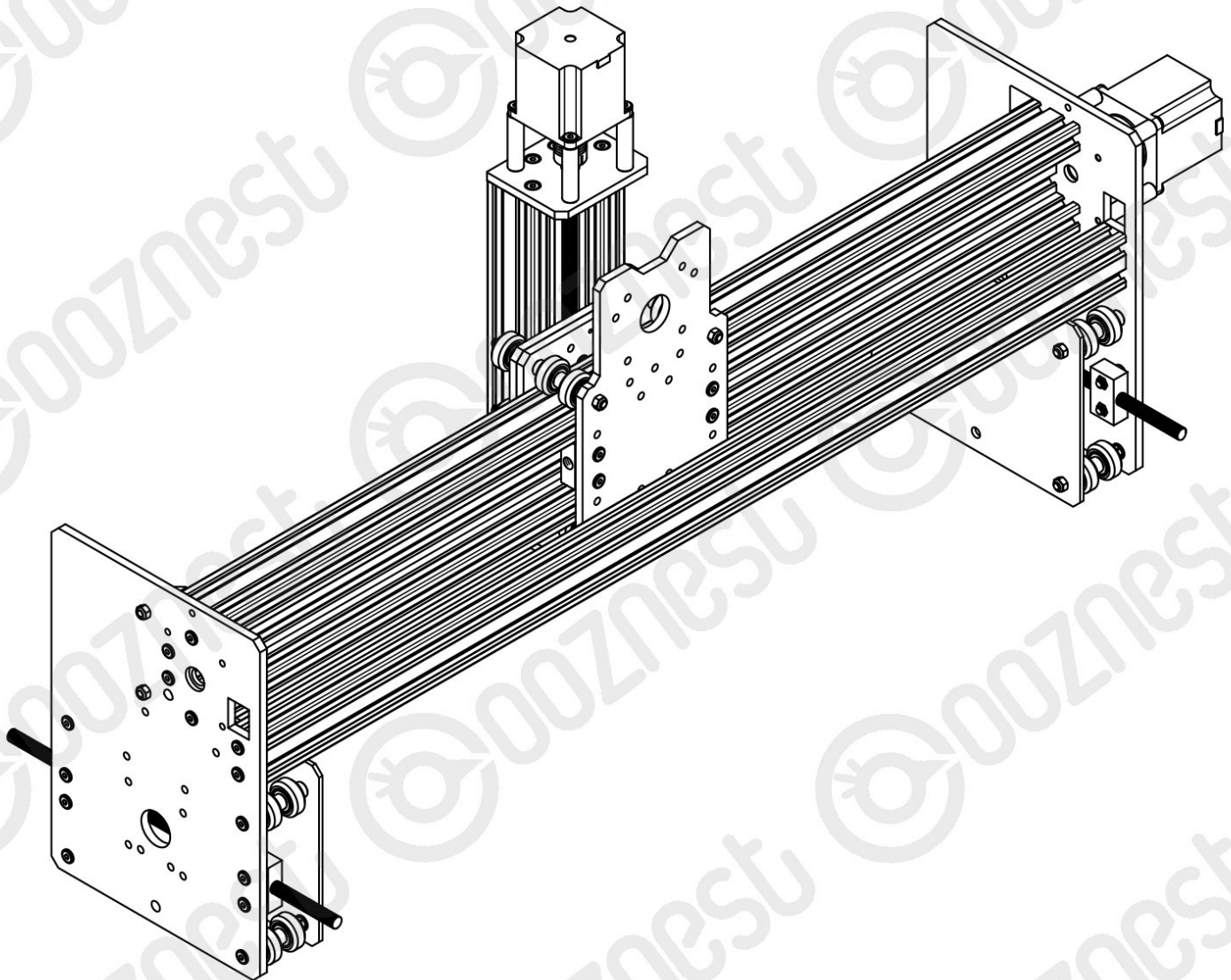


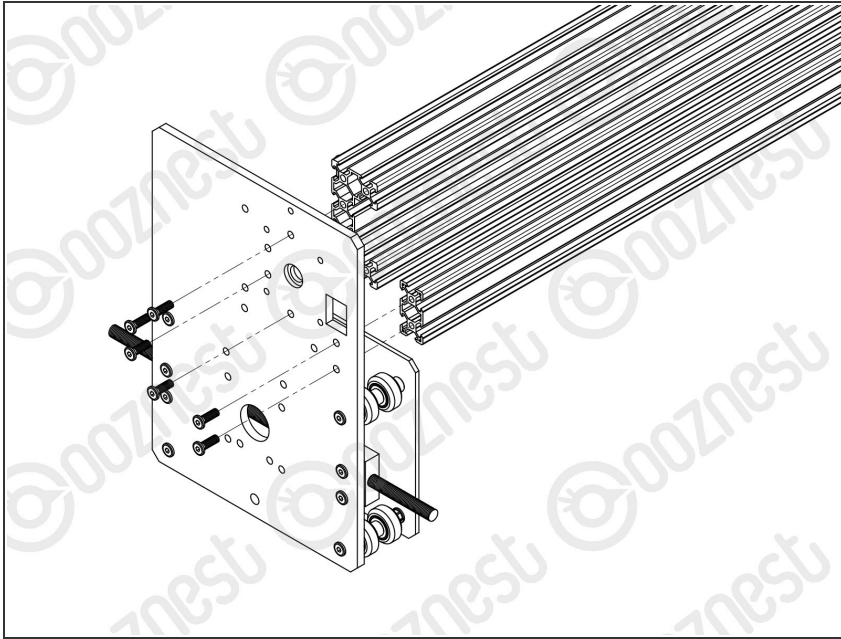


## 4. X-Gantry Assembly

Written By: Ryan Christy

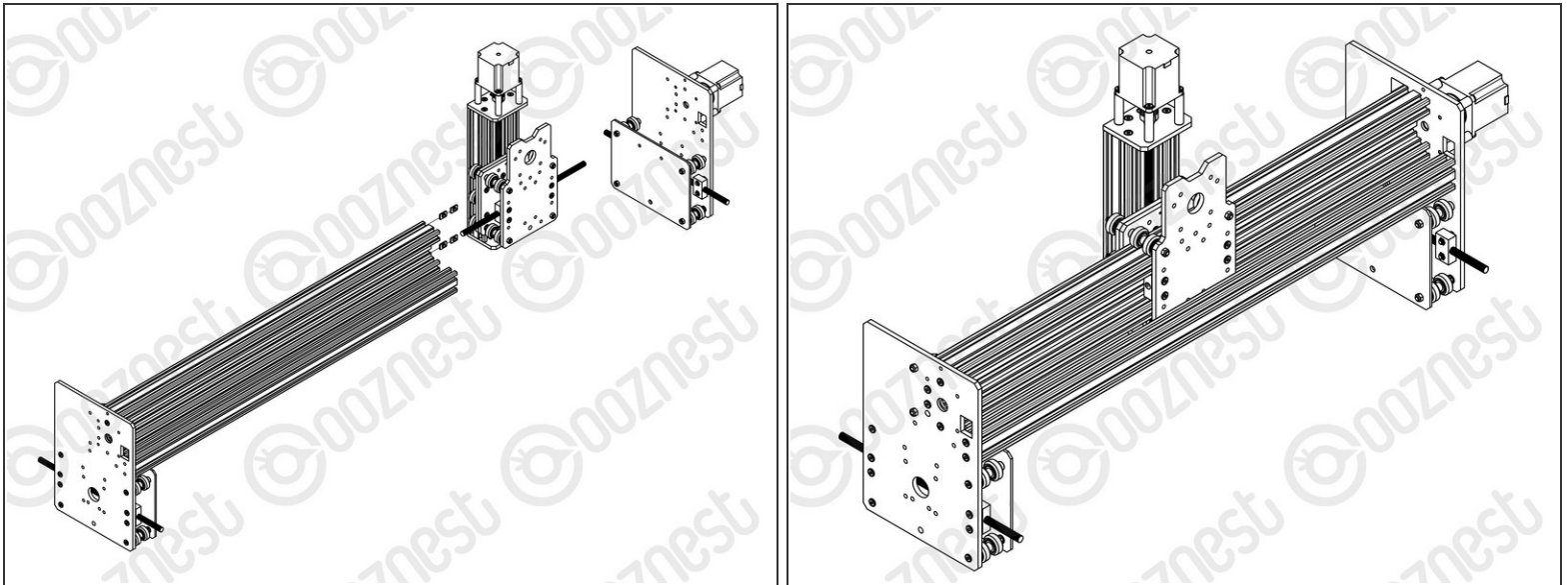


## Step 1 — Extrusions



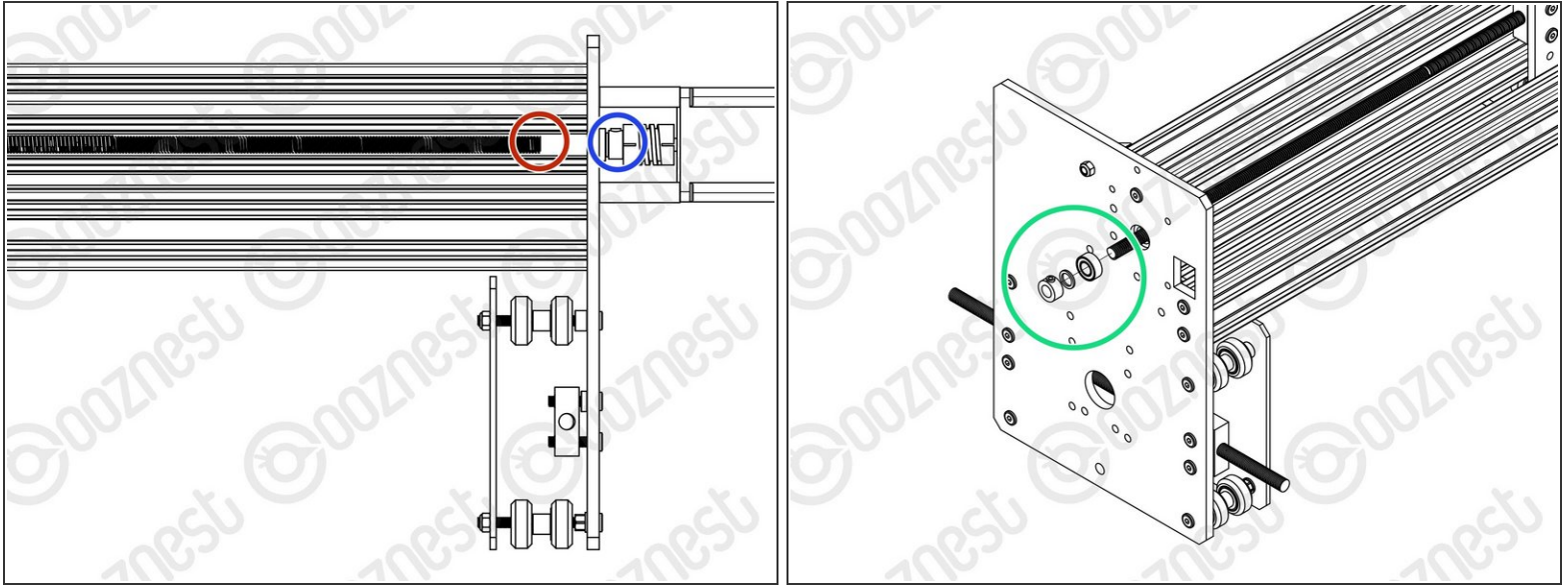
- Attach the V-Slot-2040-750mm to the back two holes on the Y-Plate-Right-Assembly using 2 x M5-Low-Profile-15mm bolts.
- Attach the C-Beam-750mm to the four non-threaded holes on the Y-Plate-Right Assembly shown above using 4 x M5-Low-Profile-15mm bolts.

## Step 2 — X-Carriage & Y-Plate-Left Assembly



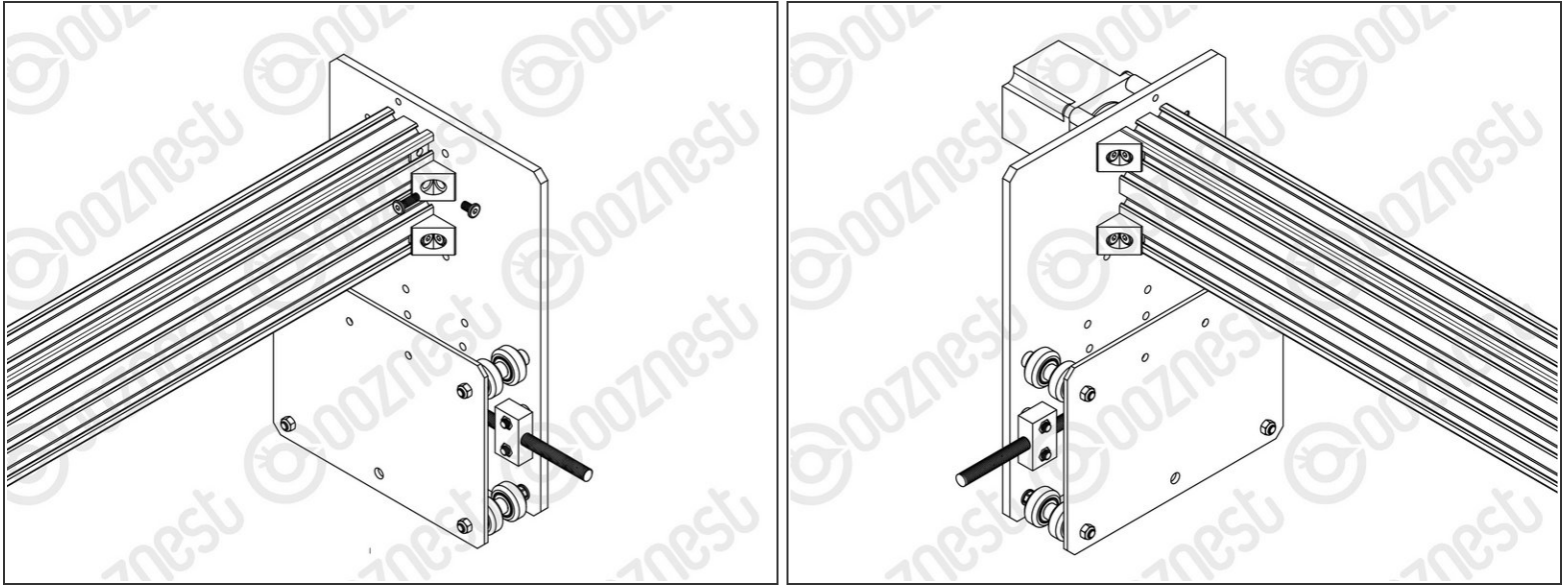
- Before the Y-Plate-Left-Assembly can be attached, Tee-Nuts need to be inserted.  
**⚠ The Tee-Nuts should be inserted so that the flat face is facing outwards.**
  - Insert 2 x Tee-Nuts in to the front facing top slot, 2 x Tee-Nuts in to the front facing bottom slot.
- Slide the X-Carriage-Assembly onto the C-Beam-750mm in the orientation seen above.
- Repeat Step 1 for the Y-Plate-Left-Assembly.
- Recheck the bottom Eccentric-Spacer-6mms on the X-Carriage-Assembly to make sure they are touching the rail, there is no wobble, and that the X-Carriage-Assembly runs smoothly along the whole length of the C-Beam-750mm.
- Place the X-Gantry Assembly onto a flat table. Check both Y-Plates are sitting flush with the table. Loosen the extrusions and adjust if needed.

### Step 3 — X-ACME Screw



- Looking at the Y-Plate-Left, adjust the X-ACME-Screw so the end is on the extrusion side of the Y-Plate-Left.
- In the gap between the Y-Plate-Left and Flexible-Coupler, insert a F688zz-Bearing, 8mm-Shim, and 8mm-Clamping-Collar. With the F688zz-Bearing closest to the Y-Plate-Left, seated inside the hole.
- Adjust the X-ACME-Screw back through the F688zz-Bearing, 8mm-Shim, and 8mm-Clamping-Collar, until it touches the NEMA 23-Stepper-Motor shaft.
- While pushing the 8mm-Clamping-Collar against the 8mm-Shim and F688zz-Bearing into the recess on the Y-Plate-Left, tighten the clamping bolt on the 8mm-Clamping-Collar.
- Tighten the grub screws on the Flexible-Coupler. Make sure one is on the flat portion of the motor shaft.
- On the outside of the Y-Plate-Right slide on a F688zz-Bearing, 8mm-Shim, and 8mm-Clamping-Collar. Inset the F688zz-Bearing into the hole.
- While pushing the 8mm-Clamping-Collar against the 8mm-Shim and F688zz-Bearing into the recess on the Y-Plate-Right, tighten the clamping bolt on the 8mm-Clamping-Collar.

## Step 4 — Angle Corners



- Attach an Angle-Corner to the Y-Plate-Right-Assembly & the front facing top slot of the C-Beam-750mm. A M5-Low-Profile-8mm screws into the Tee-Nut previously inserted, and a M5-Low-Profile-15mm goes though the Angle-Corner and attaches to a M5-Nyloc-Nut on the outside of the Y-Plate-Right-Assembly.
- Repeat this for the other 3 Angle-Corners in the positions shown above.

Thanks for following the guide. Any issues, please contact us!