

# Makertech

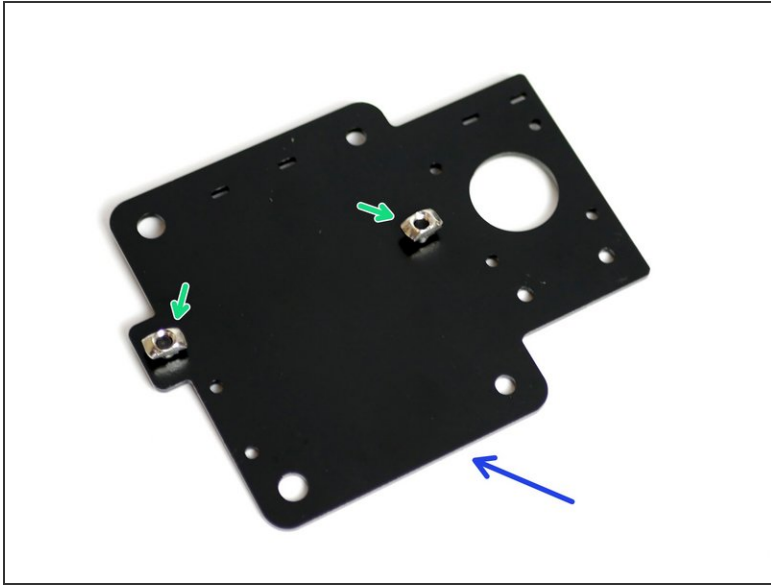
## Stage 03 - Z-Axis

Z-Axis Assembly for the Proforge 2/2S.

Written By: Makertech

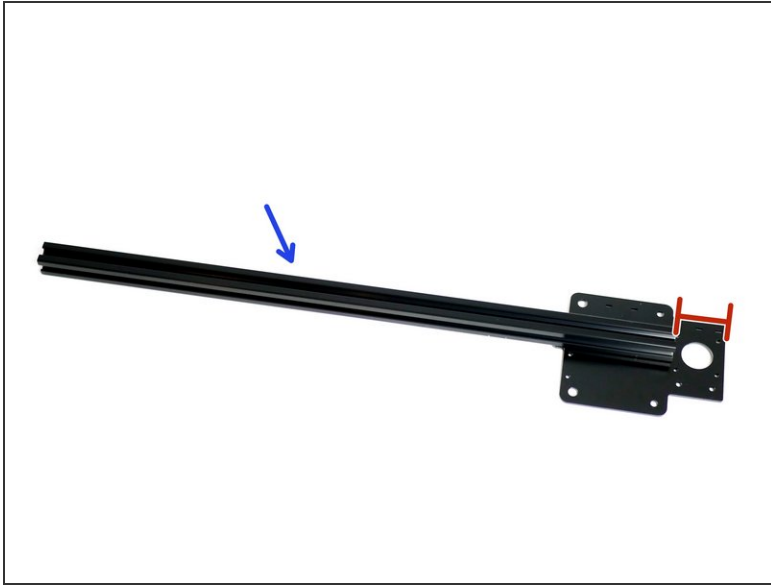


## Step 1 — Z-Axis Bracket Prep.



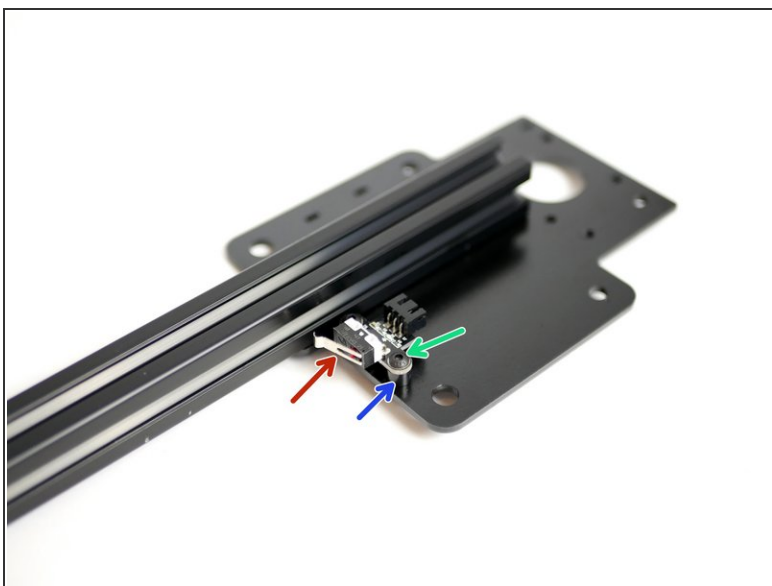
- Prepare the Z-Axis Bracket
  - Two M5 x 8mm bolts
  - Two M5 T-Nuts
- ⓘ Orient as shown in the photos.

## Step 2 — 2020 x 450mm Beam



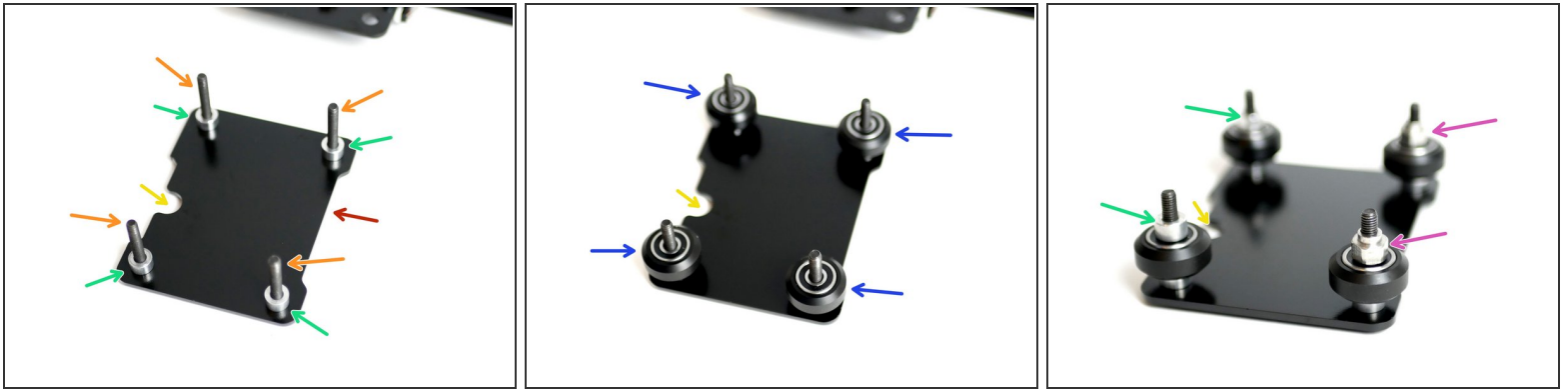
- Fix the 2020 x 450mm Beam onto the Z-Axis Bracket.
- Make sure the distance between the edge of the z-axis bracket and beam is **40mm** for the Proforge 2 and **50mm** for the Proforge 2S
- ⓘ Keep as straight and square as possible to the bracket. Use the part of the bracket that comes out to help gauge this.


## Step 3 — Y-Endstop




- Install the Endstop onto the Z-Axis Bracket.
  - Two M3 x 14mm bolts
  - Two M3 x 5mm Spacers
  - Two M3 Nyloc Nuts

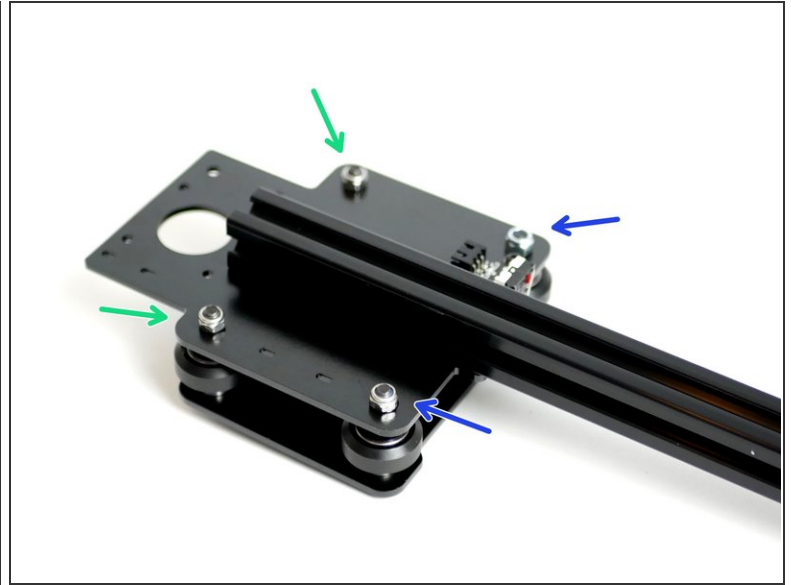
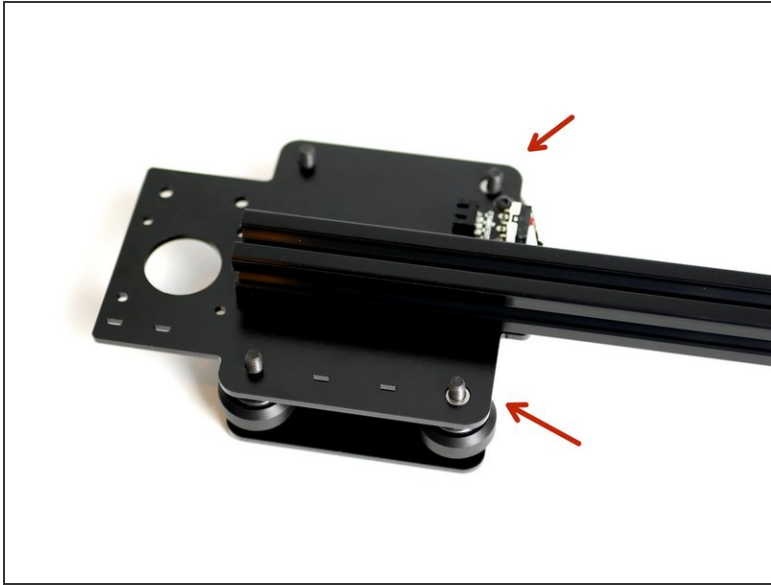
## Step 4 — Z-Axis Rollers



 Prepare the Z-axis support bracket with rollers and spacers:

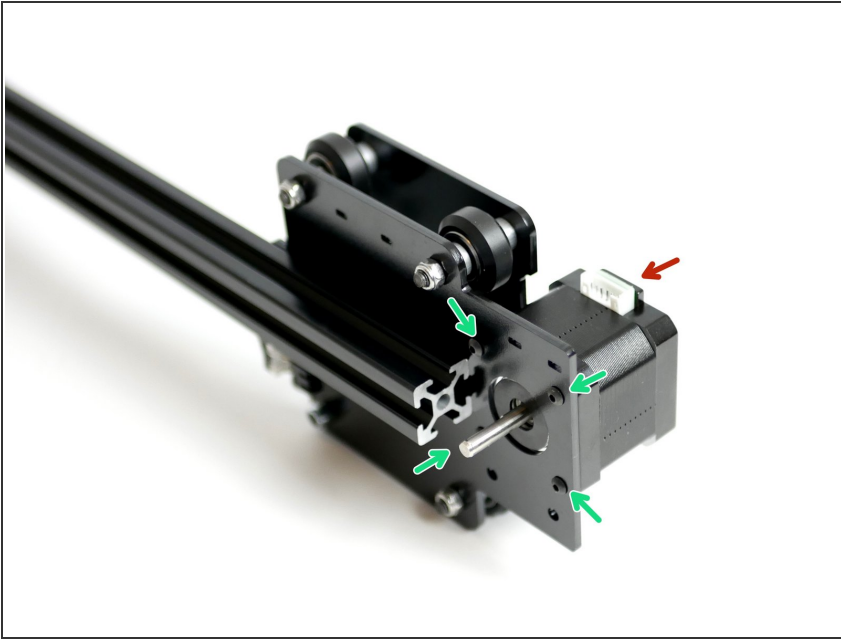
- Z-Axis Support Bracket
  - The support bracket should be oriented so that the circular cut out should be on the **lower left**.
- Four M5 x 35mm Bolts
- Six M5 x 6mm aluminium spacers. Four beneath the Roller Wheels, two above the Roller Wheels on the same side as the cutout
- [Roller Wheel Assembly](#)
- Two Eccentric Spacers. opposite side of the cutout
  -  Match the direction of the eccentric spacer in third image.

## Step 5 — Z-Axis Rollers Cont.



- Place carefully over the spacer/roller stack the main Z-Axis Bracket Assembly.
  - ☑ Match the photographs, the eccentric spacers should be on the side of the endstop.
- Tighten **firmly** the Nuts that are holding together the rear side of the assembly.
- Tighten **loosely** the nuts holding together the front of the assembly with the eccentric spacers.
  - ☑ The eccentric spacers should be able to turn freely - they will be tightened later.

## Step 6 — Y-Axis Motor



- ① Fix a NEMA 17 Motor onto the bracket as shown in the image.
  - Four M3 x 6mm bolts.
  - Orient the Motors cable connector upwards.