5. Wire Routing

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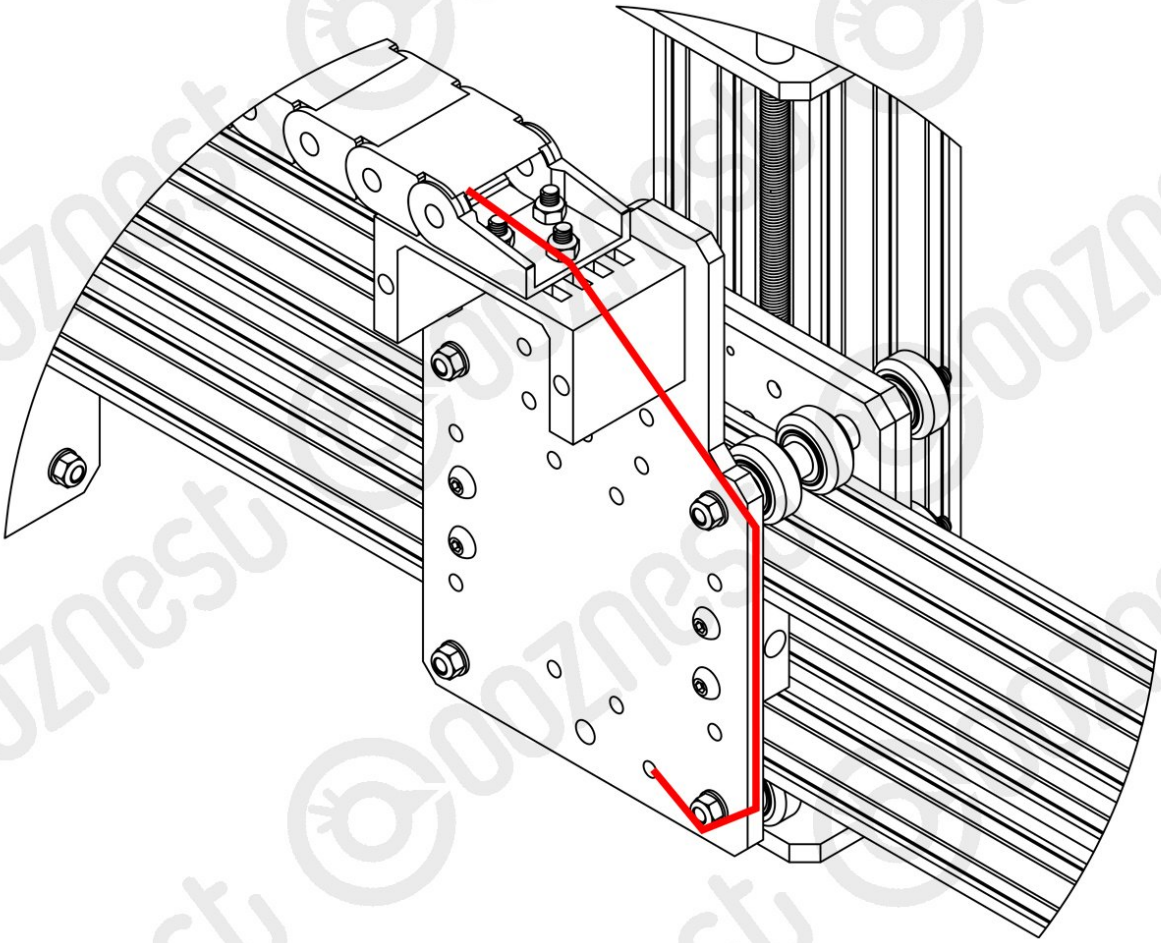
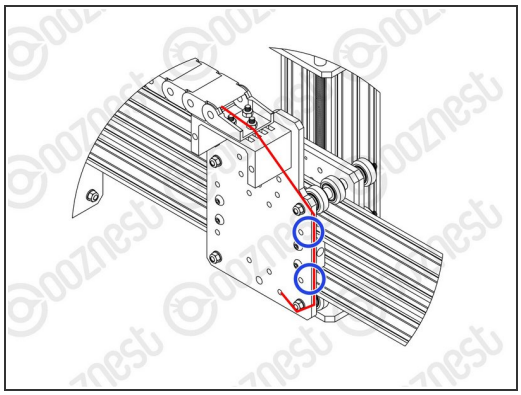
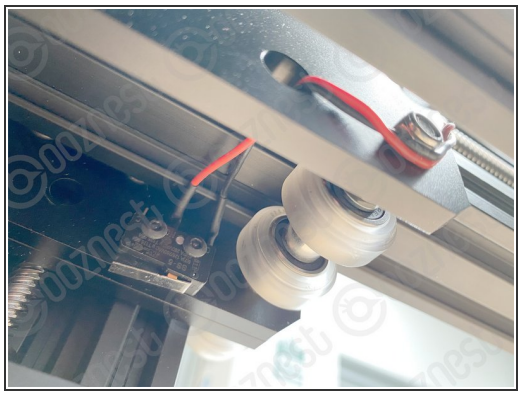
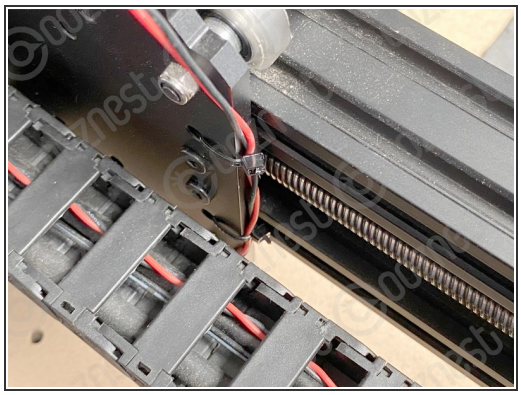


Step 1 — Wire Identifications

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.

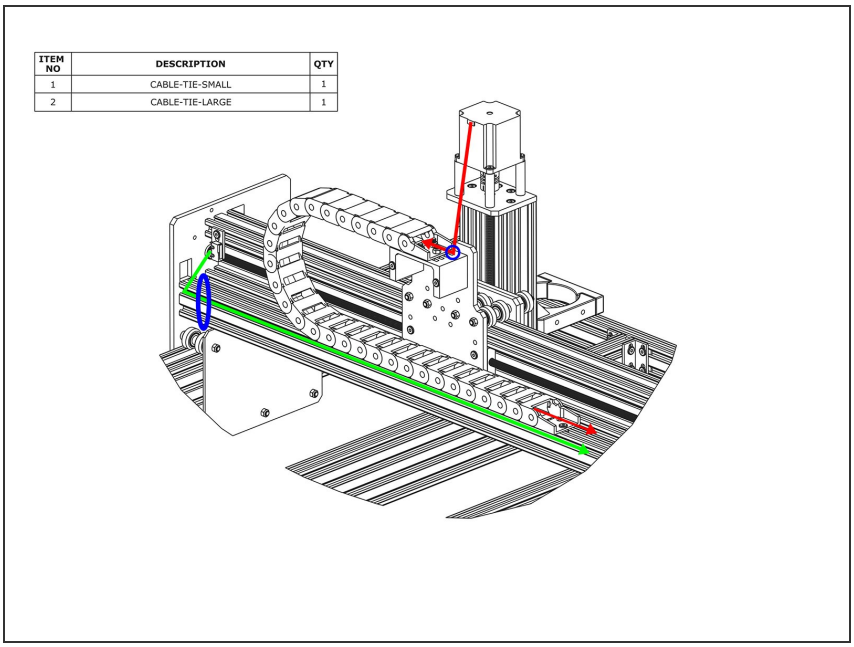
Step 2 — Z-Axis Limit Switch Wiring

- The (2)(Red) Z-Axis Limit Switch sits in-between two sets of wheels. Directly opposite there is a hole. Feed the wires through this hole as in picture 2.
- Wrap the (2)(Red) Z-Axis Limit Switch wire around the M5-Nyloc-Nut, and then up the edge of the X-Plate-Back.
  - Zip tie it to the two holes next to the edge of the X-Plate-Back.
  - Feed the wire through the X-Axis Drag Chain, and secure it with cables ties to the slots on the X-Drag-Chain-Moving-Mount.

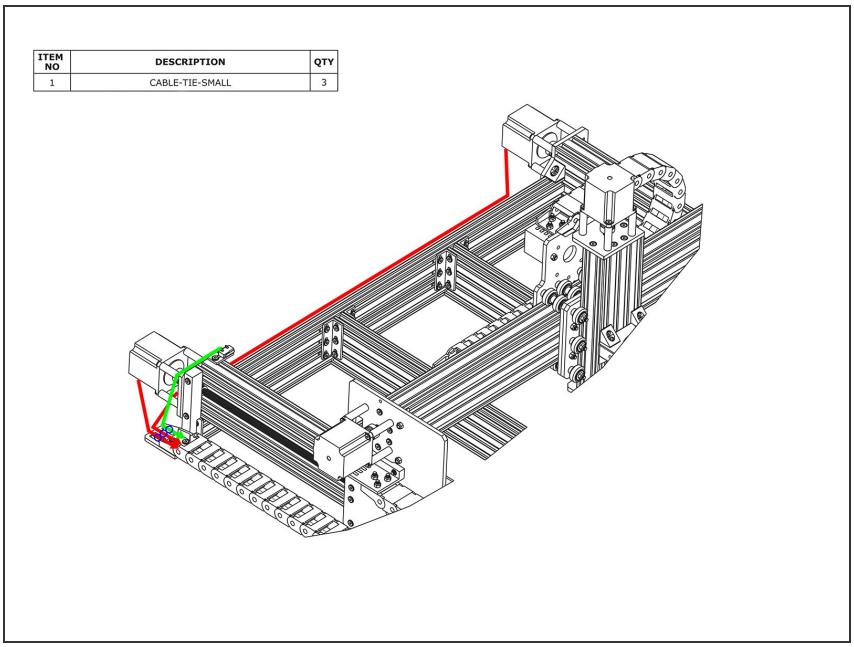
⚠ To prevent the wire from rubbing/breaking, it needs to be taught the whole way from the switch to the X-Drag-Chain-Moving-Mount.

Step 3 — Screw Driven - Gantry Wire Routing



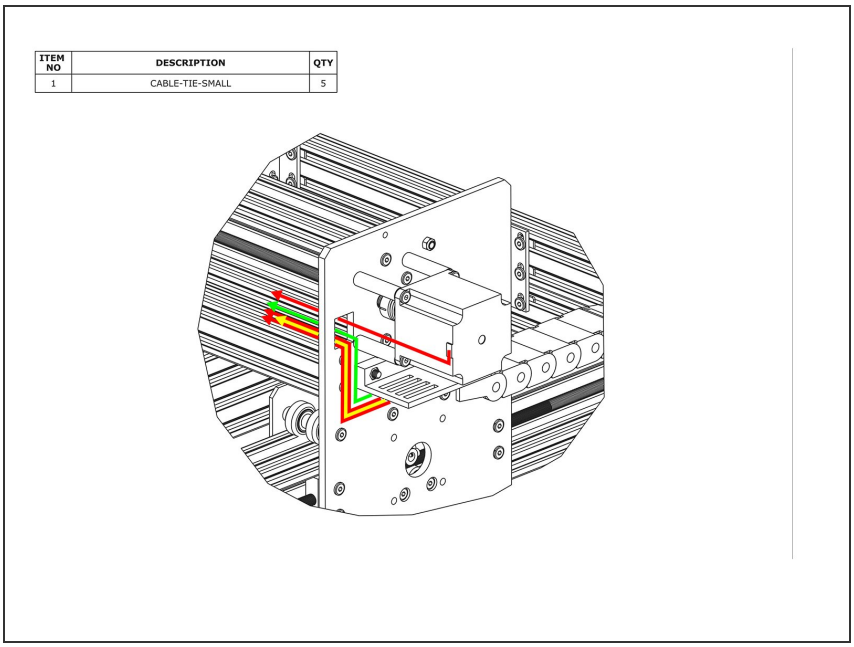
- For the (6)(Light Blue) Z-Axis Stepper Motor Wire that is inside the X-Drag-Chain, connect it to the pigtail on Z-Axis stepper motor. Making sure there is enough slack for the full travel of the Z-Axis shown in red, secure the wire to the X-Drag-Moving-End-Mount using a Cable-Tie-Small, shown by the small blue circle above.
- The lead on the (0)(Black) X-Axis Limit Switch should be secured to the V-Slot-2040-750mm using a Cable-Tie-Large at the position shown by the blue oval above. Then run the lead along to the other end of V-Slot-2040-750mm - it can be tucked into one of the slots.

Step 4 — Screw Driven - Y-Axis Wire Routing - Part 1



- Connect the two (4)(Yellow) & (5)(Green) Y-Axis Stepper Motor Wires in the Y-Drag-Chain to their corresponding pigtails on the Y-Axis stepper motors. The longer wire should connect to the right hand stepper motor.
- Secure the stepper motor wires to the Y-Axis-Fixed-End-Mount using Cable-Tie Smalls. The wire for the right hand stepper motor can be tucked into a slot on one of the extrusions along the back.
- Secure the lead on the (1)(Brown) Y-Axis Limit Switch to the Y-Axis-Fixed-End-Mount using a Cable-Tie-Small.

Step 5 — Screw Driven - Y-Axis Wire Routing - Part 2



- Connect the (3)(Orange) X-Axis Stepper Motor Wire to the pigtail on the X-Axis stepper motor and feed it through the square hole on the Y-Plate.
- Inside the Y-Drag-Chain there should be two stepper motor wires (red line), a power supply wire (yellow line), and a limit switch wire (green line). Feed all of these through the square hole on the Y-Plate.
- Remove any slack inside the Y-Drag Chain, and then secure these 4 wires to the Y-Drag-Chain-Moving-End-Mount using Cable-Tie-Smalls.

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