# 1. Y-Axis Drag Chain Assembly

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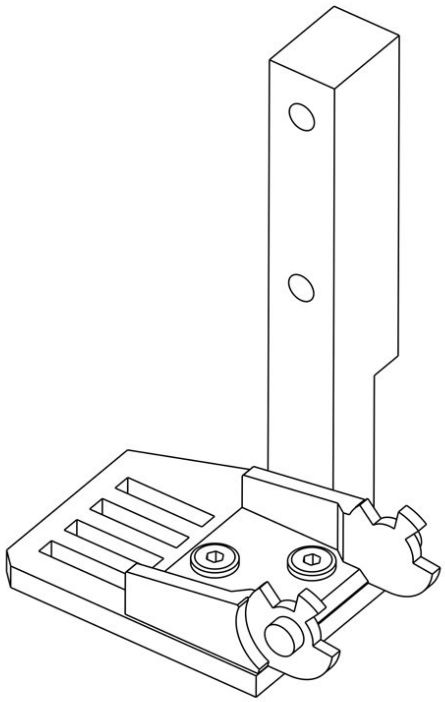
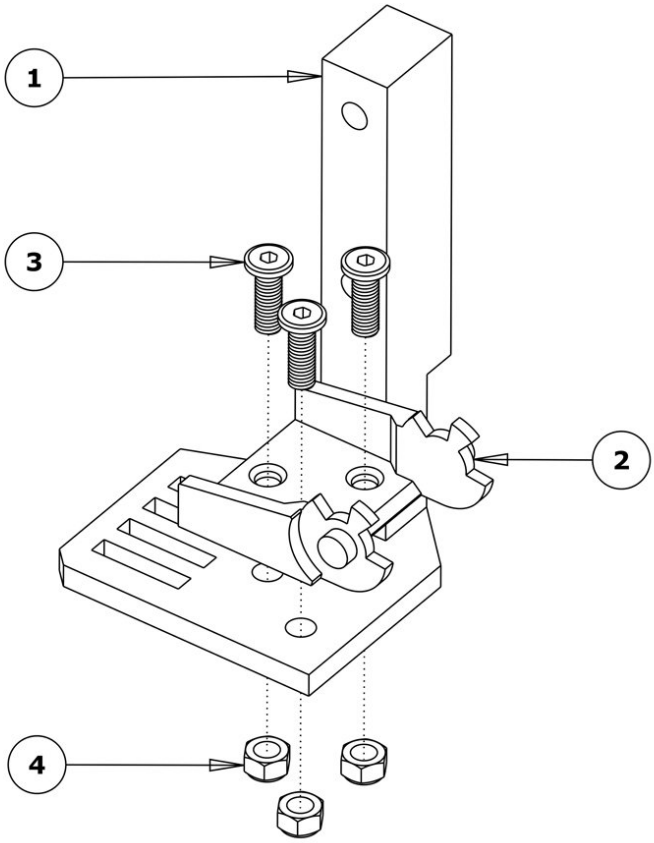
| ITEM NO | DESCRIPTION | QTY |
|---|---|---|
| 1 | Y-DRAG-CHAIN-FIXED-END-MOUNT | 1 |
| 2 | DRAG-CHAIN-FIXED-END | 1 |
| 3 | M5-LOW-PROFILE-15MM | 3 |
| 4 | M5-NYLOC-NUT | 3 |



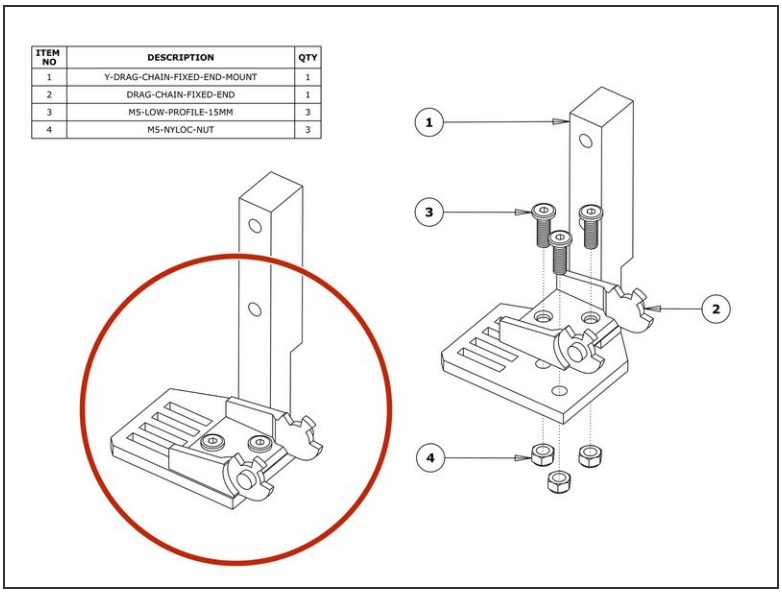


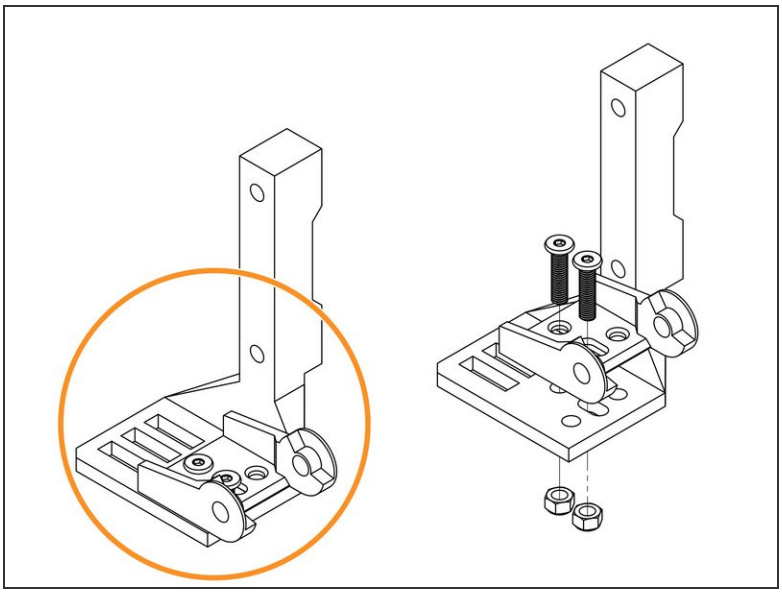
## Step 1 — Wire Identifications

If the wires in your kit have white printed tags, please ignore this step. Each wire, at the connector end has a coloured clip with a number. This colour and number identifies this wire. Please see key below.

- (0)(Black) X-Axis Limit Switch
- (1)(Brown) Y-Axis Limit Switch
- (2)(Red) Z-Axis Limit Switch
- (3)(Orange) X-Axis Stepper Motor Wire.
- (4)(Yellow) Left Y-Axis Stepper Motor Wire.
- (5)(Green) Right Y-Axis Stepper Motor Wire.
- (6)(Light Blue) Z-Axis Stepper Motor Wire.

## Step 2 — Y-Axis Fixed End Assembly



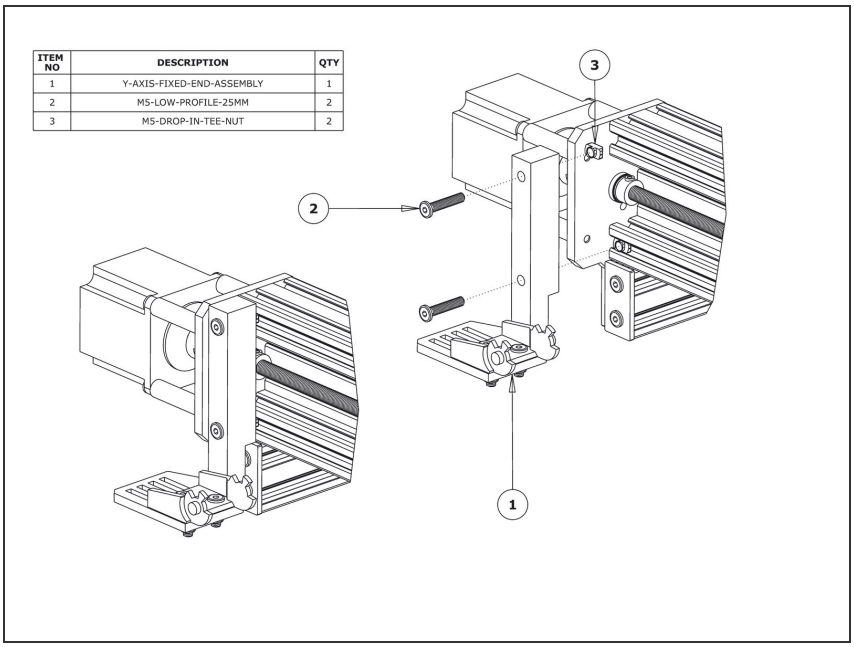



⚠ It is normally easier to connect the female end of the Y-Drag-Chain to a Drag-Chain-Fixed-End now, and then proceeding with the guide.

⚠ It will take some force to click the Y-Drag-Chain into the Drag-Chain-Fixed-End. A small flathead screwdriver can be used to help pry the Y-Drag-Chain in place.

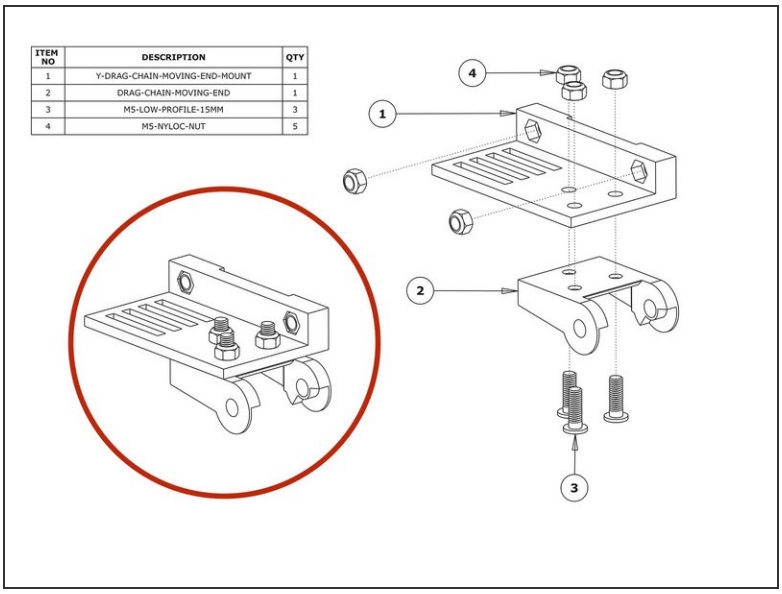
- Attach the Drag-Chain-Fixed-End to the Y-Drag-Chain-Fixed-End-Mount in the orientation shown above, using 3 x M5-Low-Profile-15mm bolts and 3 x M5-Nyloc-Nuts.
- Attach a Drag-Chain-Fixed-End to the Y-Drag-Chain-Fixed-End-Mount in the orientation shown above, using 2 x M5-Low-Profile-15mm bolts and 2 x M5-Nyloc-Nuts.

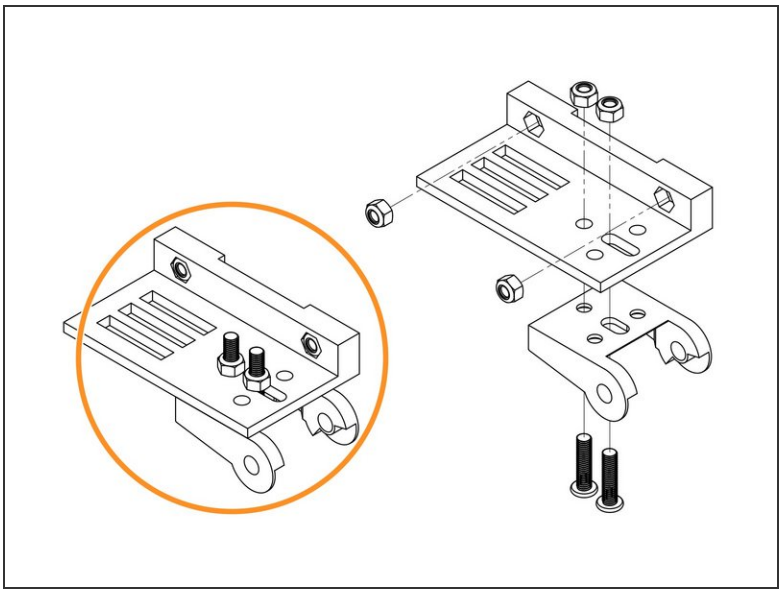
## Step 3 — Y-Axis Fixed End Mounting




- Position the Y-Axis-Fixed-End-Assembly to the back left corner of the WorkBee.
  - It should be flush with the end of the C-Beam-750mm. Secure it using 2 x M5-Low-Profile-25mm bolts and 2 x M5-Drop-In-Tee-Nuts.

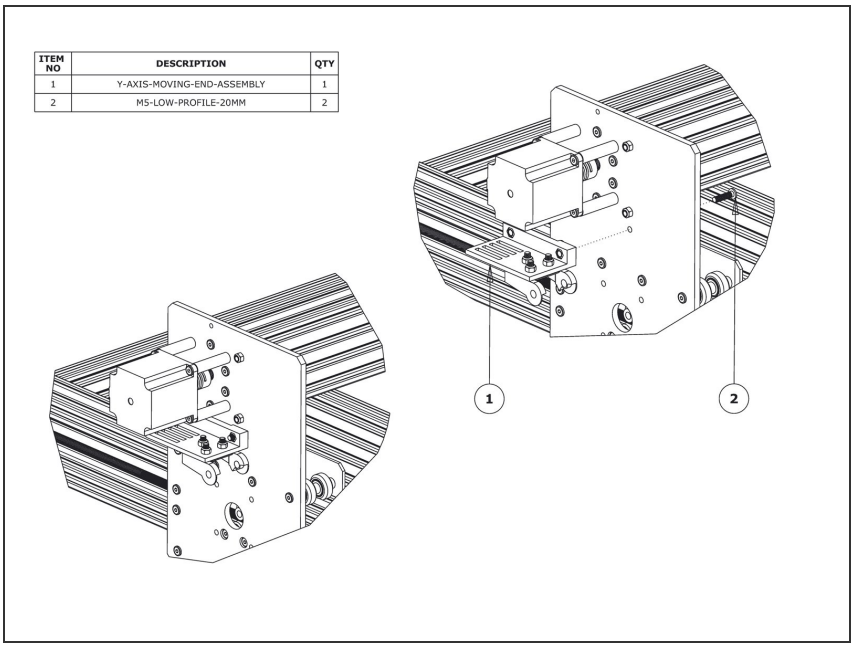
## Step 4 — Y-Axis Moving End Assembly



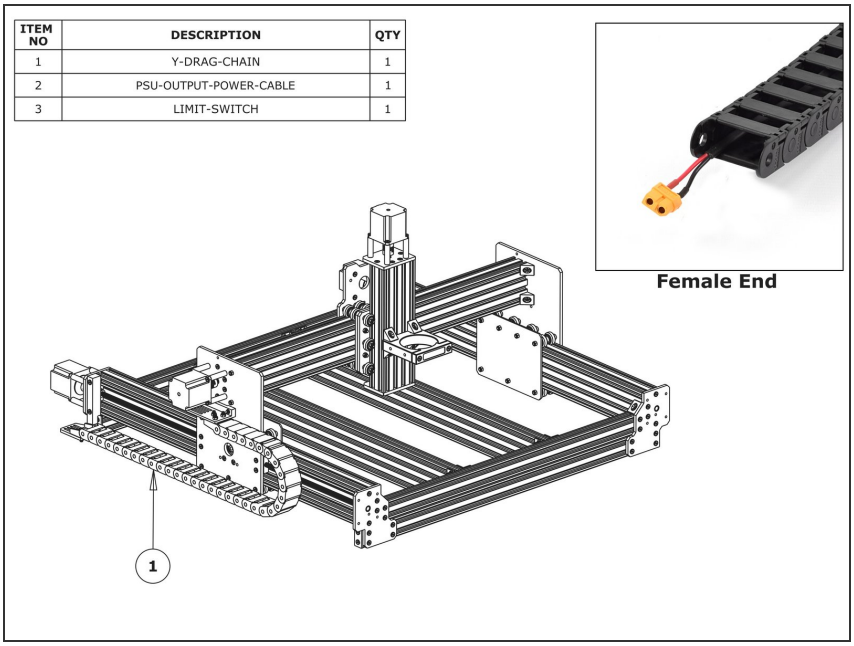
- Insert 2 x M5-Nyloc-Nuts into the insets on the Y-Drag-Chain-Moving-End-Mount. They are a snug fit, so may require a light tap with a hammer.
- Attach a Drag-Chain-Moving-End to the Y-Drag-Chain-Moving-End-Mount in the orientation shown above using 3 x M5-Low-Profile-15mm bolts and 3 x M5-Nyloc-Nuts.
- Attach a Drag-Chain-Moving-End to the Y-Drag-Chain-Moving-End-Mount in the orientation shown above using 2 x M5-Low-Profile-15mm bolts and 2 x M5-Nyloc-Nuts.

## Step 5 — Y-Axis Moving End Mounting




- Secure the Y-Axis-Moving-End-Assembly using 2 x M5-Low-Profile-15mm bolts and the 2 x M5-Nyloc-Nuts already inserted into Y-Drag-Chain-Moving-End-Mount.

## Step 6 — Y-Drag-Chain




- Lay the Y-Drag-Chain flat on a table. Feed the PSU-Output-Power-Cable through the whole length of the Y-Drag-Chain. Ensure that the end with the XT60-Connector, is located at the female end of the Y-Drag-Chain. (as shown in the ‘Female End’ image).

- Feed the two (4)(Yellow) & (5) (Green) Y-Axis Stepper Motor Wires through the Y Drag-Chain. The end of the stepper motor wires with the black connector should be at the female end of the Y-Drag-Chain - same as above.
- Feed the wires on the (1)(Brown) Y-Axis Limit-Switch, through the Y Drag-Chain. The switch portion of the Limit-Switch should be at the female end of the Y-Drag-Chain.

ⓘ If you have the Ethernet version of the Duet, now would be a good time to also insert this wire.

ⓘ The tabs of the Drag-Chain can be flipped open with a small flathead screwdriver. Doing this will help to feed the cables.

- Lay the Y-Drag-Chain flat along the left side of the WorkBee. The female end of the Y-Drag-Chain should be at the back of the machine, and the male end at the front.
  - Attach the female end of the Y-Drag-Chain to the Drag-Chain-Fixed-End on the Y-Axis Fixed-End-Assembly. It will take some force to click it into the Drag-Chain-Fixed-End. A small flathead screwdriver can be used to help pry the Drag-Chain in place.

- Bring the male end of the Y-Drag-Chain to the Y-Axis-Moving-End-Assembly and attach it to the Drag-Chain-Moving-End. It will take some force to click it into the Drag-Chain-Moving-End. A small flathead screwdriver can be used to help pry the Drag-Chain in place.

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