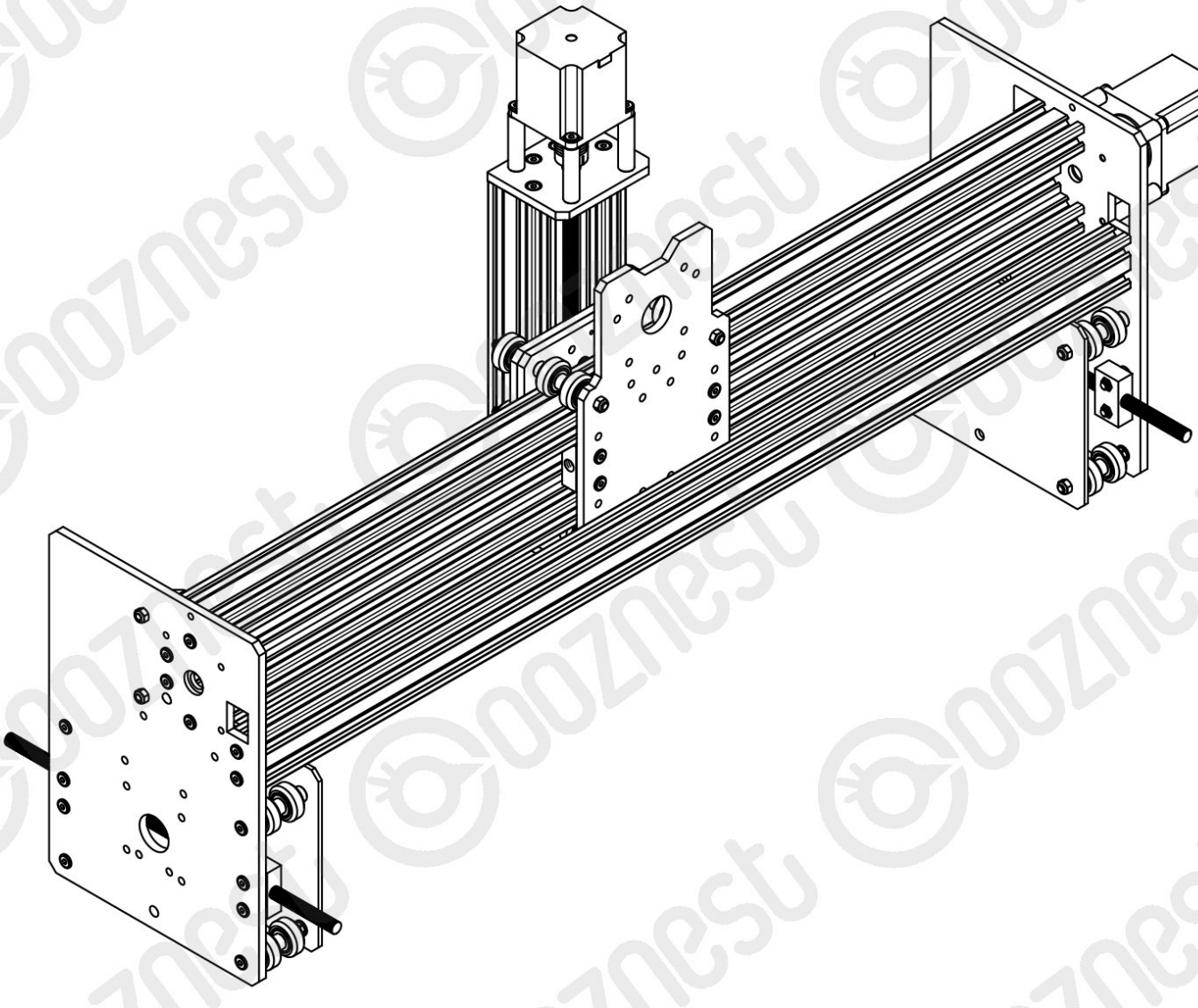
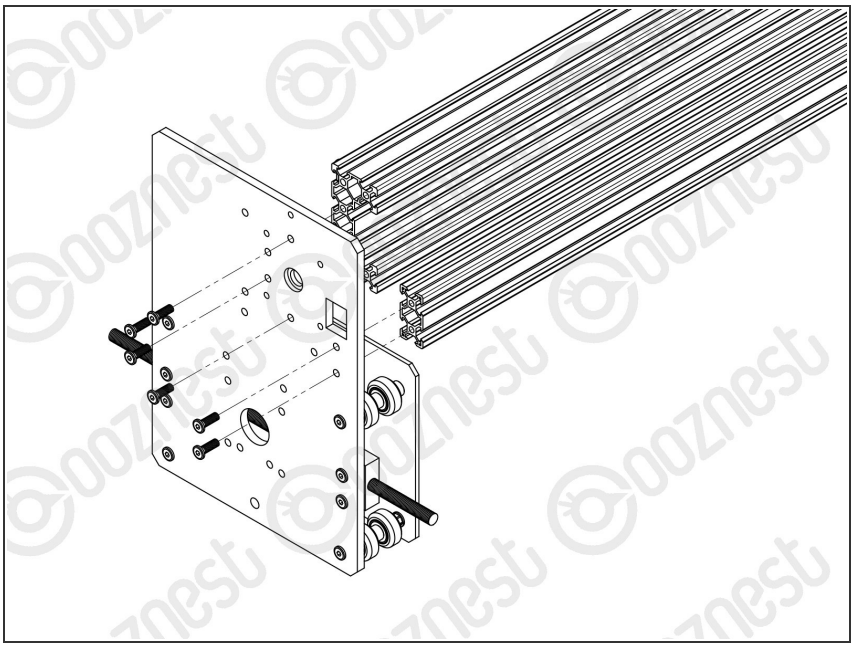
4. X-Gantry Assembly

Written By: Ryan Christy



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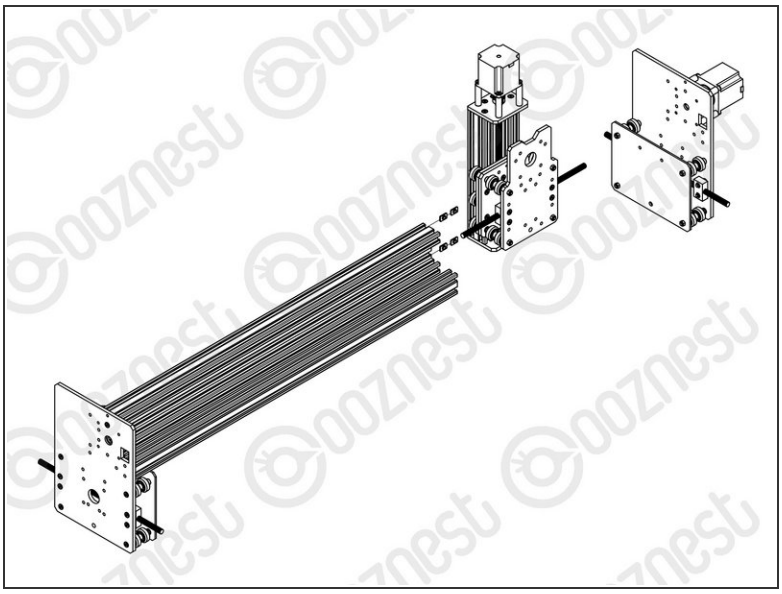
Step 1 — Extrusions

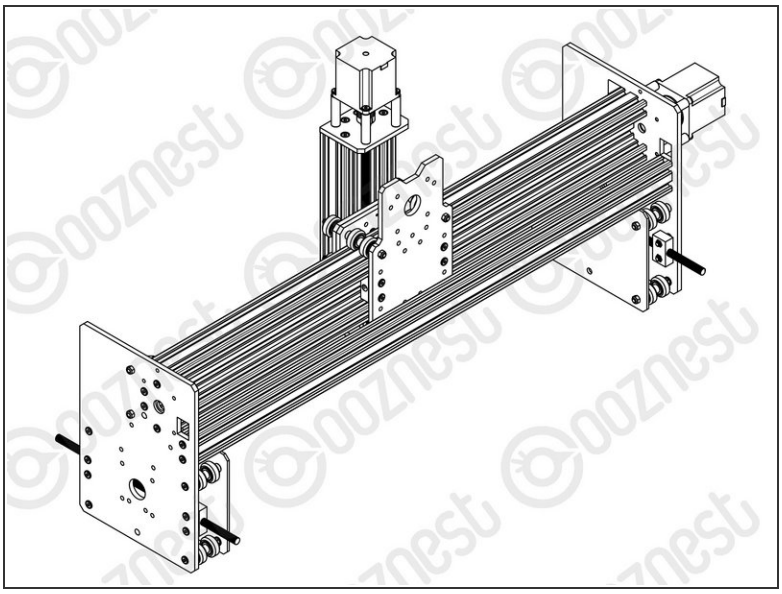


- Attach the V-Slot-2040-750mm to the back two holes on the Y-Plate-Right-Assembly using 2 x M5-Low-Profile-15mm bolts.
- Attach the C-Beam-750mm to the four non-threaded holes on the Y-Plate-Right Assembly shown above using 4 x M5-Low-Profile-15mm bolts.

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





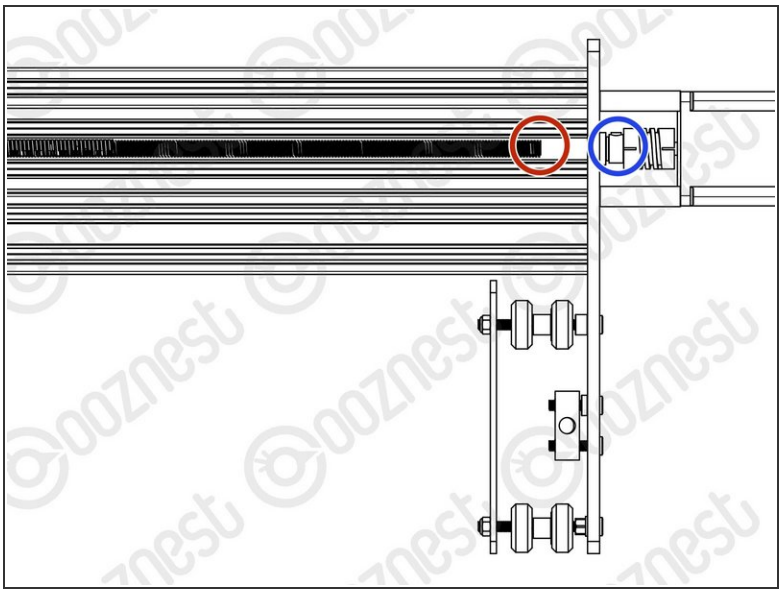
- Before the Y-Plate-Left-Assembly can be attached, Tee-Nuts need to be inserted.

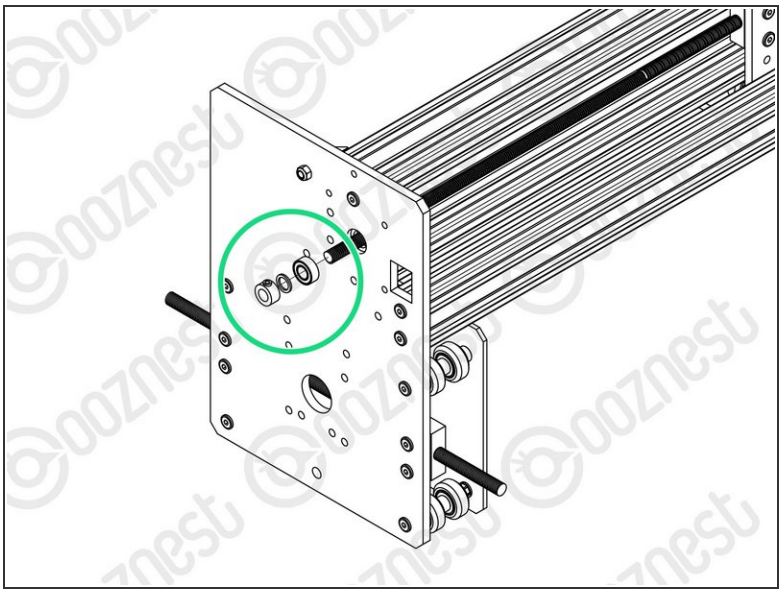
  ⚠ The Tee-Nuts should be inserted so that the flat face is facing outwards.

  - 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.

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Step 3 — X-ACME Screw

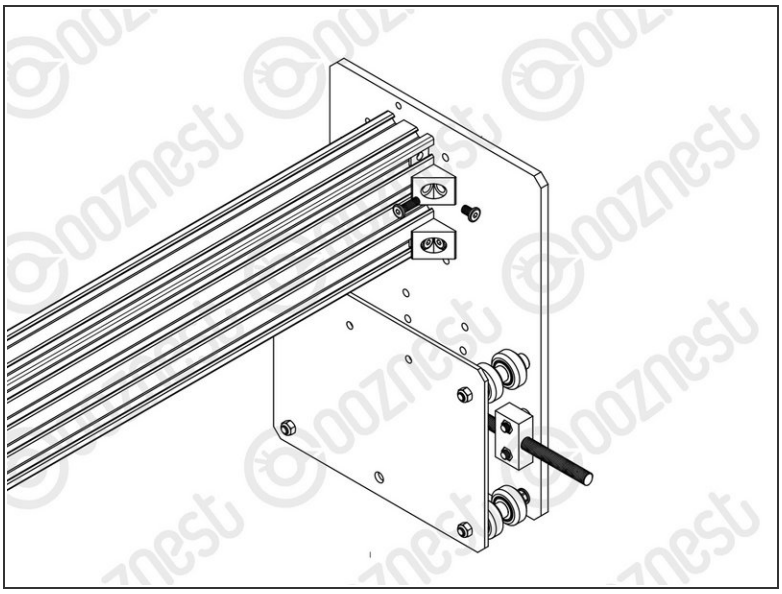


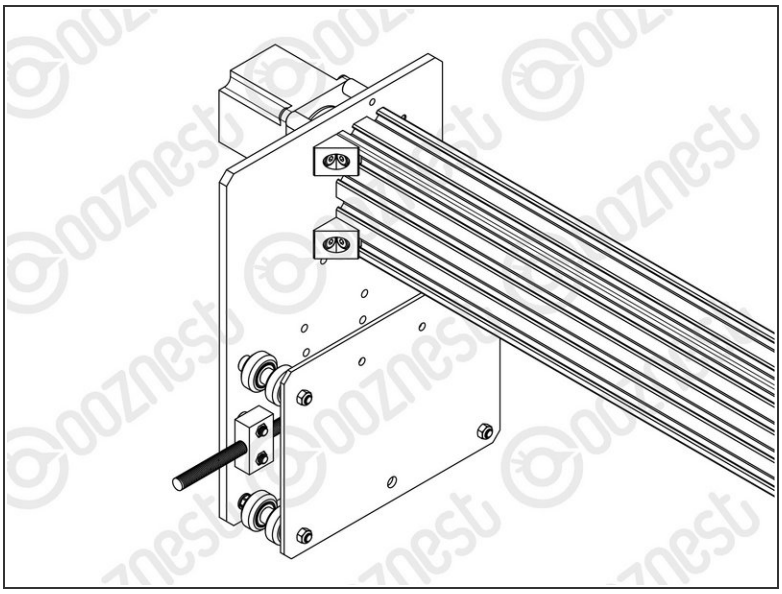


- Looking at the Y-Plate-Left, adjust the X-ACME-Screw so the end is on the extrusion side of the Y-Plate-Left.
  - In the gap between the Y-Plate-Left and Flexible-Coupler, insert a 688zz-Bearing, 8mm-Shim, and 8mm-Clamping-Collar. With the 688zz-Bearing closest to the Y-Plate-Left, seated inside the recess.
  - Adjust the X-ACME-Screw back through the 688zz-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 688zz-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 688zz-Bearing, 8mm-Shim, and 8mm-Clamping-Collar. Inset the 688zz-Bearing into the recess.
  - While pushing the 8mm-Clamping-Collar against the 8mm-Shim and 688zz-Bearing into the recess on the Y-Plate-Right, tighten the clamping bolt on the 8mm-Clamping-Collar.

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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!