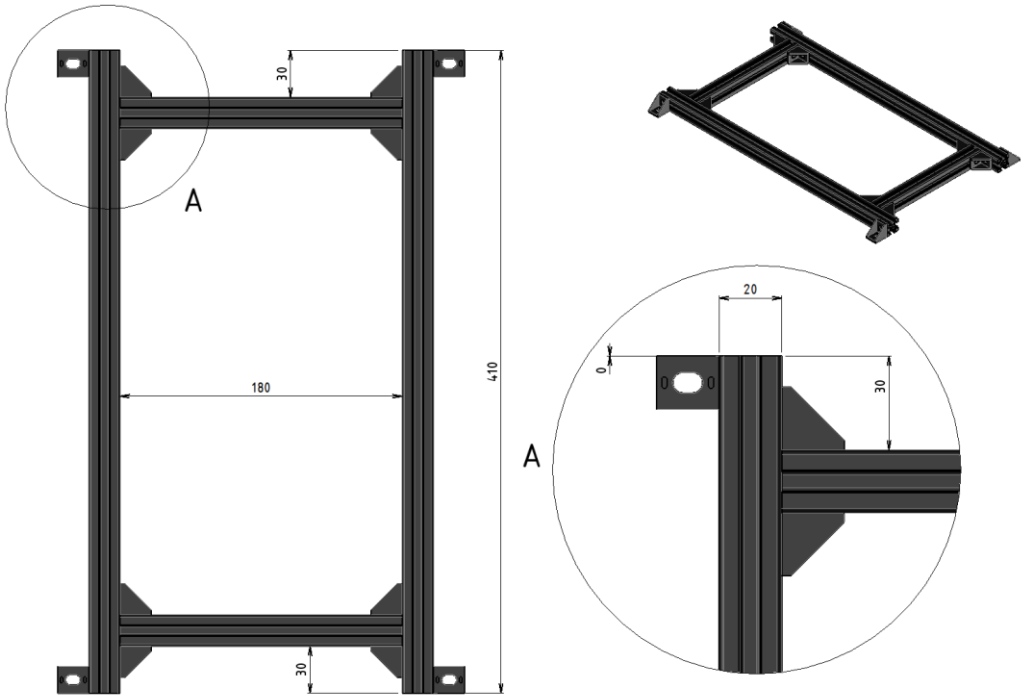
BED Assembly Manual for Voron Trident 250mm

Assembly manual for complete A and C axis bed with heated rotary PEI sheet

All 3D printed parts are designed to be printed from ABS filament . The optimal slicer settings for prints are:

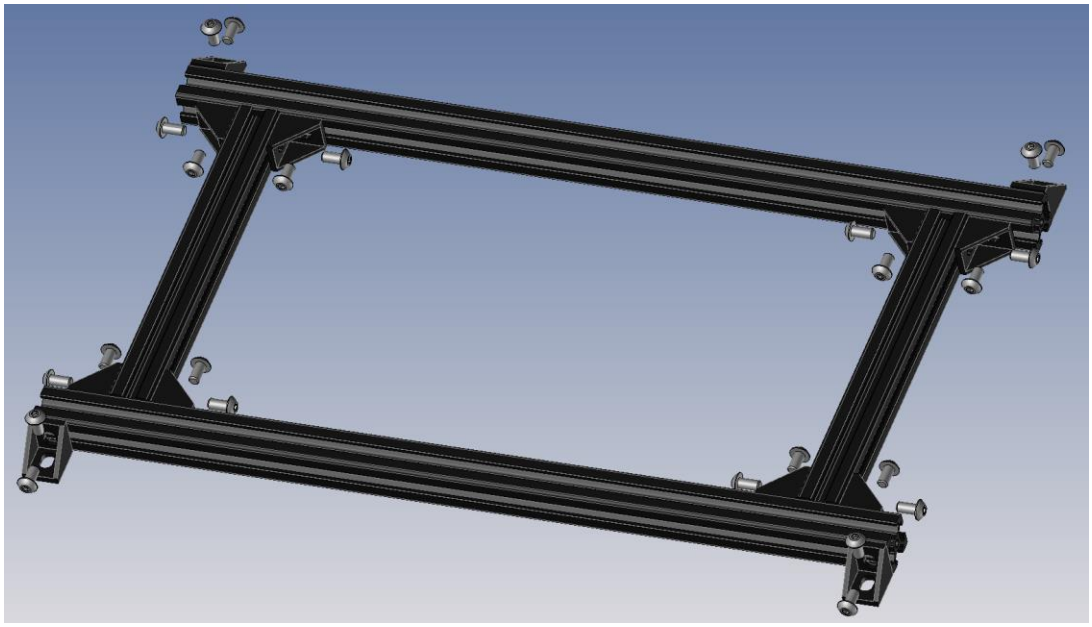
```
Layer height: 0.2mm
Extrusion width: 0.4mm, forced
Infill pecentage: 50%
Infill type:  gyroid, honeycomb, triangle, or cubic
Wall count: 5
Solid top/bottom layers: 5

NO WARPING!
```

First assembly Aluminium extrusions, they have to be cutted exact lenghts specially the 180mm long ones.



Material used in this step :

Aluminium profile	**2x 180mm please**	**cut it to the tolerance +/- 0.03mm long**
	2x 410mm	**cut it to the tolerance +/- 0.05mm long**

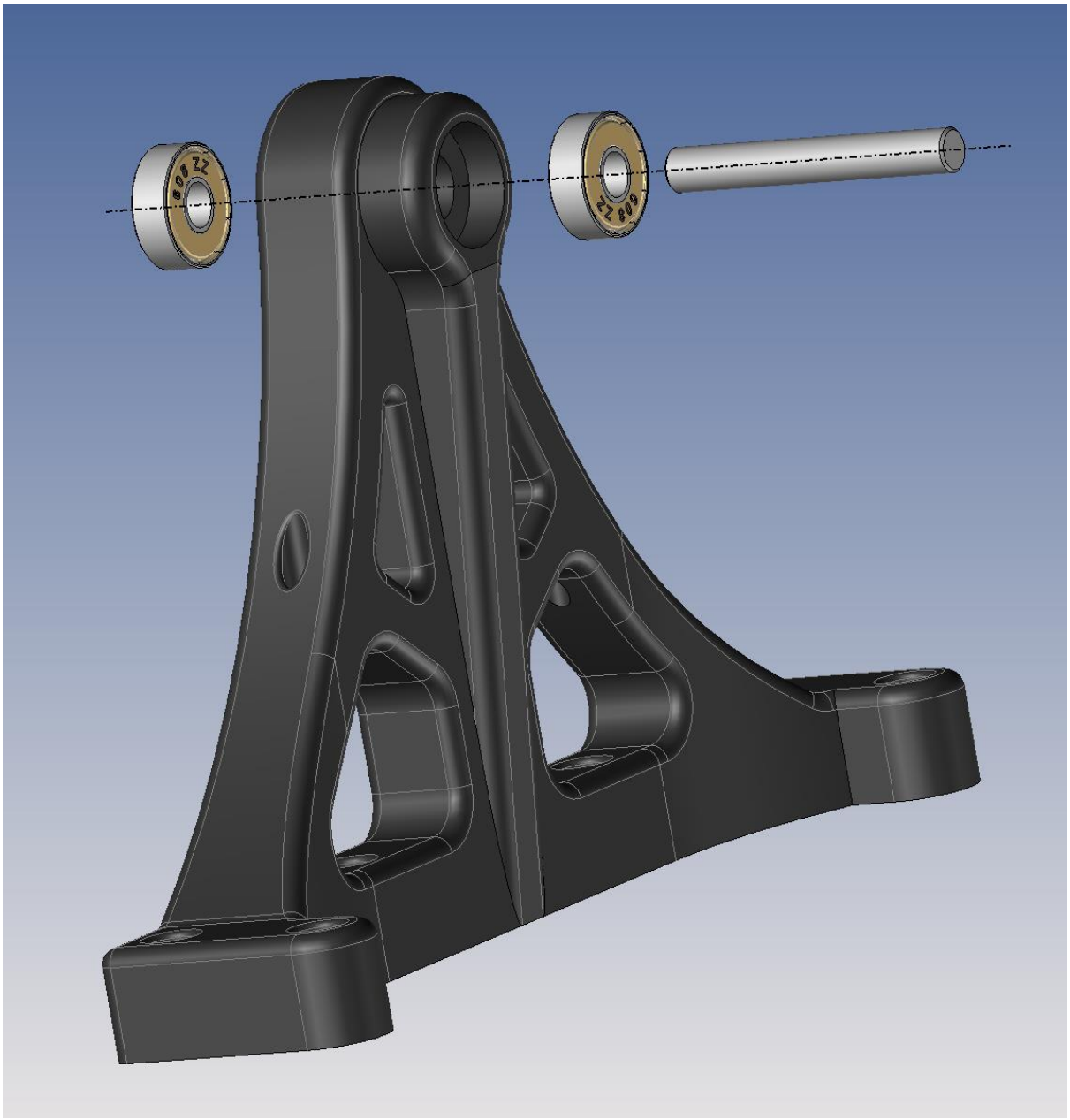


NOTE: **Please make sure that you can assemble this step on maximum flat surface**

The two 180 extrusions, must be maximally parallel and squared to the construction

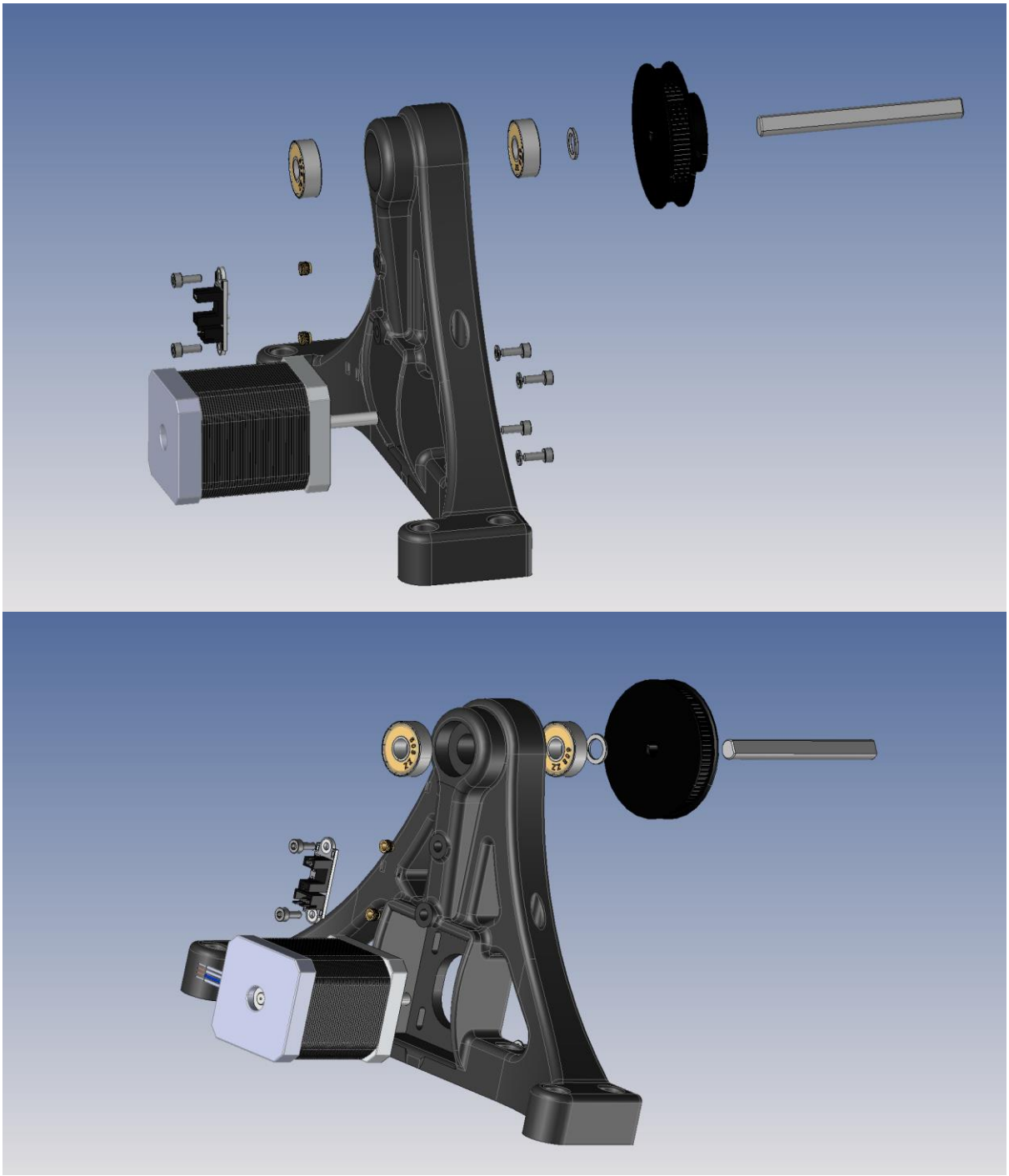
Best if you have acces to the measuring device to control the distance

24x M5 x 10mm + T-nuts



NOTE: **Please this ABS part in high quality without any warping issues**

The 8mm shaft should have, tight fit with the bearings 608zz



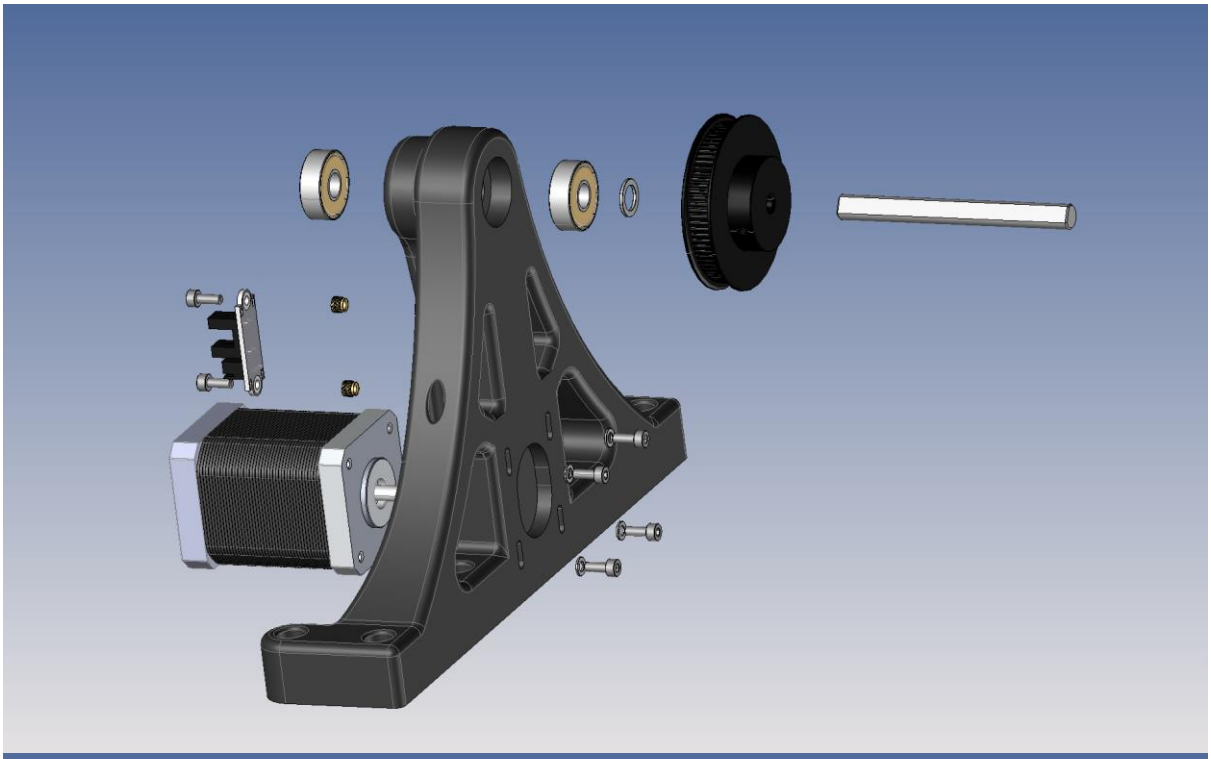
NOTE: **Please this ABS part in high quality without any warping issues**

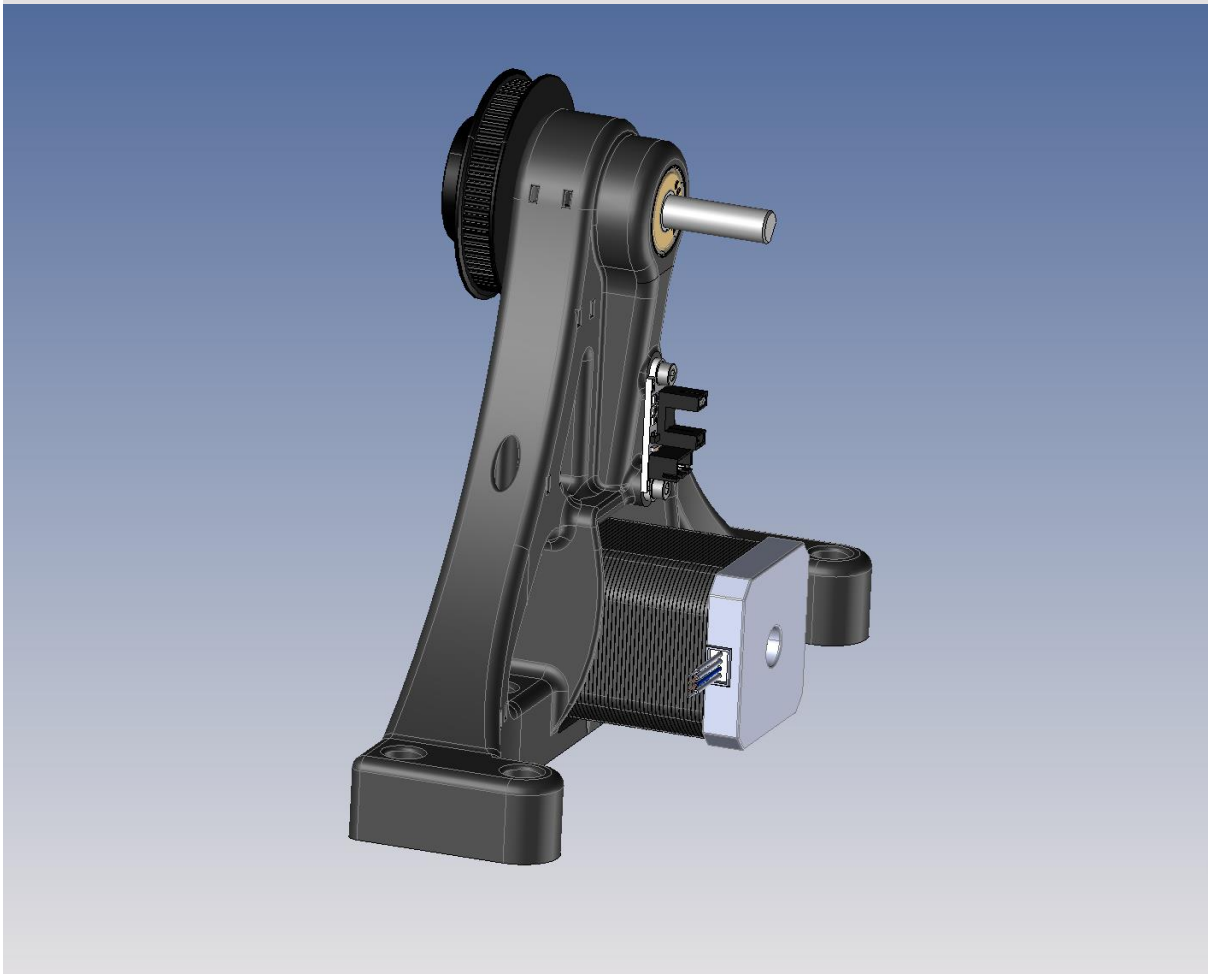
The 8mm shaft should have, tight fit with the bearings 608zz

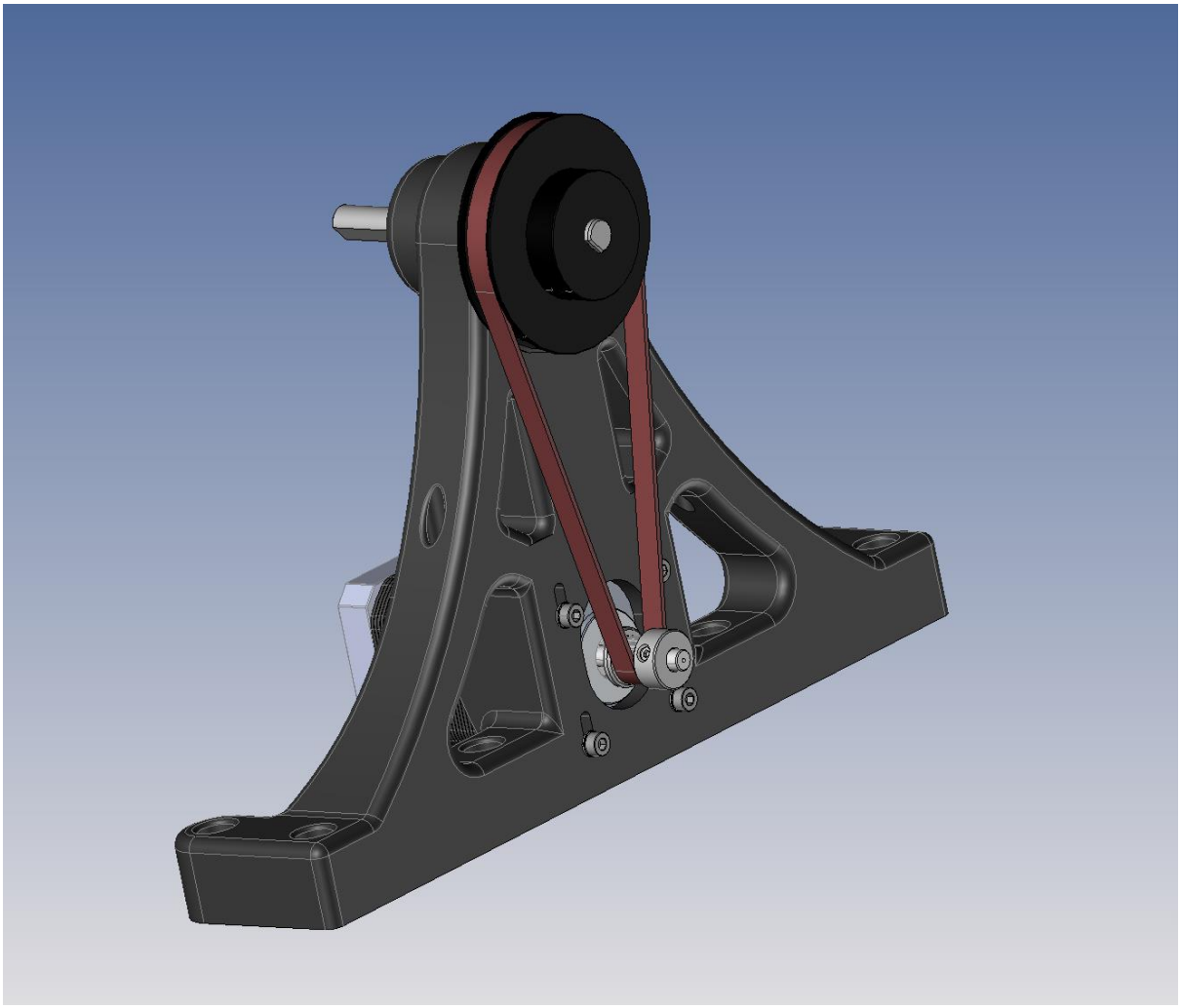
6x M3 x 8mm

4x M3 washers

1x M8 washer



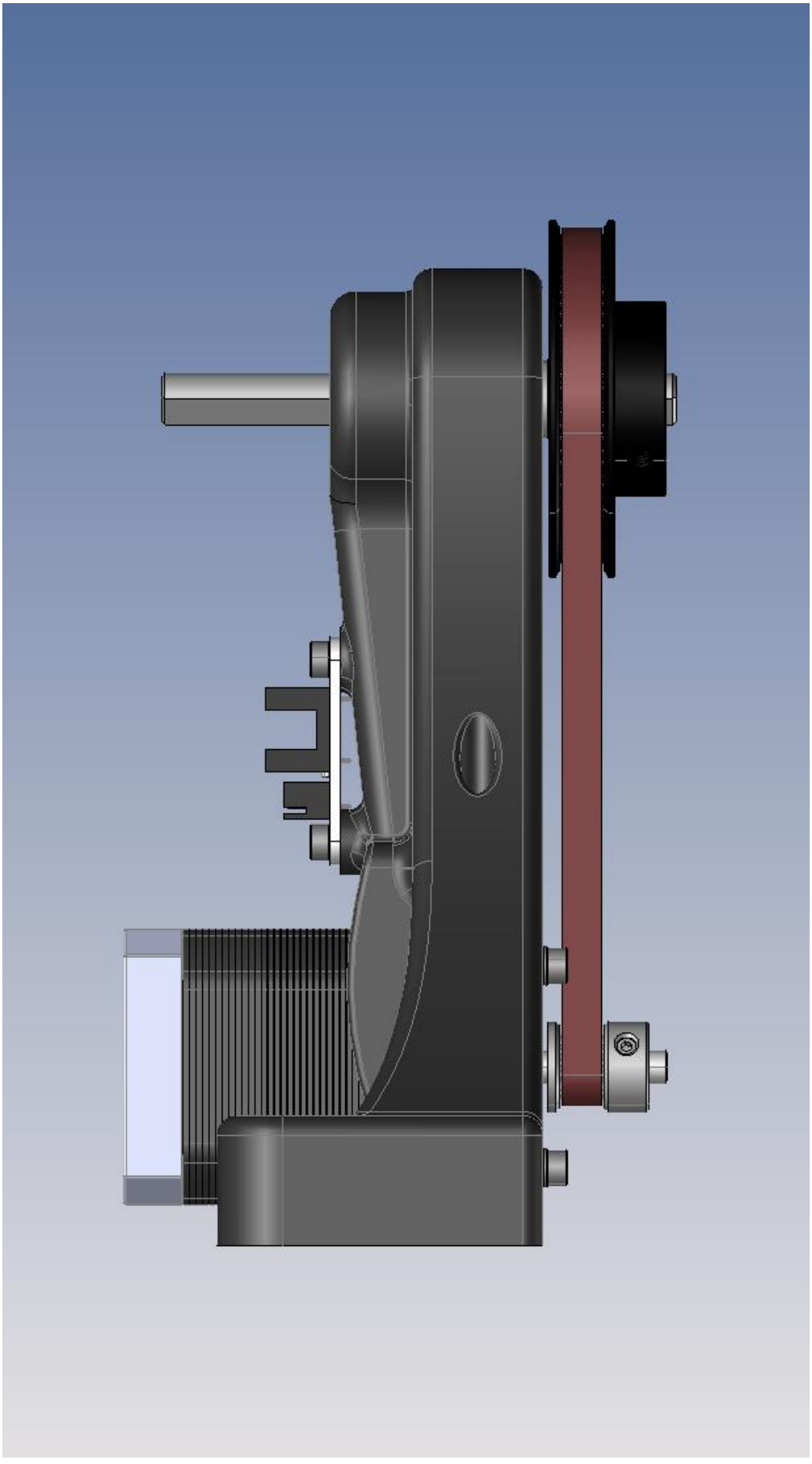


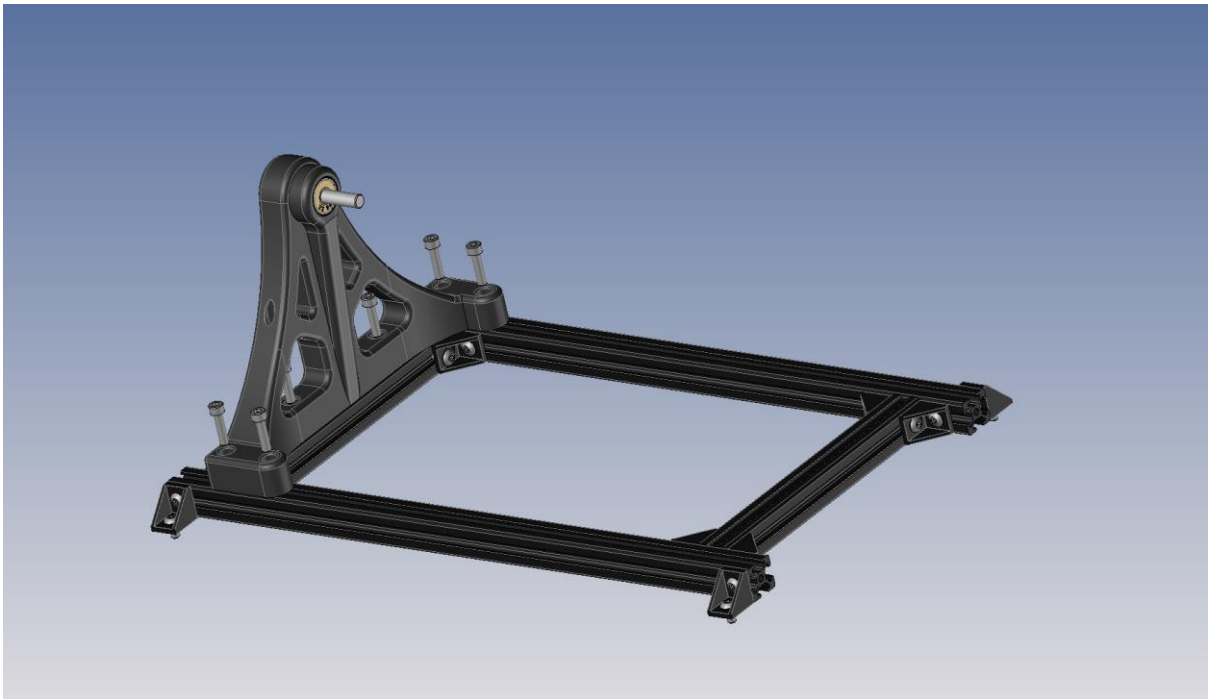


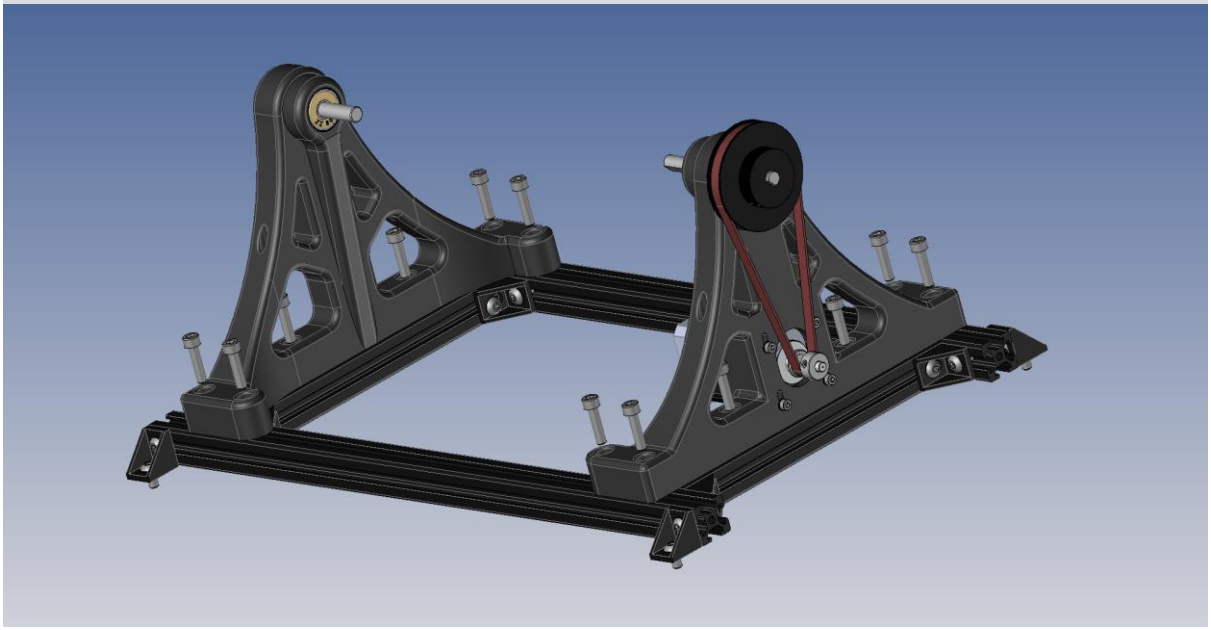
NOTE: **Please do not tension the closed loop GT-2 belt 302 yet, leave it free so the motor and pulley can rotate easily**

GT-2 Pulley 16T – 5mm bore

GT-2 Pulley 80T – 8mm bore

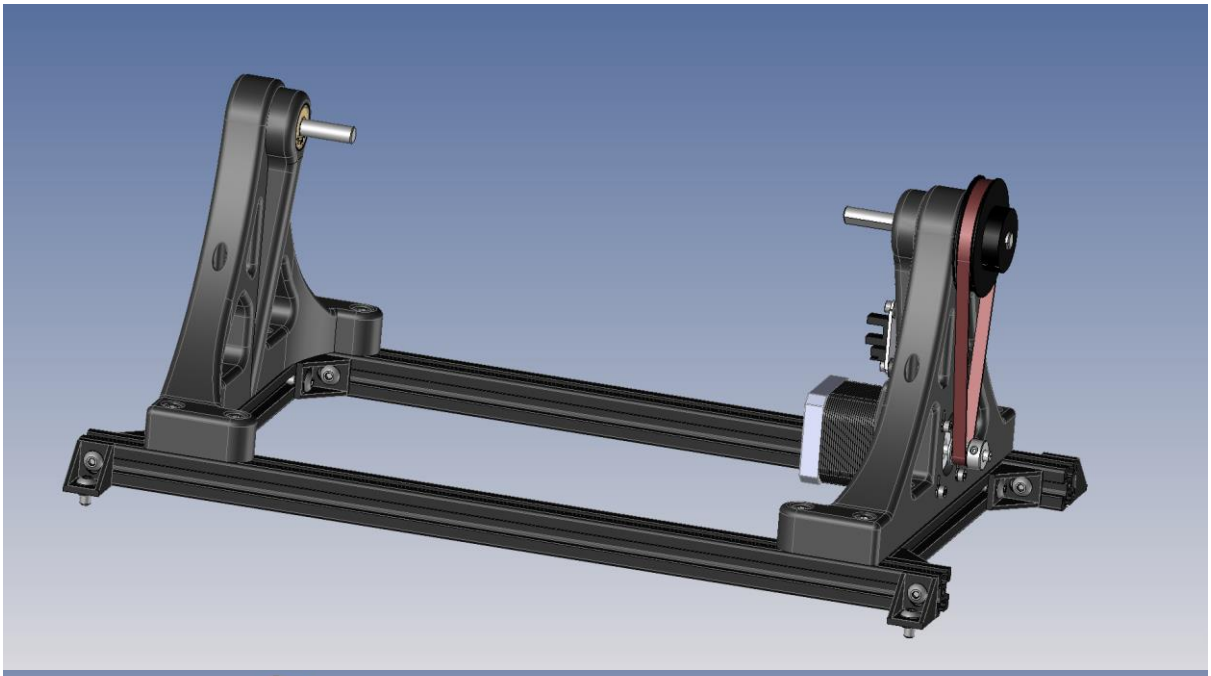


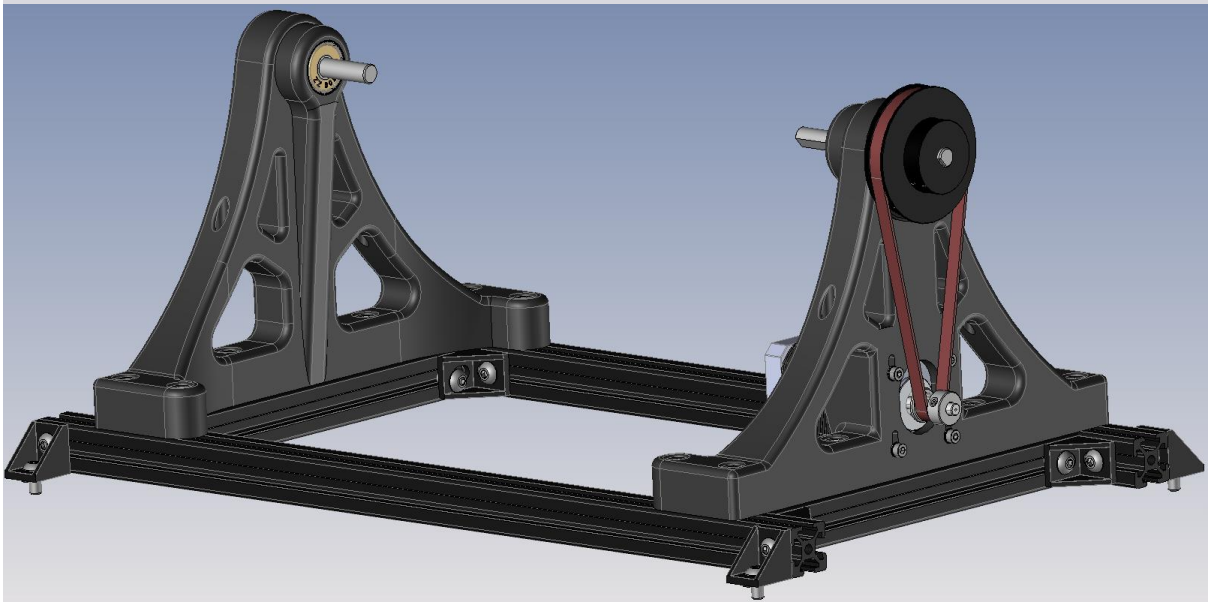


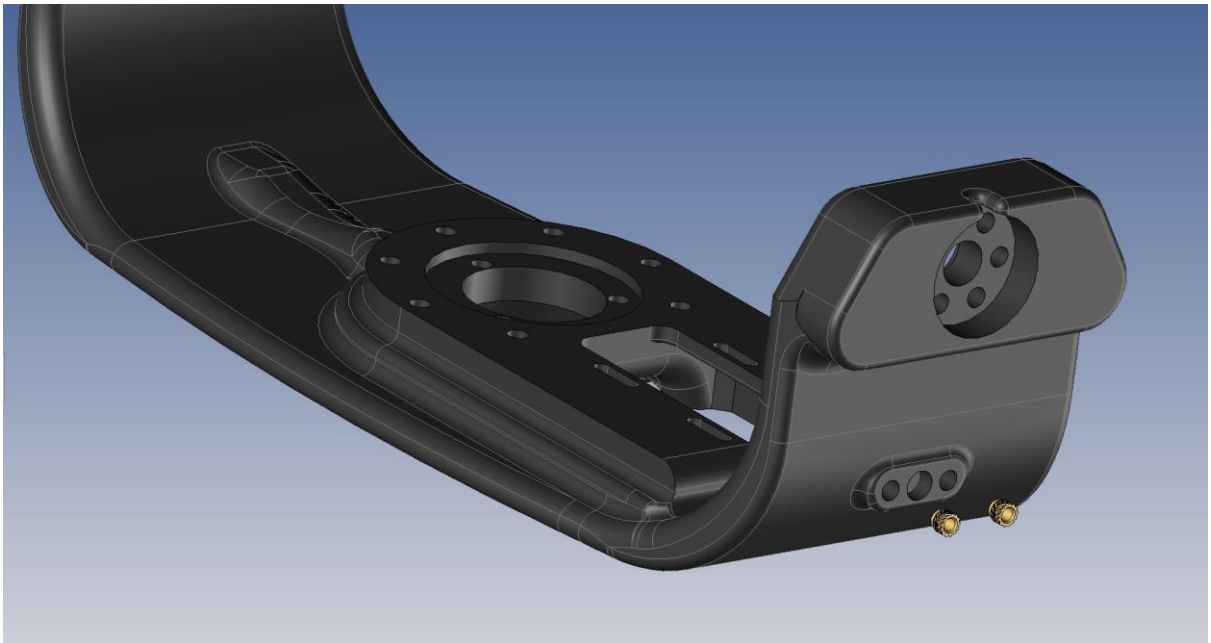


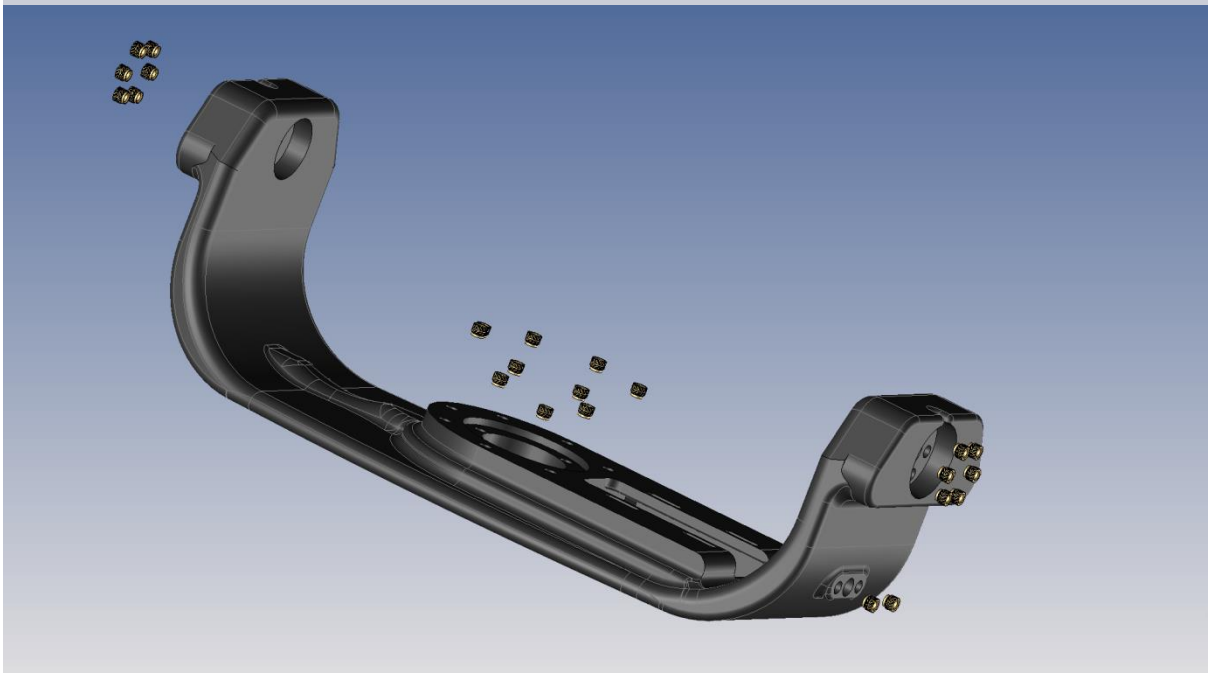
NOTE: **Please make sure the two ABS printed sides are squared with the base and also parallel**

12x M5x20mm + Tnuts

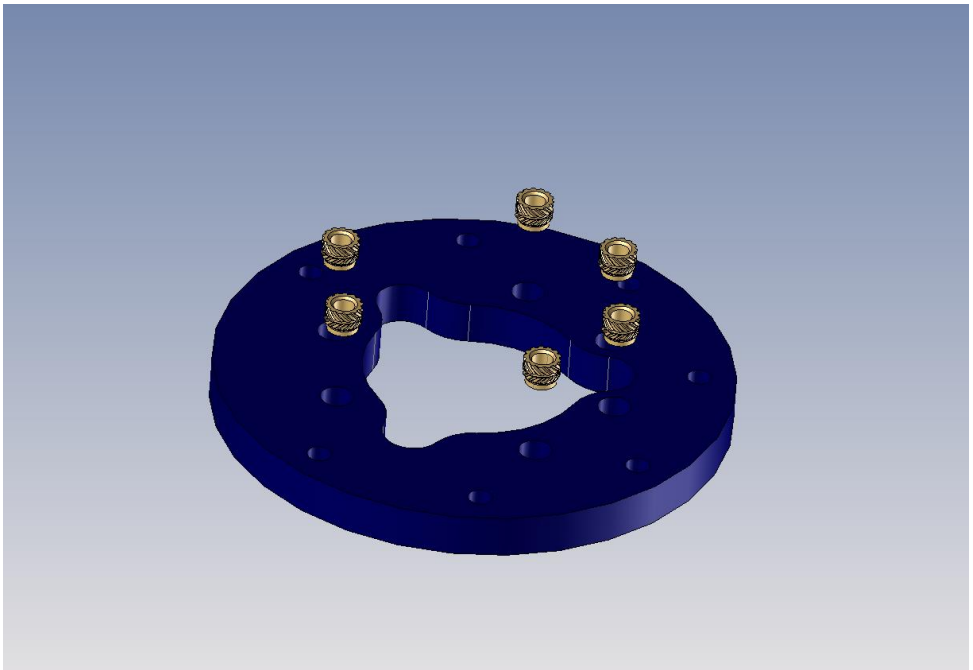


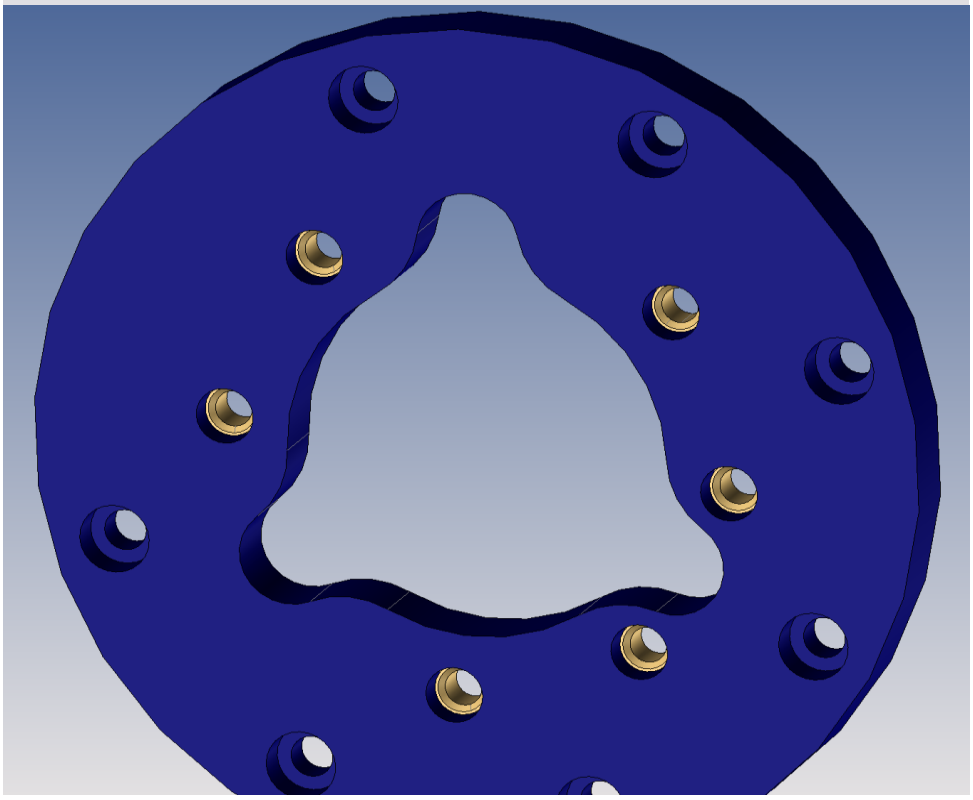




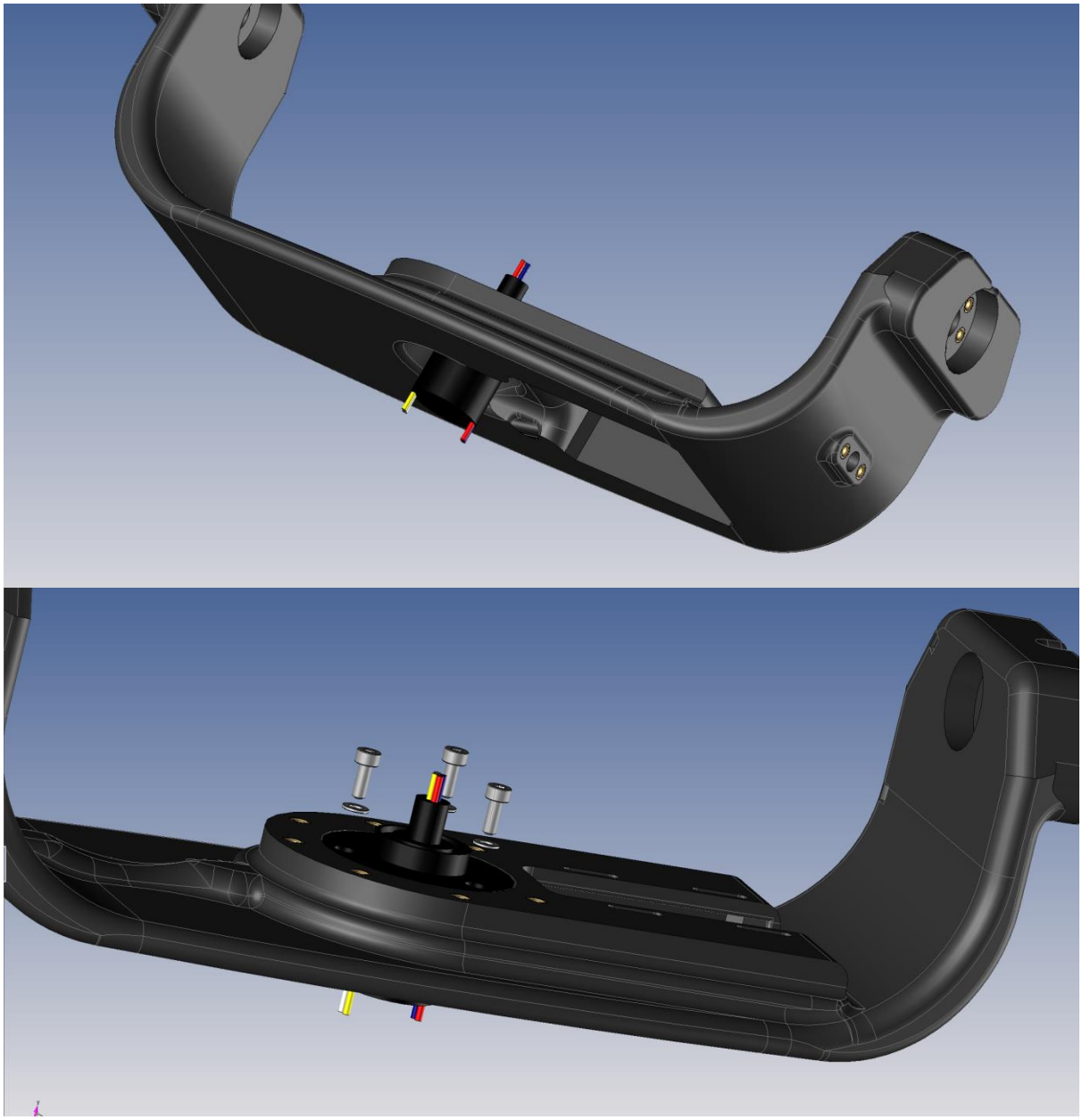


NOTE: **the heat inserts used, are M3 x 5mm**

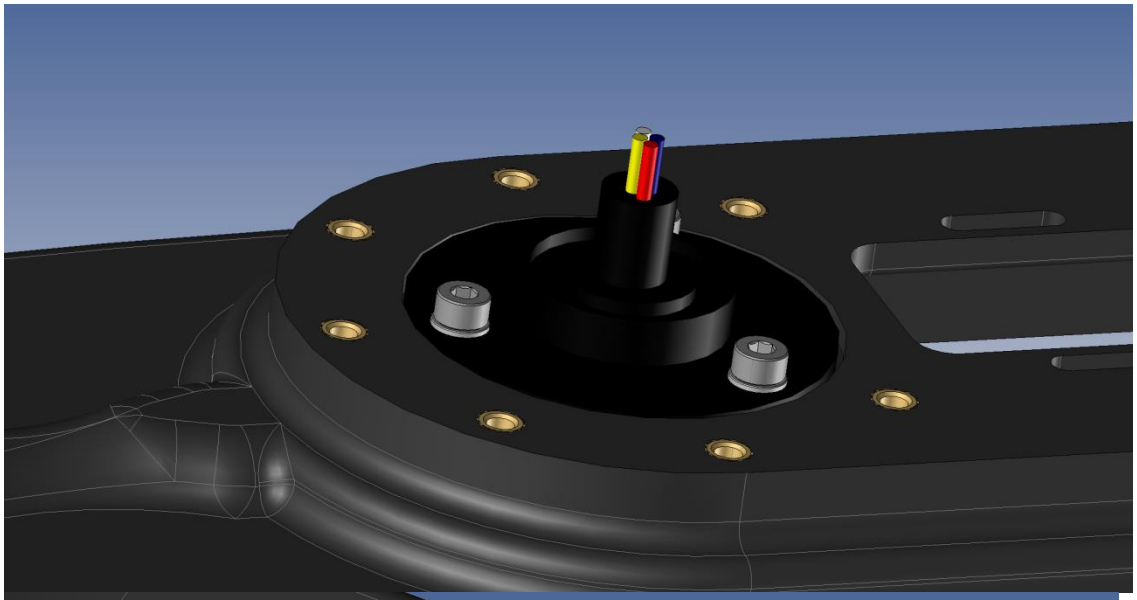


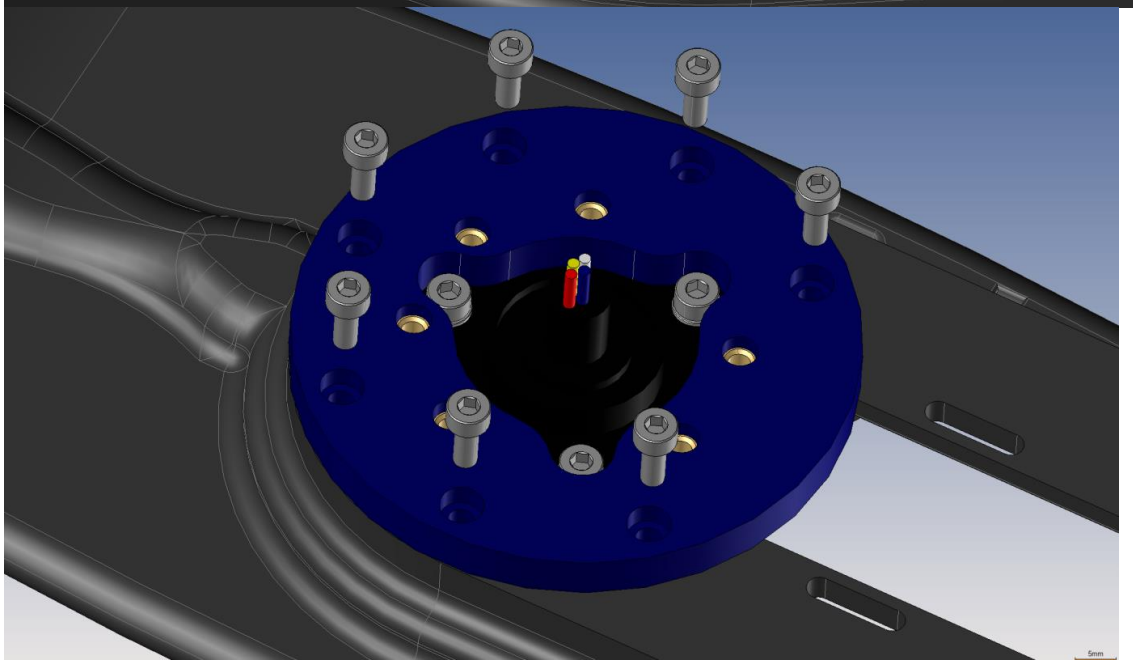


NOTE: **the heat inserts used, are M3 x 7mm**

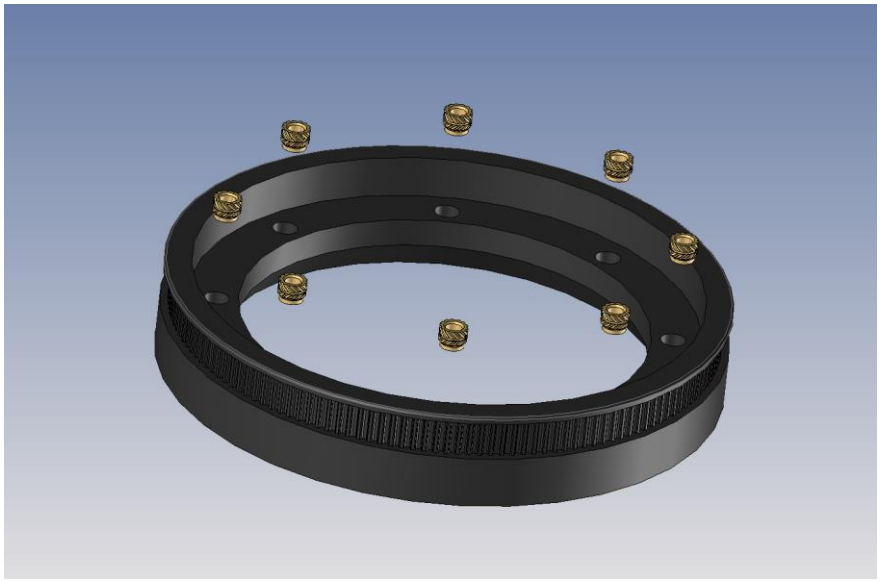


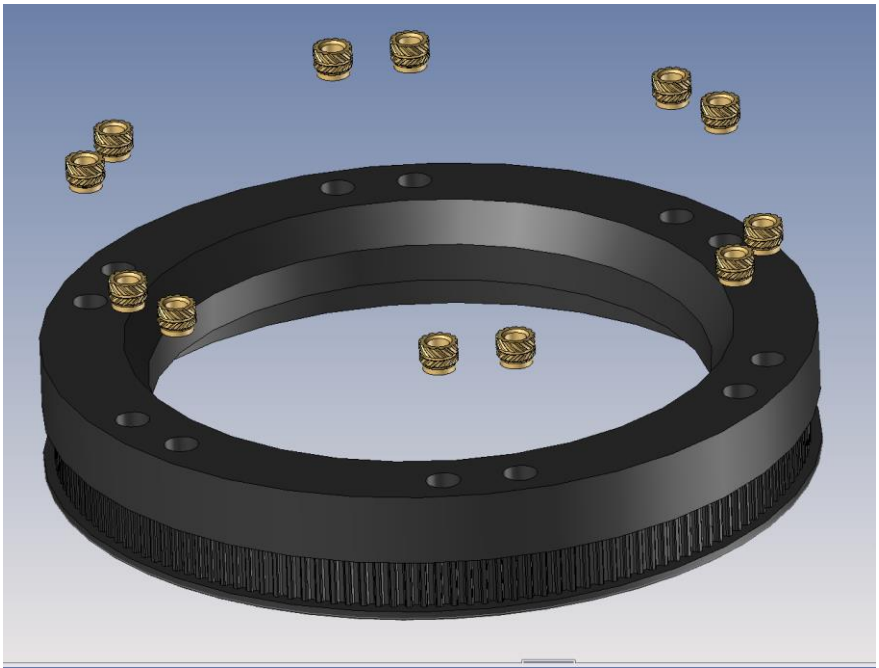
NOTE: **3x M3x8mm + M3 washers**



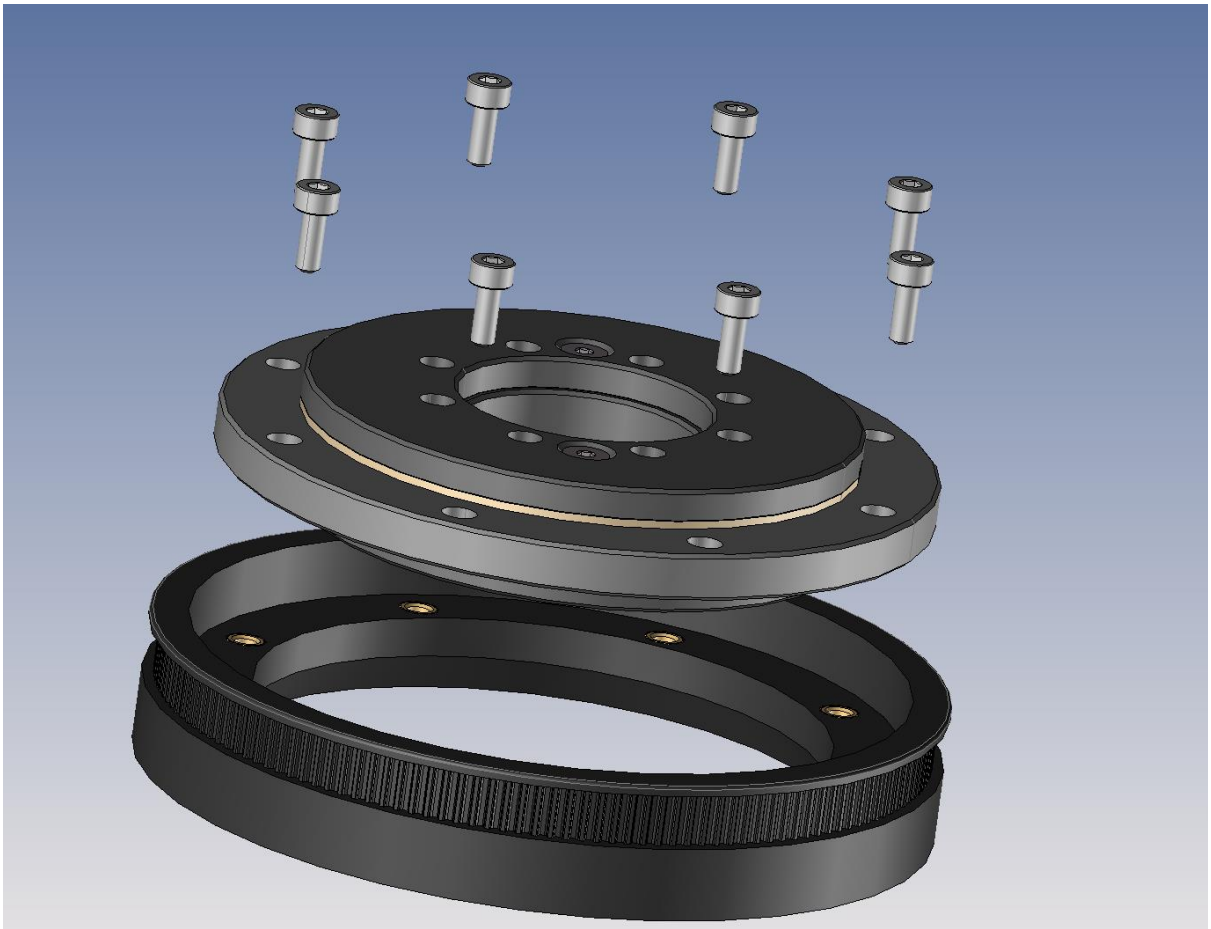


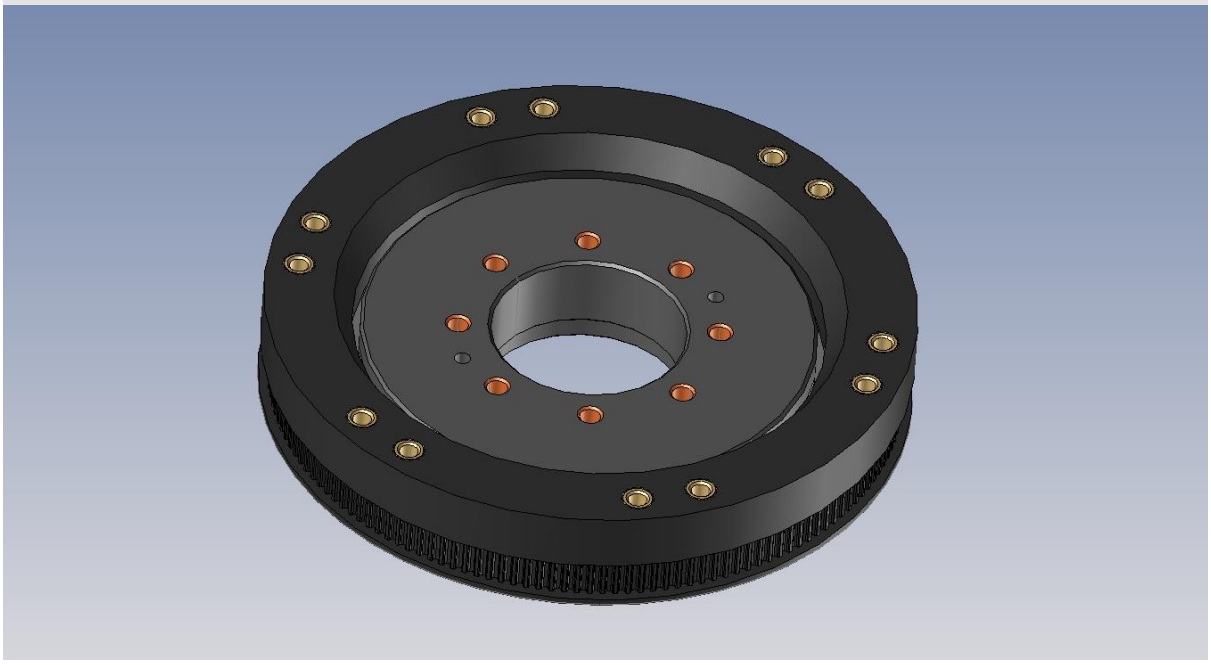
NOTE: **7x M3x8mm**



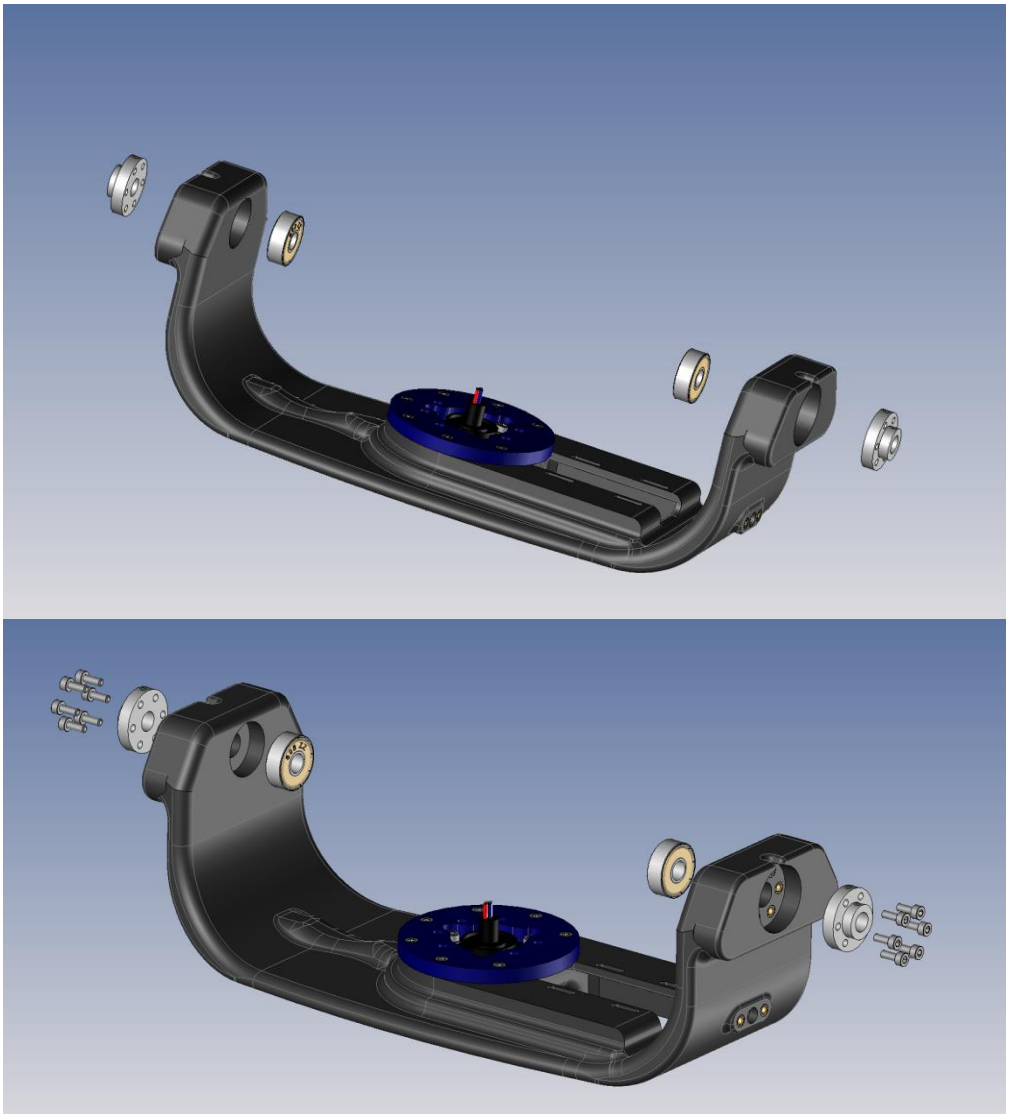


NOTE: **the heat inserts used, are M3 x 5mm**

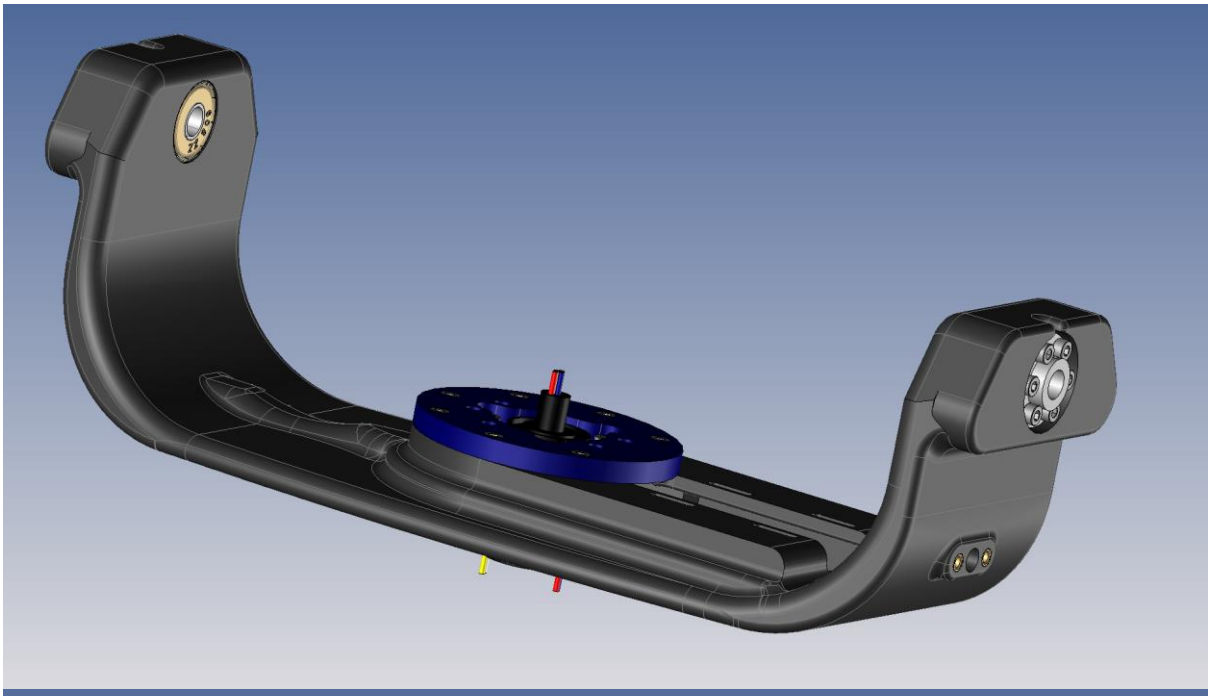


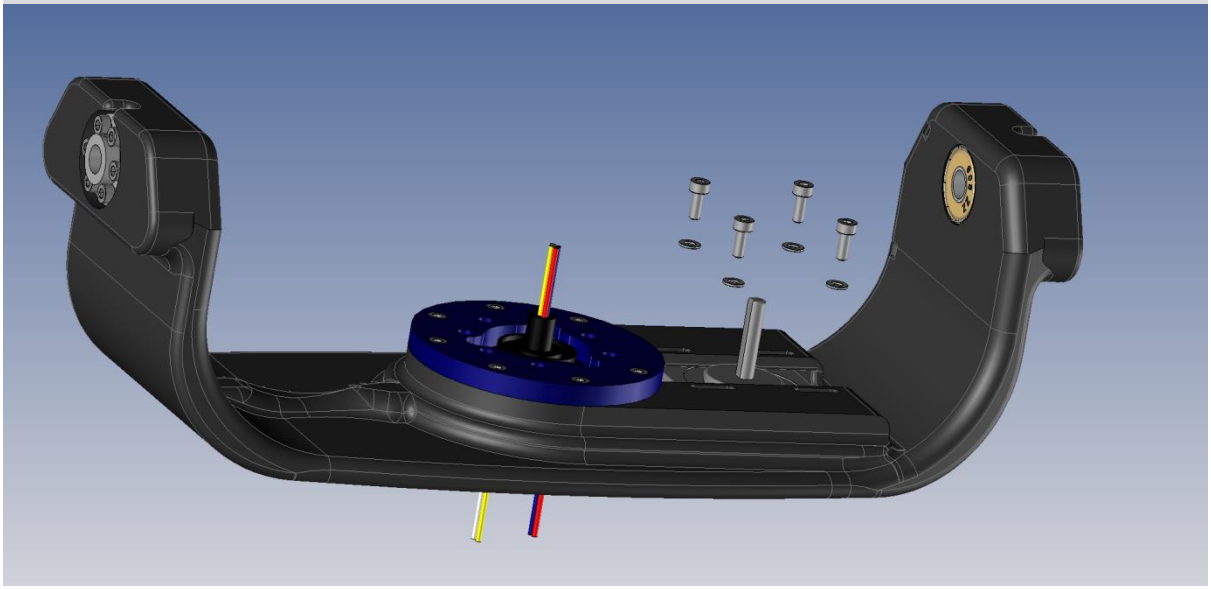


NOTE: **8x M3x10mm**

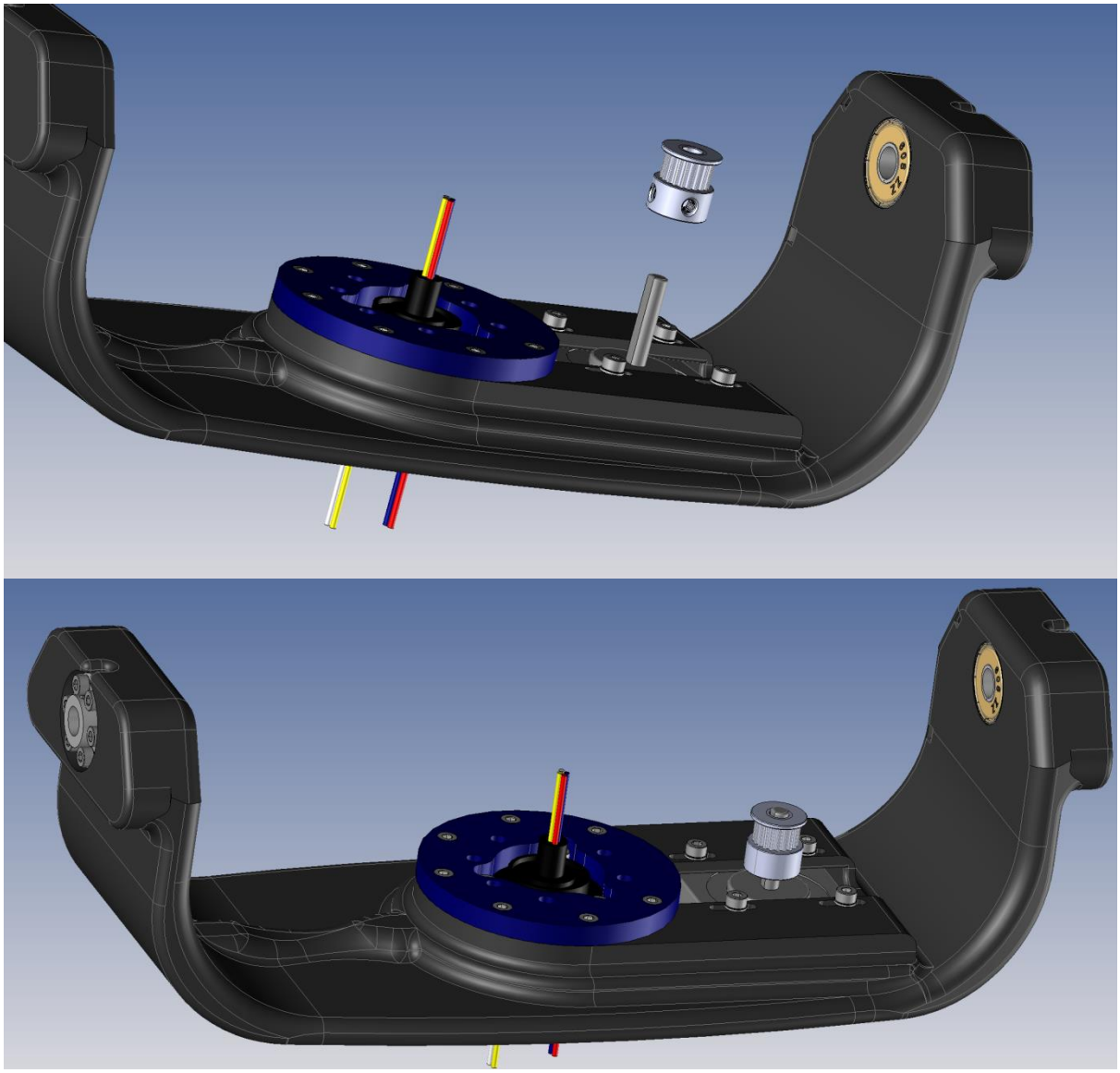


NOTE: **the pololu hub M3 threated holes, needs to be drilled out with 3.15 or 3.2 mm drill**

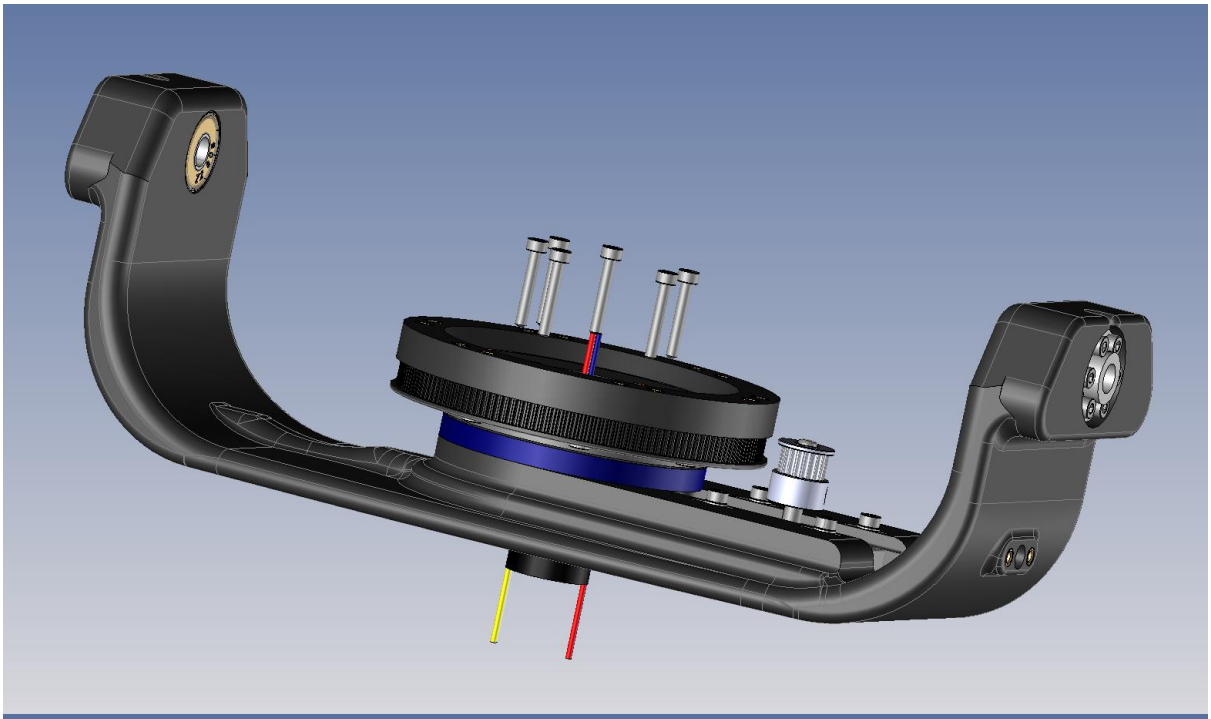


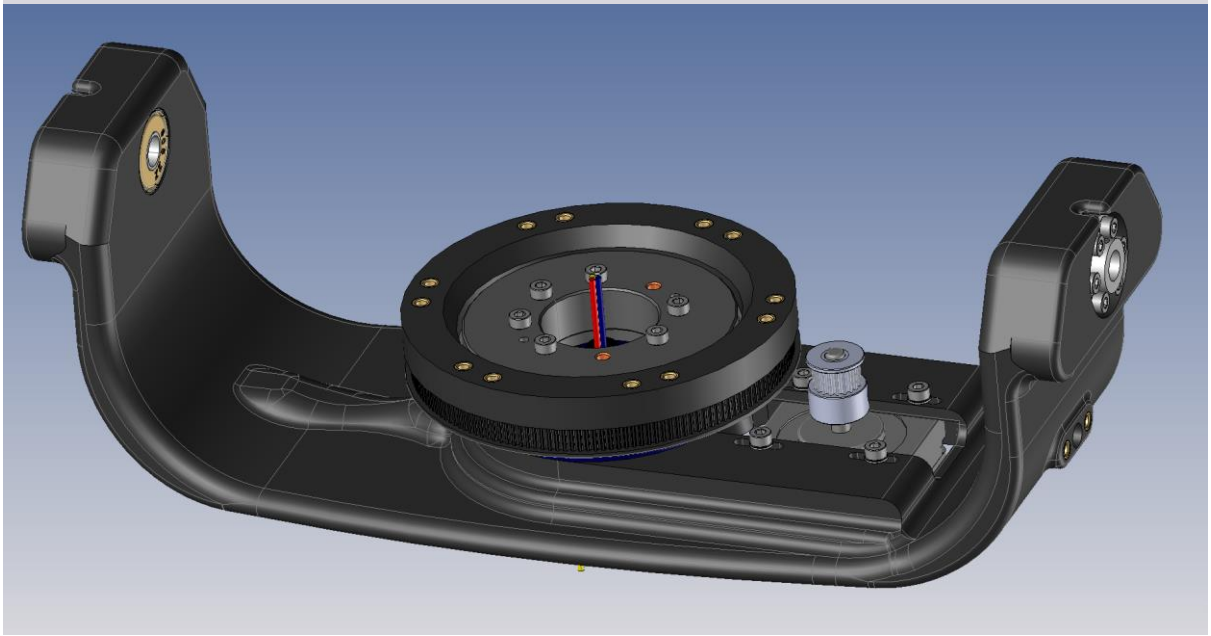


NOTE: **4x M3x8mm + M3 washers**

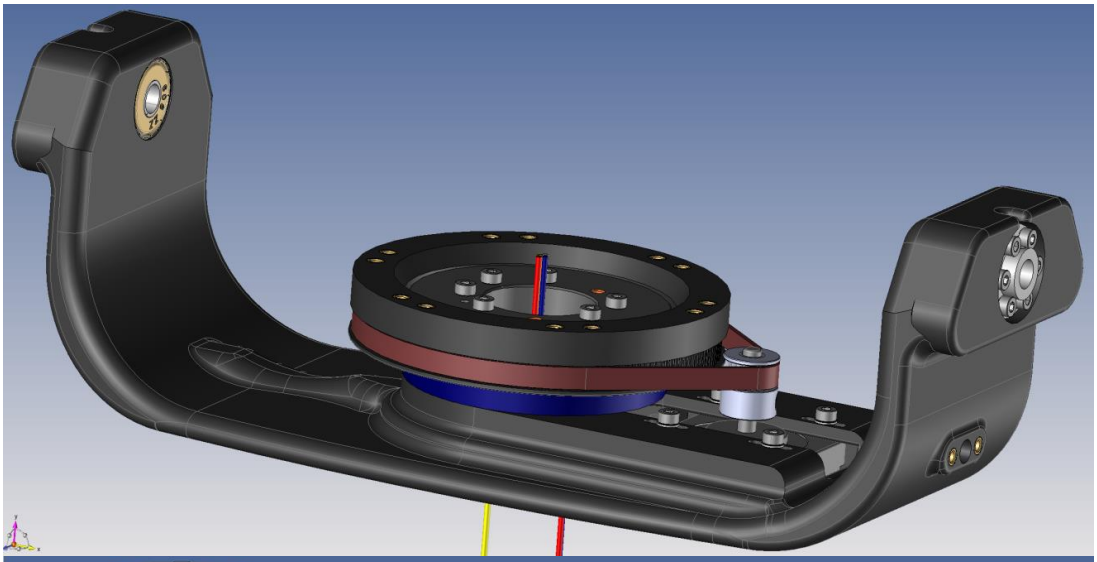


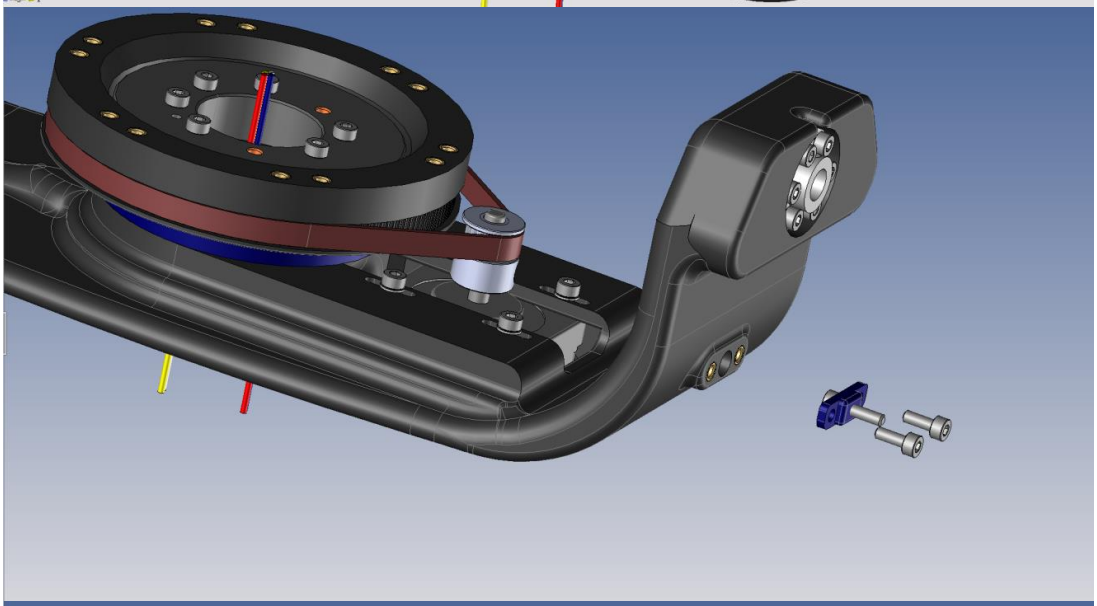
NOTE: **GT-2 Pulley 20T**

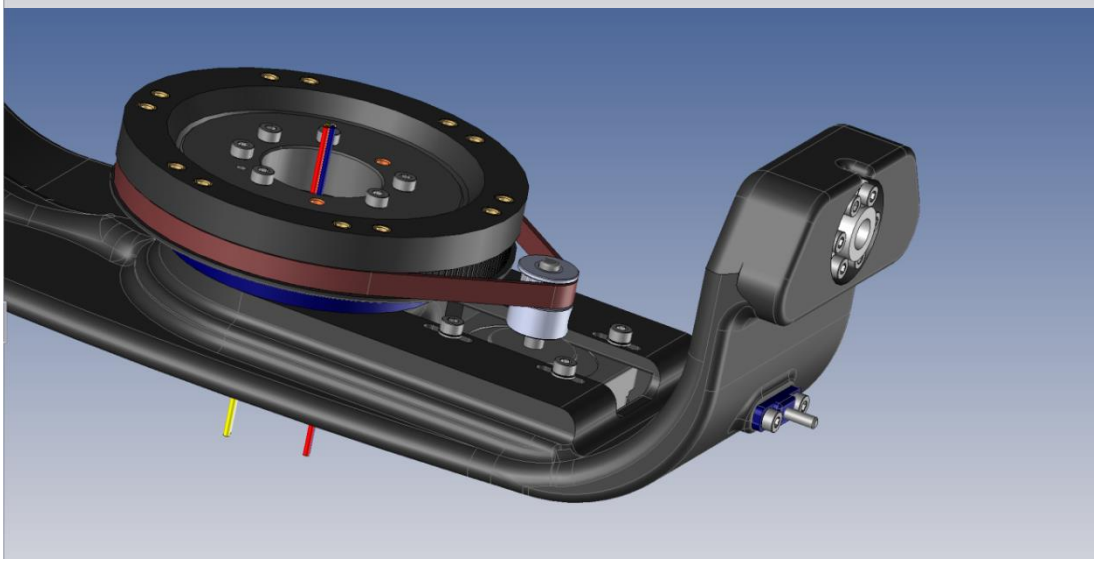




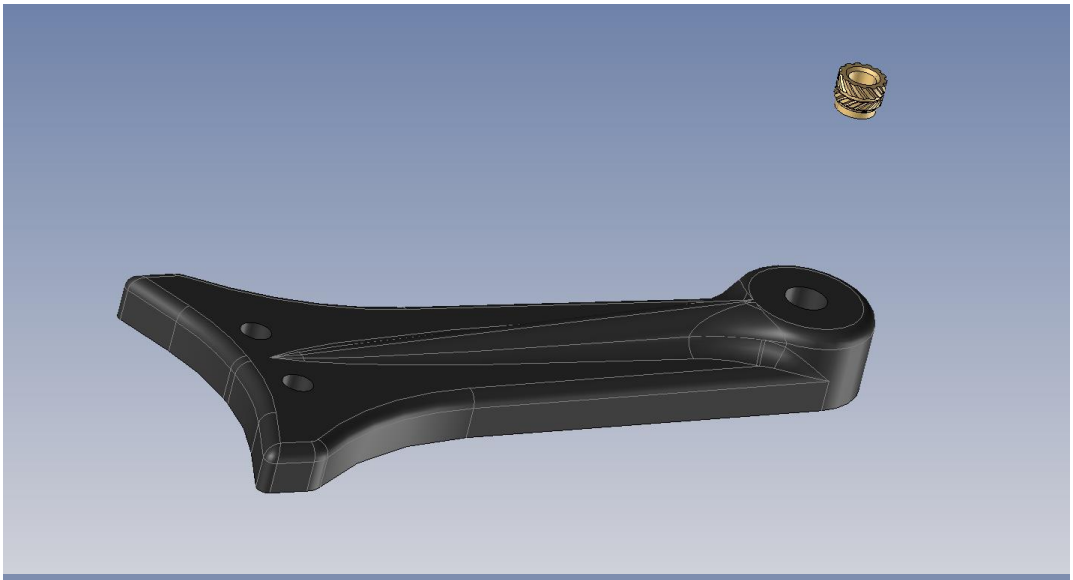
NOTE: **6x M3x20mm**

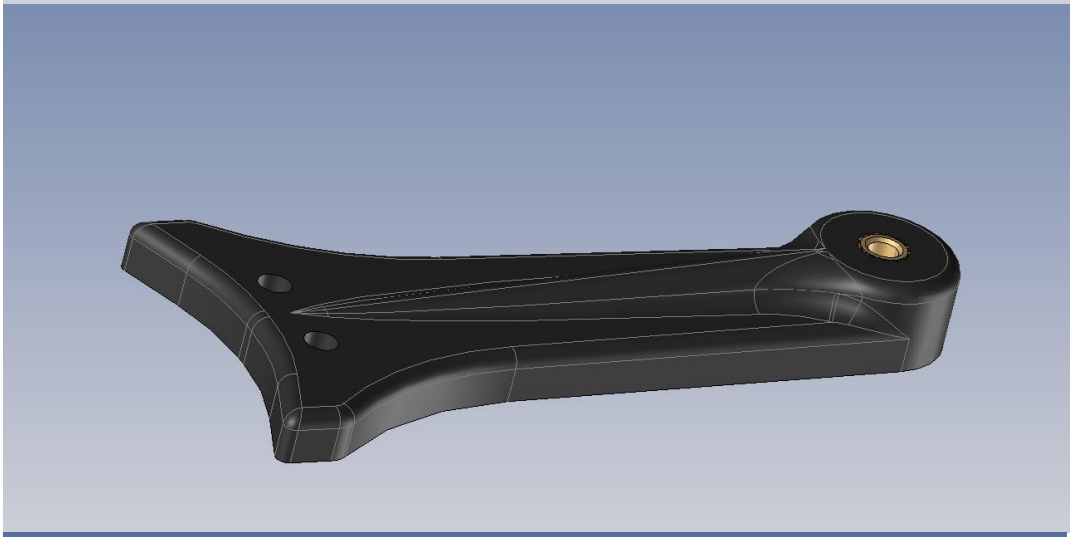


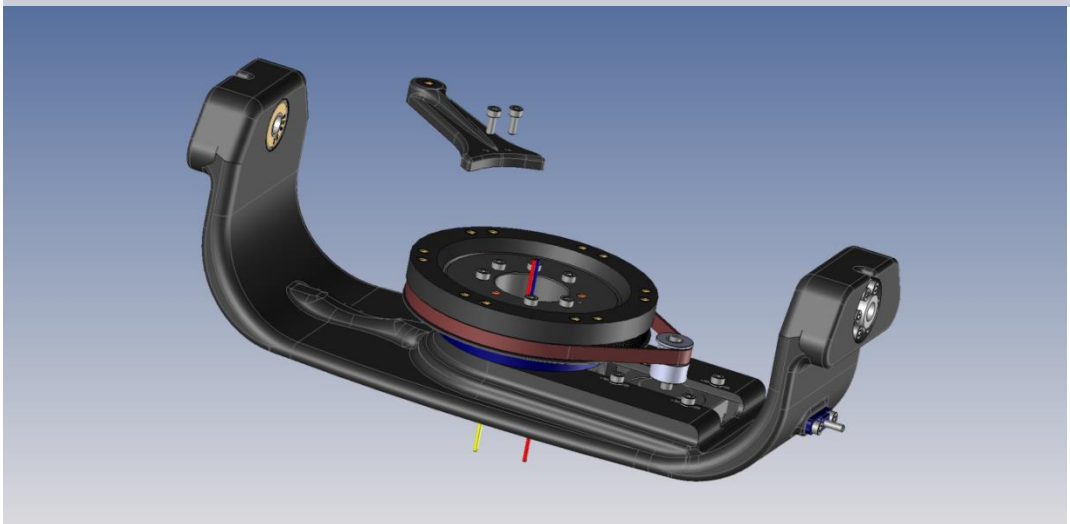




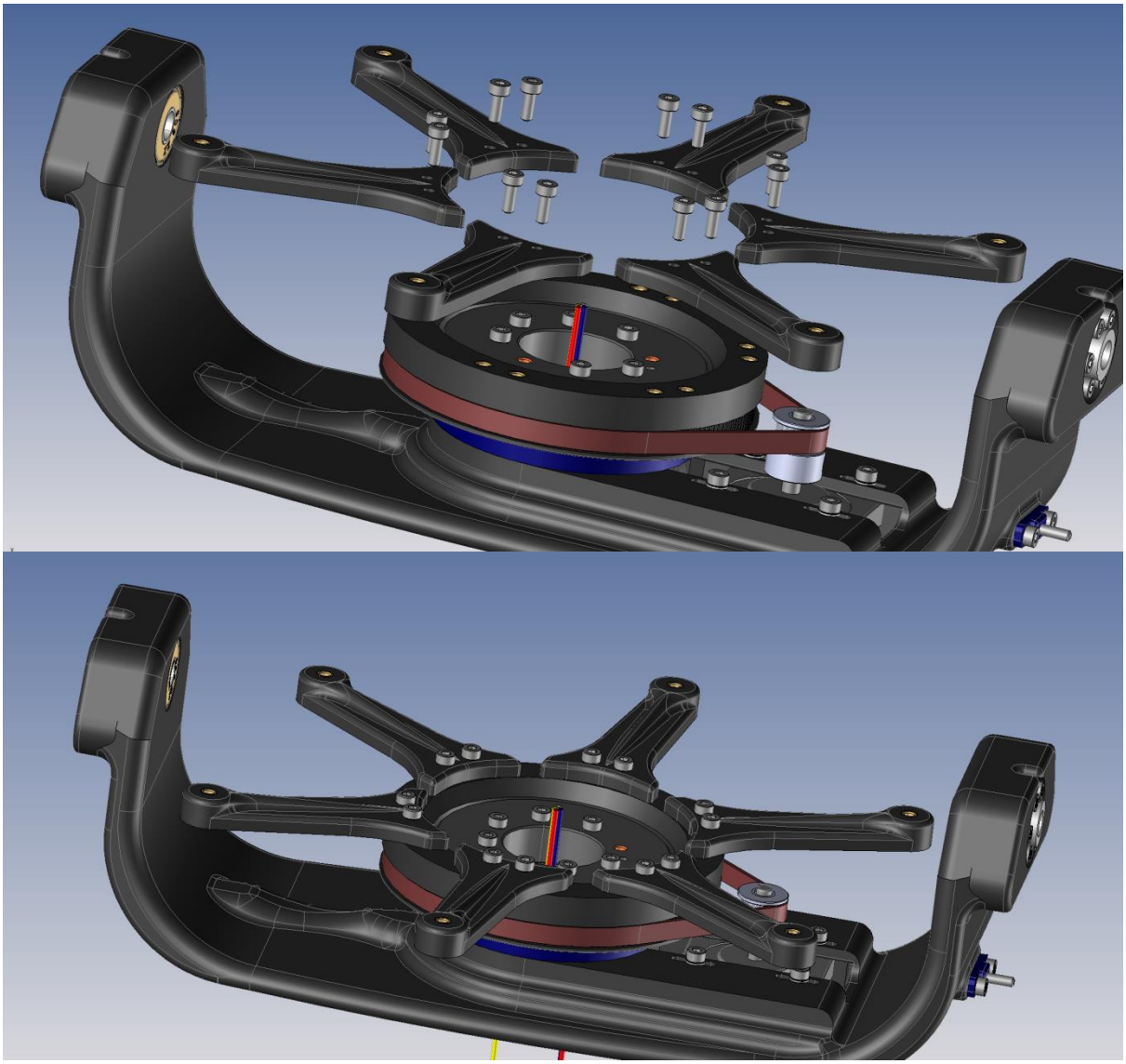
NOTE: **2x M3x8mm + 1x M3x12mm**



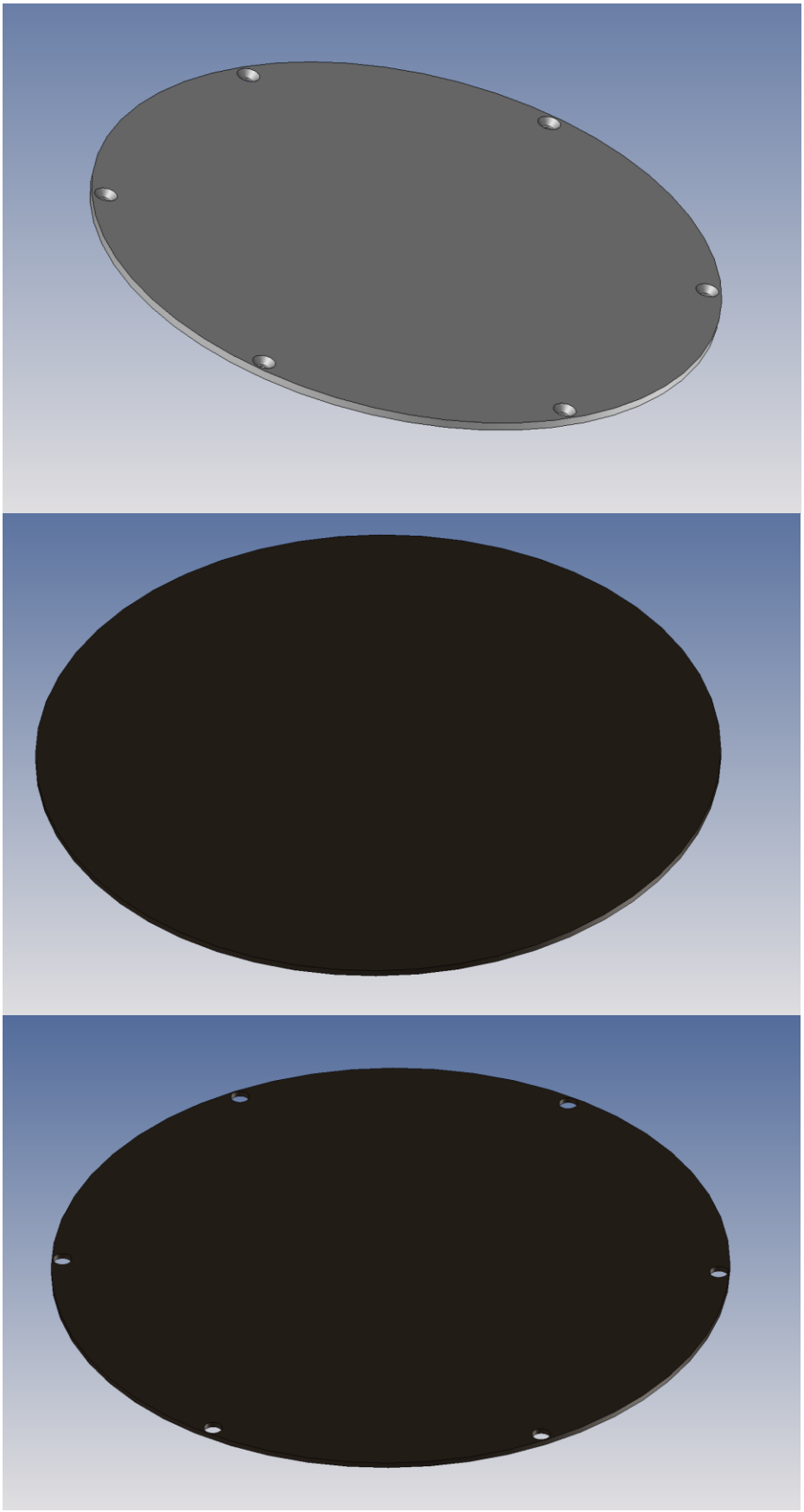




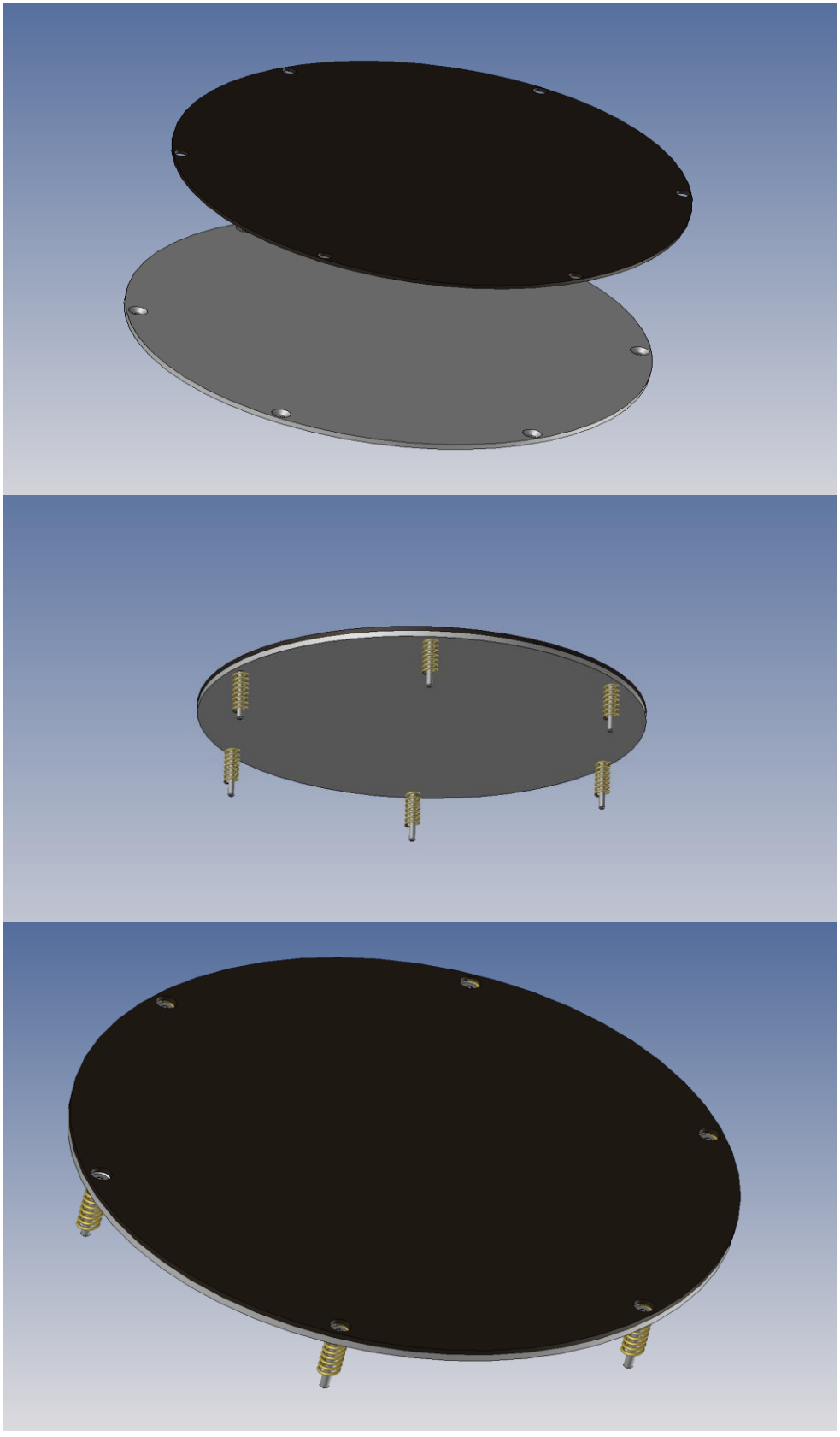
NOTE: **the heat inserts used, are M3 x 5mm**



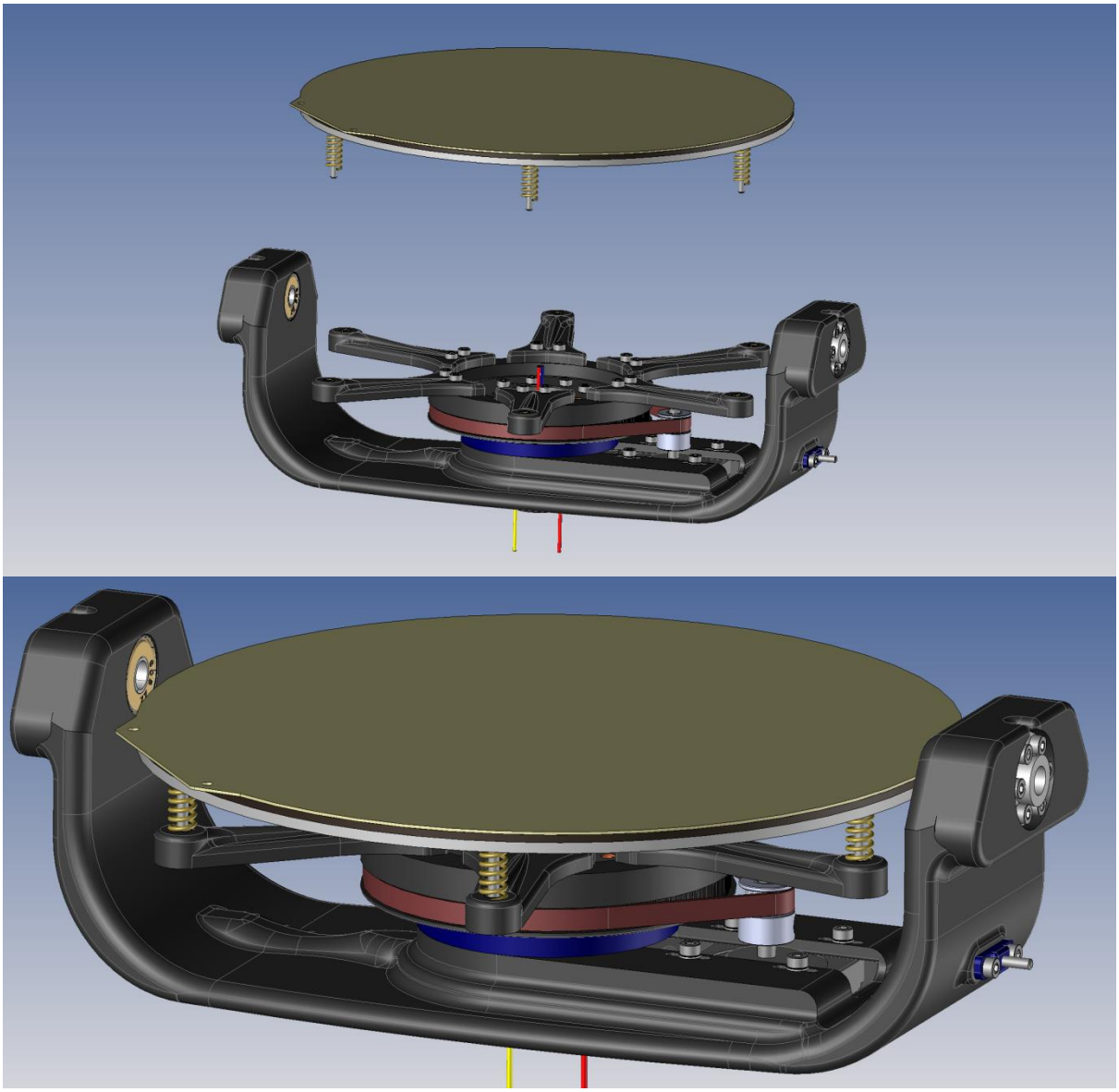
NOTE: **12x M3x8mm**



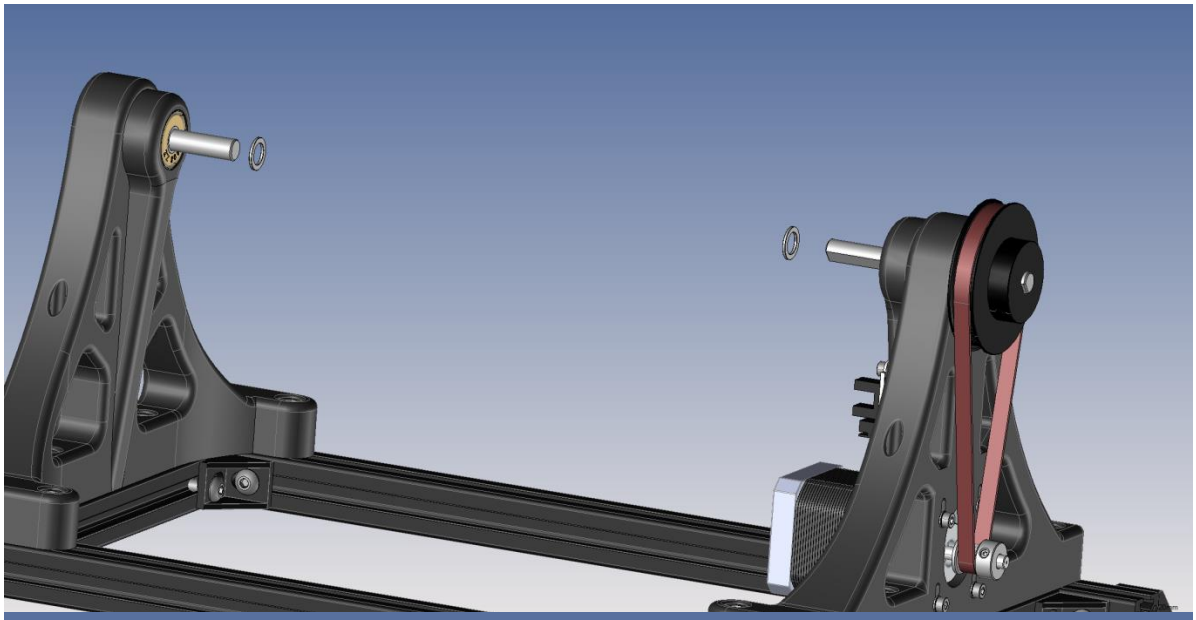
NOTE: **Please drill six holes into the magnetic sheet to match the aluminum hotbed**

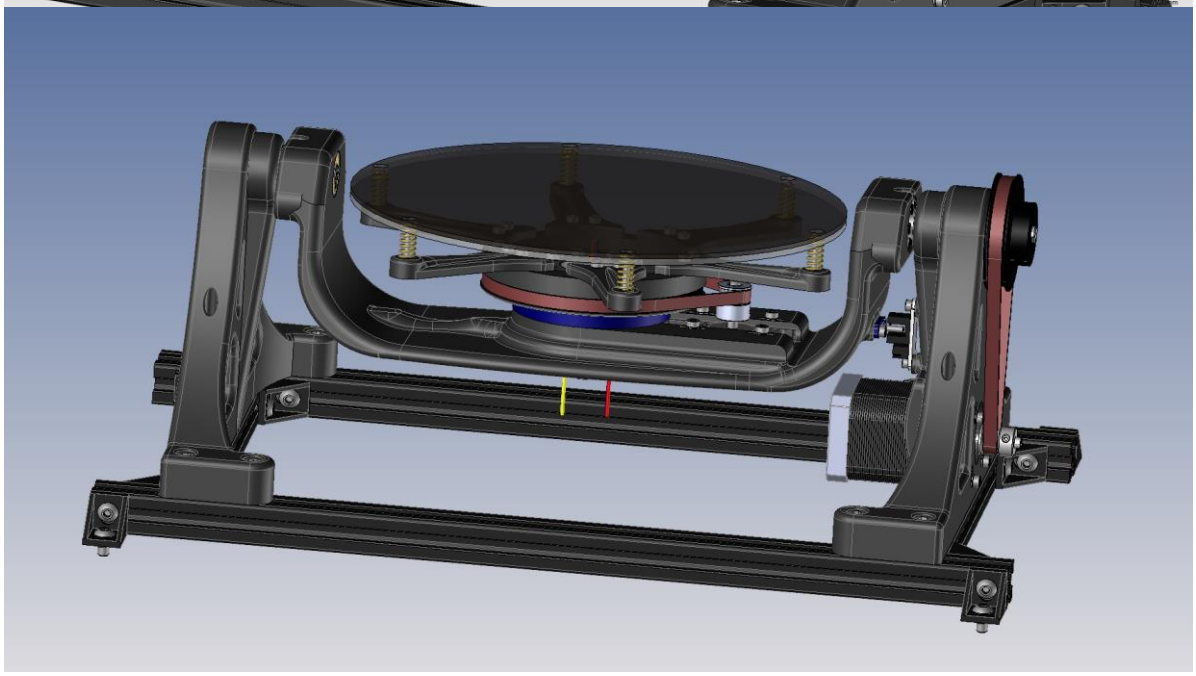


NOTE: **6x FHCS M3x22mm plus bed springs**



NOTE: **the adjustment with the bed springs for calibration of rotary bed will be done with Z axis on the printer**





NOTE: **now the tricky bit..**

the lenght of swivel ABS parts is 280mm place the bed in between sides

and then push in the 8 mm shafts tighten up the right side and then the left side in mind,

the lenght in between M8 washers should be 280mm

Rotary bed should be swiveling freely on A axis and the sides shall not be bending when

the rotary is moving on A axis

test the swivel with your hands