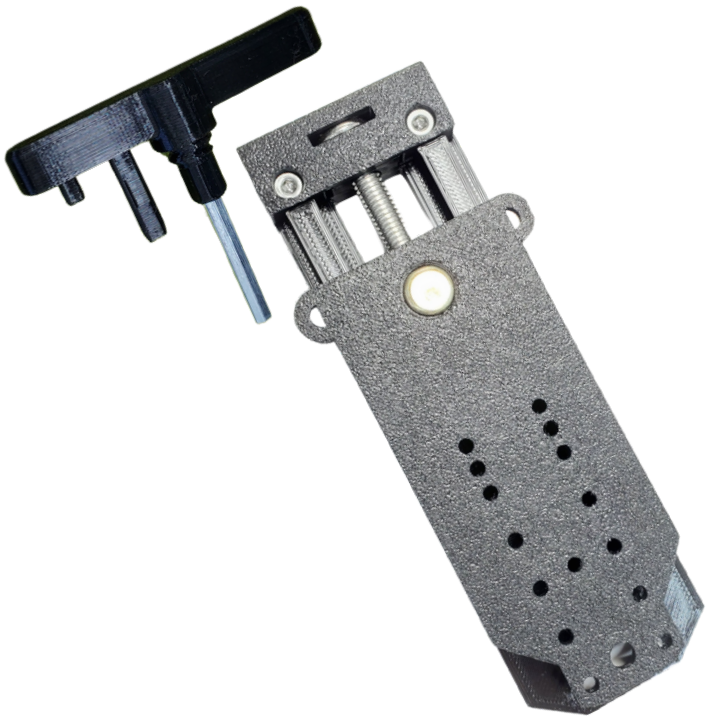
KING GUBBY DESIGNS

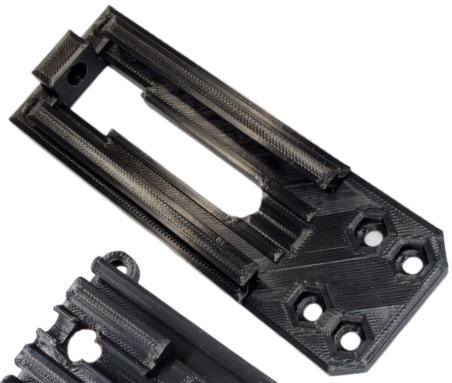
Atomstack A5



INSTALLATION MANUAL

Included Parts For Z Axis

Carriage Plate



Module Plate

A5 Adapter Plate

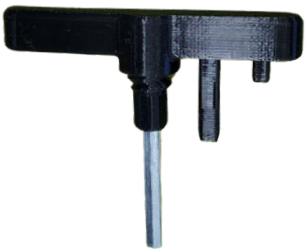
M6 Bolt

Barrel Nut

Bolt Clip

End Stop Extension

4mm T Handle Wrench



6 x M3 Screws

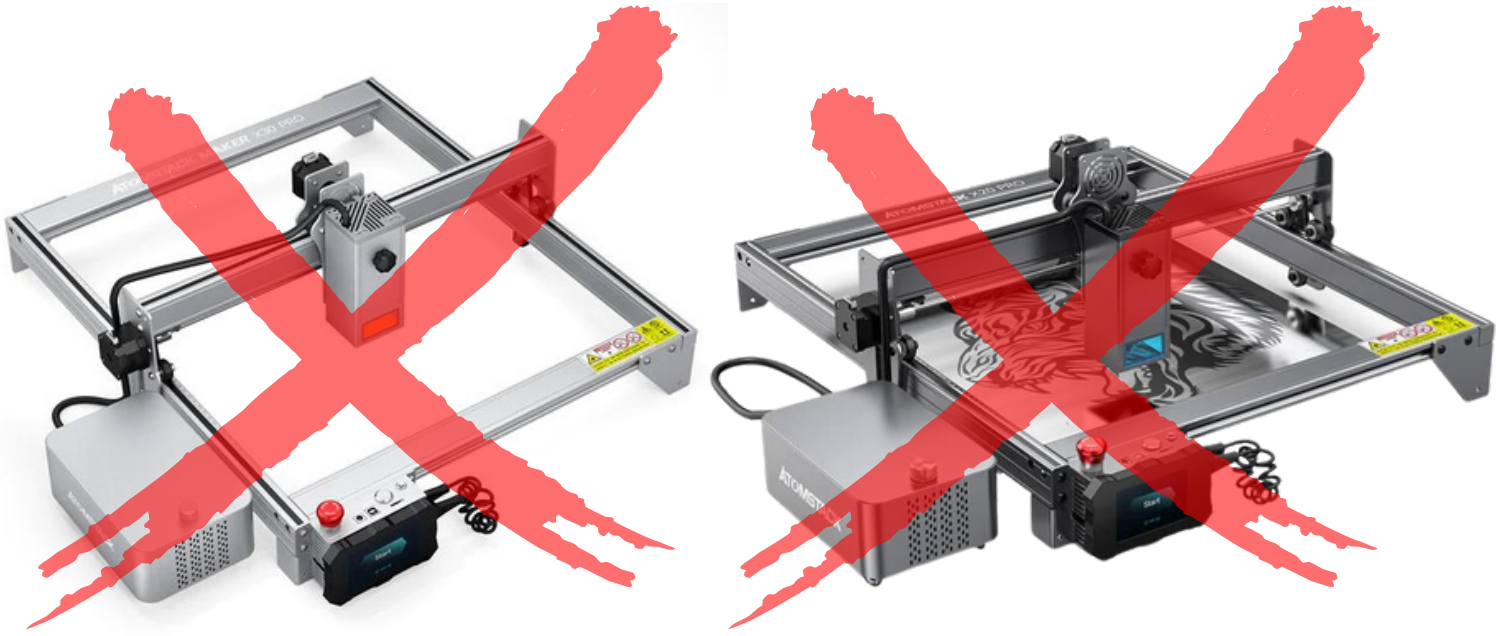
6 x M5 Screws

4 x M5 Hex Nuts

6 x M3 Hex Nuts

2 x M5 Countersunk Screws

This product is for the Atomstack A5, X7, A10, S10, M30, M40, M50



Not the X20 or X30

IMPORTANT

You need to check your home stop before turning on your laser, after installing the Z Axis. This is to avoid damage to your laser.

- **With Z Axis Adjuster installed, home laser by hand (front left corner)**
- **Observe the space between your front rail and your module**
- **If the module comes in contact with the front rail you will need to remove the end stop screw that is on the left, outer side of your frame (pictured below) and add the King Gubby end stop extension.**
- **Do this by moving the gantry back a bit to allow access to the screw, remove the screw, and replace the washer/sleeve that is around the screw with our end stop extension.**
- **Screw the screw back on (with extender).**

If the switch is activated and the module does not come in contact with the front rail you do not need to move your home stop

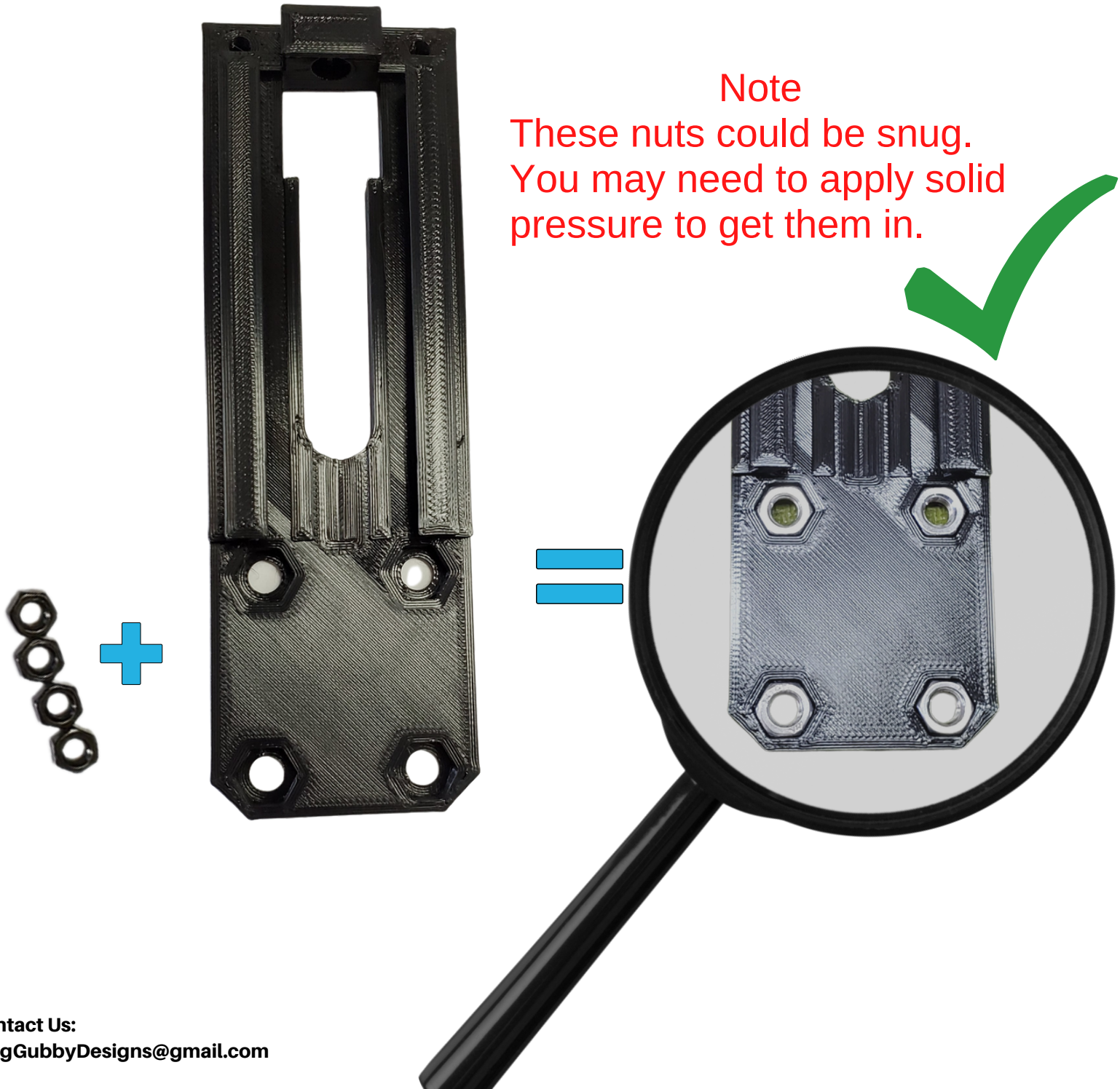
Before

End Stop Extension

After

Carriage Plate Prep

Put carriage plate (M5) nuts in carriage plate



Note
These nuts could be snug.
You may need to apply solid pressure to get them in.

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Module Plate Prep

Due to slight size variance in the barrel nuts, we recommend that you make sure that you can easily slide your barrel nut into the module plate before beginning the install process. Try pushing the nut through the designated hole. This fit is supposed to be very snug, that being said, you may need to "work it" through a few times to get the hole sized correctly. By doing this, you will make your life easier later on in the install process.

If it is hard to force through with your thumbs, set the module plate flat on a table and use something like a hammer or screwdriver butt to force the barrel nut into the hole. If there is too much 'play' in this connection point, it will cause the module to move during burns, so it is important to not widen this hole unless you absolutely cannot get the barrel nut it. And if you do open it up, do the least amount NEEDED.

Once done, remove the barrel nut from the plate and continue with instructions.

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Attach slider to the module plate

Note

If your laser does not have this slider (pictured below), skip the next page "Attaching the module with the slider" and go to "Attaching Module Plate Without The Stock Atomstack Slider"

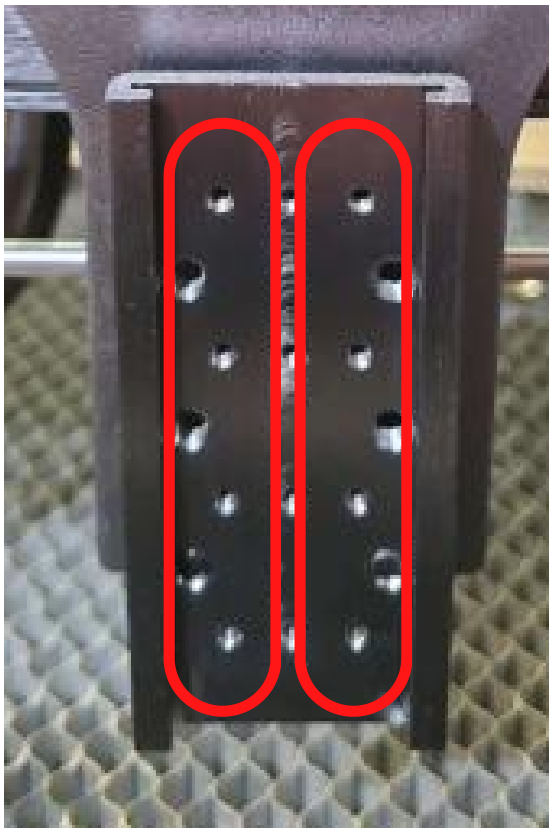
Contact Us:
KingGubbyDesigns@gmail.com

Attaching the module with the slider

You can attach the stock metal Atomstack slider (see photo A below) directly to the printed module plate, if you don't have a stock slider, you will use the A5 Adapter Plate (see next page)

You will attach the slider using 4 of the supplied M3x8mm Screws (see photo B)

Photo A



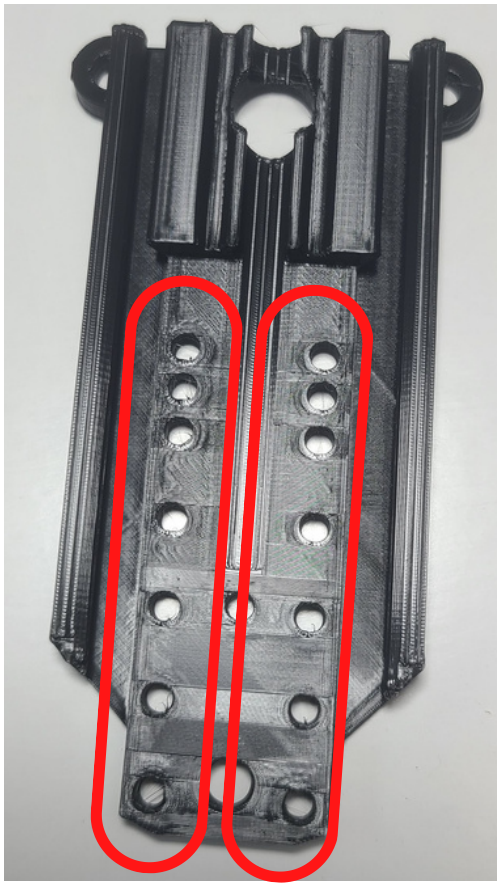
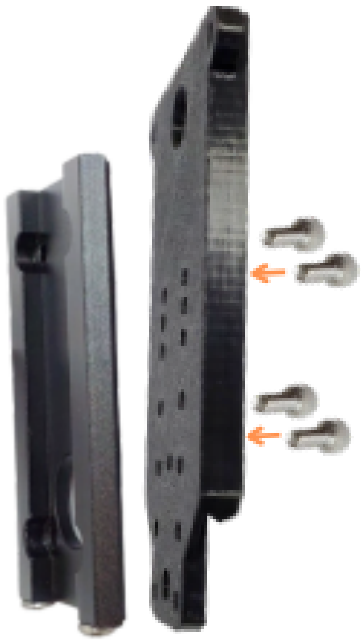


Photo B



SKIP TO PAGE 10 IF YOUR LASER IS NOT USING THIS SLIDER

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Attaching the module with the slider pt 2

Having the slider makes installation a bit easier. You can skip the next page "Attaching Module Plate Without The Stock Atomstack Slider" and go to the page "Barrel Nut and Dovetails"

SKIP TO NEXT PAGE IF YOUR LASER IS NOT USING THIS SLIDER

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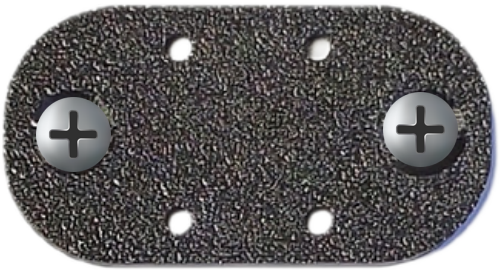
Attaching Module Plate Without The Stock Atomstack Slider

1st - Insert the M3 nuts into the available hexagons on the King Gubby Module Adapter.

2nd Attach the Module Adapter
Now, with the nuts installed and the Atomstack module removed, face the King Gubby Module Adapter "nuts down" against the Atomstack Module. Align the countersunk holes with the available holes in the module. Use the provided countersunk M5 screws to attach the Module Adapter Plate to the Atomstack Module. This should 'sandwich' or hide the 4 x M3 nuts, that were installed in the last step, up against the module.



The M3 nuts on the module adapter plate will face the module, so that you see this side when installing.

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Barrel Nut and Dovetails

Insert the barrel nut in the provided open hole on the module plate (circled in red below), which is now attached to your module.

Then, slide the dovetails together (with module attached).

Oil the dove tails on both sides. Preferably with dry lubricant, but any lubricant is acceptable

Make sure the slit on the barrel nut is facing away from the module and the slit is running parallel to the dovetails. It may be necessary to force the barrel nut through the hole a few times before you try to attach the 2 plates in the next step. This fit is supposed to be very snug. If having trouble refer to "Module Plate Prep" page

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Assembling the Z Axis

Slide the M6 bolt (75mm) through the hole in the top of the carriage plate and through the barrel nut. Screw the bolt through until the barrel nut is approximately halfway up the bolt.

Then, put the nuts into the top of the carriage plate, as seen in the image on the right. You will not be able to insert them after you mount this plate to the stock (metal) carriage plate.

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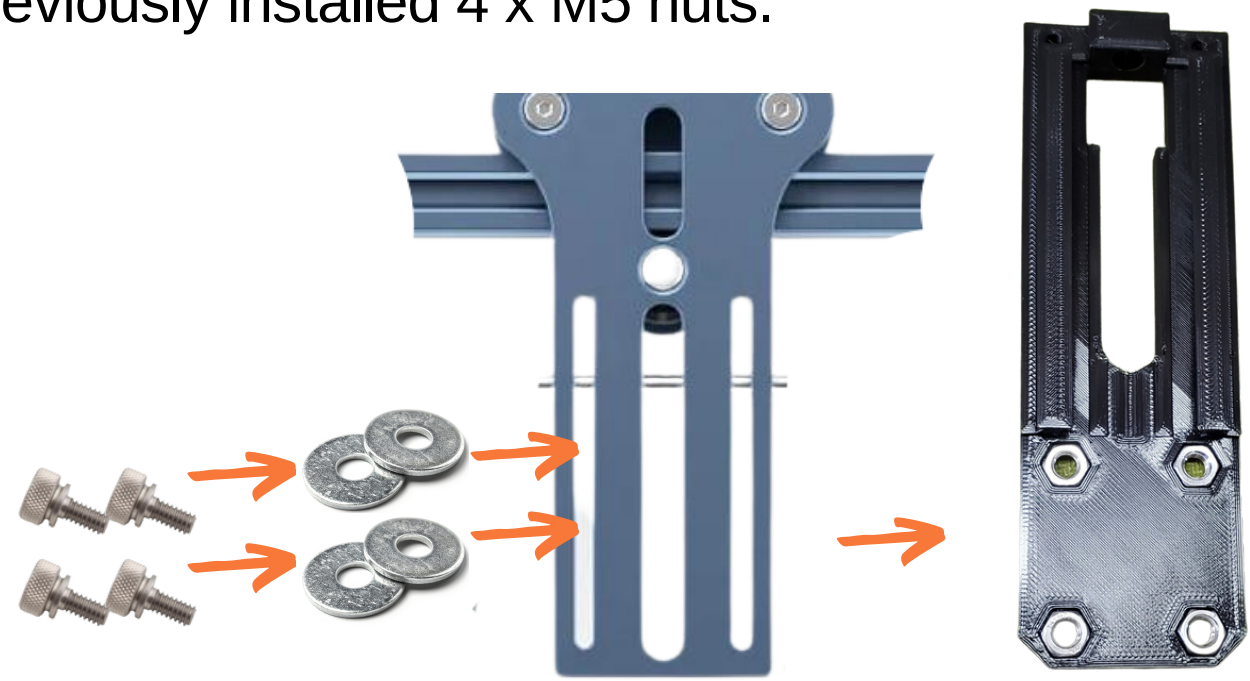
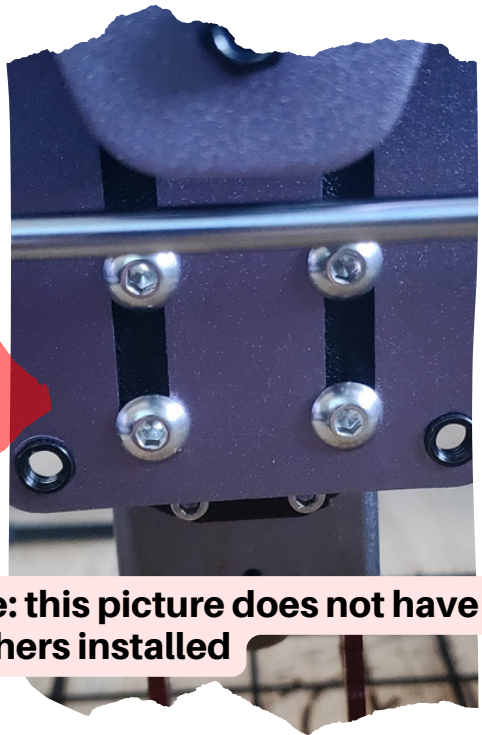
Attaching the Carriage Plate

Attach the Carriage Plate to the laser carriage by using the four provided M5 screws and washers (put washers on screws then mount the plates). Slide them through the Atomstack Slotted Carriage Plate slots and tighten through the King Gubby Carriage plate with the previously installed 4 x M5 nuts.



*There are quite a few arrangements that you can try to get the right mounting for your specific height needs. We encourage you to test different mounting arrangements.



Note: this picture does not have the washers installed

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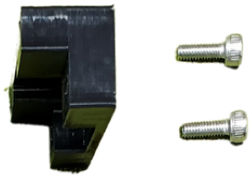
Locking the Bolt Down

Make sure the bolt head is touching the carriage plate and slide the bolt clip over the top of the bolt head to keep bolt from unscrewing while adjusting the axis. Set the remaining hex nuts in the fitted slots on the carriage plate and use the remaining M3 screws to attach the bolt clip to the carriage plate.

Hex Nuts (installed earlier)

Bolt Clip



Side view carriage plate

M3 Screws

If you used The Atomstack slider you can install your module after this piece is installed

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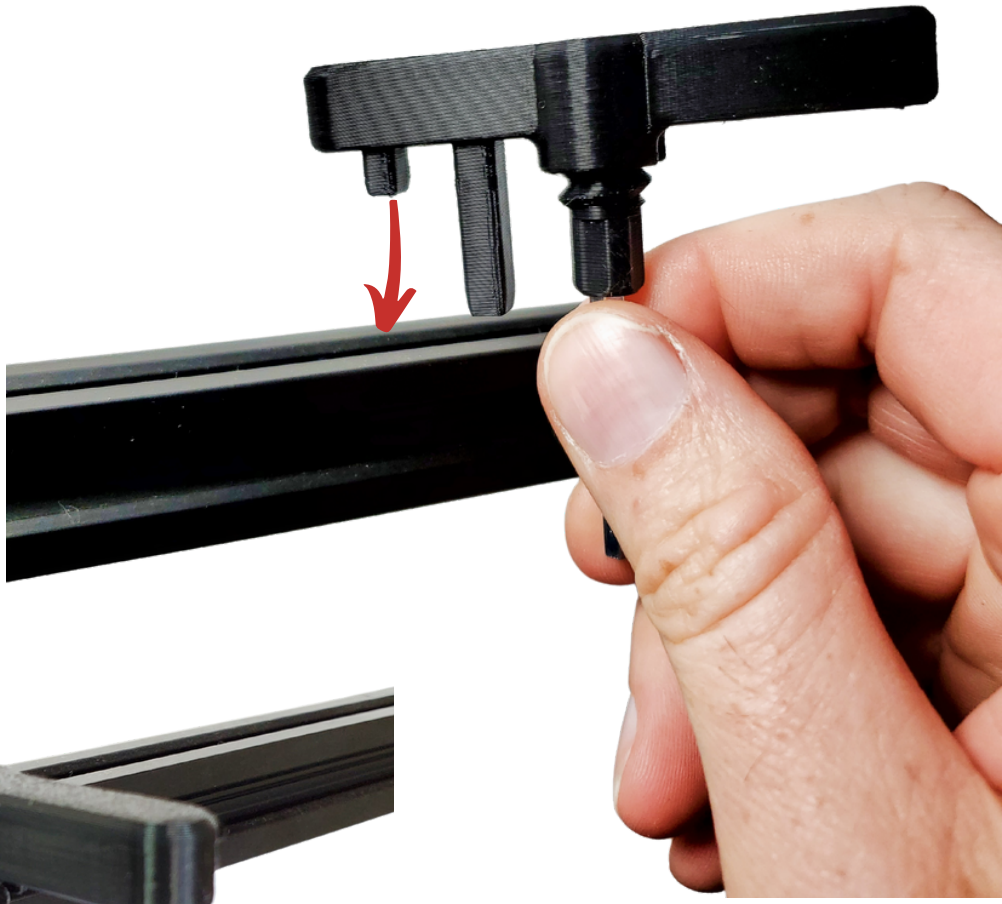
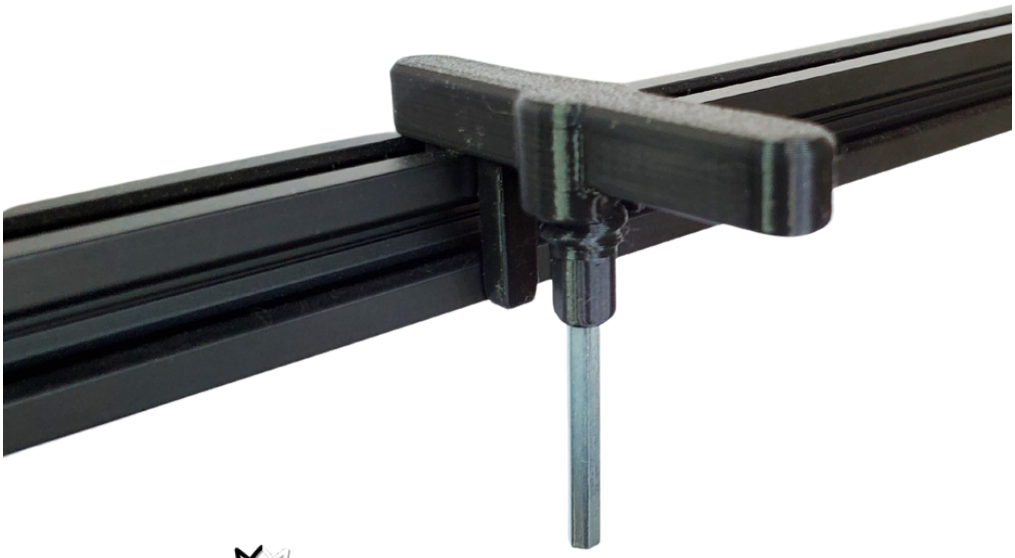
If you also got one of our Knob Upgrades, please click the image below or follow the link to see the manual.

https://cutt.ly/zknobs

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. It Doesn't work with every laser, but it might work with yours





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Tag us in your projects

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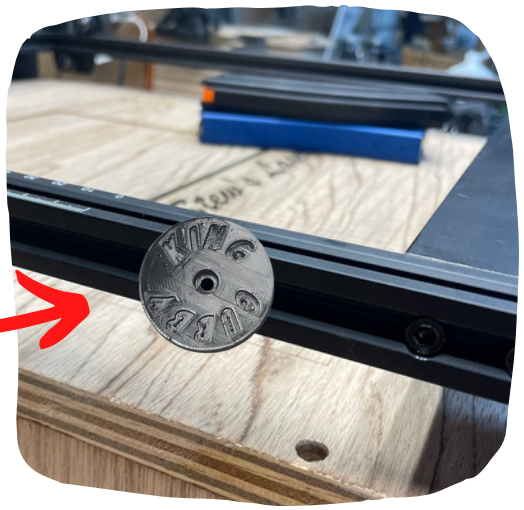
Before

we would love a better photo of this :)

End Stop Extension



After