

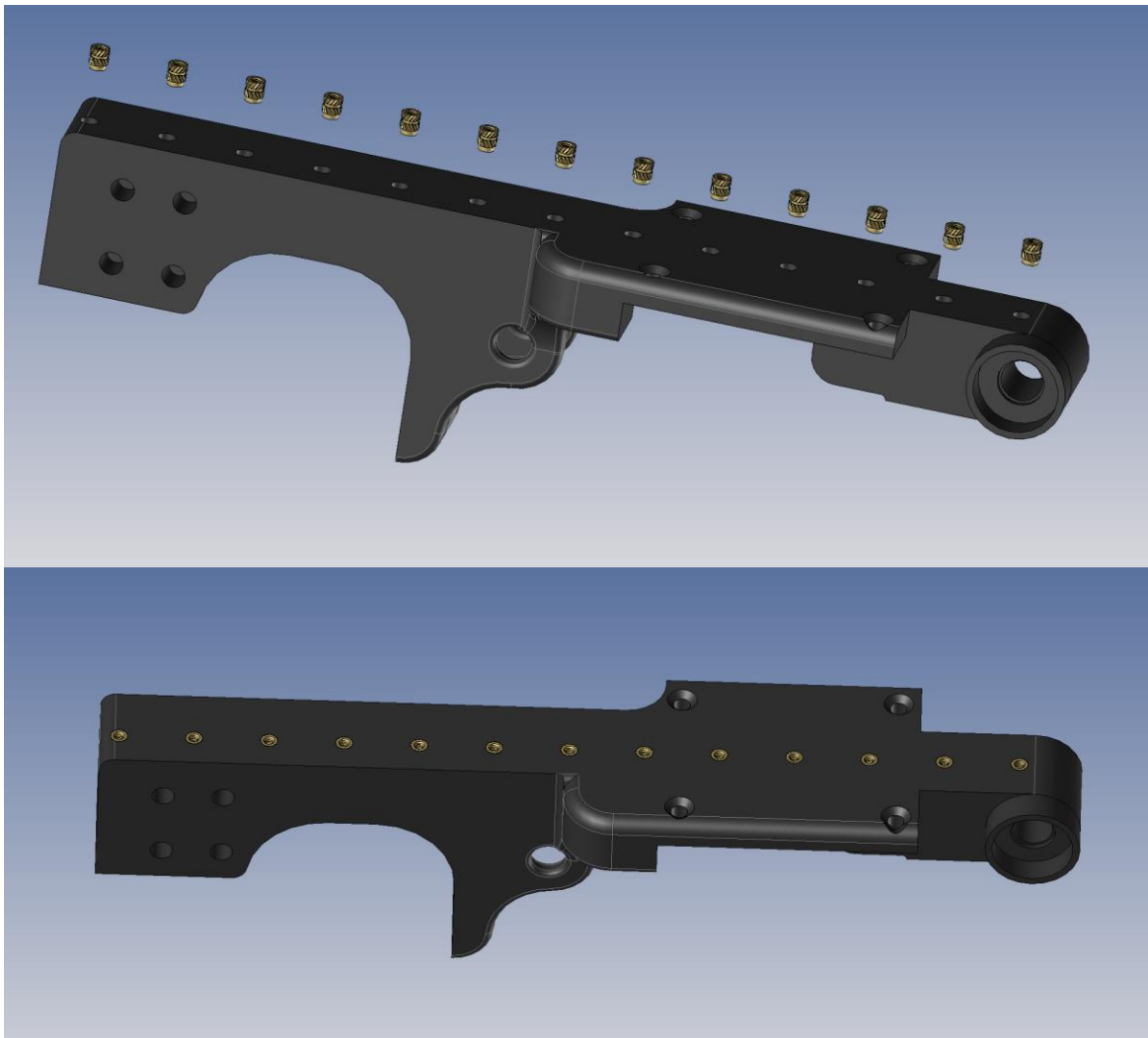
Z- axis Assembly Manual for Voron Trident 250mm

Assembly manual for complete Z axis with Hotend and Extruder – **BOWDEN DRIVE version**

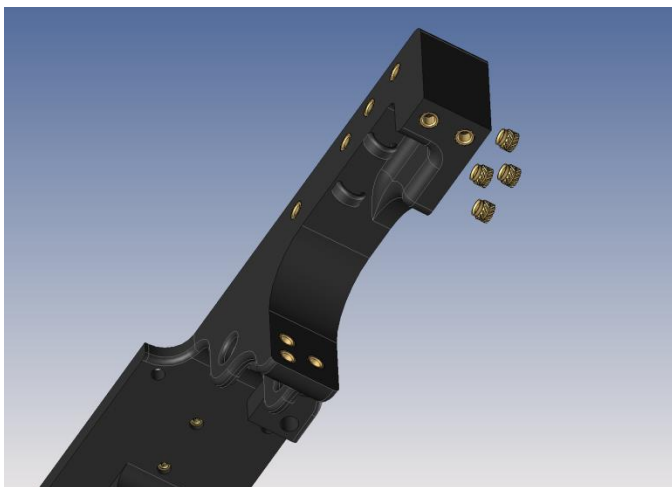
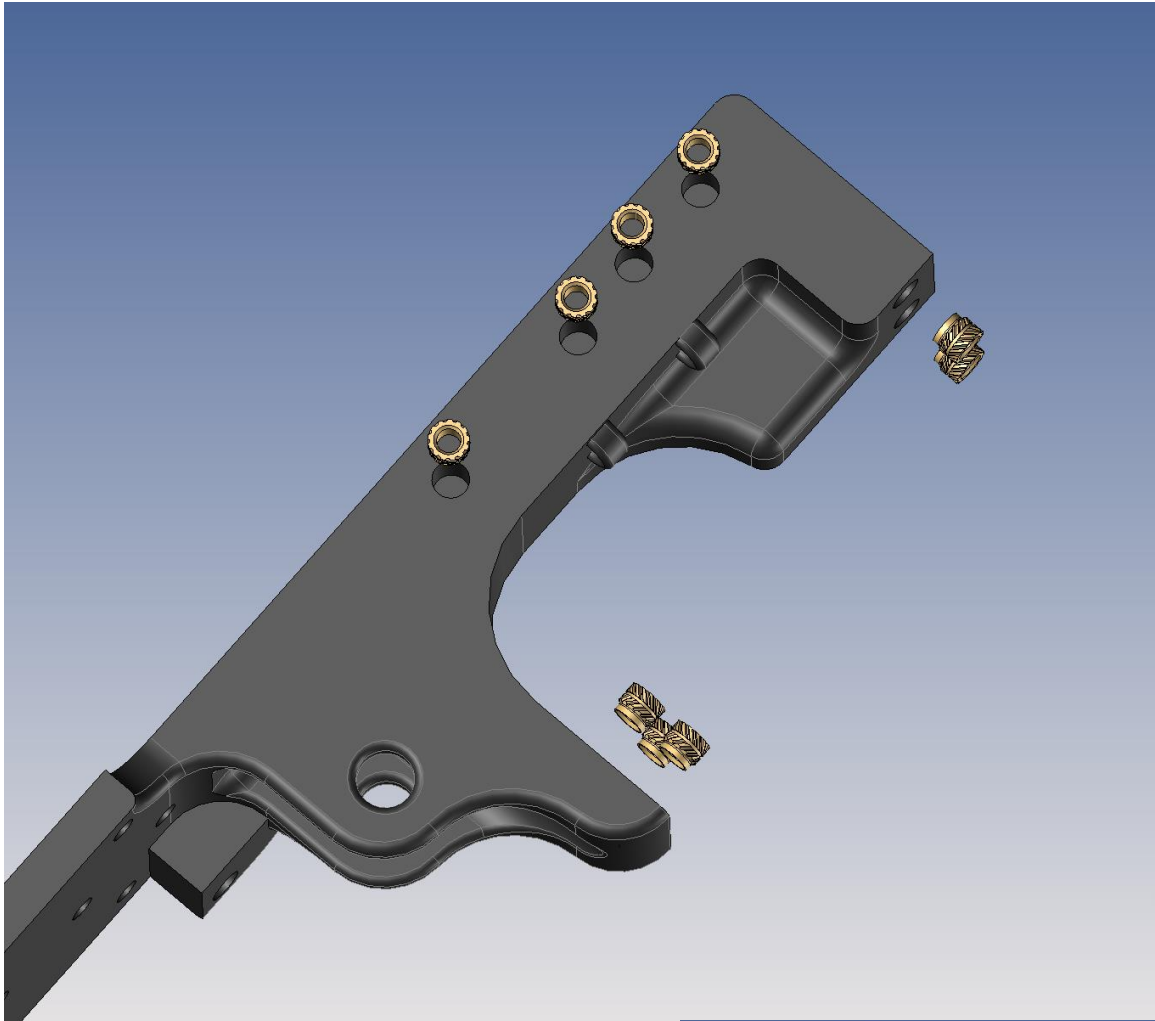
All 3D printed parts are designed to be printed from ABS filament . The optimal slicer settings for prints are:

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

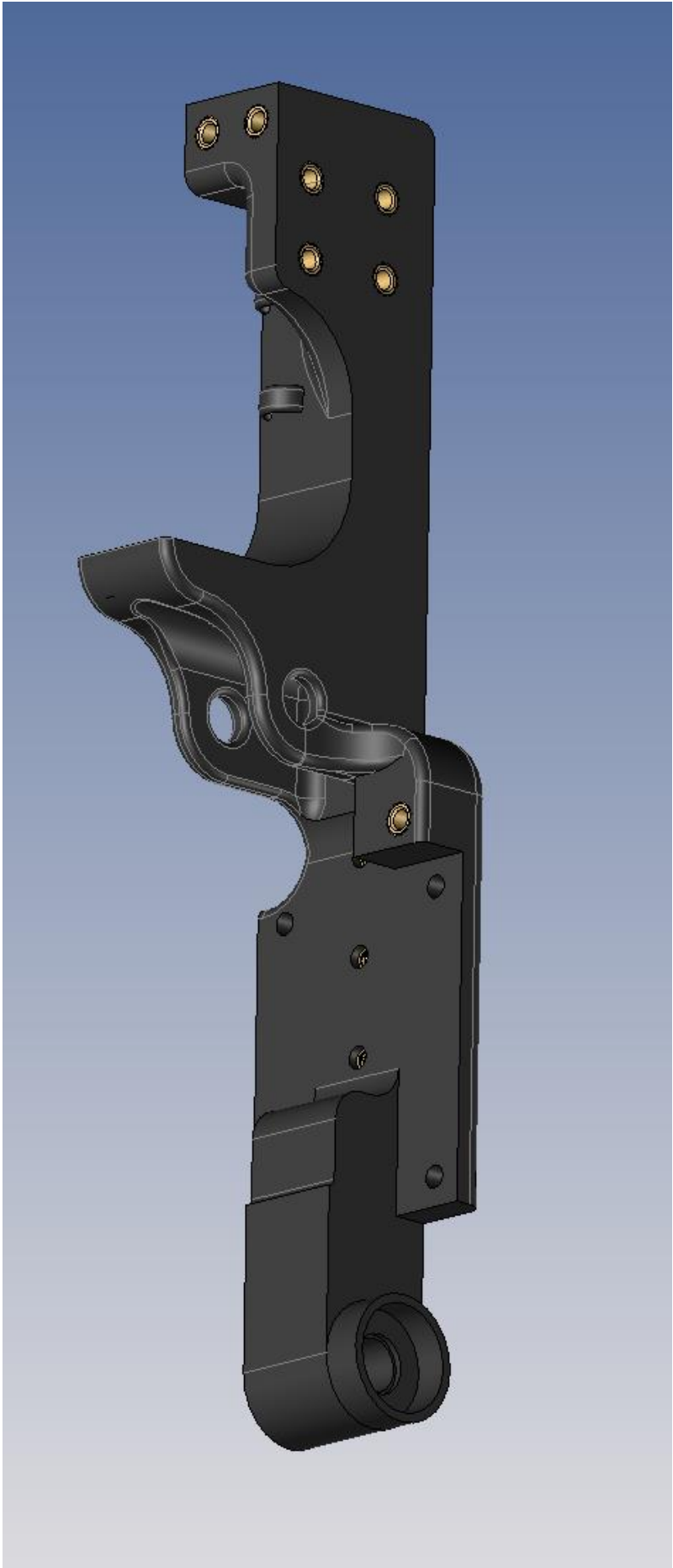
NO WARPING!

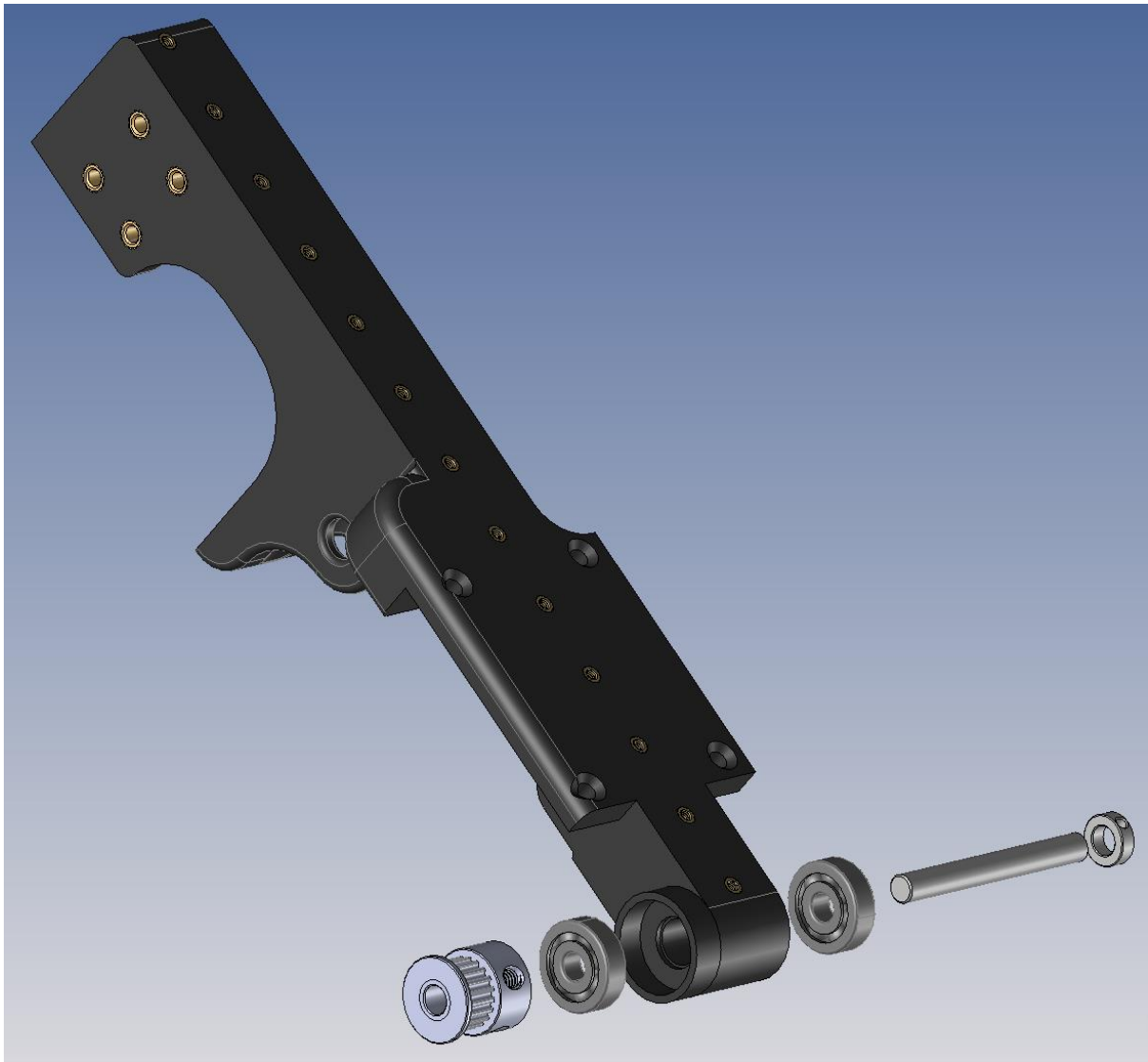


NOTE: the heat inserts used, are M2 x 4mm



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





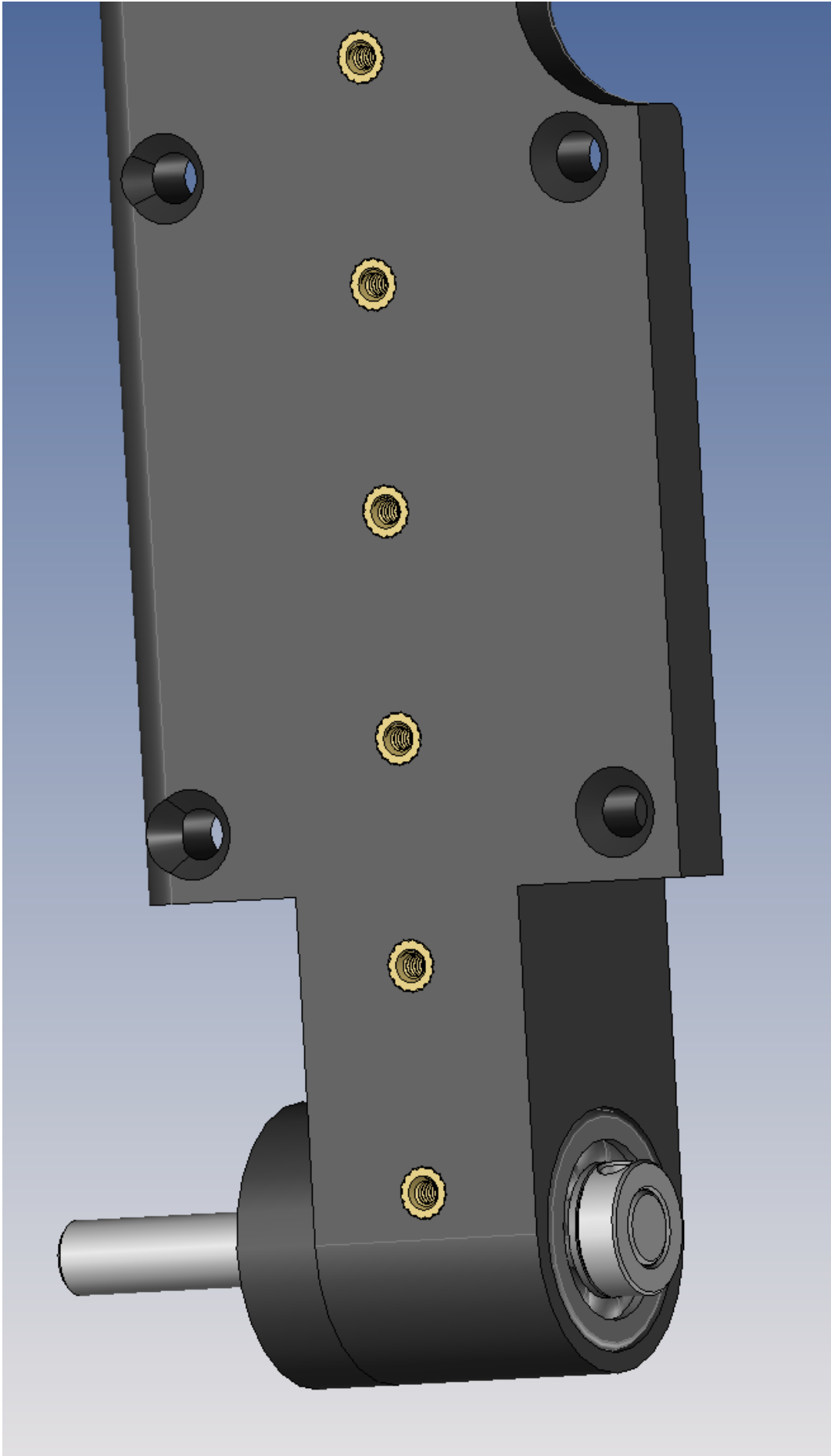
NOTE: Pulley GT-2 20T 5mm dia

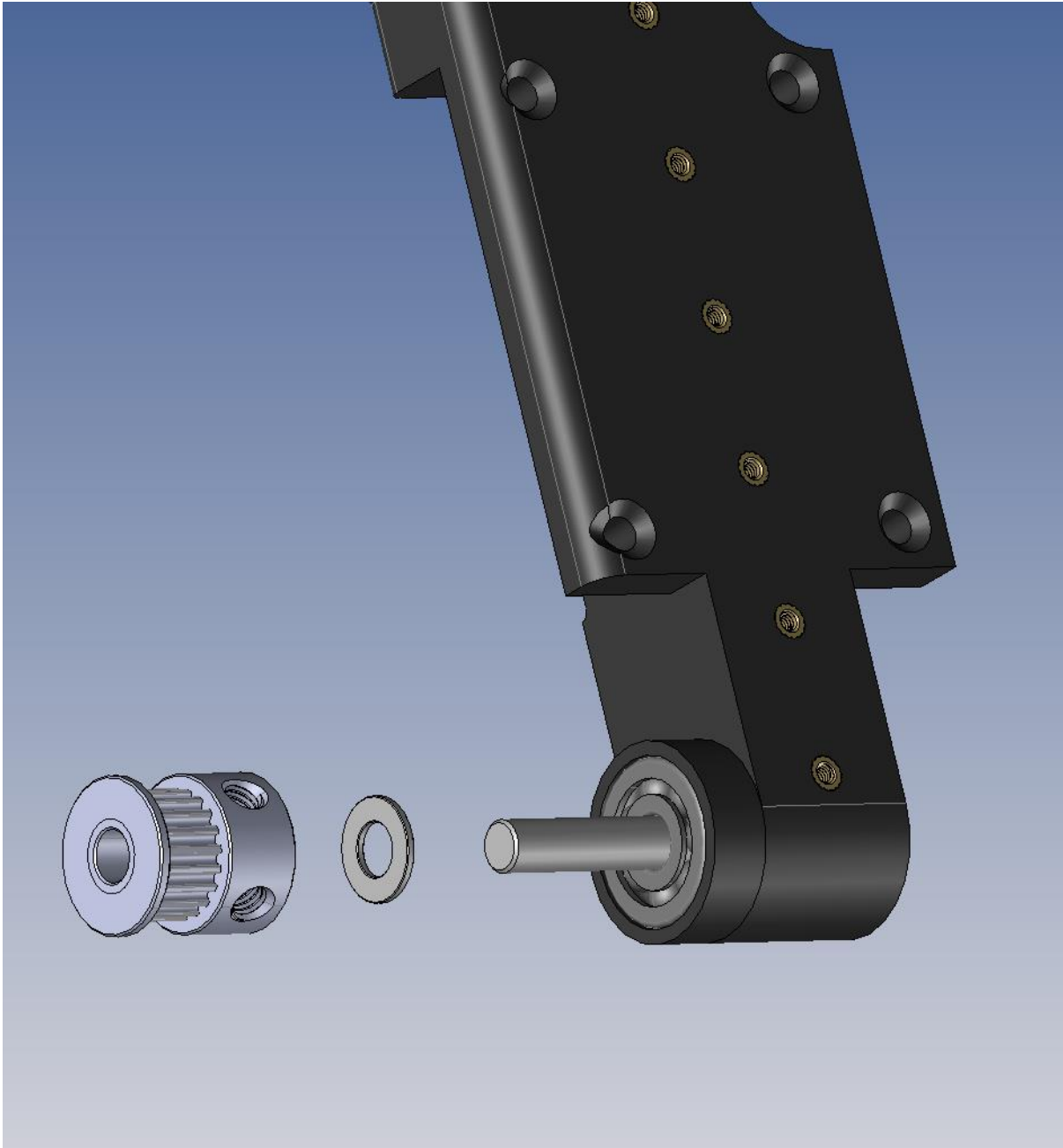
Bearing 625 ZZ

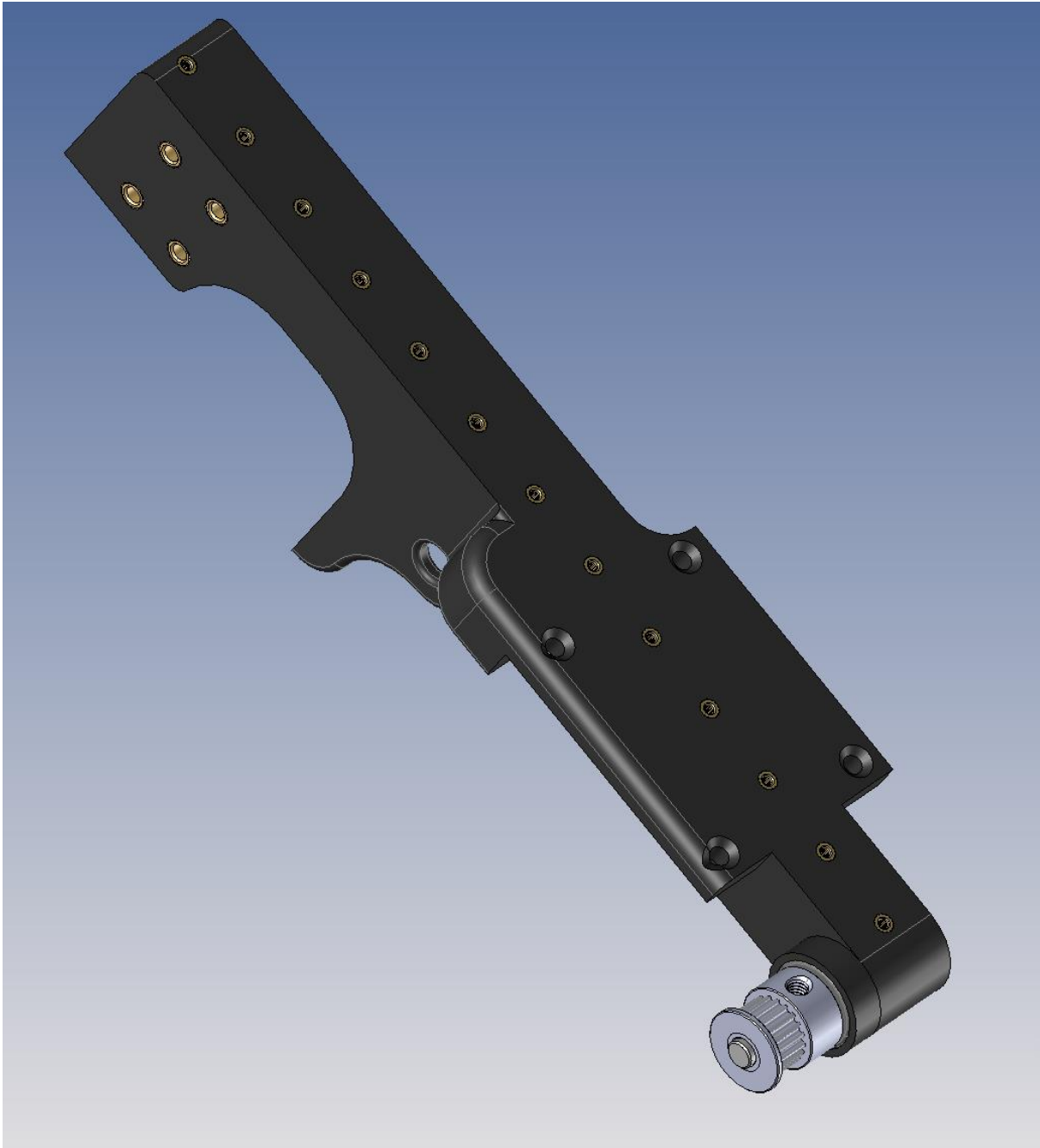
Shaft 5mm, Length 45mm

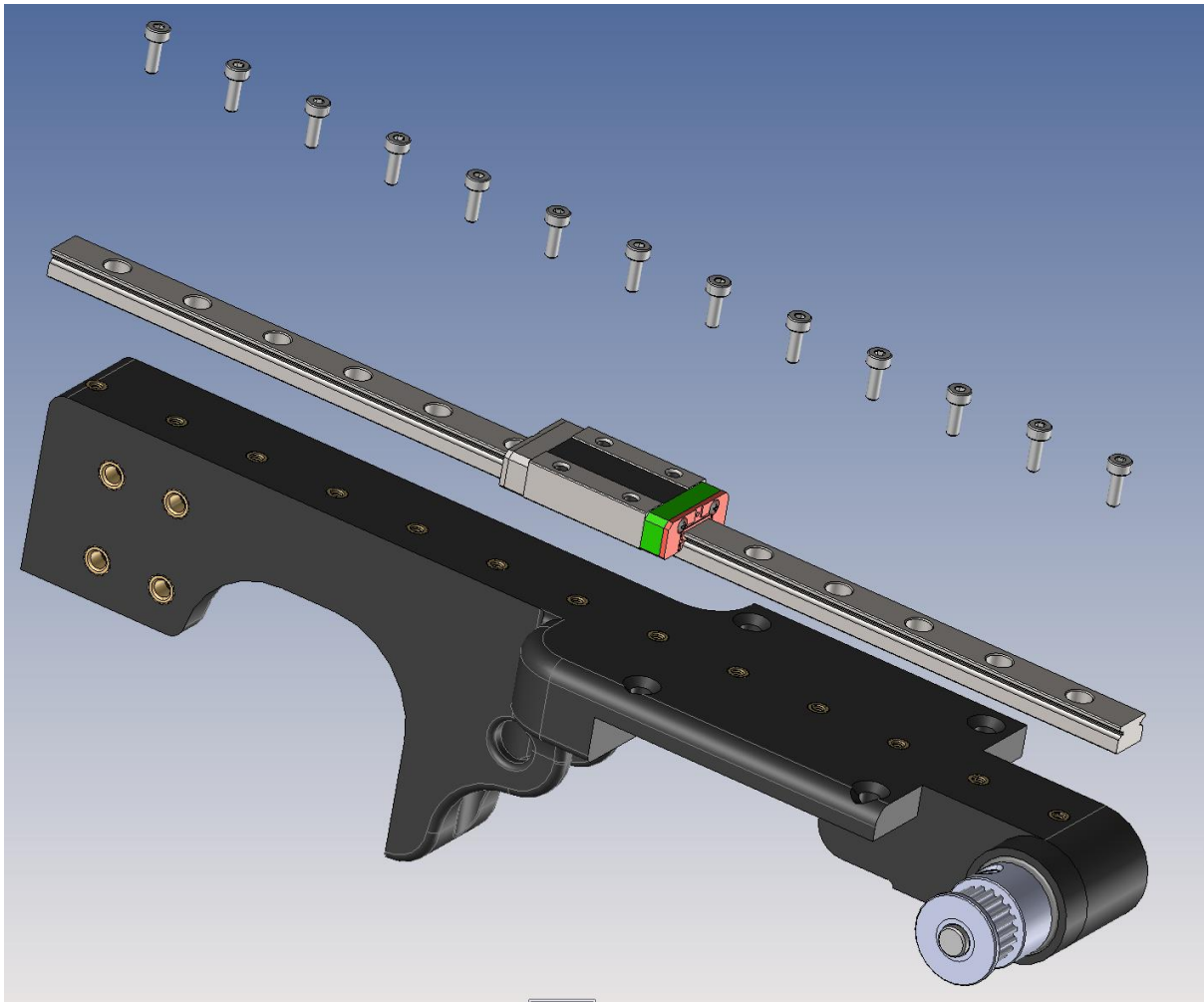
Shaft collar ID 5mm

Spacer M5 x 1mm







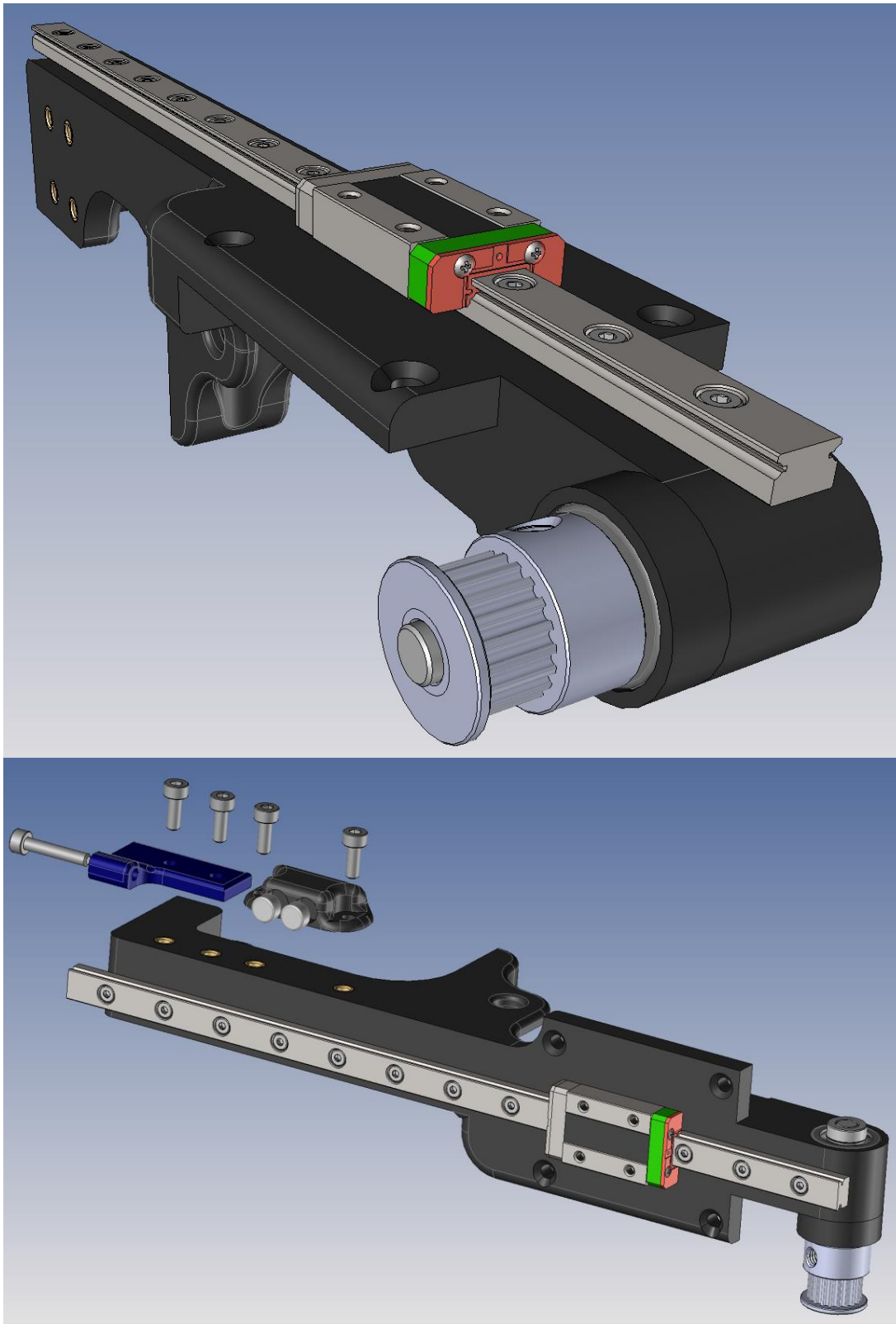


NOTE: Screw M2 x 6mm

Linear Rail MGN7 – H 200mm (use only high quality Linear Rail)

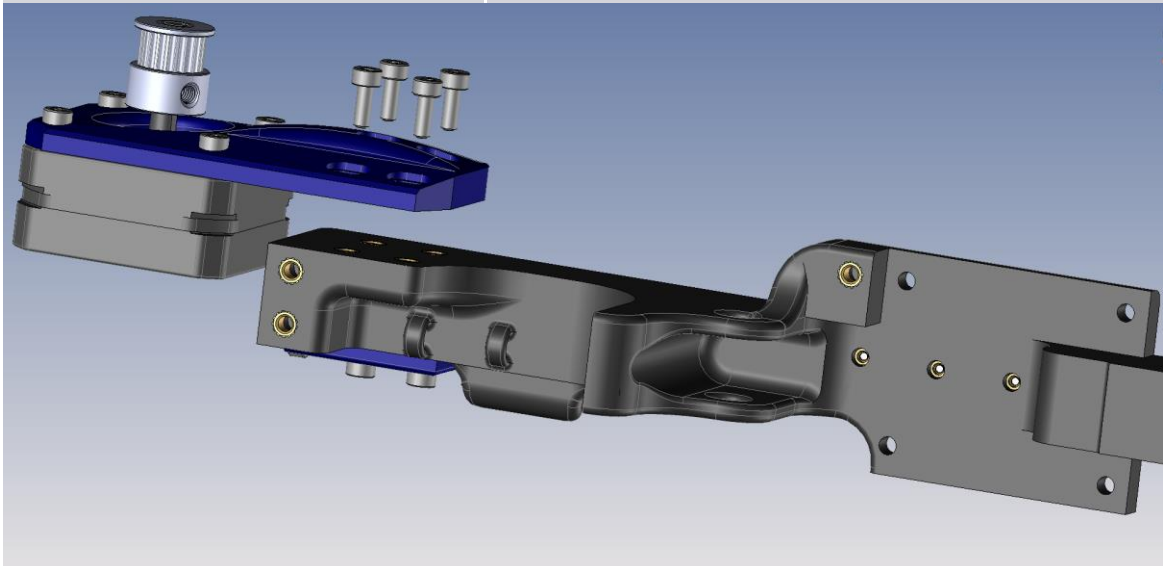
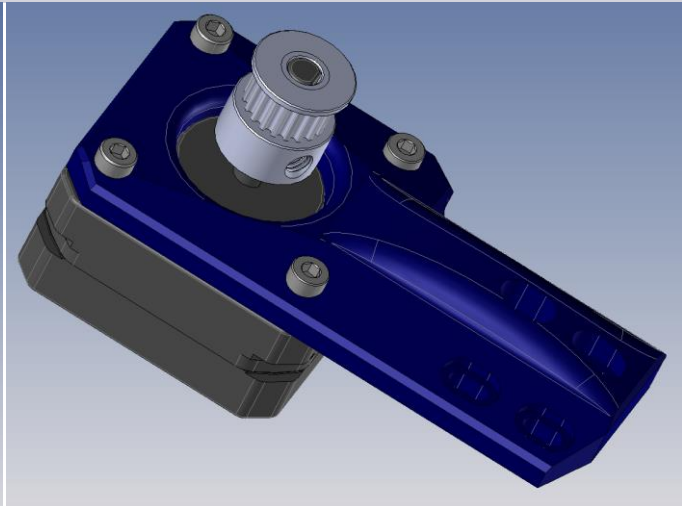
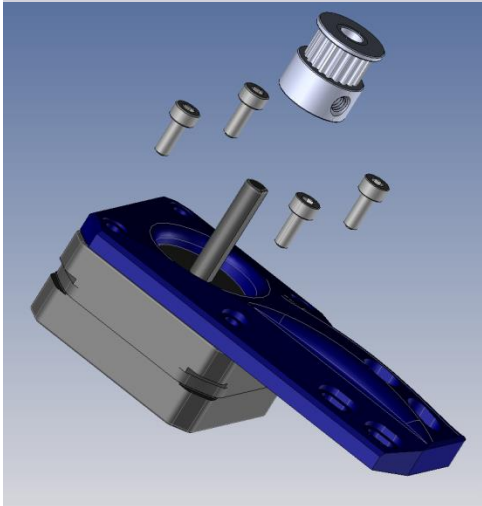
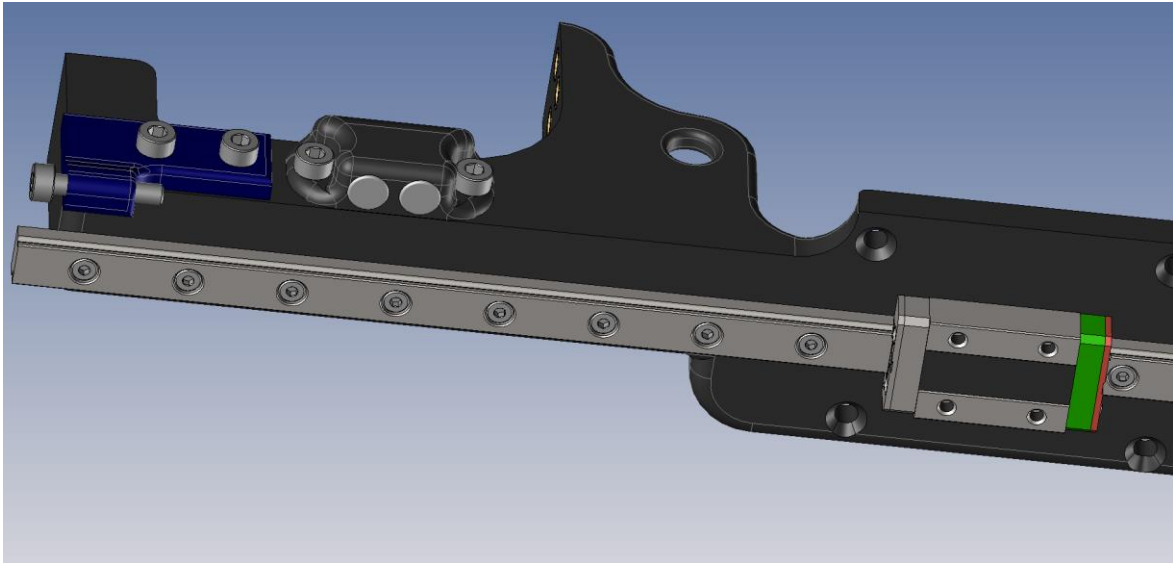
**Please secure the linear rail slider so will not fell out from the rail use rubber stoppers or
3D print them from printables**

<https://www.printables.com/model/347545-linear-rail-carriage-stop>



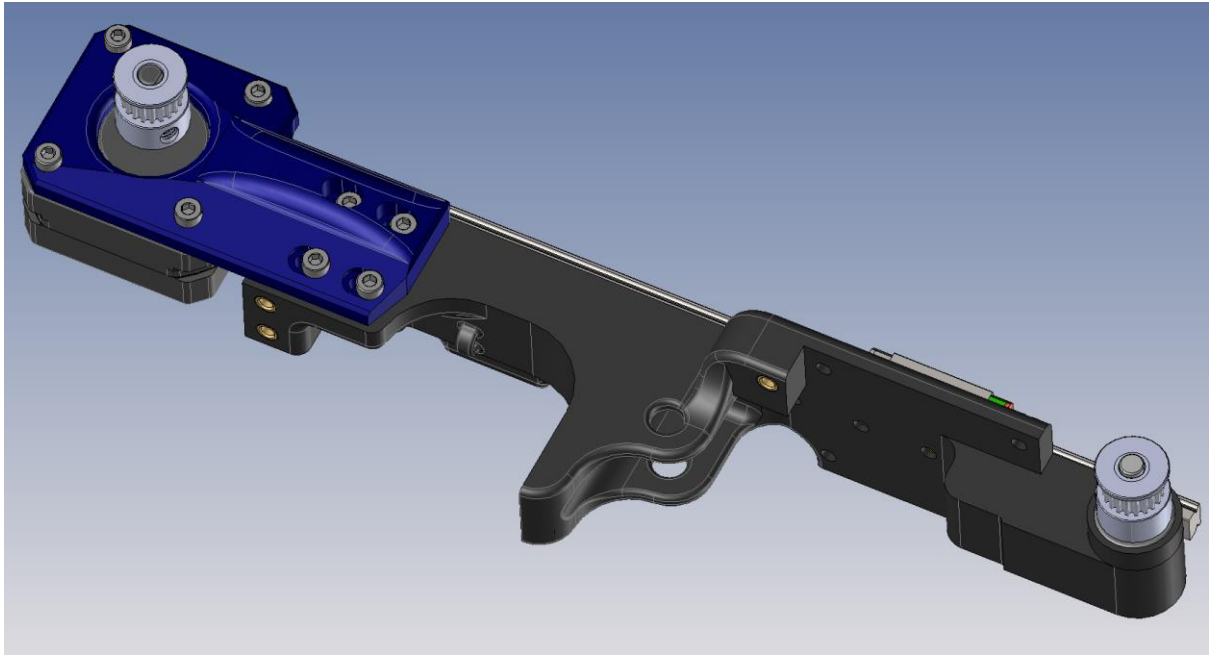
NOTE: Screw M3 x 8mm and M3 x 16mm

neodymium magnets 6x3mm

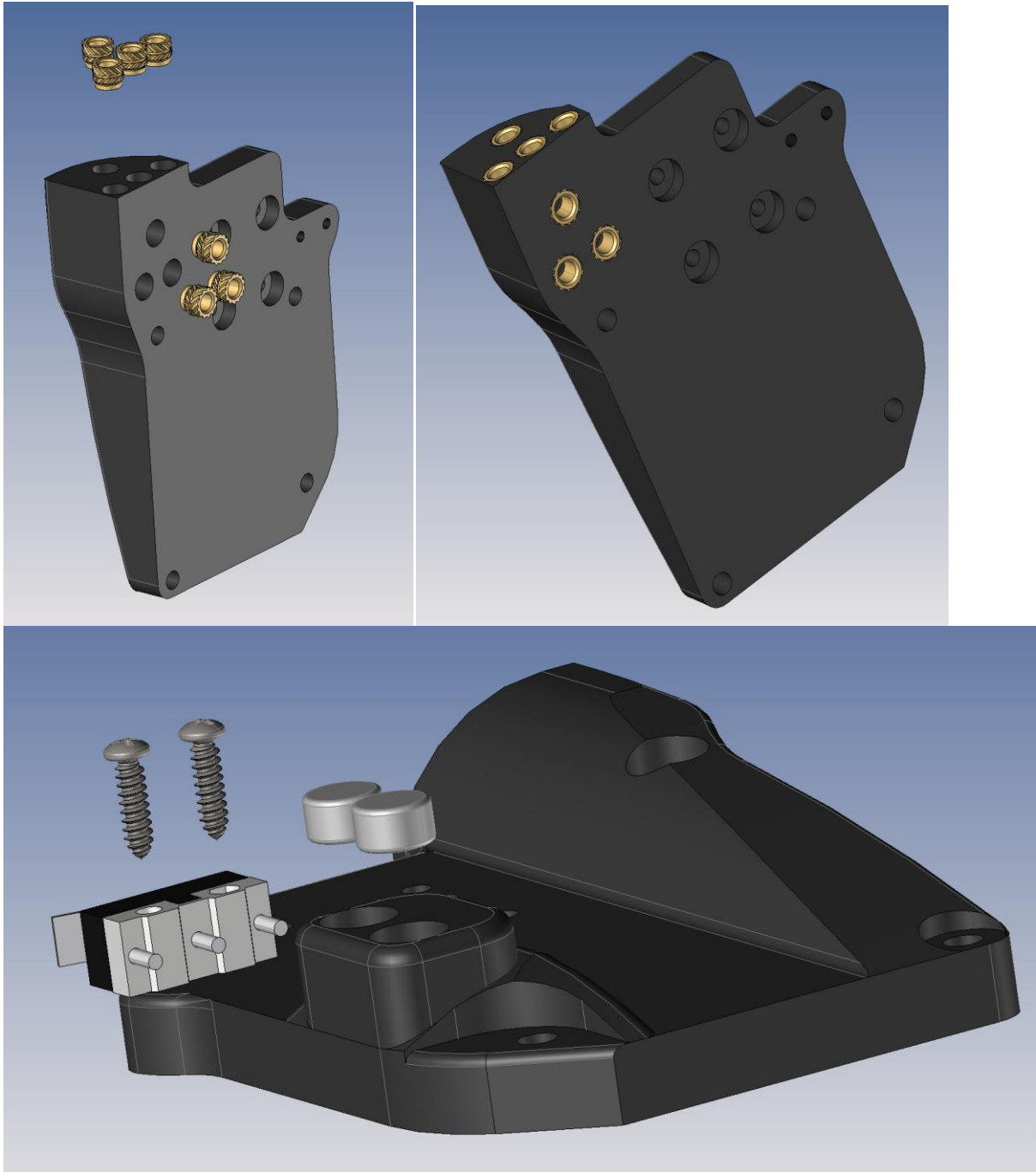


NOTE: Screw M3 x 8mm

Pulley GT-2 20T 5mm dia



NOTE: Do not tight the tensions screws yet, so the stepper motor can slide



NOTE: heat inserts M3 x 5mm

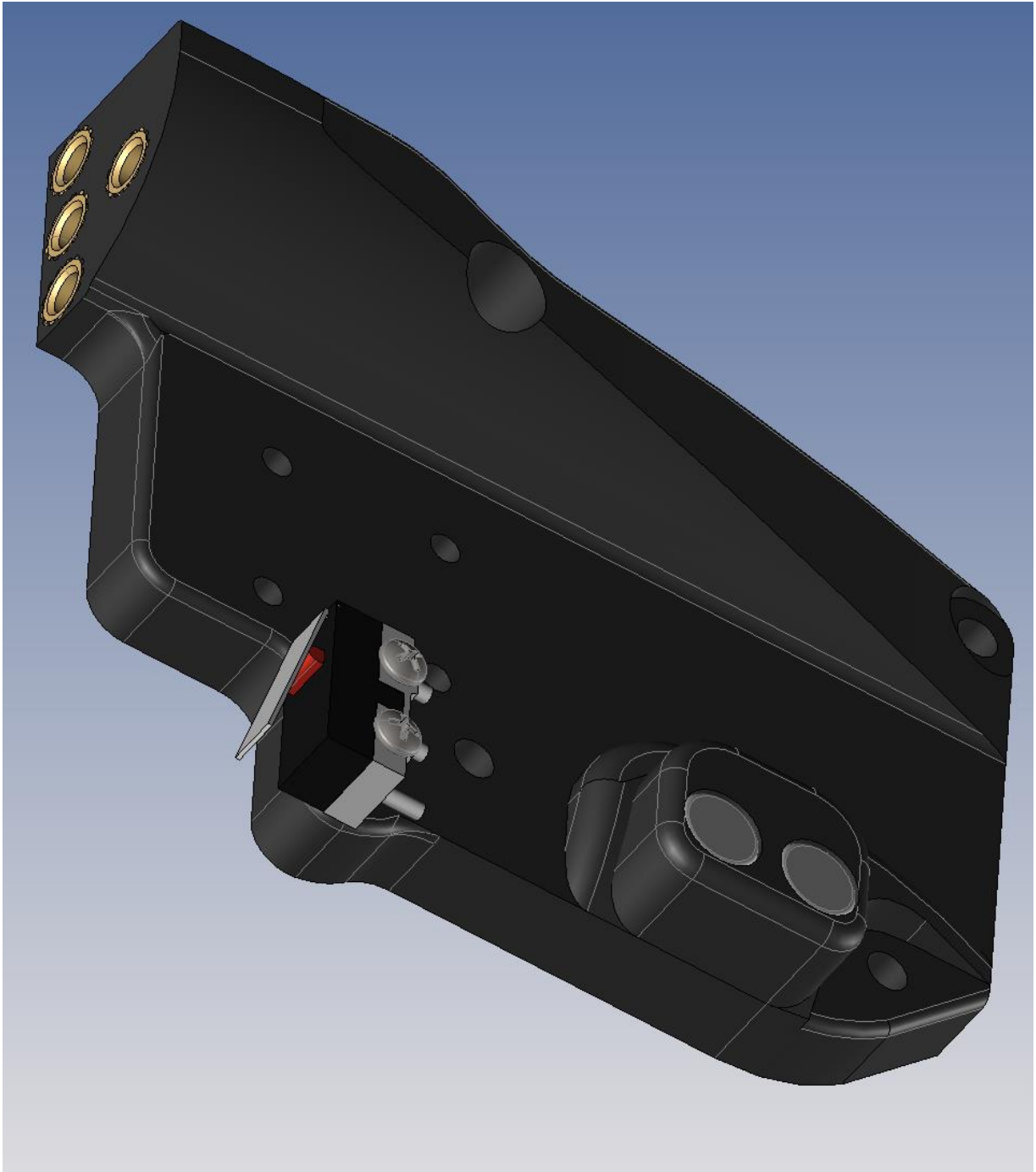
Self tapping Screw size M2

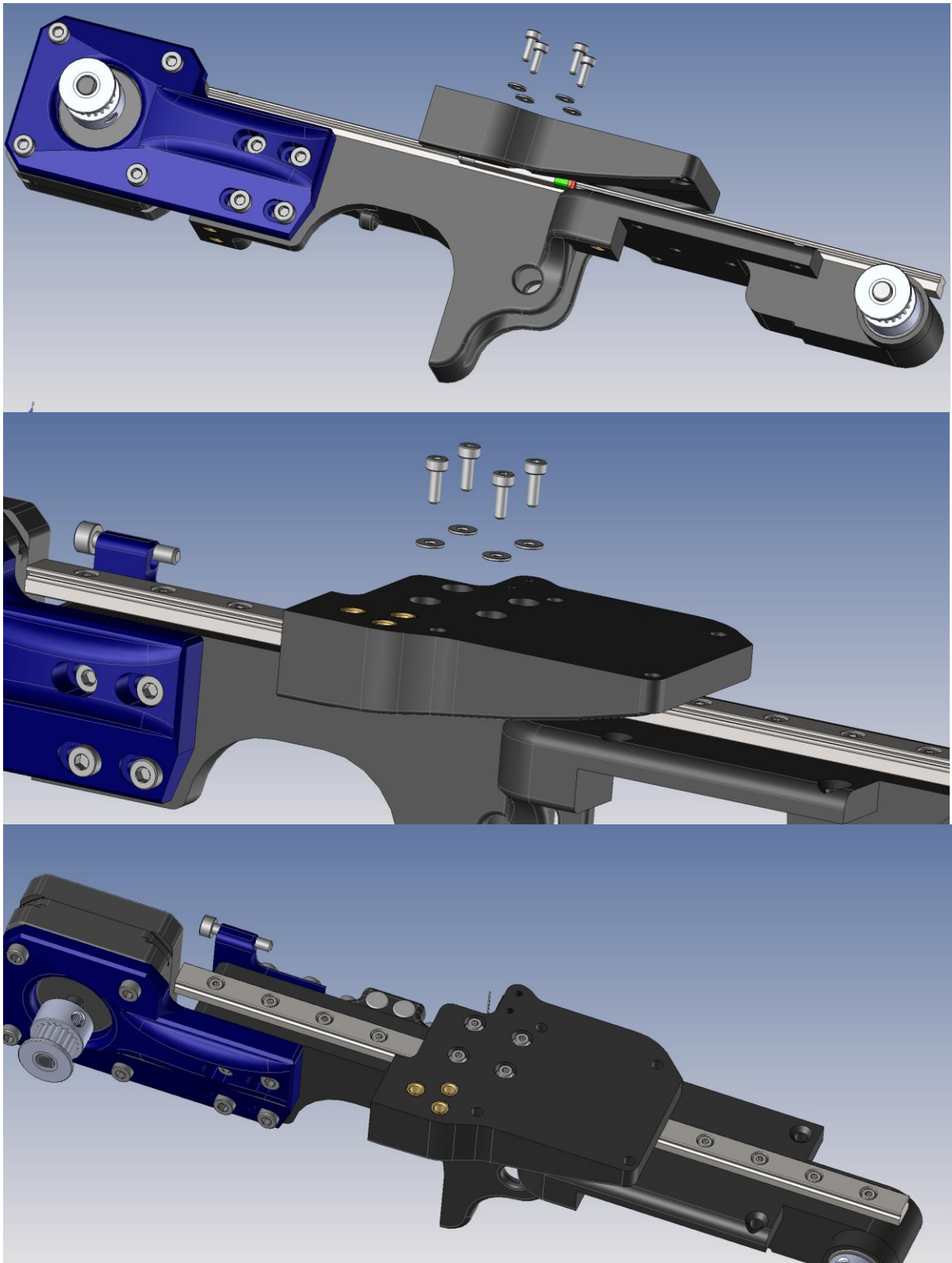
neodymium magnets 6x3mm

micro switch

Please install magnets with polarity to hold hotend mechanisms holder on Z – axis to

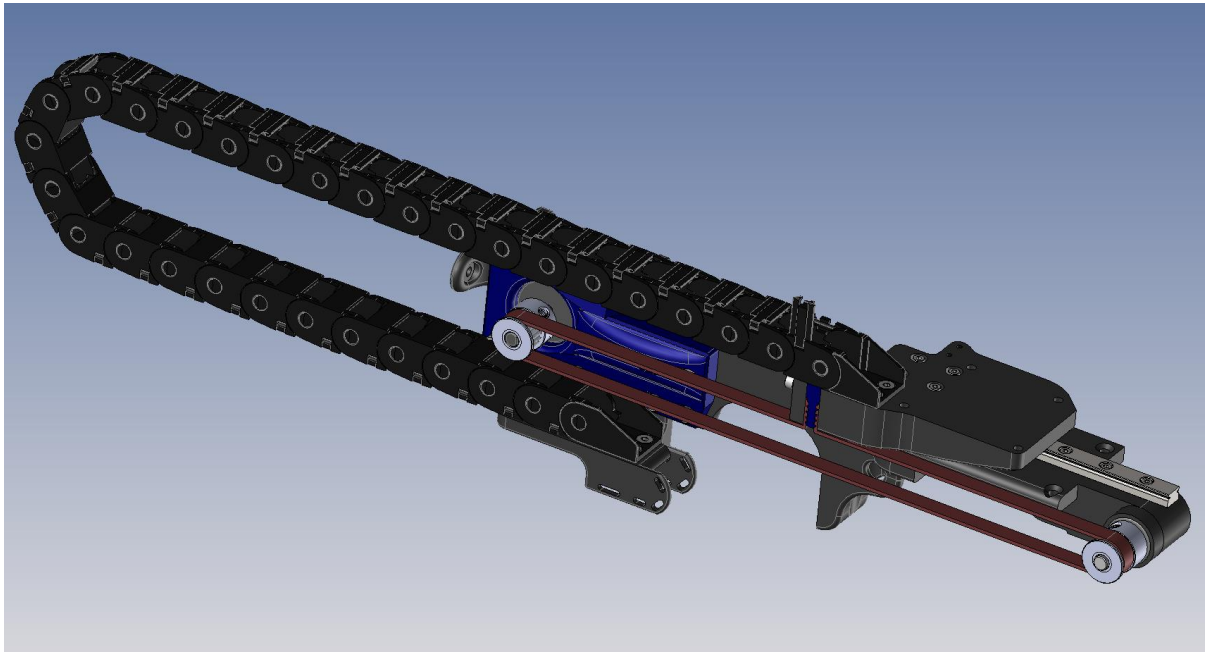
Stop falling down when stepper motor is without power (when printer is switched off)



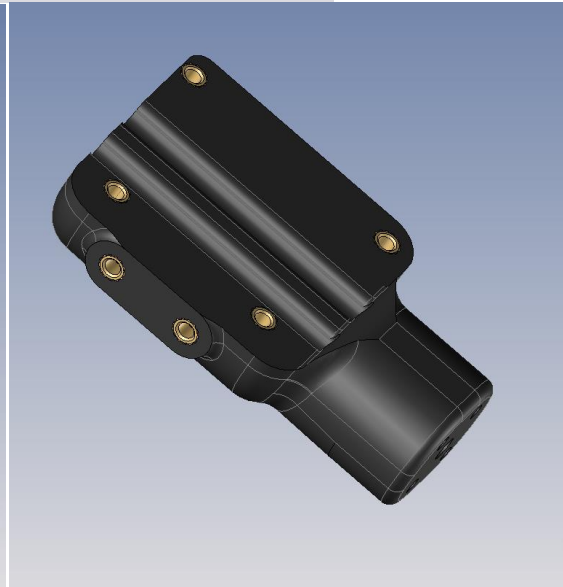
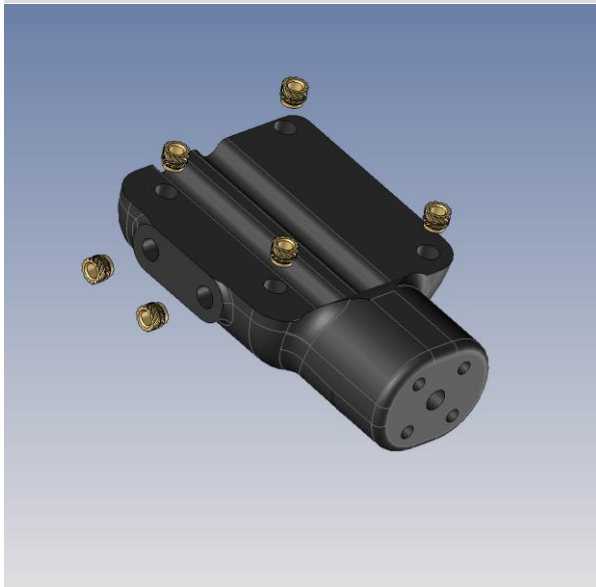
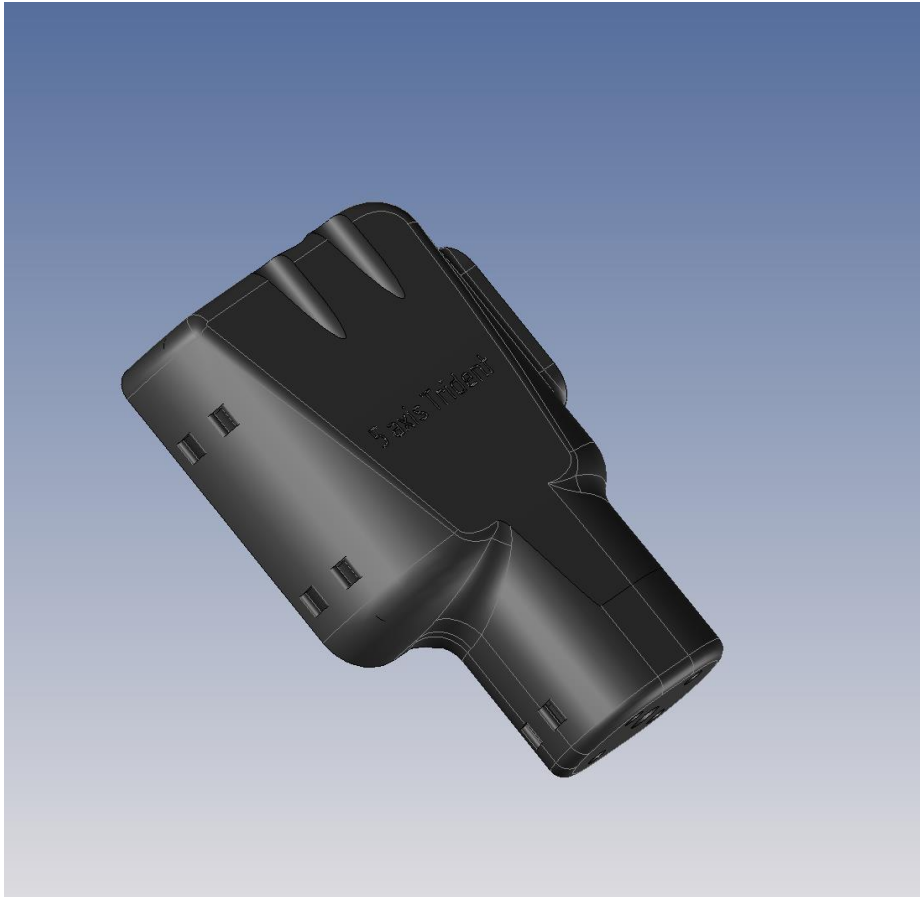


NOTE: Screw M2 x 6mm

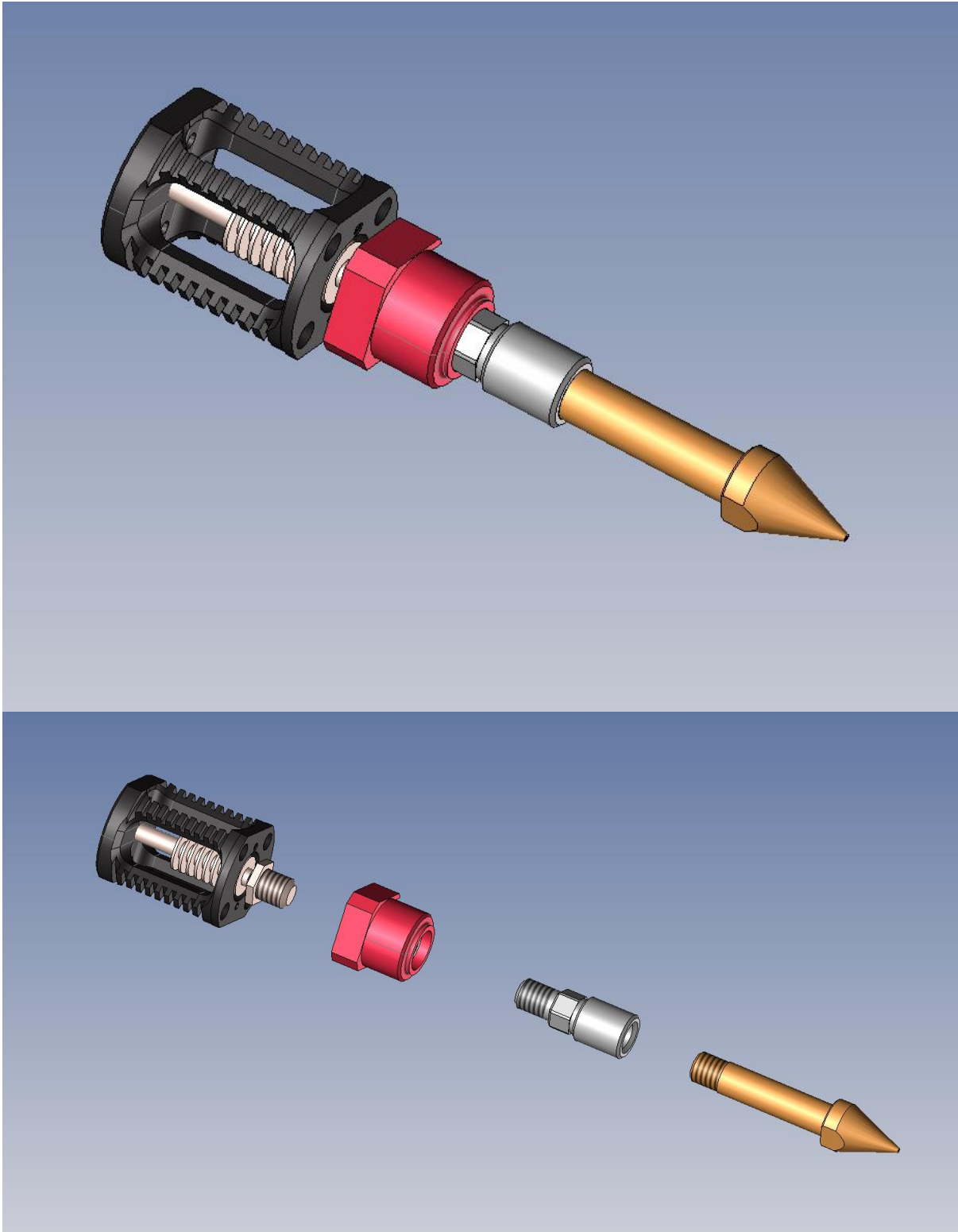
Spacer M2

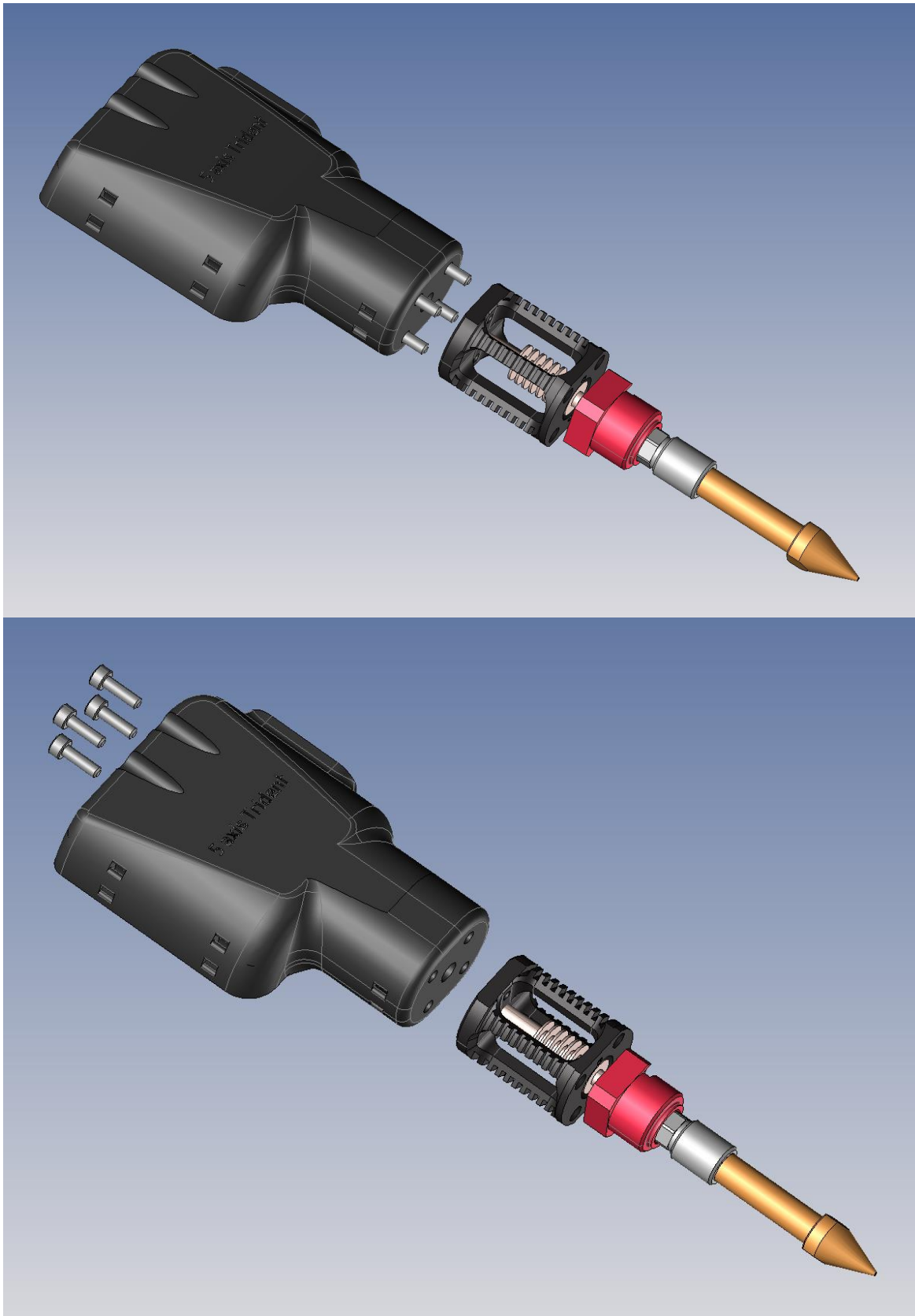


NOTE: Please follow assembly from the Direct drive version of Z – axis for the GT-2 belt drive

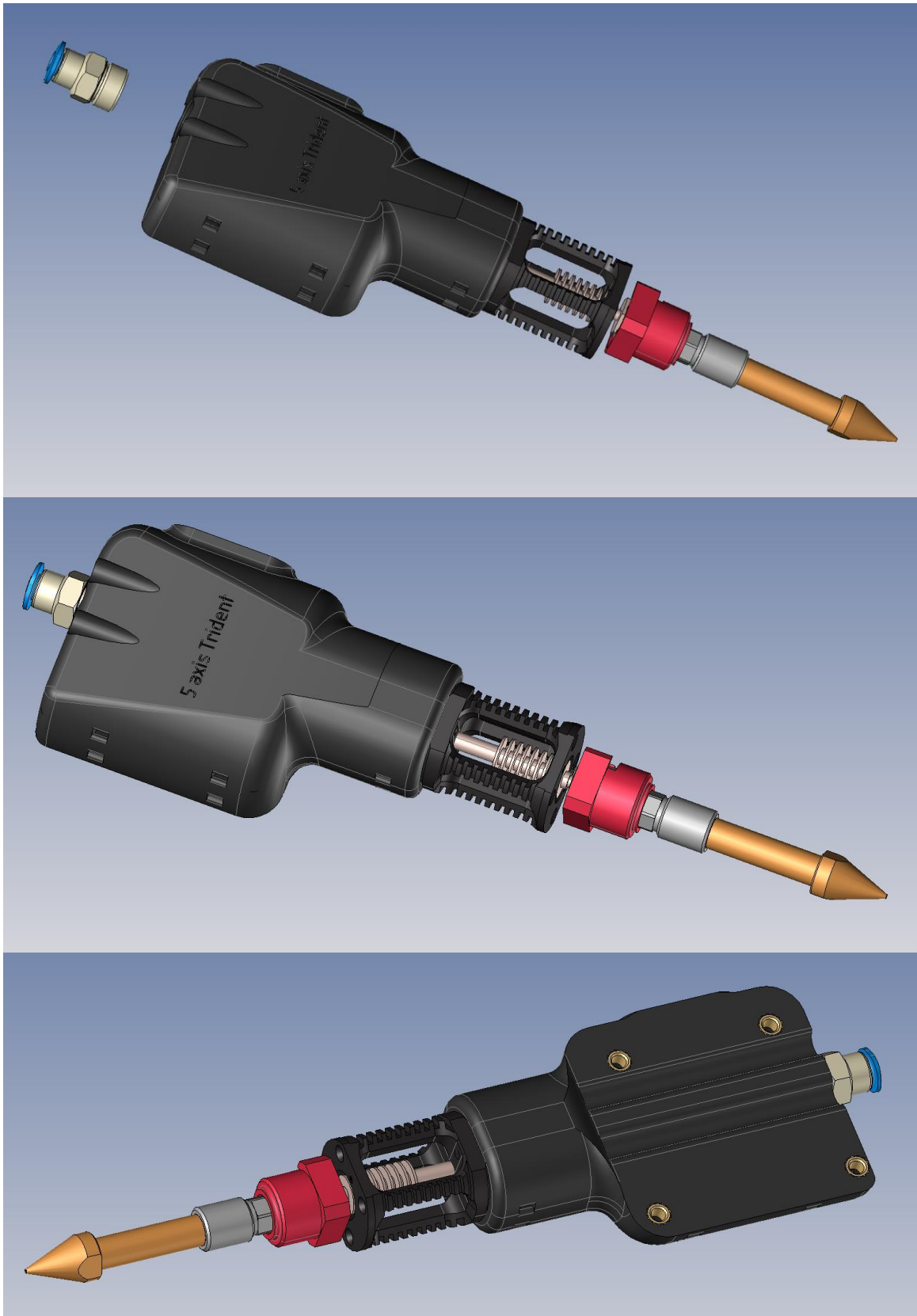


NOTE: the heat inserts used, are M3 x 5mm

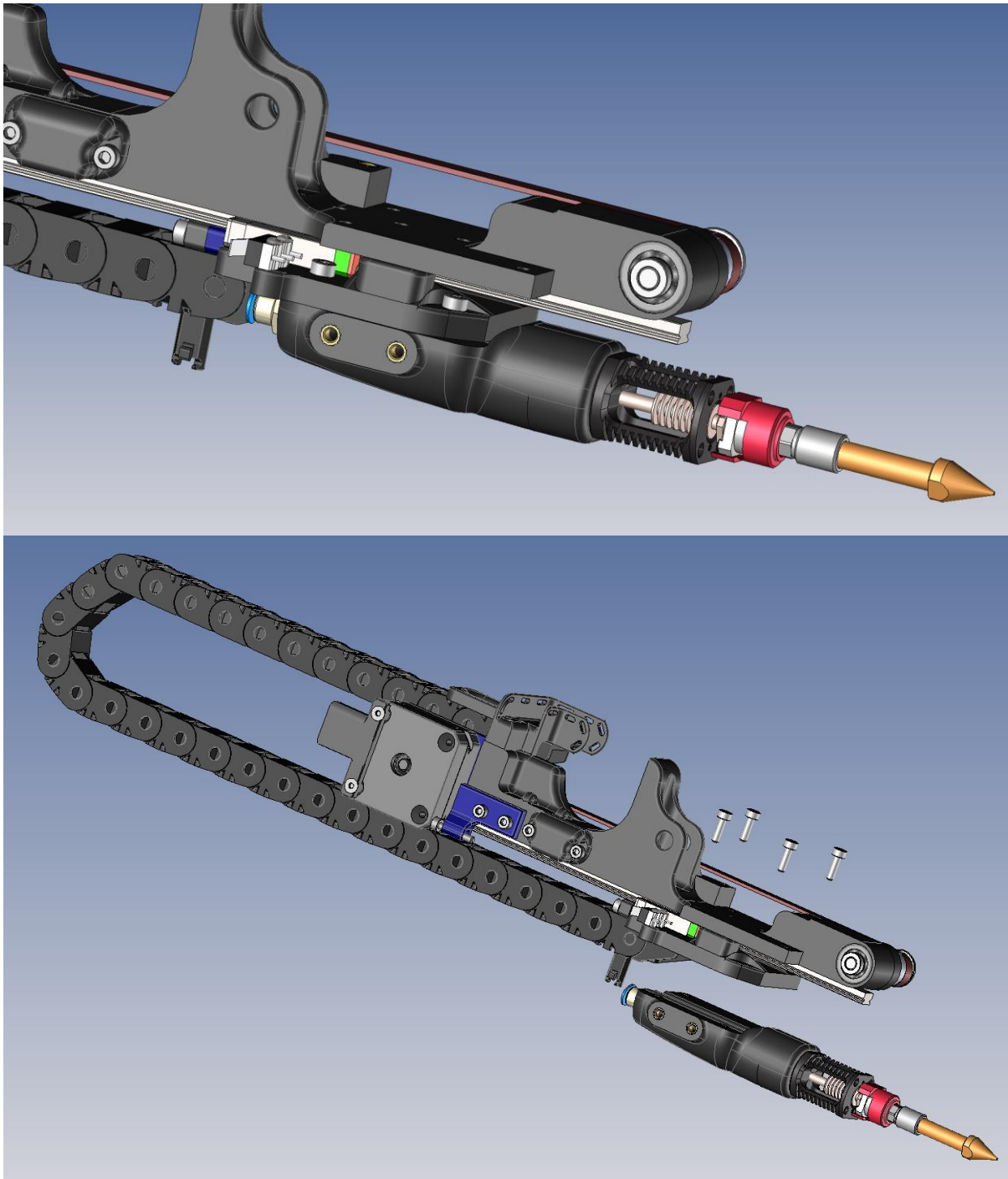




NOTE: Screw M2.5 x 6mm



NOTE: Pneumatic Coupler PC4-M10

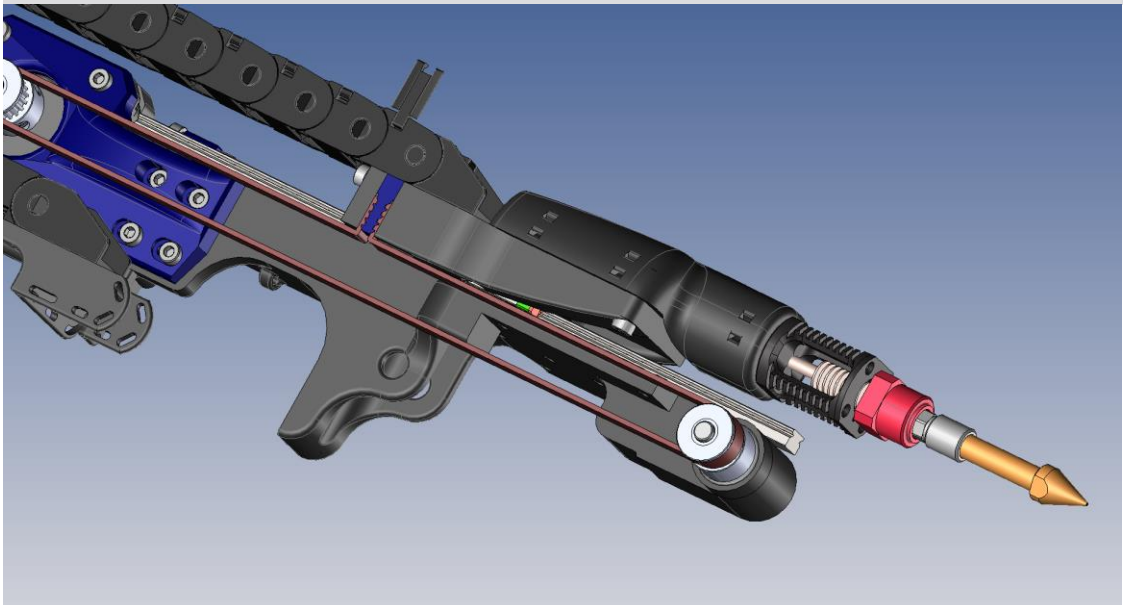
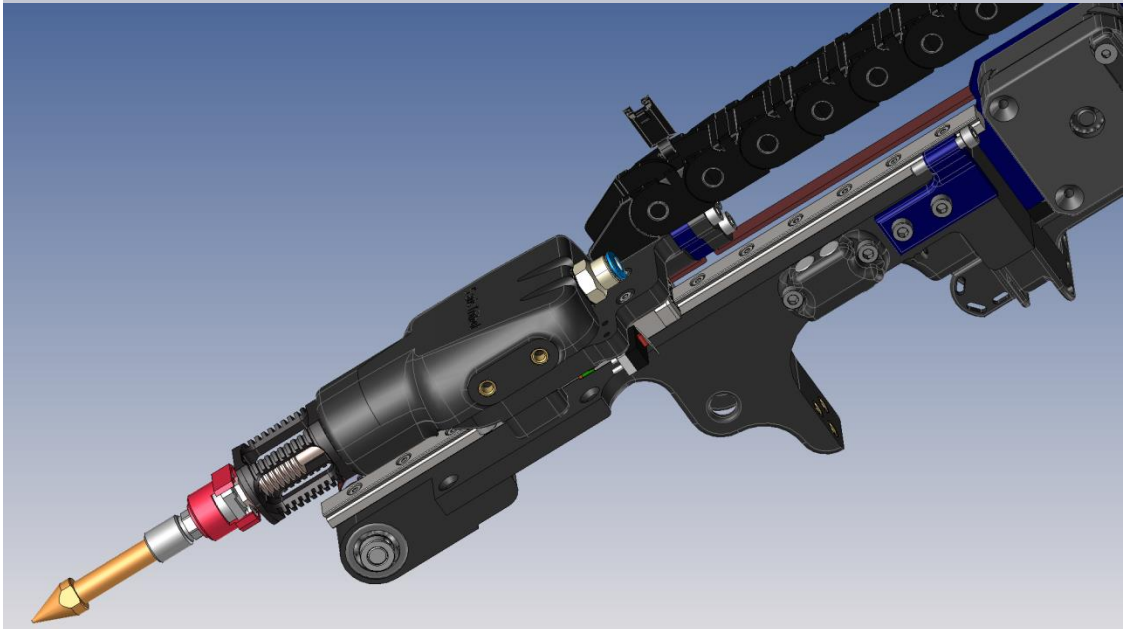
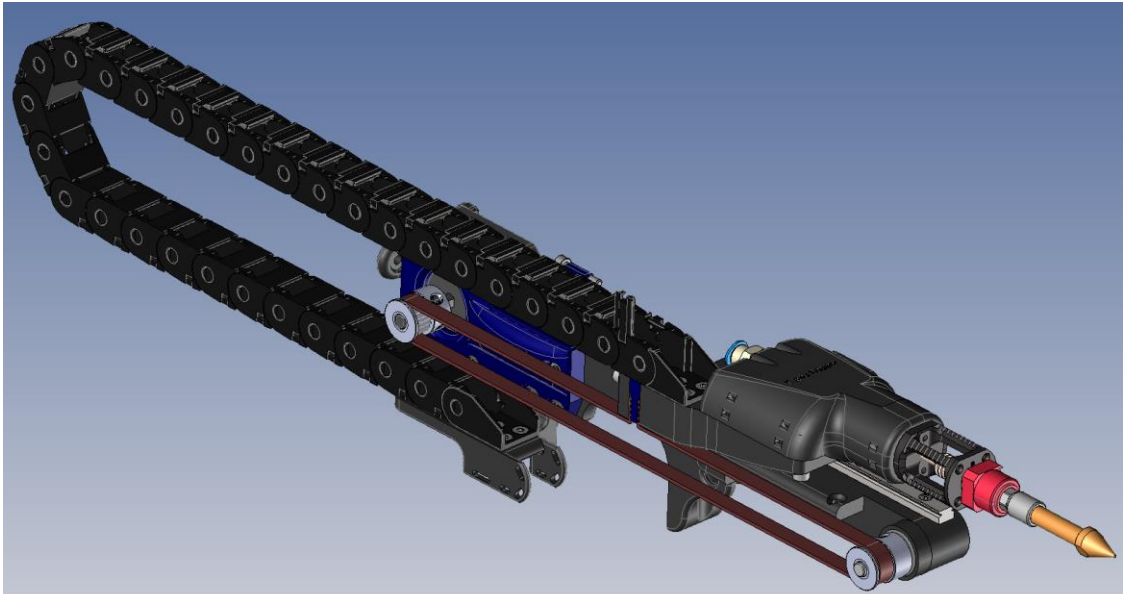


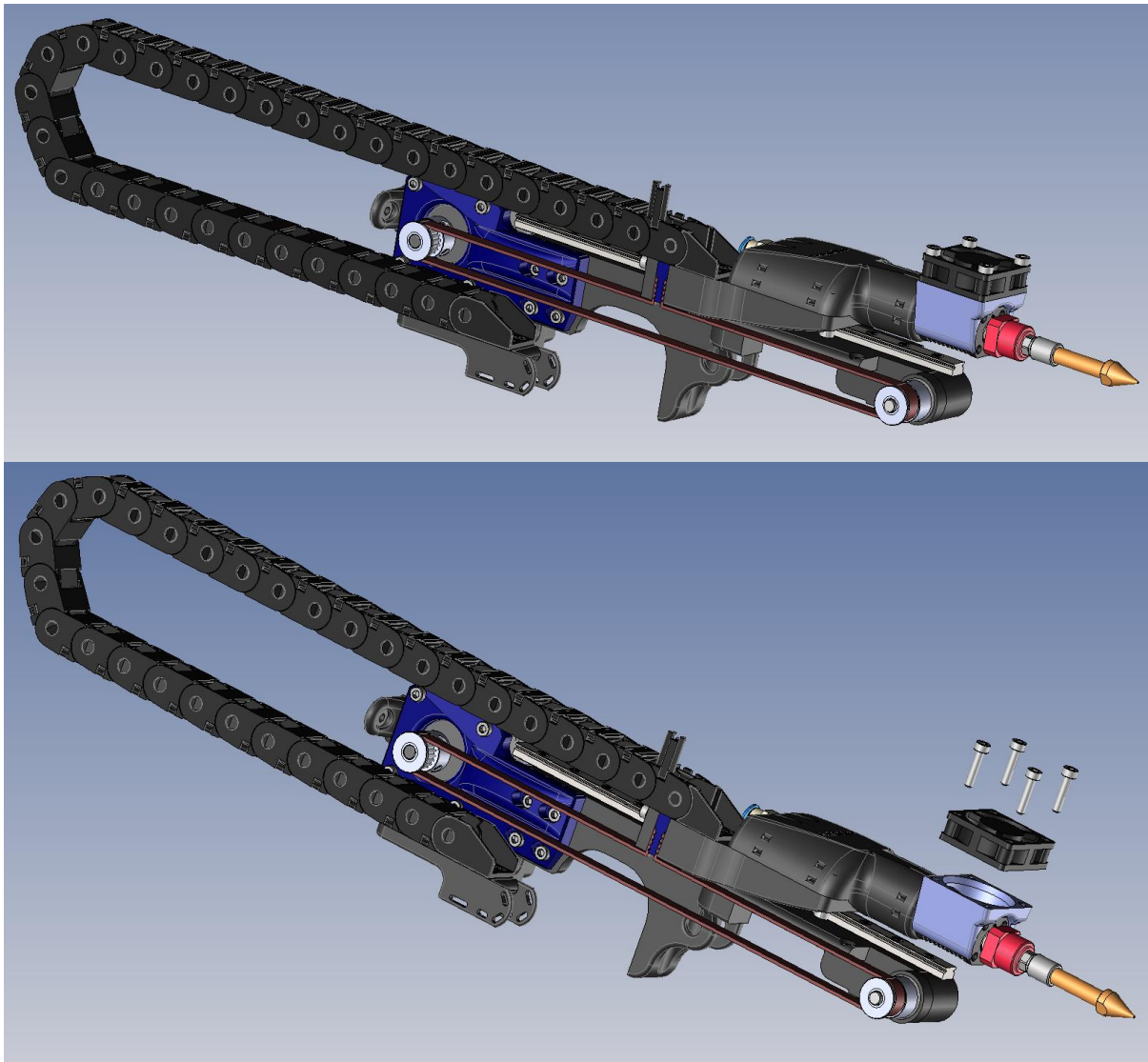
NOTE: Screw FHSC M3 x 6mm for chain link 10x11

Screw SHCS M3 x 10mm for Hotend mounting

Chain link 10 x 11

The length of the chain link enough to not interfere with upper stepper motor mechanism when the extruder will reach max. bottom





NOTE: Screw SHCS M3 x 14 mm

24V Fan 30x30x10mm

