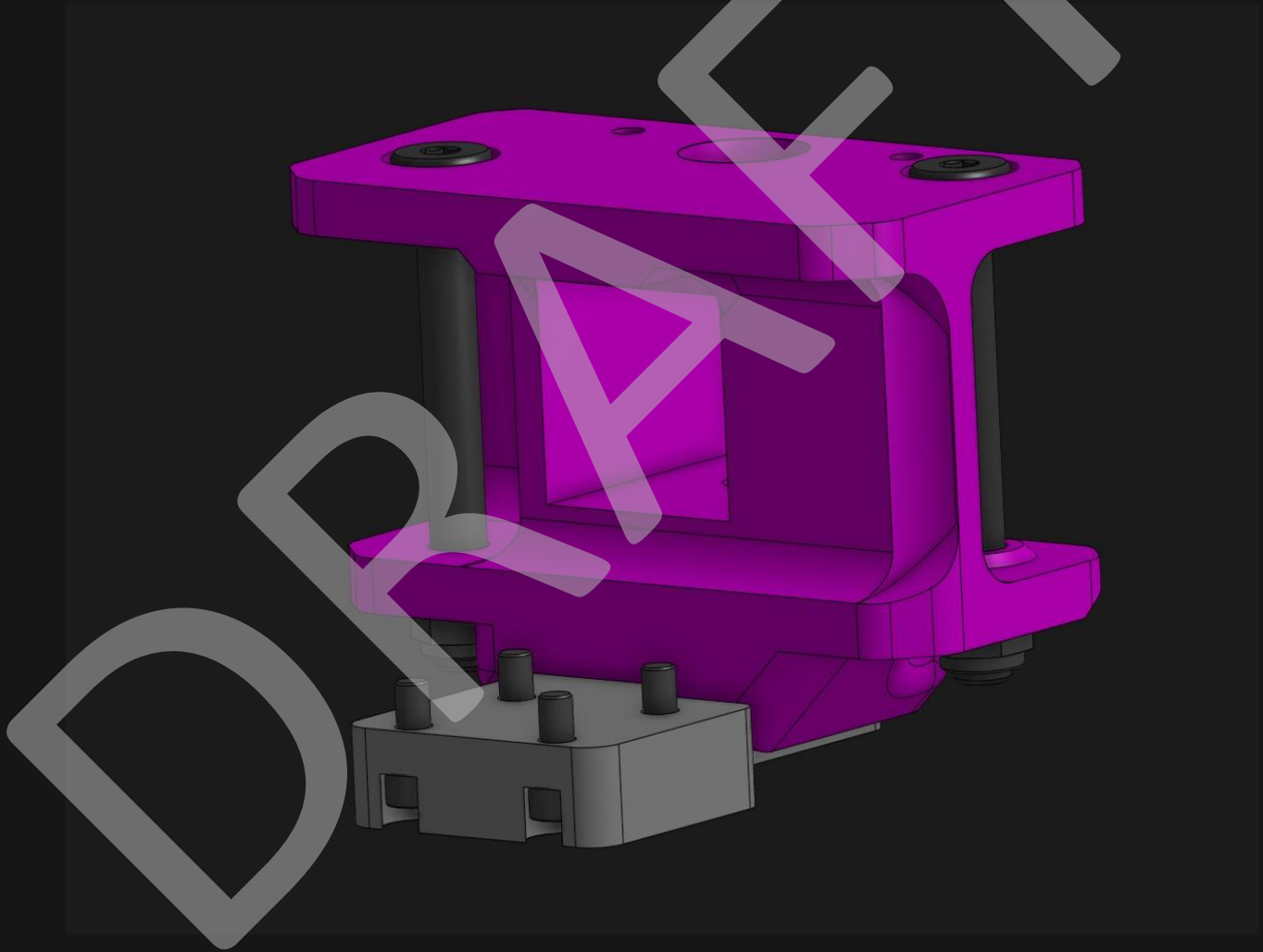


Gutter Rat GR9

X Gantry Bracket Assembly & Materials

Mellow VCORE 3 Version



Parts and Hardware

You need both left and right, the assembly process is similar for both.

For Each Side -

Hardware:

1x Non-Toothed Mellow VCORE 3 Idler

1x Toothed Mellow VCORE 3 Idler

2x M5x6mm Screws

6x M3x6mm Screws

2x M5 T-Nuts

1x M5x45mm Screw

1x M5 Lock Washer (or Loctite)

1x M5 Flat Washer

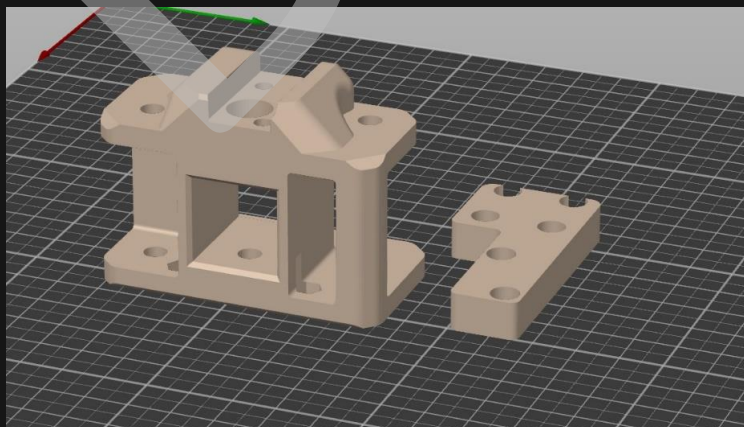
1x M5 Nut

M3x5x4mm Heat Sets Inserts

Printed Parts:

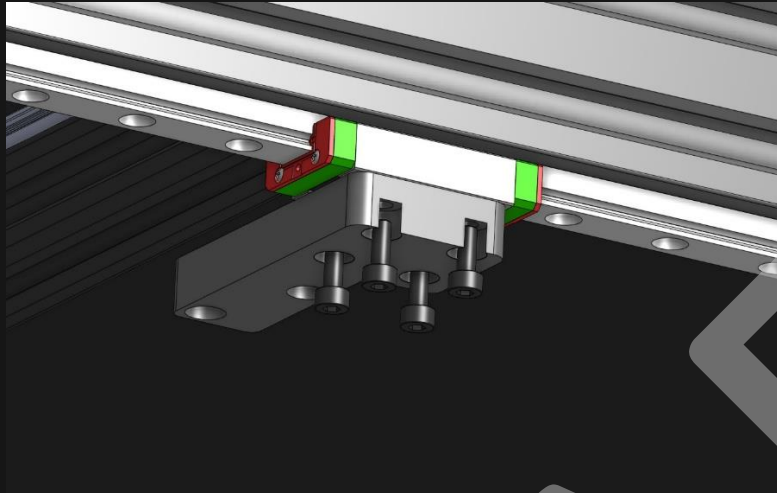
Left or Right Printed GR9 Gantry Bracket and GR9 Gantry Mount

Printed Spacers: (One of each) 3.5mm, 14.5mm, 2.5mm, 15.5mm (5mm I/D, 6mm O/D)

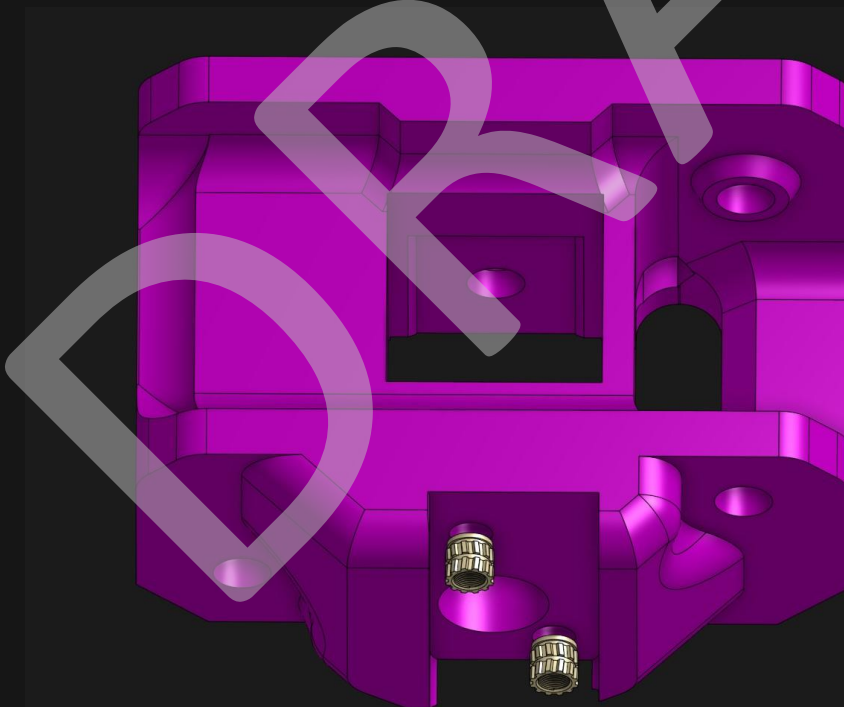


Assembly

First, mount the Gantry Mounts to the Y Rail carriages. This will need 4 M3x6mm per side.



Then, add the two heat sets to each Gantry Bracket. These are where the Gantry Mount will attach to the Gantry Bracket. Preferred are M3x5x4mm heat sets.



You will notice that one side of the bracket has a slot and the other side is enclosed. The slotted side of the brackets will be in the front of the printer, and the enclosed side will be in the rear. Below are the orders in which to install the spacers and idlers for each bracket

Left Bracket - Slotted Side (Front)

Top to Bottom

3.5mm Printed Spacer

Toothed Idler

14.5mm Printed Spacer

Left Bracket - Enclosed Side

Top to Bottom

15.5mm Printed Spacer

Non-Toothed Idler

2.5mm Printed Spacer

Right Bracket - Slotted Side (Front)

Top to Bottom

15.5mm Printed Spacer

Toothed Idler

2.5mm Printed Spacer

Right Bracket - Enclosed Side

Top to Bottom

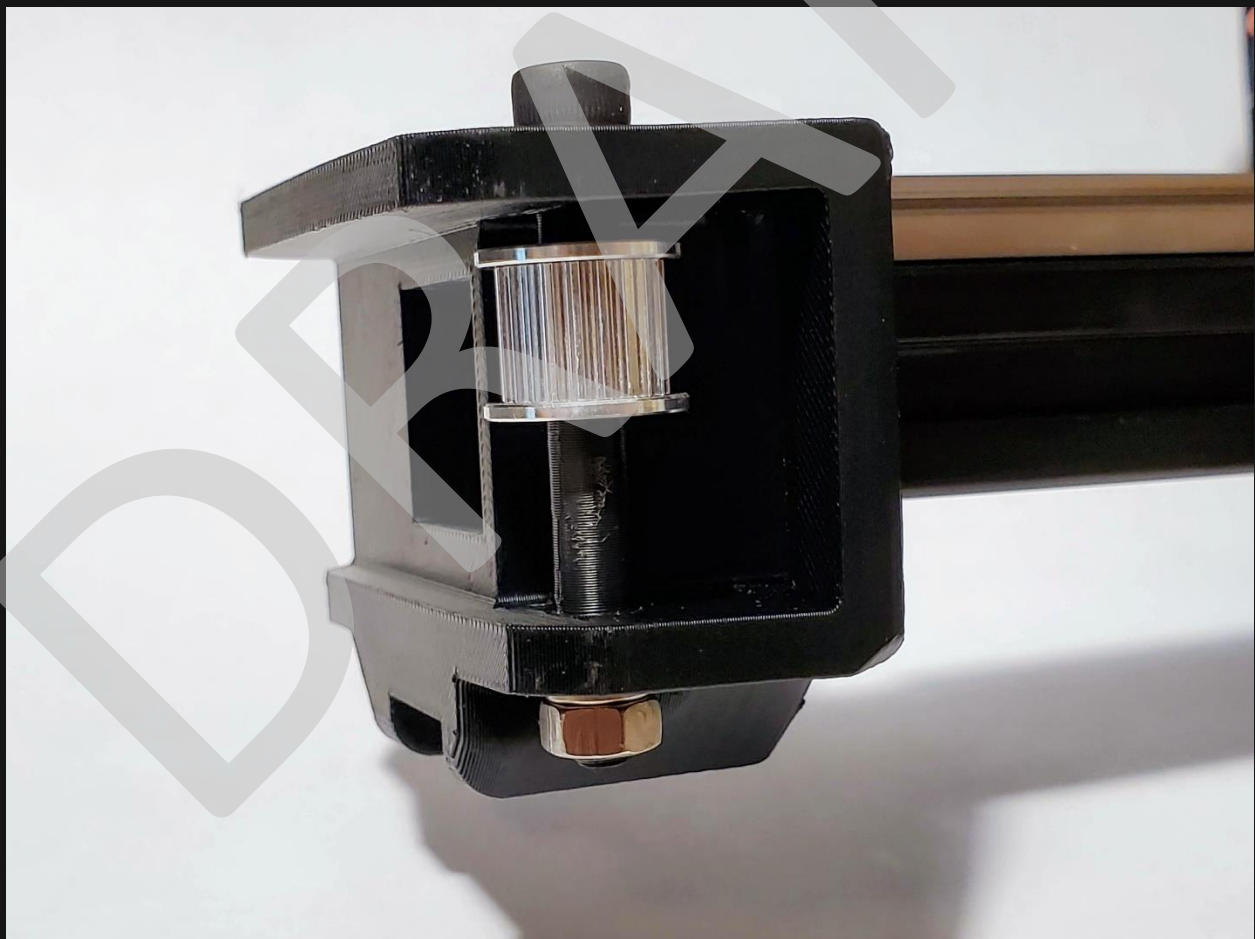
3.5mm Printed Spacer

Non-Toothed Idler

14.5mm Printed Spacer

To assemble the idlers and spacers inside the bracket, partially insert the M5x50 screw and flat washer from the top of the bracket, and slide the idlers and spacers onto the threaded portion of the M5 one at a time, in the order as described above. Continue to slide the M5 screw further down into the bracket as you slide on each idler or spacer, until you are able to push the screw through the bottom hole of the bracket fully.

Secure the assembly from the bottom of the bracket using a M5 lock washer and M5 nut, or a M5 flat washer and Loctite. Either option seems to work well. Tighten the nut while using an Allen wrench on the other end of the screw, while holding the nut with pliers. Tighten gently until the idlers no longer are able to freely move up and down in the assembly, but not so tight that you create drag on the idlers. They should spin freely by hand.



Note: Mounting the Gantry Brackets to the X Axis Extrusion takes place in a later step.