

K1 Pro User Manual

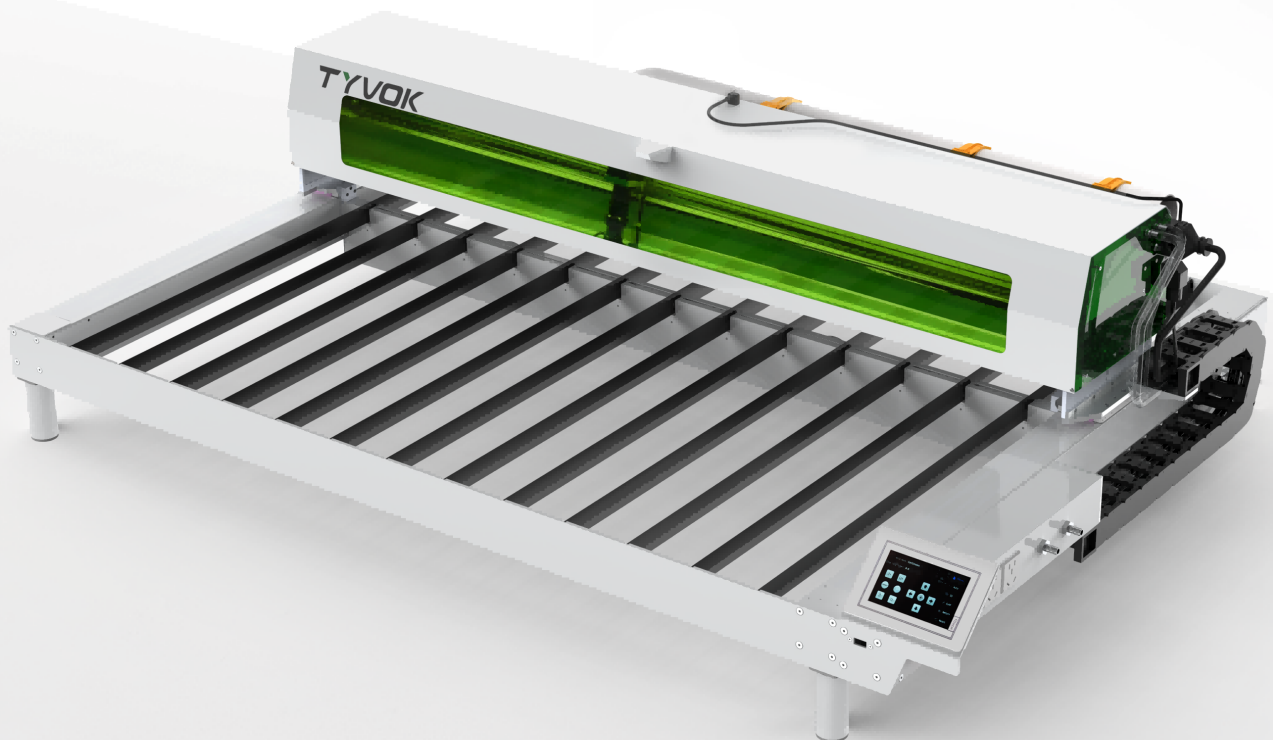
This manual introduces the Tyvok K1, including product overview, installation instructions, and usage guidelines.

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Manual Cover

TYVOK | K1 Pro



**USER
MANUAL**

A Letter to the Customers

A Letter to Customers

Dear customers,

Thank you for choosing the Tyvok K1 Pro.

To ensure safe and proper operation, please read this manual carefully before using the machine and follow all instructions provided. Failure to follow the guidelines may result in equipment damage or personal injury.

The Tyvok K1 Pro team is committed to providing reliable products and professional customer support. If you experience any issues during operation, please contact our support team using the email address provided at the end of this manual.

For additional resources, product updates, and operational guidance, please visit our official website: www.tyvok.com

The website provides information including software downloads, hardware support, operating instructions, maintenance guidance, and contact details.

Thank you for your trust and support.

Best regards,
Tyvok Team

Download APP and Usage

- 1 Download the PC software from our official website:(LightBurn Pro / TyvokStudio / RDWorks)

Download link:
<https://tyvok.com/pages/software>

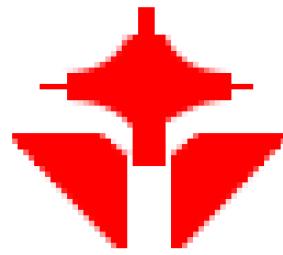
- 2 We have prepared simple tutorials for LightBurn / TyvokStudio / RDWorks on Wikipedia and provided assembly videos on YouTube.



LightBurn Pro



TyvokStudio



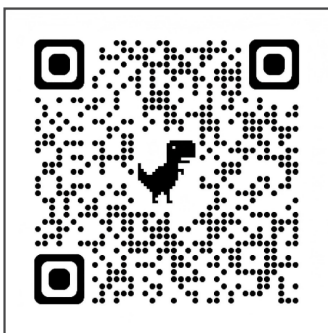
RDWorks

Afer-Sales Service

After-sales service

- We offer global online technical support for this product. If you encounter any problems during your use, please feel free to contact us and we will respond to you as soon as possible.
- Facebook : Tyvoklaser
- Youtube : @Tyvokspiderlaser
- Email : cs@tyvok.com
- Tel : +86 19926563401

Address: Room 206, Building 7, Mengliyuan Industrial Park,
Yousong Road, Longhua District, Shenzhen, PRC.



Wiki js



Youtube



Facebook

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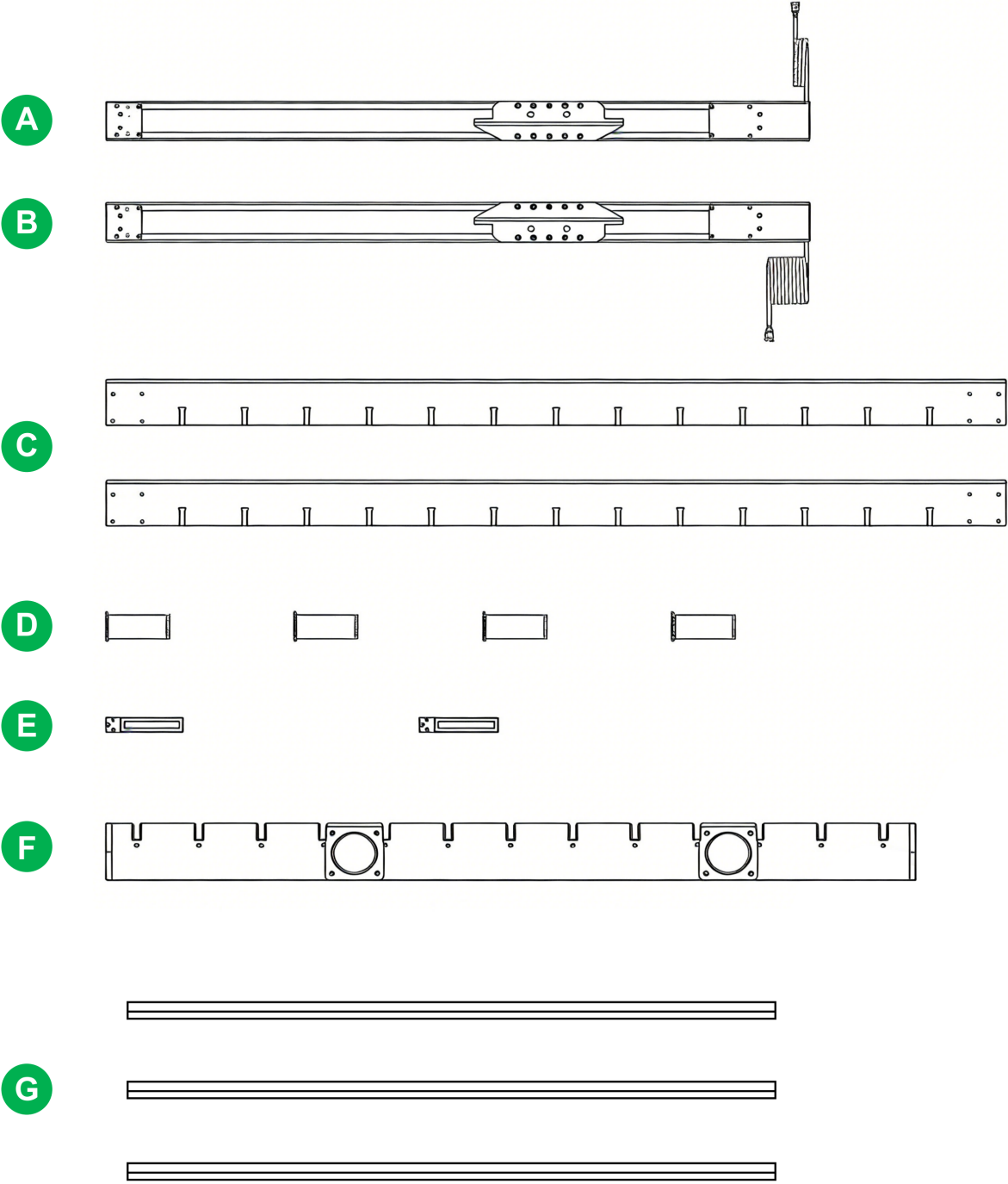
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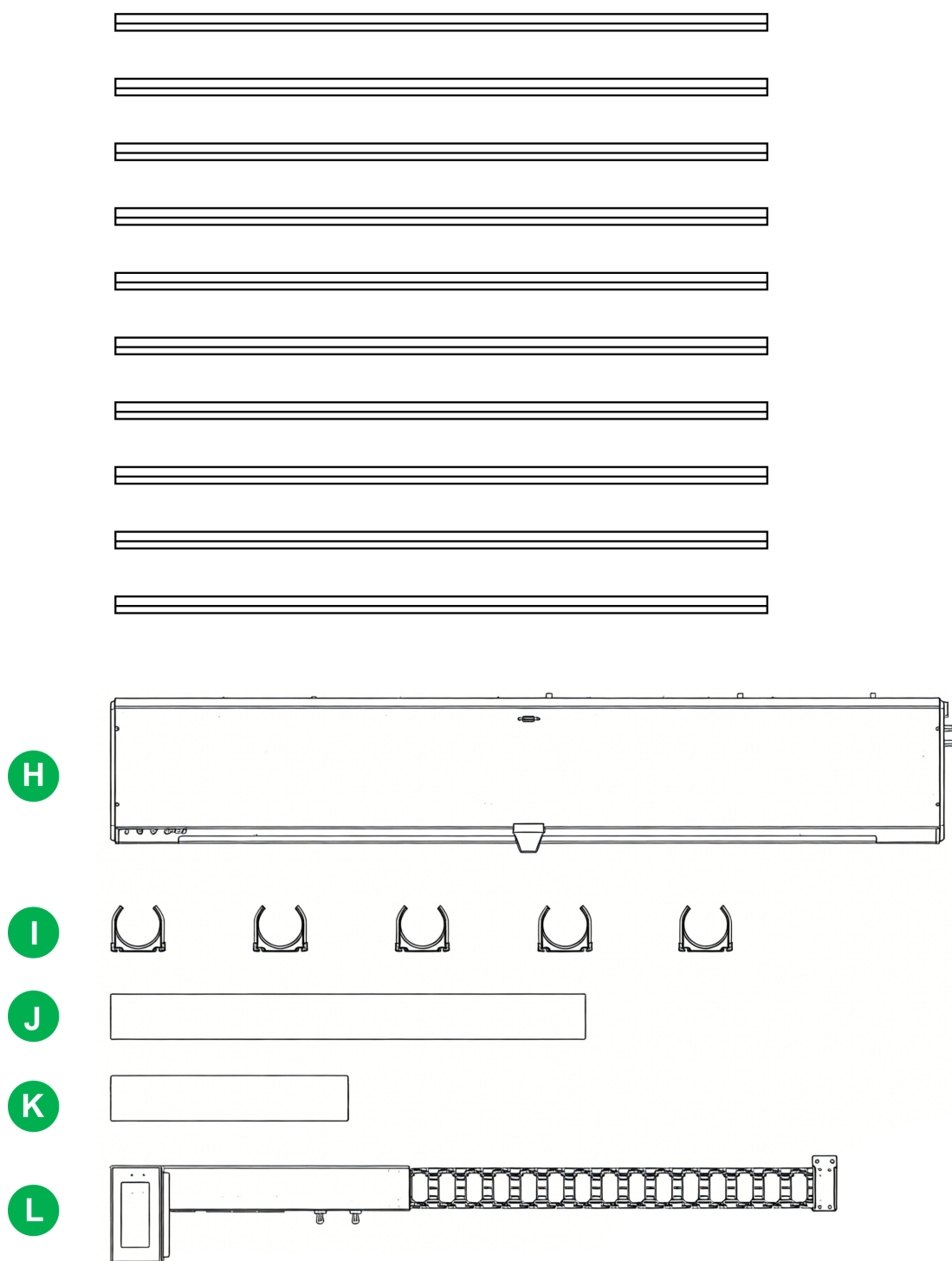
1.Accessories List

1.1 Machine Components

1. Accessories List

1.1 Machine Components (Requires Assembly)





1.2 Accessoires in Box



AC Cable



Machine USB cable



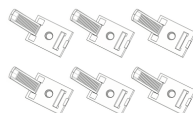
Camera USB cable



Water bottle



Goggles



Cable Clamp



User Manual



USB Flash Drive



Phillips screwdriver

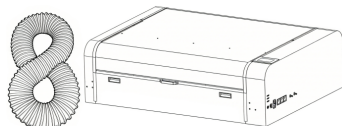


Hex wrench
2mm/2.5mm/3mm

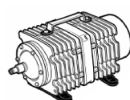


Gasket

1.3 Add-ons (Requires separate purchase)



Tyvok K1 Pro Aluminum
and Acrylic Enclosure



Industrial 145L/min
Air Assist



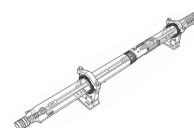
Focus lens*1 +
mirror lens*3



Acrylic Pack
(3mm Thickness)

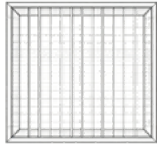


LightBurn Pro

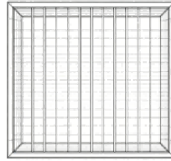


Spare Tube Kit
(Yongli 100W)

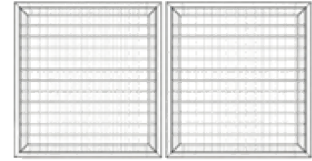
1.4 Screws List



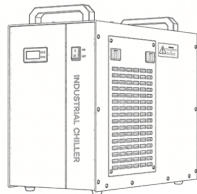
K1 Honeycomb Plate
(848*820mm)



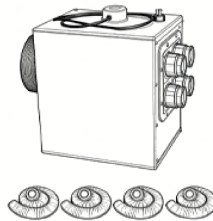
K1 Pro Honeycomb Plate(1250*1120mm)



K1 Max Honeycomb Plate(1250*2240mm)



Industrial Chiller



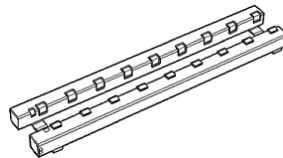
Industrial Air System
Ventilation Machine



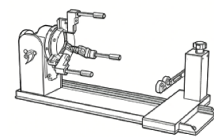
Smoke Purifier



Mini Fire
Extinguisher x 2



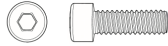
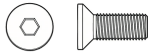
Rotary Master



Rotary Pro 2

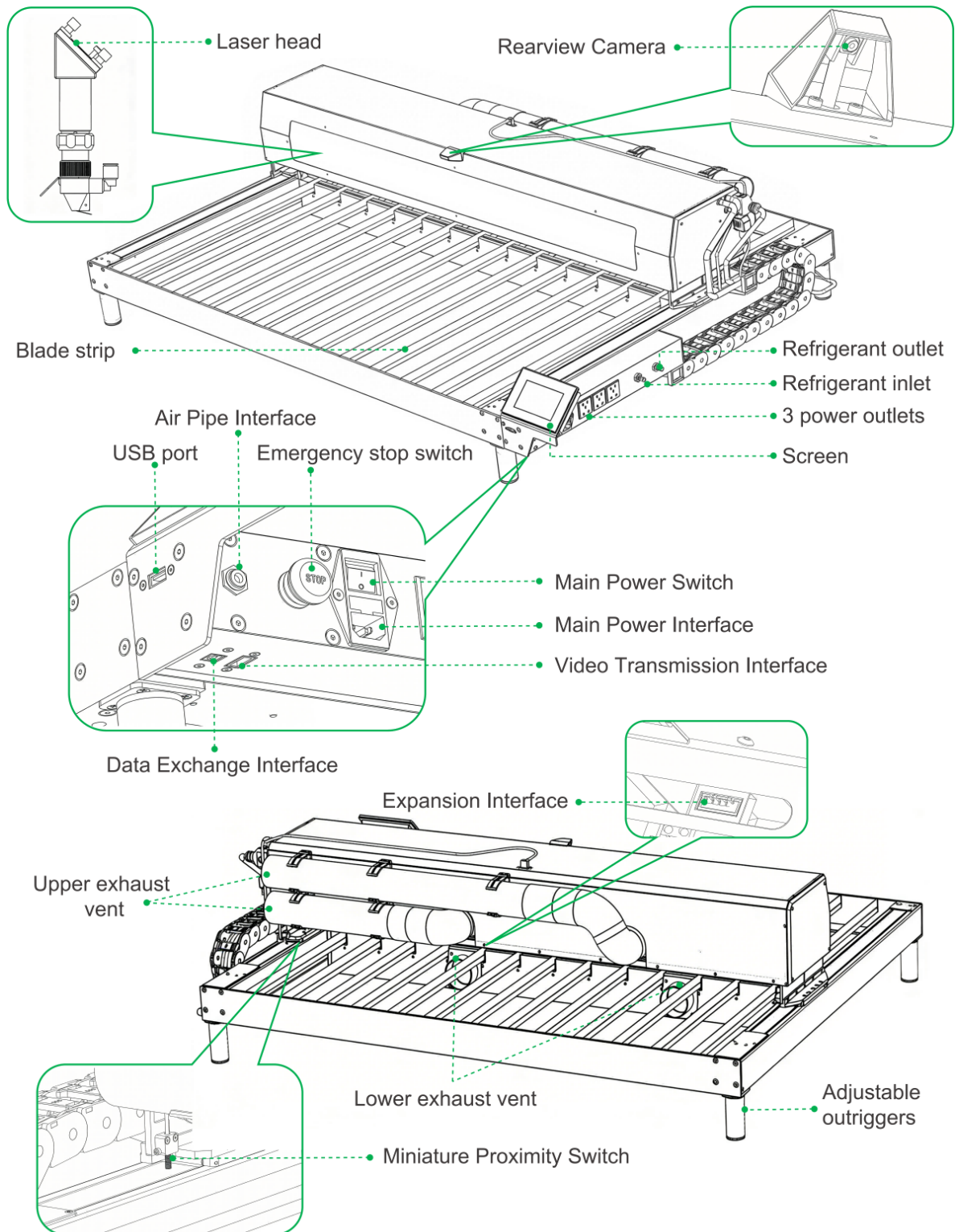
1.4 Screws List

Screw Specification

Part Number	Specification	Name	Quantity/pcs	Reference
Screw package 6	M4*8	Cup-head socket head cap screw	5	
Screw package 1	M5*10	Countersunk Hexagon Socket Screw	24	
Screw package 3	M3*16		6	
Screw package 5	M4*10		10	
Screw package 7	M5*80		4	
Screw package 8	M4*20		2	
Screw package 2	M4*6	Countersunk Phillips Screw	16	
Screw package 4	M3*8	Hand-tightened screw	2	

2.Introduction of the K1 Pro Laser Engraver

2. Introduction of the K1 Pro Laser Engraver



05

3. Quick Installation Guide

3.1 Position the Frame

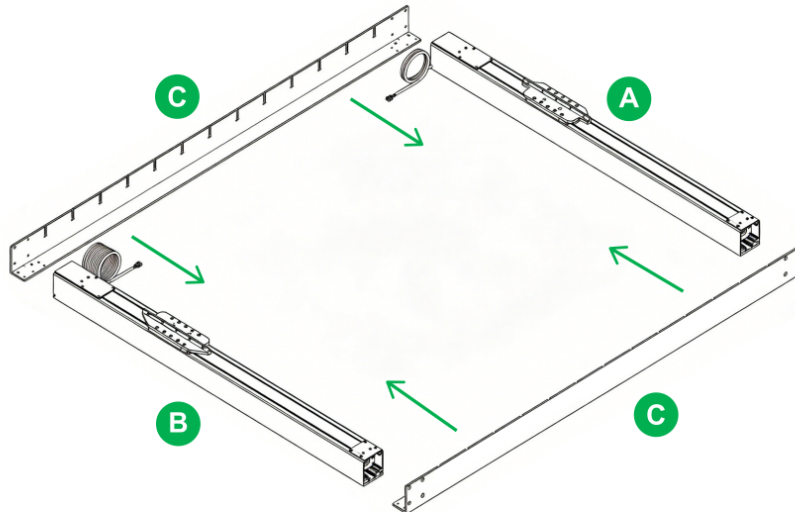
3. Quick Installation Guide

3.1 Position the frame

Assemble as shown in the diagram. Ensure the motor wires are positioned on the inner side. Note that the motor wires for Part A are shorter than those for Part B.

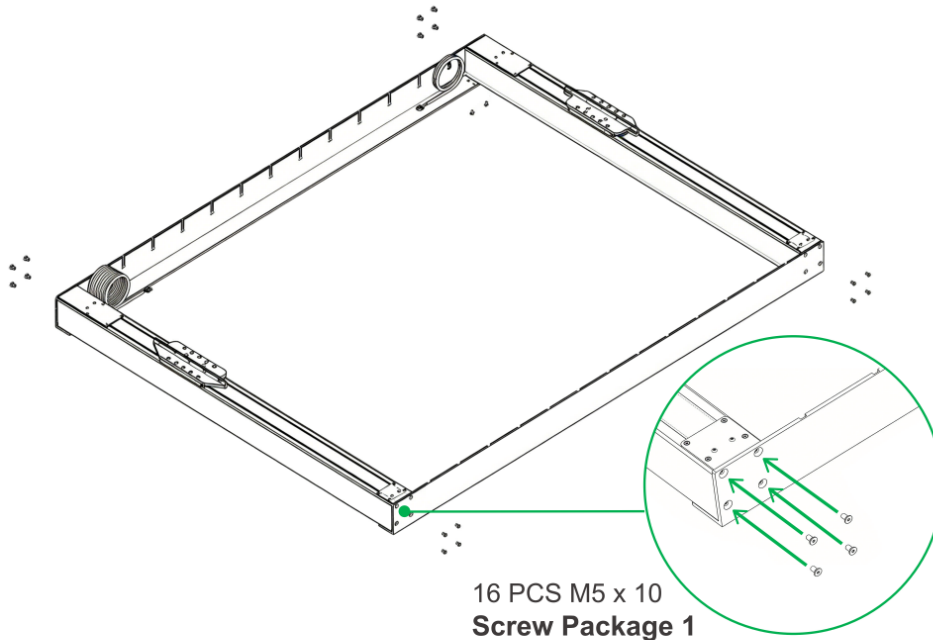


Note: We recommend that two adults be required to install this machine.



3.2 Secure the frame

Secure the connection with screws.



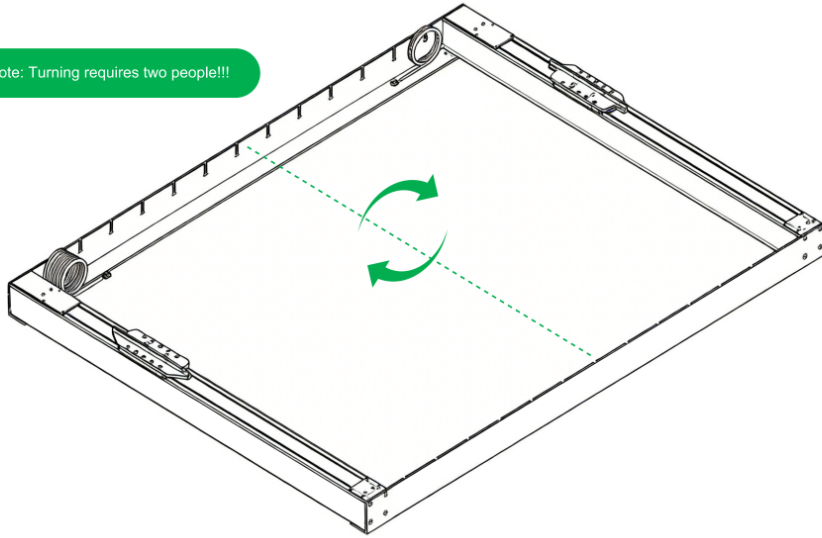
3.3 Flip and Secure the Frame

3.3 Flip and secure the frame

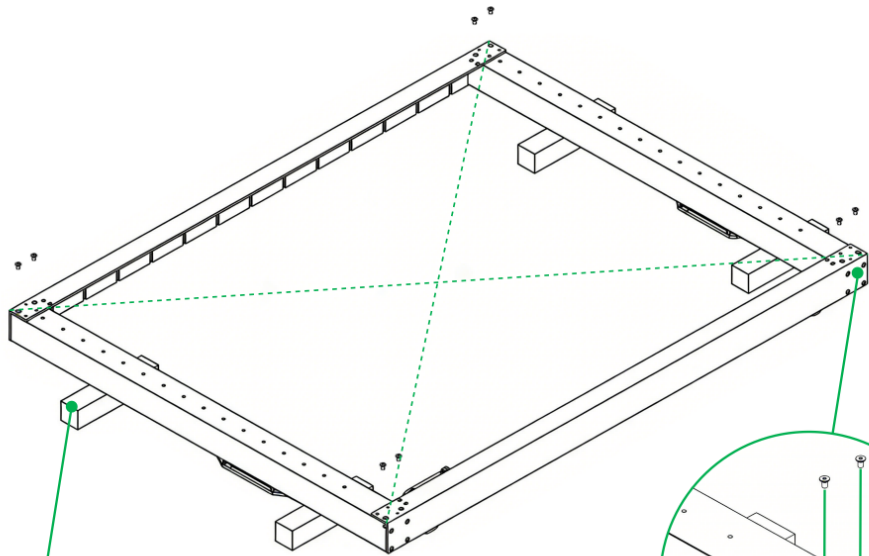
- ① Flip the top and bottom surfaces and place them on the spacers (prepare 4 spacers yourself).



Note: Turning requires two people!!!

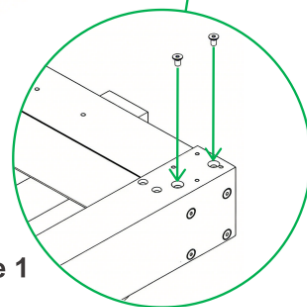


- ② After installing the screws, use a tape measure to measure the lengths of the two diagonals and subtract them. The difference should be less than 2.5mm (default value is 1825mm). If the length does not meet specifications, loosen the screws and readjust, or watch our video tutorial.
Video tutorial link: [@Tyvokspiderlaser](#)



The height of the four spacers should be consistent and greater than 30mm.

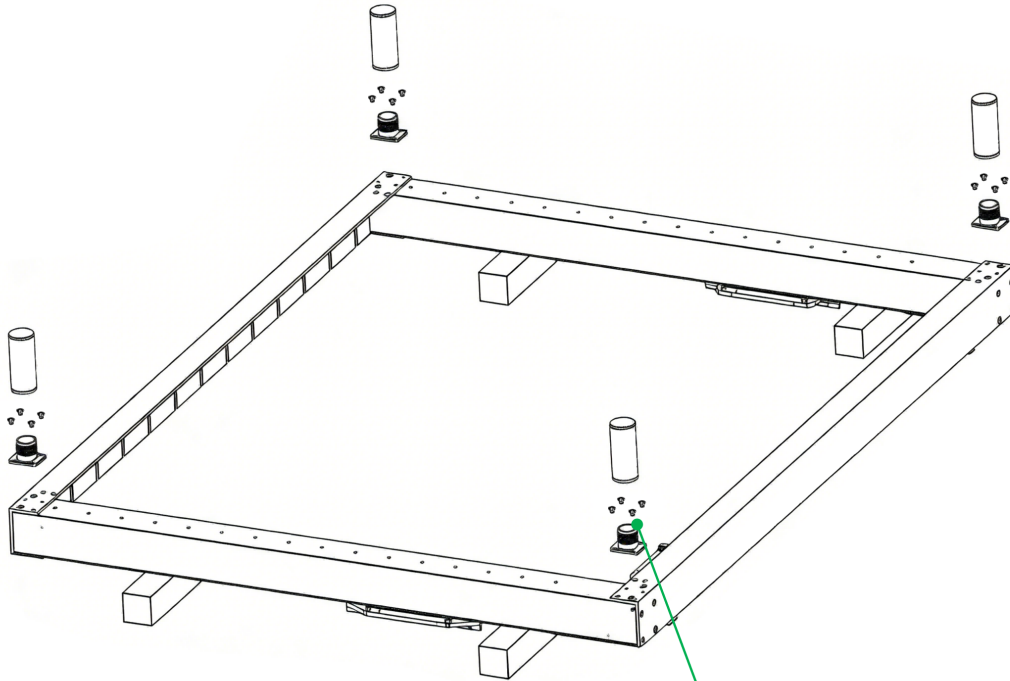
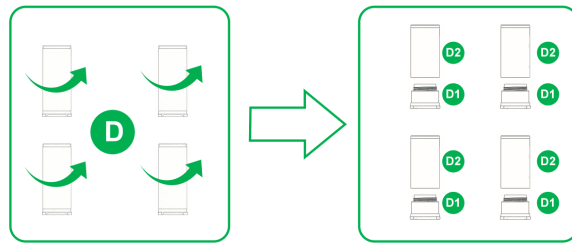
8 PCS M5 x 10
Screw Package 1



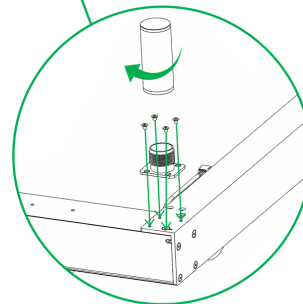
3.4 Install Outriggers

3.4 Install outriggers

- ① Rotate part D counterclockwise to separate it into two parts(D1 and D2).



- ② As shown in the figure, install D1 and D2 in sequence.



16 PCS M4 x 6 **Screw Package 2**

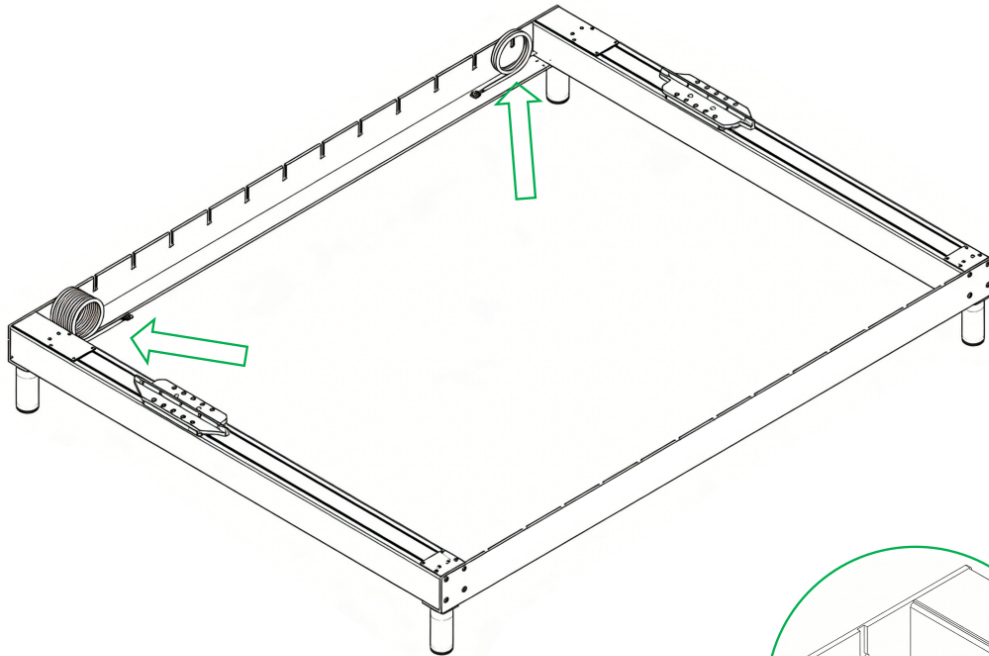
3.5 Flip the Frame again

3.5 Flip the frame again

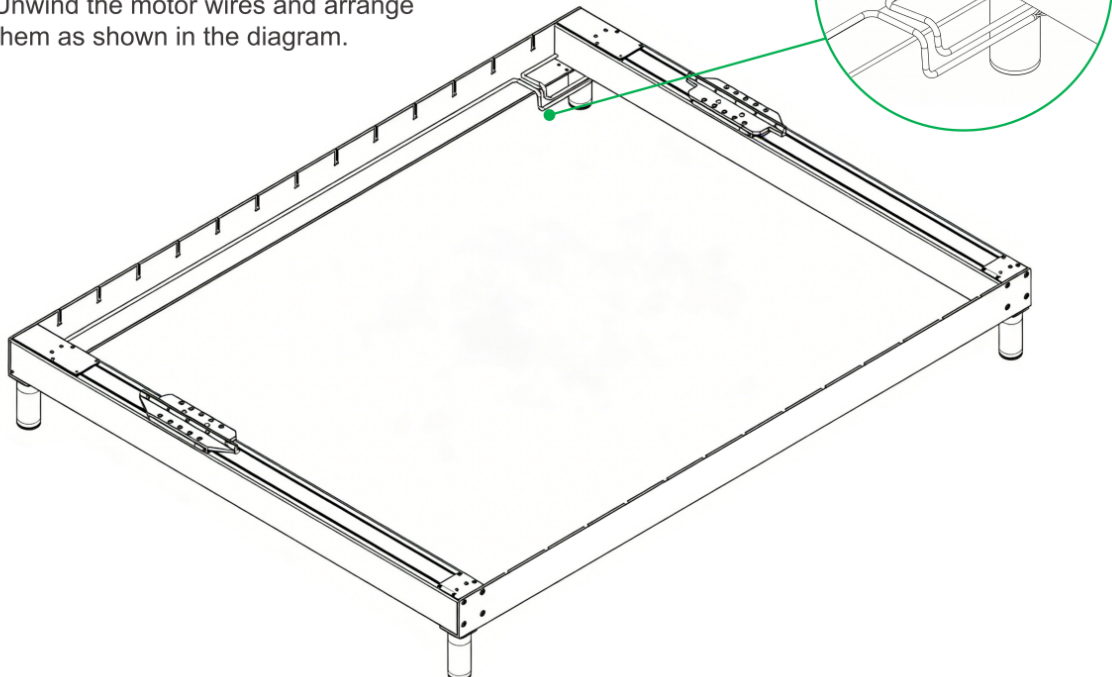
Flip the machine upside down so the legs are facing downward.



Note: Turning requires two people!!!



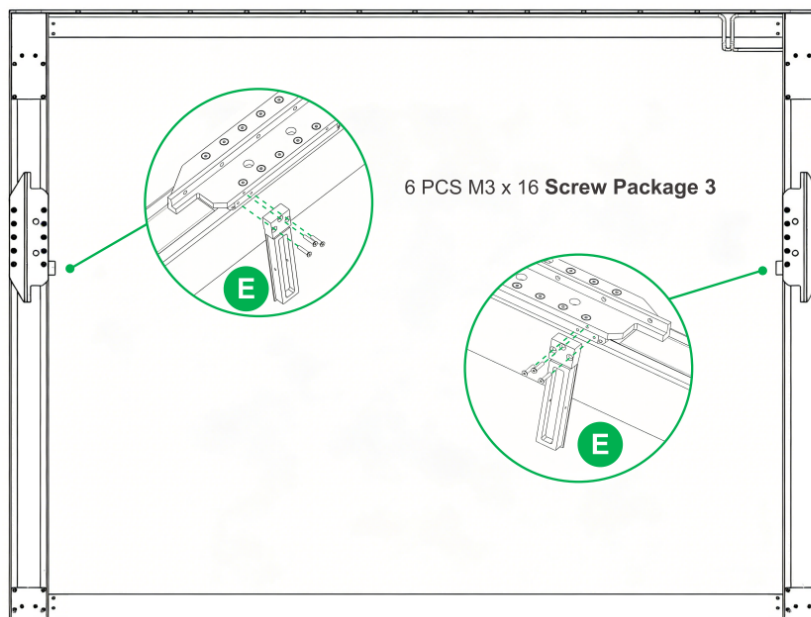
Unwind the motor wires and arrange them as shown in the diagram.



3.6 Install Air Duct Support Brackets

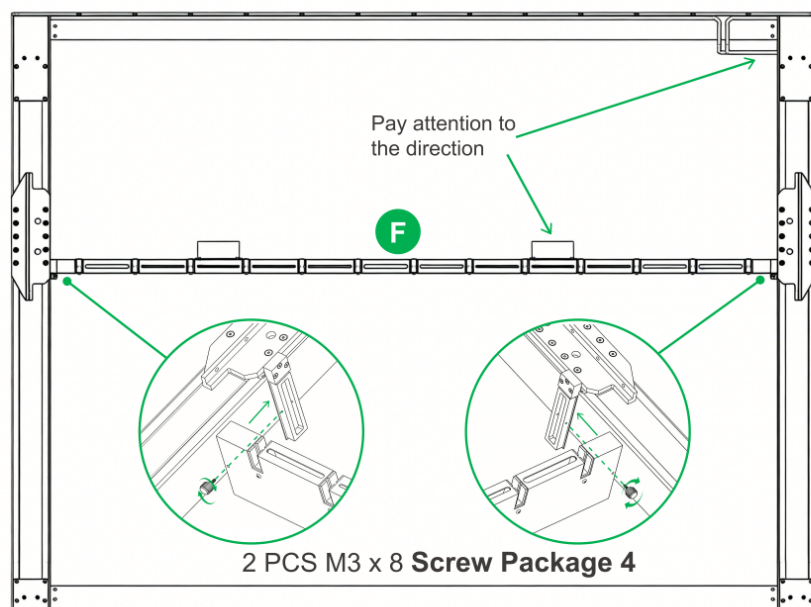
3.6 Install air duct support brackets

Install Part E



3.7 Install Air duct components

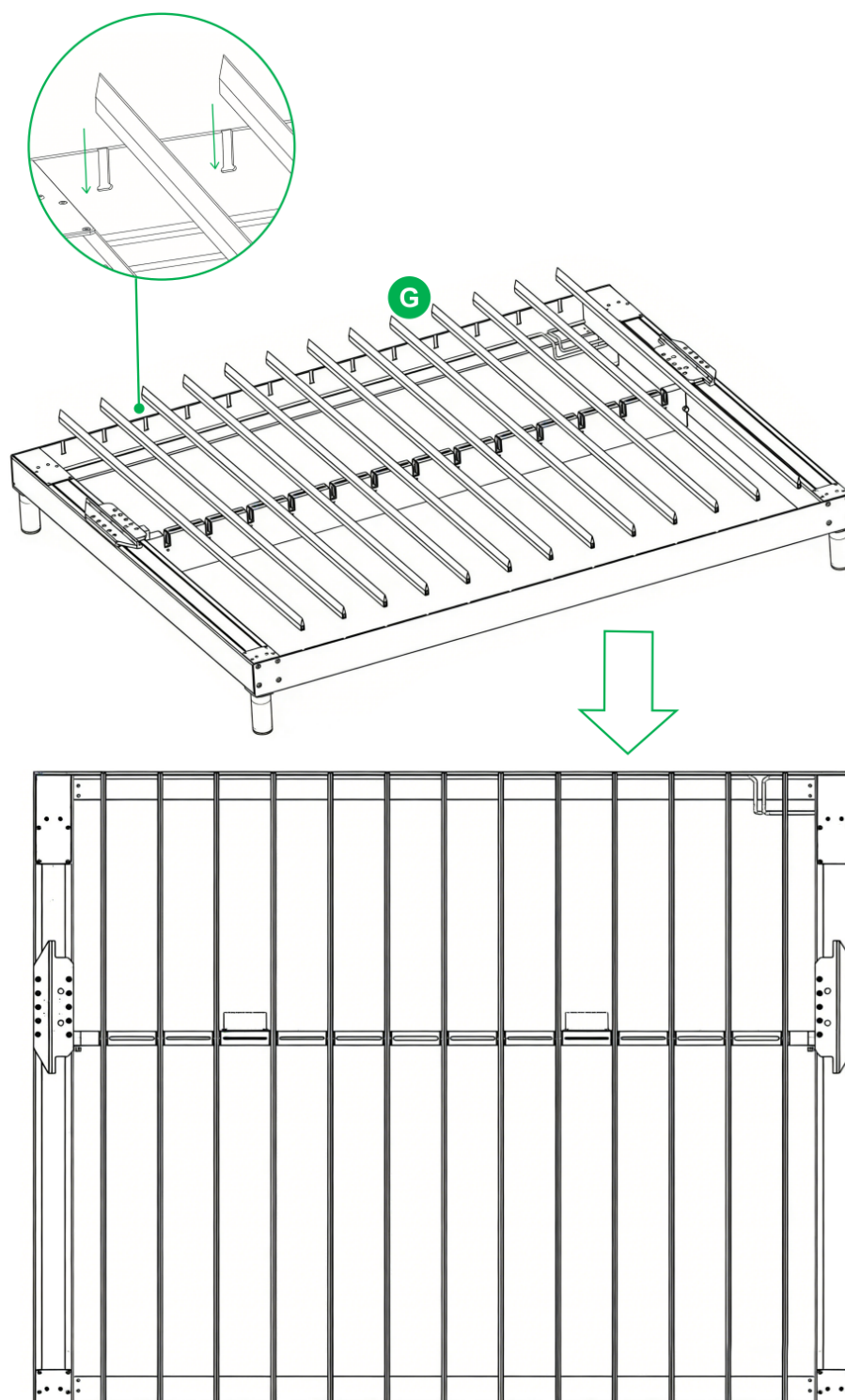
Push part F into the retaining slot of the support bracket along the direction of the arrow, then tighten the M3 x8 hand screw clockwise.



3.8 Install the Blade Strip

3.8 Install the blade strip

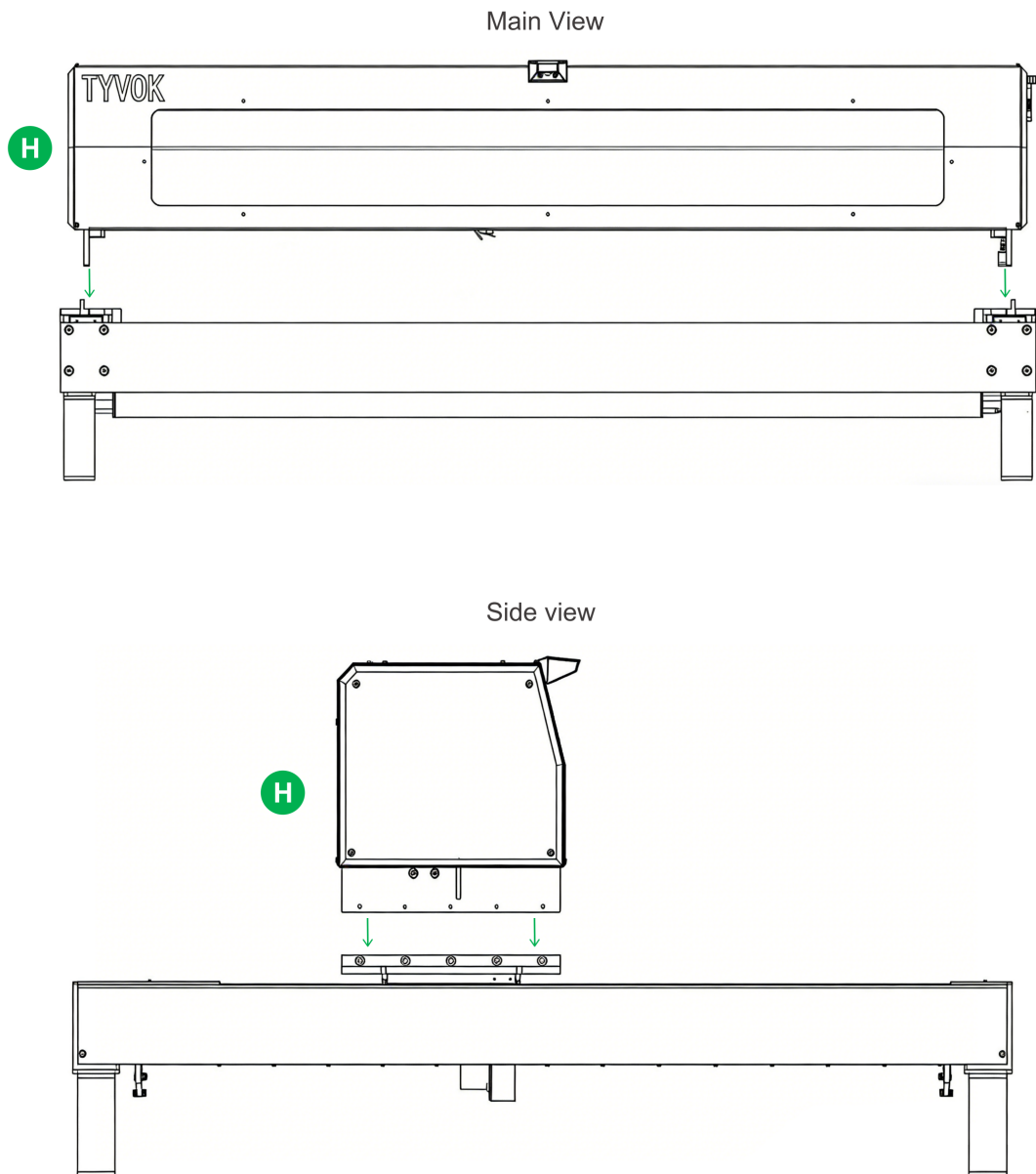
Insert the 13 PCS G parts into the groove, ensuring the sharp end faces upward.

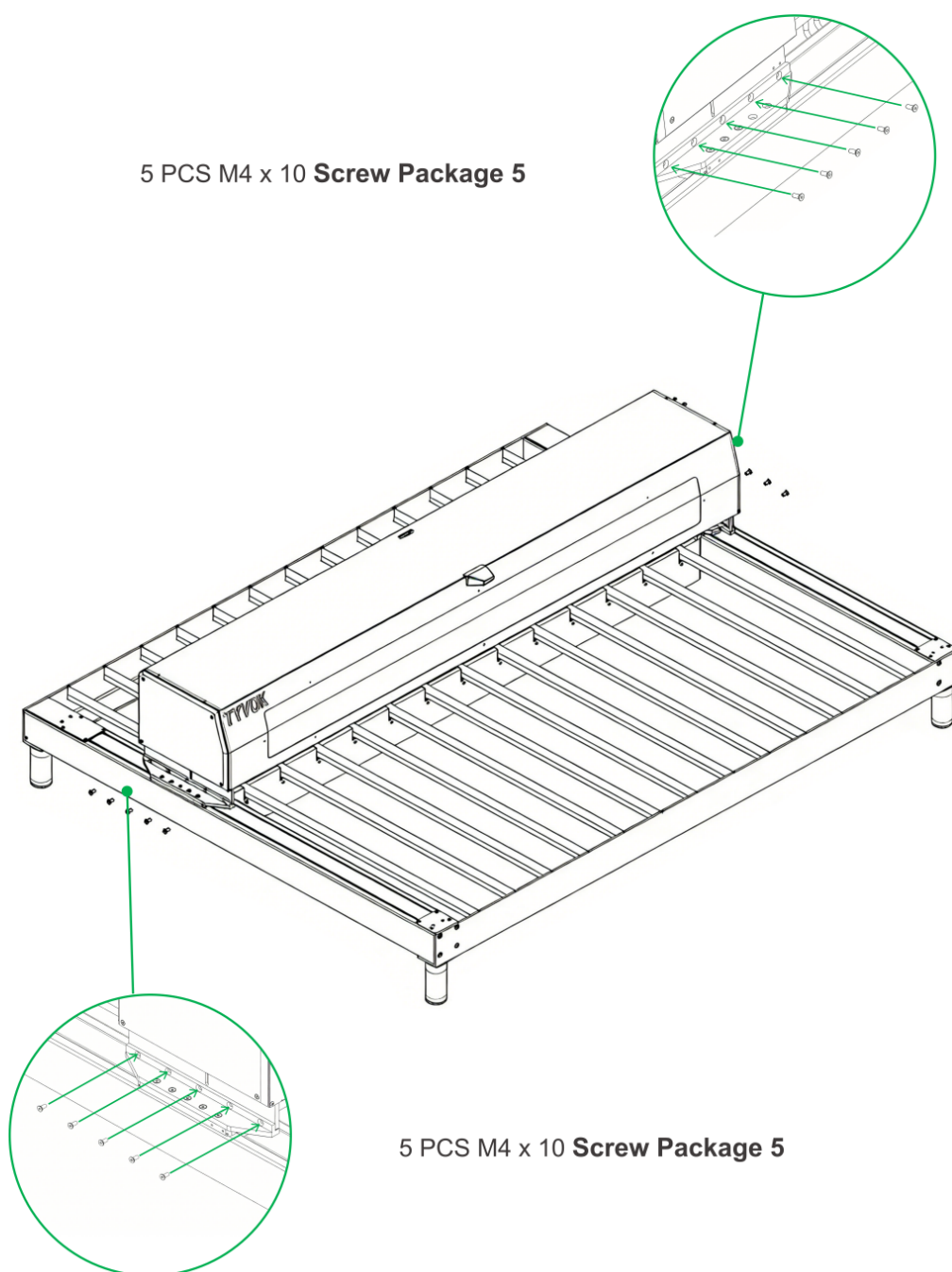


3.9 Install the X-axis Module

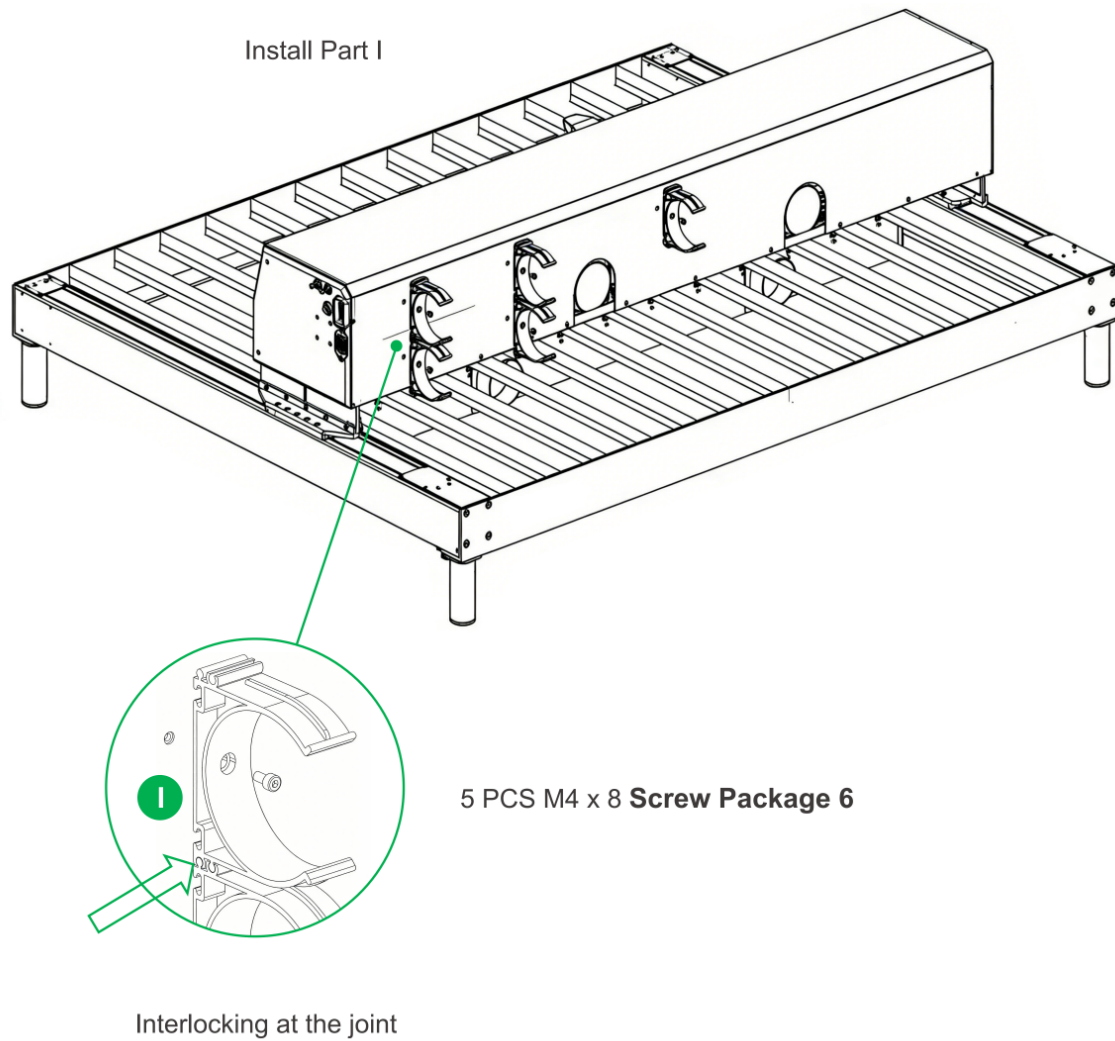
3.9 Install the X-axis module

Install part H (two-person operation recommended). Ensure holes and orientation are aligned before securing with screws as specified.





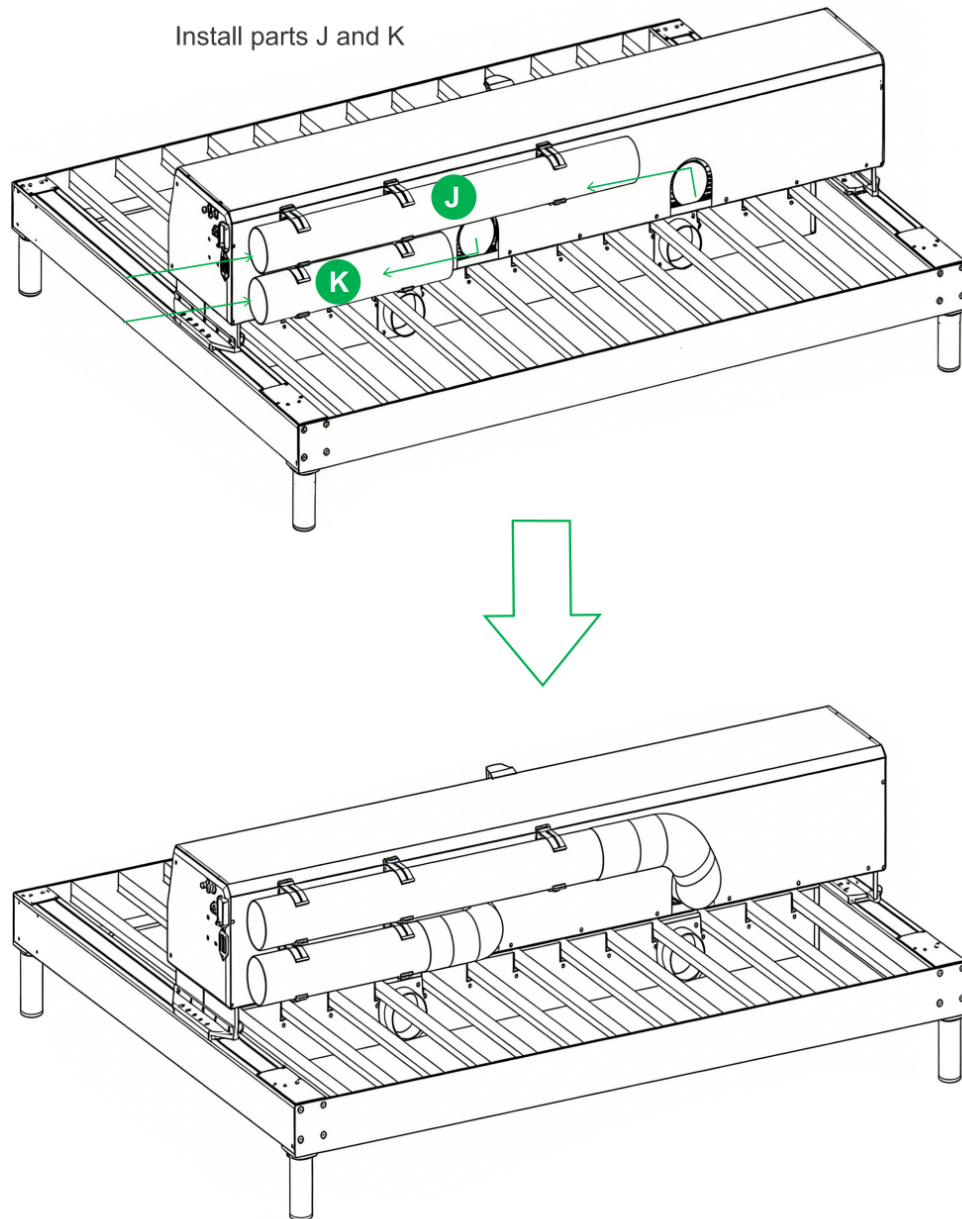
3.10 Install clamps.



3.11 Install the PVC Pipe

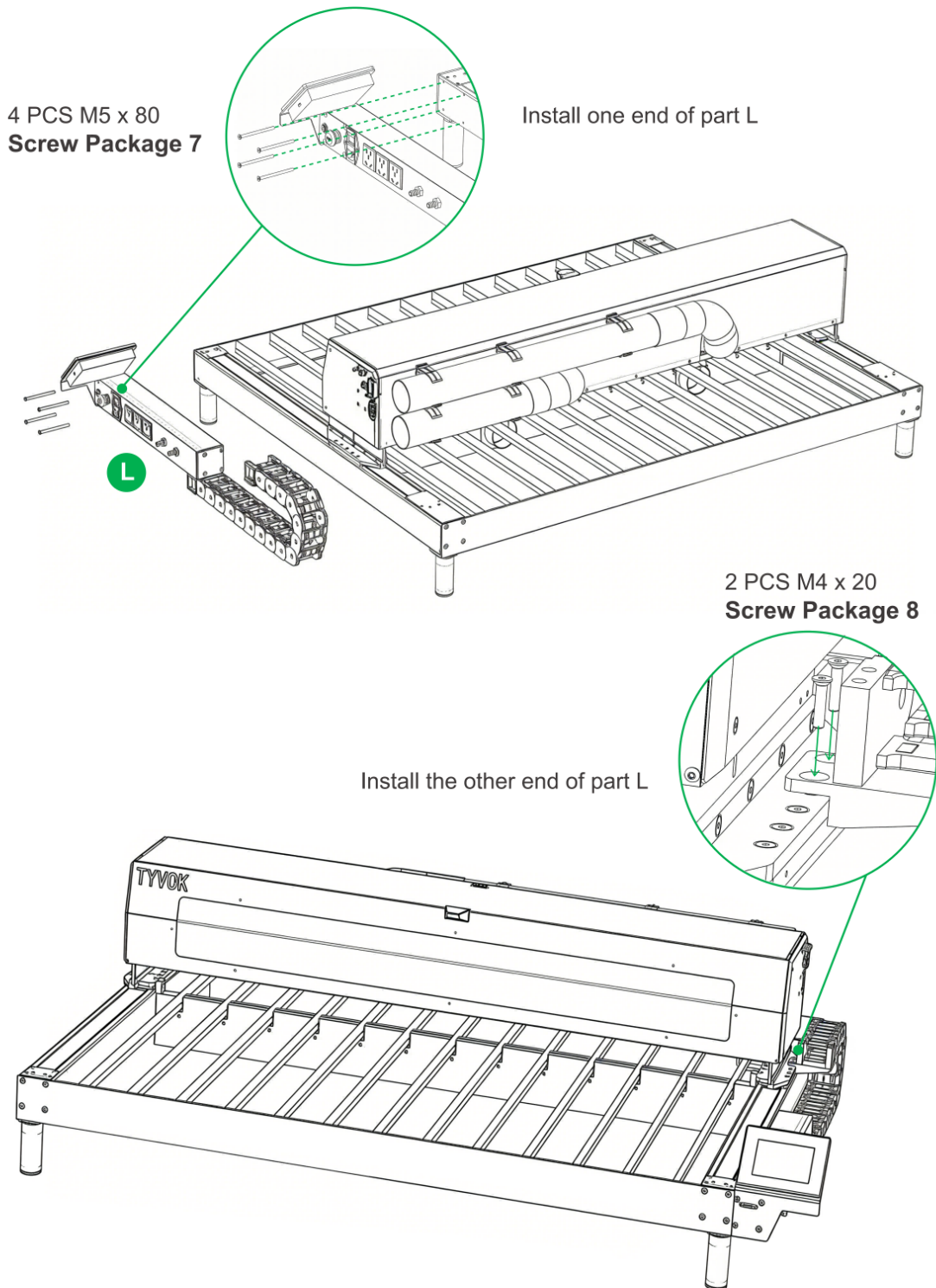
3.11 Install the PVC pipe.

Insert the PVC pipe into the clamp as shown in the diagram, then insert the two duct connectors for the X-axis into the PVC pipe.



3.12 Install the Drag Chain Components

3.12 Install the drag chain components.



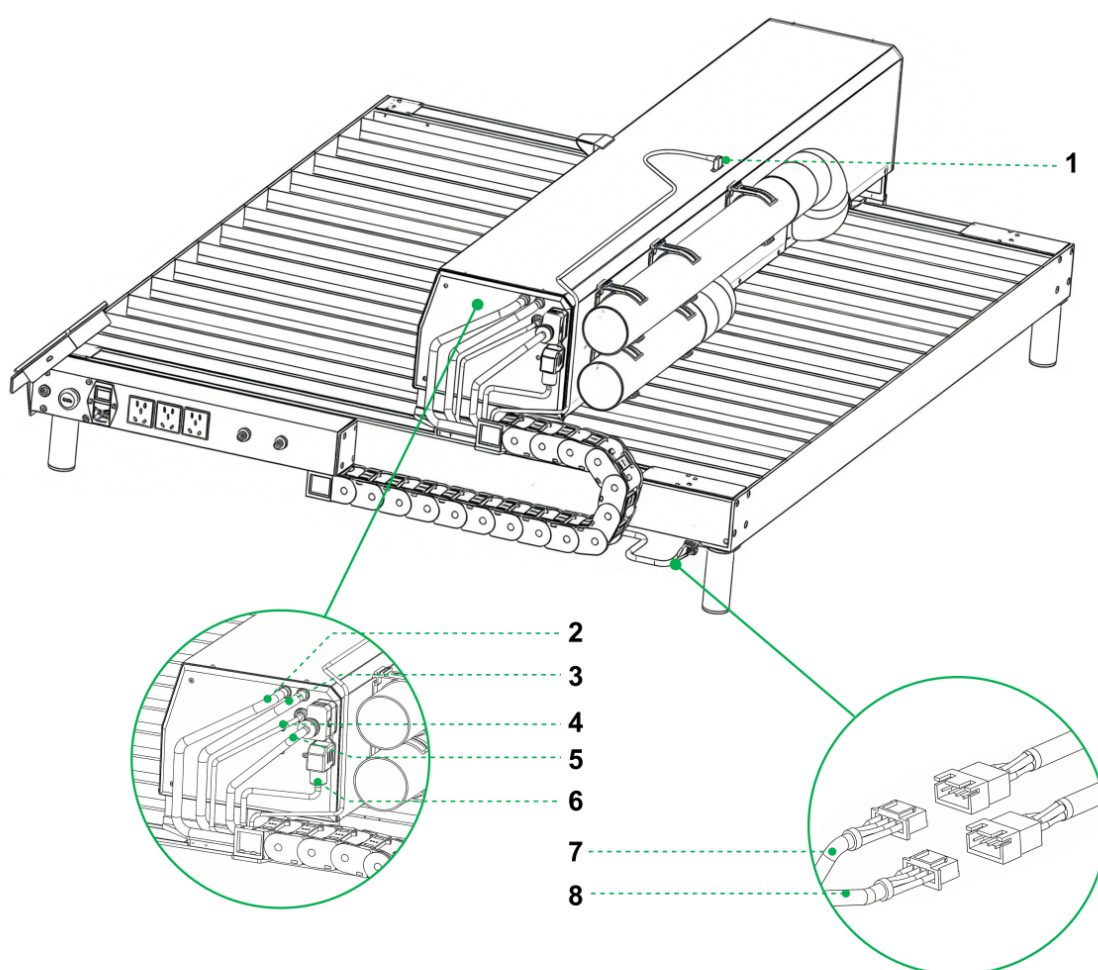
3.13 Connect Wires and Pipes

3.13 Connect wires and pipes.

1. USB port, video transmission;
2. Refrigerant inlet;
3. Refrigerant outlet;
4. Gas supply hose connection;
5. 23-pin connector, data exchange;
6. Power supply port;
7. Servo motor control interface 1;
8. Servo motor control interface 2.



Note: Interface 7 and Interface 8 are identical. No need to distinguish between them when plugging them in!



PARAMETERS

Model

Tyvok K1 Pro

Machine size

4.9ft*3.7ft(1505mm*1130mm)

Working area

3.9ft*2.3ft(1200mm*700mm)

Net weight

About 60KG

Max working speed

1000mm/s

Engraving precision

0.05 mm

Power supply

AC 110V/220V, 50-60Hz

Laser wave length

10600nm

Laser power

100W CO₂ Laser

Supported software

LightBurn Pro, RDWorks, TyvokStudio

Connection method

USB / Wi-Fi

Focus mode

Auto Focus

Format files

jpeg, png, bmp, svg, dxf, etc.

Type of supporting materials

Wood, Leather, Acrylic, Plastic, MDF, Marble, Fabric, Rubber, Paper, Foam, Cloth, etc.