# PRUSA PRINTERS



## Hero Me Gen5 Master Suite



**VIEW IN BROWSER** 

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## **Summary**

Welcome and thank you for reviewing the Hero Me Gen5 cooling system. The Hero Me Gen5 is a major upgrade to what is considered by many as the best cooling system for Creality 3D printers. The Hero Me has a dozen YouTube reviews, hundreds of public endorsements, as well as Hero Me Gen5 kits coming from TH3DStudios.com and PrinterMods.com.

A detailed and illustrated PDF with all the assembly instructions and parts cross reference is included (it is the first file in the Downloads section). It will guide you in selecting the parts needed for your printer as well as walk you step by step you through printing, assembly, and setup to be able to make great things with the Hero Me Gen5 and your 3D printer. There is also a folder organized ZIP file you can download that contains all the parts and documentation. It is the last file in the Download section.

July 13th 12:45AM PDT: Added two new Gantry Adapters for the Ender 3 V2. This gantry is different from the others in the Ender 3 series. Note this is untested, as I only had a photograph and measurements sent to me by an owner of this new printer. If you have this printer, please let me know if this works for you, or what adjustments are needed.

Ender\_3\_v2\_OEM\_Gantry\_Adapter\_9A.stl Ender 3 v2 E3D Gantry Adapter 9B.stl Due to popular request, I have added 8 new part cooling duct combinations for the 5020 radial fan!

```
5020_Lightweight_Duct_Forward_Left.stl
5020_Lightweight_Duct_Forward_Right.stl
5020_Lightweight_Duct_Standard_Left.stl
5020_Lightweight_Duct_Standard_Right.stl
5020_Single_Radial_Fan_Dual_Ducts.stl
5020_Dual_Radial_Fans_Dual_Ducts.stl
5020_30deg_Dual_Radial_Fans_Dual_Ducts.stl
5020_30deg_Single_Radial_Fan_Dual_Ducts.stl
```

Also to meet repeated requests, I have added 8 part cooling duct combinations for the 4010 radial fan (what comes stock with most printers). Note that I do not recommend the 4010 radial fan used in a single fan setup, especially with a dual duct. If you choose not to use a second 4010 fan with your OEM part, do not complain to me when your part cooling is sub-par and you are not able to bridge wide gaps. A single 4010 radial fan does not produce enough CFM to drive dual ducts.

```
4010_Lightweight_Duct_Forward_Left.stl
4010_Lightweight_Duct_Forward_Right.stl
4010_Lightweight_Duct_Standard_Left.stl
4010_Lightweight_Duct_Standard_Right.stl
4010_Single_Radial_Fan_Dual_Ducts.stl
4010_Dual_Radial_Fans_Dual_Ducts.stl
4010_30deg_Dual_Radial_Fans_Dual_Ducts.stl
4010_30deg_Single_Radial_Fan_Dual_Ducts.stl
```

Updated ALL part cooling ducts to have stronger mount arms and changed print bed orientation to reduce or in some cases eliminate the need for supports.

July 10th 5PM PDT: PrinterMods.com now has 3 hardware kits available for the Hero Me Gen5!



You can order the hardware (M3 fasteners) from them here: https://printermods.com/collections/all-products/products/herome-gen-5-installation-kit-for-ender-3-mdd-v1-2

Additional project and file updates are listed at the bottom of this page.

Michael from Teaching Tech did a review AND step by step assembly instructions (17min). Before you send me questions, please watch this video as it will help you greatly when using these instructions and parts cross reference! Check out the video below:

#### "https://www.youtube.com/embed/DUkoKzOFWFs"

Tim from TH3DStudio.com has done a detailed video of the parts selection, slicing, setup and print prep guide (32min). Check out the video below:

### "https://www.youtube.com/embed/DUkoKzOFWFs"

Kris from Kersey Fabrications lists the Hero Me as one of the Top 5 upgrades for the Ender 5. Check out the video below:

#### "https://www.youtube.com/embed/DUkoKzOFWFs"

# I am proud to announce the following separate relationships with PrinterMods.com and TH3DStudio.com!

PrinterMods.com has chosen to offer Hero Me Gen5 compatible hardware kits (nuts and bolts) that complement their MDD (Modular Direct Drive) printer upgrades. These Hero Me Gen5 kits will include all the M3 screws and nuts needed to assemble your hot-end with their MDD kits and your

Hero Me Gen5 printed parts. It will be a few weeks before the kits are listed on their website.

TH3DStudio.com plans to offer Hero Me Gen5 printed parts and hardware kits with several of their Creality 3D printer (and clones) upgrade kits. As soon as they update their shop pages, when you order your TH3D Tough All Metal Hotend, Tough Extruder, or EZABL Pro upgrades, you will be able to optionally select your printer, fan(s), EZABL, and other options so that your upgrade kit is customized to include the Hero Me Gen5 parts needed to assemble your kit on your printer. It will be a few weeks before the kits are listed on their website.

Note that there is no relationship between PrinterMods.com and TH3DStudio.com in regard to the Hero Me Gen5 cooling system. These are separate collaborations between me and each of these businesses.

I am very excited to work with these two great teams who are very active in the 3D printer community. To be clear, I do not make any money from them selling their kits, the Hero Me is Creative Commons attribution. This is about recognition of quality, and reputation.

I have had over 2,700 questions and comments that I have responded to from the community in the past year and a half, so I have created a Patreon page to provide support for the Hero Me. If you find that the Hero Me works for you please consider supporting me and this project via Patreon: https://www.patreon.com/MediaMan3D

#### 3D Printer models currently supported by the Hero Me Gen5.

Below is the continually growing list of 3D printers that are compatible with the Hero Me Gen5.

CR-10 CR-10 V2 CR-10 Mini CR-10S CR-10S4 CR-10S5 CR-10S Pro CR-10S Pro V2 CR-10 MAX CR-20 Ender 3 Ender 3X Ender 3 V2 Ender 3 Pro Ender 5 Ender 5 Pro Ender 5 Plus PrinterMods.com MDD kits for CR-10 series, Ender 3 series, & Ender 5 series. Gantry plate replacements kits for Direct Drive use. BLV Ender 3 Pro https://www.blvprojects.com

Other manufacturer's clones of the Creality CR and Ender series printers may be compatible but have not been tested. With 85 parts across 6 categories, there are over 3 Million Hero Me Gen5 part combinations! But fear not, the included parts cross reference makes it very easy for you to select the parts you need to print for your specific printer setup.

All the documentation you need can be found in the Parts Cross Reference and Illustrated Assembly Instructions PDF found in the Downloads section.

Once you've upgraded. please take a picture of your Hero Me updated printer and post a Make to Thingiverse! Happy Printing!

### **Additional Project Updates**

July 4th 6:15PM PDT: Updated a Direct Drive adapter in the Remixes section to support both Ender 3 and Ender 5 series printers. Added a new PrinterMods.com MDD compatible Direct Drive Adapter for the Creality Dual Gear extruder, Winsinn Dual Gear extruder, and clones. This remix is provided by klsummers92 on Thingiverse. Thank you Kodi! PM\_OEM\_Dual\_Gear\_Extruder\_Adapter.stl

July 4th 4:30PM PDT: Updated the Gantry Adapter for the CR-10S Pro to have better clearances when mounting to the gantry plate. Updated the PDF assembly instructions with an image to show the position of the Gantry Clips when one is needed.

CR\_OEM-MS\_Gantry\_Adapter\_3A.stl CR\_E3D\_Gantry\_Adapter\_3B.stl

July 2nd 6:45PM PDT: Updated documentation with photos and illustrations! Added support for the BLV upgrade for Ender 3 Pro systems. More info on the BLV upgrade can be found here: https://www.blvprojects.com

BLV\_Ender\_OEM\_Gantry\_Adapter\_8A.stl BLV Ender E3D Gantry Adapter 8B.stl

July 1st 12PM PDT: All but two of the Part Cooling Ducts have been updated with reinforced mounting brackets. The previous ones were snapping off for some people at the narrow point where the mount arm connect to the main fan duct body. Print these at 100% infill for best results. The two remaining (forward 5015 lightweight left/right ducts) are being updated as well and will be posted when completed.

4020\_30deg\_Dual\_Radial\_Fans\_Dual\_Ducts.stl 4020\_30deg\_Single\_Radial\_Fan\_Dual\_Ducts.stl 4020\_Dual\_Radial\_Fans\_Dual\_Ducts.stl 4020\_Lightweight\_Duct\_Standard\_Left.stl 4020\_Lightweight\_Duct\_Standard\_Right.stl 4020\_Single\_Radial\_Fan\_Dual\_Ducts.stl 5015\_30deg\_Dual\_Radial\_Fans\_Dual\_Ducts.stl 5015\_30deg\_Single\_Radial\_Fan\_Dual\_Ducts.stl 5015\_Dual\_Radial\_Fans\_Dual\_Ducts.stl 5015\_Lightweight\_Duct\_Standard\_Left.stl 5015\_Lightweight\_Duct\_Standard\_Right.stl 5015\_Single\_Radial\_Fan\_Dual\_Ducts.stl

June 30th 11:30PM PDT: Added draft ABL sensors for Hallon and Touch-Mi.

Touch-Mi ABL Medium Mount.stl Hallon ABL Medium Mount.stl

June 30th 12PM PDT: Added missing hot-end bolt arches in the front of Base 5 and Base. 6, increased the access arch for Base 1 and Base 4 to match.

Hero\_Me\_Gen5\_Base\_1.stl Hero\_Me\_Gen5\_Base\_4.stl Hero\_Me\_Gen5\_Base\_5.stl Hero\_Me\_Gen5\_Base\_6.stl

June 26th 10AM PDT: Re-posted correct ABL Adapter for close OEM 18mm sensor to include grub screw holes. OEM\_Mount\_Close\_18mm.stl

June 26th 8:10AM PDT: Created new Gantry Adapters for the CR-10S Pro V2 to match the mount holes on the gantry plate (they changed from the CR-10S Pro). CR\_OEM\_Gantry\_Adapter\_7A.stl CR\_E3D\_Gantry\_Adapter\_7B.stl

Adjusted the Gantry Adapters for the CR-10 V2 to not crowd the top left wheel bolt. CR\_MK8-MS\_Gantry\_Adapter\_2A.stl CR\_E3D\_Gantry\_Adapter\_2B.stl

Additional Direct Drive Adapters for the Ender 3 series, Ender 5 series, and CR-10/S have been added in the Remixes section. These do not require the PrinterMods.com MDD kit.

Updated the PDT document (and instructions below). The Y axis Home offset is now -9mm across all printers. The old Gantry Adapter CR\_OEM\_Gantry\_Adapter\_3A.stl has been deprecated, and the CR\_OEM\_Gantry\_Adapter\_3C.stl has been renamed to CR\_OEM\_Gantry\_Adapter\_3A.stl.

June 23rd 7:45PM PDT: The instructions below and the included PDF file that can be downloaded, have been updated to include instructions for setting the printer's X/Y Home offset (-7 or -9) as well as the instructions for the ABL sensor's firmware X/Y offset.

Direct Drive Options: All the initial Direct Drive Adapter options for the Hero Me Gen5 use the MDD kit from PrinterMods.com. I am creating other DD adapters for the Hero Me Gen5 over time, and they will be added in the coming days. The first one is available now for the Ender 5 series. I have posted a remix of a DD adapter that should be compatible (was an easy remix, but I have not tested it). Currently you can find it in the Remixes section of this project.

Update June 22nd 1:15PM PDT: The Hero Me Base files have been updated one last time. I found that in some setups on some printer configurations, that the bottom back mount surface would hit against the M5 bolt and nut for the bottom wheel on the gantry. This has been corrected across all

8 base files. You would only need to re-download the base you need if you encounter the back of the base not seating flush against the gantry adapter because of the interference from the M5 nut and bolt.

```
Hero_Me_Gen5_Base_1.stl Hero_Me_Gen5_Base_2.stl Hero_Me_Gen5_Base_3.stl Hero_Me_Gen5_Base_4.stl Hero_Me_Gen5_Base_5.stl Hero_Me_Gen5_Base_6.stl Hero_Me_Gen5_Base_7.stl Hero_Me_Gen5_Base_8.stl
```

Update June 22nd 10:30AM PDT: Updated the instructions below (and in the PDF and ZIP) with more details regarding the types of hot-ends, how they mount, and how that affects the parts you choose.

All the part cooling duct STLs (re-oriented for best printing) had to be reuploaded again as these parts failed to upload early this AM.

Update June 22nd 1:30AM PDT: For those with any Ender 5 series printer, and are using any of the ABL sensor mounts, a spacer file has been added. This is to be used if your ABL mounts do not clear the metal clip that retains the belt. Be sure to increase the Y axis firmware offset by -6. PM-Ender\_5\_ABL\_Spacer.stl

The Hero Me Base files have been strengthened further to ensure that the cooling system is secure to the gantry adapter. The hex nut inserts have been made larger. The top rear of the Hero Me Base has been re-enforced. All eight Hero Me Base files have been updated.

```
Hero_Me_Gen5_Base_1.stl Hero_Me_Gen5_Base_2.stl Hero_Me_Gen5_Base_3.stl Hero_Me_Gen5_Base_4.stl Hero_Me_Gen5_Base_5.stl Hero_Me_Gen5_Base_6.stl Hero Me Gen5_Base_5.stl Hero Me Gen5_Base_8.stl
```

All the Gantry Adapters have been updated to so as not to require supports when printing. Hex nut inserts have been added or made larger (if pre-existing).

```
CR-Ender_OEM-MS_Gantry_Adapter_1A.stl CR-Ender_E3D_Gantry_Adapter_1B.stl CR_MK8-MS_Gantry_Adapter_2A.stl CR_E3D_Gantry_Adapter_2B.stl CR_OEM_Gantry_Adapter_3A.stl CR_E3D_Gantry_Adapter_3B.stl CR_MS_Gantry_Adapter_3C.stl Ender_OEM-MS_Gantry_Adapter_4A.stl Ender_E3D_Gantry_Adapter_4B.stl PM_CR-Ender_OEM-MS_Gantry_Adapter_5A.stl PM_CR-Ender_E3D_Gantry_Adapter_5B.stl PM_Ender_OEM-MS_Gantry_Adapter_6A.stl PM_Ender_E3D_Gantry_Adapter_6B.stl PM_Gantry_Clip_6.stl
```

All the part cooling duct STLs have been re-uploaded after changing their orientation to be best for printing with little to no supports required.

Two new ABL mounts have been created to enable EZABL and OEM 18mm sensors to be closer to the hot-end when using any of the single fan-dual ducts. EZABL Mount Close 18mm.stl OEM Mount Close 18mm.stl

Update June 16th 9:45PM PDT: An error was found in the Hero Me Base files where one wall was too thin for the captured hex nuts to hold the base to the gantry adapter. All eight Hero Me Base files have been updated.

```
Hero_Me_Gen5_Base_1.stl Hero_Me_Gen5_Base_2.stl Hero_Me_Gen5_Base_3.stl Hero_Me_Gen5_Base_4.stl Hero_Me_Gen5_Base_5.stl Hero_Me_Gen5_Base_6.stl Hero Me Gen5 Base 7.stl Hero Me Gen5 Base 8.stl
```

The three gantry adapters for the CR-10S Pro, CR-10SPro V2, And CR-MAX for all their hot-end types had an error due to a bad Creality Gantry STL. These have been redesigned and fixed. CR\_OEM\_Gantry\_Adapter\_3A.stl CR\_E3D\_Gantry\_Adapter\_3B.stl CR\_MS\_Gantry\_Adapter\_3C.stl

Update June 15th 3:30PM PDT: Thanks for all the great feedback and for spotting some typos and a couple missing files, etc. All have been corrected and posted. Both the PDF and docs below are updated.

#### Thanks and Credits

I would like to thank both PrinterMods.com and TH3DStudio for selecting the Hero Me Gen5 Master Suite to complement their products!

I would especially like to thank ACWest for providing his awesome part cooling ducts to be part of the Hero Me Gen5 Master Suite. His cooling ducts have been CFM tested and validated to have the optimum focused airflow across the part at the tip of the nozzle.

ACWest and I have collaborated on the Hero Me Gen5 over the past several months. His testing and recommendations have been key to help make the Hero Me Gen5 the best possible cooling system.

Thanks to Kelokera for the original Hero Me design! https://www.thingiverse.com/thing:3092044 https://www.thingiverse.com/kelokera/about

Thank you for choosing the Hero Me Gen5 to be part of your 3D printing experience! Please post your feedback, make, or remix on the Hero Me Gen5 Thingiverse project and share this with your 3D printing friends!

Thanks.

MediaMan - Thingiverse: https://www.thingiverse.com/mediaman/

If you would like support for your Hero Me Gen5, please visit my Patreon page. Patreon: <a href="https://www.patreon.com/MediaMan3D">https://www.patreon.com/MediaMan3D</a>

Video content for the Hero Me Gen5 coming soon! YouTube: https://www.youtube.com/channel/UC5OZ3h7NX1p3mran2hgrQvQ

ACWest – Thingiverse: <a href="https://www.thingiverse.com/acwest/">https://www.thingiverse.com/acwest/</a> All Hero Me Gen5 part cooling ducts provided by ACWest

klsummers92 - Thingiverse: <a href="https://www.thingiverse.com/klsummers92">https://www.thingiverse.com/klsummers92</a>
PM\_OEM\_Dual\_Gear\_Extruder\_Adapter.stl remix provided by klsummers92

Super Hero Cartoon vector created by freepik: <a href="https://www.freepik.com/free-photos-vectors/cartoon">https://www.freepik.com/free-photos-vectors/cartoon</a>

#### 3D Printers > 3D Printers - Upgrades

Rafts: No Supports: Yes Resolution: .2mm to .28mm Infill: 35% to 50% Filament\_brand: Any Filament\_color: Any Filament\_material: PLA, PETG

Recommended printer settings: Set layer height between .2mm to .28mm layer height (lower is fine, but not required, also slows the print time greatly).

Set infill to be between 35% and 50%. The Direct Drive adapters should be at 85% or higher. Use automated supports from the build plate only (these can be sparse; you do not need a lot of support).

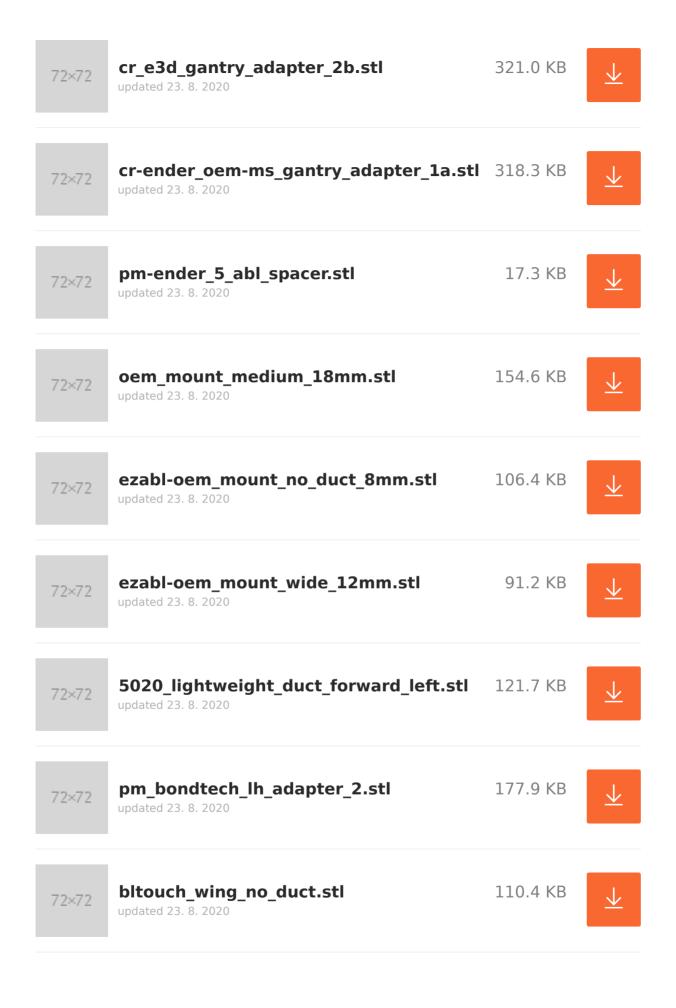
The lightweight cooling ducts can use a few well-placed supports just inside the part (not down into the duct).

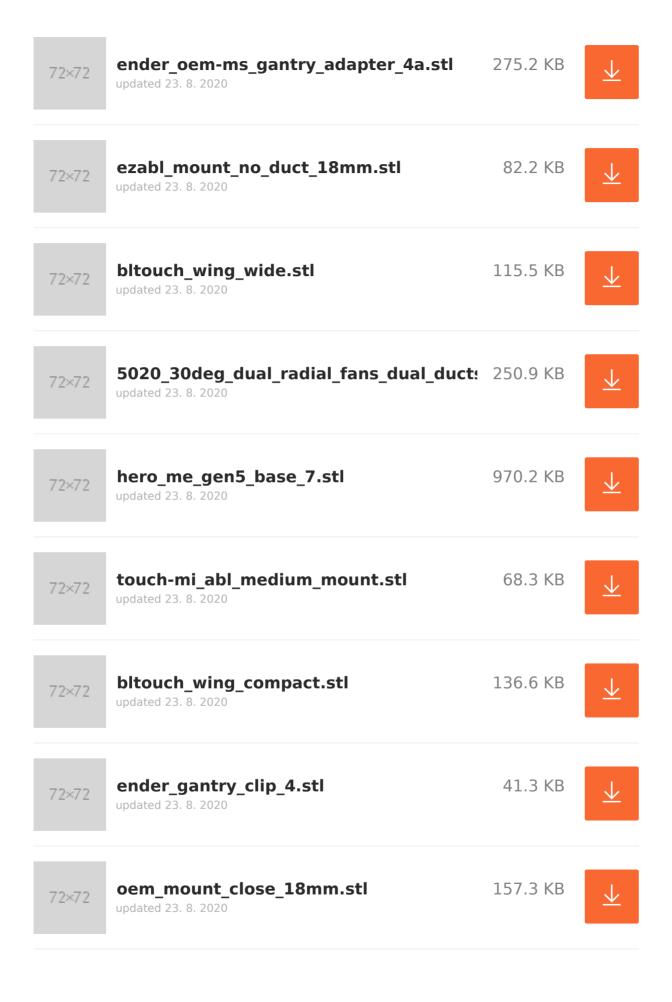
If you use a silicone sock on your printer's hot-end, you can use PLA for the cooling ducts and Hero Me base. I highly recommend using a silicone sock for you hot-end in all cases.

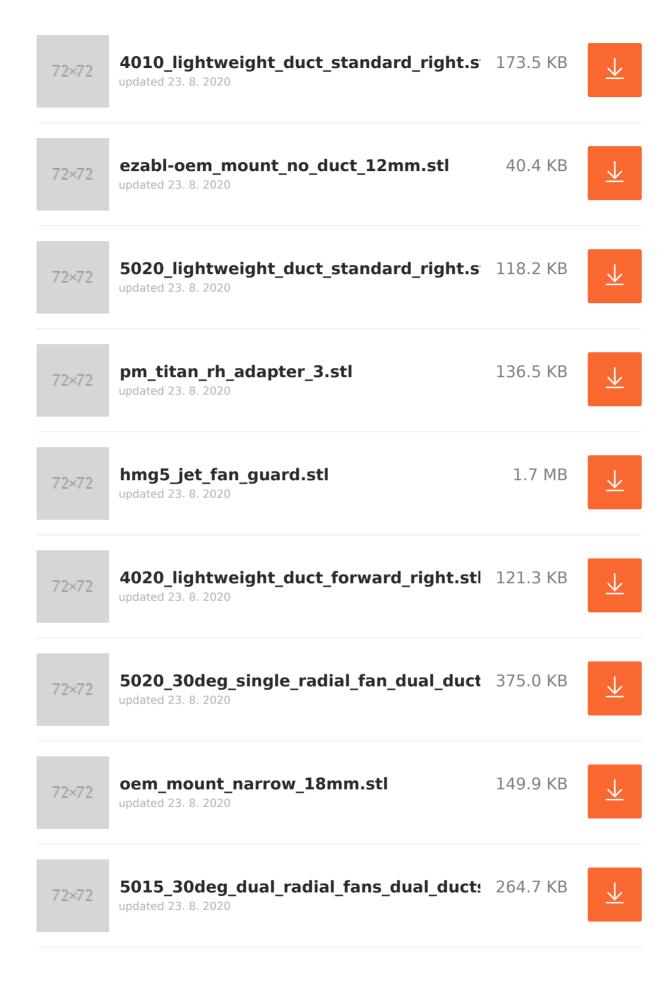
I have printed for two years with the Hero Me made from 100% PLA with no warping or melting because I have always used a silicone sock. If you do not have a silicone sock, I recommend using PETG or ABS for the base and parts cooling duct(s).

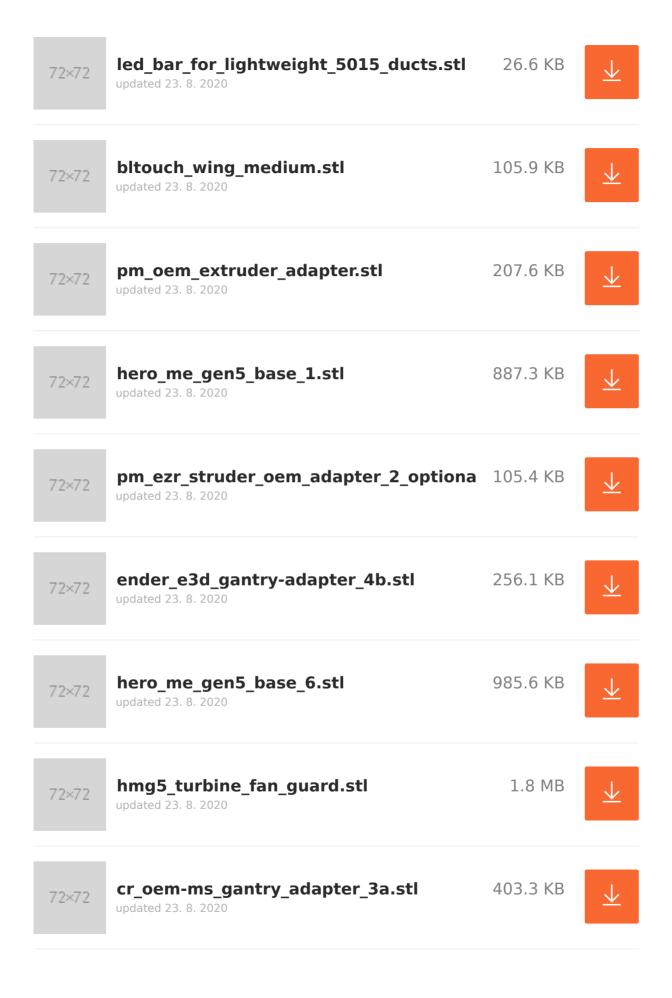
Model Files (.stl, .3mf, .obj, .amf)

**→** DOWNLOAD ALL FILES

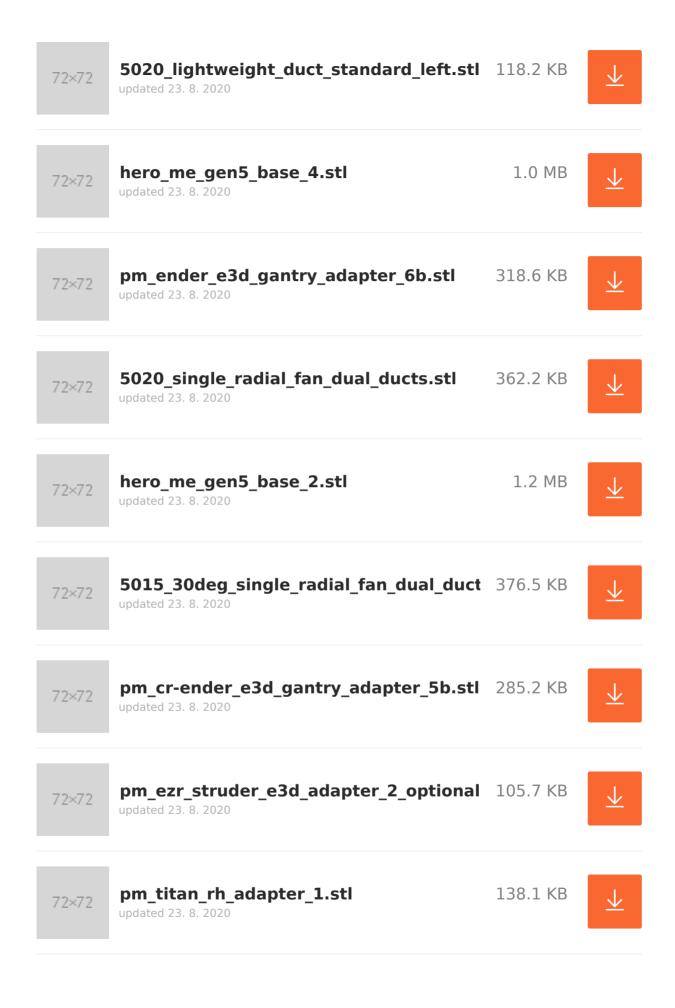


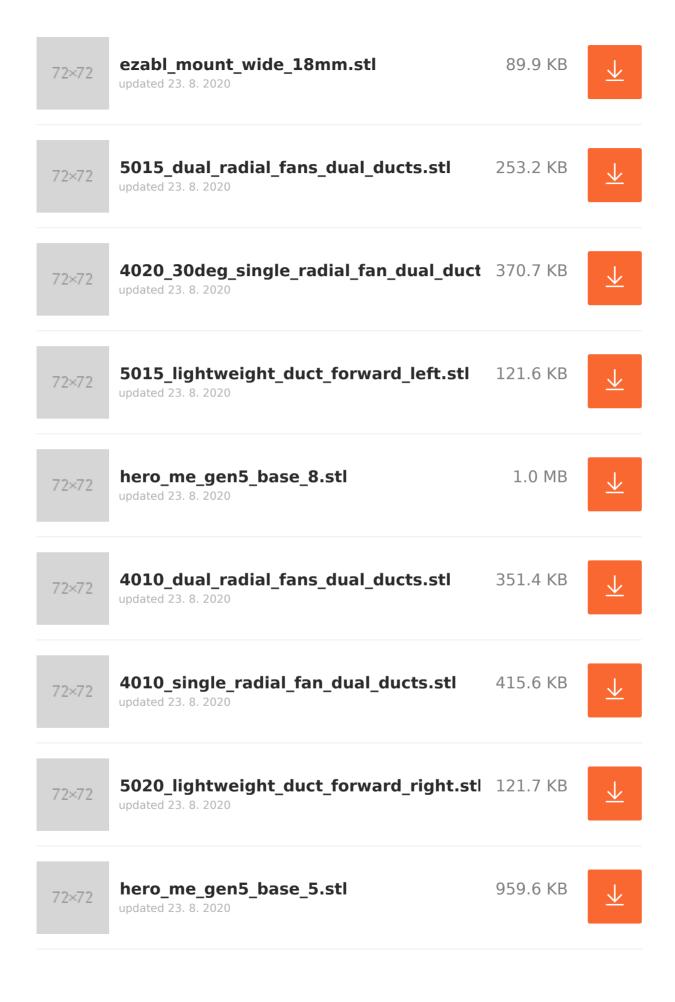


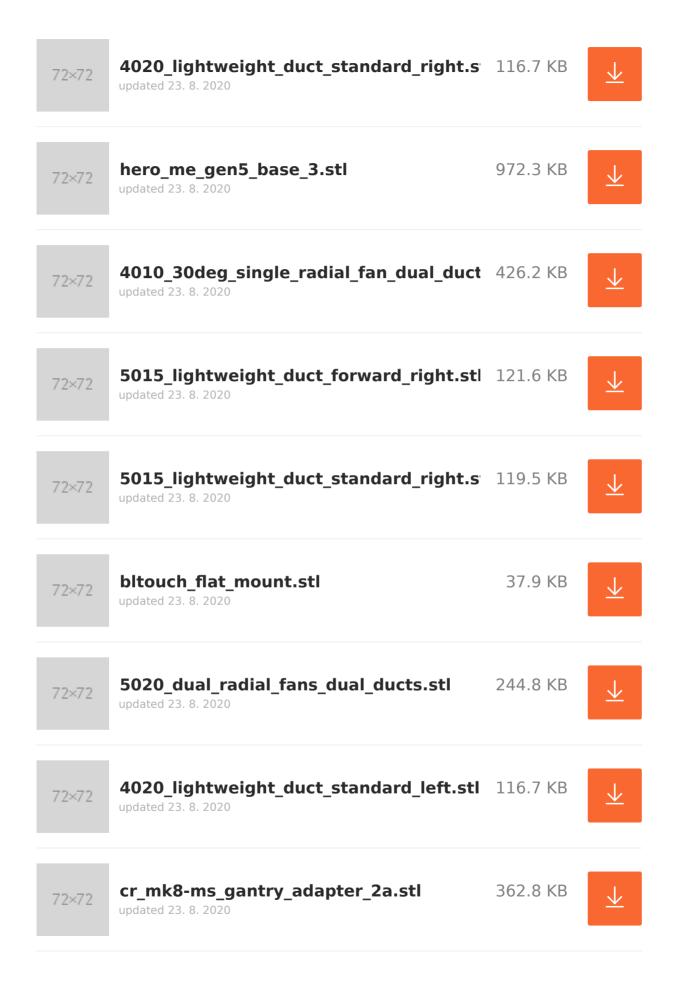


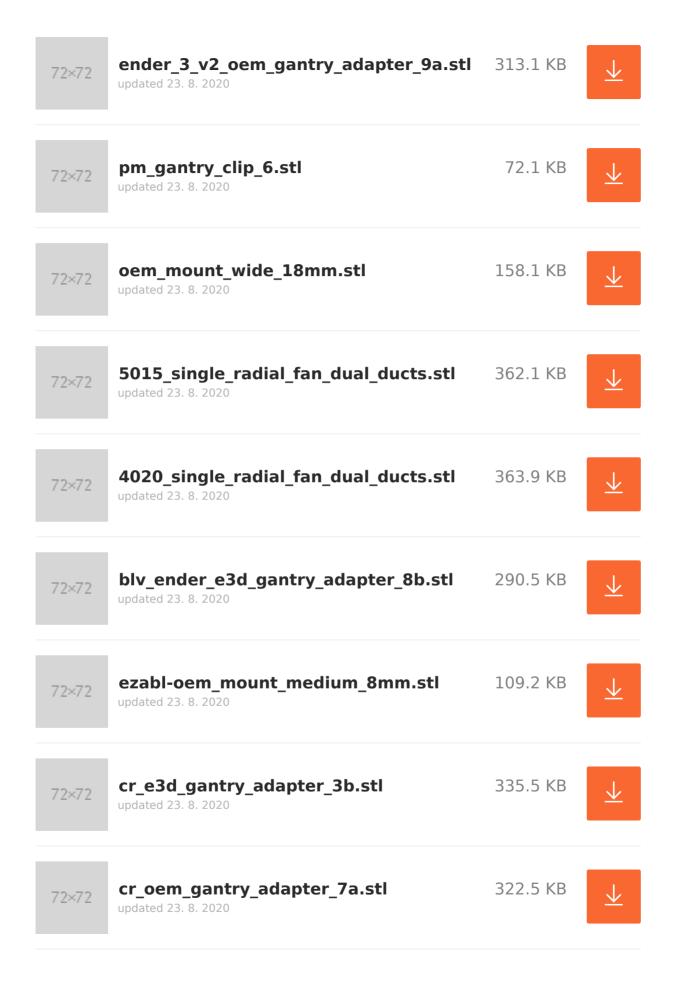


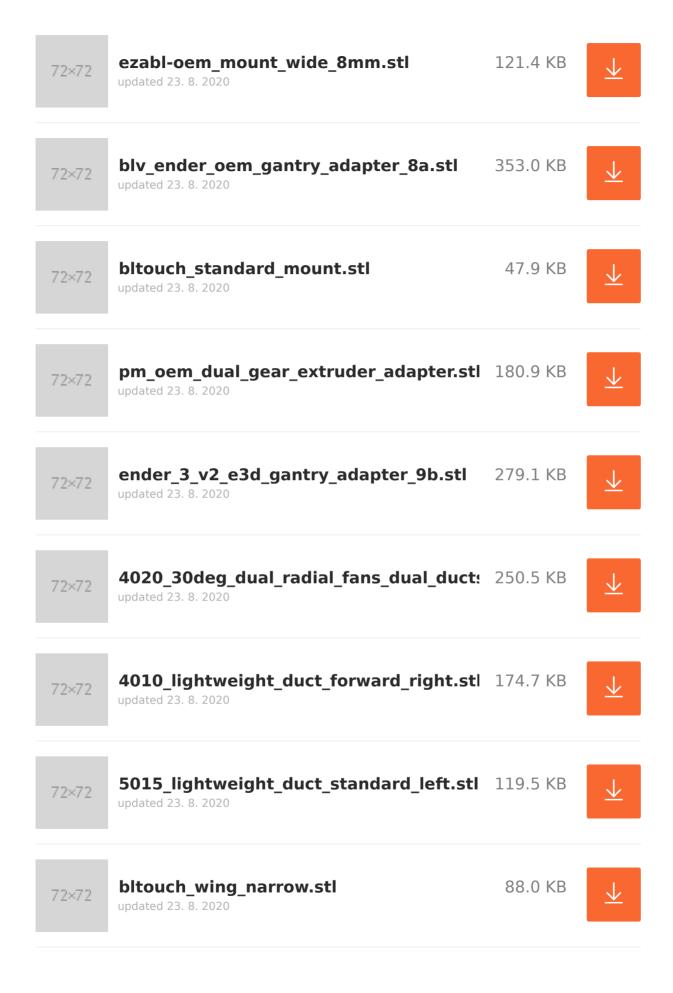


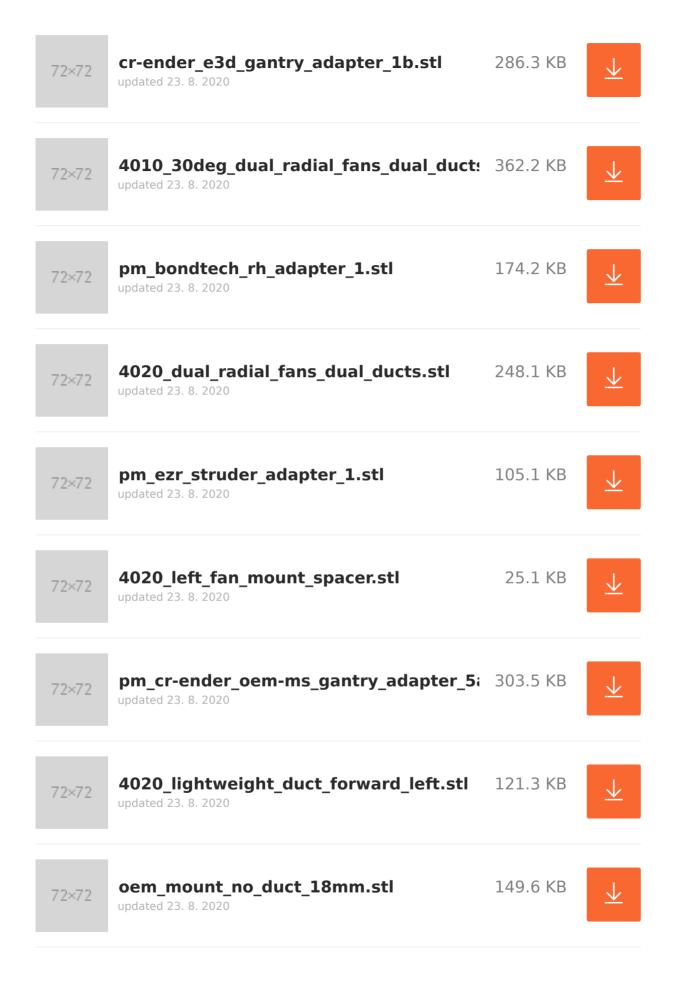


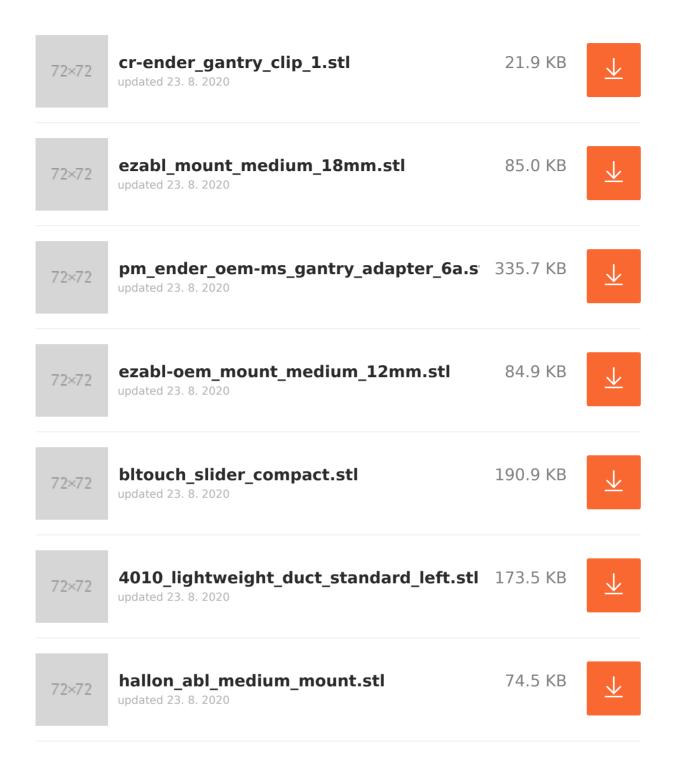












Find source .stl files on Thingiverse.com



The Author has not uploaded any print files.

Try to search in <u>User print files</u> section or generate and upload your own.

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