

Our Z-Chain Upgrade Kit includes all the components necessary to support a variety of machine configurations.

Depending on your specific setup, you'll use one of the following motor-side options:

- **ATC Motor Bracket** – for use with our Automatic Tool Changer motors
- **Water-Cooled Motor Bracket** – designed to accommodate our water-cooled spindle motors

And on the stepper side, you'll choose between:

- **Ultimate Hose Clamp Base** – designed for compatibility with our Onefinity Ultimate Hose Clamp (sold separately)
- **NEMA23 Stepper Base with Coupler** – a secure and straightforward mounting solution for traditional setups

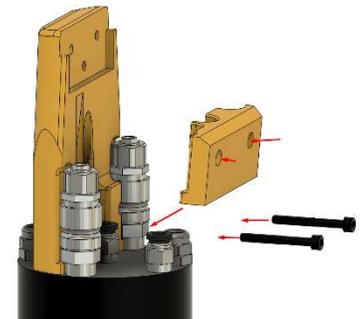
We include all required hardware and components in this kit, making it easy to adapt the Z-axis cable management to your chosen motor and stepper setup.

ATC Motor Bracket



The bracketing base for the ATC motor is a two-piece 3d printed bracket that takes a little bit of effort to wiggle into place correctly. Route the wires and tubes appropriately so they meet at the entrance of the cable chain which is not pictured to the left.

After the larger rear piece is in place with tubing and wires oriented correctly, you can slide the front smaller piece into place and connect them together using the included M4 screws.

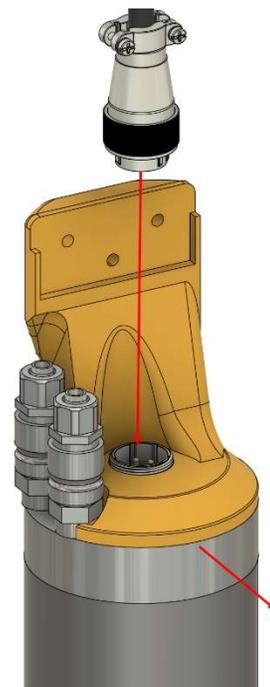


Water-Cooled Bracket

The water-cooled bracket slides over top of your H20 connector. This allows your electrical H20 cable connector to help secure the bracket into position.

The left side allows for your coolant tubes. Doesn't matter if you're using the standard water connectors or sporting our Kool Connectors. Either should work perfectly so long as their orientated on the left side.

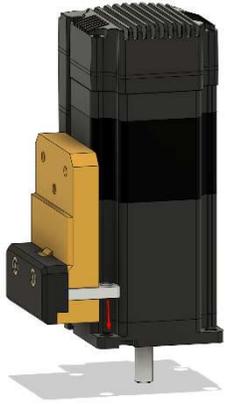
This should correspond with the spindle's main logo facing forward on your machine.



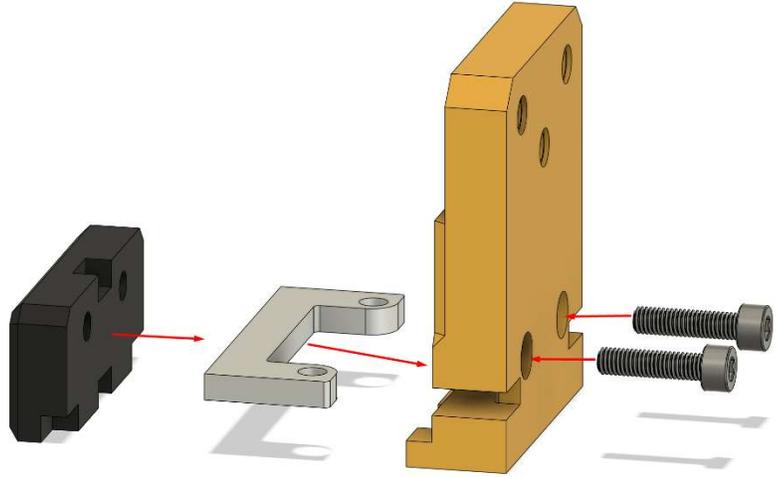


NEMA23 Base

Preassemble your NEMA23 base as shown to the right. Use the included M5 screws to secure it as a single unit.



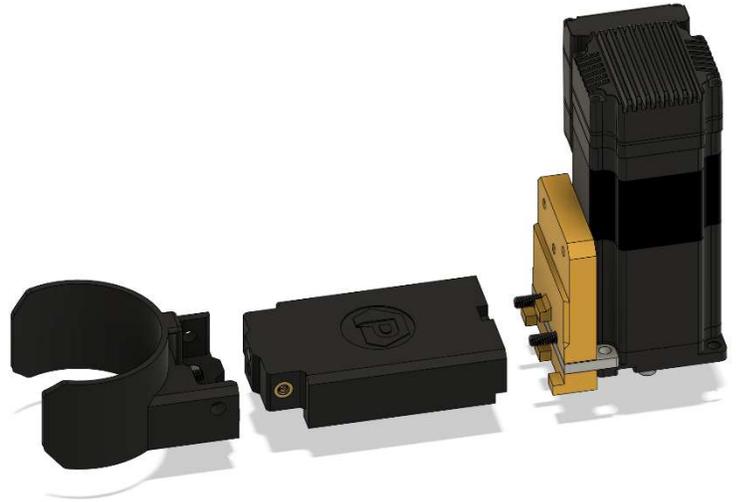
This assembly will then slide right along the rear side of your Z Stepper and mount using two of the screws on already on your machine.



You may need to acquire longer screws for mounting this.

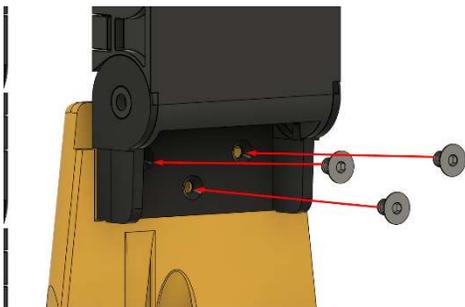
IF you already have our Ultimate hose clamp mounted in that spot, you can attach the “Arm” part you already have instead of using the included blank.

We have installed our Z-Chain onto a few machines so far with great success. If you have trouble please reach out to us for assistance at support@pwnCNC.com We are very interested in keeping our products usable on a wide range of machine brands.



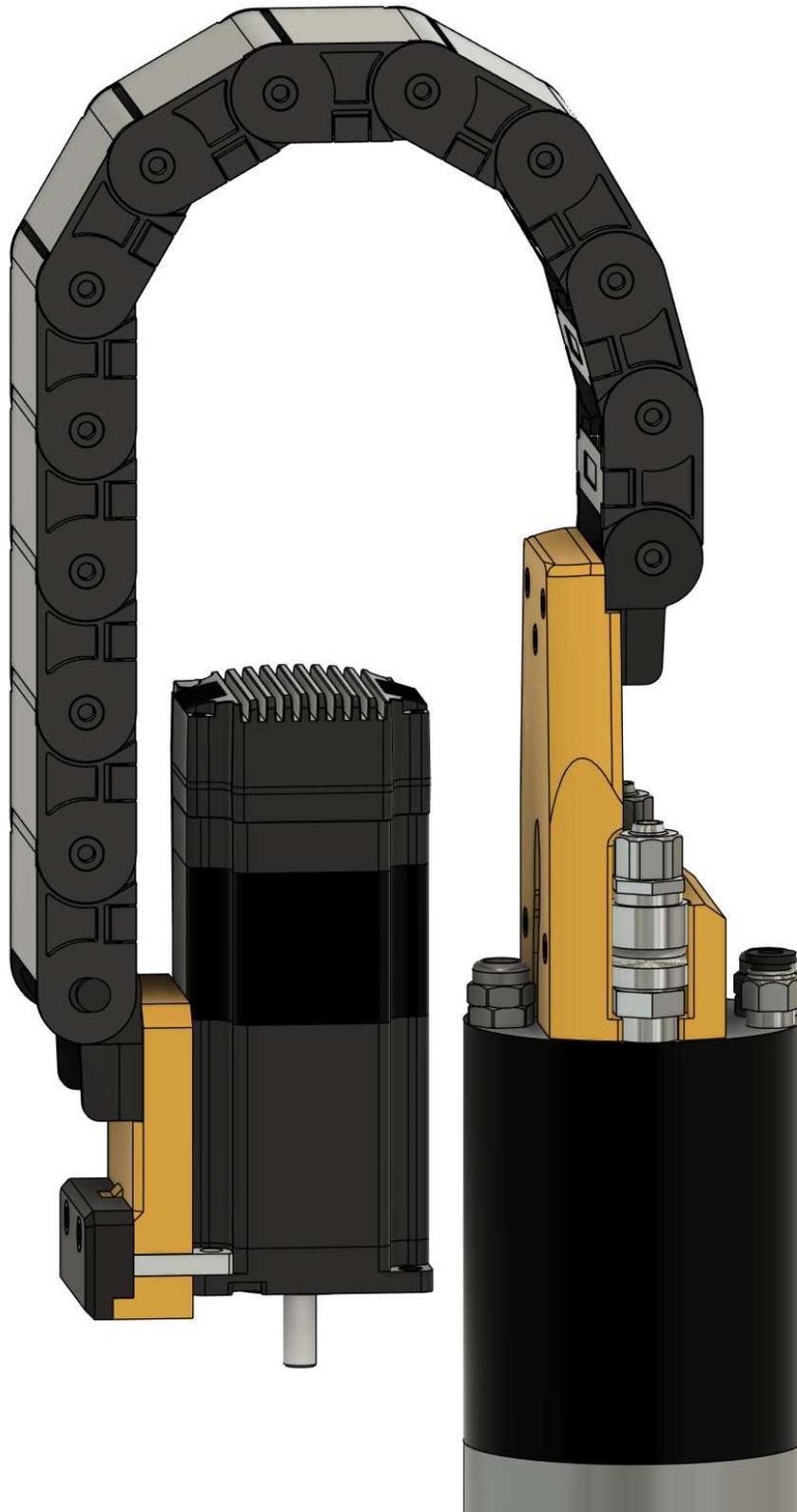
Z-Cable Chain

Lastly you can route your tubes and wires through the included z-cable chain and attach either end to the bases using the included M4 triangular screws.





Below is an example of a completed Z-Chain installed onto an ATC with the UHC coupler and blank.





Here we have our Z-Chain installed onto a water-cooled spindle and Base attached to our UHC for 1f. Attach the z-chain base to your UHC for 1f using the included M3 screws.

