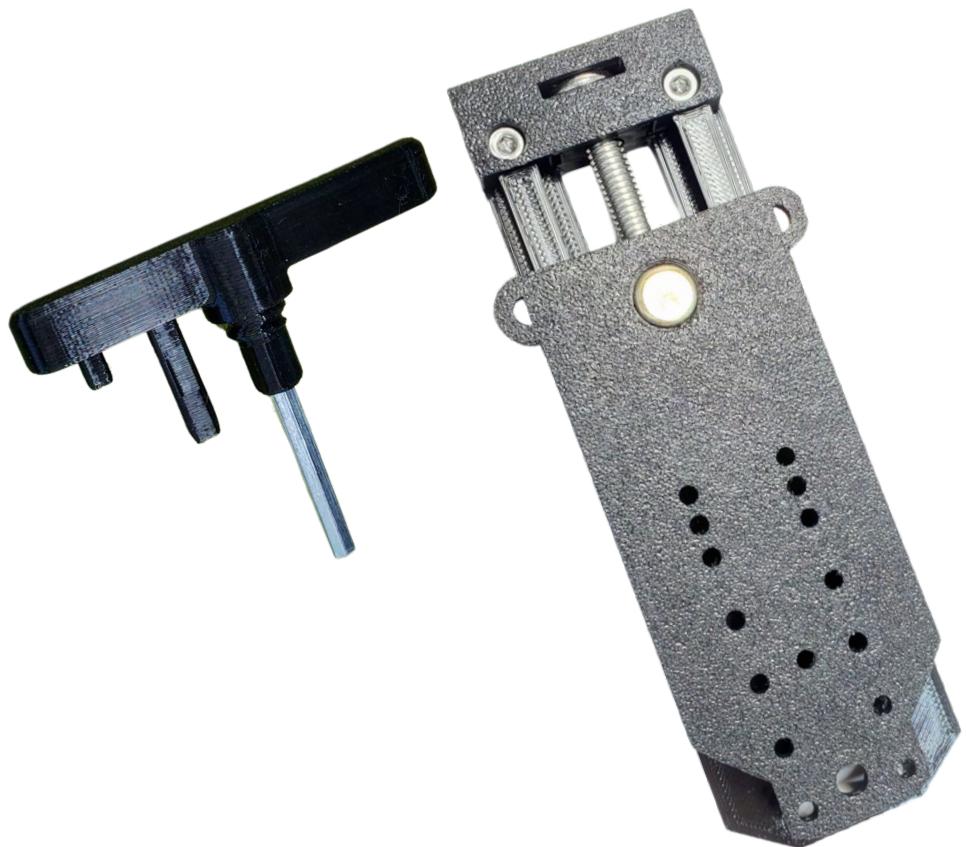


# KING GUBBY



## Ortur & Aufero Z Axis Adjuster



## INSTALLATION MANUAL

# KING GUBBY



## Checkout our other laser upgrades for your laser

### LASER ENCLOSURE



WORKS WITH:  
xTool, Ortur, Neje, Sculpfun, Aufero, Etc...

Laser Enclosure Tent For Smoke Control & Eye Protection |  
Free Domestic Shipping

### ORTUR PRO MODEL UPGRADE KIT

FOR ORTUR LU2-4 (12V/24V)



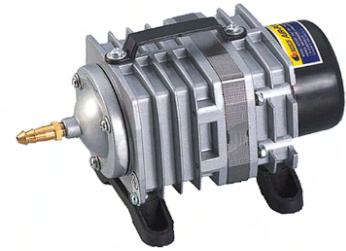
Z Axis Adjuster - Belt Tensioners  
Air Assist - Stackable Brick Feet  
Nozzle Pack - Bit Drive & Knob Pack  
Universal Focus Spacer

### NEJE ULTIMATE UPGRADE KIT

FOR NEJE PLUS & MAX



Z Axis Adjuster - Air Assist - Stackable Brick Feet  
Nozzle Pack - Bit Drive & Knob Pack  
Universal Focus Spacer



Air Compressor/Pump for King Gubby Air Assists

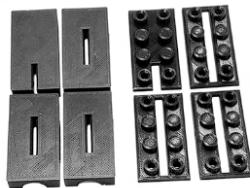
### Z AXIS ADJUSTER KNOBS

For KING Gubby Design Z Axis Adjusters



Z Axis Adjuster Knobs (Add-on For The King Gubby Z Axis  
Adjuster)

### STACKABLE "BRICK" FEET FOR ORTUR PRO MODEL



Ortur PRO MODEL Laser Master 2 Stackable Brick Feet

### RETAINING FEET FOR ORTUR STANDARD LM2



Ortur Laser Master 2 Retaining Feet

### ORTUR PRO MODEL AIR ASSIST



Ortur Laser Master 2 Bottom Mount Air Assist (For LU2-4 12V  
& 24V and LF Modules)

[View all](#)



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KingGubbyDesigns@gmail.com

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# Included Parts



**Carriage Plate**



**Module Plate**



**M6 Bolt**



**Barrel Nut**



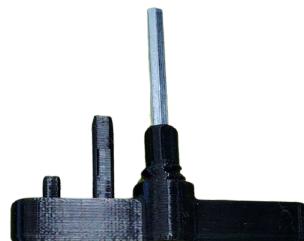
**Required Tool**

Not included in kit



**2.5mm Allen Wrench**

**Bolt Clip**



**4mm T Handle Wrench**

**10 x M3 (8mm) Screws**



**10 x M3 Hex Nuts**



**2 x LM3 End Stop Extension**



**LM3 Adapter Fitting**



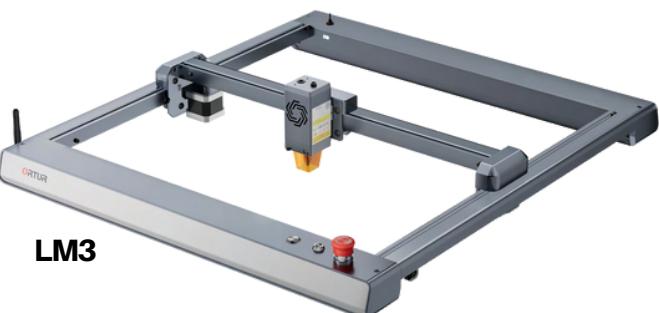
**LM2 & Neje End Stop Extension**



\*This is only needed for LM2 Standard models - even when adapting a Neje module.

# This product works with everything here

## Frames



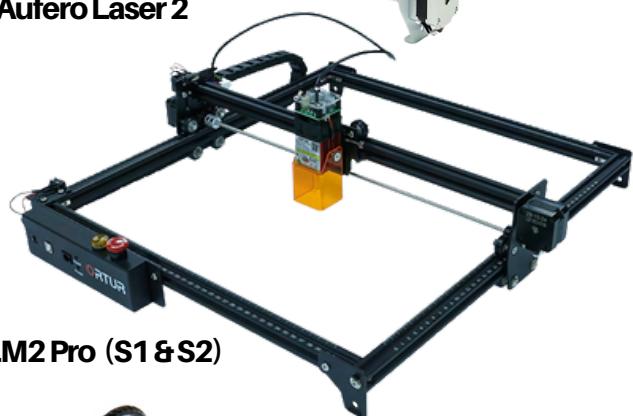
LM3



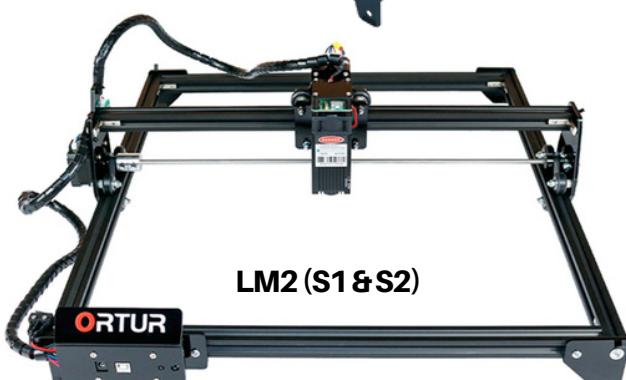
LU1-2  
LU1-3  
LU1-4



Aufero Laser 2



LM2 Pro (S1 & S2)



LM2 (S1 & S2)



Aufero  
Laser 1

## Modules

## Ortur & Aufero



LU2-4 (12V)  
LU2-4 (24V)



LU2-4-SF



LU2-4-LF



LU2-10A

## Neje



A40640  
N40640  
A40630

## TwoTrees



10W

\*Not all modules will adapt to all frames due to power or mechanical compatibility. Please check with the respective manufacturers and do your due diligence before trying to combine laser components

# **IMPORTANT**

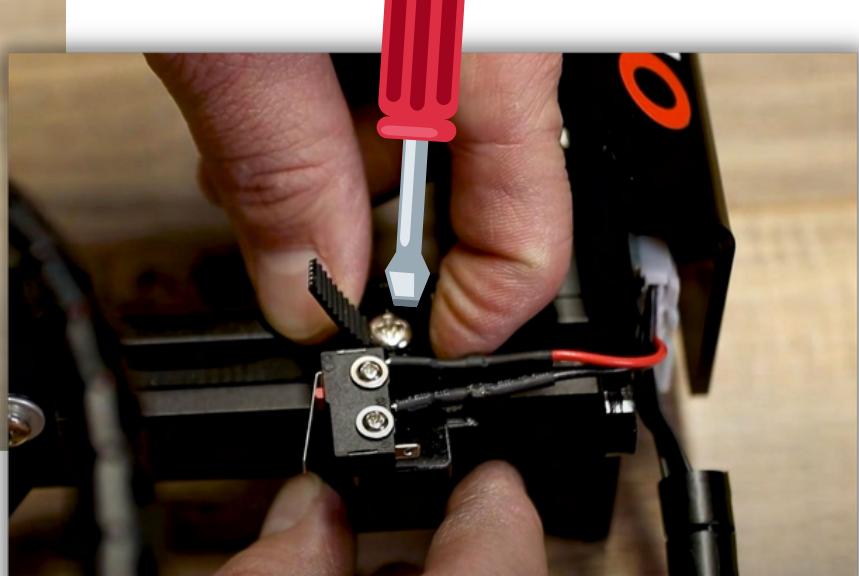
## **TO AVOID DAMAGING YOUR LASER**

**You need to check your home stop before turning on your laser, after installing the Z Axis. Not all end stop triggers are the same, check with your lasers instructions before altering anything.**

**See "Notes for the LM3 Part 2" page for LM3 instructions.**

- With the Z Axis Adjuster installed, home the laser by hand
- Observe the space between your front rail and your module
- If the module comes in contact with the front rail, without hitting the home stop contact switch, you will need to move the contact switch forward (different models have different locations - see your Ortur manual)
- To do this, loosen the screw holding the contact switch in place and move it forward (away from the power supply)
- Move your gantry towards the front rail until there is a space between the module and the front rail then move your home stop contact switch forward until it is fully engaged
- Tighten your home stop screw at this position
- Retighten your belt

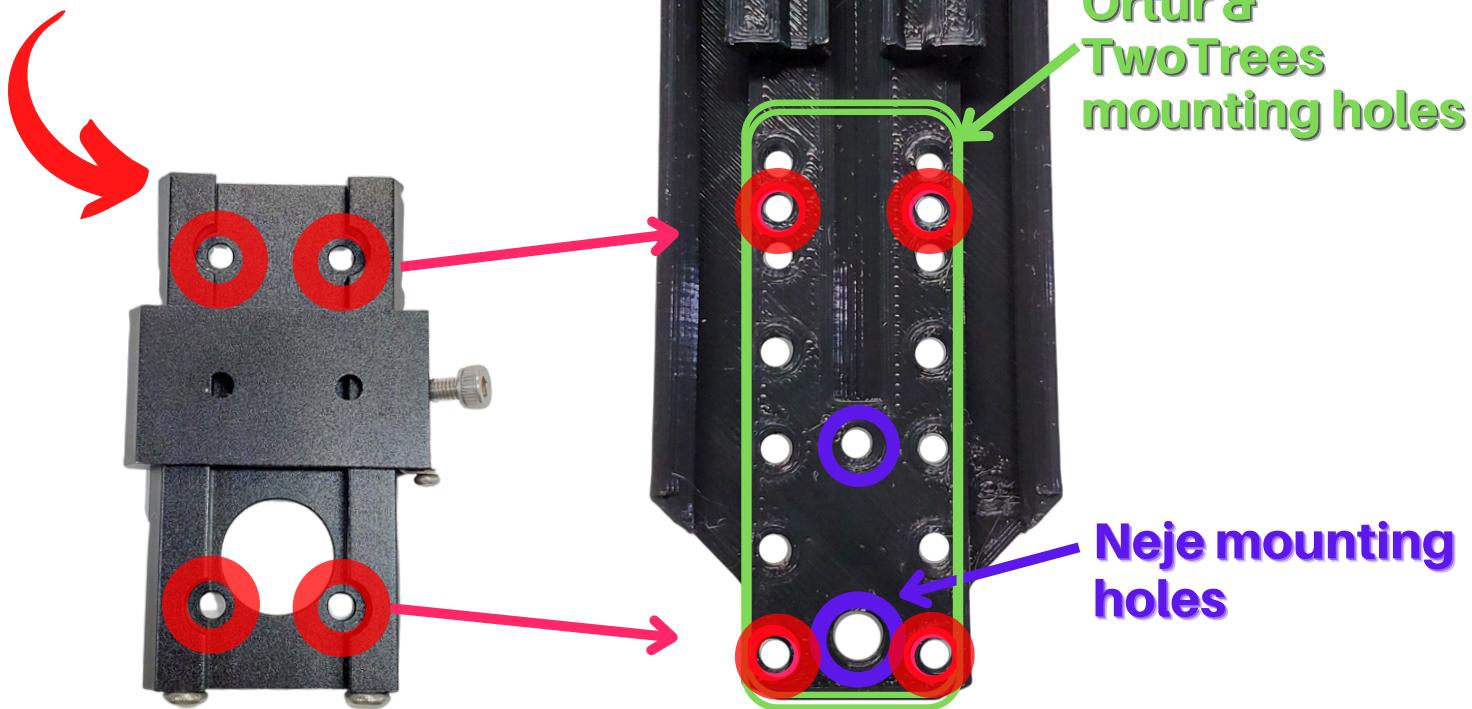
**If the wires on your trigger are too short, we have an end stop block that works to extend your trigger. Please contact us if you need one.**



\* Not all end stop triggers will look the same, please refer to your laser's owner manual to see how to adjust your specific end stop trigger. See "Notes for the LM3 Part 2" page for LM3 instructions

# General Module Attachment Configurations

If you wish, you can attach the stock Ortur Slider to our module plate, it helps with quick module swapping, but you lose just a tad more burn area because the z axis will protrude out from the carriage a little more (the depth of the Ortur Slider).



The slider is required for the 10W module.

# Module Attachment Configurations Part 2



LU2-10A

Remove Ortur Slider  
& mount here



Ortur Slider

Module Plate



## Note

The King thinks these are the most ideal holes to mount the Ortur Slider to, but feel free to experiment. Everyone sets up differently



LU2-4-LF



LU2-4-SF

LU2-4 (12V)  
LU2-4 (24V)

Module Plate



## Note

All of these modules screw directly into the threaded holes in the back of the heat sink.

\*When installing the SF module, leave the bottom 2 holes open if you intend to use a King Gubby Air Assist with this Z Axis



LU1-2  
LU1-3  
LU1-4

Module Plate



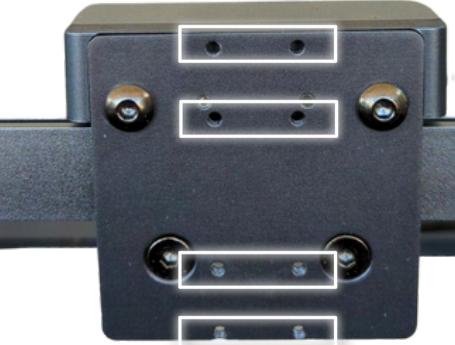
## Note

The King thinks these are the most ideal holes to mount to, but feel free to experiment. Everyone sets up differently

\*When installing the LU1 module, leave the bottom 2 holes open if you intend to use a King Gubby Air Assist with this Z Axis

# Carriage Plate Configurations

Laser Master 3

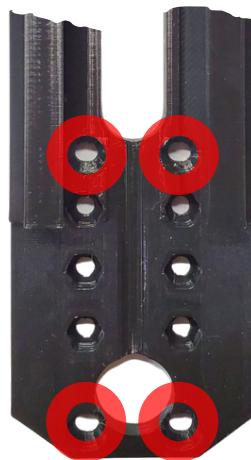
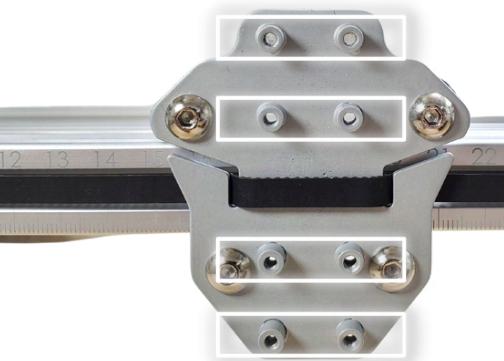


## Note

The King thinks the top mounting position is the most ideal mounting position, but feel free to experiment. Everyone sets up differently

\*The above picture does not have the Ortur Slider removed, but yours will be mounted to your module already. Also, see "Notes for the LM3" Page below for more on installing.

Aufero Laser 2

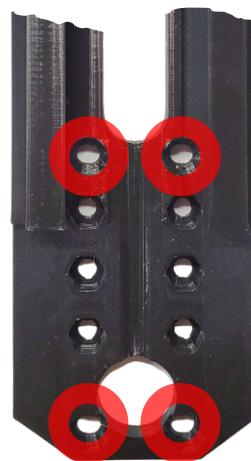


## Note

The King thinks the bottom mounting position is the most ideal mounting position, but feel free to experiment. Everyone sets up differently

\*If you are using our Stackable Brick Feet you must mount your Z Axis on the bottom mounting holes.

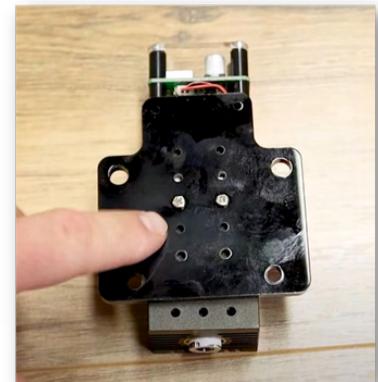
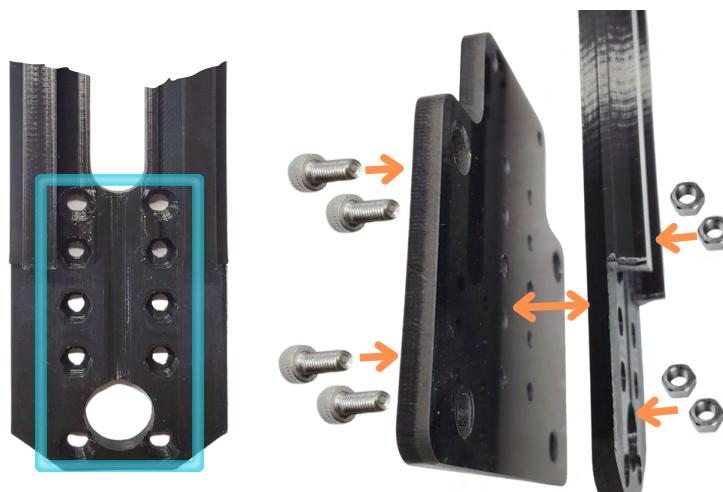
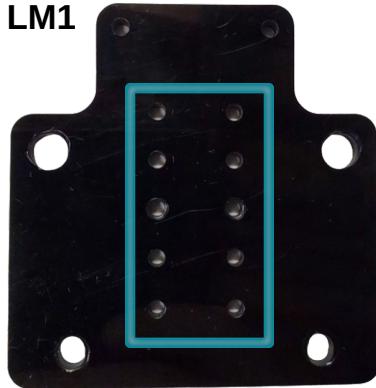
Laser Master 2 Pro



# Carriage Plate Configurations Part 2

LM2 (S1 & S2)

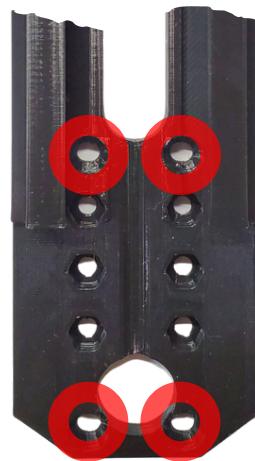
LM1



\*2 anchor points are sufficient, but use 4 if you want more stability.

Aufero Laser 1

Carriage plate image  
coming Soon



Spacers



\*2 anchor points are sufficient, but use 4 if you want more stability. Also, you will need to use the stock spacers with the z axis (pictured left).

Ortur Laser Master 1

Instructions coming soon.

For now our [LM1 instruction manual](#) is  
only slightly different and will suffice

# Attaching the module plate

Choose desired position and mount the module plate to the module using the supplied (or stock) M3 screws. The flat side of plate goes against the module. You only need 2 screws to mount your laser to this plate, but if your laser/module allows for 4 then you can also do that.



\*You may have a different module that you are attaching, this page is just for illustrative purposes and is a general depiction of the way to attach the plate to the module.

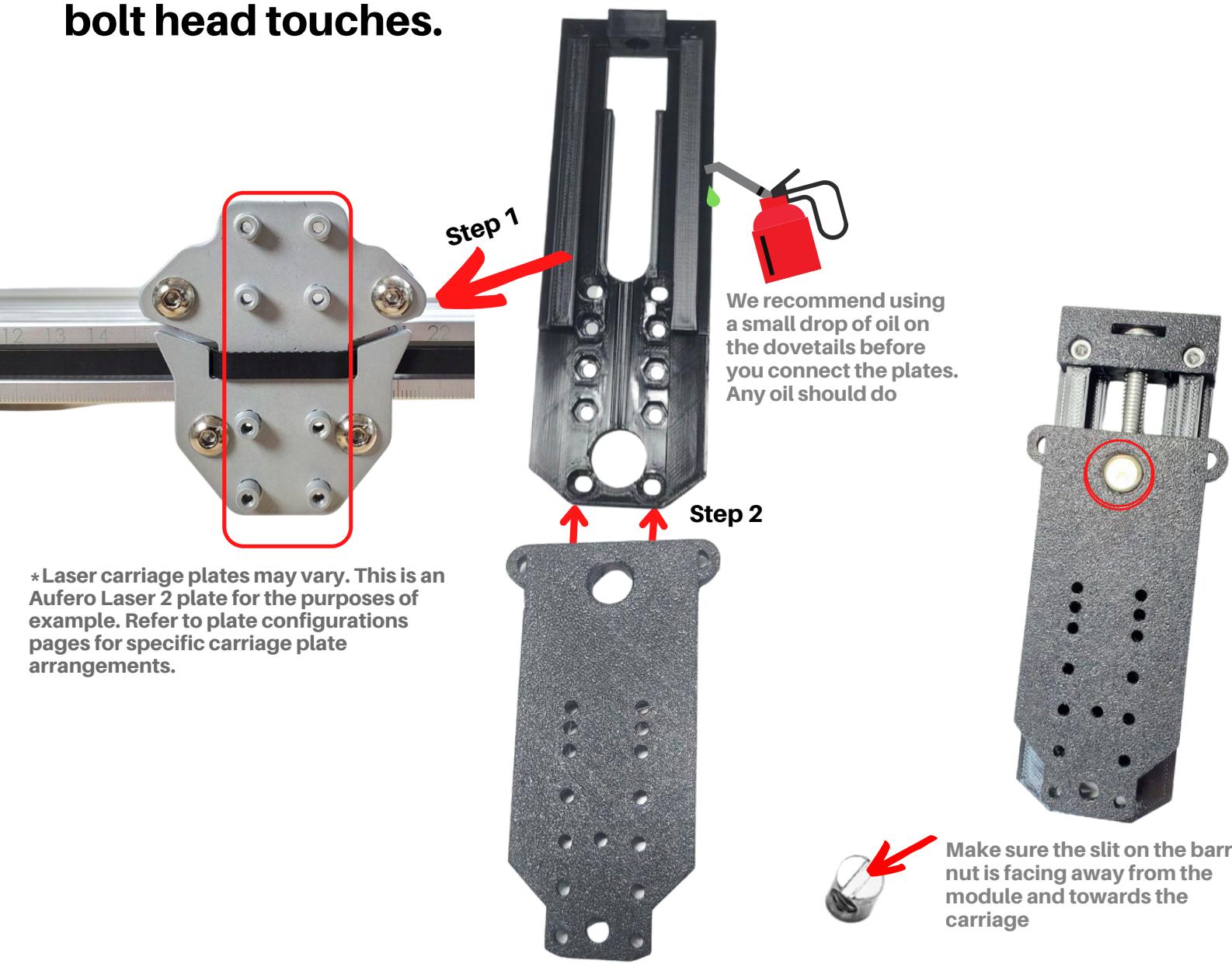
# Assembling the Z Axis

**Step 1:** attach the carriage plate to the laser carriage by using the provided (or stock) M3 screws.

**Step 2:** slide the module plate (already fixed to your module) onto the carriage plate by aligning the dovetails and sliding upwards.

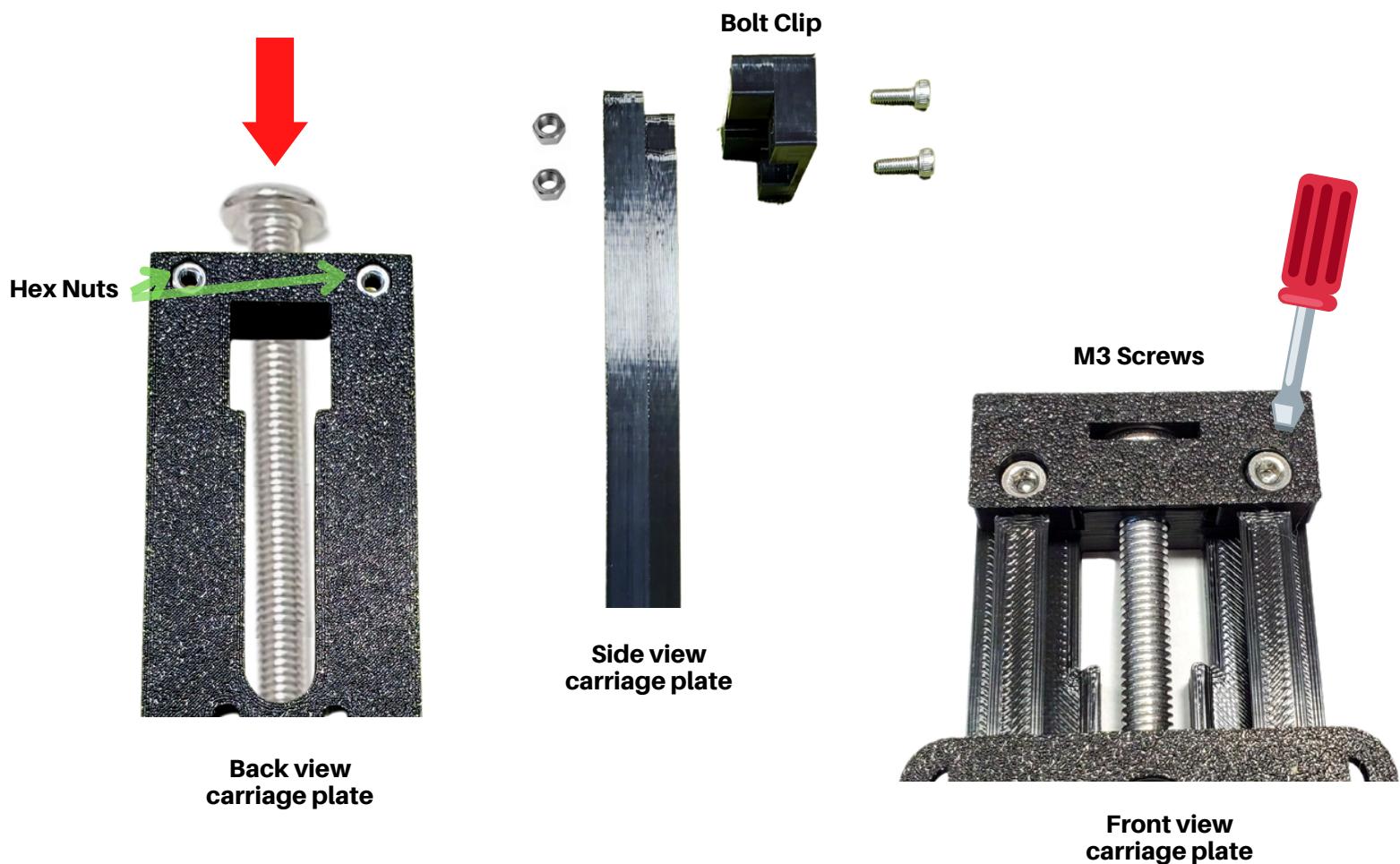
**Step 3:** insert the barrel nut into the large hole on the module plate (circled in red below).

**Step 4:** slide the M6 bolt (75mm) through the hole in the top of the carriage plate, and screw down until the bolt head touches.



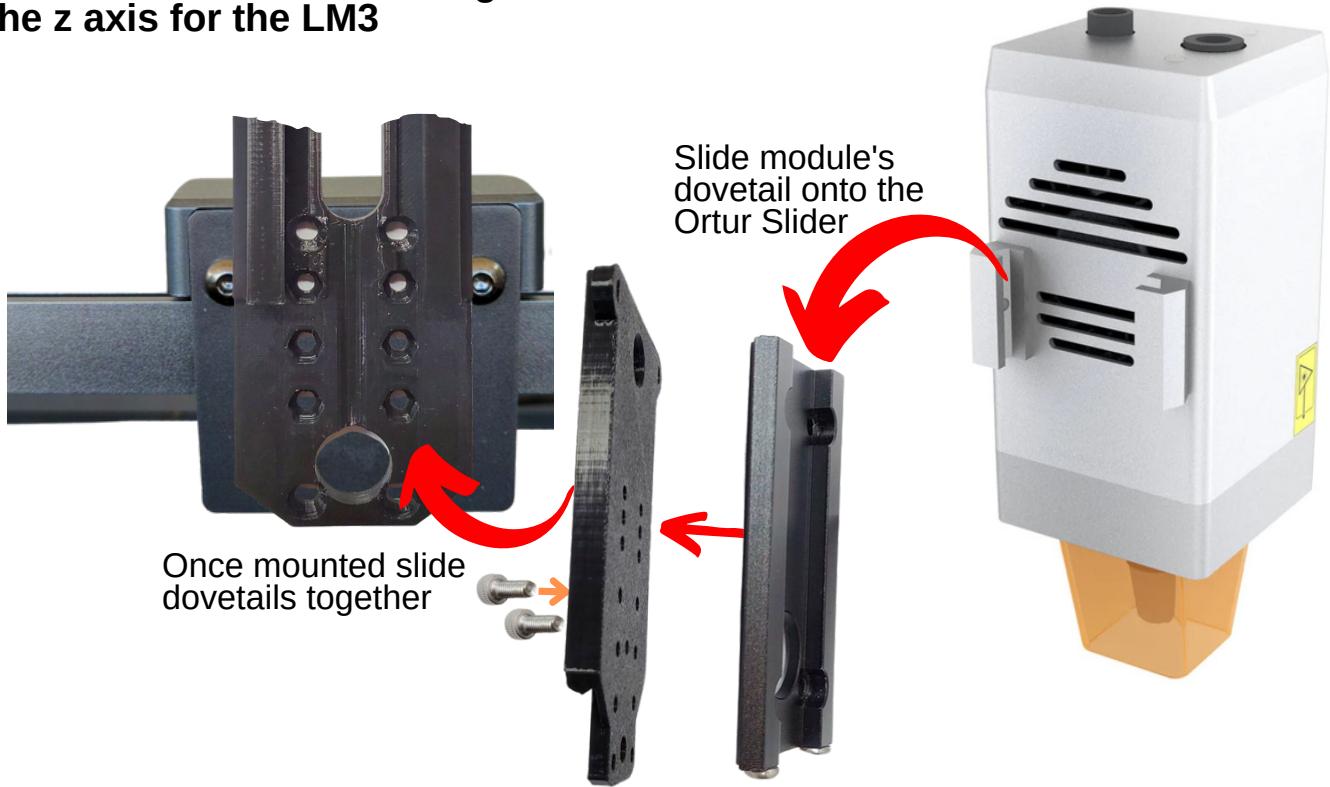
# Locking the Bolt Down

**Make sure the bolt head is touching the top of the carriage plate and slide the bolt clip over the top of the bolt head. Set two hex nuts in the fitted slots on the carriage plate and use two M3 screws to attach the bolt clip to the carriage plate.**



# Notes for the LM3

General outline of attaching  
the z axis for the LM3

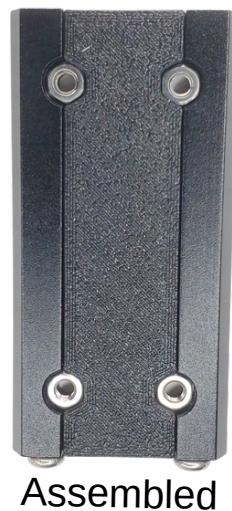


The King thinks these are the most ideal  
holes to mount the Ortur Slider to, but feel  
free to experiment

# Notes for the LM3 Part 2



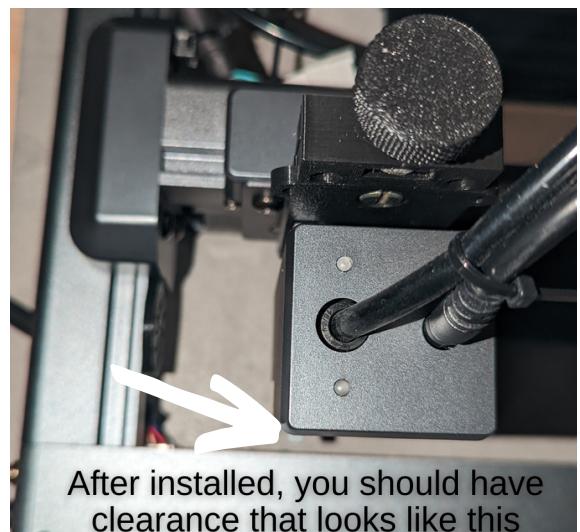
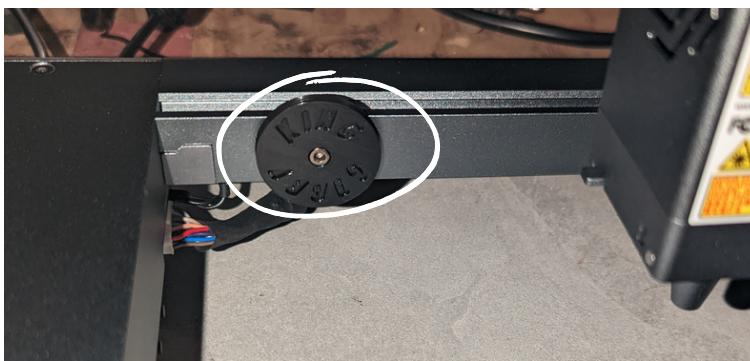
If your Ortur Slider doesn't have the drilled holes (which some don't), we have made a solution for that. Simply fit the LM3 Adapter Fitting into the slider - so that the circle piece fits into the other circled piece - and add M3 nuts to the 4 outer holes and mount the same as all other carriages above.



Assembled

## LM3 End Stop/Limit Switch Spacer Installation

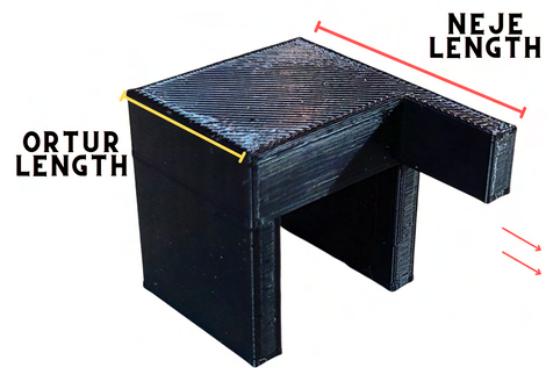
Unscrew your LM3 limit screws and insert the King Gubby limit switch spacers over the hole and replace the screw.



After installed, you should have clearance that looks like this

# End Stop Spacer:

You only need to use this if you have a standard LM2 frame and your wire harness doesn't allow your end stop trigger forward far enough. If you have adapted a Neje module then the extension will point towards the gantry.



[Click here a the video explanation](#)

Gantry of laser

Ortur facing  
Direction



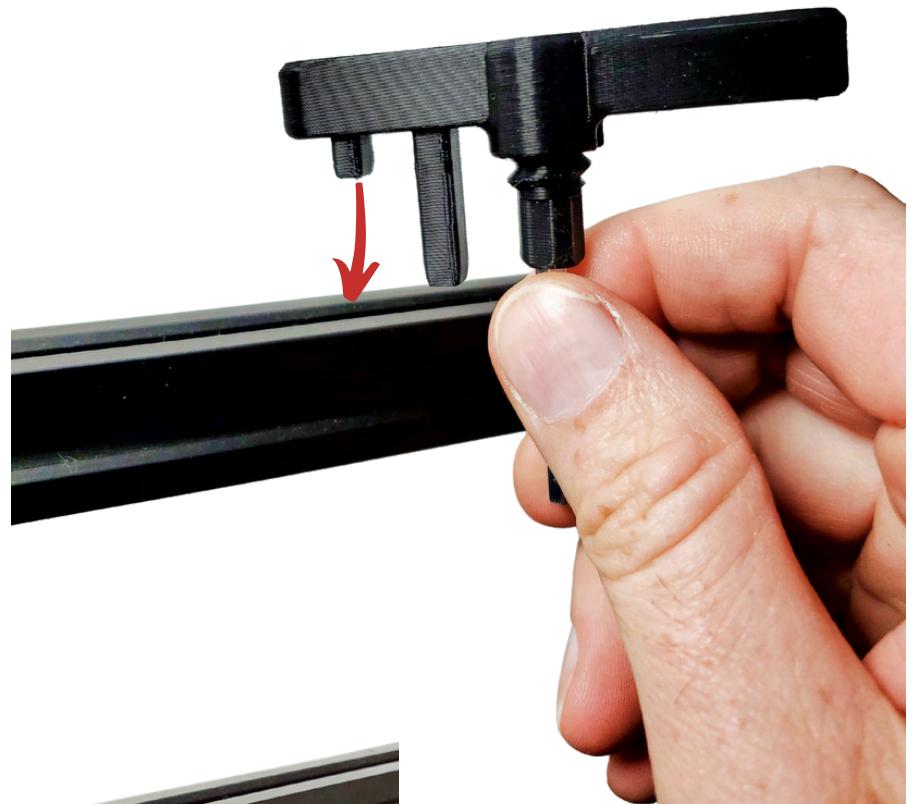
Neje facing  
Direction



Front of laser

## Oh and...

By the way, the reason the t-handle looks so funny is because it rests on your laser's aluminum extrusion. Keeps it out of reach of those tool trolls. Please do not hang it on your gantry extrusion though :)



Contact Us:  
KingGubbyDesigns@gmail.com

Tag us in your projects



# **IMPORTANT**

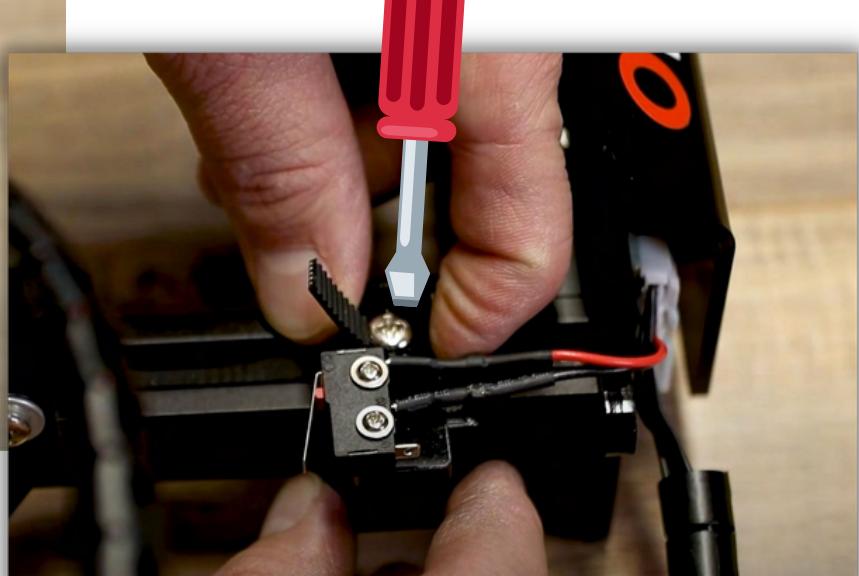
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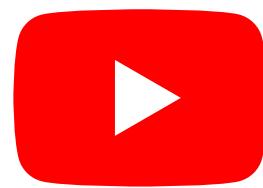


\* Not all end stop triggers will look the same, please refer to your laser's owner manual to see how to adjust your specific end stop trigger. See "Notes for the LM3 Part 2" page for LM3 instructions

**If you have any questions or concerns, please feel free to reach out to us. We are always looking to improve our products and make our products better for the laser community.**



**Tag us in your projects**



Contact Us:  
[KingGubbyDesigns@gmail.com](mailto:KingGubbyDesigns@gmail.com)