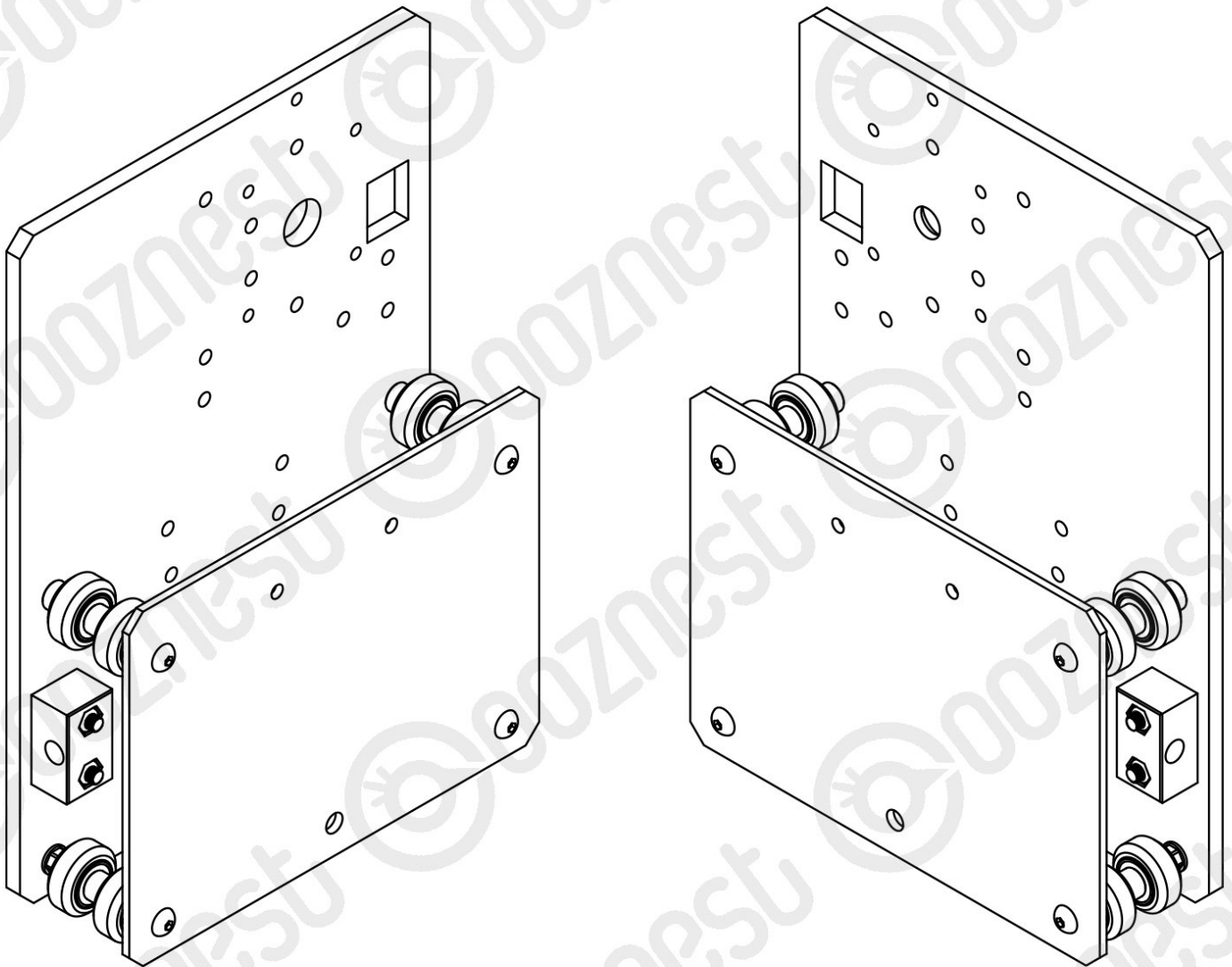


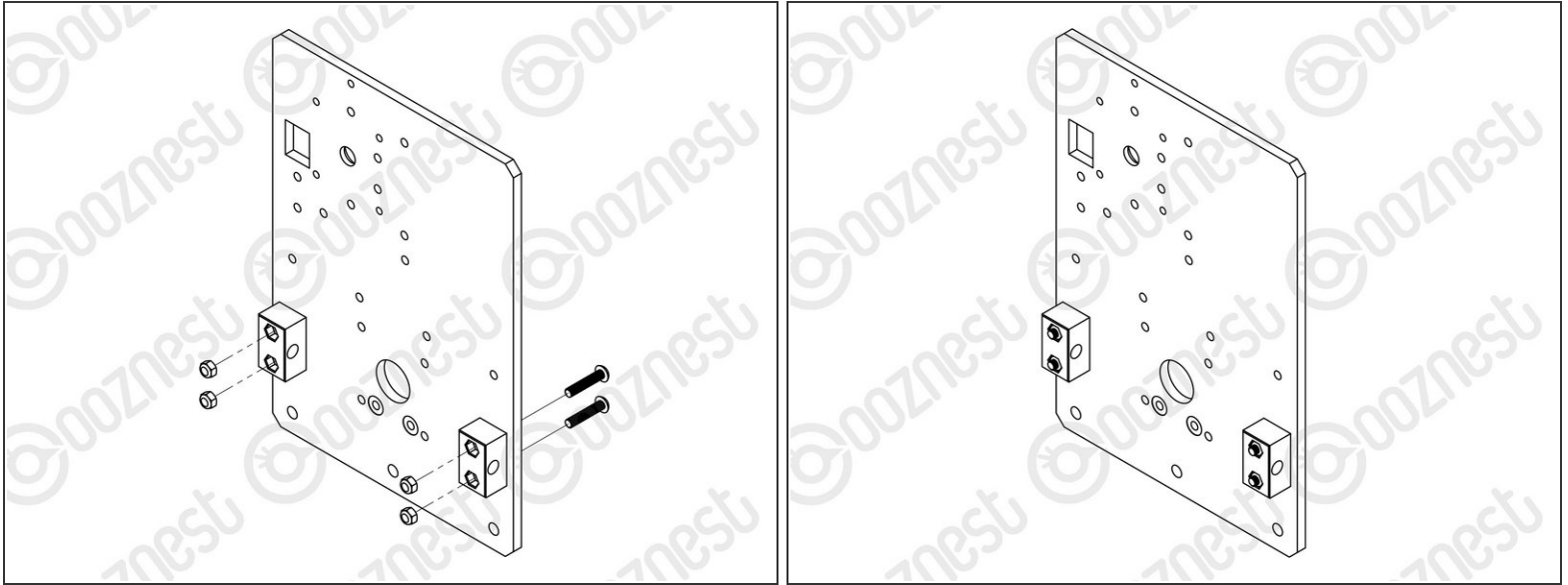


2. Y-Plate Assembly

Written By: Robert



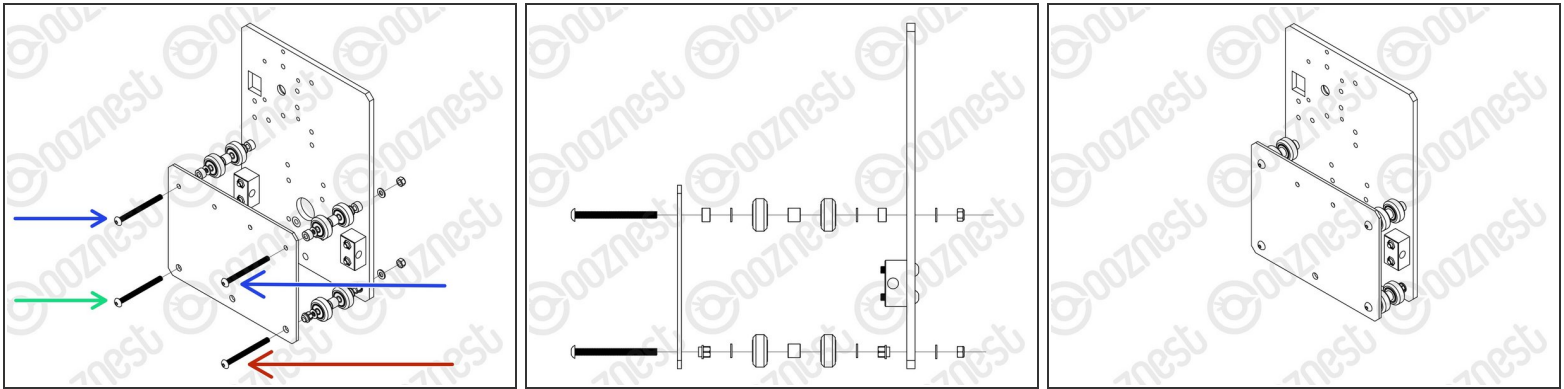
Step 1 — Nut Blocks



- Attach 2 x Nut-Blocks to a Y-Plate-Outer using 4 x M5-Button-Head-Bolt-25mm & 4 x M5-Nyloc-Nuts.

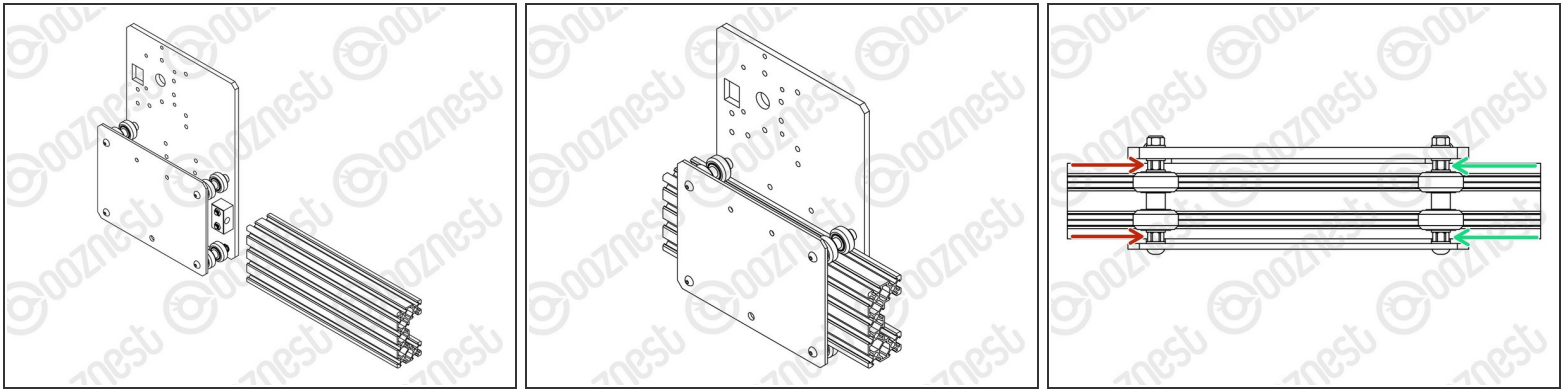
⚠ Keep these bolts loose so the Nut-Blocks can still move side to side.

Step 2 — Wheels



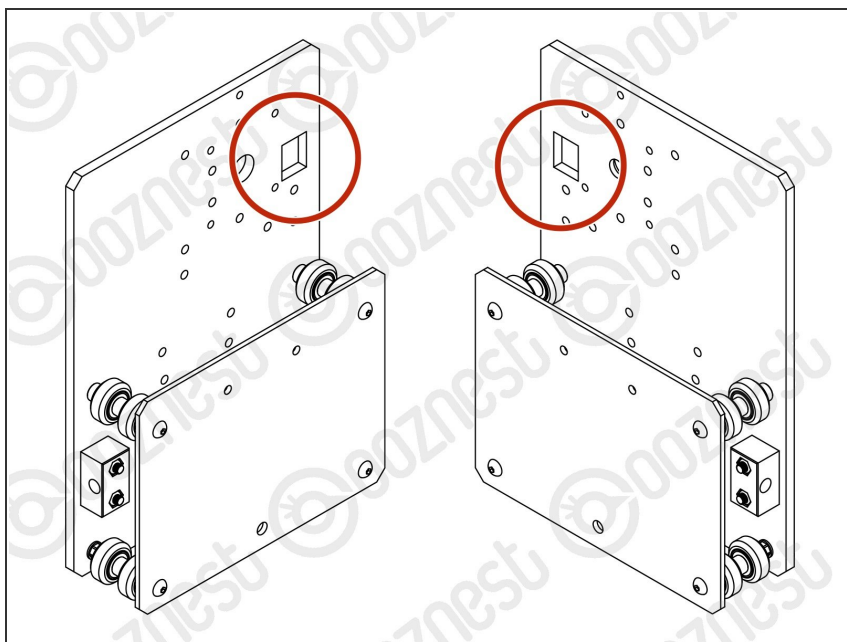
- Assemble the bottom right Solid-Wheel set first. Insert a M5-Button-Head-Bolt-60mm through the Y-Plate-Inner
- On to the bolt add an Eccentric-Spacer-6mm. (Rounded portion into the Y-Plate-Inner)
- Then add a Precision-Shim - -> - Solid-Wheel - -> - Aluminium-Spacer-9mm - -> - Solid-Wheel - -> - Precision-Shim
- Add an Eccentric-Spacer-6mm then a Y-Plate-Outer. (Rounded portion of the Eccentric-Spacer-6mm goes into the Y-Plate-Outer)
- On the outside of the Y-Plate-Outer add onto the bolt a Precision Shim then a M5-Nyloc-Nut. Only slightly thread on the M5-Nyloc-Nut.
- Repeat the above for the other Solid-Wheel set on the bottom row.
- Repeat for the 2 x Solid-Wheel sets on the top row, but use a Aluminium-Spacer-6mm instead of each Eccentric-Spacer-6mm.
- The M5-Nyloc-Nuts can now be tightened. Ensure that each Solid-Wheel still rotates freely.

Step 3 — Wheel Adjustment



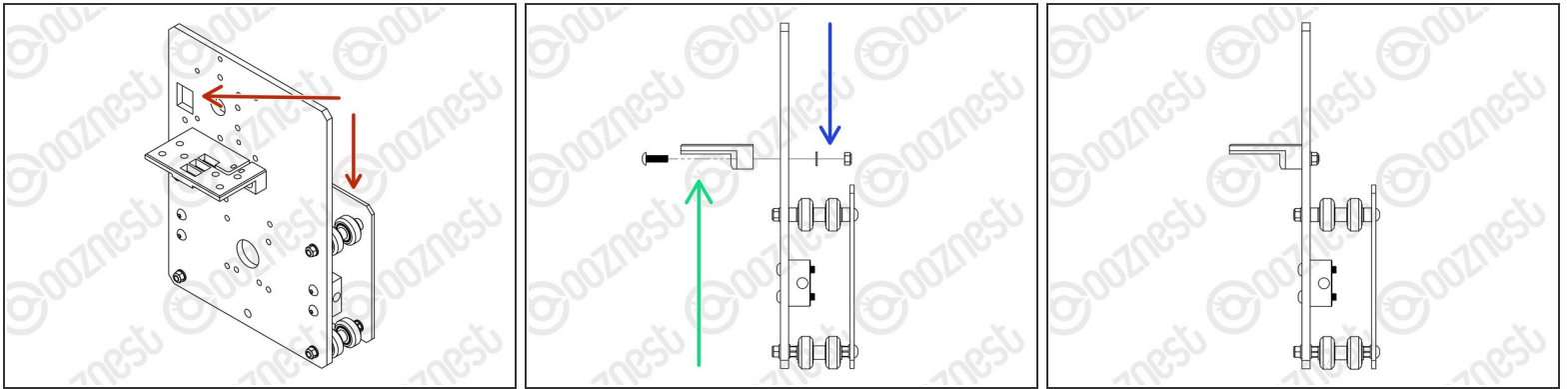
- On the hexagonal portion of the Eccentric-Spacer-6mm, there will be a face that is marked with '6mm'.
 - Using a 8mm spanner, rotate each Eccentric-Spacer-6mm so that this face is facing downwards. (Doing this maximises the gap between the top and bottom row of Solid-Wheels)
 - Insert Extrusion-D in-between the two rows of wheels. Turn the assembly upside down so Extrusion-D is sitting on the top row of Solid-Wheels.
 - Rotate both Eccentric-Spacer-6mms on one set of Solid-Wheels until there is a small amount of friction between the Solid-Wheels and Extrusion-D
 - Repeat for the other set of Solid-Wheels.
 - Slide Extrusion-D back and forth. This should require a small amount of force, and all Solid-Wheels should spin.
 - Check there is no wobbling of Extrusion-D. Once happy, double-check the tightness of the M5-Nyloc Nuts and remove Extrusion-D.
- ⓘ Try to get all the Solid-Wheels touching Extrusion-D as best as possible. If not, it is not a problem, we will check the Eccentric-Spacers-6mms again once the machine is built.

Step 4 — Repeat



- Repeat Steps 1-3 for another Y-Plate Assembly. It should be a mirror image of the previous assembly.
- Ensure the square cut out on the Y-Plate-Outer is at the back.

Step 5 — Drag Chain Mount



- A Drag-Chain-Mount needs to be attached to the second Y-Plate-Outer.
 - Make sure you have the correct Y-Plate-Outer.
 - The square cut out on the Y-Plate-Outer is at the back with the wheels on the opposite side.
 - Insert 2 x M5-Button-Head-Bolt-16mms through the Drag-Chain-Mount, then through the Y-Plate-Outer.
 - Then add a 2 x Precision-Shims and 2 x M5-Nyloc-Nuts on the opposite side of the Y-Plate-Outer.
- ⓘ Moving forward this will be known as the Y-Carriage-Left.
 - ⓘ The other one will be known as the Y-Carriage-Right.

Step 6 — Guide Complete



- i The Y-Carriages can be put to one side until later.
- Guide Complete - Proceed to [3. X-Carriage Assembly](#)

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