



Skywire Miner

Assembly Manual

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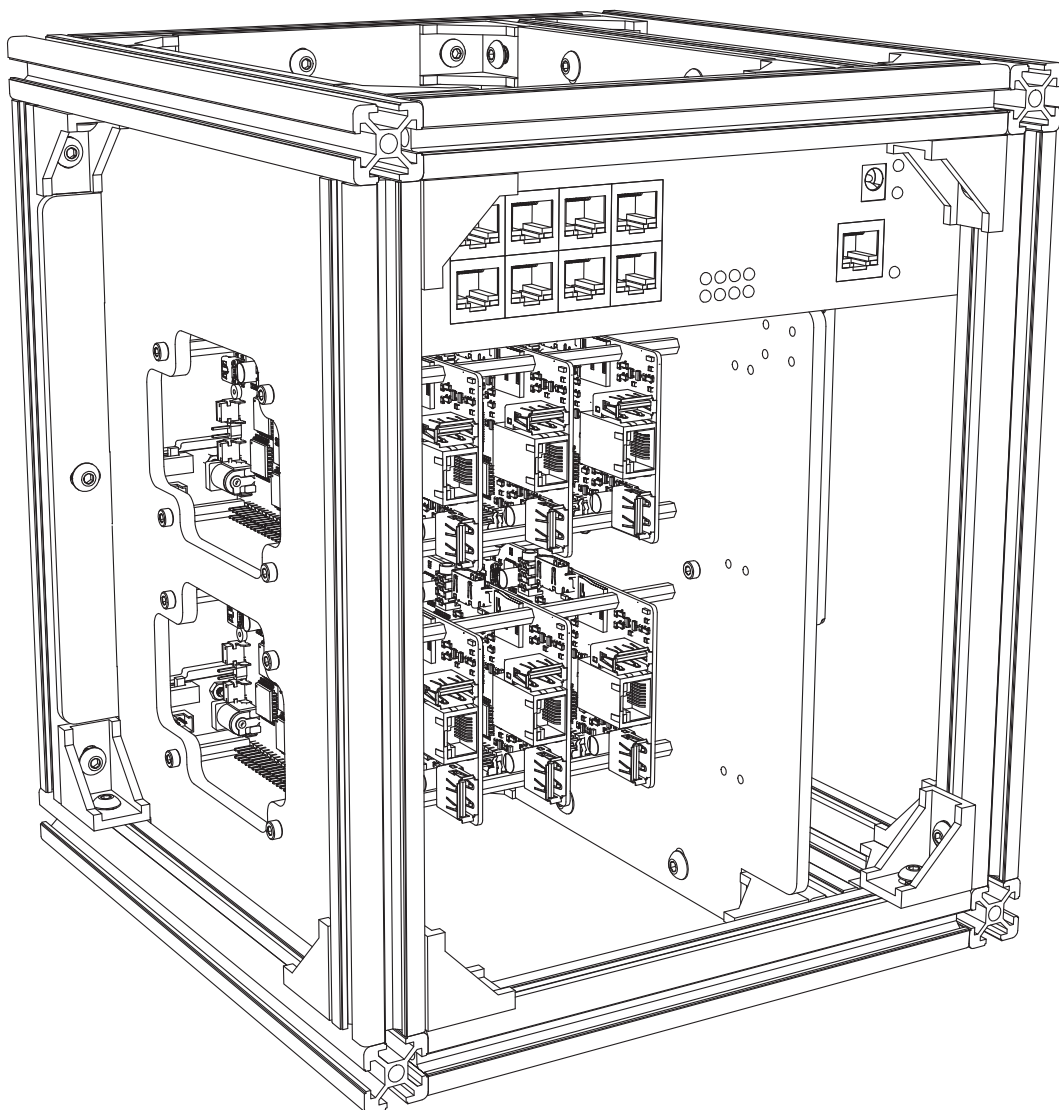
support@skycoin.com



SKYWIRE MINER

OVERVIEW

01



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Introduction

Skywire Miner is groundbreaking technology that redirects the control of large Internet service providers (ISPs) and helps individuals leverage that power. The Skywire Miner peer-to-peer model promotes net neutrality and content sharing, without imposing any blocking, performance decrease, or censorship. Skywire Miner is built with an open-access network that ensures privacy and encourages free speech. Our mission in creating Skywire is to shape the future of the Internet for the better.

Our revolutionary networking protocol is already changing the Internet as we know it. The protocol is based on Multi-Protocol Label Switching (MPLS), which includes benefits of higher performance, better quality of service, more reliability, and greater security. Skywire Miner goes well beyond these standards to deliver an even faster network that is optimized for high performance and maximum privacy. A user can bypass the ISPs and maintain control of their Internet access experience — effectively operating as an independent ISP.

Warranty

Thank you for your interest and trust in the Skywire Miner.

In using the product, you are obliged to install and operate the Skywire Miner according to the safety instructions, warnings, specification sheet, and assembly manual — as well as common sense. Otherwise, the Skycoin team won't be responsible for any property losses or personal injuries caused by failure to understand the proper use of the product.

Since this is the first version of the Skywire Miner — built especially for early-adopter customers — you may face an unexpected situation. We appreciate your patience in dealing with such scenarios. The Skycoin team stands ready to help, and remains willing to offer the most appropriate solution to address any product defect. This includes a warranty that covers, as necessary, free repair, replacement of parts*, or replacement of the entire product.

Warranty terms: This manufacturer warranty covers any defects in material or workmanship that may occur under normal use within a period of one (1) year from the purchase date. When you discover any defects with the Skywire Miner, stop all operation and contact the Skycoin team immediately to obtain warranty coverage. You may reach the Skycoin team here at: <https://store.skycoin.net/pages/support>

Exclusions: There is absolutely no coverage for accidents, fire, or water damage, acts of nature or external forces, or damage caused by repairs, unauthorized upgrade attempts, or removal of components. This warranty does not cover cosmetic damage. This warranty does not apply to products that have been lost, altered, broken or damaged by misuse or

failure to follow instructions provided with the product. Also, there is no warranty against normal wear.

Remedy terms: At its discretion, Skycoin will make remedy through replacement or repair of defects—in either materials and or workmanship. Return shipping costs are the responsibility of the original purchaser.

Warranty period: All warranty claims must be reported to the manufacturer during the one year warranty period from the date of purchase to be eligible for coverage.

Safety

It's important that you assemble and operate this product and all components in strict accordance with the instructions in this manual.

Handling circuit boards — Exercise extreme caution while handling printed circuit boards (PCBs) to avoid mechanical or electrical damage. Only handle the PCBs by the edges, to minimize the risk of electrostatic discharge damage.

Proper voltage — Before connecting the power cord, ensure that you switch to the correct input range on the power supply unit that corresponds to the voltage that your electrical outlet provides.

Firm connections — Before powering up the Skywire Miner, ensure that all connections are secure for all components, and confirm that there are no loose screws or loose components anywhere within the Skywire Miner unit. Do not connect any devices to the Skywire Miner that are not included in this package.

Precautions — take time to consider situations that may be dangerous or cause damage:

- During operation, do not expose Skywire Miner to water or moisture.
- Do not expose Skywire Miner to heat from any source. This appliance is designed for reliable operation at normal ambient room temperatures.
- Do not tug in the middle of the power supply cable to unplug the unit. Unplug the Skywire Miner from the end of the cable, where the plug inserts into the socket.
- Place Skywire Miner where the power cord has adequate slack to safely connect the Skywire Miner to the power supply socket.
- Place the power cord in such a way that people cannot step on it. Do not place anything over the power cord.

If any of the following situations occur, stop using the Skywire Miner immediately and contact support to make arrangements to check your unit:

- Liquid has penetrated into the Skywire Miner.
- The Skywire Miner has been exposed to moisture or heat.
- The Skywire Miner does not work well, or it does not function according to the content in the user guide.
- The Skywire Miner has been dropped and damaged.
- The Skywire Miner has obvious breakage.

Warning!

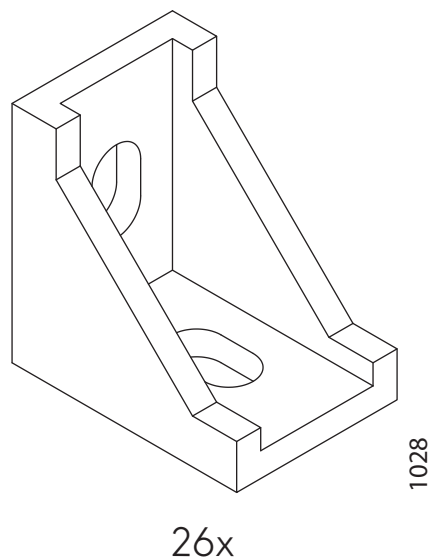
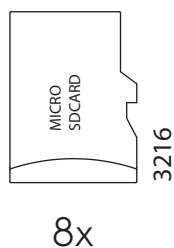
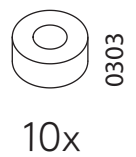
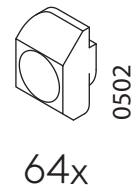
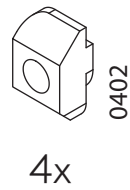
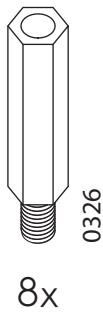
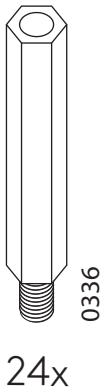
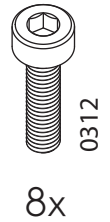
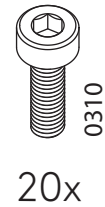
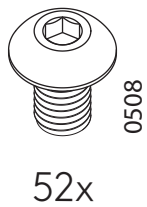
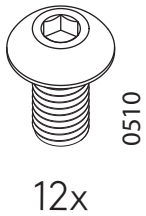
- Always unplug the power cord from the power outlet before installing any component into this appliance or removing anything from this appliance.
- When the power is on, do not contact any conductive objects with any Skywire Miner components.
- Do not touch the Skywire Miner with any wet part of your body, and do not operate the Skywire Miner while barefoot.
- The Skywire Miner is not intended for use by children. Nor is it intended for use by persons that exhibit any physical, sensory, or mental impairment, or persons lacking experience and knowledge of the Skywire Miner—unless supervised or previously instructed in its use by those responsible for their safety.

Specification Sheet of Skywire Miner	
Build 2.0	
Physical	
Net Weight	4 kg (9 lbs)
Chassis Demensions (LxWxH)	235x235x275 mm (9.5x9.5x11 inch)
Shipping Weight	4.5kg (10 lbs)
Shipping Dimensions (LxWxH)	320x320x190 mm (12.5x12.5x7.5 inch)
Structure Materials	Aluminum Alloy & Acrylic
Computing Unit Quantity	8
Computing	
CPU Model	ARM Cortex™-A53
Computing Core Quantity	32
GPU Model	Hexa-core Mali450
RAM (Shared with G-RAM)	16GB (32 x 512MB DDR3)
Storage	8 x 16GB Class-10 A1 Micro SD
Network	
LAN Bandwidth	8 x 100Mbps
LAN Ethernet Cable Type	CAT-6
Electrical	
AC Input Voltage	85~132V / 170~264V
AC Input Frequency	47~63Hz
Max Input Current	2.4A @115V AC / 1.2A @ 230V AC
Max Inrush Current	30A @115V AC / 60A @230V AC
Fuse Current	3A
Backup Fuse	Included
Input Plug Type	IEC 60320 C14
Power Cord Standard	GB/T 5023.3-2008
Power Connector Type	NEMA 5-15 or GB1002-2008 1-Phase 2-Pole Earthed
Environmental	
Working Temperature	-10°C~40°C (14°F~104°F)
Working Humidity	20%~90% RH
Storage Temperature	-20°C~60°C (-4°F~140°F)
Storage Humidity	10%~95% RH

SCREWS & PARTS

SCREWS AND PARTS

07



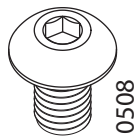
STEP 01

1194 Shorter Aluminum Profile

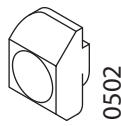
0508 M5x8mm Hex Screw

0502 M5 T-Nut

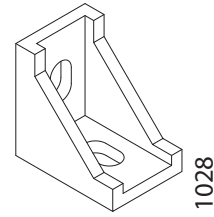
1028 Corner Bracket



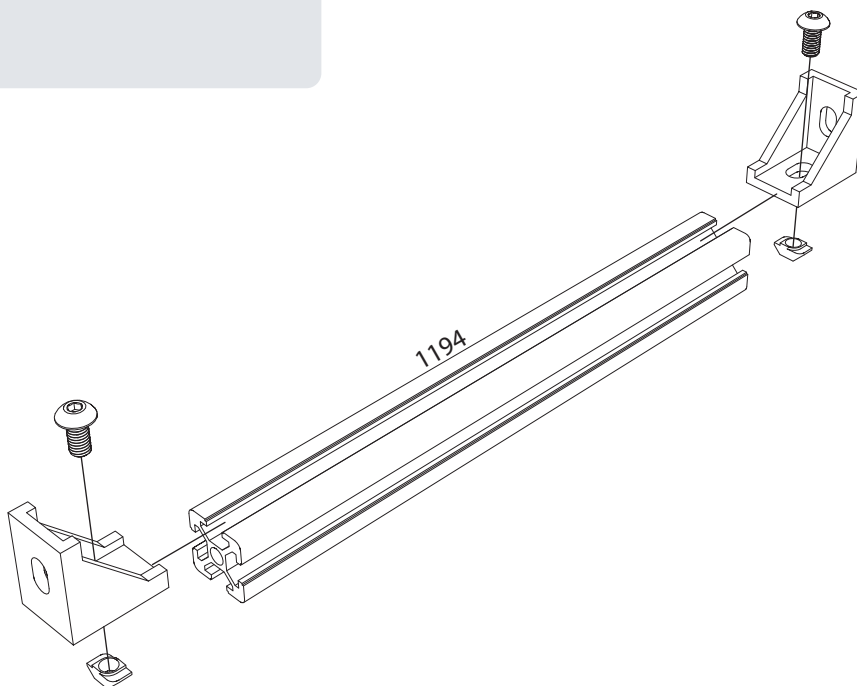
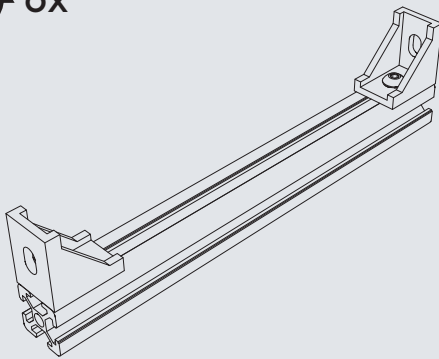
2x



2x



2x

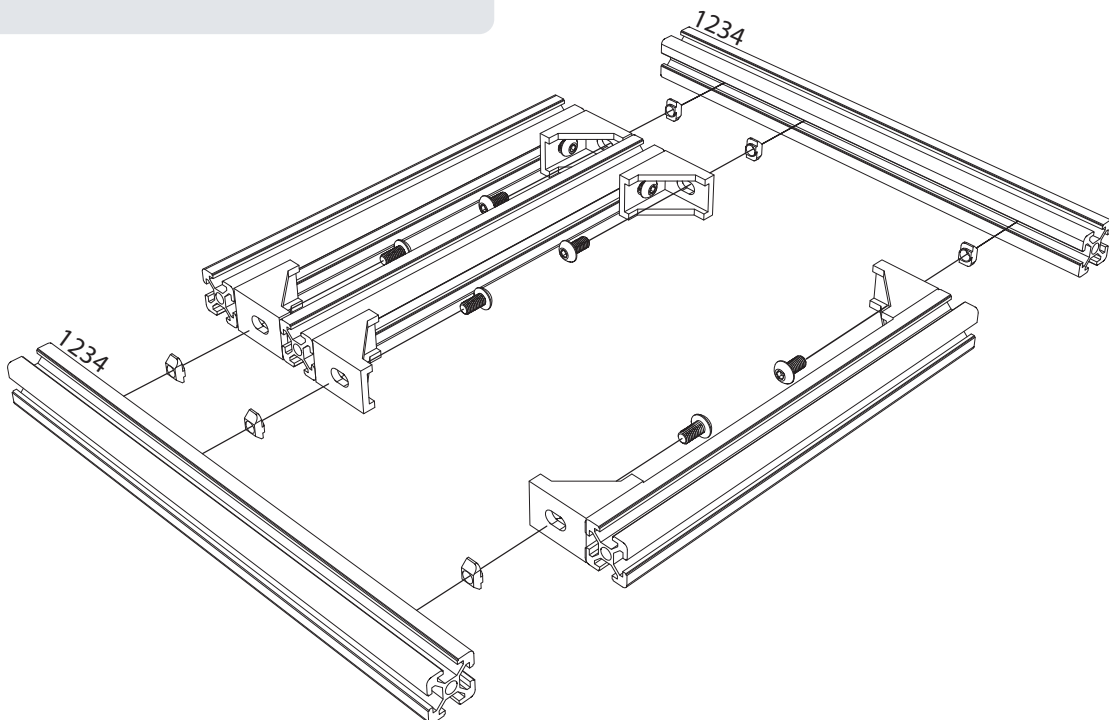
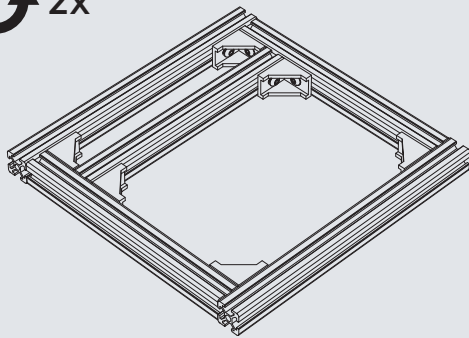
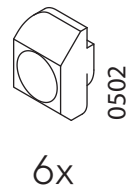
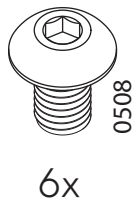


STEP 02

1234 Longer Aluminum Profile

0508 M5x8mm Hex Screw

0502 M5 T-Nut



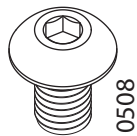
STEP 03

1234 Longer Aluminum Profile

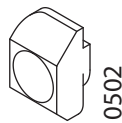
0508 M5x8mm Hex Screw

0502 M5 T-Nut

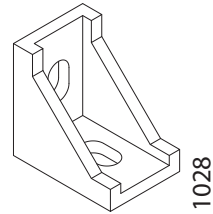
1028 Corner Bracket



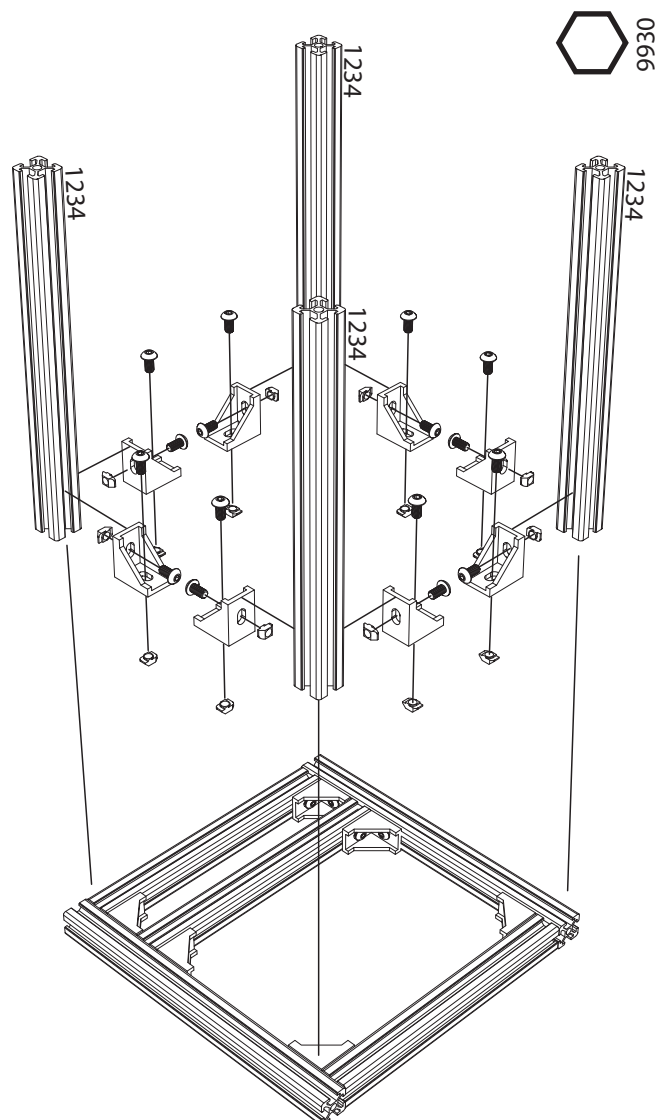
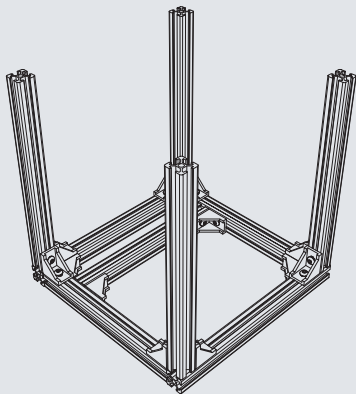
16x



16x

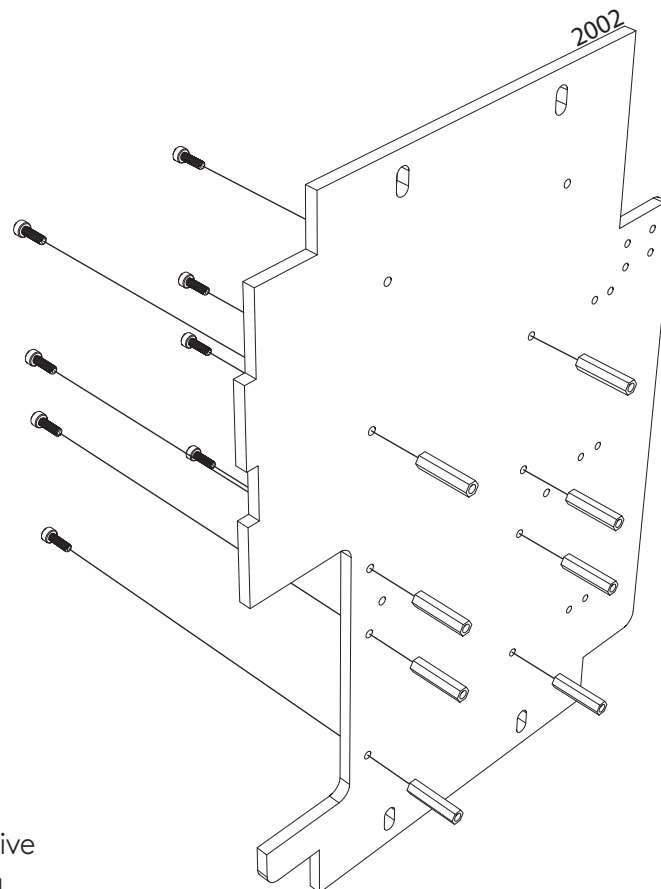
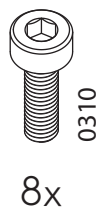


8x



STEP 04

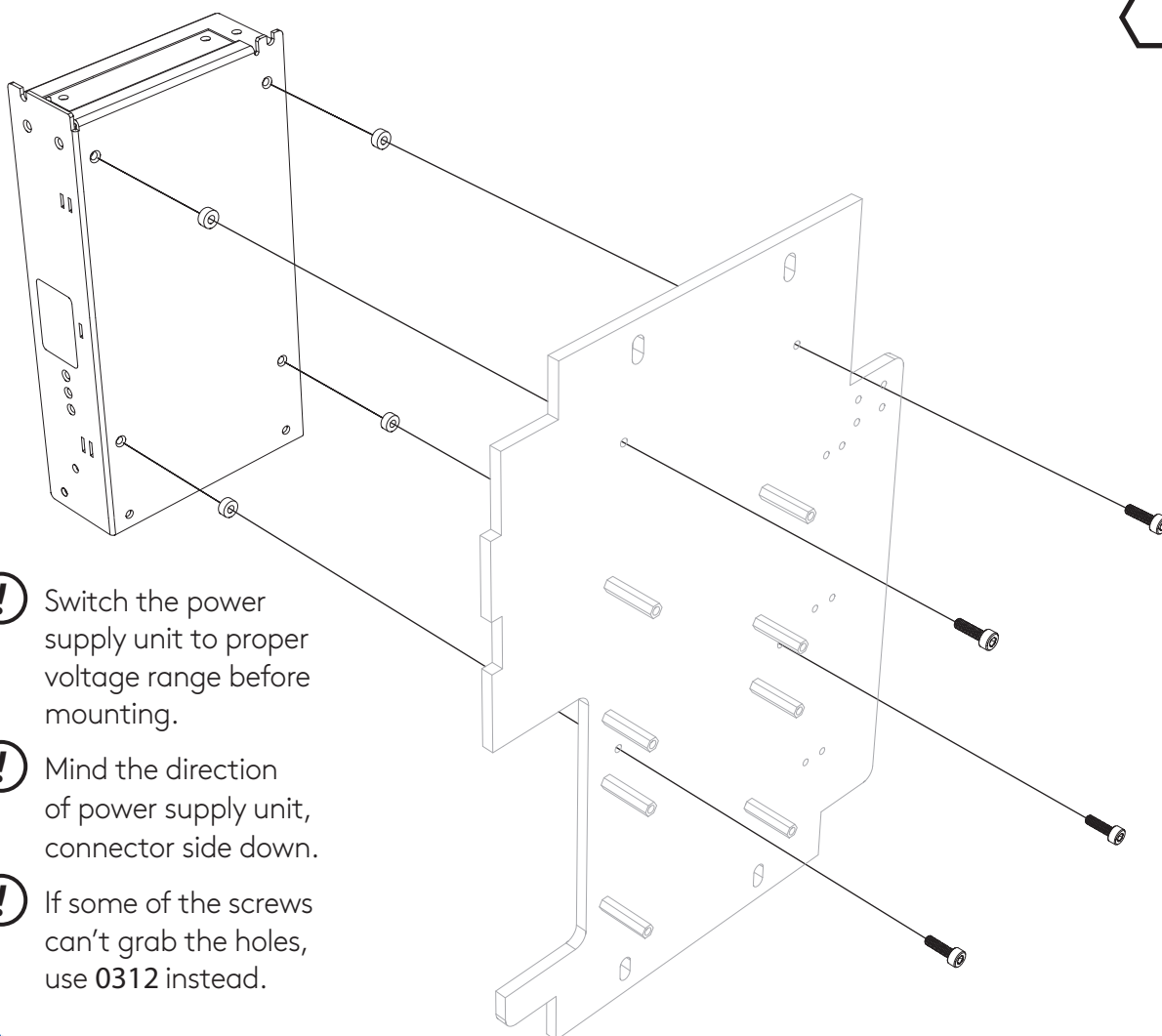
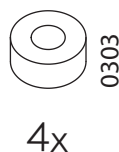
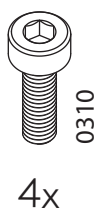
- 2002 Acrylic Inner Panel
- 0310 M3x10mm Hex Screw
- 0320 20mm F-F Spacer



⚠ Strip the protective film before using acrylic panels.

STEP 05

- 5011 Power Supply Unit
- 0310 M3x10mm Hex Screw
- 0303 M3 Nylon Spacer

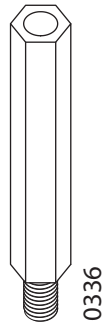


- ! Switch the power supply unit to proper voltage range before mounting.
- ! Mind the direction of power supply unit, connector side down.
- ! If some of the screws can't grab the holes, use 0312 instead.

STEP 06

4100 Orange Pi Prime

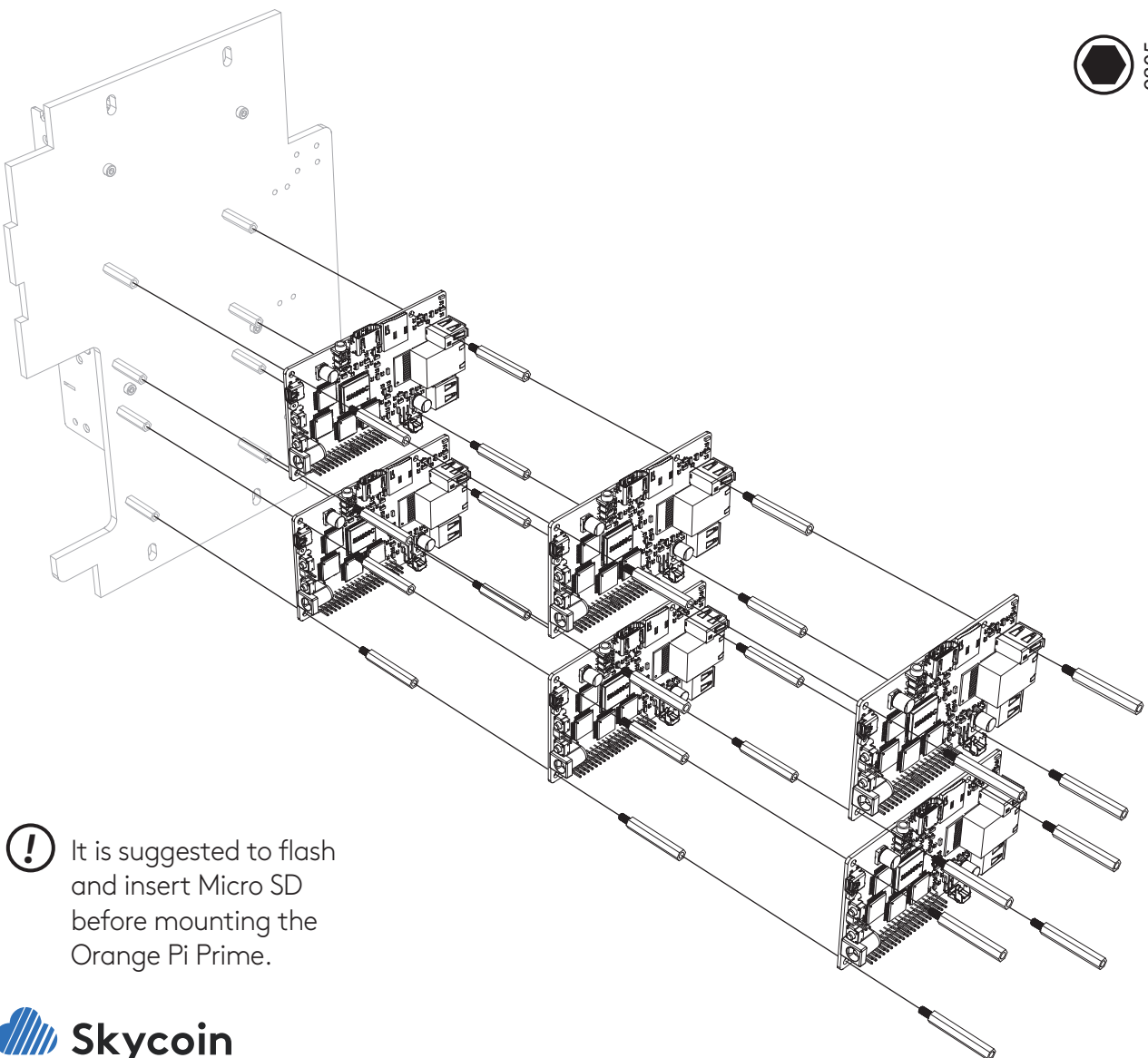
0336 30mm F-M Spacer



24x



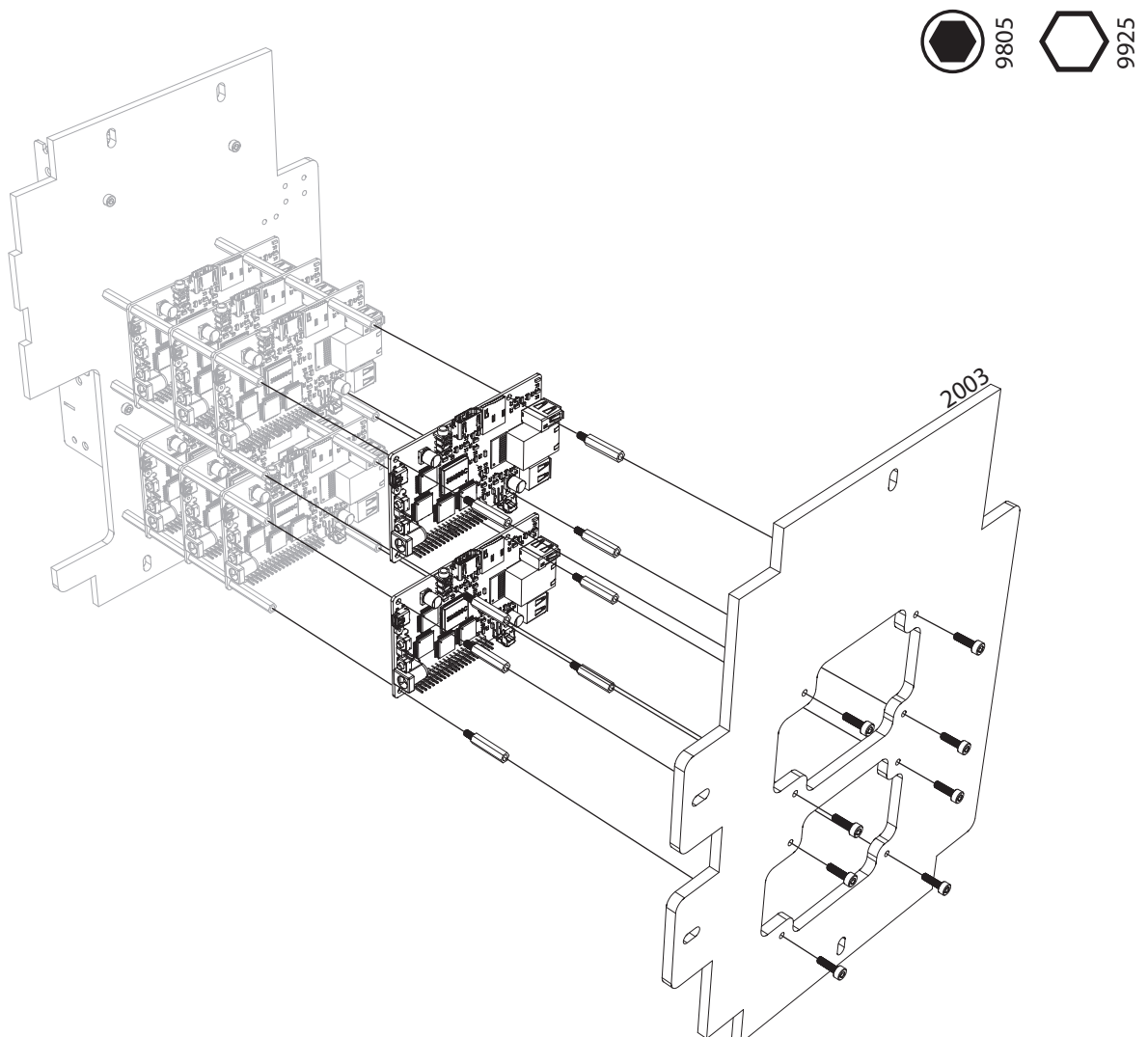
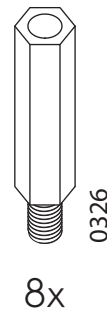
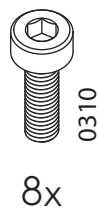
9805



! It is suggested to flash and insert Micro SD before mounting the Orange Pi Prime.

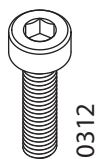
STEP 07

- 2003 Acrylic Outer Panel
- 4100 Orange Pi Prime
- 0310 M3x10mm Hex Screw
- 0326 20mm F-M Spacer



STEP 08

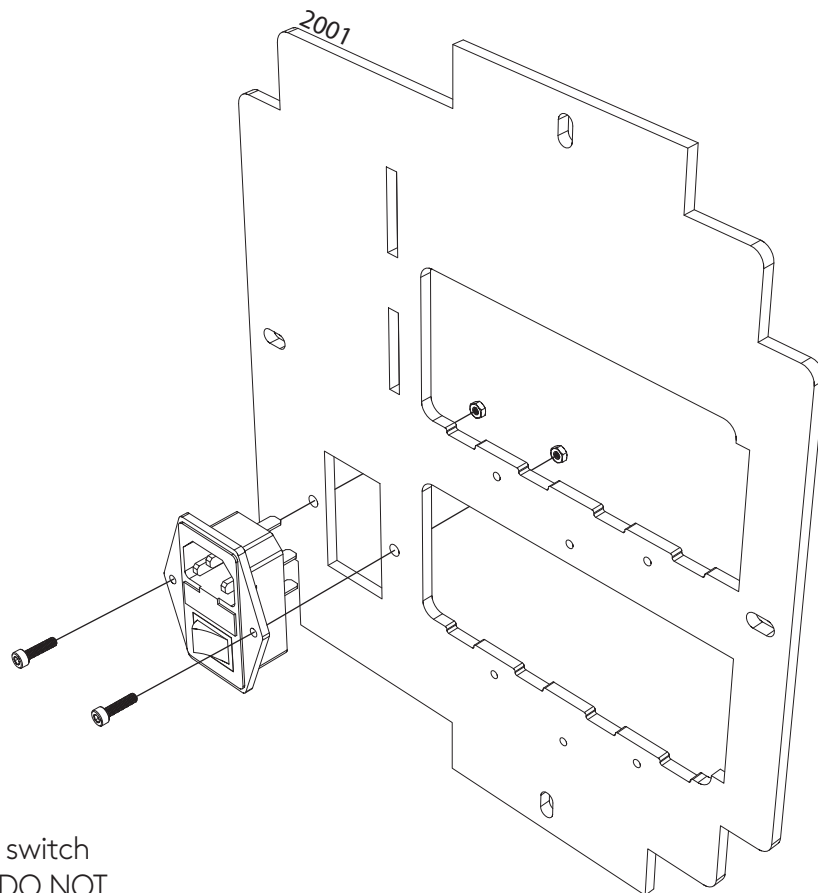
- 2001 Acrylic Back Panel
- 5001 Power Socket
- 0312 M3x12mm Hex Screw
- 0302 M3 Nut



2x



2x



⚠ Ensure the switch is off, and DO NOT plug the power cord.

STEP 09

5020 Power Distribution Board

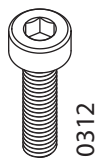
0312 M3x12mm Hex Screw

0510 M5x10mm Hex Screw

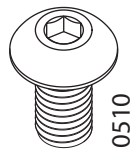
0303 M3 Nylon Spacer

0302 M3 Nut

0502 M5 T-Nut



6x



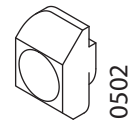
2x



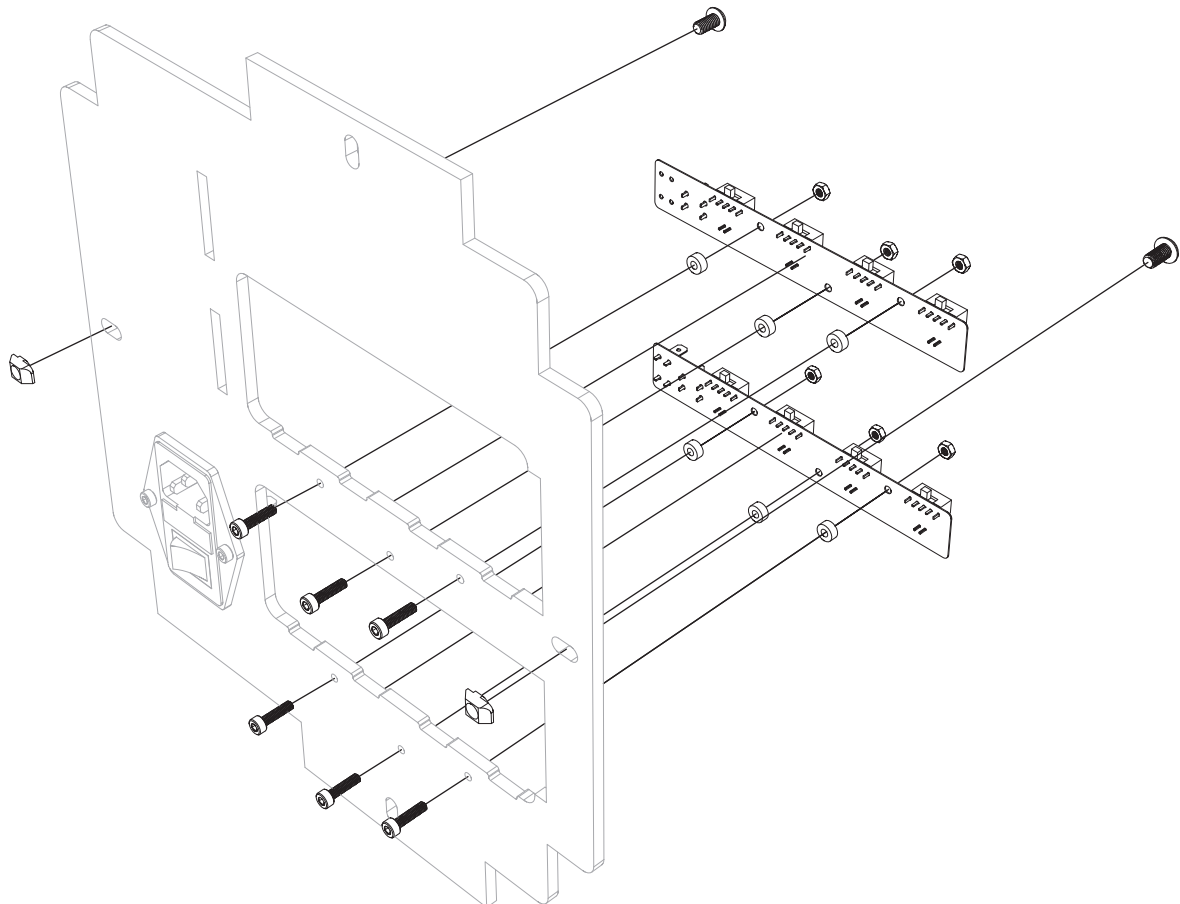
6x



6x












2x



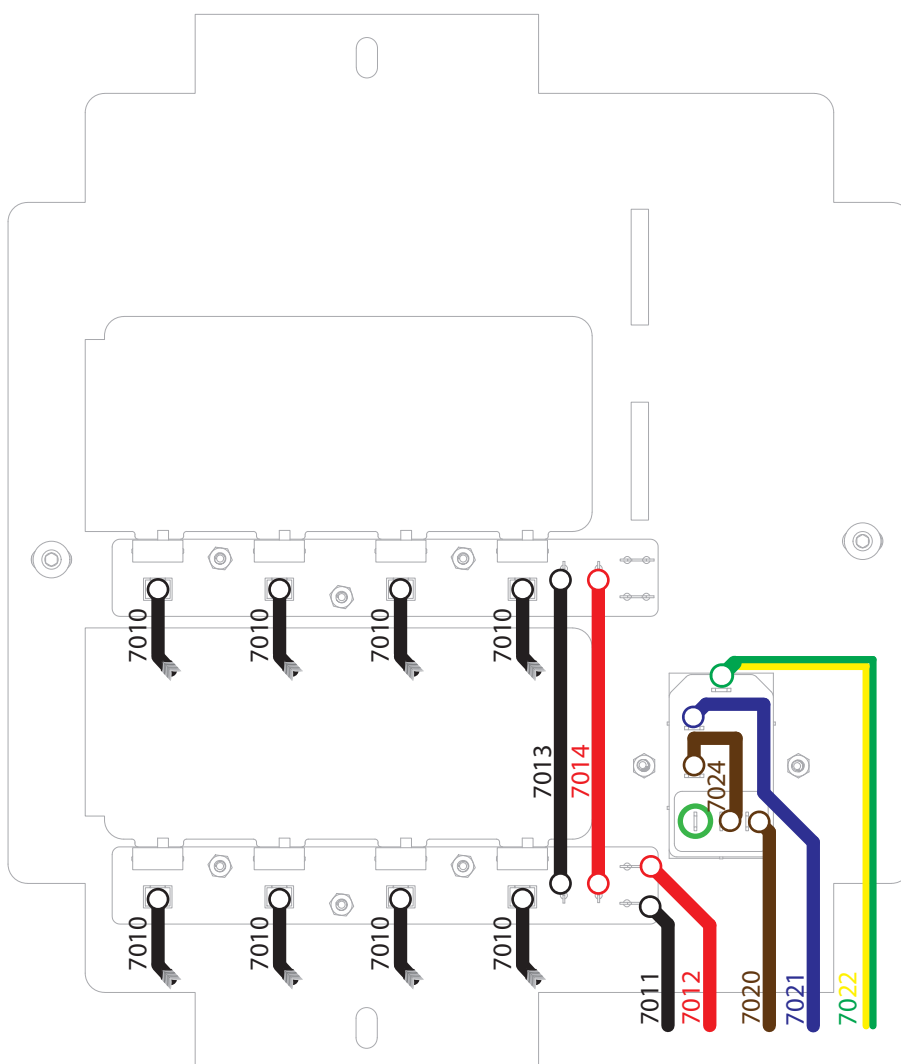
STEP 10

CABLE CONNECTION

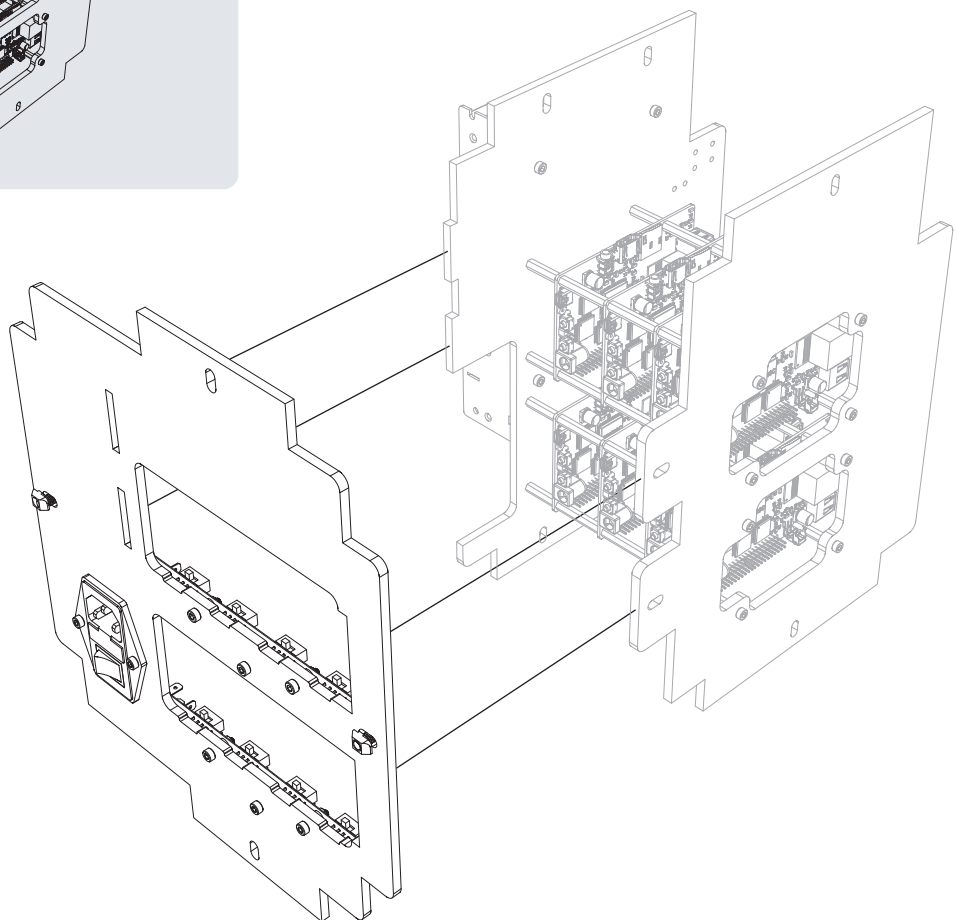
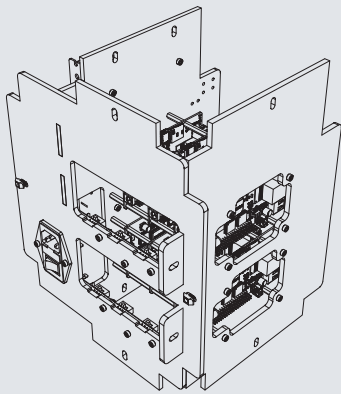
17

7010	DC Cable			7020	AC Cable
7011	DC Cable			7021	AC Cable
7012	DC Cable			7022	Earthing Cable
7013	DC Cable			7024	AC Cable
7014	DC Cable				

- ⚠ Check the cable codes carefully.
- ⚠ Leave the leftmost tab on the power socket UNUSED (in green circle).
- ⚠ Cable 7011, 7012, 7013, 7014 should be crimped onto the PCB with pliers for solid connection.



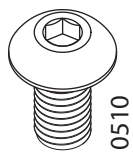
STEP 11



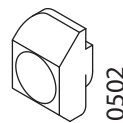
STEP 12

0510 M5x10mm Hex Screw

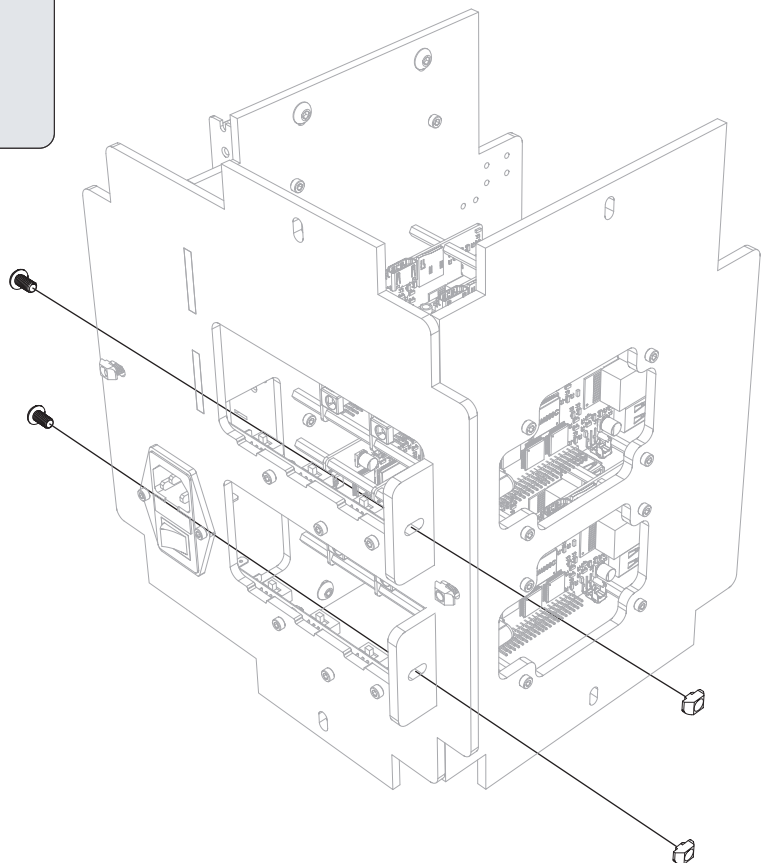
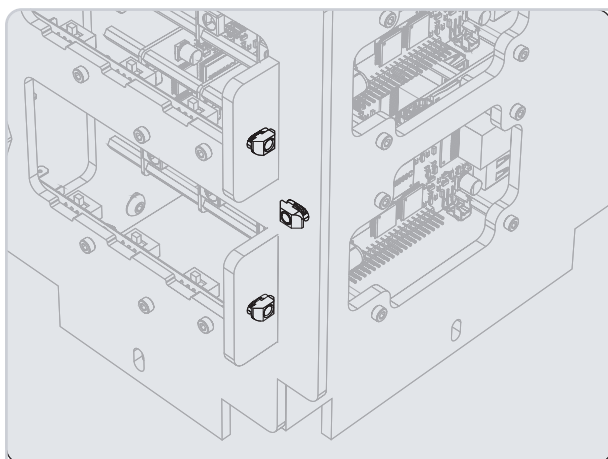
0502 M5 T-Nut



2x

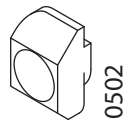


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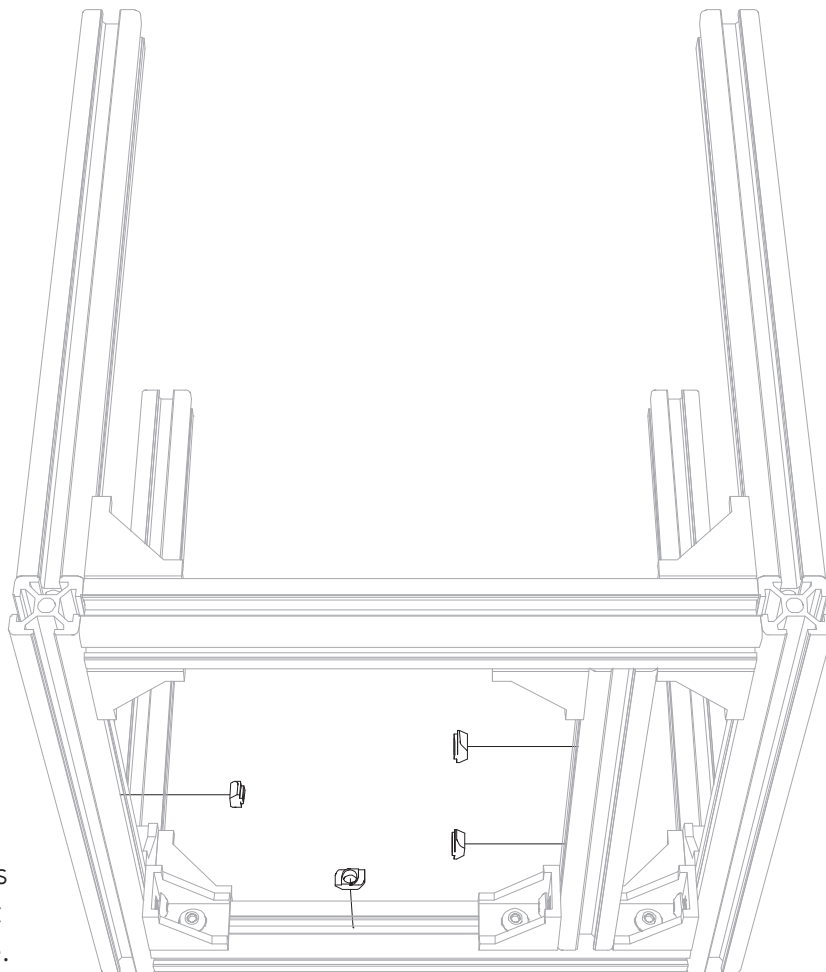


STEP 13

0502 M5 T-Nut



4x

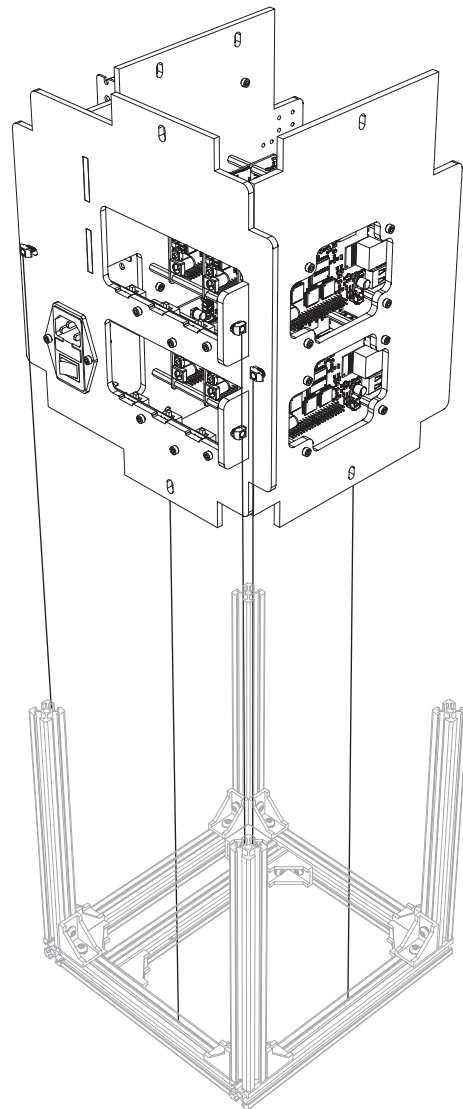
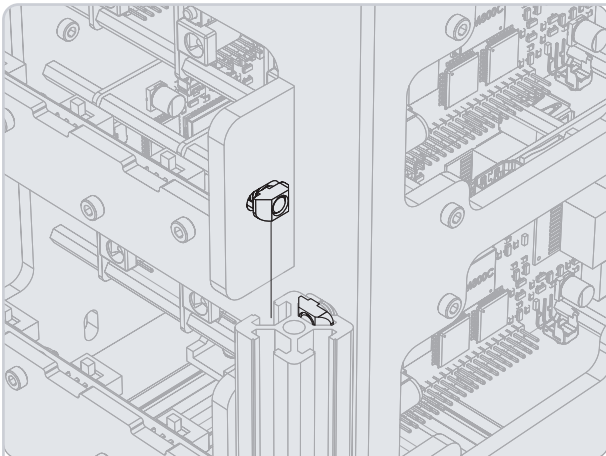


! Put the nuts into the slot for later use.

STEP 14

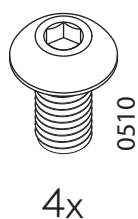
FINAL ASSEMBLY

21



STEP 15

0510 M5x10mm Hex Screw



! Shake carefully to align the nuts to the holes.

STEP 16

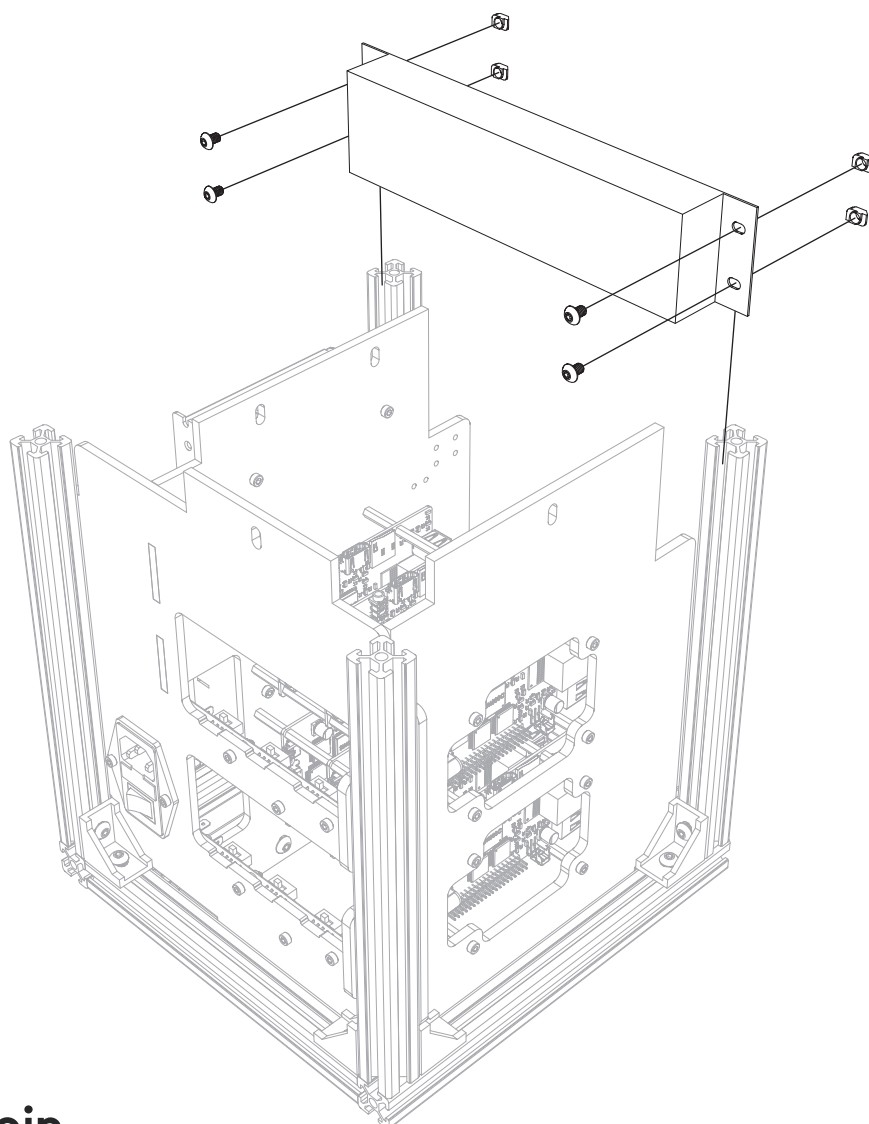
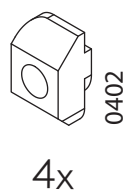
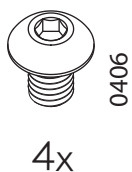
FINAL ASSEMBLY

23

3000 Router

0406 M4x6mm Hex Screw

0402 M4 T-Nut



STEP 17

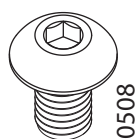
FINAL ASSEMBLY

24

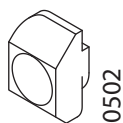
0508 M5x8mm Hex Screw

0502 M5 T-Nut

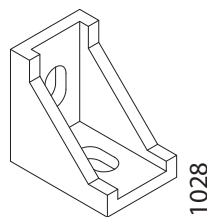
1028 Corner Bracket



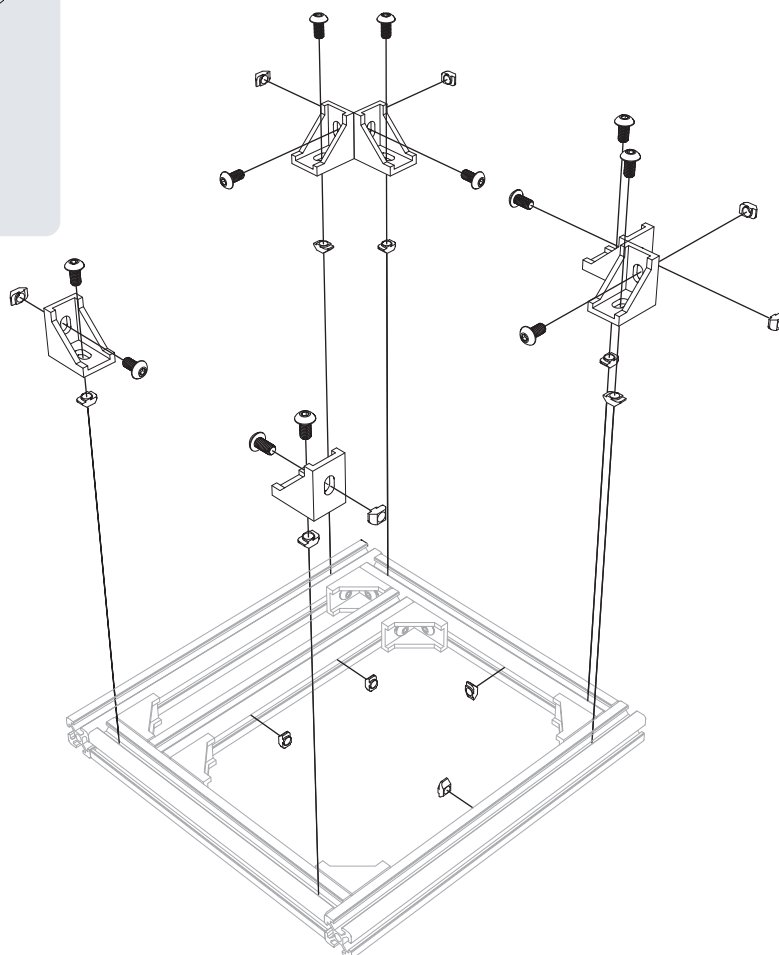
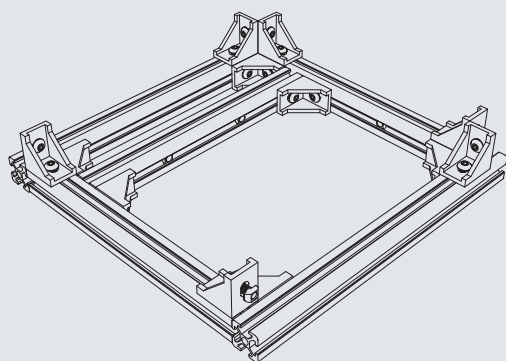
12x



16x

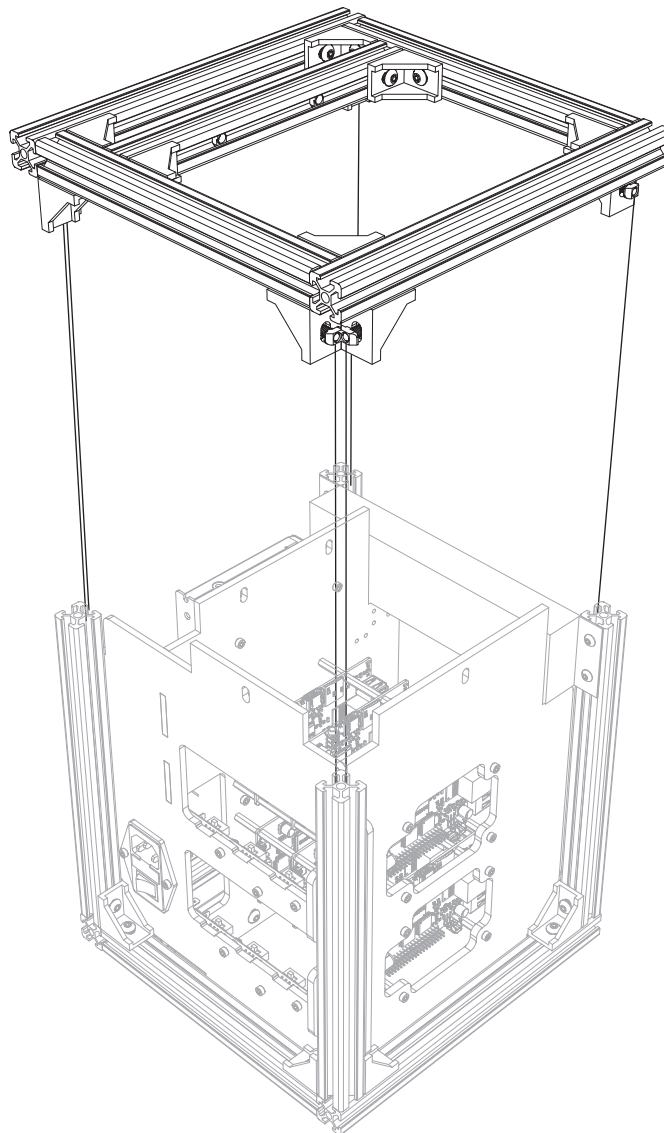


6x



! This step is based on the structure indicated on page 9.

STEP 18



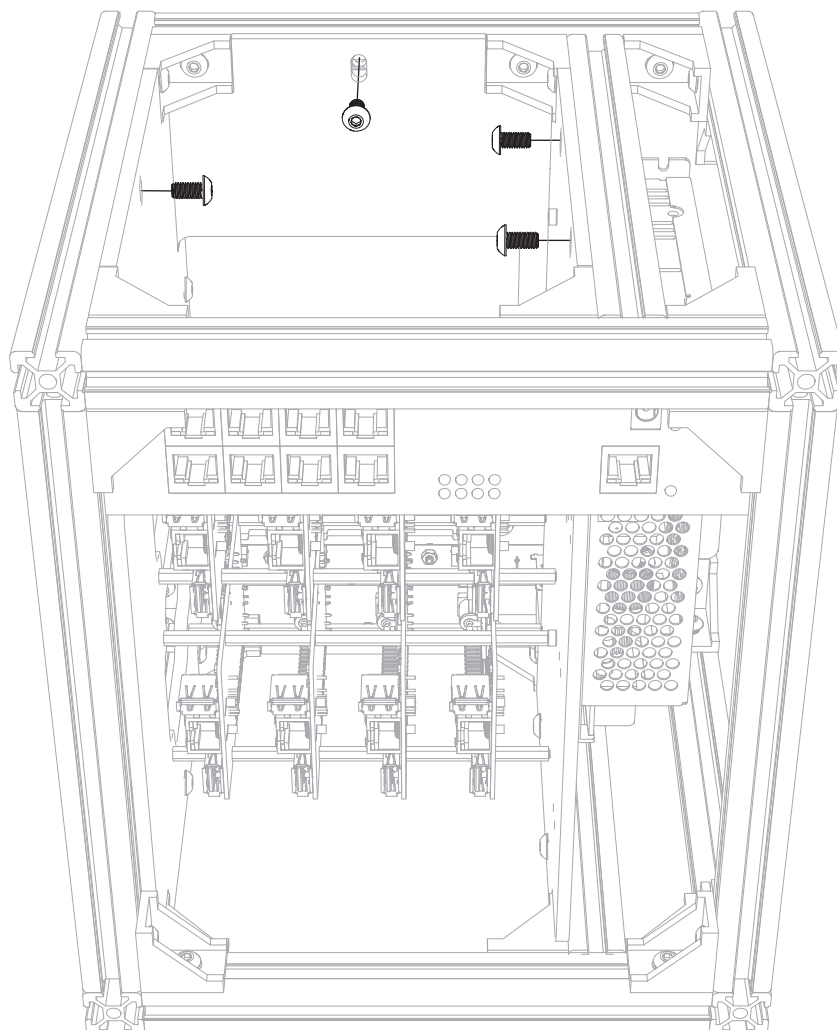
⚠ Loose and re-tighten all the screws on the vertical pillars, helping release the stress in the structure.

STEP 19

0510 M5x10mm Hex Screw



4x



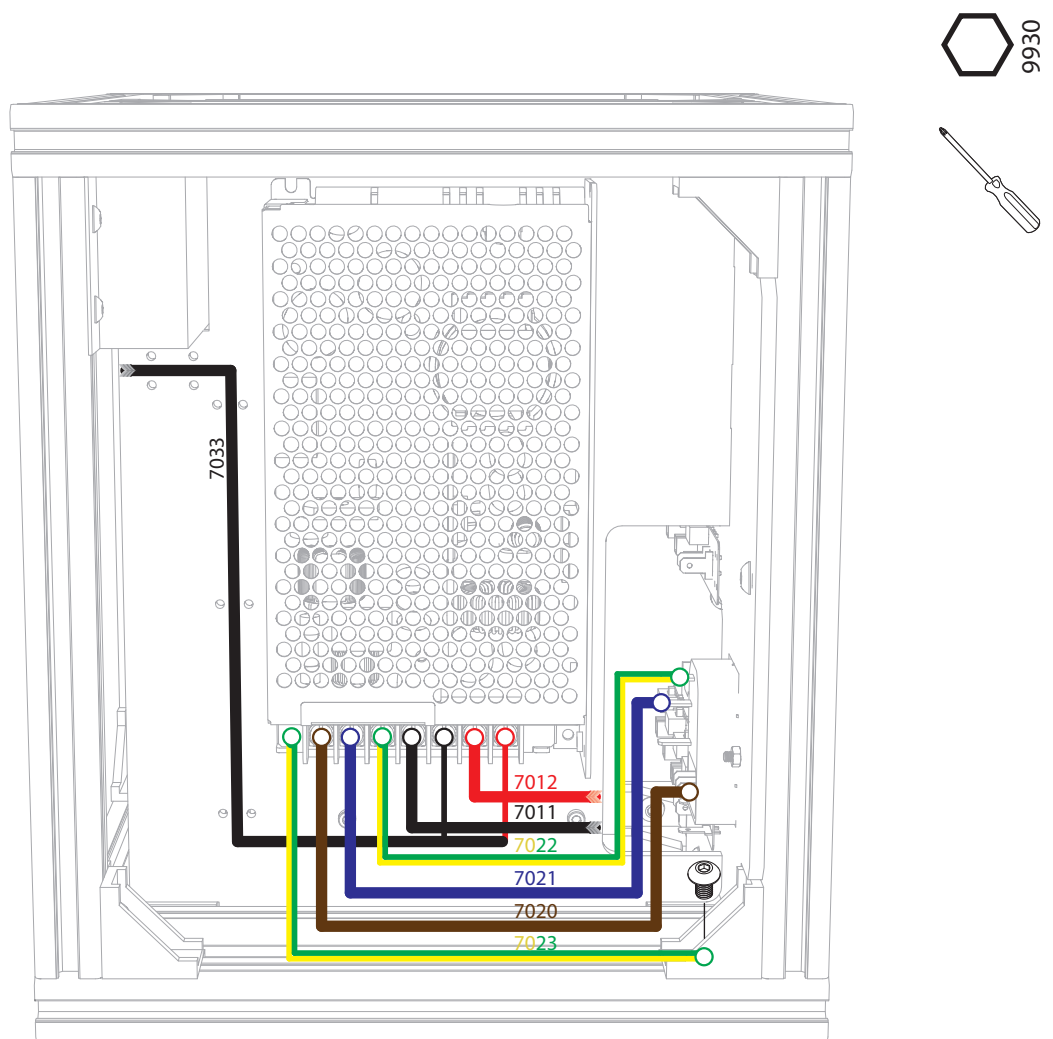
STEP 20

CABLE CONNECTION

27

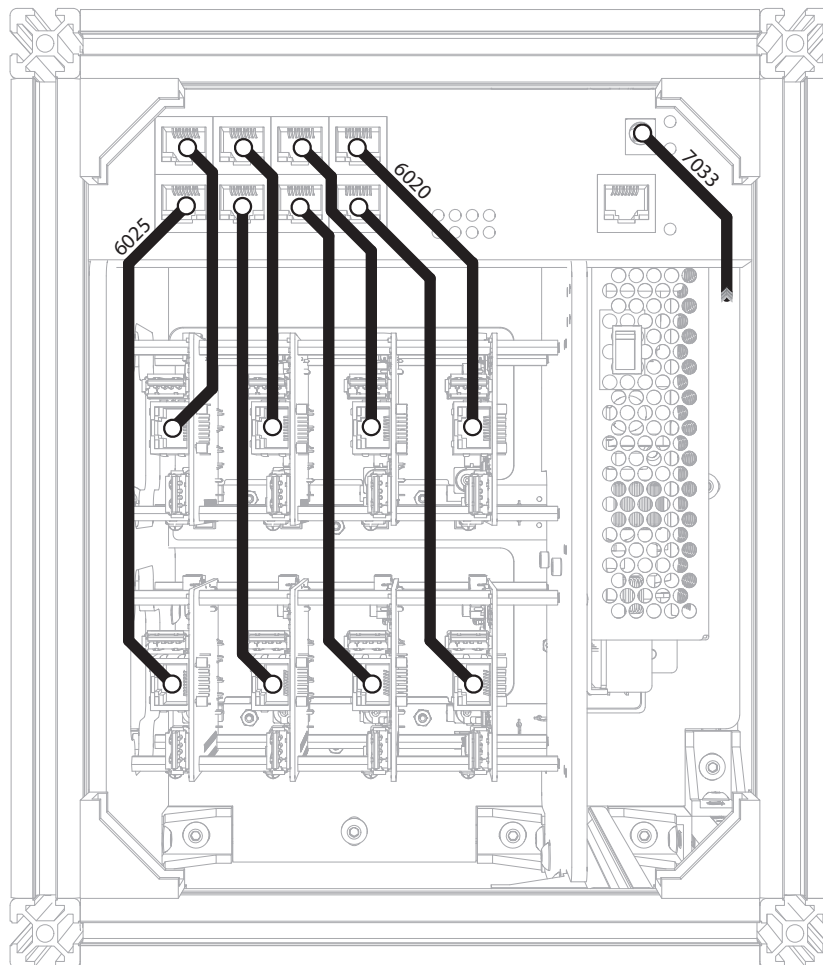
7011	DC Cable			7022	Earthing Cable
7012	DC Cable			7023	Earthing Cable
7020	AC Cable			7033	DC Cable
7021	AC Cable				

! Check the cable codes carefully.



STEP 21

- 6020 Ethernet Cable
- 6025 Ethernet Cable
- 7033 DC Cable



STEP 22

7010 DC Cable

