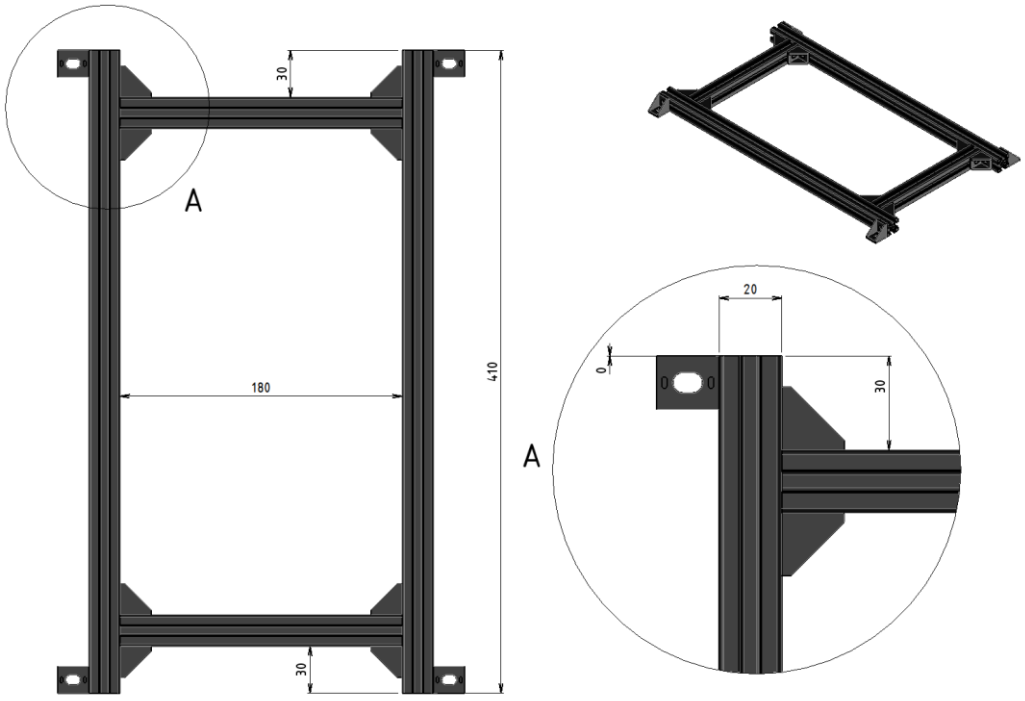
# BED Assembly Manual for Voron Trident 250mm

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

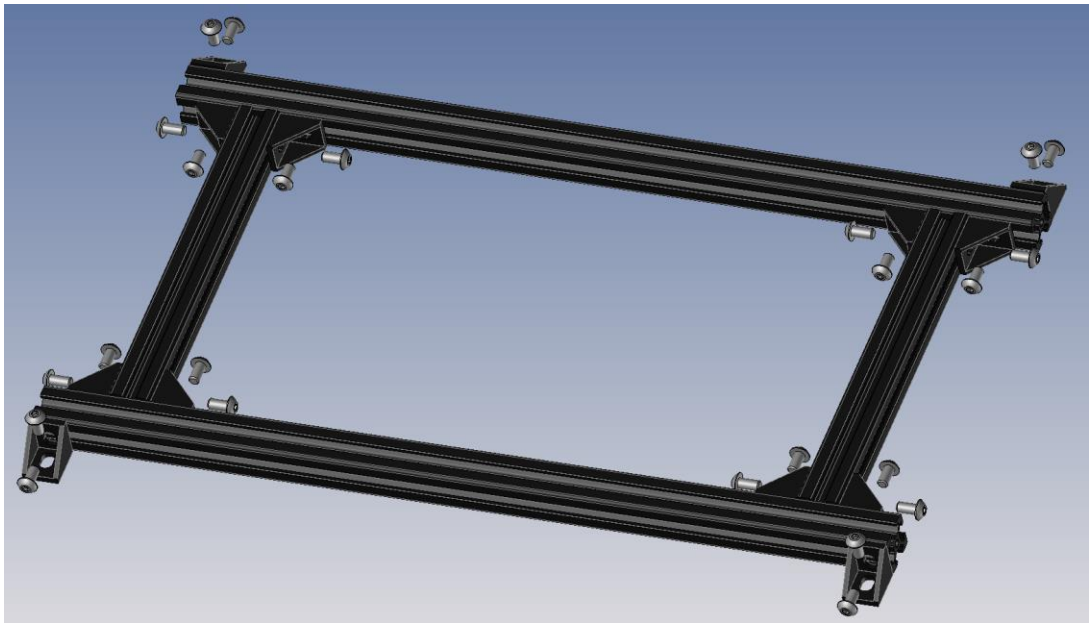
All 3D printed parts are designed to be printed from ABS filament . The optimal slicer settings for prints are:

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** |

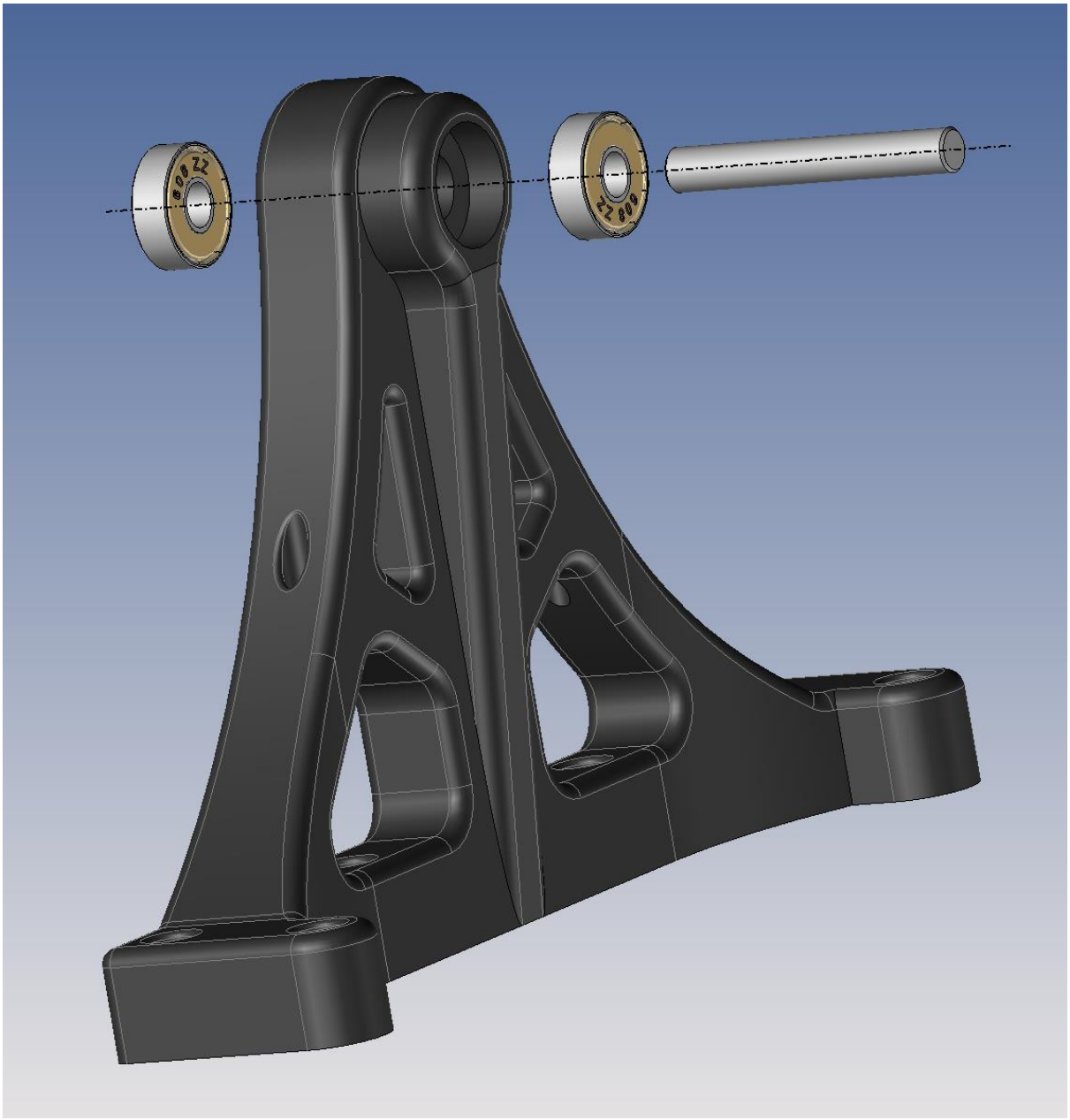


**NOTE:** **Please make sure that you can assemble this step on maximum flat surface**

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

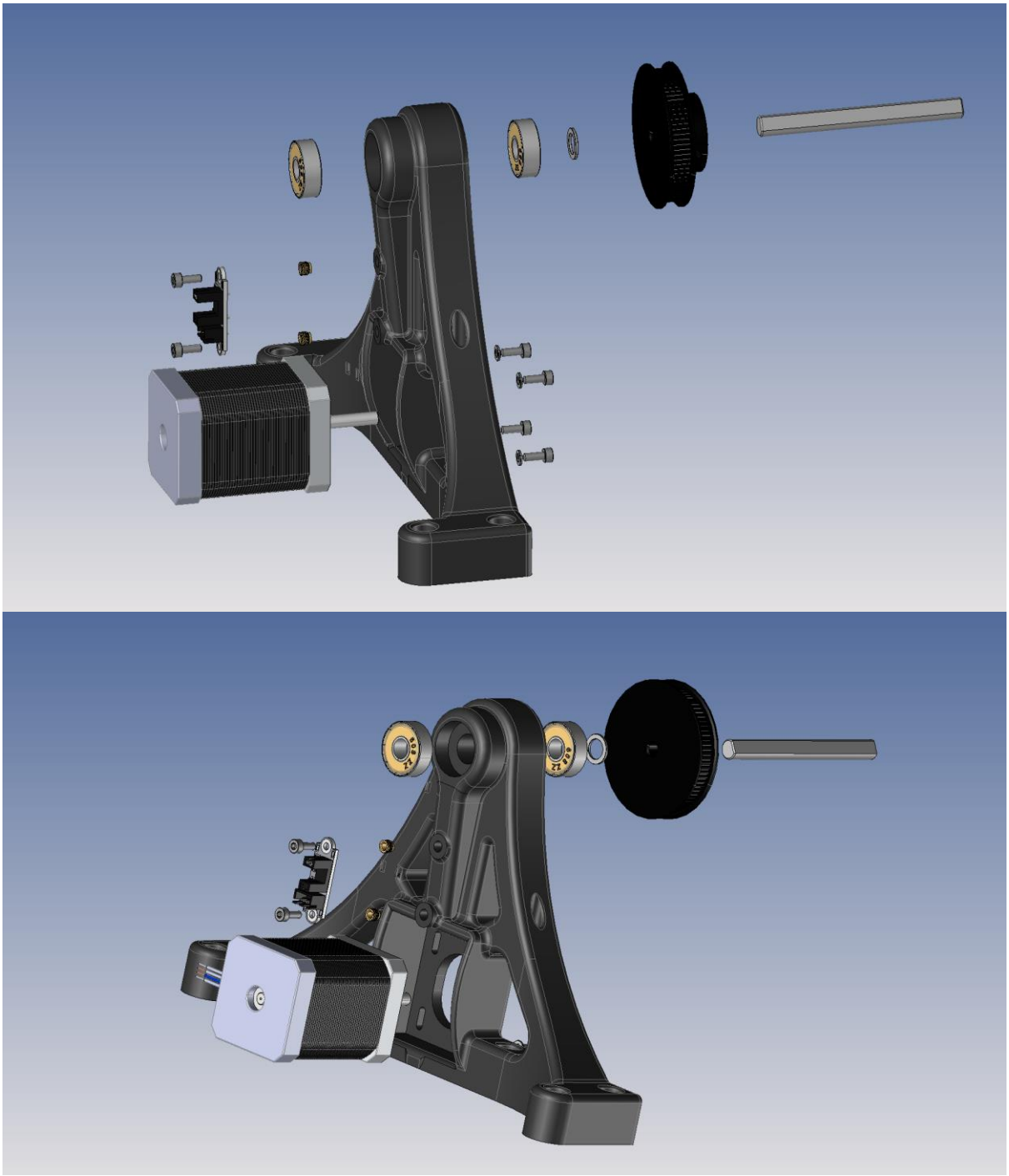
**Best if you have acces to the measuring device to control the distance**

**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**



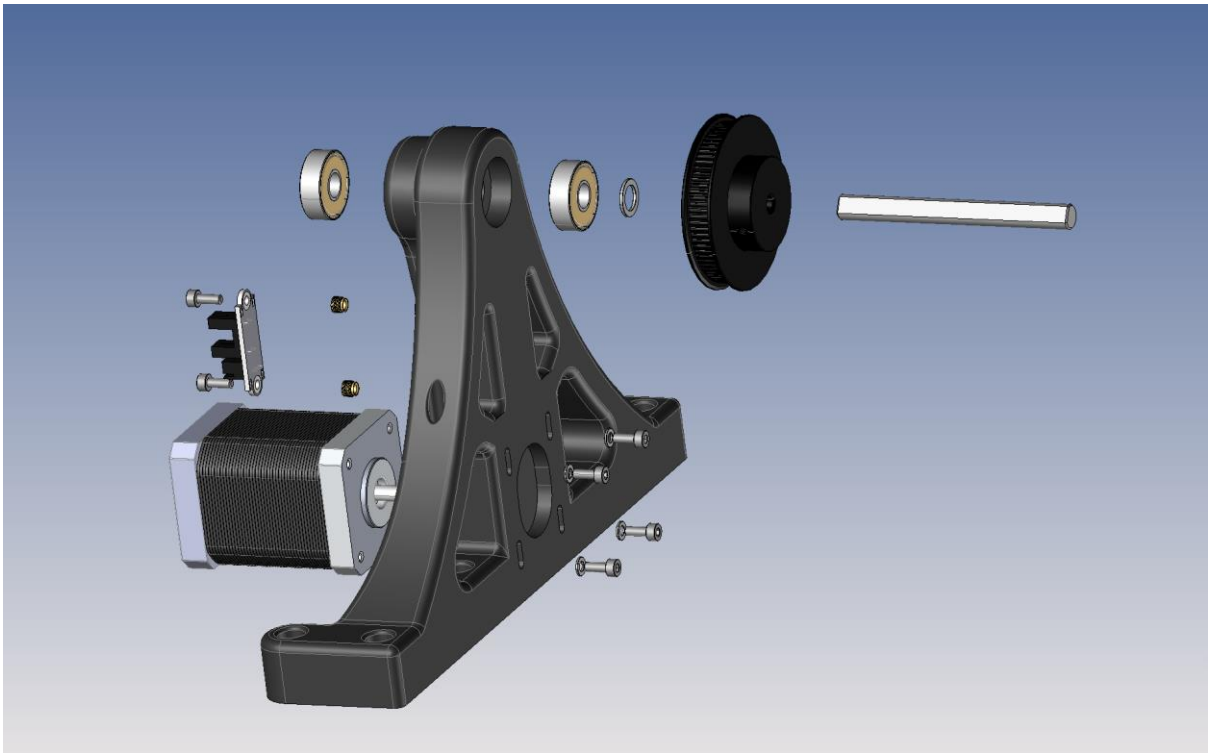
**NOTE:** **Please this ABS part in high quality without any warping issues**

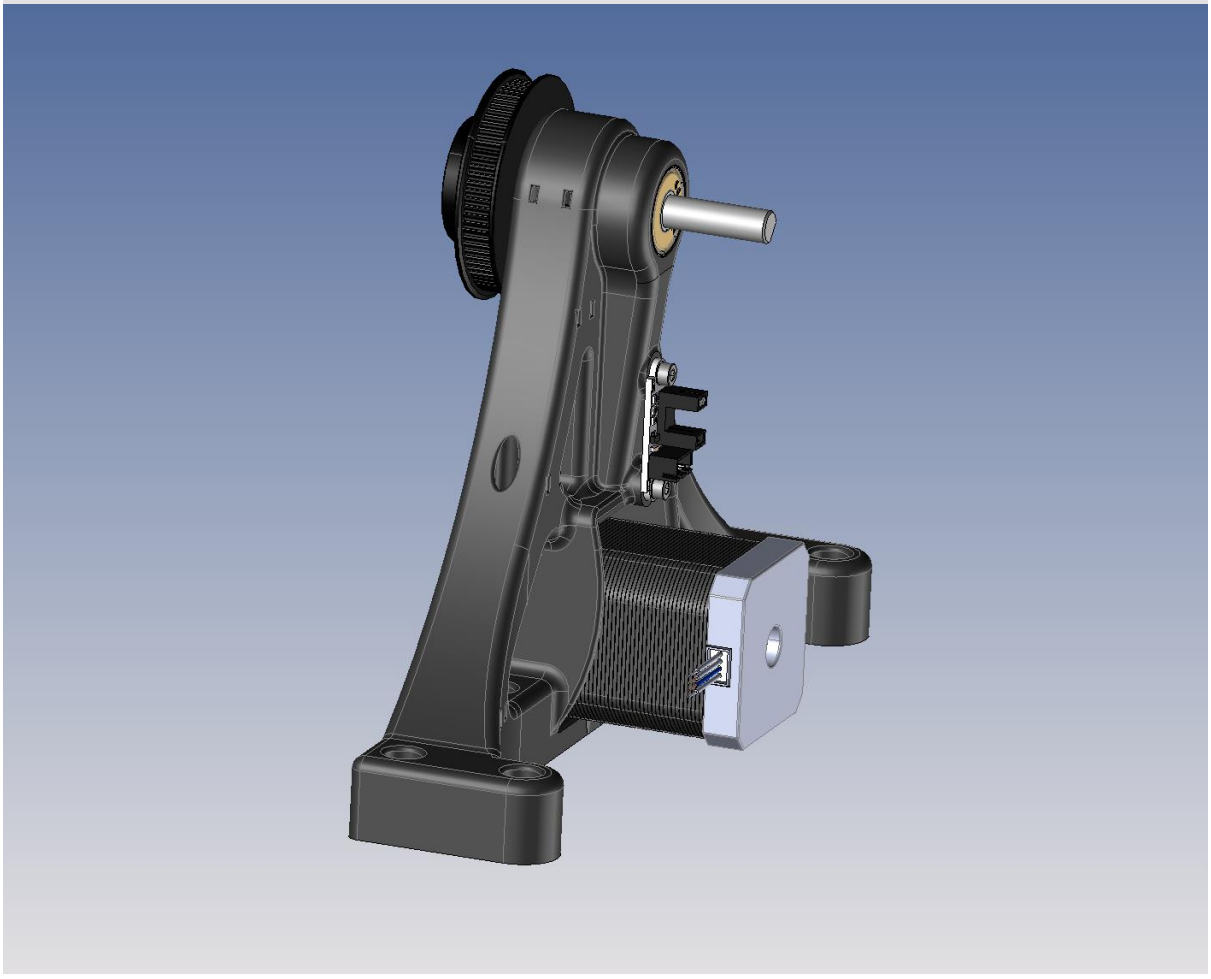
**The 8mm shaft should have, tight fit with the bearings 608zz**

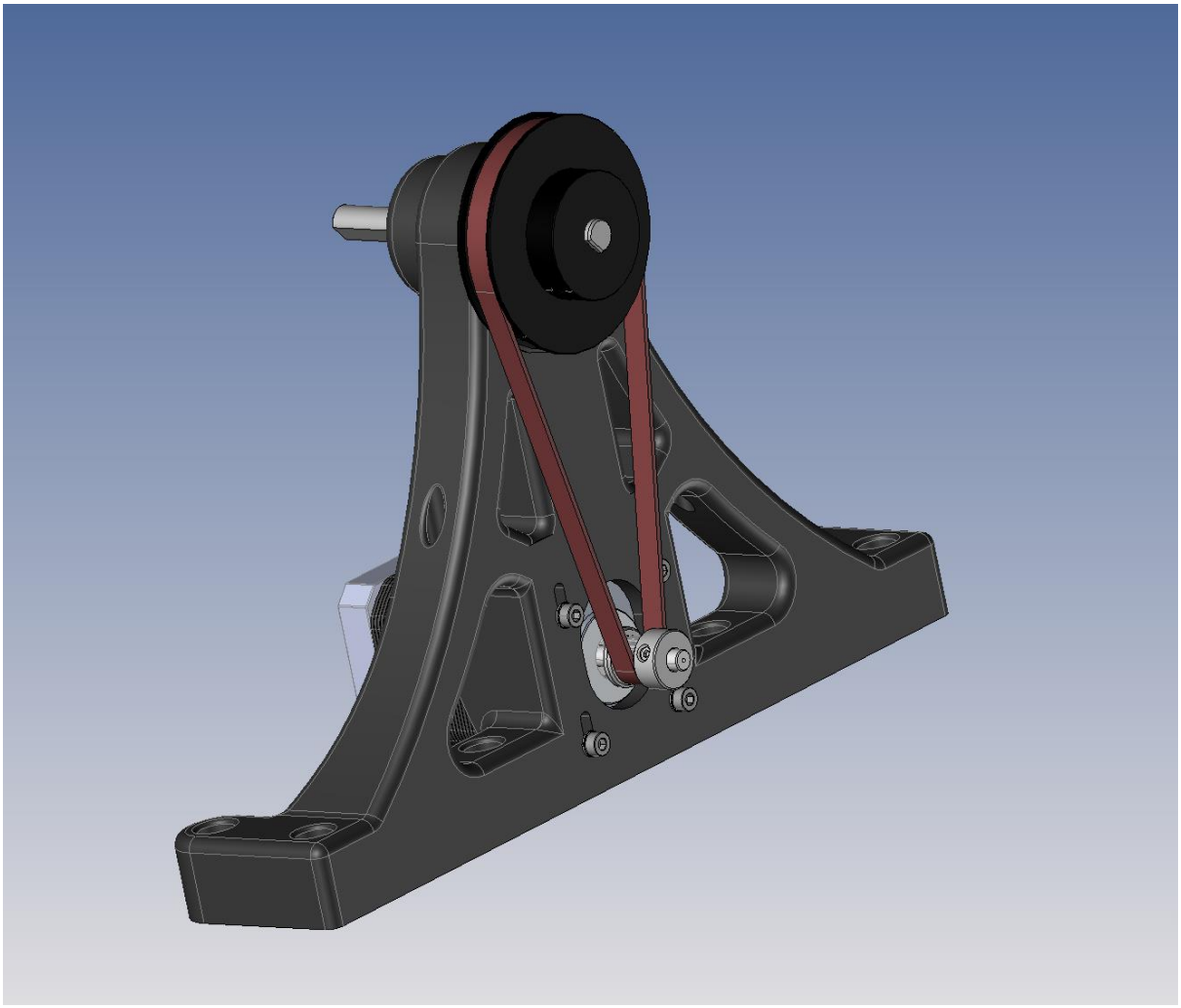
**6x M3 x 8mm**

**4x M3 washers**

**1x M8 washer**



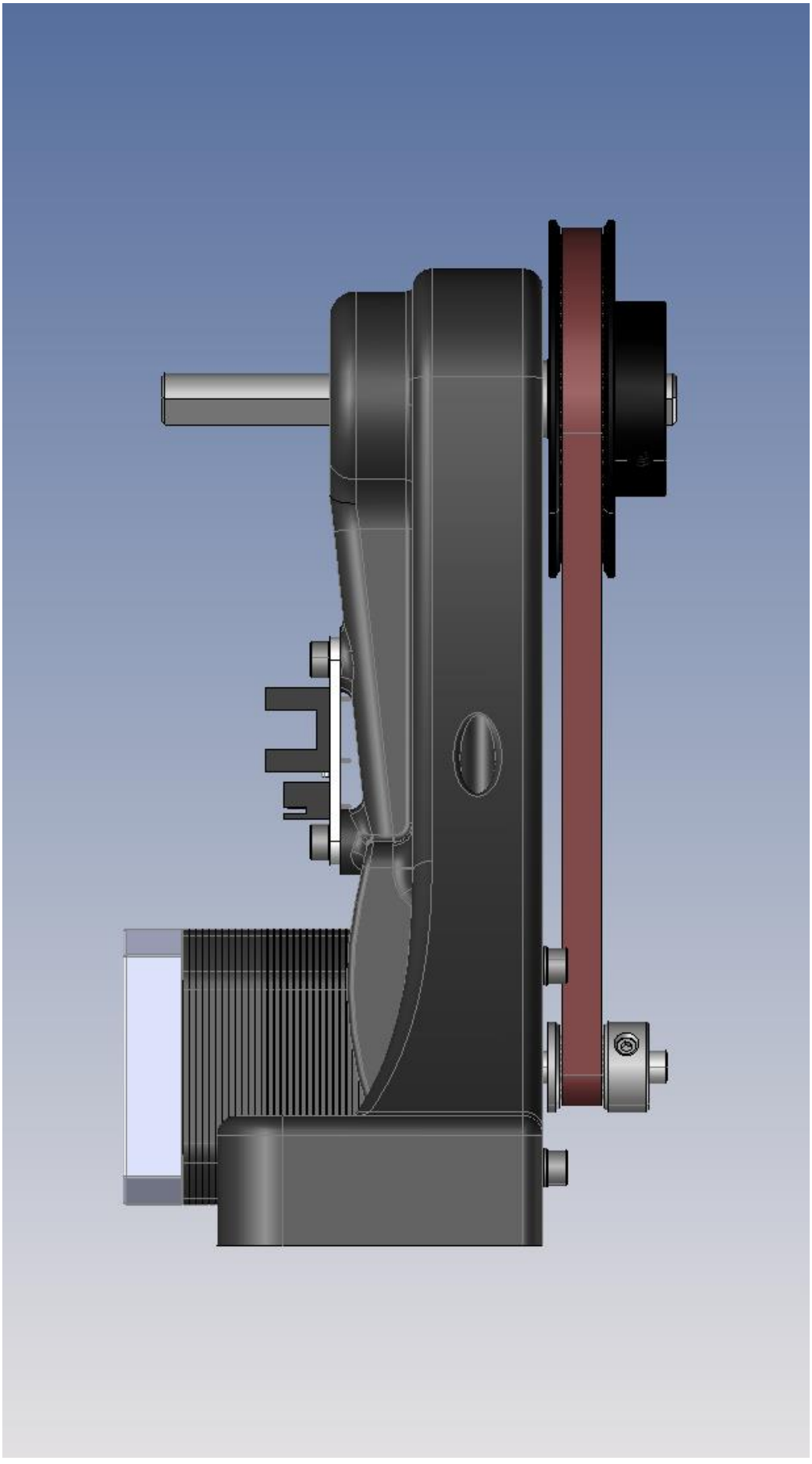


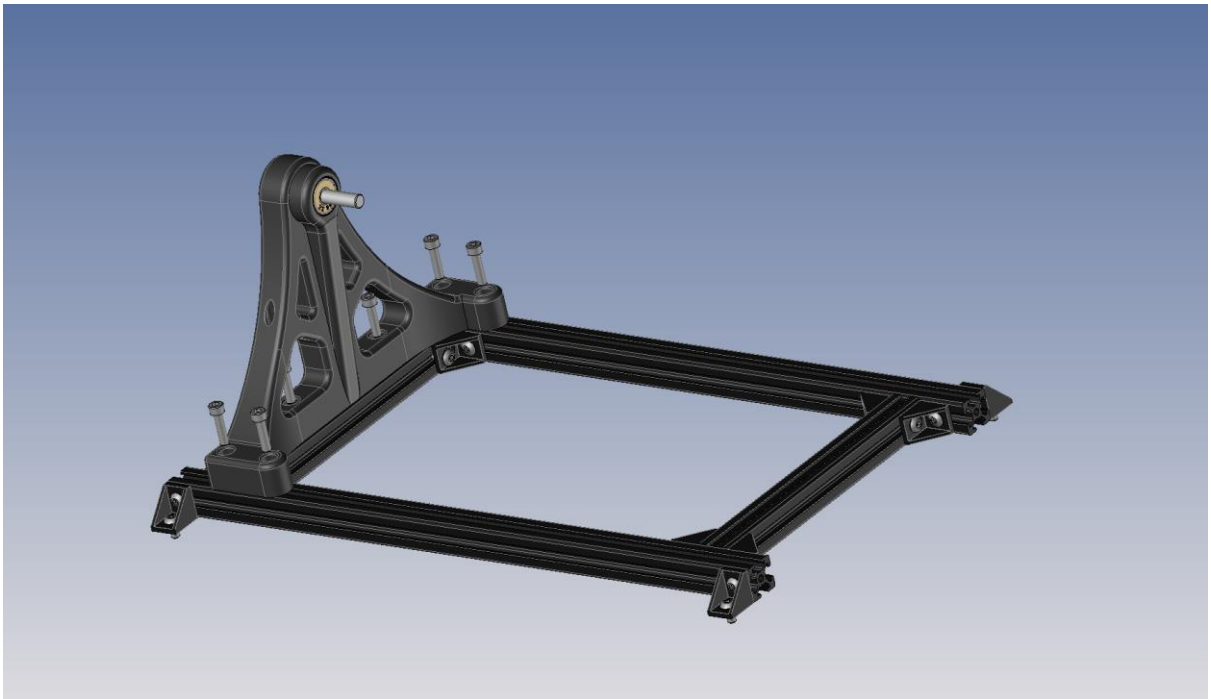


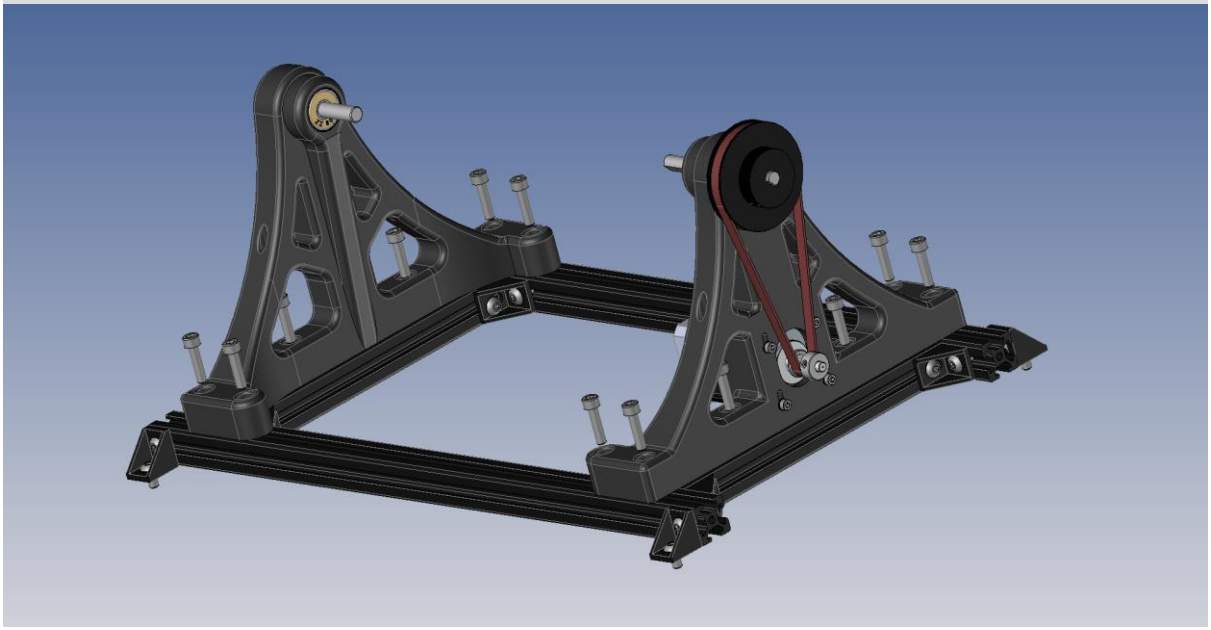
**NOTE:** **Please do not tension the closed loop GT-2 belt 302 yet, leave it free so the motor and pulley can rotate easily**

**GT-2 Pulley 16T – 5mm bore**

**GT-2 Pulley 80T – 8mm bore**

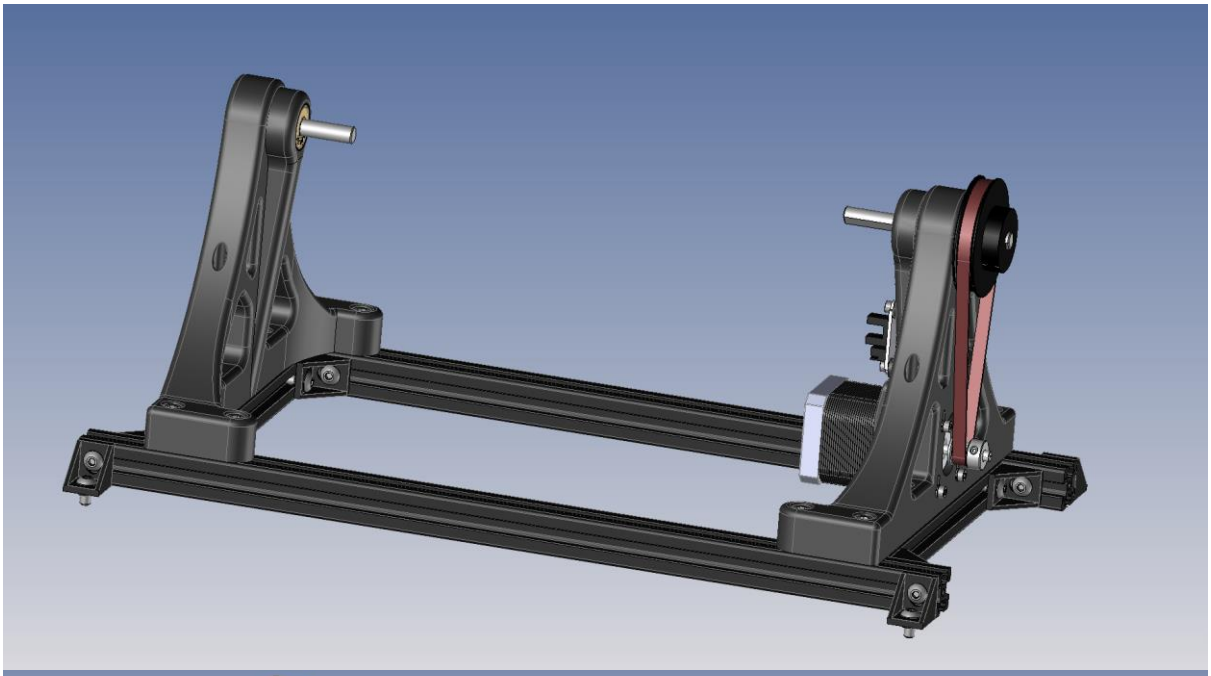


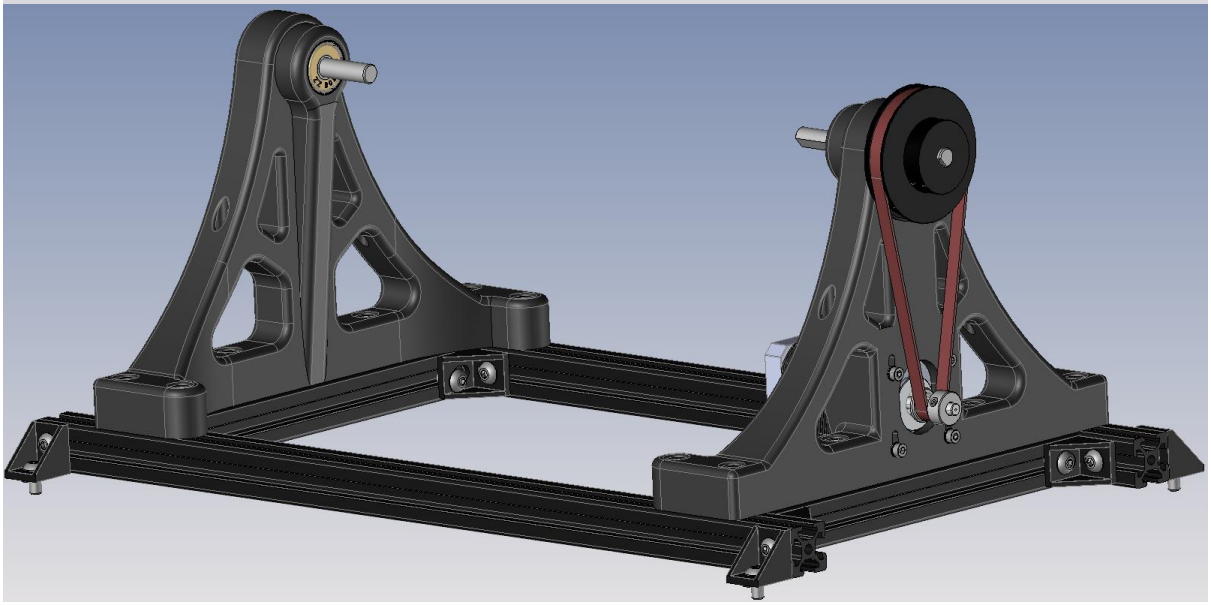


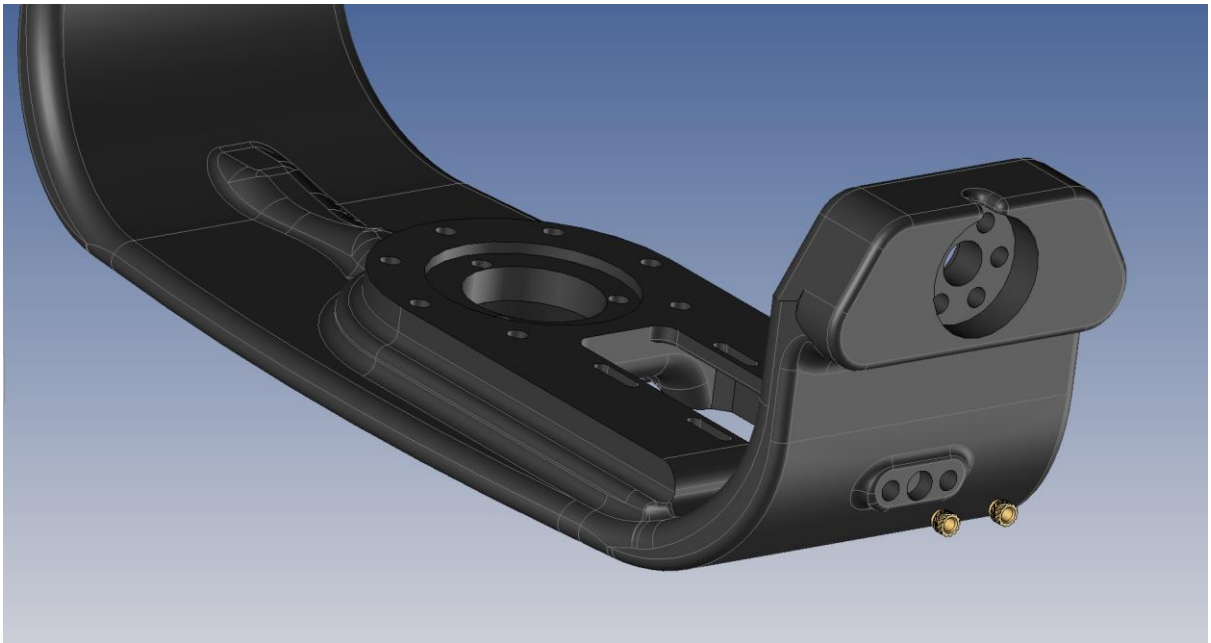


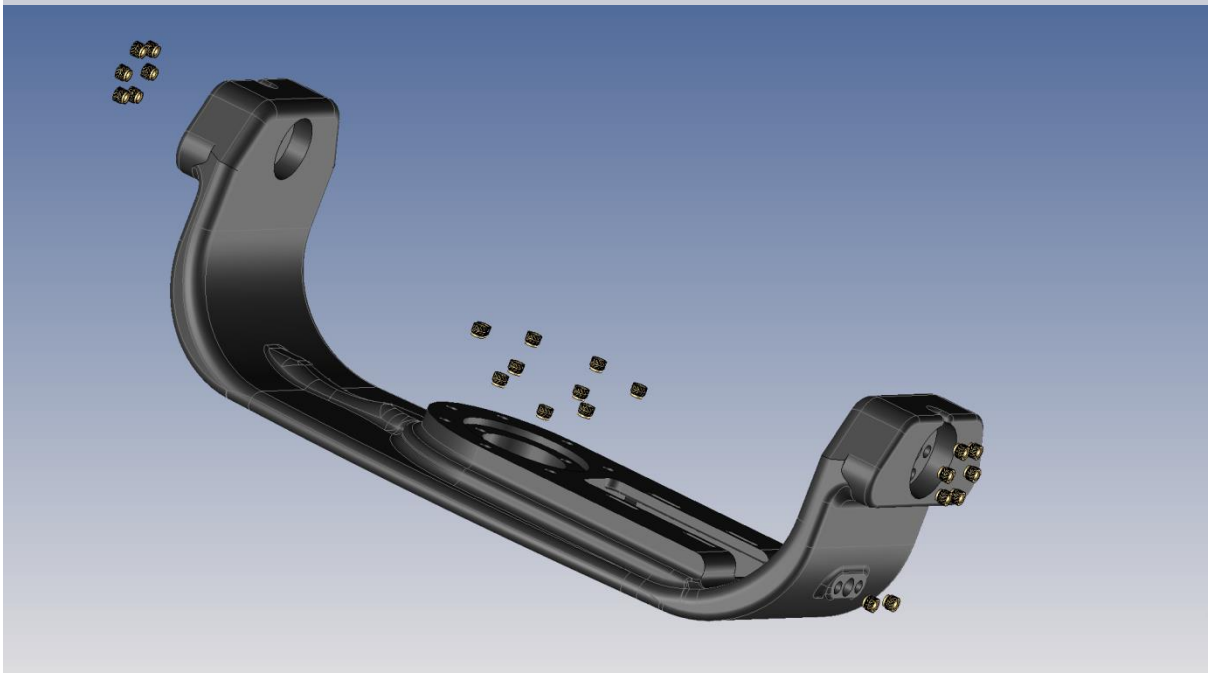
**NOTE:** **Please make sure the two ABS printed sides are squared with the base and also parallel**

**12x M5x20mm + Tnuts**

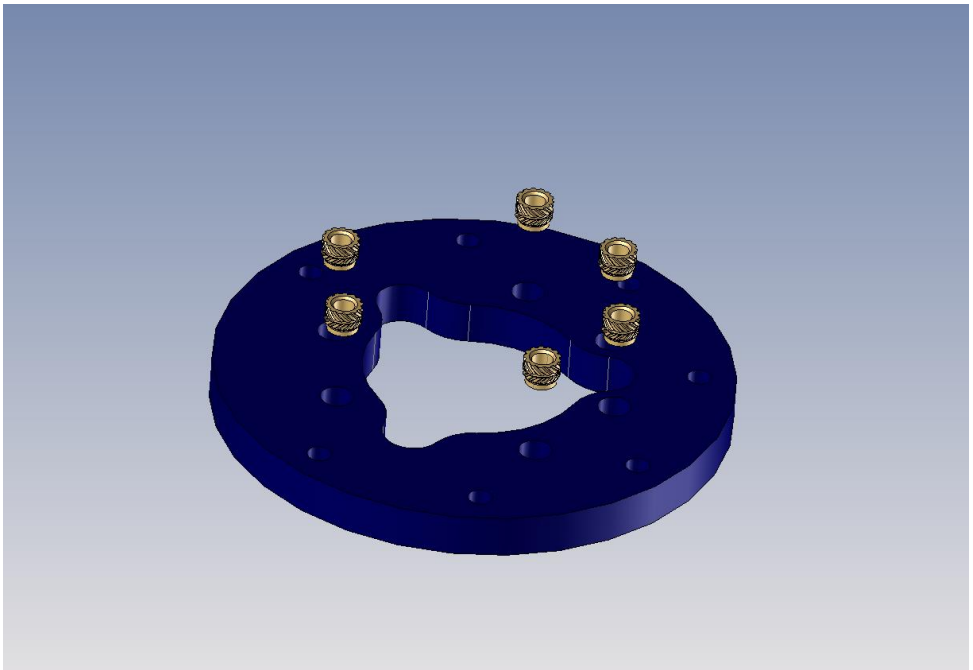


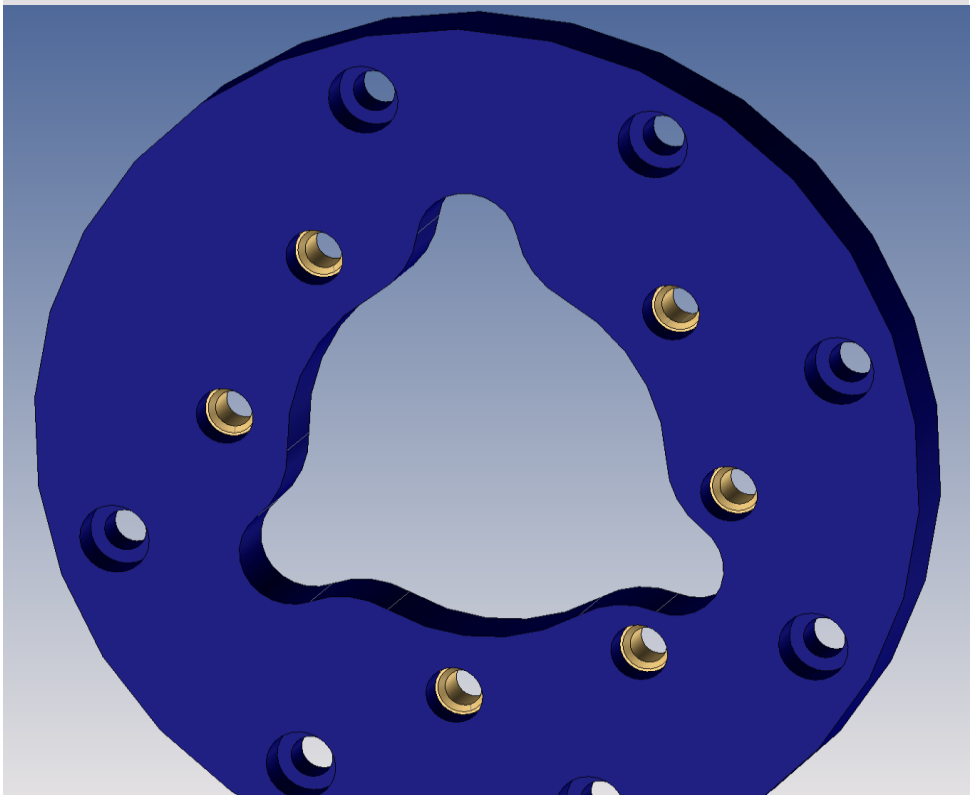




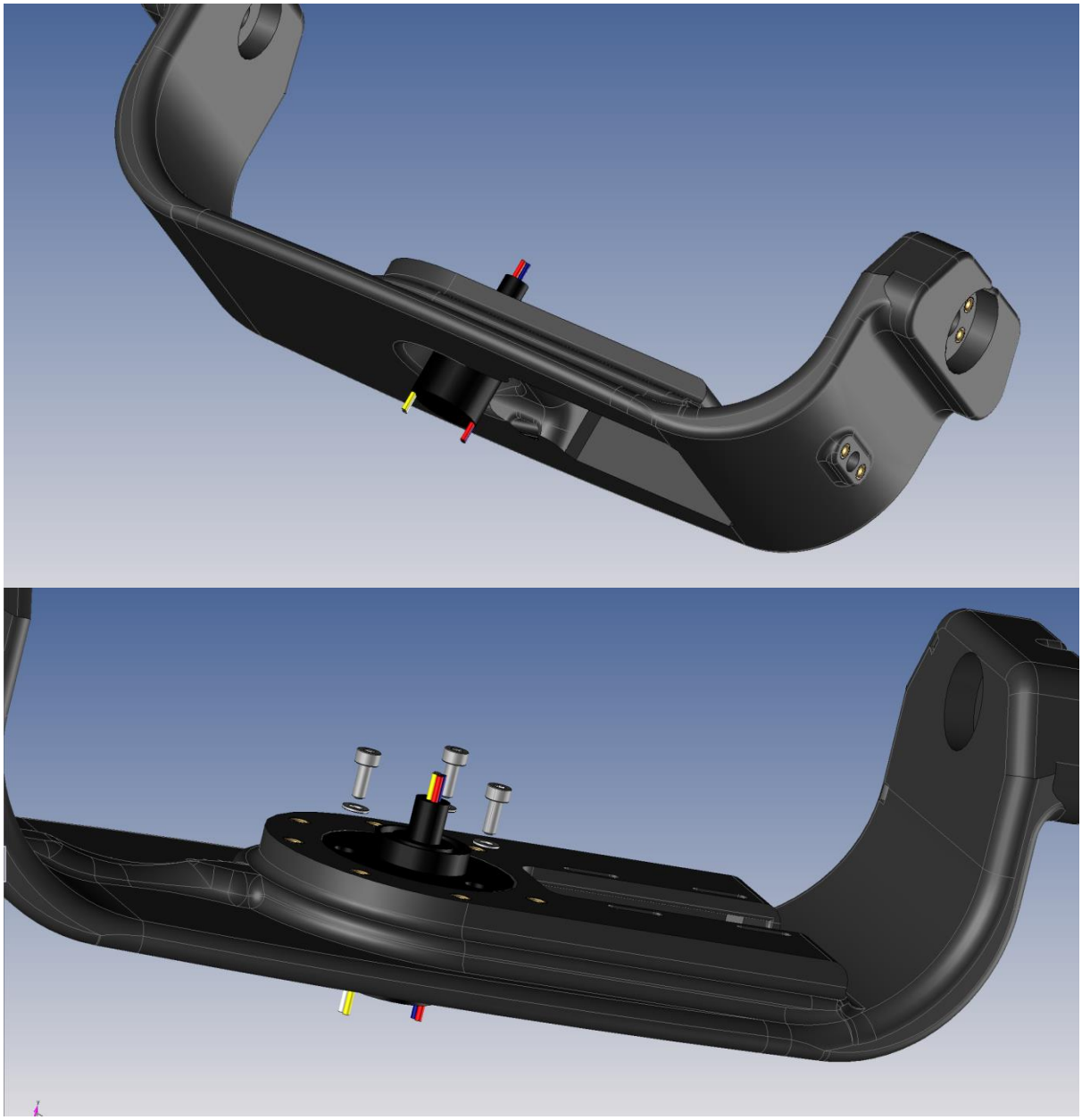


**NOTE:** **the heat inserts used, are M3 x 5mm**

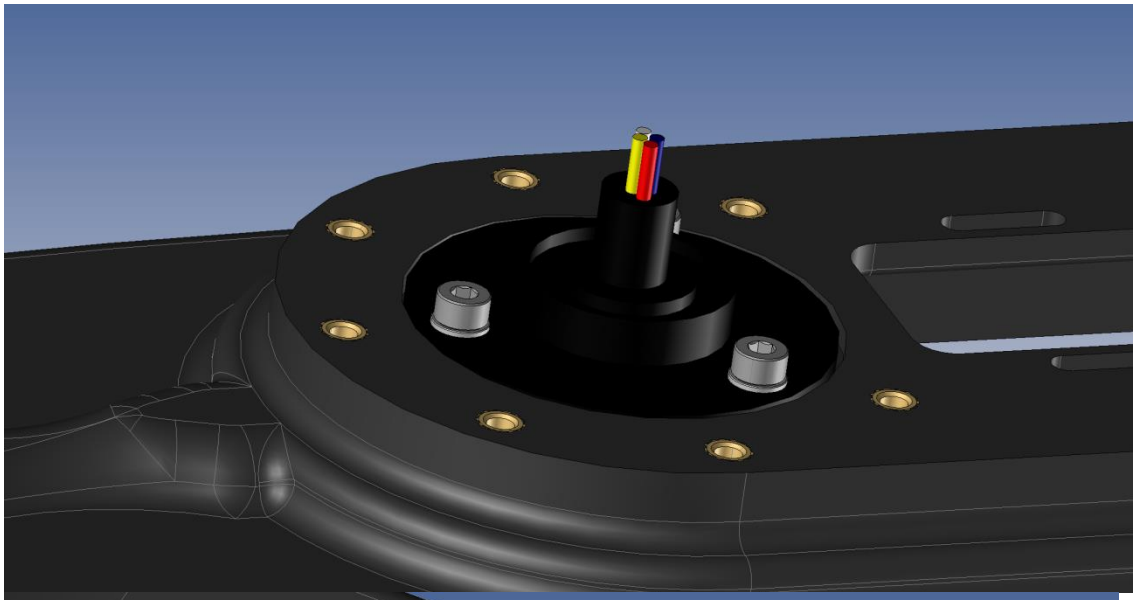


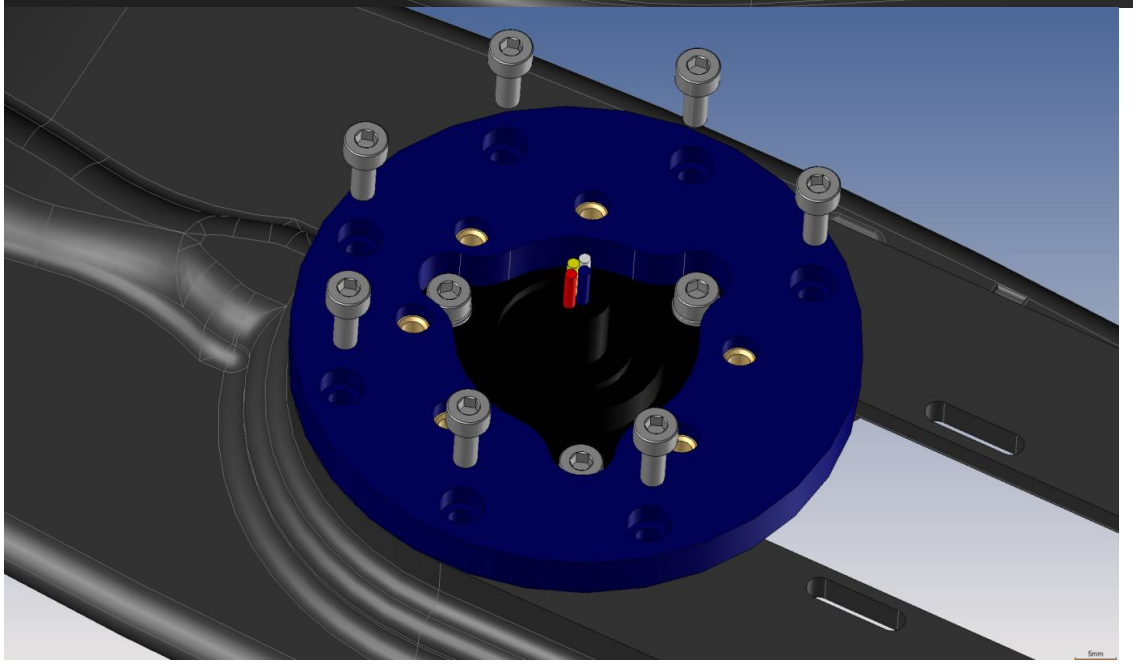


**NOTE:** **the heat inserts used, are M3 x 7mm**

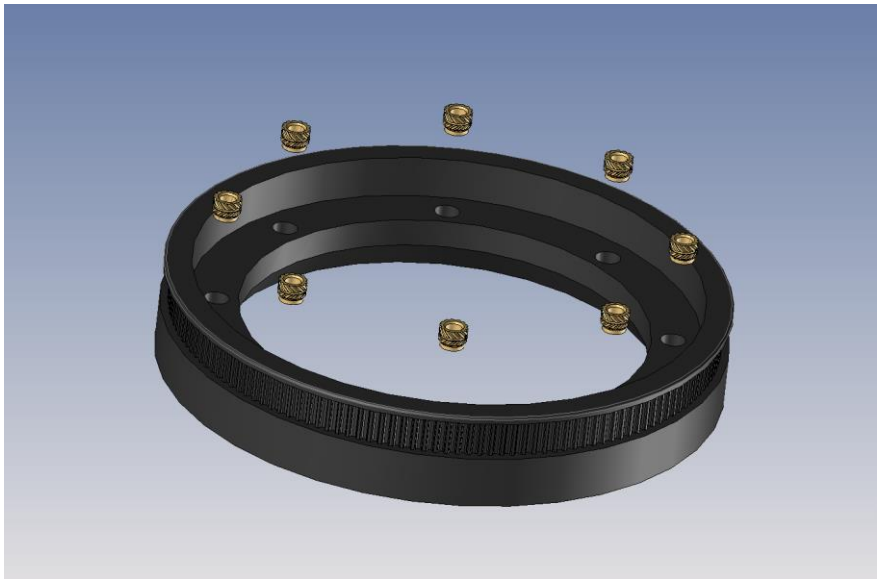


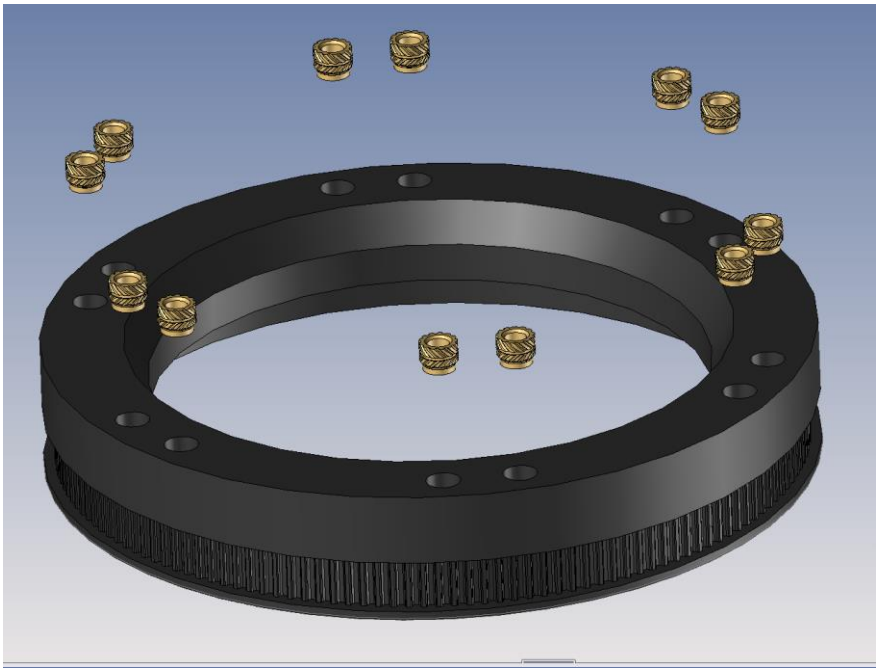
**NOTE:** **3x M3x8mm + M3 washers**



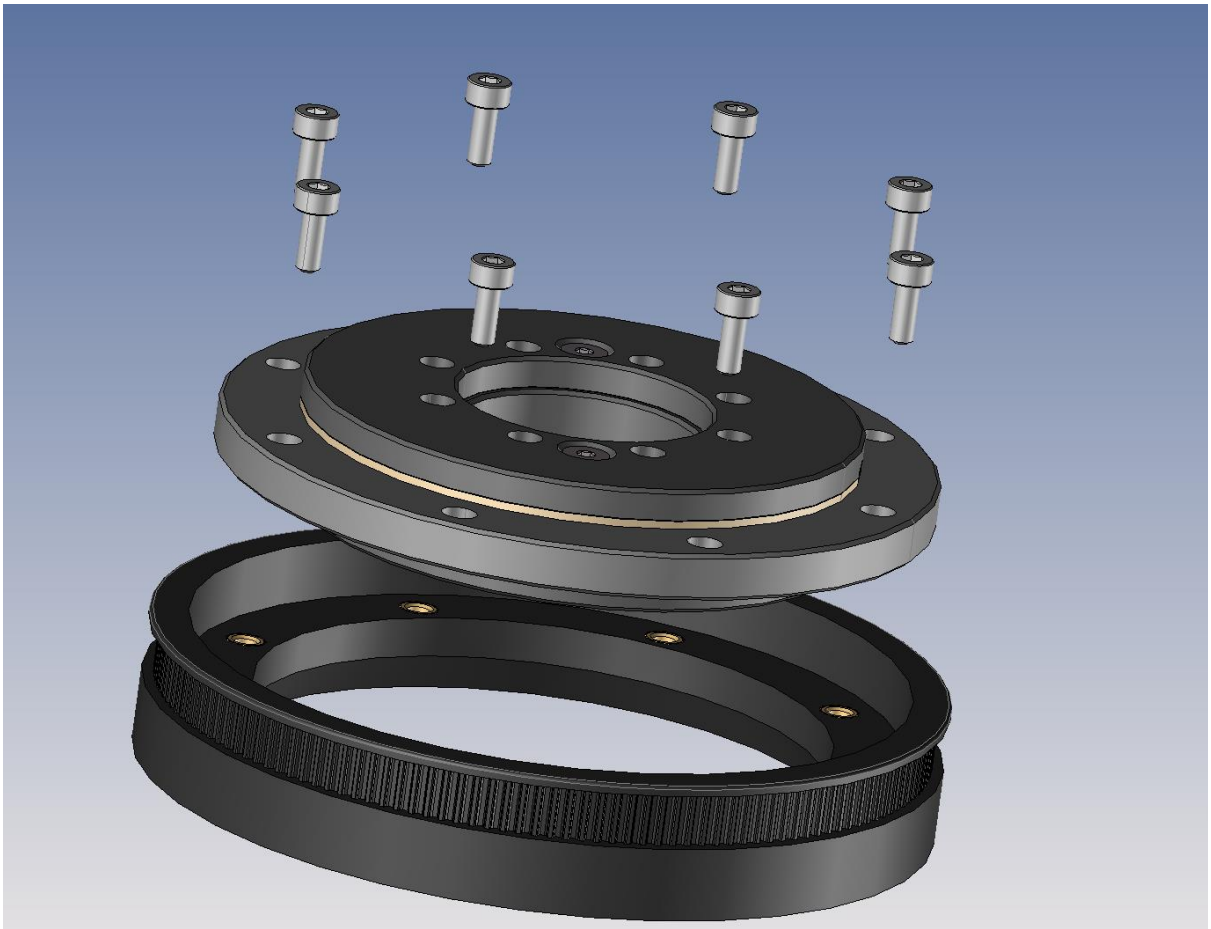


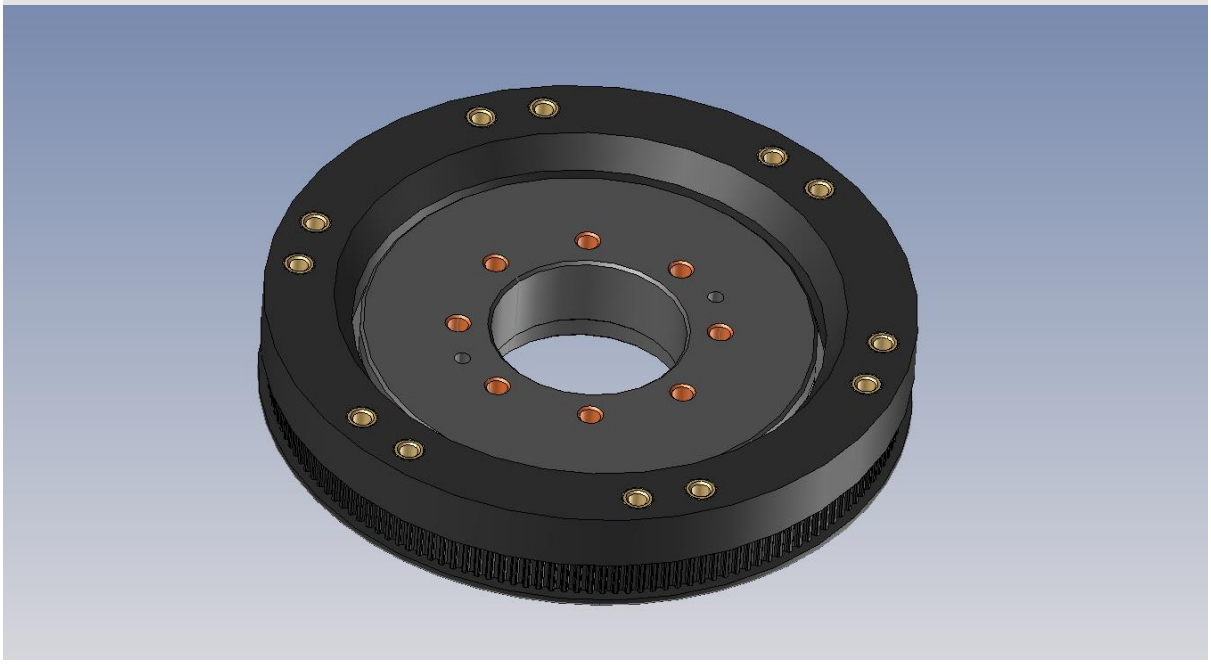
**NOTE:** **7x M3x8mm**



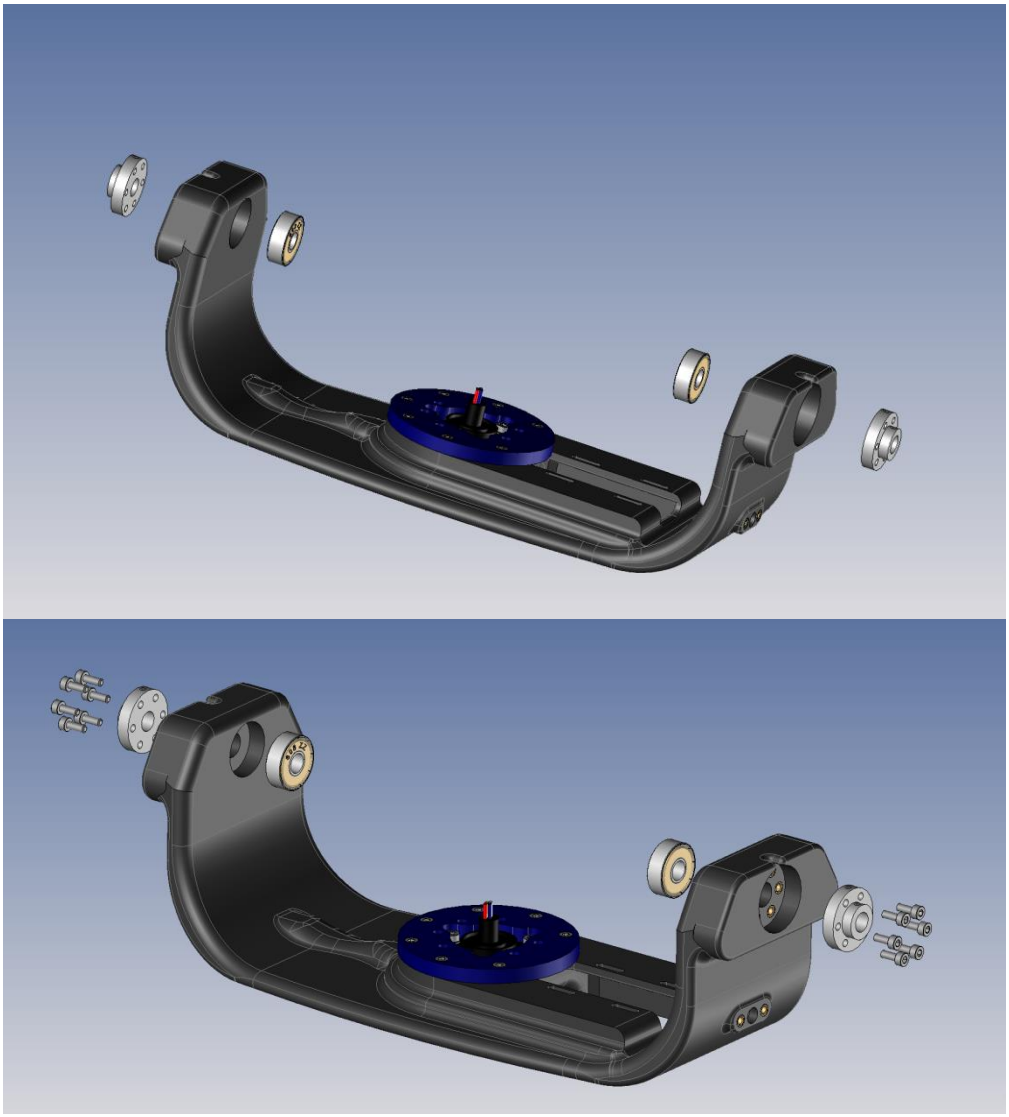


**NOTE:** **the heat inserts used, are M3 x 5mm**

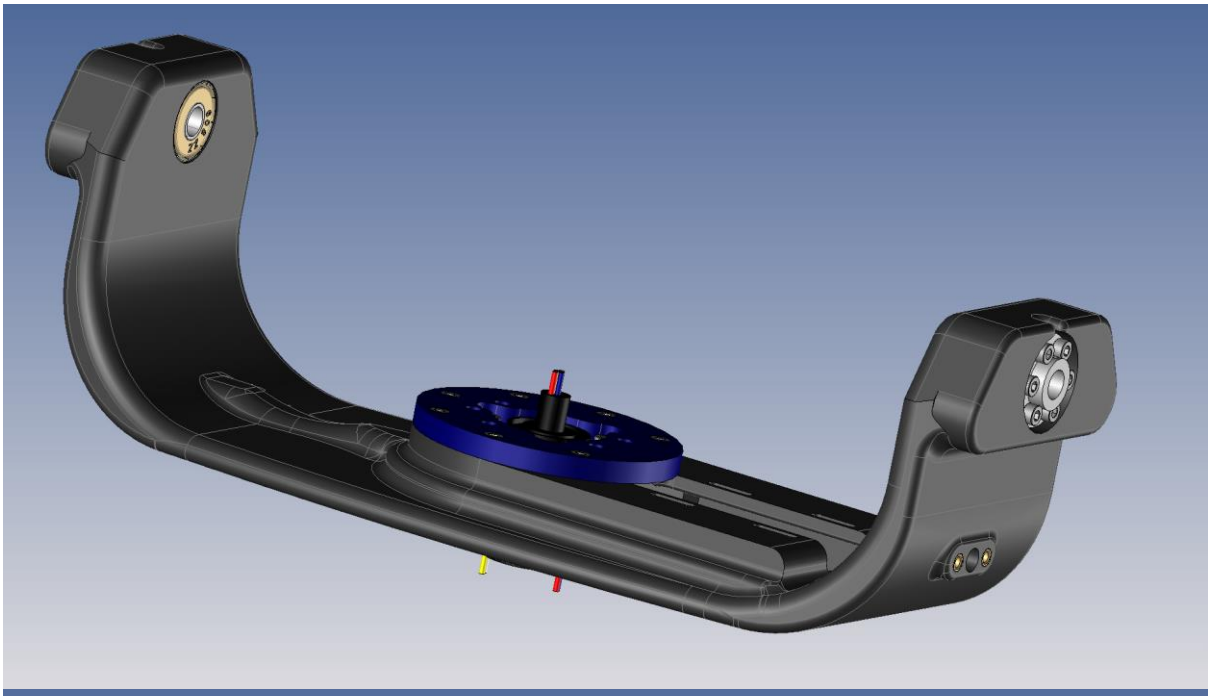


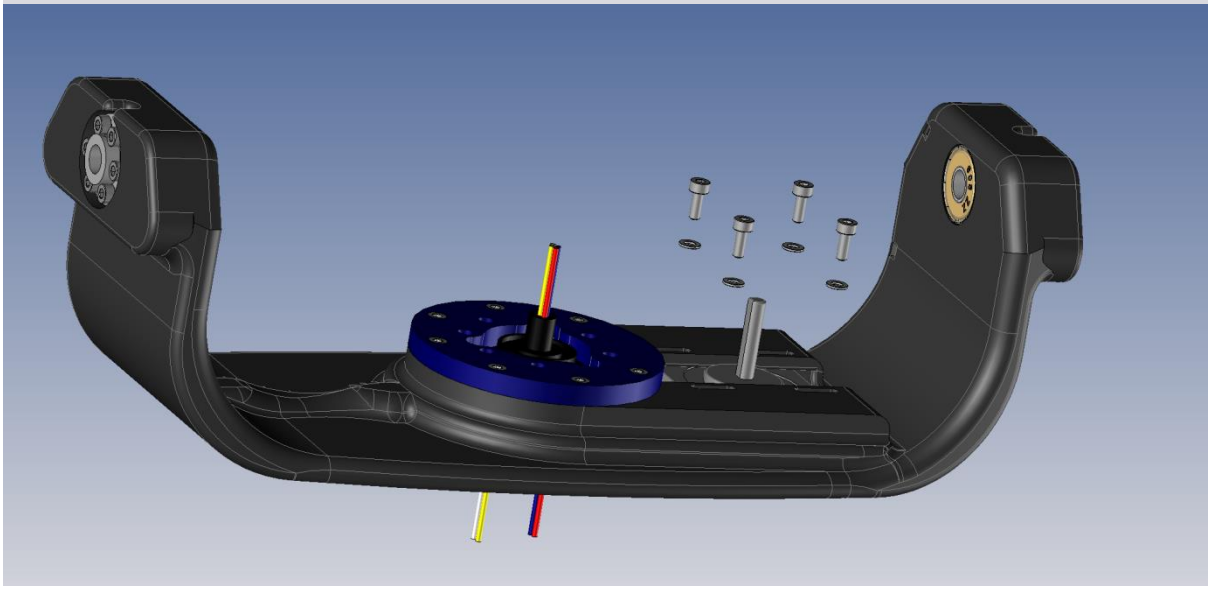


**NOTE:** **8x M3x10mm**

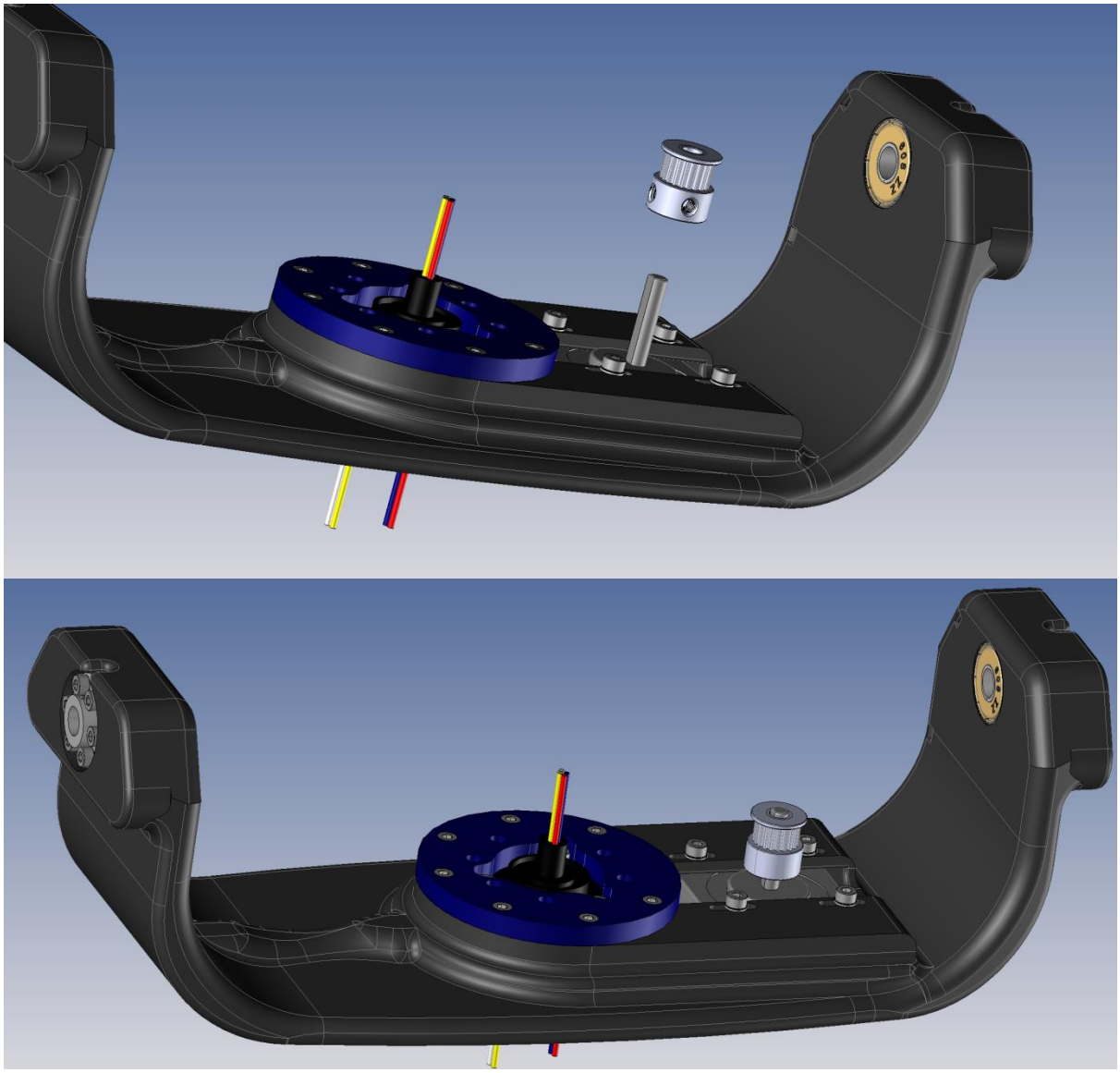


**NOTE:** **the pololu hub M3 threated holes, needs to be drilled out with 3.15 or 3.2 mm drill**

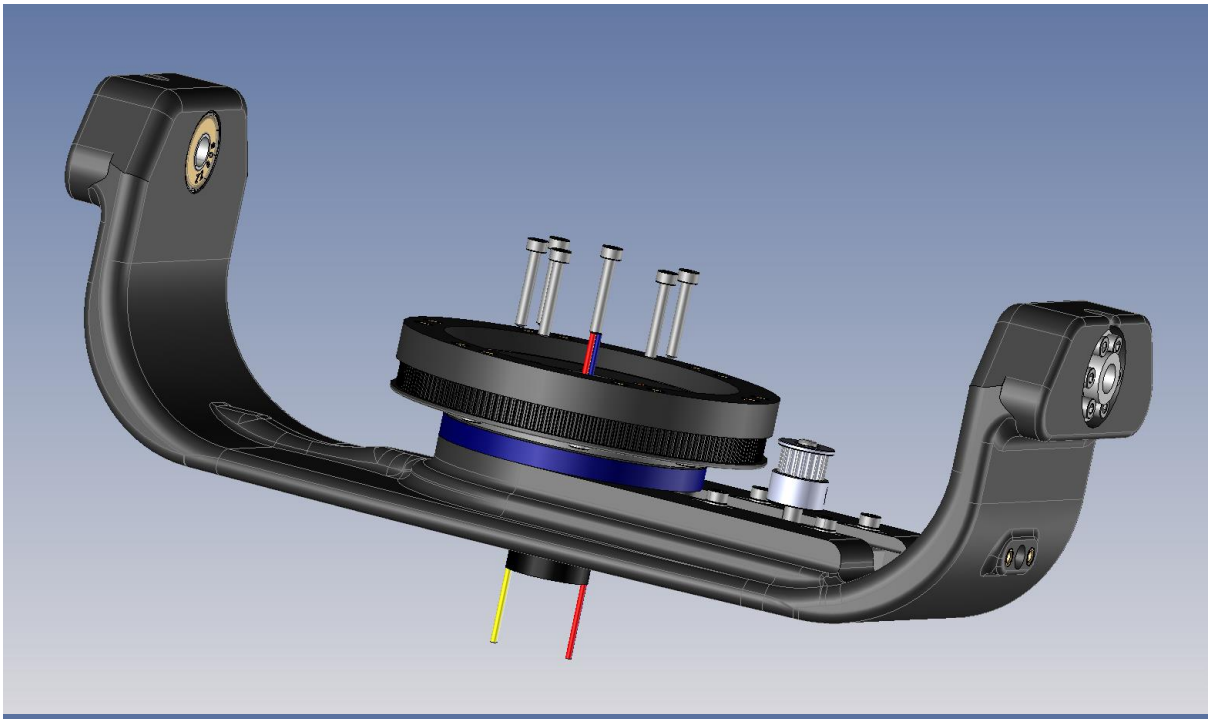


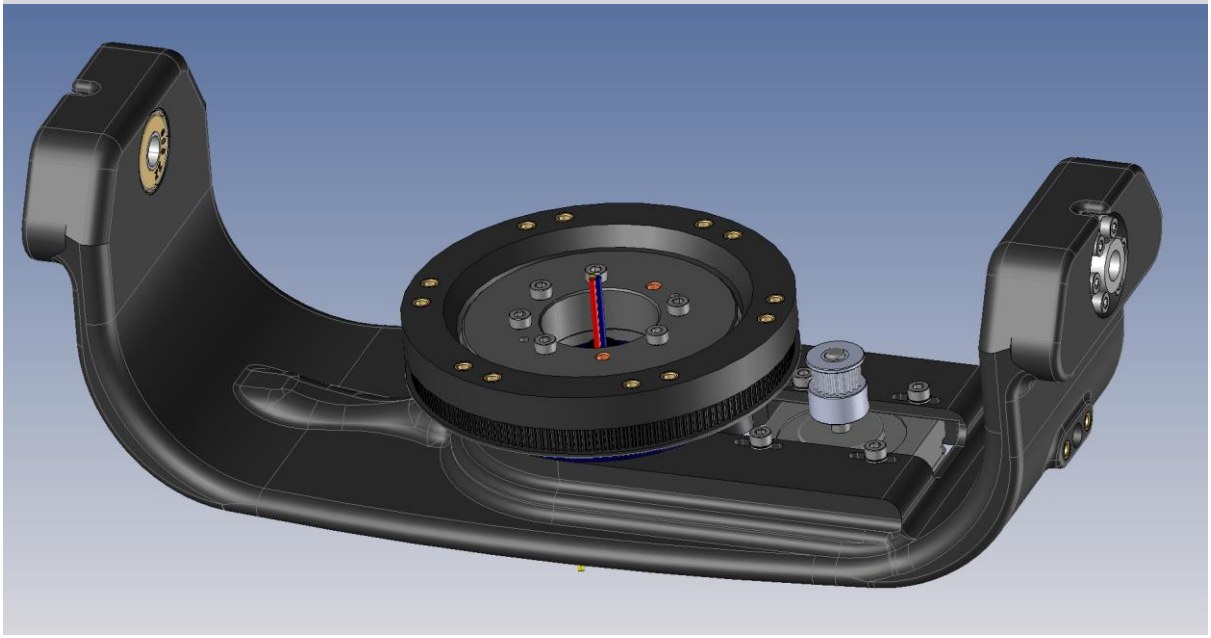


**NOTE:** **4x M3x8mm + M3 washers**

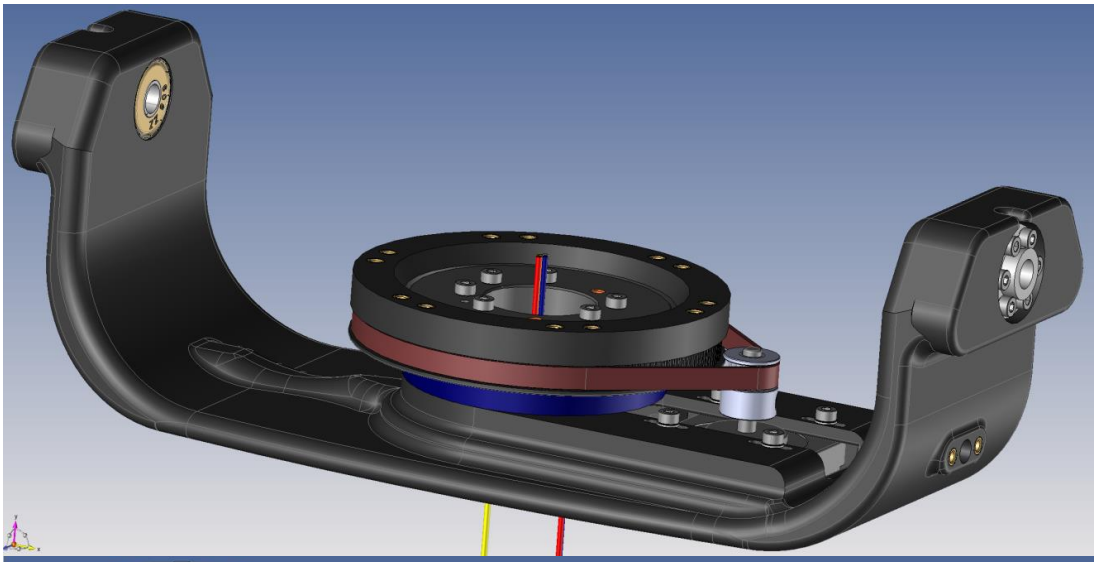


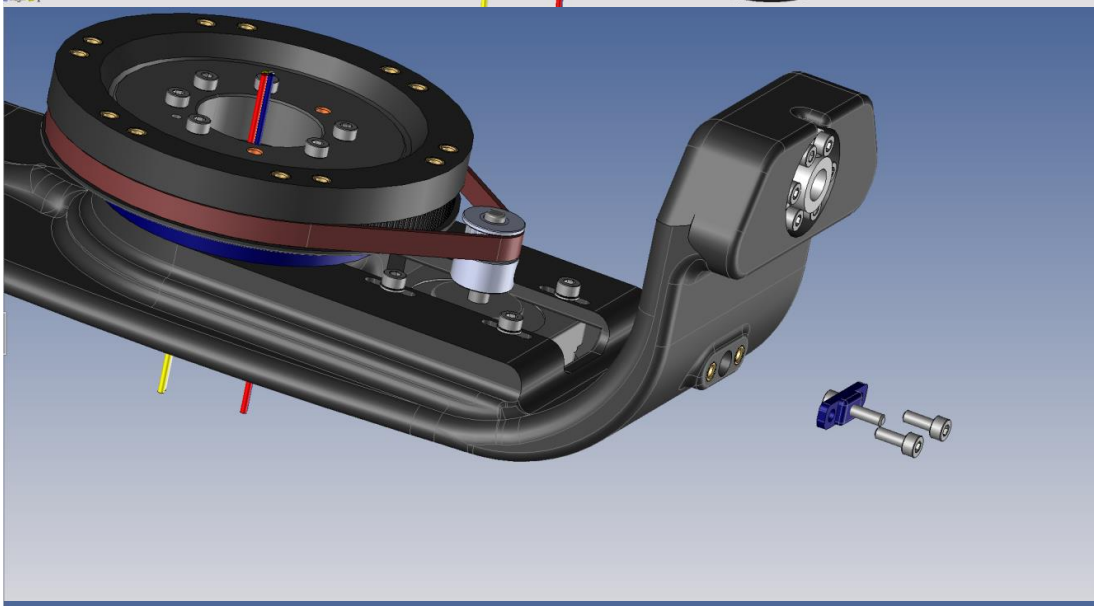
**NOTE:** **GT-2 Pulley 20T**

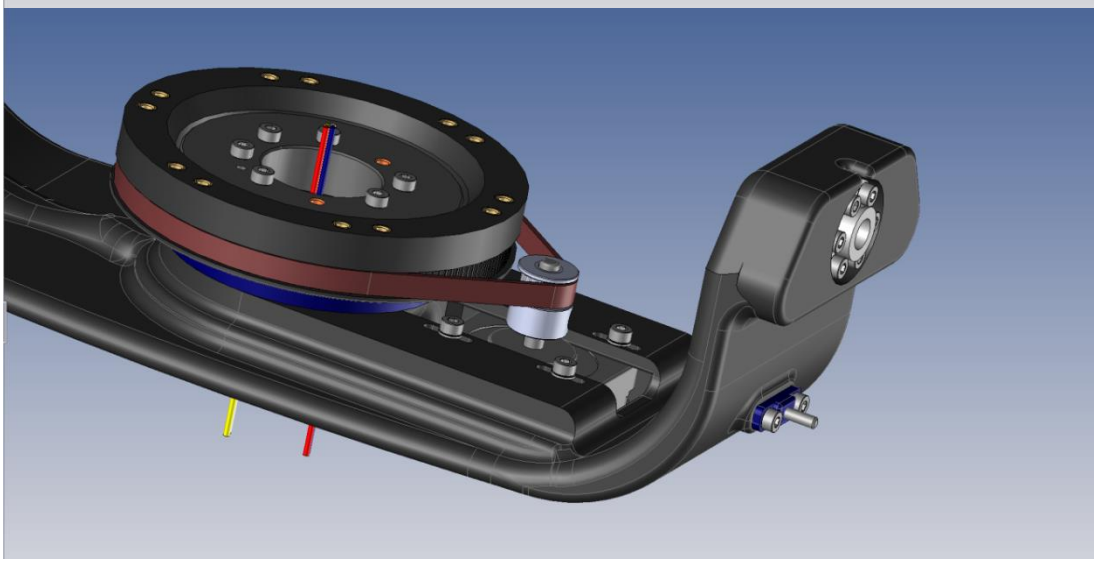




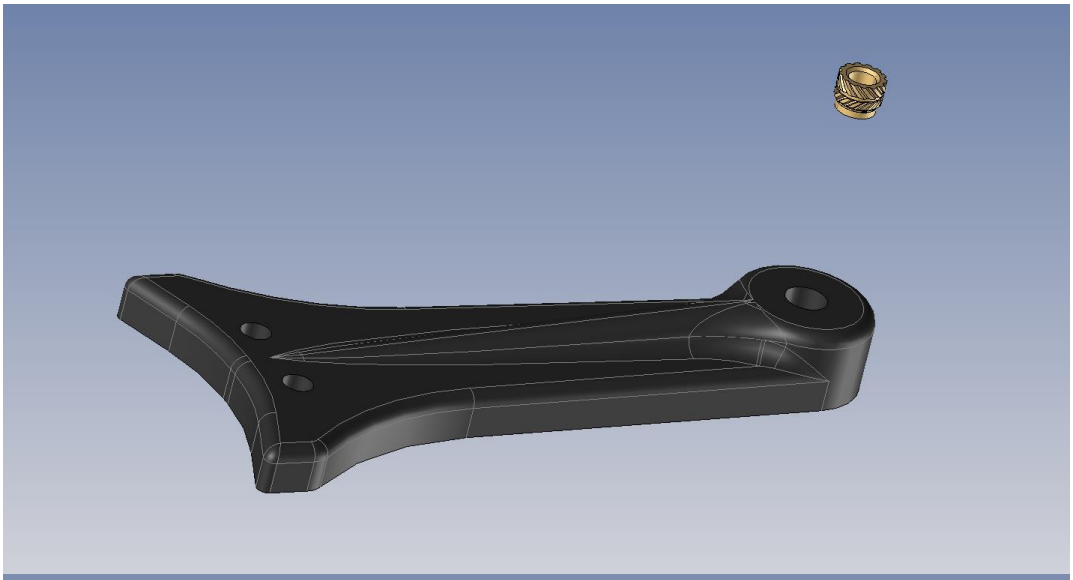
**NOTE:** **6x M3x20mm**

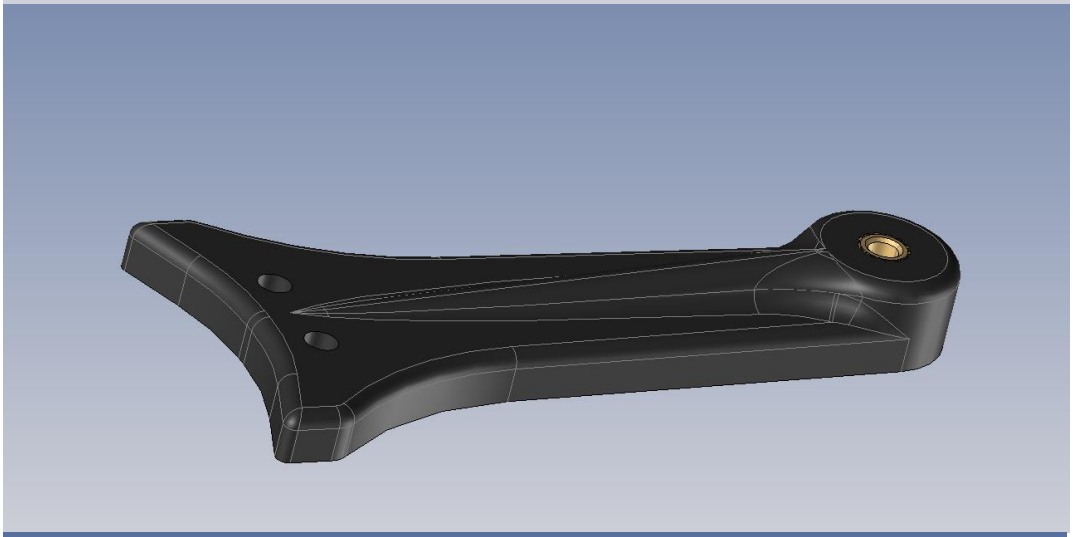


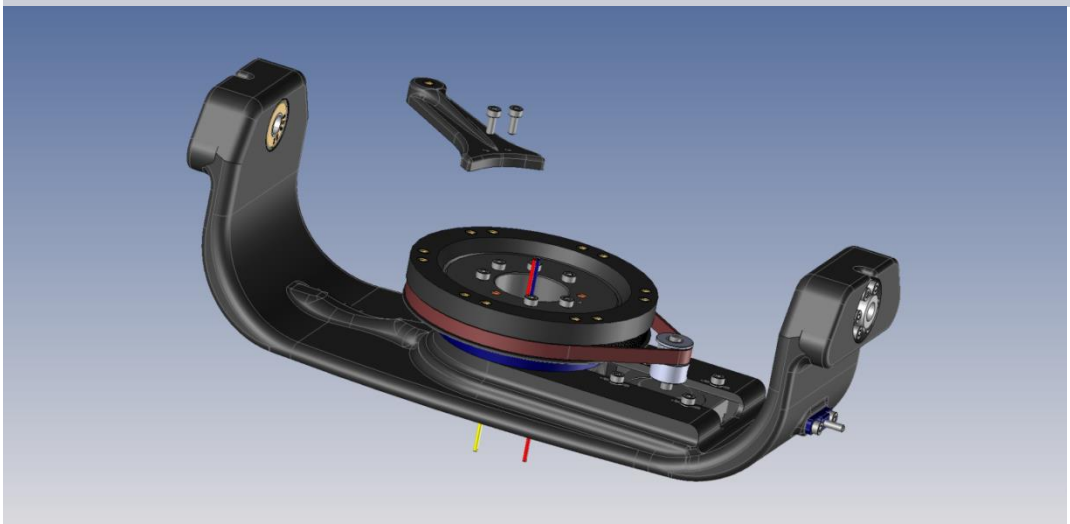




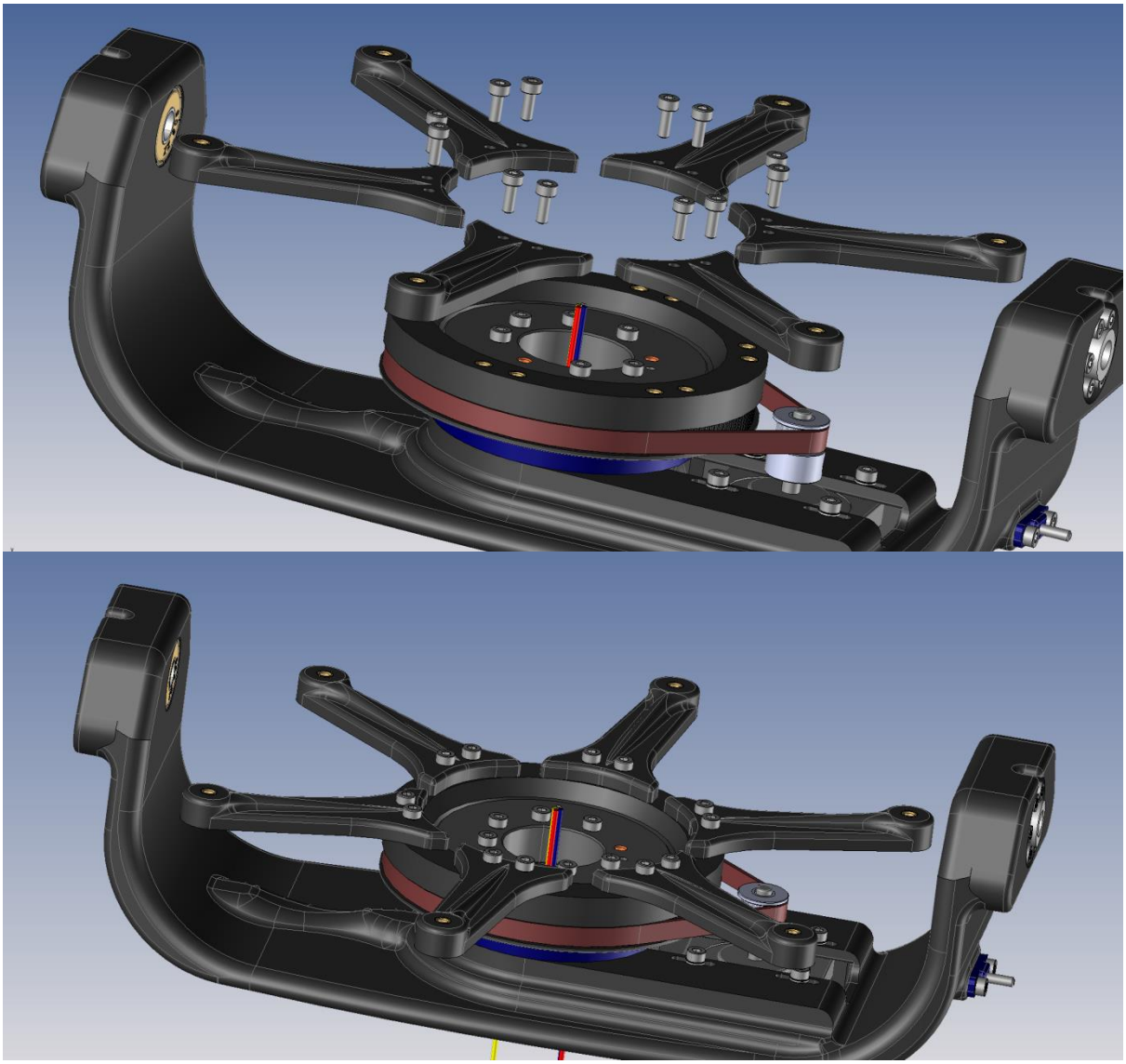
**NOTE:** **2x M3x8mm + 1x M3x12mm**



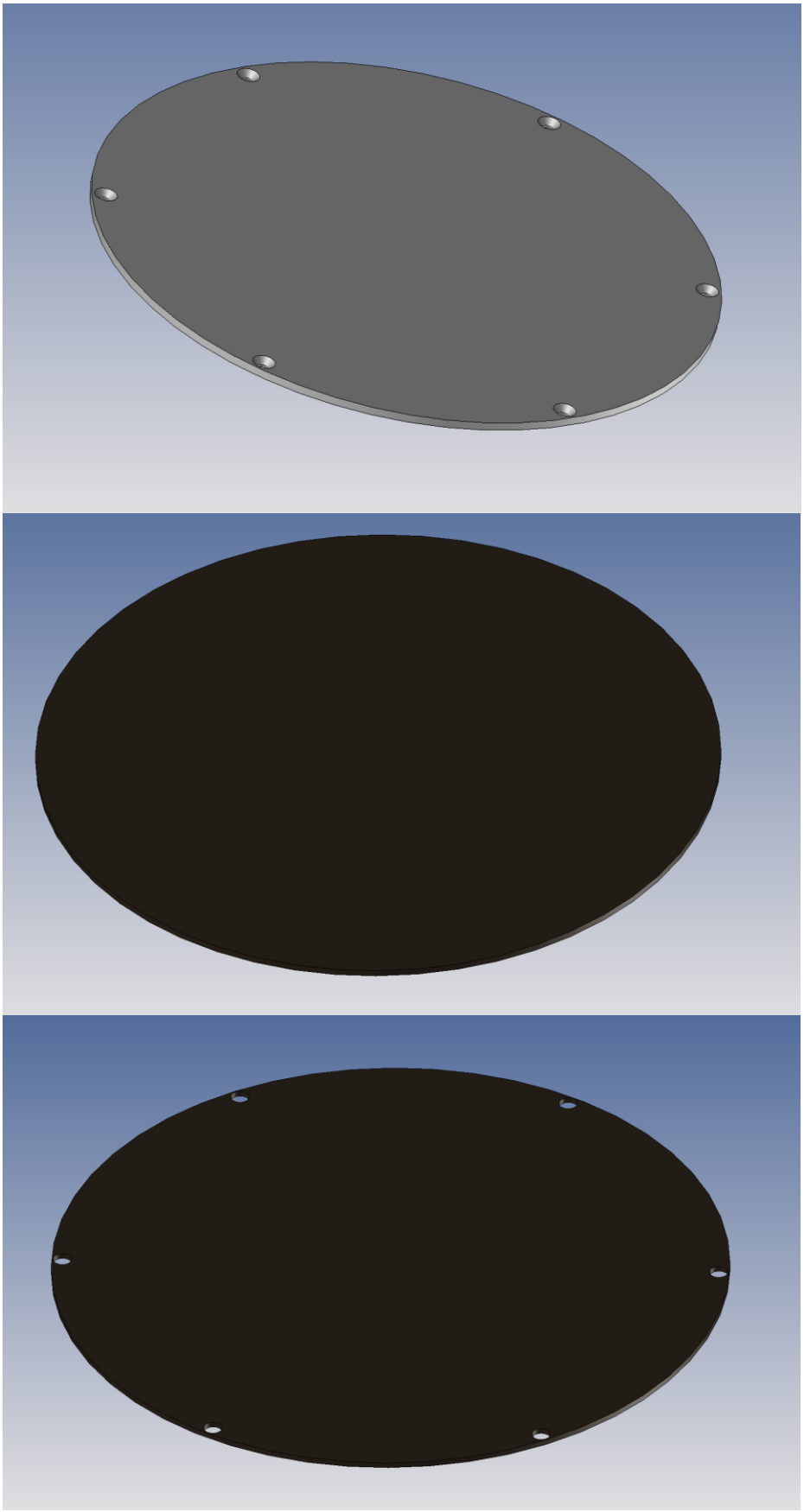




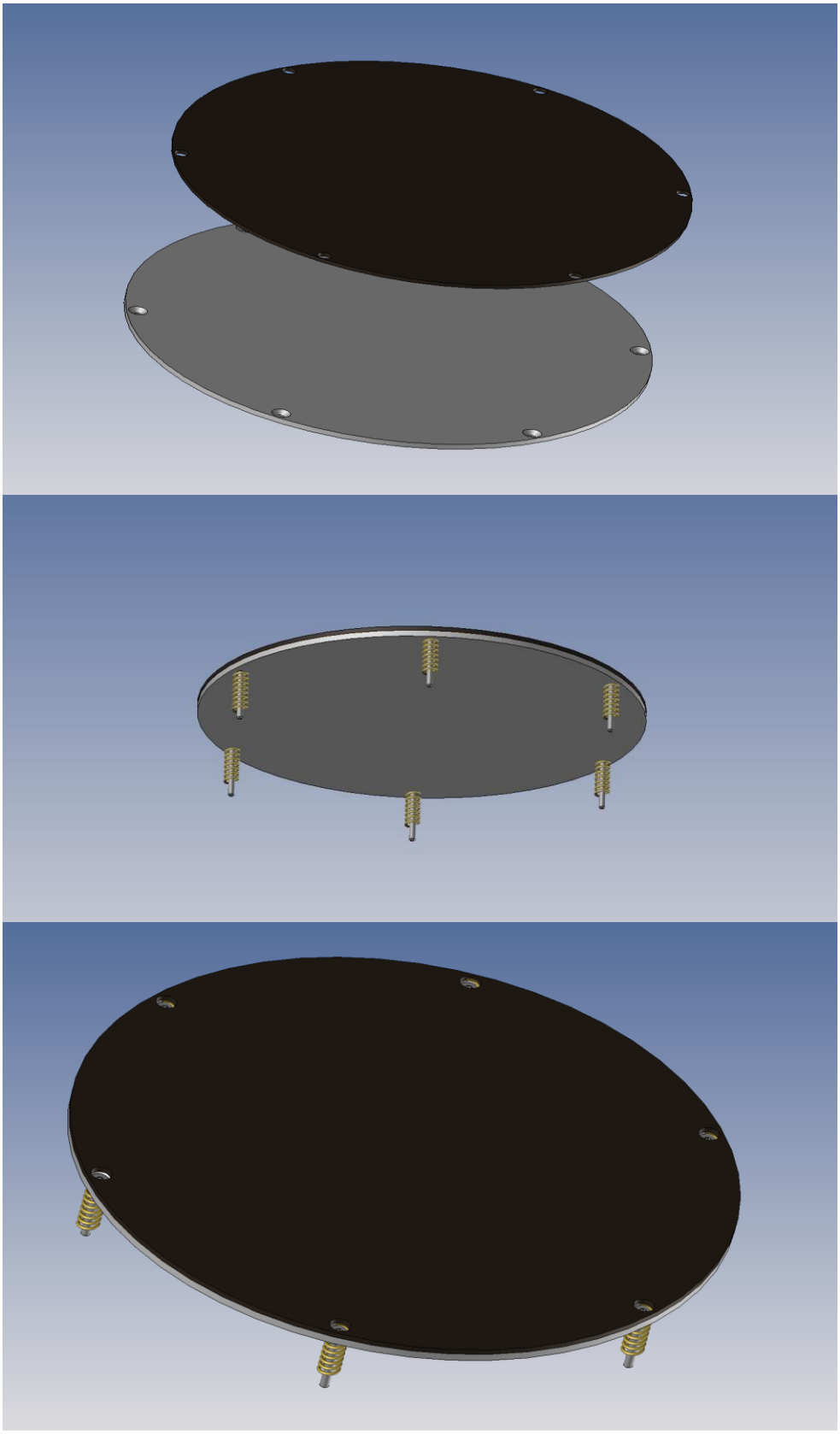
**NOTE:** **the heat inserts used, are M3 x 5mm**



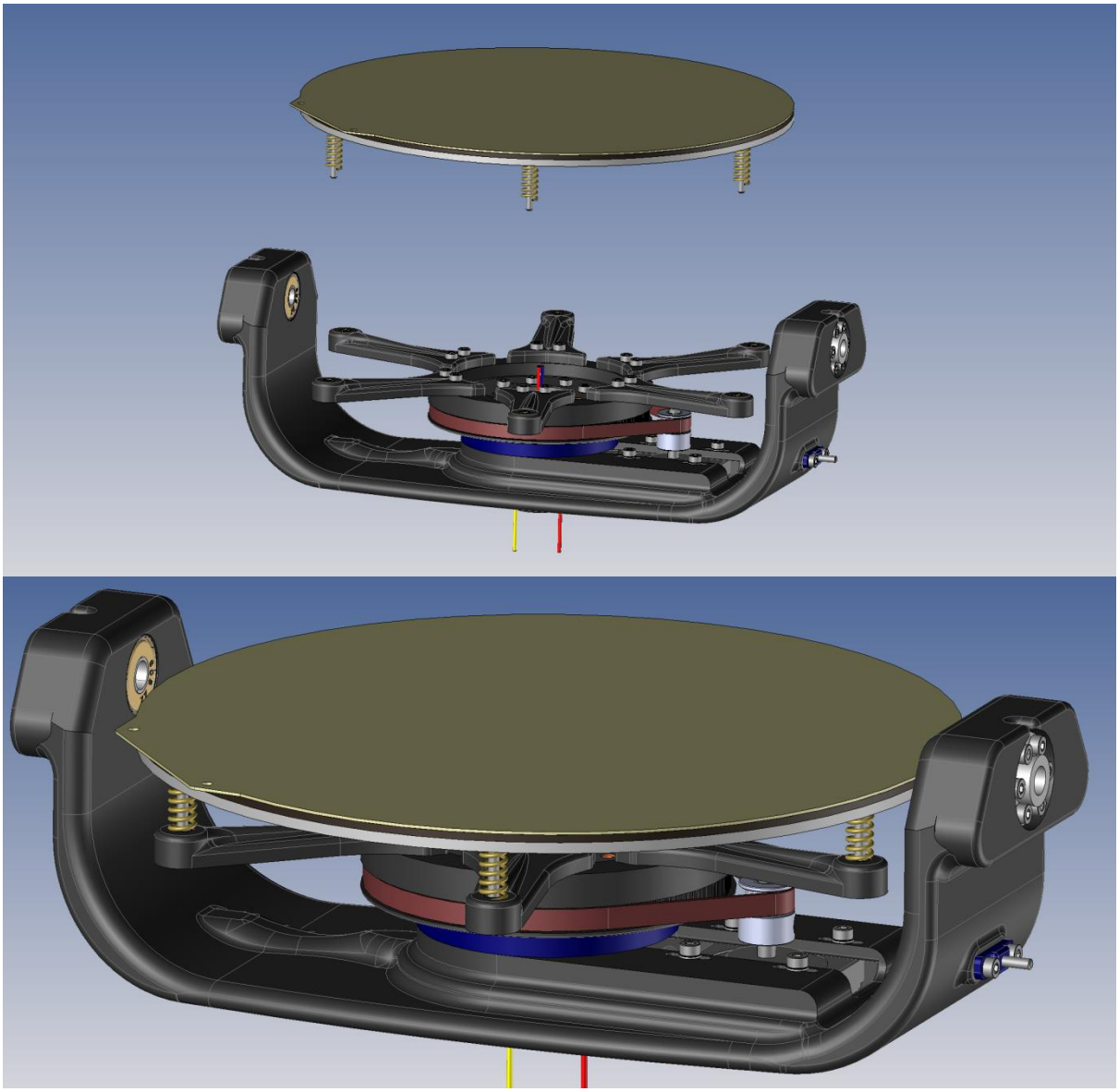
**NOTE:** **12x M3x8mm**



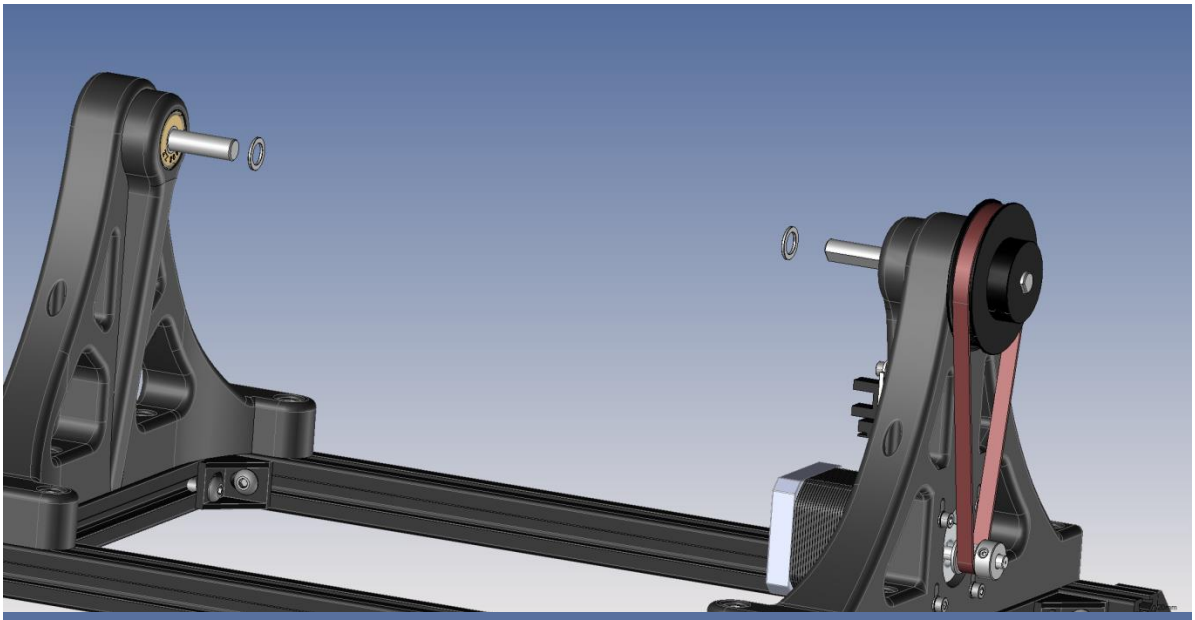
**NOTE:** **Please drill six holes into the magnetic sheet to match the aluminum hotbed**

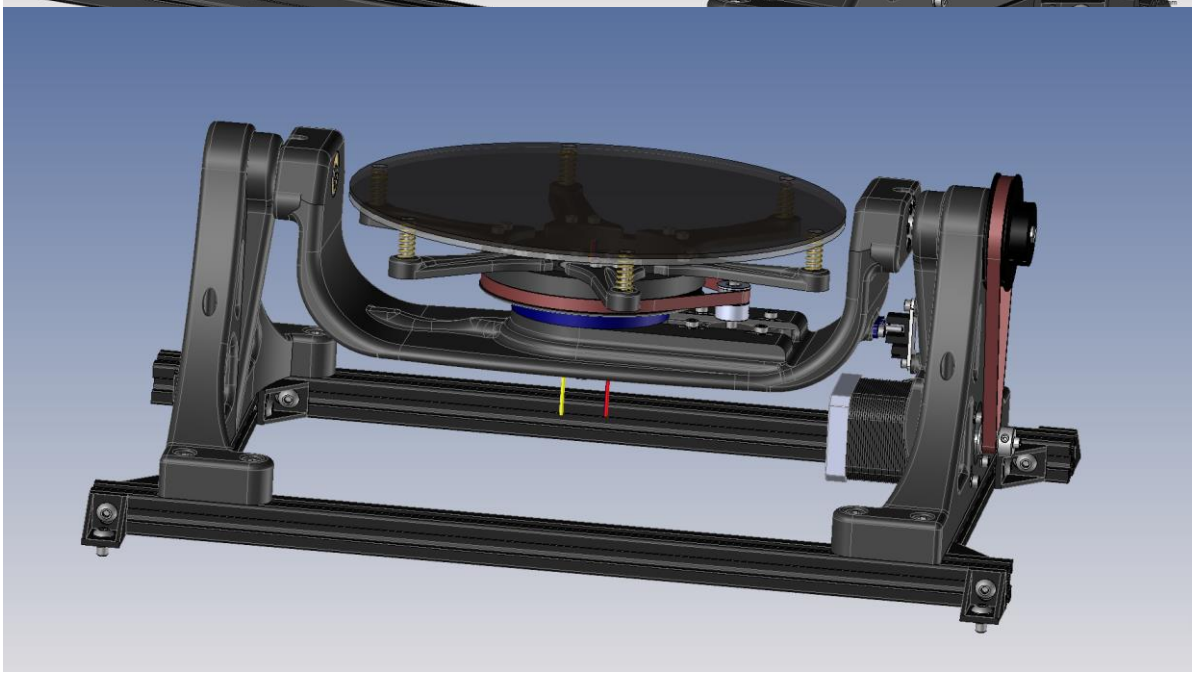


**NOTE:** **6x FHCS M3x22mm plus bed springs**



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





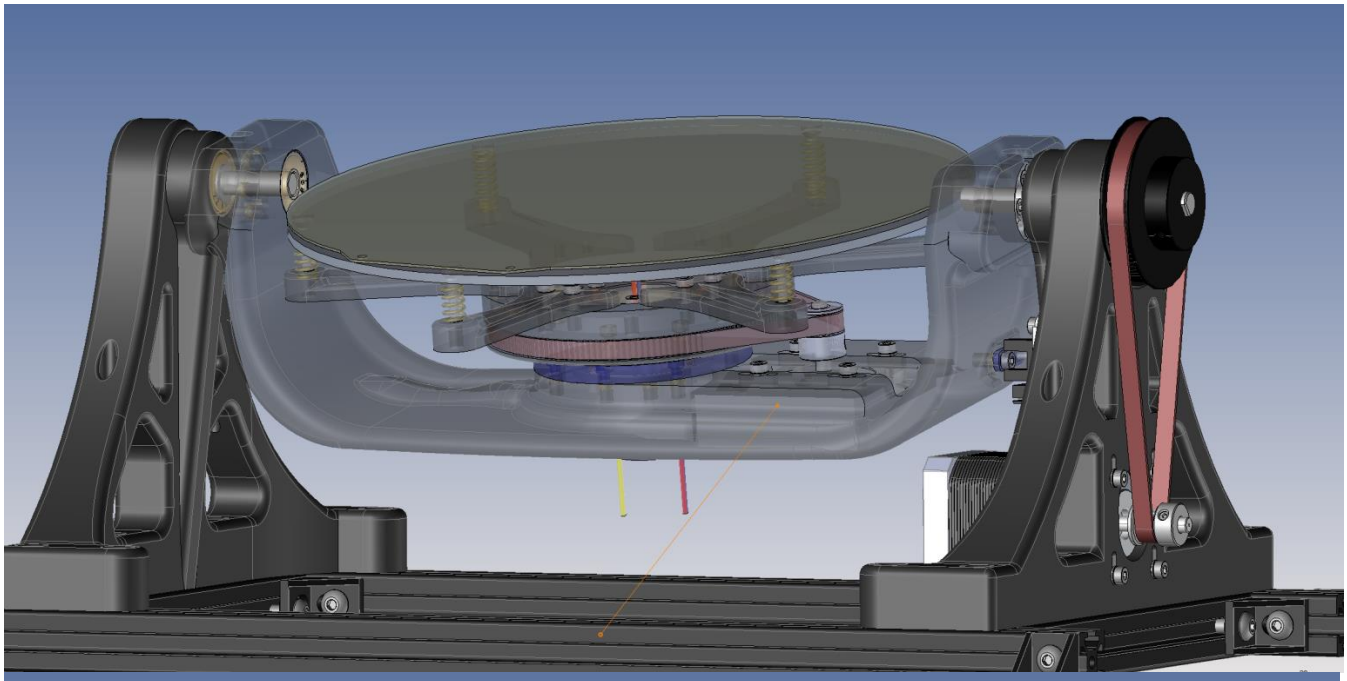
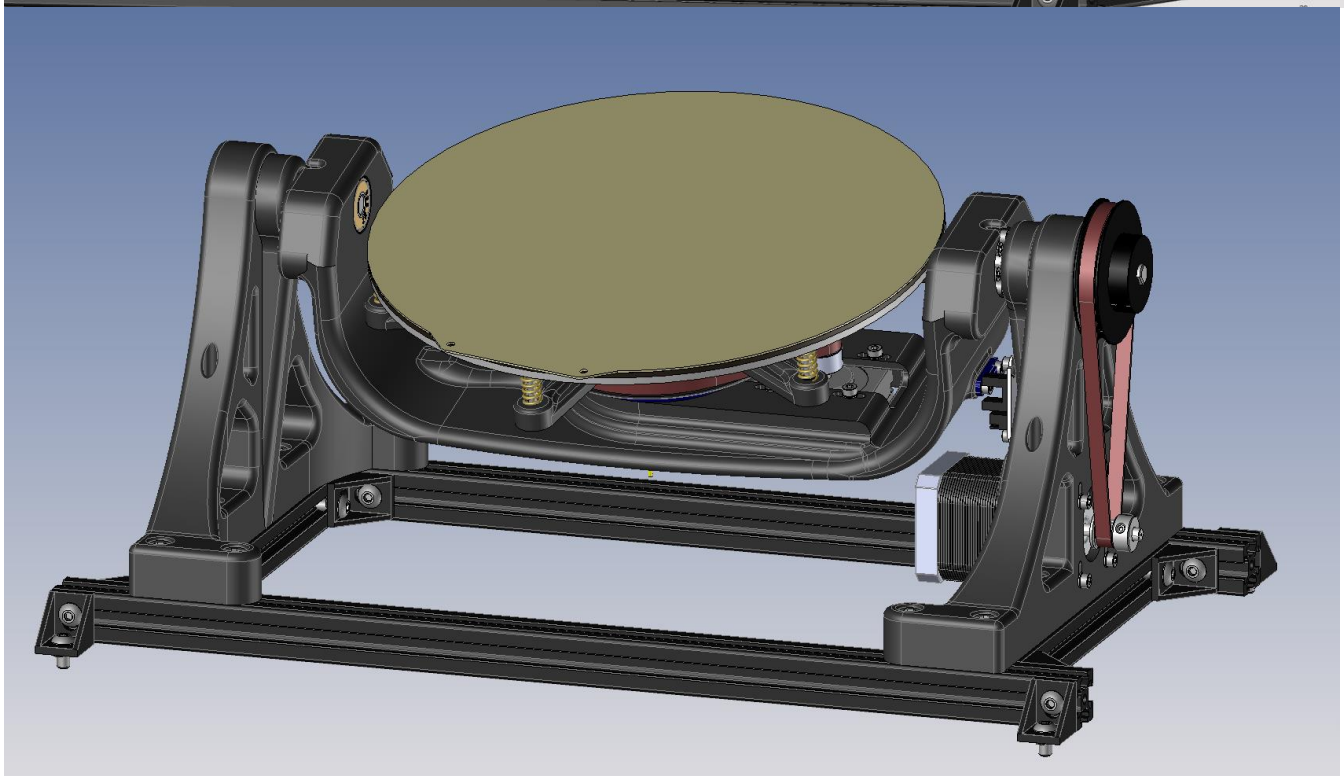
**NOTE:** **now the tricky bit..**

**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**