Toolhead Cable Harness for Voron V2.4 / Trident with:

Stoolthburner Toolhood DCP to Ostonue MC

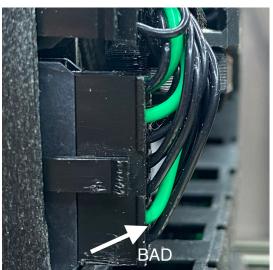
- Stealthburner Toolhead PCB to Octopus MCU
- (optional) XY-Endstop PCB Cable (Fits Microswitch or Hall-Effect)

SAFETY: Installer/user is responsible for ensuring the safe installation and use of this cable assembly. Verify all signal and power paths have proper continuity prior to use.

Installation:

1. Extruder Motor Wires ARE DISCONNECTED TO FACILITATE STEPPER CONFIGURATION

- a. Connect harness and extruder motor to toolhead pcb.
- b. Use a meter to identify motor wire with resistance between it and the single installed wire. Install this conductor in the single open position next to the pre-installed wire.
- c. Verify resistance between the other two stepper motors and install them in the remaining two motor positions.
- d. Refer to Voron documentation (https://docs.vorondesign.com/) or appropriate configuration guide to complete stepper configuration.
- 2. Overall Installation: Install toolhead before cable. Start cable install at toolhead and work toward the MCU.
- 3. **Secure Cable:** Wrap harness with tape before securing with zip tie or other device. Ensure retaining method does not deform insulation. Ensure wires are not under tension at connectors. See photos below.
- 4. Cable Chain: Find a mid-length between loose and tight before securing harness in cable chain.
- 5. **Verify Ground (GND), Power (24V, 5V) and Hot-End (HEO):** Ensure these wires have continuity and terminate correctly prior to power-on.
- 6. **ABL = PROBE.** ABL is an abbreviation for Auto Bed Leveling.
- 7. **XY-PCB Cable:** If using a hall effect board, verify that the voltage provided by the MCU is appropriate per hardware documentation. This cable is intended for XY-PCB using JST-XH connectors.





A Note About **Strain Relief**: The best we can do is ensure that each wire has neutral forces on it to the best of our ability. Molex recommends strain relief be approximately 2cm from the end of the 14-pin Microfit 3.0 connector. The toolhead and pcb designs do not accommodate appropriate strain relief, so we do the best we can

Harness made in Michigan. Quality First. Voron Discord at Snajo#7414 or by email at jason@onewaylight.com

Cable Comb Instructions - Quick and Hopefully Helpful!

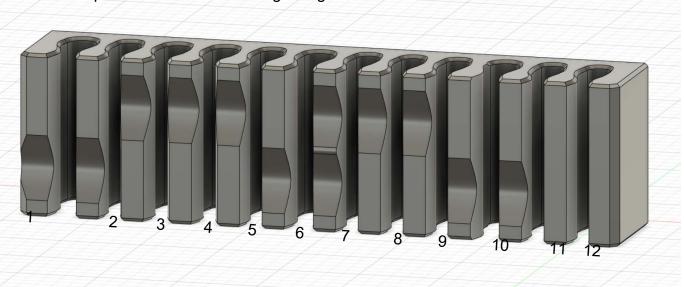
Printing, A way.

Orient like the below image

Nozzle: 0.4mm

Line Width: 0.4-0.6mmLayer Height: 0.2mm

- Print Evaluation: Ensure the bottom layer is not squished such that the notches are narrower on the bottom than on the top. Adjust and reprint to ensure wires are not damaged.
- Fit Check 1: Attempt to insert a 20awg wire into Position 1 below. Note the Notches. If notch is too tight, stretch the model lengthwise and reprint; compress if too loose.
- Fit Check 2: Attempt to insert two 24awg wires into Position 3 as per the previous fit check. If fit Check 1 is good, this should work as well. Adjust further if necessary.
- Contact Snajo#7414 on the voron discord or via email at jason@onewaylight.com with questions or comments regarding this model or instructions.



Wire Loading Scheme by position:

- *Note Orientation of Notches
- *Note Bold wires are 20AWG

1.	HEO (Hot End On)	7.	5V & LED (5V + LED to toolhead)
2.	HEF (Hot End Fan)	8.	TH0 (2 wires, Toolhead Thermistor)
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EM (2 wires, motor)
EM (2 wires, motor)
EM (2 wires, motor)
AUX
PCF (Part Cooling Fan)
24V *24V PSU V+
ABL (Probe/AutoBedLevel)

6. **GND** *24V PSU V- 12. FS (Filament Sensor)

*NOT PINOUT!!! This only for loading the cable comb.