Hero Me Gen6

- **Parts Cross Reference**
- **Assembly Instructions**
- **Parts Inventory (450 STLs)**
- **Over 285 million combinations**

WHEN IT COMES TO COOLING EVERYBODY DESERVES A HERO!

Exclusively for Hero Me Gen6 Patrons

Hero Me Gen6

Cross-Reference, Assembly Instructions, Parts Inventory

Table of Contents:

NOTE: I recommend reviewing each section before diving into your specific 3D printer setup.

Hero Me Gen6 Introduction and Background

Welcome and thank you for selecting the Hero Me Gen6 cooling system for your 3D printer. The Hero Me was originally designed by Marcelino A. Mosquea S. (Kelokera) from the Dominican Republic and posted to Thingiverse in September of 2018. release.

By end of 2018 Marcelino was no longer active on Thingiverse, and not responding to questions and requests from the community. Seeing great feedback and interest from the community, I created my first full remix of the Hero Me (Gen2) in January 2019. Later in 2019, I was able to connect with Marcelino and he gave me his approval to take over the Hero Me project. Now 4 years on I continue to update the Hero Me and add support for new printers, hotends, ABL sensors and other addons.

The key design concepts behind the Hero Me is to provide superior part cooling performance and to make a system that is modular, to support different brands and models of printers, hotends, direct drives, fans, ABLs, and other addons. This core modularity has allowed for the creation of over 600 different addons and remixes across the community in the years since.

Now six generations later, the Hero Me Gen6 continues with these key design guidelines. The Hero Me Gen6 has maintained backward compatibility for most of the parts for Gen3, Gen4, and Gen5. The flexibility of the Hero Me Gen6 also makes it future proof, as it also supports new tool changing systems, including the Wham Bam MUTANT, PrinterMods Xchange, and the BigTreeTech HermitCrab as well as the newly popular Orbiter and Sherpa direct drive extruders among many others. The Hero Me Gen6 is one of the top 2-3 aftermarket part cooling systems available on the Internet, now with over a half million downloads.

Hero Me Gen6 simplifies assembly and make future hotend maintenance and/or upgrades much easier by using threaded heat pressed inserts (no more M3 nuts to deal with). The HMG6 suite of parts will be compatible with future Hero Me releases and generations.

The instructions below will help you to select the parts needed for your printer as well as guide you through printing, assembly, and setup to be able to make great things with the Hero Me Gen6 and your 3D printer. This is the second generation of this document. While it has been significantly improved, I am sure there is lots of room for improvement. If you find any discrepancies or have suggestions on how this manual for the Hero Me can be further improved, please send them to me at: mediaman3d@gmail.com.

If you do not find your specific printer/model, hotend, direct drive, ABL, or other setup covered in this document, check out the Remixes tab of the Thingiverse project or my Thingiverse collection of Hero Me compatible designs, as there are now over 600 remixes, adaptations, and compatible add-on parts for the Hero Me Gen6.

https://www.thingiverse.com/thing:4460970/remixes
https://www.thingiverse.com/mediaman/collections/hero-me-cooling-systems

If you like my work, please consider supporting my work via Patreon or these other services. Thank You and Happy Printing! Andy aka MediaMan3D

https://www.patreon.com/MediaMan3D
https://www.buymeacoffee.com/MediaMan3D
https://www.paypal.com/paypalme/arsoderberg
https://www.youtube.com/c/MediaMan3D

Hero Me Gen6 Dictionary and Naming conventions

Reviewing this dictionary will really help you with understanding the STL file naming conventions and assist you with your parts selection process.

HMG5 – Hero Me Gen5, identifying attribute: captive M3 Nuts

HMG6 – Hero Me Gen6, identifying attribute: M3 threaded heat pressed inserts

ADXL345 – PCB based accelerometer used with Klipper firmware to calibrate a 3D printer

Hero Me Base or **DD Base** – Core component of the Hero Me system with standardized mounts for hotend, fans, extruders, ABL, and ADXL345 (optional)

X carriage or **Gantry Plate** – Metal plate that the hotend assembly mounts to on the X axis

Gantry Adapter – the plate that marries the Hero Me Base to the X carriage of the 3D printer. It also has a mount point for optional accessories such as ABL sensors (BLTouch, CR Touch, EZABL, Pinda, HallON, etc.)

Gantry Clip – A small part that is used to help retain the Gantry Adapter to the X carriage because there are not enough mount points provided. Most all Gantry Clips are aligned on the right side of the X carriage from the back and line up to a mount point on the Gantry Adapter. The Gantry Clip for an Ender 5/Pro/Plus fits in the vertical slot of the X carriage from behind and lines up with two of the four mount points for the Hero Me Base and Gantry Adapter.

Part Cooling Duct – fans attach to this part to cool the printed part below the nozzle

DD – Direct Drive extruder

ABL – Auto Bed Level sensor

EZABL – An ABL sensor from TH3D Studios

E3D – E3DOnline hotend manufacturer

V6 or **E3DV6** – E3D Online hotend (collar mount)

'V6 Style' – Creality hotend for the CR-10S Pro that looks like the E3D V6 but mounts with 2 screws horizontally

Volcano – E3D Online hotend (high flow, tall)

Clone – a copy of a name brand/model of 3D printer part

Collar or **Groove** – The type of mount used by E3D V6 hotends and clones

Revo Six, **Revo Micro**, **Revo Voron** – E3D Online hotend

MK8 – standard hotend used by Creality (two screw horizontal mount)

MS – Micro Swiss All Metal hotend (MK8 clone)

Mosquito – Slice Engineering hotend (two screw top or collar mount)

Copperhead – Slice Engineering hotend (two screw top or collar mount)

OEM or **Stock** – used in reference to the stock part that came with the 3D printer

BMO – Phaetus Dragonfly BMO hotend (collar/groove mount)

BMS – Phaetus Dragonfly BMS hotend (two screw horizontal mount)

HIC – Phaetus Dragonfly HIC hotend (two screw mount, thicker heat sink)

Dragon – Phaetus Dragon hotend (Mosquito clone) (two screw top or collar mount)

Spider – Creality Spider high temperature hotend (collar or two screw horizontal mount)

Rapido – Phaetus Rapido hotend (Revo Six clone) collar mount

HF or **UHF** – Phaetus Dragon high temp, high flow hotends

XY Offset – a distance measured in mm. Often used to calibrate the position of an ABL sensor in relation to the nozzle of the hotend. Also used to set the Home position of the hotend via GCODE commands or instructions in the firmware of the printer.

OEM-MK8-MS-MSDD-BMS – Used in STL filenames. The STL is for use with hotends that match one of these types (or a clone of one).

E3DV6-Revo Six-Spider-BMO - Used in STL filenames. The STL is for use with hotends that match one of these types (or a clone of one).

Tall – Used in STL part cooling duct filenames. STLs with this attribute are for use with very tall hotends (e.g., Rapido UHF, E3D-Online Volcano, etc.) These ducts are too tall for most hotends.

Tall – Used in STL direct drive base filenames. STLs with this attribute are for use with some tall x carriages to have the stepper fit above the X carriage facing the back of the printer.

Right - Used in STL direct drive base filenames. STLs with this attribute are for use with very tall x carriages. The stepper motor is turned 90 degrees to the right.

Long – Used in STL part cooling duct filenames. STLs with this attribute are for use with very specific printer setups when called for in the documentation (e.g., Micro Swiss DD kits, Neptune 3). These ducts should not be used for any other configurations, as the duct tips will be out of alignment with the nozzle.

Brace – Used in STL part cooling duct filenames. STLs with this attribute have a brace ring that connects to both fan mount points

Lightweight – Used in STL part cooling duct filenames. STLs with this attribute are lower weight versions of the other equivalent ducts.

Forward – Used in STL part cooling duct filenames. STLs with this attribute have the fan moved forward more than other ducts. This enables a BLTouch or CRTouch to be mounted behind the left duct to be closer to the nozzle to improve the mesh created from leveling the bed.

Dual - Used in STL part cooling duct filenames. STLs with this attribute use two fans.

Single - Used in STL part cooling duct filenames. STLs with this attribute use one fan.

30deg tilt - Used in STL part cooling duct filenames. STLs with this attribute have the fan tilted forward by 30 degrees compared to other equivalent ducts. This is a special case duct, only used in a direct drive setup where the stepper motor is turned 90 degrees to the left or the right. The fan(s) would otherwise collide with the stepper or worse (not be mountable).

Reverse - Used in STL direct drive base filenames. The stepper motor will face the back of the printer

Mirrored - Used in STL direct drive base filenames. The extruder is a mirrored (left hand) version from the vendor.

Mount - Used primarily in STL ABL and filenames. The Mount STL connects directly to the Gantry Adapter. A Wing STL connects to the Mount. This part controls the distance the ABL sensor is from the nozzle. Different widths (Compact, Close, Narrow, Standard, Medium, and Wide) are provided to ensure that space is made available for the left-hand part cool duct.

Wing - Used primarily in STL ABL and filenames. An ABL sensor connects to the Wing STL and the Wing connects to the Mount. This part controls the height of the ABL sensor. Different widths (Compact, Close, Narrow, Standard, Medium, and Wide) may be provided to ensure that space is made available for the left-hand part cool duct.

3D Printers, Hotends, Extruders, Fans, ABLs Supported by the Hero Me Gen6

Below is the continually growing list of 3D printers that are compatible with the Hero Me Gen6. Many more 3D printer brands and models are supported by the community in either the remix section or in my collection of Hero Me compatible designs found on Thingiverse.com or Printables.com.

Other manufacturer's clones of the Creality CR series and Ender series printers that are not listed below may be compatible but have not been tested. With over 450 parts across 6 categories, there are well over 285 million Hero Me Gen6 part combinations! But fear not, this cross reference makes it easy for you to select the parts you need to print for your specific printer setup.

Anet ET4, ET5, A8 Anycubic Vyper Creality CR-10 CR-10 V2, V3 CR-10 Mini CR-10S CR-10S4 CR-10S5 CR-10S Pro CR-10S Pro V2, V3 CR-20 CR-MAX Creality Ender 3 Ender 3X Ender 3 V2 Ender 3 Pro Ender 3 MAX Ender 5 Ender 5 Pro Ender 5 Plus ENDER 6 CoreXY	Most clones of CR and Ender Elegoo Neptune 2, 2S, 3 Exoslide Geeetech A10, A20, A30 Kywoo Lantro Longer LK5 Sovol SV01 & SV02 Sunlu S8 Tevo Tarantula & Tornado Tronxy X5SA Pro Two Trees Bluer & Sapphire Pro Voron Switchwire Voxelab Aquila-Pro ZYLTech Gear V3 3DFused X Axis upgrades BLV Ender 3 Linear Rail Upgrade Micro Swiss DD kit BigTreeTech HermitCrab PrinterMods Xchange & MDD kit V1.2, V1.3 Wham Bam MUTANT Wham Bam Universal X carriages

More 3D printers & components from the community via remixes and mods here:
https://www.thingiverse.com/thing:3433619/remixes
https://www.thingiverse.com/mediaman/collections/hero-me-cooling-systems
https://www.printables.com/social/56045-mediaman3d/collections/113081

If you want to have a printer, hotend, extruder, ABL, or other device or addon supported by the Hero Me Gen6, please provide as much detail as possible. For me to make adaptations to support anything new I request that you include STEP or STL files of the item to be supported. If those are not available, mechanical drawings with measurements, and finally if none of the these are available, take pictures of the item and measurements of its dimensions as well as locations, sizes, and reference measurements of any mounting locations.

I have a backlog of addon requests, so it may take several weeks or longer before I am able to work on these requests. Requests are done in the order of popularity, the more requests for the same update the sooner it will be done. Submit requests to: MediaMan3D@gmail.com
Please place 'Hero Me Gen6 Request' in the subject of your email.

Hotend Brands and Models Supported:

- Creality OEM (2 screw mount)
- Creality CR-10S Pro (2 screw mount)
- Creality Spider High Temp
- MK8
- Micro Swiss All Metal
- E3D-Online V6 & Volcano
- E3D-Online Revo Six
- E3D-Online Revo Micro
- E3D-Online Revo Voron
- Slice Copperhead
- Slice Mosquito
- Slice Mosquito for Creality
- Phaetus Dragon (2 screw mount)
- Phaetus Dragon (grove mount)
- Phaetus Dragonfly BMO
- Phaetus Dragonfly BMS
- Phaetus Dragonfly HIC
- Phaetus Rapido HF, UHF
- Phaetus Taichi
- Clones of any hotends above (note: look-alikes may not fit, just true clones)

Auto Bed Level (ABL) Sensors Supported:

- BLTouch
- EZABL Pro
- EZABL Pro Mini
- PINDA
- CR Touch
- HallON
- Touch Mi
- TA sensor
- Omron sensor
- 8mm, 12mm & 18mm sensors
- Clones of any ABL sensors above

Direct Drive Extruder Brand and Models Supported:

- Creality stock Single and Dual gear
- Sovol SV01 stock
- E3D-Online Titan
- Bondtech BMG (and mirror)
- Bondtech BMG-M
- BMG Mini (clone)
- Bondtech LGX
- Bondtech LGX Lite
- Orbiter V1.5 & V2.0
- Sailfin
- Sherpa Mini
- Sherpa Micro
- Micro Swiss DD Kit
- PrinterMods MDD Kit
- Smartwatch Clockwork
- Voron Afterburner
- Voron Stealthburner
- Clones of any extruders above (note: look-alikes may not fit, just true clones)

Heat Sink and Part Cooling Fans Supported:

- 4010 radial (single and dual)
- 4020 radial (single and dual)
- 5015 radial (single and dual)
- 5020 radial (single and dual)
- 4010 & 4020 axial fans for heat sink cooling

Note: I recommend fans with the following in their description: “brushless, sealed, dual ball bearing” radial fans. I have found Sunon and Winsinn to be good brands. I do not recommend (or support) axial fans for part cooling (not enough CFM).

Hardware - M3 Screws and Threaded Inserts

Important Note: The Hero Me Base, DD Base, Gantry Adapters, and some other components require the use of M3 screws and M3 threaded heat press inserts to assemble the system. You will need a soldering iron (preferably with an insert tip) to install the inserts into the Hero Me parts.

The preferred size of threaded insert is M3 4.6 OD x 4mm length (3mm – 5.0mm length is acceptable). Note that 5.7mm length is too long for most setups.

1. KB3D. A bit expensive (sold by the piece) but the perfect size: kb-3d.com/store/inserts-fasteners-adhesives/97-brass-heat-set-threaded-insert-for-plastic-m3x46x4mm.html

2. Fabreeko. A little longer than I like, but still works: fabreeko.com/collections/v2-4/products/threaded-heat-inserts-m3x5x4-100pc-per-bag

3. Amazon. Perfect size, 100pcs.: https://www.amazon.com/dp/B08T7M2H4S

4. Amazon. Perfect size, fewer pieces (more than enough for a couple Hero Me setups) but also includes a proper tip for a soldering iron: amzn.to/3nMnSsJ

5. CNC Kitchen EU. Perfect size, 100pcs: https://cnckitchen.store/Gewindeeinsatz-threaded-insert-M3-Short-100-Stk-pcs-p431146045

6. Prusa3D. EU. Perfect size, 100pcs: https://www.prusa3d.com/product/threaded-inserts-m3-short-100-pcs

7. (Amazon Italy) 100pcs: https://www.amazon.it/gp/product/B09ZHSGHXD/

Because I cannot know the total number of M3 screws or what sizes any given Hero Me Gen6 setup will require (remember over 260 million combinations), I recommend that you purchase (if you don't already have a selection) a M3 screw assortment box that has M3 hex socket head or button head screws from 6mm to 30mm lengths.

1. Amazon US: 300PCS M3 Hex Socket Head Cap Screws Assortment Set Kit with Storage Box https://www.amazon.com/Stainless-Screws-300PCS-Assortment-Storage/dp/B094NHTRLS

2. Amazon US: 1350 Pcs M3 x 4/5/6/8/10/12/14/16/18/20/25/30 Stainless Steel 304 Hex Socket Head assortment: https://www.amazon.com/iexcell-Stainless-Socket-Washers-Assortment/dp/B09XN629BF

3. PrinterMods.com offers Hero Me compatible hardware kits (nuts and bolts) that complement their MDD (Modular Direct Drive) printer upgrades. These Hero Me Gen6 kits will include M3 screws and nuts needed to assemble your hotend with their MDD kits and your Hero Me printed parts. Note that this kit does not include threaded inserts.
https://printermods.com/products/herome-gen-5-installation-kit-for-ender-3-mdd-v1-2

4. TH3DStudios.com also sells M3 screw and nut assortments here:
https://www.th3dstudio.com/product/3d-printer-m3-m4-m5-screw-nut-assortment/

Hero Me Gen6 Parts Cross-Reference

STEP 1 - Parts Cross Reference Preparation

You will need the following information about your printer's setup to select the correct parts to print.

Required:	**Optional:**
Printer brand and model, or X carriage Hotend brand/type model and mount option Fan(s) types & size(s) for part cooling	ABL sensor model/type (if any) Extruder model/type (if used for DD)

If you have not already, download the latest release ZIP of the Hero Me Gen6 STL library from this Patreon post (It will always be the most current, as well as nicely organized in folders/sub folders by category and type of STL): https://www.patreon.com/posts/68674465

Below are the questions you need to answer to use the parts cross reference guide to select the STLs you need to print for your Hero Me Gen6 upgrade. Write your answers down on a piece of paper, it will help when reading through the parts cross reference guide.

If after using the instructions below, you still have trouble selecting the parts you need, post a message in the #hmg6-support channel of the Discord server, or a direct message to me in Patreon, with the answers to the numbered questions below so I or another Hero Me community member can help you.

1. What 3D Printer brand and model? (E.G. Ender 3 V2, CR-10S Pro V3, Neptune 2, Voxelab Aquila, etc. etc.).

2. Is your 3D printer's X carriage non-stock? (Yes, No) If No, skip the next question. If the answer is Yes, the answer to the next question overrides the first question, as this is used to identify the Gantry Adapter needed since the stock one is not being used.

3. What brand/ model of 3rd party X carriage will be used? (E.G. PrinterMods MDD, Micro Swiss DD kit, 3DFused (3 versions), BLV, Wham Bam Systems Universal X carriage (two versions), or other).

The answers from the above questions are used to select the Gantry Adapter. Note that there are two versions of every Gantry Adapter, the next three questions will identify which type of the Gantry Adapter to use.

4. What Brand/model of hotend are you using? (E.G. Creality stock, Phaetus Dragonfly, Slice Mosquito, Micro Swiss, E3D V6, etc. etc.)

5. What type of mount does the hotend use? (Type 1 or Type 2) Hotend mounts fall into two types:
Type 1: Hotends that mount directly to the X carriage via 2 screws, like the stock hotend from Creality, the Micro Swiss, MK8, and Dragonfly BMS, and others. (Filenames include OEM-MS-MK8-BMS)

Type 2: Hotends that mount via a collar or some other fixture that attaches to the X carriage, like the E3D V6, Revo Six, Slice Mosquito, and others. (Filenames include: E3D V6-Revo Six-BMO)

If you answered, 'Type 1', skip the next question.

6. If you answered 'Type 2': If your hotend has more than one way to be mounted, which mount type will be used? (E.G. Groove/Collar mount, Top screws, etc.)

7. Will you be using a Bowden extruder or a Direct Drive extruder? (Bowden, Direct Drive)

If you selected Bowden: Skip the next two questions as you now have the info to select the right Hero Me Base.

If you selected Direct Drive:

8. Which direct drive brand and model will be used? (E.G. Bondtech BMG, LGX, LGX Lite, Orbiter V1.5 or V2.0, Sherpa Mini, Titan, Creality Single or Dual Gear, etc.) This is needed along with the next question to select the correct Hero Me DD Base file.

9. Do you want the stepper motor to face the front of rear of the 3D printer? (Forward, Reverse)

Some printers have tall X carriages that prevent having the stepper in the back (Reverse). Some printers with low enough X carriages may have other issues (tight X axis to Z axis assembly where a stepper would hit the aluminum extrusion before allowing the nozzle to get to X0). These issues require the stepper to face the front (Forward).

With the DD Brand/model and the hotend and mount type, and stepper orientation, you now have the info to select the Hero Me DD Base.

Next, the type and number of part cooling fans (This helps identify which part cooling ducts to use):

10. How many part cooling fans? (1 or 2)

11. What size Fan(s)? (4010, 4020, 5015, 5020)

12. Optional - What type of ABL sensor will be used? (E.G. BLTouch, CRTouch, EZABL, Pinda, TA sensor, etc.)

This identifies the ABL mounting part(s). The selection of ABL mount parts is affected by which part cooling ducts are used, as the sensor needs to be positioned not to interfere with the part cooling duct. The variations of the ABL mounts affect how far from the nozzle they are mounted. BLTouch and CRTouch require two STLs (wing and mount).

13. Optional - Will you be using an ADXL345 accelerometer for use with Klipper? (Yes, No) ADXL345 adapters are in the Options folder.

14. Optional - Do you need a heat sink fan guard? If yes, there are several to pick from in the Options folder. Almost any 40mm fan guard can be used.

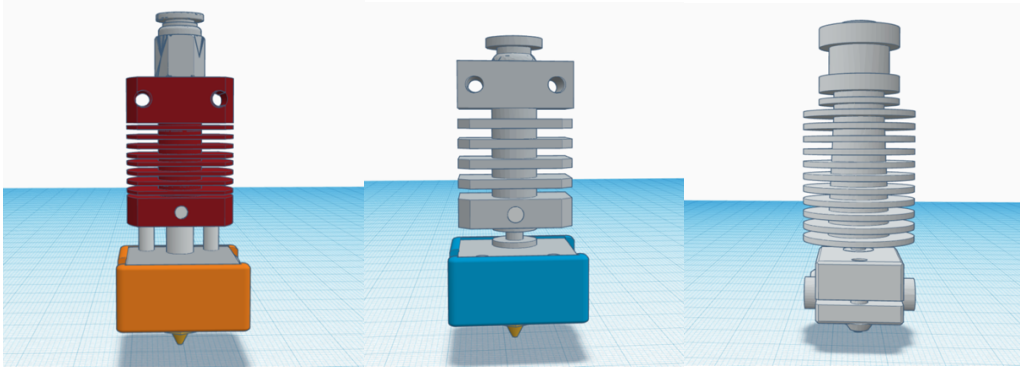
With the answers to these questions, you have what you need to select the parts for your unique Hero Me setup.

Hero Me Gen6 Supported Hotend mount types

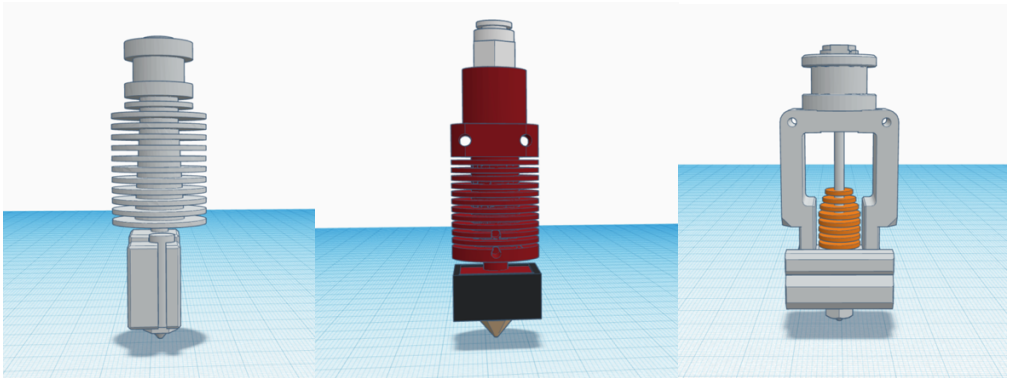
Important Note: You will see references to some hotends as being either ‘V6 style’ or ‘V6 clone’. For the purposes of these instructions, ‘V6 style’ specifically refers to the Creality OEM hotend for the CR-10S Pro (V1, V2, others) that have a red round heat sync, but mount to the gantry with two M3 bolts. This style of hotend mounts the same way and location as the OEM hotend on an Ender 3 or the 3rd party Micro Swiss hotend.

All references to E3D V6 or ‘V6 clone’ refer to all those hotends that match the round collar mount of an E3D V6 hotend. This is important as there are different Hero Me Gen6 base and Gantry Adapter parts for these two different hotend mounting styles. There are others that do not match either of these, and they have their own Hero Me Base and Gantry Adapter parts.

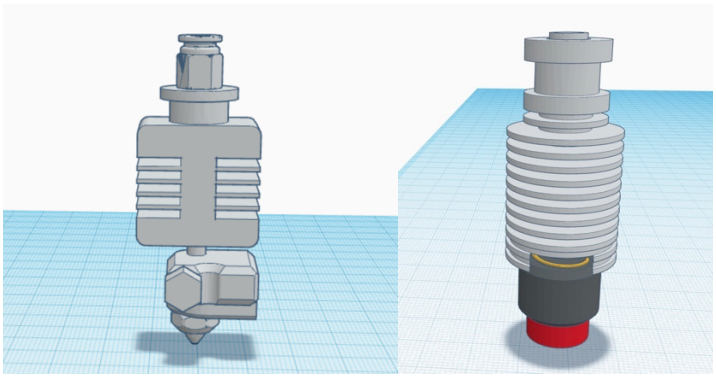
Here are renderings of some of the hotends that the Hero Me Gen6 supports:



Left: Creality OEM (Ender 3, CR-10/S), Center: Micro Swiss, Right: E3D V6 or clone (Phaetus Dragonfly BMO and others)



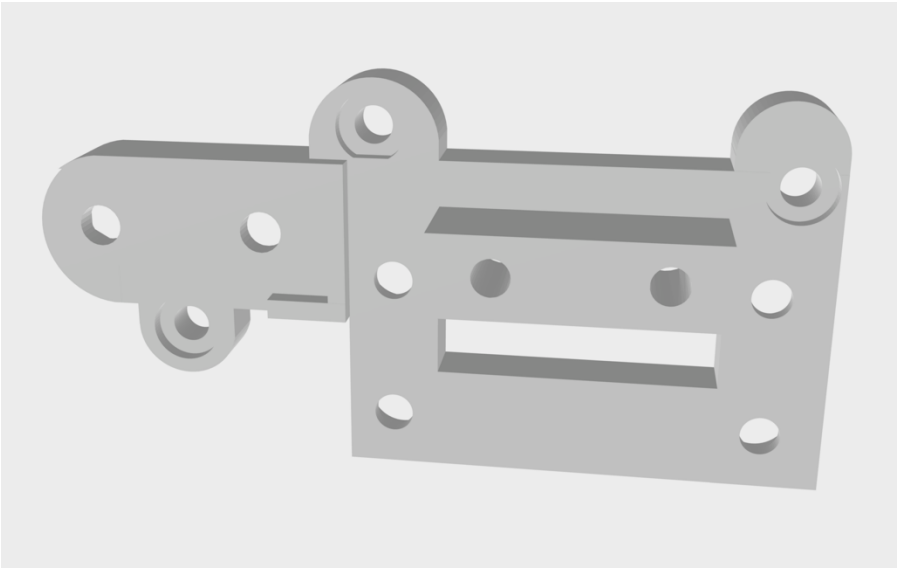
Left: E3D Volcano or clone, Center: Creality ‘V6 Style’ (CR-10S Pro), Right: Mosquito



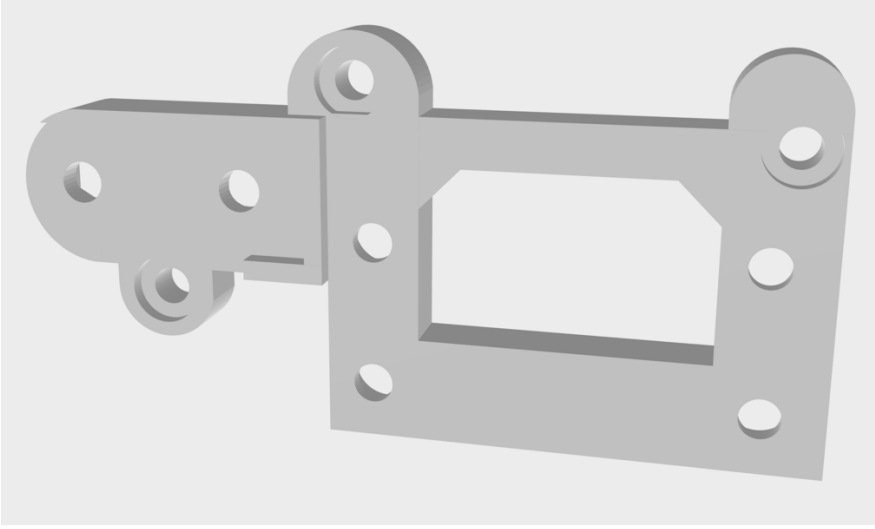
Left: Dyze Designs DyzEnd-X and DyzEnd Pro Right: E3D Revo Six

Hero Me Gen6 Gantry Adapter plates and the hotends that they support

There are two basic types of Hero Me Gantry Adapters. One type is used where the hotend you want to use is mounted horizontally to the X carriage or Gantry Adapter with two M3 screws (e.g., Creality OEM, Mk8, and Micro Swiss, Dragonfly BMS, HIC, Spider, etc.). The other type is used for all other hotends that have a vertical mount (clamped collar, screws) to a bracket or the Hero Me Base (e.g., E3D V6, or Mosquito, Phaetus Dragon ST/HT, Dragonfly BMO, etc.). Note that some hotends offer both options to choose from (e.g., Creality Spider). You will use only use one of these two types.



Example: OEM, Mk8, Micro Swiss, Dragonfly BMS, Dragonfly HIC, and Creality ‘V6 Style’, all the hotends listed here will mount with two M3 screws to the gantry adapter



Example: E3D V6, Volcano, Spider, Mosquito, Dragon ST, Dragonfly BMO, Rapido, all the hotends listed here will mount to the Hero Me Base

STEP 2 - Hero Me Gen6 Gantry Adapter Selection

Required info: 3D Printer Brand/ Model (or 3rd party X carriage) and Hotend Brand/Model.

Find your 3D printer model and hotend type on the following pages to select the right Gantry Adapter STL files for your 3D printer. Note that some Creality printers have versions (V2, V3 etc.), be sure that you are matching to the exact model you have, to what is listed below. There can be differences in the gantry plates from one version of printer model to the next.

IMPORTANT: If you are going to use a 3rd party X carriage, then do NOT look for your printer model when selecting the Gantry Adapter, instead look for the brand & model of the X carriage you are using. From the Hero Me perspective, the 'model' of the printer is determined by the X carriage you are using.

You only need to make one match in this section that will identify one or two STL files needed, then go on to Step 3.

3DFused X carriages and X axis upgrades

3DFused has two types of X carriage, Standard and Direct Drive, and two versions for each type, Normal and V2.

- **3DFused Standard Normal carriage.** Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
  - 3DFused Normal E3DV6-Revo Six-BMO Gantry Adapter.stl
  - 3DFused Normal Gantry Clip.stl
  - Y axis offset is -9mm

- **3DFused Standard Normal carriage.** Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:
  - 3DFused Normal OEM-MK8-MS-BMS Gantry Adapter.stl
  - 3DFused Normal Gantry Clip.stl
  - Y axis offset is -9mm

- **3DFused Direct Drive Normal carriage.** Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
  - 3DFused Normal E3DV6-Revo Six-BMO Gantry Adapter.stl
  - 3DFused Normal DD Gantry Clip.stl
  - Y axis offset is -9mm

- **3DFused Direct Drive Normal carriage.** Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:
  - 3DFused Normal OEM-MK8-MS-BMS Gantry Adapter.stl
  - 3DFused Normal DD Gantry Clip.stl
  - Y axis offset is -9mm

- **3DFused Standard V2 carriage.** Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - 3DFused V2 E3DV6-Revo Six-BMO Gantry Adapter.stl
    - 3DFused V2 Gantry Clip.stl
    - Y axis offset is -9mm

- **3DFused Standard V2 carriage.** Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:
    - 3DFused V2 OEM-MK8-MS-BMS Gantry Adapter.stl
    - 3DFused V2 Gantry Clip.stl
    - Y axis offset is -9mm

- **3DFused Direct Drive V2 carriage.** Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - 3DFused V2 E3DV6-Revo Six-BMO Gantry Adapter.stl
    - 3DFused V2 DD Gantry Clip.stl
    - Y axis offset is -9mm

- **3DFused Direct Drive V2 carriage.** Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:
    - 3DFused V2 OEM-MK8-MS-BMS Gantry Adapter.stl
    - 3DFused V2 DD Gantry Clip.stl
    - Y axis offset is -9mm

Anet

- **Anet A8.** Stock extruder:
    - Anet A8 OEM-MK8-MS-BMS X Carriage-Gantry Adapter.stl
    - Y axis offset is -9mm

- **Anet A8.** E3D V6 – Revo Six – BMO – and clones
    - Anet A8 E3DV6-Revo Six-BMO X Carriage-Gantry Adapter.stl
    - Y axis offset is -9mm

- **Anet ET4 and ET5**. Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:
    - Anet ET4-5 OEM-MK8-MS-BMS Gantry Adapter.stl
    - Y axis offset is -9mm

- **Anet ET4 and ET5**. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - Anet ET4-5 E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -9mm

Anycubic

- **Chiron.** Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:
    - Anycubic Chiron OEM-MK8-MS-BMS Gantry Adapter.stl
    - Y axis offset is -9mm

- **Chiron**. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - Anycubic Chiron E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -9mm

- **Vyper.** Stock extruder, Bowden setup. These are all the files you need; you can skip the rest of the parts cross-reference:
    - HMG6 Base Anycubic Vyper.stl
    - HMG6 Anycubic Vyper Gantry Adapter.stl
    - HMG6 Anycubic Vyper Heat Sink Brace.stl (replaces black metal ring at base of heat sink).
    - HMG6 Anycubic Vyper BLTouch Mount.stl (optional)
    - These are all the parts you need for use with the Vyper's stock hotend
    - Y axis offset is -9mm

BigTreeTech

- **BigTreeTech HermitCrab** Rapid tool changer with an E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito, or V6 clones then use the following:
    - BTT HermitCrab E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Add -9mm to the Y axis offset

- **BigTreeTech HermitCrab** Rapid tool changer Plus the Dragonfly BMS hotend, then use the following:
    - BTT HermitCrab Dragonfly BMS Gantry Adapter.stl
    - Add -9mm to the Y axis offset

- **BigTreeTech HermitCrab** Rapid tool changer with an OEM, Mk8, or Micro Swiss hotends then use the following:
    - BTT HermitCrab OEM-MK8-MS Gantry Adapter.stl
    - Add -9mm to the Y axis offset

BLV CR-10 and Ender 3 Upgrades (Ben Levi)

- **BLV upgraded CR-10 series or Ender 3/Pro/V2.** Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:

  If you have this printer model, you may have to print all three to identify the one that fits your version.
    - BLV Ender OEM-MK8-MS-BMS Gantry Adapter A.stl
      OR
    - BLV Ender OEM-MK8-MS-BMS Gantry Adapter B.stl
    - Y axis offset is -9mm

- **BLV upgraded CR-10 series or Ender 3/Pro/V2.** Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:

  If you have this printer model, you may have to print all three to identify the one that fits your version.
  - BLV Ender E3DV6-Revo Six-BMO Gantry Adapter A.stl
    OR
  - BLV Ender E3DV6-Revo Six-BMO Gantry Adapter B.stl
  - Y axis offset is -9mm

Creality CR-10 Series

- **CR-10, CR-10S, CR-10S4, CR-10S5, CR-20**. Plus, one of the following hotends: Stock, MK8, or Micro Swiss (or other hotend that uses two M3 bolts to mount horizontally, except BMS, Spider, or HIC) then use the following:
  - CR-10 OEM-MK8-MS Gantry Adapter.stl
  - CR-10 Gantry Clip.stl
  - Y axis offset is -9mm

- **CR-10, CR-10S, CR-10S4, CR-10S5, CR-20**. Plus the Dragonfly BMS hotend, then use the following:
  - CR-10 Dragonfly BMS Gantry Adapter.stl
  - CR-10 Gantry Clip.stl
  - Y axis offset is -9mm

- **CR-10, CR-10S, CR-10S4, CR-10S5, CR-20**. Plus the Creality Spider (two screw) or Dragonfly HIC hotend, then use the following:
  - CR-10 Spider-HIC Gantry Adapter.stl
  - CR-10 Gantry Clip.stl
  - Y axis offset is -9mm

- **CR-10, CR-10S, CR-10S4, CR-10S5, CR-20**. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
  - CR-10 E3DV6-Revo Six-BMO Gantry Adapter.stl
  - CR-10 Gantry Clip.stl
  - Y axis offset is -9mm

- **CR-10, CR-10S, CR-10S4, CR-10S5, CR-20**. With a Mosquito for Creality hotend, use the following:
  - CR-10 Mosquito for Creality Gantry Adapter.stl
  - CR-10 Gantry Clip.stl
  - Y axis offset is -9mm

- **CR-10, CR-10S, CR-10S4, CR-10S5, CR-20**. With a Phaetus Taichi hotend, use the following:
  - CR-10 Phaetus Taichi Gantry Adapter.stl
  - CR-10 Gantry Clip.stl
  - Y axis offset is -9mm

- **CR-10 V2 or CR-10 V3** Plus, one of the following hotends: Stock, MK8, or Micro Swiss (or other hotend that uses two M3 bolts to mount horizontally, except BMS, Spider, or HIC) then use the following:

    - CR-10V2 OEM-MK8-MS Gantry Adapter.stl
    - Y axis offset is -9mm

- **CR-10 V2 or CR-10 V3**. Plus the Dragonfly BMS hotend, then use the following:
    - CR-10v2 Dragonfly BMS Gantry Adapter.stl
    - Y axis offset is -9mm

- **CR-10 V2 or CR-10 V3**. Plus the Creality Spider (two screw) or Dragonfly HIC hotend, then use the following:
    - CR-10V2 Spider-HIC Gantry Adapter.stl
    - Y axis offset is -9mm

- **CR-10 V2 or CR-10 V3** Plus one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - CR-10V2 E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -9mm

- **CR-10S Pro or CR-10 MAX** Plus, one of the following hotends: Stock, MK8, or Micro Swiss (or other hotend that uses two M3 bolts to mount horizontally, except BMS, Spider, or HIC) then use the following:
    - CR-10S Pro OEM-MK8-MS Gantry Adapter.stl
    - Y axis offset is -9mm

- **CR-10S Pro or CR-10 MAX** Plus the Dragonfly BMS hotend, then use the following:
    - CR-10S Pro Dragonfly BMS Gantry Adapter.stl
    - Y axis offset is -9mm

- **CR-10S Pro or CR-10 MAX** Plus the Creality Spider (two screw) or Dragonfly HIC hotend, then use the following:
    - CR-10S Pro Spider-HIC Gantry Adapter.stl
    - Y axis offset is -9mm

- **CR-10S Pro or CR-10 MAX** Plus one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - CR-10S Pro E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -9mm

- **CR-10S Pro V2 or V3** Plus, one of the following hotends: Stock, MK8, or Micro Swiss (or other hotend that uses two M3 bolts to mount horizontally, except BMS, Spider, or HIC) then use the following:
    - CR-10S Pro V2 OEM-MK8-MS Gantry Adapter.stl
    - Y axis offset is -9mm

- **CR-10S Pro V2 or V3** Plus the Dragonfly BMS hotend, then use the following:
    - CR-10S Pro V2 Dragonfly BMS Gantry Adapter.stl
    - Y axis offset is -9mm

- **CR-10S Pro V2 or V3** Plus the Creality Spider (two screw) or Dragonfly HIC hotend, then use the following:
    - CR-10S Pro V2 Spider-HIC Gantry Adapter.stl
    - Y axis offset is -9mm

- **CR-10S Pro V2 or V3** Plus one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - CR-10S Pro V2 E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -9mm

Creality Ender 3-5-6 Series

- **Ender 3, Ender 3X, or Ender 3 Pro**. Plus, one of the following hotends: Stock, MK8, or Micro Swiss (or other hotend that uses two M3 bolts to mount horizontally, except BMS, Spider, or HIC) then use the following:
    - Ender 3-Pro OEM-MK8-MS Gantry Adapter.stl
    - Ender 3 Series Gantry Clip.stl
    - Y axis offset is -9mm

- **Ender 3, Ender 3X, or Ender 3 Pro** Plus the Dragonfly BMS hotend, then use the following:
    - Ender 3-Pro Dragonfly BMS Gantry Adapter.stl
    - Ender 3 Series Gantry Clip.stl
    - Y axis offset is -9mm

- **Ender 3, Ender 3X, or Ender 3 Pro** Plus the Creality Spider (two screw) or Dragonfly HIC hotend, then use the following:
    - Ender 3-Pro Spider-HIC Gantry Adapter.stl
    - Ender 3 Series Gantry Clip.stl
    - Y axis offset is -9mm

- **Ender 3, Ender 3X, or Ender 3 Pro**. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - Ender 3-Pro E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Ender 3 Series Gantry Clip.stl
    - Y axis offset is -9mm

- **Ender 3, Ender 3X, or Ender 3 Pro**. With a Mosquito for Creality hotend, use the following:
    - Ender 3-Pro Mosquito for Creality Gantry Adapter.stl
    - Ender 3 Series Gantry Clip.stl
    - Y axis offset is -9mm

- **Ender 3, Ender 3X, or Ender 3 Pro**. With a Phaetus Taichi hotend, use the following:
    - Ender 3-Pro Phaetus Taichi Gantry Adapter.stl
    - Ender 3 Series Gantry Clip.stl
    - Y axis offset is -9mm

- **Ender 3 V2** Plus, one of the following hotends: Stock, MK8, or Micro Swiss (or other hotend that uses two M3 bolts to mount horizontally, except BMS, Spider, or HIC) then use the following:
    - Ender 3V2 Pro OEM-MK8-MS Gantry Adapter.stl
    - Ender 3 Series Gantry Clip.stl
    - Y axis offset is -9mm

- **Ender 3, Ender 3X, or Ender 3 Pro** Plus the Dragonfly BMS hotend, then use the following:
    - Ender 3V2 Dragonfly BMS Gantry Adapter.stl
    - Ender 3 Series Gantry Clip.stl

    - Y axis offset is -9mm

- **Ender 3, Ender 3X, or Ender 3 Pro** Plus the Creality Spider (two screw) or Dragonfly HIC hotend, then use the following:
    - Ender 3V2 Spider-HIC Gantry Adapter.stl
    - Ender 3 Series Gantry Clip.stl
    - Y axis offset is -9mm

- **Ender 3 V2** Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount or are vertically mounted). It seems that Creality has changed the Ender 3 V2 gantry over time.

  If you have this printer model, you may have to print all three to identify the one that fits your version.

    - Ender 3V2 E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Ender 3 Series Gantry Clip.stl
    - Y axis offset is -9mm (applies to all)

- **Ender 3 MAX** Plus one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally), use the following:
    - Ender 3 Max OEM-MK8-MS-BMS Gantry Adapter.stl
    - Y axis offset is -9mm

- **Ender 3 MAX** Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount or are vertically mounted), use the following:
    - Ender 3 Max E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -9mm

- **Ender 5, Ender 5 Pro, or Ender 5 Plus.** Plus, one of the following hotends: Stock, MK8, or Micro Swiss (or other hotend that uses two M3 bolts to mount horizontally, except BMS, Spider, or HIC) then use the following:
    - Ender 5 Pro-Plus OEM-MK8-MS Gantry Adapter.stl
    - Ender 5 Pro-Plus Gantry Clip.stl
    - Y axis offset is -9mm

- **Ender 5, Ender 5 Pro, or Ender 5 Plus Pro** Plus the Dragonfly BMS hotend, then use the following:
    - Ender 5 Pro-Plus Dragonfly BMS Gantry Adapter.stl
    - Ender 3 Series Gantry Clip.stl
    - Y axis offset is -9mm

- **Ender 5, Ender 5 Pro, or Ender 5 Plus** Plus the Creality Spider (two screw) or Dragonfly HIC hotend, then use the following:
    - Ender 5 Pro-Plus Spider-HIC Gantry Adapter.stl
    - Ender 3 Series Gantry Clip.stl
    - Y axis offset is -9mm

- **Ender 5, Ender 5 Pro, or Ender 5 Plus.** Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount or are vertically mounted), use the following:
    - Ender 5 Pro-Plus E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Ender 5 Pro-Plus Gantry Clip.stl

    - Y axis offset is -9mm

- **Ender 6** Plus one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally), use the following:
    - Ender 6 OEM-MK8-MS-BMS Gantry Adapter.stl
    - Y axis offset is -13mm

- **Ender 6** Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount or are vertically mounted), use the following:
    - Ender 6 E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -13mm

Elegoo

- **Neptune 2/2S.** Plus one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally), use the following:
    - Neptune 2-2S OEM-MK8-MS-BMS Gantry Adapter.stl
      Or
    - Neptune 2-2S OEM-MK8-MS-BMS No ABL Gantry Adapter.stl
    - Y axis offset is -9mm

- **Neptune 2/2S.** Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount or are vertically mounted), use the following:
    - Neptune 2-2S E3DV6-Revo Six-BMO Gantry Adapter.stl
      Or
    - Neptune 2-2S E3DV6-Revo Six-BMO No ABL Gantry Adapter.stl
    - Y axis offset is -9mm

- **Neptune 3.** Plus, the Stock hotend, use the following:
    - Neptune 3 stock Gantry Adapter.stl
      Or
    - Neptune 3 Stock Gantry Adapter No ABL.stl
    - Y axis offset is -9mm

- **Neptune 3.** Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally), use the following:
    - Neptune 3 OEM-MK8-MS-BMS Gantry Adapter.stl
    - Y axis offset is -9mm

- **Neptune 3.** Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount or are vertically mounted), use the following:
    - Neptune 3 E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -9mm

Exoslide Based 3D Printers

- **Exoslide**. 3D printer with an Exoslide linear rail on the X. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount or are vertically mounted), use one of the following:
    - Exoslide E3DV6-Revo Six-BMO Gantry Adapter.stl
      OR for DD Setups
    - Exoslide E3DV6-Revo Six-BMO DD Gantry Adapter.stl
    - Y axis offset is -9mm

- **Exoslide**. 3D printer with an Exoslide linear rail on the X axis. Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally), use the following:
    - Exoslide MK8-MS-BMS Gantry Adapter.stl
    - Y axis offset is -9mm

Geeetech

- **A10, A20, or A30**. Plus, one of the following hotends: Stock, MK8, or Micro Swiss (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:
    - GeeetechA10-A20-A30 OEM-MK8-MS Gantry Adapter.stl
    - Y axis offset is -9mm

- **A10, A20, or A30**. Plus the following Dragonfly BMS hotend, then use the following:
    - GeeetechA10-A20-A30 Dragonfly BMS Gantry Adapter.stl
    - Y axis offset is -9mm

- **A10, A20, or A30**. Plus the following Spider (two screw) or Dragonfly HIC hotend, then use the following:
    - GeeetechA10-A20-A30 Spider-HIC Gantry Adapter.stl
    - Y axis offset is -9mm

- **A10, A20, or A30**. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - Geeetech A10-A20-A30 E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -9mm

Hero Me Gen6 Generic V-Wheel and Linear Rail X Carriages [UNTESTED]

IMPORTANT: These X carriages have the Hero Me Gantry Adapter mounting points built in. No separate Gantry Adapter is needed. These are currently experimental and untested. If you choose to install one of these, please do report back how well it works for you.

Hotend Mounting Spacers
For ALL the following Generic V-Wheel and Linear Rail X carriage setups that use one of the following hotends you will need to use a spacer:

- Stock, MK8, Micro Swiss (or any other hotend that uses two M3 bolts to mount horizontally) then add the following to the X carriage below:
    - HMG6 Spacer OEM-MK8-MS Hotend.stl
    - Y axis offset is -9mm

- Dragonfly BMS (or any other hotend that uses two M3 bolts to mount horizontally) then add the following to the X carriage below:
    - HMG6 Spacer OEM-MK8-MS Hotend.stl
    - Y axis offset is -9mm

- Creality Spider or Dragonfly HIC screw mount, then add the following to the X carriage below:
    - HMG6 Spacer Spider-Dragonfly HIC Hotend.stl
    - Y axis offset is -7mm

If your hotend is not any of the above and mounts via a groove, collar, or vertical screw mounts, then you do not need any of the hotend spacers listed above.

- **Ender 3 style V-Wheel Model**
    - HMG6 Ender 3 V Wheel X Carriage.stl
    - HMG6 Ender 3 V Wheel Belt Bracket.stl
    - Y axis offset is -9mm (or -7mm for Spider or Dragonfly HIC)

- **Ender 5 style V-Wheel Model**
    - HMG6 Ender 5 V Wheel X Carriage.stl
    - Y axis offset is -9mm (or -7mm for Spider or Dragonfly HIC)

- **Ender 5 style MGN9-H Linear Rail**
    - HMG6 Ender 5 MGN9-H Linear Rail X Carriage.stl
    - Y axis offset is -9mm (or -7mm for Spider or Dragonfly HIC)

- **Generic MGN12-H Linear Rail Front**
    - HMG6 MGN12-H Linear Rail Front X Carriage.stl
    - HMG6 Linear Rail Front Belt Bracket.stl
    - Y axis offset is -9mm (or -7mm for Spider or Dragonfly HIC)

- **Generic MGN12-H Linear Rail Top**
    - HMG6 MGN12-H Linear Rail Top X Carriage.stl
    - HMG6 Linear Rail Top Belt Bracket.stl
    - Y axis offset is -9mm (or -7mm for Spider or Dragonfly HIC)

- **Generic MGN9-H Linear Rail Front**
    - HMG6 MGN9-H Linear Rail Front X Carriage.stl
    - HMG6 Linear Rail Front Belt Bracket.stl
    - Y axis offset is -9mm (or -7mm for Spider or Dragonfly HIC)

- **Generic MGN9-H Linear Rail Top**
    - HMG6 MGN9-H Linear Rail Top X Carriage.stl
    - HMG6 Linear Rail Top Belt Bracket.stl
    - Y axis offset is -9mm (or -7mm for Spider or Dragonfly HIC)

Kywoo

- **Kywoo**. Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:
    - Kywoo OEM-MK8-MS-BMS Gantry Adapter.stl
    - Y axis offset is -9mm

- **Kywoo**. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - Kywoo E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -9mm

Lantro

- **Lantro**. Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:
    - LANTRO OEM-MK8-MS-BMS Gantry Adapter.stl
    - Y axis offset is -9mm

- **Lantro**. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - LANTRO E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -9mm

Longer

- **LK5 Pro**. Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:
    - Longer LK5 Pro OEM-MK8-MS-BMS Gantry Adapter.stl
    - Y axis offset is -9mm

- **LK5 Pro**. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - Longer LK5 Pro E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -9mm

Micro Swiss Direct Drive Kits

- **Micro Swiss Direct Drive Extruder** for Ender 5-Pro-Plus and Stock, MK8, or Micro Swiss hotend, use the following below. (No Y axis offset is needed). Be sure to use the MSDD ‘Long’ part cooling ducts, as the nozzle is offset from the Hero Me standard.
    - Micro Swiss DD Ender 5 Gantry Adapter.stl
      Plus, the Hero Me Gen6 base that matches your hotend

- **Micro Swiss Direct Drive** Extruder for an Ender 3 series (or clone) and Stock, MK8, or Micro Swiss hotend, use the following below. (No Y axis offset is needed). Be sure to use the MSDD ‘Long’ part cooling ducts, as the nozzle is offset from the Hero Me standard.
    - Micro Swiss DD CR-Ender 3 Gantry Adapter.stl
    - Micro Swiss DD CR-Ender 3 Gantry Clip.stl
    - Plus, the Hero Me Gen6 base that matches your hotend

- **Micro Swiss Direct Drive Extruder** for printers with a linear rail on the X axis and a Mosquito for Creality hotend, use the following below. (No Y axis offset is needed). Be sure

to use the MSDD 'Long' part cooling ducts, as the nozzle is offset from the Hero Me standard.
    - Micro Swiss DD Ender 3 Mosquito for Creality Gantry Adapter.stl
    - Micro Swiss DD Ender 3 Mosquito for Creality Gantry Clip.stl
    - Plus, the Hero Me Gen6 base that matches your hotend

- **Micro Swiss Direct Drive Extruder** for printers with a linear rail on the X axis, and Stock, MK8, or Micro Swiss hotend, use the following below. (No Y axis offset is needed). Be sure to use the MSDD 'Long' part cooling ducts, as the nozzle is offset from the Hero Me standard.
    - Micro Swiss DD Linear Rails Gantry Adapter.stl
    - Plus, the Hero Me Gen6 base that matches your hotend

- **Micro Swiss Direct Drive Extruder** for printers with Exoslides on the X axis, and Stock, MK8, or Micro Swiss hotend, use the following below. (No Y axis offset is needed). Be sure to use the MSDD 'Long' part cooling ducts, as the nozzle is offset from the Hero Me standard.
    - Micro Swiss DD Exoslide Gantry Adapter.stl
    - Plus, the Hero Me Gen6 base that matches your hotend

OpenBuilds

- **Mini**. Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:
    - OpenBuilds Mini V OEM-MK8-MS-BMS Gantry Adapter.stl
    - Y axis offset is -9mm

- **Mini**. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - OpenBuilds Mini V E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -9mm

PrinterMods

- **PM V1.3 X carriage – Ender 3** with an E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito, or V6 clones then use the following:
    - PM V1.3 CR-Ender E3DV6-Revo Six-BMO Gantry Adapter.stl
    - PM Ender 3 Gantry Clip.stl
    - Y axis offset is -9mm

- **PM V1.3 X carriage – Ender 3** with an OEM, Mk8, Micro Swiss, or Dragonfly BMS hotends, use the following:
    - PM V1.3 CR-Ender OEM-MK8-MS-BMS Gantry Adapter.stl
    - PM Ender 3 Gantry Clip.stl
    - Y axis offset is -9mm

- **PM V1.3 X carriage – Ender 5** with an E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito, or V6 clones then use the following:
    - PM V1.3 Ender 5 E3DV6-Revo Six-BMO Gantry Adapter.stl
    - PM Ender 5 Gantry Clip.stl
    - Y axis offset is -9mm

- **PM V1.3 X carriage – Ender 5** with an OEM, Mk8, Micro Swiss, or Dragonfly BMS hotends, use the following: (
    - PM V1.3 Ender 5 OEM-MK8-MS-BMS Gantry Adapter.stl
    - PM Ender 5 Gantry Clip.stl
    - Y axis offset is -9mm

- **XChange** tool changer with an E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito, or V6 clones then use the following: (add -9mm to the Y axis home offset recommended by PrinterMods for the XChange).
    - XChange E3DV6-Revo Six-BMO Gantry Adapter.stl

- **XChange** tool changer with an OEM, Mk8, Micro Swiss, or Dragonfly BMS hotends, use the following: (add -9mm to the Y axis home offset recommended by PrinterMods for the Xchange. Not for use with V6 or clones).
    - XChange OEM-MK8-MS-BMS Gantry Adapter.stl

- **Xchange – NO ABL** tool changer with an E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito, or V6 clones then use the following: (add -9mm to the Y axis home offset recommended by PrinterMods for the XChange).
    - XChange E3DV6-Revo Six-BMO No ABL Gantry Adapter.stl

- **Xchange – NO ABL** tool changer with an OEM, Mk8, Micro Swiss, or Dragonfly BMS hotends, use the following: (add -9mm to the Y axis home offset recommended by PrinterMods for the Xchange. Not for use with V6 or clones).
    - XChange OEM-MK8-MS-BMS Gantry No ABL Adapter.stl

Sovol

- **SV01**. Stock hotend, then use the following:
    - Sovol SV01 Stock V5-E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -9mm

- **SV01**. Plus, one of the following hotends: MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:
    - Sovol SV01 OEM-MK8-MS-BMS Gantry Adapter.stl
    - Y axis offset is -9mm

- **SV01**. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - Sovol SV01 E3DV6-Revo Six-BMO - Bondtech BMG Gantry Adapter.stl
    - Y axis offset is -9mm

- **SV02**. Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:
    - Sovol SV02 OEM-MK8-MS-BMS Gantry Adapter.stl
    - Y axis offset is -9mm

- **SV02**. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - Sovol SV02 E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -9mm

Sunlu

- **Model**. Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:
    - Sunlu S8 OEM-MK8-MS-BMS Gantry Adapter.stl
    - Y axis offset is -9mm

- **Model**. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - Sunlu S8 E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -9mm

Tevo

- **Tarantula Pro**. Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:
    - Tevo Tarantula Pro OEM-MK8-MS-BMS Gantry Adapter.stl
    - Tevo Tarantula Pro Gantry Clip.stl
    - Y axis offset is -9mm

- **Tarantula Pro**. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - Tevo Tarantula Pro E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Tevo Tarantula Pro Gantry Clip.stl
    - Y axis offset is -9mm

- **Tevo Tornado**. Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:
    - Tevo Tornado OEM-MK8-MS-BMS Gantry Adapter.stl
    - Tevo Tornado Gantry Clip.stl
    - Y axis offset is -9mm

- **Tevo Tornado**. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - Tevo Tornado E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Tevo Tornado Gantry Clip.stl
    - Y axis offset is -9mm

Tronxy

- **X5SA-Pro**. Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:
    - Tronxy X5SA-Pro OEM-MK8-MS-BMS Gantry Adapter.stl
    - Y axis offset is -9mm

- **X5SA-Pro No ABL**. Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following
    - Tronxy X5SA-Pro OEM-MK8-MS-BMS No ABL Gantry Adapter.stl
    - Y axis offset is -9mm

- **X5SA-Pro**. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - Tronxy X5SA Pro E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -9mm

- **X5SA-Pro No ABL**. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - Tronxy X5SA Pro E3DV6-Revo Six-BMO No ABL Gantry Adapter.stl
    - Y axis offset is -9mm

Two Trees

- **Bluer**. Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:
    - Two Trees Bluer OEM-MK8-MS-BMS Gantry Adapter.stl
    - Y axis offset is -9mm

- **Bluer**. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - Two Trees Bluer E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -9mm

- **Sapphire Pro**. Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:
    - Two Trees Sapphire Pro OEM-MK8-MS-BMS Gantry Adapter.stl
    - Y axis offset is -9mm

- **Sapphire Pro**. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - Two Trees Sapphire Pro E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -9mm

Voron Switchwire

- No Gantry Adapter is needed, The Hero Me Base and collar mounts directly to the Switchwire's X carriage mount points.

Voxelab

- **Voxelab Aquila/Pro** with an E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito, or V6 clones then use the following:

    - Voxelab Aquila-Pro E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -9mm

- **Voxelab Aquila/Pro** with an OEM, Mk8, BMS, or Micro Swiss hotends then use the following:
    - Voxelab Aquila-Pro OEM-MK8-MS-BMS Gantry Adapter.stl
    - Y axis offset is -9mm

Wham Bam Systems

- **MUTANT**. Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:
    - MUTANT OEM-MK8-MS-BMS Gantry Adapter.stl
    - Y axis offset is -9mm

- **MUTANT**. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - MUTANT E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -9mm

- **Universal X carriage**. Plus, one of the following hotends: Stock, MK8, or Micro Swiss hotend (or any other hotend that uses two M3 bolts to mount horizontally, except BMS, HIC, or Spider) then use the following:
    - Universal Linear Rail OEM-MK8-MS Gantry Adapter.stl
    - Y axis offset is -9mm

- **Universal X carriage**. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - Universal Linear Rail E3DV6-Revo Six-BMO Gantry Adapter.stl
    - Y axis offset is -9mm

ZYLTech

- **Gear V3**. Plus, one of the following hotends: Stock, MK8, Micro Swiss, or Dragonfly BMS hotend (or any other hotend that uses two M3 bolts to mount horizontally) then use the following:
    - ZYLTech Gear V3 OEM-MK8-MS-BMS Gantry Adapter.stl
    - ZYLTech Gear V3 Gantry Clip.stl
    - Y axis offset is -9mm

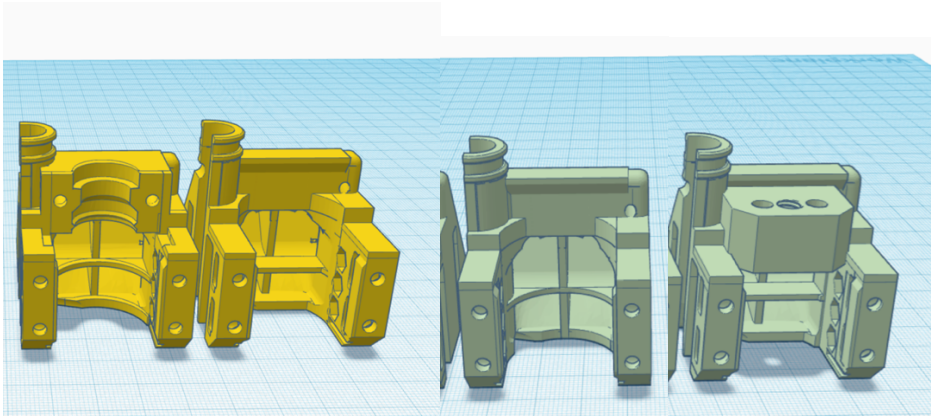
- **Gear V3**. Plus, one of the following hotends: E3D V6, Revo Six, Volcano, TH3D Tough, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then use the following:
    - ZYLTech Gear V3 E3DV6-Revo Six-BMO Gantry Adapter.stl
    - ZYLTech Gear V3 Gantry Clip.stl
    - Y axis offset is -9mm

Step 3 – Hero Me Base Selection (Bowden)

Hero Me Gen6 Bases (Bowden) and the hotends they support

If you plan to use a Direct Drive setup, skip to that section.

The Hero Me Bases shown below are examples, there are many more listed later as part of your selecting the appropriate base for your hotend.



Hero Me Bases above from left to right:

- HMG6_Base_E3DV6-Revo_Six-Spider-BMO.stl (E3D V6, E3D V6, Revo Six, Volcano, Tough, and other V6 clone hotends)
- HMG6 Base OEM-MK8-MS-Dragonfly BMS.stl (Creality OEM, MK8, Micro Swiss, Dragonfly BMS, and other MK8 clone hotends)
- HMG6 Base CR10S-Pro.stl (Creality OEM 'V6 style' and other large hotends)
- HMG6 Base Mosquito-Dragon-ST-HT.stl (MDD ready, Slice Mosquito, & Phaetus Dragon hotends)

Note that for any Hero Me DD base that has a collar style mount for the hotend, you will need to use one of the following collar STLs to lock the hotend in place. Some clones of name brand hotends that use a collar/groove mount do not match the collar shape, so you may have to print more than one of the following to match your specific hotend.

- HMG6 E3D V6 collar.stl
- HMG6 Groove Mount Collar.stl
- HMG6 Mosquito-Dragon Collar.stl
- HMG6 Universal collar.stl
- HMG6 DyzEnd-X-Pro collar.stl

Required Info: Hotend Brand/Model and type of mounting used. If you plan to use a Direct Drive setup, skip to that section.

Next, knowing which hotend you are using, select the right Base for your printer. There may be additional parts listed, you will need these as well (if listed with the base).

You only need to make one match that will identify one or two STL files needed from this section, then go on to Step 4.

ANYCUBIC Vyper
- HMG6 Base Anycubic Vyper.stl

Creality Stock / OEM, MK8 and other MK8 clone hotends
- HMG6 Base OEM-MK8-MS-MSDD-BMS.stl
  Or
- HMG6 Base OEM-MK8-MS-MSDD-BMS-Tall.stl (tall chimney)
  Or
- HMG6 Base OEM-MK8-MS-MSDD-BMS Ender 3V2.stl (for use with Ender 3 V2 only)

Creality OEM 'V6 style' and other large hotends (Not for E3D V6 or clones)
- HMG6 Base CR10S-Pro.stl
  Note that this is NOT an E3D V6 collar mounted hotend. It uses the stock two screws to mount the same as Creality's other MK8 type hotends. This is called 'V6 Style' only because of the cylindrical shape of the hotend is visually like the E3D V6.

Creality Spider
- HMG6 Base Spider-HIC.stl
  Note: The Creality Spider has two ways to mount it; E3D V6 collar type, and two screw horizontal mount. If you are going to use the collar mount, then make selections as if you ARE using an E3D V6 hotend unless there is a specific Spider collar specific STL.

E3D-Online V6 and Clones
E3D V6, Volcano, TH3D Tough, and other V6 clone hotends with a collar/groove mount
- HMG6 Base E3DV6-Revo Six-Spider-BMO.stl
- HMG6 Universal collar.stl
  Or
- HMG6 Base E3DV6-Revo Six-BMO Tall Ender 3V2.stl (for use with Ender 3 V2 only)
- HMG6 Universal collar.stl

E3D-Online Revo Six
- HMG6 Base E3DV6-Revo Six-Spider-BMO.stl
  Or
- HMG6 Base E3DV6-Revo Six-BMO Tall Ender 3V2.stl (for use with Ender 3 V2 only)
- HMG6 Universal collar.stl

E3D-Online Revo Micro
- HMG6 Base E3D Revo Micro.stl

E3D-Online Revo Voron
- **NOT YET AVAILABLE**

Micro Swiss All Metal
- Micro Swiss DD Base OEM-MK8-MS-BMS.stl
  OR
- Micro Swiss DD Base OEM-MK8-MS-BMS Tall.stl (tall chimney))
  Or
- HMG6 Base OEM-MK8-MS-MSDD-BMS Tall Ender 3V2.stl (for use with Ender 3 V2 only)

Phaetus Dragonfly BMO
- HMG6 Base E3DV6-Revo Six-Spider-BMO.stl
- HMG6 Universal collar.stl
  Or
  HMG6 Base E3DV6-Revo Six-BMO Tall Ender 3V2.stl (for use with Ender 3 V2 only)
- HMG6 Universal collar.stl

Phaetus Dragonfly BMS
- HMG6 Base OEM-MK8-MS-MSDD-BMS.stl
  Or
- HMG6 Base OEM-MK8-MS-MSDD-BMS-Tall.stl (tall chimney)
  Or
- HMG6 Base OEM-MK8-MS-MSDD-BMS Tall Ender 3V2.stl (for use with Ender 3 V2 only)

Phaetus Dragonfly HIC
- HMG6 Base Spider-HIC.stl

Phaetus Dragon
- HMG6 Base Mosquito-Dragon-ST-HT.stl
  Note: The Phaetus Dragon has two ways to mount it; E3D V6 collar type, and four screw vertical mount. If you are going to use the collar mount, then make selections as if you ARE using an E3D V6 hotend unless there is a specific Dragon collar specific STL.

Phaetus Rapido
- HMG6 Base Phaetus Rapido HF-UHF.stl
  Note: The Phaetus Rapido has two ways to mount it; E3D V6 collar type, and four screw vertical mount. If you are going to use the collar mount, then make selections as if you ARE using an E3D V6 hotend unless there is a specific Rapido collar specific STL.

Slice Engineering Mosquito & Phaetus Dragon (screws) hotends
- HMG6 Base Mosquito-Dragon-ST-HT.stl

Slice Engineering Copperhead
- HMG6 Base Slice Copperhead.stl
  Note: The Copperhead has two ways to mount it; E3D V6 collar type, and four screw vertical mount. If you are going to use the collar mount, then make selections as if you ARE using an E3D V6 hotend unless there is a specific Copperhead collar specific STL.

Dyze Designs DyzEnd-X and DyzEnd Pro hotends (not direct drive)
- HMG6 Base DyzEnd-X-Pro.stl
- HMG6 DyzEnd-X-Pro collar.stl
  Does not use the 25mm fan included with the DyzEnd. Use a 40mm axial fan.

Step 4 – Hero Me Base Selection (Direct Drive)

Hero Me Gen6 Direct Drive Bases and the hotends they support

This section is organized by Hotend brand/type and then by extruder brand/type.

Required Info: Hotend brand/model and mount type. Direct Drive extruder brand/model. Note: IF your setup is not listed here, it may be listed in the Remixes section of the Hero Me Gen6 project on Thingiverse.com or Printables.com. If you are using a Bowden setup, skip this section.

You only need to make one match that will identify one or two STL files needed from this section, then go on to Step 5.

REMINDER: Hero Me Naming Lingo. Some terms can be used in combination in a single STL:

Reverse - Used in STL direct drive base filenames. The stepper motor will face the back of the printer. If a Hero Me DD Base STL **does NOT have 'reverse'** in the filename, then the stepper motor faces the front of the printer.

Mirror - Used in STL direct drive base filenames. The extruder is a mirrored (left hand) version from the vendor.If a Hero Me DD Base STL does NOT have 'reverse' in the filename, then the stepper motor faces the front of the printer.

Tall – Used in STL direct drive base filenames. STLs with this attribute are for use with some tall x carriages to have the stepper fit above the X carriage facing the back of the printer.

Right - Used in STL direct drive base filenames. STLs with this attribute are for use with very tall x carriages. The stepper motor is turned 90 degrees to the right.

Creality OEM-MK8-MS-BMS

If your hotend is Creality OEM/Stock, MK8, Micro Swiss, or a Dragonfly BMS (or any other hotend that uses two M3 bolts to mount horizontally), the find your extruder brand and model in the following. If not, skip to the next section on page 33. You only need one Hero Me DD Base STL:

Bondtech

- HMG6 DD Base OEM-MK8-MS-BMS - MG Mini.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Bondtech BMG Mirror Reverse.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Bondtech BMG Mirror.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Bondtech MG Reverse.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Bondtech BMG.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Bondtech LGX Lite Bottom Mount Reverse.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Bondtech LGX Lite Reverse.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Bondtech LGX Lite.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Bondtech LGX Reverse.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Bondtech LGX.stl
- HMG6 DD Base Spider Screws - Bondtech BMG Reverse.stl

Creality

- HMG6 DD Base OEM-MK8-MS-BMS - Creality Dual Gear Reverse.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Creality Dual Gear Right.stl
  This is used when the stepper needs to be at 90 degrees
- HMG6 DD Base OEM-MK8-MS-BMS - Creality Dual Gear Tall Reverse.stl
  This is used with some tall X carriages
- HMG6 DD Base OEM-MK8-MS-BMS - Creality Single Gear Reverse.stl

E3D Titan

- HMG6 DD Base OEM-MK8-MS-BMS - Titan Reverse.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Titan Tall-Reverse.stl

Micro Swiss
- Micro Swiss DD Base OEM-MK8-MS-BMS Tall.stl
- Micro Swiss DD Base OEM-MK8-MS-BMS.stl

Neptune 3
- Neptune 3 DD Base OEM-MK8-MS-BMS - Bondtech LGX Lite.stl
- Neptune 3 DD Base OEM-MK8-MS-BMS - Orbiter V2.0.stl
- Neptune 3 DD Base OEM-MK8-MS-BMS – Stock.stl

Orbiter
- HMG6 DD Base OEM-MK8-MS-BMS - Orbiter v1.5 Reverse.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Orbiter v1.5.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Orbiter v2.0 Reverse.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Orbiter v2.0.stl
- HMG6 DD Base Spider-HIC - Orbiter v1.5 Reverse.stl
- HMG6 DD Base Spider-HIC - Orbiter v1.5.stl

Sailfin
- HMG6 DD Base OEM-MK8-MS-BMS - Sherpa Mini.stl

Sherpa
- HMG6 DD Base OEM-MK8-MS-BMS - Sherpa Micro.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Sherpa Mini.stl

Smartwatch
- HMG6 DD Base OEM-MK8-MS-BMS - Smartwatch Clockwork.stl

Sovol
- Sovol SV01 DD Base OEM-MK8-MS-BMS.stl
  Then choose one of the following:
  - Sovol SV01 BMG Standard Stepper Motor Mount.stl
  - Sovol SV01 BMG Mirrored Stepper Motor Mount.stl
  - Sovol SV01 Stock Stepper Motor Mount.stl

E3D-Online V6-Revo Six-Revo Micro-BMO

If your hotend is an E3D V6, Revo Six, Revo Micro, Revo Voron, Volcano, TH3D Tough, Copperhead, Mosquito (stock), or Dragonfly BMO (or any other hotend that use a collar/groove mount, or are vertically mounted) then find your hotend and extruder brand and model in the following:

Note that for any Hero Me DD base that has a collar style mount for the hotend, you will need to use one of the following collar STLs to lock the hotend in place. Some clones of name brand hotends that use a collar/groove mount do not match the collar shape, so you may have to print more than one of the following to match your specific hotend.

- HMG6 E3D V6 collar.stl
- HMG6 Groove Mount Collar.stl
- HMG6 Mosquito-Dragon Collar.stl
- HMG6 Universal collar.stl
- HMG6 DyzEnd-X-Pro collar.stl

Bondtech
- HMG6 DD Base E3D Revo Micro - Bondtech BMG Reverse.stl
- HMG6 DD Base E3D Revo Micro - Bondtech LGX Lite.stl
- HMG6 DD Base E3D Revo Voron - Bondtech LGX Reverse.stl
- HMG6 DD Base E3D Revo Voron - Bondtech LGX.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Bondtech BMG Mirror Reverse.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Bondtech BMG Mirror.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Bondtech BMG Reverse.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Bondtech BMG.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Bondtech LGX Lite Bottom Mount Reverse.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Bondtech LGX Lite.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Bondtech LGX Tall.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Bondtech LGX Reverse.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Bondtech LGX.stl
- HMG6 DD Base Spider Collar- Bondtech BMG Reverse.stl

Creality
- HMG6 DD Base E3DV6-Revo Six-BMO - Creality Dual Gear Right.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Creality Dual Gear Reverse.stl
  This is used when the stepper needs to be at 90 degrees
- HMG6 DD Base E3DV6-Revo Six-BMO - Creality Dual Gear Tall Reverse.stl
  This is used with some tall X carriages
- HMG6 DD Base E3DV6-Revo Six-BMO - Creality Single Gear Reverse.stl

E3D Titan
- HMG6 DD Base E3DV6-Revo Six-BMO - Titan Reverse.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Titan Tall-Reverse.stl

Orbiter
- HMG6 DD Base E3D Revo Micro - Orbiter V1.5 Reverse.stl
- HMG6 DD Base E3D Revo Micro - Orbiter V1.5.stl
- HMG6 DD Base E3D Revo Micro - Orbiter V2.0 Reverse.stl
- HMG6 DD Base E3D Revo Micro - Orbiter V2.0.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Orbiter v1.5 Reverse.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Orbiter v1.5.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Orbiter v2.0 Reverse.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Orbiter v2.0.stl

Sailfin
- HMG6 DD Base E3D Revo Micro - Sherpa Mini.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Sherpa Mini.stl

Sherpa
- HMG6 DD Base E3D Revo Micro - Sherpa Micro Reverse.stl
- HMG6 DD Base E3D Revo Micro - Sherpa Micro.stl
- HMG6 DD Base E3D Revo Micro - Sherpa Mini.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Sherpa Micro.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Sherpa Mini.stl

Sovol

- Sovol SV01 DD Base Stock V5-E3DV6-Revo Six-BMO.stl
  Then choose one of the following:
    - Sovol SV01 BMG Standard Stepper Motor Mount.stl
    - Sovol SV01 BMG Mirrored Stepper Motor Mount.stl
    - Sovol SV01 Stock Stepper Motor Mount.stl

Two Trees

- Sapphire Pro E3DV6-Revo Six-Spider-BMO-Dragon-Mosquito-LGX DD Gantry Adapter.stl
- Sapphire Pro HMG6 DD Base Slice Mosquito for Sapphire Pro.stl
  Or
- Sapphire Pro E3DV6-Revo Six-Spider-BMO-Dragon-Mosquito-Sherpa Mini DD Gantry Adapter.stl
- Sapphire Pro HMG6 DD Base Phaetus Dragon.stl

Voron Switchwire Afterburner/Stealthburner

- HMG6 Base E3DV6-Revo Six-BMO - Hypersonic.stl
- HMG6 E3DV6 Collar - Hypersonic.stl
- HMG6 Afterburner Extruder Cover.stl
- No changes needed for the Stealthburner extruder cover

Phaetus Dragon

- Anycubic Vyper DD Base - Phaetus Dragon - Orbiter v2.0 Reverse.stl
- HMG6 DD Base Phaetus Dragon - Bondtech BMG Mirror Reverse.stl
- HMG6 DD Base Phaetus Dragon - Bondtech BMG Reverse.stl
- HMG6 DD Base Phaetus Dragon - Bondtech LGX Lite Reverse.stl
- HMG6 DD Base Phaetus Dragon - Bondtech LGX Lite.stl
- HMG6 DD Base Phaetus Dragon - Bondtech LGX Reverse.stl
- HMG6 DD Base Phaetus Dragon - Bondtech LGX.stl
- HMG6 DD Base Phaetus Dragon - Orbiter v1.5.stl
- HMG6 DD Base Phaetus Dragon - Orbiter v2.0 Reverse.stl
- HMG6 DD Base Phaetus Dragon - Orbiter v2.0.stl
- HMG6 DD Base Phaetus Dragon - Sherpa Micro.stl
- HMG6 DD Base Phaetus Dragon - Sherpa Mini.stl
- HMG6 DD Base Phaetus Dragon Groove - Orbiter v1.5.stl

Phaetus Dragonfly HIC

- HMG6 DD Base Dragonfly HIC - Orbiter v1.5.stl
- HMG6 DD Base Dragonfly HIC - Orbiter v2.0.stl

Slice Copperhead

- HMG6 DD Base Copperhead Collar - LGX Lite.stl
- HMG6 DD Base Copperhead Collar - LGX Reverse.stl
- HMG6 DD Base Copperhead Collar - LGX.stl
- HMG6 DD Base Copperhead Screw - LGX Lite.stl
- HMG6 DD Base Copperhead Screw - LGX Reverse.stl
- HMG6 DD Base Copperhead Screw - LGX.stl
- HMG6 DD Base Slice Copperhead Groove - Orbiter v1.5.stl
- HMG6 DD Base Slice Copperhead Groove - Orbiter v2.0.stl
- HMG6 DD Base Slice Copperhead Screw - Orbiter v1.5.stl
- HMG6 DD Base Slice Copperhead Screw - Orbiter v2.0.stl

Slice Mosquito

- HMG6 DD Base Mosquito - Bondtech BMG Mirror Reverse.stl
- HMG6 DD Base Mosquito - Bondtech BMG Reverse.stl
- HMG6 DD Base Mosquito - Bondtech BMG-M Mirror Reverse.stl
- HMG6 DD Base Mosquito - Bondtech BMG-M Mirror.stl
- HMG6 DD Base Mosquito - Bondtech BMG-M Reverse.stl
- HMG6 DD Base Mosquito - Bondtech BMG-M.stl
- HMG6 DD Base Mosquito - Bondtech BMG.stl
- HMG6 DD Base Mosquito - Bondtech LGX Lite Reverse.stl
- HMG6 DD Base Mosquito - Bondtech LGX Lite.stl
- HMG6 DD Base Mosquito - Bondtech LGX Reverse.stl
- HMG6 DD Base Mosquito - Bondtech LGX.stl
- HMG6 DD Base Mosquito - Orbiter v1.5 Reverse.stl
- HMG6 DD Base Mosquito - Orbiter v1.5.stl
- HMG6 DD Base Mosquito - Orbiter v2.0 Reverse.stl
- HMG6 DD Base Mosquito - Orbiter v2.0.stl
- HMG6 DD Base Mosquito - Sherpa Micro.stl
- HMG6 DD Base Mosquito - Sherpa Mini.stl

Additional DD adapters can be found in this collection of Hero Me GEN6 Thingiverse projects:
https://www.thingiverse.com/mediaman/collections/hero-me-cooling-systems

Step 5 – Hero Me Part Cooling Duct Selection

Hero Me Gen6 Part Cooling Ducts by ACWest. Supporting 5015, 5020, 4020, and 4010 radial fans (choose one single or dual or choose two single):

Now on to the parts cooling fan(s) choices. Based upon which fan or fans you want to use, select the single duct or pair of ducts that meet your needs. Note that the Lightweight ducts give the best visibility of your printer's hotend.

Important Note: Inexpensive 3D printer manufacturers use the lowest cost, or smallest size items possible when assembling their printers. While this gets you a very low-cost printer to purchase, it also compromises the performance and capabilities of the printer. One of the most frequent upgrades (if not THE most frequent) is in part cooling. Why else are you are here reading this now?

DISCLAIMER: I do not recommend the manufacturer supplied OEM 4010 radial fan used alone as your cooling fan setup, especially with a dual duct. A single 4010 radial fan does not produce enough CFM (air flow) to properly cool your parts. Using a single 4010 fan to drive dual ducts and will have no benefit for overhangs or bridging. If you choose not to use a second 4010 fan with your OEM 4010 fan (or replace it completely with a higher CFM fan like 4020, 5015, or 5020), please do not complain to me when your part cooling is sub-par, overhangs droop, or are not able to bridge wide gaps. This is not a Hero Me Gen6 design flaw, this is due to insufficient air flow from these small fans.

Required Info: Type and number of part cooling fans.

The Part Cooling Fan(s) selection is organized by nozzle position and then by fan size. What I mean by nozzle position is this. There are two scenarios where the nozzle is not in the standard position compared to the majority of use cases.

The first are very tall hotends such as the **Phaetus Rapido** and **E3D Volcano** (and others like them). The part cooling ducts for this type of hotend are known as 'Tall Ducts'. These ducts need to be able to reach down further to reach the nozzle of these hotends.

The second outlier is the **Micro Swiss Direct Drive kit** and **Elegoo Neptune 3** where the nozzle is further back in the Y axis. The part cooling ducts for this type of hotend are known as 'Long Ducts'. These ducts need to be able to reach back further to reach the nozzle of the hotends used in either the MS DD kit or the Neptune 3.

All other Hero Me Gen6 setups use the 'Standard' part cooling ducts.

REMINDER: Hero Me Naming Lingo. Some terms can be used in combination in a single STL:

> **Tall** – Used in STL part cooling duct filenames. STLs with this attribute are for use with very tall hotends (e.g., Rapido UHF, E3D-Online Volcano, etc.) These ducts are too tall for most hotends.
>
> **Long** – Used in STL part cooling duct filenames. STLs with this attribute are for use with very specific printer setups when called for in the documentation (e.g., Micro Swiss DD kits, Neptune 3). These ducts should not be used for any other configurations, as the duct tips will be out of alignment with the nozzle.
>
> **Brace** – Used in STL part cooling duct filenames. STLs with this attribute have a brace ring that connects to both fan mount points

Lightweight – Used in STL part cooling duct filenames. STLs with this attribute are lower weight versions of the other equivalent ducts.

Forward – Used in STL part cooling duct filenames. STLs with this attribute have the fan moved forward more than other equivalent ducts. This enables a BLTouch or CRTouch to be mounted behind the left duct to be closer to the nozzle to improve the mesh created from leveling the bed.

Dual - Used in STL part cooling duct filenames. STLs with this attribute use two fans.

Single - Used in STL part cooling duct filenames. STLs with this attribute use one fan.

30deg tilt - Used in STL part cooling duct filenames. STLs with this attribute have the fan tilted forward by 30 degrees compared to other equivalent ducts. This is a special case duct, only used in a direct drive setup where the stepper motor is turned 90 degrees to the left or the right. The fan(s) would otherwise collide with the stepper or worse (not be mountable).

Select the type of duct, then the fan size, and finally the part cooling duct you want to use.

You only need to make one match that will identify one or two STL files needed from this section, then go on to Step 6.

Standard – HMG6 Part Cooling Ducts (for most setups). – Pick One Set

4010 Fans

Use one:
- HMG6-dual-4010.stl
- HMG6-single-4010.stl

Use pair:
- HMG6-lightweight-4010-left.stl
- HMG6-lightweight-4010-right.stl

Use pair: For use with BLTouch and CRTouch to hide behind left duct
- HMG6-lightweight-forward-4010-left.stl
- HMG6-lightweight-forward-4010-right.stl

Special cases only (use one):
- HMG6-dual-4010-30deg tilt.stl
- HMG6-single-4010-30deg tilt.stl

4020 fans

Use this with all 4020 fans that have a gap in the mount point
- 4020 Fan Mount Spacer.stl

Use one:
- HMG6-dual-4020.stl
- HMG6-single-4020.stl

Use pair:
- HMG6-lightweight-4020-left.stl
- HMG6-lightweight-4020-right.stl

Use pair:
- HMG6-lightweight-4020-left-brace.stl
- HMG6-lightweight-4020-right-brace.stl

Use pair: For use with BLTouch and CRTouch to hide behind left duct
- HMG6-lightweight-forward-4020-left.stl
- HMG6-lightweight-forward-4020-right.stl

Special cases only (use one)
- HMG6-dual-4020-30deg tilt.stl
- HMG6-single-4020-30deg tilt.stl

5015 fans

Use one:
- HMG6-dual-5015-6deg-brace.stl
- HMG6-dual-5015-6deg-brace-inserts.stl
- HMG6-dual-5015.stl
- HMG6-single-5015-6deg-brace.stl
- HMG6-single-5015.stl

Use pair:
- HMG6-lightweight-5015-left-brace.stl
- HMG6-lightweight-5015-right-brace.stl

Use pair: For use with BLTouch and CRTouch to hide behind left duct
- HMG6-lightweight-forward-5015-left-brace.stl
- HMG6-lightweight-forward-5015-right-brace.stl

For use with IDEX printers
- HMG6-single-5015-Trihorn-Duct-Left-brace.stl
- HMG6-single-5015-Trihorn-Duct-Right-brace.stl

Special cases only
- HMG6-dual-5015-30deg tilt.stl
- HMG6-single-5015-30deg tilt.stl

5020 fans

Use one
- HMG6-dual-5020 stl
- HMG6-single-5020.stl

Use pair:
- HMG6-lightweight-5020-left.stl
- HMG6-lightweight-5020-right.stl

Use pair: For use with BLTouch and CRTouch to hide behind left duct
- HMG6-lightweight-forward-5020-left.stl
- HMG6-lightweight-forward-5020-right.stl

Special cases only
- HMG6-dual-5020-30deg tilt.stl
- HMG6-single-5020-30deg tilt.stl

Long Ducts - Micro Swiss Direct Drive and Elegoo Neptune 3 specific versions of the HMG6 cooling ducts. – Pick One Set

4010 Fans

Use one:
- HMG6-long-dual-4010.stl
- HMG6-long-single-4010.stl
- HMG6-long-lightweight-4010 Pair with Supports.stl

Use pair:
- HMG6-long-lightweight-4010-left.stl
- HMG6-long-lightweight-4010-right.stl

Use pair: For use with BLTouch and CRTouch to hide behind left duct
- HMG6-long-lightweight-forward-4010-left.stl
- HMG6-long-lightweight-forward-4010-right.stl

Special cases only (use one):
- HMG6-long-dual-4010-30deg tilt.stl
- HMG6-long-single-4010-30deg tilt.stl

4020 fans

Use this with all 4020 fans that have a gap in the mount point
- 4020 Fan Mount Spacer.stl

Use one:
- HMG6-long-dual-4020.stl
- HMG6-long-single-4020.stl

Use pair:
- HMG6-long-lightweight-4020-left.stl
- HMG6-long-lightweight-4020-right.stl

Use pair: For use with BLTouch and CRTouch to hide behind left duct
- HMG6-long-lightweight-forward-4020-left.stl
- HMG6-long-lightweight-forward-4020-right.stl

Special cases only (use one)
- HMG6-long-dual-4020-30deg tilt.stl
- HMG6-long-single-4020-30deg tilt.stl

5015 fans

Use one:
- HMG6-long-dual-5015-6deg-brace.stl
- HMG6-long-dual-5015-brace-inserts.stl
- HMG6-long-dual-5015.stl
- HMG6-long-single-5015.stl

Use Pair:
- HMG6-long-lightweight-5015-left-brace-insert.stl
- HMG6-long-lightweight-5015-right-brace-insert.stl

Use pair:
- HMG6-long-lightweight-5015-left-brace.stl
- HMG6-long-lightweight-5015-right-brace.stl

Use pair: For use with BLTouch and CRTouch to hide behind left duct
- HMG6-long-lightweight-forward-5015-left-brace.stl
- HMG6-long-lightweight-forward-5015-right-brace.stl

Special cases only
- HMG6-long-dual-5015-30deg tilt.stl
- HMG6-long-single-5015-30deg tilt.stl

5020 fans

Use one
- HMG6-long-dual-5020.stl
- HMG6-long-single-5020.stl

Use pair:
- HMG6- long-lightweight-5020-left.stl
- HMG6- long-lightweight-5020-right.stl

Use pair: For use with BLTouch and CRTouch to hide behind left duct
- HMG6-long-lightweight-forward-5020-left.stl
- HMG6-long-lightweight-forward-5020-right.stl

Special cases only
- HMG6- long-dual-5020-30deg tilt.stl
- HMG6-long-single-5020-30deg tilt.stl

Tall Ducts - Phaetus Rapido HF, UHF and E3D Volcano specific versions of the HMG6 cooling ducts. – Pick One Set

4010 Fans

Use one:
- HMG6-tall-dual-4010.stl
- HMG6-tall-single-4010.stl

Use pair:
- HMG6-tall-lightweight-4010-left.stl
- HMG6-tall-lightweight-4010-right.stl

Use pair: For use with BLTouch and CRTouch to hide behind left duct
- HMG6-tall-lightweight-forward-4010-left.stl
- HMG6-tall-lightweight-forward-4010-right.stl

Special cases only (use one):
- HMG6-tall-dual-4010-30deg tilt.stl
- HMG6-tall-single-4010-30deg tilt.stl

4020 fans

Use this with all 4020 fans that have a gap in the mount point
- 4020 Fan Mount Spacer.stl

Use one:
- HMG6-tall-dual-4020.stl
- HMG6-tall-single-4020.stl

Use pair:
- HMG6-tall-lightweight-4020-left.stl
- HMG6-tall-lightweight-4020-right.stl

Use pair: For use with BLTouch and CRTouch to hide behind left duct
- HMG6-tall-lightweight-forward-4020-left.stl
- HMG6-tall-lightweight-forward-4020-right.stl

Special cases only (use one)
- HMG6-tall-dual-4020-30deg tilt.stl
- HMG6-tall-single-4020-30deg tilt.stl

5015 fans

Use one:
- HMG6-tall-dual-5015-brace.stl
- HMG6-tall-dual-5015.stl
- HMG6-tall-single-5015.stl

Use pair:
- HMG6-tall-lightweight-5015-left.stl
- HMG6-tall-lightweight-5015-right.stl

Use pair: For use with BLTouch and CRTouch to hide behind left duct
- HMG6-tall-lightweight-forward-5015-left.stl
- HMG6-tall-lightweight-forward-5015-right.stl

Special cases only
- HMG6-tall-dual-5015-30deg tilt.stl
- HMG6-tall-single-5015-30deg tilt.stl

5020 fans

Use one
- HMG6-tall-dual-5020.stl
- HMG6-tall-single-5020.stl

Use pair:
- HMG6-tall-lightweight-5020-left.stl
- HMG6-tall-lightweight-5020-right.stl

Use pair: For use with BLTouch and CRTouch to hide behind left duct
- HMG6-tall-lightweight-forward-5020-left.stl
- HMG6-tall-lightweight-forward-5020-right.stl

Special cases only
- HMG6-tall-dual-5020-30deg tilt.stl
- HMG6-tall-single-5020-30deg tilt.stl

Step 6 – Hero Me ABL Selection (optional)

Hero Me Gen6 ABL (Automatic Bed Leveling) mounts for EZABL, BLTouch, CRTouch, Creality Stock, 12mm & 18mm OEM Sensors (choose one):

Required Info: Brand/model of ABL sensor to be used and which part cooling duct you selected above.

Finally, on to the ABL mounts. If you are not going to use an ABL sensor, you can skip this section. Based upon the ABL sensor you have and the part cooling fan or fans you are going to use, select the appropriate ABL mount.

If you are not using a fan on the left, then use the appropriate ABL mount that has 'No Duct' in the name. If you are using a 4010 fan on the left, you will most likely need one with 'Narrow' or 'Compact' in the name. If you are using a 5015 fan on the left, you will most likely need one with 'Medium' in the name. If you are using a 5020 or a 4020 fan on the left, you will need one with 'Wide' in the name. Dual Ducts with a single fan, will most likely need an adapter with 'Narrow' in the name. This is not exact as there are combinations of ABL sensor and part cooling duct that need an ABL mount that is one size larger than above.

Important Note 1: The use of an ABL sensor with the Hero Me Gen6 will require you to update your firmware X & Y offsets for the sensor in relation to the hotend nozzle. While settings for various ABL setups are provided in Step 12 of the Assembly Guide, instructions on updating and compiling your firmware are not part of this guide. There are many sources available for this information (Facebook groups, YouTube videos, etc. If you purchase an EZABL Pro from TH3DStudios.com they provide complete instructions on how to make the firmware changes. If you have their EZBoard Lite, they even provide a web portal to help automate the firmware update. The firmware X, Y offsets for the ABL mount you select are found in Step 12 of the Hero Me assembly instructions below.

Important Note 2: If you have any Ender 5 series and are using any of the ABL sensor mounts, you may need to use a spacer to clear the metal clip that holds the belt on the left side. This applies to both the OEM gantry plate and the PrinterMods.com MDD plate. The spacer file is: Ender_5_ABL_Spacer.stl The firmware offset for the Y axis will increase by -6 (spacer width).

EZABL / OEM (8mm, 12mm, 18mm round)

- EZABL, EZABL Pro Sensor Mounts - Pick One
  - EZABL_Mount_No_Duct_18mm.stl (for use with no left fan)
  - EZABL_Mount_Close_18mm.stl (for use with single fan, dual duct)
  - EZABL_Mount_Narrow_18mm.stl (for use with 5015 single fan dual ducts)
  - EZABL_Mount_Medium_18mm.stl (for use with 5015 dual fans and 5015 dual fan ducts)
  - EZABL_Mount_Wide_18mm.stl (for use with 4020 dual fans)

- 18mm OEM/Generic Sensor Mounts - Pick One
  - OEM_Mount_No_Duct_18mm.stl (for use with no left fan)
  - OEM_Mount_Close_18mm.stl (for use with single fan, dual duct)
  - OEM_Mount_Narrow_18mm.stl (for use with 5015 single fan dual ducts)
  - OEM_Mount_Medium_18mm.stl (for use with 5015 dual fans and dual fan ducts)
  - OEM_Mount_Wide_18mm.stl (for use with 4020 dual fans)

- EZABL Mini and 12mm OEM Sensor Mounts - Pick One

    - EZABL-OEM_Mount_No_Duct_12mm.stl (for use with no left fan)
    - EZABL-OEM_Mount_Medium_12mm.stl (for use with 5015 single fan dual ducts, 5015 dual fans, and 5015 dual fan ducts)
    - EZABL-OEM_Mount_Wide_12mm.stl (for use with 4020 dual fans)

- 8mm OEM Sensor Mounts - Pick One
    - OEM_Mount_No_Duct_8mm.stl (for use with no left fan)
    - OEM_Mount_Medium_8mm.stl (for use with 5015 single fan dual ducts, 5015 dual fans, and 5015 dual fan ducts)
    - OEM_Mount_Wide_8mm.stl (for use with 4020 dual fans)

BLTouch

- BLTouch Wing - Pick One Wing
    - BLTouch_Wing_No_Duct.stl (for use with no left fan)
    - BLTouch_Wing_Narrow.stl (for use with 5015 single fan dual ducts)
    - BLTouch_Wing_Medium.stl (for use with 5015 dual fans and 5015 dual fan ducts)
    - BLTouch_Wing_Wide.stl (for use with 4020 dual fans)

- BLTouch Mount - Pick One Mount
    - BLTouch_Mount_Standard.stl (BLTouch perpendicular to X carriage)
    - BLTouch_Flat_Mount.stl (BLTouch parallel to X carriage, left of center)
    - BLTouch_Flat_Mount_Center.stl (BLTouch parallel to X carriage)

Or

- BLTouch Compact Mount (Set)
    - BLTouch_Wing_Compact.stl
    - BLTouch_Mount_Compact.stl
    - This set can be used to have the BLTouch sit behind a 4020 or 5015 Lightweight duct on the left.

- BLTouch Compact Mount ALT(Set)
    - BLTouch_Wing_Compact_alt.stl
    - BLTouch_Mount_Compact_alt.stl
    - This set provides for a taller hotend (more height range on BLTouch)

CR Touch

- CRTouch Wing - Pick One Wing
    - BLTouch_Wing_No_Duct.stl (for use with no left fan)
    - BLTouch_Wing_Narrow.stl (for use with 5015 single fan dual ducts)
    - BLTouch_Wing_Medium.stl (for use with 5015 dual fans and 5015 dual fan ducts)
    - BLTouch_Wing_Wide.stl (for use with 4020 dual fans)

- CR Touch Mount – Pick One Mount
    - CR Touch_Flat_Mount_center.stl (for use with no left fan)
    - CR Touch_Flat_Mount_right.stl (used with a medium or compact wing to get sensor closer to the nozzle. For use with no left fan)
    - CR Touch_Flat_Mount_left.stl (CRTouch parallel to X carriage, left of center)
    - CR Touch_Standard_Mount.stl (CRTouch perpendicular to X carriage)

- CR Touch Compact Mount (Set)
    - CR Touch_Mount_Compact.stl
    - CRTouch_Wing_Compact.stl
    - This set can be used to have the CR Touch sit behind a 4020 or 5015 Lightweight duct on the left.

Creality Stock

- Creality Stock Sensor Mounts - Pick One
    - OEM_Mount_Close_18mm.stl
    - OEM_Mount_Medium_18mm.stl
    - OEM_Mount_Narrow_18mm.stl
    - OEM_Mount_No_Duct_18mm.stl
    - OEM_Mount_Wide_18mm.stl

Other ABL Sensors

- Anycubic Vvper BLTouch Mount.stl
- Hallon Medium ABL Mount.stl
- PM Ender 5 ABL Spacer.stl
- TA Sensor ABL Mount.stl
- TA Sensor Flat ABL Mount.stl
- Touch-Mi Medium ABL Mount.stl
- Universal Hallon-Omron-TA ABI Mount.stl

Step 7 – Hero Me Gen6 Options (optional)

To wrap the choices up, select the heat sync fan guard or provide one of your own.

- HMG6 Jet Fan Guard.stl
- HMG6 Turbine Fan Guard.stl
- HMG6 Lightweight Fan Guard.stl

If you have an LED strip to light the hotend and are using two 5015 fans with the Lightweight ducts, be sure to print the STL file for the LED Bar.

- LED Straight Bar 51mm for Lightweight 5015 Ducts.stl
- LED Straight Bar 55mm for Lightweight 4020 Ducts.stl
- LED Curved Bar 100mm for Lightweight 5015 Ducts.stl
- LED Curved Bar 100mm for Lightweight 4020 Ducts.stl

If you are a Klipper firmware user and want to mount an ADXL345 accelerometer, the Hero Me Bases and DD Bases all have mount holes on the bottom of the Base. These are sized for M2.5 by 3mm threaded inserts. Some ADXL345 PCBs will fit this hole pattern, but many will not, so I have created adapters that mount to the bottom of the base allowing the PCB to attach to the adapter.

- ADXL345 Mount Spacer-14.4mm.stl
- ADXL345 Mount Spacer-15.4mm.stl
- ADXL345 Mount Spacer-20mm.stl

There are a few other optional STLs in the Options folder. These include:

40mm Fan Dial Gauge Holder 7_98mm-press.stl
40mm Fan Dial Gauge Holder 7_98mm-screw.stl

Use these to mount a Dial gauge to the Hero Me for analog bed level calibration.

HMG6 BMG PTFE Collar Insert v1.stl
HMG6 BMG PTFE Collar Insert v2.stl
HMG6 BMG PTFE Collar Insert v3.stl

In case you do not have the metal spacer that is used with some extruders (normally used for Bowden setups), I have three versions that can be used inside your extruder (BMG, Titan, others) to constrain the PTFE tube in a Hero Me DD setup.

You are now ready to proceed to the assembly procedures.

Hero Me Gen6 General Assembly Procedures:

Step 1: Download the current Hero Me Gen 6 STLs AND watch two assembly videos to become oriented to the assembly process

Note that public STL libraries will always be 30 days delayed from the STL files available to my patrons. Download the latest from Patreon here: https://www.patreon.com/posts/68674465

Remixes and other Hero Me compatible add-ons can be found on Printables.com and Thingiverse.com

Before you get started, I highly recommend that you watch these two videos.

The first is a June 6th YouTube video on the assembly of the Hero Me Gen6 by Vincent at YouMakeTech: https://youtu.be/JyRK7ab-JPw
When you are done be sure to read my comment below the video. While his assembly video is accurate, some of the things he says in the video are not up to date, as he was not working from the latest files or documentation.

The second video is a Hero Me Gen6 upgrade from Gen5 by Daniel at Crosslink.io has additional info: https://youtu.be/SAYI_T5YewQ

Please consider subscribing to these two great YouTube channels! More Hero Me Gen6 related videos are listed in the Hero Me Gen6 Videos section later in this guide.

If you skipped the parts cross reference, you would need the following information about your printer's setup to select the correct parts to print from the parts cross reference guide above.

Required:	Optional:
Printer Model Hotend type Fan(s) & size(s) for part cooling	ABL Sensor model/type (if any) Direct Drive extruder model/type (if I do not yet support your DD extruder, check the remixes on the Thingiverse project)

You will need an assortment of M3 screws as well as M3 threaded inserts to assemble the Hero Me Gen6 system onto your printer:

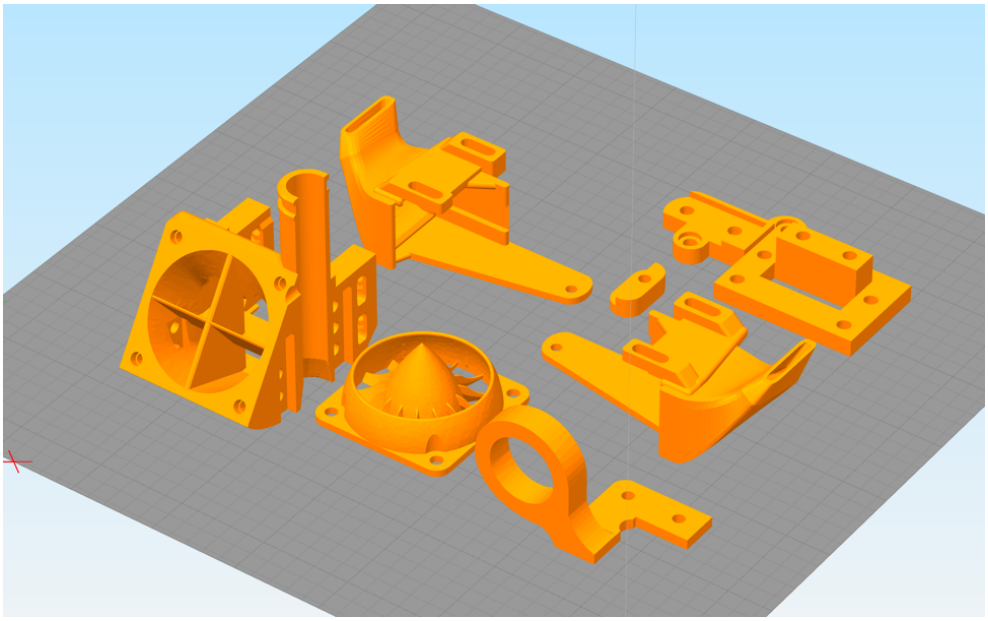
Because I cannot know the total number of M3 screws or what sizes any given Hero Me Gen6 setup will require (remember over 260 million combinations), I recommend that you purchase (if you don't already have a selection) a M3 screw assortment box that has M3 hex socket head or button head screws from 6mm to 30mm lengths. Note some setups may need a few M3 nuts due to the parts selection you make. See the Hardware section (Page 9) for links to several vendors for both M3 screws and M3 threaded inserts.

You will need the tools that came with your printer, hex wrenches, screw driver, as well as a soldering iron for the threaded inserts.

Step 2. Print the parts.

Recommended printer settings:
Set layer height between .2mm to .28mm (lower is fine, but not required, also slows the print time greatly).
Set perimeters to 3 walls.
Set infill to be between 35% and 50%. The Direct Drive Bases should be at 60% 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 hotend, you can use PLA+ for the cooling ducts and Hero Me base. I highly recommend using a silicone sock for you hotend in all cases. I have printed for four 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).

If you plan to use your printer with ASA, ABS, Nylon, or other high temp filaments, then you must print the Hero Me parts in at least ASA or ABS.

Step 3. Clean and trim the parts as needed. Install threaded inserts.

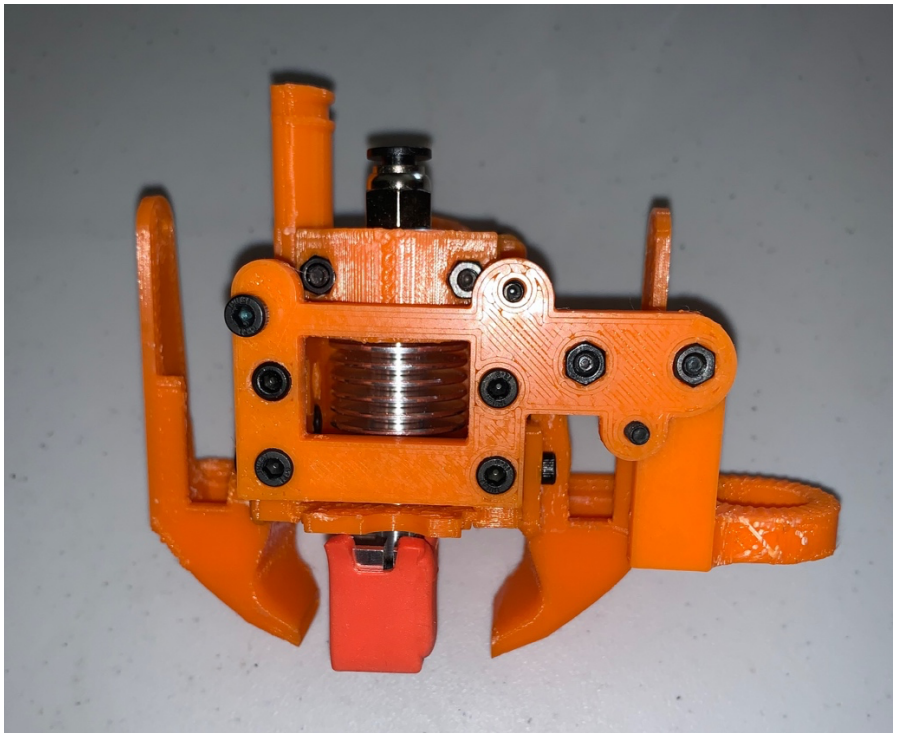
Test fit all the parts before assembly (and before installing inserts) to be sure that you have a good fit and proper contact. Test fit again after installing the inserts.

Install the M3 threaded inserts into all the parts that require them. The Hero Me Base will have at least 18 holes that need M3 threaded inserts. Hero Me DD Bases will use two to four addition M3 threaded inserts. There are NO M3 nuts used on any Hero Me Gen6 Base or DD Base.

The Gantry Adapter will use two threaded inserts for the ABL mount points. Other parts that use the insert are the Gantry Clips, Collar Mounts, and some ABL mounts (others accessory parts may still require M3 nuts in the captive sockets).

The bottom of every Hero Me Base and DD Base have two holes sized for M2.5 threaded inserts. These are optional. They are only used for adding an ADXL345 accelerometer for use with Klipper firmware to calibrate the printer.

There are several great YouTube videos that show the correct way to install the threaded inserts into your parts.

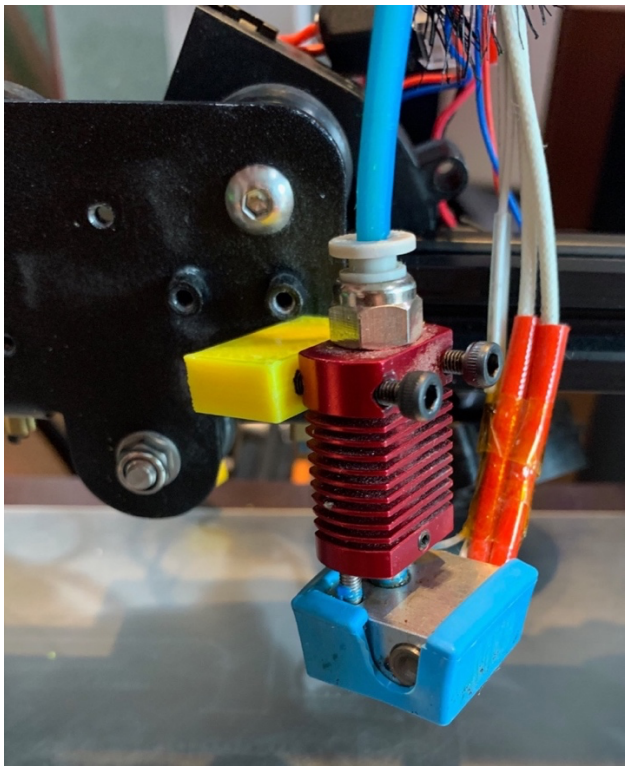


Depending on the height of your hotend block, on the Hero Me base you will want to choose one of the three cooling duct mount positions. The ducts provide vertical adjustment flexibility. Be sure you have printed the correct duct type for your hotend. See pages 35 and 36 for details.

The proper placement should give you 3-4mm of vertical adjustment. I recommend that the bottom of the part cooling duct should be 1.4mm to 1.8mm off the build plate when the nozzle is just touching the bed surface. 1.6mm is the sweet spot. There is an STL in the options folder you can print to help you set the correct height for your ducts once everything is assembled.

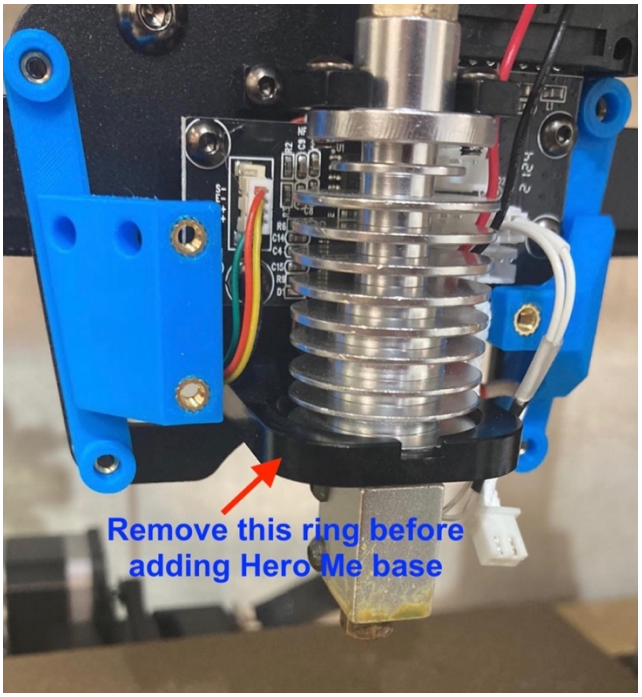
Step 4. Disassemble current hotend assembly from the X carriage.

Prepare and make any adjustments, wiring changes, fan changes or additions, or any other changes needed on you hotend wire loom before assembling the Hero Me Gen6 cooling system.



For many setups, you will need to remove the X carriage from the printer to properly assemble the Hero Me setup as some screws or Gantry clips mount from the back side.

ANYCUBIC Vyper specific step (all others skip to Step 5A/B)



If your model of Vyper has one, remove the black ring that surrounds the base of the heat sink. This part serves as protection should the nozzle have a crash from some sideways collision. This part serves no support function.

The screws are on the back of the X carriage. You will replace the ring with the following part (reuse the screws):

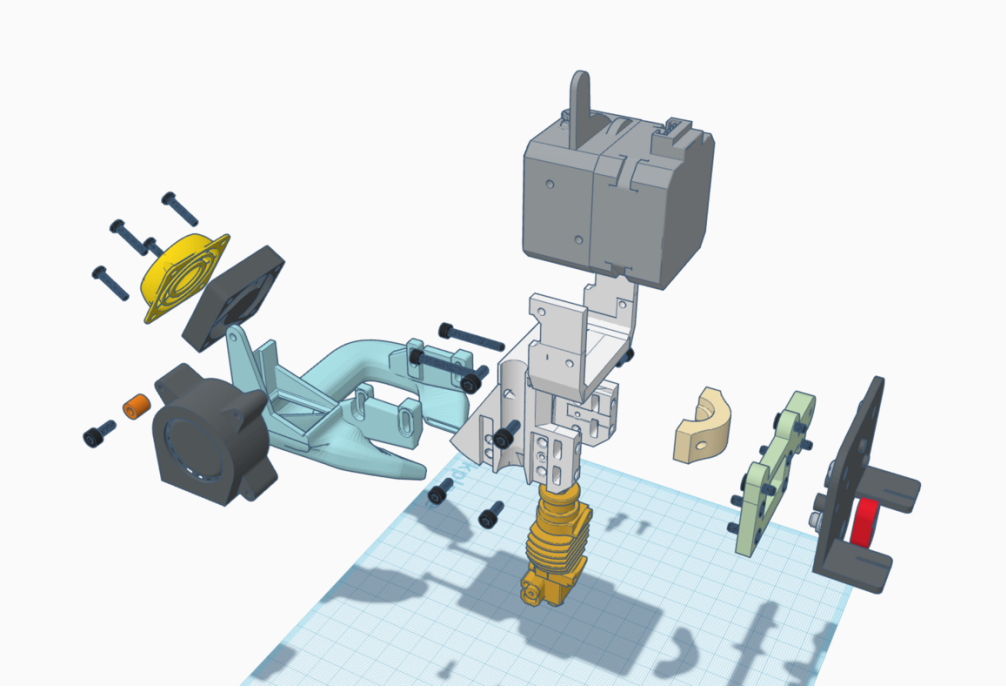
HMG6 Anycubic Vyper Heat Sink Brace.stl (print this part with 4 perimeters and 50% infill in PETG or ABS)

The black ring is no longer needed as the Hero Me Base and the heat sink brace parts perform the same function. Save the ring if you should ever want to return your hotend to stock.

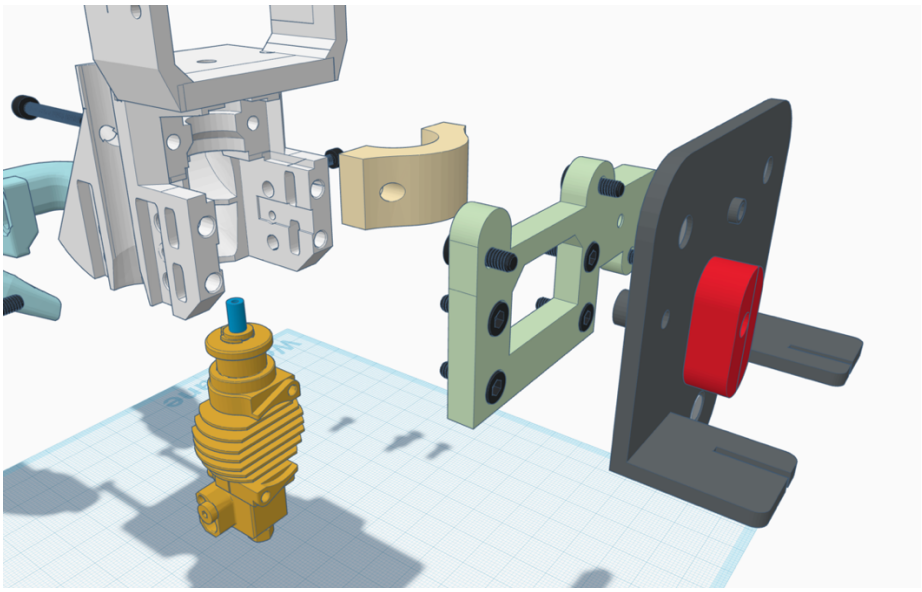
Go to Step 6.

Step 5. Hero Me Assembly

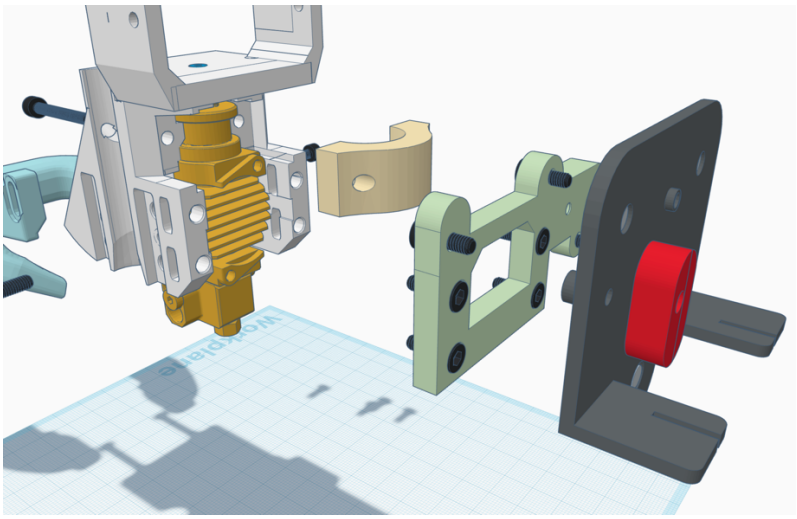
Below are a series of images that help show the assembly of the Hero Me Gen6 system to your X carriage. While your specific parts may be very different, they all follow the same basic pattern.



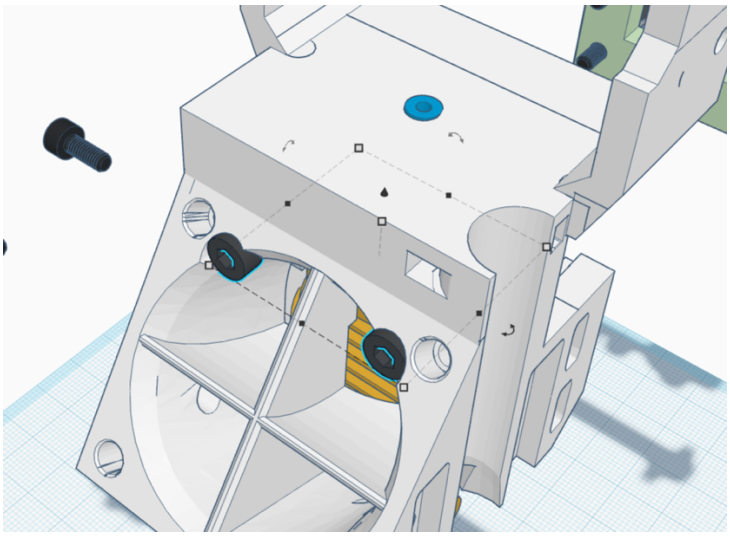
Exploded view of a Copperhead and LGX extruder with a 4020 part cooling fan mounting to an Ender 3 X carriage.



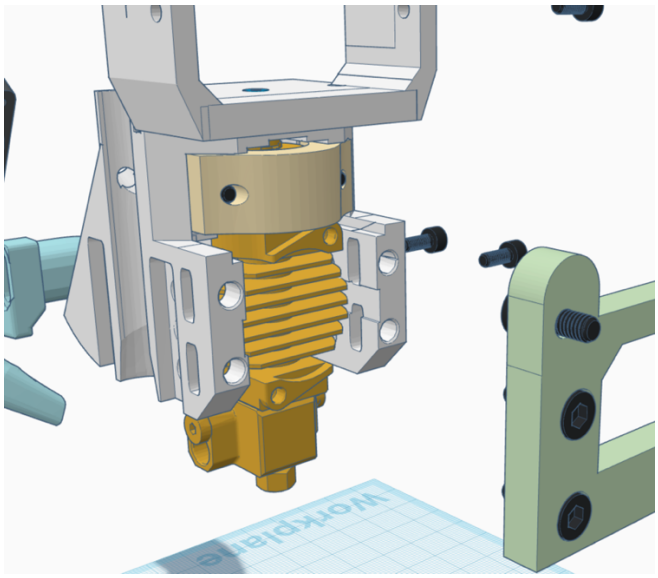
Start with the Hotend



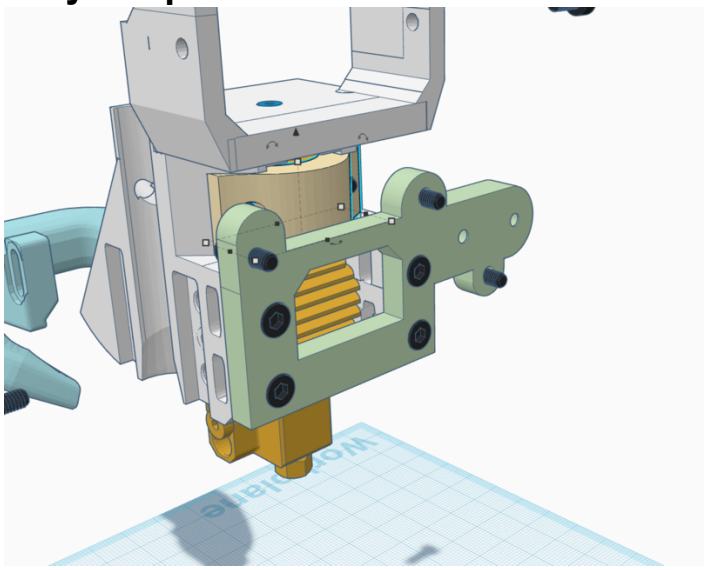
Attach hotend to Hero Me DD Base



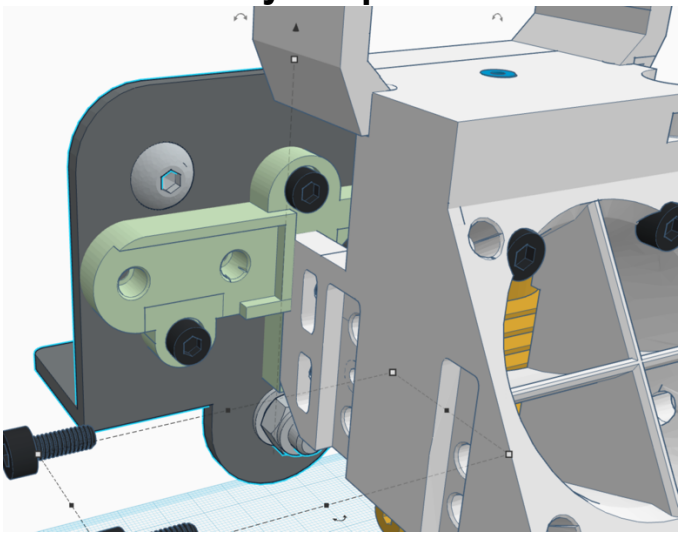
Insert M3 screws from the front



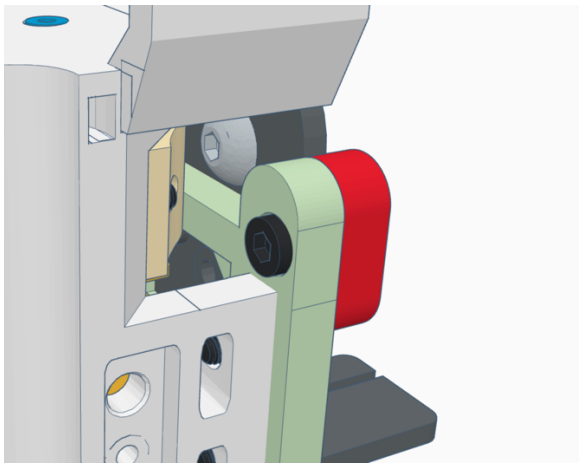
And secure to the collar. Note that stock hotends with screw mounts, attach to the Gantry Adapter and not the Hero Me Base.



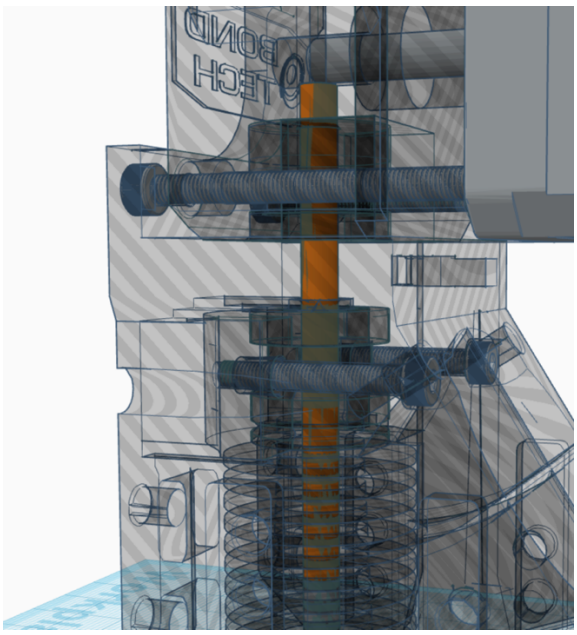
Attach the Gantry Adapter to the DD Base



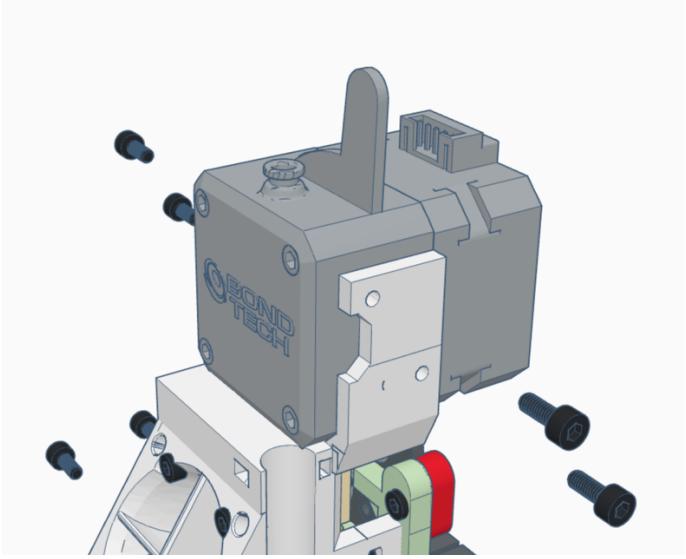
Mount the Gantry Adapter to the X carriage



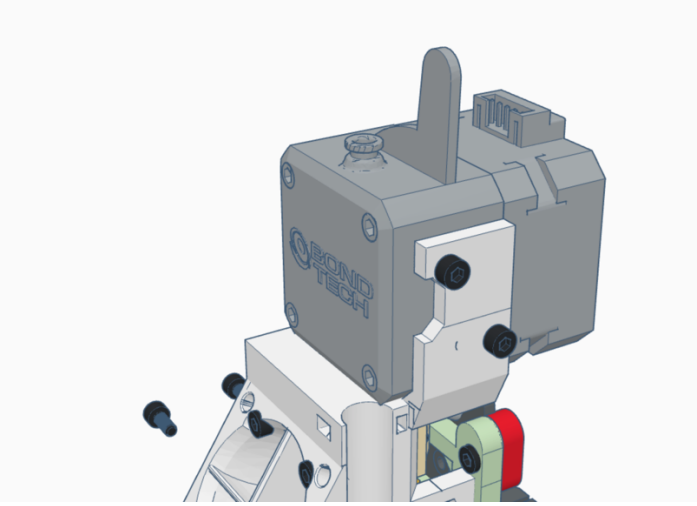
Add a Gantry Clip (If needed for your setup)



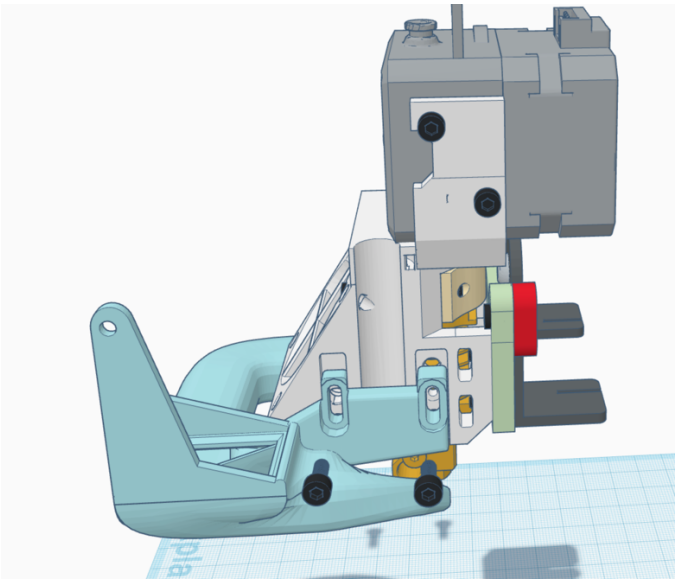
If using a Hero Me DD Base, Measure carefully & install the PTFE tube



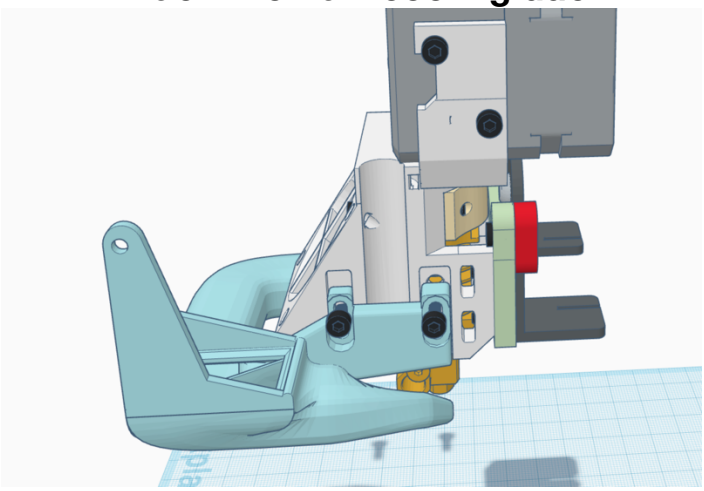
Attach the extruder to the DD Base



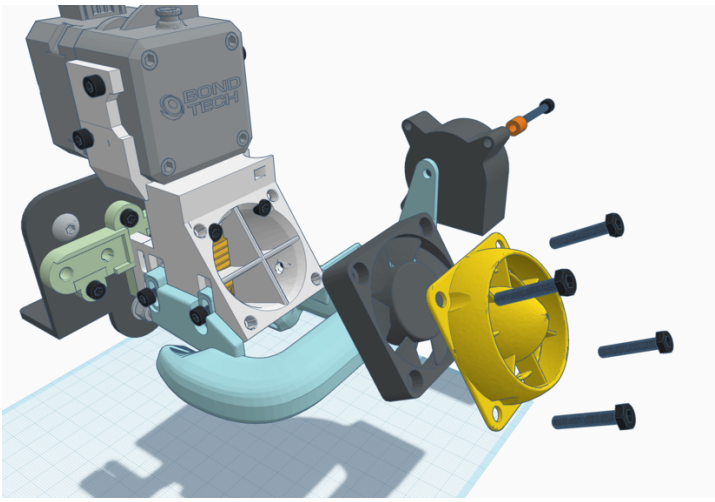
Secure with M3 screws



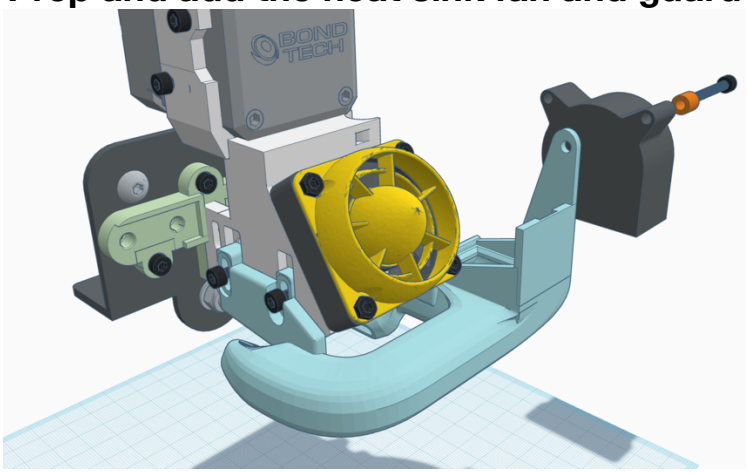
Attach the Part cooling duct



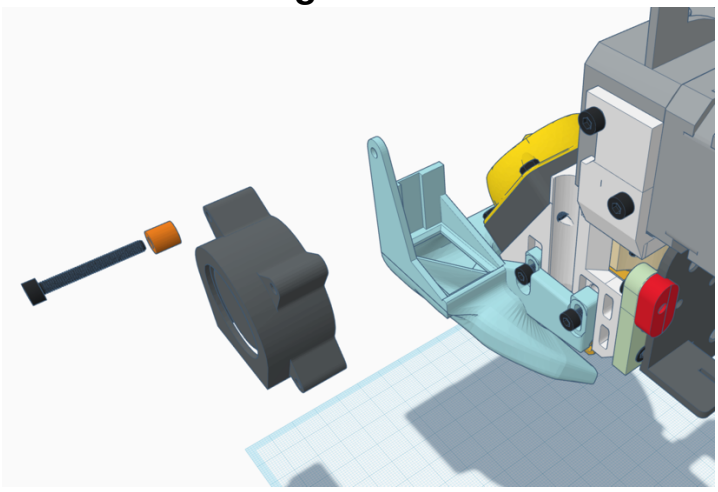
Secure with one M3 screw per post



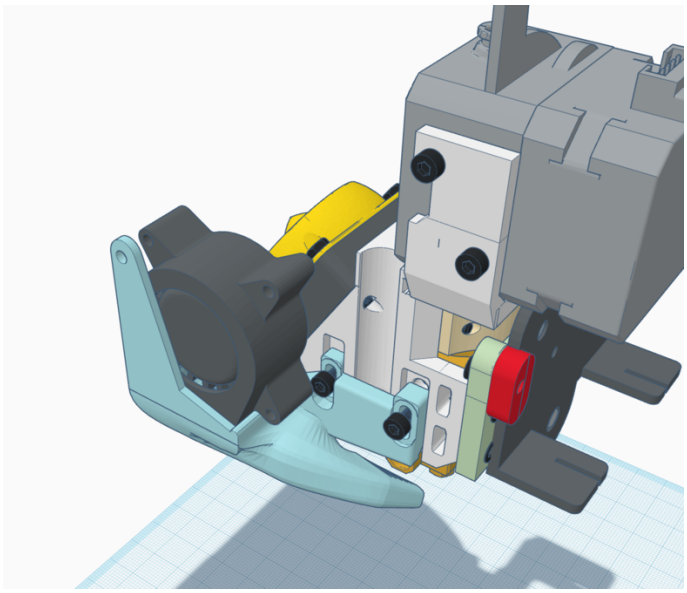
Prep and add the heat sink fan and guard



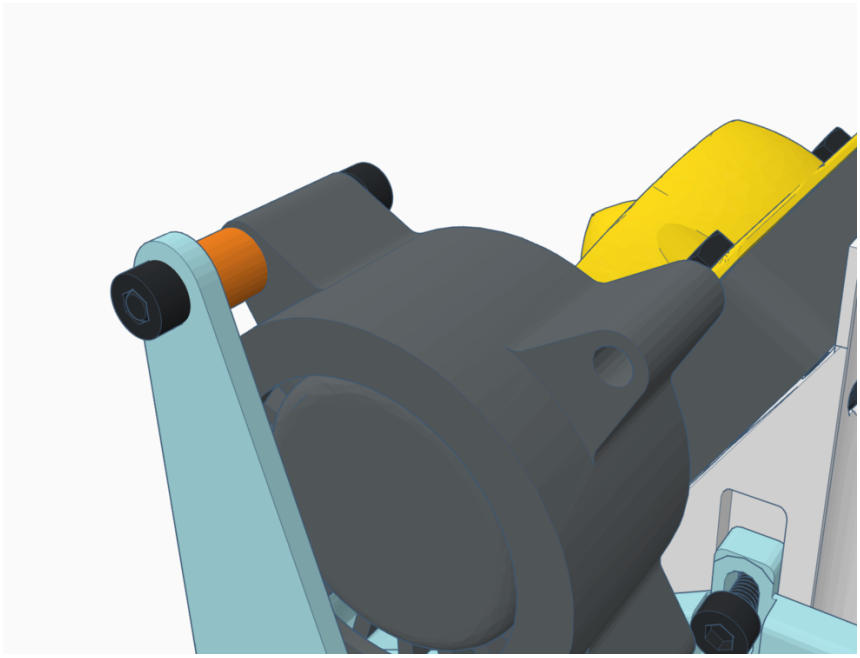
Secure the fan and guard with four M3 screws



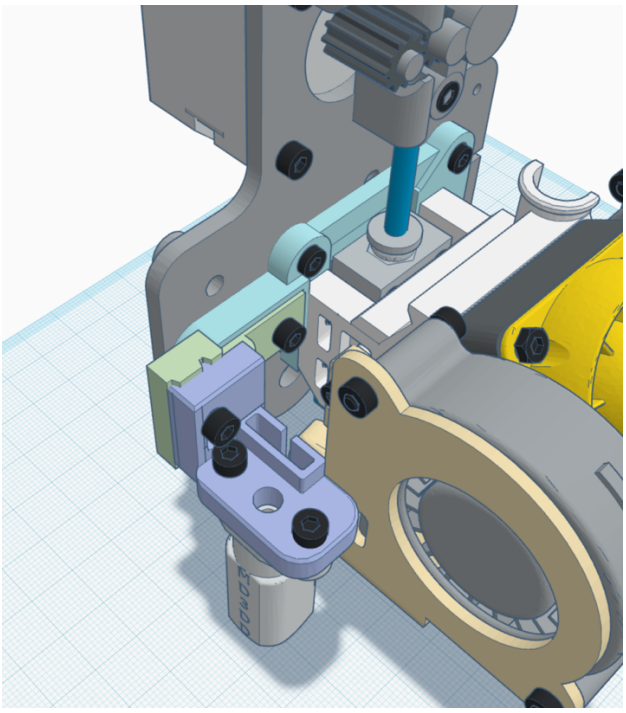
Attach the fan to the part cooling duct



Secure the fan to the duct. Some duct use two M3 screws per fan

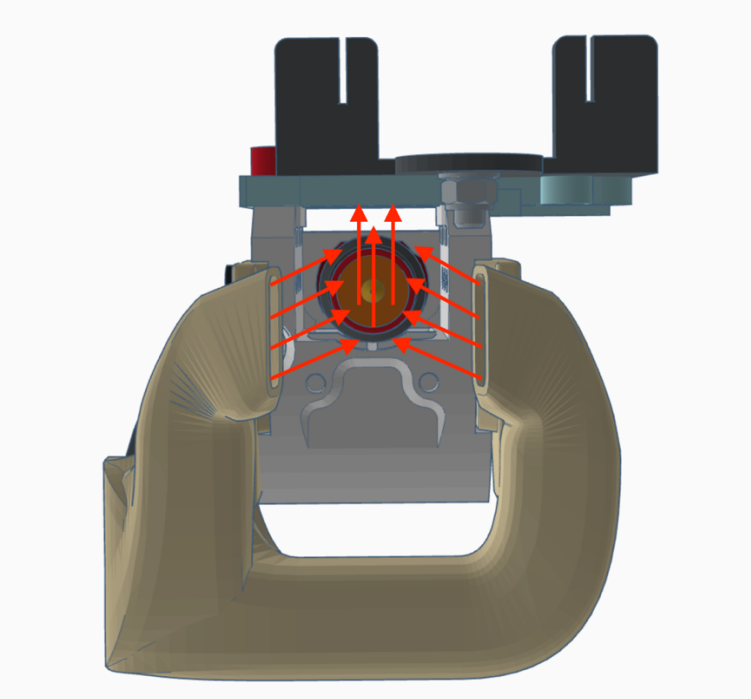


Some fans require a spacer

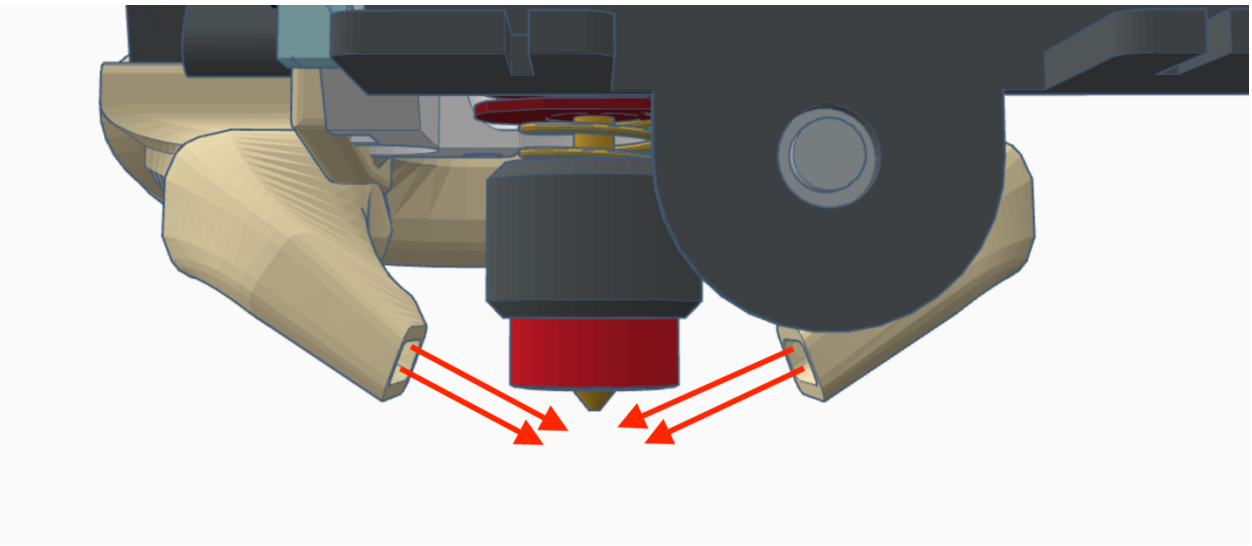


Attach the ABL wing, mount, and sensor (if used)

Note the position of the part cooling ducts in relation to the nozzle:



Note that the nozzle is NOT centered vertically between the ducts. This positioning is correct. The ducts are channeled to direct the airflow at an angle (upside down Y shaped) to maintain a laminar air flow at the part below the nozzle to greatly reduce turbulence.

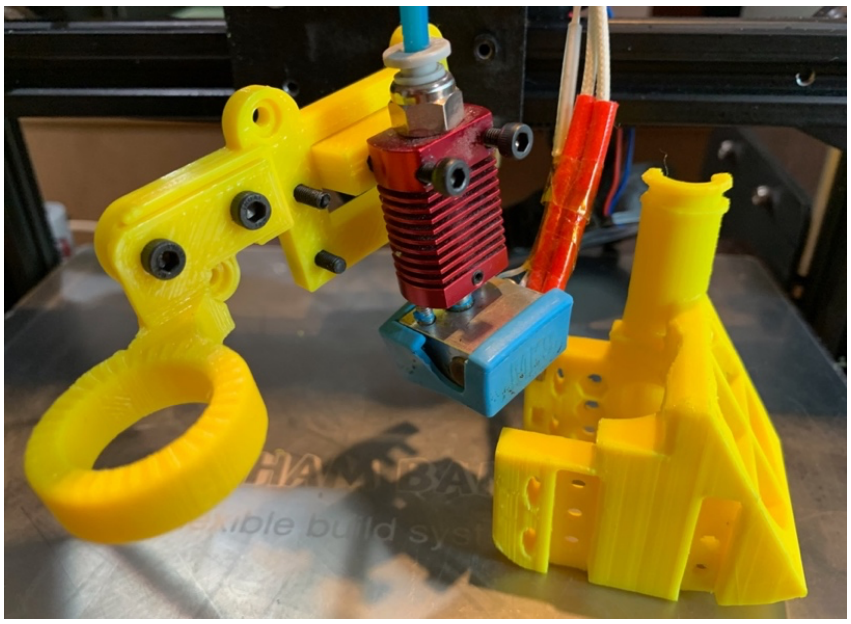


The duct tips are tilted down to direct the laminar airflow to the part below the nozzle.

Depending on the hotend you have, perform Step 5A or Step 5B (not both).

Step 5A. OEM, Mk8, Micro Swiss, or BMS style hotend

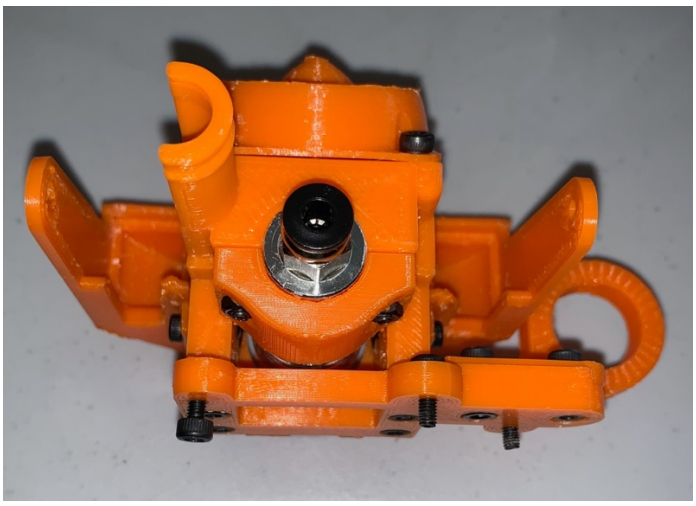
If using an OEM, Mk8, or Micro Swiss style hotend (one that has 2 screws to mount it), place it on the gantry adapter stand-off and feed the screws through the hotend and stand-off. If your selected stand-off has inserts for M3 hex nuts for the hotend, then tighten the bolts to the hex nuts in the back of the gantry adapter. If your selected adapter does not have the nut inserts, leave the bolts lose for now. They will be tightened when mounting to the x carriage back plate. Be sure to have the heat block oriented correctly with the wires coming up the right side of the base in the wire tower. Attach the Hero Me Base to the Gantry Adapter with four M3 6-8mm screws.



-OR-

Step 5B. E3D V6, Revo Six, Volcano, Dragon, Mosquito, or V6 clone

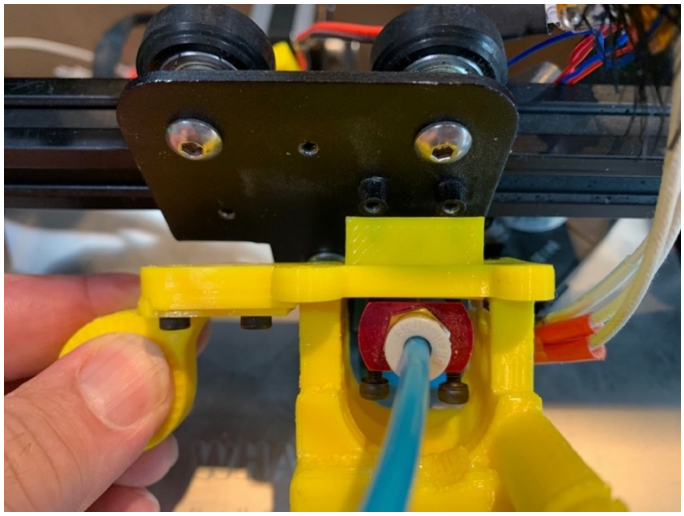
If using an E3D V6, Revo Six, Volcano, Dragon, Mosquito, or V6 clone, place it in the Hero Me base and add the M3 screws (and collar for E3D, Tough, and V6 clones) and tighten securely, be sure to have the heat block oriented correctly with the wires coming up the right side of the base in the wire tower.



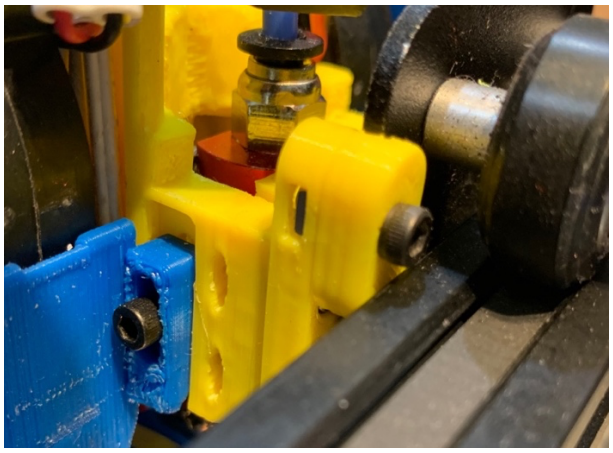
Step 6. Attach the Hero Me base to the gantry adapter and insert and tighten the four M3 6-8mm screws from the back of the gantry adapter into the Hero Me.

Step 7. Optional. If you have an ABL sensor, attach your sensor to the ABL adapter. And attach the ABL adapter to the gantry adapter with two M3 bolts and tighten.

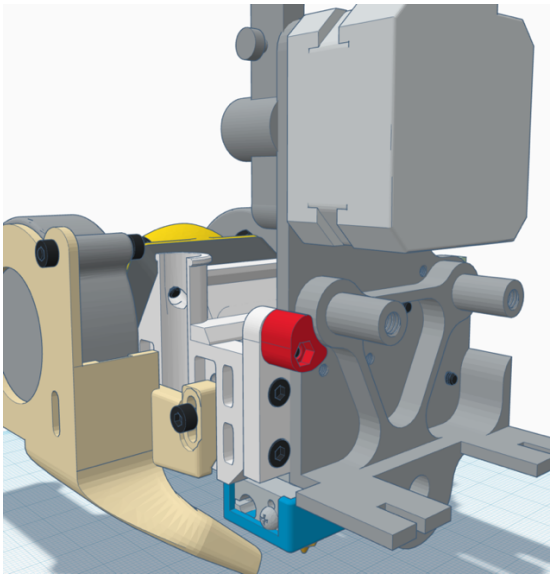
Step 8. Attach the Hero Me and gantry adapter assembly to your printer's backplate at at least three mount point3 (or two holes and the gantry adapter clip) with M3 screws. Tighten the two bolts for the hotend body to the gantry plate. There is easy access from the front of the Hero Me base.



Again, photo is of an older version where the hotend spacer is a separate part.

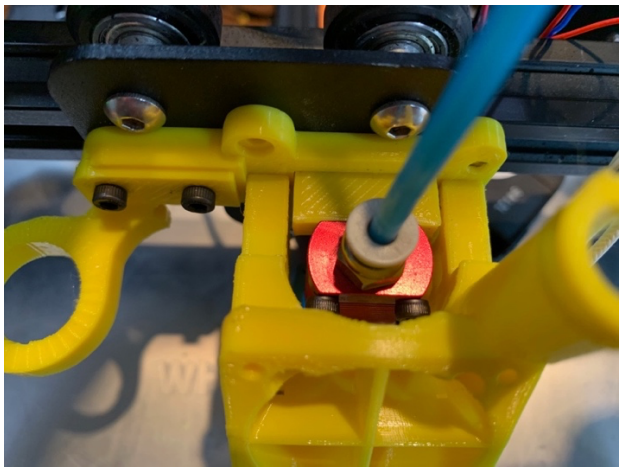


If your setup uses one, here is where the Gantry Clip goes.



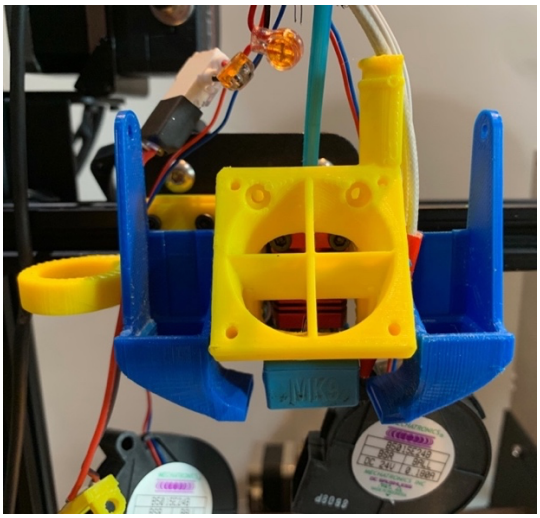
Here is the position of the Gantry Clip on a Micro Swiss DD kit

Depending on your printer model, you may have to loosen or remove the gantry from the X axis rail to access the position for the gantry clip (if needed). Ender 5/Pro/Plus printers will require the removal of the X carriage from the X axis to be able to install the required Gantry Clip. Tighten until secure. If needed tighten or reattach the gantry plate to the rail and adjust the printer's offset nut (V-Wheel setups) so the gantry rides smoothly on the rail with no play/slop.

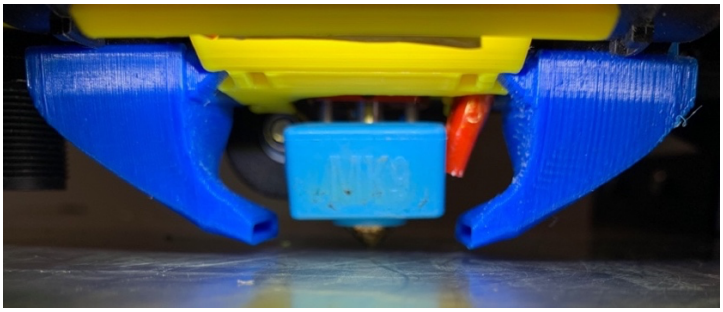


This shows the correct positioning of the Hero Me and hotend.

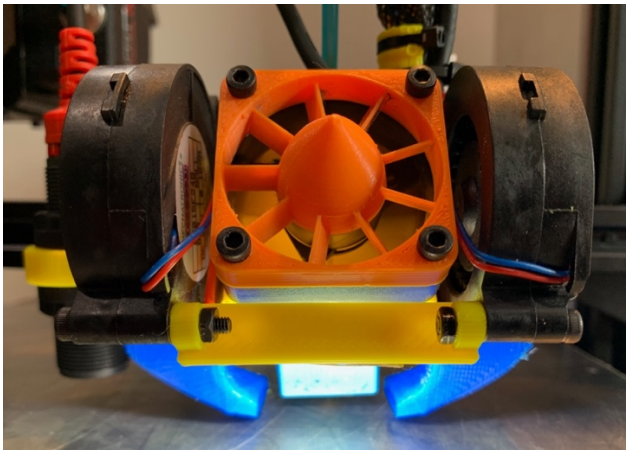
Step 9. Attach the part cooling duct (or ducts) to the Hero Me base. One M3 screw in each vertical mount bar is all that is needed. Loosely tighten, allow for you to move the cooling duct up and down along the slots.



Step 10. Attach the part cooling fans to the ducts and adjust the height of the ducts to you desired spacing above the build plate and tighten. I recommend that the bottom of the cooling duct(s) be between 1.4mm and 1.8mm off the build plate when the hotend nozzle is touching the build plate.



Step 11. Attach the fan to cool the hotend to the front of the Hero Me base. Optionally use one of the supplied fan guards (or your own) when attaching the fan to the front of the Hero Me base. Perform any needed cable management and place a zip-tie at the top of the Hero Me towel to hold the wires in place.



Step 12. ABL Sensor offsets for Firmware or GCODE

Check that everything is secure and where it belongs. And before you print… You will need to set your printer's Home offset (not to be confused with the ABL sensor firmware offset). The Gantry Adapters for the hotends move the nozzle forward -9mm from the original position.

This move was necessary to allow the Hero Me Gen6 to be compatible with the most printers, hotends, ABL sensors, and fans. The nozzles of all the supported hotends are in the same position in the Hero Me Gen6, allowing the parts cooling ducts to all be accurately designed to cool the part directly below the nozzle tip. The cooling ducts have been CFD calibrated and real-world tested to perform to the optimum. When using two fans you can reduce the power to just 25-40% to have practically silent printing.

Optional: If you have an ABL sensor, adjust the height of the sensor to the specs provided by the manufacturer. Below are the ABL X, Y offsets based upon the STL file measurements of all the ABL sensor mounts. Based upon your printed parts and how the Hero Me is assembled, your setup may vary slightly. To get the best results for your printer, measure your setup's X, Y offsets from the tip of your nozzle to the tip (or center) of your ABL sensor (round to the nearest integer). Since the ABL mounts are on the left, the X distance in mm will be a negative value for the firmware offset. The Y axis may have a positive or negative number. If you do not have calipers to properly measure the offsets, use the values below that match your part selection.

Important Note: If you have any Ender 5 series, using any of the ABL sensor mounts, and had to use the spacer to clear the metal clip, then be sure to increase the ABL sensor Y axis offset by -6.

Firmware Offset for BLTouch and CR Touch ABL sensors:
Note that the CR Touch wing and mounts use the same offset as the BLTouch parts with the same filename attributes.

BLTouch_Wing_Wide.stl with BLTouch_Mount_Standard.stl	X -60, Y -13
BLTouch_Wing_Wide.stl with BLTouch_Flat_Mount.stl	X -68, Y -2
BLTouch_Wing_Medium.stl with BLTouch_Mount_Standard.stl	X -55, Y -13
BLTouch_Wing_Medium.stl with BLTouch_Flat_Mount.stl	X -64, Y -2
BLTouch_Wing_Narrow.stl with BLTouch_Mount_Standard.stl	X -43, Y -13
BLTouch_Wing_Narrow.stl with BLTouch_Flat_Mount.stl	X -51, Y -12
BLTouch_Wing_No_Duct.stl with BLTouch_Mount_Standard.stl	X -37, Y -8
BLTouch_Wing_No_Duct.stl with BLTouch_Flat_Mount.stl	X -46, Y +2
BLTouch_Wing_Compact.stl with BLTouch_Mount_Compact.stl	X -38, Y +6
BLTouch_Wing_Compact.stl with BLTouch_Mount_Standard.stl	X -57, Y -10

BLTouch_Wing_Wide.stl with CR Touch_Standard_Mount.stl	X -60, Y -13
BLTouch_Wing_Wide.stl with CR Touch_Flat_Mount_left.stl	X -68, Y -2
BLTouch_Wing_Wide.stl with CR Touch_Flat_Mount_center.stl	X -59, Y -2
BLTouch_Wing_Wide.stl with CR Touch_Flat_Mount_right.stl	X -50, Y -2
BLTouch_Wing_Medium.stl with CR Touch_Standard_Mount.stl	X -55, Y -13
BLTouch_Wing_Wide.stl with CR Touch_Flat_Mount_center.stl	X -55, Y -2
BLTouch_Wing_Wide.stl with CR Touch_Flat_Mount_right.stl	X -46, Y -2

BLTouch_Wing_Medium.stl with CR Touch_Flat_Mount_left.stl	X -64, Y -2
BLTouch_Wing_Narrow.stl with CR Touch_Standard_Mount.stl	X -43, Y -13
BLTouch_Wing_Narrow.stl with CR Touch_Flat_Mount_left.stl	X -51, Y -12
BLTouch_Wing_Wide.stl with CR Touch_Flat_Mount_center.stl	X -42, Y -2
BLTouch_Wing_Wide.stl with CR Touch_Flat_Mount_right.stl	X -33, Y -2
BLTouch_Wing_No_Duct.stl with CR Touch_Standard_Mount.stl	X -37, Y -8

BLTouch_Wing_No_Duct.stl with CR Touch_Flat_Mount_left.stl	X -46, Y +2
BLTouch_Wing_Wide.stl with CR Touch_Flat_Mount_center.stl	X -37, Y -2
BLTouch_Wing_Wide.stl with CR Touch_Flat_Mount_right.stl	X -28, Y -2
BLTouch_Wing_Compact.stl with CR Touch_Mount_Compact.stl	X -38, Y +6
BLTouch_Wing_Compact.stl with CR Touch_Standard_Mount.stl	X -57, Y -10

Firmware Offset for EZABL, EZABL Pro:

EZABL_Mount_Wide_18mm.stl	X -62, Y -5
EZABL_Mount_Medium_18mm.stl	X -58, Y -5
EZABL_Mount_Narrow_18mm.stl	X -51, Y -5
EZABL_Mount_Close_18mm.stl	X -41, Y -3
EZABL_Mount_No_Duct_18mm.stl	X -35, Y -3

Firmware Offset for OEM/Generic 18mm sensor:

OEM_Mount_Wide_18mm.stl	X -62, Y -5
OEM_Mount_Medium_18mm.stl	X -58, Y -5
OEM_Mount_Narrow_18mm.stl	X -51, Y -5
OEM_Mount_Close_18mm.stl	X -41, Y -3
OEM_Mount_No_Duct_18mm.stl	X -35, Y -3

Firmware Offset for EZABL Mini, & OEM/Generic 12mm sensor:

EZABL-OEM_Mount_Wide_12mm.stl	X -56, Y -1
EZABL-OEM_Mount_Medium_12mm.stl	X -46, Y +1
EZABL-OEM_Mount_No_Duct_12mm.stl	X -39, Y +1

The Marlin setting for the ABL offset can be made in firmware, but it also can be done via GCode. The firmware setting can be edited/added to the configuration.h file. You would add the following line and replace the X and Y values with the ones from the ABL sensor and mount combination you are using from the list above.

#define X_PROBE_OFFSET_FROM_EXTRUDER -50 ; -distance of probe in whole mm left of the nozzle example only
#define Y_PROBE_OFFSET_FROM_EXTRUDER -10 ; -front of nozzle, example only

Or you can set the ABL sensor offsets in GCode via your slicer software. Based upon the ABL sensor and mount combination you are using from the above list, you would add the following line and replace the X and Y values with the ones from the list to the Start GCode in your slicer's settings:

M851 X-50 Y-10 ; ABL Sensor offsets - example only

The detailed instructions for Marlin firmware and GCode on setting the ABL offset are here:
https://marlinfw.org/docs/gcode/M851.html

The Home setting can be made in firmware, but it also can be done via GCode. The firmware setting can be edited/added to the configuration.h file. Based upon the Gantry Adapter you are using, you would add one of these two lines in the configuration.h file, then recompile and upload to your printer.

#define MANUAL_Y_HOME_POS -9
Or
M206 X -46, Y +2 X -37, Y -2 ; example only

You can set the Home setting via your slicer software. Based upon the Gantry Adapter you are using, you would add one of these two lines to the Start GCode in your slicer's settings:

M206 Y-9 ; Y axis offset

In case these values do not place the hotend's nozzle just inside the edge of the build plate when homing the Y axis, you can adjust the Y offset value up or down to work for your setup.

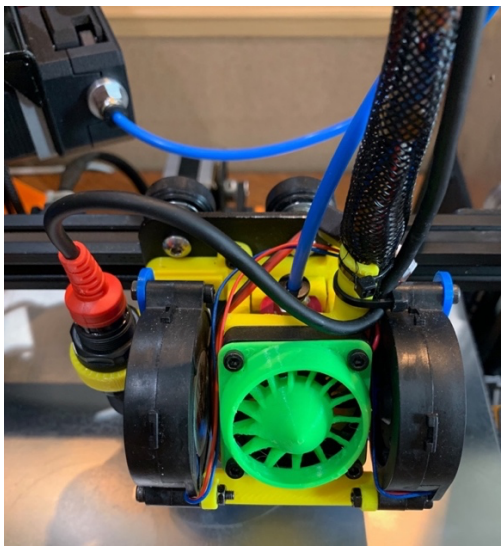
The Marlin firmware detailed instructions on setting the printer's Home offset is here:
https://marlinfw.org/docs/gcode/M206.html

Use G29 to set the area to be probed. On a bed that is 235mm by 235m here is an example:

G29 B205 F20 L20 R205

Where:
'B' is the the back limit of the probing grid.
'F' is the front limit of the probing grid
'L' is the left limit of the probing grid
'R' is the right limit of the probing grid

The detailed instructions on G29 is:
https://marlinfw.org/docs/gcode/G029-abl-bilinear.html



Once you have set the Home offset, perform your printer's bed leveling process, then take a picture of your completed upgrade with the Hero Me and post a Make to Thingiverse here:
https://www.thingiverse.com/thing:4460970/makes
Or post a make to Printables.com here:
https://www.printables.com/model/39322-hero-me-gen6-master-suite/comments

Happy 3D Printing!

3D Printer Model Specific Notes

Ender 5 Pro/Plus

When using 5015 fans on the Ender 5 Pro/Plus you will need to reposition the front crossbar down by 40mm to ensure access to the full Y axis build space (and to not crash into the crossbar when homing the printer). Dropping the crossbar has another benefit, full easy view of the first layer of prints that were blocked by the Ender 5 Pro/Plus top frame. Moving the crossbar down by 40mm will have no negative affect on frame strength. There are several mods for this both commercial and free to print. You can search for 'Ender 5 Crossbar' or 'crossbar relocation' in Thingiverse and come up with at least a half dozen options.

Here are links to a few STL sets:
https://www.thingiverse.com/thing:4410969
https://www.thingiverse.com/thing:4485125
https://www.thingiverse.com/thing:4912123
https://www.printables.com/model/100469-ender-5-front-crossbar-relocator
https://www.thingiverse.com/thing:3876601

There is also an issue with some Ender 5 Plus printers, in that with some hotend setups (not just Hero Me Gen6) the hotend can collide with the stock bed rod holders. Bondtech has created parts to replace the stock bed rod holders that fix this issue. While they sell them, they also offer the STLs for free:

Bed Rod Holder Set for Ender-5 Plus
https://www.bondtech.se/product/ddx-bed-rod-holder-set-ender-5-plus/
Bed Rod Holder Set for Ender-5 Plus (Free STLs)
https://www.bondtech.se/downloads/STL/Creality/Bed_rod_holder_for_Ender-5-Plus.STL

If you have any Ender 5 series and are using any of the ABL sensor mounts, you may need to use a spacer to clear the metal clip that holds the belt on the left side. This applies to both the OEM gantry plate and the PrinterMods.com MDD plate. The spacer file is: Ender_5_ABL_Spacer.stl and is found in the ABL Mounts/Other ABL Sensors/ folder. The firmware offset for the Y axis will increase by -6 (spacer width).

Remixes and Mods of the Hero Me Gen6 Master Suite

The Hero Me Gen6 Master Suite has standardized all the key mount points for each part type.

Those parts that specifically use the Gen3 and Gen4's 45° angle ABL/accessory mount position are no longer compatible with the Hero Me Gen5 or Gen6.

I would like to encourage all those makers who have created remixes or new parts for the Hero Me in the past, use the Gen6's standardized mount points for compatibility.

Here are links to the hundreds of Hero Me Gen6 mods and remixes:https://www.thingiverse.com/thing:3433619/remixes (122 remixes)
https://www.thingiverse.com/thing:4460970/remixes (165 remixes)
https://www.thingiverse.com/mediaman/collections/hero-me-cooling-systems (614 mods & remixes)
https://www.printables.com/social/56045-mediaman3d/collections/113081 (59 mods & remixes)

The Hero Me Gen5 Archive can be found here: https://www.thingiverse.com/thing:5210744

Hero Me Gen6 Assembly Videos from Users and Reviewers

Before you get started, I recommend that you watch this June 6th Hero Me Gen6 assembly YouTube video from Vincent at YouMakeTech:
https://youtu.be/JyRK7ab-JPw
When you are done be sure to read my comment below the video. While his assembly video is accurate, some of the things he says in the video are not up to date, as he was not working from the latest files or documentation. Please consider subscribing to his YouTube channel!

The Hero Me Gen6 (upgrade from Gen5) video from Daniel Crosslink.io has additional info:
https://youtu.be/SAYI_T5YewQ Please consider subscribing to his YouTube channel!

Daniel from Crosslink.io also interviews me about the Hero Me Gen6, the history, design principles, cooling characteristics, and many more Hero Me topics. This video is a great FAQ all about the Hero Me Gen6.
https://youtu.be/Q2A-YQjH-90

While the Crosslink interview is 1 hour long, Daniel has edited it into seven chapters for easy viewing (6-15minutes each).
https://www.youtube.com/playlist?list=PLV3fxzgNDX7zOkJBfp6Ra22BmSCvbEcK5

I have an in-depth discussion about the Hero Me Gen6 and the state of 3D printing with Grant of 3D Musketeers on his Making Awesome Video Podcast (Season 2 Episode 37)
https://youtu.be/TXfM7sUTxLI

The videos below are based on the Hero Me Gen5 series but do have value as well.
Here is a step by step install for a stock Ender 5 by Tesla DIY Geek (but it can easily be adapted for other printer models and components):
https://www.tesladiygeek.com/2020/04/how-to-install-hero-me-hot-end-cooling.html

YouMakeTech reviewed the Hero Me Gen5 as well as provided a great compact assembly video
https://youtu.be/Cz-Ag0OTL7M

Michael from Teaching Tech did a review AND step by step assembly instructions on Gen5.
https://www.youtube.com/embed/DUkoKzOFWFs

Tim from TH3DStudio.com has done a detailed Gen5 video of the parts selection, slicing, setup, and print prep guide (32min).
https://www.youtube.com/embed/GJtpsmtKFD4

Kris from Kersey Fabrications lists the Hero Me as one of the Top 5 upgrades for the Ender 5.
https://www.youtube.com/embed/dbS9MA4UkZA

BuildXYZ did an upgrade guide for a CR-10S Pro with the Hero Me Gen4 (this is still applicable now and useful with other printers/models)
https://www.buildxyz.xyz/creality-cr-10s-pro-hero-me-build-guide/

Hero Me Gen6 Parts Inventory

If you have downloaded some or all the Hero Me Gen6 STLs from Thingiverse, while all the files there are current, Thingiverse no longer supports projects in ZIP format that can be organized into folders for each category and type. Check the date of your downloads compared to the date of this manual, if you downloaded Hero Me STLs prior to this date, some or all your files may have been updated.

I STRONGLY RECOMMEND that you download the whole Here Me Gen6 suite from either the Patreon.com post, Cults3D.com or Printables.com. Here are links to download from those libraries:

https://www.patreon.com/posts/68674465 (this is newer than the two links below)

https://cults3d.com/en/3d-model/tool/hero-me-gen5-master-suite-for-creality-clones-e3dv6-oem-microswiss-volcano-mosquito-hot-end-4020-fan-5015-fan-cr10-ender3-ender5-cr10spro-and-more

https://media.printables.com/media/prints/39322/packs/721480_fdbc9d98-85f2-4a2a-9167-28bae1d986f2/hero-me-gen6-master-suite-model_files.zip

The folder/file organization you see below mirrors what can be found on Patreon or Cults3D. While Printables.com has files in folders, they are not nested as shown below.

Gantry Plate Adapters

3DFused

- 3DFused Bondtech LGX Top Mount.stl
- 3DFused V3 E3DV6-Revo Six-BMO Gantry Adapter.stl
- 3DFused Mosquito high Gantry Adapter.stl
- 3DFused Mosquito low Gantry Adapter.stl
- 3DFused Normal DD Gantry Clip.stl
- 3DFused Normal E3DV6-Revo Six-BMO Gantry Adapter.stl
- 3DFused Normal E3DV6-Revo Six-BMO Gantry Adapter V2.stl
- 3DFused Normal Gantry Clip.stl
- 3DFused Normal OEM-MK8-MS-BMS Gantry Adapter.stl
- 3DFused V3 OEM-MK8-MS-BMS Gantry Adapter.stl
- 3DFused V2 DD Gantry Clip.stl
- 3DFused V2 E3DV6-Revo Six-BMO Gantry Adapter.stl
- 3DFused V2 Gantry Clip.stl
- 3DFused V2 OEM-MK8-MS-BMS Gantry Adapter.stl
- LGX-Top-Mount for 3DFused-PrinterMods plates.stl

Anet

- Anet A8 OEM-MK8-MS-BMS X Carriage-Gantry Adapter.stl
- Anet A8 E3DV6-Revo Six-BMO X Carriage-Gantry Adapter.stl
- Anet ET4-5 E3DV6-Revo Six-BMO Gantry Adapter.stl
- Anet ET4-5 OEM-MK8-MS-BMS Gantry Adapter.stl

Anycubic

- Anycubic Chiron E3DV6-Revo Six-BMO Gantry Adapter.stl
- Anycubic Chiron OEM-MK8-MS-BMS Gantry Adapter.stl
- Anycubic Vyper Gantry Adapter.stl
- Anycubic Vyper Heat Sink Brace.stl

BLV-Linear Rail

- BLV Ender E3DV6-RevoSix-BMO Gantry Adapter A.stl
- BLV Ender E3DV6-RevoSix-BMO Gantry Adapter B.stl
- BLV Ender OEM-MK8-MS-BMS Gantry Adapter A.stl
- BLV Eder OEM-MK8-MS-BMS Gantry Adapter B.stl

CR-10 Series

- CR-10 Dragonfly BMS Gantry Adapter.stl
- CR-10 E3DV6-Revo Six-BMO Gantry Adapter.stl
- CR-10 Gantry Clip.stl
- CR-10 Mosquito for Creality Gantry Adapter.stl
- CR-10 OEM-MK8-MS Airflow Gantry Adapter.stl
- CR-10 OEM-MK8-MS Gantry Adapter.stl
- CR-10 Phaetus Taichi Gantry Adapter.stl
- CR-10 Spider-HIC Gantry Adapter.stl
- CR-10S Pro Dragonfly BMS Gantry Adapter.stl
- CR-10S Pro E3DV6-Revo Six-BMO Gantry Adapter.stl
- CR-10S Pro OEM-MK8-MS Gantry Adapter.stl
- CR-10S Pro V2 Dragonfly BMS Gantry Adapter.stl
- CR-10S Pro Spider-HIC Gantry Adapter.stl
- CR-10S Pro V2 E3DV6-Revo Six-BMO Gantry Adapter.stl
- CR-10S Pro V2 OEM-MK8-MS Gantry Adapter.stl
- CR-10S Pro V2 Spider-HIC Gantry Adapter.stl
- CR-10V2 E3DV6-Revo Six-BMO Gantry Adapter.stl
- CR-10V2 OEM-MK8-MS Gantry Adapter.stl
- CR-10V2 Dragonfly BMS Gantry Adapter.stl
- CR-10V2 Spider-HIC Gantry Adapter.stl

Ender 3-5-6 Series

- Ender 3 Max E3DV6-Revo Six-BMO Gantry Adapter.stl
- Ender 3 Max OEM-MK8-MS Gantry Adapter.stl
- Ender 3 Series Gantry Clip.stl
- Ender 3-Pro Dragonfly BMS Gantry Adapter.stl
- Ender 3-Pro E3DV6-Revo Six-BMO Gantry Adapter.stl
- Ender 3-Pro Mosquito for Creality Gantry Adapter.stl
- Ender 3-Pro OEM-MK8-MS Airflow Gantry Adapter.stl
- Ender 3-Pro OEM-MK8-MS Gantry Adapter.stl
- Ender 3-Pro Phaetus Taichi Gantry Adapter.stl
- Ender 3-Pro Spider-HIC Gantry Adapter.stl
- Ender 3V2 Dragonfly BMS Gantry Adapter.stl
- Ender 3V2 E3DV6-Revo Six-BMO Gantry Adapter.stl
- Ender 3V2 OEM-MK8-MS Gantry Adapter.stl
- Ender 3V2 Spider-HIC Gantry Adapter.stl
- Ender 5 Pro-Plus Dragonfly BMS Gantry Adapter.stl
- Ender 5 Pro-Plus E3DV6-Revo Six-BMO Gantry Adapter.stl

- Ender 5 Pro-Plus Gantry Clip.stl
- Ender 5 Pro-Plus OEM-MK8-MS Gantry Adapter.stl
- Ender 5 Pro-Plus Spider-HIC Gantry Adapter.stl
- Ender 6 E3DV6-Revo Six-BMO Gantry Adapter.stl
- Ender6 OEM-MK8-MS-BMS Gantry Adapter.stl
- Ender 5 Pro-Plus Spider-HIC Gantry Adapter.stl

Exoslide

- Exoslide E3DV6-Revo Six-BMO DD Gantry Adapter.stl
- Exoslide E3DV6-Revo Six-BMO Gantry Adapter.stl
- Exoslide OEM-MK8-MS-BMS Gantry Adapter.stl

Geeetech

- Geeetech A10-A20-A30 Dragonfly BMS Gantry Adapter.stl
- Geeetech A10-A20-A30 Spider-HIC Gantry Adapter.stl
- Geeetech A10-A20-A30 OEM-MK8-MS Gantry Adapter.stl
- Geeetech A10-A20-A30 E3DV6-Revo Six-BMO Gantry Adapter.stl

Micro Swiss DD Kits

- Micro Swiss DD CR-Ender 3 Gantry Adapter.stl
- Micro Swiss DD CR-Ender 3 Gantry Clip.stl
- Micro Swiss DD Ender 3 Mosquito for Creality Gantry Clip.stl
- Micro Swiss DD Ender 3 Mosquito for Creality Gantry Adapter.stl
- Micro Swiss DD Ender 5 Gantry Adapter.stl
- Micro Swiss DD Exoslide Gantry Adapter.stl
- Micro Swiss DD Linear Rails-Dragonfly HIC Gantry Adapter.stl

Neptune

- Neptune 2-2S E3DV6-Revo Six-BMO Gantry Adapter.stl
- Neptune 2-2S E3DV6-Revo Six-BMO No ABL Gantry Adapter.stl
- Neptune 2-2S OEM-MK8-MS-BMS Gantry Adapter.stl
- Neptune 2-2S OEM-MK8-MS-BMS No ABL Gantry Adapter.stl
- Neptune 3 E3DV6-Revo Six-BMO Gantry Adapter.stl
- Neptune 3 OEM-MK8-MS-BMS Gantry Adapter.stl
- Neptune 3 Stock Gantry Adapter No ABL.stl
- Neptune 3 stock Gantry Adapter.stl

Other Printer Models

- BTT HermitCrab E3DV6-Revo Six-BMO Gantry Adapter.stl
- BTT HermitCrab OEM-MK8-MS Gantry Adapter.stl
- BTT HermitCrab Dragonfly BMS Gantry Adapter.stl
- Kywoo E3DV6-Revo Six-BMO Gantry Adapter.stl
- Kywoo OEM-MK8-MS-BMS Gantry Adapter.stl
- LANTRO E3DV6-Revo Six-BMO Gantry Adapter.stl
- LANTRO OEM-MK8-MS-BMS Gantry Adapter.stl
- Longer LK5 Pro E3DV6-Revo Six-BMO Gantry Adapter.stl
- Longer LK5 Pro OEM-MK8-MS-BMS Gantry Adapter.stl
- OpenBuilds Mini V E3DV6-Revo Six-BMO Gantry Adapter.stl
- OpenBuilds Mini V OEM-MK8-MS-BMS Gantry Adapter.stl
- Sunlu S8 E3DV6-Revo Six-BMO Gantry Adapter.stl
- Sunlu S8 OEM-MK8-MS-BMS Gantry Adapter.stl
- Voxelab Aquila-Pro E3DV6-Revo Six-BMO Gantry Adapter.stl

- Voxelab Aquila-Pro OEM-MK8-MS-BMS Gantry Adapter.stl
- ZYLTech Gear V3 E3DV6-Revo Six-BMO Gantry Adapter.stl
- ZYLTech Gear V3 Gantry Clip.stl
- ZYLTech Gear V3 OEM-MK8-MS-BMS Gantry Adapter.stl

PrinterMods MDD Kits

- PM Ender 3 Gantry Clip.stl
- PM Ender 5 Gantry Clip.stl
- PM V1.3 CR-Ender E3DV6-Revo Six-BMO Gantry Adapter.stl
- PM V1.3 CR-Ender OEM-MK8-MS-BMS Gantry Adapter.stl
- PM V1.3 Ender 5 E3DV6-Revo Six-BMO Gantry Adapter.stl
- PM V1.3 Ender 5 OEM-MK8-MS-BMS Gantry Adapter.stl
- XChange E3DV6-Revo Six-BMO Gantry Adapter.stl
- XChange E3DV6-Revo Six-BMO No ABL Gantry Adapter.stl
- XChange OEM-MK8-MS-BMS Gantry Adapter.stl
- XChange OEM-MK8-MS-BMS Gantry No ABL Adapter.stl

Sovol

- Sovol SV01 E3DV6-Revo Six-BMO - Bondtech BMG Gantry Adapter.stl
- Sovol SV01 OEM-MK8-MS-BMS Gantry Adapter.stl
- Sovol SV01 Stock V5-E3DV6-Revo Six-BMO Gantry Adapter.stl
- Sovol SV02 E3DV6-Revo Six-BMO Gantry Adapter.stl
- Sovol SV02 OEM-MK8-MS-BMS Gantry Adapter.stl

Tevo

- Tevo Tarantula Pro E3DV6-Revo Six-BMO Gantry Adapter.stl
- Tevo Tarantula Pro Gantry Clip.stl
- Tevo Tarantula Pro OEM-MK8-MS-BMS Gantry Adapter.stl
- Tevo Tornado E3DV6-Revo Six-BMO Gantry Adapter.stl
- Tevo Tornado Gantry Clip.stl
- Tevo Tornado OEM-MK8-MS-BMS Gantry Adapter.stl

Tronxy

- Tronxy X5SA Pro E3DV6-Revo Six-BMO Gantry Adapter.stl
- Tronxy X5SA Pro E3DV6-Revo Six-BMO No ABL Gantry Adapter.stl
- Tronxy X5SA-Pro OEM-MK8-MS-BMS Gantry Adapter.stl
- Tronxy X5SA-Pro OEM-MK8-MS-BMS No ABL Gantry Adapter.stl

Two Trees

- Two Trees Bluer E3DV6-Revo Six-BMO Gantry Adapter.stl
- Two Trees Bluer OEM-MK8-MS-BMS Gantry Adapter.stl
- Two Trees Sapphire Pro E3DV6-Revo Six-BMO Gantry Adapter.stl
- Two Trees Sapphire Pro OEM-MK8-MS-BMS Gantry Adapter.stl

Wham Bam Systems

- MUTANT E3DV6-Revo Six-BMO Gantry Adapter.stl
- MUTANT OEM-MK8-MS-BMS Gantry Adapter.stl
- Universal Linear Rail E3DV6-Revo Six-BMO Gantry Adapter.stl
- Universal Linear Rail OEM-MK8-MS-BMS Gantry Adapter.stl

X Carriages UNTESTED

- Anet A8 OEM-MK8-MS-BMS X Carriage-Gantry Adapter.stl
- HMG6 Ender 3 V Wheel Belt Bracket.stl

- HMG6 Ender 3 V Wheel X Carriage.stl
- HMG6 Ender 5 MGN9-H Linear Rail X Carriage.stl
- HMG6 Ender 5 V Wheel X Carriage.stl
- HMG6 MGN9-H Linear Rail Front Belt Bracket.stl
- HMG6 MGN9-H Linear Rail Front X Carriage.stl
- HMG6 Linear Rail Top Belt Bracket.stl
- HMG6 MGN9-H Linear Rail Top X Carriage.stl
- HMG6 MGN12-H Linear Rail Front X Carriage.stl
- HMG6 MGN12-H Linear Rail Top X Carriage.stl
- HMG6 Spacer BMS Hotend.stl
- HMG6 Spacer OEM-MK8-MS Hotend.stl
- HMG6 Spacer Spider-Dragonfly HIC Hotend.stl

Bowden Bases

- HMG6 Base CR10S-Pro Stock.stl
- HMG6 Base DyzEnd-X-Pro.stl
- HMG6 Base E3D Revo Micro.stl
- HMG6 Base E3DV6-Revo Six-BMO Ender 3 V2.stl
- HMG6 Base E3DV6-Revo Six-Spider-BMO.stl
- HMG6 Base OEM-MK8-MS-MSDD-BMS Ender 3V2.stl
- HMG6 Base OEM-MK8-MS-MSDD-BMS.stl
- HMG6 Base OEM-MK8-MS-MSDD-BMS-Tall.stl
- HMG6 Base Phaetus Dragon.stl
- HMG6 Base Phaetus Rapido HF-UHF.stl
- HMG6 Base Slice Copperhead.stl
- HMG6 Base Slice Mosquito for Creality.stl
- HMG6 Base Slice Mosquito.stl
- HMG6 Base Spider-HIC Collar.stl
- HMG6 Base Spider-HIC Screw.stl
- HMG6 Copperhead Collar.stl
- HMG6 DyzEnd-X-Pro collar.stl
- HMG6 E3DV6 collar.stl
- HMG6 Universal collar.stl
  - **Anycubic Vyper**
    - 2 Anycubic Vyper Base E3DV6-Revo Six-BMO.stl
    - Anycubic Vyper Base Stock.stl
  - **Neptune 3**
    - Neptune 3 Base OEM-MK8-MS-BMS Tall.stl
    - Neptune 3 Base OEM-MK8-MS-BMS.stl

Direct Drive Bases

Creality OEM-MK8-MS-BMS

Bondtech

- HMG6 DD Base OEM-MK8-MS-BMS - BMG Mini.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Bondtech BMG Mirror Reverse.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Bondtech BMG Mirror.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Bondtech BMG Reverse.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Bondtech BMG.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Bondtech LGX Lite Bottom Mount Reverse.stl

- HMG6 DD Base OEM-MK8-MS-BMS - Bondtech LGX Lite Reverse.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Bondtech LGX Lite.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Bondtech LGX Reverse.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Bondtech LGX Tall.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Bondtech LGX.stl
- HMG6 DD Base Spider Screws - Bondtech BMG Reverse.stl

Creality

- HMG6 DD Base OEM-MK8-MS-BMS - Creality Dual Gear Reverse.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Creality Dual Gear Right.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Creality Dual Gear Tall Reverse.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Creality Single Gear Reverse.stl

E3D Titan

- HMG6 DD Base OEM-MK8-MS-BMS - Titan Reverse.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Titan Tall-Reverse.stl

KingRoon (Titan style)

- HMG6 DD Base OEM-MK8-MS-BMS - Kingroon Tall.stl

Orbiter

- HMG6 DD Base OEM-MK8-MS-BMS - Orbiter v1.5 Reverse.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Orbiter v1.5.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Orbiter v2.0 Reverse.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Orbiter v2.0.stl
- HMG6 DD Base Spider-HIC - Orbiter v1.5 Reverse.stl
- HMG6 DD Base Spider-HIC - Orbiter v1.5.stl

Sailfin

- HMG6 DD Base OEM-MK8-MS-BMS - Sherpa Mini.stl
  Use the Mid-Sherpa STL of the Sailfin BOM

Sherpa

- HMG6 DD Base OEM-MK8-MS-BMS - Sherpa Micro.stl
- HMG6 DD Base OEM-MK8-MS-BMS - Sherpa Mini.stl

E3D-Online V6-Revo Six-BMO

Bondtech

- HMG6 DD Base E3D Revo Micro - Bondtech BMG Reverse.stl
- HMG6 DD Base E3D Revo Micro - Bondtech LGX Lite.stl
- HMG6 DD Base E3D Revo Voron - Bondtech LGX Reverse.stl
- HMG6 DD Base E3D Revo Voron - Bondtech LGX.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Bondtech BMG Mirror Reverse.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Bondtech BMG Mirror.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Bondtech BMG Reverse.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Bondtech BMG.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Bondtech LGX Lite Bottom Mount Reverse.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Bondtech LGX Lite.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Bondtech LGX Reverse.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Bondtech LGX.stl

- HMG6 DD Base Spider Collar- Bondtech BMG Reverse.stl

Creality
- HMG6 DD Base E3DV6-Revo Six-BMO - Creality Dual Gear Reverse.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Creality Dual Gear Right.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Creality Dual Gear Tall Reverse.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Creality Single Gear Reverse.stl

E3D Titan
- HMG6 DD Base E3DV6-Revo Six-BMO - Titan Reverse.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Titan Tall-Reverse.stl

KingRoon (Titan style)
- HMG6 DD Base E3DV6-Revo Six-BMO - Kingroon Tall.stl

Orbiter
- HMG6 DD Base E3D Revo Micro - Orbiter V1.5 Reverse.stl
- HMG6 DD Base E3D Revo Micro - Orbiter V1.5.stl
- HMG6 DD Base E3D Revo Micro - Orbiter V2.0 Reverse.stl
- HMG6 DD Base E3D Revo Micro - Orbiter V2.0.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Orbiter v1.5 Reverse.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Orbiter v1.5.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Orbiter v2.0 Reverse.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Orbiter v2.0.stl

Sailfin
- HMG6 DD Base E3D Revo Micro - Sherpa Mini.stl
  Use the Mid-Sherpa STL of the Sailfin BOM
- HMG6 DD Base E3DV6-Revo Six-BMO - Sherpa Mini.stl
  Use the Mid-Sherpa STL of the Sailfin BOM

Sherpa
- HMG6 DD Base E3D Revo Micro - Sherpa Micro Reverse.stl
- HMG6 DD Base E3D Revo Micro - Sherpa Micro.stl
- HMG6 DD Base E3D Revo Micro - Sherpa Mini.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Sherpa Micro.stl
- HMG6 DD Base E3DV6-Revo Six-BMO - Sherpa Mini.stl

Micro Swiss
- Micro Swiss DD Base OEM-MK8-MS-BMS Tall.stl
- Micro Swiss DD Base OEM-MK8-MS-BMS.stl

Neptune 3
- Neptune 3 DD Base OEM-MK8-MS-BMS - Bondtech LGX Lite.stl
- Neptune 3 DD Base OEM-MK8-MS-BMS - Orbiter V2.0.stl
- Neptune 3 DD Base OEM-MK8-MS-BMS - Stock.stl

Phaetus Dragon
- Anycubic Vyper DD Base - Phaetus Dragon - Orbiter v2.0 Reverse.stl
- HMG6 DD Base Phaetus Dragon - Bondtech BMG Mirror Reverse.stl
- HMG6 DD Base Phaetus Dragon - Bondtech BMG Reverse.stl
- HMG6 DD Base Phaetus Dragon - Bondtech LGX Lite Reverse.stl
- HMG6 DD Base Phaetus Dragon - Bondtech LGX Lite.stl

- HMG6 DD Base Phaetus Dragon - Bondtech LGX Reverse.stl
- HMG6 DD Base Phaetus Dragon - Bondtech LGX.stl
- HMG6 DD Base Phaetus Dragon - Orbiter v1.5.stl
- HMG6 DD Base Phaetus Dragon - Orbiter v2.0 Reverse.stl
- HMG6 DD Base Phaetus Dragon - Orbiter v2.0.stl
- HMG6 DD Base Phaetus Dragon - Sherpa Micro.stl
- HMG6 DD Base Phaetus Dragon - Sherpa Mini.stl
- HMG6 DD Base Phaetus Dragon Groove - Orbiter v1.5.stl
- HMG6 Mosquito-Dragon Collar.stl

Phaetus Dragonfly HIC

- HMG6 DD Base Dragonfly HIC - Orbiter v1.5.stl
- HMG6 DD Base Dragonfly HIC - Orbiter v2.0.stl

Slice Copperhead

- HMG6 DD Base Copperhead Collar - LGX Lite.stl
- HMG6 DD Base Copperhead Collar - LGX Reverse.stl
- HMG6 DD Base Copperhead Collar - LGX.stl
- HMG6 DD Base Copperhead Screw - LGX Lite.stl
- HMG6 DD Base Copperhead Screw - LGX Reverse.stl
- HMG6 DD Base Copperhead Screw - LGX.stl
- HMG6 DD Base Slice Copperhead Groove - Orbiter v1.5.stl
- HMG6 DD Base Slice Copperhead Groove - Orbiter v2.0.stl
- HMG6 DD Base Slice Copperhead Screw - Orbiter v1.5.stl
- HMG6 DD Base Slice Copperhead Screw - Orbiter v2.0.stl

Slice Mosquito

- HMG6 DD Base Mosquito - Bondtech BMG Mirror Reverse.stl
- HMG6 DD Base Mosquito - Bondtech BMG Reverse.stl
- HMG6 DD Base Mosquito - Bondtech BMG-M Mirror Reverse.stl
- HMG6 DD Base Mosquito - Bondtech BMG-M Mirror.stl
- HMG6 DD Base Mosquito - Bondtech BMG-M Reverse.stl
- HMG6 DD Base Mosquito - Bondtech BMG-M.stl
- HMG6 DD Base Mosquito - Bondtech BMG.stl
- HMG6 DD Base Mosquito - Bondtech LGX Lite Reverse.stl
- HMG6 DD Base Mosquito - Bondtech LGX Lite.stl
- HMG6 DD Base Mosquito - Bondtech LGX Reverse.stl
- HMG6 DD Base Mosquito - Bondtech LGX.stl
- HMG6 DD Base Mosquito - Orbiter v1.5 Reverse.stl
- HMG6 DD Base Mosquito - Orbiter v1.5.stl
- HMG6 DD Base Mosquito - Orbiter v2.0 Reverse.stl
- HMG6 DD Base Mosquito - Orbiter v2.0.stl
- HMG6 DD Base Mosquito - Sherpa Micro.stl
- HMG6 DD Base Mosquito - Sherpa Mini.stl
- HMG6 Mosquito-Dragon Collar.stl

Smartwatch

- HMG6 DD Base OEM-MK8-MS-BMS - Smartwatch Clockwork.stl

Sovol SV01

- Sovol SV01 MG Mirrored Stepper Motor Mount.stl
- Sovol SV01 MG Standard Stepper Motor Mount.stl
- Sovol SV01 DD Base OEM-MK8-MS-BMS.stl

- Sovol SV01 DD Base Stock V5-E3DV6-Revo Six-BMO.stl
- Sovol SV01 Stock Stepper Motor Mount.stl

Two Trees

- Sapphire Pro E3DV6-Revo Six-Spider-BMO-Dragon-Mosquito-LGX DD Gantry Adapter.stl
- Sapphire Pro HMG6 DD Base Slice Mosquito for Sapphire Pro.stl
- Sapphire Pro E3DV6-Revo Six-Spider-BMO-Dragon-Mosquito-Sherpa Mini DD Gantry Adapter.stl
- Sapphire Pro HMG6 DD Base Phaetus Dragon.stl

Voron Switchwire Afterburner/Stealthburner

- HMG6 Base E3DV6-Revo Six-BMO - Hypersonic.stl
- HMG6 E3DV6 Collar - Hypersonic.stl
- HMG6 Afterburner Extruder Cover.stl

Other DD Parts

- HMG6 E3D V6 collar.stl
- HMG6 Groove Mount Collar.stl
- HMG6 Mosquito-Dragon Collar.stl
- LGX-Top-Mount for 3DFused-PrinterMods plates.stl

Part Cooling Ducts by ACWest

Standard Part Cooling Ducts

4010 fans

- HMG6-dual-4010.stl
- HMG6-lightweight-4010-left.stl
- HMG6-lightweight-4010-right.stl
- HMG6-lightweight-forward-4010-left.stl
- HMG6-lightweight-forward-4010-right.stl
- HMG6-single-4010.stl
    - **Special cases only**
        - HMG6-dual-4010-30deg tilt.stl
        - HMG6-single-4010-30deg tilt.stl

4020 fans

- 4020 Fan Mount Spacer.stl
- HMG6-dual-4020.stl
- HMG6-lightweight-4020-left.stl
- HMG6-lightweight-4020-right.stl
- HMG6-lightweight-4020-left-brace.stl
- HMG6-lightweight-4020-right-brace.stl
- HMG6-lightweight-forward-4020-left.stl
- HMG6-lightweight-forward-4020-right.stl
- HMG6-single-4020.stl
    - **Special cases only**
        - HMG6-dual-4020-30deg tilt.stl
        - HMG6-single-4020-30deg tilt.stl

5015 fans

- HMG6-dual-5015-6deg-brace.stl
- HMG6-dual-5015-6deg-brace-inserts.stl

- HMG6-dual-5015.stl
- HMG6-lightweight-5015-left-brace.stl
- HMG6-lightweight-5015-right-brace.stl
- HMG6-lightweight-forward-5015-left-brace.stl
- HMG6-lightweight-forward-5015-right-brace.stl
- HMG6-single-5015-6deg-brace.stl
- HMG6-single-5015-Trihorn-Duct-Left-brace.stl
- HMG6-single-5015-Trihorn-Duct-Right-brace.stl
- HMG6-single-5015.stl
    Special cases only
    - HMG6-dual-5015-30deg tilt.stl
    - HMG6-single-5015-30deg tilt.stl

5020 fans

- HMG6-dual-5020.stl
- HMG6-lightweight-5020-left.stl
- HMG6-lightweight-5020-right.stl
- HMG6-lightweight-forward-5020-left.stl
- HMG6-lightweight-forward-5020-right.stl
- HMG6-single-5020.stl
    Special cases only
    - HMG6-dual-5020-30deg tilt.stl
    - HMG6-single-5020-30deg tilt.stl

Long Ducts – Neptune 3 - Micro Swiss Direct Drive

4010 fans

- HMG6-long-dual-4010.stl
- HMG6-long-lightweight-4010 Pair with Supports.stl
- HMG6-long-lightweight-4010-left.stl
- HMG6-long-lightweight-4010-right.stl
- HMG6-long-lightweight-forward-4010-left.stl
- HMG6-long-lightweight-forward-4010-right.stl
- -HMG6-long-single-4010.stl
    Special cases only
    - HMG6-long-dual-4010-30deg tilt.stl
    - HMG6-long-single-4010-30deg tilt.stl

4020 fans

- 4020 Fan Mount Spacer.stl
- HMG6-long-dual-4020.stl
- HMG6-long-lightweight-4020-left.stl
- HMG6-long-lightweight-4020-right.stl
- HMG6-long-lightweight-forward-4020-left.stl
- HMG6-long-lightweight-forward-4020-right.stl
- HMG6-long-single-4020.stl
    Special cases only
    - HMG6-long-dual-4020-30deg tilt.stl
    - HMG6-long-single-4020-30deg tilt.stl

5015 fans

- HMG6-long-dual-5015-brace.stl
- HMG6-long-lightweight-5015-left-brace-insert.stl
- HMG6-long-lightweight-5015-right-brace-insert.stl

- HMG6-long-dual-5015-brace-inserts.stl
- HMG6-long-dual-5015.stl
- HMG6-long-lightweight-5015-left-brace.stl
- HMG6-long-lightweight-5015-right-brace.stl
- HMG6-long-lightweight-forward-5015-left-brace.stl
- HMG6-long-lightweight-forward-5015-right-brace.stl
- HMG6-long-single-5015.stl
    Special cases only
    - HMG6-long-dual-5015-30deg tilt.stl
    - HMG6-long-single-5015-30deg tilt.stl

5020 fans

- HMG6-long-dual-5020.stl
- HMG6-long-lightweight-5020-left.stl
- HMG6-long-lightweight-5020-right.stl
- HMG6-long-lightweight-forward-5020-left.stl
- HMG6-long-lightweight-forward-5020-right.stl
- HMG6-long-single-5020.stl
    Special cases only
    - HMG6-long-dual-5020-30deg tilt.stl
    - HMG6-long-single-5020-30deg tilt.stl

Tall Ducts - E3D Volcano-Rapido UHF

4010 fans

- HMG6-tall-dual-4010.stl
- HMG6-tall-lightweight-4010-left.stl
- HMG6-tall-lightweight-4010-right.stl
- HMG6-tall-lightweight-forward-4010-left.stl
- HMG6-tall-lightweight-forward-4010-right.stl
- HMG6-tall-single-4010.stl
    Special cases only
    - HMG6-tall-dual-4010-30deg tilt.stl
    - HMG6-tall-single-4010-30deg tilt.stl

4020 fans

- 4020 Fan Mount Spacer.stl
- HMG6-tall-dual-4020.stl
- HMG6-tall-lightweight-4020-left.stl
- HMG6-tall-lightweight-4020-right.stl
- HMG6-tall-lightweight-forward-4020-left.stl
- HMG6-tall-lightweight-forward-4020-right.stl
- 3 HMG6-tall-single-4020.stl
    Special cases only
    - HMG6-tall-dual-4020-30deg tilt.stl
    - HMG6-tall-single-4020-30deg tilt.stl

5015 fans

- HMG6-tall-dual-5015-brace.stl
- HMG6-tall-dual-5015.stl
- HMG6-tall-lightweight-5015-left.stl
- HMG6-tall-lightweight-5015-right.stl
- HMG6-tall-lightweight-forward-5015-left.stl
- HMG6-tall-lightweight-forward-5015-right.stl

- HMG6-tall-single-5015.stl
  Special cases only
  - HMG6-tall-dual-5015-30deg tilt.stl
  - HMG6-tall-single-5015-30deg tilt.stl

5020 fans

- HMG6-tall-dual-5020.stl
- HMG6-tall-lightweight-5020-left.stl
- HMG6-tall-lightweight-5020-right.stl
- HMG6-tall-lightweight-forward-5020-left.stl
- HMG6-tall-lightweight-forward-5020-right.stl
- HMG6-tall-single-5020.stl
  Special cases only
  - HMG6-tall-dual-5020-30deg tilt.stl
  - HMG6-tall-single-5020-30deg tilt.stl

ABL Mounts

BLTouch

- BLTouch Flat Mount Center.stl
- BLTouch_Flat_Mount.stl
- BLTouch_Mount Compact_alt.stl
- BLTouch Mount_Compact.stl
- BLTouch Mount Standard.stl
- BLTouch_Wing_Compact_alt.stl
- BLTouch_Wing_Compact.stl
- BLTouch_Wing_Medium_Threaded.stl
- BLTouch_Wing_Medium.M3Nut.stl
- BLTouch_Wing_Narrow.stl
- BLTouch_Wing_No_Duct.stl
- BLTouch_Wing_Wide.stl

Creality Stock

- OEM Mount Close 18mm.stl
- OEM Mount Medium 18mm.stl
- OEM Mount Narrow 18mm.stl
- OEM Mount No Duct 18mm.stl
- OEM Mount Wide 18mm.stl

CR Touch

- CR Touch Flat Mount Center.stl
- CR Touch Flat Mount left.stl
- CR Touch_Flat_Mount_right.stl
- CR Touch Mount Compact.stl
- CR Touch Mount Standard.stl
- CR Touch_Wing_Compact.stl
- CR Touch_Wing_Medium_Threaded.stl
- CR Touch_Wing_Medium.M3Nut.stl
- CR Touch_Wing_Narrow.stl
- CR Touch Wing_No_Duct.stl
- CR Touch Wing Wide.stl

EZABL

- EZABL Mount Close 18mm.stl
- EZABL_Mount_Medium_18mm.stl
- EZABL_Mount_Narrow_18mm.stl
- EZABL Mount No Duct 18mm.stl
- EZABL Mount Wide 18mm.stl
- EZABL-OEM Mount Medium 8mm.stl
- EZABL-OEM Mount Medium 12mm.stl
- EZABL-OEM Mount No Duct 8mm.stl
- EZABL-OEM_ Mount_No Duct 12mm.stl
- EZABL-OEM Mount Wide 8mm.stl
- EZABL-OEM Mount Wide 12mm.stl

Other ABL Sensors

- Anycubic Vvper BLTouch Mount.stl
- Hallon Medium ABL Mount.stl
- Ender 5 ABL Spacer.stl
- TA Sensor ABL Mount.stl
- TA Sensor Flat ABL Mount.stl
- Touch-Mi Medium ABL Mount.stl
- Universal Hallon-Omron-TA ABI Mount.stl

Options

- 40mm Fan Dial Gauge Holder 7_98mm-press.stl
- 40mm Fan Dial Gauge Holder 7_98mm-screw.stl
- ADXL345 Mount Spacer-14.4mm.stl
- ADXL345 Mount Spacer-15.4mm.stl
- ADXL345 Mount Spacer-20mm.stl
- HMG6 BMG PTFE Collar Insert v1.stl
- HMG6 BMG PTFE Collar Insert v2.stl
- HMG6 BMG PTFE Collar Insert v3.stl
- HMG6 Duct Offset Check v5.stl
- HMG6 Duct Offset Check.stl
- HMG6 Jet Fan Guard.stl
- HMG6 Lightweight Fan Guard.stl
- HMG6 Turbine Fan Guard.stl
- LED Curved Bar 100mm for Lightweight 5015 Ducts.stl
- LED Curved Bar 100mm for Lightweight 4020 Ducts.stl
- LED Straight Bar for 51mm for Lightweight 5015 Ducts.stl
- LED Straight Bar 55mm for Lightweight 4020 Ducts.stl

Note: If you are looking for the PrinterMods Direct Drive Adapters, they have been replaced by the Hero Me Gen6 DD Bases. If you need any STL files from that set, they are available on Thingiverse as part of the Hero Me Gen5 Archive: https://www.thingiverse.com/thing:5210744

Thanks and Credits

I would especially like to thank ACWest for providing his awesome part cooling ducts to be part of the Hero Me Gen6 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 Gen 5 & Gen6 over the past year. His testing and recommendations have been key to help make the Hero Me Gen6 the best possible cooling system.

Thank you for choosing the Hero Me Gen6 to be part of your 3D printing experience! Please post your feedback, make, or remix on the Hero Me Gen6 Thingiverse project and share this with your 3D printing friends!

Printables.com: https://www.printables.com/model/39322-hero-me-gen6-master-suite
Thingiverse.com: https://www.thingiverse.com/mediaman/

If you would like support for your Hero Me Gen6, please visit my Patreon page.
Patreon: https://www.patreon.com/MediaMan3D

Video content for the Hero Me Gen6 coming soon!
YouTube: https://www.youtube.com/c/MediaMan3D

ACWest - Thingiverse: https://www.thingiverse.com/acwest/
klsummers92 – Thingiverse: https://www.thingiverse.com/klsummers92
PM_OEM_Dual_Gear_Extruder_Adapter.stl remix provided by klsummers92
Superhero graphic courtesy of www.freepik.com

Additional Project Updates (will be posted below in order of most recent first):

August 4th Update 2:

Geeetech A10-A20-A30 E3DV6-Revo Six-BMO Gantry Adapter.stl
Revised to provide better access to the upper right mount point, changed lower right mount to a threaded insert from the back side.

Geeetech A10-A20-A30 Dragonfly BMS Gantry Adapter.stl
Geeetech A10-A20-A30 Spider-HIC Gantry Adapter.stl
Geeetech A10-A20-A30 OEM-MK8-MS Gantry Adapter.stl
Updated as above, but also for the corrected nozzle standoff positions as described in the update notes below.

August 4th Update: Hero Me Gen6 Update 3 is released

Reset the color highlighting in the Parts Inventory section. New and updated STLs are highlighted in Yellow.

There have been just a few updates since July 15th. Here is a list of the updates:

HMG6 DD Base OEM-MK8-MS-BMS - Bondtech BMG Reverse.stl
Revised to support taller X carriages

HMG6 DD Base Phaetus Dragon - Orbiter V2.0 Reverse.stl
HMG6 DD Base Phaetus Dragon - Orbiter v2.0.stl
Revised to lower the hotend by 2mm to allow the heat block to properly clear the bottom of the base when a sock is attached

Universal Linear Rail E3DV6-Revo Six-BMO Gantry Adapter.stl
Universal Linear Rail OEM-MK8-MS Gantry Adapter.stl
Revised to support additional DD bases that are not tall enough

HMG6 Linear Rail Top Belt Bracket.stl
Lengthened to reach belt path under extrusion

Important Note: If you are using any of the following hotends: Dragonfly BMS, Dragonfly HIC, or Creality Spider (two screw version), please read the following.

A small design error was found in some gantry adapters that causes the nozzle position of these three hotends to be off by up to 2mm from where they should be in relation to the part cooling ducts (and for the prescribed Hero Me 9mm Y axis offset). The difference in thickness of the heat sinks for these hotends was not considered when creating the standoffs on the Gantry Adapters.

For Bowden setups the issue is that part cooling is not correctly lined up. For DD setups in addition to the part cooling alignment, when using one of these three hotends with a Hero Me DD Base and the old Gantry Adapters, the PTFE tube path is not straight. At least, the PTFE tube will have a slight bend, at worst, the hotend, Base, and extruder will not line up to assemble at all.

The following Gantry Adapters have been revised to correct for this error. If you are using a Dragonfly BMS, Dragonfly HIC, or Creality Spider (two screw version) with one of the following 15 hotend/printer combos, please reprint the Gantry Adapter and update your setup. If you are using

one of these three hotends and the Gantry Adapter for your printer is not listed, please let me know and I will prioritize getting your Gantry Adapter updated, as I have 30 more to correct.

CR-10 Dragonfly BMS Gantry Adapter.stl
CR-10S Pro Dragonfly BMS Gantry Adapter.stl
CR-10S Pro V2 Dragonfly BMS Gantry Adapter.stl
CR-10V2 Dragonfly BMS Gantry Adapter.stl
Ender 3-Pro Dragonfly BMS Gantry Adapter.stl
Ender 3V2 Dragonfly BMS Gantry Adapter.stl
Ender 5 Pro-Plus Dragonfly BMS Gantry Adapter.stl
BTT HermitCrab Dragonfly BMS Gantry Adapter.stl
Specific Gantry Adapter for the Dragonfly BMS as the nozzle position was off by +2mm in the Y axis.

CR-10 Spider-HIC Gantry Adapter.stl
CR-10S Pro Spider-HIC Gantry Adapter.stl
CR-10S Pro V2 Spider-HIC Gantry Adapter.stl
CR-10V2 Spider-HIC Gantry Adapter.stl
Ender 3-Pro Spider-HIC Gantry Adapter.stl
Ender 3V2 Spider-HIC Gantry Adapter.stl
Ender 5 Pro-Plus Spider-HIC Gantry Adapter.stl
Specific Gantry Adapter for the Creality Spider and Dragonfly HIC as the nozzle position was off by -2mm in the Y axis.

These same changes will be coming to the rest of the Gantry Adapter STLs for the Dragonfly BMS, Spider, Dragonfly HIC, and OEM-MK8-MS in the next 5-7 days. If you are using a Dragonfly BMS, Dragonfly HIC, or Creality Spider (two screw version) on a printer other that those already updated, please let me know and I will prioritize getting your Gantry Adapter updated.

The following Gantry Adapters have been updated to remove the Dragonfly BMS notch in the standoff. There is no change to Y axis position. Reprinting one of these is completely optional as there is no issue.

CR-10 OEM-MK8-MS Gantry Adapter.stl
CR-10S Pro OEM-MK8-MS Gantry Adapter.stl
CR-10S Pro V2 OEM-MK8-MS Gantry Adapter.stlCR-10V2 OEM-MK8-MS Gantry Adapter.stl
Ender 3-Pro OEM-MK8-MS Gantry Adapter.stl
Ender 3V2 OEM-MK8-MS Gantry Adapter.stl
Ender 5 Pro-Plus OEM-MK8-MS Gantry Adapter.stl
BTT HermitCrab OEM-MK8-MS Gantry Adapter.stl

July 15th, 2022, Update

- New source in Europe (Amazon Italy) for threaded inserts: https://www.amazon.it/gp/product/B09ZHSGHXD/

- All New and Improved STLs since July 12th have been highlighted in grey in the Parts Inventory. Next update I will be clearing the color highlighting to start fresh.

- Added two new braced ducts for 4020
    - HMG6-lightweight-4020-left-brace.stl
    - HMG6-lightweight-4020-right-brace.stl

- Added new Straight and Curved LED bars for 4020 Lightweight ducts
    - LED Straight Bar 55mm for Lightweight 4020 Ducts.stl
    - LED Curved Bar 100mm for Lightweight 4020 Ducts.stl

- Updated the two LED bars (straight and curved) in the Options folder to be 51mm wide (mount points) and two use threaded inserts (optional).

- Added Anet A8 X carriage/Gantry Adapter for E3D V6 and clones
- Fixed Anet A8 X carriage/Gantry Adapter stock hotend

July 12th, 2022, Update

- Added more details to the ABL settings for firmware and gcode.
- All New and Improved STLs since July 9th have been highlighted in blue in the Parts Inventory.
- Added Hero Me Gen6 DD Base for Sapphire Pro/Plus with E3DV6 and Sherpa Mini
    - Sapphire Pro E3DV6-Revo Six-Spider-BMO-Dragon-Mosquito-Sherpa Mini DD Gantry Adapter.stl
    - Sapphire Pro HMG6 DD Base Phaetus Dragon.stl
- Added Hero Me Gen6 DD Base for Voron Switchwire Afterburner/Stealthburner
    - HMG6 Base E3DV6-Revo Six-BMO – Hypersonic
    - HMG6 Afterburner Extruder Cover.stl
    - HMG6 E3DV6 Collar - Hypersonic.stl
- Added versions of several part cooling ducts that use threaded inserts to mount the fans
    - HMG6-long-lightweight-5015-left-brace-insert.stl
    - HMG6-long-lightweight-5015-right-brace-insert.stl
    - HMG6-long-dual-5015-brace-inserts.stl
    - HMG6-dual-5015-6deg-brace-inserts.stl
    - I will be adding both braces and inserts (where possible) to the part cooling ducts.

July 9th, 2022, Update

- All New and Improved STLs since July 8th have been highlighted in green in the Parts Inventory.
- Added DD Bases for the KingRoon (Titan style) extruder for OEM and E3D V6 (and clones) hotends
    - HMG6 DD Base E3DV6-Revo Six-BMO - Kingroon Tall.stl
    - HMG6 DD Base OEM-MK8-MS-BMS - Kingroon Tall.stl

- Added a tall version of the DD Base for LGX and E3D V6 (and clones)
    - HMG6 DD Base E3DV6-Revo Six-BMO - Bondtech LGX Tall.stl

- Added two new Bowden Hero Me Bases for use only with Ender 3 V2 printers. These have a tighter heat sink duct path to take advantage of the opening in the X carriage for the warm air to escape.
    - HMG6 Base E3DV6-Revo Six-BMO Tall Ender 3V2.stl
    - HMG6 Base OEM-MK8-MS-MSDD-BMS Tall Ender 3V2.stl

July 8th, 2022, Update:

- Added links to Hero Me Gen6 assembly videos.
- Added some missing ABL sensors to the documentation
- Edited and added details to some procedures.
- Changed the order two sections to be more consistent with when info is needed.
- Added section on 3D Printer Model specific notes. This section will grow over time. The first printer covered is the Ender 5 Pro/Plus.

July 7th, 2022, Update 2:

- Added a version of the Hero Me Base for OEM-MK8-MS-MSDD-BMS that has a tall chimney like the one for the Micro Swiss DD kit.
  HMG6 Base OEM-MK8-MS-MSDD-BMS-Tall.stl
- Add threaded inserts for the ABL mounts to
  CR-10 OEM-MK8-MS-BMS Airflow Gantry Adapter.stl

July 7th, 2022, Update:

- Fixed a couple filename errors (docs were wrong, STLs were right).

- All New and Improved STLs since May 9th have been highlighted in yellow in the Parts Inventory starting on page 66 (why list them twice).

- Added text in the hotends section regarding the Phaetus Dragon (and others) that have multiple mounting options (typically the E3D V6 collar plus their own unique screw mount pattern).

  When listing a Hotend and the Hero Me Bases and DD Bases for those Hotends by name, they are for the 'unique' mounting type that hotend uses. If a hotend you are going to use has a E3D V6 collar mount (and that is what you want) then think of that hotend AS an E3D V6 and pick from the E3D V6 selections (Gantry Adapter, Hero Me Base and DD Base), unless there is a specific listing for that hotend in regard to a collar mount option.

July 5th, 2022, Update 2:
Added:

- Sapphire Pro E3DV6-Revo Six-Spider-BMO-Mosquito-LGX DD Gantry Adapter.stl
- Sapphire Pro HMG6 DD Base Slice Mosquito for Sapphire Pro.stl

- Corrected:
  HMG6 DD Base OEM-MK8-MS-BMS - Bondtech LGX Lite Reverse.stl
- BLTouch_Mount_Standard.stl was named wrong in several places.

July 5th, 2022, Update:
Corrected a copy paste text error on page 23, no impact on process. I am working on a list of the new and updated files to add to the project updates with all new or updates since May 10th.

July 4th, 2022, Update:
This document has been complete revised, with greatly improve parts cross-reference and assembly instructions. Updated to include all the new STLs that have been added in the last 6 months, as well as more details on Gen6 assembly and threaded inserts process and placement.

All the Hero Me STL filenames have been updated to easily identify what printer/hotend/extruder/ABL/Fan, etc. that they designed for. Additional folders and subfolders have been created to make finding what you need easier. These changes correlate to what is in the new Parts Cross-Reference and Inventory sections of the new docs.

- 67 New or Improved Gantry Adapters
- 50 New or Improved Hero Me DD Bases
- 14 New X carriages with Hero Me Gantry Adapter built-in (untested)
- 7 New or Improved Hero Me Bases (Bowden)
- 5 New Part Cooling Ducts with braces
- 4 New STLs in the Options folder
- 1 New BLTouch wing and mount

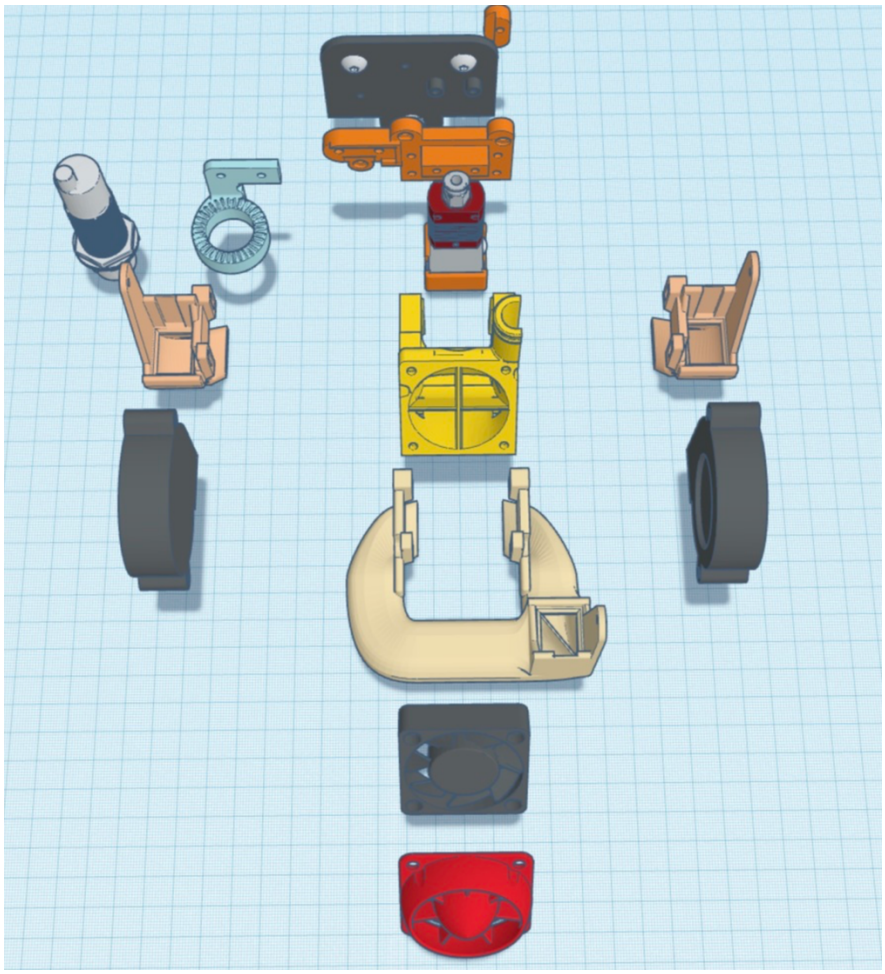
New 3D printer models that are now supported:

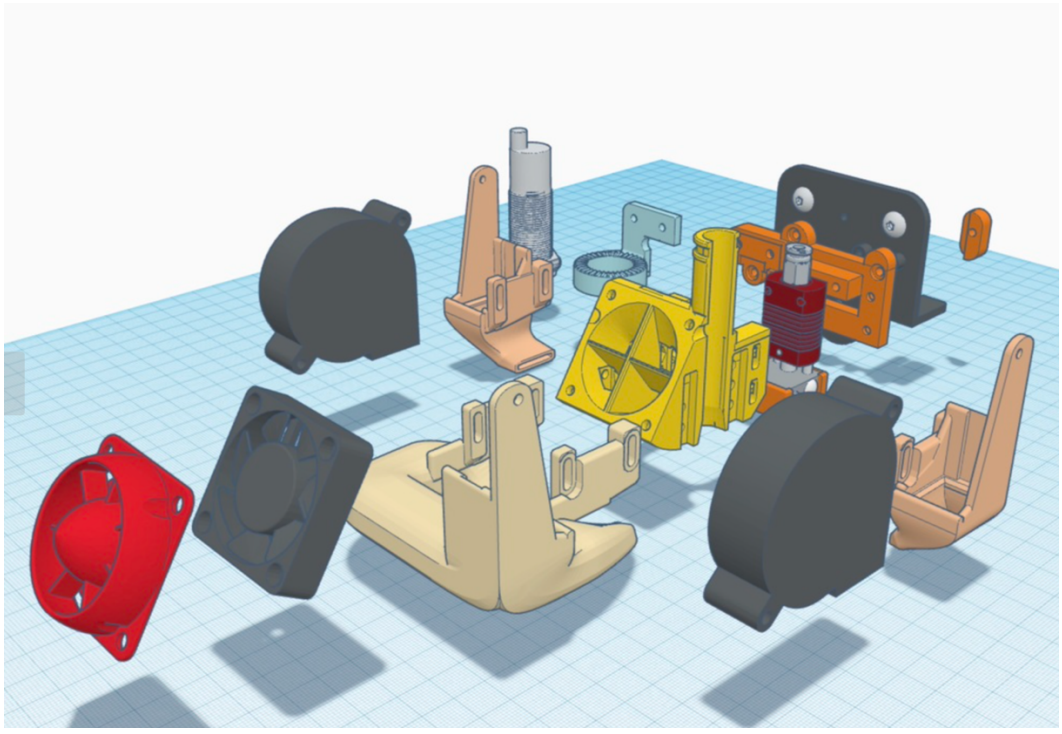
- Anet A8
- Elegoo Neptune
- 3 Geeetech A10, A20, A30
- Micro Swiss DD - Mosquito for Creality
- Open Builds Mini
- Sovol SV02
- Two Trees Bluer
- Two Trees Sapphire (S5)
- ZYLTech Gear V3
- Known Clones of any above (where the X carriage is a match)

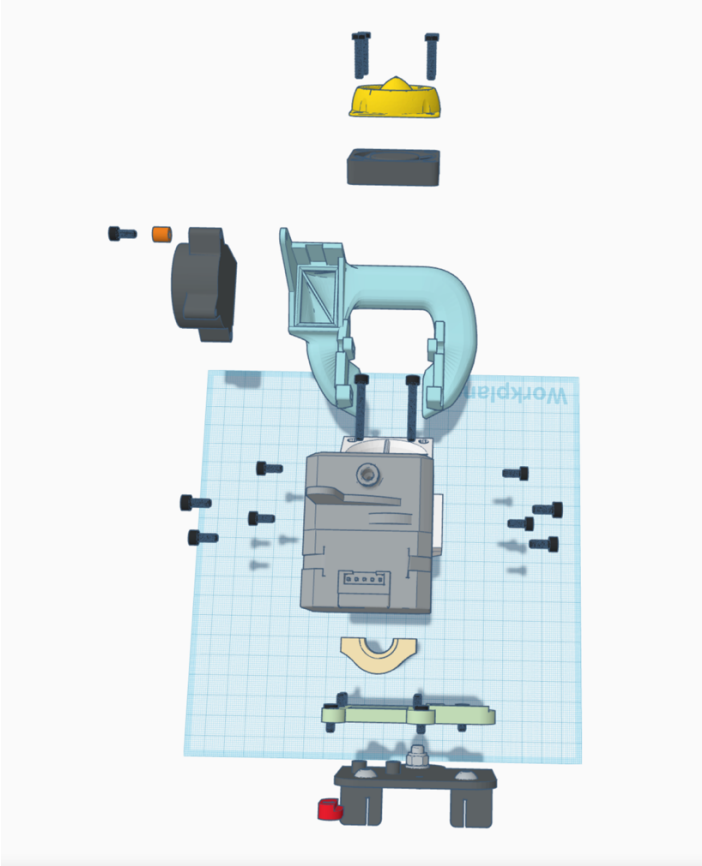
New Direct Drive Extruders that are now supported:

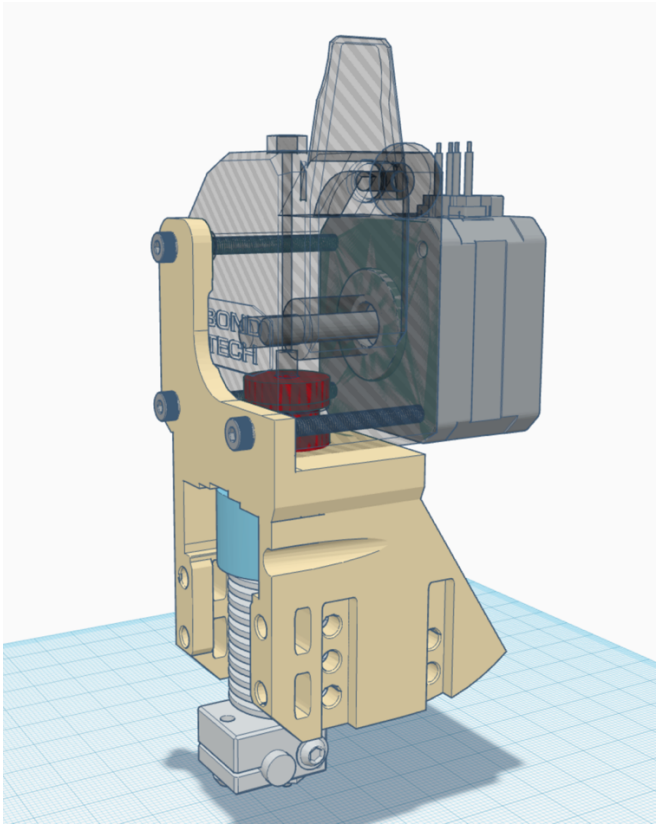
Sailfin

Hero Me Gen6 Image Gallery

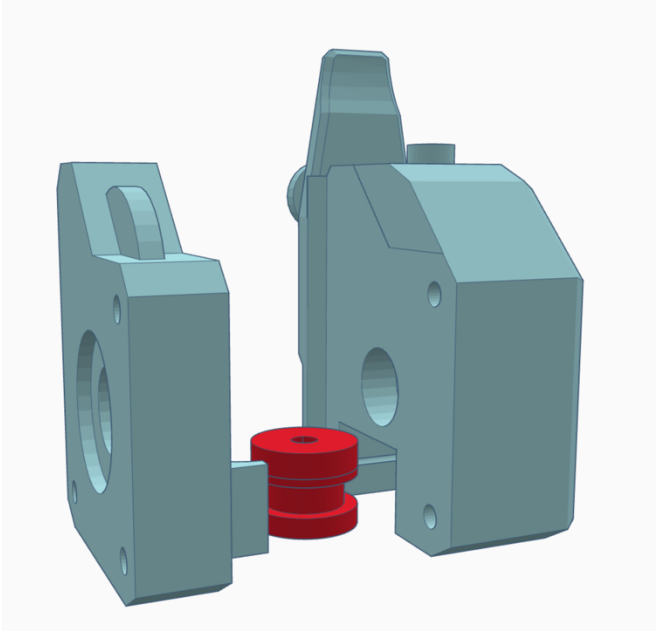




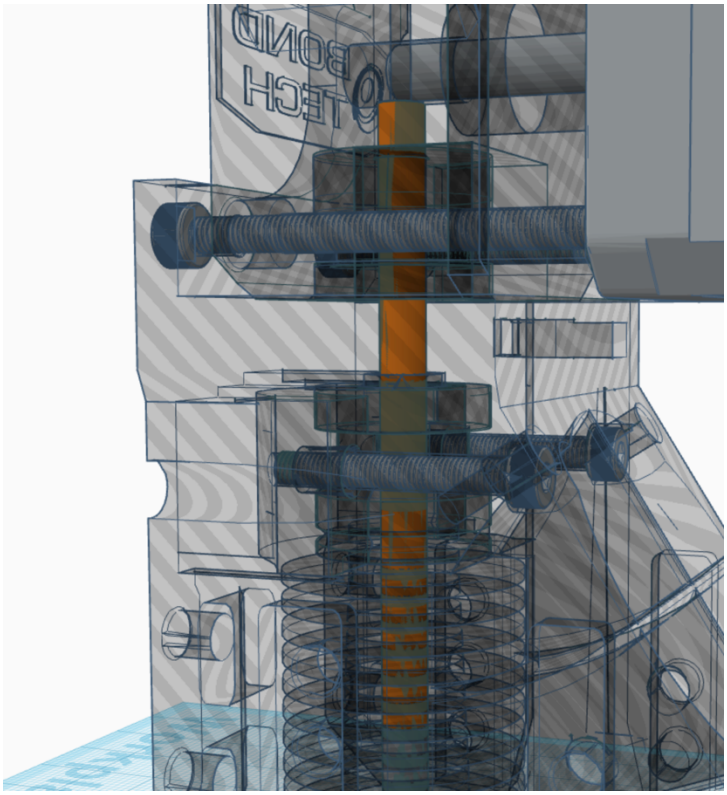




Note the extruder and stepper orientation and screw placement for the Bondtech BMG on Hero Me DD Bases with this bracket type.



Hero Me DD setups use the spacer in BMG, Titan, and similar extruders.



Note that the PTFE tube is completely captive between the extruder, Hero Me DD Base and the hotend. There is no need for PTFE couplers.

