

# SKT

*TAP Edition*

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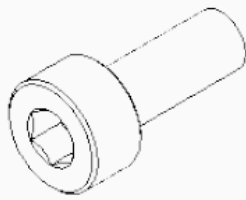
## ASSEMBLY GUIDE



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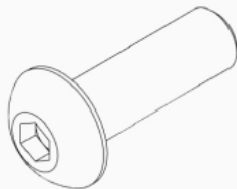
## Hardware reference



### SOCKET HEAD CAP SCREW (SHCS)

Metric fastener with a cylindrical head and hex drive. The most common fastener used on the Voron.

ISO 4762



### BUTTON HEAD CAP SCREW (BHCS)

Metric fastener with a domed shape head and hex drive.

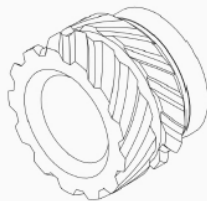
ISO 7380-1



### FLAT HEAD COUNTERSUNK SCREW (FHCS)

Metric fastener with a cone shaped head and a flat top.

**MUST BE MAGNETIC, NO STAINLESS!**  
ISO 10642



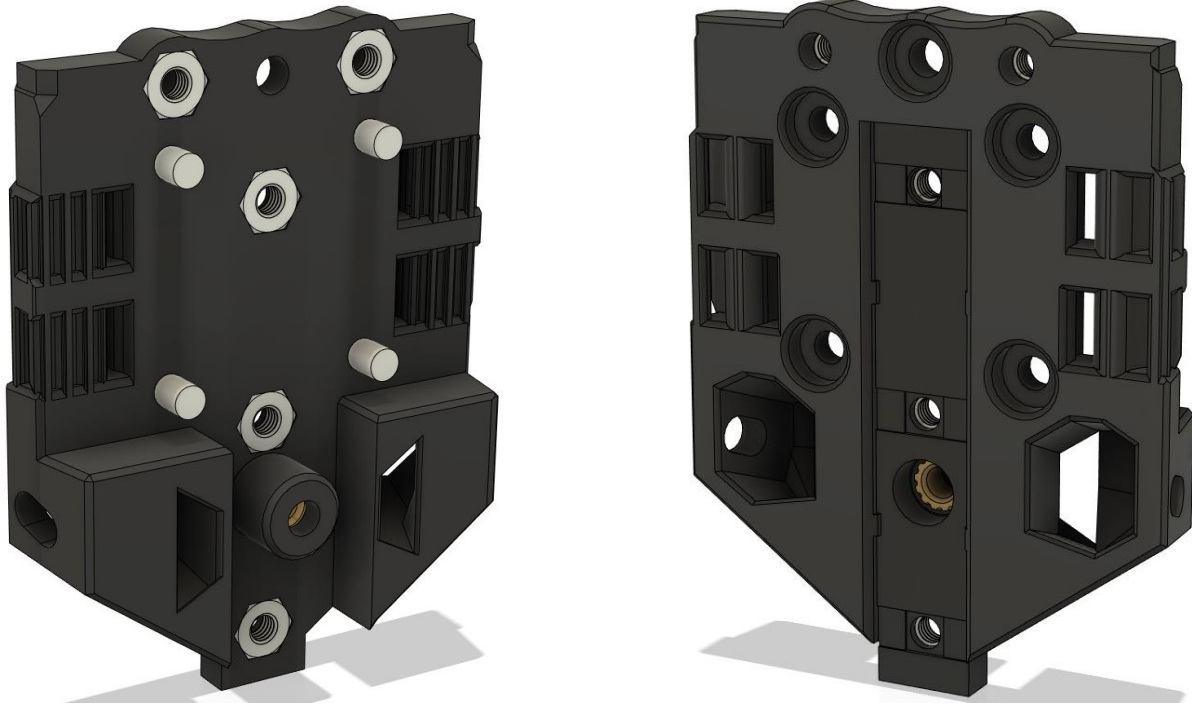
### HEAT-SET INSERT

These are made of brass, threaded on the inside and has ridges on the outside. Heat them up to approx 250C with a soldering iron and push them into the plastic.

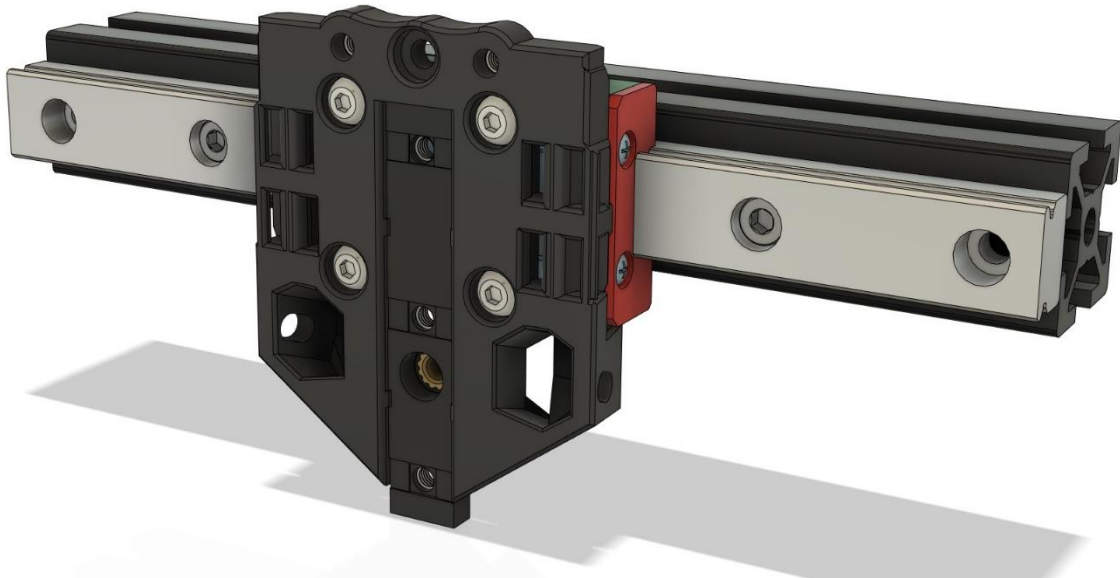
As the plastic cools, it solidifies around the knurls and ridges on the insert for excellent resistance to both torque and pull-out.

***Threaded inserts have to be M3x5x4 type***

## Step 1: Front carriage



- 1) Insert the m3 nuts as shown in the figure above.
- 2) Insert the m3 threaded insert as shown in the figure above.



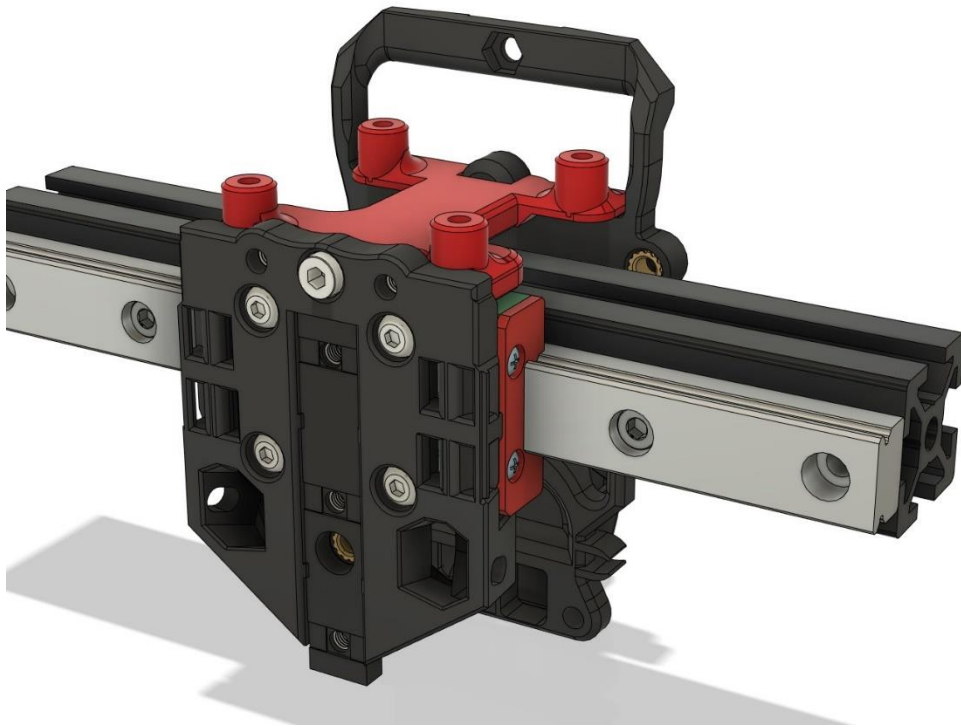
- 3) Place all the belts in the apposite location.
- 4) Place 4x6mm BHCS m3 screws to block the front body on the mgn12 carriage.

## Step 2: Rear carriage



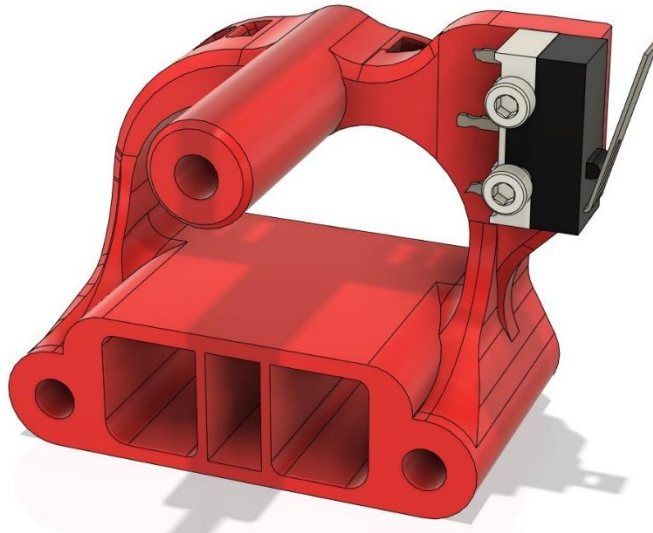
- 1) Insert the m3 threaded inserts as shown in the figure above.

## Step 3: Partial carriage assembly

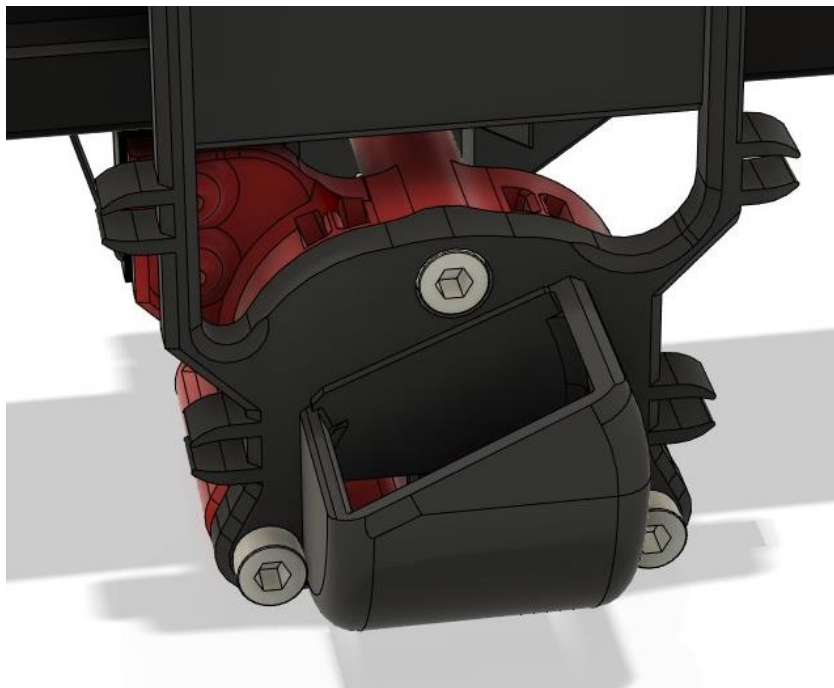


- 1) Keep the front, top and rear carriage parts together
- 2) Insert a M3x40mm SHCS head

#### Step 4: Lower carriage assembly

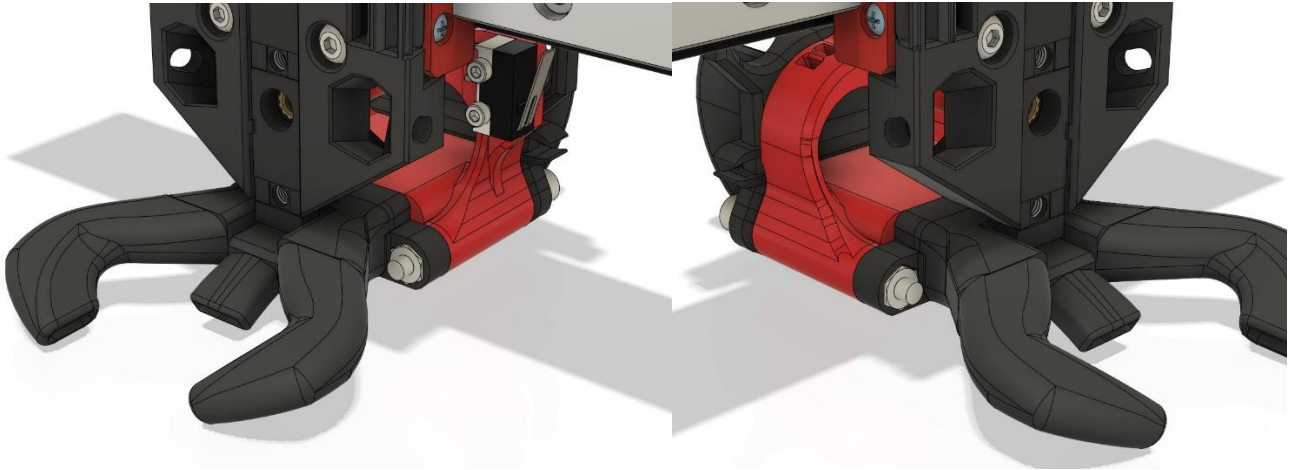


- 1) Insert 2 self-tapping screws M2x8mm (10mm as well) to lock the switch in right position



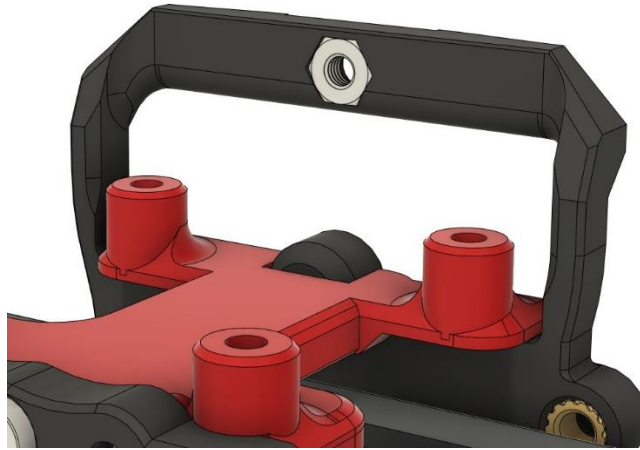
- 2) Insert 3 M3x35mm SHCS head as shown in the figure above. The center screw must be screwed into the front carriage insert.

## Step 5: Fanduct

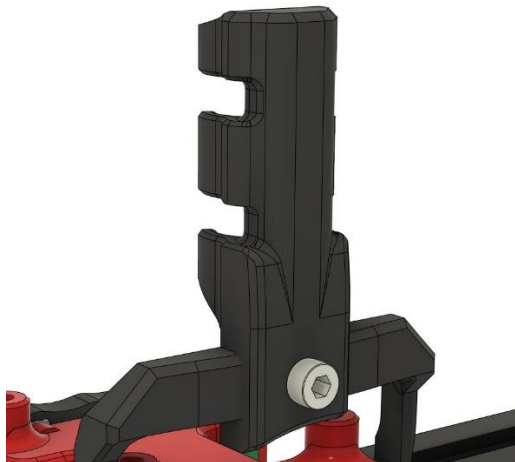


- 1) Place 2 M3 nuts and screw in the M3x35mm inserted in previous step.

## Step 6: Umbilical mount



- 1) Place the M3 nut as shown in the figure above.

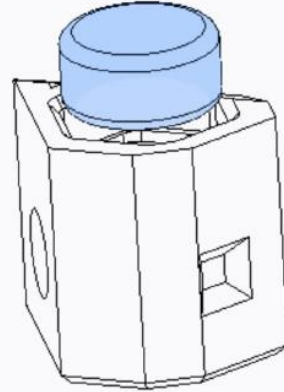
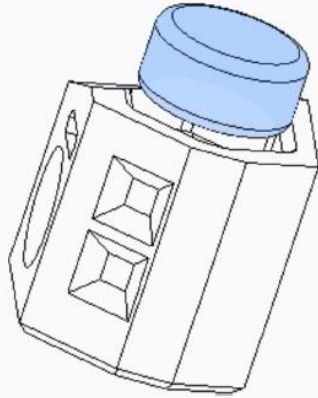


- 2) Screw in an M3x6mm (8mm as well) SHCS

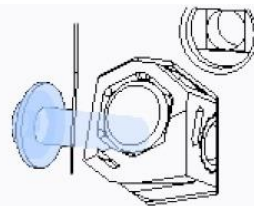
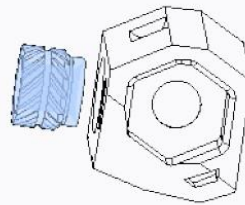
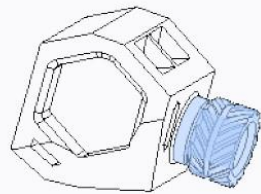


## Step 7: Rear TAP system – initial assembly

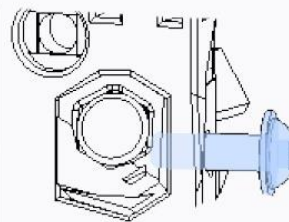
(2) 6x3 magnets  
2 drops RTV or Superglue



(10) Heat-set Inserts  
(1) M3 Hex Nut



M3x10 BHCS  
+ M3 washer

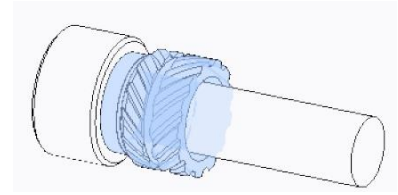


M3x10 BHCS  
+ M3 washer



## Step 8: Rear TAP system – MGN9 rail installation

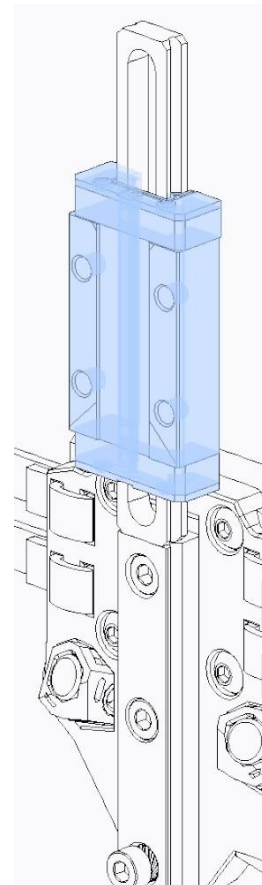
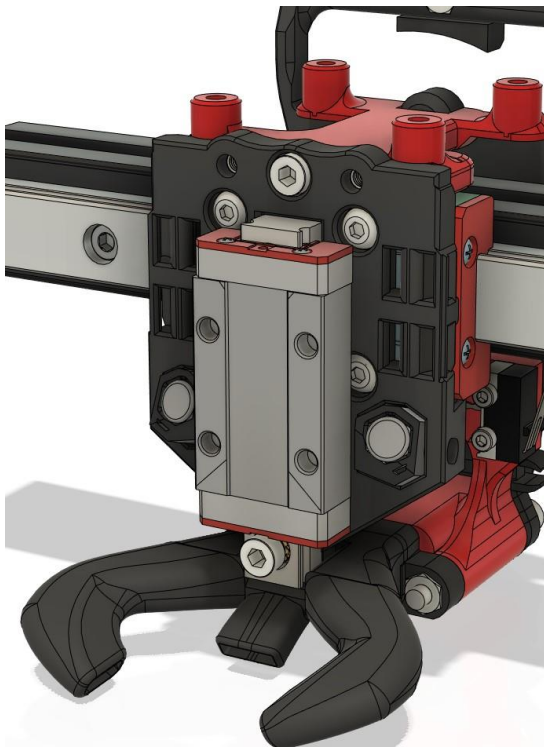
- 1) Prepare an M3x10mm SHCS head screw and screw in an M3 threaded insert as shown in figure above



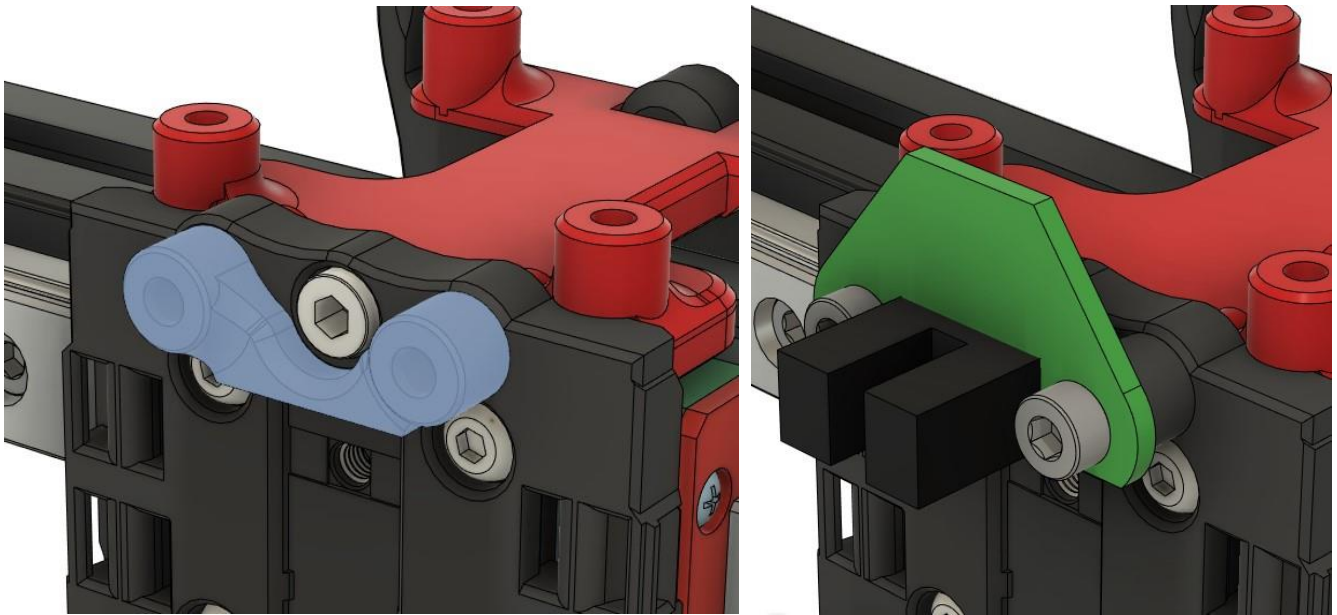
- 2) Screw in 2 M3x6mm SHCS (top and center)
- 3) Screw in the M3x10 SHCS with threaded insert (bottom)



- 4) Insert the Mgn9 carriage on the rail using the apposite tool

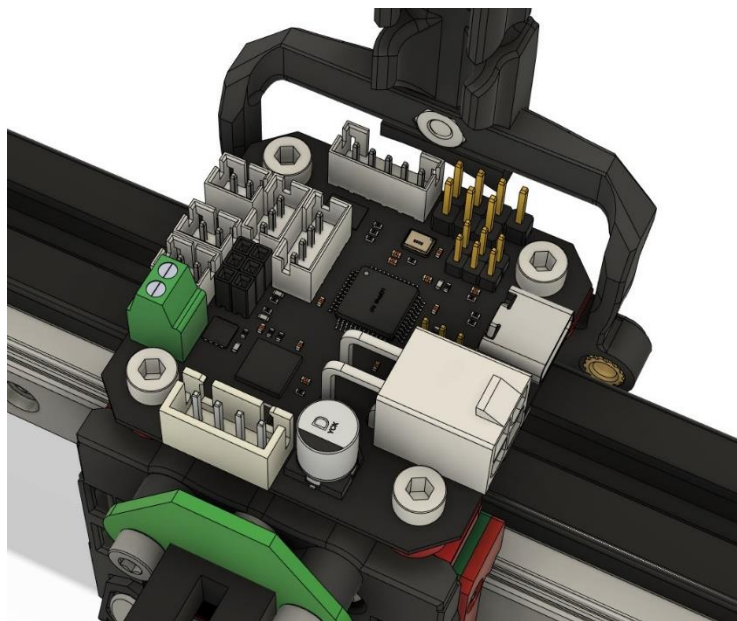


## Step 9: Rear TAP system – Probe installation



- 1) Place the spacer over the front carriage body
- 2) Screw in 2 M3x10mm (SHCS or BHCS) to ensure the probe in the right location

## Step 10: Toolboard installation



- 1) Place the toolboard over the top carriage
- 2) Screw in 4 M3x4mm (SHCS or BHCS) to ensure the toolboard on the mount, as shown in picture above.

**Note:** The toolboards SHT42, EBB42 and THR42 are compatible

## Step 11: Front TAP system

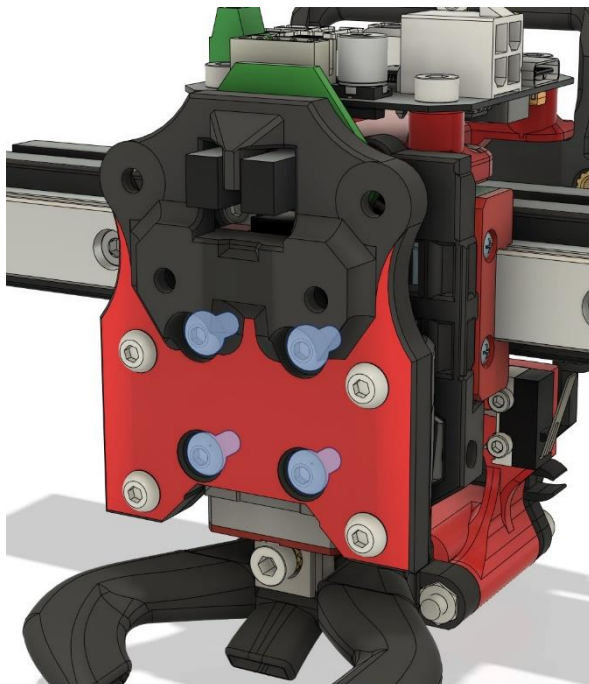
- 1) Place 6 M3 nuts as shown in picture on the side



- 2) Screw in 4 M3x8mm BHCS as shown in picture on the side

- 3) Screw in 2 M3x6mm FHCS as shown in picture on the side

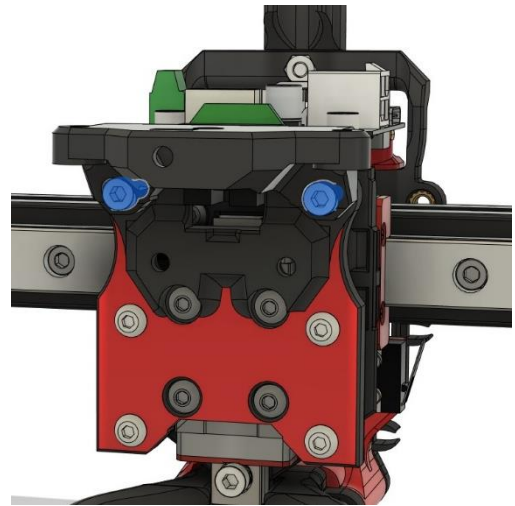
The holes here are designed at an angle.  
Go slow. Tighten the FHCS until they are flush, but do not over tighten.



- 4) Screw in 4 M3x6mm BHCS as shown in picture on the side, to ensure the front tap system to the MGN9 carriage

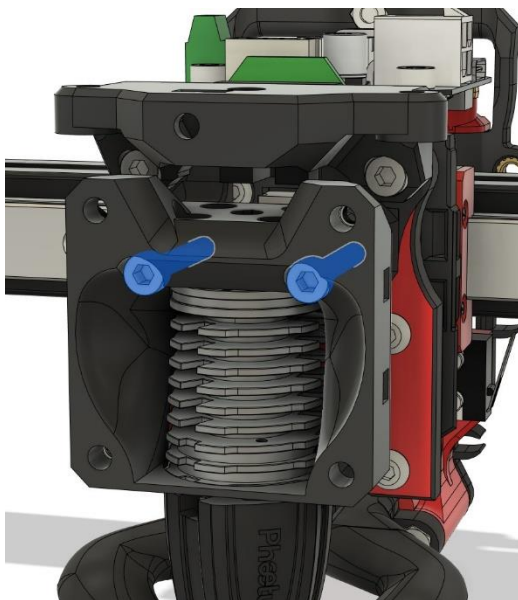
## Step 12: Extruder adapter installation

- 1) Place the adapter as show in side picture
- 2) Screw in 2 M3x8mm SHCS to ensure the adapter



## Step 12: Hotend installation

- 1) Insert 2 (4 if you want) M3 nuts as shown in side picture



- 2) Screw in 2 SHCS screws to ensure the hotend mount.

**Note:** The screws to be used in this step can change according to the different hotend types