

3D MODEL ONLY

Voron V0.1 CR10 Hotend (Mini Afterburner mod)



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[VIEW IN BROWSER](#)

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Summary

The Voron V0.1 is a fantastic printer, but the Mini Afterburner toolhead currently can only be build with either a...

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The Voron V0.1 is a fantastic printer, but the Mini Afterburner toolhead currently can only be build with either a DragonFly, a Dragon or a Mosquito hotend. These hotends are great, but they are very expensive.

This mod is a Mini Afterburner Cowling to make it compatible with some sub \$5 hotends that are originally designed for the CR10. The performance (maximum flow) is not as good as the hotends that were planned by the Voron design team, but this part is otherwise identical/compatible with the original Mini Afterburner of the Voron V0.1.

The parts required are:

- An all metal CR10 hotend like the one shown in pictures (eg: keyword for Aliexpress "cr10 hotend all metal")
- 2 M3 Brass heatstake inserts - short M3x5x4
- 2 M3x16mm screw (any head type)

- All the parts (3D printed and hardware) required to build a normal Mini Afterburner, except the "[a]_Cowling". Please note:
 - Concerning the "[a]_Mid_Body" part, you should print the **Dragon** version and add about 10mm of PTFE tube, as instructed in the manual.
 - Those parts may be downloaded from the official Voron Github, but I have also archived them here just to be safe.

The build instructions are basically the Voron manual. The only difference is that you need to add two heatstake inserts to be able to secure the hotend.

Advice: this is not specific to this hotend, but with the Mini Afterburner design, I don't recommend doing filament changes by removing the previous filament as it often results in jamming everything and having to disassemble the extruder... A better, simpler method is to cut the filament, and push the previous one with the new one through the nozzle!

Warning: this mod may not be compatible with all CR10 hotends. Make sure you get a compatible one. The dimensions of every CR10 hotend should be compatible but the default (non-"all metal") hotends are designed to be used with a bowden tube inserted deep into the cold side, which is a problem for this mod.

Other mods on my Voron V0:

- The Ultimate Spool Holder by filamentry (<https://www.thingiverse.com/thing:2047554>)
- V0 handles slim by Ch4rlesB (https://github.com/VoronDesign/VoronUsers/tree/master/printer_mods/Ch4rlesB/V0_Handles_Slim)
- AC input connector skirt by me (<https://www.thingiverse.com/thing:5239634>)
- A Raspi Camera support by me (to be published)
- LED support rail by me (<https://www.thingiverse.com/thing:5239608>)

Print Settings

Print in ABS with the same parameters specified by the Voron team:

Printer:

Voron V0

Rafts:

No

Supports:

No*

Resolution:

0.2 mm

Infill:

40%

Filament:

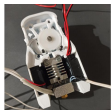
Geetech Black ABS

(* if you print the "stl/Cowling_CR10_AllMetal_builtin_support.STL" file. A version with no built-in support material is also included in this mod "stl/Cowling_CR10_AllMetal.STL". This file is not recommended and requires support material generation under the inserts lip."

Note : there is [an active pull request](#) to add this part in the [VoronUsers](#) Github repository.

Category: 3D Printer Parts

This remix is based on



Voron V0.1 CR10 Hotend (Mini Afterburner mod)

by CGrassin

Model files



cowling_cr10_allmetal_builtin_support.stl



cowling_cr10_allmetal_no_support.stl



strain_relief_spacers_x2.stl



strain_relief_spacers_ldo_x2.stl



guidler_dd_x1.stl



x_carriage_90_x1.stl



a_mid_body_dragon_x1.stl



strain_relief_body_x1.stl



latch_dd_x1.stl



motor_frame_x1.stl



latch_shuttle_dd_x1.stl

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