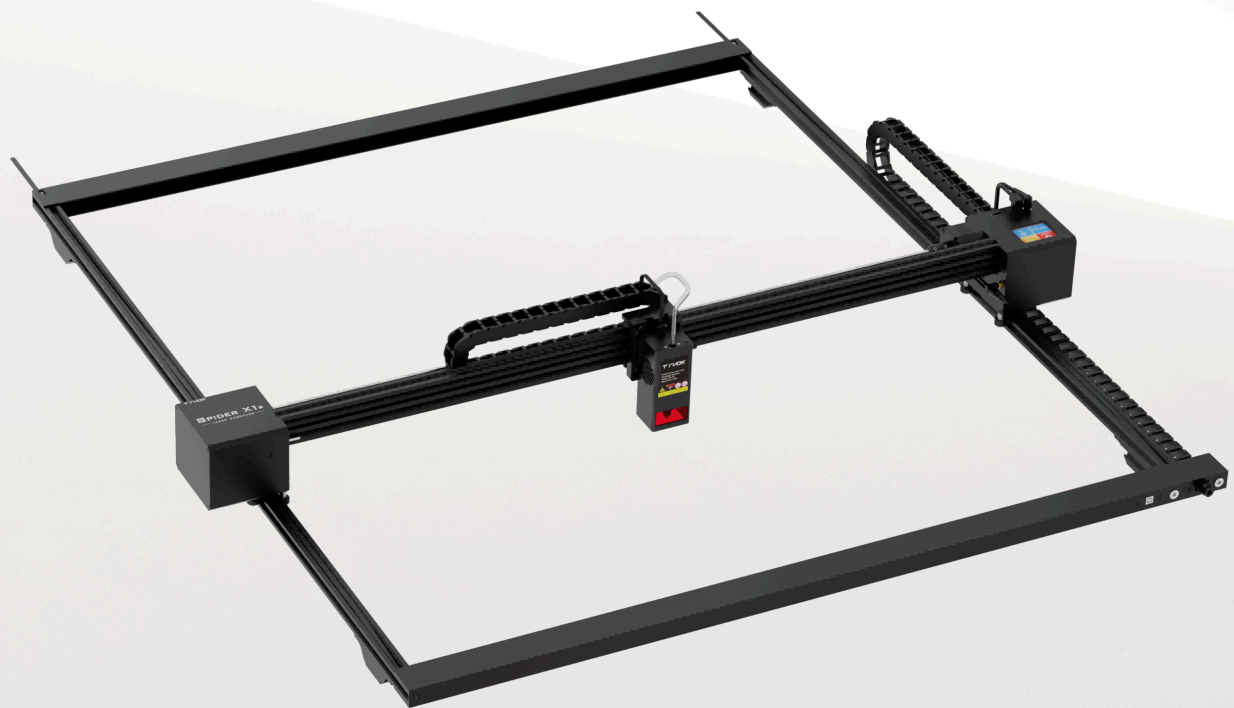


Spider X1S -2026 User Manual

Tyvok Spider X1S - 2026

User Manual

TYVOK | Spider X1S



**USER
MANUAL**

Welcome to Tyvok

WELCOME TO TYVOK

Thank you for choosing the Tyvok X1S 2026.

This manual will guide you through the setup, operation, and maintenance of your machine to help you achieve the best performance and a safe user experience.

For software downloads, tutorials, product updates, and technical support, please visit:

www.tyvok.com
www.wiki.tyvok.com

We appreciate your trust and support and look forward to being part of your creative journey.

Tyvok Team

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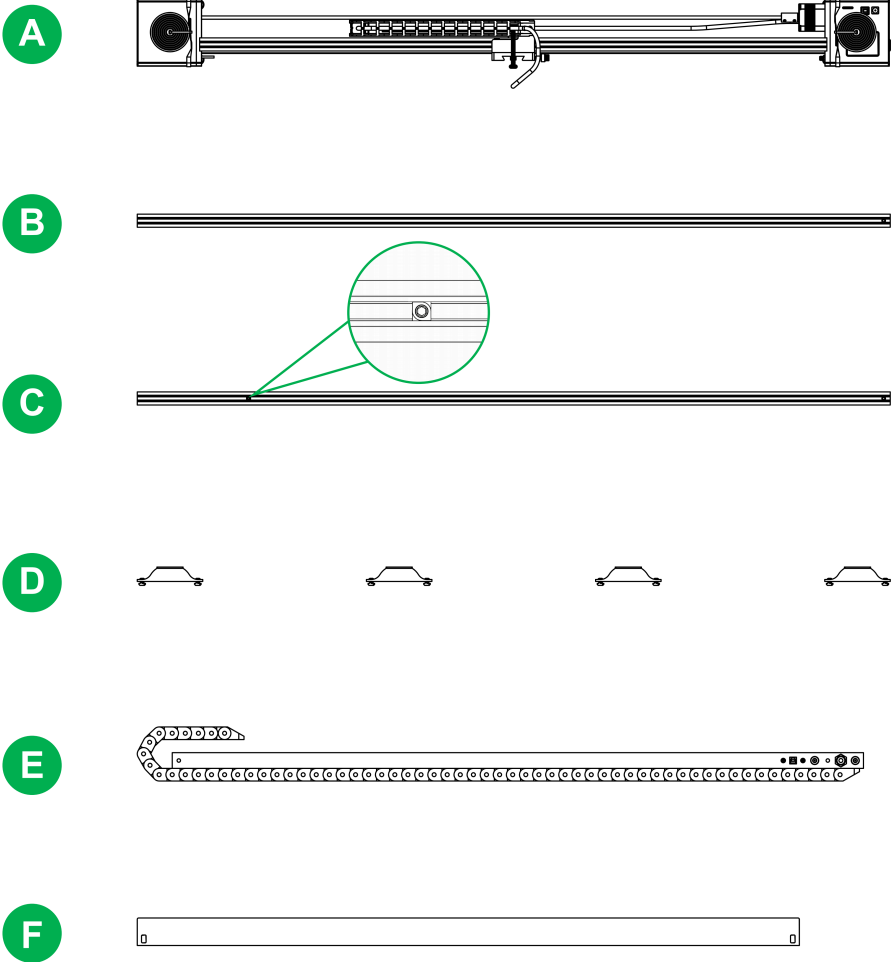
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01/ Bill of Materials(BOM)

1.1 Standard Components(800*800mm)

01 / Bill of Materials (BOM)

1.1 Standard Components (800mm × 800mm)

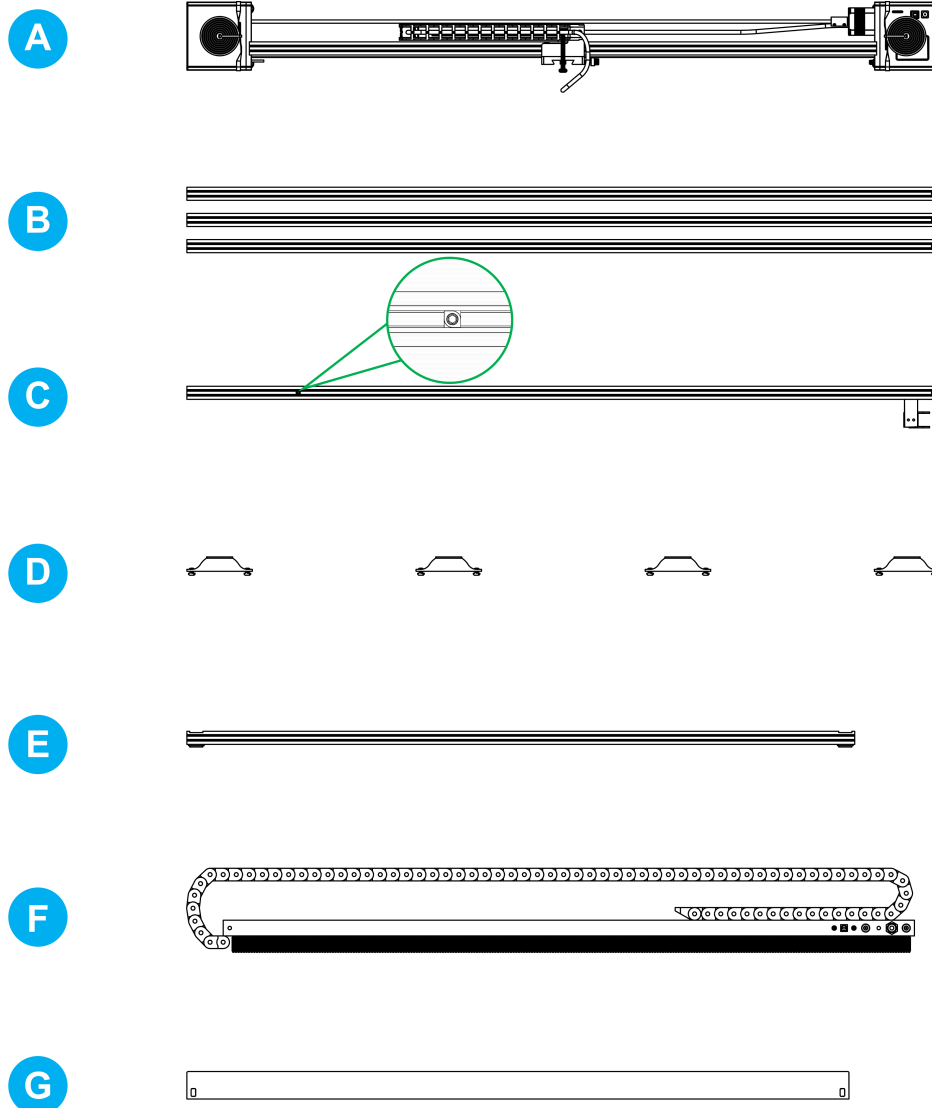


Note:

Check all components before assembly.
If any item is missing or damaged, contact support@tyvok.com.

1.2 Extension Components(800*2000mm)

1.2 Extension Components (800mm × 2000mm)



Note:

Check all components before assembly.

If any item is missing or damaged, contact support@tyvok.com.

1.3 Standard Accessories

1.3 Standard Accessories



Power Adapter



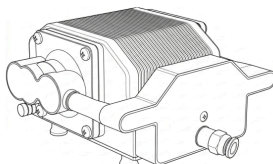
USB cable



Hex Key Set
(2/2.5/3mm)



Safety Goggles



Air Assist Pro II (50L)



Cleaning Brush



TF Card



Card Reader



Laser Focus Block

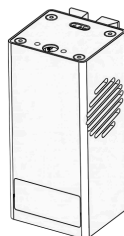


Wi-Fi Antenna

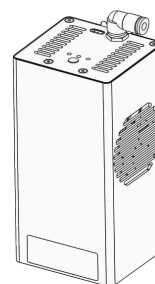
1.4 Optional Accessories



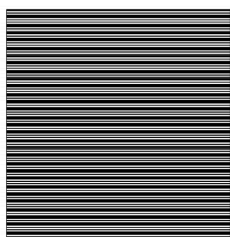
10W Laser Module



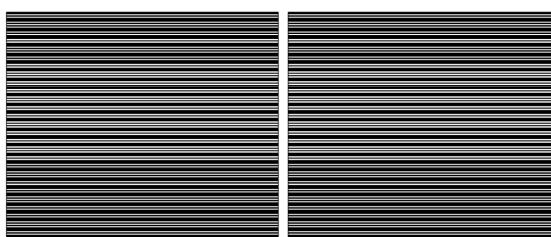
20W Laser Module



60W Laser Module



Working Plate
Standard Version



Working Plate
Extension Version

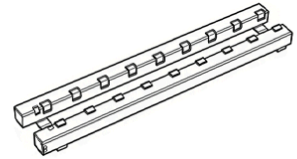
1.5 Screws (Specifications & Quantities)



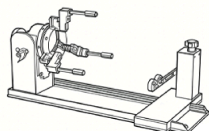
Drawing Module



Mini Fire Extinguisher x 2



Rotary Master



Rotary Pro 2

1.5 Screws (Specifications & Quantities)

Screw Specification (800mm*800mm)

Part Number	Specification	Name	Quantity/pcs	Reference
Screw package 1	M5	T-Slot Nut	4	 
Screw package 2	M3*6	Countersunk Hex Socket Screw	3	 
Screw package 3	M5*8	Button Head Hex Socket Screw	4	 

Screw Specification (800mm*2000mm)

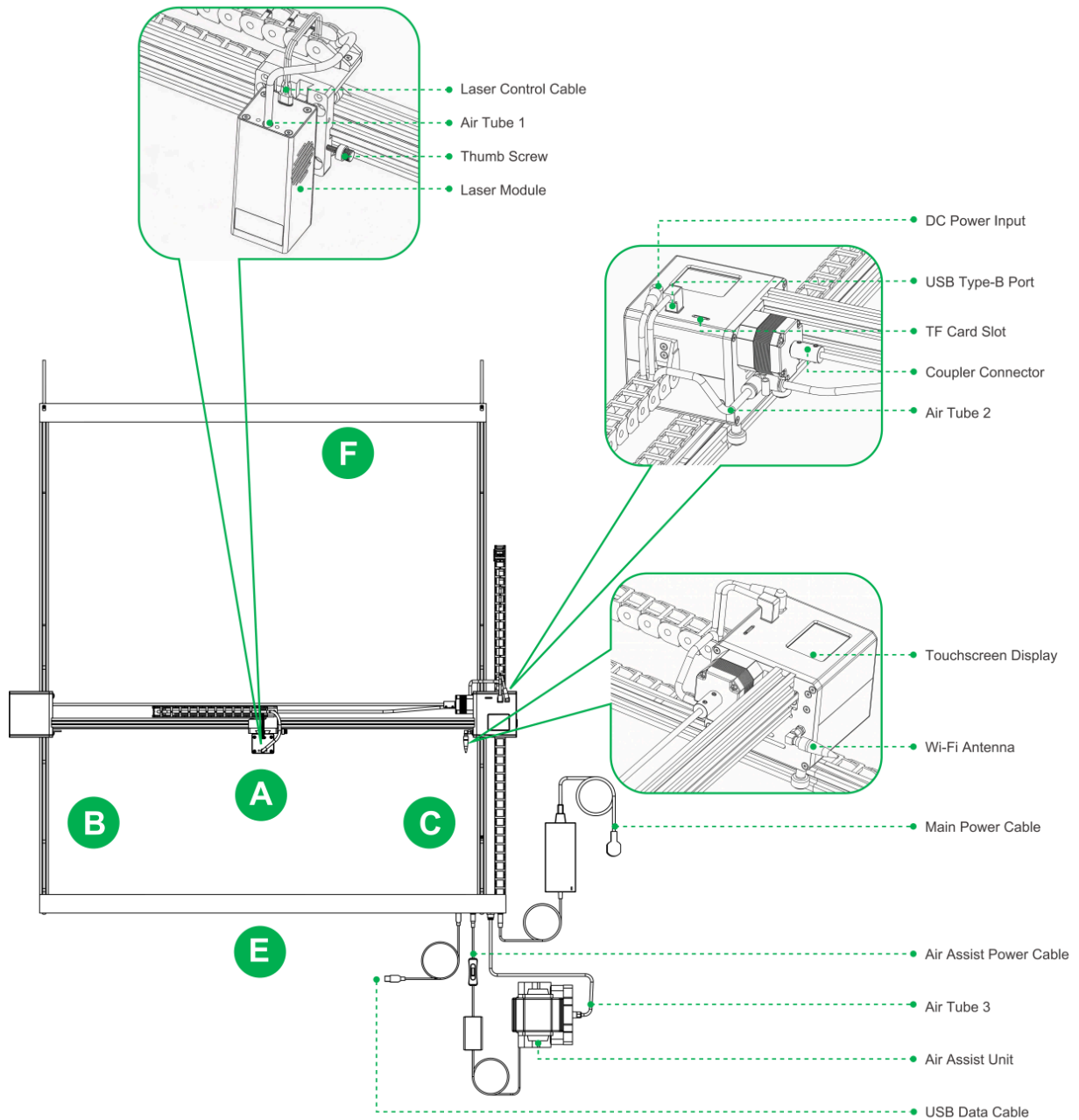
Part Number	Specification	Name	Quantity/pcs	Reference
Screw package 1	M5	T-Slot Nut	4	 
Screw package 2	M3*6	Countersunk Hex Socket Screw	2	 
Screw package 4	M3*30		4	
Screw package 3	M5*8	Button Head Hex Socket Screw	4	 

02/ Device Overview

2.1 X1S Standard Version (800mm*800mm)

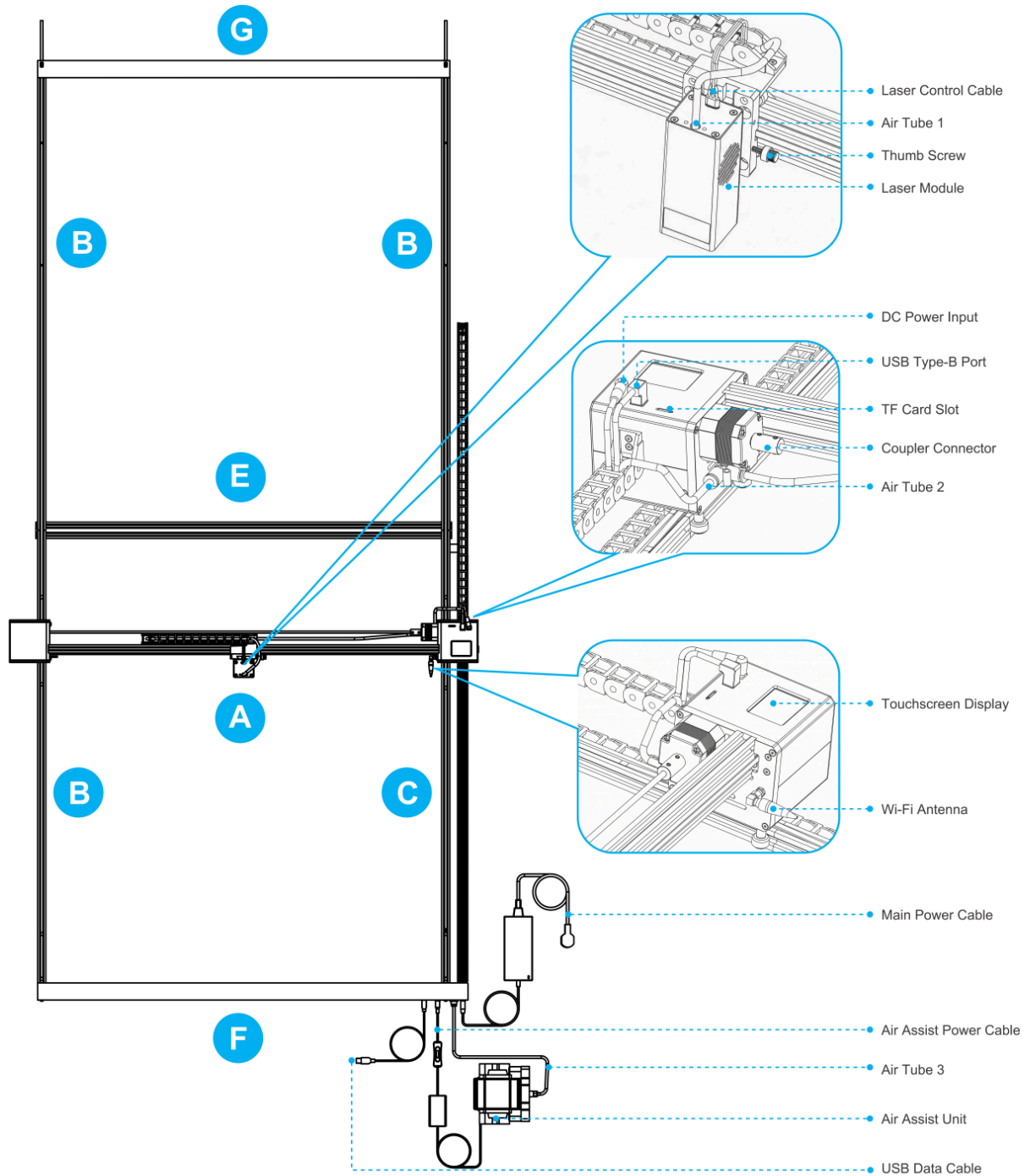
02 / Device Overview

2.1 X1S Standard Version (800mm*800mm)



2.2 X1S Extension Version (800mm*2000mm)

2.2 X1S Extension Version (800mm*2000mm)



06

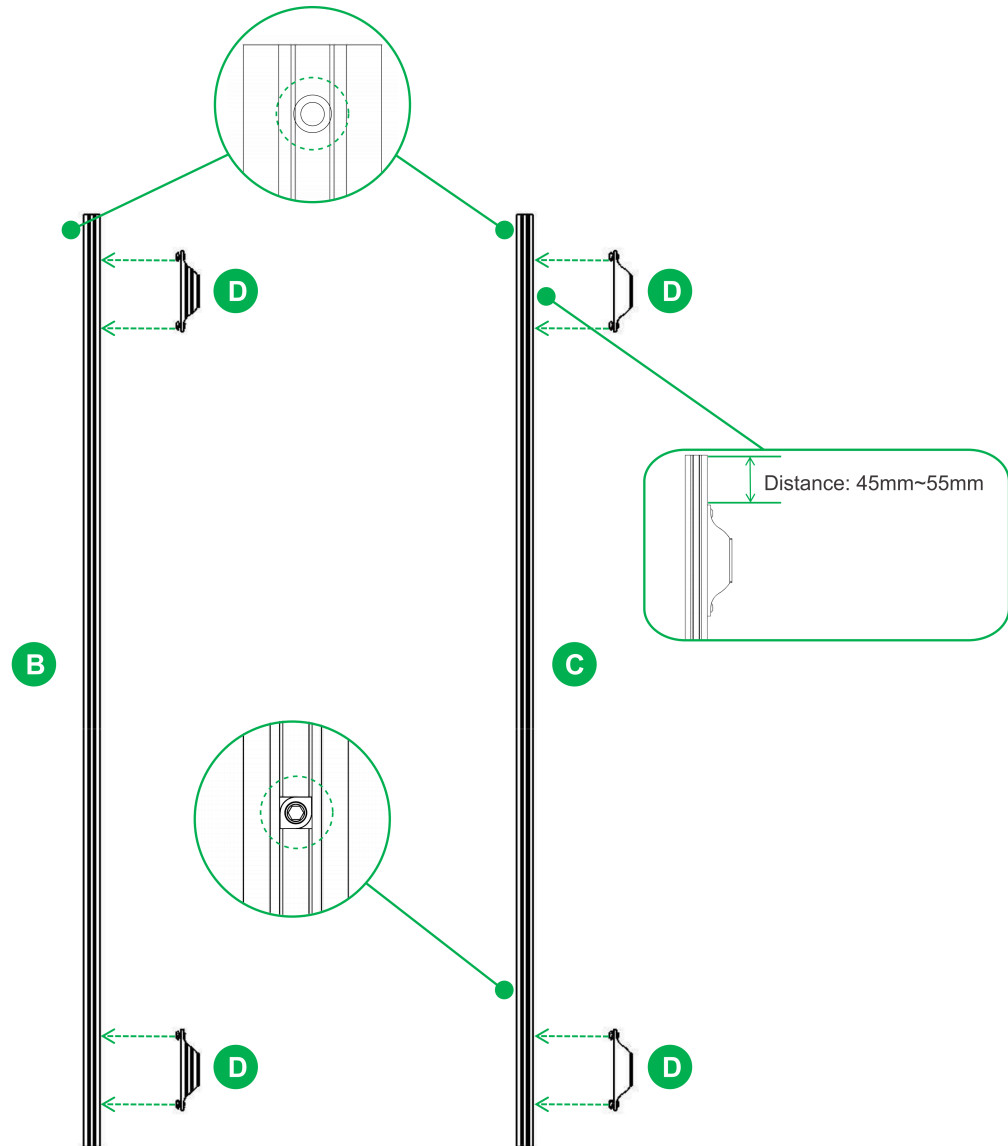
03/ X1S Standard Version Installation (800mm*800mm)

3.1 Install Support Legs

03 / X1S Standard Version Installation (800mm*800mm)

3.1 Install Support Legs

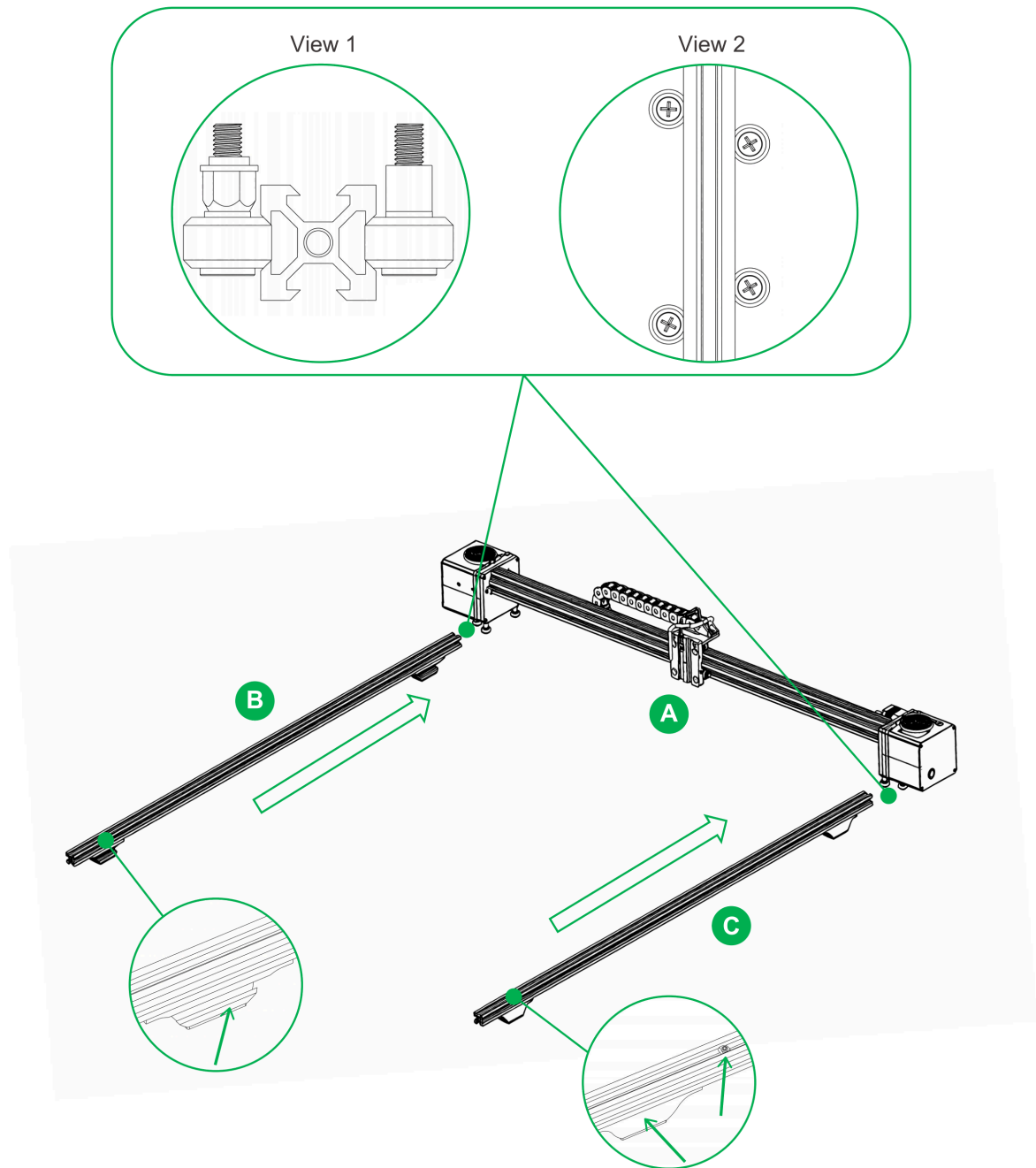
Install Support Leg D onto Parts B and C in the direction shown. Tighten screws to secure.



3.2 Install Main Unit

3.2 Install Main Unit

Align Parts B and C with the slots under the left and right wheel housings of Main Unit A.
No fastening is required at this stage.

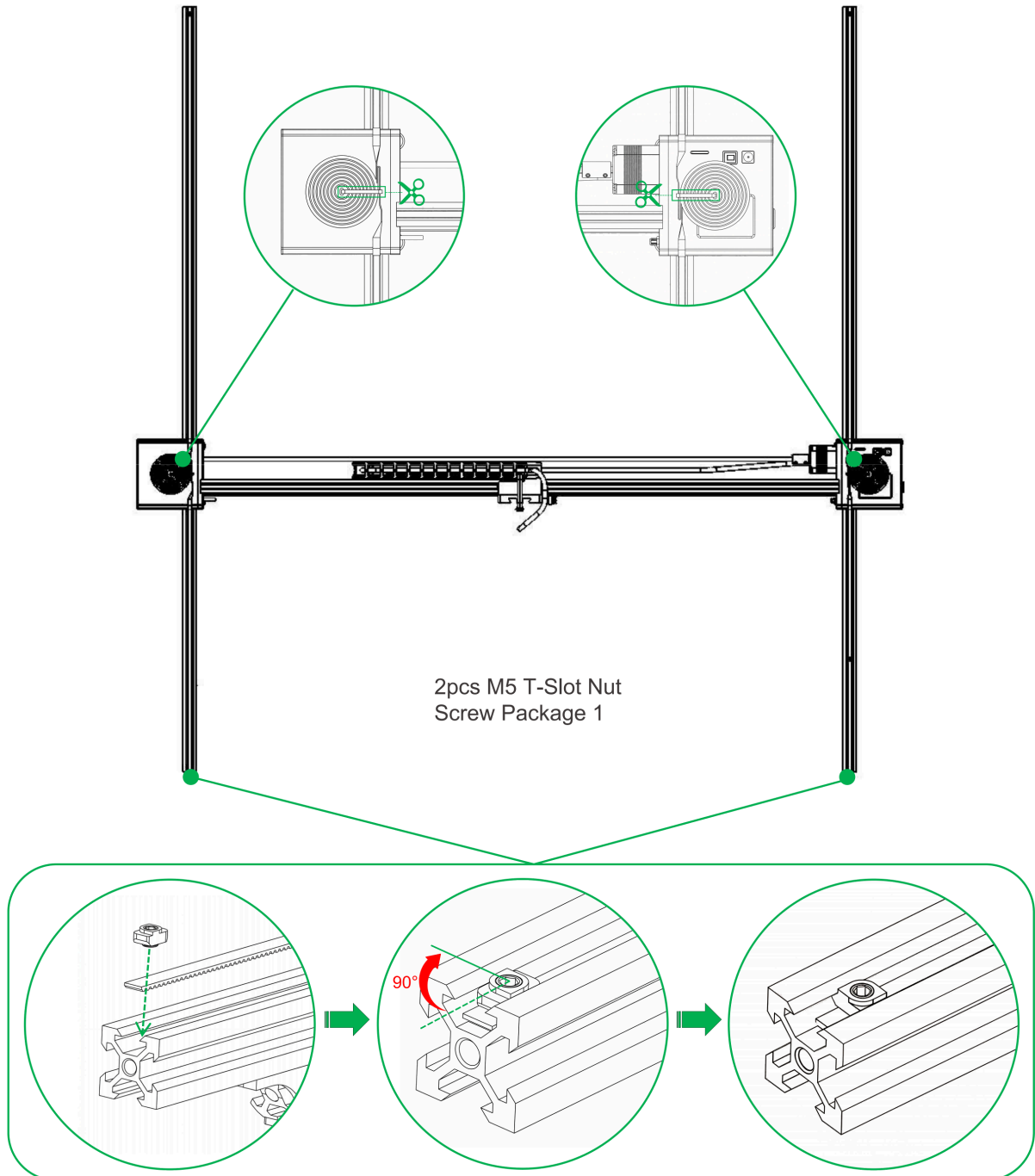


3.3 Secure Timing Belts

3.3 Secure Timing Belts

Cut the two white cable ties as shown. Unfold both timing belts with the toothed side facing down. Secure one end of each timing belt using 2 pcs T-slot nuts.

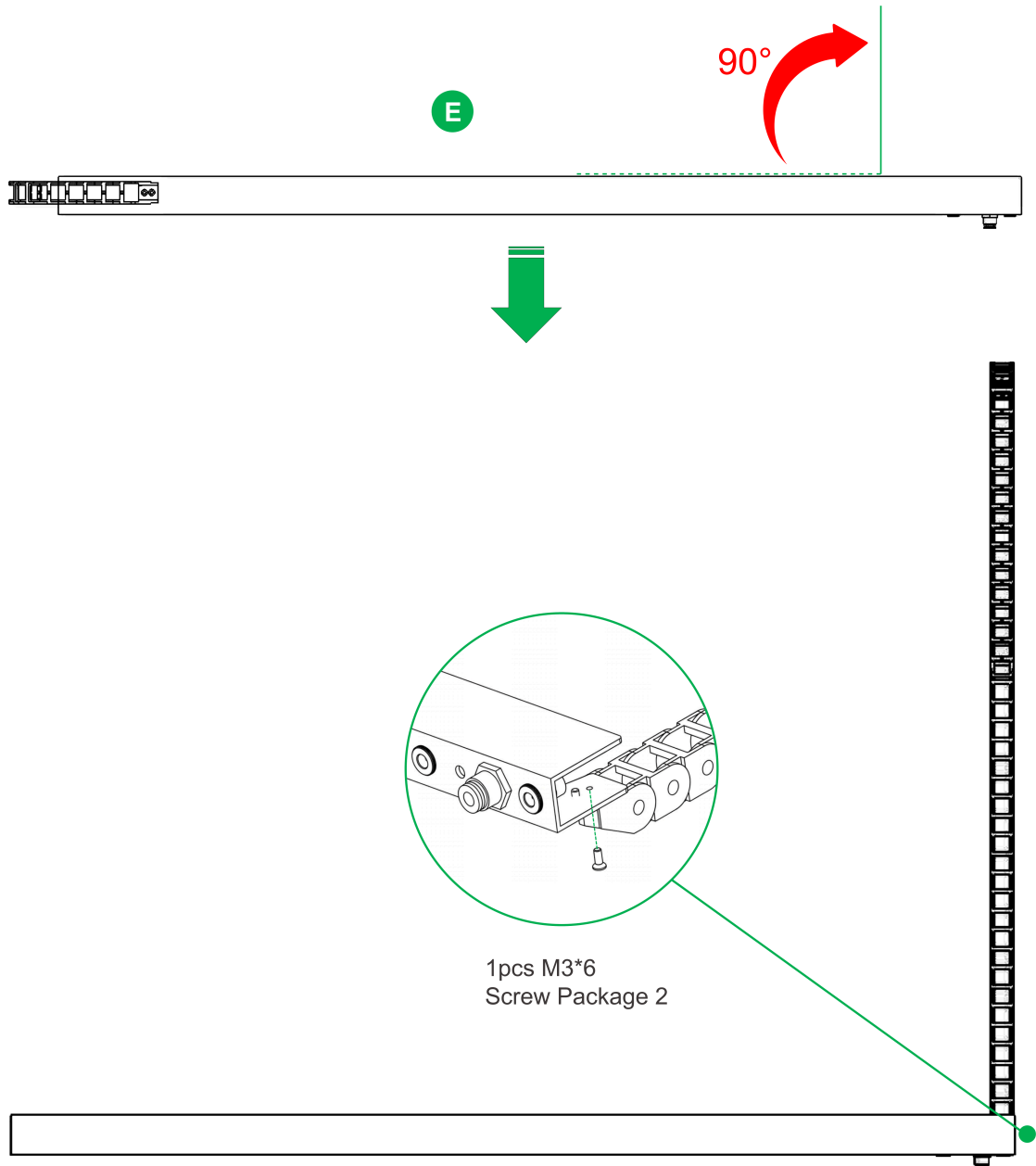
Caution: Do not damage the black timing belt during cutting.



3.4 Secure Y-axis Drag Chain

3.4 Secure Y-axis Drag Chain

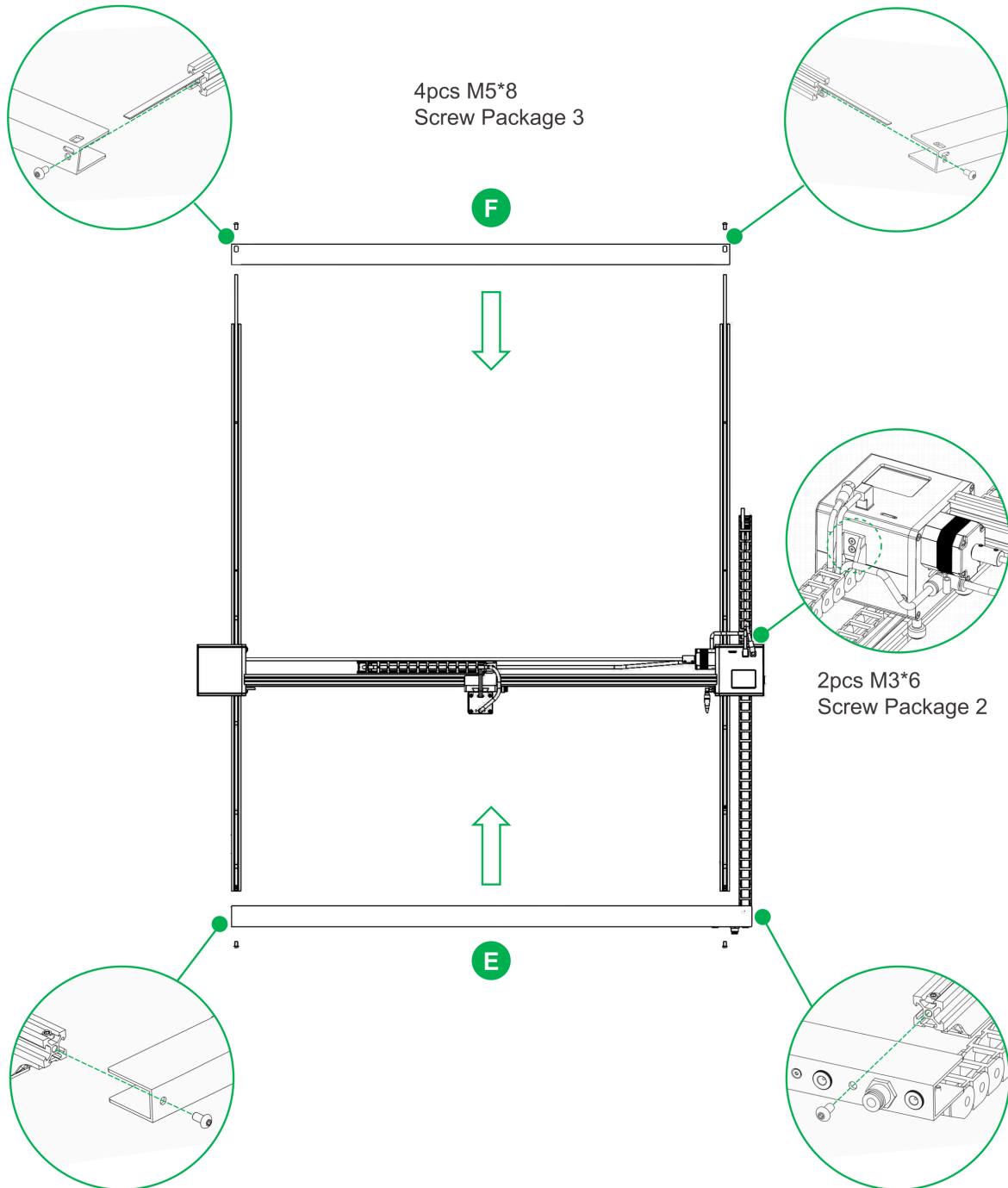
Rotate and unfold the drag chain on Part E as shown. Secure one end using screws.



3.5 Install X-axis Frame

3.5 Install X-axis Frame

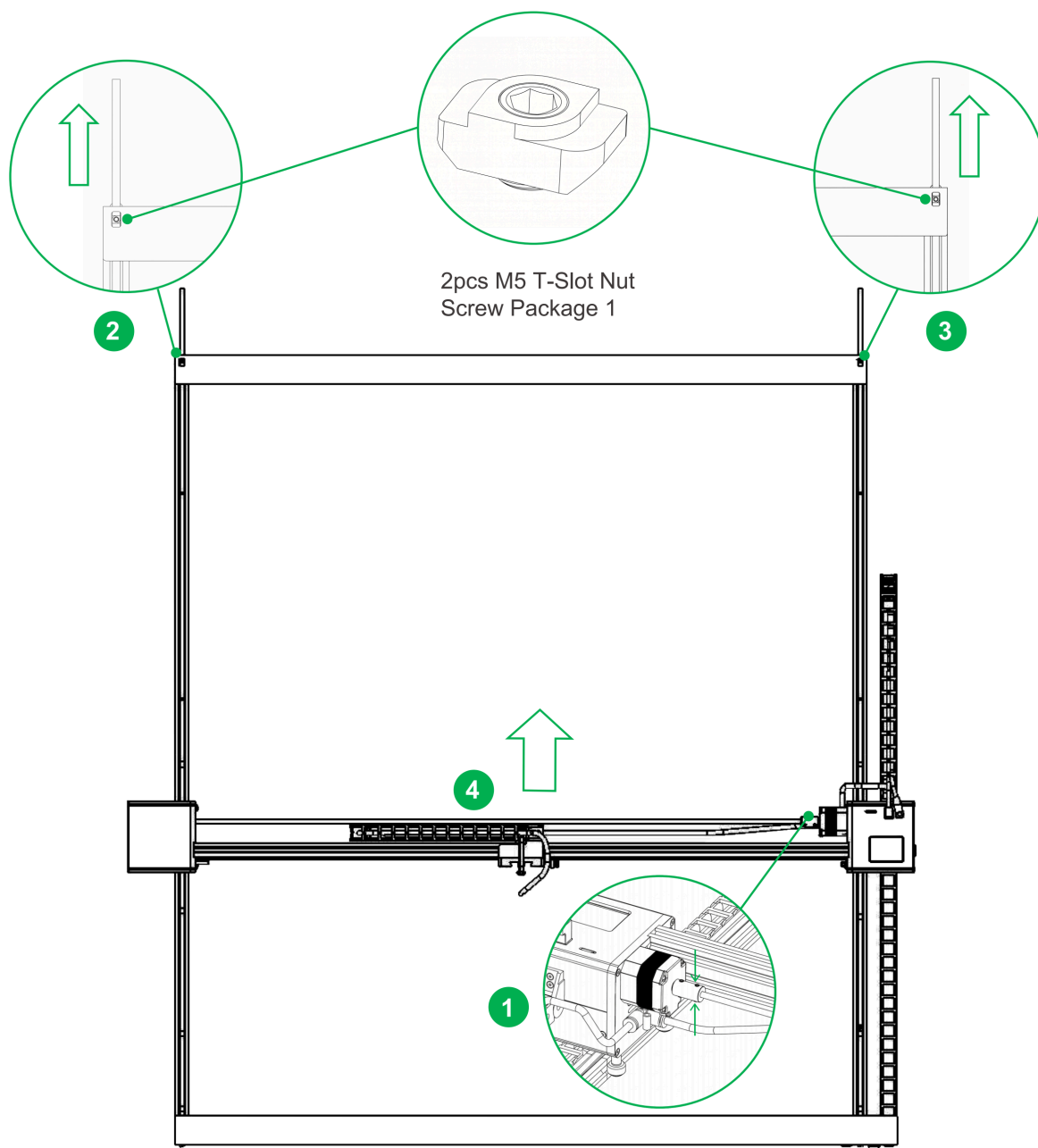
Assemble Parts E and F as shown, then secure with screws.



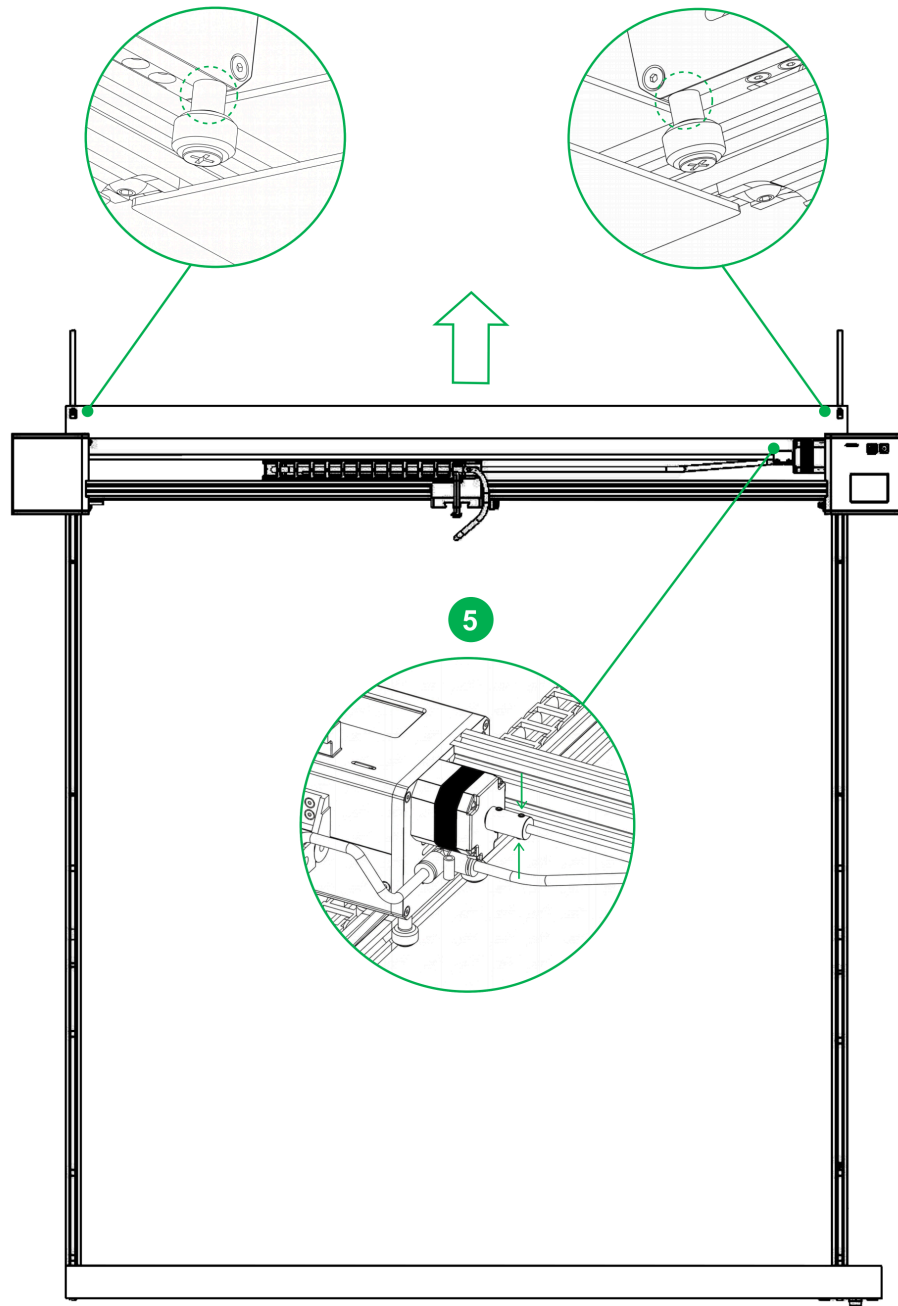
3.6 Tension Timing Belts

3.6 Tension Timing Belts

1. Loosen the two set screws on the coupling (as indicated).
2. Pull the left timing belt in the direction shown and secure it with an M5 T-slot nut.
3. Pull the right timing belt in the same direction, ensuring even tension on both sides, then secure with an M5 T-slot nut.
4. Slide Main Unit A toward the frame edge in the direction shown.



5. Ensure both sides of Main Unit A are fully flush with the frame edges, then tighten the two set screws on the coupling.



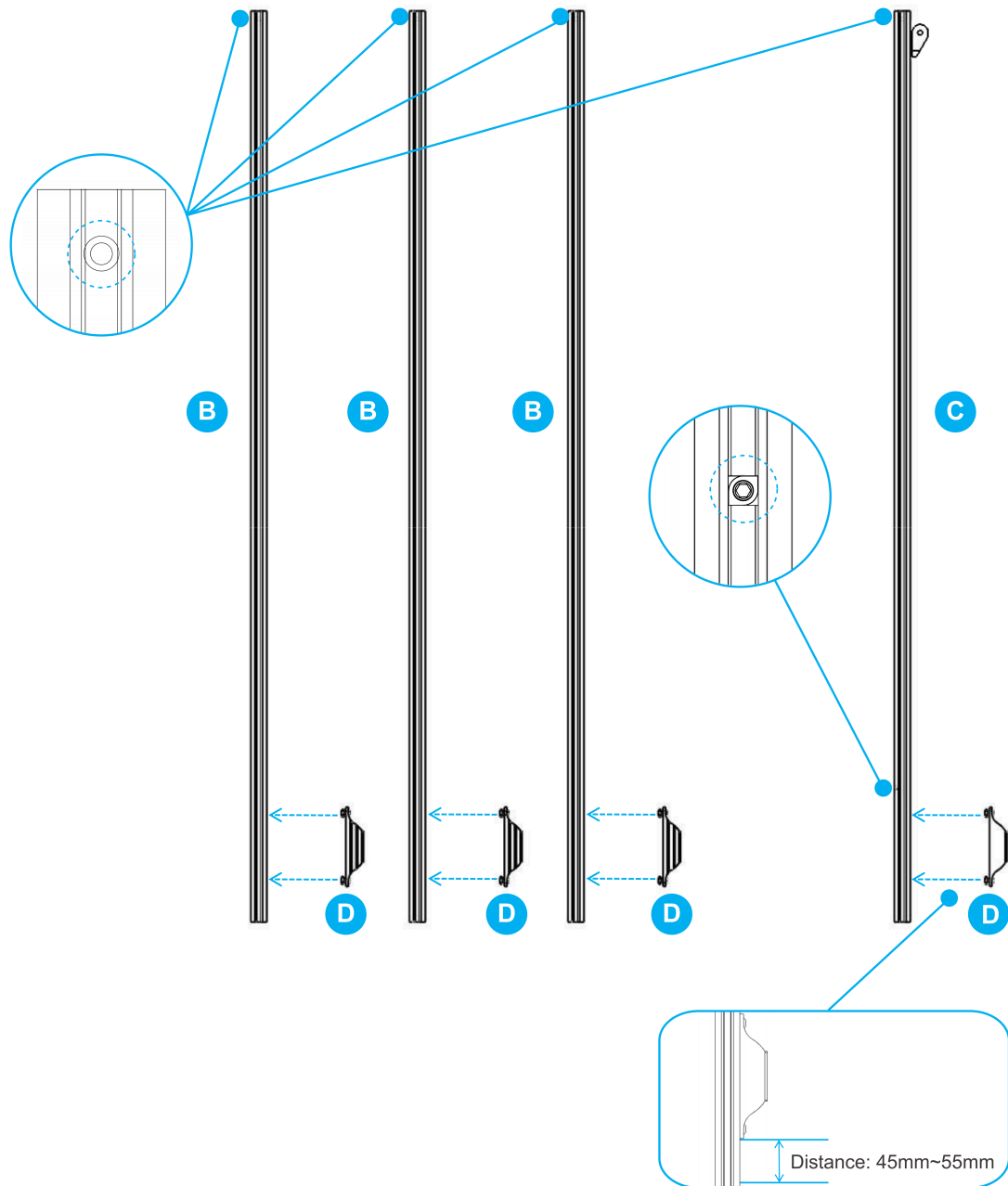
04/ X1S Extension Version Installation (800mm*2000mm)

4.1 Install Support Legs

04 / X1S Extension Version Installation (800mm*2000mm)

4.1 Install Support Legs

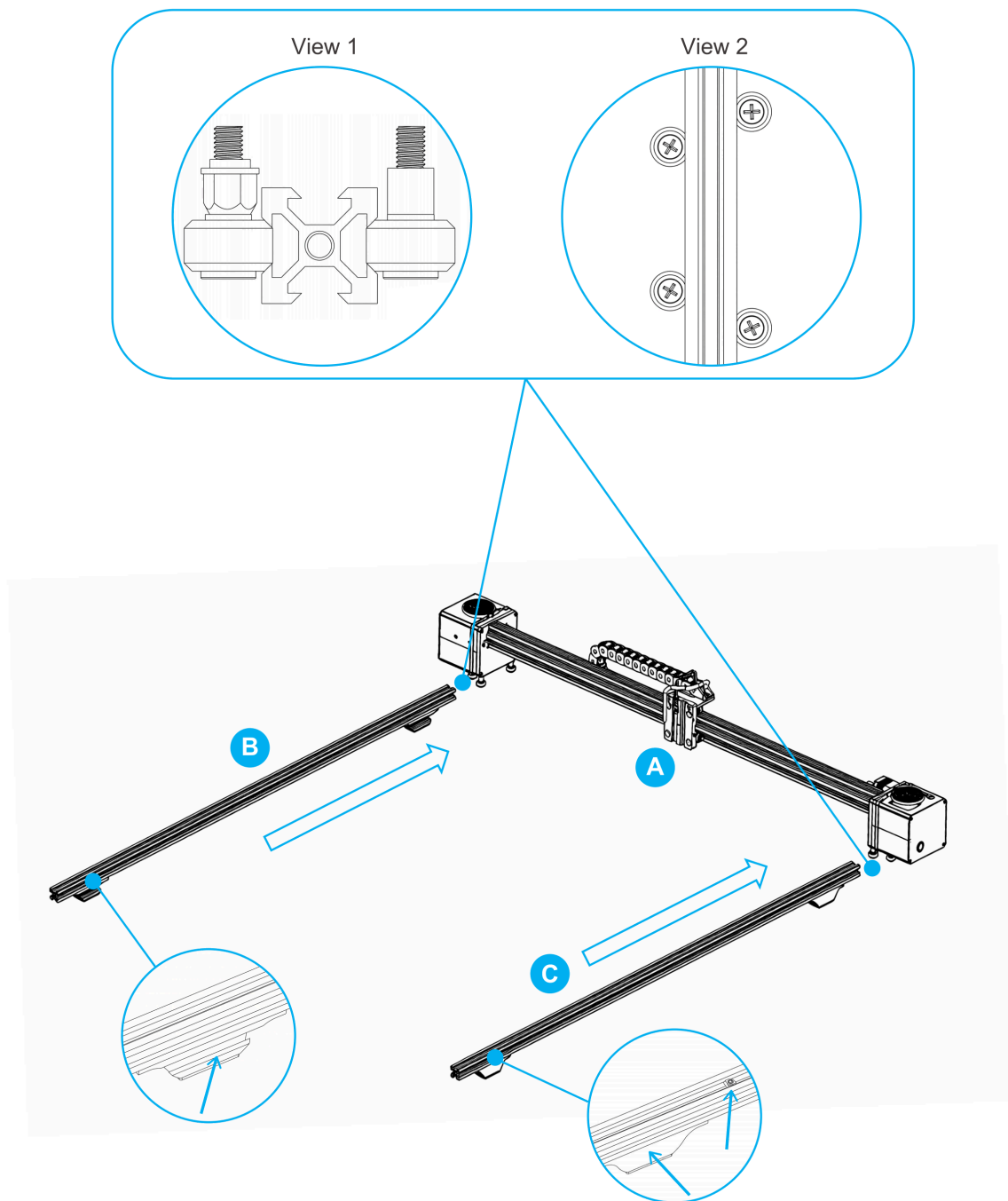
Install Support Leg D onto Parts B and C in the direction and position shown.
Tighten screws to secure.



4.2 Install Main Unit

4.2 Install Main Unit

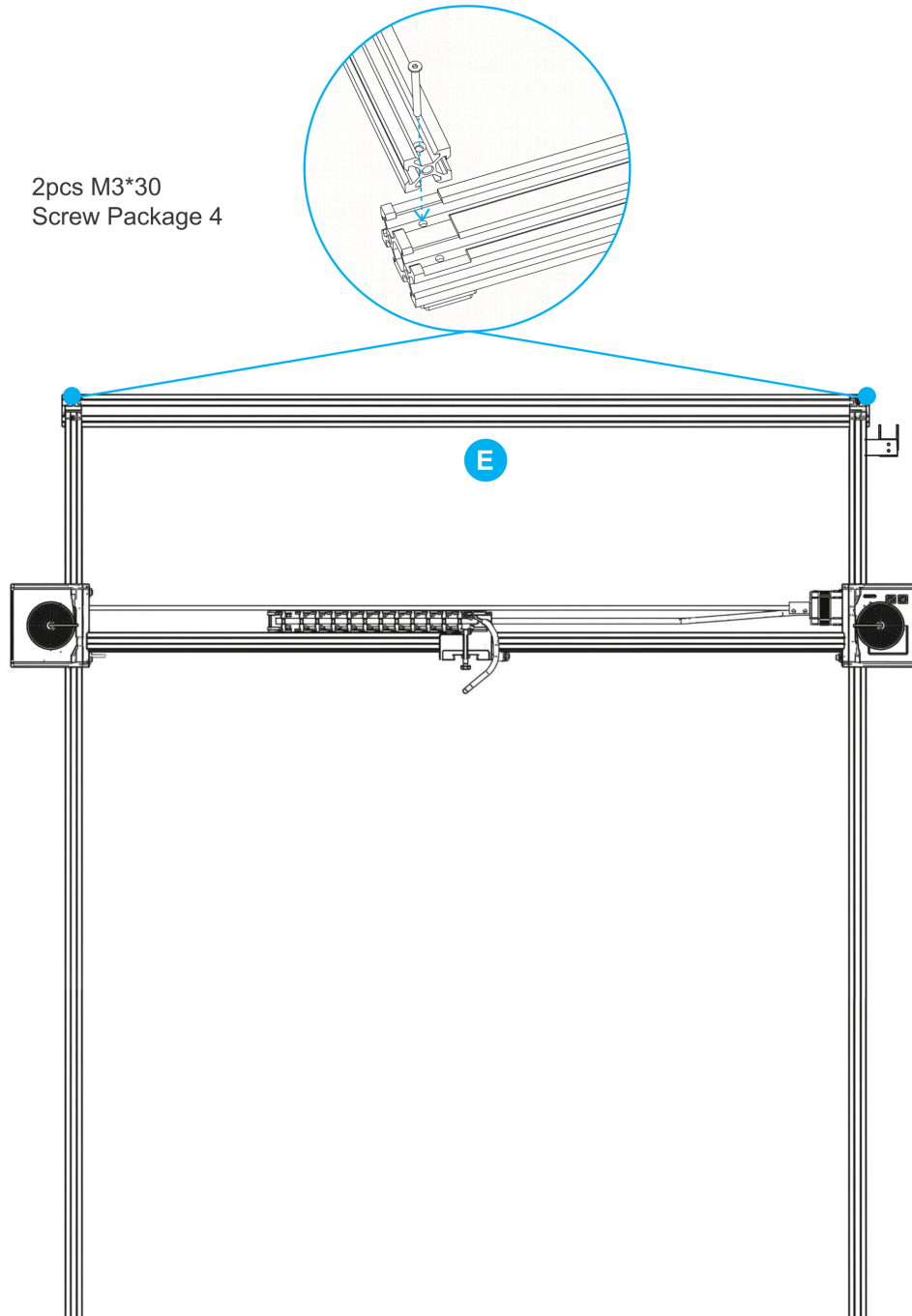
Align and insert Parts B and C into the roller slots under the left and right housings of Main Unit A.
No fastening is required at this stage.



4.3 Install Center Connecting Beam

4.3 Install Center Connecting Beam

Install Center Connecting Beam E at the position shown and secure it with screws.

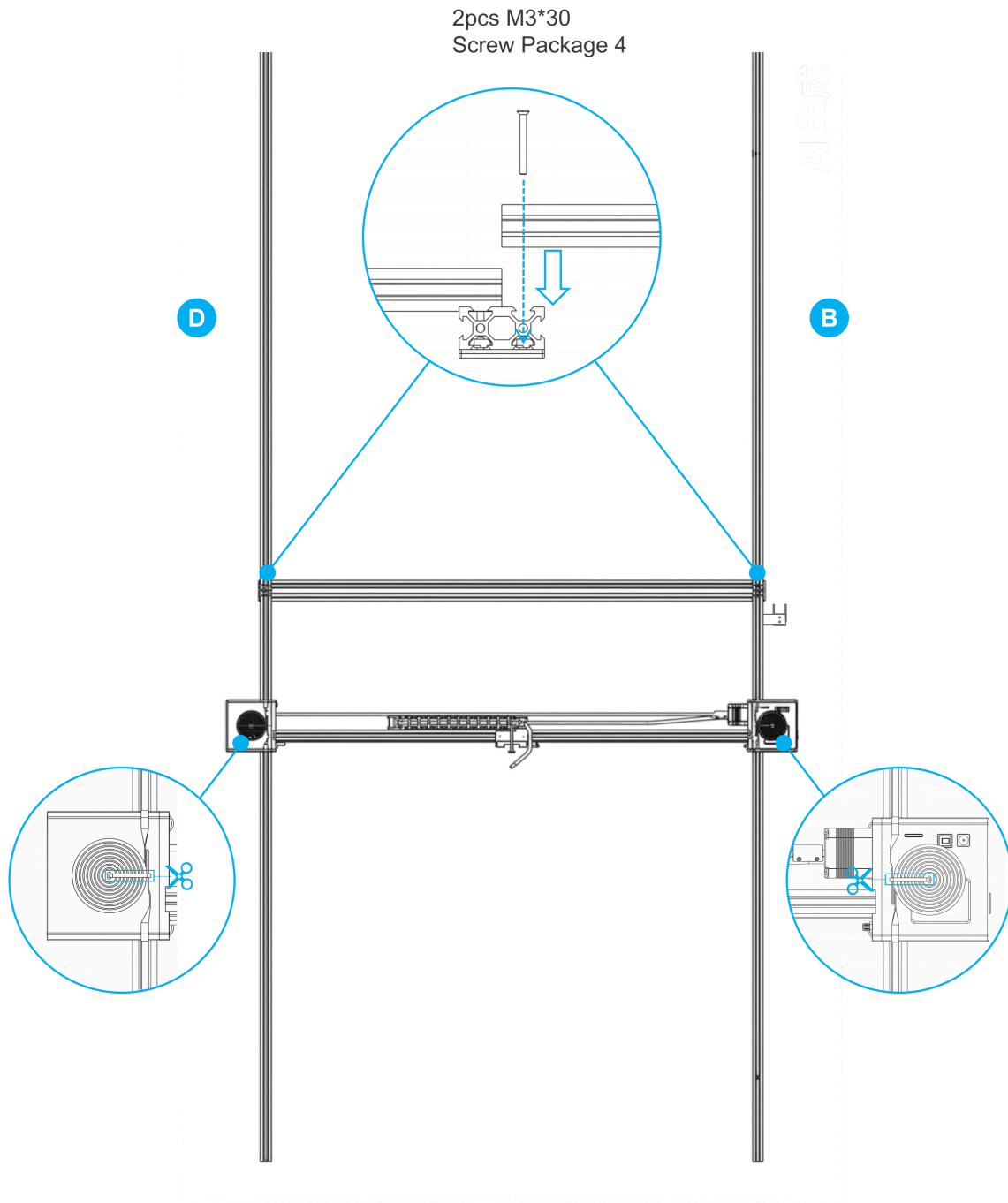


4.4 Install Y-axis Extension Frame

4.4 Install Y-axis Extension Frame

Install Y-axis Extension Frame B at the position shown and secure it with screws. Then cut the two white cable ties using scissors.

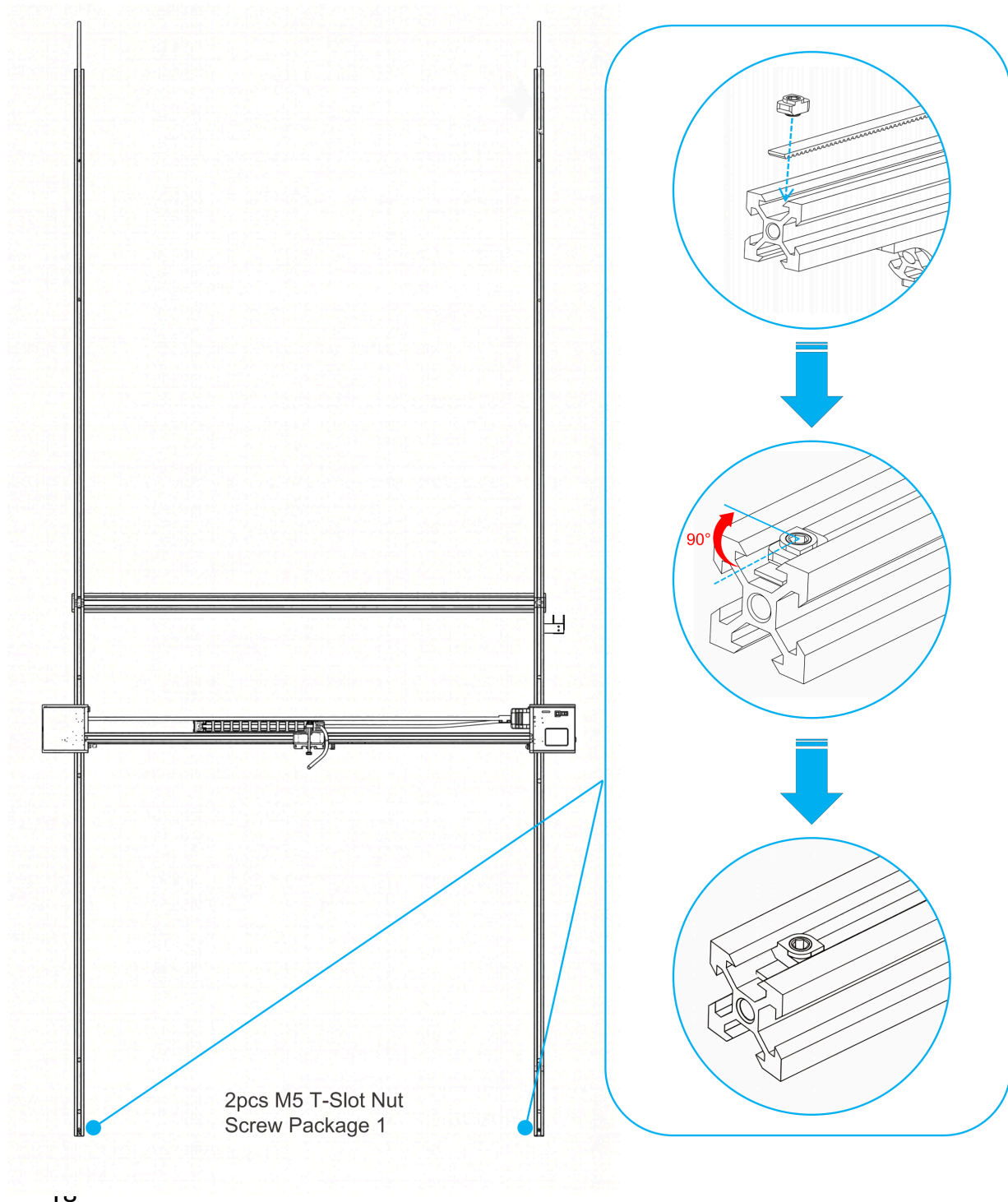
Caution: Do not damage the black timing belt during cutting.



4.5 Secure Timing Belts

4.5 Secure Timing Belts

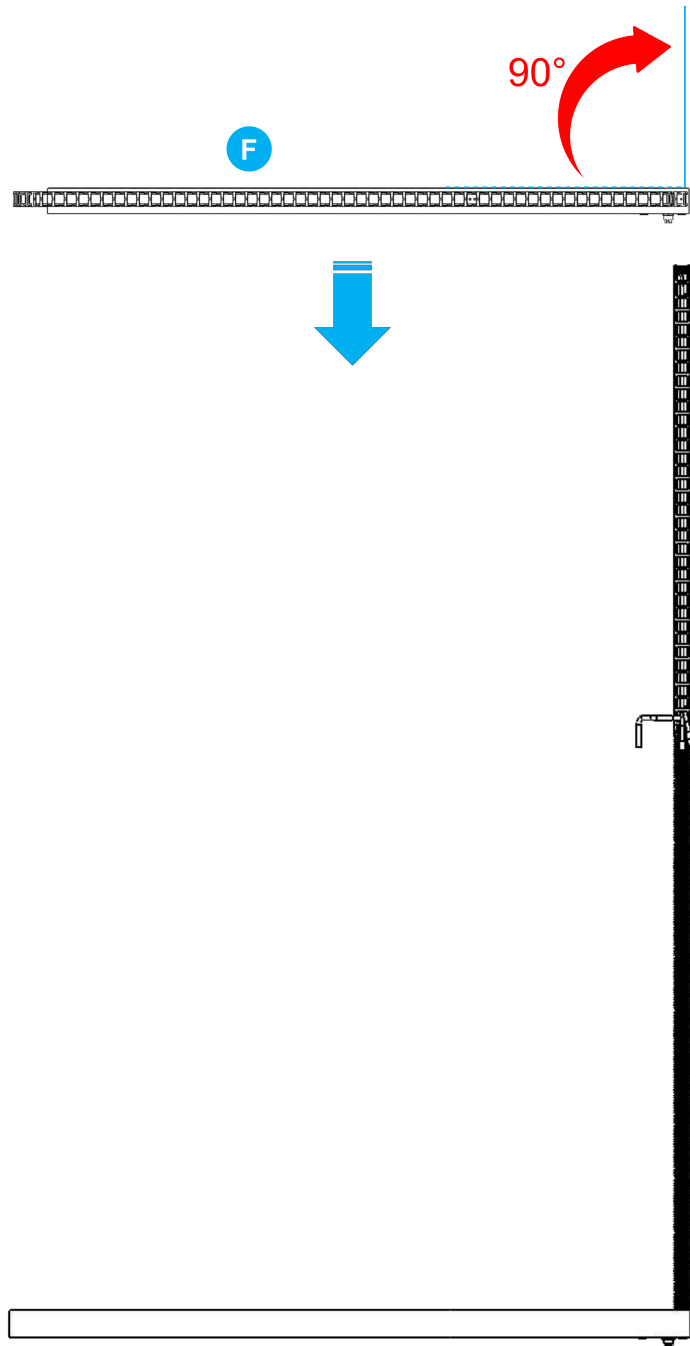
Unfold both timing belts (toothed side facing down). Secure one end of each belt using 2 pcs T-slot nuts.



4.6 Unfold the Drag Chain

4.6 Unfold the Drag Chain

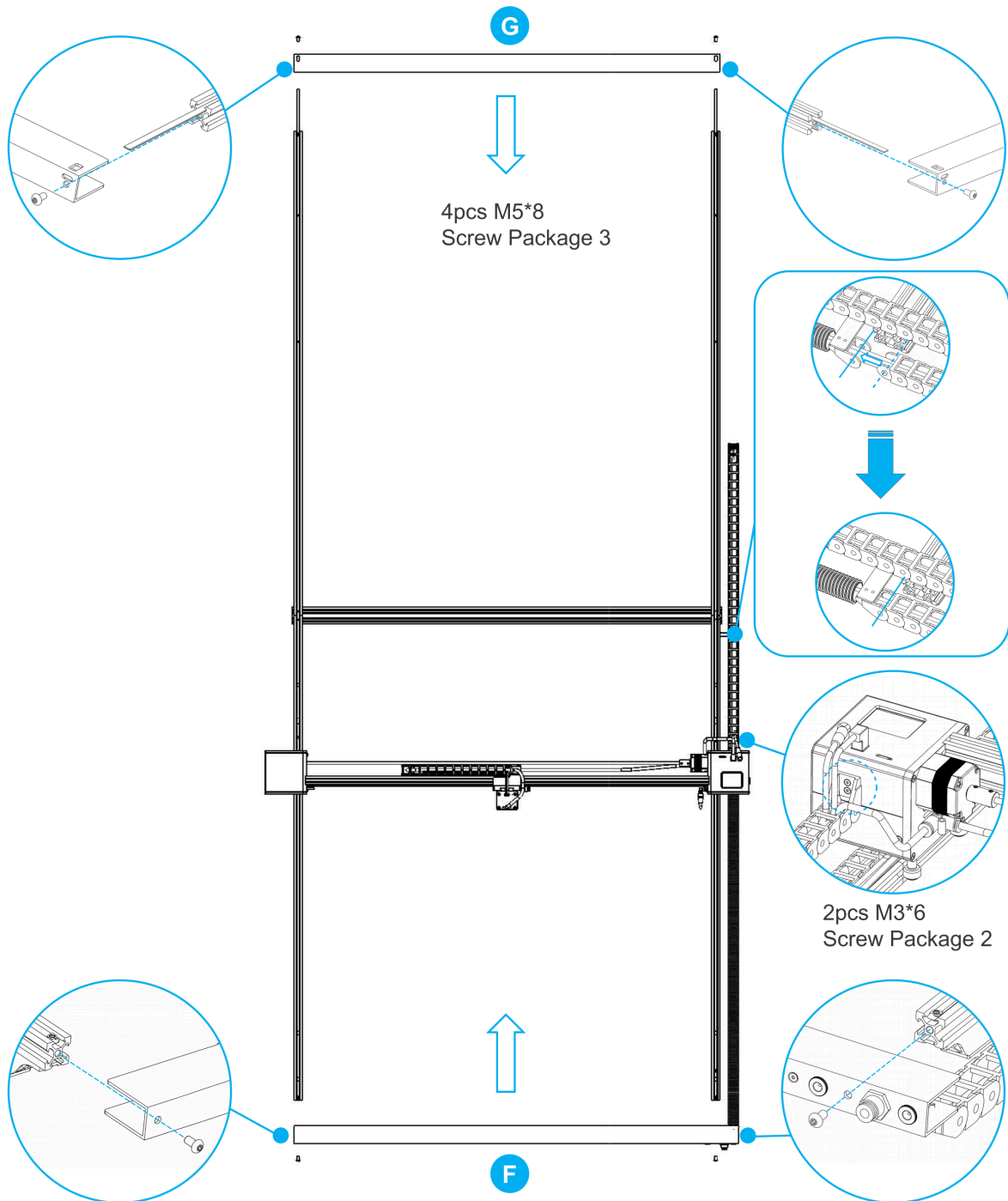
Rotate and unfold the drag chain on Part F as shown.



4.7 Install X-axis Frame

4.7 Install X-axis Frame

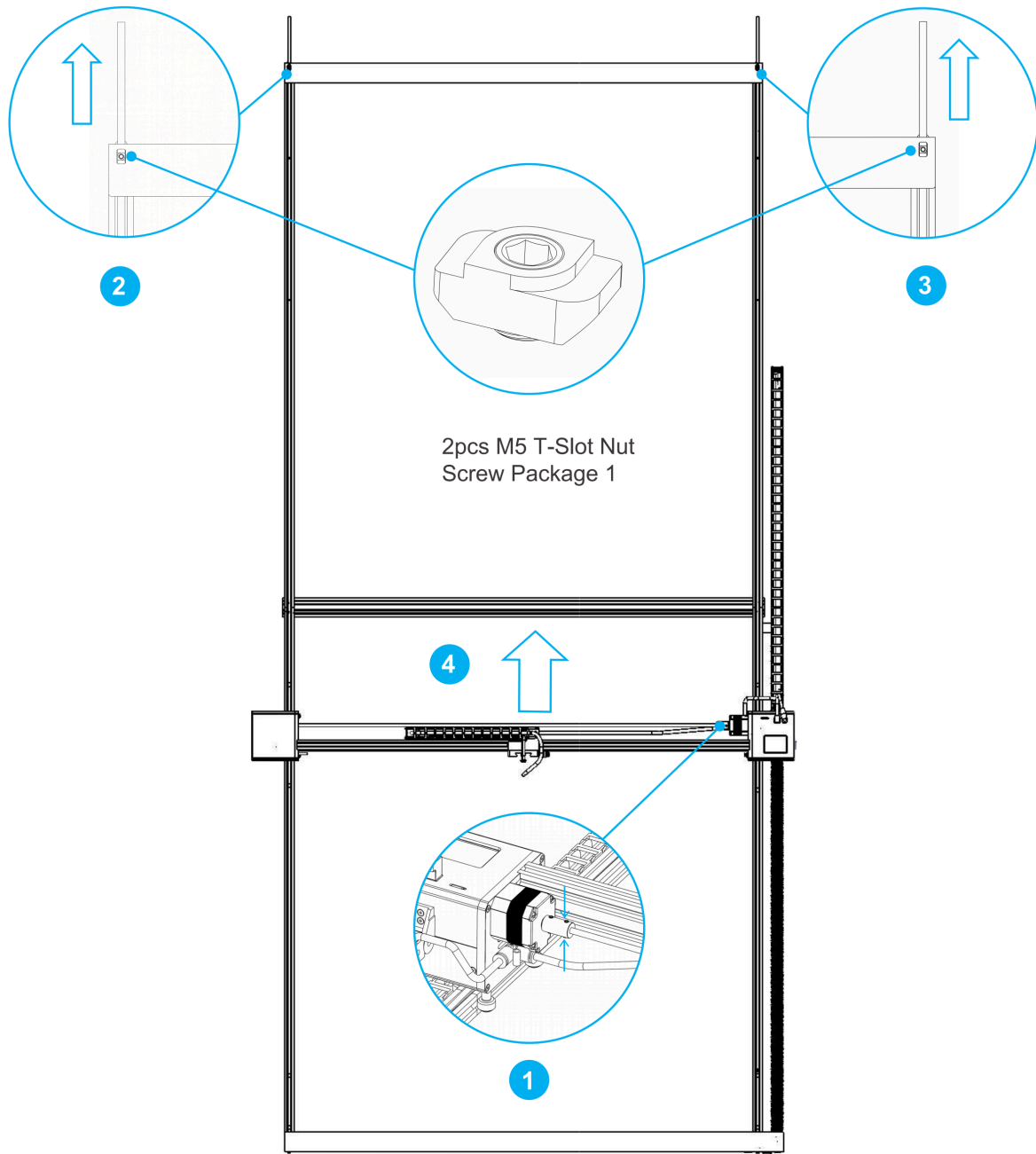
Assemble Parts F and G as shown, then secure with screws.



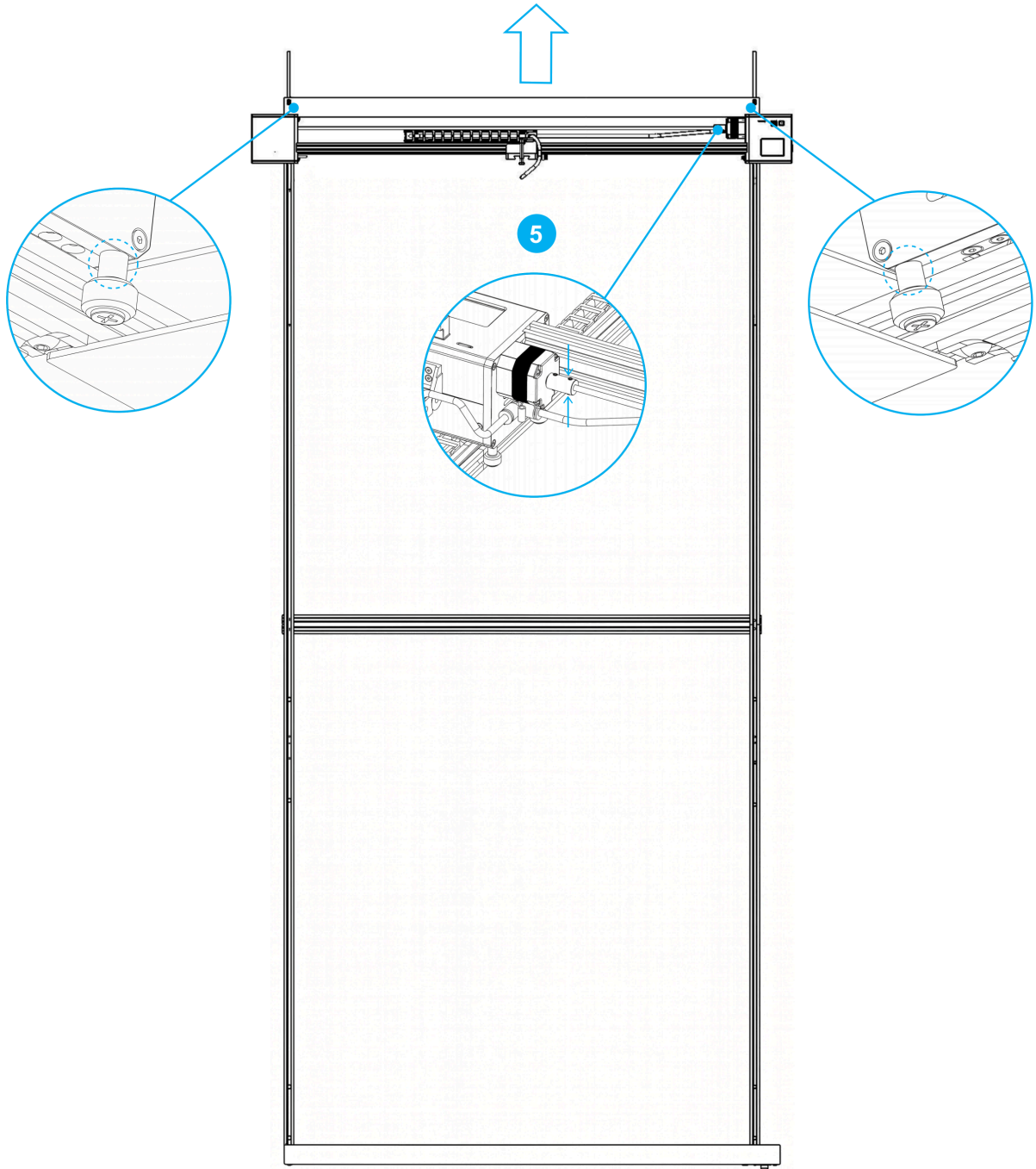
4.8 Tension Timing Belts

4.8 Tension Timing Belts

1. Loosen the two set screws on the coupling (as shown).
2. Pull the left timing belt in the direction indicated and secure it with an M5 T-slot nut.
3. Pull the right timing belt in the same direction, ensuring even tension on both sides, then secure it with an M5 T-slot nut.
4. Slide Main Unit A toward the frame edge in the direction shown.



5. Ensure both sides of Main Unit A are fully flush with the frame edges, then tighten the two set screws on the coupling.



05 / Safety Instructions

- Before use, ensure the device is properly assembled and the laser lens is clean.
- Secure the main unit firmly before operation.
- Use only the specified power adapter.
- Always wear protective goggles during operation.
- Keep flammable, explosive, or reflective materials away from the laser area.
- Do not move the device or the material while engraving is in progress.
- Keep children and pets away during operation.
- Ensure the engraving area is well ventilated.
- Do not engrave materials that may release toxic or harmful gases.
- Never direct the laser toward eyes, skin, people, or animals.

06 / Precautions

- Read all safety instructions before use.
- The laser beam may cause permanent eye injury or skin burns.
- Never direct the laser toward people, animals, or reflective surfaces.
- Always wear protective goggles during operation.
- Keep mobile phones, tablets, cameras, and other sensitive devices away from the laser area.
- Follow all operating instructions and safety guidelines during use.

07 / Disclaimer

Please read this manual carefully before use.

Failure to follow the instructions and safety guidelines in this manual may result in personal injury, property damage, or device damage.

By using this product, you acknowledge and accept all safety instructions, warnings, and operating guidelines described in this manual.

Users are responsible for operating the product safely and in accordance with applicable local laws and regulations.

08 / Warnings

- This product uses a Class 4 laser. Direct exposure to the laser beam may cause serious eye or skin injury.
- Always wear protective goggles and use appropriate protective equipment during operation.
- Keep flammable, explosive, and reflective materials away from the laser area.
- Ensure the working environment is clean and well ventilated.
- Do not engrave materials that may release toxic, harmful, or corrosive gases.
- Use only the specified power adapter and power supply.
- Do not operate the device under unstable voltage or overloaded power conditions.
- Keep the device away from strong electromagnetic interference sources.
- Never look directly into the laser beam or point the laser toward people or animals.
- Ensure the material being engraved is suitable for laser engraving.

09/ Warranty Terms

09 / Warranty Terms

Before requesting warranty service, please contact Tyvok Customer Support for assistance.
Please include proof of purchase and a description of the issue when applying for repair, replacement, or return service.

Warranty Policy: <https://tyvok.com/pages/warranty-policy>

Service Type

Repair ☐ Replacement ☐ Return ☐

Name: _____ Telephone: _____

Address: _____

Email: _____ Order Number: _____

Purchase Day: _____ Sales Channel: _____

Issue Description: _____

Service Record: _____

Users are responsible for operating the product in compliance with applicable local laws and regulations.
Tyvok is not responsible for damage or liability caused by improper use of the product.
Product appearance and specifications may vary slightly depending on the model and production batch.
Shenzhen Tyvok Technology Co., Ltd. reserves the right of final interpretation.



Shenzhen Tyvok Technology Co., Ltd.

We support global online technical support services for this product. If you have any problems during your use, please contact cs@Tyvok.com.

10 / Software & Support

Software & Tutorials

- 1 Download software from the official website:
<https://tyvok.com/pages/software>
- 2 Tutorials and setup videos for LaserGRBL, LightBurn and TyvokStudio are available on the Tyvok Wiki and YouTube channel.



TyvokStudio



LaserGRBL



LightBurn

After Sales Service

Global online technical support is available for this product.

If you need assistance, please contact Tyvok Customer Support.



cs@tyvok.com



support@tyvok.com

Community & Tutorials

Follow Tyvok for tutorials, product updates and community content.



Facebook : Tyvoklaser



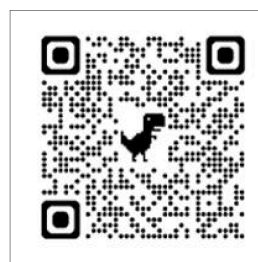
YouTube : @Tyvokspiderlaser



Wiki



Youtube



Facebook

PARAMETERS

Model

Spider X1S

Machine size

3.8ft*3.8ft(1154mm*1150mm) / 7.6ft*3.8ft(2304mm*1150mm)

Net weight

About 12KG

Working area

2.6ft*2.6ft(800*800mm) / 2.6ft*6.6ft(800*2000mm)

Input

100-240V ~ 50-60Hz

Output

24.0V == 4.0A 24.0V == 5.0A 24.0V == 10.0A

Machine Power

96W/120W/240W

Laser wave length

455±5nm

Laser power

10W/20W/60W

Connection method

USB/Wi-Fi

Laser engraving software

LaserGRBL , LightBurn , TyvokStudio

Format files

jpeg, png, bmp, svg, dxf

Type of supporting materials

Cardboard, wood, bamboo, rubber, leather, fabric, acrylic, painted metal, plastic, etc.