

BED Assembly Manual for Voron Trident 250mm

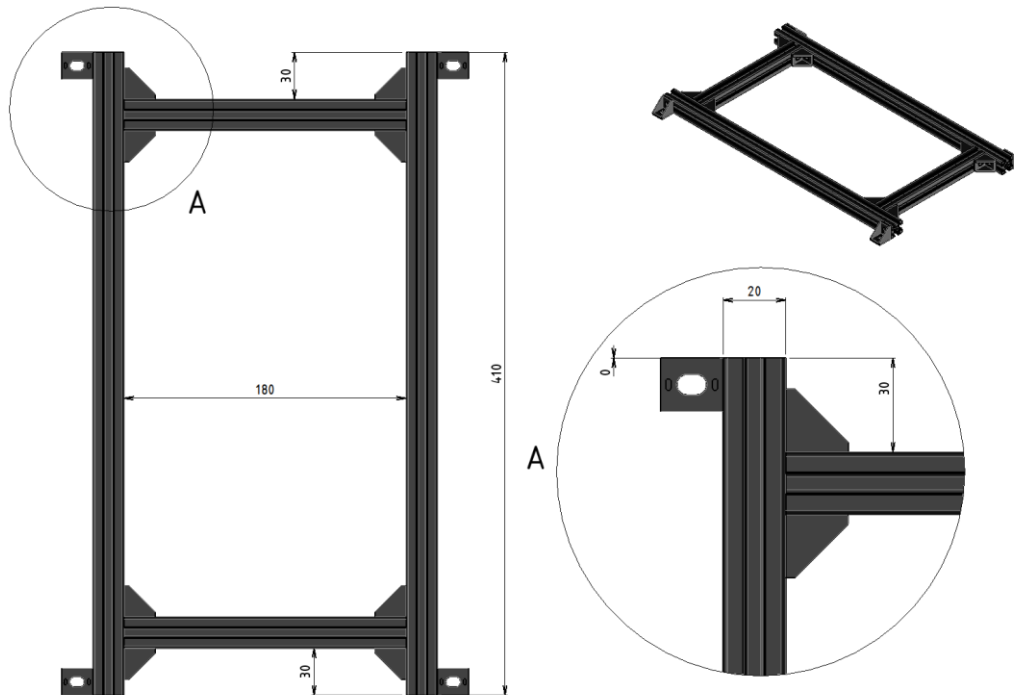
Assembly manual for complete A and C axis bed with heated rotary PEI sheet

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 percentage: 50%
Infill type: gyroid, honeycomb, triangle, or cubic
Wall count: 5
Solid top/bottom layers: 5

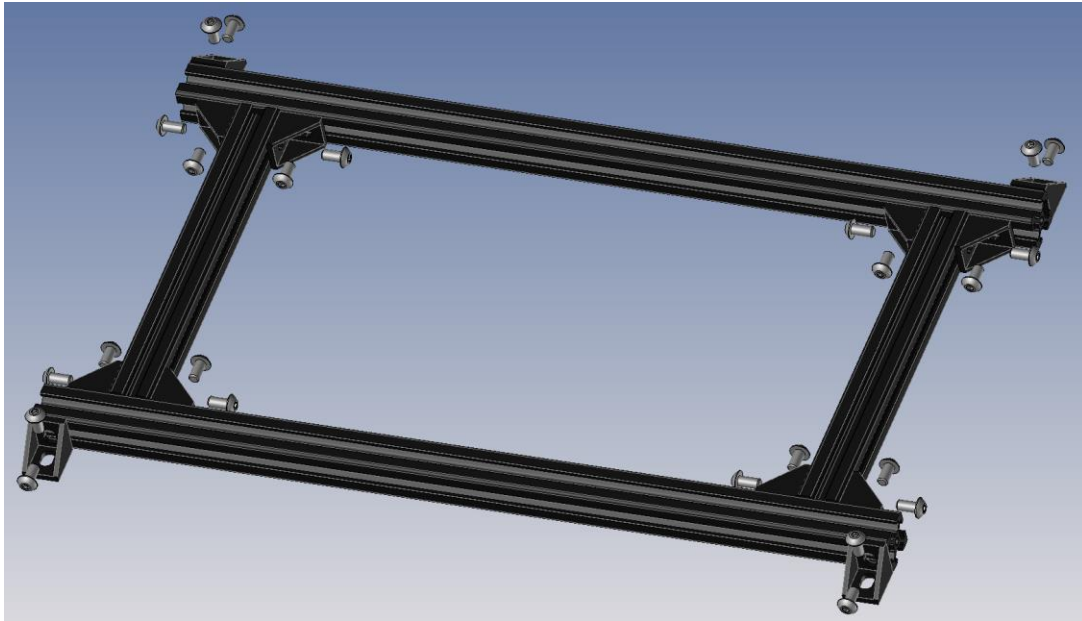
NO WARPING!

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
	2x 410mm	cut it to the tolerance +/- 0.05mm

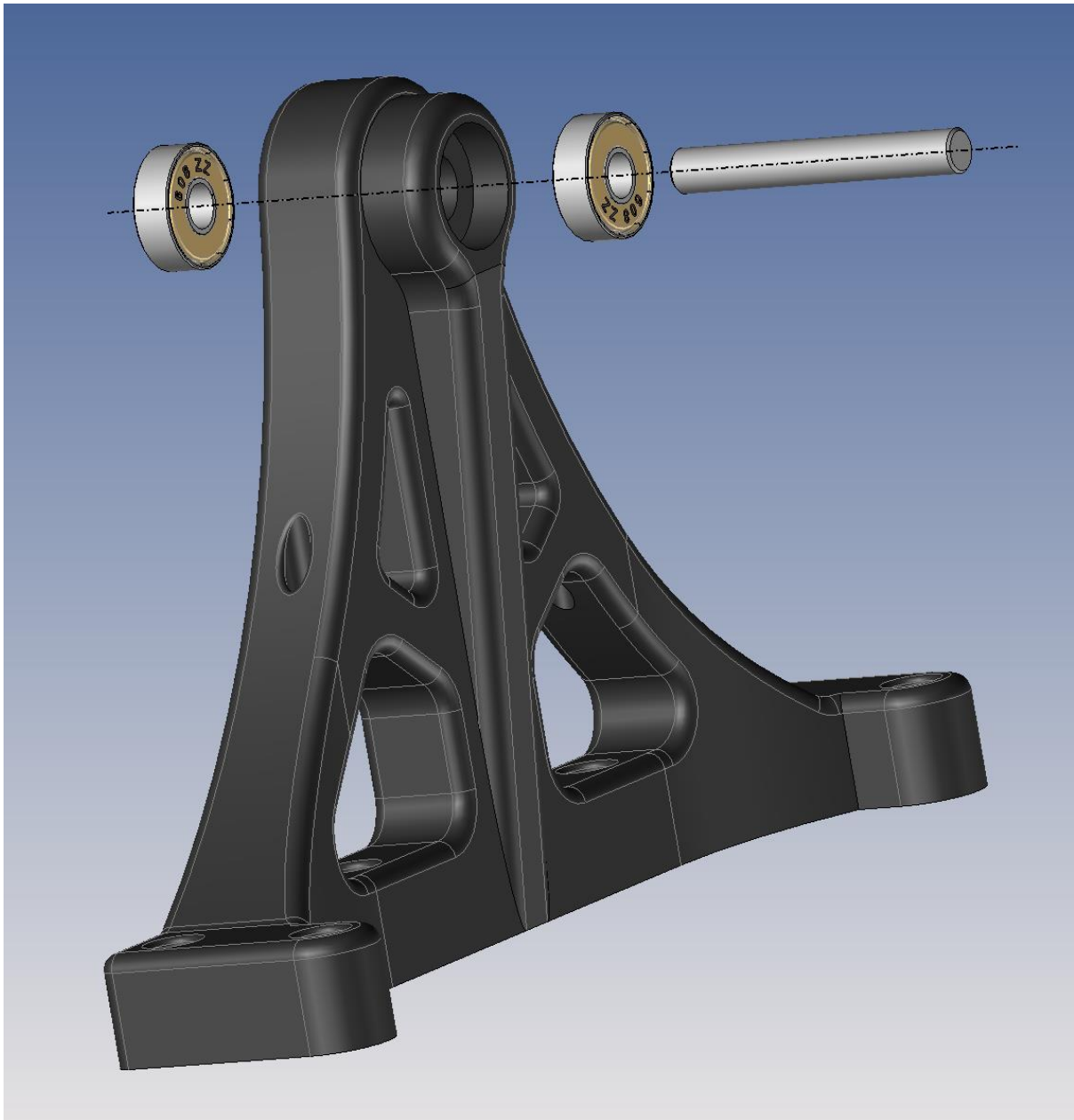


NOTE: Please make sure that you can assemble this step on maximum flat surface

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

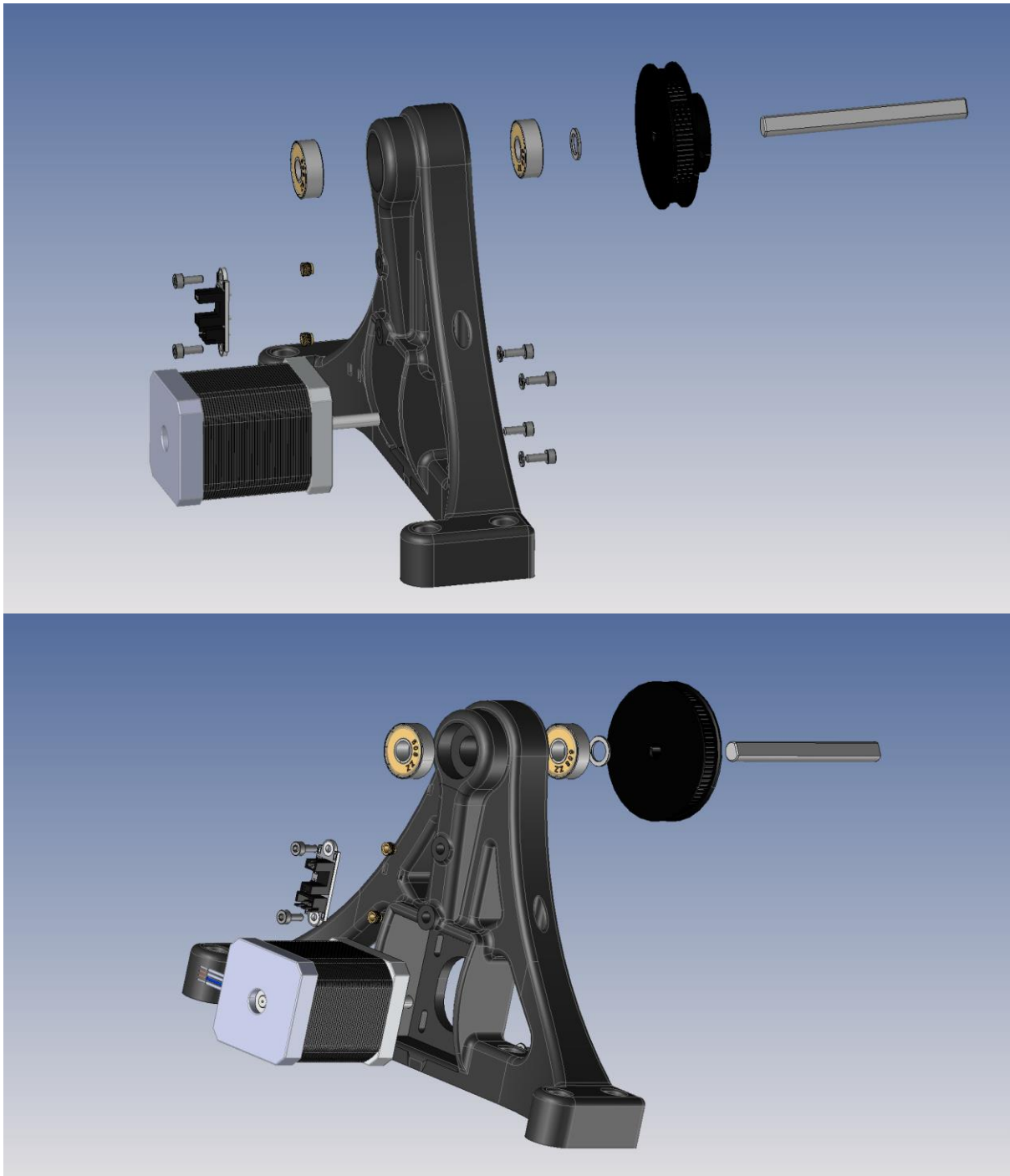
Best if you have acces to the measuring device to control the distance

24x M5 x 10mm + T-nuts



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

The 8mm shaft should have, small tolerance H8 fit with the bearings 608zz



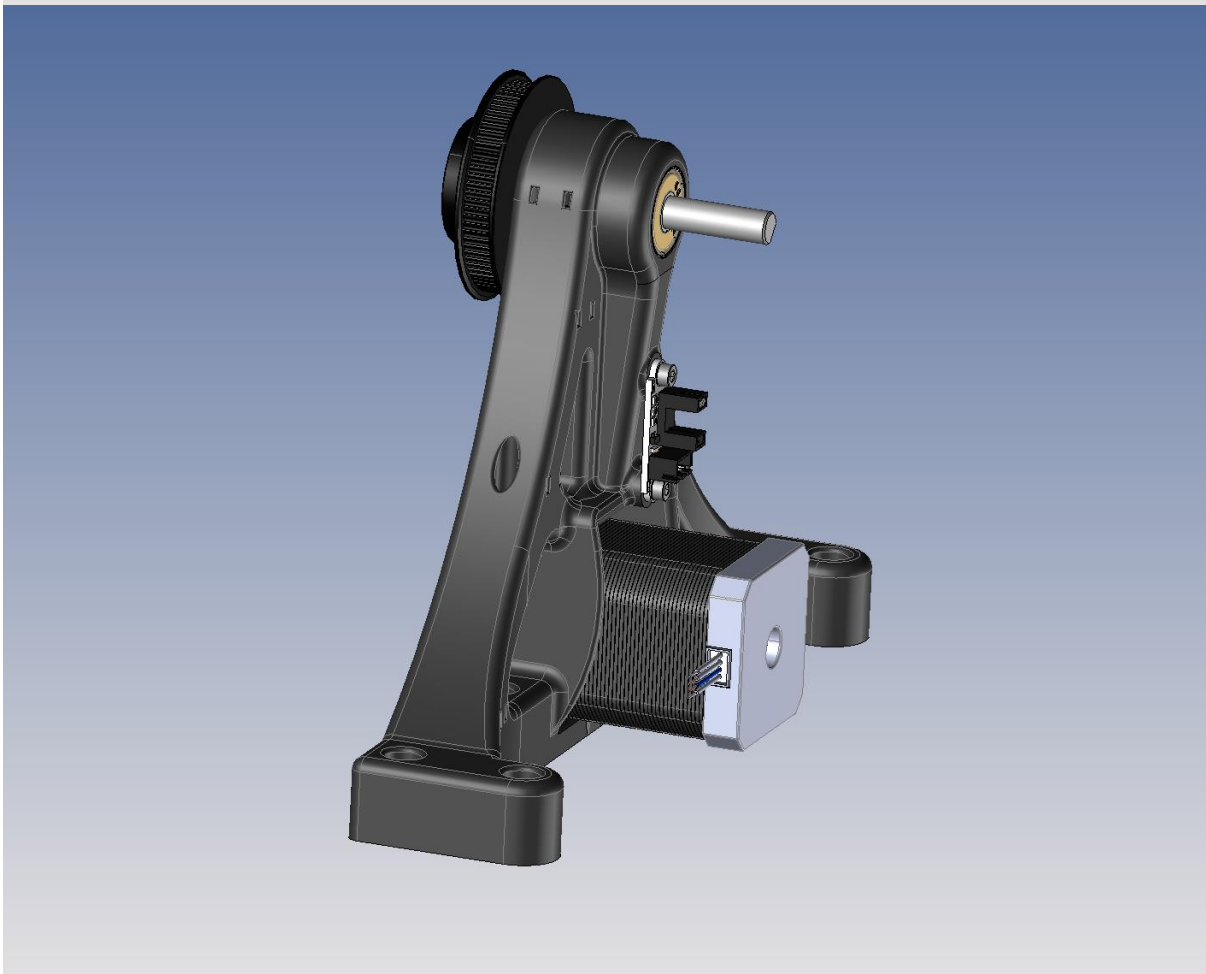
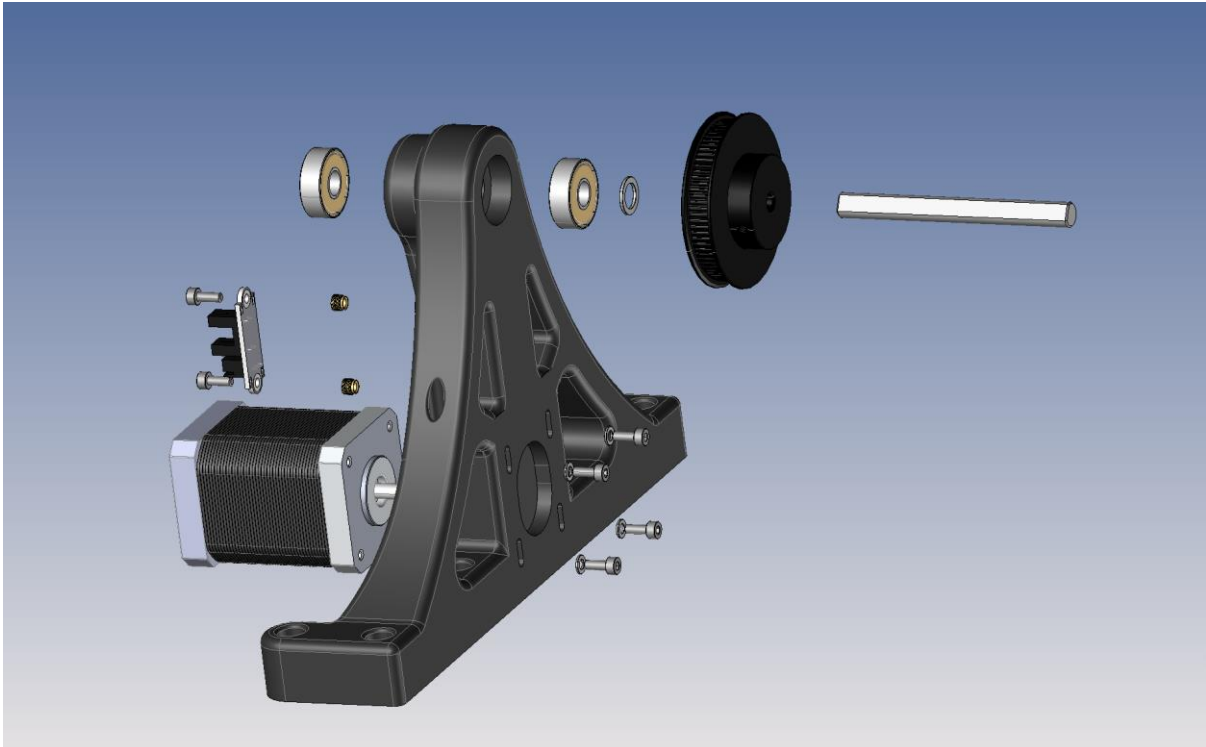
NOTE: Please print this ABS part in high quality without any warping issues

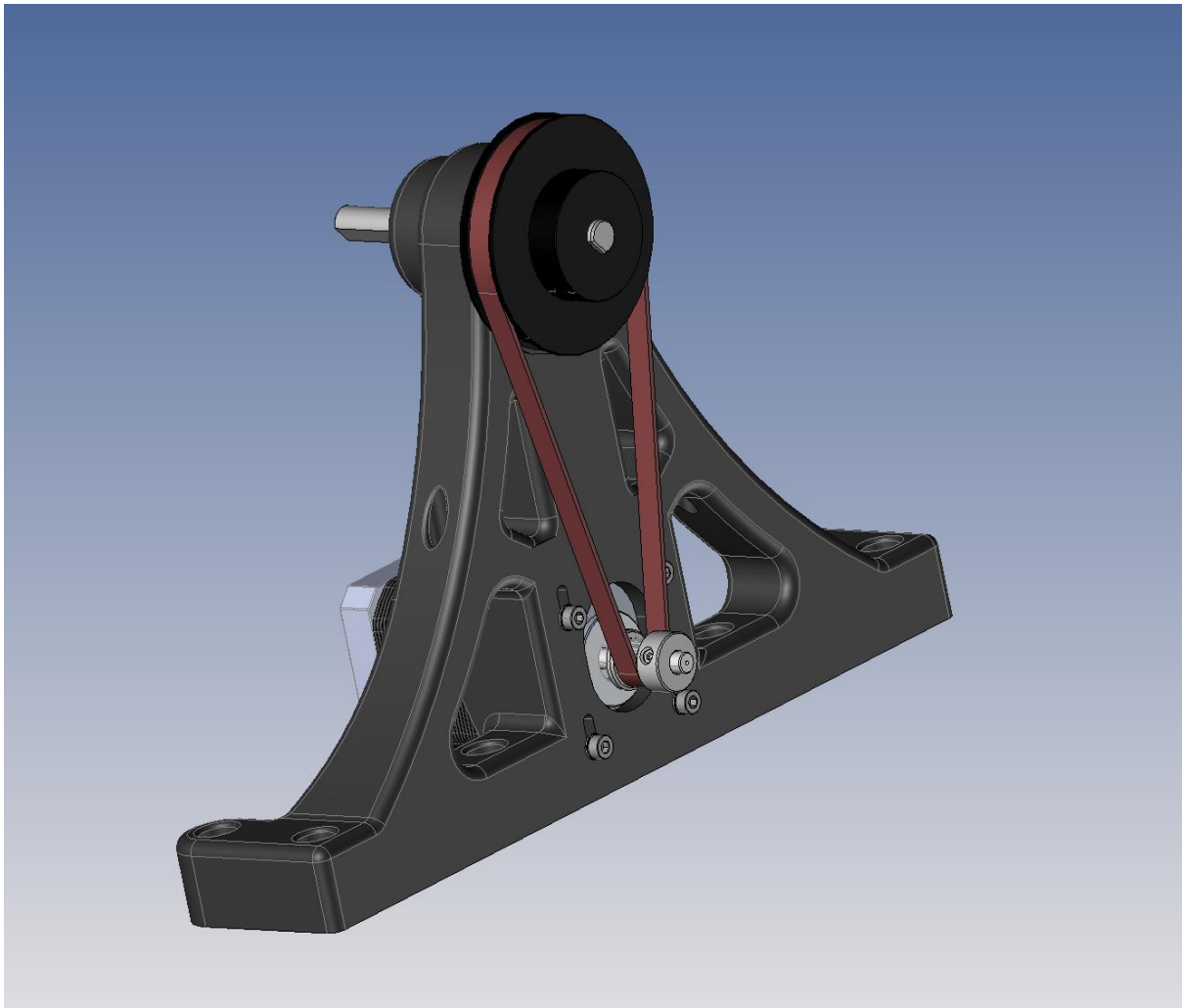
The 8mm shaft should have, small tolerance H8 fit with the bearings 608zz

6x M3 x 8mm

4x M3 washers

1x M8 washer



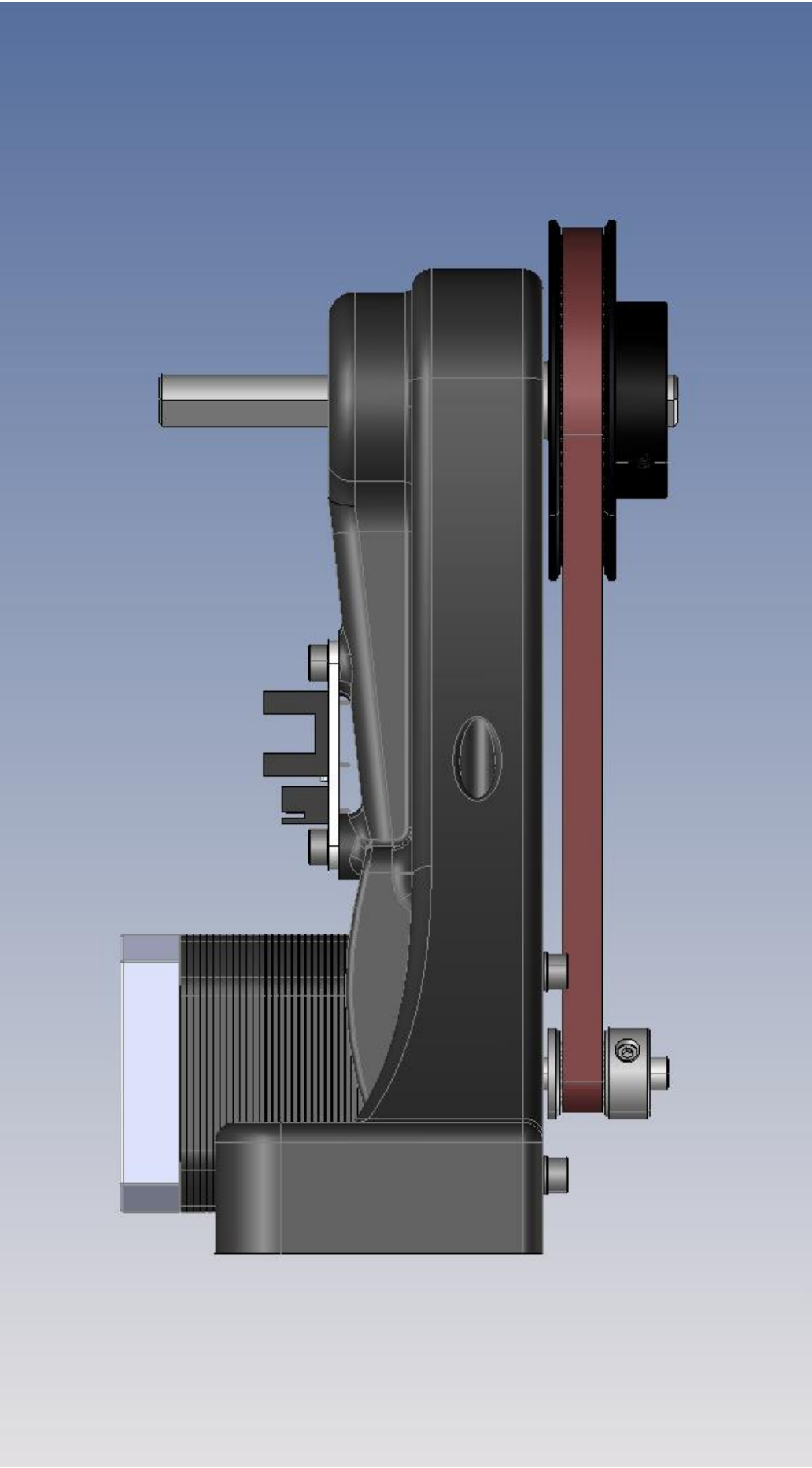


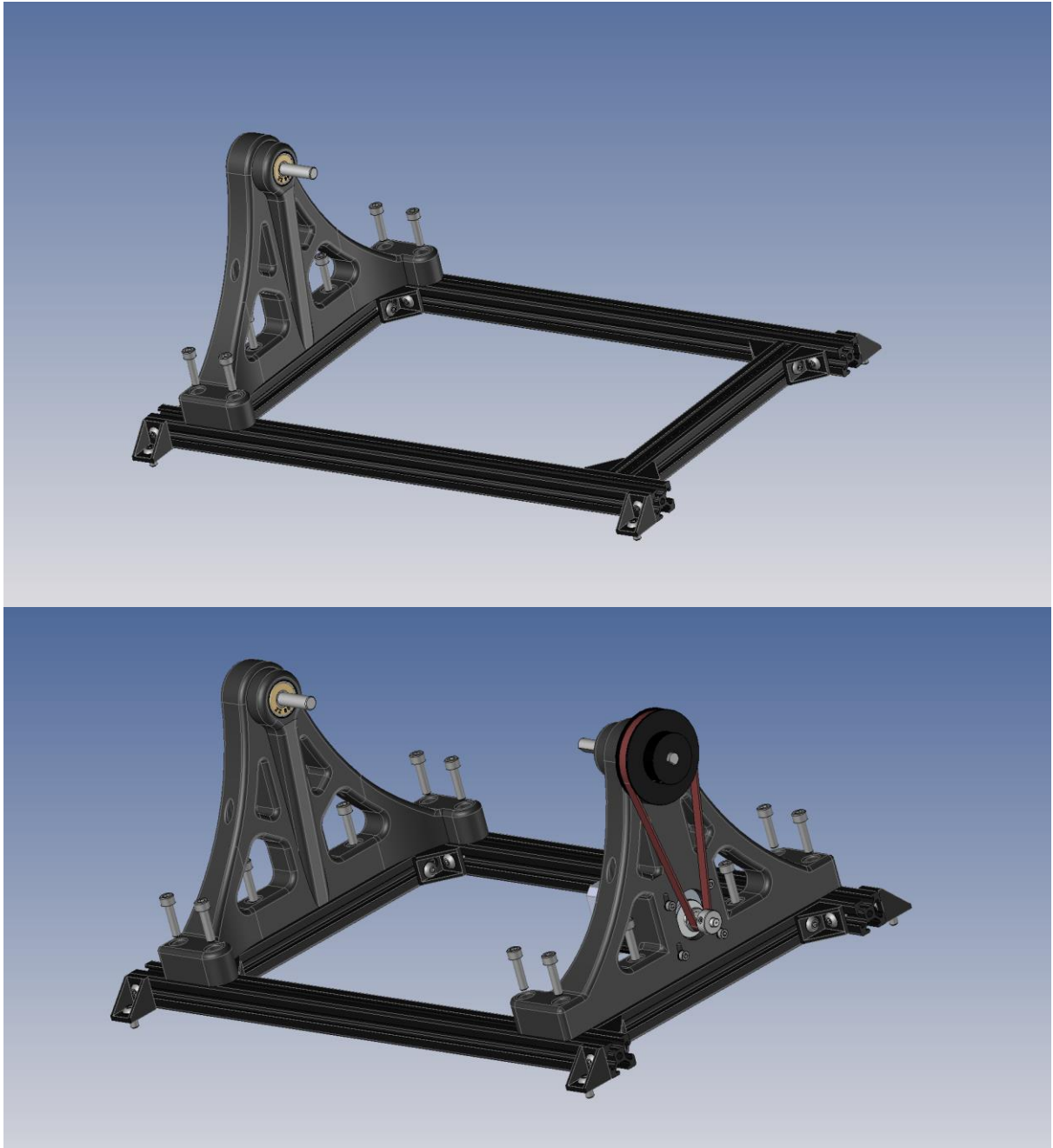
NOTE: Please do not tension the closed loop GT-2 belt 302 yet, leave it free so the motor and pulley can rotate easily

GT-2 Pulley 16T – 5mm bore

GT-2 Pulley 80T – 8mm bore

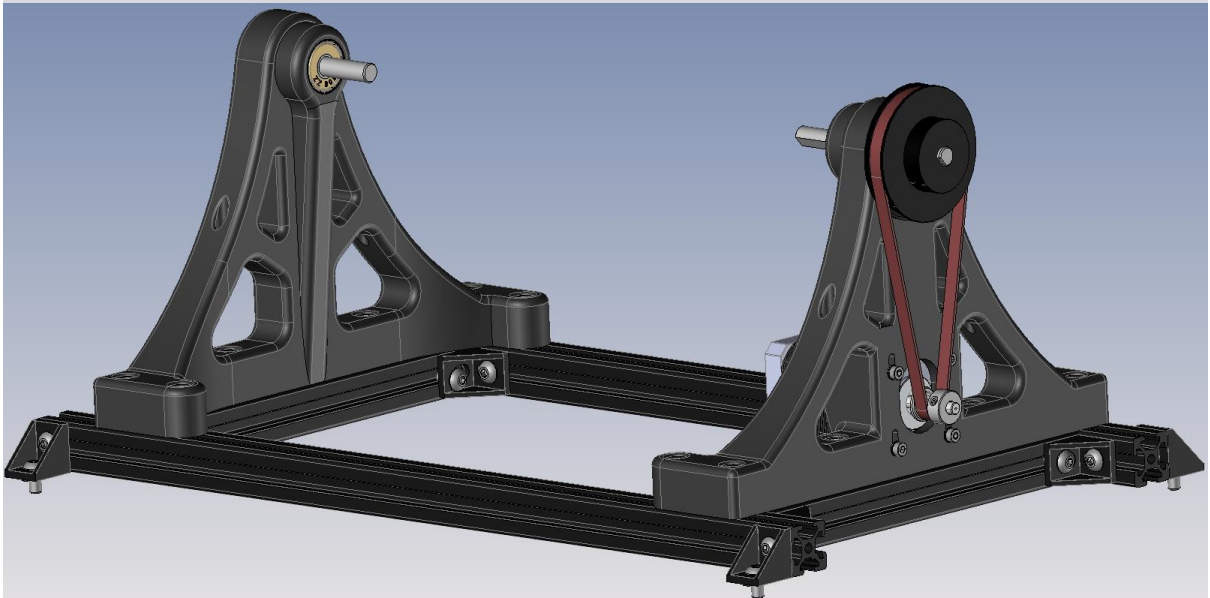
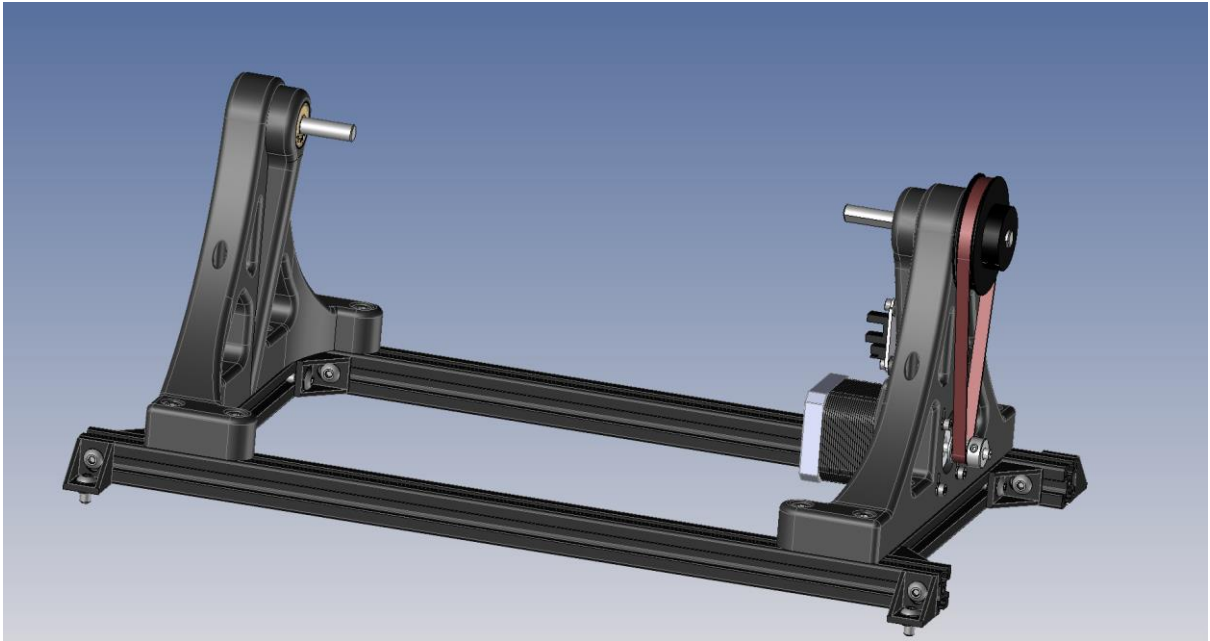
Closed loop GT-2 belt 6mm wide length 302 or 303 mm

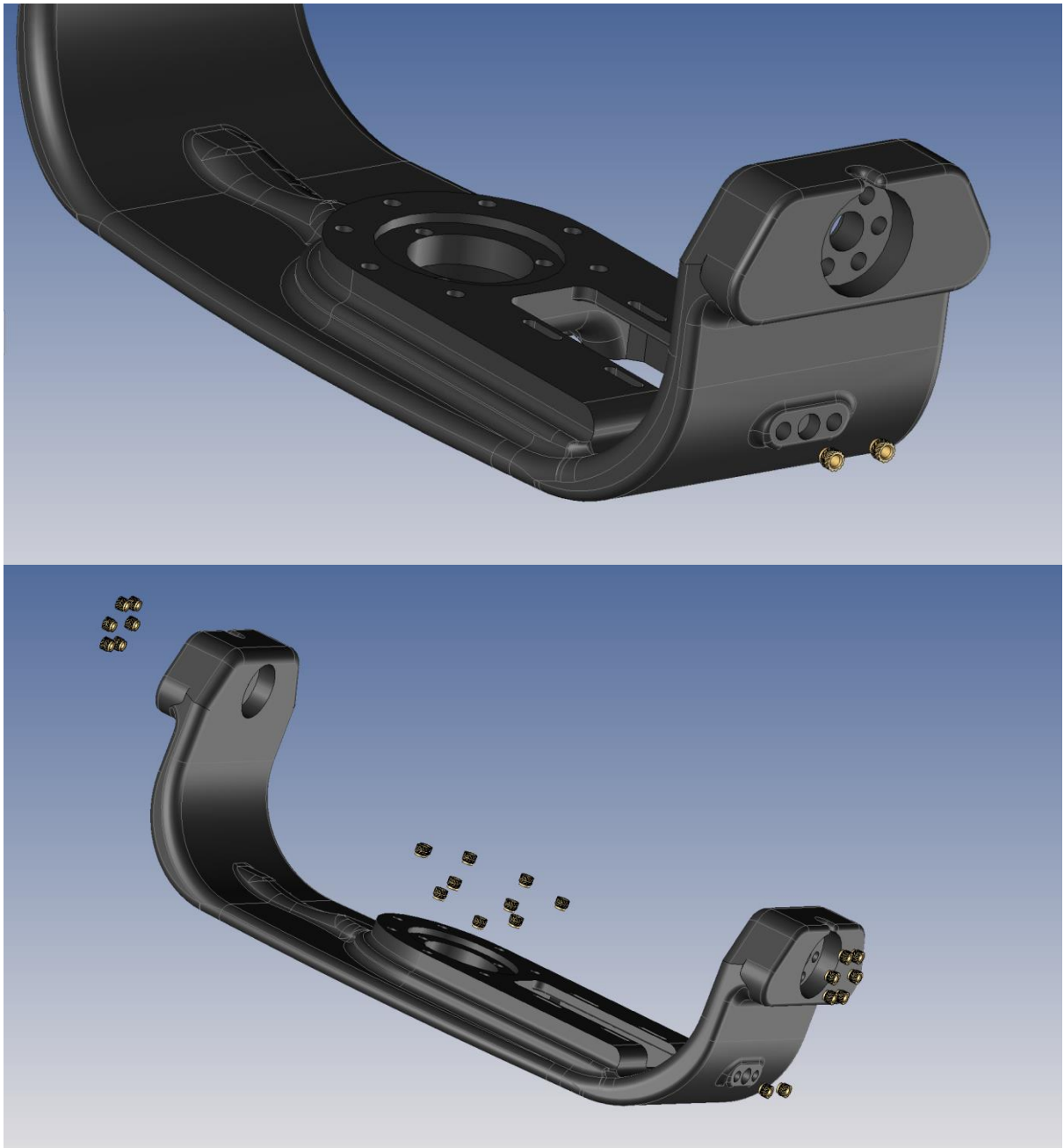




NOTE: Please make sure the two ABS printed sides are squared with the base and also parallel

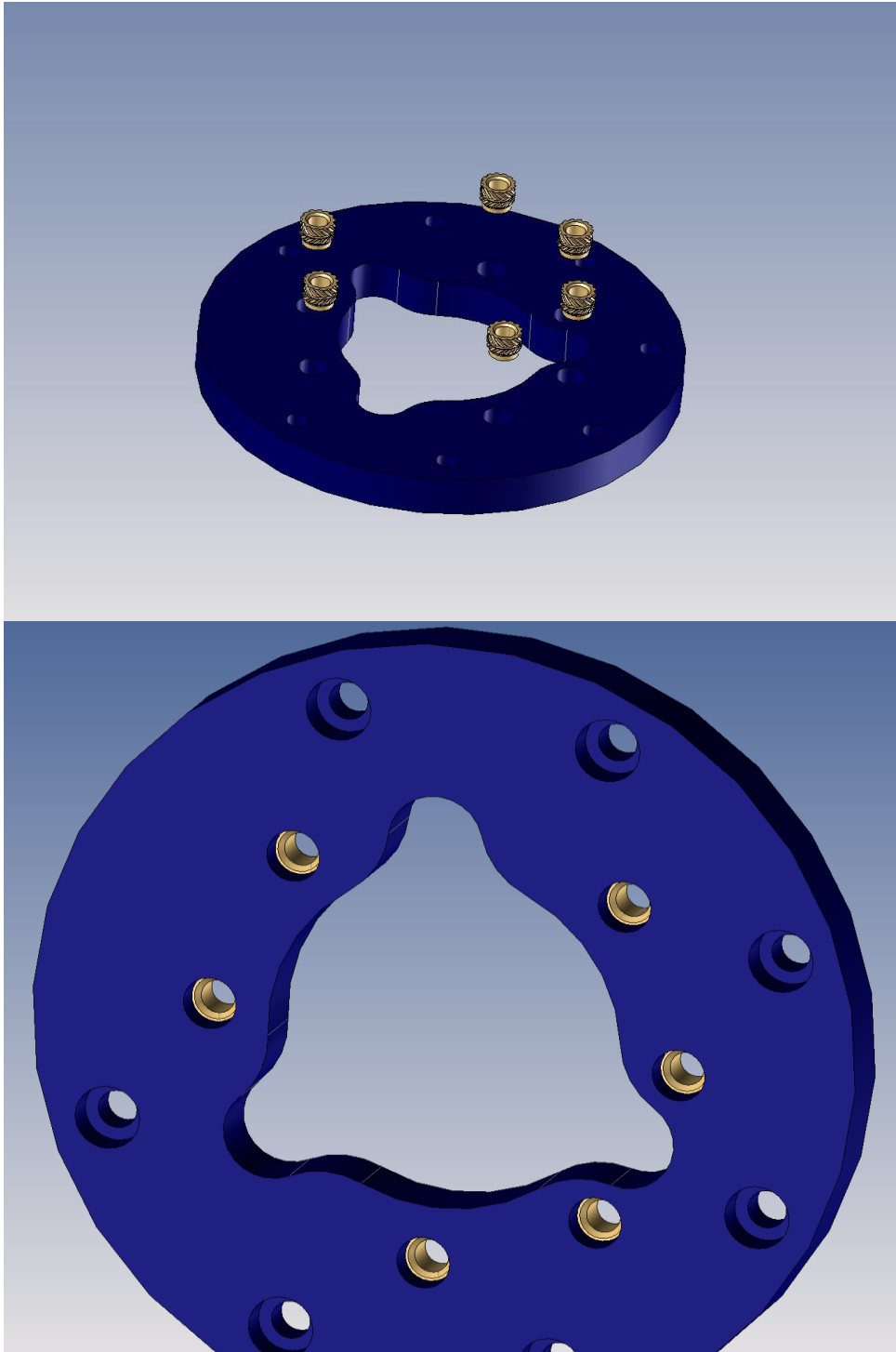
12x M5x20mm + Tnuts



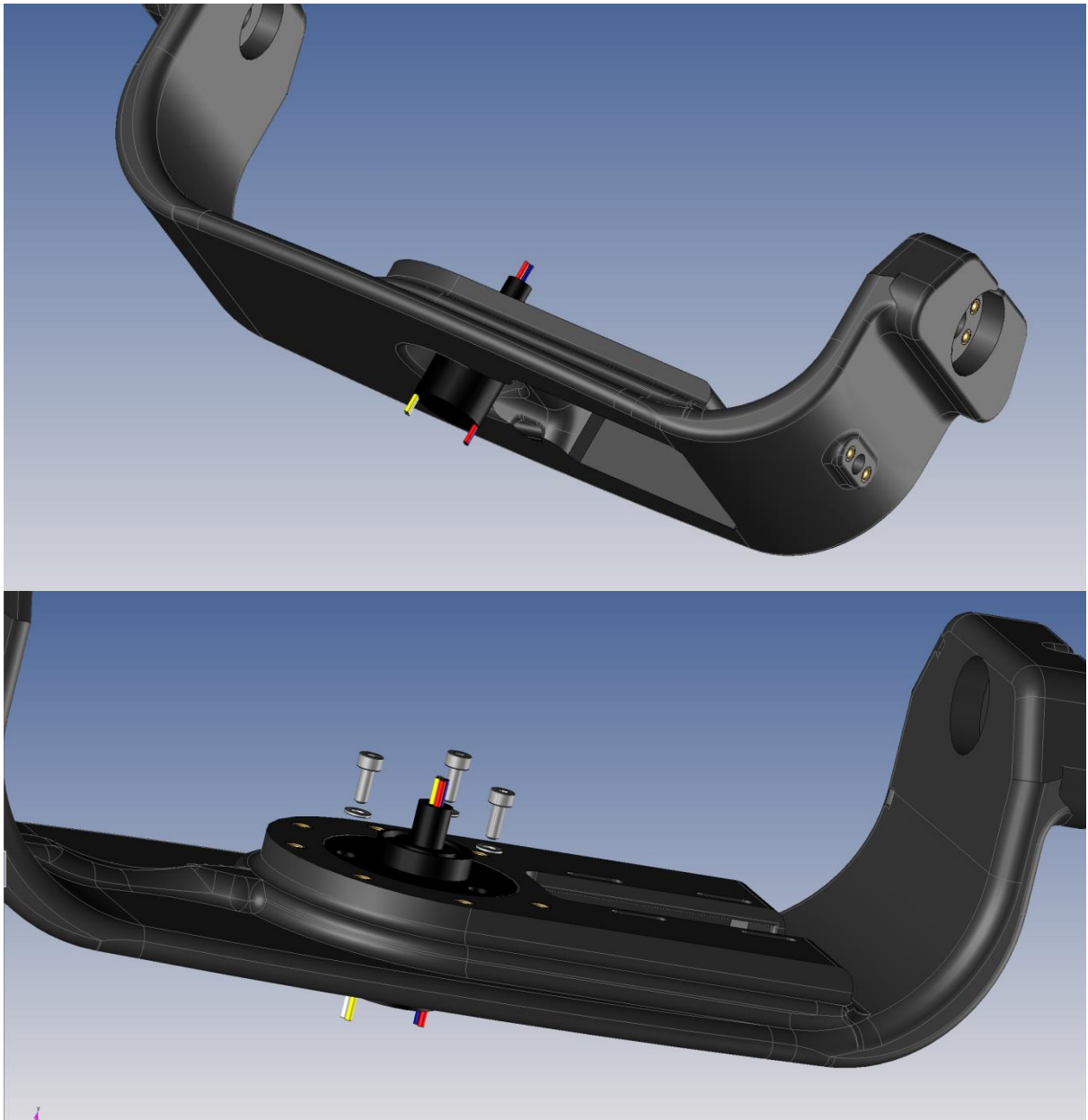


NOTE: the heat inserts used, are M3 x 5mm



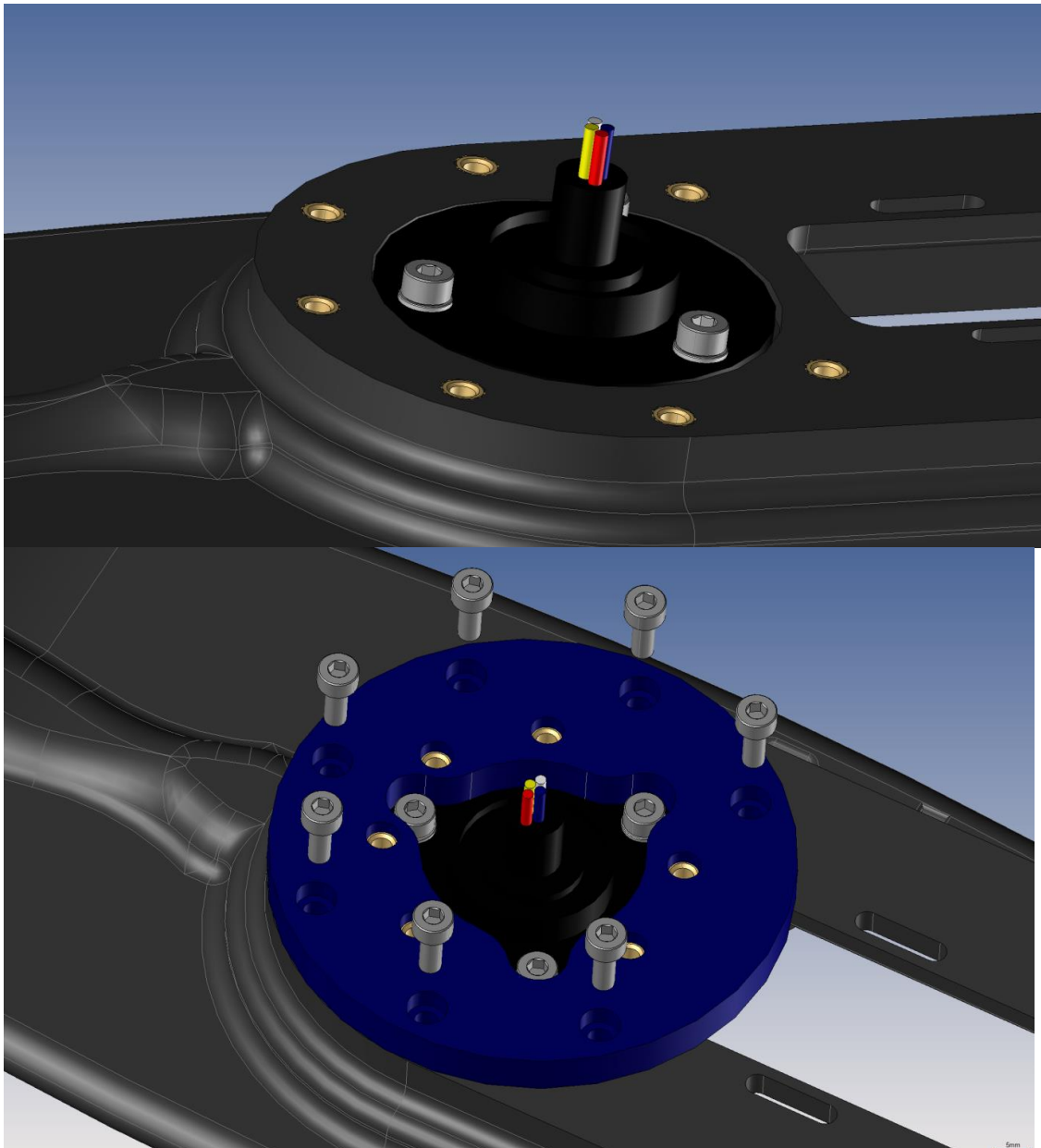


NOTE: the heat inserts used, are M3 x 7mm

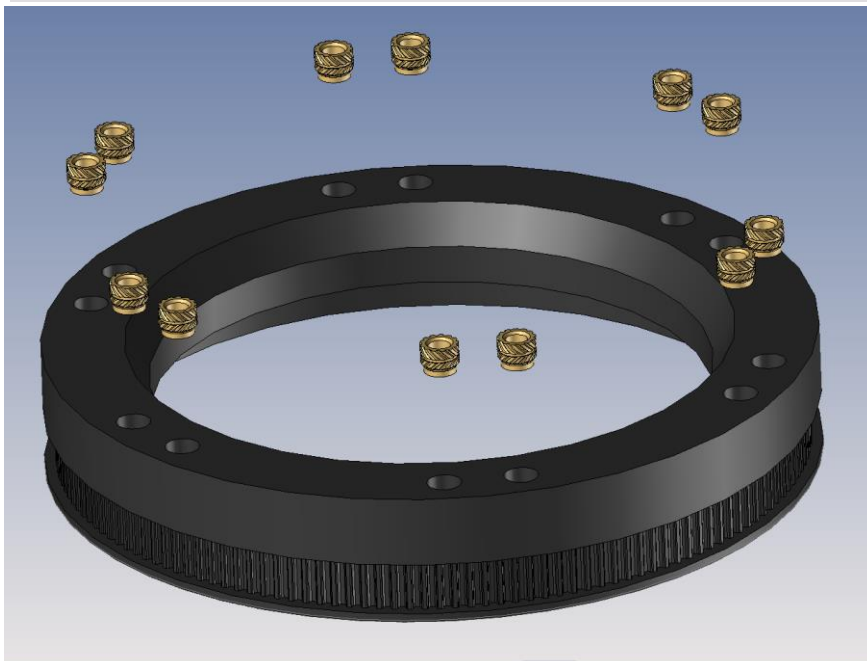
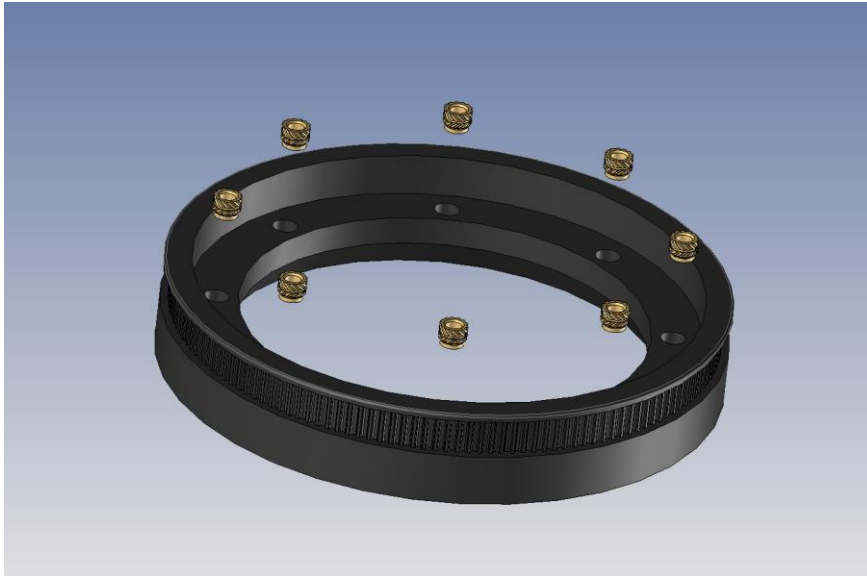


NOTE: 3x M3x8mm + M3 washers

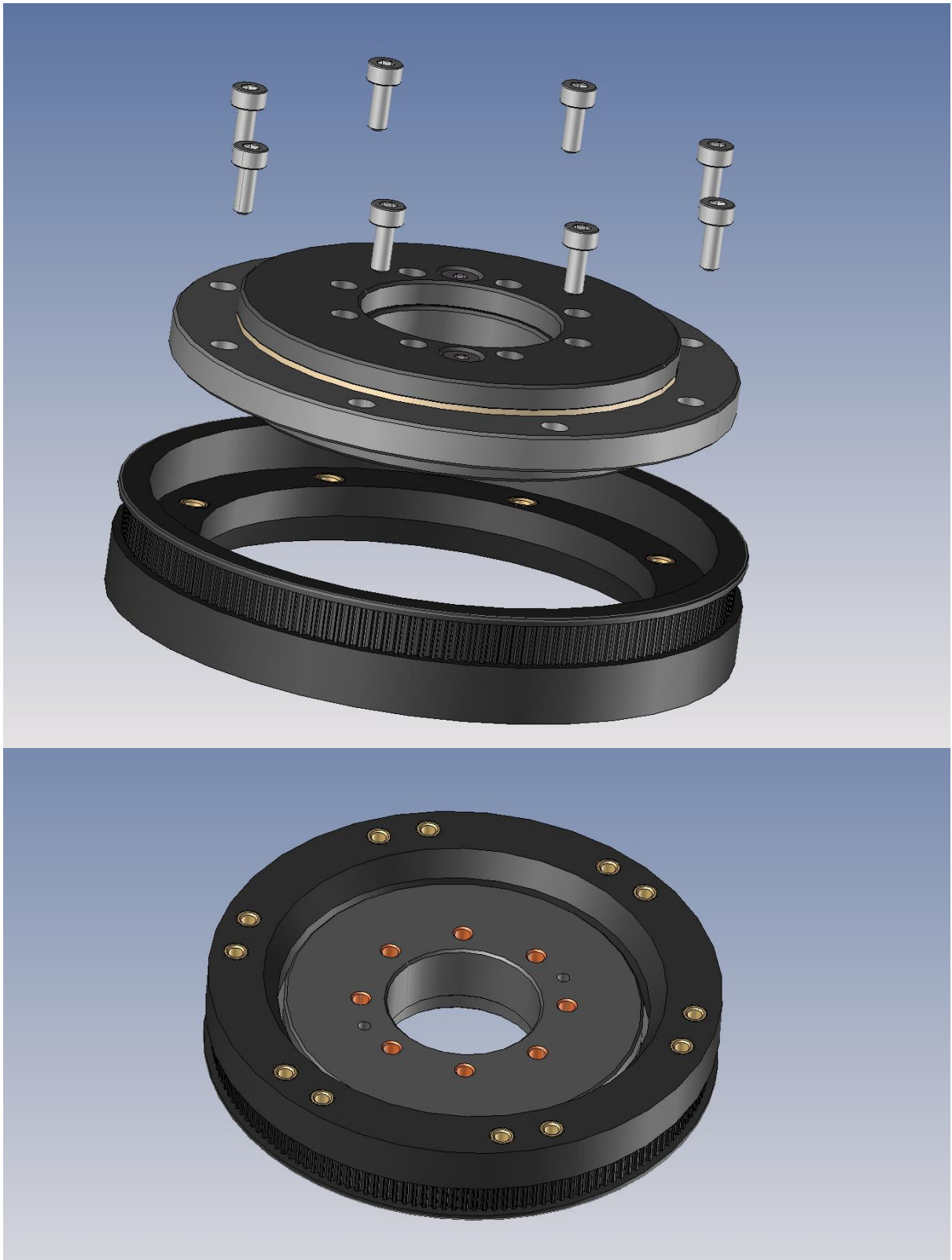
Slip ring dia Dia 22mm 4CH 10A



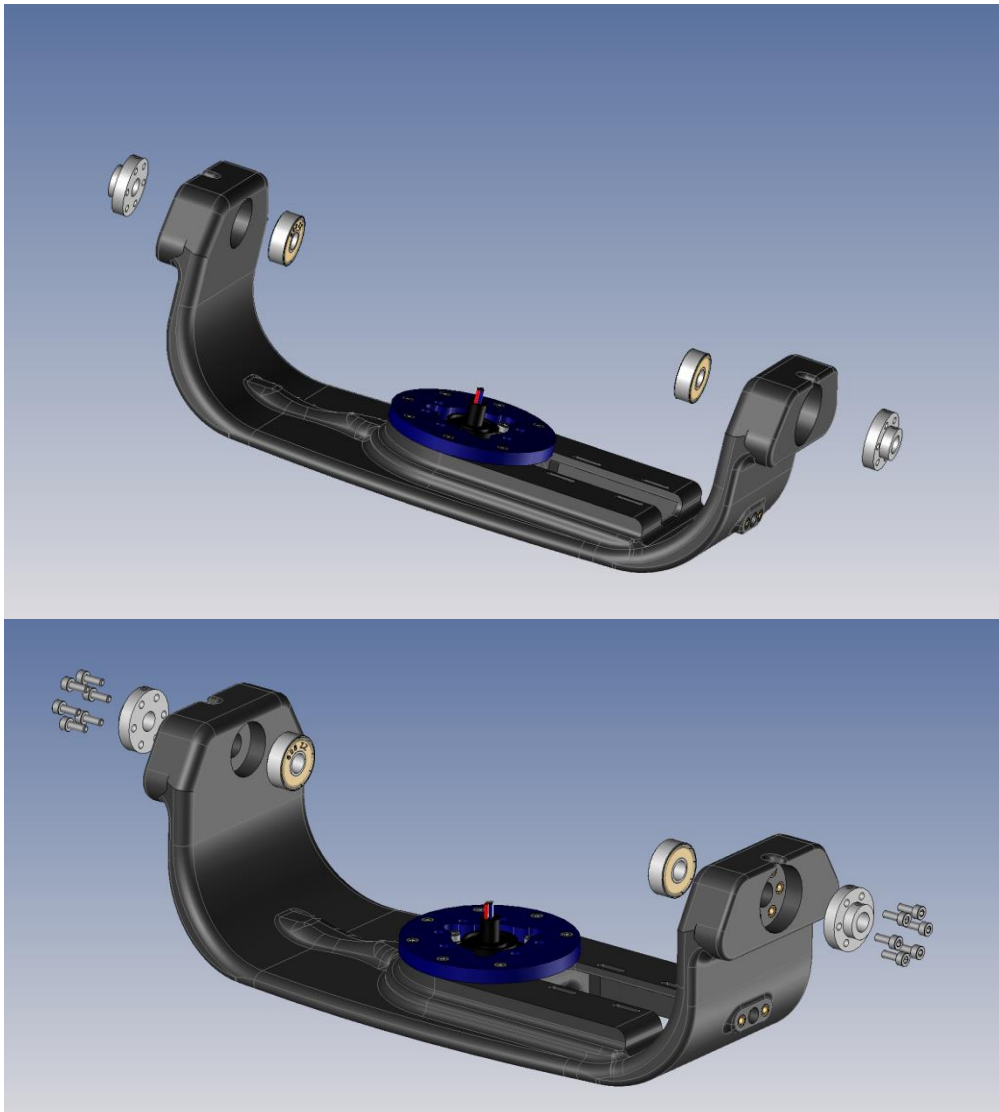
NOTE: 7x M3x8mm



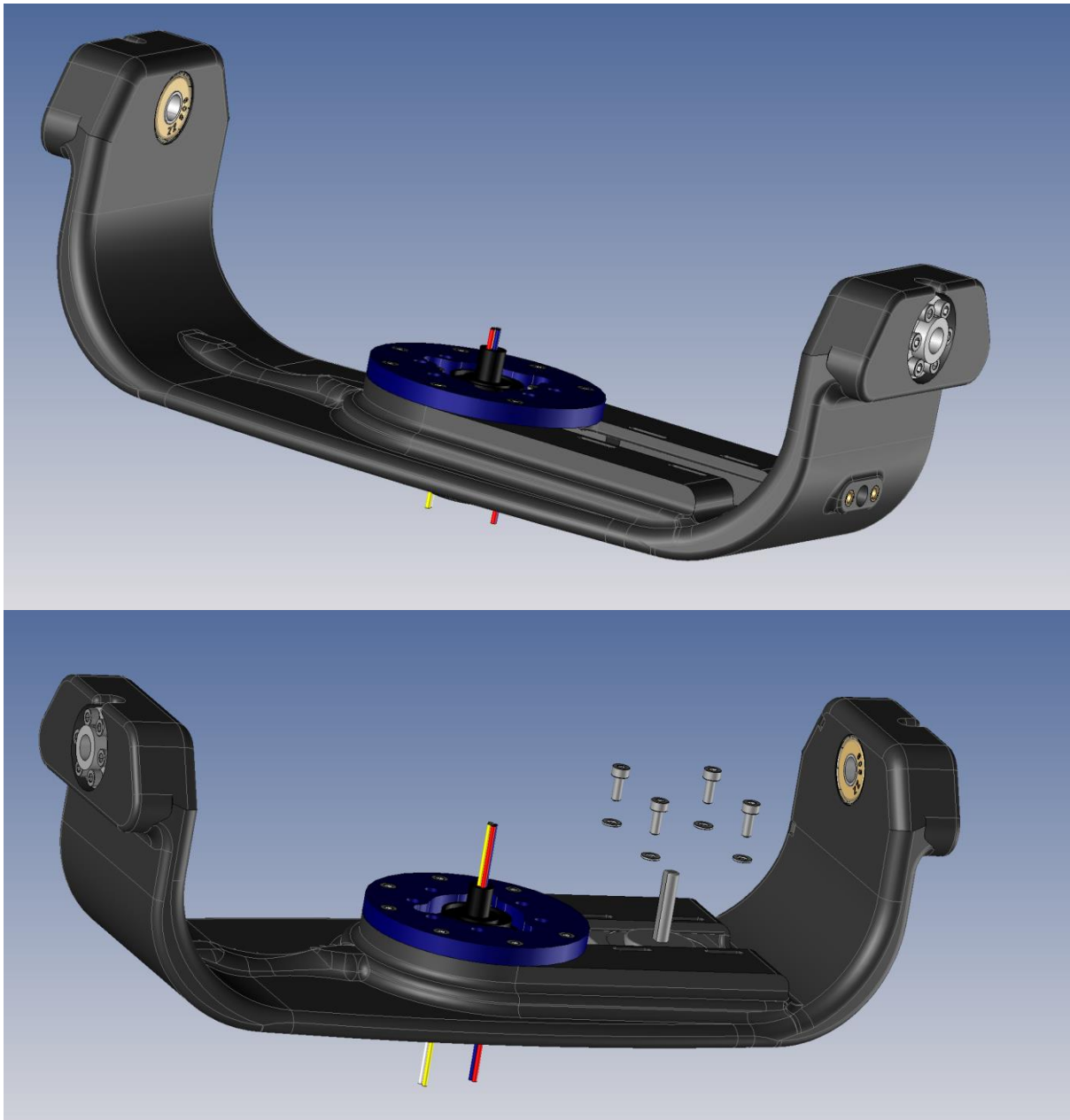
NOTE: the heat inserts used, are M3 x 5mm



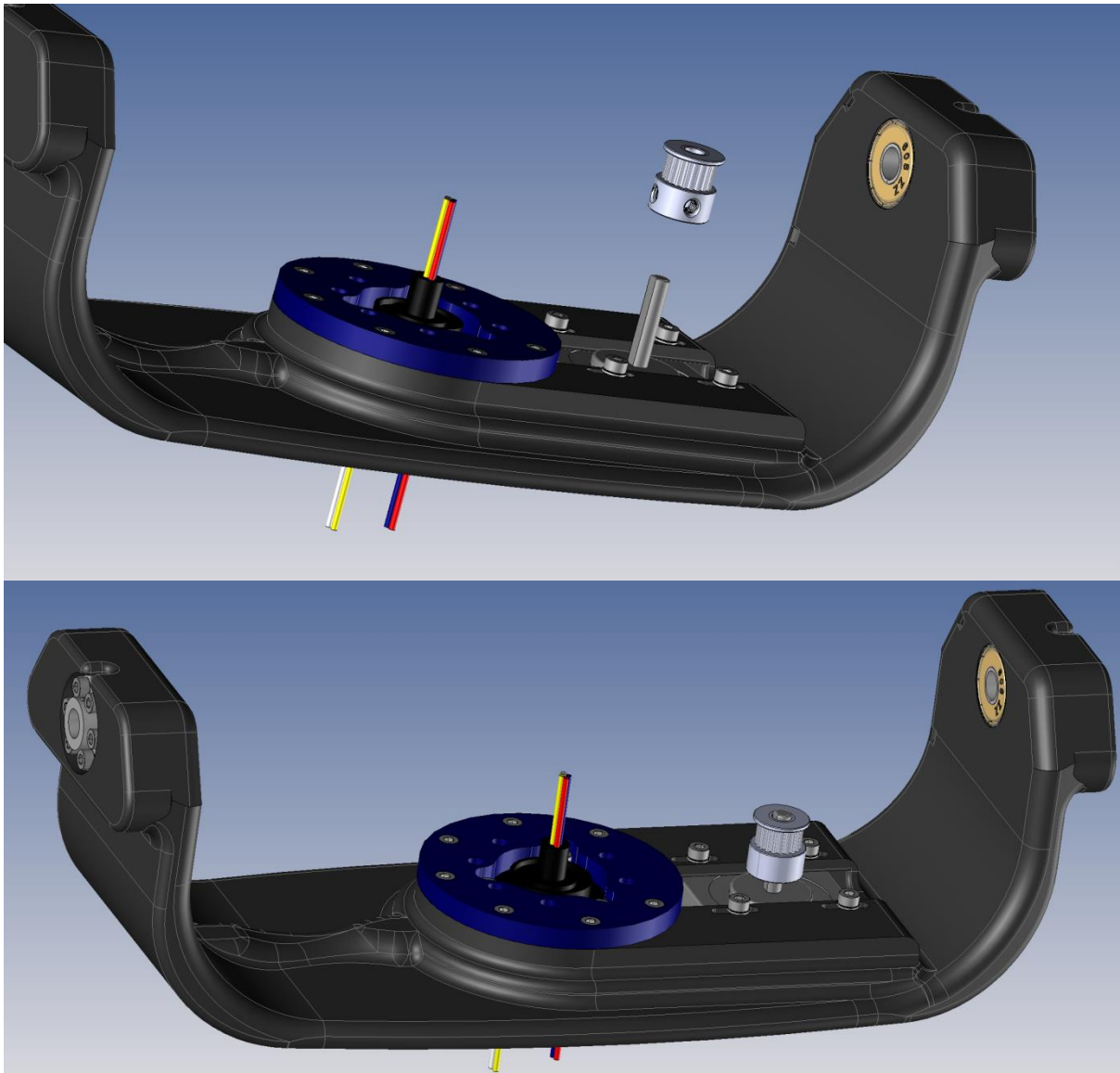
NOTE: IGUS - PRT_04_30 Diameter 90mm
8x M3x10mm



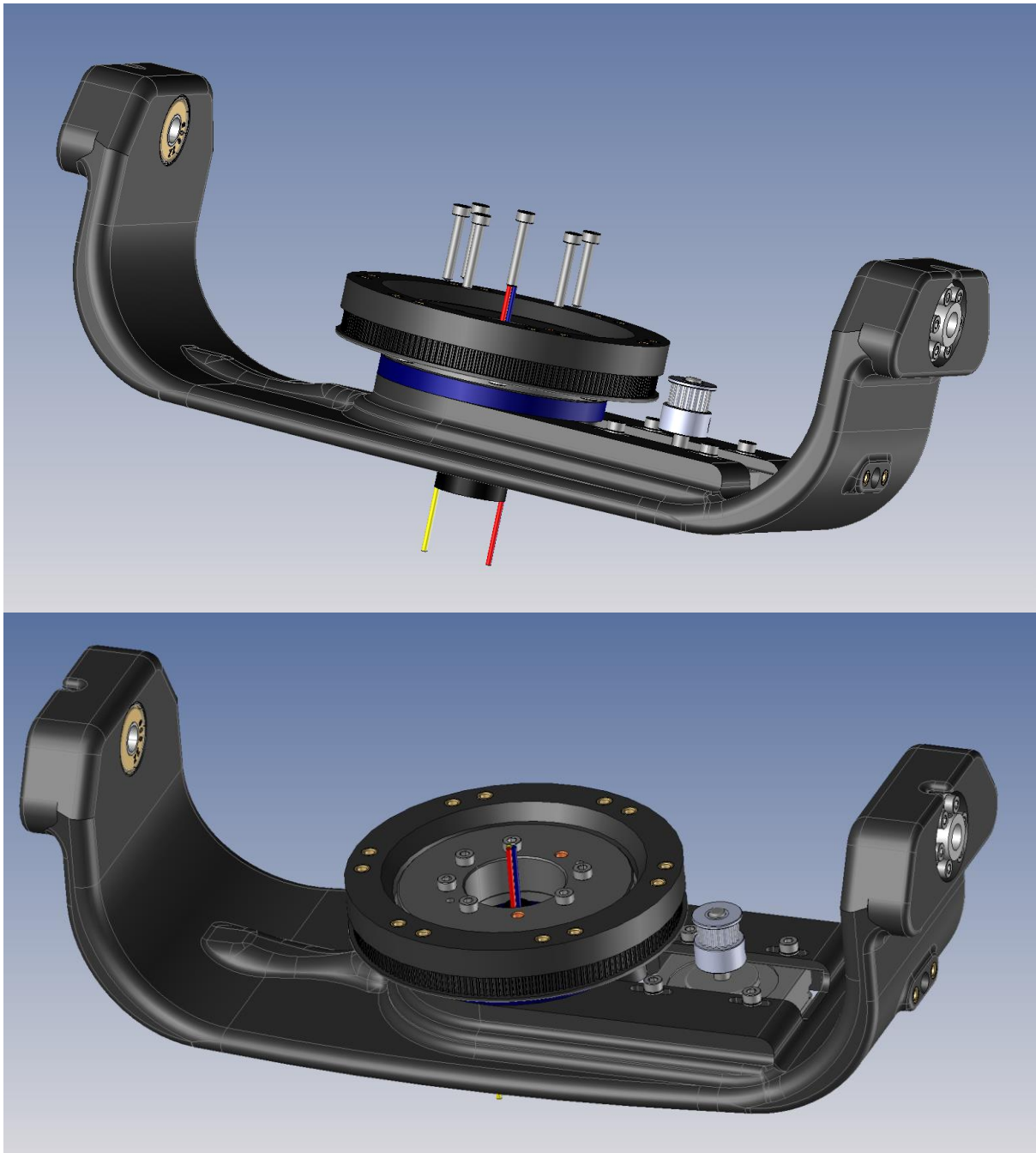
NOTE: the pololu hub M3 threaded holes, needs to be drilled out with 3.15 or 3.2 mm drill



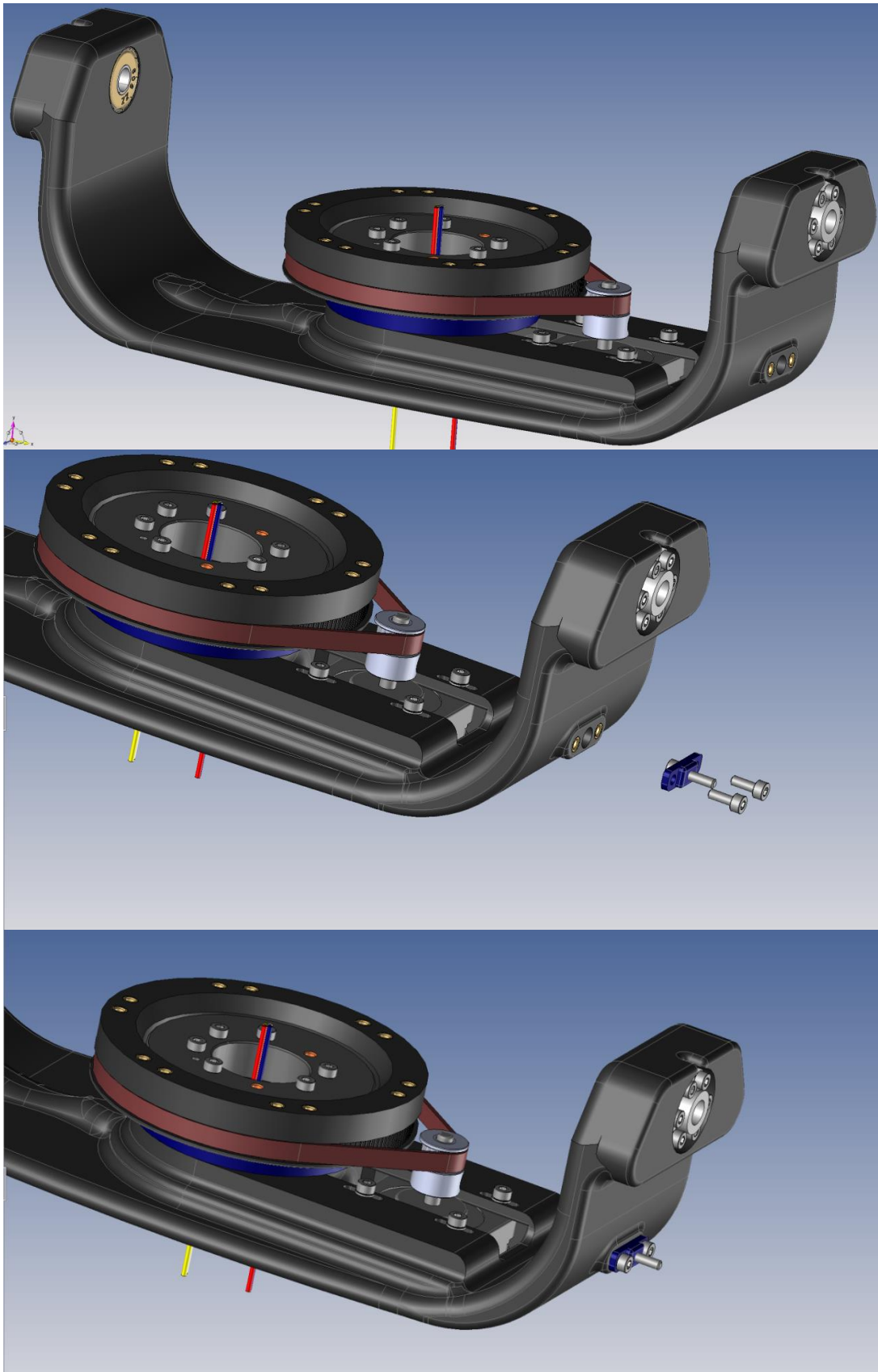
NOTE: 4x M3x8mm + M3 washers



NOTE: GT-2 Pulley 20T



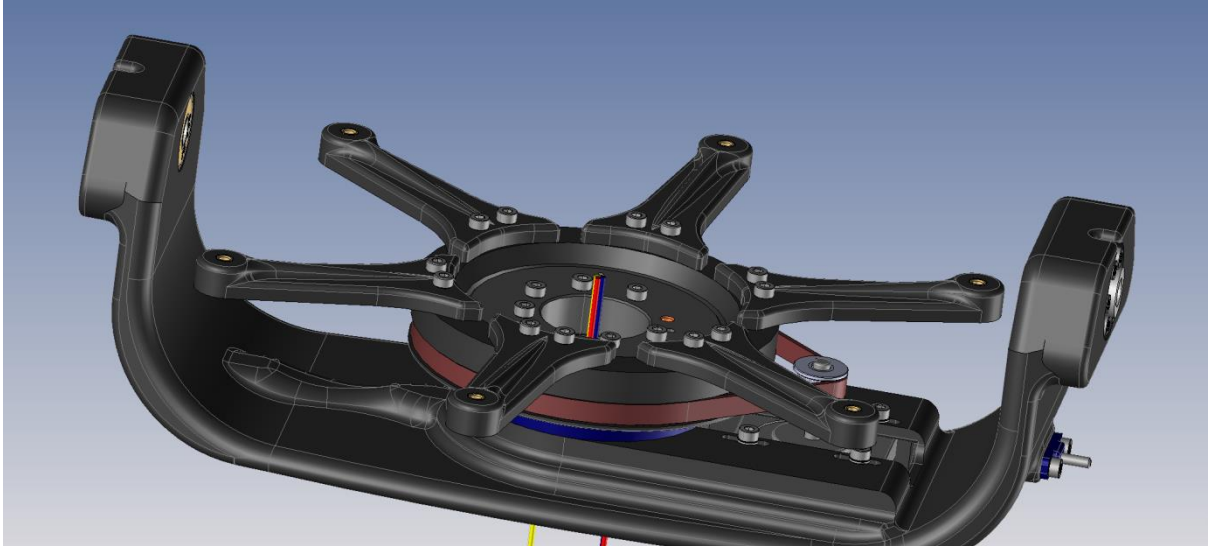
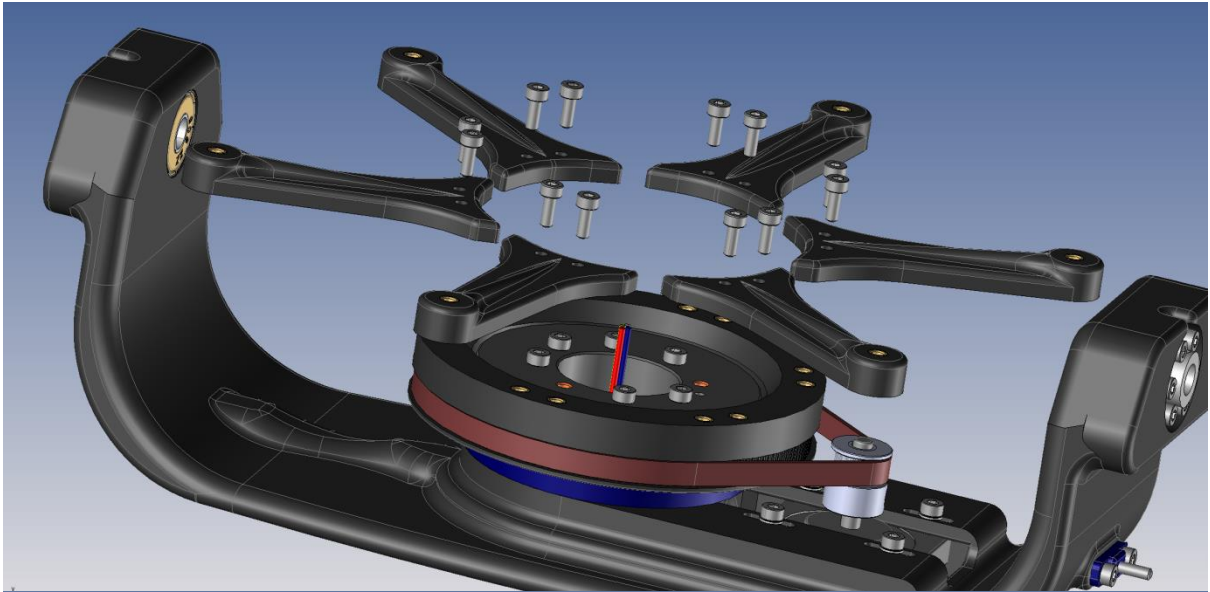
NOTE: 6x M3x20mm



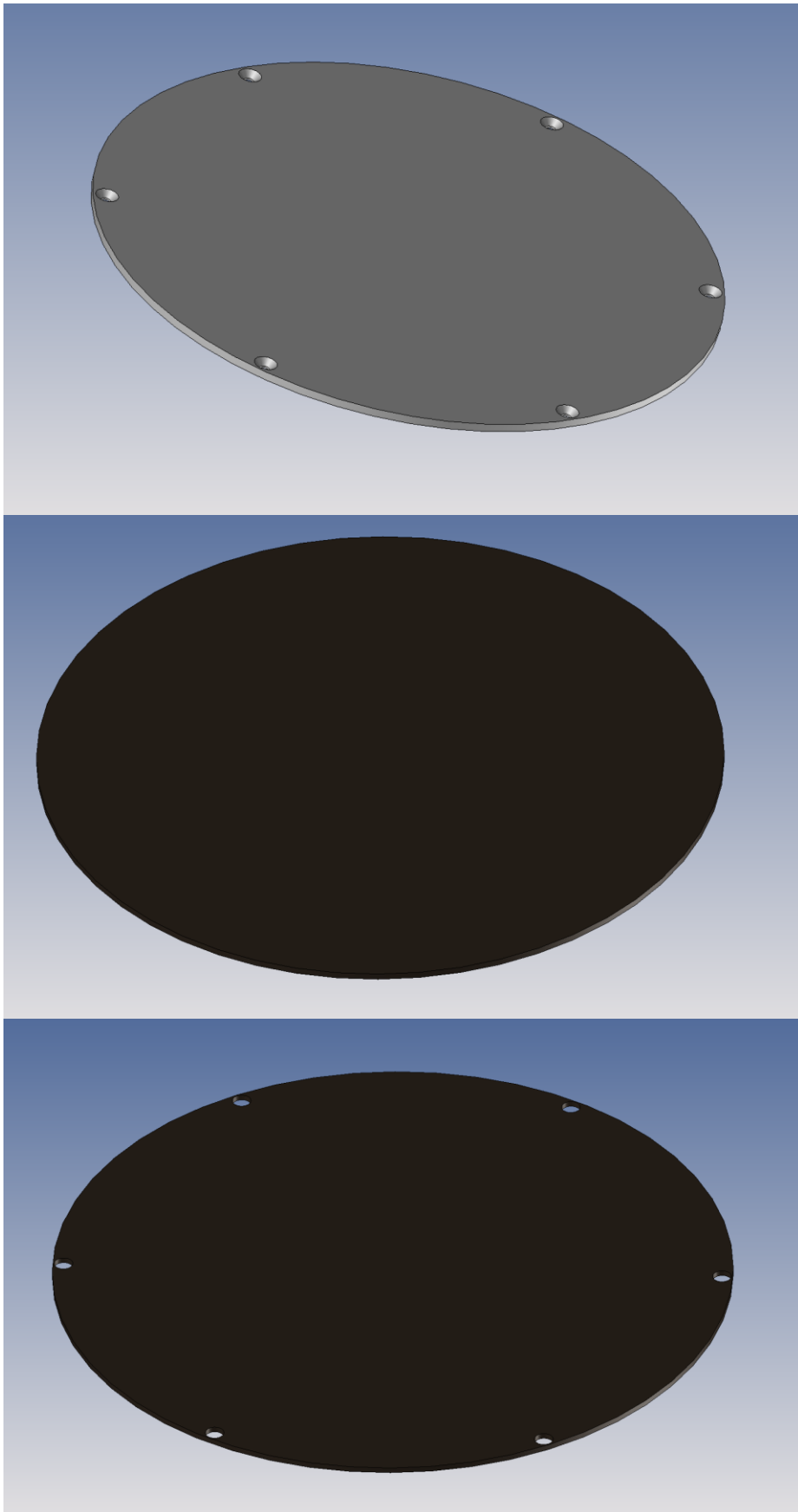
NOTE: 2x M3x8mm + 1x M3x12mm, Closed loop GT-2 belt 6mm wide length 330 mm



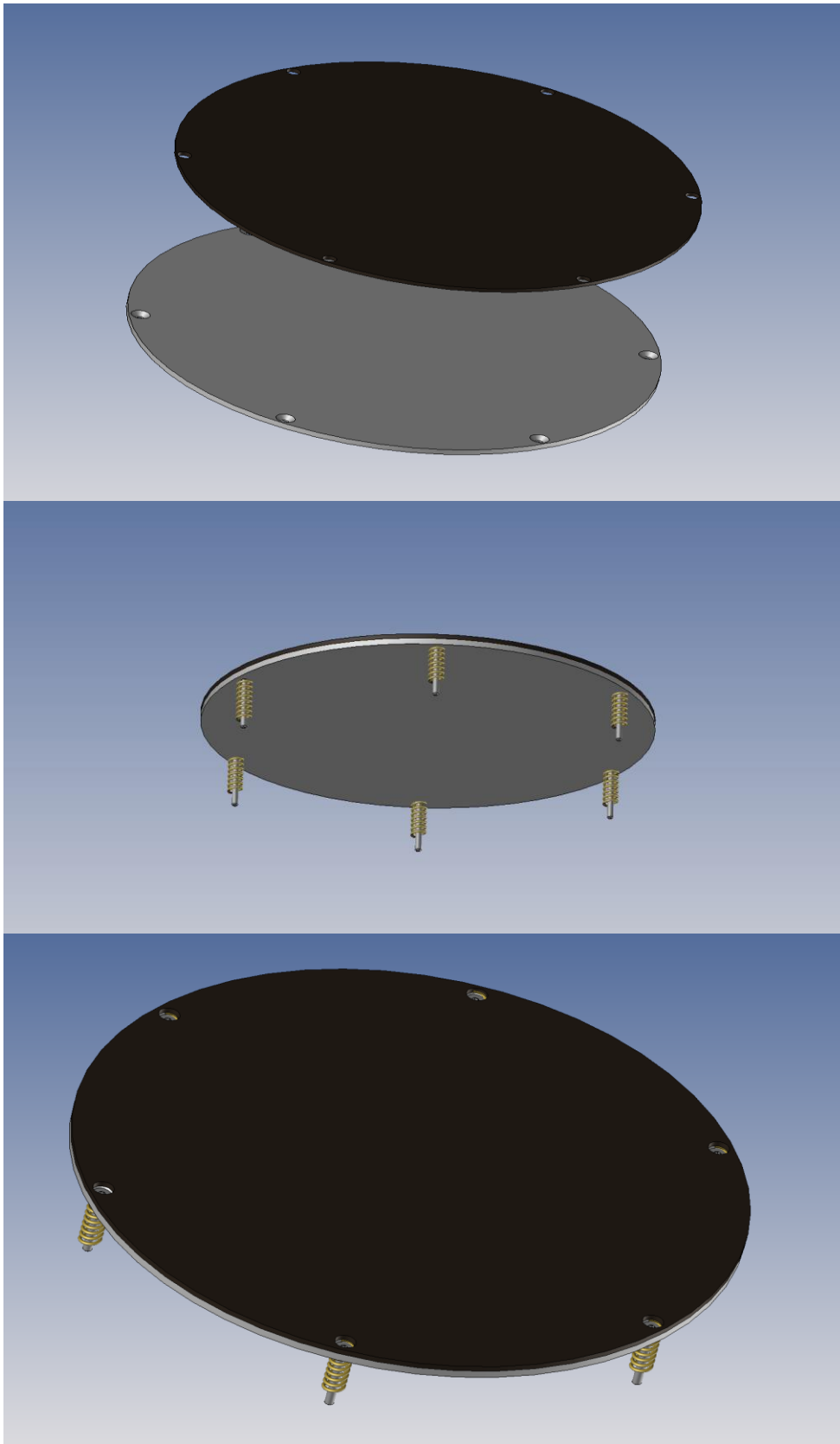
NOTE: the heat inserts used, are M3 x 5mm



NOTE: 12x M3x8mm

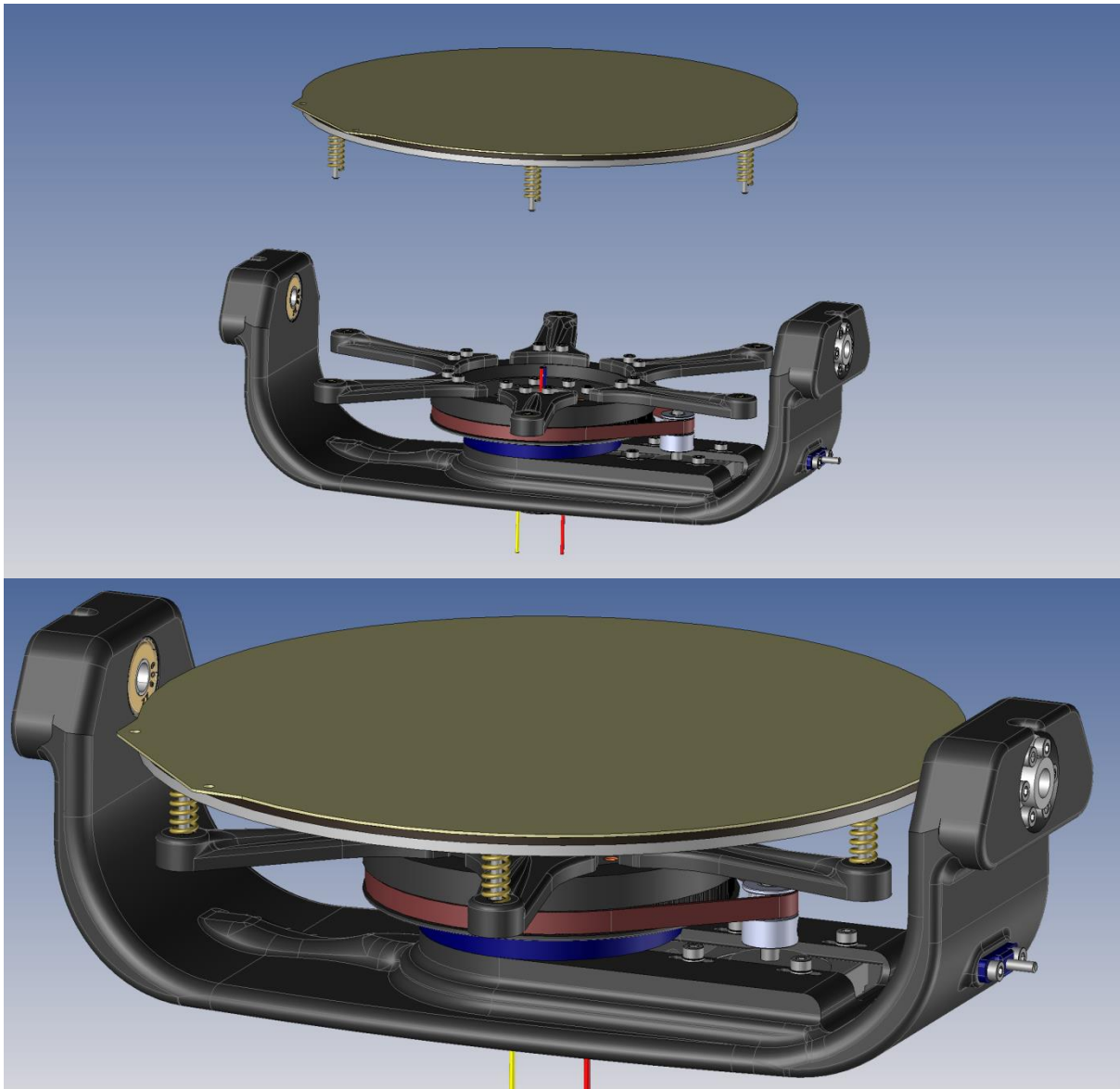


NOTE: Please drill six holes into the magnetic sheet to match the aluminum hotbed

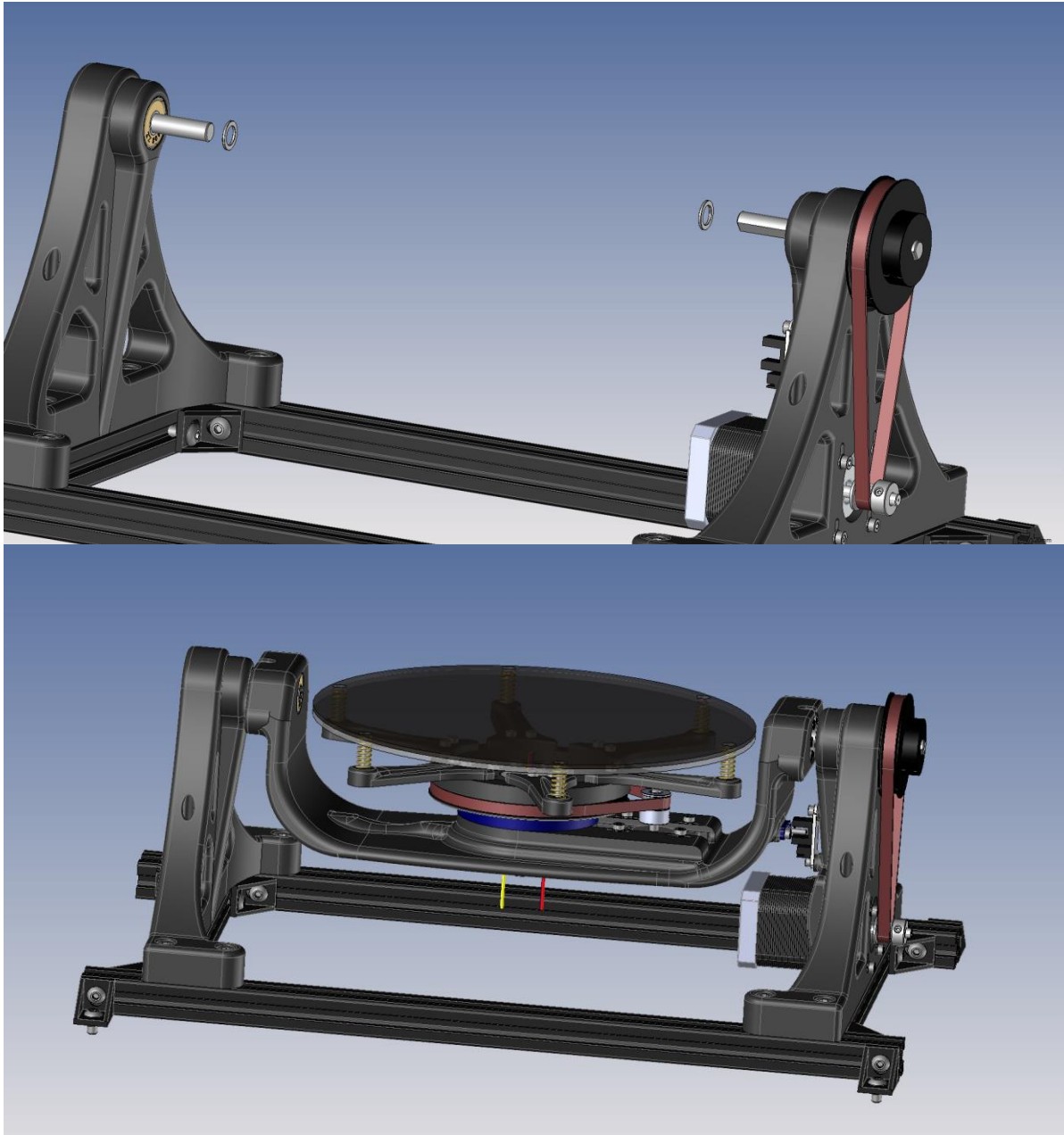


NOTE: 6x FHCS M3x22mm

Bed springs ID 3mm OD 6mm Length 15mm



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 length 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 length 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

