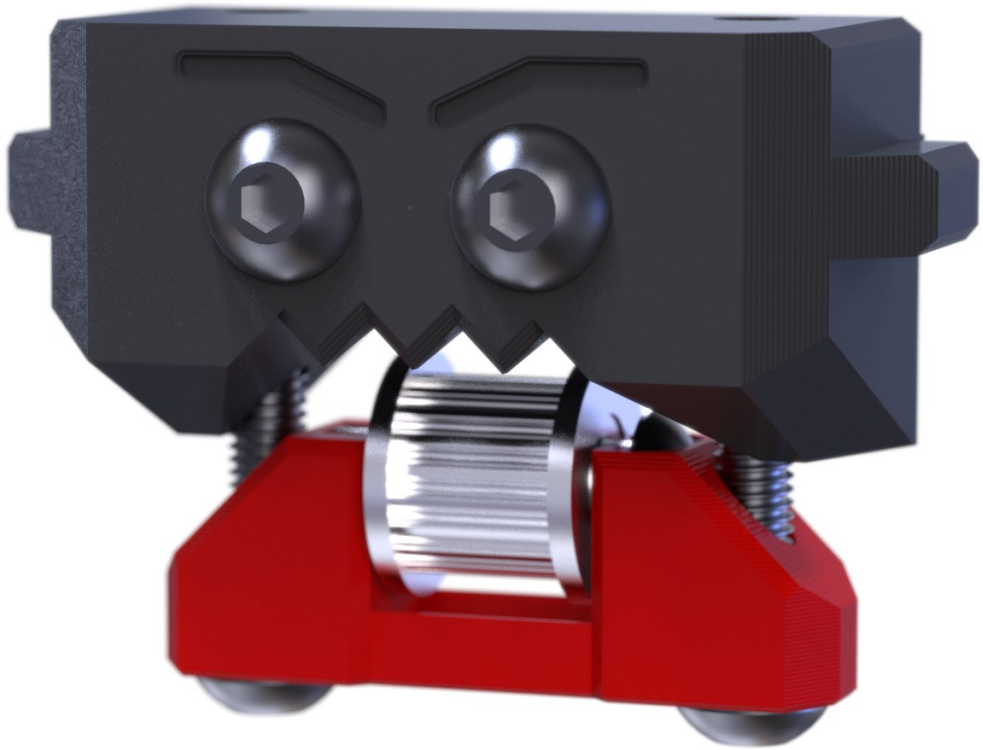
BZI

ASSEMBLY MANUAL



Everyone could use a little extra Beef

VERSION 11/4/2023

STL FILE KEY

The STL naming convention used for BFI/BZI is the same as that used for VORON printers:

PRIMARY COLOR

Example
BZI_V2.4_idler_body_x4.stl
These files will have nothing at the start of the filename.

ACCENT COLOR

Example
[a]_BZI_V2.4_carrier_x4.stl
These files will have ''[a]'' to the front to mention that they are intended to be printed with an accent color.

QUANTITY REQUIRED

Example
[a]_BZI_V2.4_carrier_x4.stl
If a file ends with ''_x#'', that is telling you the quantity of that part required to build this system..

PRINT GUIDELINES

The recommended print settings are also those used for VORON printers:

FDM MATERIAL
Micron was designed for ABS. Use other plastics at your own discretion.

LAYER HEIGHT
Recommended : 0.2mm

EXTRUSION WIDTH
Recommended : Forced 0.4mm

INFILL PERCENTAGE
Recommended : 40%

INFILL TYPE
Grid, Gyroid, Honeycomb, Triangle, Cubic, Adaptive Cubic.

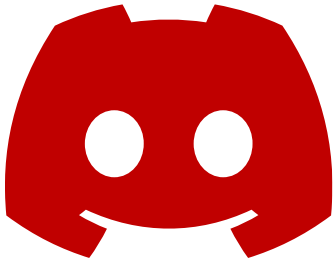
WALL COUNT
Recommended : 4

SOLID TOP/BOTTOM LAYERS
Recommended : 5

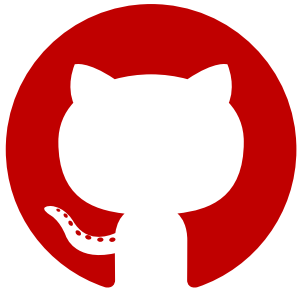
SUPPORTS REQUIRED
If the part needs supports, they are built into the model.

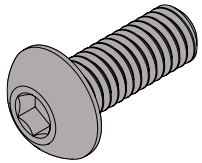
HOW TO GET HELP

DISCO? OH ...DISCORD
If you need assistance with your BFI/BZI assembly, you can head over the Voron Discord server and post your questions (typically in the **#voronuser_mods** channel).



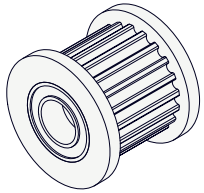
GIT GUD
If you want to stay up to date on the latest files for BFI/BZI. The github page is the only source for the latest files.



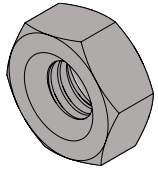


BUTTON HEAD CAP SCREW (BHCS)
Metric fastener with a domed shaped head and hex drive.

ISO 7380-1



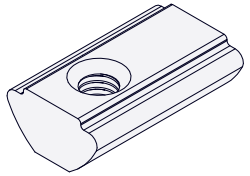
GT2 20T TOOTHED IDLER
GT2 idler used in BZI



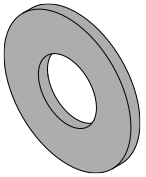
HEX NUT
Hex nuts couple with bolts to create a tight, secure joint.

ISO 4032 / DIN 934

ATTENTION BUBBLE
This logo denotes steps that are common areas that mistakes can occur.

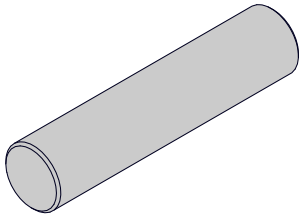


DROP-IN 2020 T-NUT
Nut that can be inserted into the slot of an aluminum profile.



M5 SHIMS
Not to be confused with stamped washers. These are used in all M5 call-out locations in this manual.

3x6x0.5 DIN 988

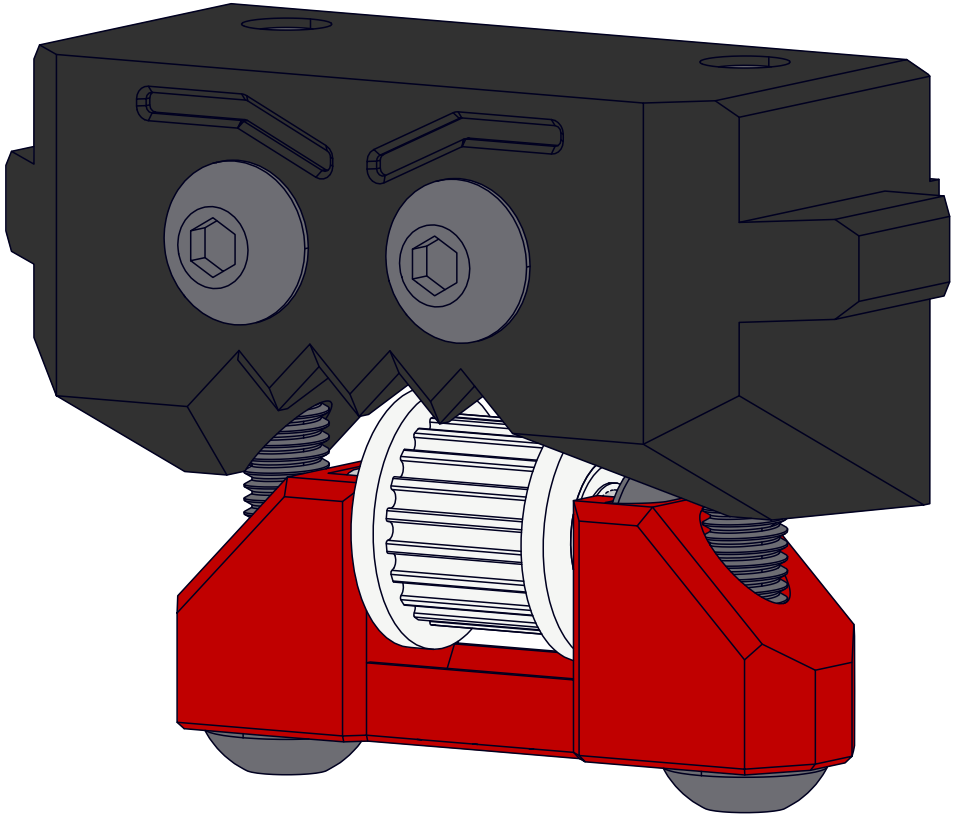


5MM PIN
Steel shaft, 5mm in diameter

Hardware Used

Look for the **RED** call outs to mention the various hardware used

BZI



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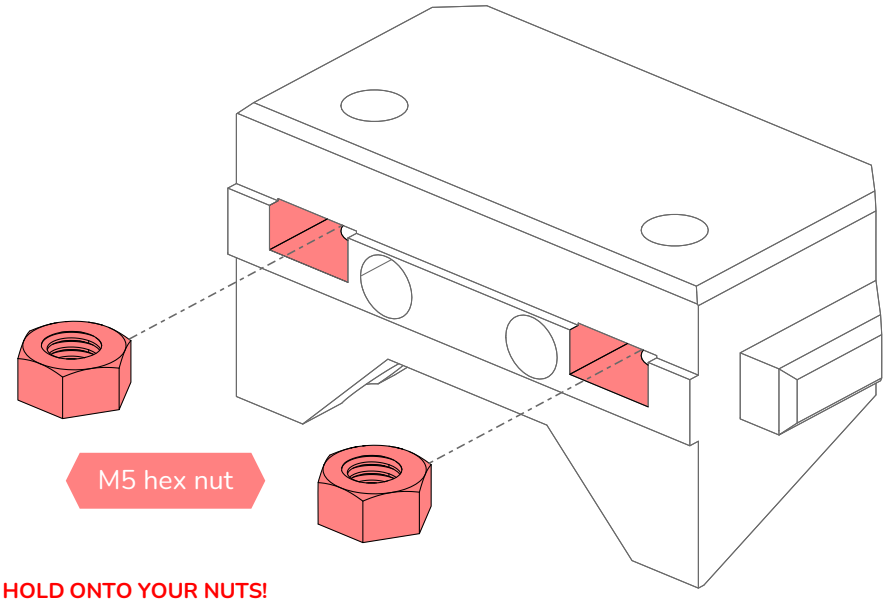
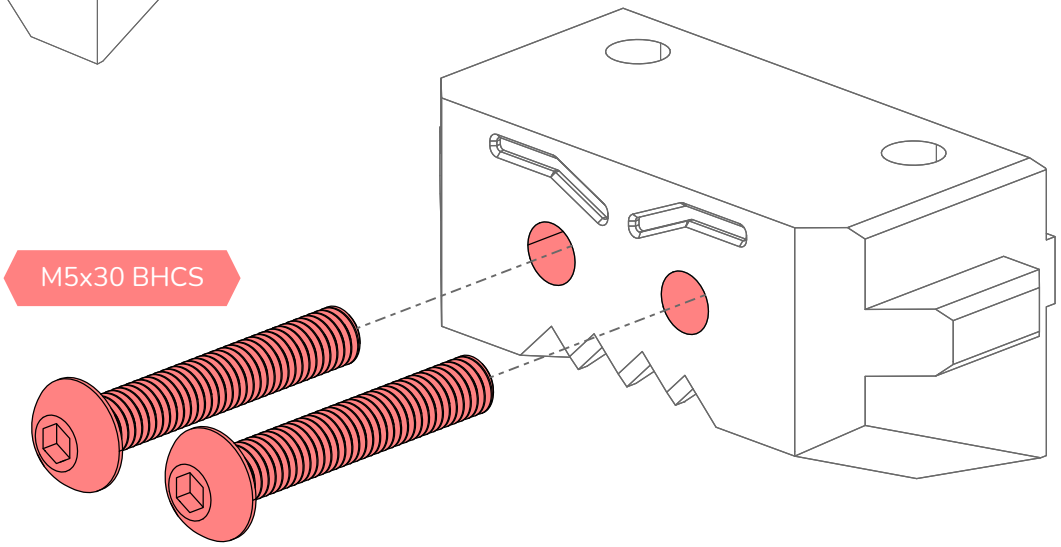


HOLD ONTO YOUR NUTS!
M5 hex nuts get pressed into these recesses in the back of the main body, once installed the 2020 extrusions keep them from falling out. The holes above the hex nuts are slightly undersized , this is on purpose to act as a built-in lock nut.

YOU HAVE BEEN FRAMED!
Mount the main body to your frame in the same location as the stock Z idlers. There is only a single STL for the main body instead of 2 as it fits both sides of the frame.



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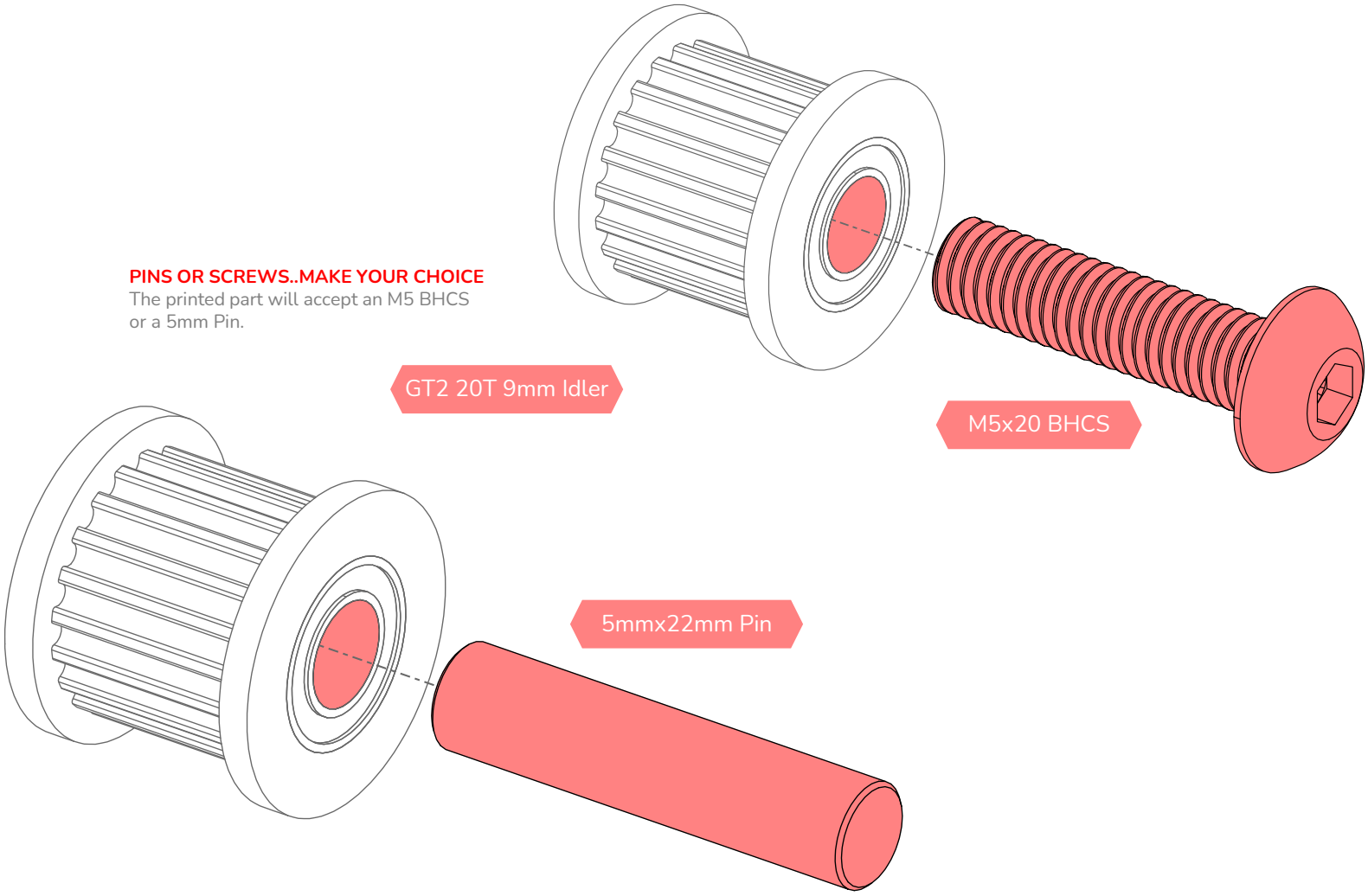
PINS OR SCREWS..MAKE YOUR CHOICE
The printed part will accept an M5 BHCS or a 5mm Pin.



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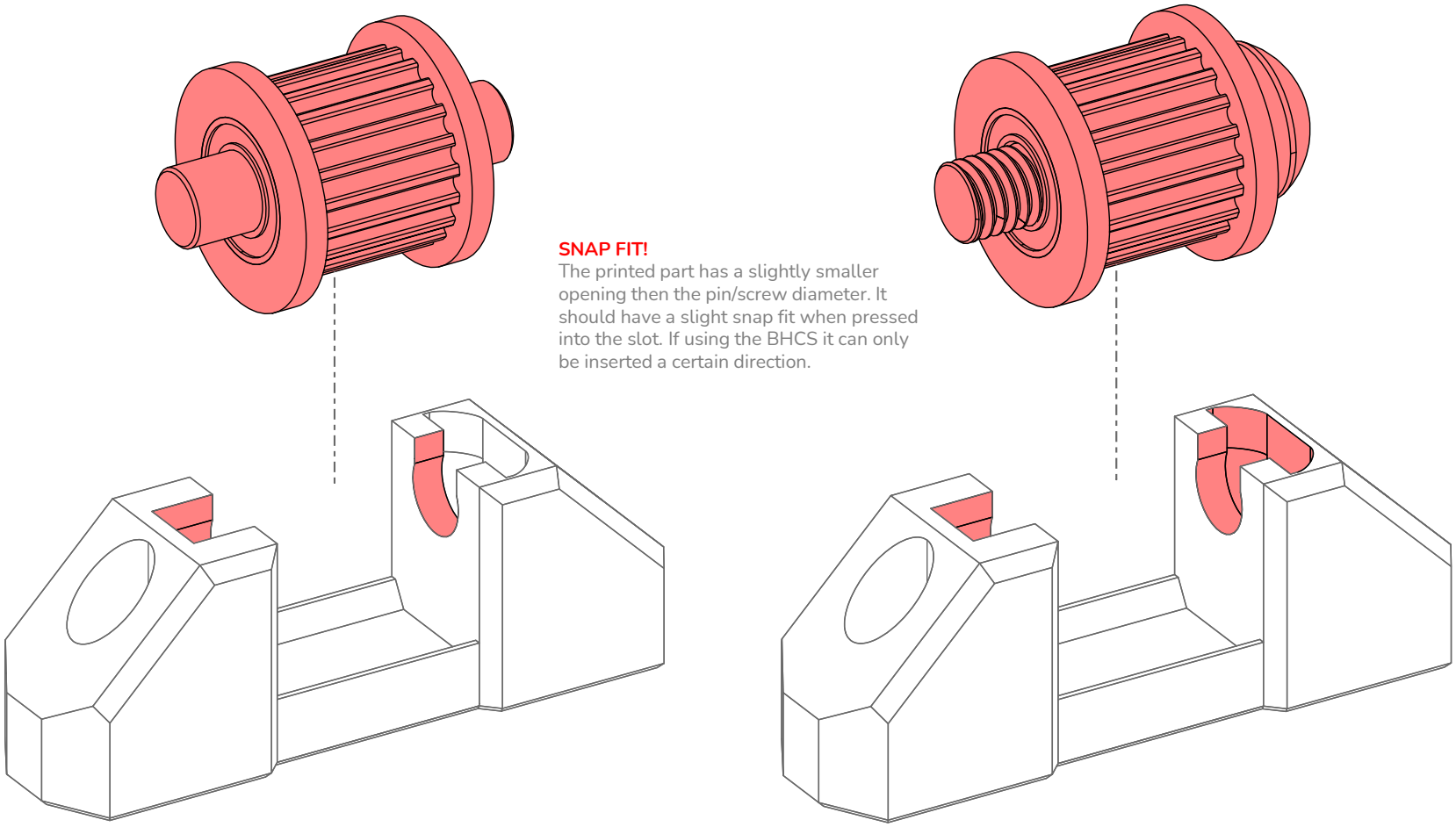
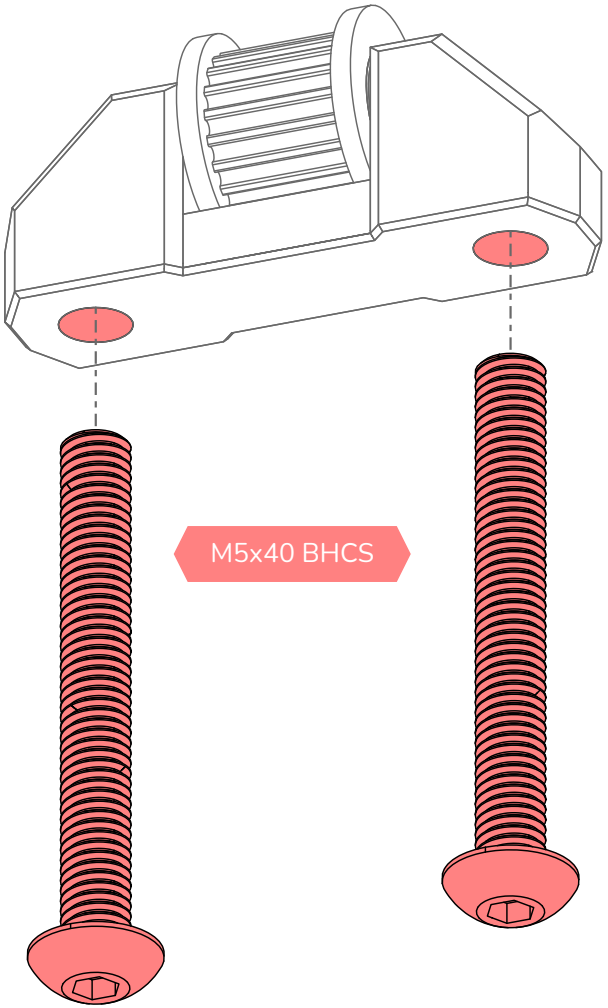
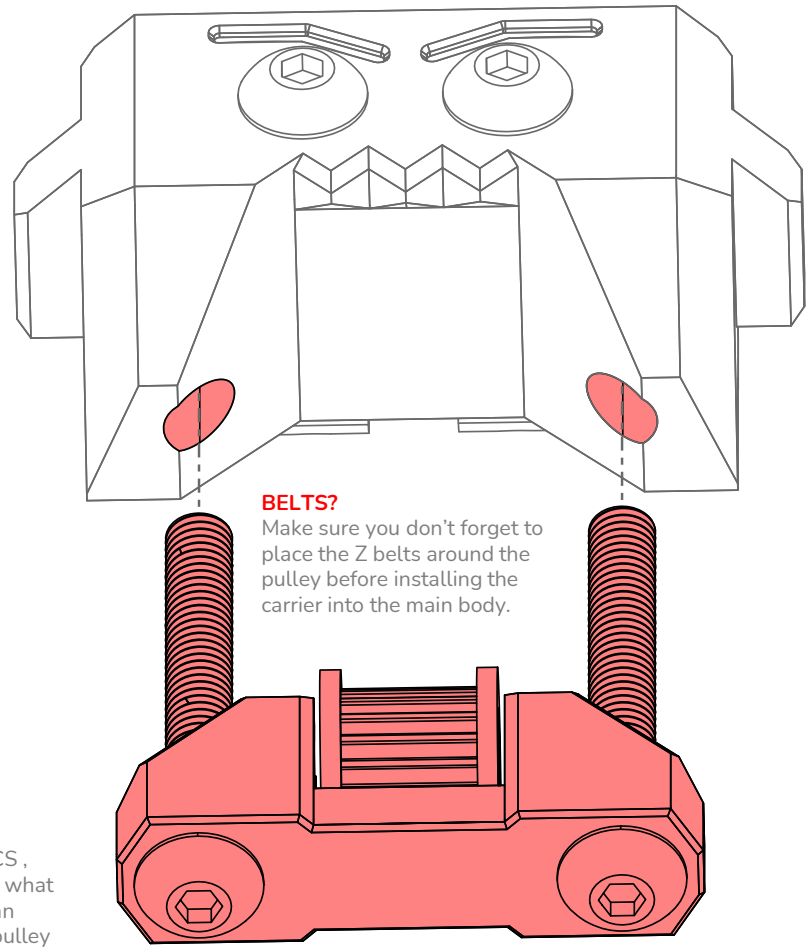


SNAP FIT!
The printed part has a slightly smaller opening then the pin/screw diameter. It should have a slight snap fit when pressed into the slot. If using the BHCS it can only be inserted a certain direction.

BZI

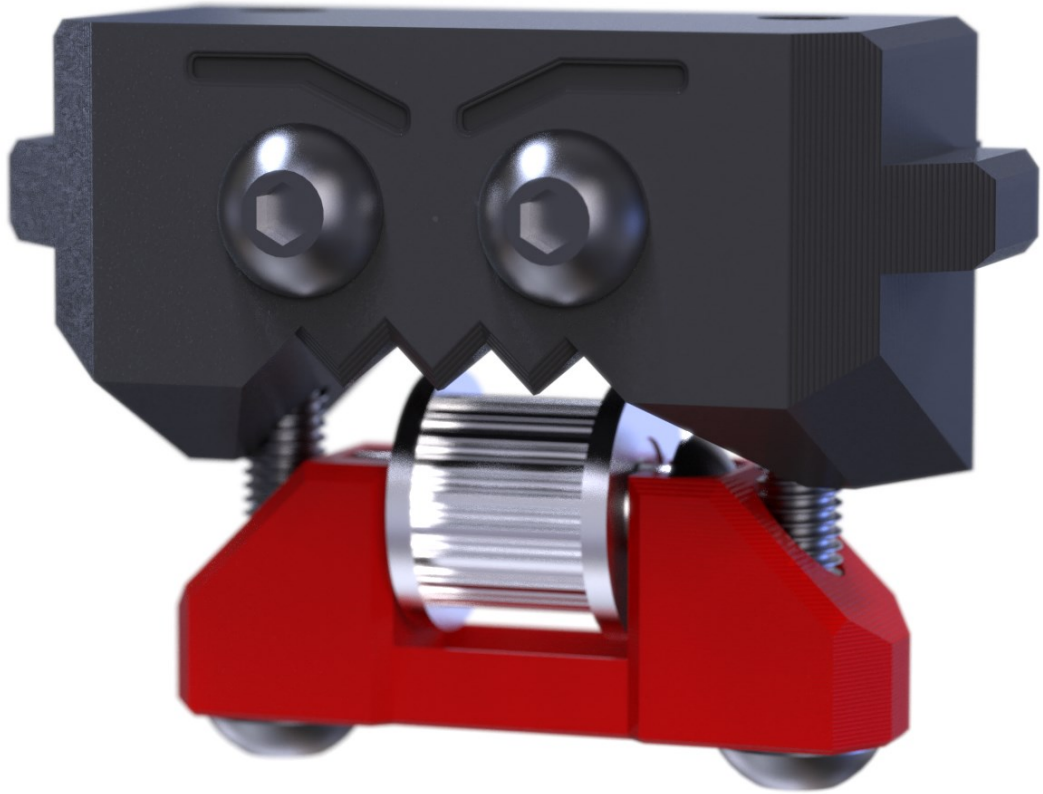


IS THAT TOO TIGHT??
Using the 2 m5x40 BHCS , you tension the Z belts , what makes BZI nice is you can adjust the angle of the pulley to ensure proper tracking of the belt.



BELTS?
Make sure you don't forget to place the Z belts around the pulley before installing the carrier into the main body.

BZI



VERSION 02/15/2024