

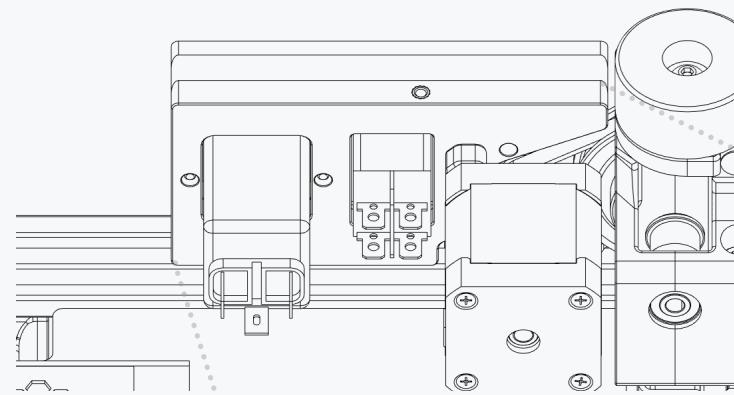
INPUT VOLTAGE SWITCH

Check the input voltage switch of the power supply. It is located in the highlighted area.

Make sure the selection matches your local mains voltage. Refer to the Mean Well LRS-200 datasheet for possible settings (voron.link/e0szdyh).

POWER INLET

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MAINS INLET WIRING

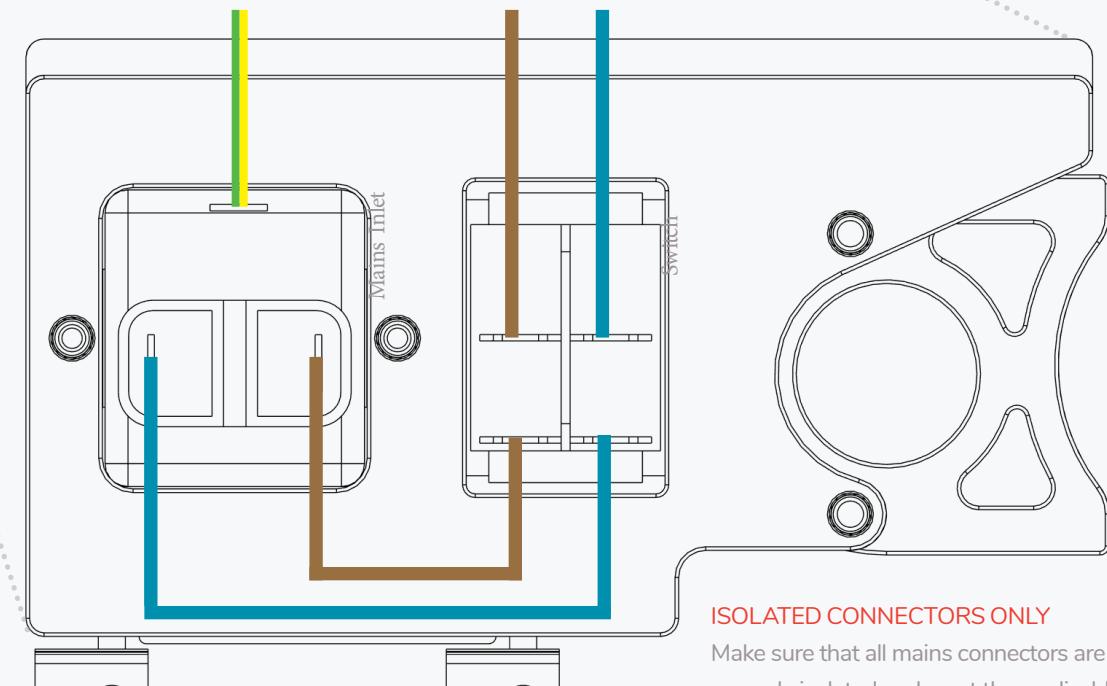
We show the wiring in the IEC colour scheme.
Depending on your region the colour scheme and
wiring standards will differ.

Mains wiring should only be done by qualified personnel trained in local regulations and safety standards. Depending on your local regulations you may be forbidden from wiring the mains side and/or putting the printer into operation; seek professional assistance.

Failure to observe those could result in bodily harm.

ATTACH 250MM OF WIRE

Cables should be at least 1mm² (AWG18) or thicker depending on local regulations.



ISOLATED CONNECTORS ONLY

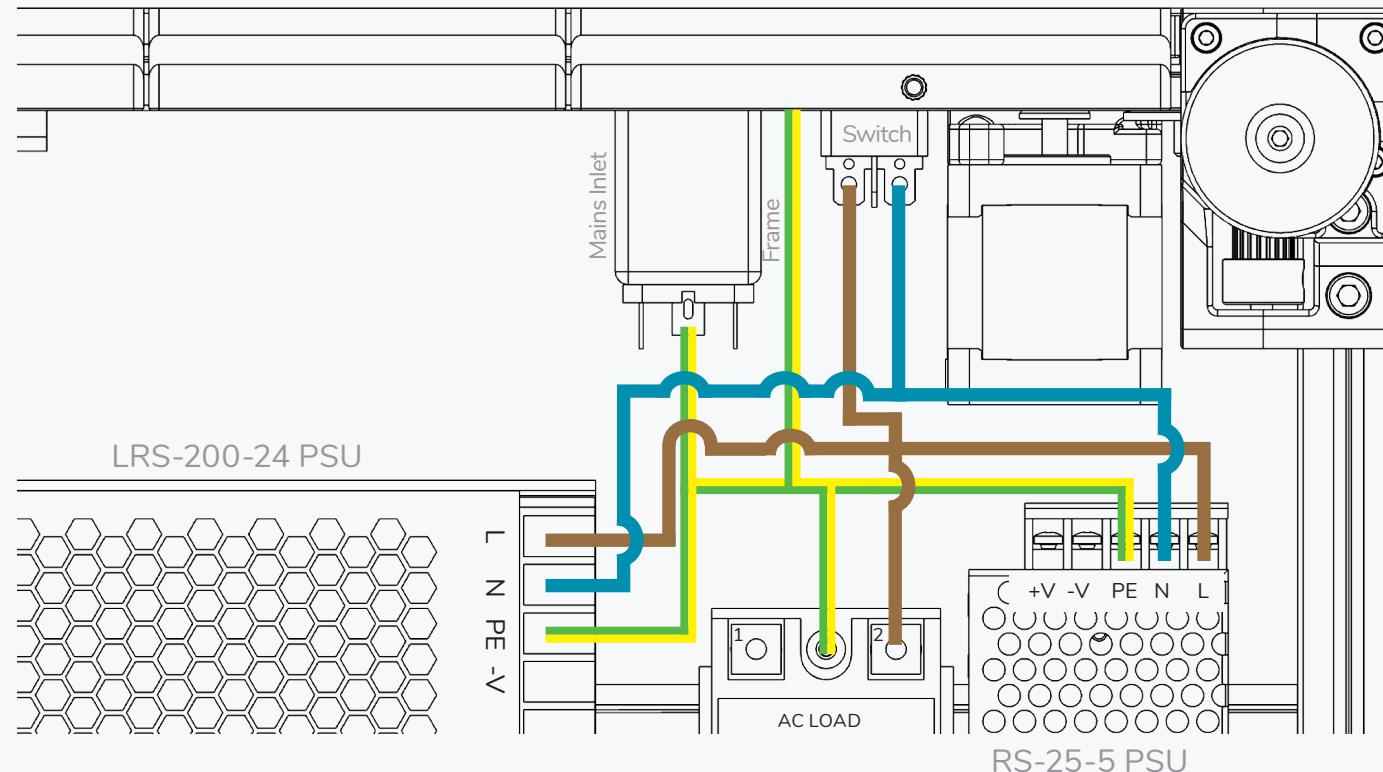
Make sure that all mains connectors are properly isolated and meet the applicable safety standards.

MAINS WIRING CONTINUED

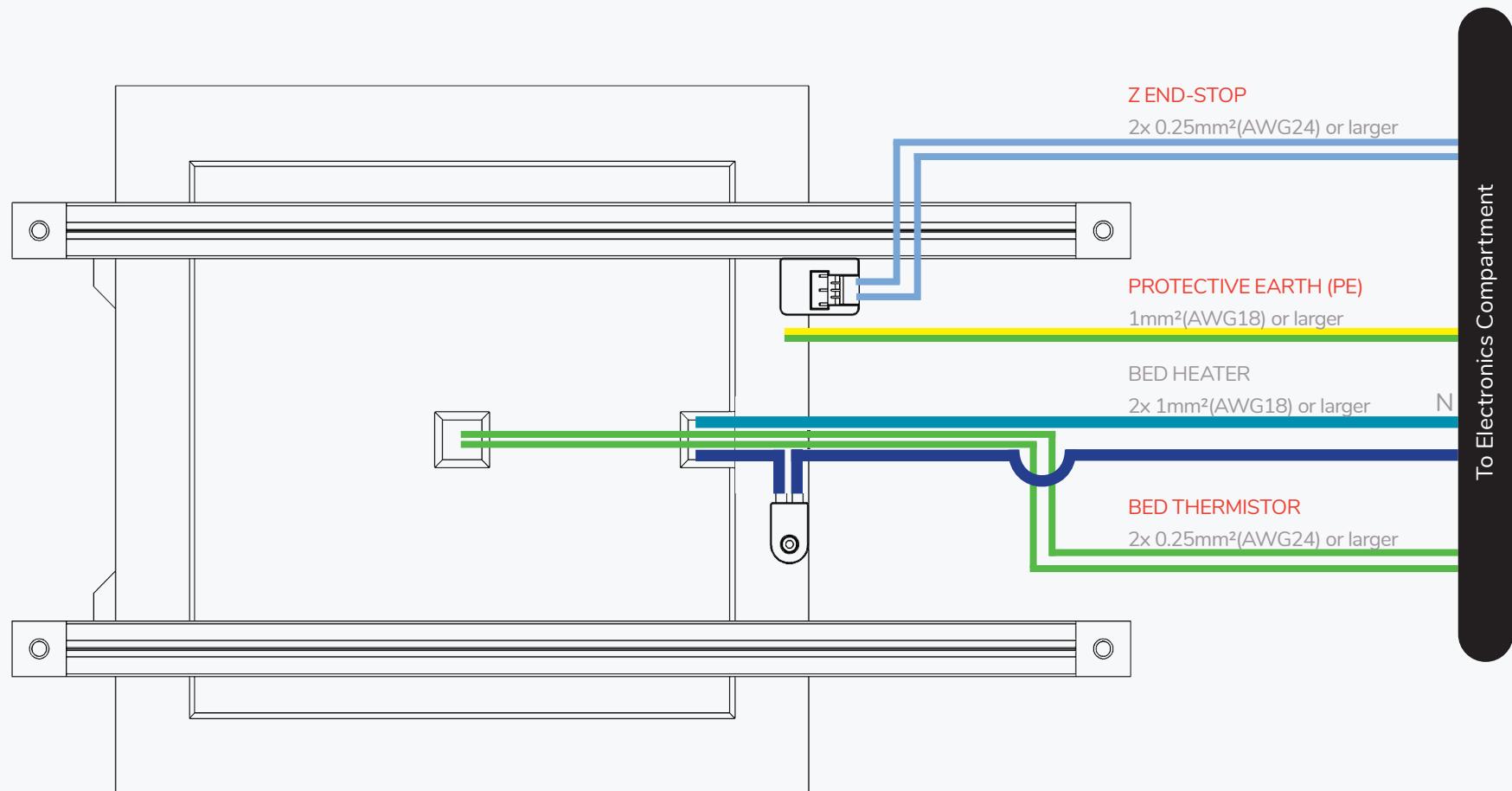
Secure the wires with cable clips / cable tie anchors.

The bed heater is powered by AC voltage and receives its PE in a later step.

Observe your local regulations in regards to the Protective Earth connections for the frame/other components.

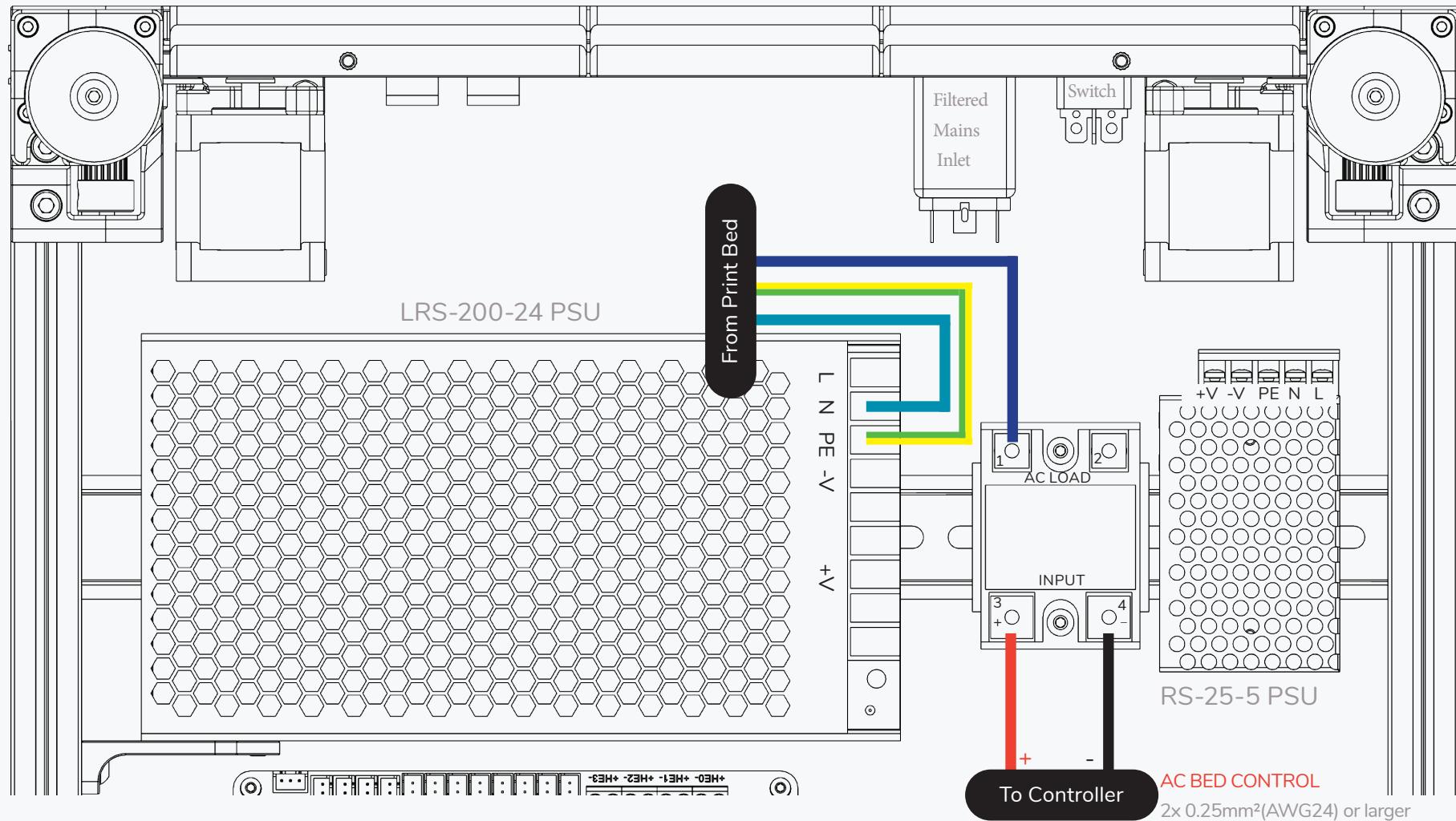


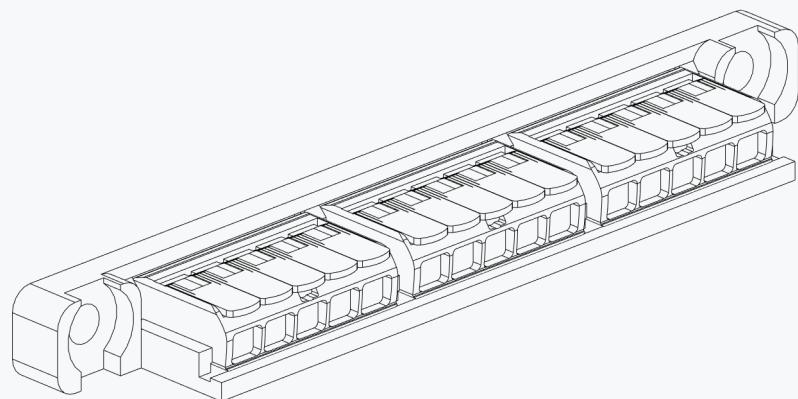
BED CABLE HOOKUP



MAINS WIRING

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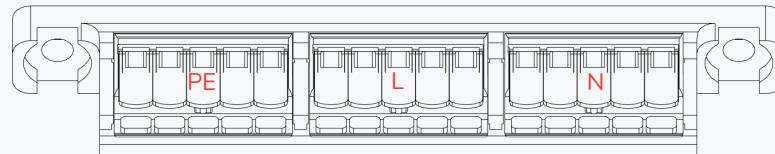




OPTION: WAGO CLAMPS FOR MAINS

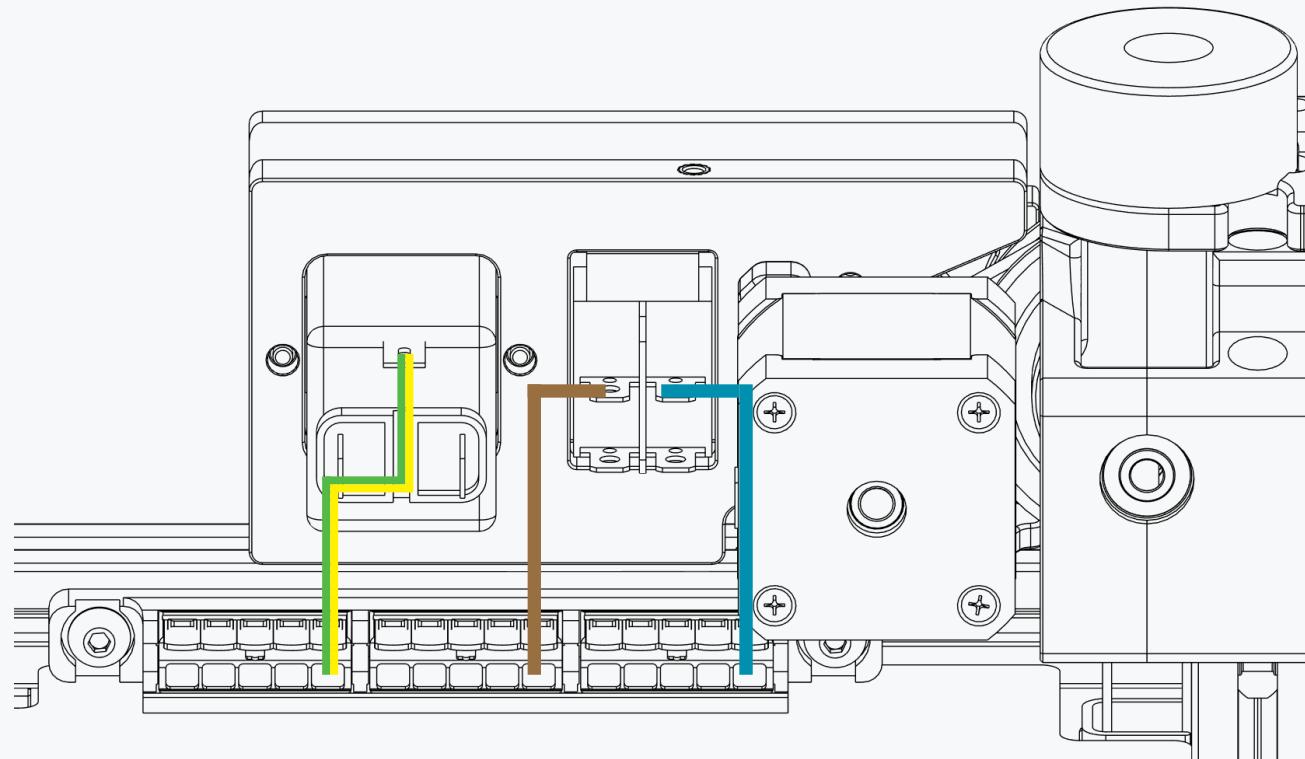
WAGO wire clamps allow for a clean and easy wiring of the mains side.

You may want to label your clamps as shown below.



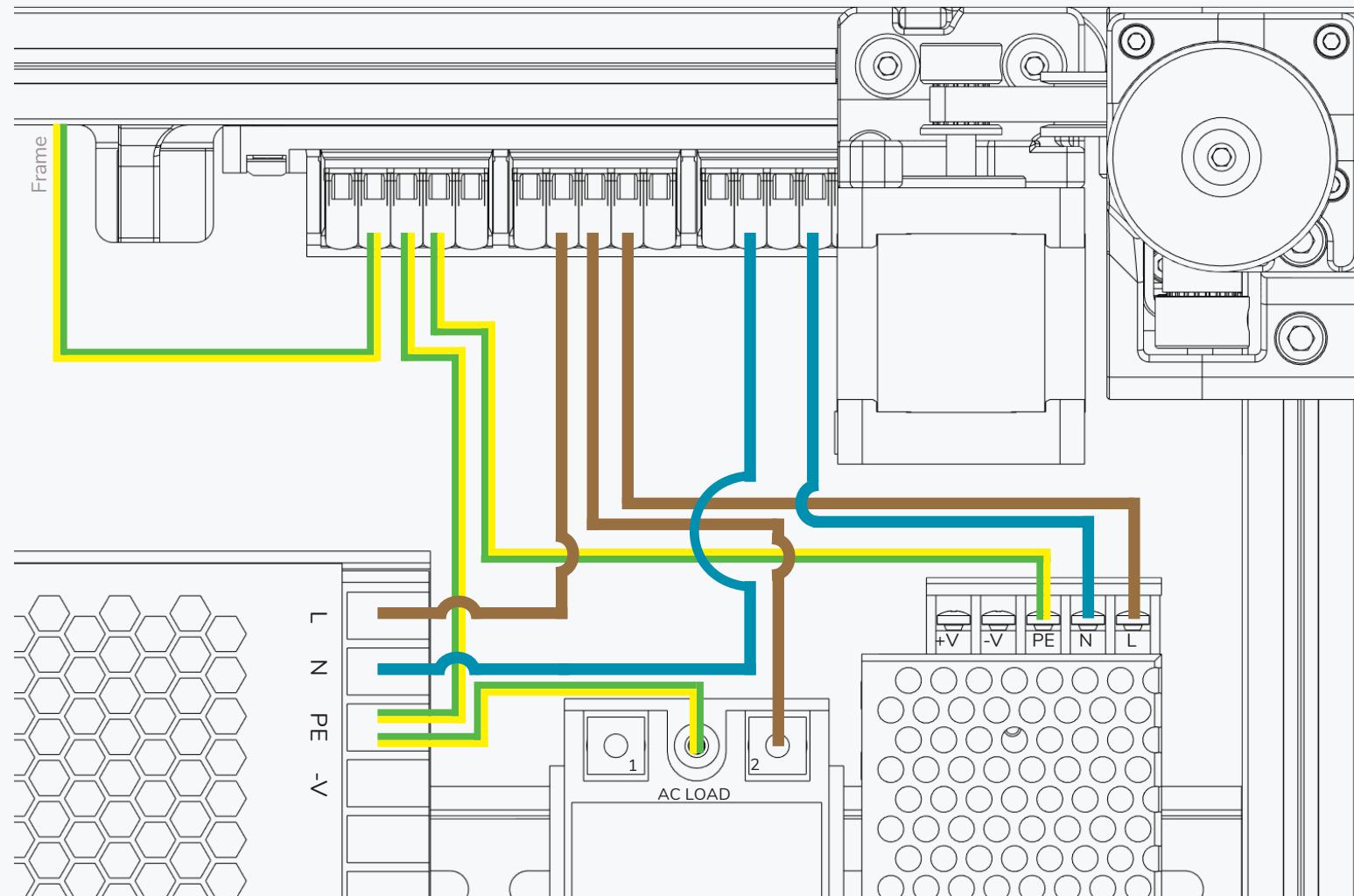
ALTERNATE MAINS WIRING - WAGO CLAMPS

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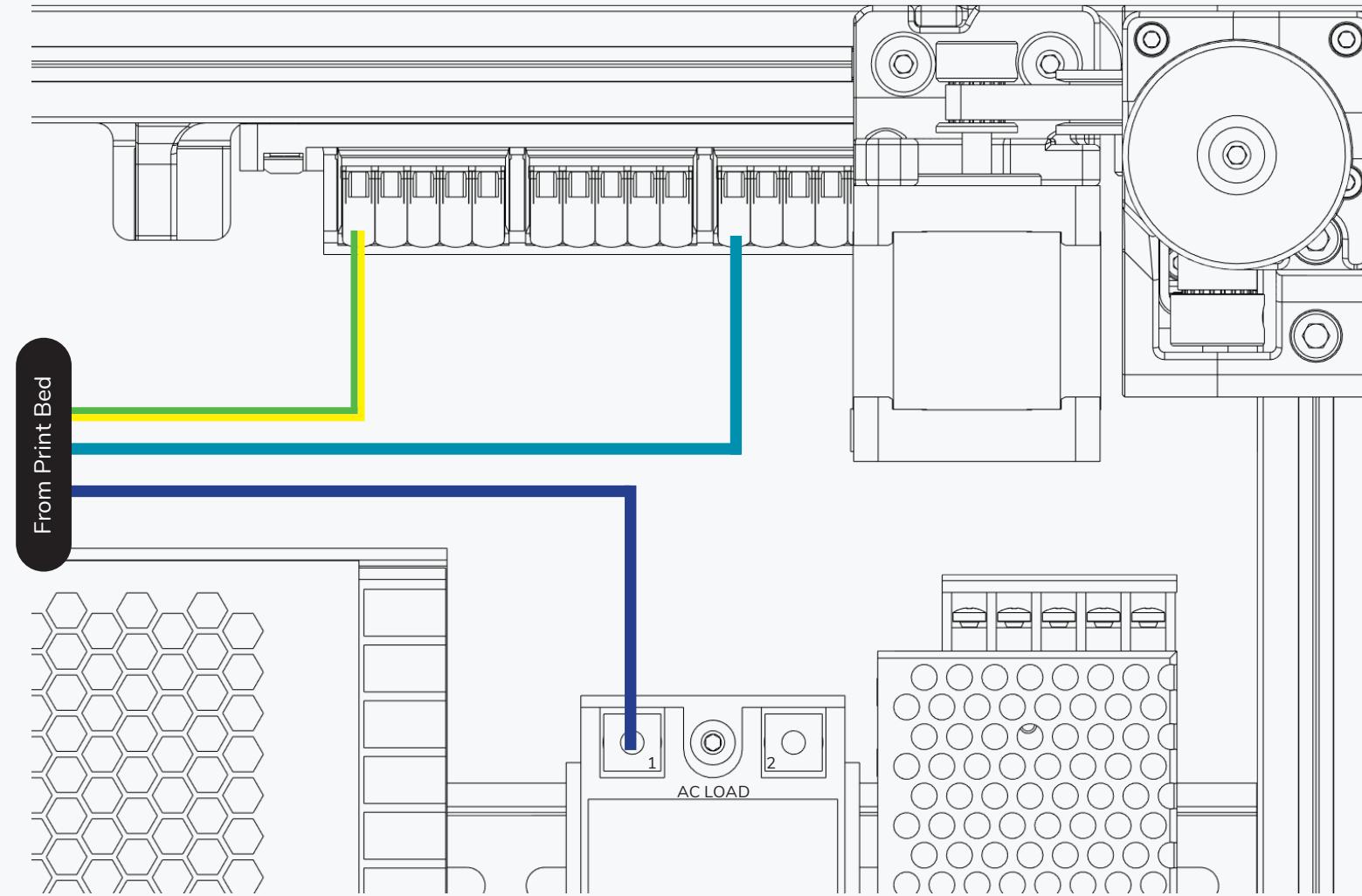
ALTERNATE MAINS WIRING - WAGO CLAMPS

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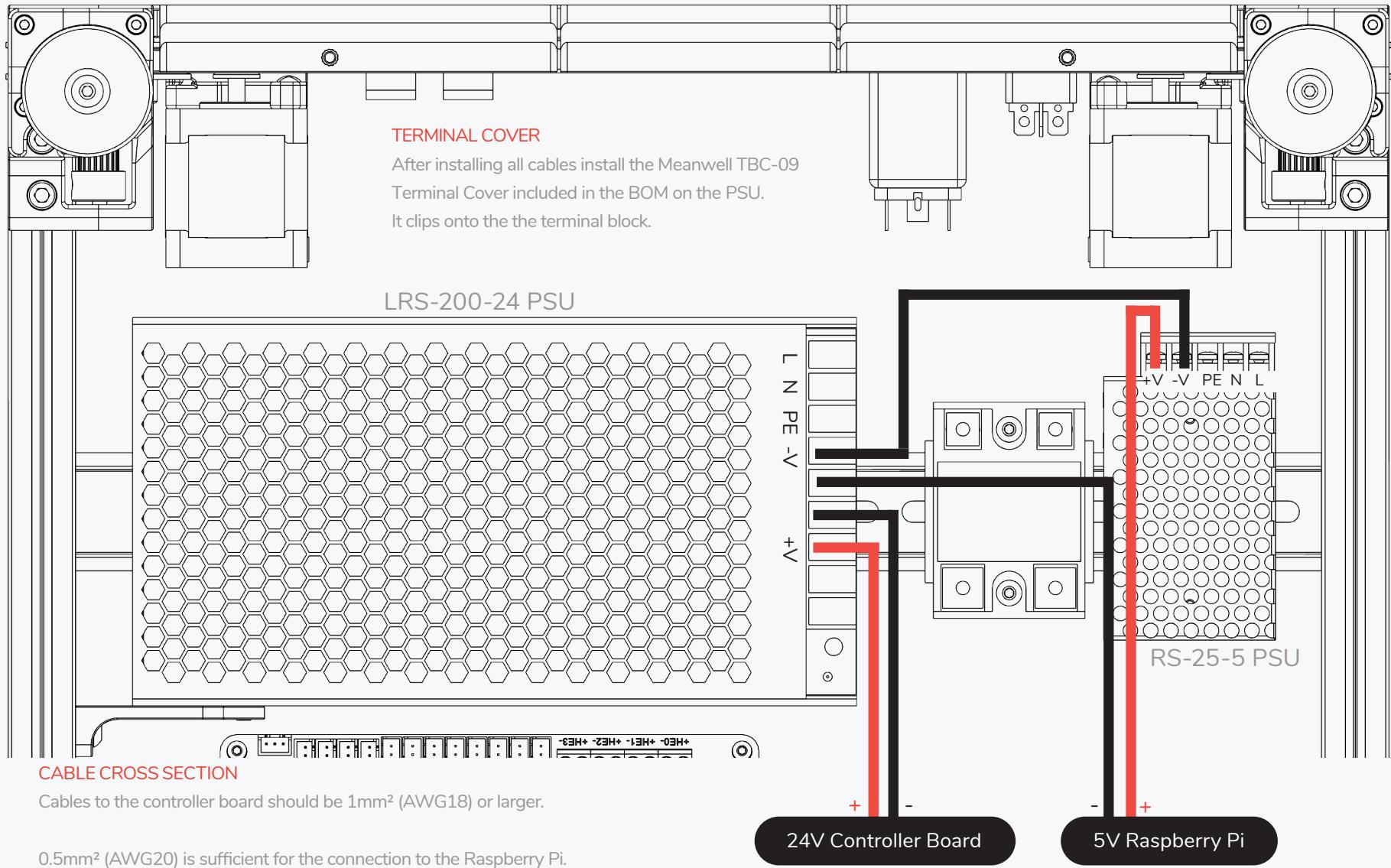


ALTERNATE MAINS WIRING - WAGO CLAMPS

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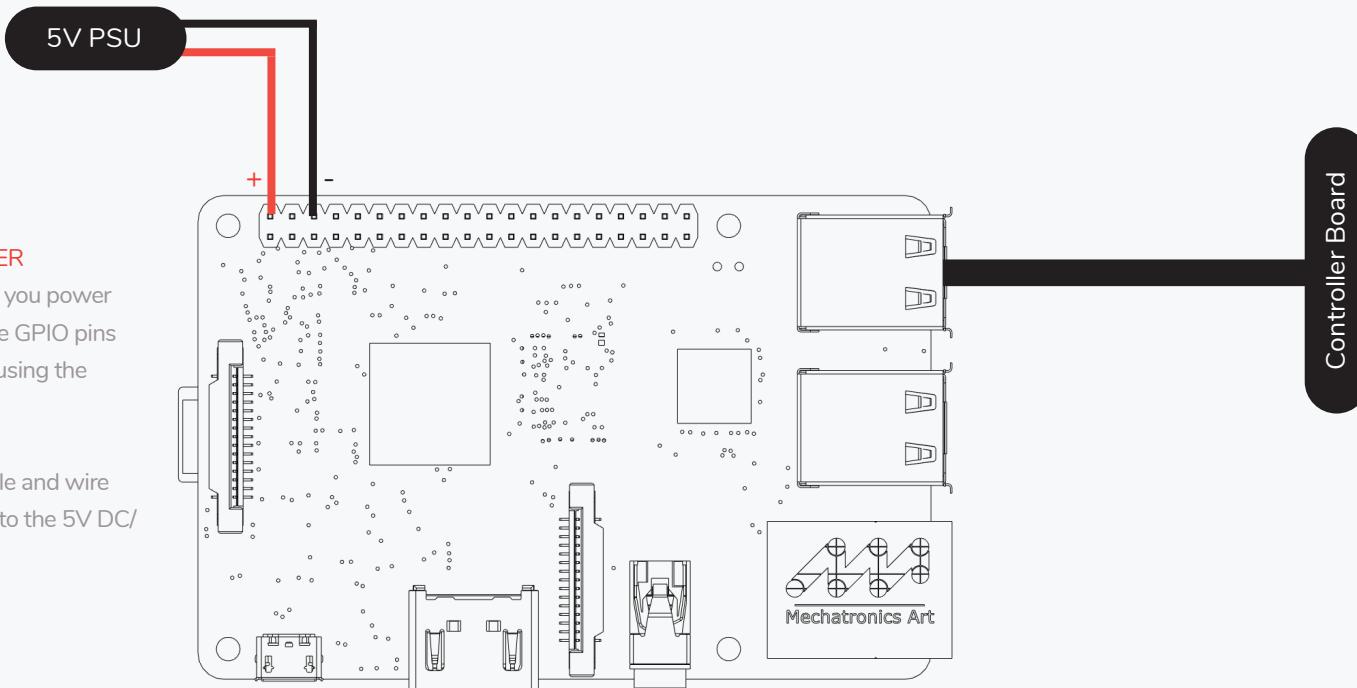
DC POWER



RASPBERRY PI POWER

While we suggest that you power the Raspberry Pi via the GPIO pins you may also power it using the "Power-In" USB port.

Cut a suitable USB cable and wire the + and ground lines to the 5V DC/DC converter instead.



CONTROLLER BOARD

JUMPERS

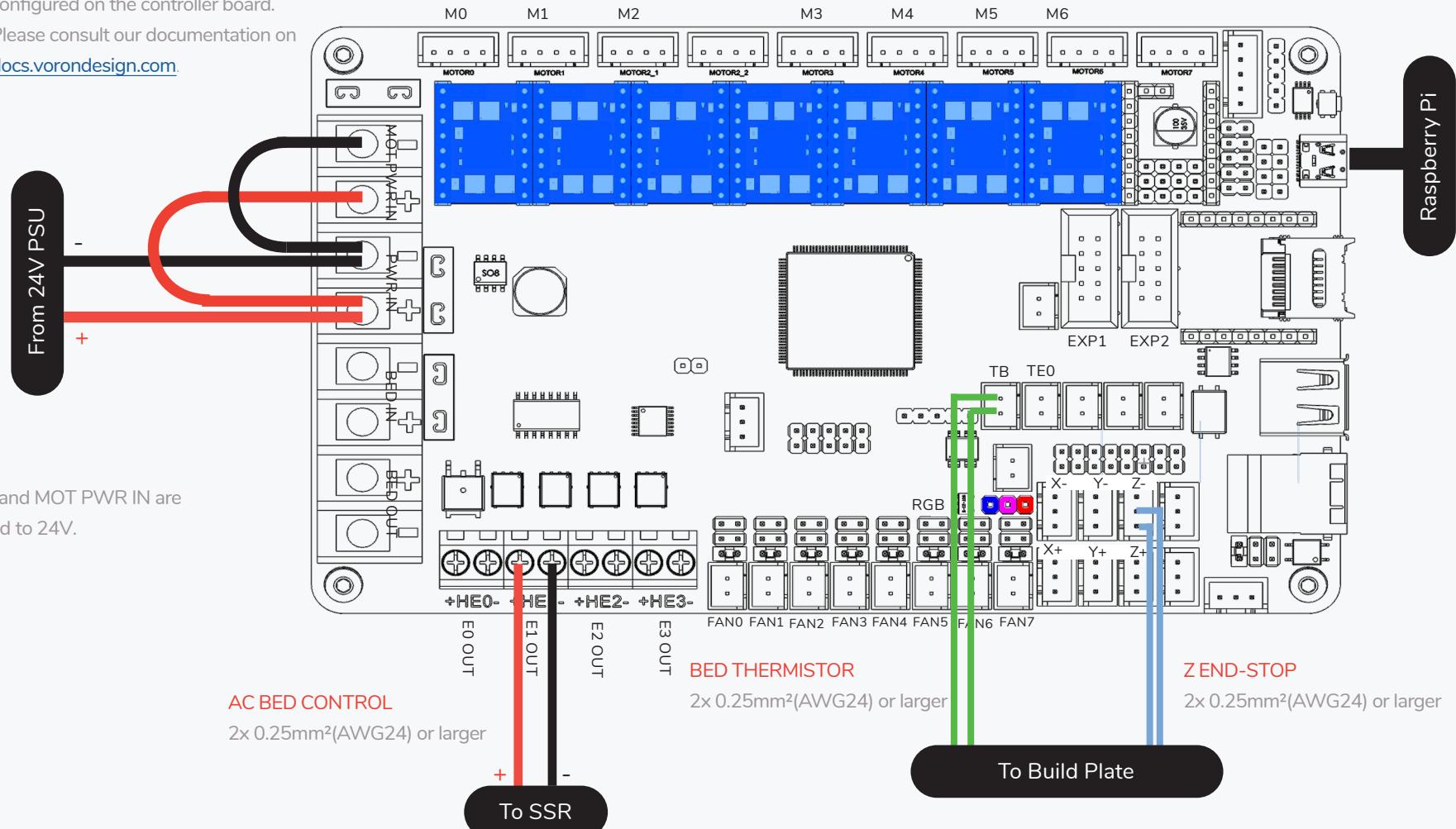
Several jumpers may need to be configured on the controller board.

Please consult our documentation on docs.vorondesign.com.

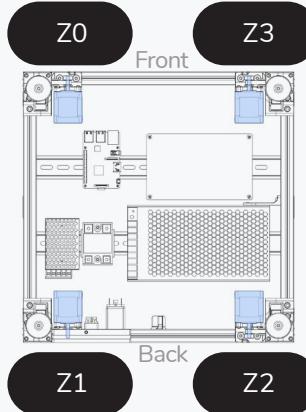
CONTROLLER BOARD

The assembly manual will outline the wiring for a Bigtreetech Octopus V1.1. You can find additional documentation and alternative configurations on docs.vorondesign.com.

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CONTROLLER BOARD

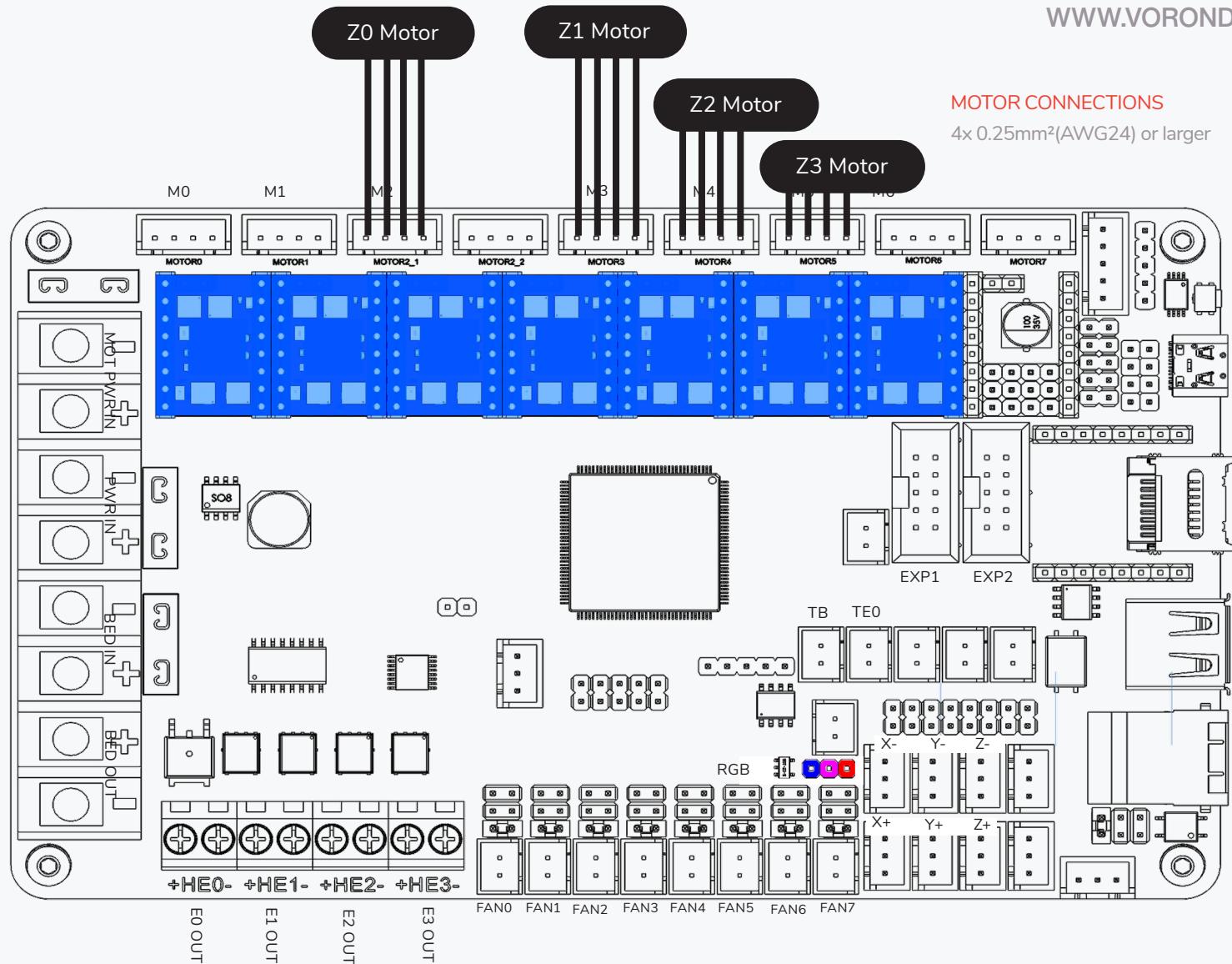


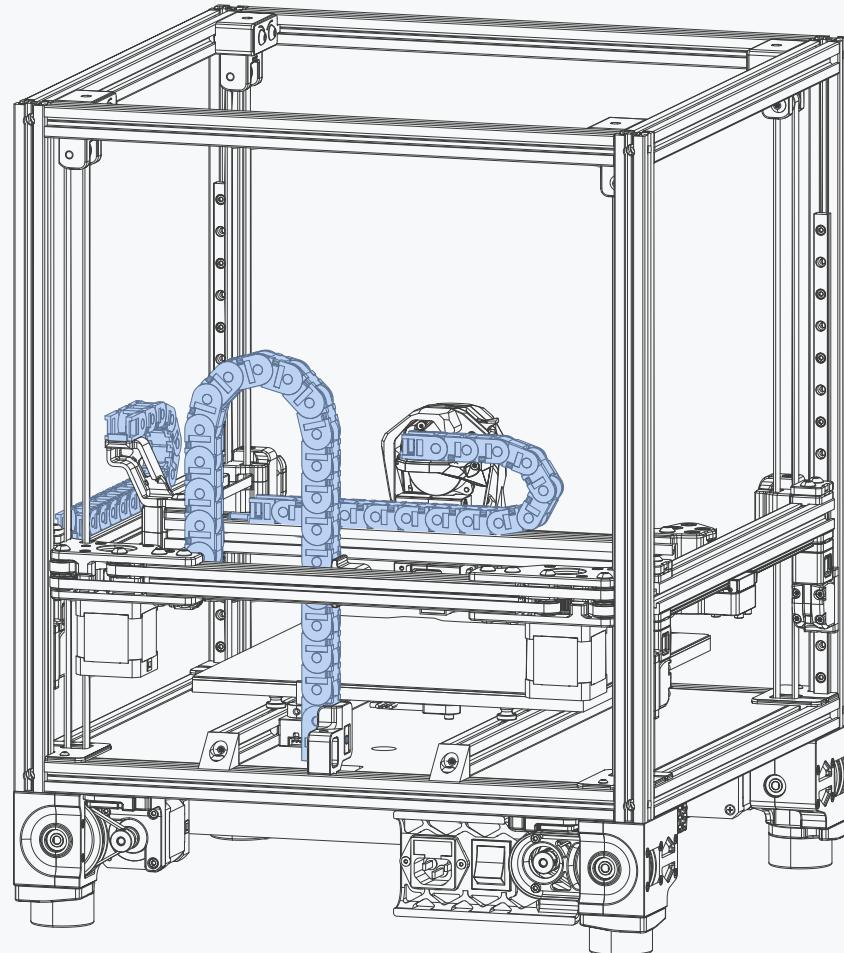
BLACK MOTOR WIRES?

There is no standardized stepper wire colouring scheme. Each manufacturer implements their wires colours slightly different.

Please consult the datasheet of your stepper motors for the correct order.

If your motors came with plugs it's usually safe to assume that this order is correct.





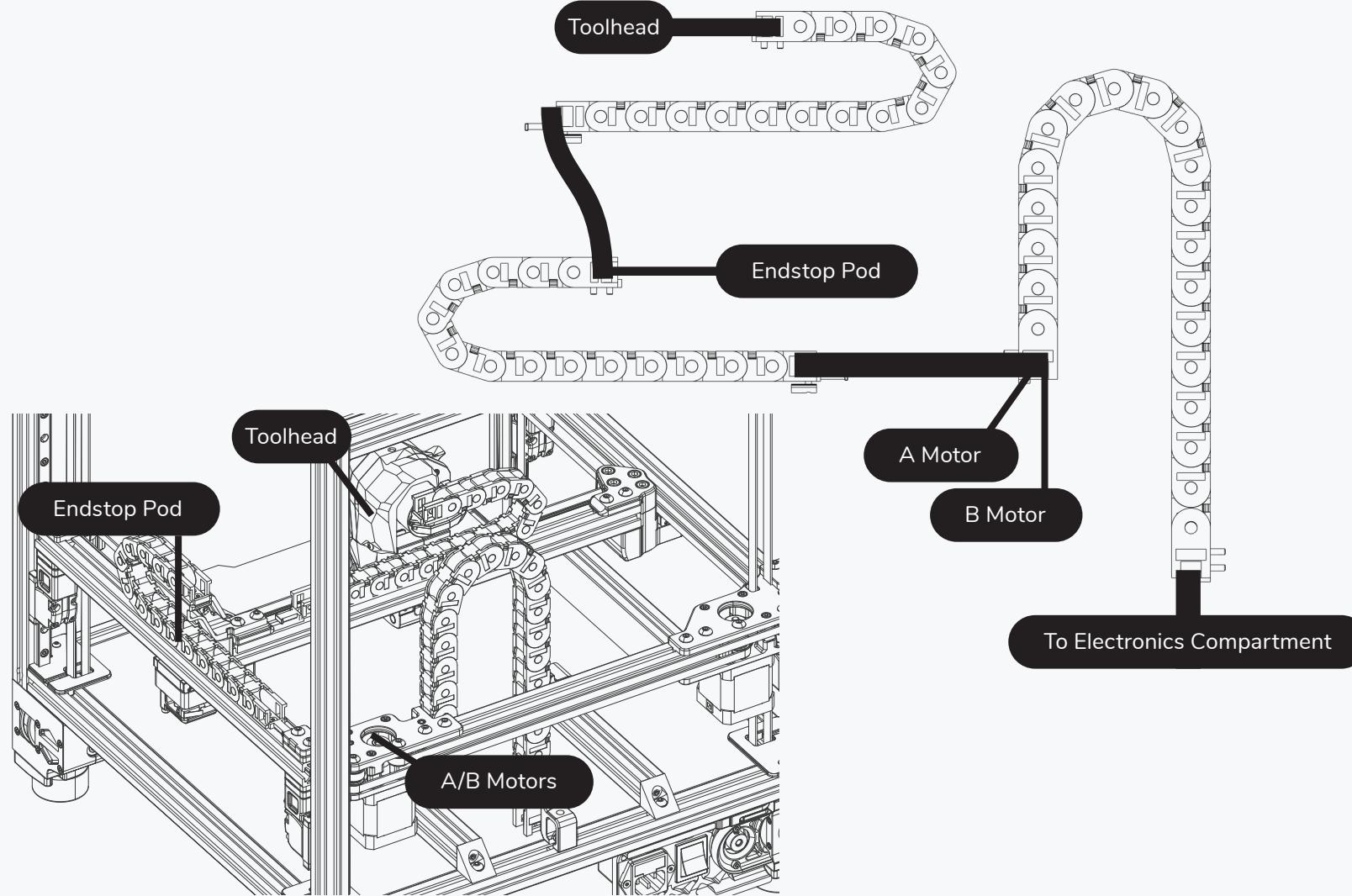
CABLE CHAINS INSTALL

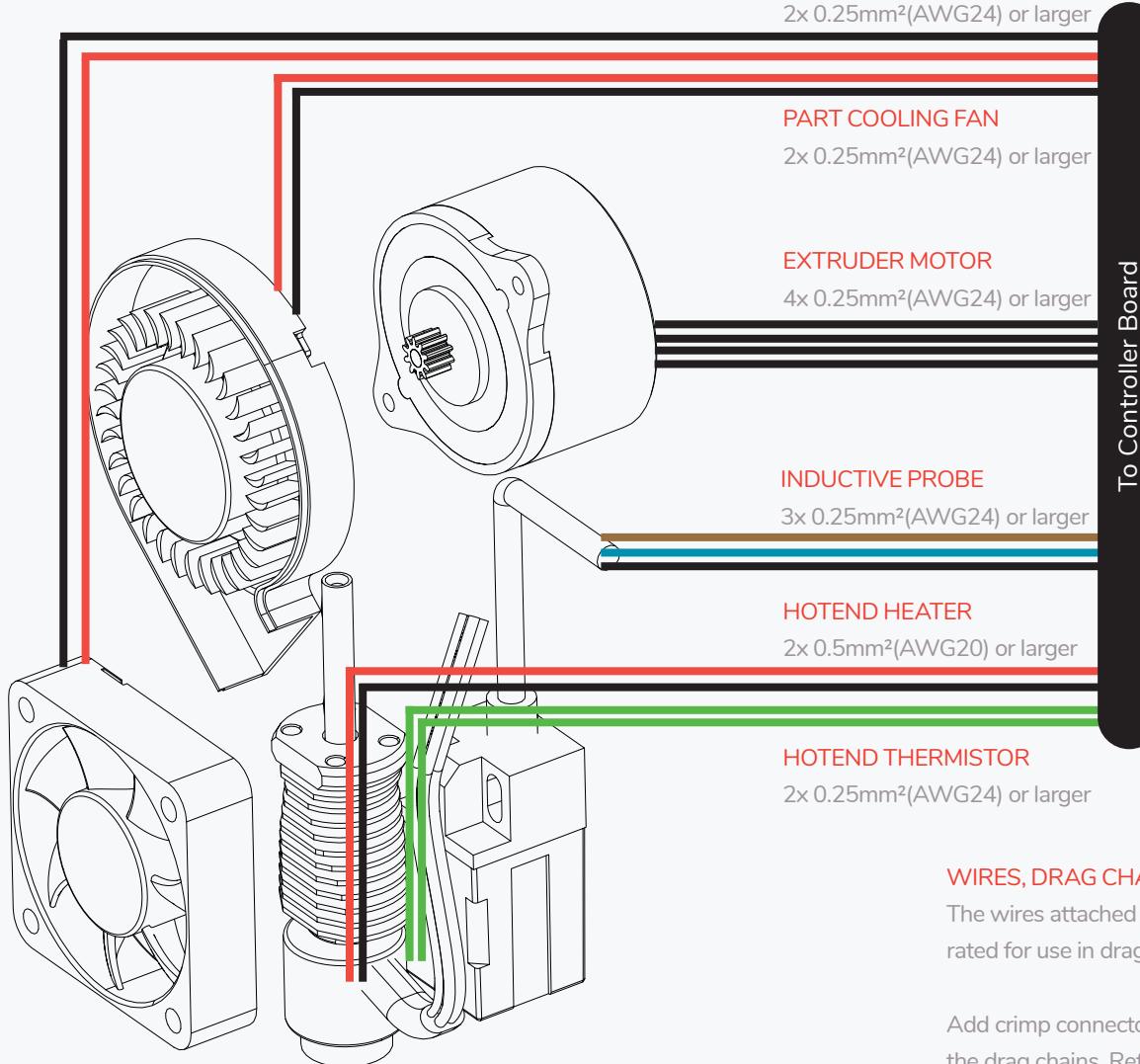
You can opt to install the chains now and fish the wires through the chains or build the complete harness outside of the printer and install it in one go. Either approach does work.

If you sourced a pre-built wire harness completing the harness outside of the printer is recommended.

CABLE CHAINS - OVERVIEW

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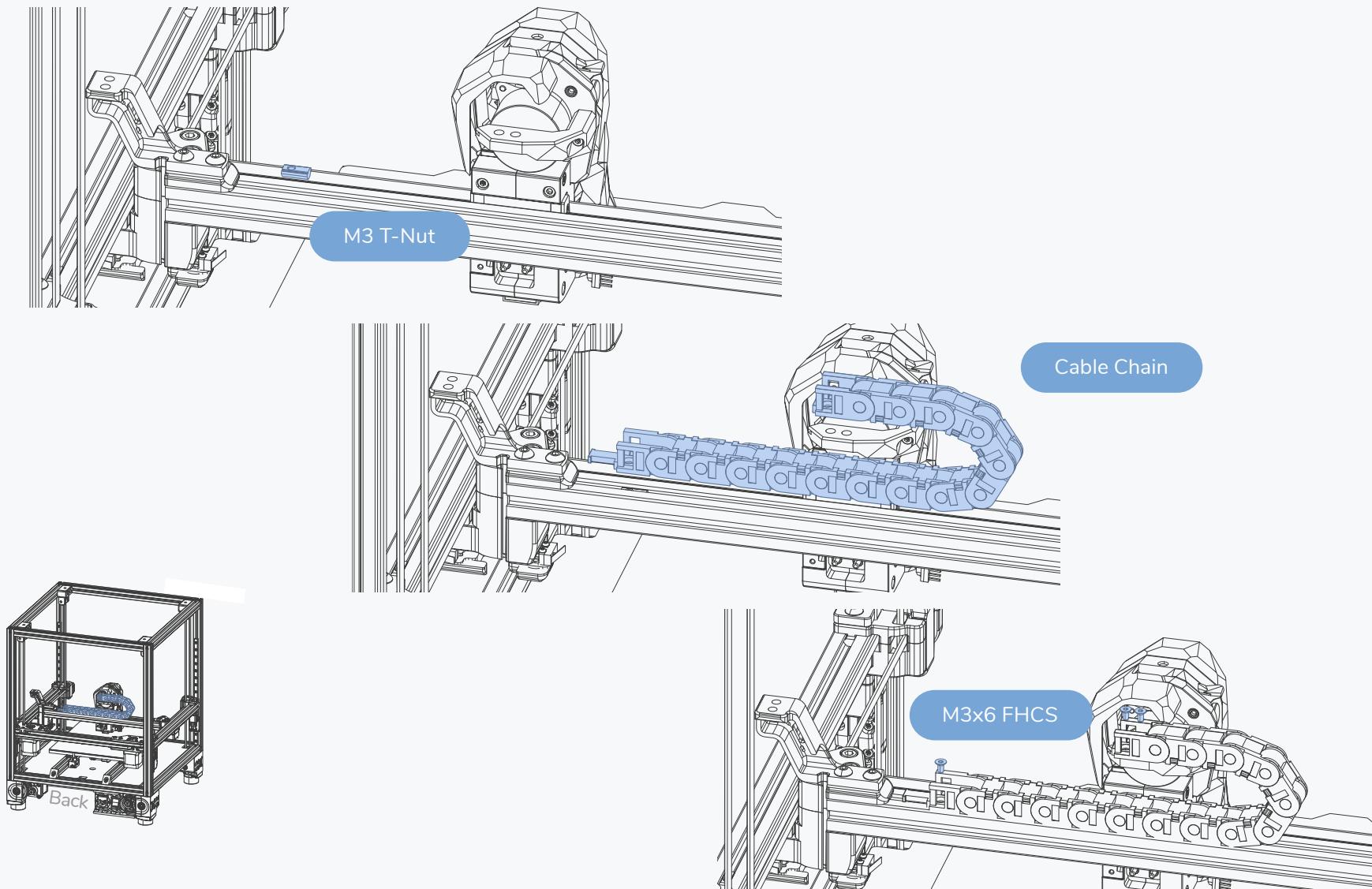


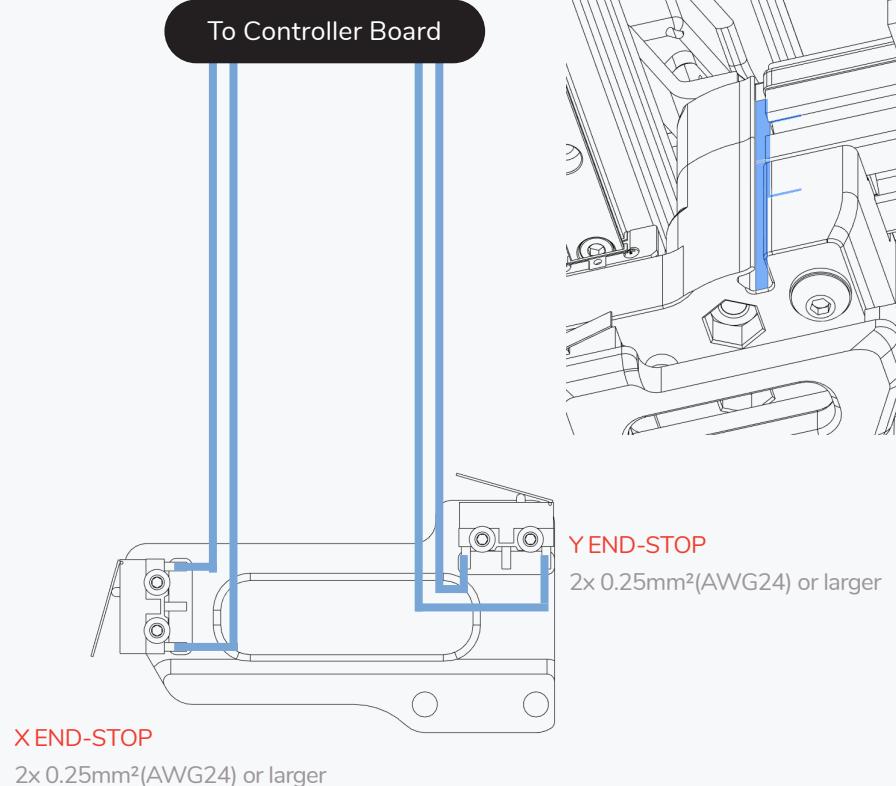


The wires attached to the probe, fans, heater, etc. are usually not rated for use in drag chains.

Add crimp connectors at the toolhead and run suitable wire down the drag chains. Refer to the sourcing guide for options.

X CABLE CHAIN

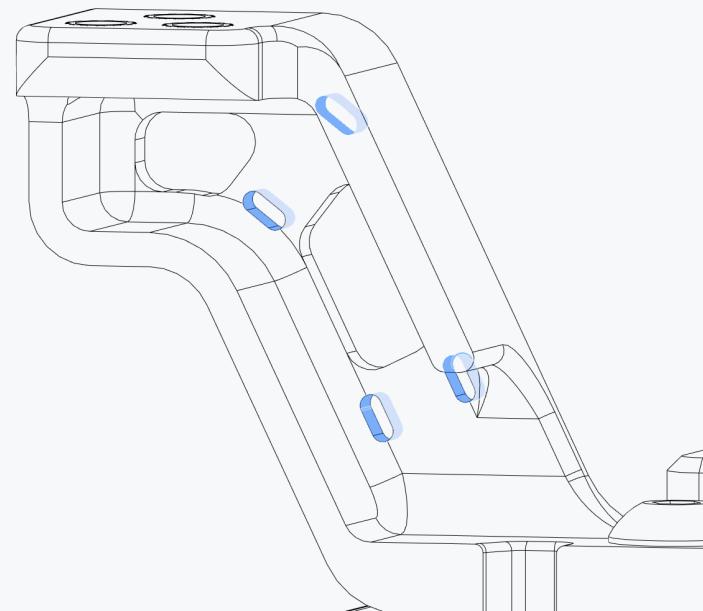




OPTION: ENDSTOP BOARD/HALL EFFECT BOARD

Those boards utilize a 4 pin connector instead. Please refer to

<https://voron.link/djhyygu> and <https://voron.link/d6qb7o6> for details.

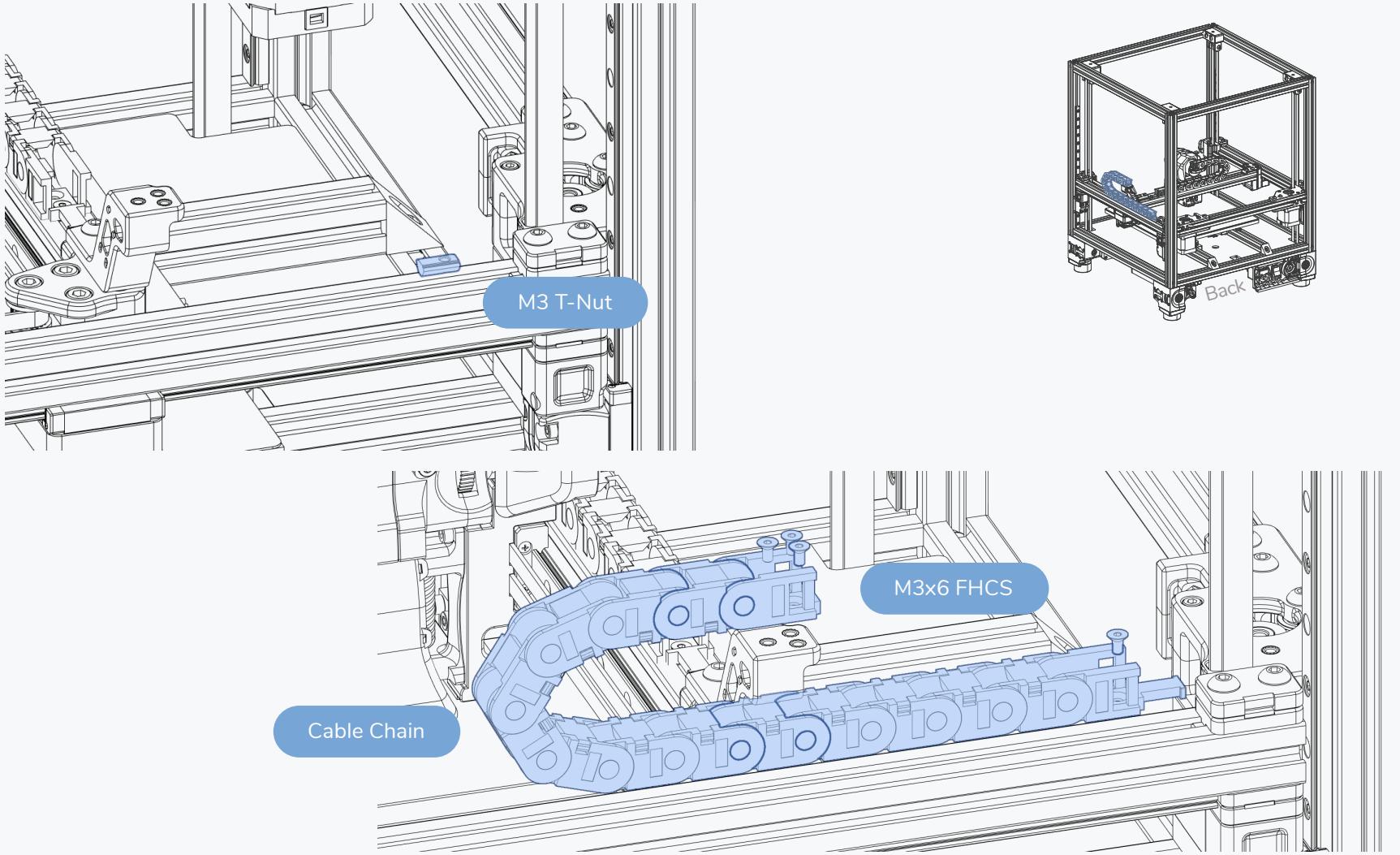


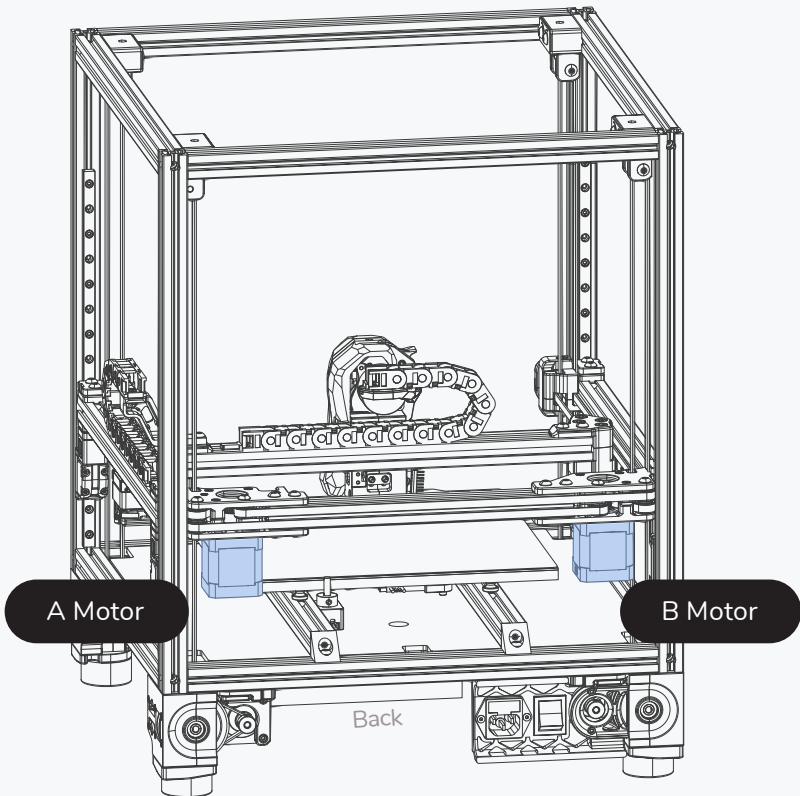
ZIP TIE LOOPS

Secure the wire bundle to the strain relief using small zip ties.

Y CABLE CHAIN

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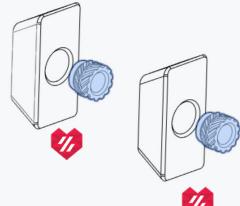


SECURING MOTOR CABLES

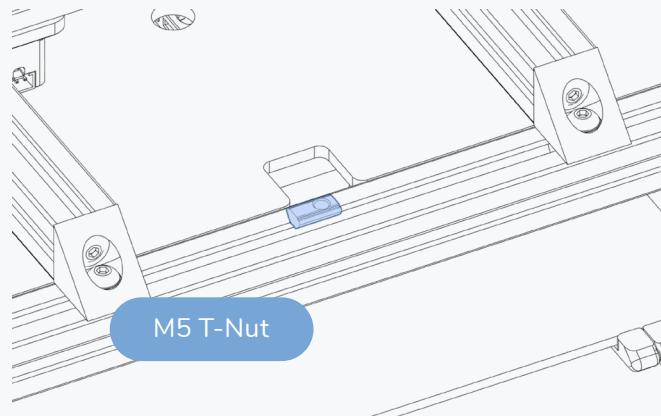
Secure the wire bundles for the A and B motors along the small extrusion that sits between the drives with small zip ties. These motor wires will both enter the Z cable chain that is installed on the next page.

Z CABLE CHAIN

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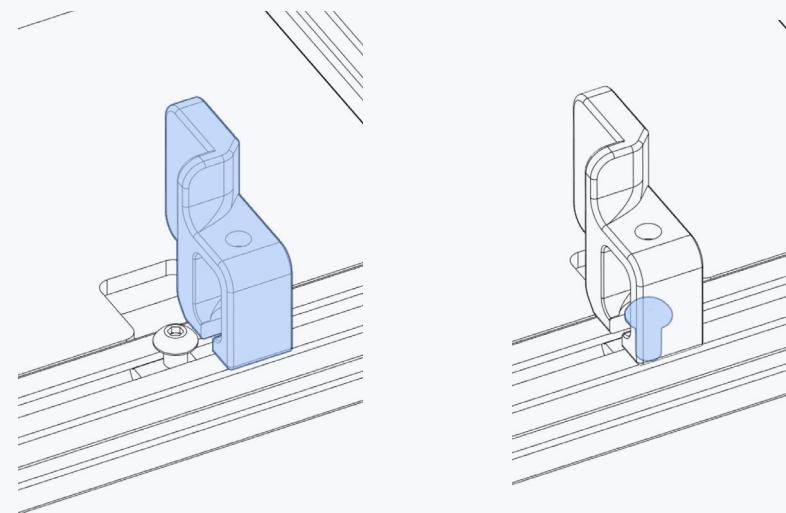
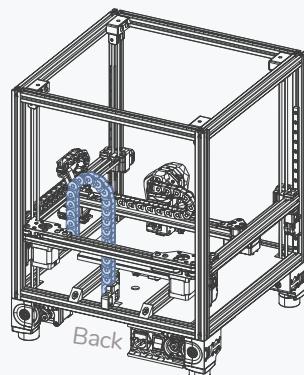
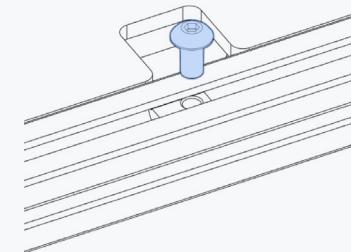


Heat Set Insert



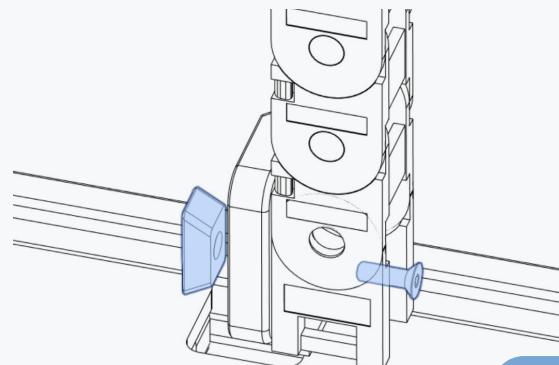
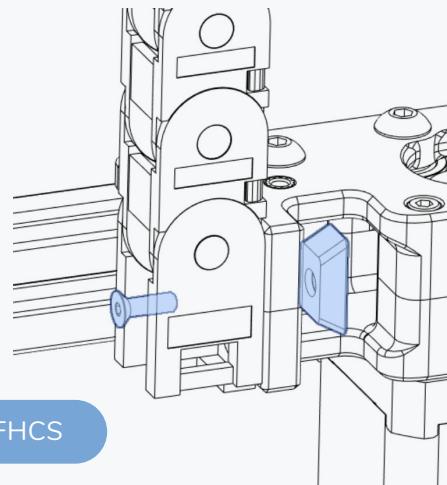
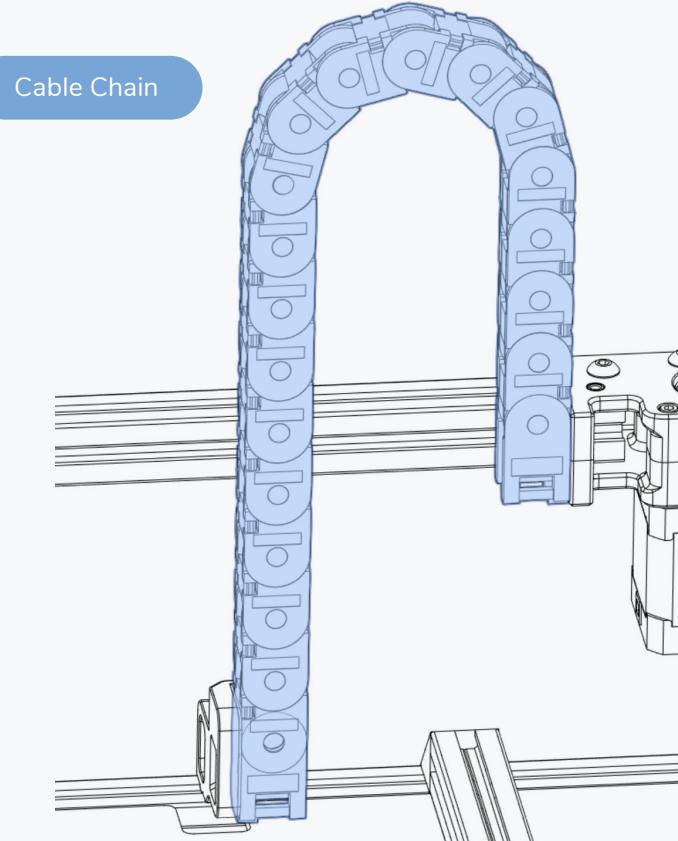
M5 T-Nut

M5x10 BHCS



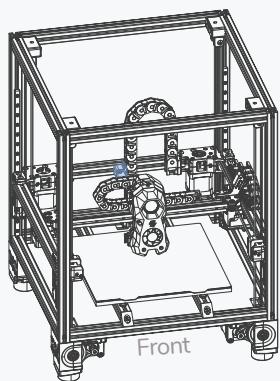
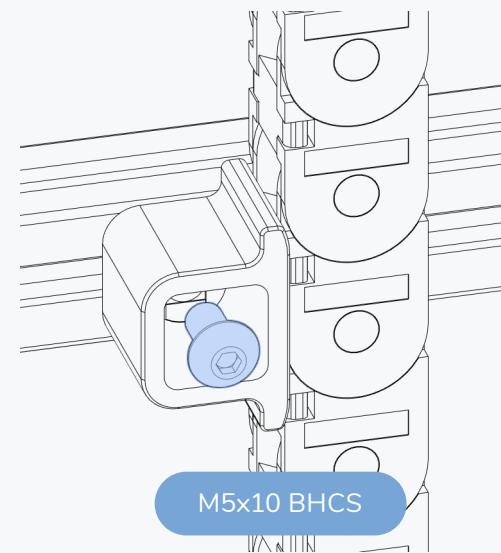
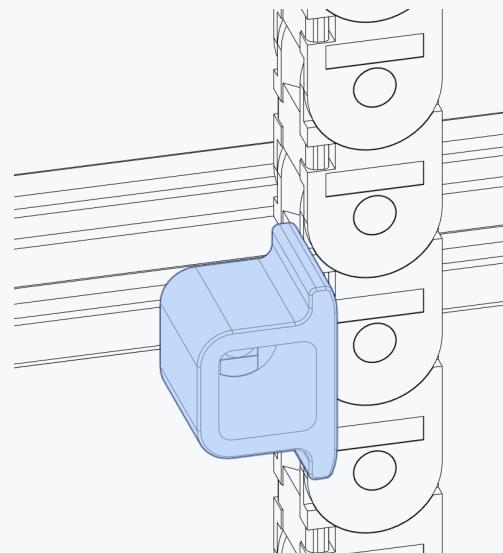
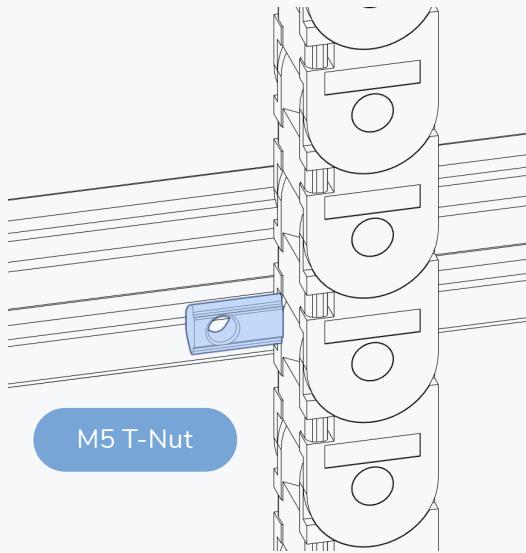
Z CABLE CHAIN

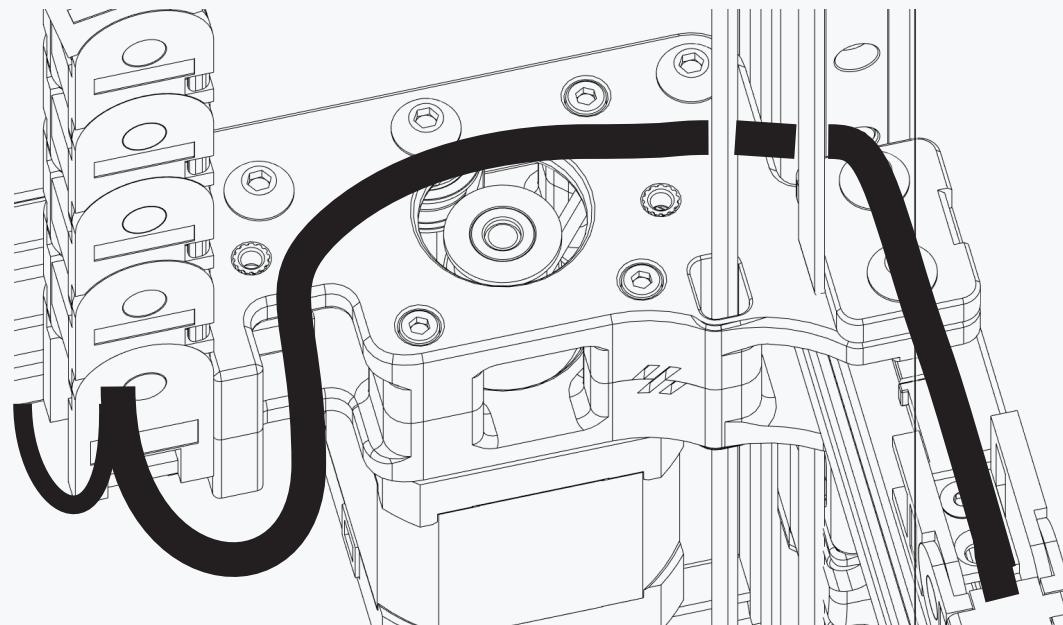
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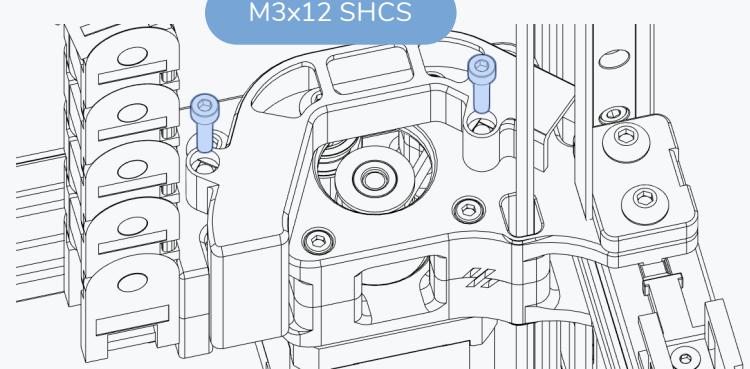
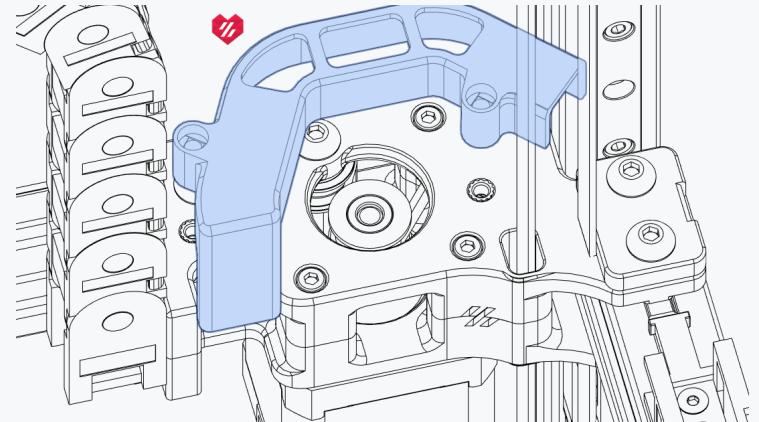
Z CABLE CHAIN

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**WIRE PATH**

Guide the wire bundle behind the Z belt and over the A drive as shown above. Secure it with zip ties on the strain relief of the cable chains.



CONTROLLER WIRING

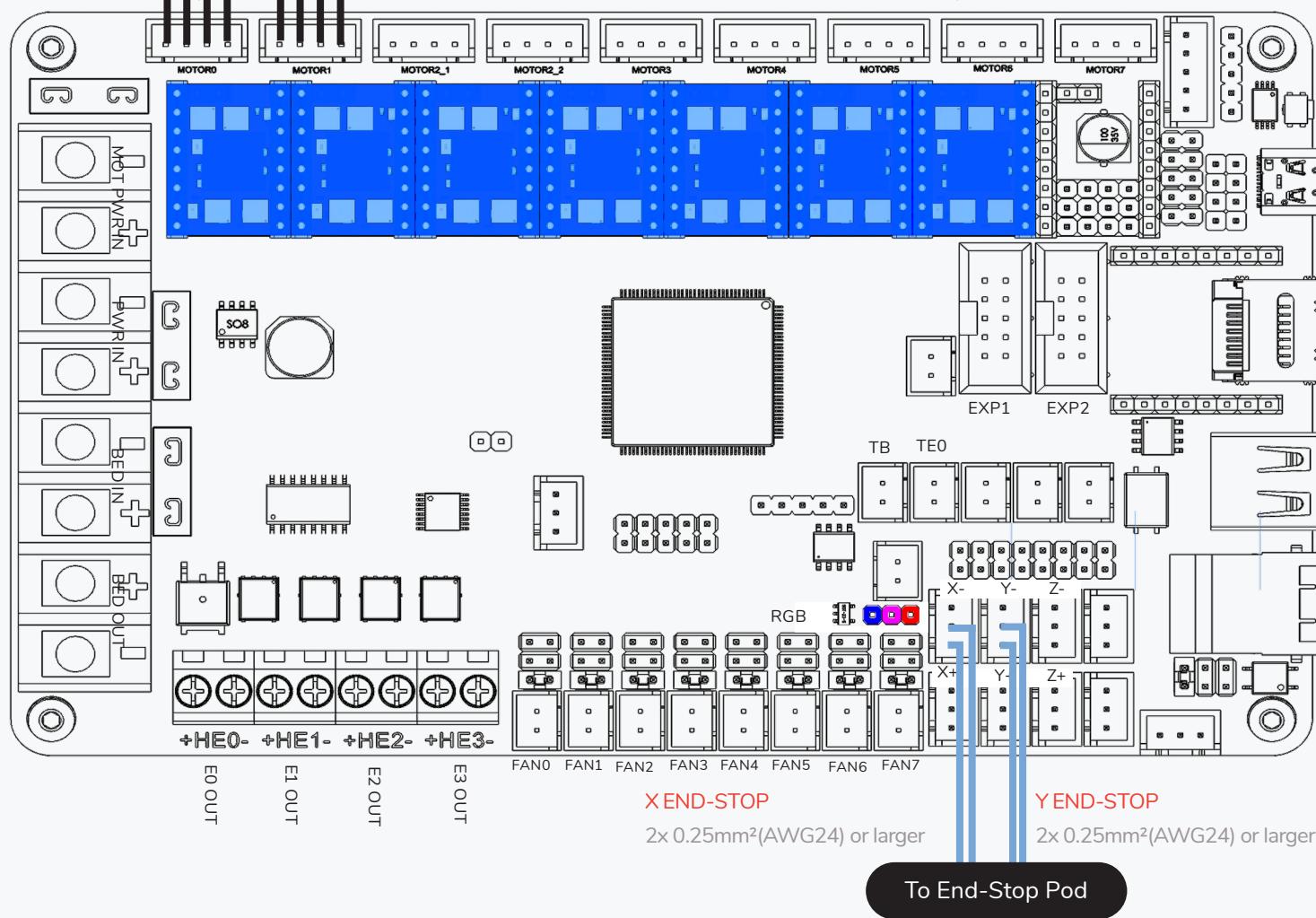
B MOTOR

4x 0.25mm²(AWG24) or larger

B Motor

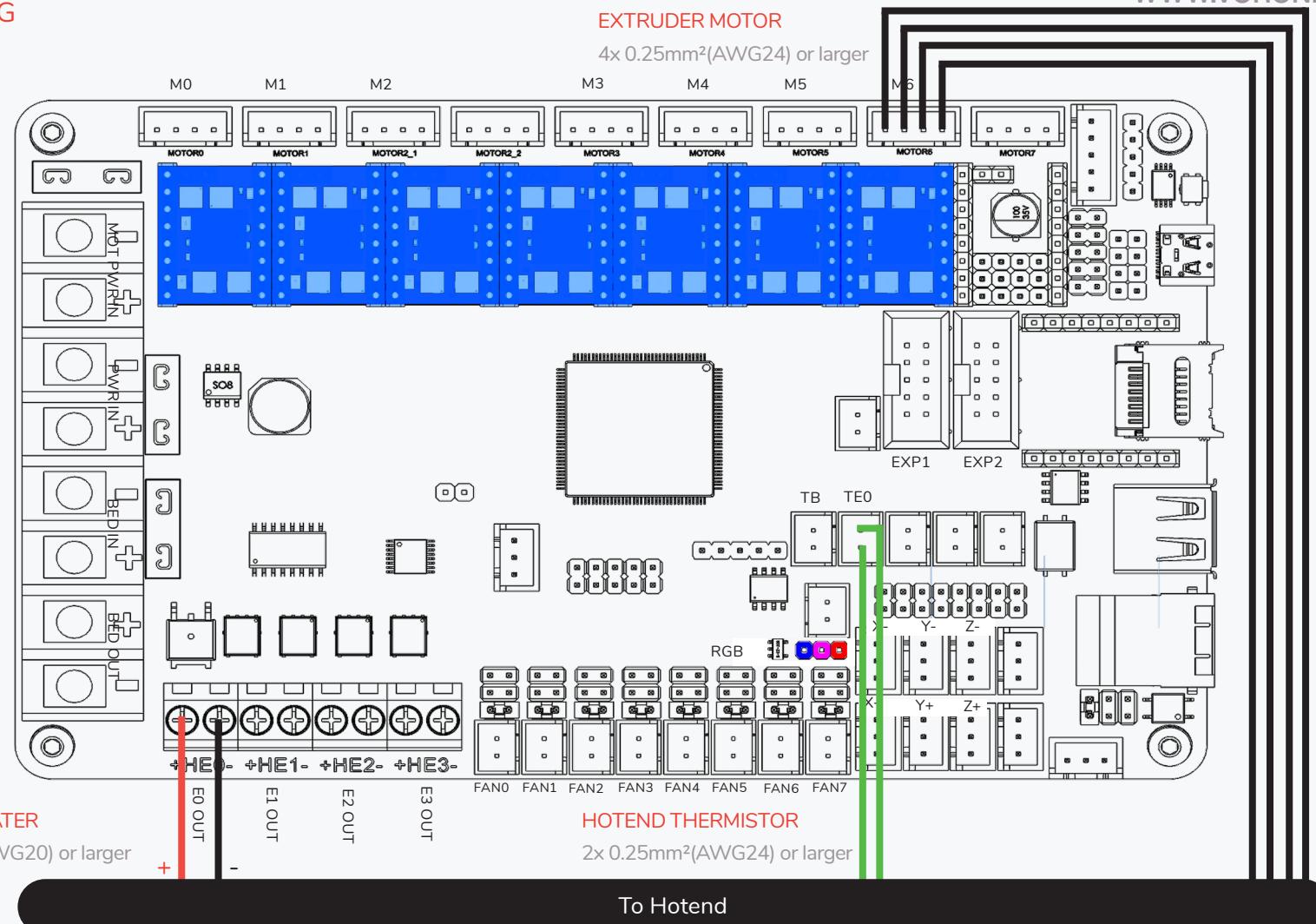
A Motor

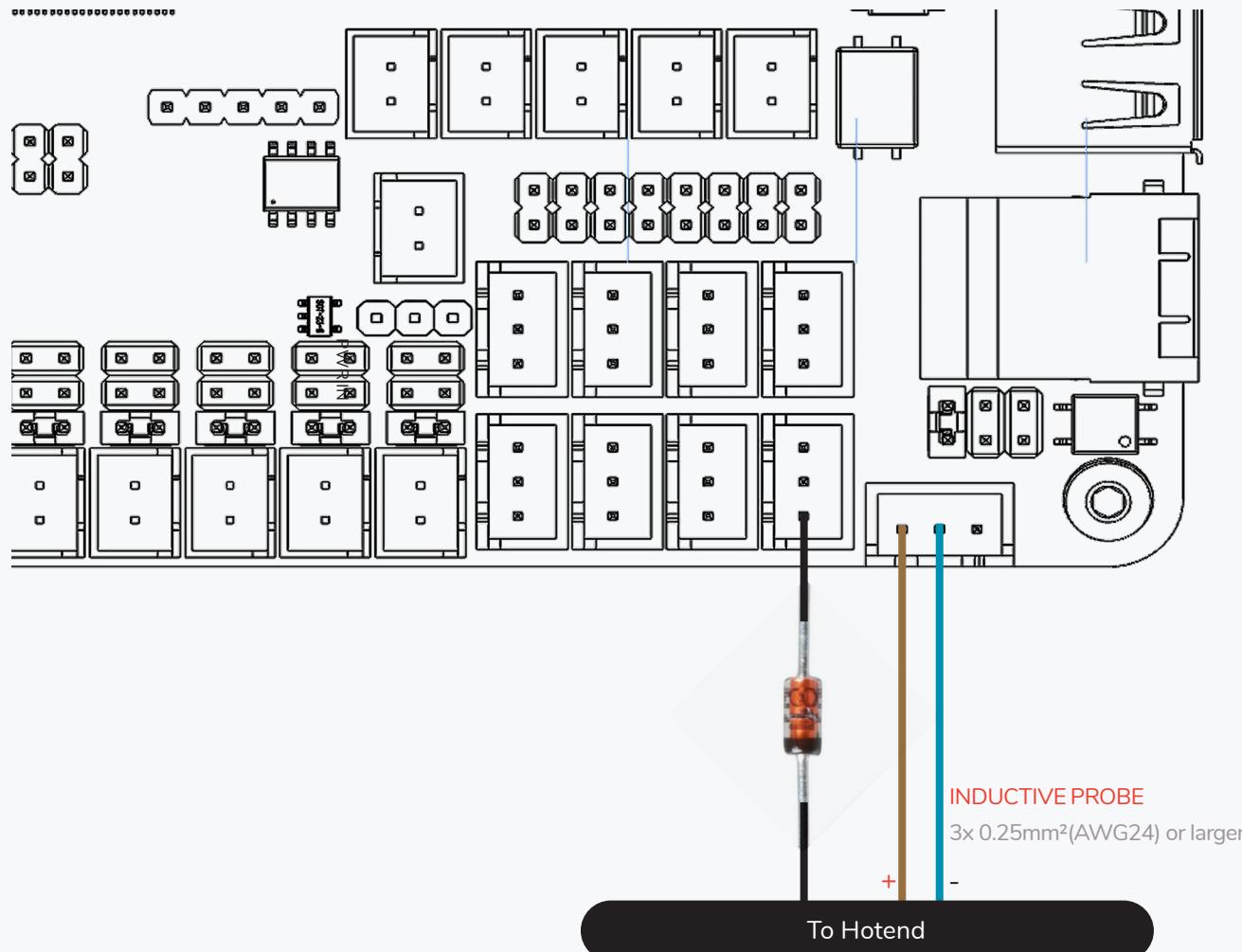
A MOTOR

4x 0.25mm²(AWG24) or larger

CONTROLLER WIRING

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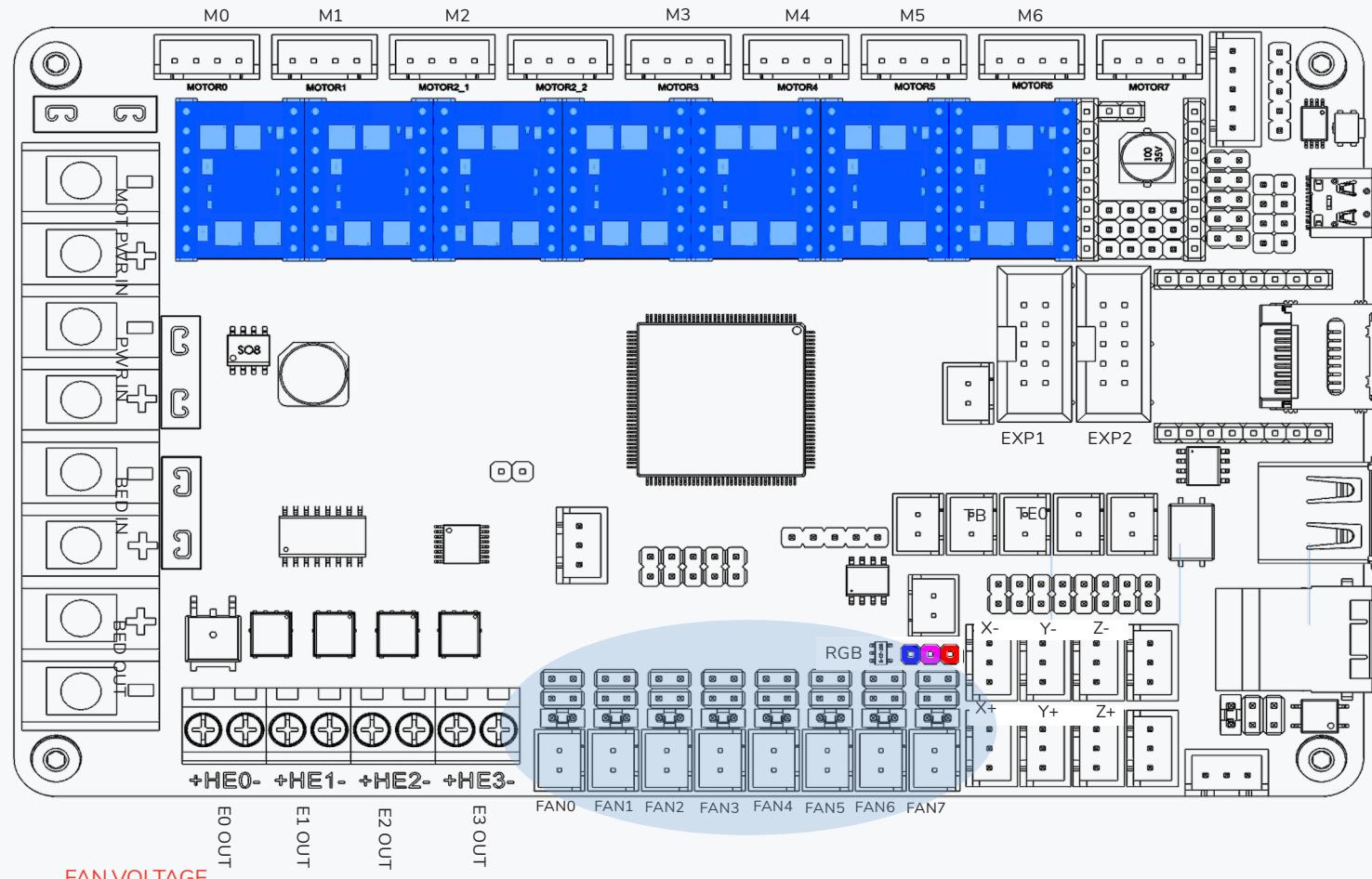


PROBE HOOKUP

Instead of using the dedicated probe input of the BTT Octopus we recommend wiring the probe's signal line to an endstop input using a BAT85 diode as protection.

The black ring on the diode "points" toward the toolhead.

For technical details please refer to <https://voron.link/n9i7lss>.



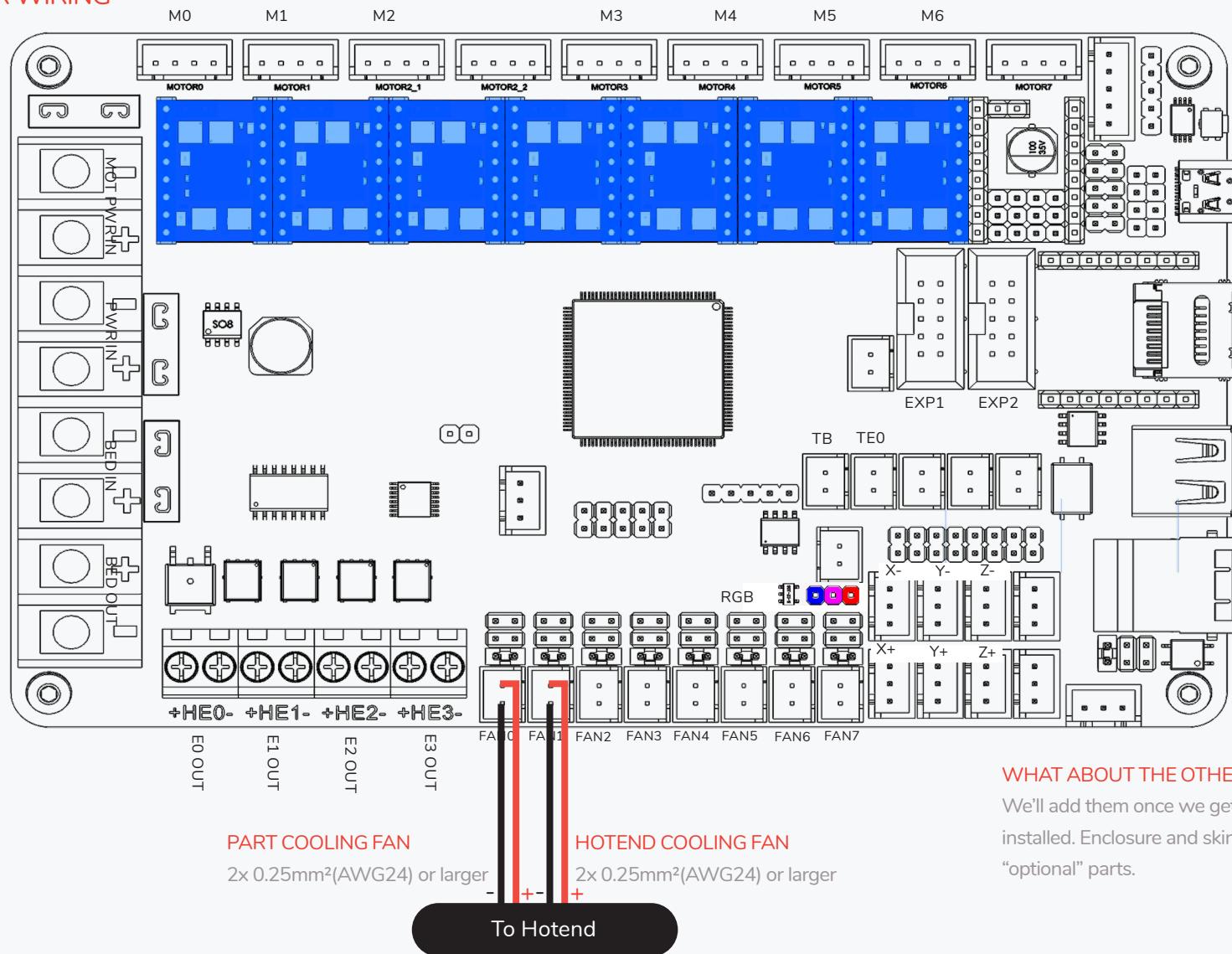
FAN VOLTAGE

The fans recommended in the sourcing guide are 24V fans.

Please check your hotend cooling (40x40x10 axial), part cooling (40x40x20 blower) and exhaust/electronics (60x60x20 axial) fans for their voltage rating and jumper the voltage selection accordingly. Refer to the [Bigtreetech Octopus V1.1 manual](#) for possible settings.

CONTROLLER WIRING

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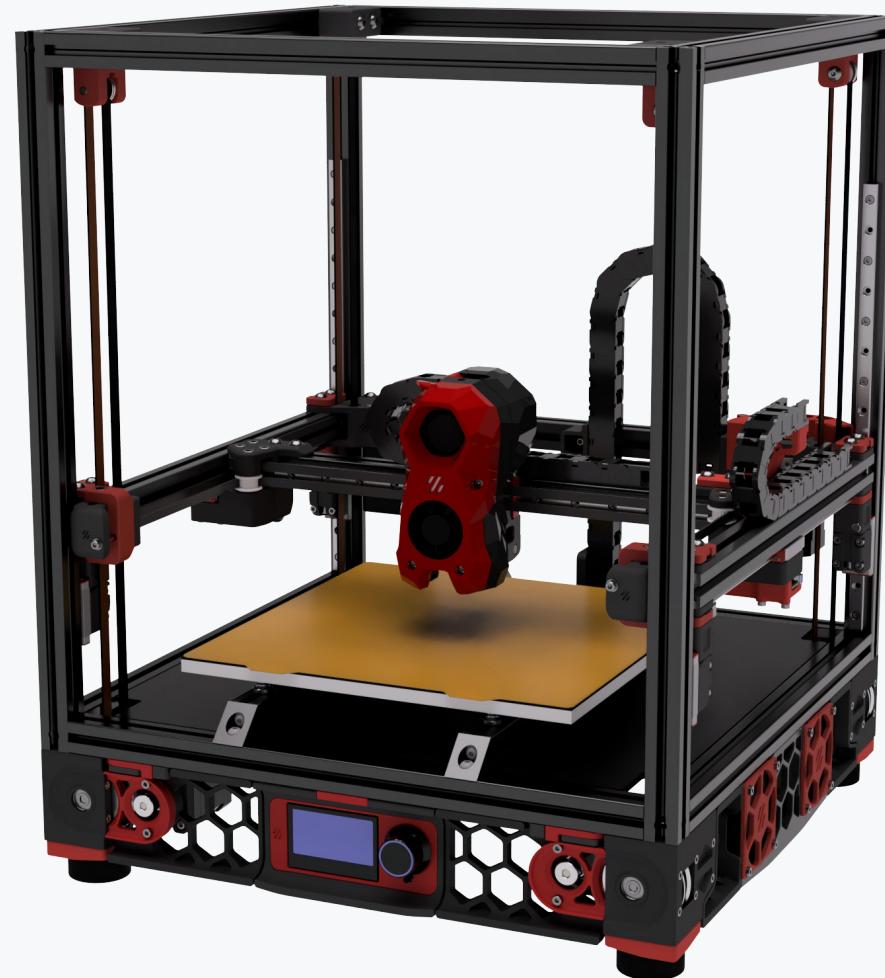


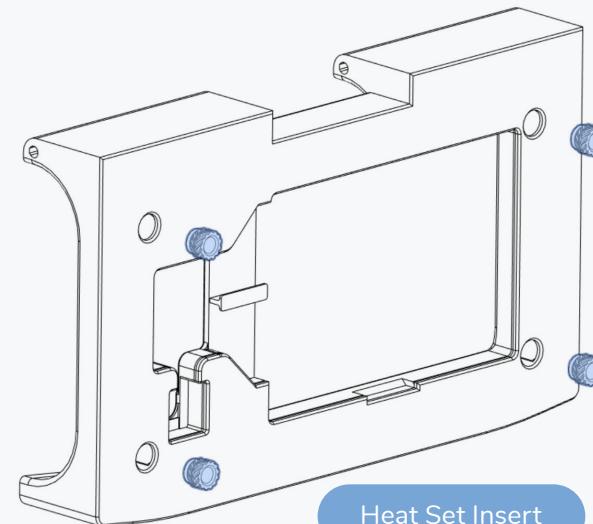
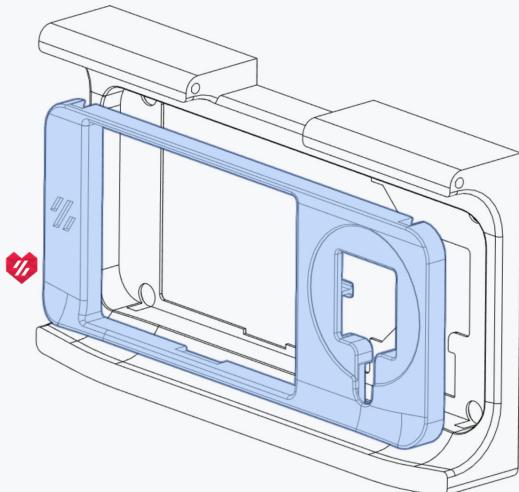
WHAT ABOUT THE OTHER FANS?

We'll add them once we get them installed. Enclosure and skirts are "optional" parts.

SKIRTS

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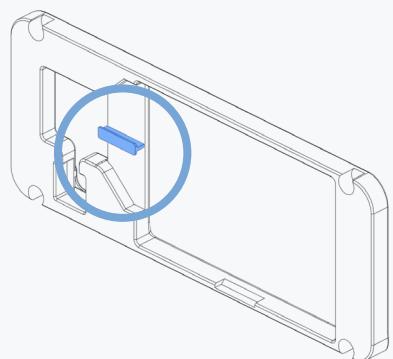




Heat Set Insert

FRONT COVER

The front cover is held in place by the heat set inserts. Hold the front face firmly in place while inserting the heat set inserts.



BUILT-IN SUPPORT

Remove the highlighted section. It's a built-in support for printability.