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%

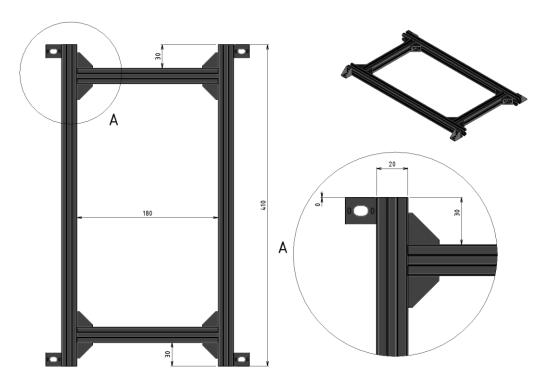
Infill type: gyroid, honeycomb, triangle, or cubic

Wall count: 5

Solid top/bottom layers: 5

NO WARPING!

First assembly Aluminium extrusions, they have to be cutted exact lengths 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

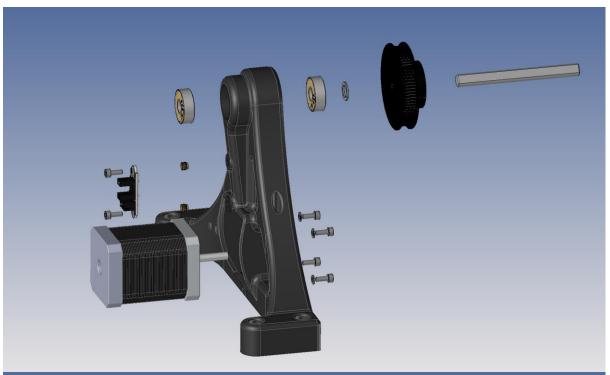
Best if you have acces to the measuring device to control the distance

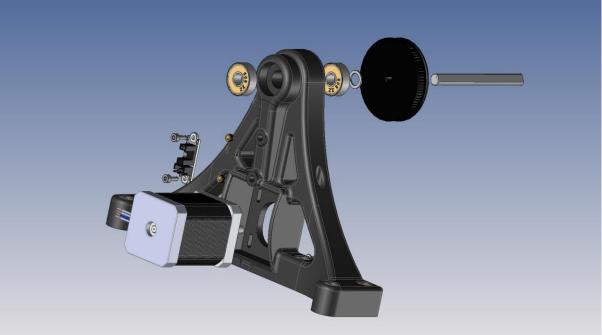
24x M5 x 10mm + T-nuts



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

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





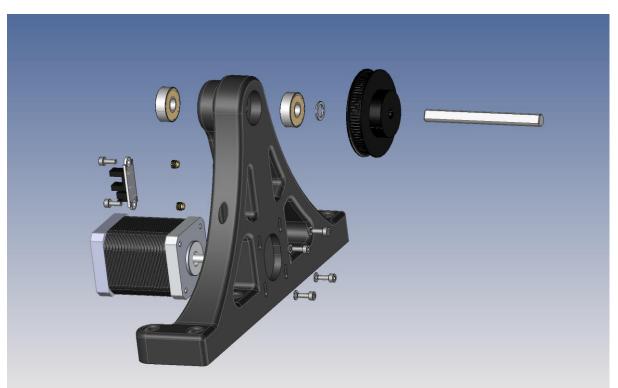
NOTE: Please this ABS part in high quality without any warping issues

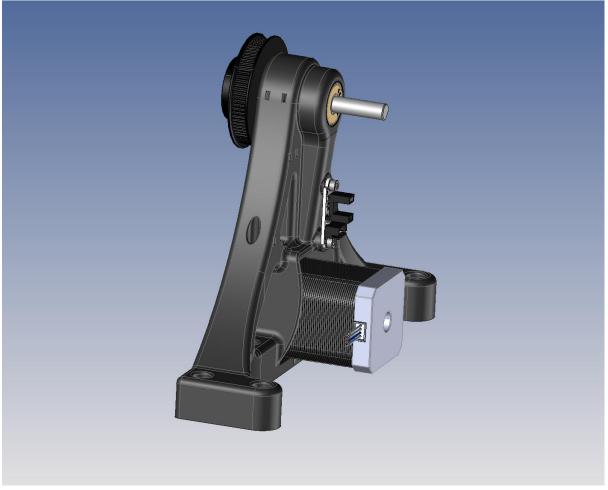
The 8mm shaft should have, tight fit with the bearings 608zz

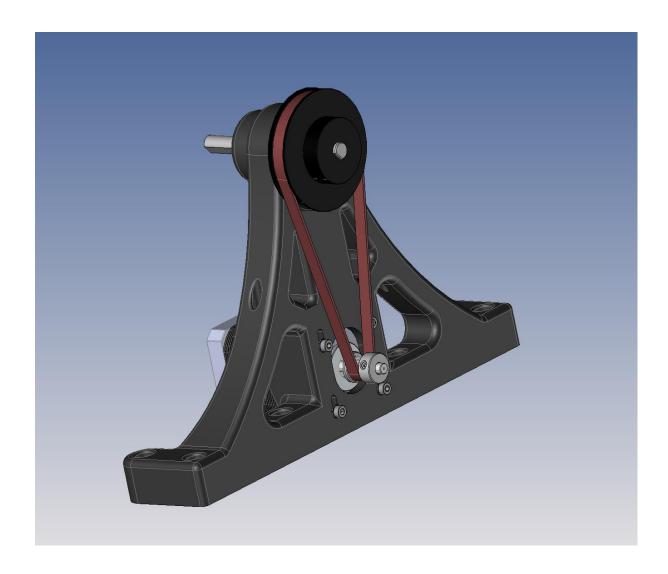
6x M3 x 8mm

4x M3 washers

1x M8 washer





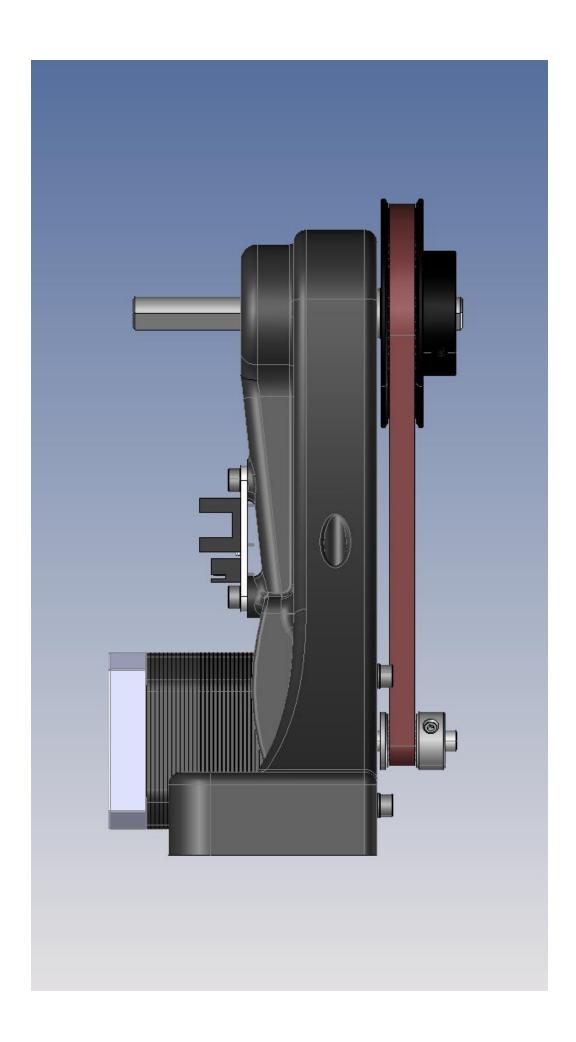


NOTE: Please do not tension the closed loop GT-2 belt 302 yet, leave it free so the motor and pulley can rotate easily

GT-2 Pulley 16T – 5mm bore

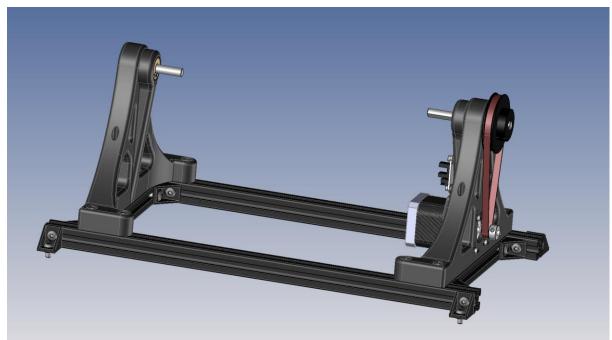
GT-2 Pulley 80T – 8mm bore

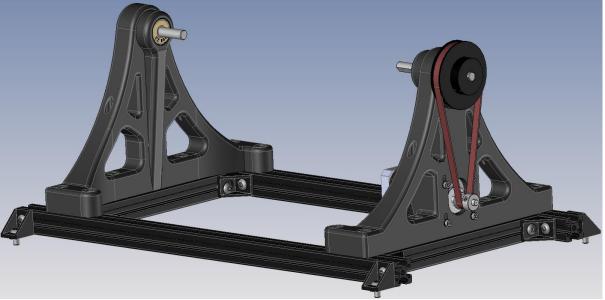
Closed loop GT-2 belt 6mm wide lenght 302 or 303 mm

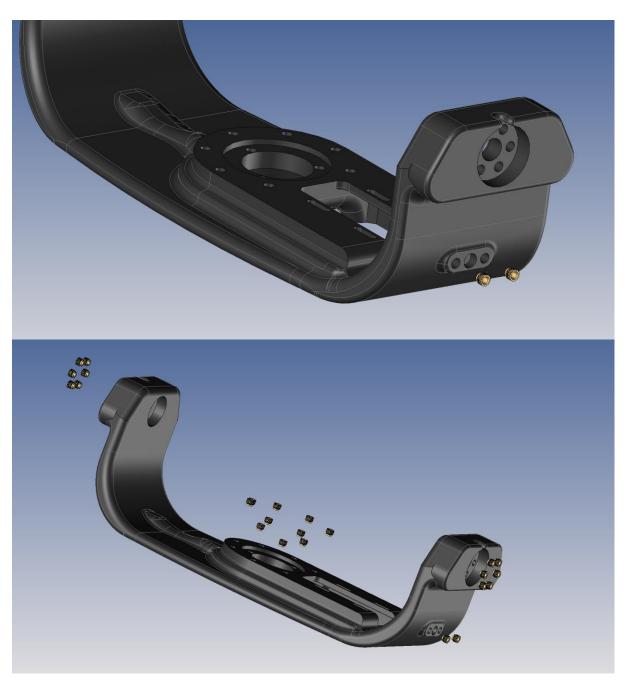




NOTE: Please make sure the two ABS printed sides are squared with the base and also parallel



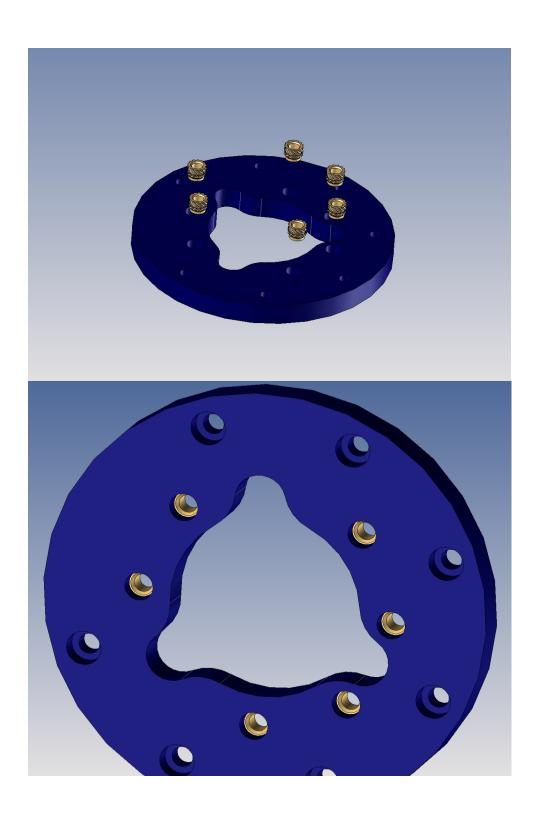




NOTE: the heat inserts used, are M3 x 5mm



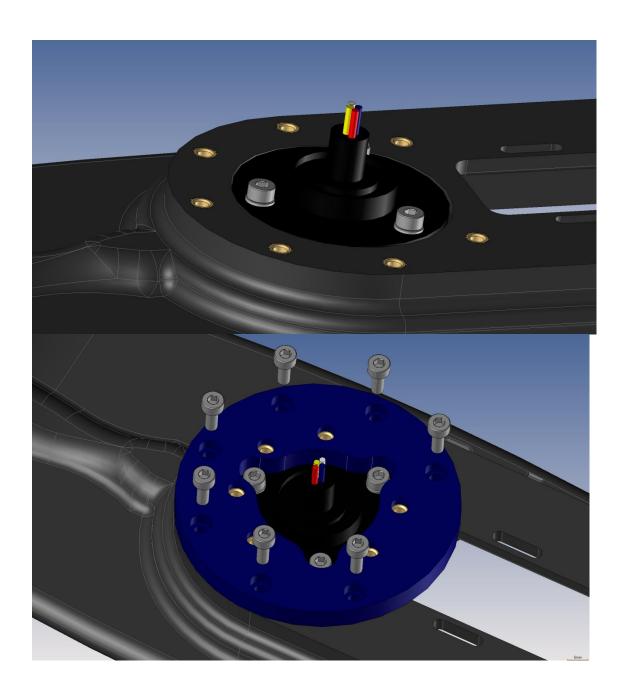




NOTE: the heat inserts used, are M3 x 7mm



NOTE: 3x M3x8mm + M3 washers



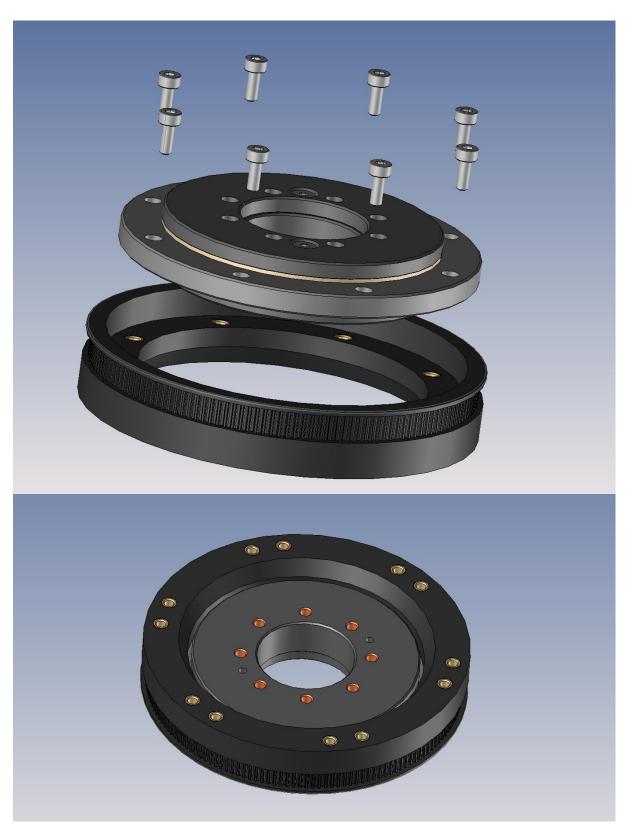
NOTE: 7x M3x8mm



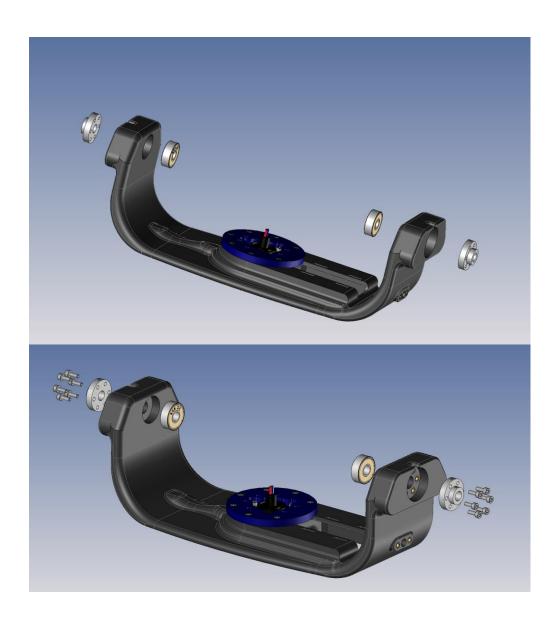




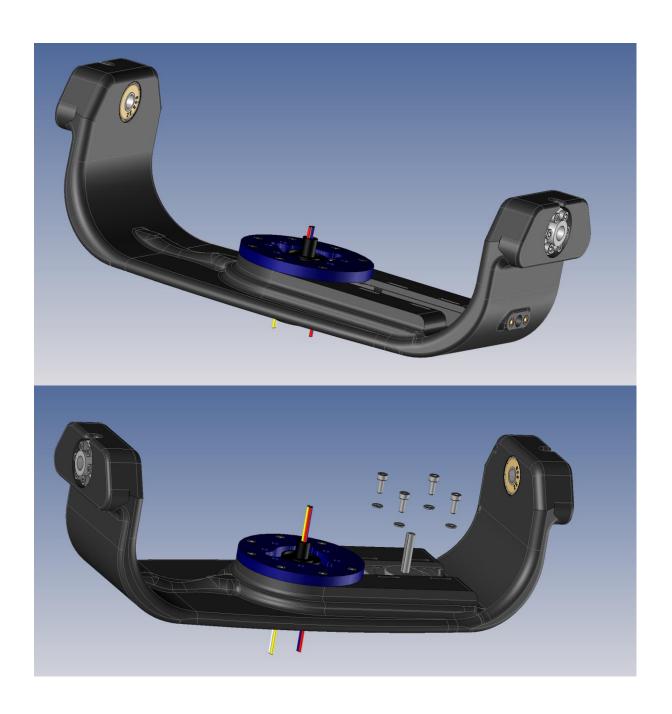
NOTE: the heat inserts used, are M3 x 5mm



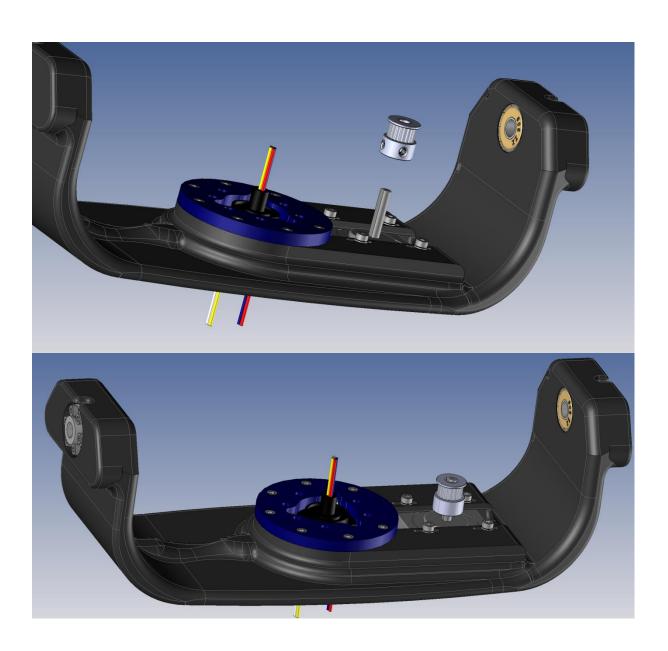
NOTE: IGUS - PRT_04_30 Diameter 90mm 8x M3x10mm



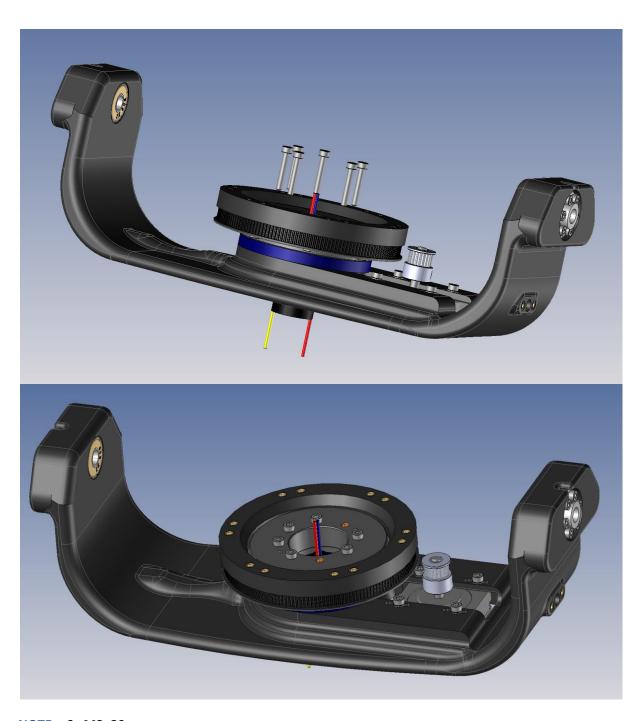
NOTE: the pololu hub M3 threated holes, needs to be drilled out with 3.15 or 3.2 mm drill



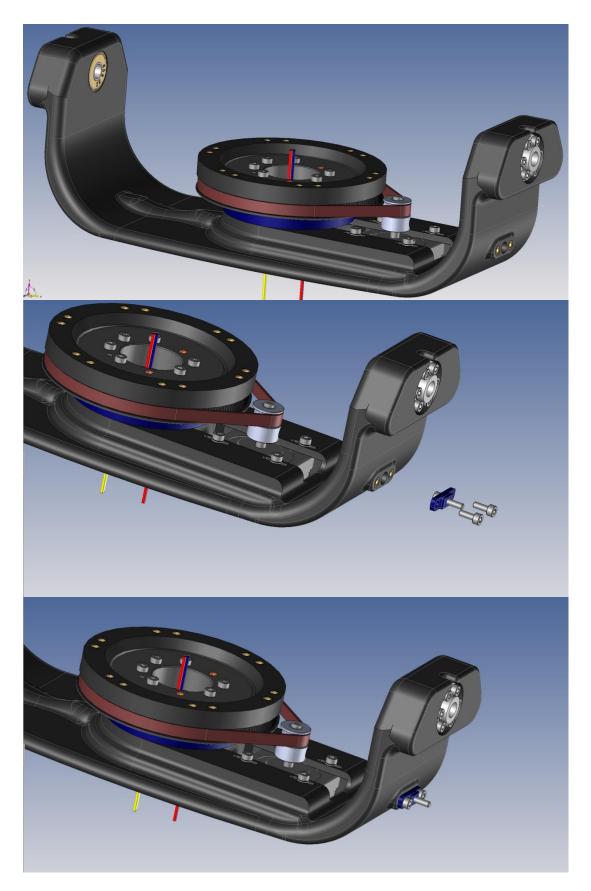
NOTE: 4x M3x8mm + M3 washers



NOTE: GT-2 Pulley 20T



NOTE: 6x M3x20mm



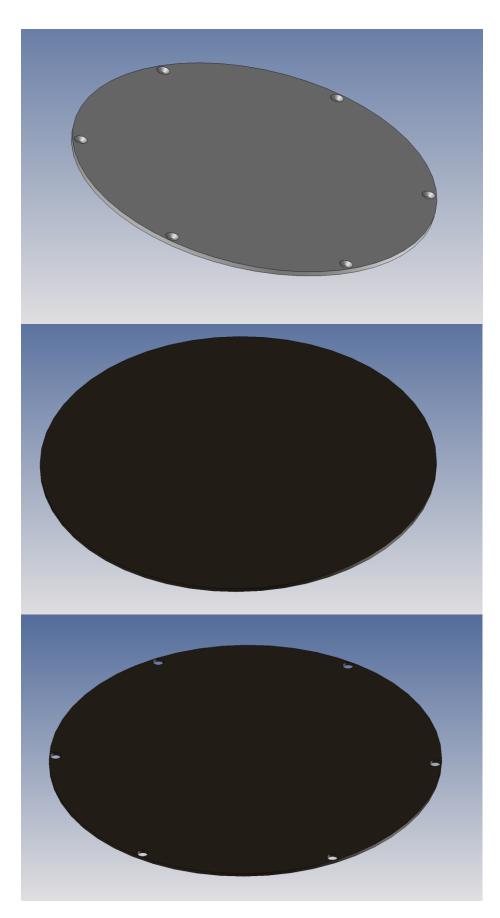
NOTE: 2x M3x8mm + 1x M3x12mm, Closed loop GT-2 belt 6mm wide lenght 330 mm



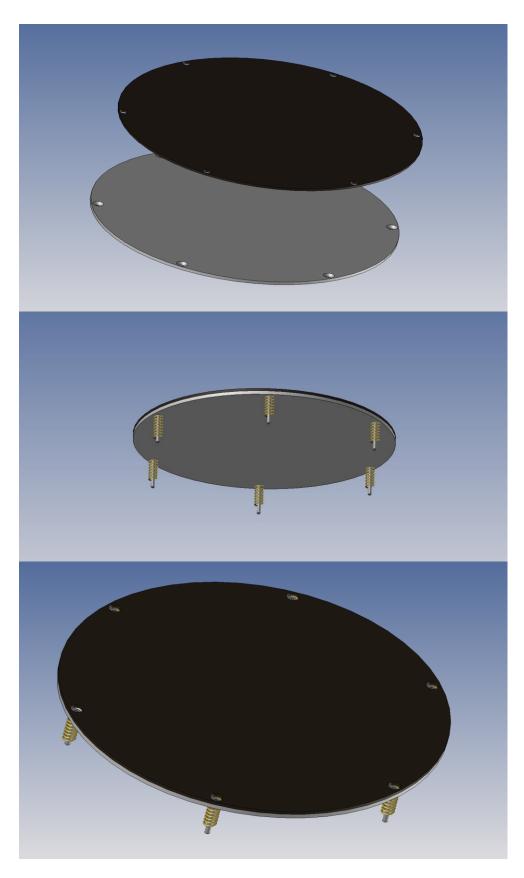
NOTE: the heat inserts used, are M3 x 5mm



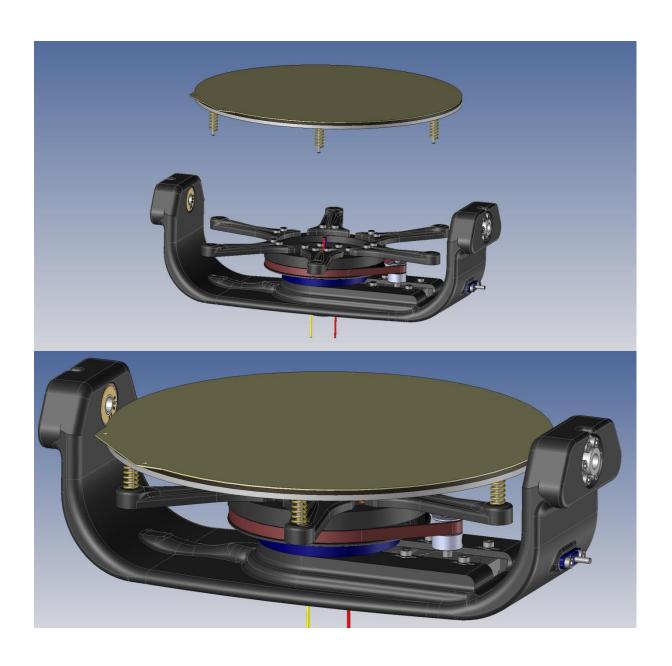
NOTE: 12x M3x8mm



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



NOTE: 6x FHCS M3x22mm 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 rotary is moving on A axis

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

