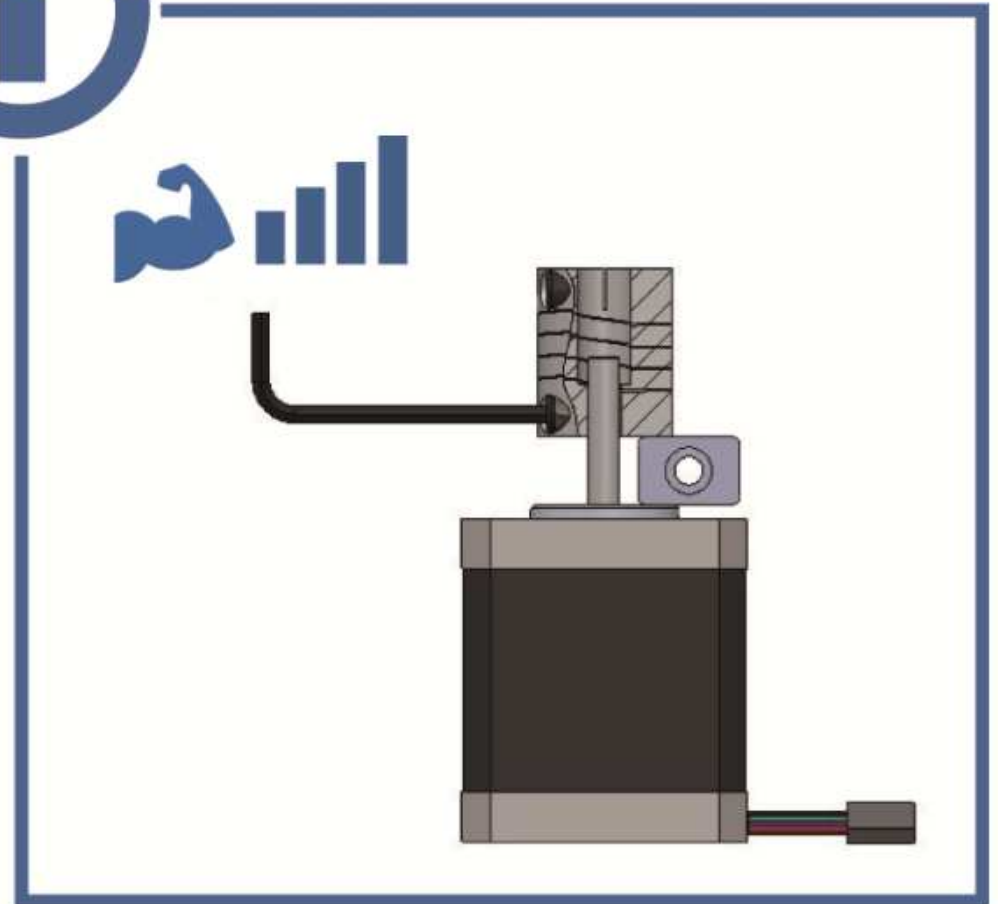
1



x2

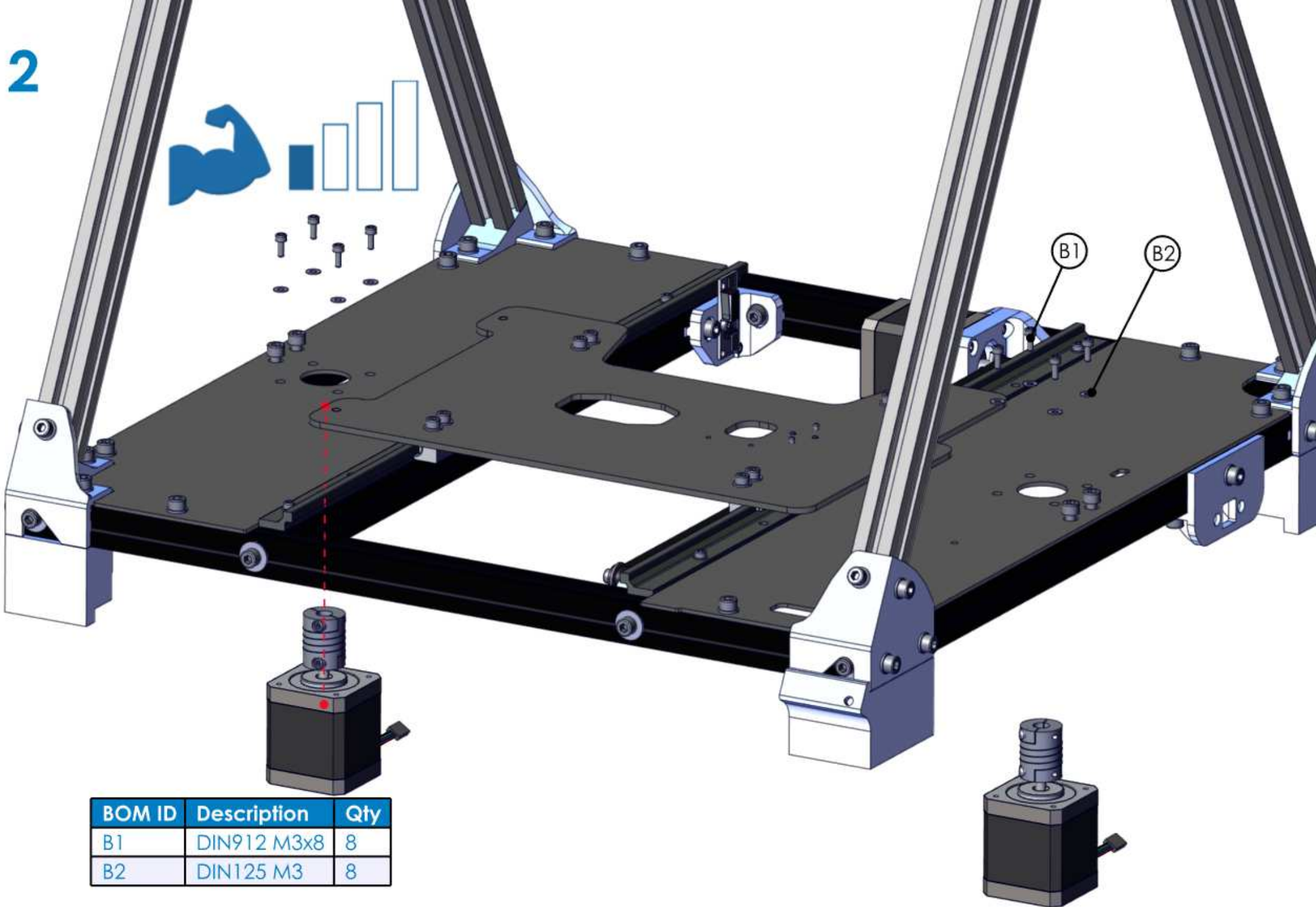


BOM ID	Description	Qty
A1	Z Steel Coupling 5 to 8	1
A2	Stepper NEMA 17 v2	1

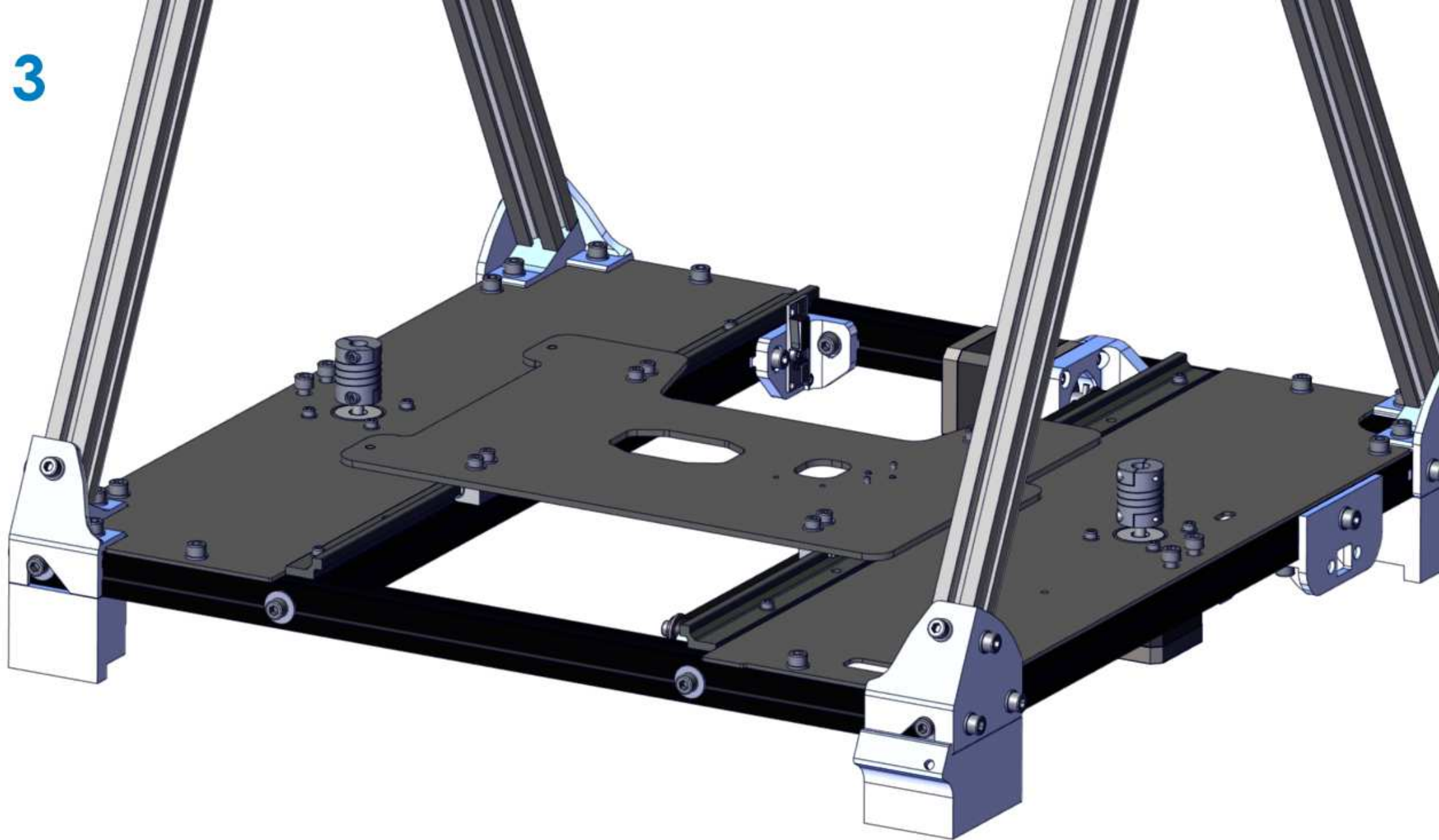


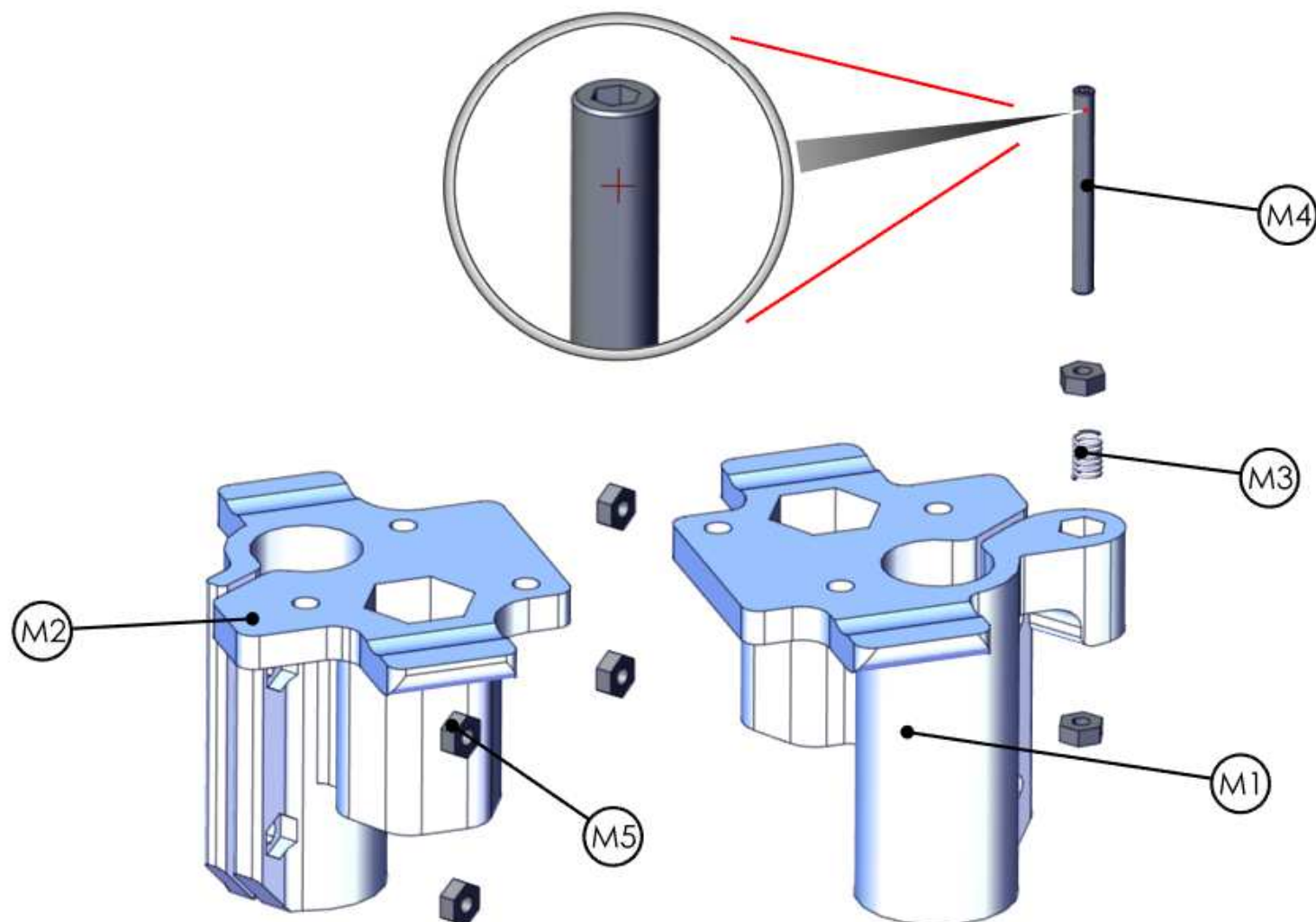


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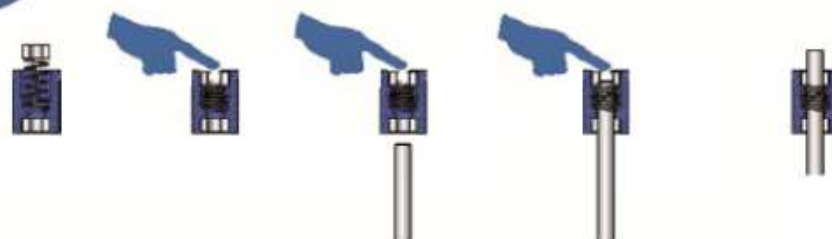


3





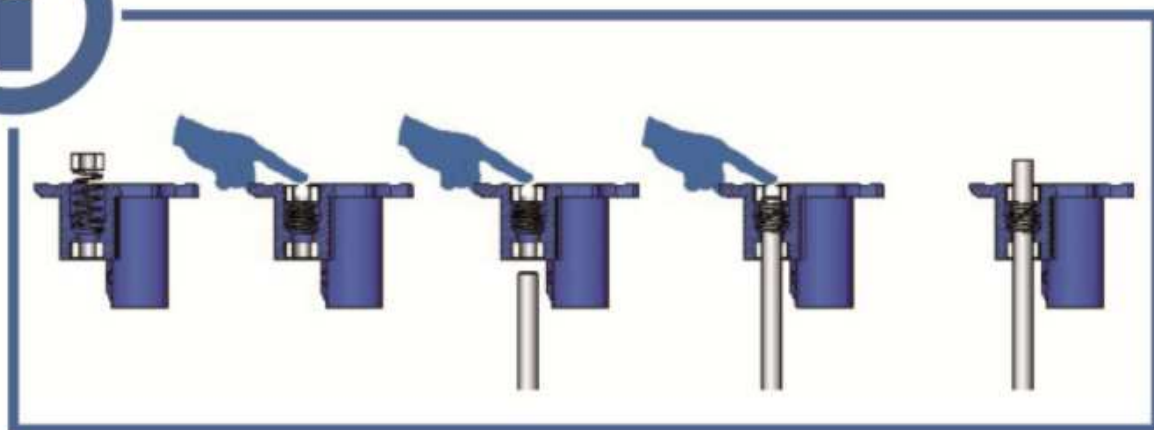
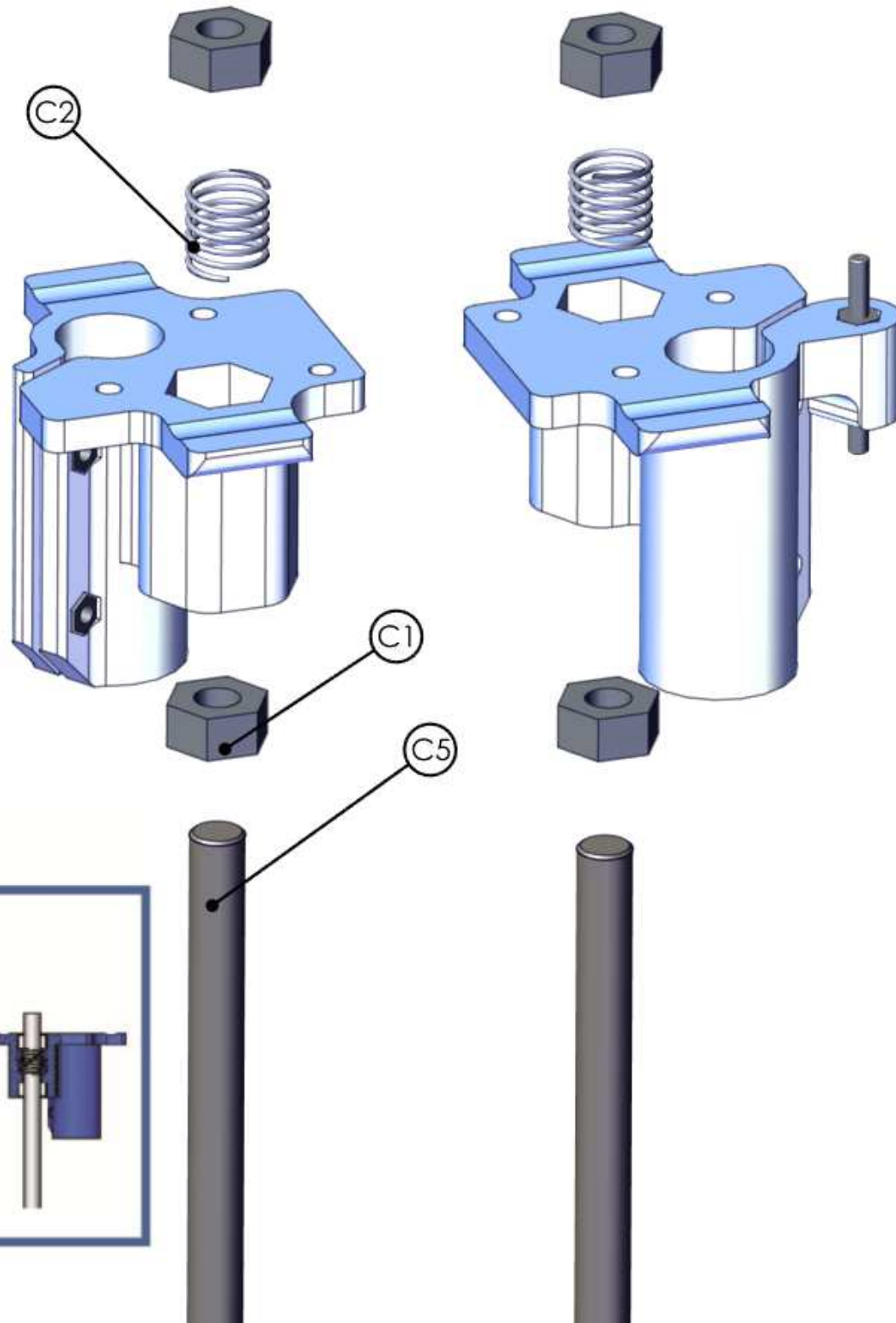
BOM ID	Description	Qty
M1	Z motion motor	1
M2	Z motion idler	1
M3	End stop spring	1
M4	DIN913 M3x30	1
M5	DIN934 M3	6



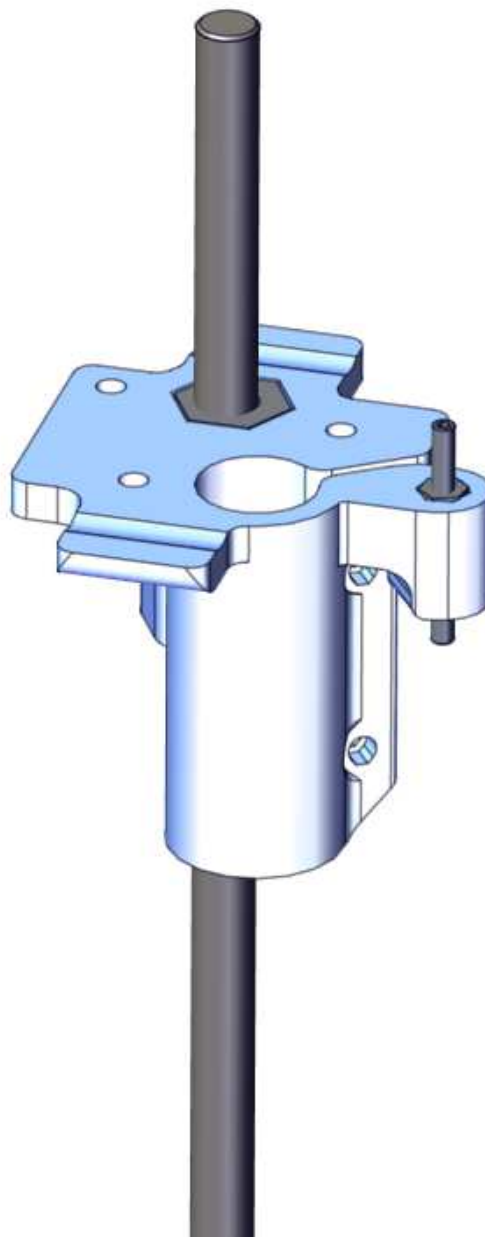
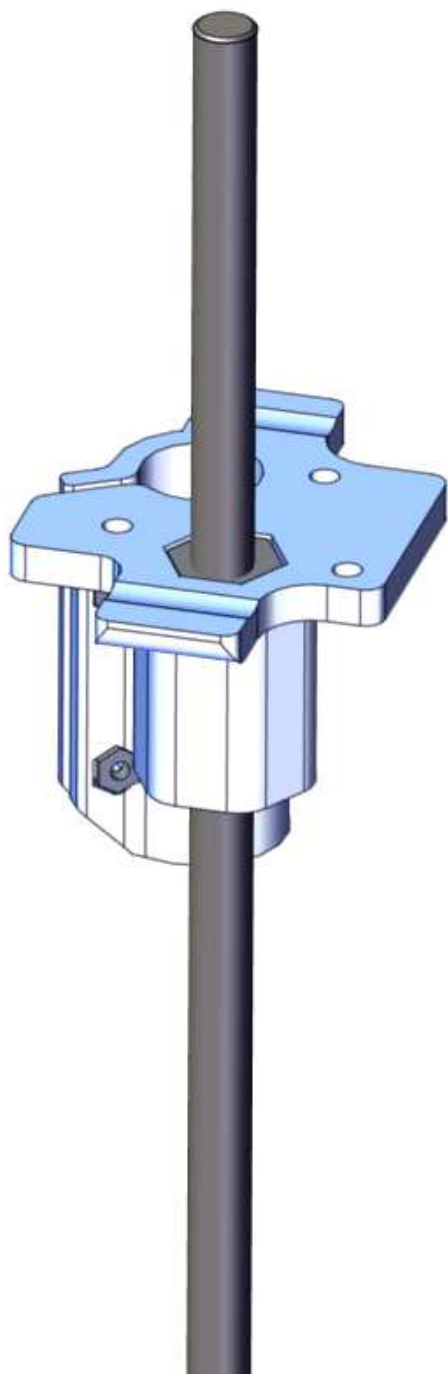


5

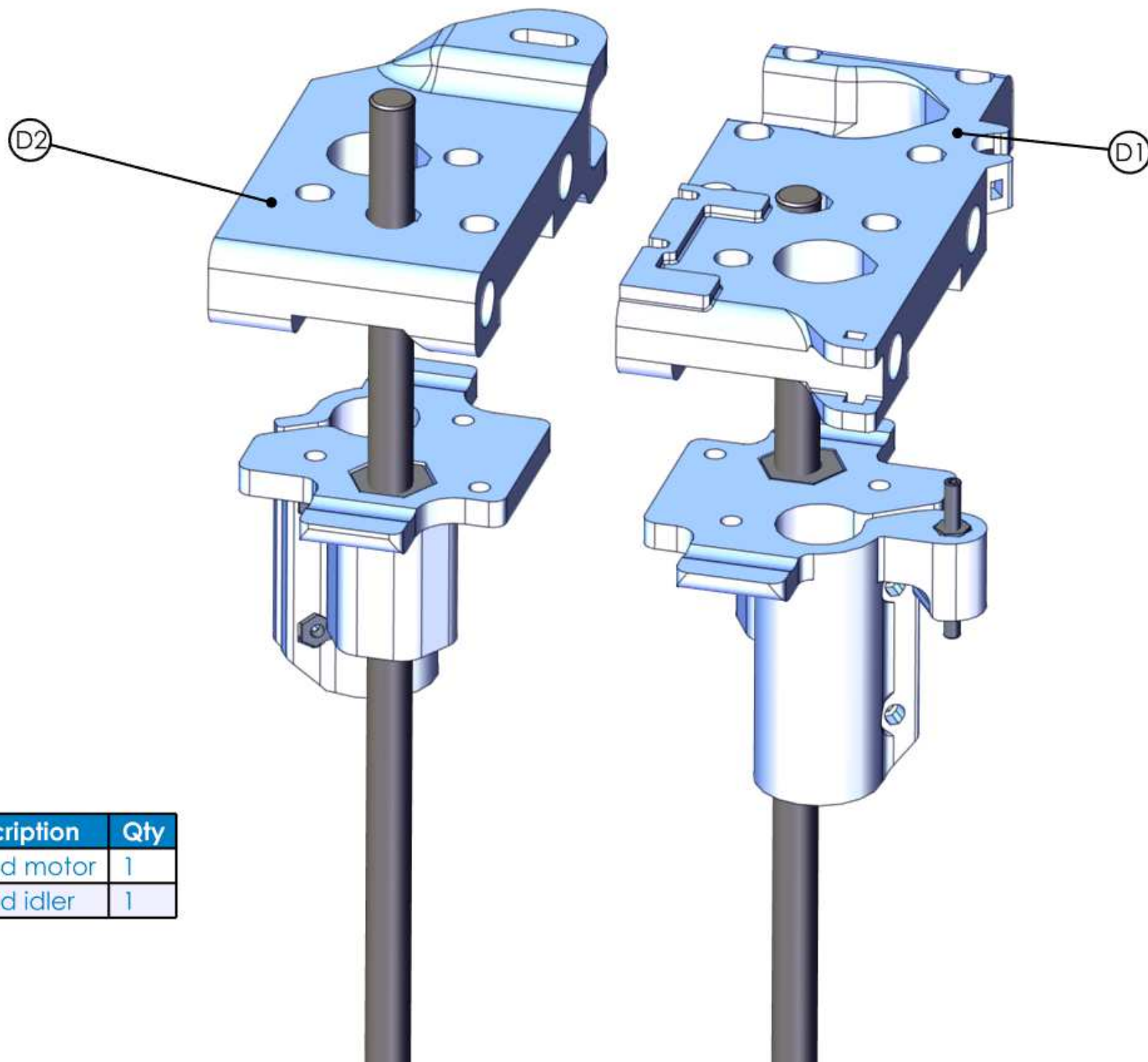
BOM ID	Description	Qty
C1	DIN934 M8	4
C2	Z Spring	2
C5	Rod bar M8x366	2



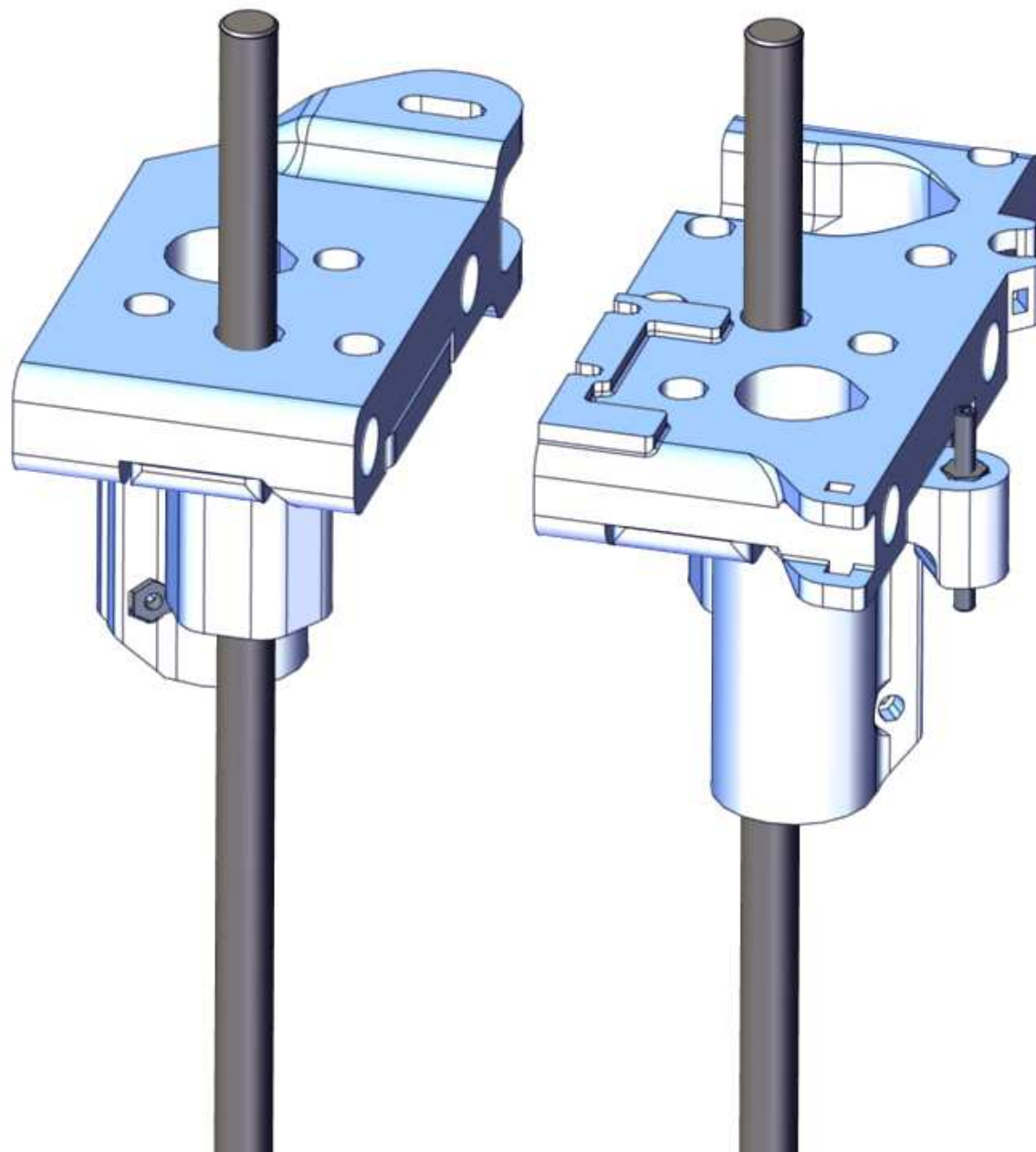
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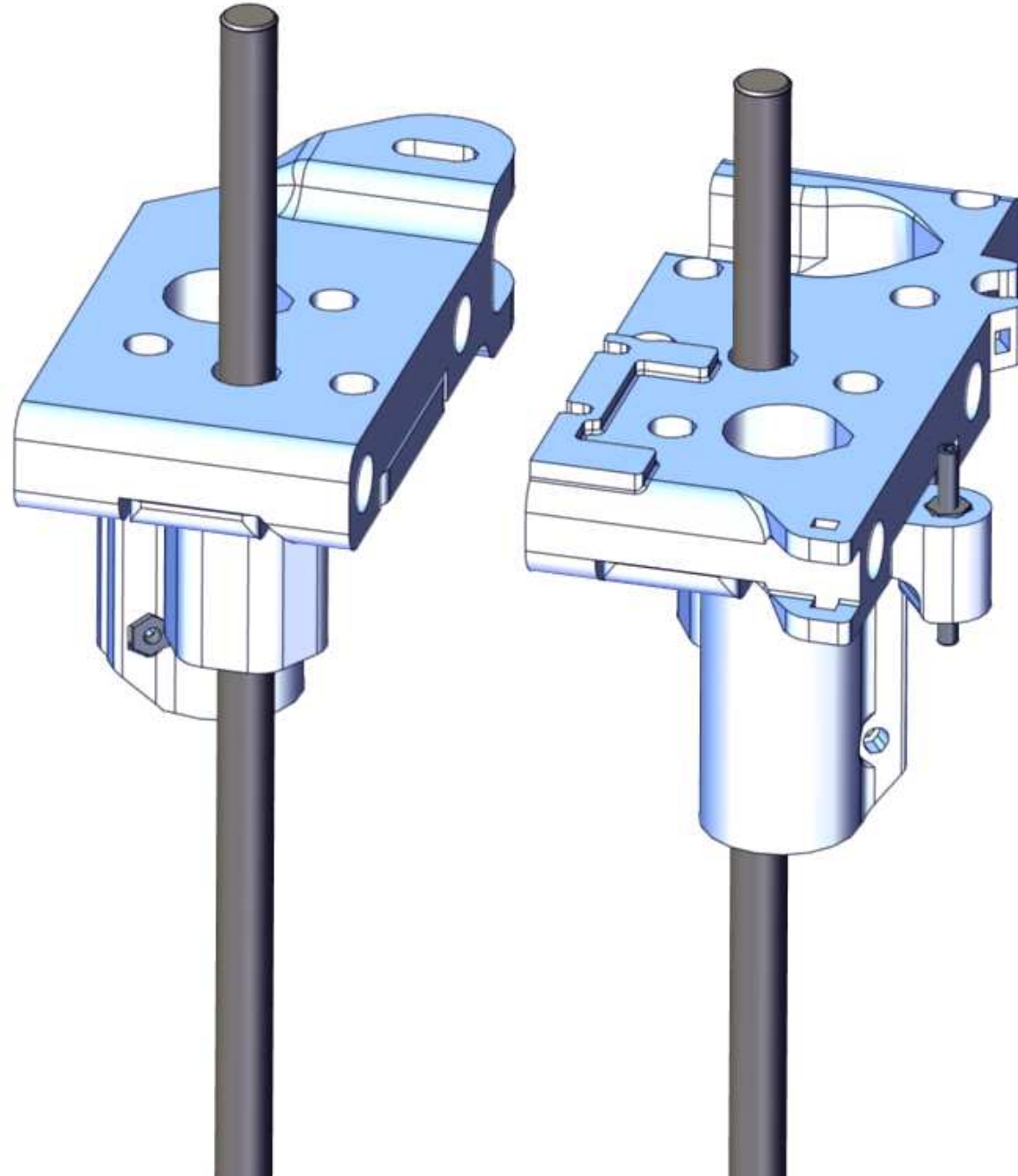




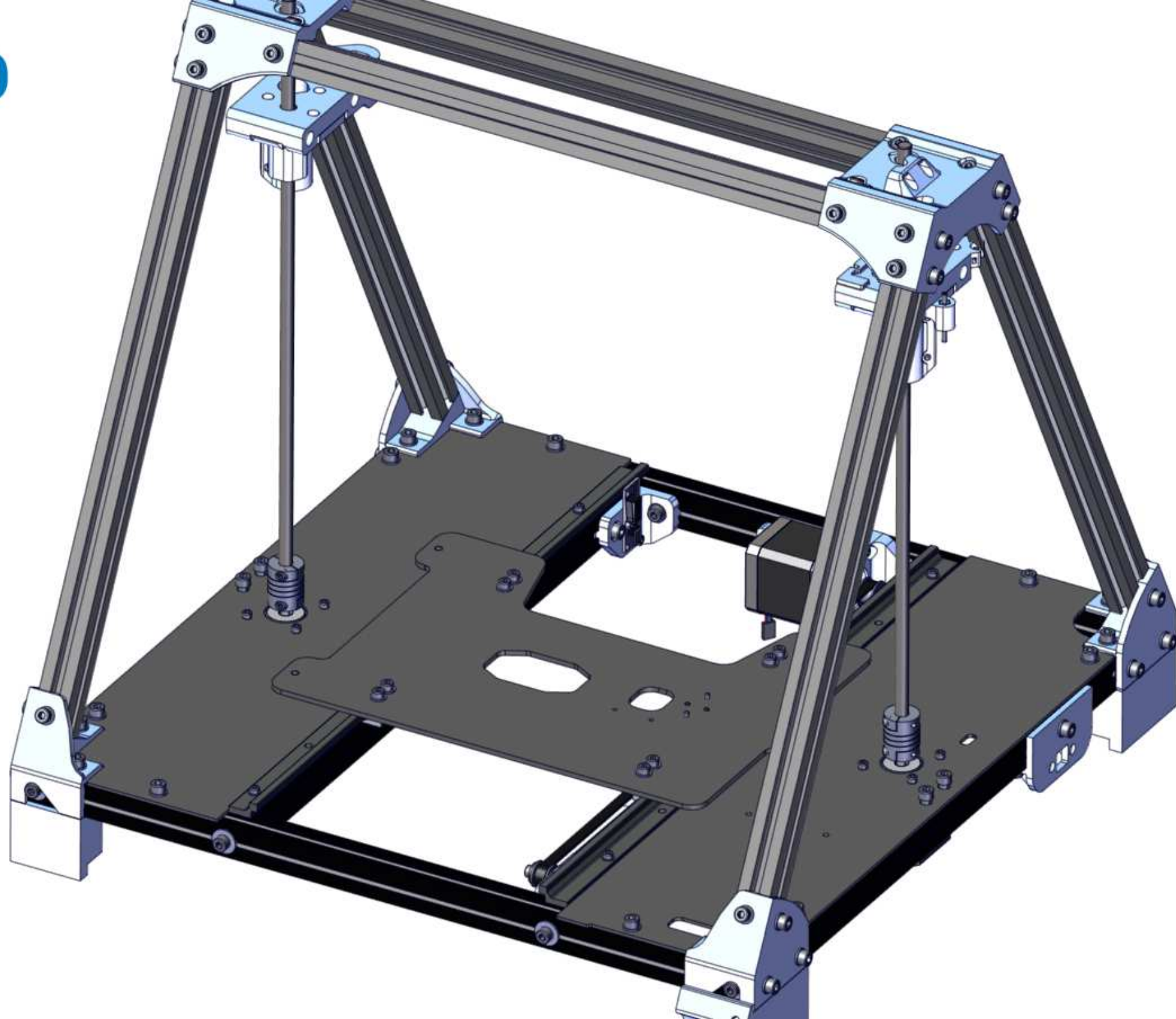


BOM ID	Description	Qty
D1	X-end motor	1
D2	X-end idler	1





10







PLASTIC BUSHING  
06



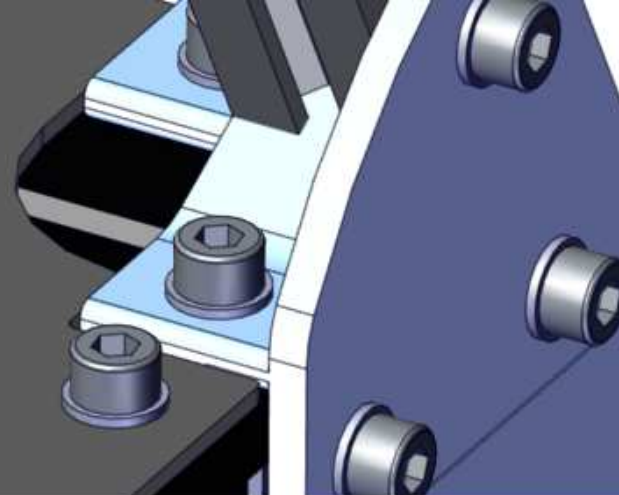
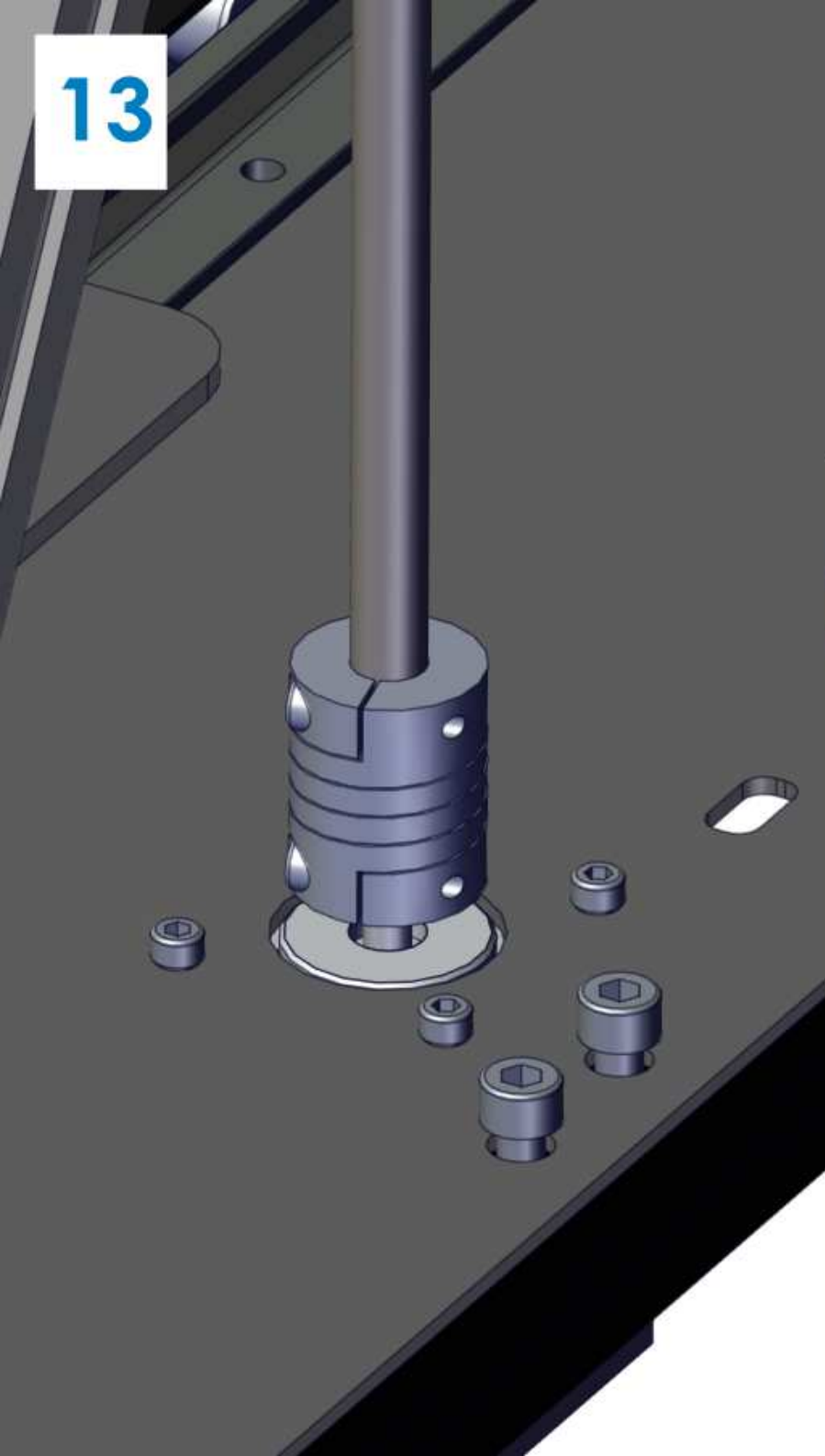
PLASTIC BUSHING  
38

M1

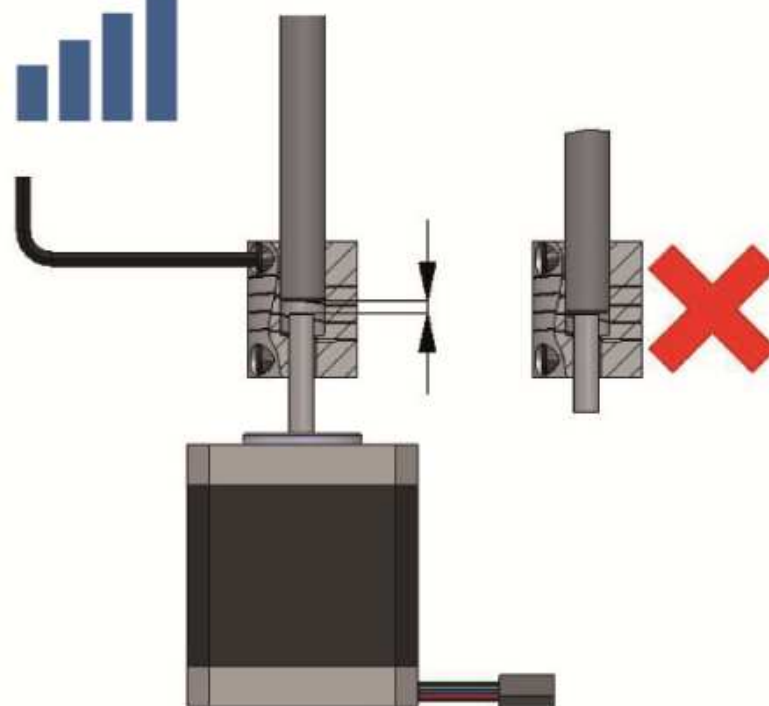
BOM ID	Description	Qty
M1	IGUS JFM-0810-06	2



13



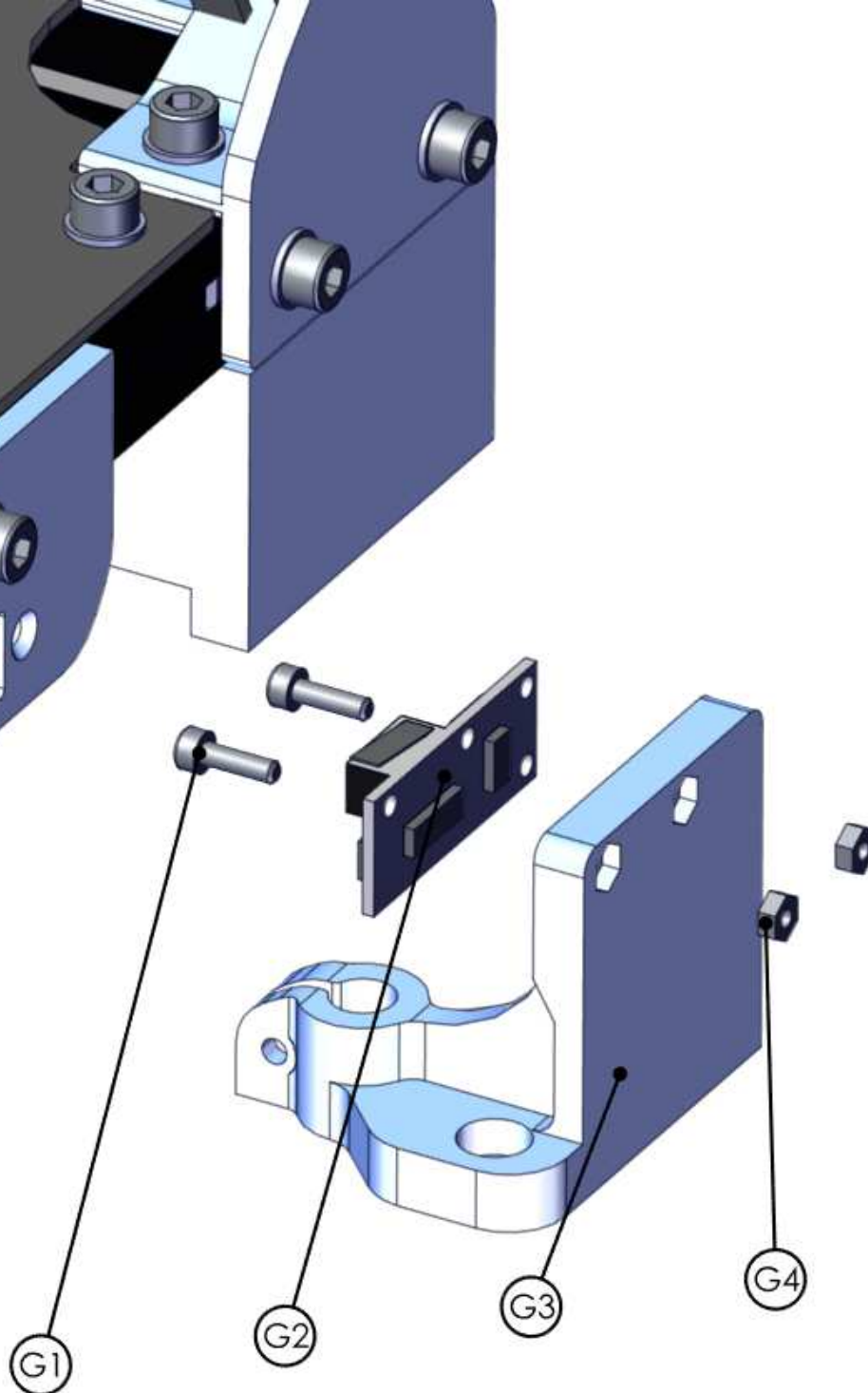
الرجاء





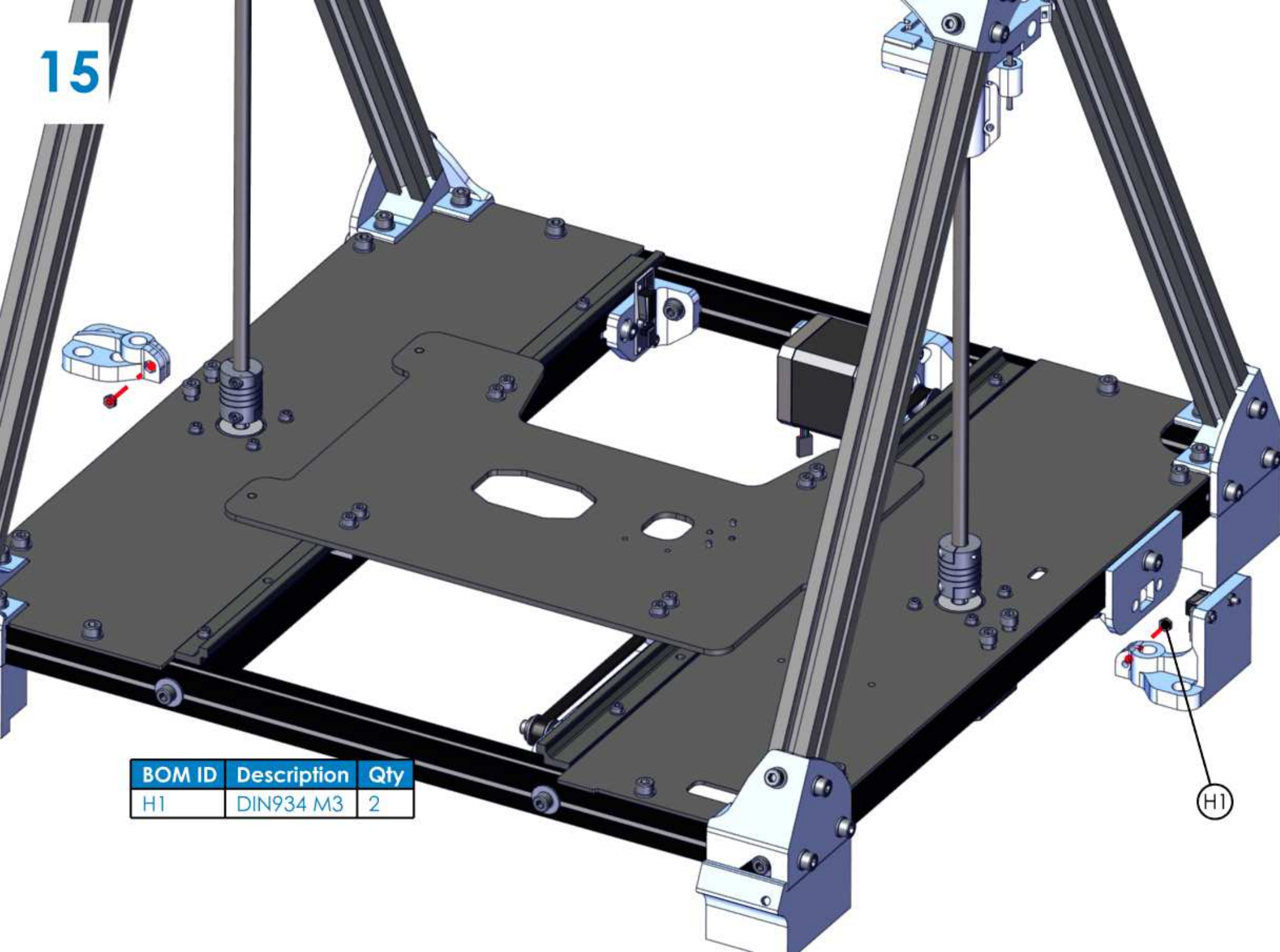
14

BOM ID	Description	Qty
G1	DIN912 M3x10	2
G2	Endstop	1
G3	Z lower bar right clamp	1
G4	DIN934 M3	2





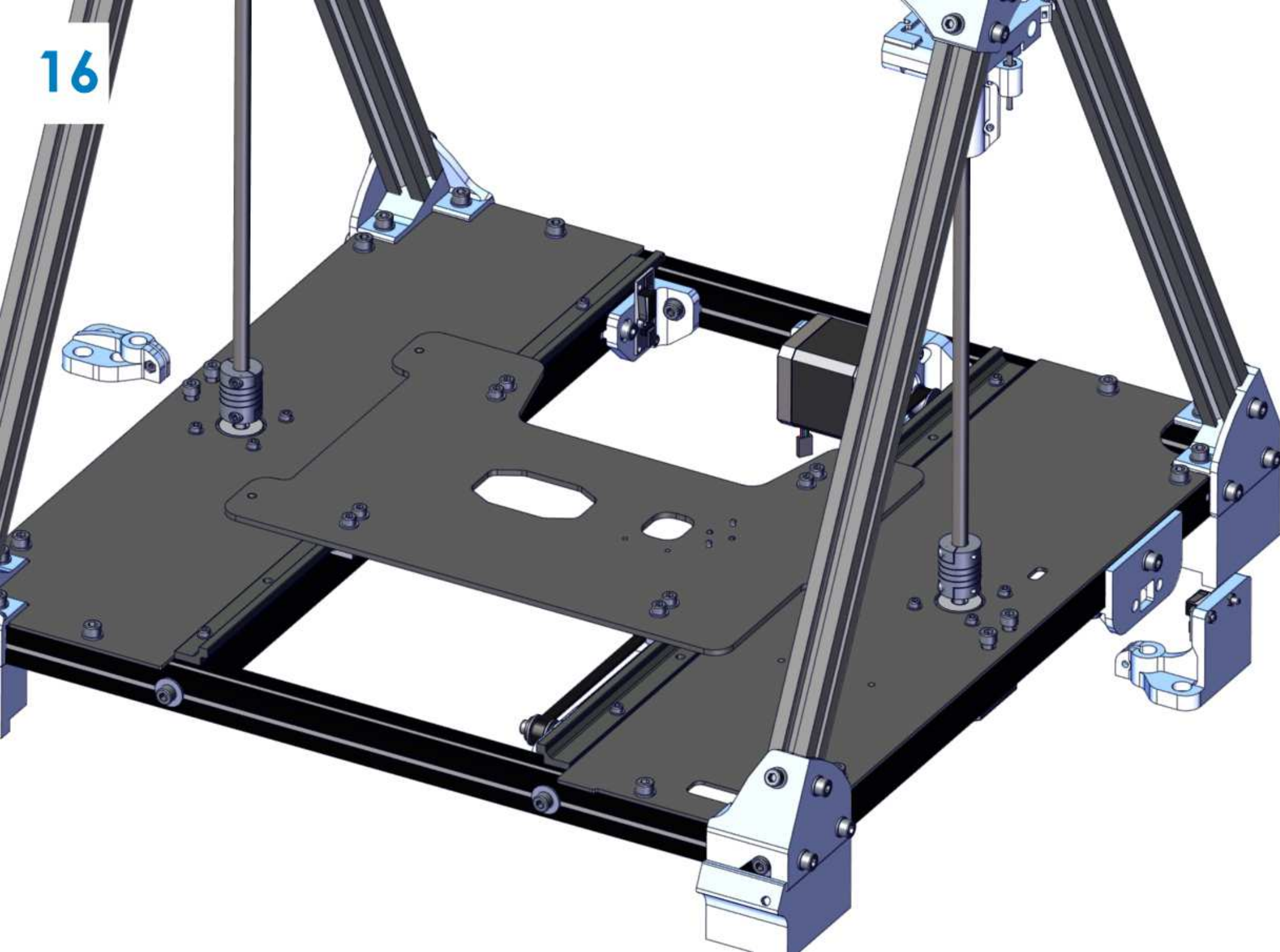
15



BOM ID	Description	Qty
H1	DIN934 M3	2

H1

16





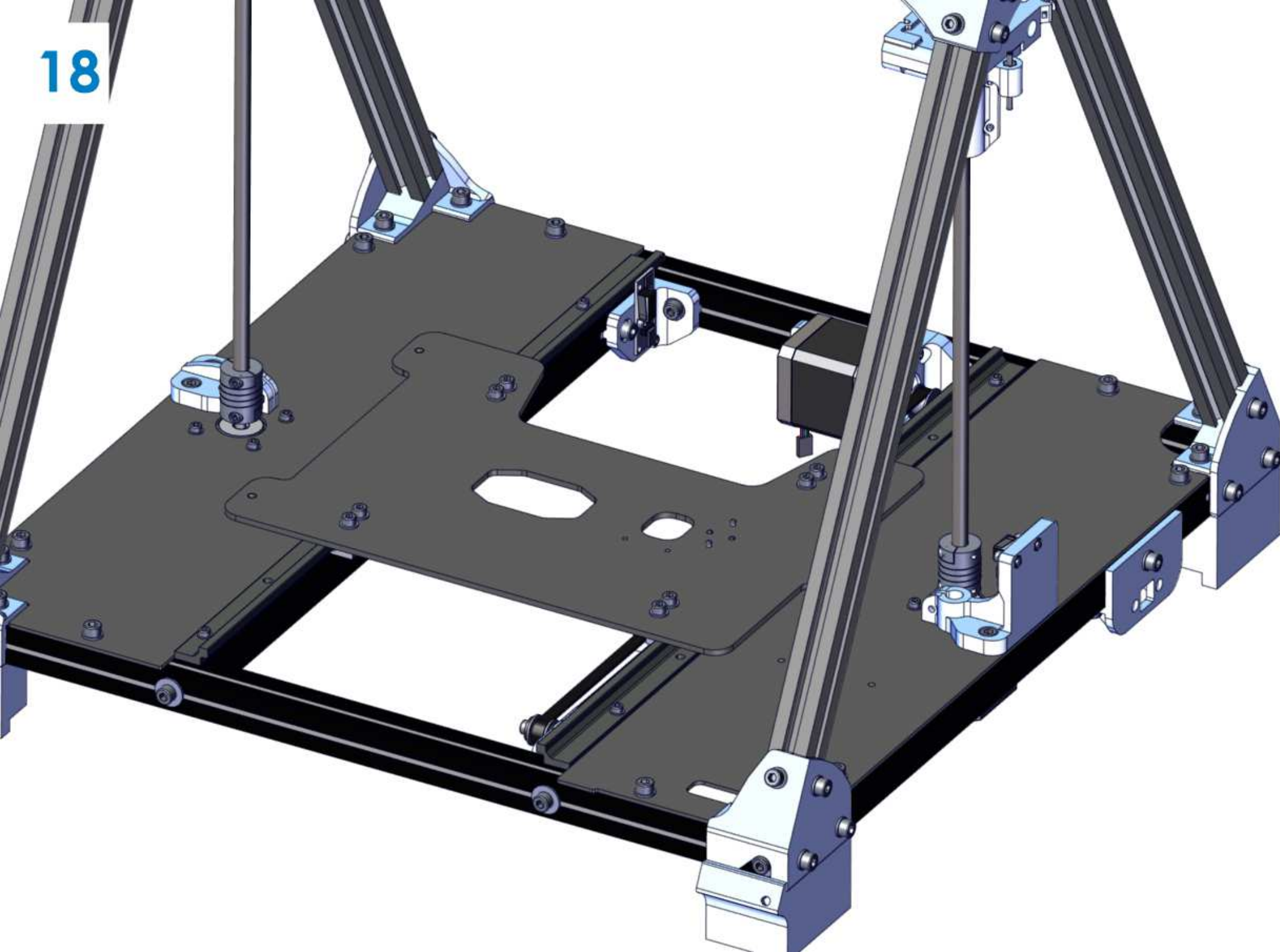


These screws were placed before. You have to get them out carefully, without move the pins and put them back again to the corresponding part.

11

BOM ID	Description	Qty
I1	DIN912 M5x10	4

18





19

11

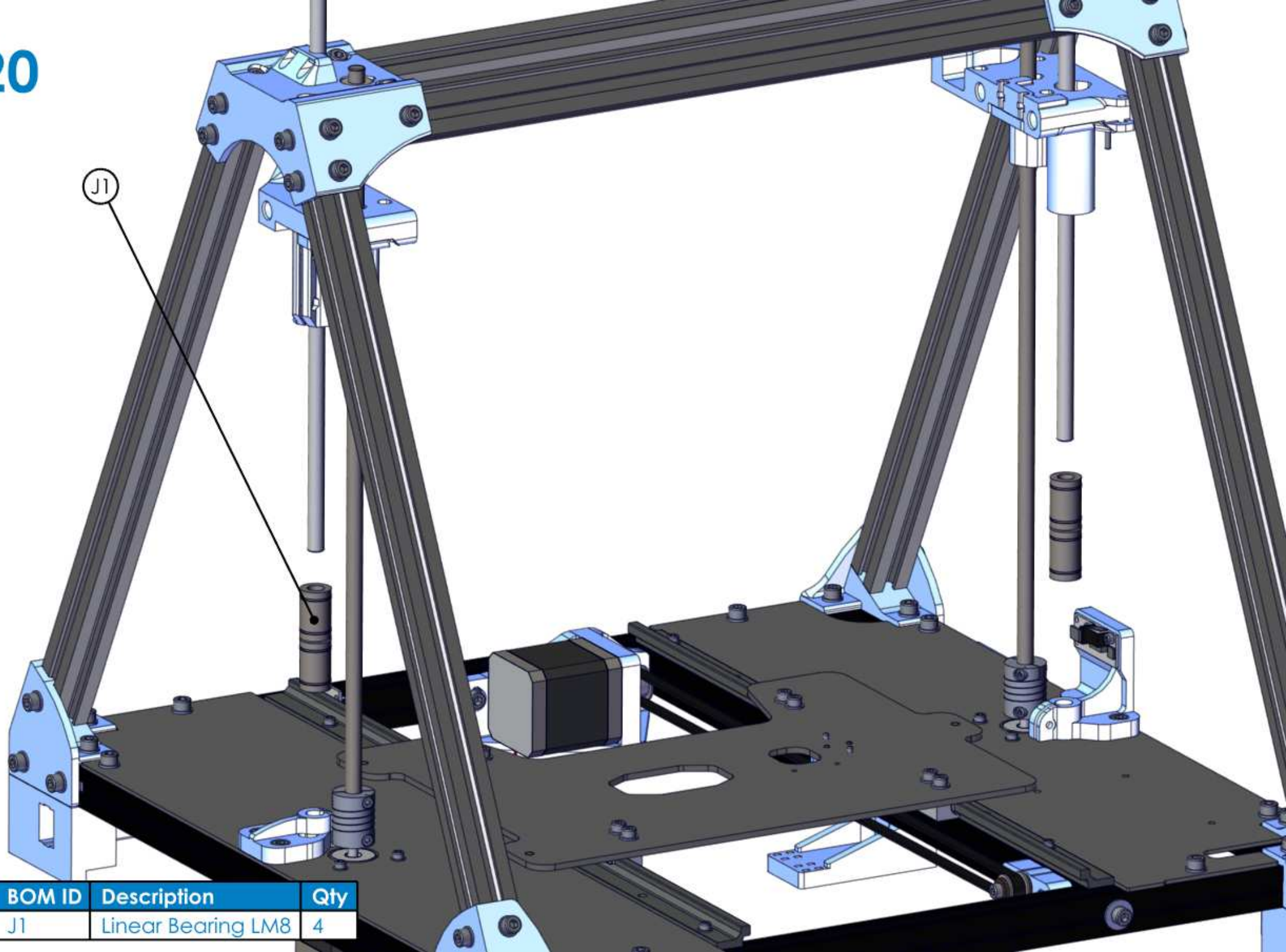


SMOOTH BAR Ø8 x 391

SMOOTH BAR Ø8 x 432

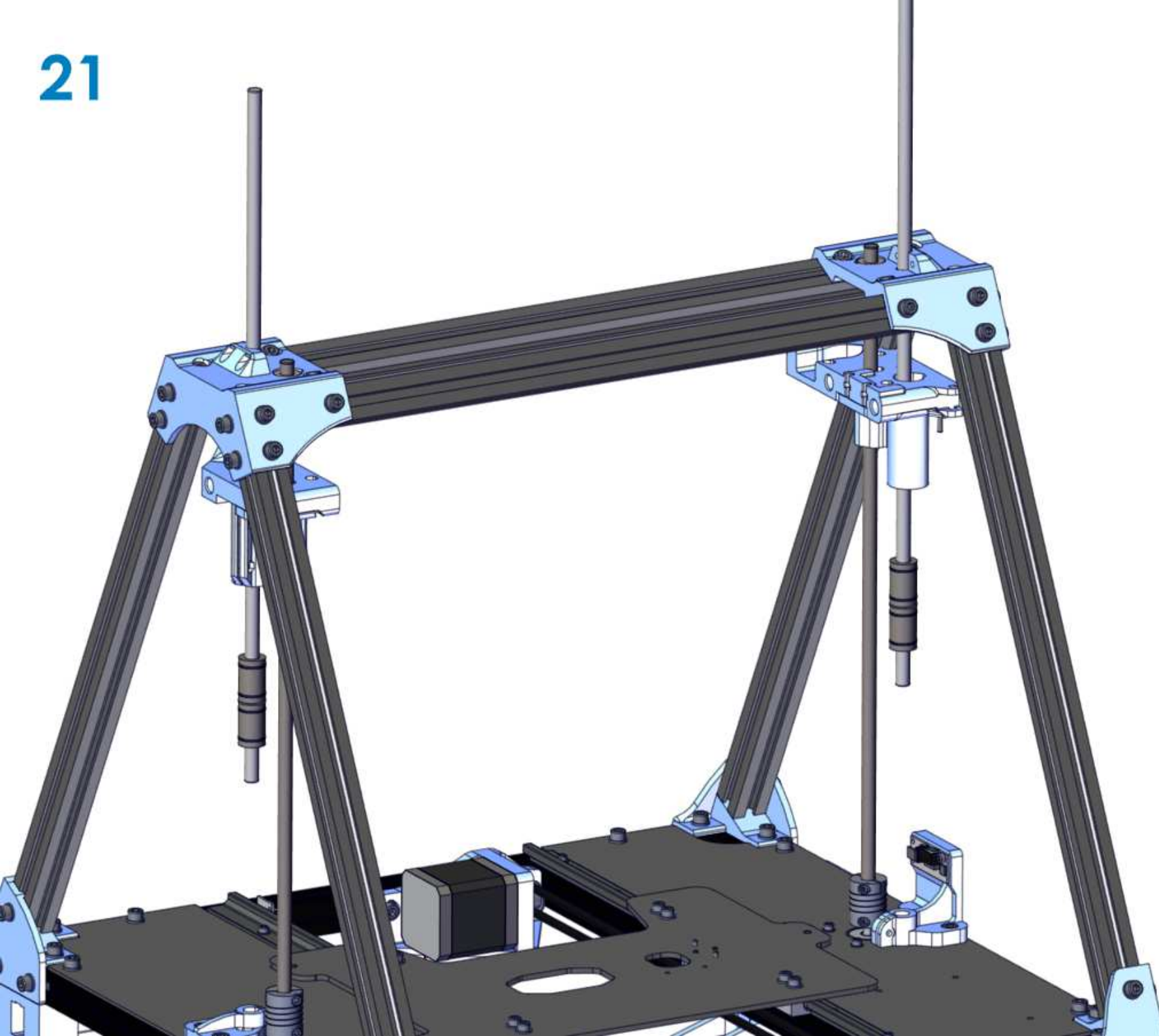


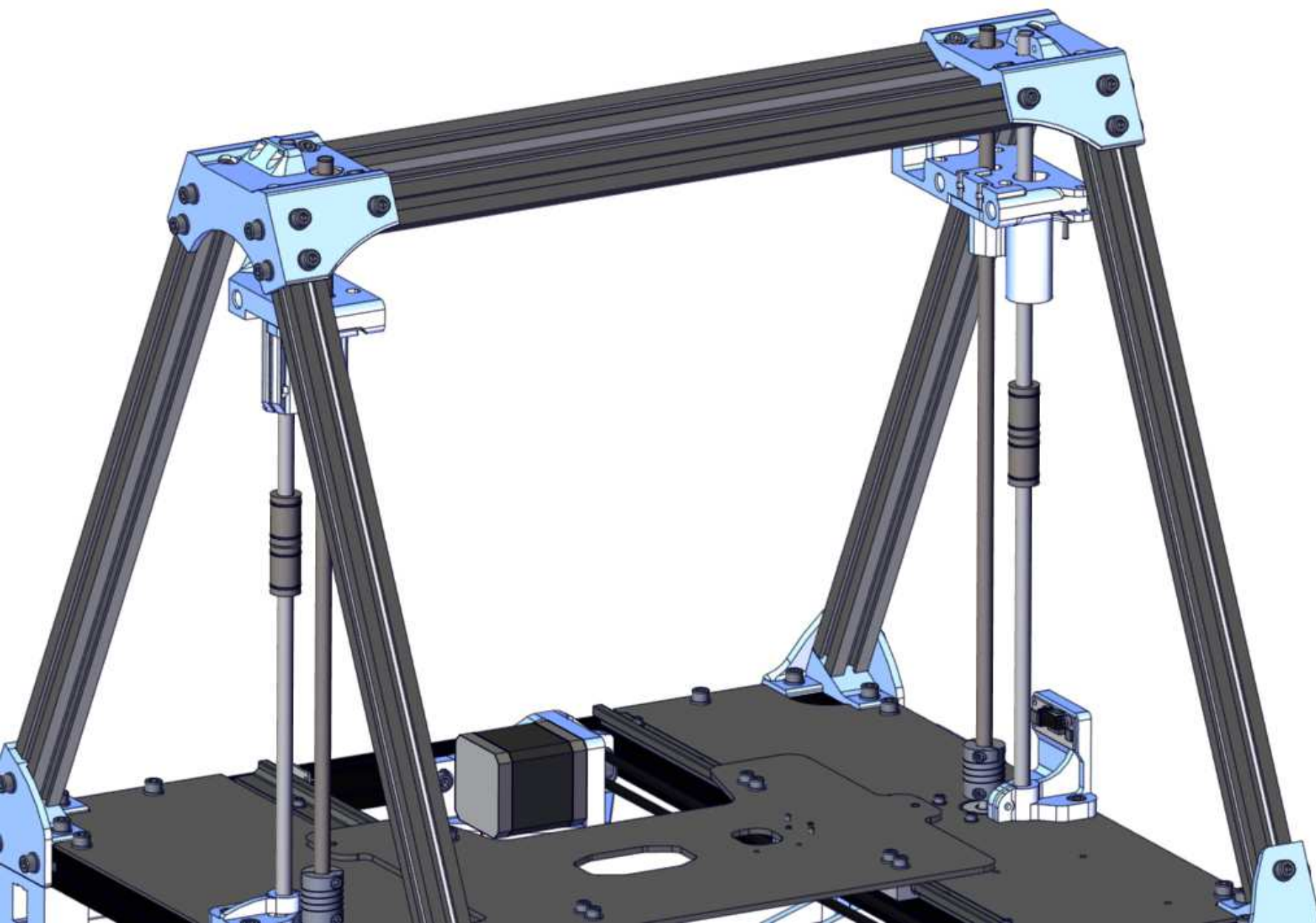
BOM ID	Description	Qty
11	Smooth bar Ø8x391	2



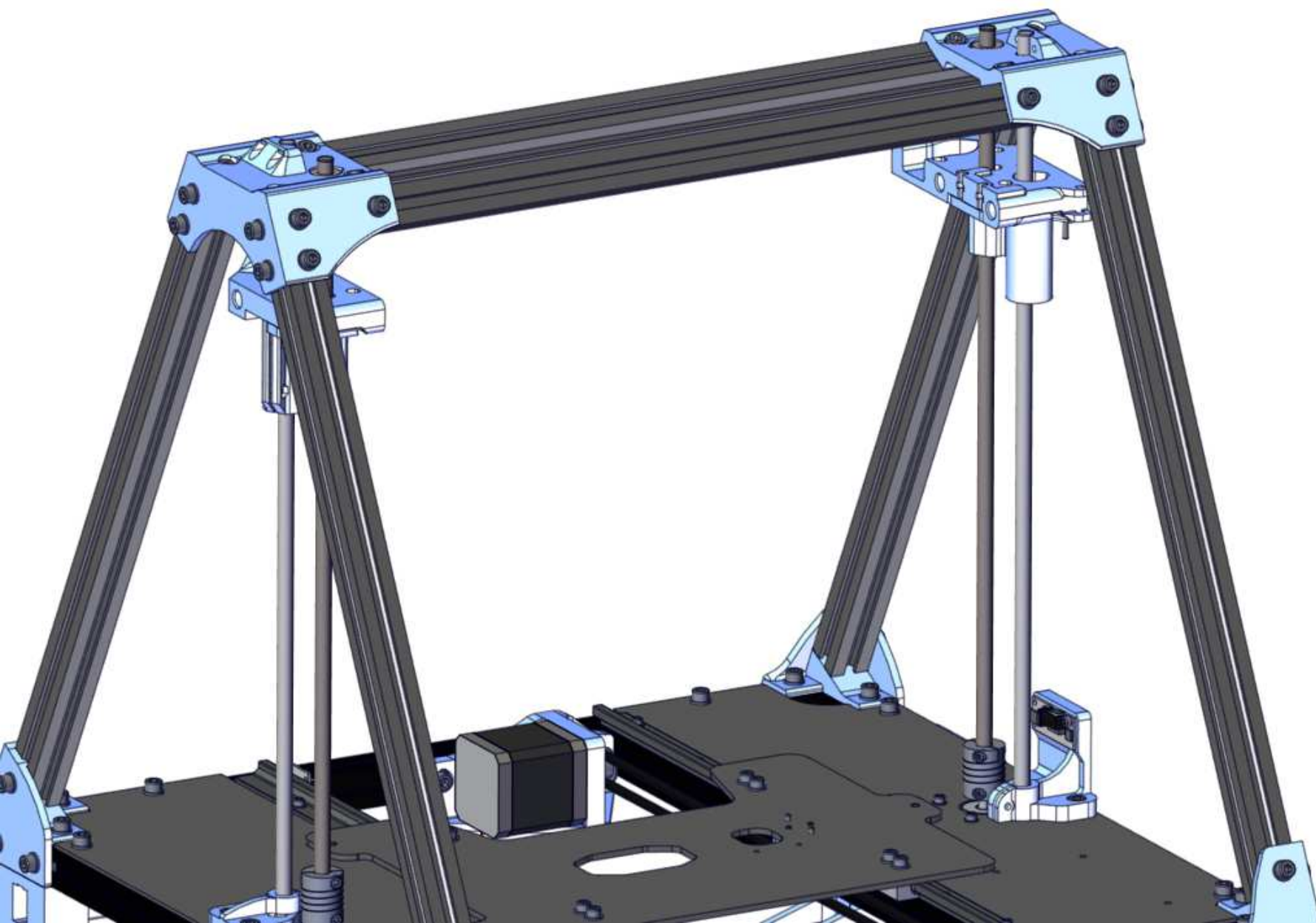
BOM ID	Description	Qty
J1	Linear Bearing LM8	4



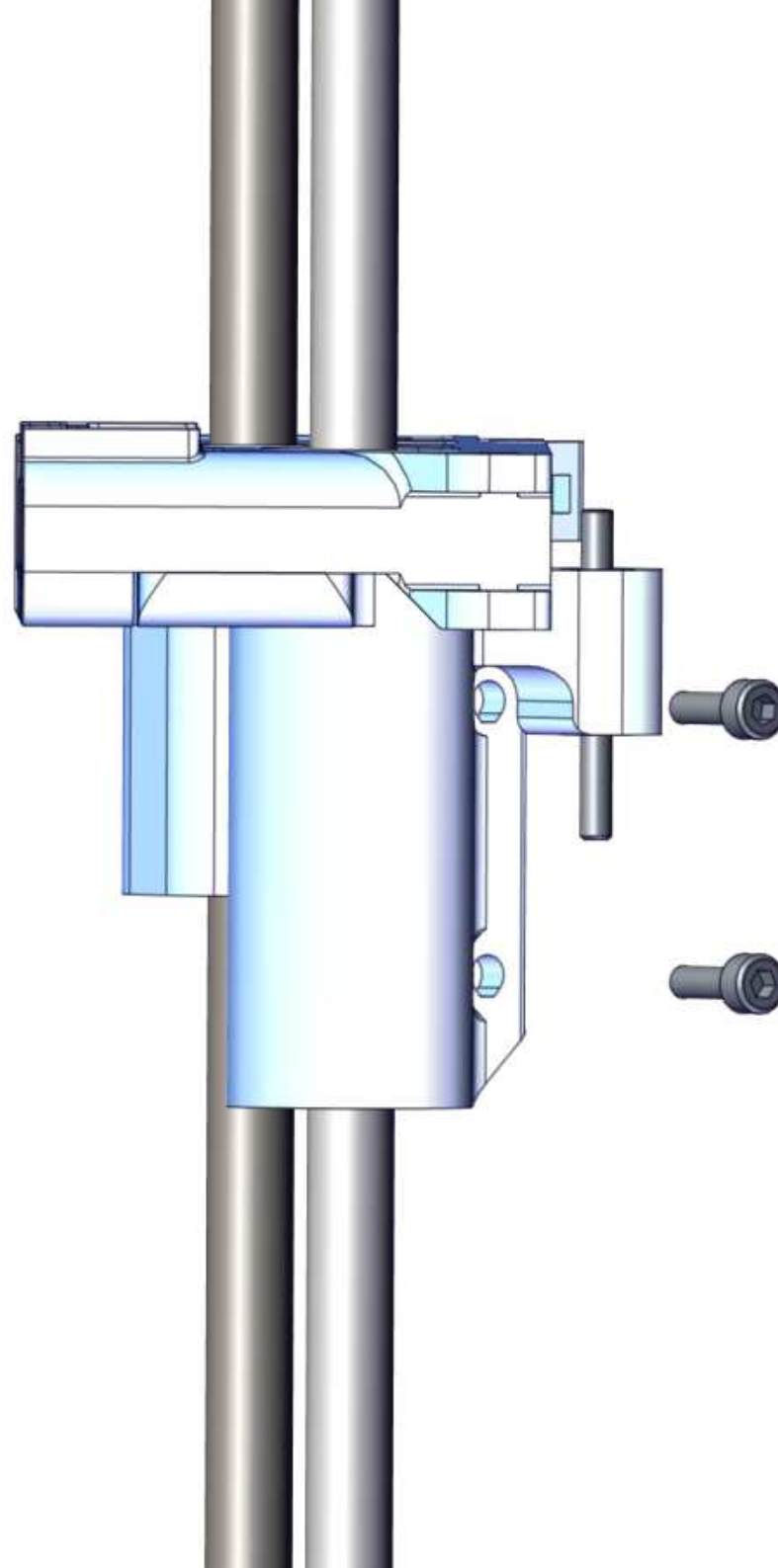




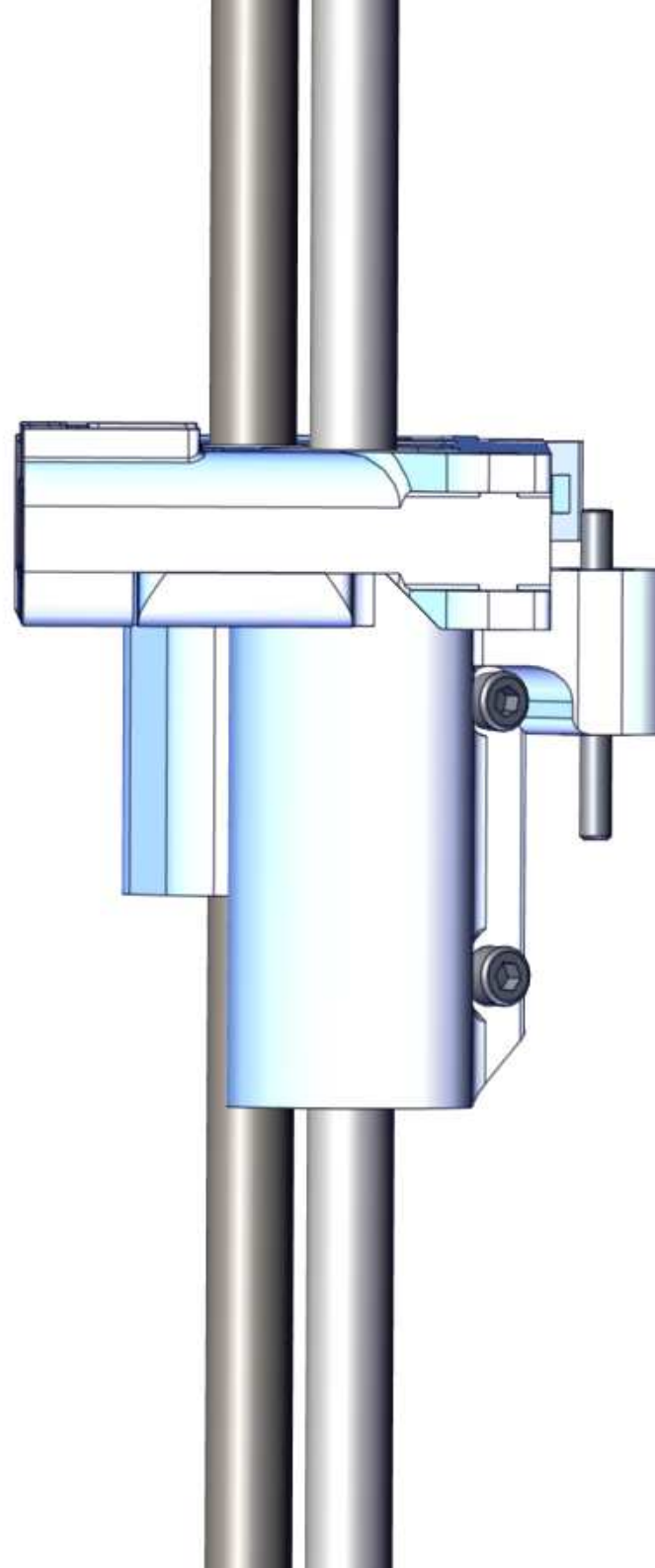
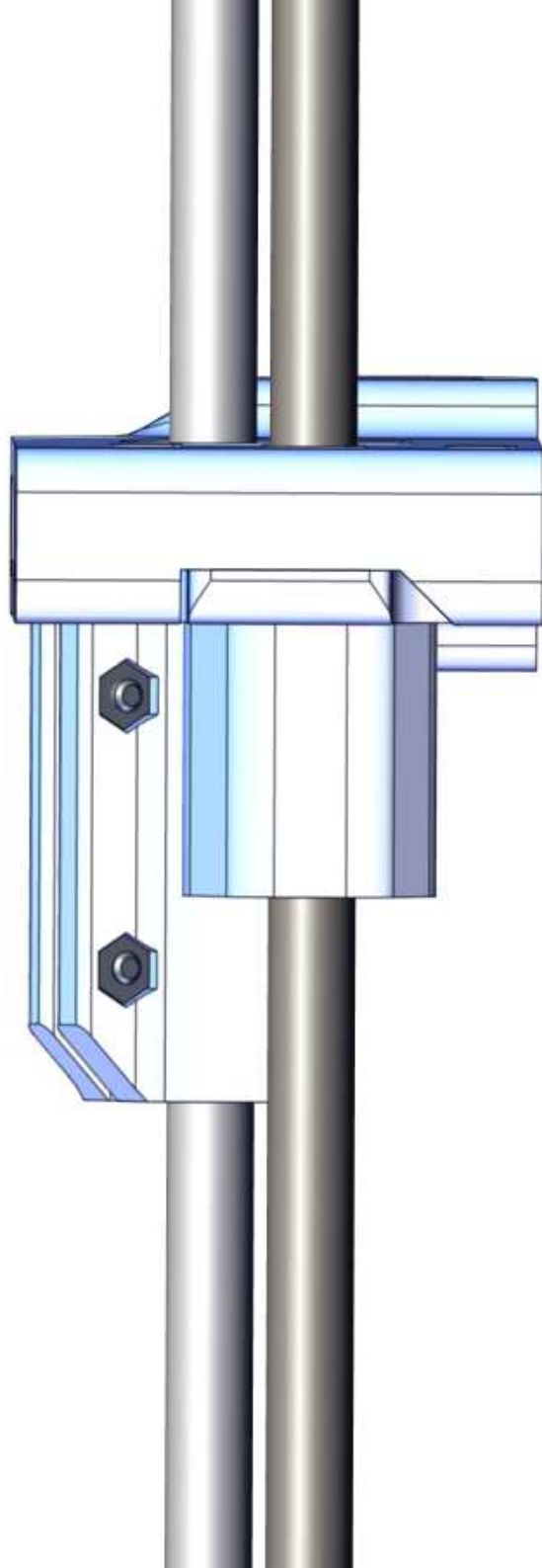




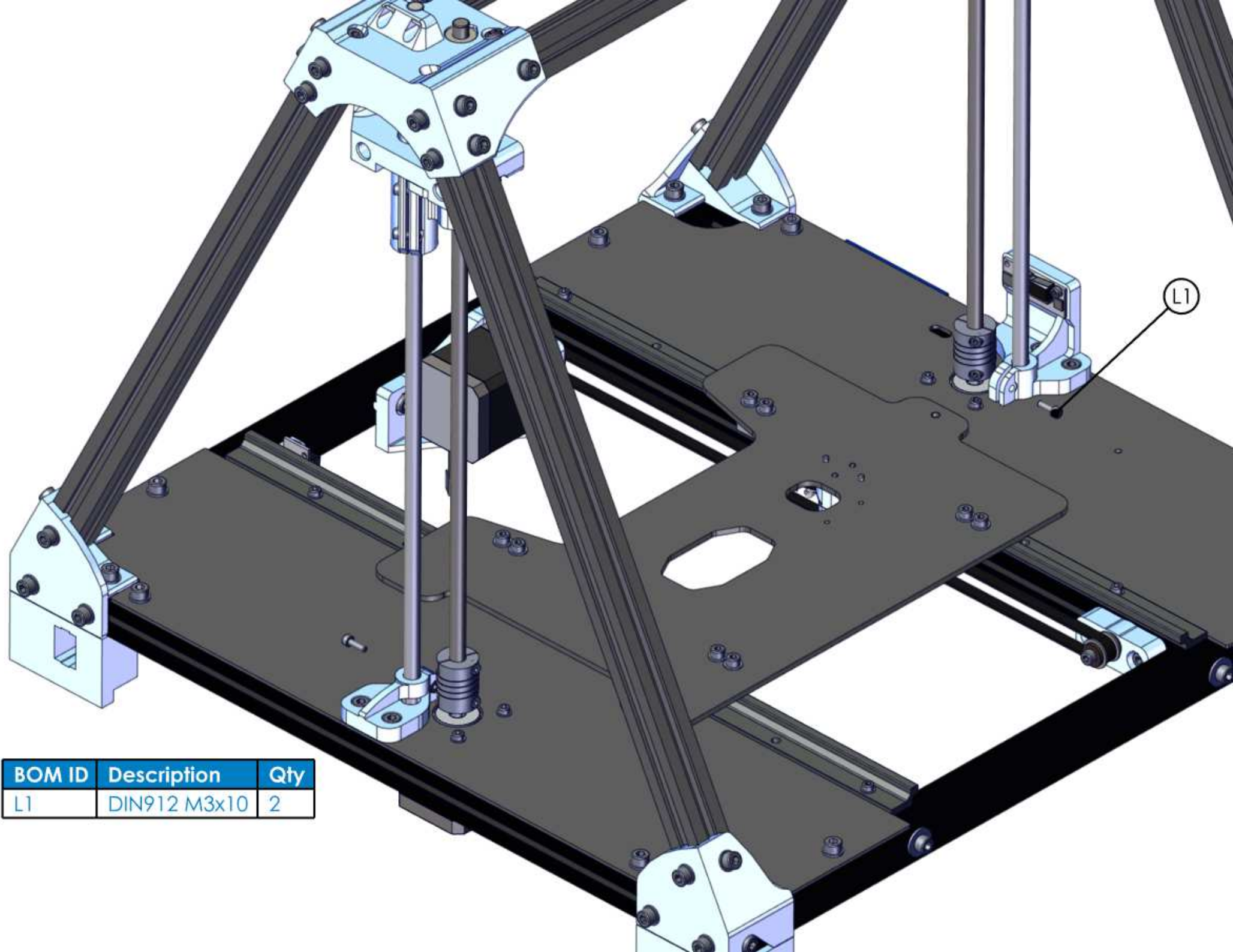
24



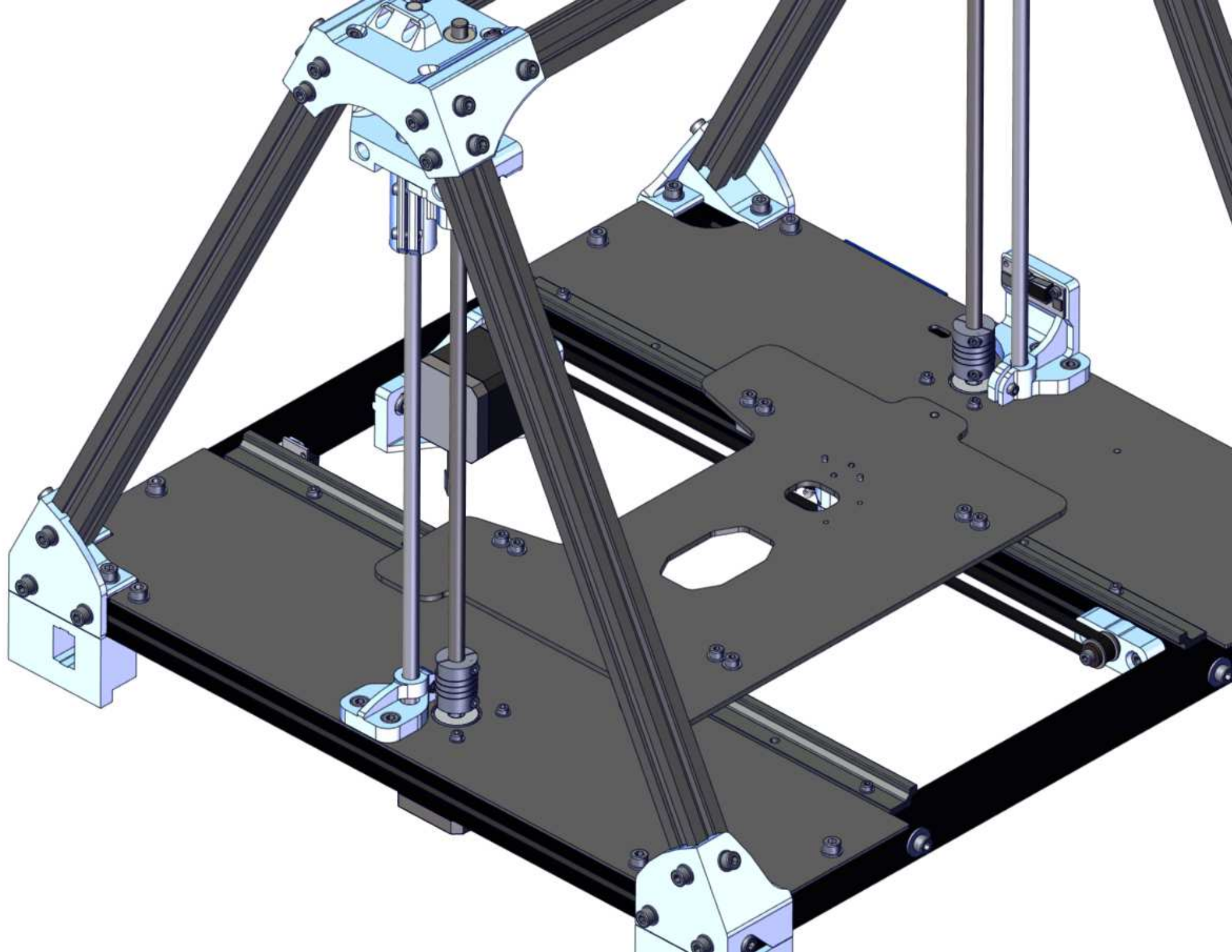
BOM ID	Description	Qty
K1	DIN912 M3x12	4



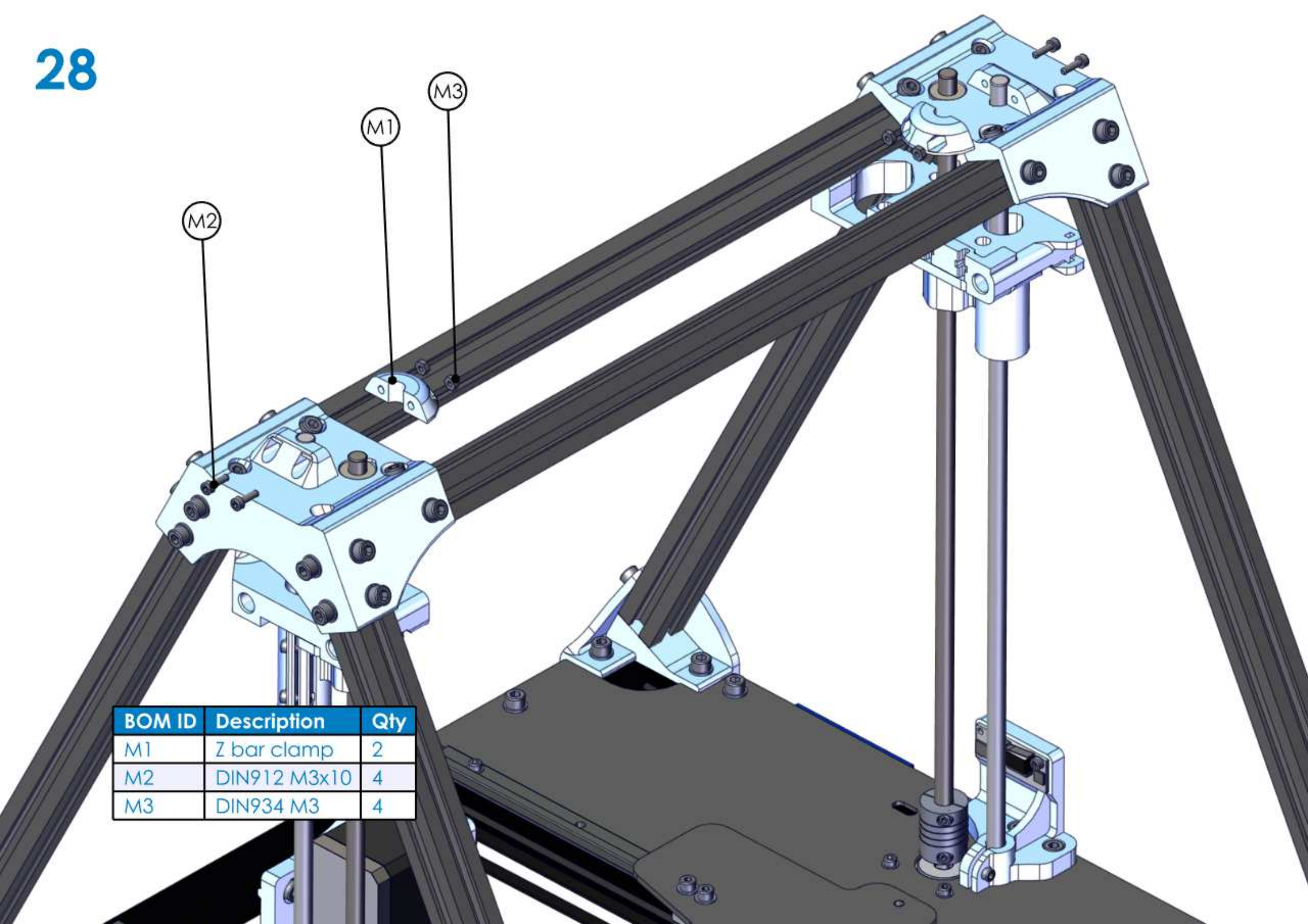




BOM ID	Description	Qty
L1	DIN912 M3x10	2

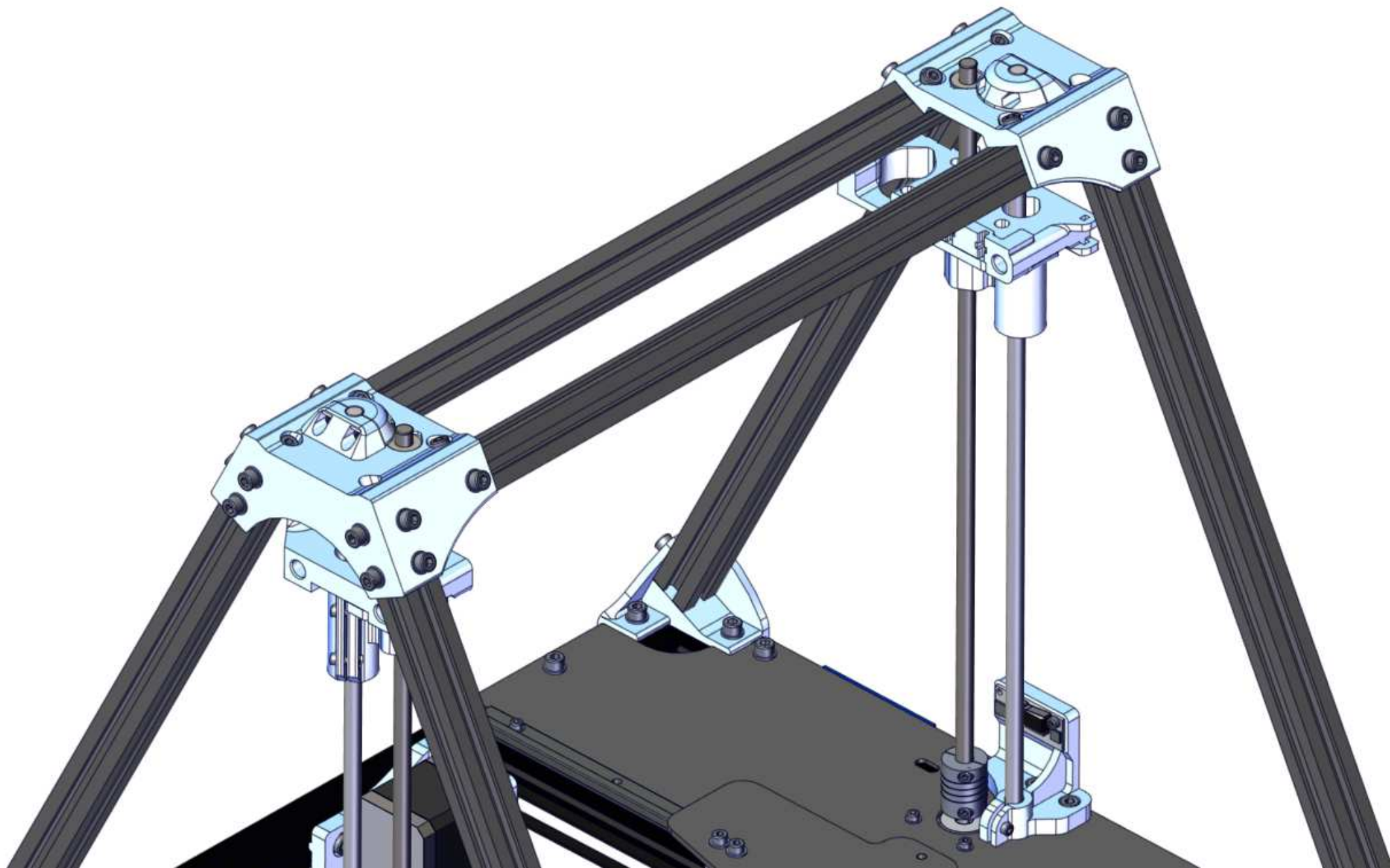






BOM ID	Description	Qty
M1	Z bar clamp	2
M2	DIN912 M3x10	4
M3	DIN934 M3	4

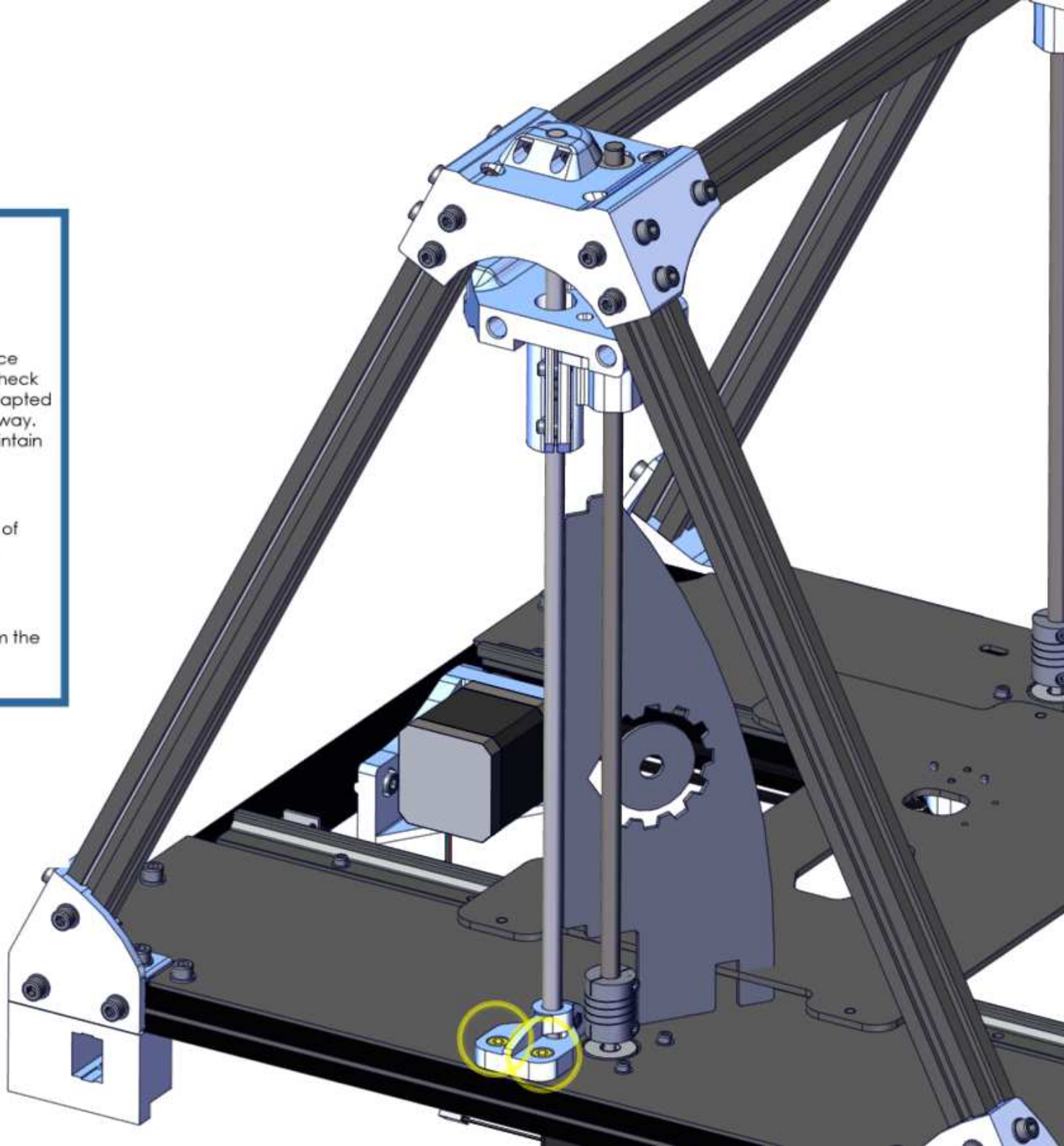






### Z axis calibration process

1. With the screws highlighted and loosened, place the tool as it is shown in the slide #28 in order to check the perpendicular of the flat rods. It should be adapted to the vertical line of the tool in the best possible way. Once achieved, tighten the screws slightly to maintain its position and go for the next point.
2. With the tool positioned as the slide #29, at 90° of the previous position, repeat the process that it is explained and finally tighten the screws to fix the position of the bar.
3. Repeat the above in the other smooth rod from the Z axis.





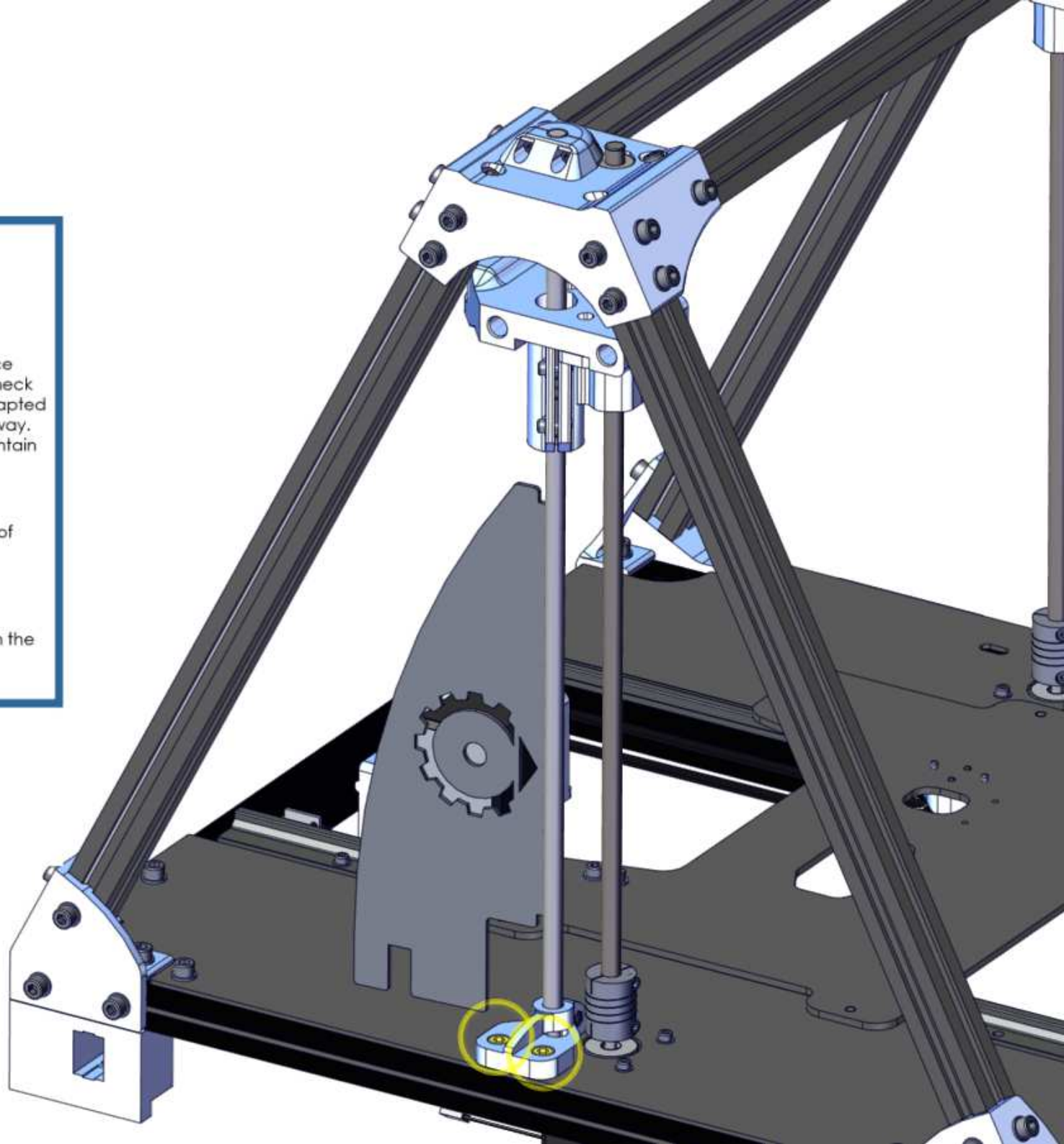


### Z axis calibration process

**1.** With the screws highlighted and loosened, place the tool as it is shown in the slide #28 in order to check the perpendicular of the flat rods. It should be adapted to the vertical line of the tool in the best possible way. Once achieved, tighten the screws slightly to maintain its position and go for the next point.

**2.** With the tool positioned as the slide #29, at 90° of the previous position, repeat the process that it is explained and finally tighten the screws to fix the position of the bar.

**3.** Repeat the above in the other smooth rod from the Z axis.

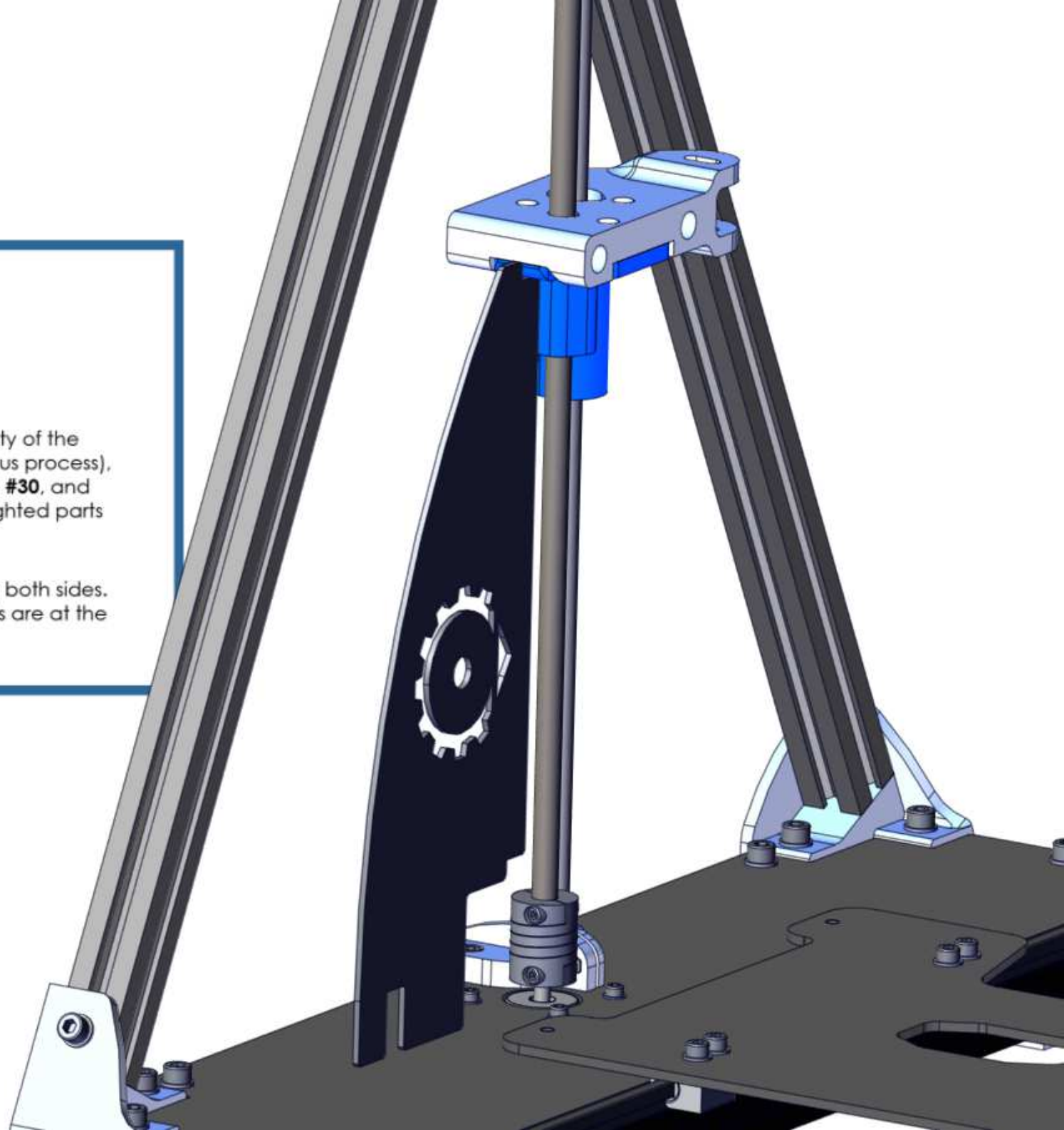






### X axis calibration process

1. Once calibrated the perpendicularity of the smooth rods from the Z axis (the previous process), place the tool as it is shown in the slide #30, and down both sides at once let the highlighted parts touching the tool.
2. Check the distance with the tool on both sides. This ensures that both sides of the X axis are at the same height.

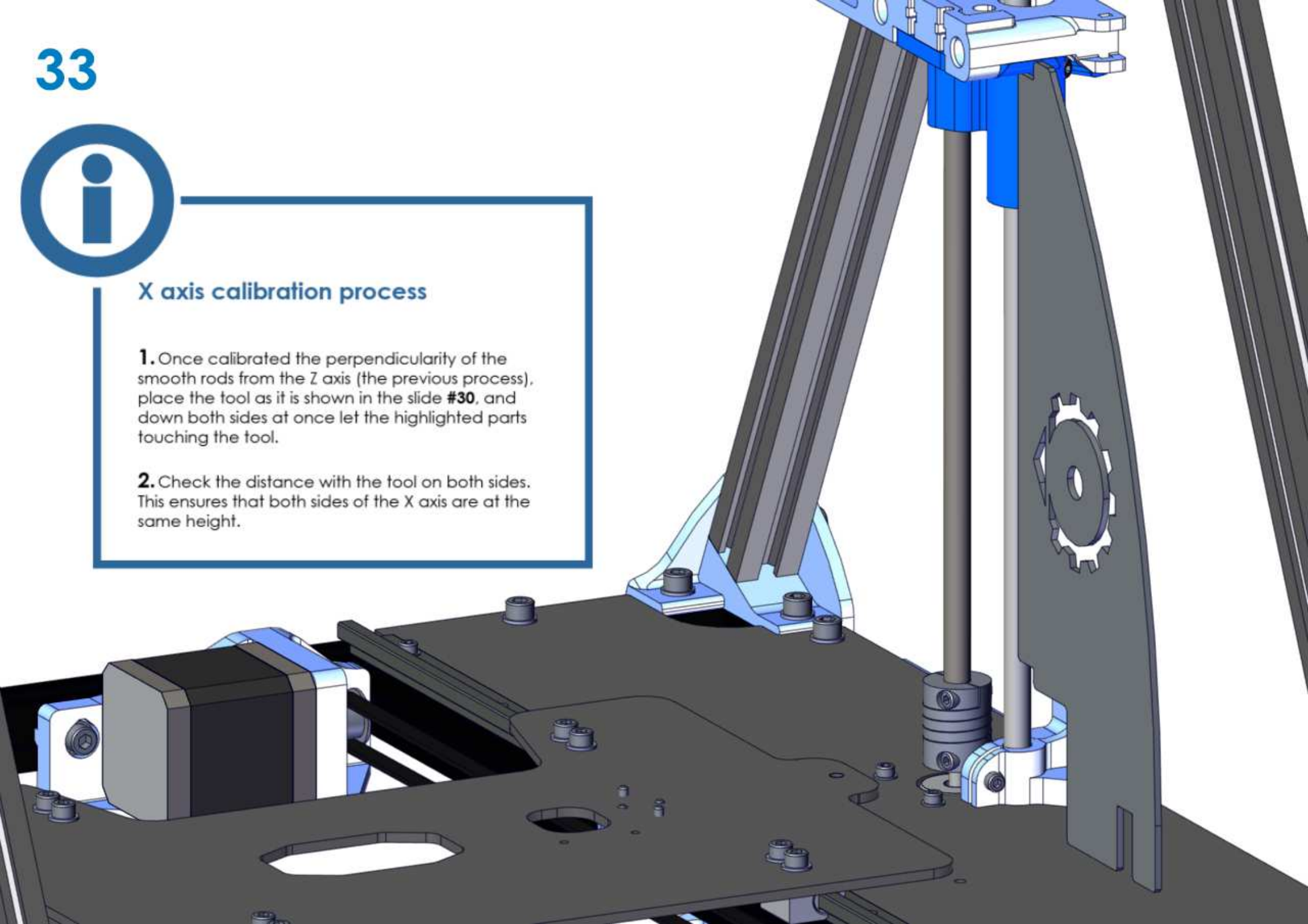


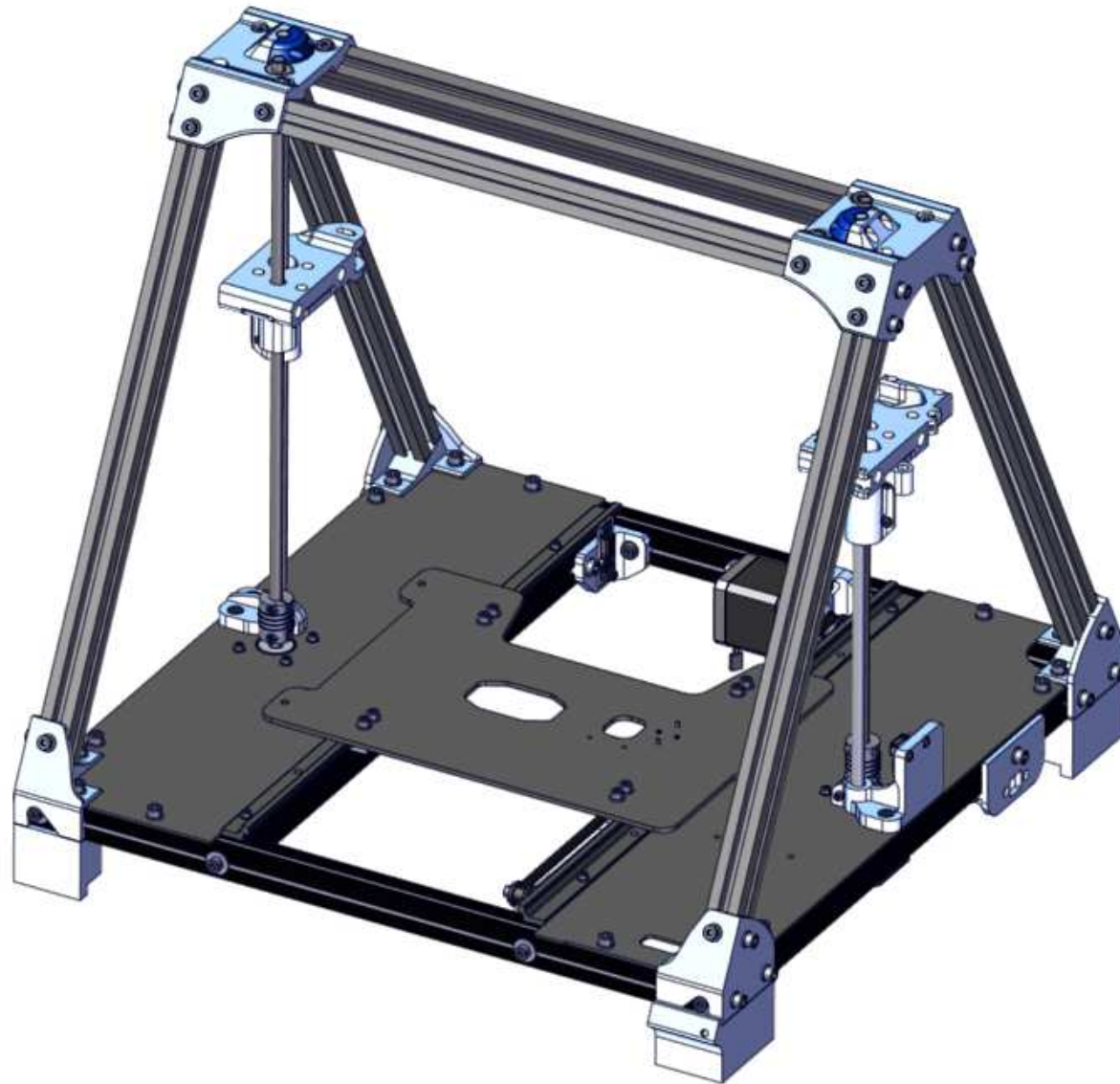


### X axis calibration process

**1.** Once calibrated the perpendicularity of the smooth rods from the Z axis (the previous process), place the tool as it is shown in the slide #30, and down both sides at once let the highlighted parts touching the tool.

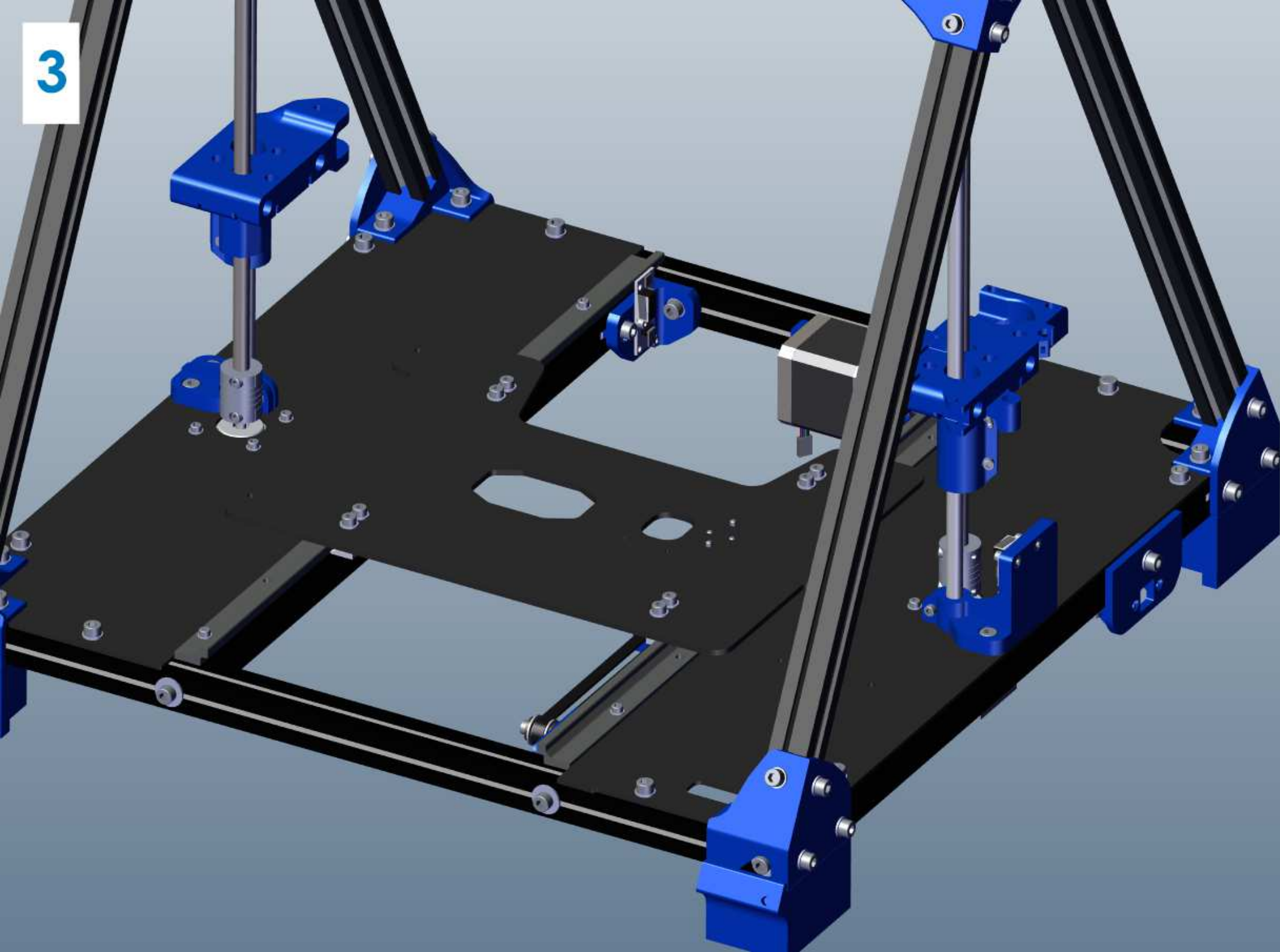
**2.** Check the distance with the tool on both sides. This ensures that both sides of the X axis are at the same height.







3



3

