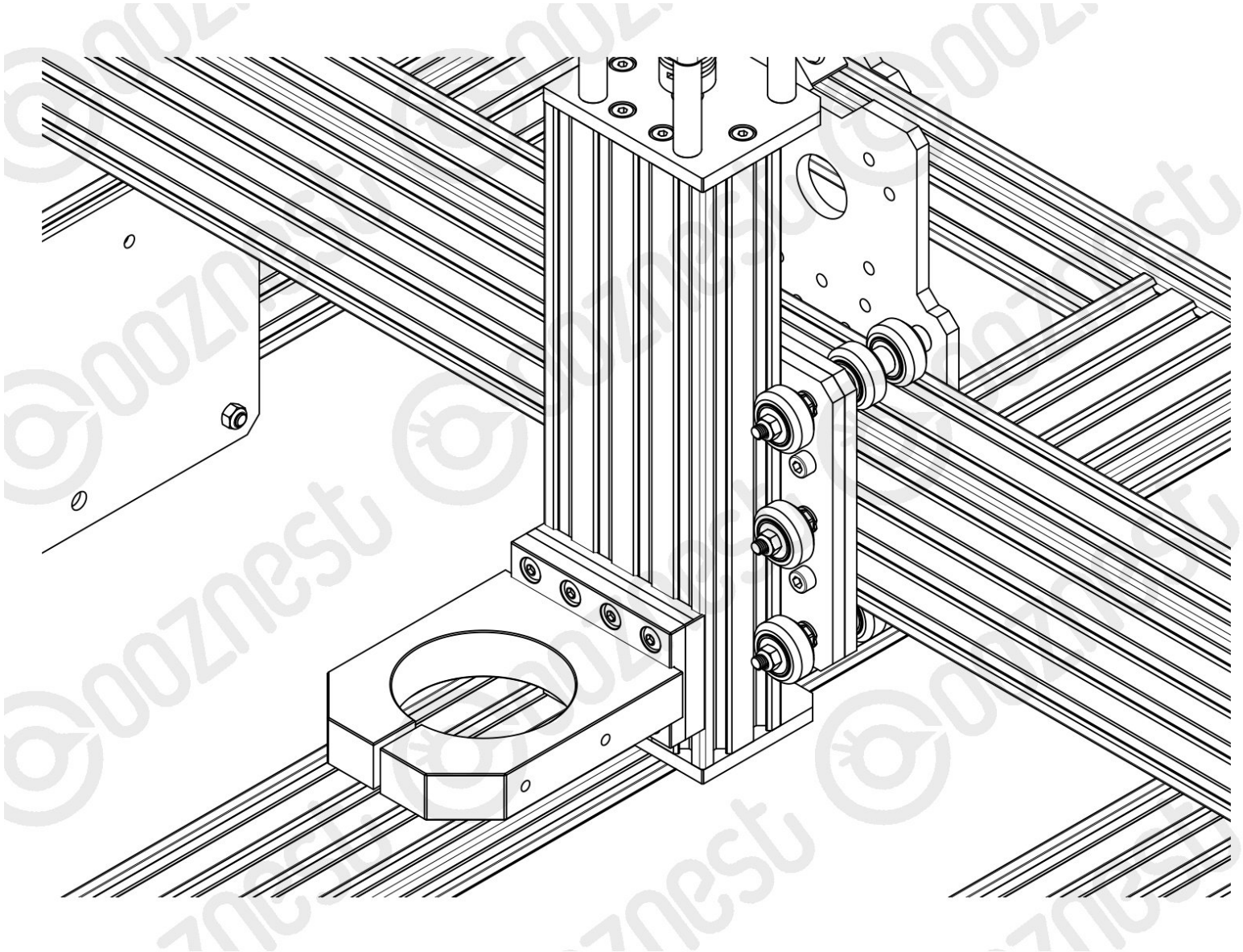


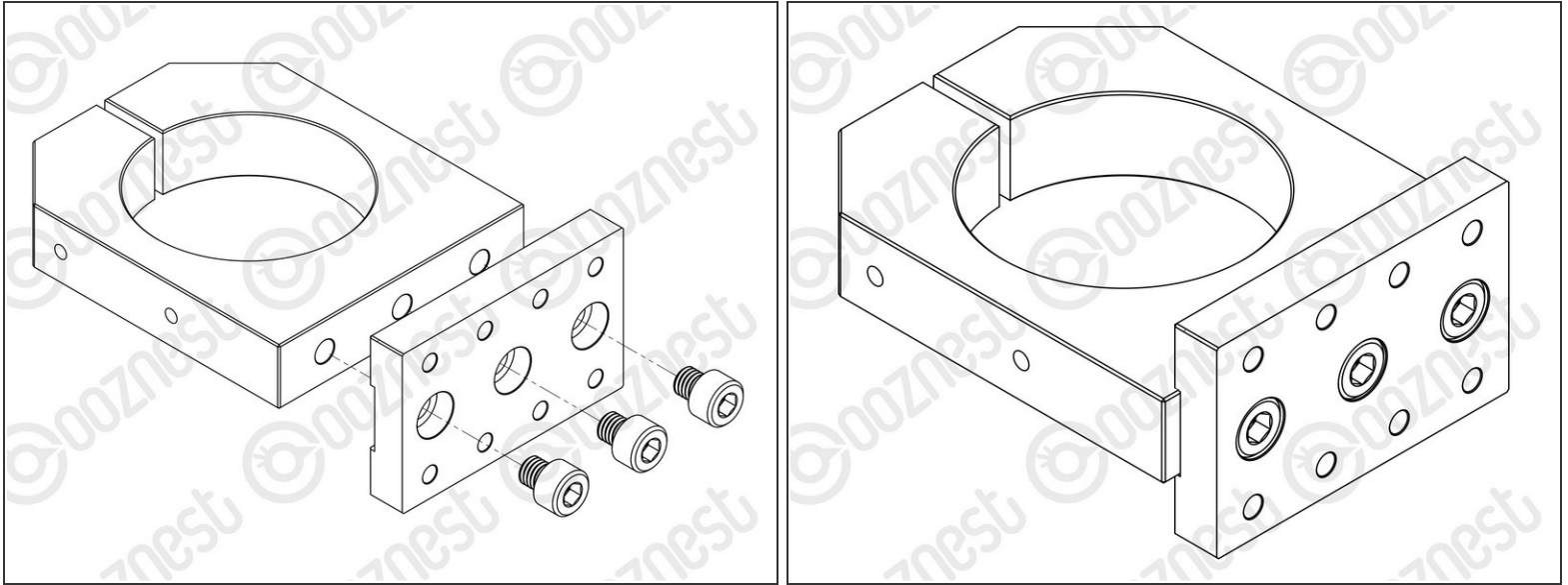


7. Router Mount

Written By: Ryan Christy

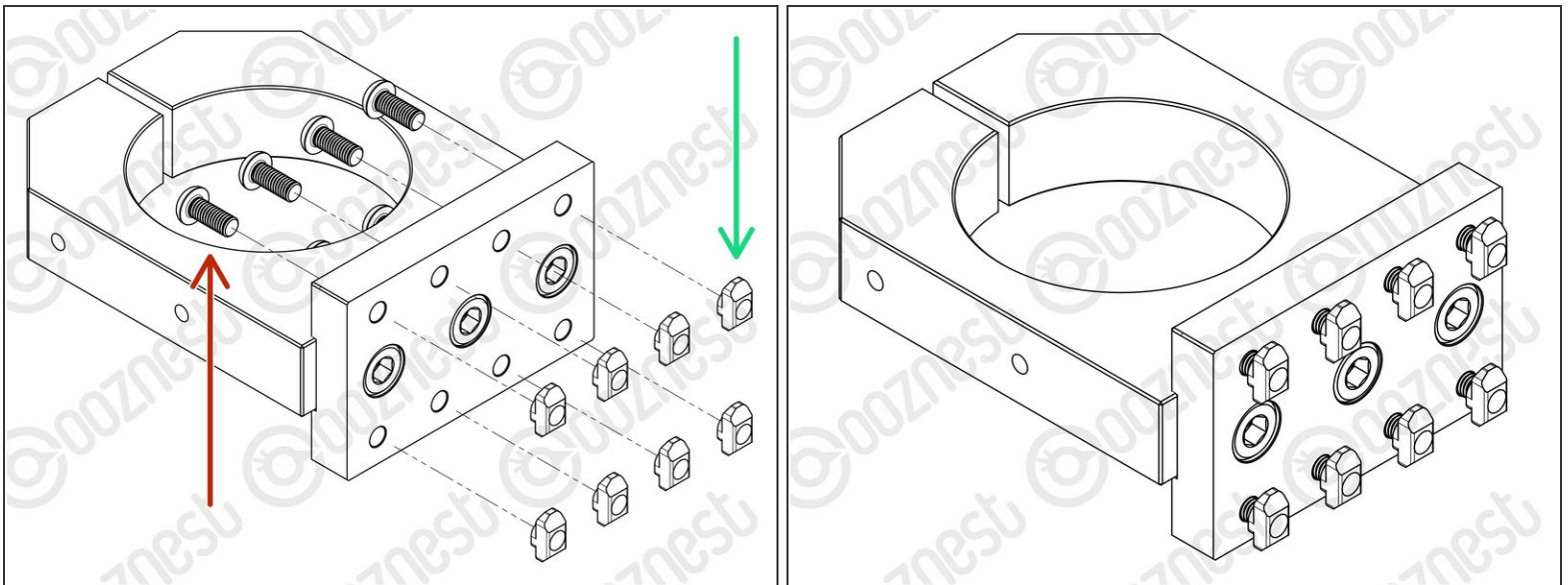


Step 1 — Router Mount Assembly



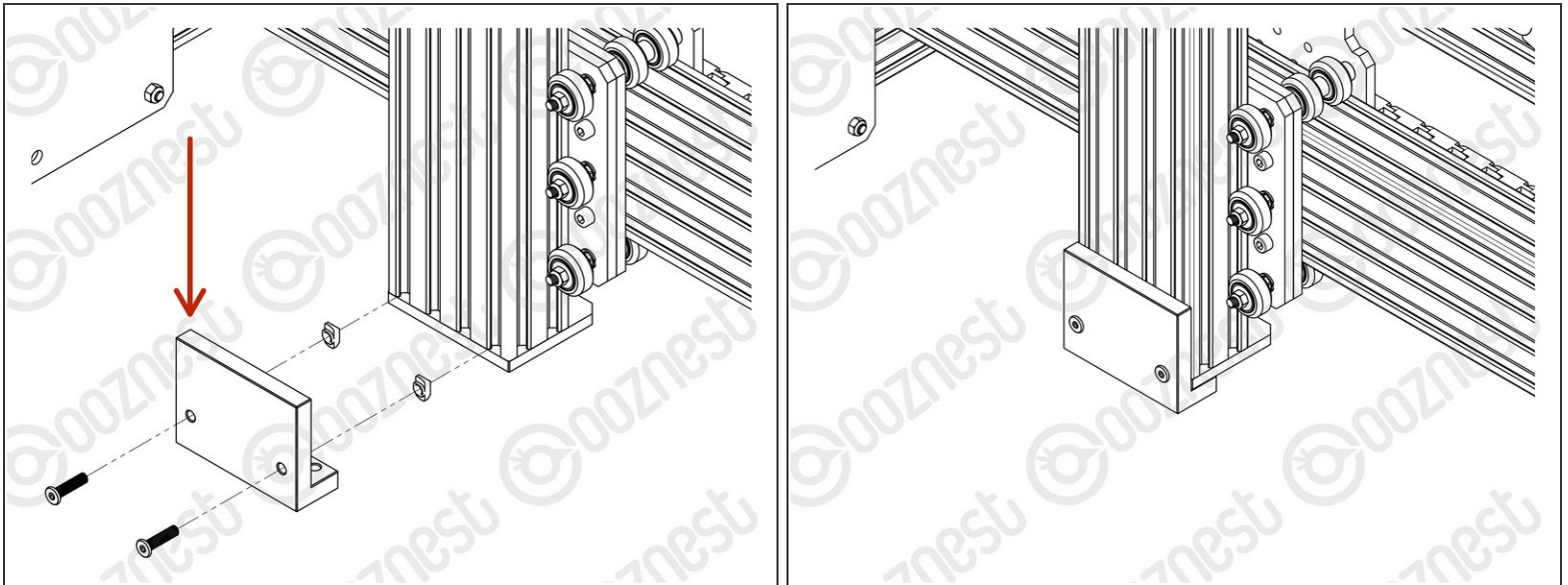
- Attach the Z-Bracket to the Router-Clamp using 3 x M8-Cap-Head-Bolt-8mm. **(Please note in your kit these may be M8-Cap-Head-Bolt-10mm)**

Step 2 — Z-Axis Hardware



- Insert 8 x M5-Button-Head-Bolt-12mm through the Z-Bracket.
- Slightly thread a M5-Drop-In-Tee-Nut on to the end of each bolt.

Step 3 — Height Reference Tool



⚠ Reference the correct face of the Height-Reference-Tool for your Router Head.

i 50.00mm - Katsu/Makita/DeWalt Routers.

i 17.60mm - Mafell/Kress/Festool Spindles.

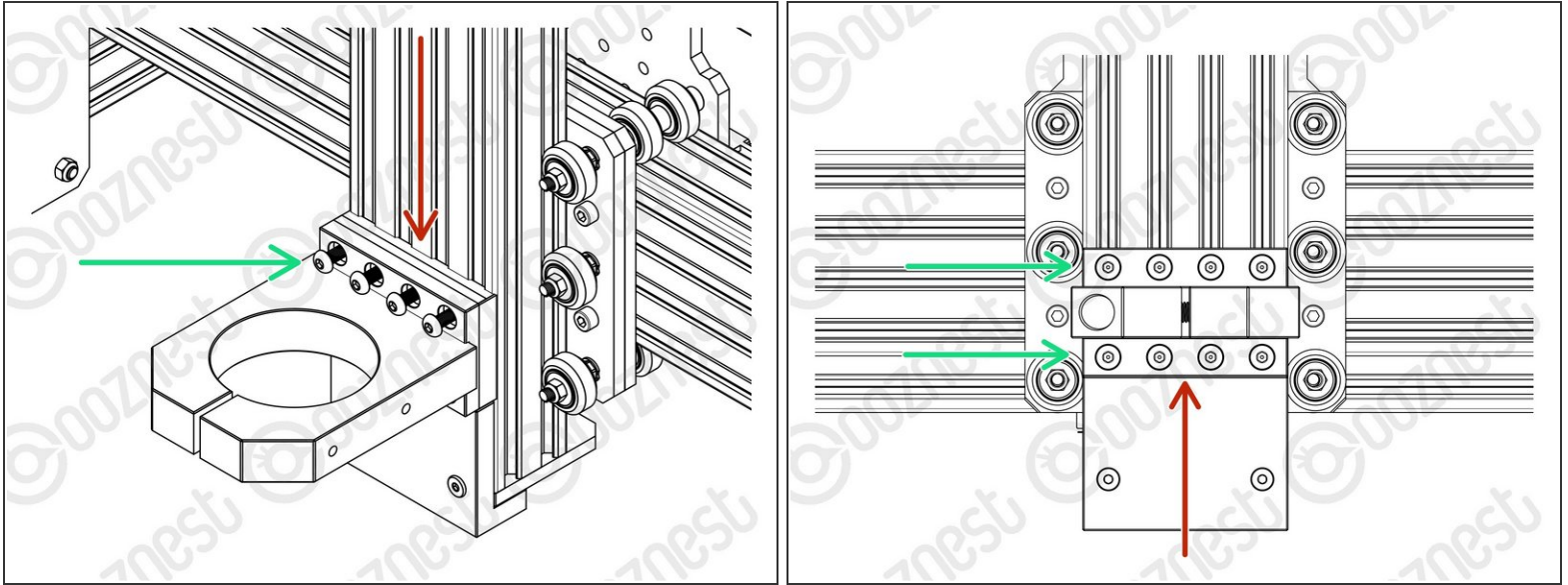
- Attach the Height-Reference-Tool to the bottom of Extrusion-D using 2 x M5-Button-Bolt-12mm and 2 x M5-Drop-In-Tee-Nuts.

i The Height-Reference-Tool should be pushed up as high as possible.

⚠ Do not over-tighten the 2 x M5-Button-Bolt-12mm.

i The Height-Reference tool will be removed later.

Step 4 — Mounting



⚠ On one face of the Router-Clamp there are 4 threaded holes. These should be face down.

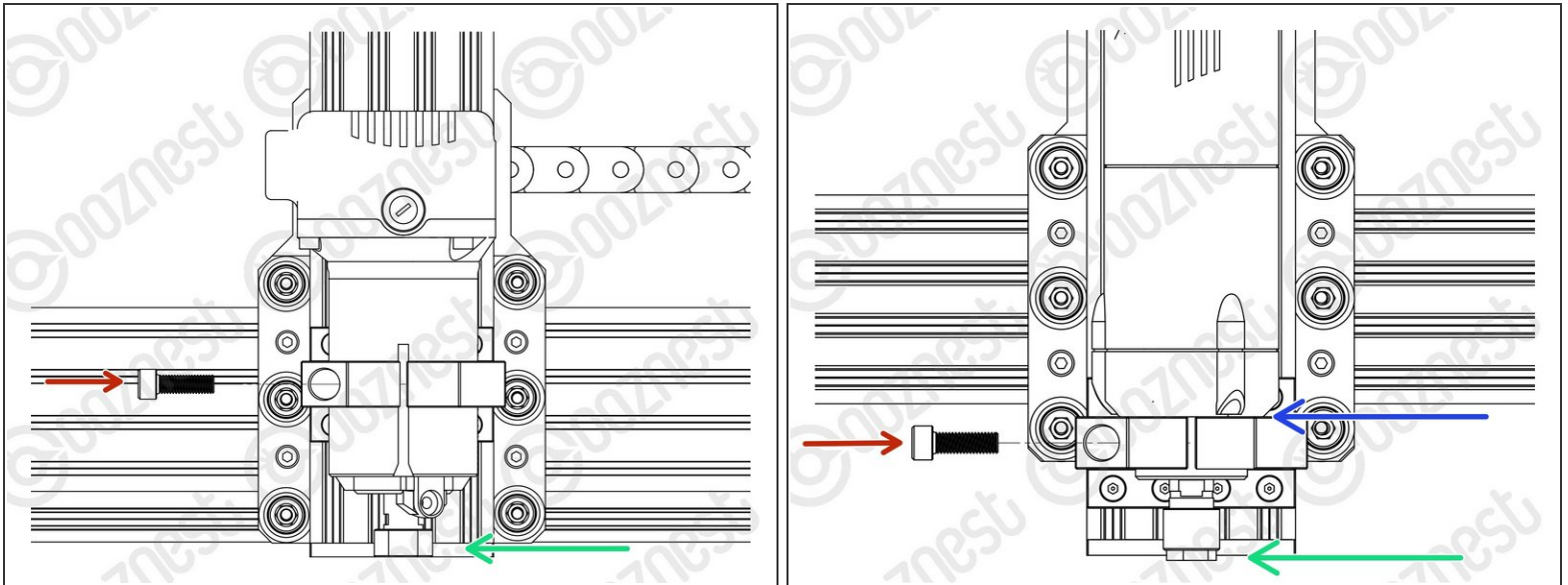
- Sit the Router-Mount-Assembly on top of the Height-Reference-Tool.
- Fix the Router-Mount-Assembly to Extrusion-D.
- Tighten the 8 x M5-Button-Head-Bolt-12mm inserted previously.

⚠ Make sure M5-Drop-In-Tee-Nuts are engaged with the slots on Extrusion-D.

⚠ Remove the Height-Reference-Tool.

- ① The Height-Reference-Tool is no longer needed.
- ① **But it can come in handy.** It has an etched ruler to measure end mill stick out.

Step 5 — Attaching The Router Head



- Insert the Router Head into the Router-Clamp and tighten the clamp using the M8-Cap-Head-Bolt-25mm.
- For Katsu/Makita/Dewalt Routers position it with the collet flush with the bottom of the Z-Axis.
- For Mafell/Kress/Festool Spindles position the body flat on the top of the Router-Clamp.

⚠ Do not overtighten the Router-Clamp.

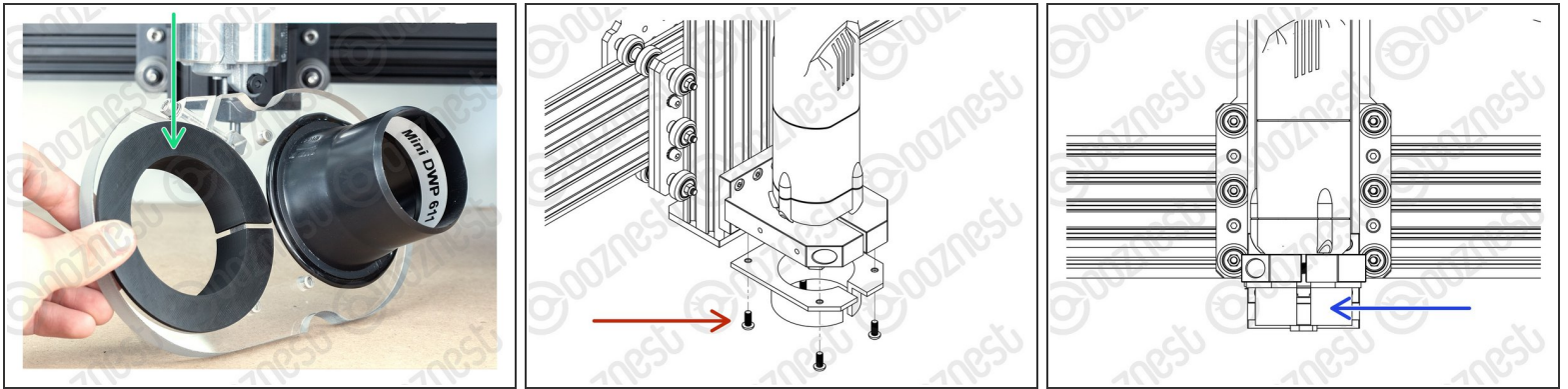
⚠ It should be tightened no more than the point that the Router Head can no longer be rotated by hand.

⚠ Any tighter and you will run the risk of pre-maturely wearing the brushes of the Router Head.

i The power wire of the Router Head should run vertically up to the ceiling. If you have a Dust Shoe, it can be clipped to the extractor hose.

⚠ Do not put the power wire inside the drag chains of the machine. It is a high power wire and should not run alongside the other wires.

Step 6 — Dust Shoe Adaptors



i Dust-Shoe-Adaptors will be included in the 65mm (Katsu/Makita) and 43mm (Mafell/Kress/Festool) versions of the Router Mount.

● Katsu

- The 65mm Dust-Shoe-Adaptor sits inside the Dust Shoe. The Dust Shoe is then clamped around the body of the Katsu/Makita Router.

● Mafell

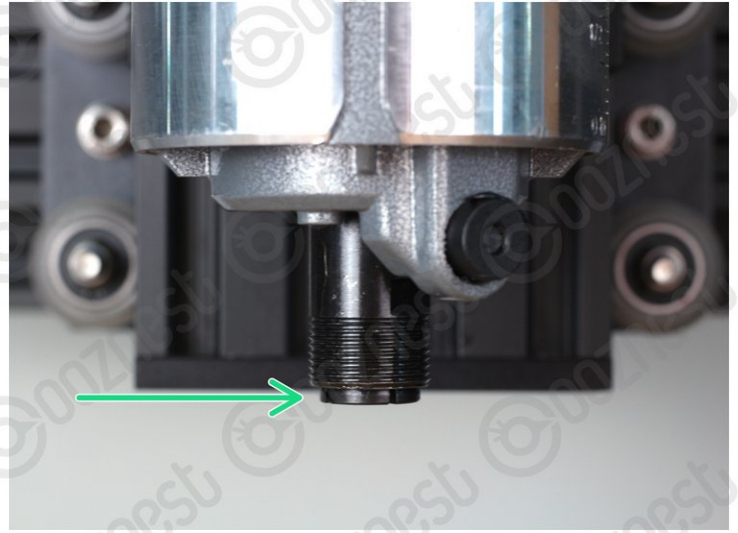
- This should only be installed if you have a Dust Shoe.
- Attach the 43mm Dust-Shoe-Adaptor to the underside of the Router-Clamp using 4 x M5-Button-Head-5mm Bolts.
- The Dust Shoe clamps around the circular portion of the 43mm Dust-Shoe-Adaptor.

Step 7 — "Breaking In" The Router Head



- ① The Mafell FM 1000 is broken in by the Manufacturer so is ready for use.
- ① For the Katsu, we recommend running it at a medium RPM, with no load, for 30-60 minutes.
- ⚠ Remove the collet while doing this so it does not come off.

Step 8 — Collets



⚠ Always use the correct collet size for the cutter.

- Mafell

- Click the collet into the nut first, then insert the end mill fully.
- Fix the collet with a maximum torque of 10-11Nm. Tighten the collet by hand, then a 1/8 turn with a spanner, this should be about right.
- Keep the collet lubricated with a solid lubricant (e.g. Molykote P-40) or by lightly greasing.

- Katsu

- Push the collet into the shaft and then the nut over it. The end mill can then be inserted fully.
- Only use the button on the side to hand tighten the collet. To fully tighten, use two spanners, a 13 spanner on the flat portion of the shaft, the included 22mm spanner on the collet nut.

Step 9 — Guide Complete



① Starting to look like a CNC Machine now. Now we begin the electrics.

- Guide Complete - Proceed to [1. Drag Chains](#)

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