

Rat Rig

00. Preparations

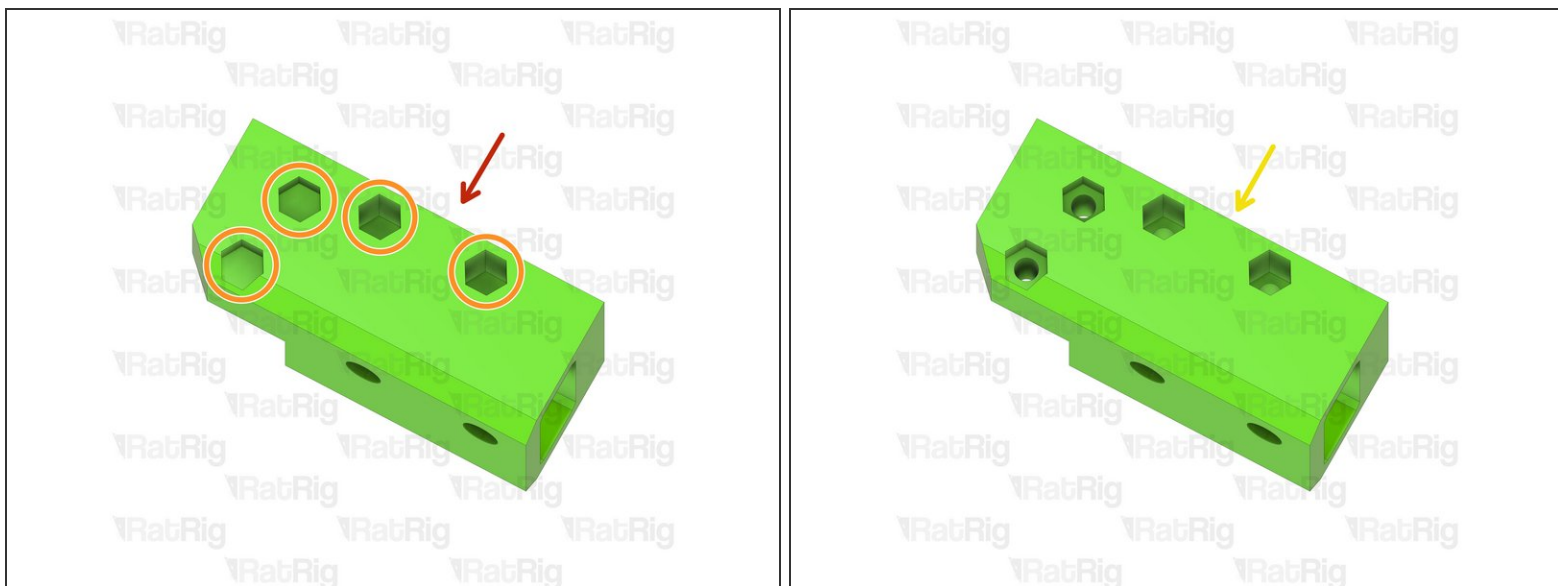
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INTRODUCTION

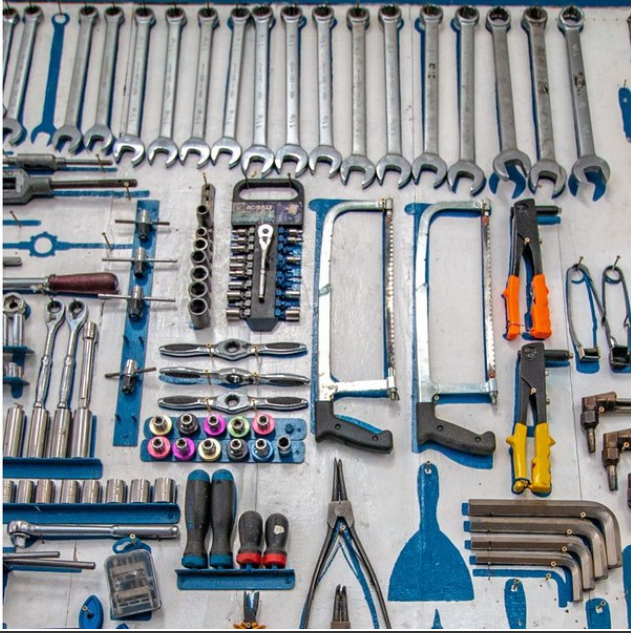
[video: <https://youtu.be/eO3UwISix2M>]

Step 1 — Prepare the printed parts



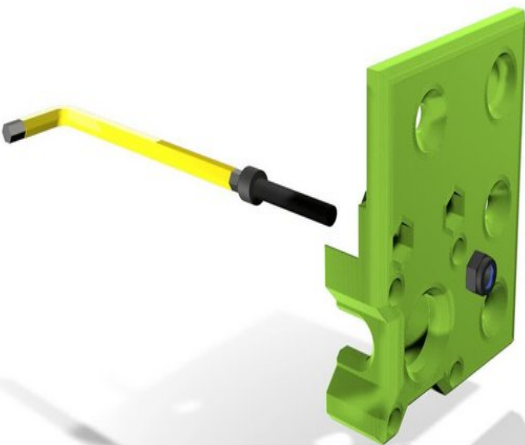
- ⓘ One of the V-Minion printed parts has sacrificial layers which must be removed prior to assembly.
- ⓘ It is recommended to remove them by using a screwdriver, an Allen key, or a drill, to push through the layers. This clears the holes for the screws.
- y_belt_mount printed part
- Sacrificial layers to be cleared
- Prepared printed part

Step 2 — Recommended tools



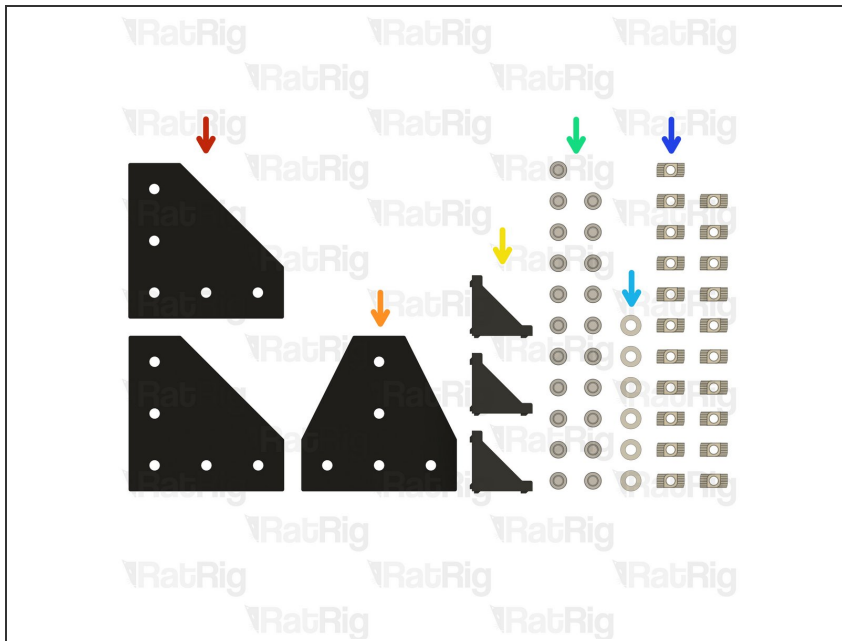
- i It is recommended to have the following tools for use during the V-Minion assembly
 - Allen Key / Hex Wrenches in the following sizes: 2.5mm, 3mm, 4mm, 5mm & 6mm
 - 8mm Spanner / Wrench
 - Wire cutters & a wire stripper
 - Tape measure or calipers
 - Crimping tool
 - Cross slot / Philips screwdriver
 - Flat / straight screwdriver

Step 3 — Installing hex nuts into printed parts



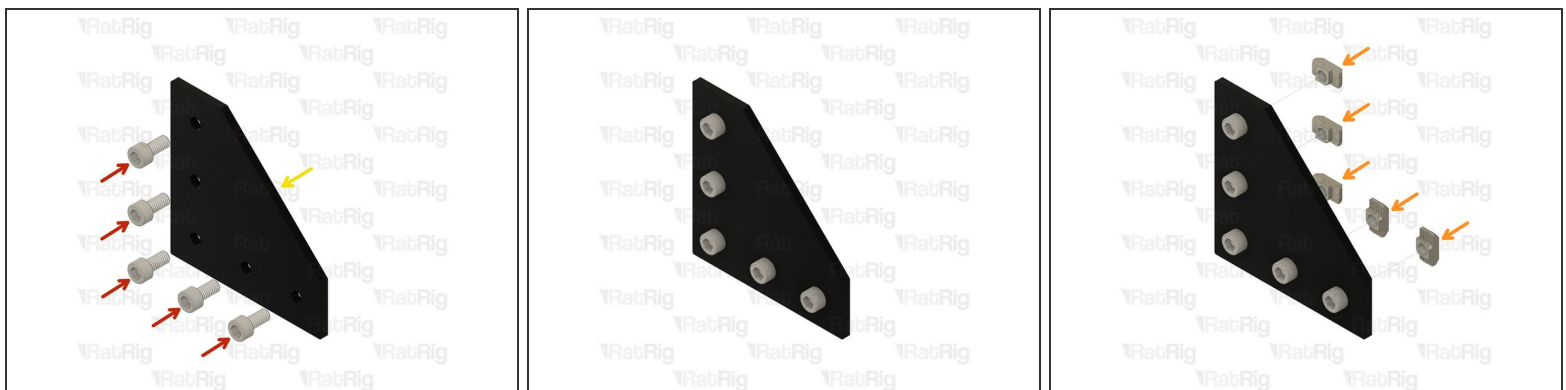
- i Occasionally you will need to install a hex nut into a printed part
- i The hex nut needs to be fully pulled into the printed part to ensure there are no issues with assembly or cross threading
- i This animation shows how to use a cap head screw to pull a hex nut into a printed part

Step 4 — Prepare the parts for the brackets



- 2x Corner Plate
- 1x T-Shape Joining Plate
- 3x 90 Degree Corner
- 21x M6x12 Cap Head Screw
- 6x M6 Washer
- 21x 3030 Drop-in T-Nut - M6

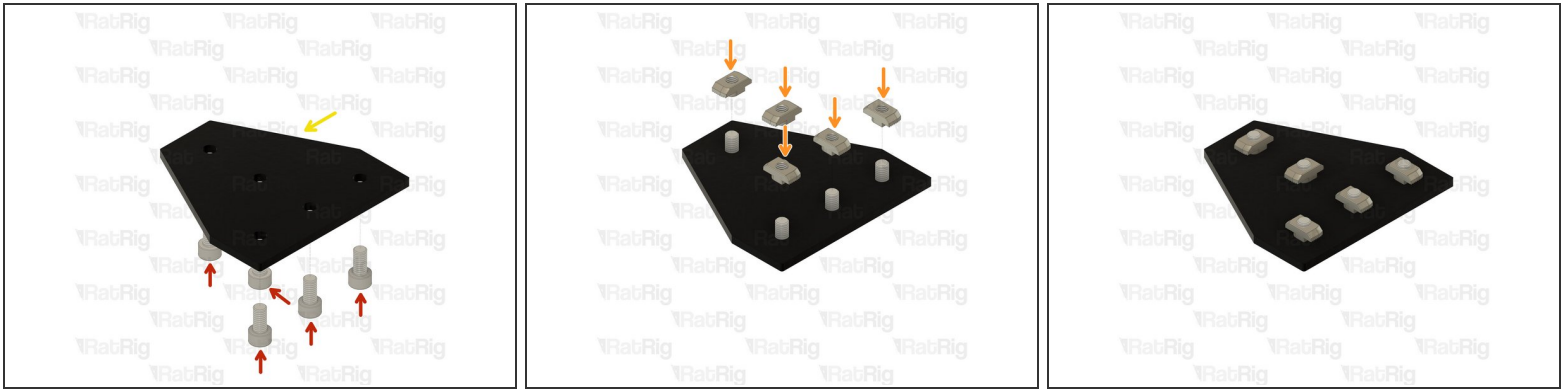
Step 5 — Assemble the corner plates (x2)



- M6x12 Cap Head Screw
- 3030 Drop In T-Nut M6
- Joining Plate for 3030

i Loosely thread the 3030 T-Nuts onto the M6x12 screws. Do not tighten them at this point.

Step 6 — Assemble the T-shape joining plate




- M6x12 Cap Head Screw
- 3030 Drop In T-Nut M6
- T-Shape Joining Plate for 3030

i Loosely thread the 3030 T-Nuts onto the M6x12 screws. Do not tighten them at this point.

Step 7 — Assemble the 90 degree corners (x3)




- M6x12 Cap Head Screw
- M6 Washer
- 3030 Drop-in T-Nut - M6
- Cast 90 Degree Corner Bracket for 3030

 Loosely thread the 3030 T-Nuts onto the M6x12 screws. Do not tighten them at this point.

Step 8 — Next guide



 Continue with the next guide: [01. Frame Assembly](#)