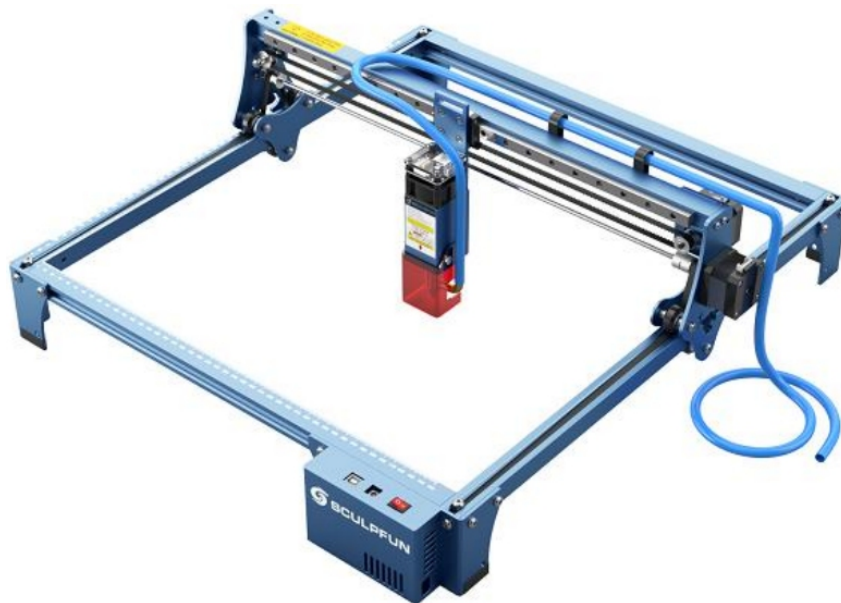




# SCULPFUN S30 MAX Laser Engraver Instruction Manual

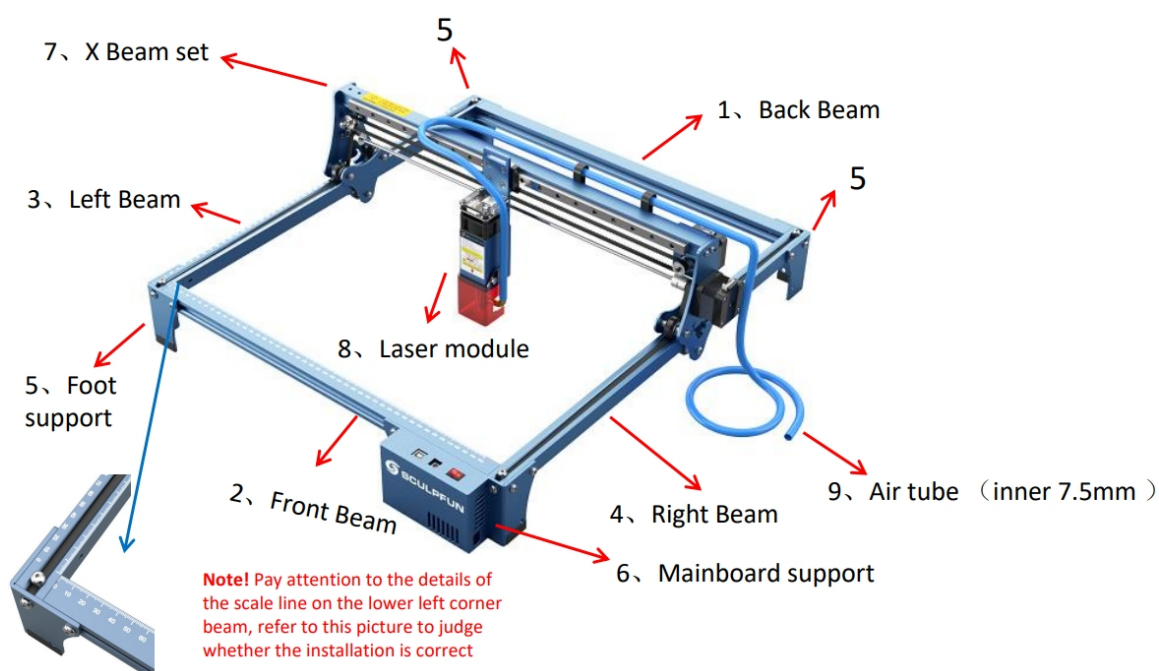
[Home](#) » [SCULPFUN](#) » SCULPFUN S30 MAX Laser Engraver Instruction Manual 



## Contents

- 1 Preview the main parts
- 2 Assemble the back, left and right beams
- 3 Assemble X beam set and front beam
- 4 Install the belt
- 5 Install T nut
- 6 Install laser module and Laser shield
- 7 Install air pipes and cables
- 8 Important Using Tips
- 9 Documents / Resources
- 9.1 References

## Preview the main parts



## Main Unit:

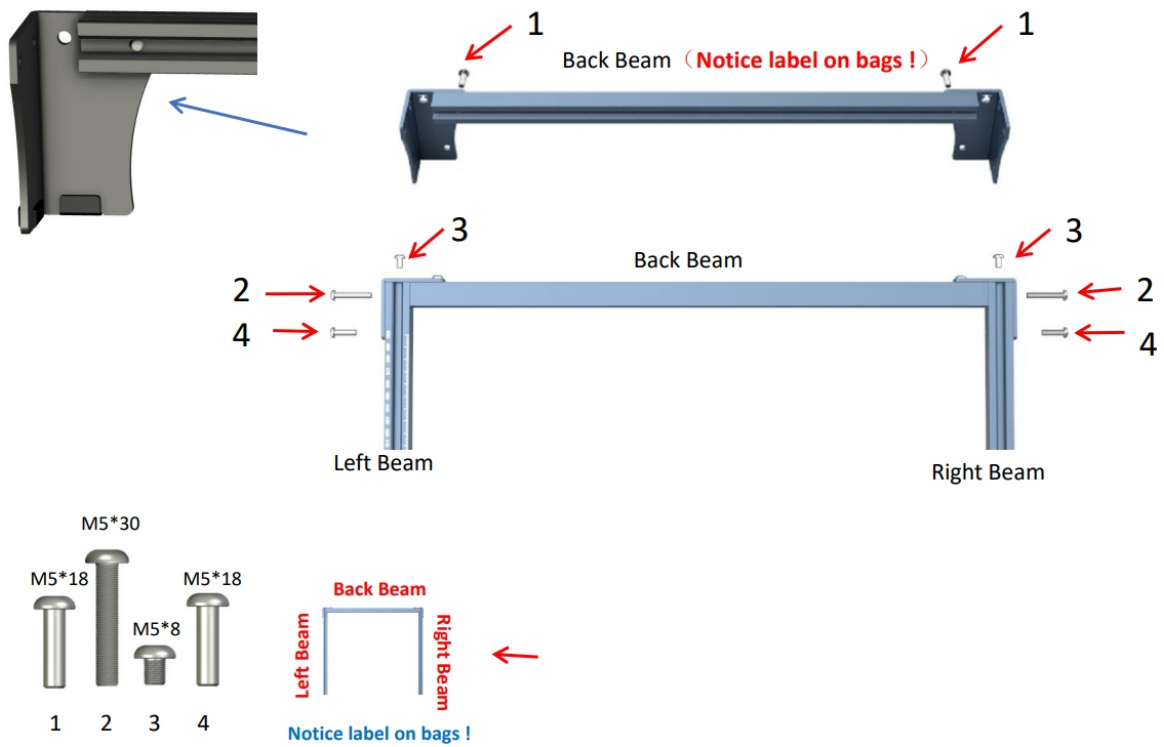
|  |   |  |
|--|---|--|
| 1 Back Beam<br>2 Front Beam<br>3 Left Beam | 4 Right Beam<br>5 Foot support<br>6 Mainboard support | 7 X Beam set<br>8 Laser module<br>9 Air tube |
|--|---|--|

## Note!

This picture is the total picture after the assembly is completed. In the subsequent steps, if you are unclear about the installation details, you can check it with this picture.

## Step 1

## Assemble the back, left and right beams

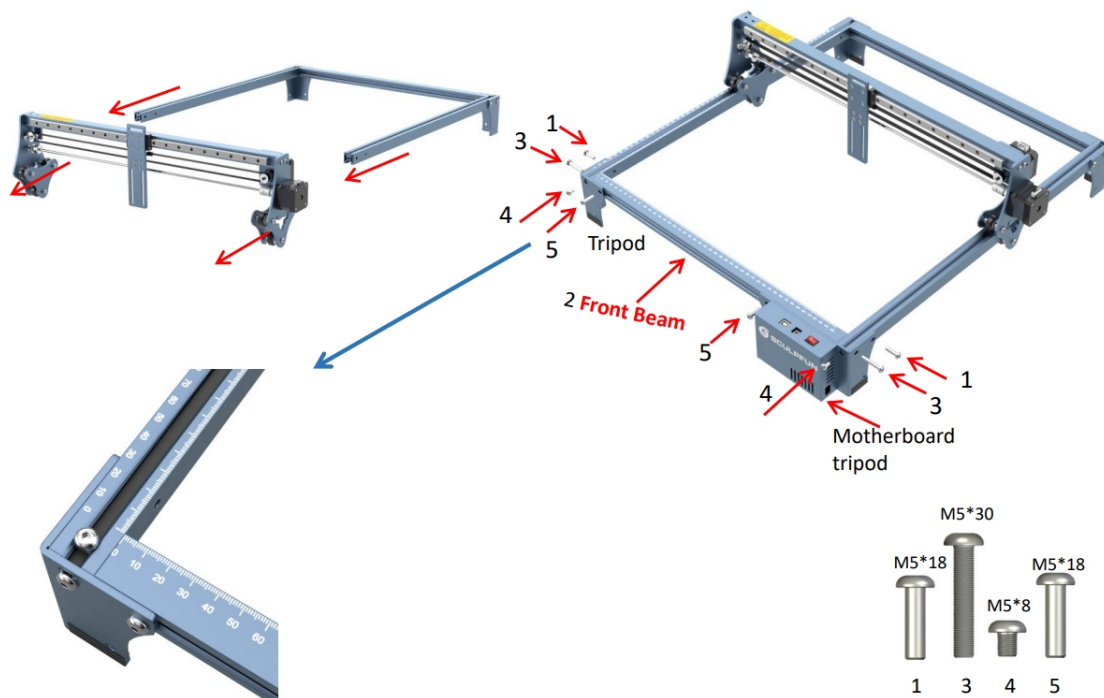


## Note

1. Find the required tool and screw model before starting assembly: T-shaped hexagon wrench, Step 1 Screw bag, left/right/back frame beams, tripod\*2.
2. Notice label position! There is label paper on the beam, and the label is placed in the position as shown on the left.
3. When assembling, ensure that the edges of the beam and the tripod are neatly parallel and tight.
4. The picture on the left is the frame after Step 1 is assembled.

## Step 2

### Assemble X beam set and front beam

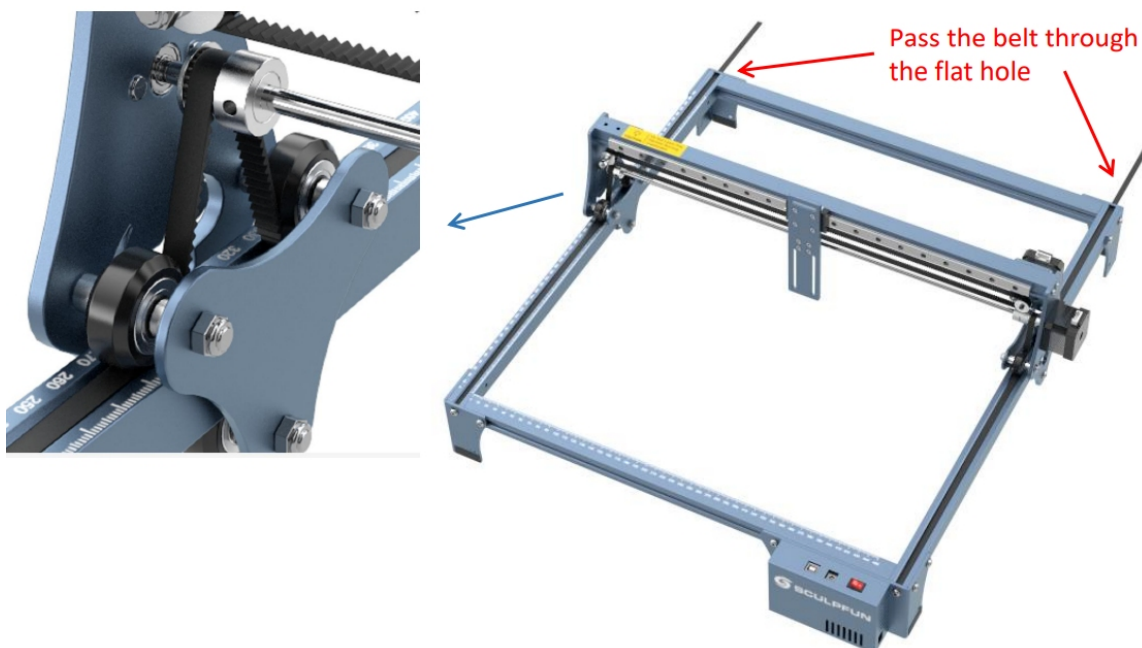


### Assembly steps:

1. Push the X beam assembly into the U-shaped frame, paying attention to the direction of white logo!
2. Required components: tripod\*1, motherboard tripod, front frame beam, Step3 screw pack, T-shaped hexagonal wrench.
3. Assemble the tripod, main board tripod, and front frame beam according to the right figure, install them in the order of step 12345, and tighten the screws 1/3/4/5 in the order.

### Step 3

### Install the belt



### Installation steps:

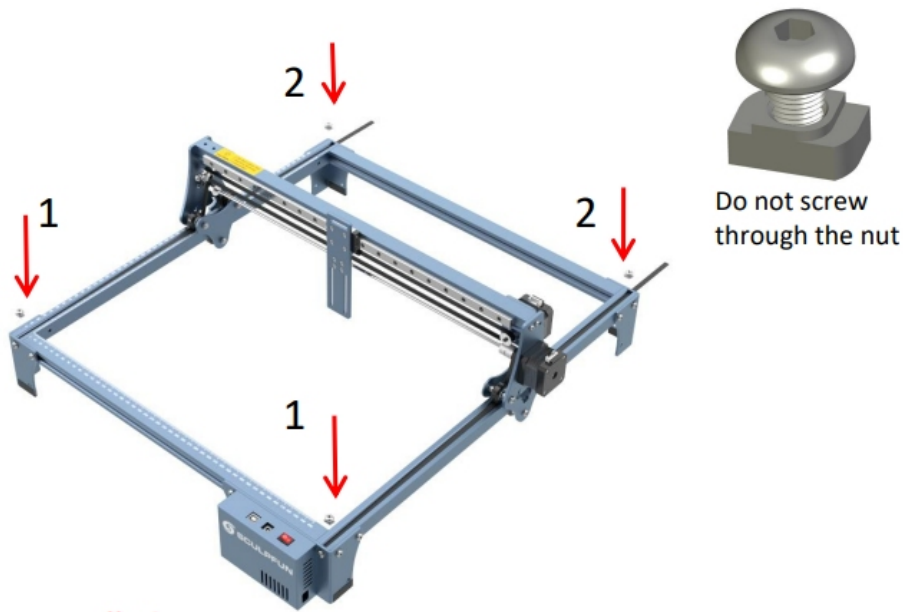
Install the belt to the position shown in the figure, note:

1. The belt should be installed in the direction of the arrow in the figure above.
2. The tooth pattern of the belt faces downwards and engages with the gears.
3. Please pass the belt through the flat hole, there should be an extra part of the belt at one end for easy pulling and tightening of the belt.

We suggest you don't cut off the extra belt after Step 4 , this is good for the future maintenance.

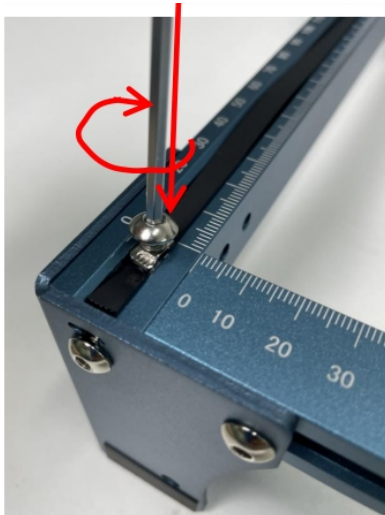
#### Step 4

#### Install T nut

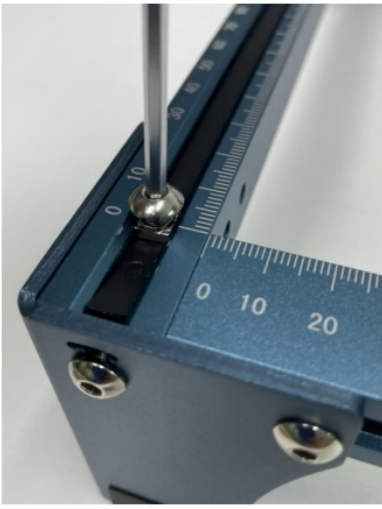


#### Installation steps:

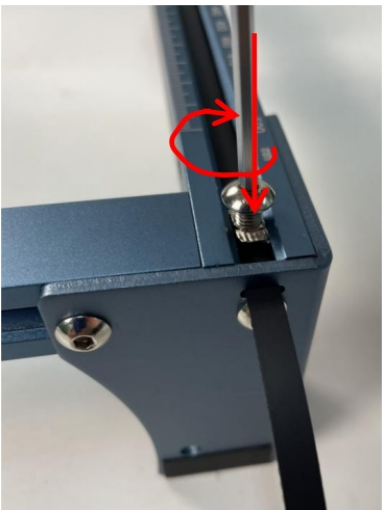
1. First install the T-nut on one side as shown in the figure.
2. Install the other end of the T-nut on the other side, and note that the long side of the T-nut is perpendicular to the groove after installation. After the installation is complete, the belt is in a tight state. For extra belts, if you are not familiar with the use of belts, we suggest that you do not cut off the extra belts



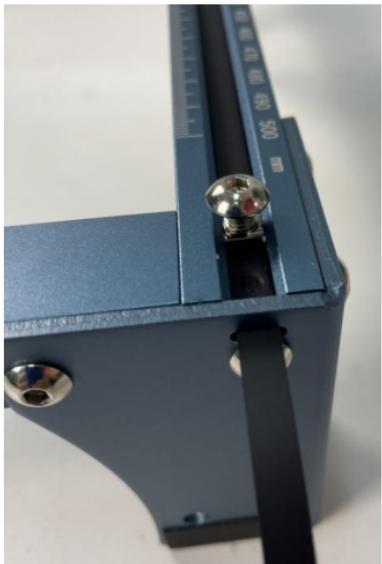
Put the T nut into the groove, the long side is parallel to the groove, Strongly press the T nut while rotating the wrench clockwise to make the long side of the T nut perpendicular to the groove



Tighten the screws and keep the long side of the T-nut perpendicular to the groove.

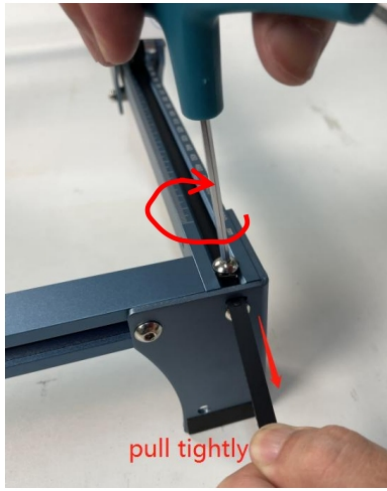


Put the T nut into the groove, the long side is parallel to the groove, Strongly press the T nut while rotating the wrench clockwise to make the long side of the T nut perpendicular to the groove



Do not tighten the T nut, pull the belt with your hand to make the belt tight

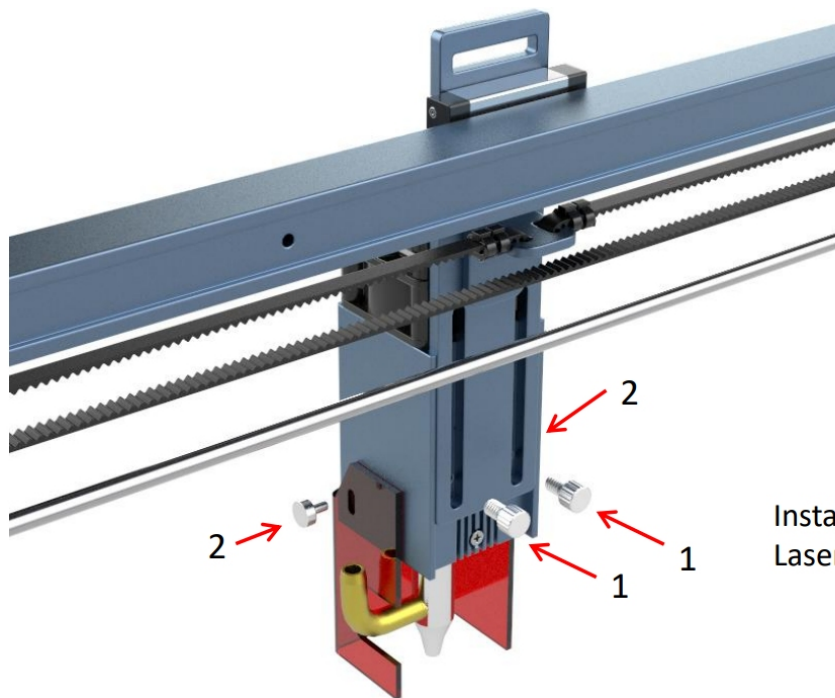




With the belt tightened, tighten the screws to keep the long side of the T-nut perpendicular to the groove.

## Step 5

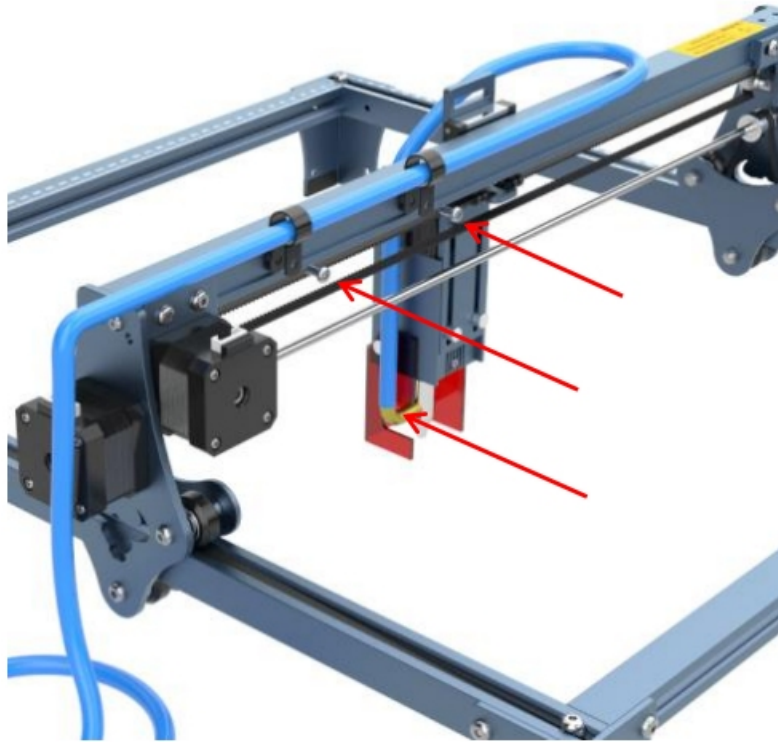
### Install laser module and Laser shield



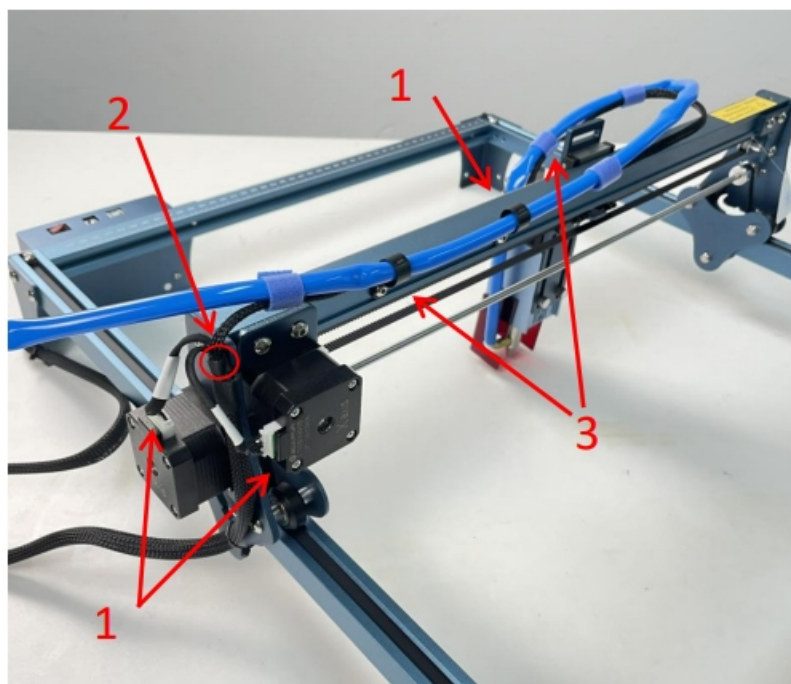
Install laser module and  
Laser shield by hand screws

## Step 6

### Install air pipes and cables



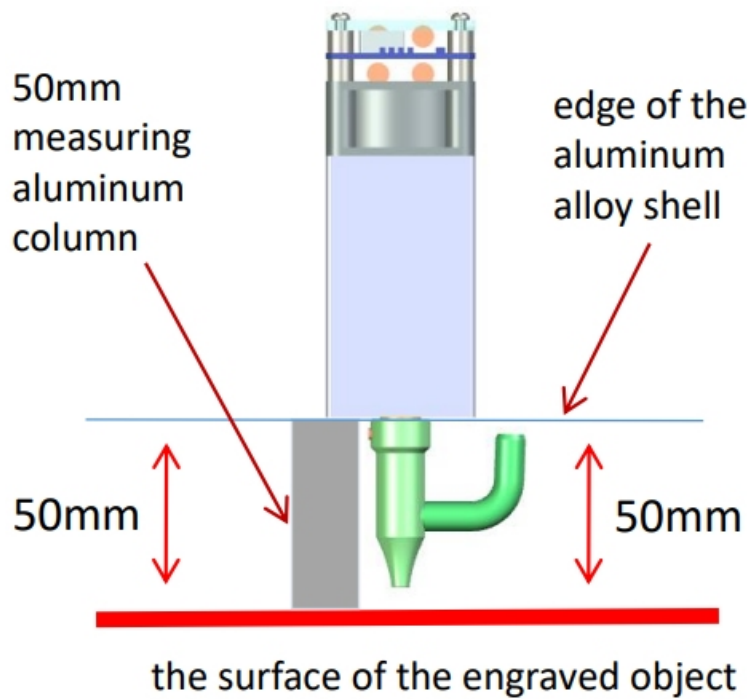
Install the blue air tube on the machine, fix it on the X beam with screws and brackets, the air tube is finally inserted on the nozzle, after installation you need to slide the laser to confirm that the air tube is in a loose state.



1. Connect the motor and cable, note: the X and Y motor are marked on the terminals. Install the laser cable.
2. Fix the cable on the machine hole with black cable tie. Keep cables slack.
3. Fix the air tube and cable with sticky strips to ensure that they are tied together. Slide the lasers to confirm that they are in a relaxed state.

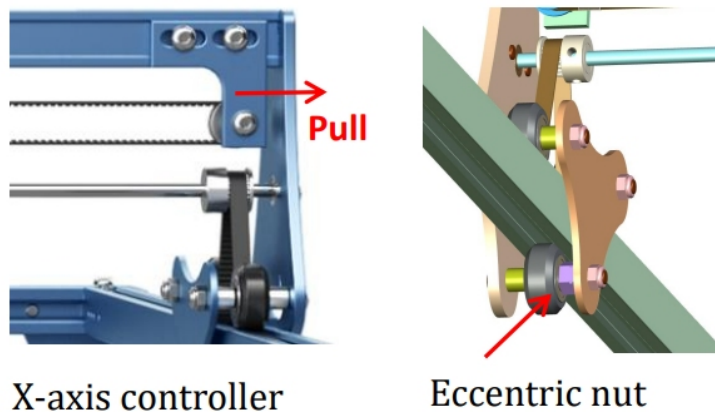
### Important Using Tips





#### Focusing principle:

1. The focal length of the SCULPFUN laser module is fixed and cannot be changed.
2. The specific position of the laser focus is 50mm directly below the edge of the aluminum alloy shell of the laser module.
3. We provide a 50mm measuring aluminum column to help find the laser focus.
4. When the laser is focused on the surface of the engraved object, it will exert its maximum engraving effect.



#### How to adjust the tension of X and Y belts

1. For the X-axis, just loosen the screw, tighten it to one side, and then fix the screw.
2. For the Y-axis, you need to adjust the hexagonal eccentric nut next to the bottom roller, which can control the tightness of the Y-axis. In addition, the tightness of the Y-axis belt also affects the Y-axis. You can lift the machine at an angle of 45°. If the beam slides smoothly, it means that the Y-axis is proper.



**Adjust with wrench**

### **Sculp your fun !**

Engraving software:

LightBurn for better cutting:

<https://lightburnsoftware.com/>

LaserGRBL is easier for beginner: <http://lasergrbl.com/>

Learn more in User manual or YouTube.

### **Customer Service:**

- For detailed warranty policy, please visit our official website at: [www.sculpfun3d.com](http://www.sculpfun3d.com)
- For Laser Engraver technical support and service, please email: [support@sculpfun3d.com](mailto:support@sculpfun3d.com)
- Official Group for Sculpfun Users: <https://www.facebook.com/groups/538557960530958>
- OFFICIAL YOUTUBE: <https://www.youtube.com/c/SCULPFUNReal/videos>

Manufacturer: Shenzhen Sculpfun  
Technology Co., Ltd.

Address: Room 201, Building B, Jinzhicai Factory, No. 1, Guihua Industrial Zone, Guanlan Street, Longhua District, Shenzhen City, Guangdong China

**Note:** This Manual is just for installation, For how to use laserGRBL software, how to show the position of the engraving pattern, and how to set the engraving parameters of different materials, please scan the QR code or visit the website [www.sculpfun3d.com](http://www.sculpfun3d.com) to download the User Manual.



<http://qr61.cn/o5qfPp/qxnJk9E>

Scanner APP: QR Code Reader/Barcode  
Scanner or any APP with scanner

Q sculpfun




YouTube



---

## Documents / Resources

|  |   |
|--|---|
|  The image shows the cover of the SCULPFUN S30 Laser Engraver Assembly Instructions. It features a blue and white line drawing of the engraver's frame and a red laser head. Below the drawing are several small icons: a recycling symbol, a leaf, a circular arrow, a crossed-out trash can, and a 'MADE IN CHINA' label. | <p><a href="#">SCULPFUN S30 MAX Laser Engraver</a> [pdf] Instruction Manual<br/>S30 MAX Laser Engraver, S30, MAX Laser Engraver, Laser Engraver</p> |
|--|---|

## References

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.