Magneto Filament Cutter



This Is a Filament cutter I have designed for VzBot Printhead (https://github.com/VzBoT3D/Vz-Printhead-CNC) series and is a direct replacement for the VzBot Adapter Plate adding 2mm to the hotend length. The Magneto Filament Cutter is compatible with Vz-Printhead with long Goliath (or any other hotend other than Short Goliath). To be transparent I was heavily inspired by Magnus Hansson and Francois Lamarche's design from the HevORT group. This project would not be possible without the outstanding help and assistance from Mellow3D & BTT/Biqu!

Compatability

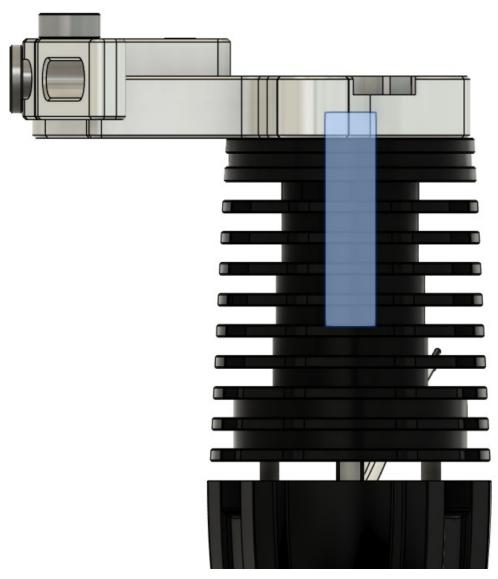
Printhead/Hotend/Extruder	Verified	Source
Mellow CNC Aluminium VzBoT 330/235 Printhead	Verified	AliExpress
Mellow CNC Aluminium RatRig and Hevort Printhead	Verified	AliExpress
Mellow All Metal CNC ZeroG Printhead	Verified	AliExpress
Goliath Air / Water V2	Verified	AliExpress
Phaetus RAPIDO SERIES	Verified	
Dragon Hotend	Verified	
VzHextrudORT LOW PLUS	Verified	AliExpress
VzHextrudORT LOW	Not Recommended Due to PTFE Not being retained by ECAS/Bowden coupler feeding into HextrudORT as well as no good options for filament guide at the cutter. Review option in STL files and review Read Me for Instructions.	AliExpress

Assembly notes.

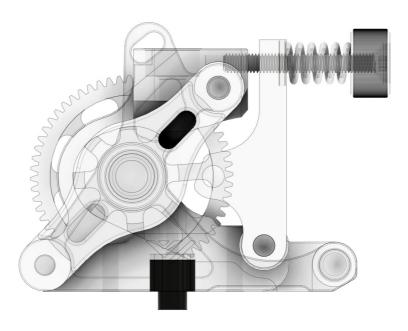
PTFE 4x1.75-2mm Capricorn or equivalent for heat break

Hotend	Lengths
Rapido SERIES	17 mm
Dragon UHF	3 mm

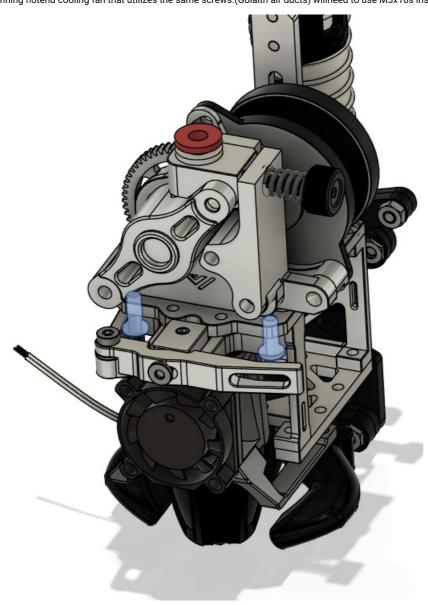
Hotend	Lengths
Goliath AIR	11.5 mm
Goliath Water	12 mm



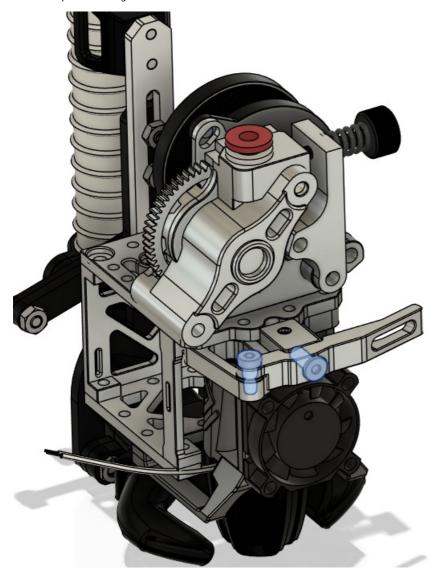
Insert a filament guide before installing the extruder. This guide is necessary for proper cutting action of the filament. This is meant to be a very tight fit into the hextrudort.



This is a direct replacement for the VzPrinthead Hotend Adapter plate. The original plate utilizes M3x6 screws, this will be changed out for M3x8 screws. When running hotend cooling fan that utilizes the same screws. (Golaith air ducts) willneed to use M3x10s instead of M3x8



It is recommended to apply Loctite (linked in BOM) to these two screws. As you are tightening these two screws bring them to the point of minimizing free play but NOT to the point of adding resistance to motion.



Official partners producing this product are

BTT/Biqu Mellow3D





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