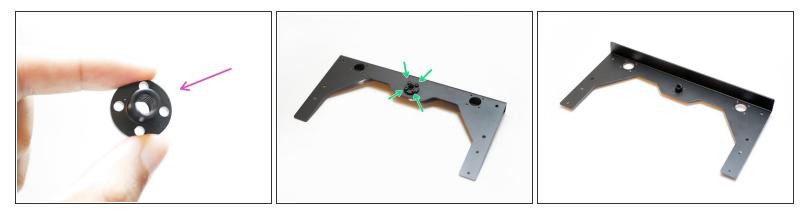
# Makertech Stage 04: Platform

Written By: Makertech 3D



# Step 1 — Platform Panels - Lead Screw Nut

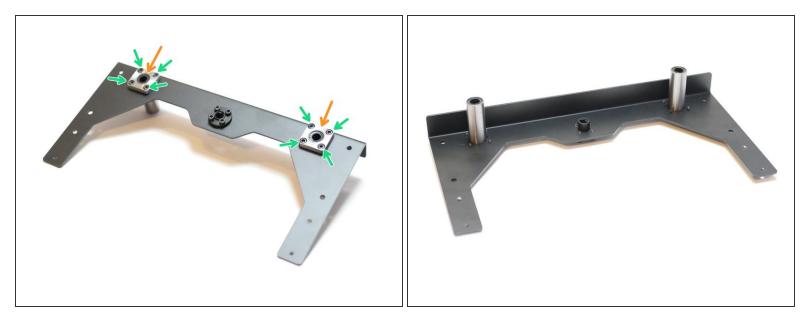


(i) Fix the lead screw nut onto the platform panel as shown.

- Lead Screw Nut
- M3 x 6mm Cap
- (i) Repeat for both panels

 $\bigwedge$  Note the orientation of the nut in relation to the panel also.

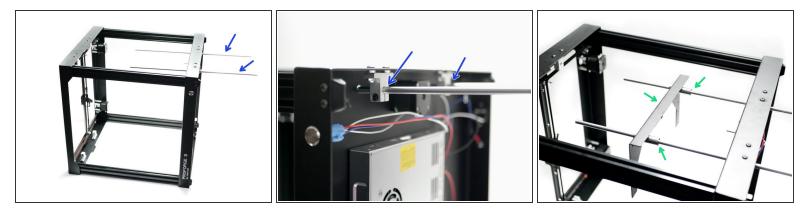
## Step 2 — Platform Panels - Linear Bearings



- (i) Secure two LMK8LUU linear bearings onto the panels like shown.
  - LMK8LUU
  - M3 x 6mm Cap
- (i) Repeat for both Panels

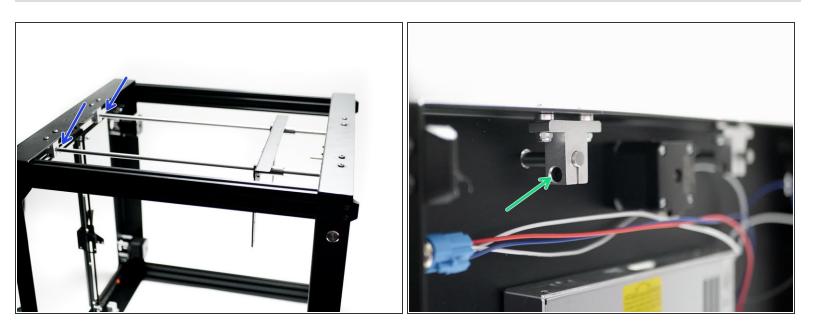
 $\bigwedge$  Note the orientation of the bearings in relation to the panels also.

#### Step 3 — Z-Rods



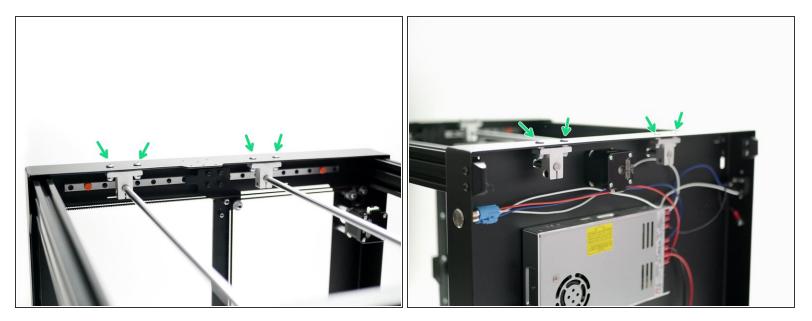
- (i) Place the printer onto its side.
- Slide two z-rods in through the mounts on the base.
- Slide one of the platform panel assemblies onto the rods like shown.
- The mounts themselves should at this stage only be fastened on loosely, as instructed in the base and top panel assembly notes.

#### Step 4 — Securing the Z-Rods



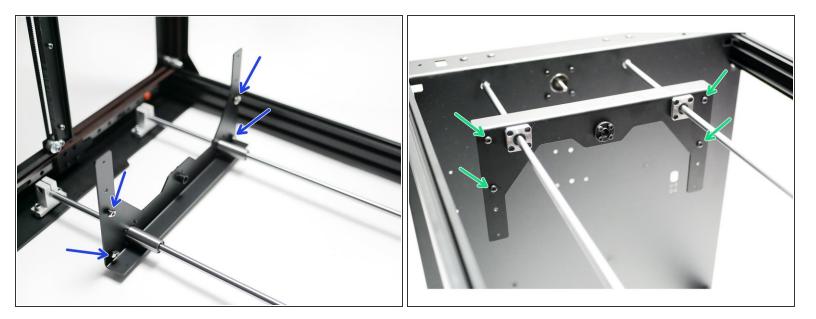
- Push the shafts all the way up into the brackets on the top panel.
- Secure the shafts onto the mounts by firmly tightening the M4 bolts on each bracket.

## Step 5 — Securing the Brackets



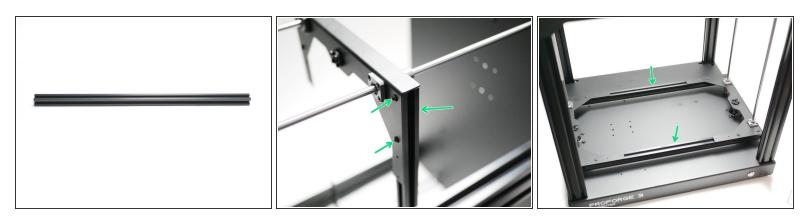
- With the mounts now clamping down onto the rods, it is time to firmly secure the brackets to the panels.
- (i) Repeat this for the other side also.

#### Step 6 — T-Nuts



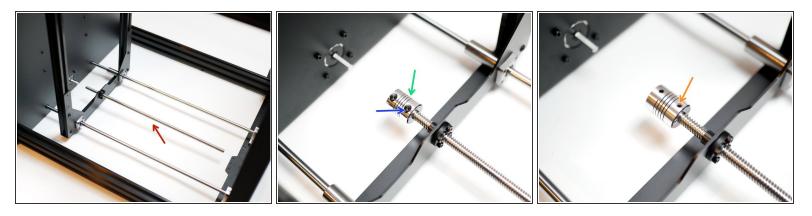
- (i) Loosely fasten M4 x 6mm bolts and M4 t-nuts onto the fours holes on the platform panels like shown.
  - $\blacksquare$  Note the orientation, the T-nuts should point towards the base.
  - M4 x 6mm
  - M4 T-Nut
- (i) Repeat for the other platform panel also.

# Step 7 — 2020 Extrusions



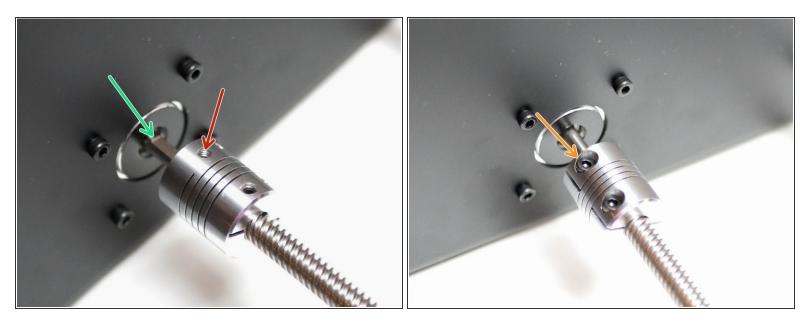
(i) Take the 2020 extrusions and secure them to the platform panels like shown.

## Step 8 — Lead Screw



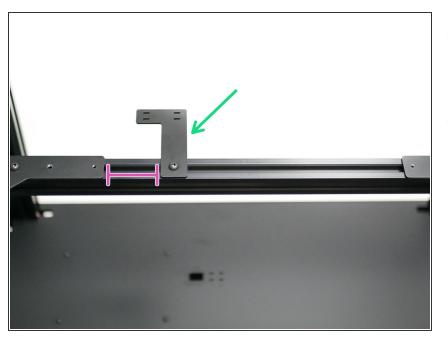
- Screw the lead screw into the lead screw nut.
- Take a coupling and push it all the way onto the leadscrew,
- Tighten this bolt to clamp the coupling in place on the lead screw.
- Finally, tighten the set screw on the coupling also.

# Step 9 — Lead Screw Coupling



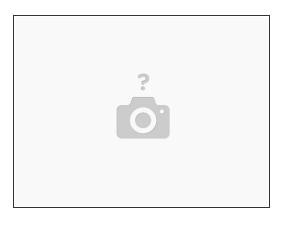
- (i) Slide the coupling onto the z-motor shaft.
- (i) Secure the set screw onto the flat side of the shaft.
  - Set screw
  - Flat side of motor shaft
- Finally clamp the coupling in place by tightening this bolt.

# Step 10 — Heated Bed Cable Relief Bracket



- Secure the cable relief bracket to the rear 2020 extrusion like shown with an M4 x 6mm bolt and M4 T-nut.
- Fix it approximately an inch from the left platform panel.

## Step 11 — Proforge 3.5



 $\bigwedge$  If building the Proforge 3.5 complete <u>this stage</u> instead.