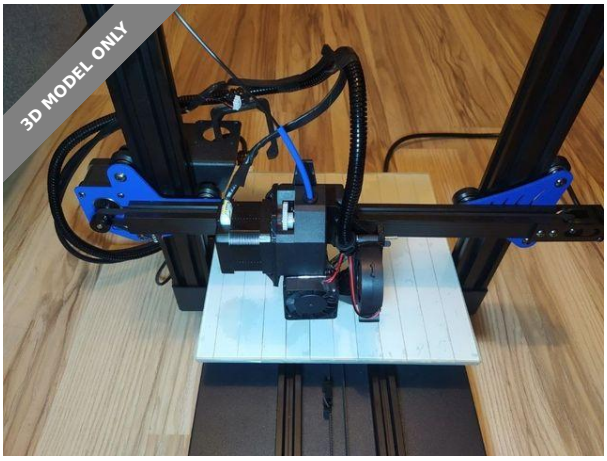


# TwoTrees Bluer Simple and Rigid Direct Drive E3D V6

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VIEW IN BROWSER

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## Summary

Description I designed very rigid and simplistic direct drive mount for my TwoTrees Bluer V2. I haven't found a...

3D Printers > 3D Printers - Upgrades

Tags: directdrive directdriveextruder e3dhotend e3dv6 twotrees twotreesbluer

## Description

I designed very rigid and simplistic direct drive mount for my TwoTrees Bluer V2.

I haven't found a solution that fits V6 hotend and have proper 5015 part-cooling fan.

My main goal was to use a minimal number of external parts and keep the upgrade as simple as possible, while maintaining the high performance cooling solution.

## Main advantages to using this solution

- Very stiff design, no side to side wobble

- Minimal external parts required, uses a stock extruder motor
- No build area lost- nozzle is practically in the same position as stock hotend
- Part-cooling mounts are mirrored of a standard Ender-3 base plate mount, so you can print your favourite par cooling solution or other accessories!
- Efficient part-cooling solution- very good overhangs and bridges
- Adjustable part-cooling fan mount- you can fine tune to optimal airflow

## Parts required for this mod

This mod uses mostly screws from original hotend solution, but you will need also:

- 1x V6 Hotend
- 1x5015 blower fan
- 1x4010 fan
- 2xM2.5 screws to mount hotend fan
- 1xM3 long screw and nut for mounting part-cooling fan
- 2xM3 screws to attach part-cooling fan mount
- 2xM3 brass inserts for mounting part-cooling fan to base plate
- Cable to extend extruder wires
- Zip ties for cable management

## Instructions

1. Print all three parts
    - Add a piece of tape to fill a hole in v6 fan mount (I sliced this part in order to fit properly).
2. Melt in two M3 inserts to base plate
3. Attach base plate to original X carriage with stock screws
4. Prepare V6 hotend and attach fan mount and fan
5. Mount V6 hotend to BMG extruder
6. Screw extruder and motor to the base plate
7. Attach part-cooling mount and*__adjust height__*
8. Insert 5015 blower fan and screw it in place
9. Extend extruder cable and do some wire management
10. Done :)

## Side notes

If you don't have M3 inserts to melt into base mount, just make the holes smaller in your editing software and use M3 tap or simple screw to make base plate threads.

The base plate mount was entirely designed by me, printing orientation is presented in one of the photos.

Part cooling fan was inspired by @phelanp11 work.

Hotend cooling solution is a butchered version of @JamesK1 mount.

Printing all the parts took me 4.5h and about 60g of the filament.

## End notes

Feel free to comment and post makes. Likes will be greatly appreciated :)

*__Happy printing :)__*

## Print Settings

**Printer Brand:**

Creality

**Printer:**

Ender 3

**Rafts:**

No

**Supports:**

Yes

**Resolution:**

0.6mm nozzle + 0.2mm layer

**Infill:**

20%

**Filament:** Rosa-3D PET-G Black

**Notes:**

Print with supports from bed only, for better rigidity use 3 perimeters with 0.6mm line width.

Category: 3D Printer Parts

# Model files

**bluerdirectdrive-_base_plate.stl**

**bluerdirectdrive-_part_cooling.stl**

**bluerdirectdrive-_hotend_cooling.stl**

Find source .stl files on Thingiverse.com

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