

BETA



STEALTHBURNER

WE BUILD SPACE SHUTTLES WITH GARDENING TOOLS

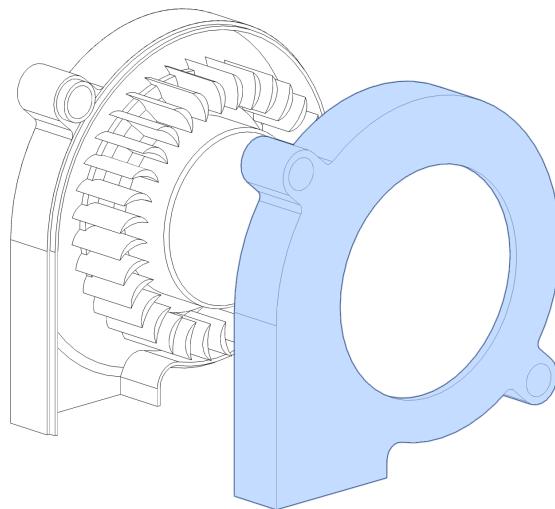
V1.05-BETA

This document is intended to help you assemble BETA version of StealthBurner toolhead system.

Be aware these steps may differ from the final release version.

Good luck! 

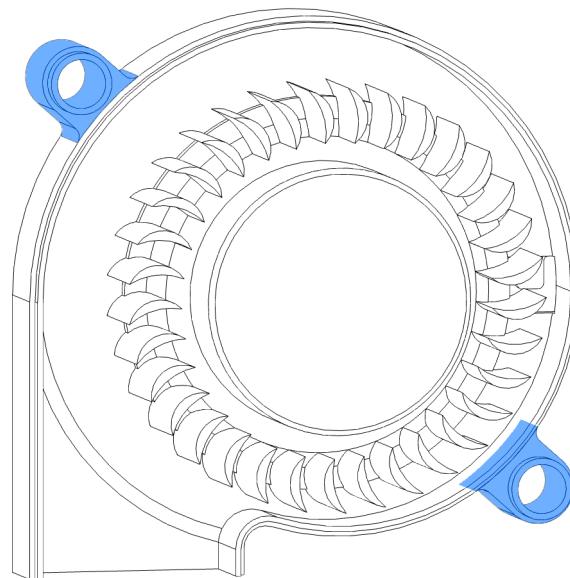
4	COOLING FAN PREP
5	X CARRIAGE FRAME
8	CLOCKWORK2
18	FAN MODULE
23	HOT END HOUSING
25	FINAL ASSEMBLY
29	CW2 EXPLODED DIAGRAM

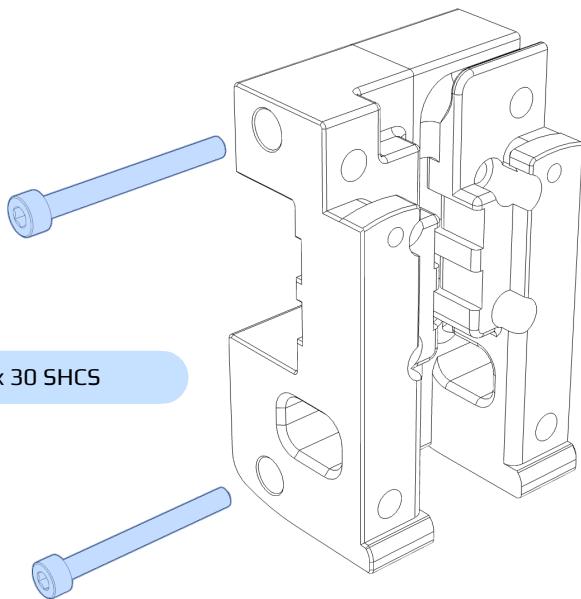
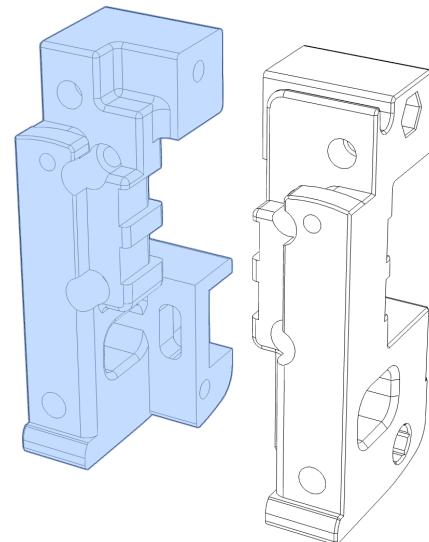
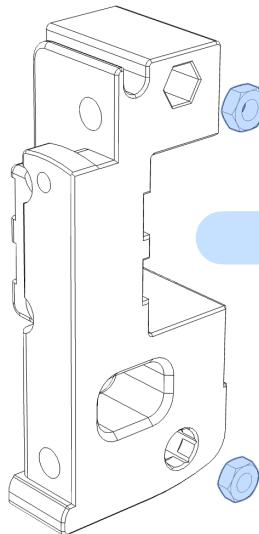
**NOTE**

Remove the front of the 5015 fan. Clip off and file down the stock mounting ears.

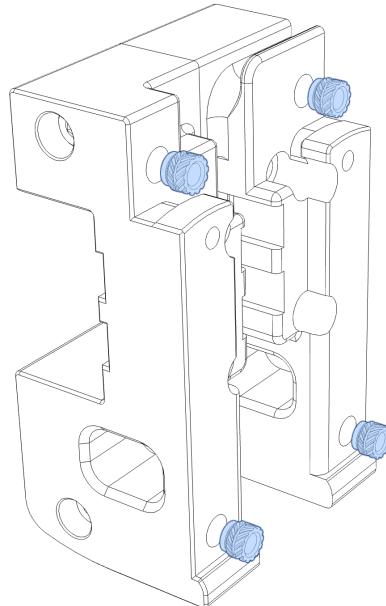
There's a trimming jig STL included in the release to make this task easier.

Do not damage the rear housing in the process.

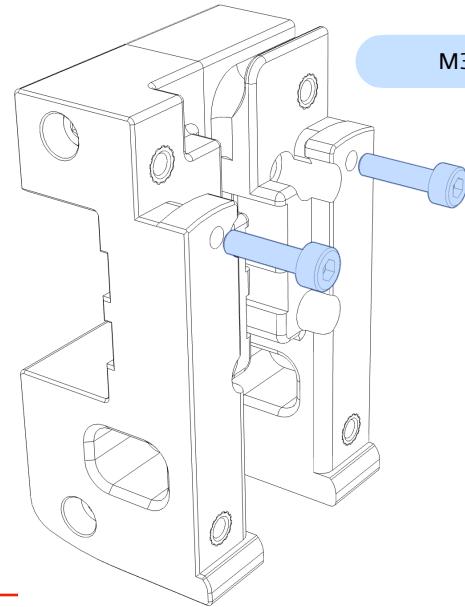




M3 Threaded Inserts



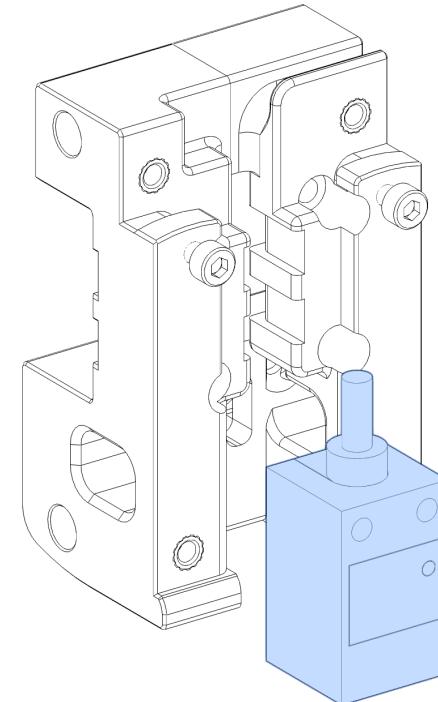
M3 x 12 SHCS

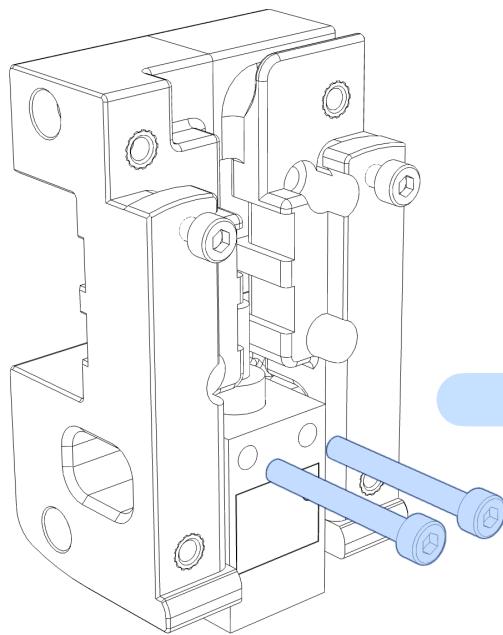


NOTE

Screws thread directly into plastic and serve as indexing pins for the hot end housing.

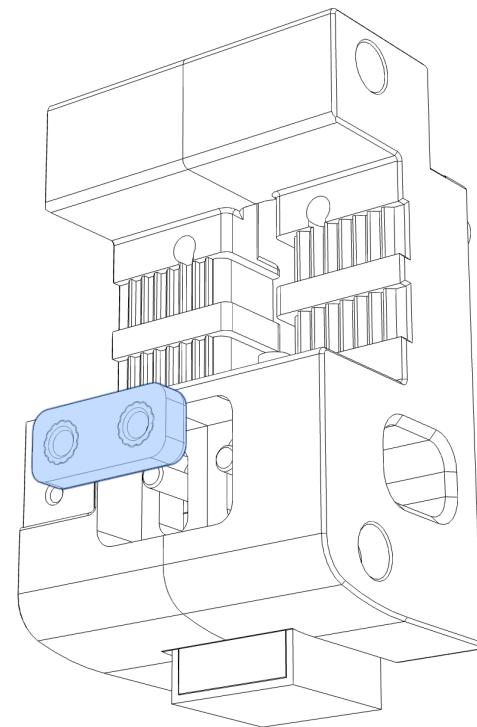
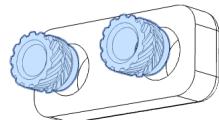
Leave an approximately 2mm gap when installing.

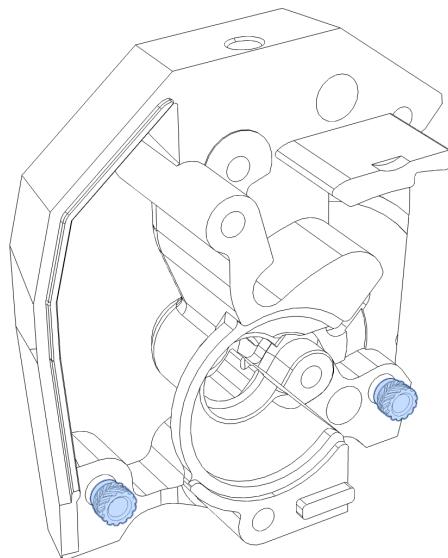




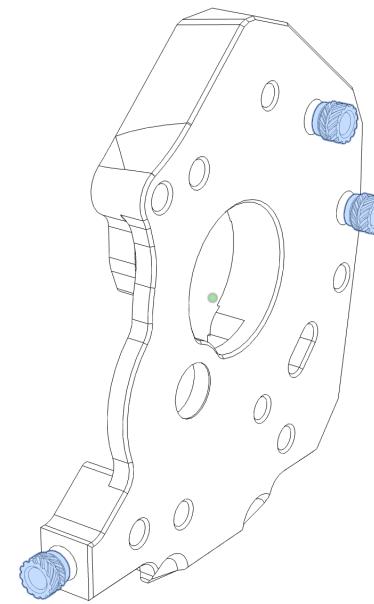
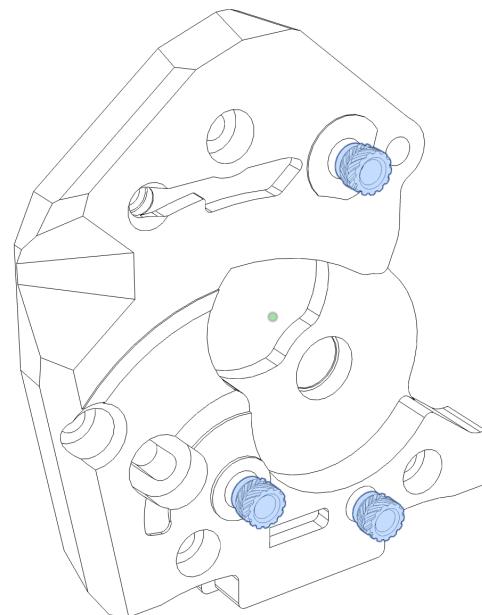
M3 x 25 SHCS

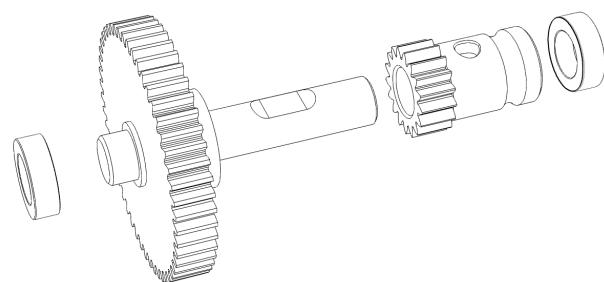
M3 Threaded Inserts



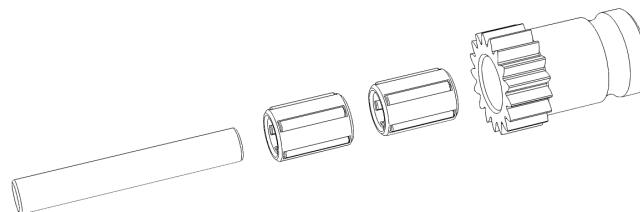


M3 Threaded Inserts



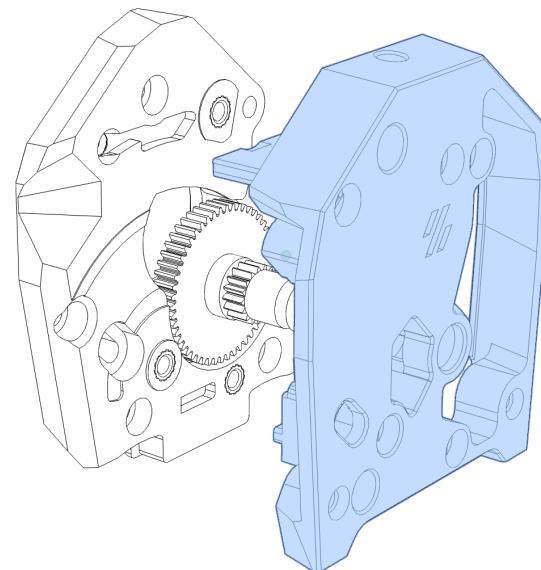
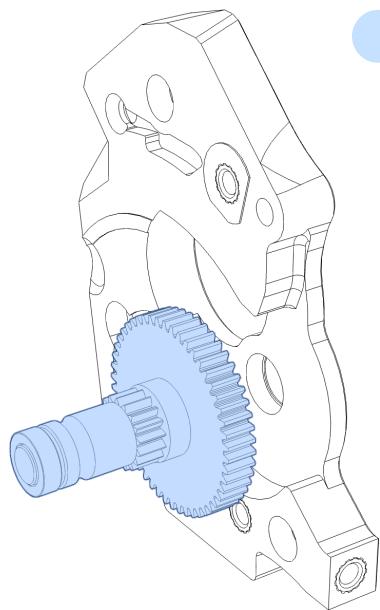
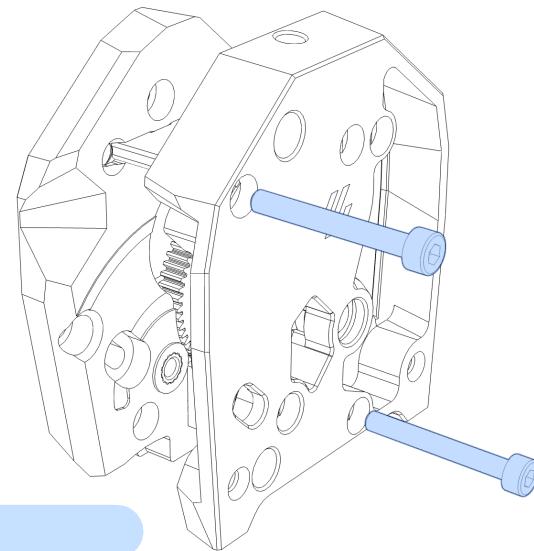
BMG Driveshaft Assembly**NOTE**

Use thread locker when installing the drive gear set screw

BMG Idler Gear Assembly**NOTE**

Lubricate the needle bearings with grease before installation.

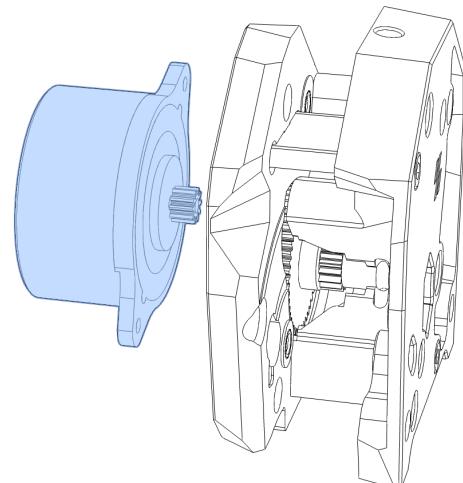
Use just enough for a thin coat.

BMG Driveshaft Assembly**M3 x 25 SHCS****NOTE**

Do not over tighten the screws to avoid binding.

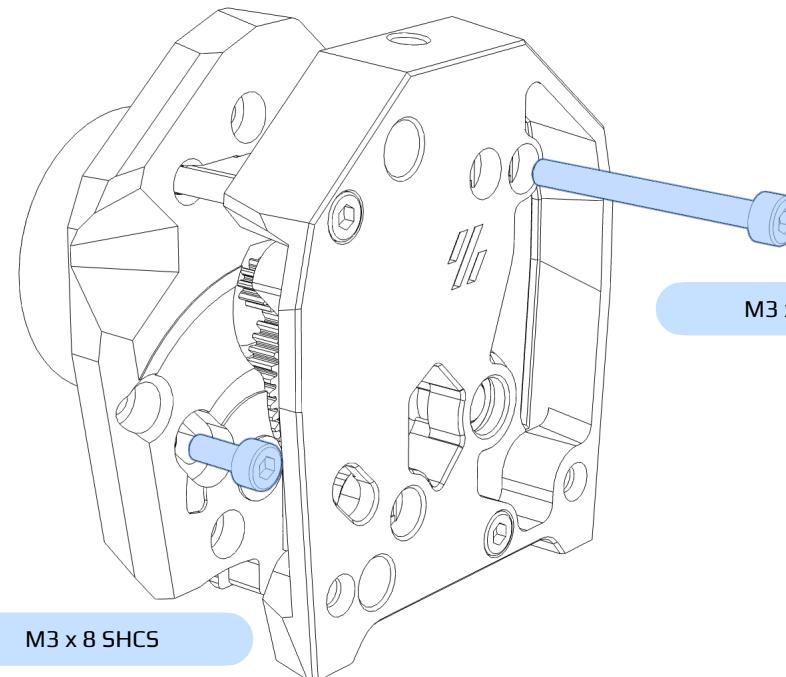
Be sure the gear with the grub screw is installed on the driveshaft.

NEMA14 Pinion Stepper Motor



NOTE

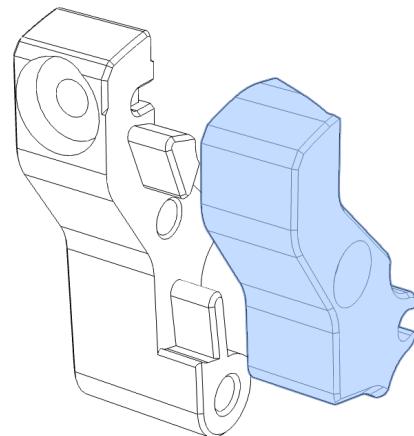
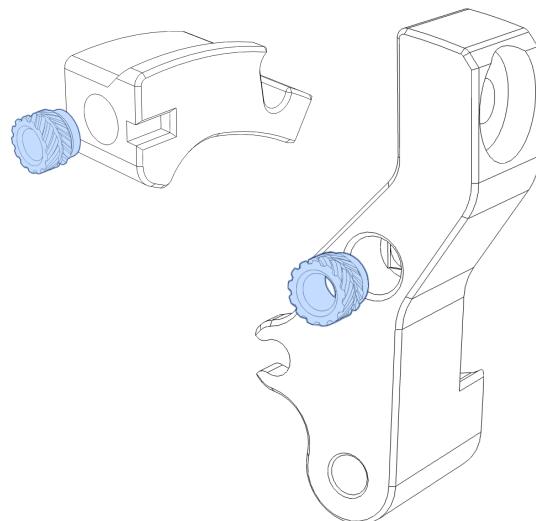
Pivot the motor to find the correct gear mesh position. There should be very slight backlash in the main drive gear.



M3 x 8 SHCS

M3 x 8 SHCS

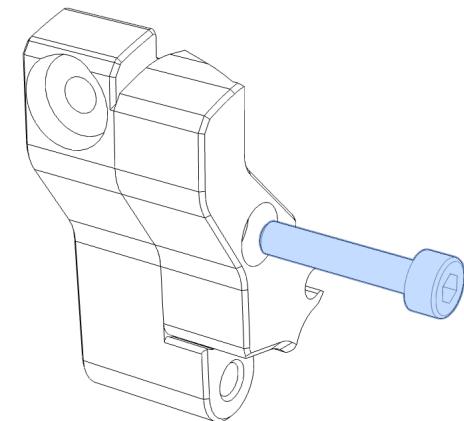
M3 Threaded Insert

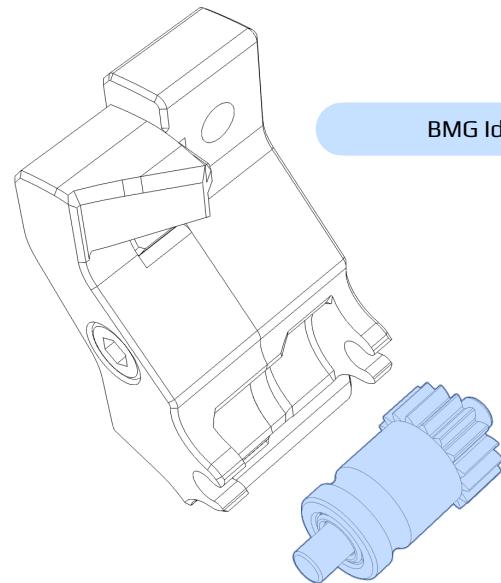


NOTE

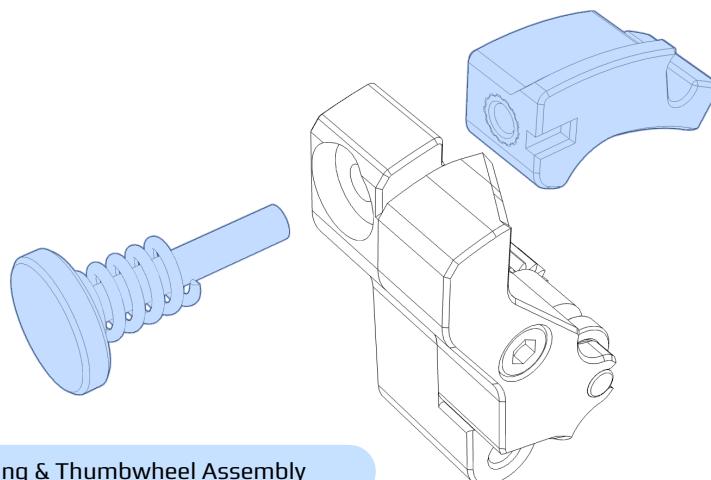
Screw hole clearances in the guidler are intentionally tight to ensure correct alignment.

M3 x 16 SHCS





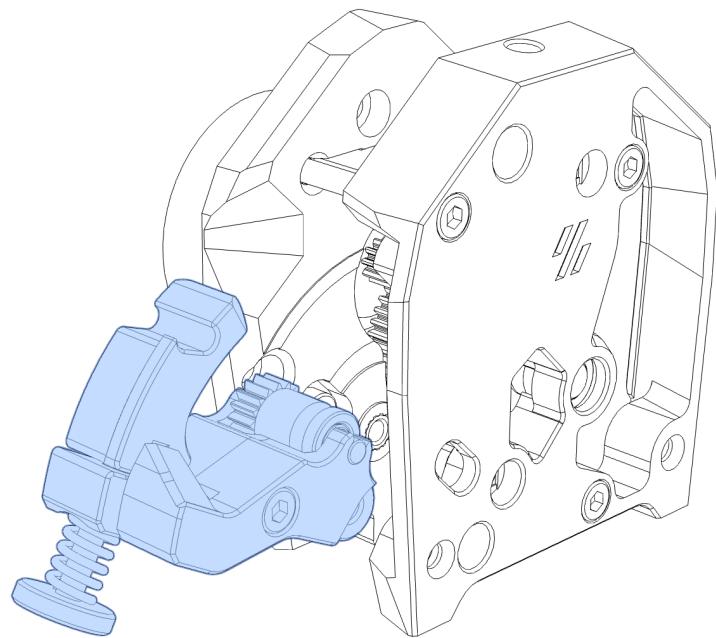
BMG Idler Gear Assembly



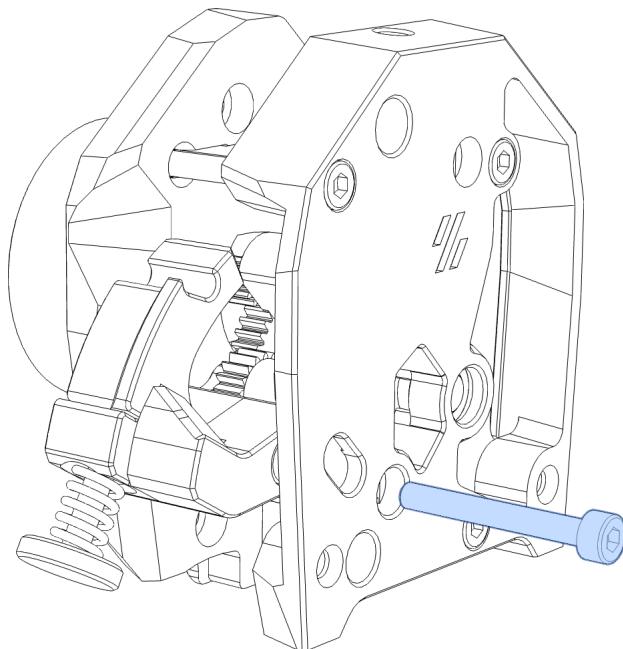
BMG Spring & Thumbwheel Assembly

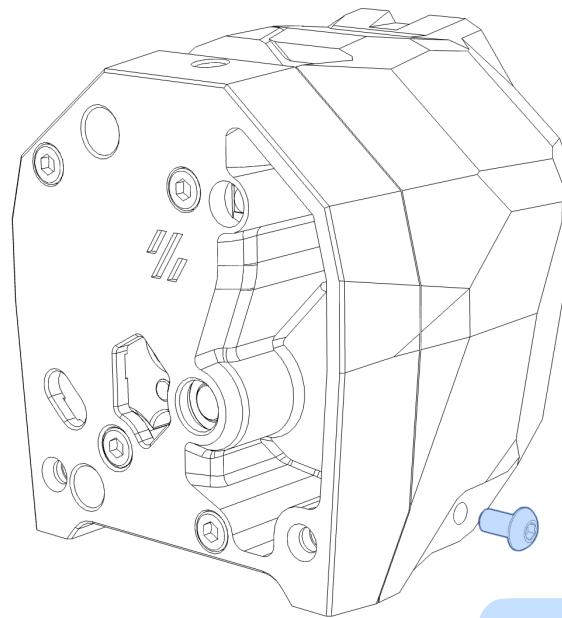
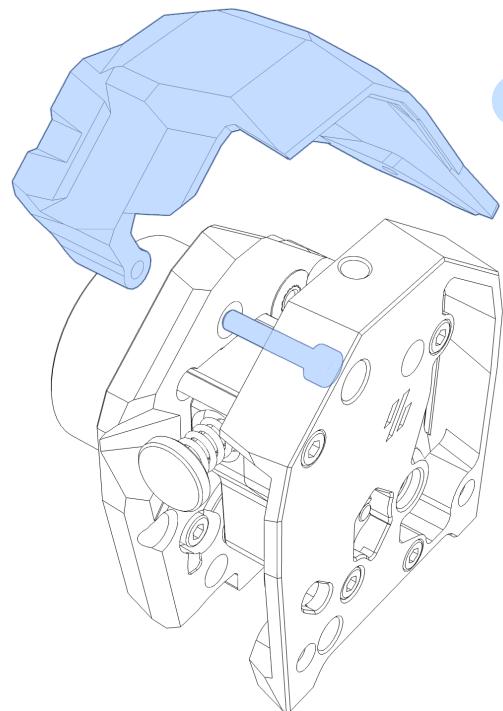
NOTE

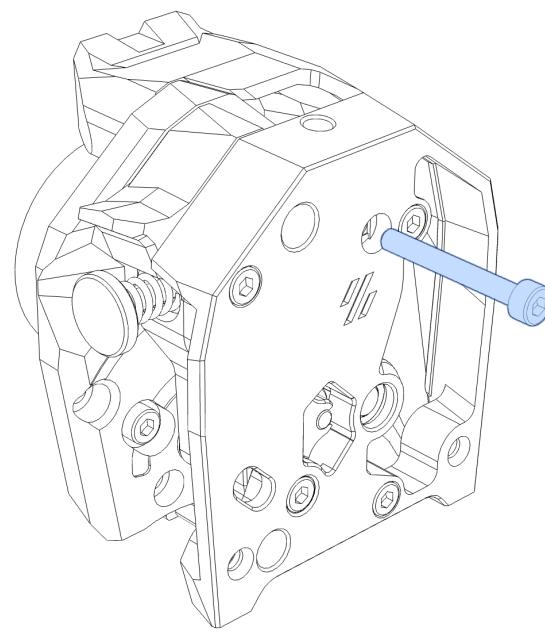
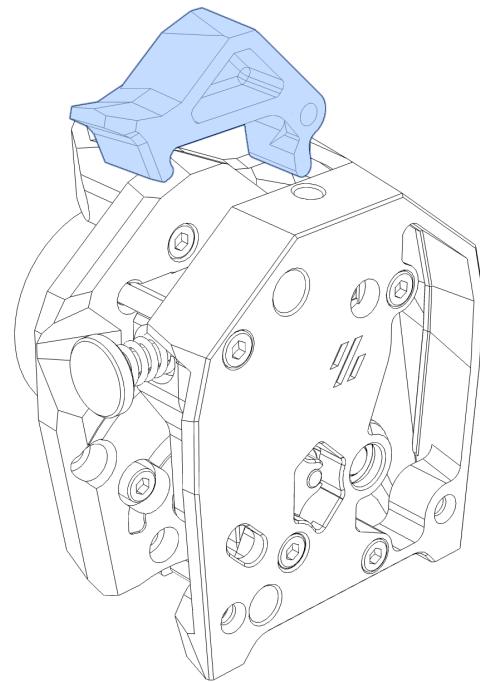
Due to variances in thumbscrews and springs, the plastic washer for the thumbscrew assembly may or may not be needed achieve proper tension on your filament.



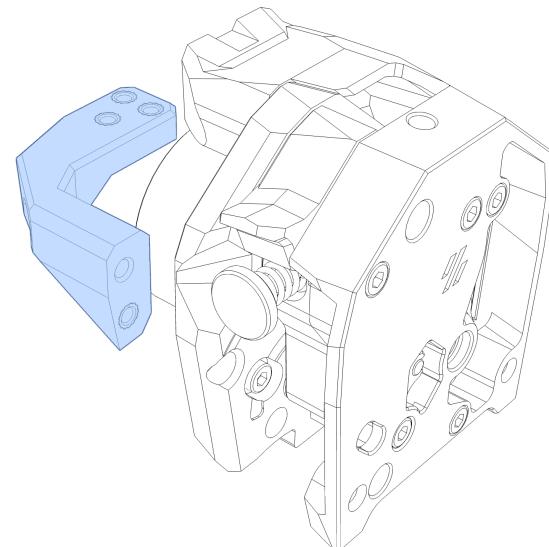
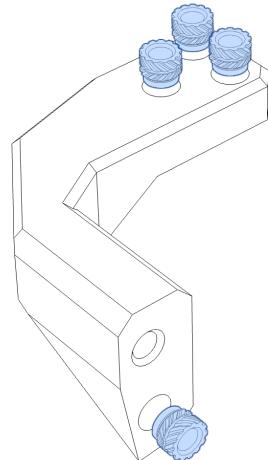
M3 x 25 SHCS







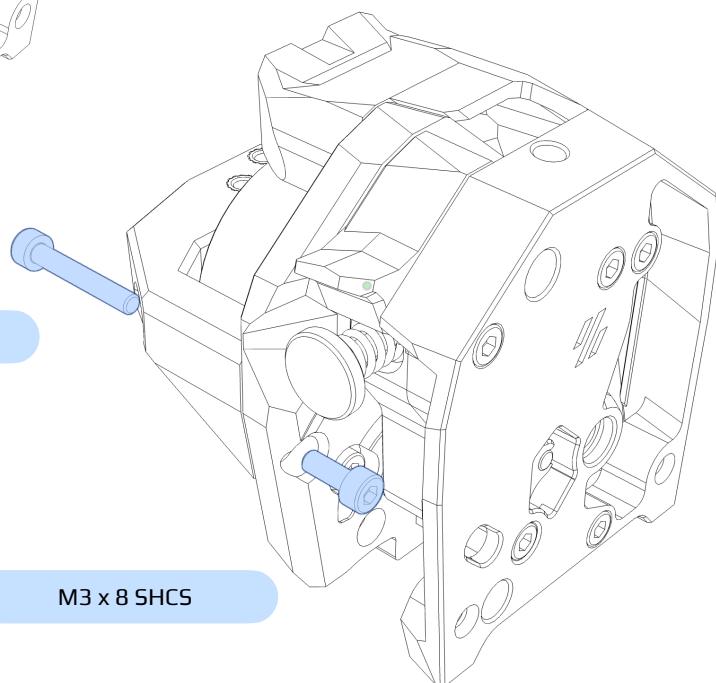
M3 Threaded Inserts



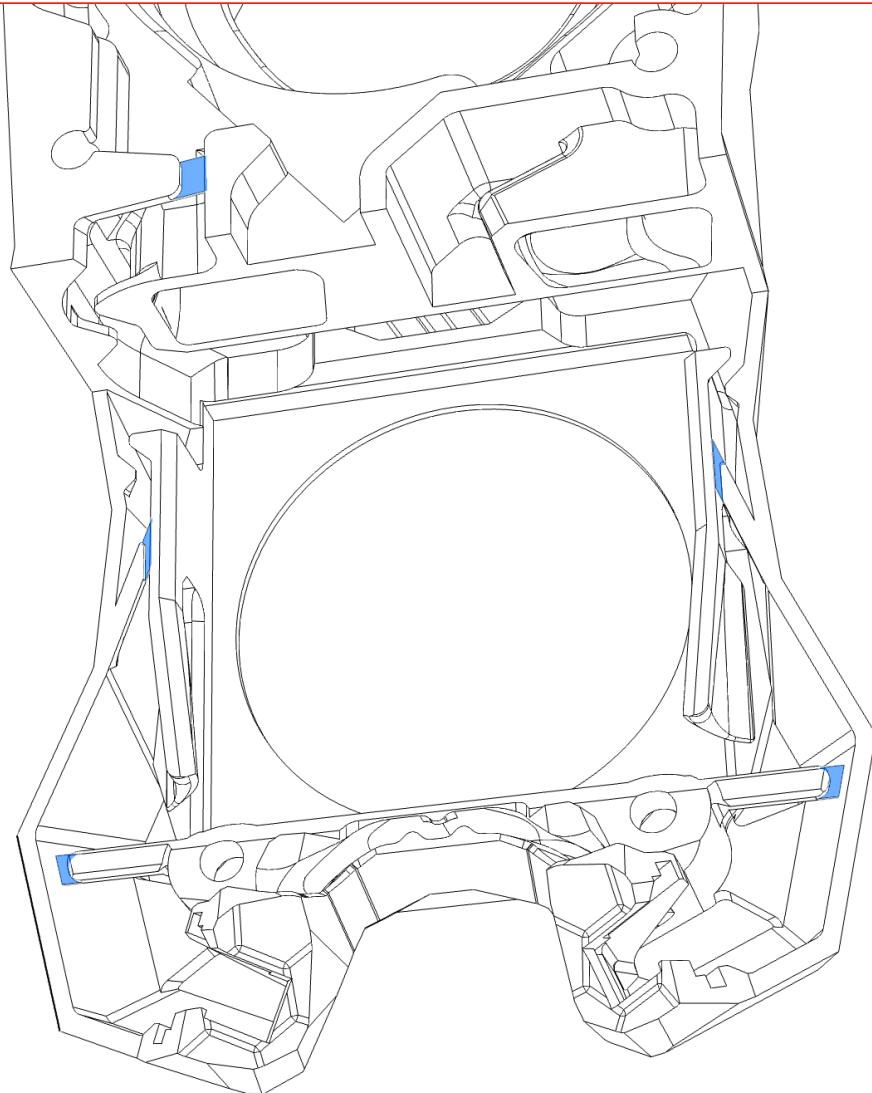
NOTE

3-hole chain anchor mount shown. STLs are provided for other configurations.

M3 x 20 SHCS

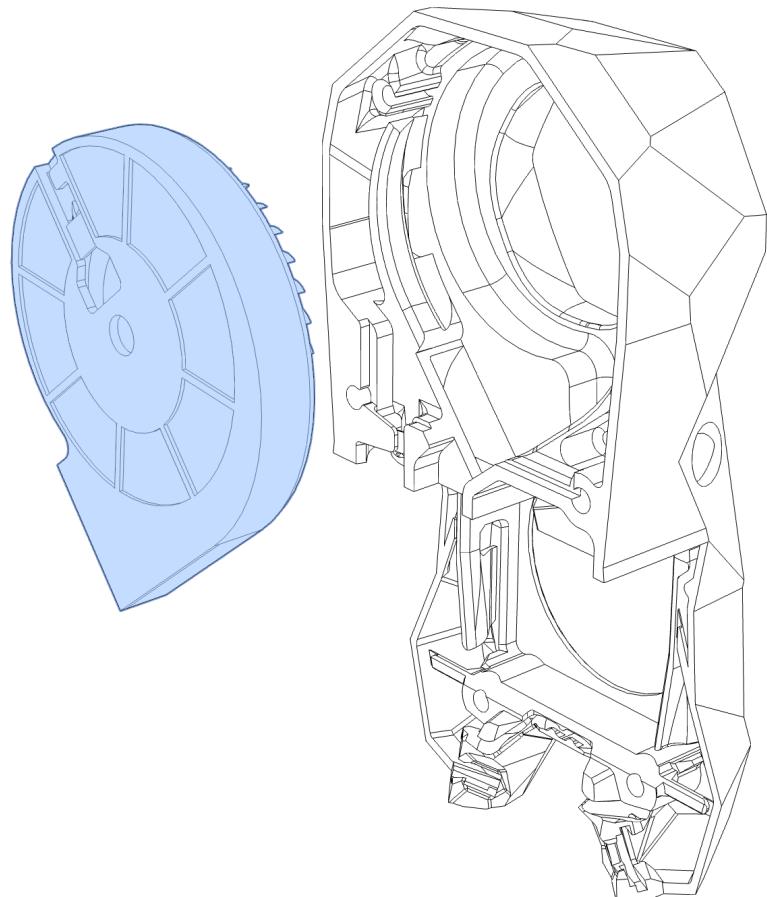


M3 x 8 SHCS

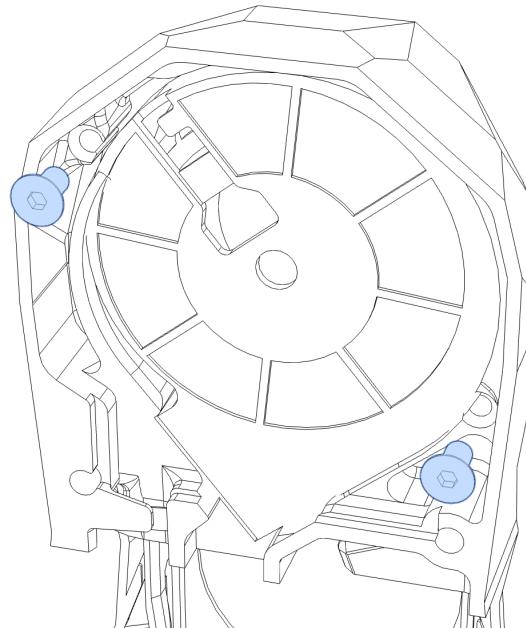
**NOTE**

Trim off bridge supports from wire management tabs.

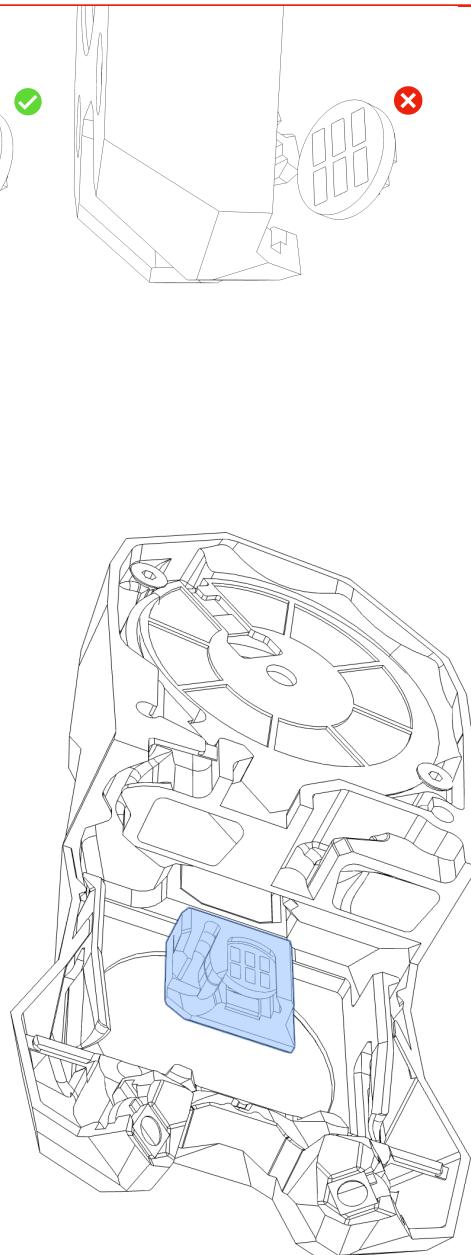
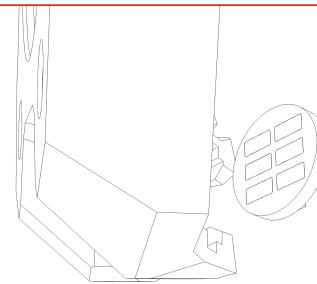
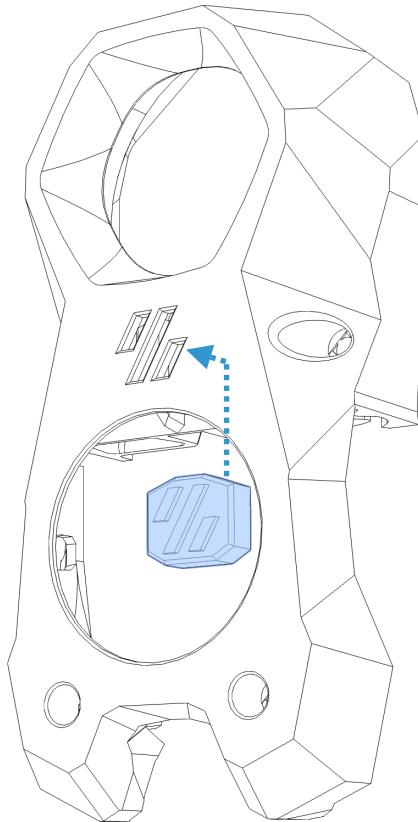
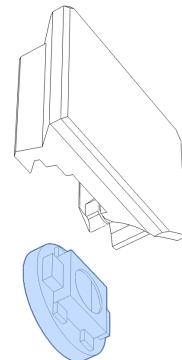
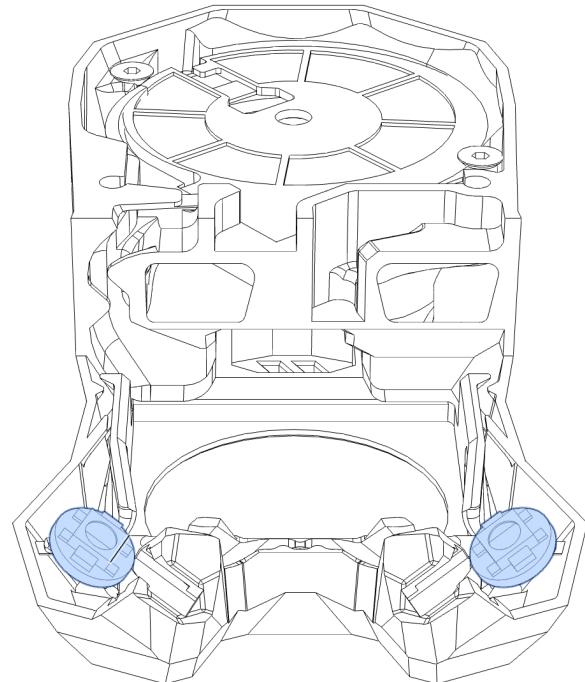
5015 Fan (Trimmed)

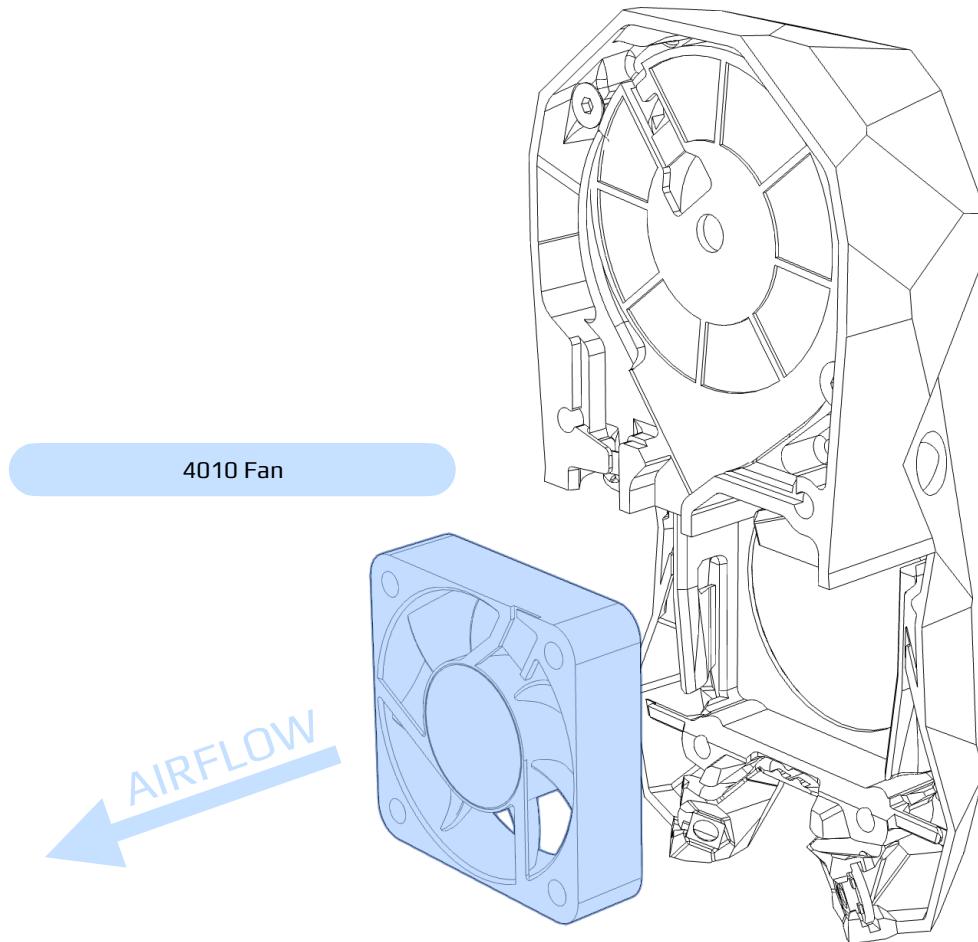


M3 x 6 FHCS



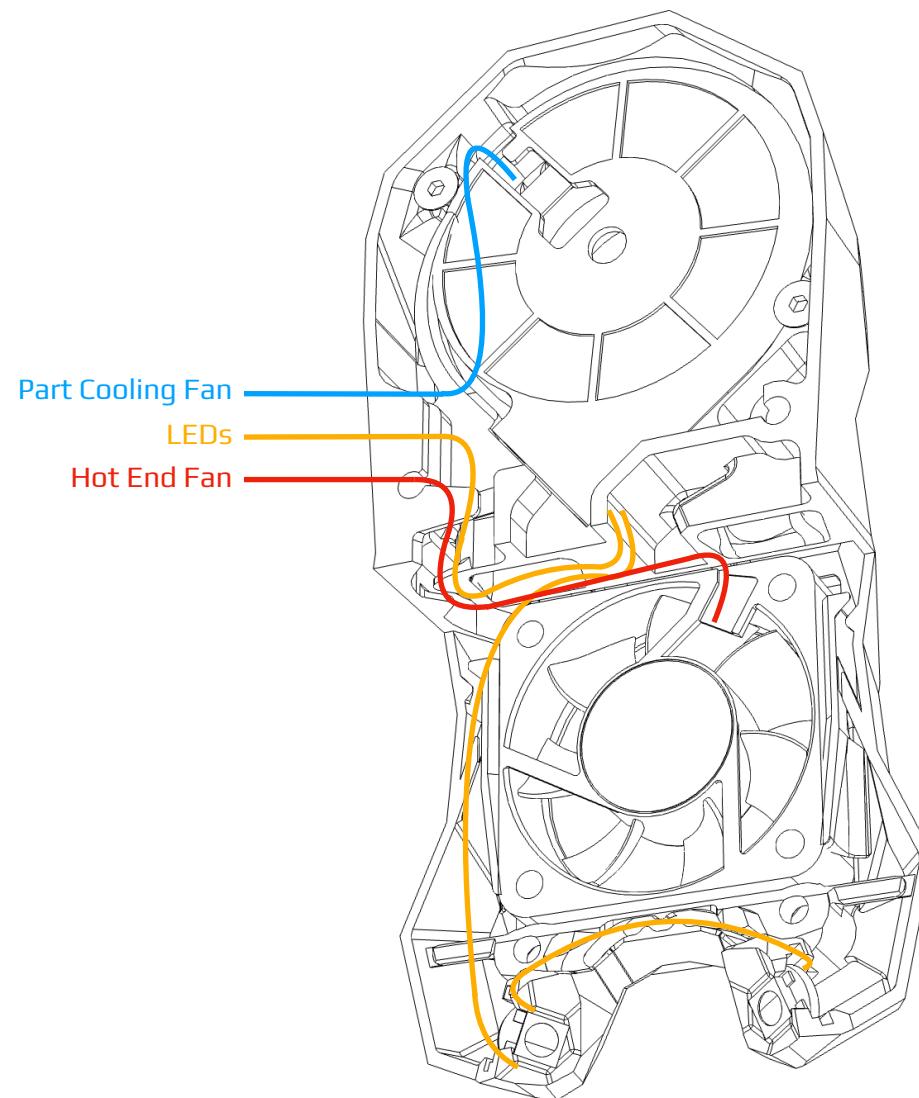
RGBW LED Module

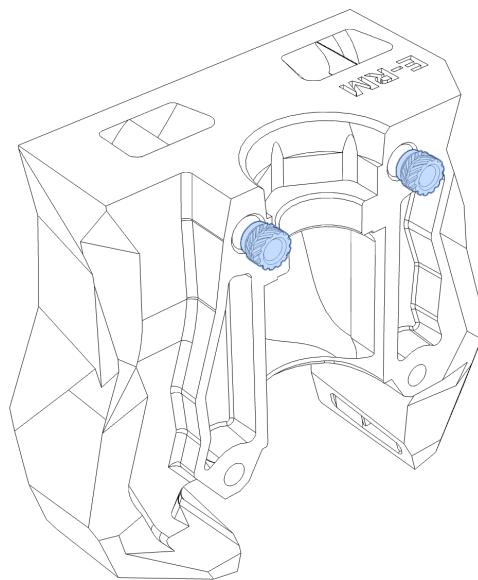


**NOTE**

Tip the fan towards the top when inserting, then push down to fully seat.

Ensure wires are fully seated in the top channel.

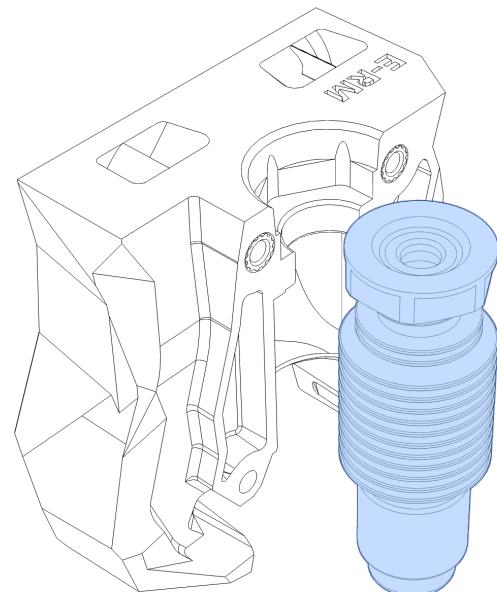




M3 Threaded Inserts

NOTE

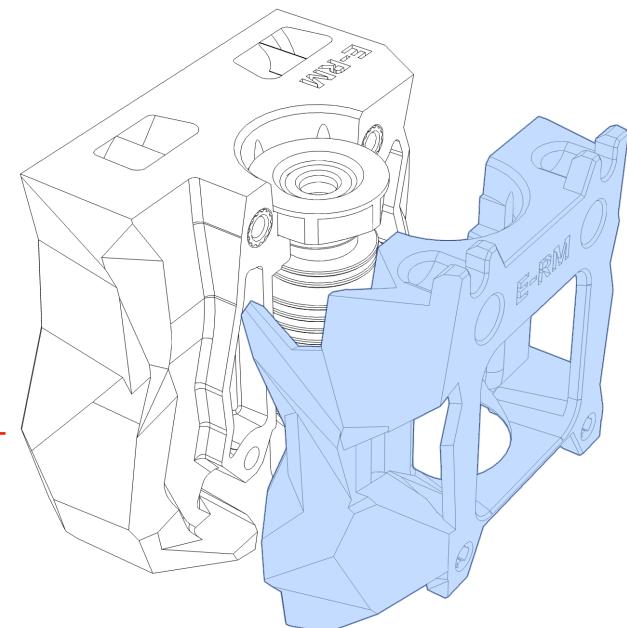
E3D Revo Micro housing is pictured. Assembly steps for all hot end housings are identical.

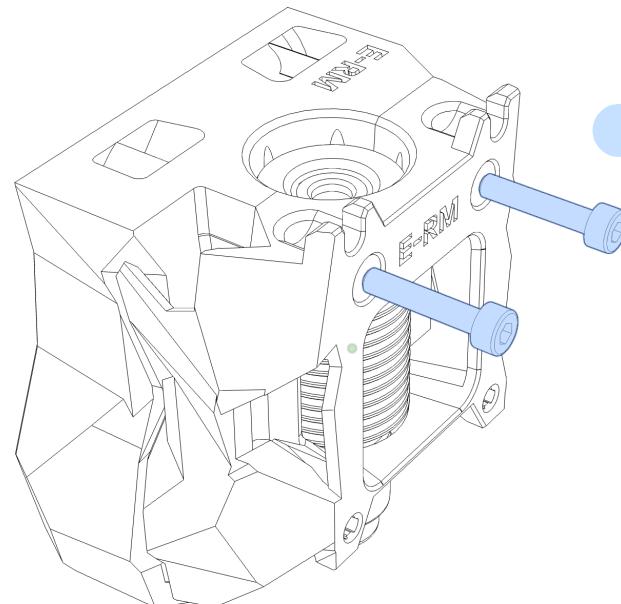


NOTE

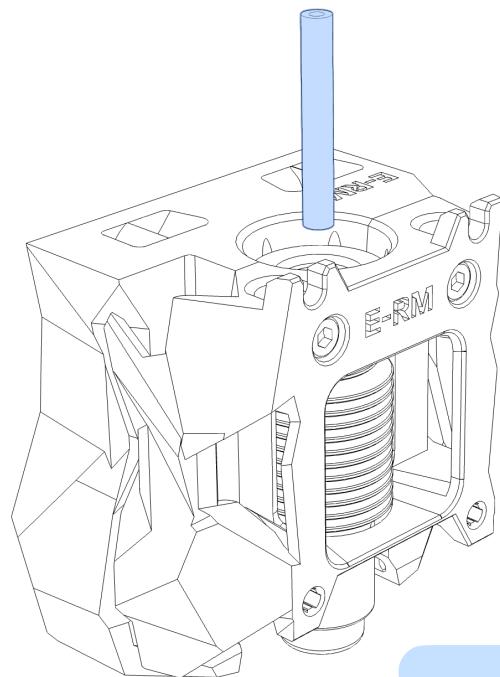
CW1 Compatibility version of the rear toolhead housing (with an extra wire cutout) is shown.

CW2 does not require this cutout.





M3 x 16 SHCS

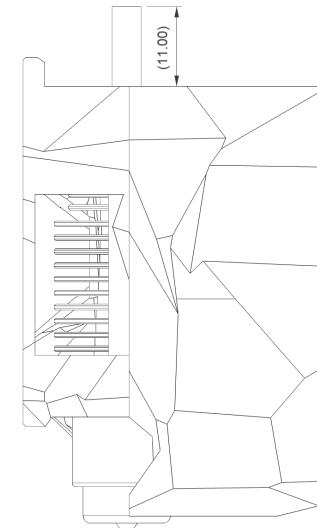


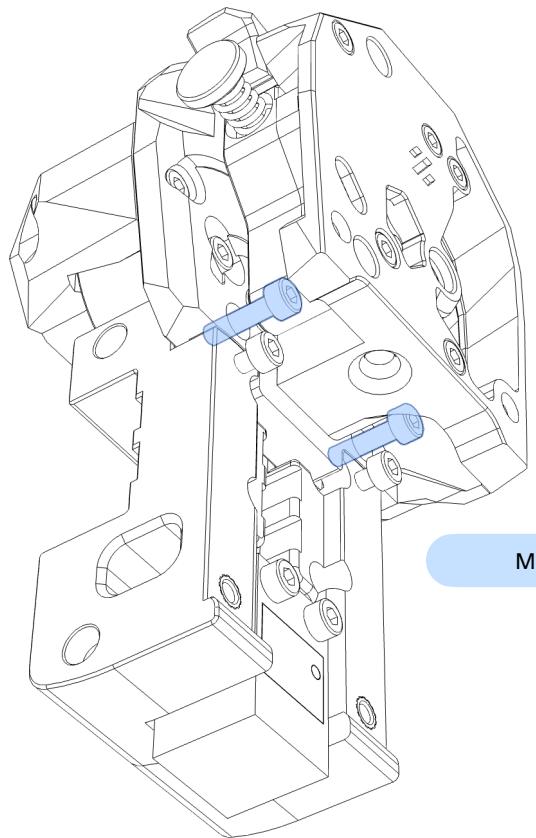
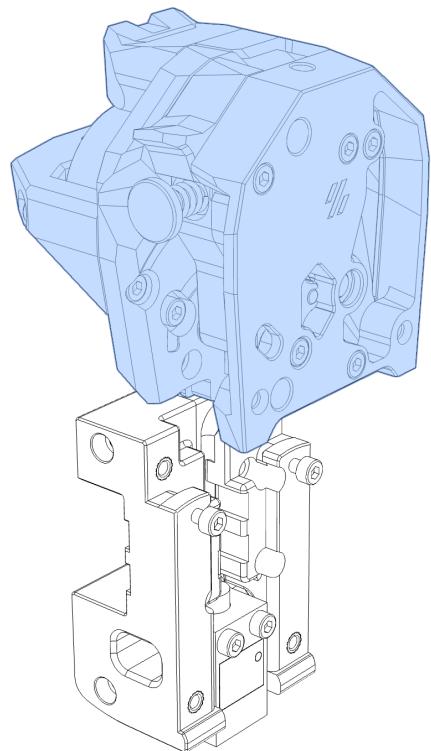
PTFE Tube (4mm OD 2mm ID)

NOTE

Use the channel on the side of the housing to route hot end cables before tightening the screws

PTFE tube length varies and is dependent on the hot end used.



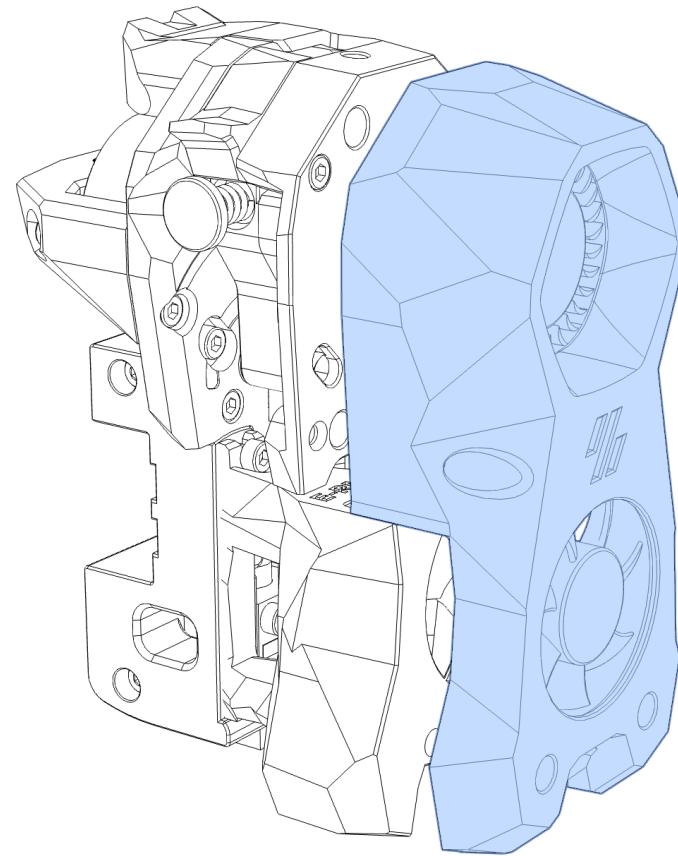
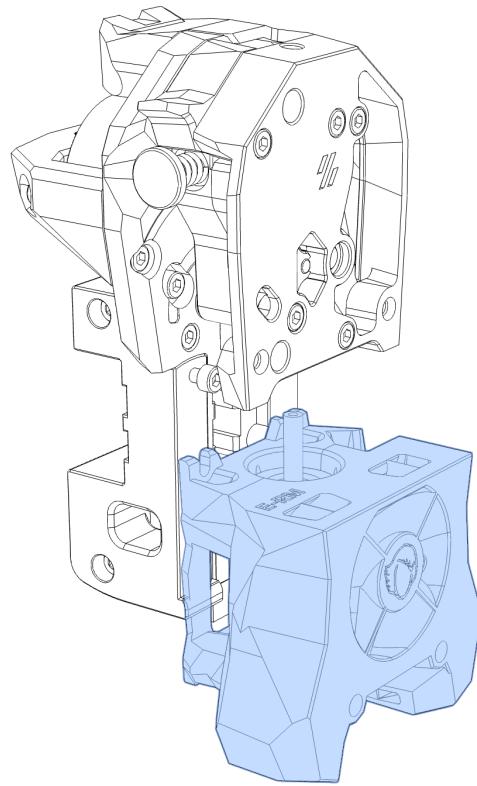


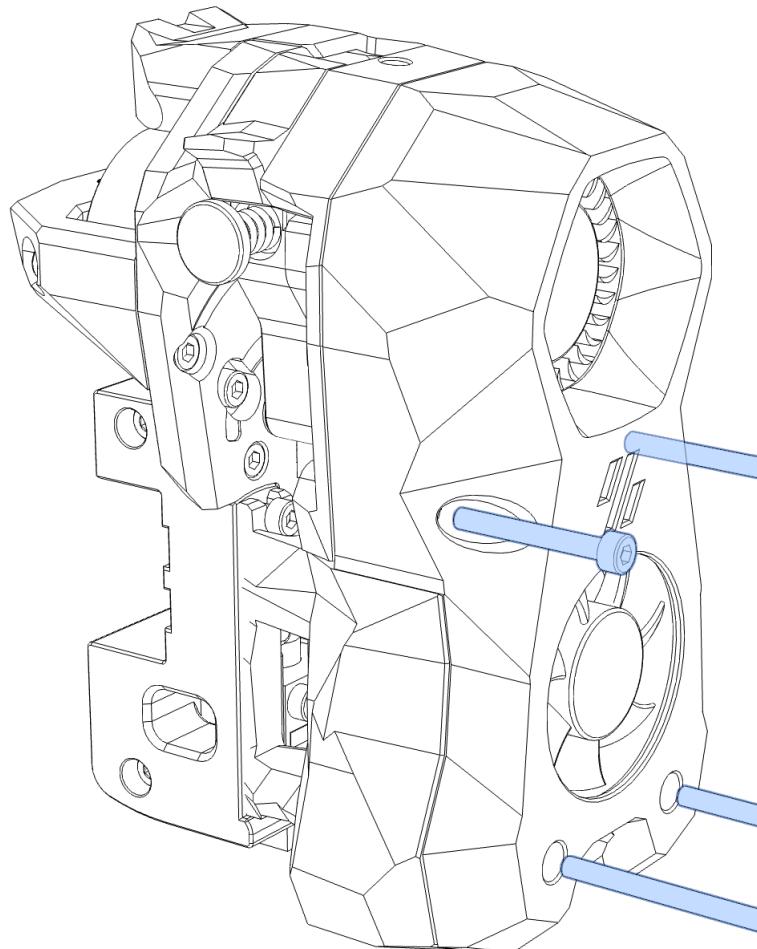
NOTE

X Carriage should already be mounted on the MGN12 rail and secured with four M3x8 SHCS

FINAL ASSEMBLY

BETA



**NOTE**

To remove and install the hot end housing, loosen M3x25 screws, and completely remove M3x50 screws.

CW1 will require shorter upper bolts (M3x20).

Please provide any and all feedback on this BETA by filing a GitHub issue on the [Voron-Afterburner repo](#)

and / or

by voicing your experience in the [#stealthburner_beta](#) channel of our Discord server

[VORON Design Discord](#)

Enjoy!

