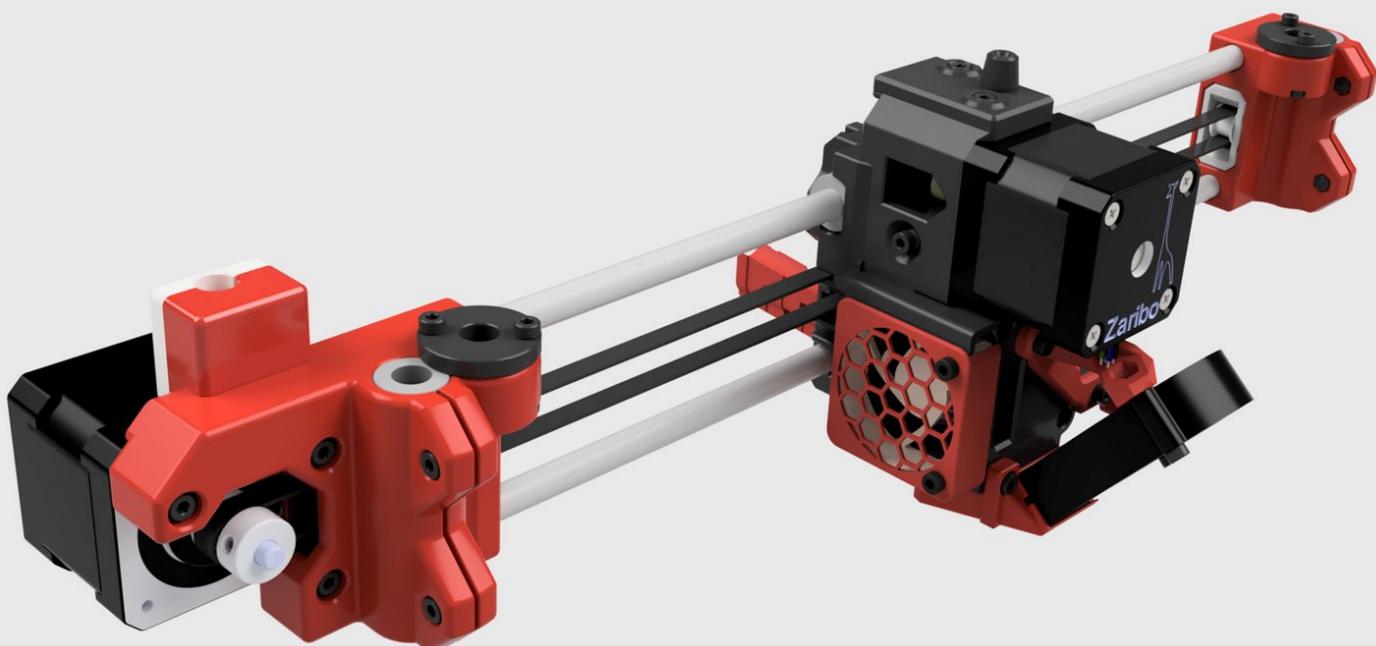




04 | Z and X Axis Assembly

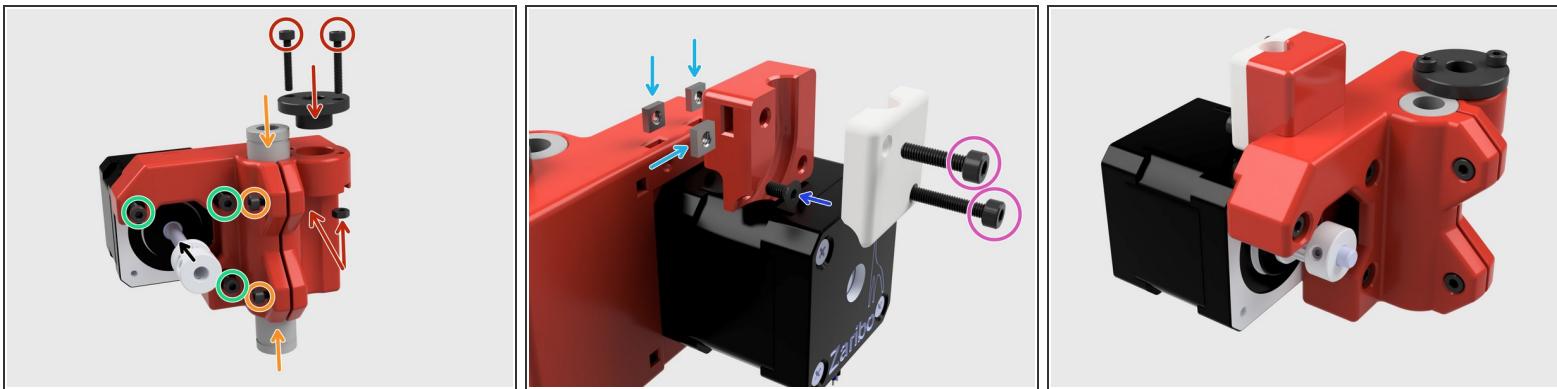
Written By: Murathan Araz



 **TOOLS:**

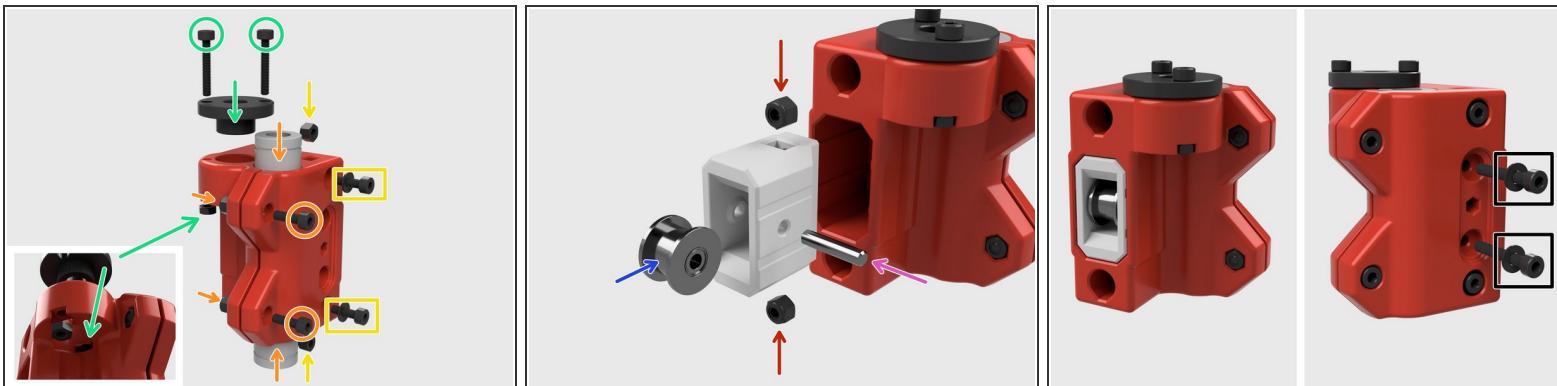
- [Mahi Driver Kit - 48 Bit Driver Kit \(1\)](#)

Step 1 — 04 | Z and X Axis Assembly



- Insert the [Misumi LM8UU](#) bearings to the x axis motor holder. Use 2 x [M3x10 socket Cap Screws](#) and 2 x [M3 Nylon Nuts](#) to squeeze the bearing holder. Do not tighten it too much, just to keep the bearing in place. Not more.
 Warning, bearing tightener nuts are NYLON M3 Nuts, not the regular nuts.
- Put the [POM Nut](#) in its place and align the unthreaded holes. Use 2 x [M3x18 Socket Cap Screws](#) and 2 x [M3 Nuts](#) to fasten the pom nut.
- Push the [GT2 Pulley](#) to the motor shaft but to not fully tighten the small screws on the pulley yet.
- Use 3 x [M3x18 Socket Cap Screws](#) and 2 x [M3 Nuts](#) to fasten the pom nut.
- Insert 2 x [M3 Square Nuts](#) to the motor holder body and 1 x [M3 Square Nut](#) to the cable guide body.
- Use a [M3x0.6 Flat Head Screw](#) to mount the X motor cable guide housing.
- After installing the X motor cable through the guide channel, use a [M3x12 Socket Cap Screw](#) for the upper hole and a [M3x18 Socket Cap Screw](#) for the bottom hole to mount the X motor cable guide cover.

Step 2



- Insert 2 x [LMU8 Bearings](#). Use 2 x [Nylon M3 Nuts](#) and [M3x10 Socket Cap Screws](#) to tighten the bearings just to hold the bearings in their place. Attention! DO NOT TIGHTEN more!
- Put the [Pom Nut](#) and align the unthreaded holes for the screws. Use 2 x [M3 Nuts](#) (*See the small picture at left-bottom to insert one of the M3 Nuts*) and 2 x [M3x18 Socket Cap Screws](#) to fasten the Pom Nut in it's place.
- Insert 2 x [Nylon M3 Nuts](#) from top and bottom to fasten rod spacers. Use 2 x [M3 Washers](#) and [M3x10 Socket Cap Screws](#) to tighten later in order to take up the excessive space between rods and the X axis holders.
- Insert 2 x [Nylon M3 Nuts](#) to the belt tensioner.
- Push the [Idler Timing Pulley](#) inside the belt tensioner.
- Use the supplied [Dowel Pin](#) to secure the Idler Pulley.
- Use 2 x [M3 Washers](#) and 2 x [M3x20 Socket Cap Screws](#) to mount the belt tensioner. Catch the M3 nuts in the tensioner, and tighten the M3 screws up to the clearance of the tensioner.

To reassemble your device, follow these instructions in reverse order.