

# KifSuisse

## Build Guide



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*Northeast Designs - PG. 1*

## ***Step Zero: Required Tools.***

*-2mm and 2.5mm Hex Key / Hex Driver*

*-Craft knife / Sandpaper / Files for cleaning up printed parts*

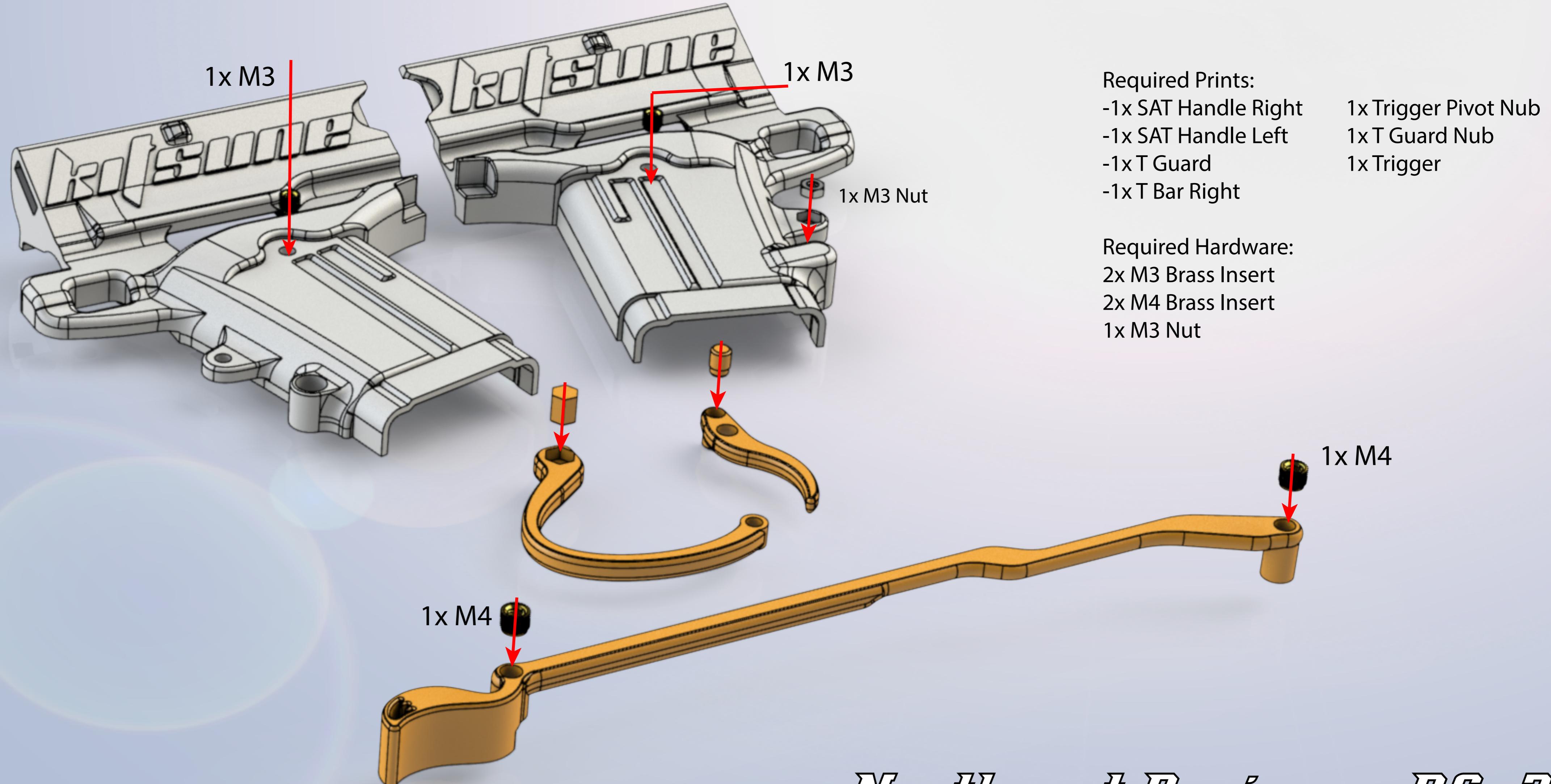
*-**\*IMPORTANT\*** Plastic safe lubricant, I.E. Oatey's Silicone Grease (Available at most US Hardware stores), or Super Lube Silicone Lubricating Grease with PTFE (Available on Amazon). DO NOT use a spray lubricant, as the propellant used in spray cans can react badly with the plastic parts.*

*-Soldering iron for installing brass inserts (If you don't have a soldering iron, you can attach the inserts by drilling out their mounting holes slightly and securing them with superglue.)*

*-**\*IMPORTANT\*** Blue loctite for the plunger rod, if you do not apply loctite the plunger rod can loosen over time and risk failure.*

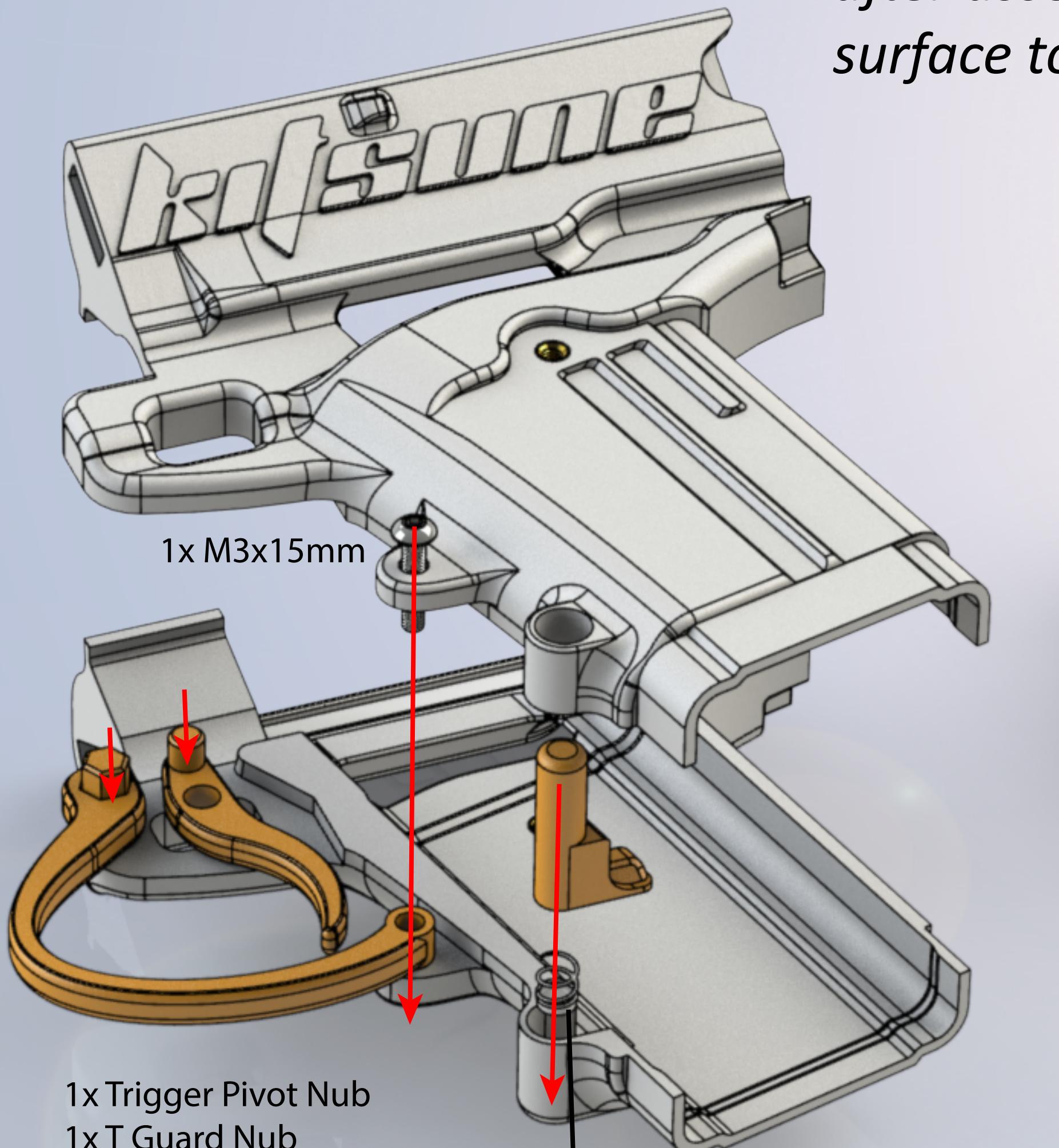
## *Step one: Brass inserts and Nubs*

*Install the four brass inserts using a soldering iron as shown below. Note that some are M3 and some are M4, Pay attention to the notation. In addition, install the two nubs in the Trigger and Trigger Guard. The nubs may require a dab of superglue to keep them tight, or a bit of sanding to make them press in smoothly.*



## Step Two: Handle Assembly

Assemble the handle as shown. Make sure the trigger pivots freely after assembly, you may have to do a bit of sanding on the internal surface to get it moving 100% smoothly.



### Required Prints:

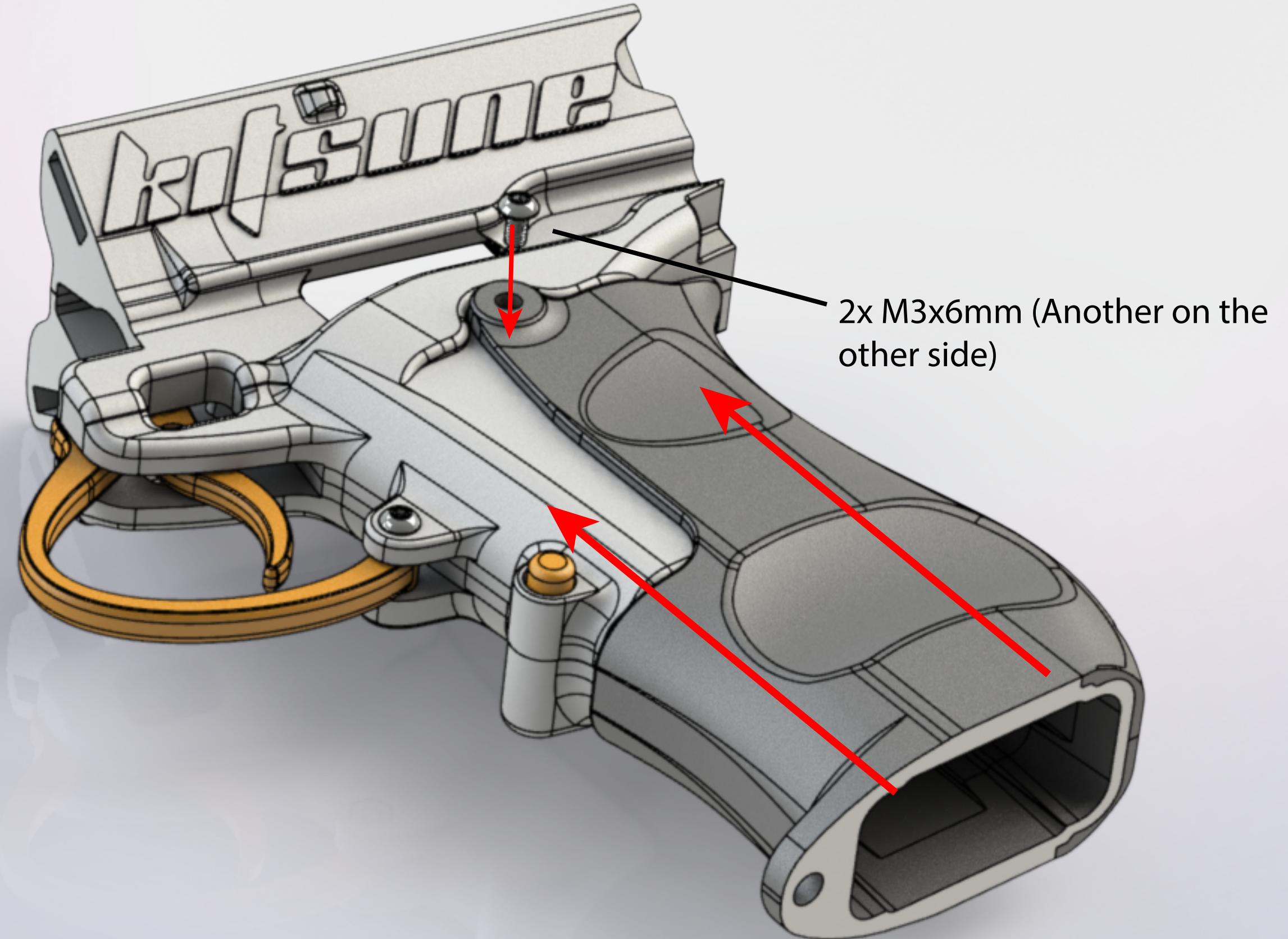
- 1x SAT Handle Right
- 1x SAT Handle Left
- 1x MonoGrip
- 1x Mag Release

- 1x Trigger Pivot Nub
- 1x T Guard Nub
- 1x Trigger

Mag Release spring  
(Smaller than the catch spring)

### Required Hardware:

- 2x M3x6mm Screws
- 1x M3x15mm Screw
- 1x Mag Release Spring

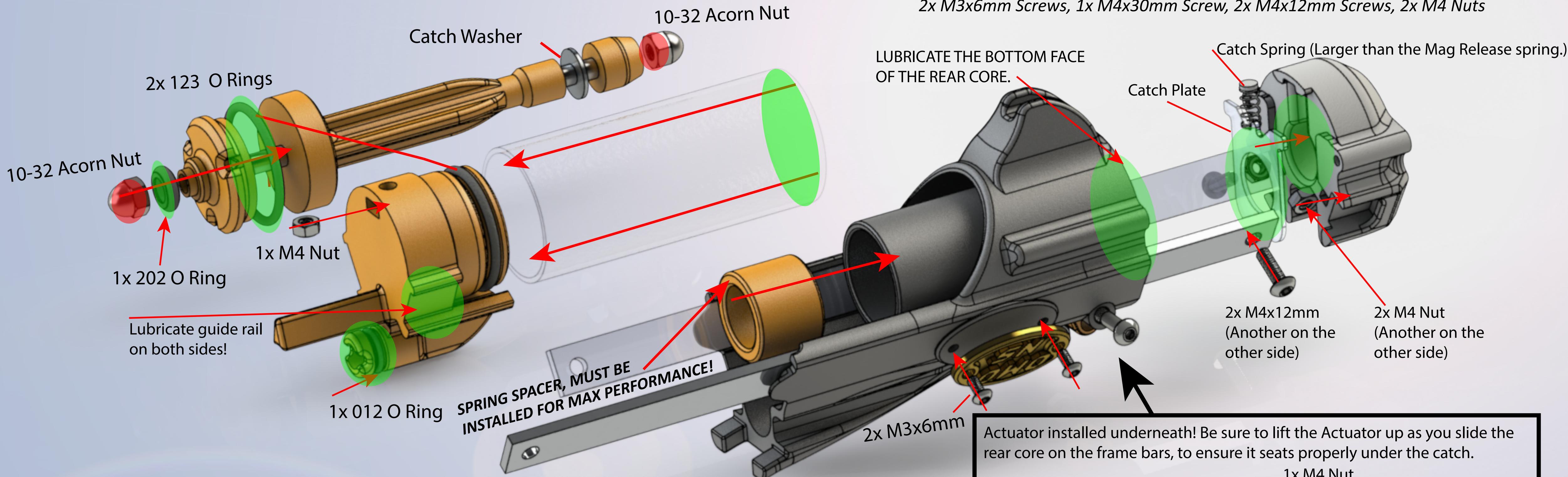


*NOTE: The shown handle is the nightengale grip. Assembly of the Angled Talon grip is the same, but instead of having a button mag release in the front it has a detent mag release in the back.*

# Step Three: Plunger, Catch, and Rear Core

Printed Parts: Plunger, Plunger Top, Catch Surface, TurnDown, Rear Core, Rear Cap, SN Plate, Spring Spacer.

Hardware: 2x Frame Bars, 1x Plunger Threaded Rod, 1x Catch Plate, 1x Catch Washer, 1x Catch Spring, 2x 10-32 Acorn Nuts, 2x 123 O Rings, 1x 012 O Ring, 1x 202 O Ring, 2x M3x6mm Screws, 1x M4x30mm Screw, 2x M4x12mm Screws, 2x M4 Nuts



Assemble the Plunger, Plunger Tube, and Rear Core as shown.

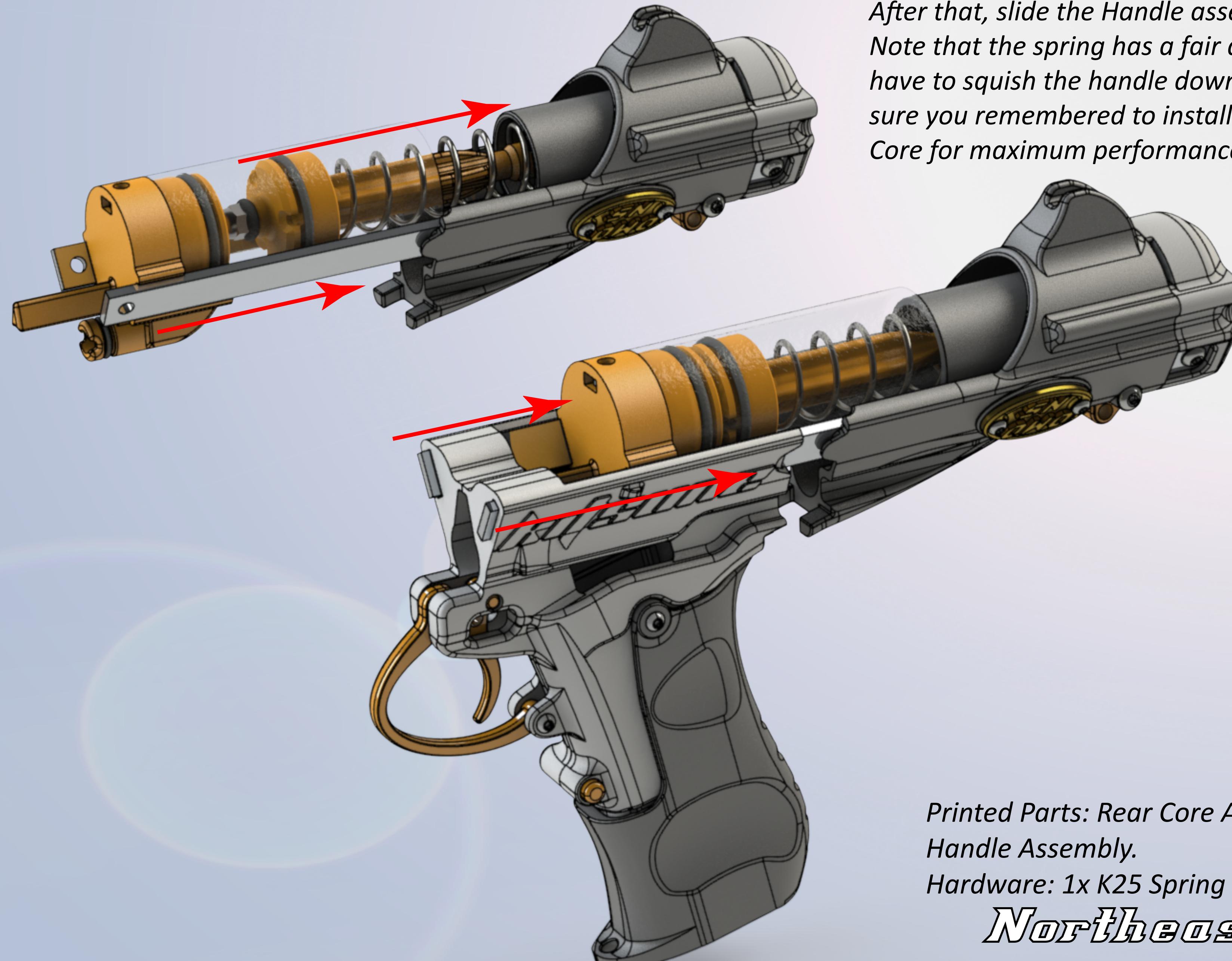
**VERY IMPORTANT:** Apply blue loctite to the two ends of the Plunger threaded rod to make sure it stays together.

**VERY IMPORTANT:** Apply a generous amount of lubricant in the shown areas.

**Areas shaded in RED: Apply Loctite.**

**Areas shaded in GREEN: Apply lubricant.**

## **Step Four: Body Assembly Part One**



*Install the Plunger in the PT, followed by the main K25 spring, and slide that assembly onto the rear core as shown. After that, slide the Handle assembly onto the frame bars. Note that the spring has a fair amount of preload, so you'll have to squish the handle down to get it to sit flush. Make sure you remembered to install the spring spacer in the Rear Core for maximum performance.*

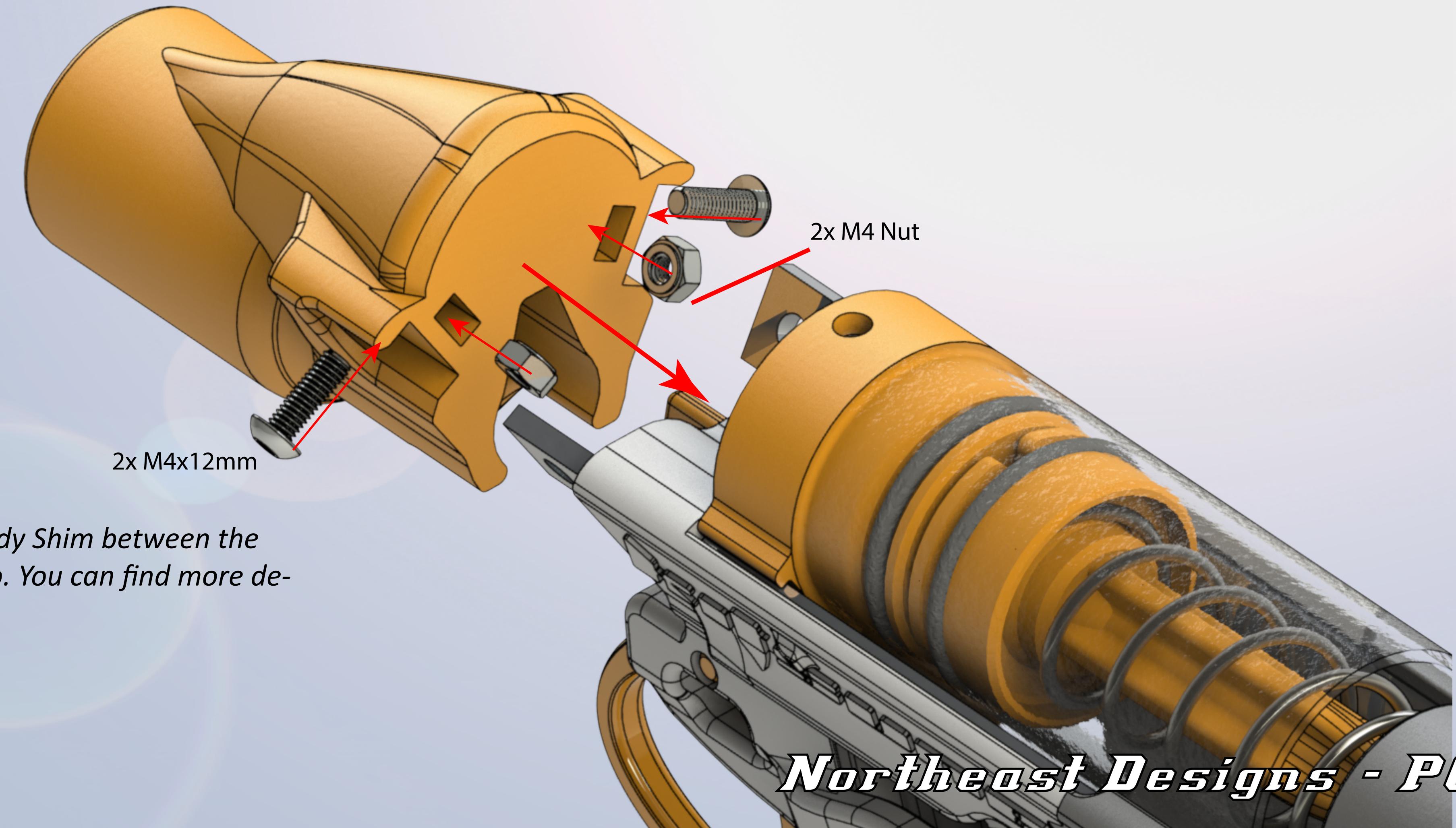
**Printed Parts:** Rear Core Assembly, Plunger Assembly, PT Assembly, Handle Assembly.  
**Hardware:** 1x K25 Spring

## Step Five: Body Assembly Part Two

Printed Parts: Front Cap, Body assembly.

Hardware: 2x M4x12mm, 2x M4 Nut.

Install the Front Cap onto the main body as shown. Note that the spring has a fair amount of preload, so you'll have to squish the handle down to get it to sit flush.

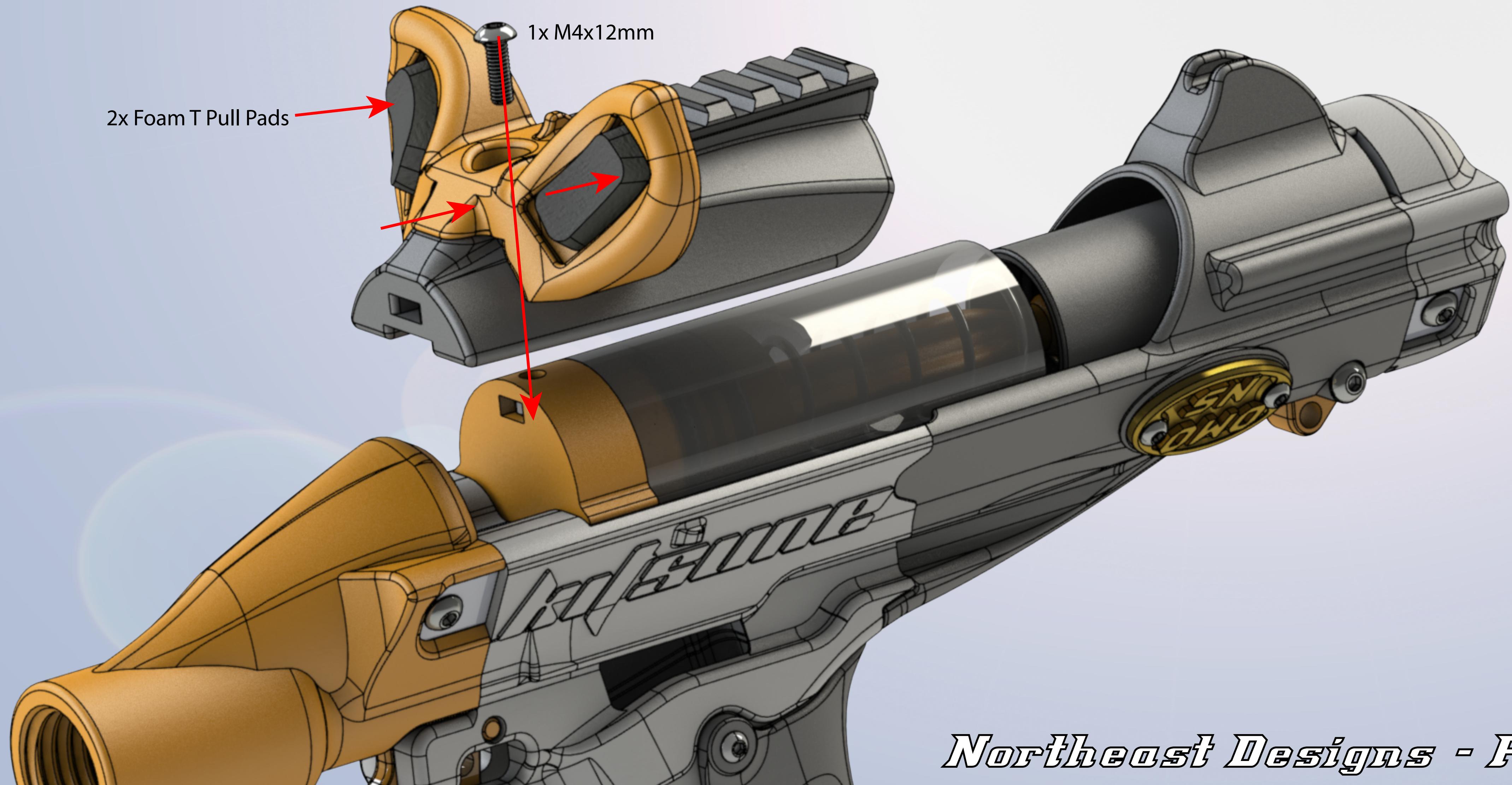


NOTE: You may have to install a Body Shim between the Handle assembly and the Front Cap. You can find more details about this on page 14.

## Step Six: Slide & Ears

Printed Parts: 1x Slide, 1x T Pull  
Hardware: 1x M4x12mm Screw.

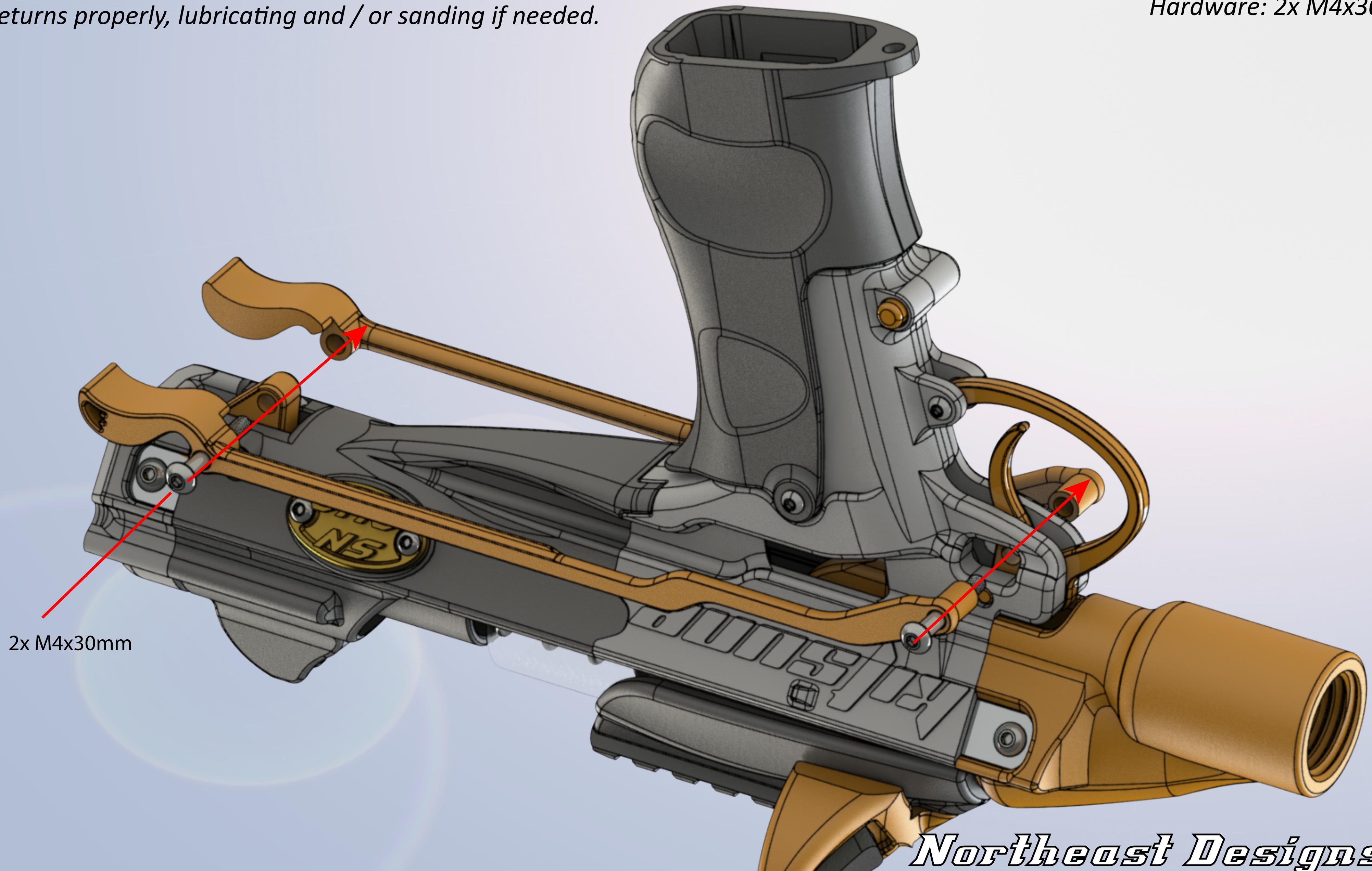
Slide the T Pull onto the top of the slide, and then attach the slide to the plunger tube with a M4x12mm Screw. Remember to stick the foam ear pads on the T pull.



## **Step Seven: Trigger Linkage**

Assemble the trigger linkage as shown. Do not overtighten the screws, and make sure the linkage pivots freely and returns properly, lubricating and / or sanding if needed.

Printed Parts: T Bar Right, T Bar Left,  
Body assembly.  
Hardware: 2x M4x30mm Screws.



## **Step Eight: Barrel**

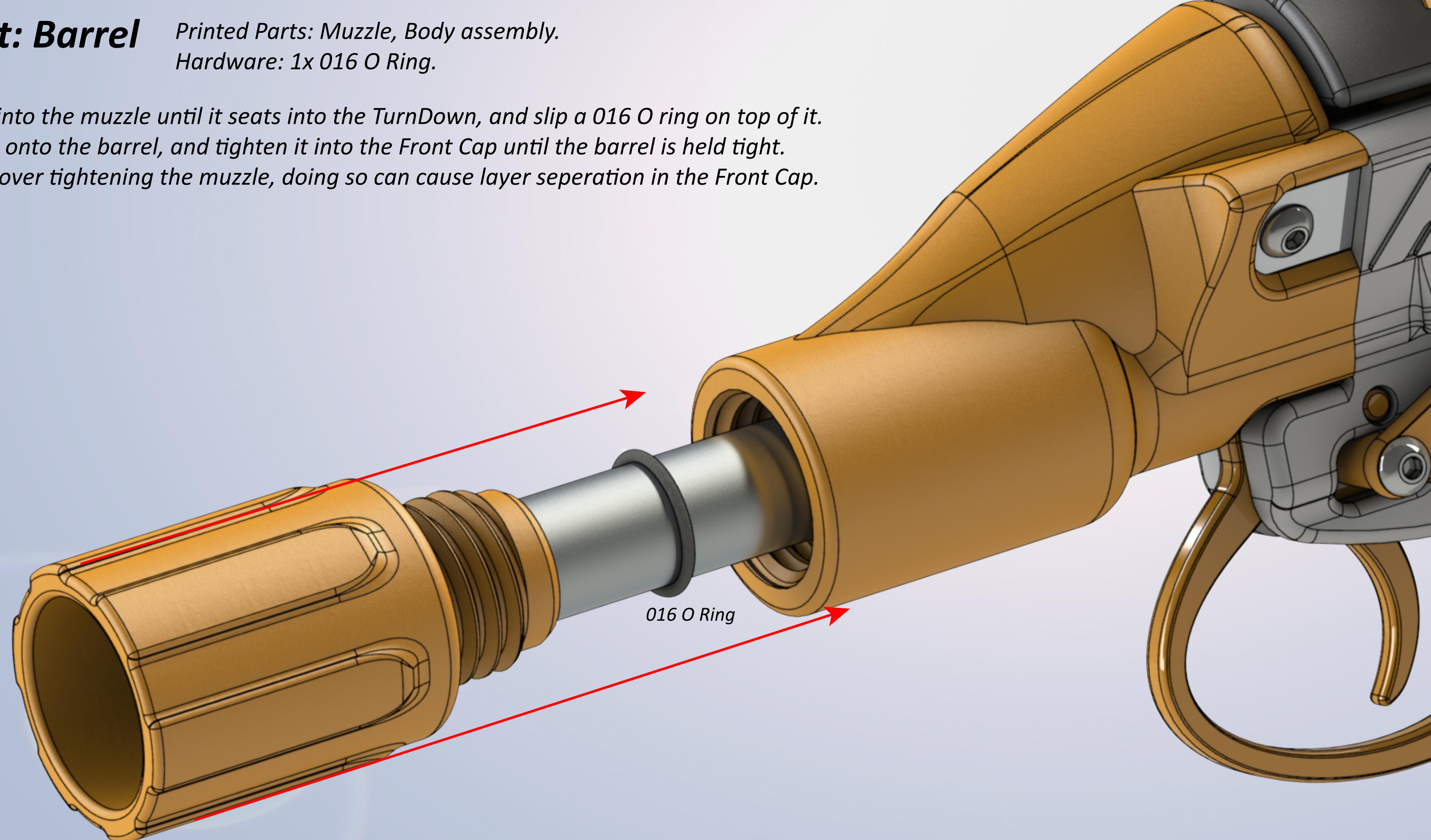
*Printed Parts: Muzzle, Body assembly.*

*Hardware: 1x 016 O Ring.*

*Slide the barrel into the muzzle until it seats into the TurnDown, and slip a 016 O ring on top of it.*

*Slide the muzzle onto the barrel, and tighten it into the Front Cap until the barrel is held tight.*

*Warning: Avoid over tightening the muzzle, doing so can cause layer seperation in the Front Cap.*

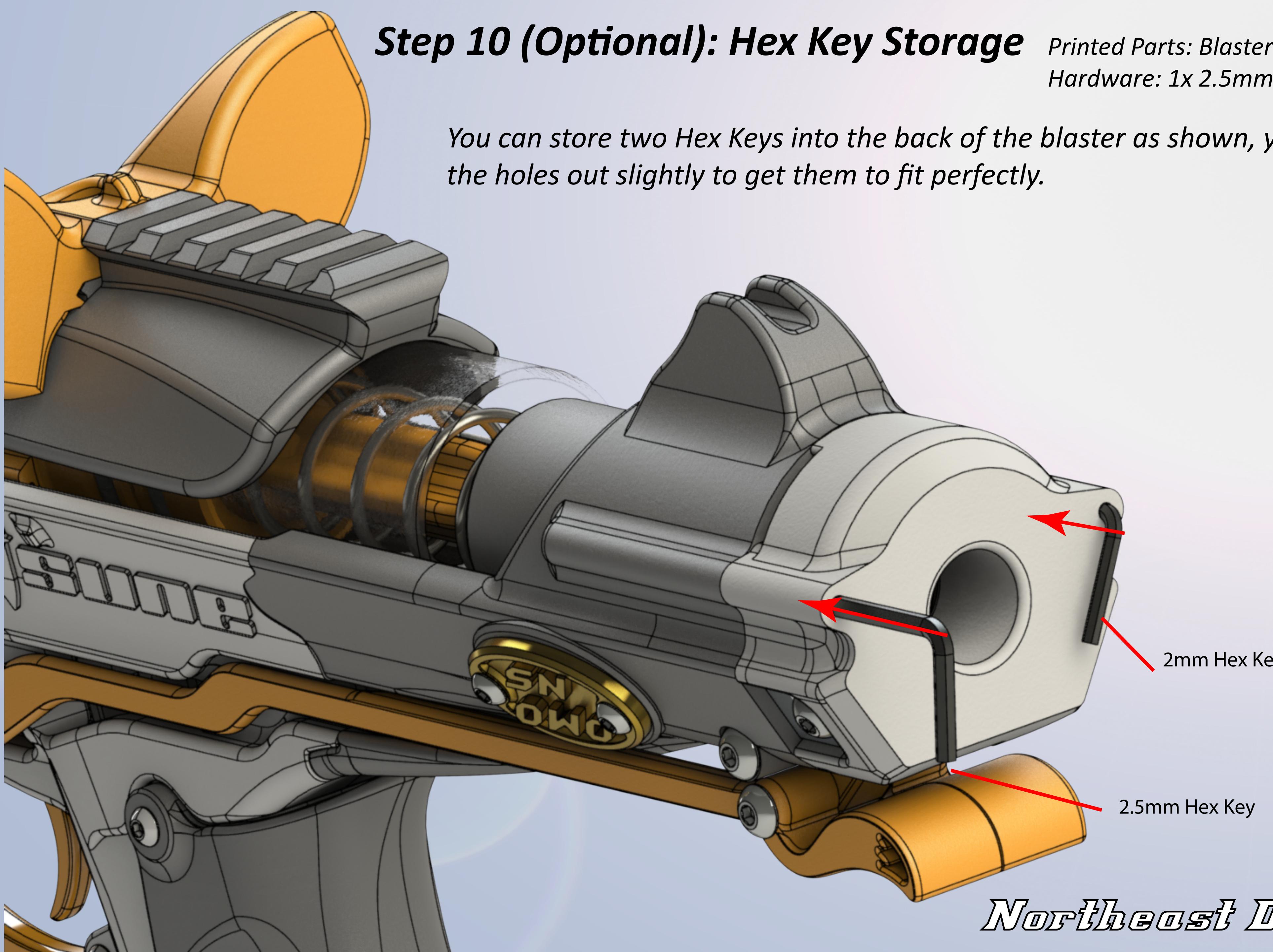


## ***Step 10 (Optional): Hex Key Storage***

*Printed Parts: Blaster assembly.*

*Hardware: 1x 2.5mm Hex Key, 1x 2mm Hex Key.*

*You can store two Hex Keys into the back of the blaster as shown, you may have to drill the holes out slightly to get them to fit perfectly.*





*With that, your Kitsune is done!*

*Extra documentation can be  
found beyond this page, so  
please read until the end.*

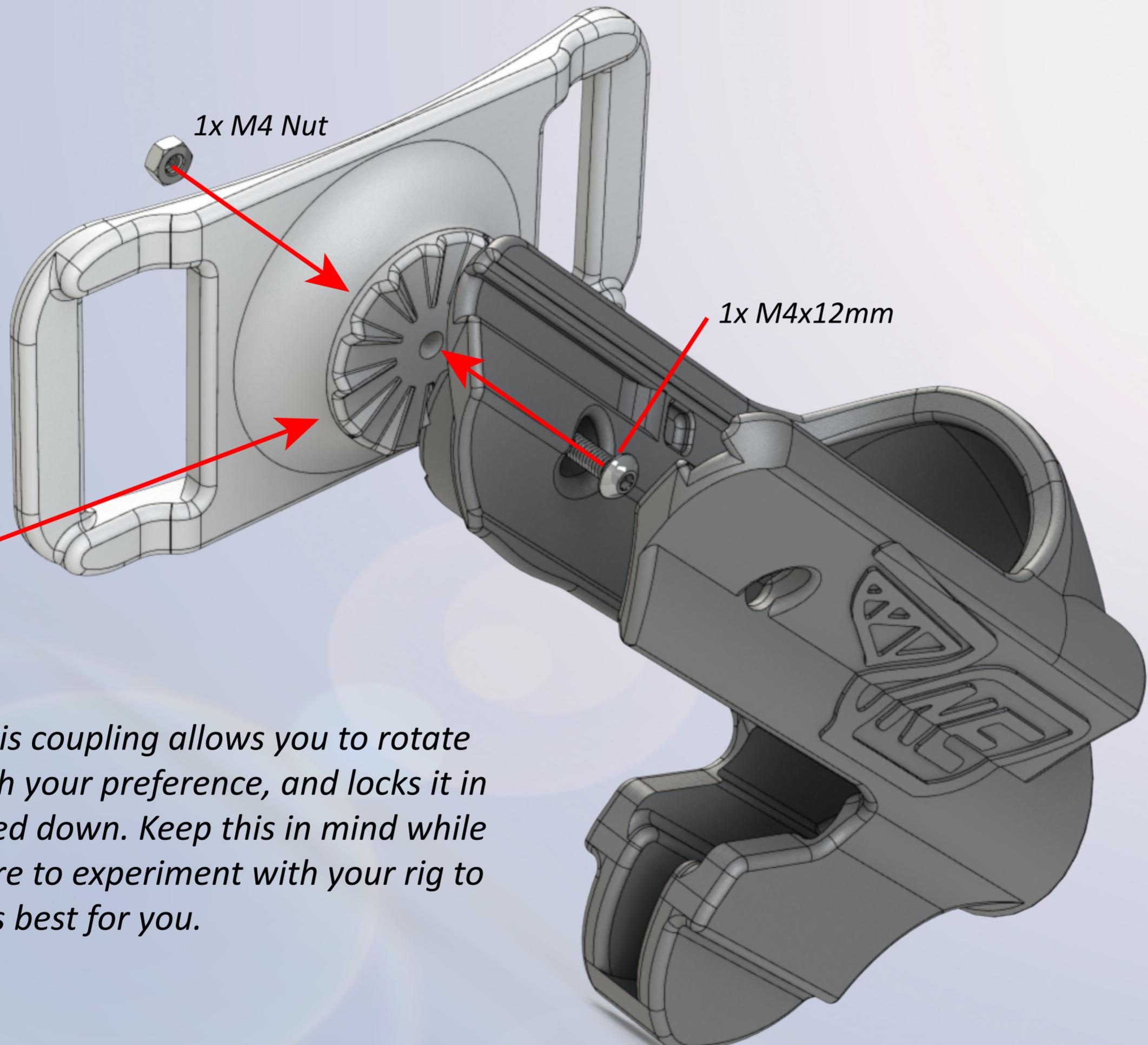


## Extra: Holster

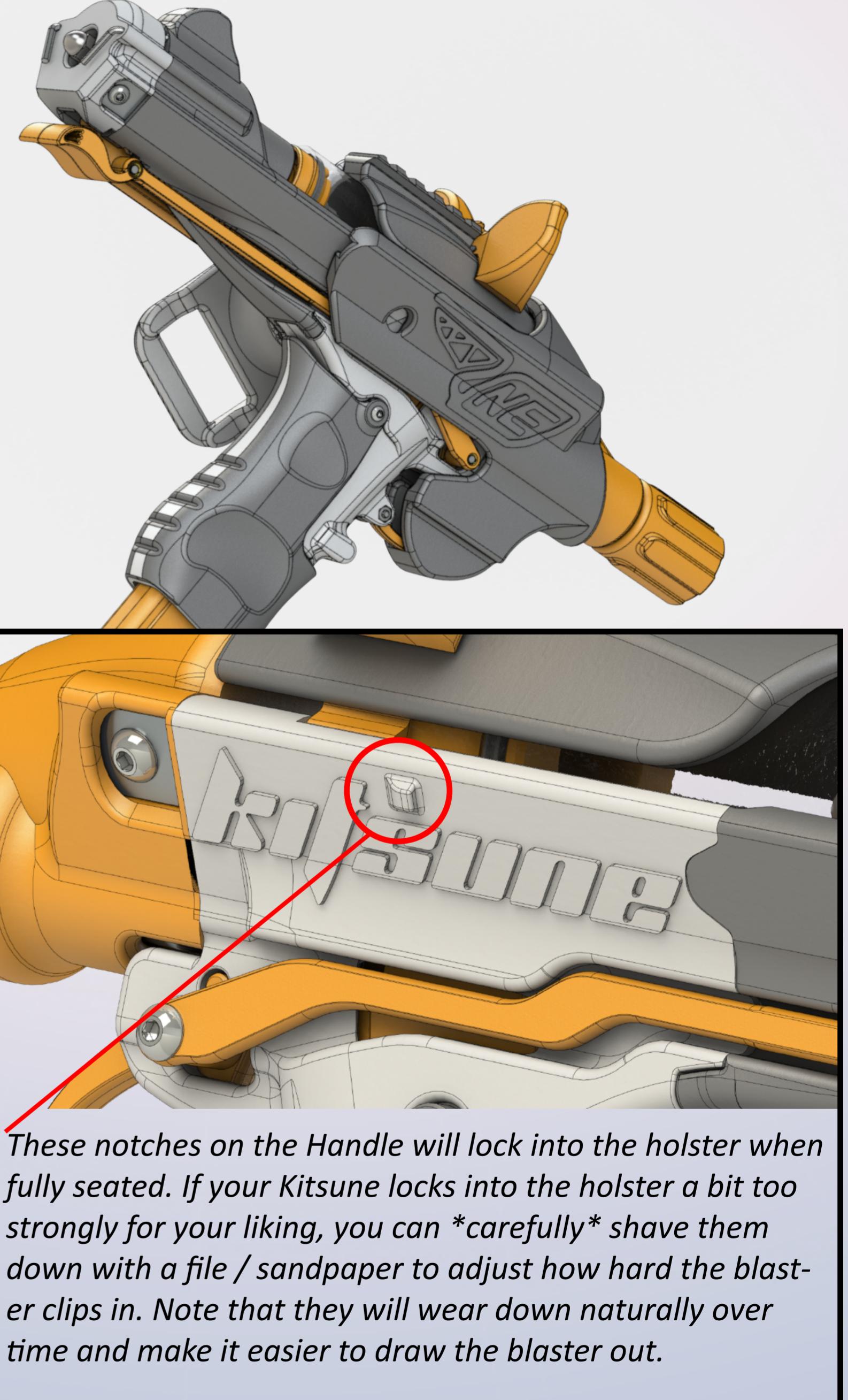
The Kitsune has a printed holster included in the fileset, refer to this step to learn how to build it.

Printed Parts: 1x Holster, 1x Holster Belt Clip

Hardware: 1x M4x12mm Screw, 1x M4 Nut.



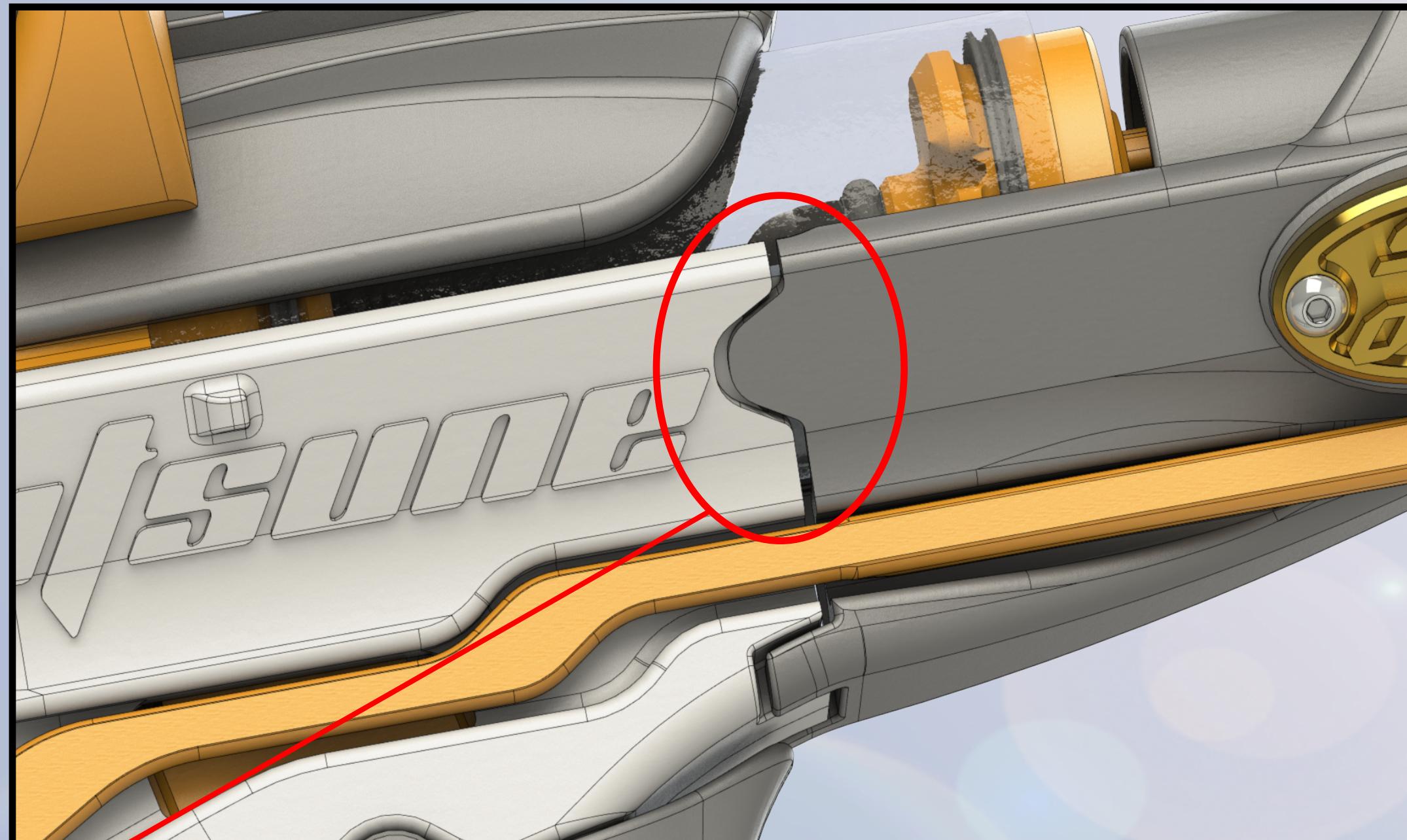
Note this toothed coupling. This coupling allows you to rotate the holster body to fit best with your preference, and locks it in that orientation when tightened down. Keep this in mind while building the Holster and be sure to experiment with your rig to find the orientation that works best for you.



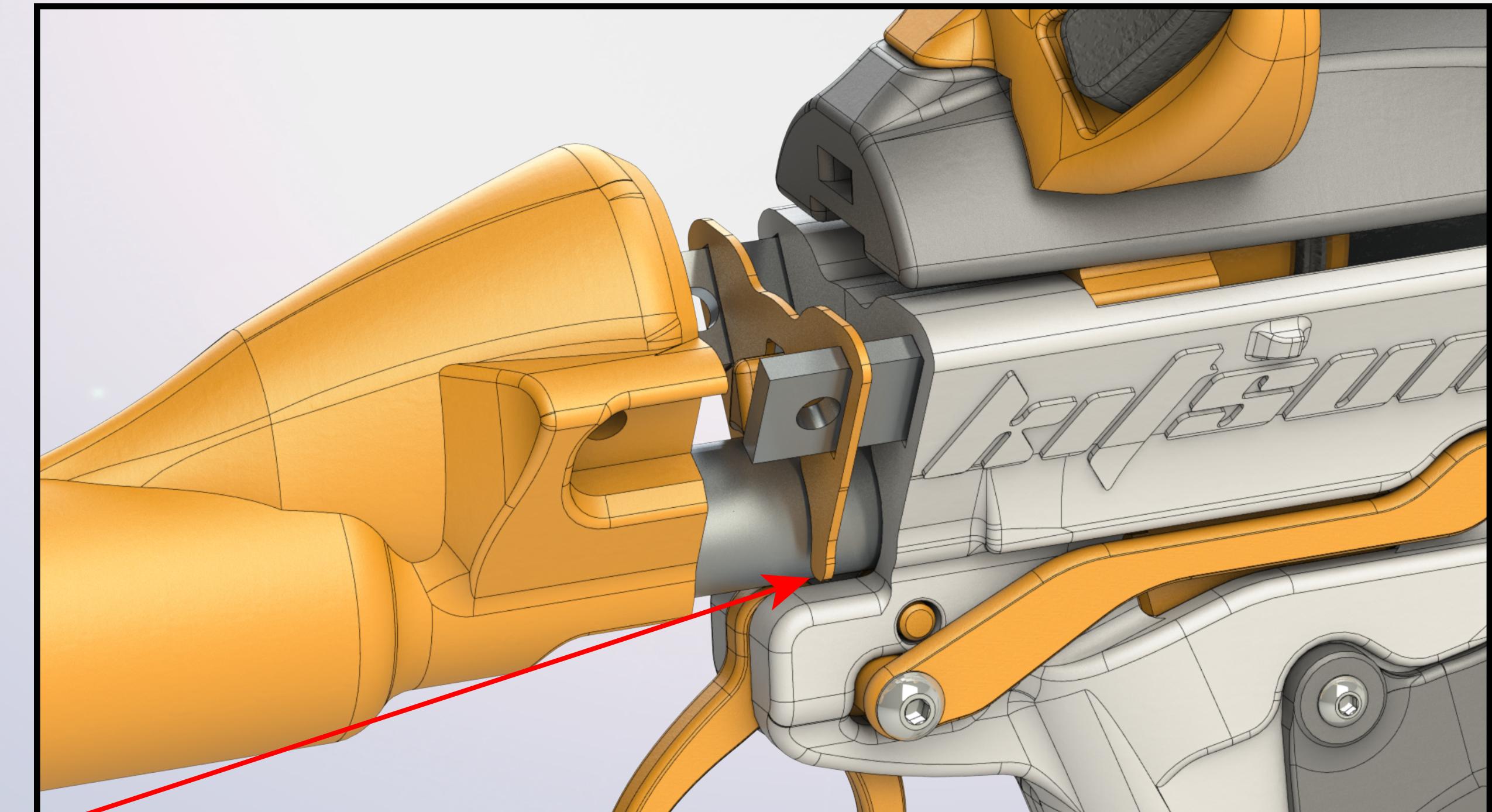
These notches on the Handle will lock into the holster when fully seated. If your Kitsune locks into the holster a bit too strongly for your liking, you can \*carefully\* shave them down with a file / sandpaper to adjust how hard the blaster clips in. Note that they will wear down naturally over time and make it easier to draw the blaster out.

## Extra: Body Shims

If you find after building your Kitsune that there is a small gap between parts on the body, creating a slight wobble in the frame, you can use a “Body Shim” to fix it. I’d recommend starting with a 0.04” shim as a baseline, and try other shims if needed. You can also stack different shims on top of each other to get a custom shim height. If you have access to a pair of calipers, you can measure the exact gap and print the exact shim that you need, but it’s pretty easy to get it right through just trial and error.



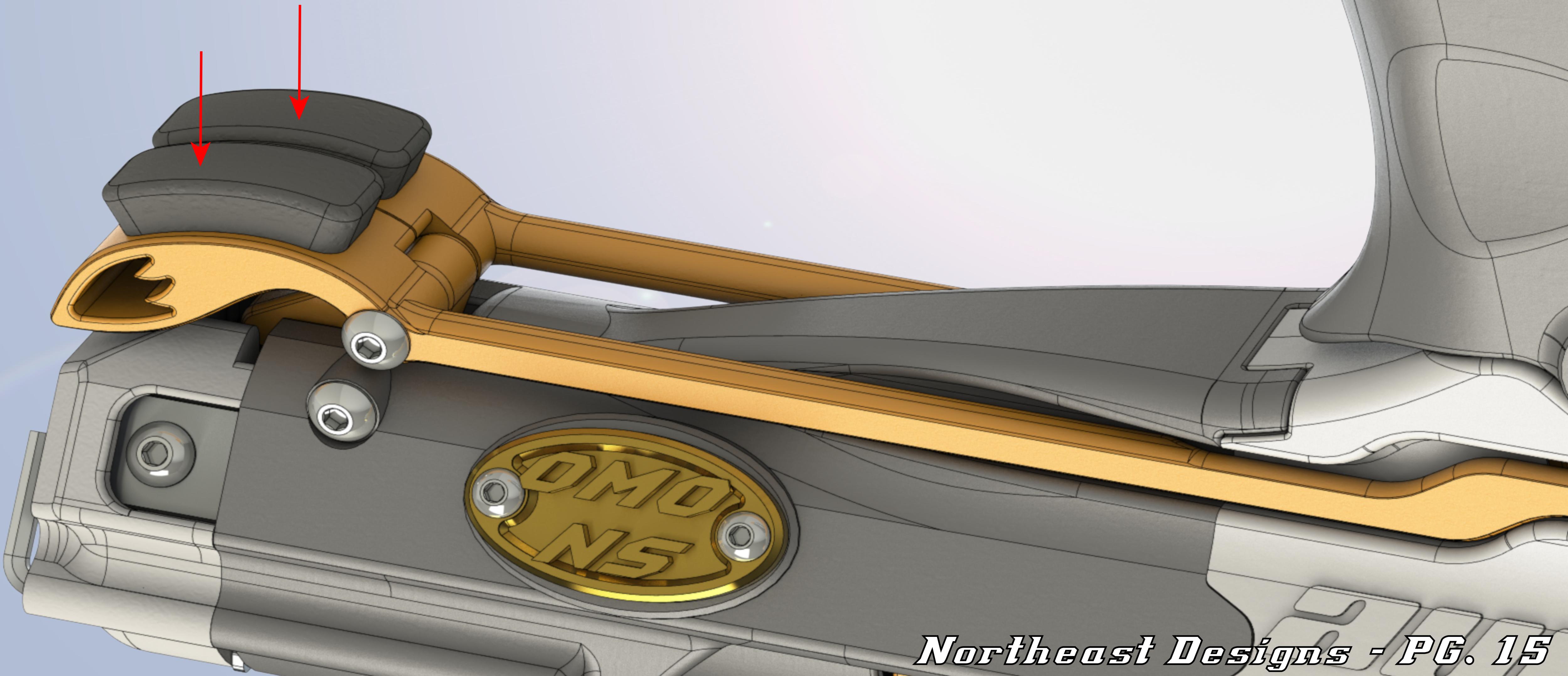
Body gap, requires Body Shim to fix. You can measure the exact shim needed with calipers.



Body Shim installed between the Handle Assembly and Front Cap.

## **Extra: Wrist Pads**

*There are two extra foam T Pull pads included in your kit. You can attach these to the tail on the backside of the Trigger Bars to increase comfort.*



# **Common Issues & Fixes**

## **Problem: Can't get the blaster to catch / Resistance towards the end of prime**

**Solution:** This is a common issue with this catch setup when everything is brand new. You may have to pull back pretty hard to get it to catch the first few times. It will quickly bed in and get easier to catch within a magazine or so. In addition, make sure you remember to lubricate the catch well.

## **Problem: Prime is sticky / action gets stuck while cycling**

**Solution:** Make sure you lubricate the guide rails on the TurnDown as detailed in step three. If you did lubricate and it's still sticky, you can carefully sand the guide rails until the plunger tube cycles smoothly. NOTE: the guide rails will wear in naturally over time, so don't remove too much material if you end up sanding them.

## **Problem: Performance is lower than expected**

**Solution:** Make sure you installed a spring spacer in the Rear Core. There are two spring spacers, a "Mid" spacer, and a "Max" spacer. The mid spacer should give you a 5-10 FPS boost over no spacer, and the max spacer should give you a 10-15 FPS boost over no spacer. If you have a spacer installed and the performance is still low, ensure that the air seal is tight. It's possible to not seat the barrel down far enough for it to seal in the TurnDown, and it's possible for your Plunger prints to have gaps from poor print quality causing an air leak.

## **Problem: Trigger pull is too heavy / trigger gets stuck (Doesn't return properly)**

**Solution:** First, ensure that the catch has been well lubricated as detailed in step three. Also make sure that you properly cleaned the area the trigger sits inside the handle, small bits of plastic can cause it to stick. Make sure the two screws on the trigger linkage are not overtightened, if your trigger gets stuck you need to loosen them slightly.

More troubleshooting tips will be added to this page over time. If you need more specific help, ask in the NED Discord server or Email [NEDesignsCS@gmail.com](mailto:NEDesignsCS@gmail.com)