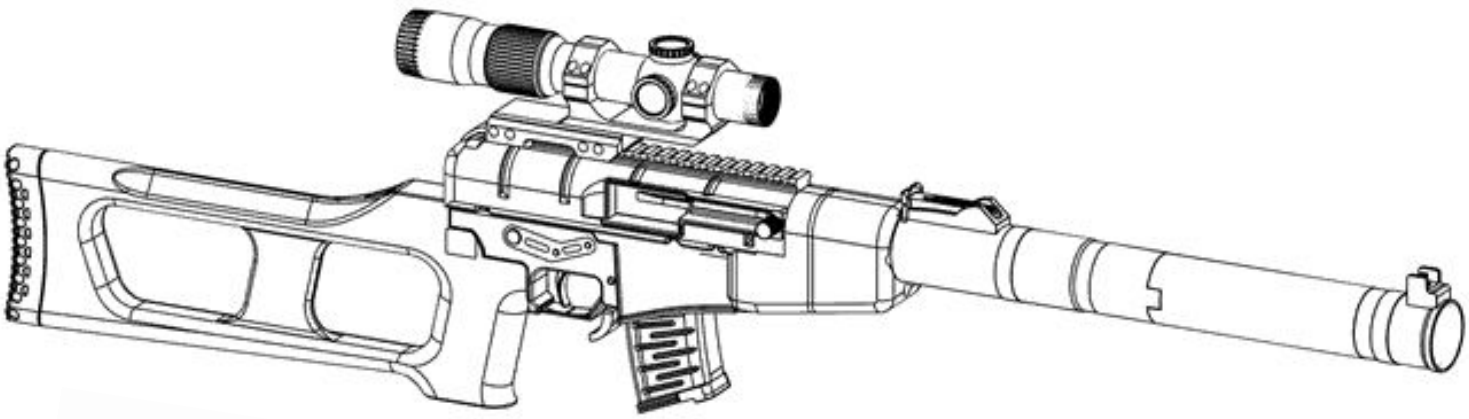
3DSS Printorez
Assembly guide



By: Peacekeeper

Contents

Section I: Introduction

The 3DSS Printorez is a labor of love, taking me nearly a year to release as a solo developer. While this is my first full project from beta to release, I've previously worked on printed designs from others and created private designs I didn't deem ready for public release. This project has undergone hundreds of hours of CAD development and over 1,000 rounds of testing with my dedicated testers.

This 9x19mm build is based on the 9x39 VSS Vintorez, utilizing standard Mac-11 components for easier assembly and part availability. To those asking, "Why not .300 BLK?"—I'm working on it, but it's challenging.

The project offers numerous variations, including an AS VAL variant compatible with picatinny railed braces and AR-15 grips. You can build a suppressed PCC with a 50mm OD suppressor, folding brace, and Glock mags, or a dedicated VSS-style build with custom magazines. More details on suppressors and variants will be provided in the documentation.

Acknowledgments: A massive thank you to my testers—your support made this possible. If you're reading this, consider beta testing for other developers to help push the community forward. Godspeed, o7.

Special thanks to PLA.Boi for designing a custom suppressor for this project. He's a legend in this community and will always have a home here.

BEAR BURNER REVIVAL ItsWabbitSzn

Section II: Tools and shopping list

To assemble this firearm, you will **need** the following tools:

- Gunsmiths punch set (or be handy with a screwdriver and hammer)
- A set of **LONG METRIC** allen wrenches
- A Pair of cutters (for glock variant)
- Set of imperial drill bits to ream holes

Section III: Parts kit checklist

Hardware:

- (6) M5 Square Nuts
- (3) M5x90mm Socket Head Bolts
- (1) Cut Ender Bed Spring (Side Release Var.)
- (3) M5x40mm Bolt
- (1) M3 x 15mm Socket Head Screw
- (2) M4 x 30mm Socket Head Screw
- (1) M3 Hex Nut
- (1) M4x22mm Dowel Pin
- (1) .375” Compression Spring
- (1) Dowel Pin 3x32 for Glock Feed Ramp
- (3) 5mm x 35mm Pins/Rods
- (1) SCS plate
- Potentially 1 DB FCG reinforcement plate

Suppressor hardware

- 37mm ID 40mm OD carbon fiber tube at least 400mm long
  Or
- 47mm ID 50mm OD carbon fiber tube at least 400mm long
- 1/2*28-3/4*16 Thread Adapter
- 2 part epoxy resin

Weapon Hardware:

- AR-15 FCG
- AR-15 Safety assembly
- Mac 11 External Trunnion (velocity arms one works fine)
- Mac 11 5.4” Barrel
- Mac 11 Bolt
- Mac 11 Charging handle
- 15rd or 33rd Glock magazine springs

AVES

For all Mac 11 parts and Trunnion barrel combos
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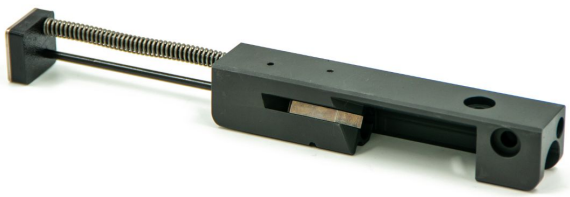

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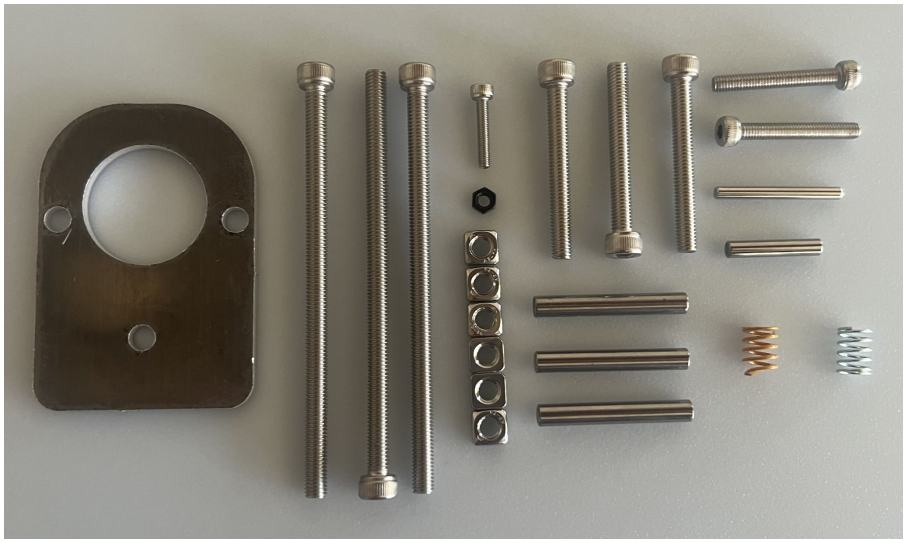
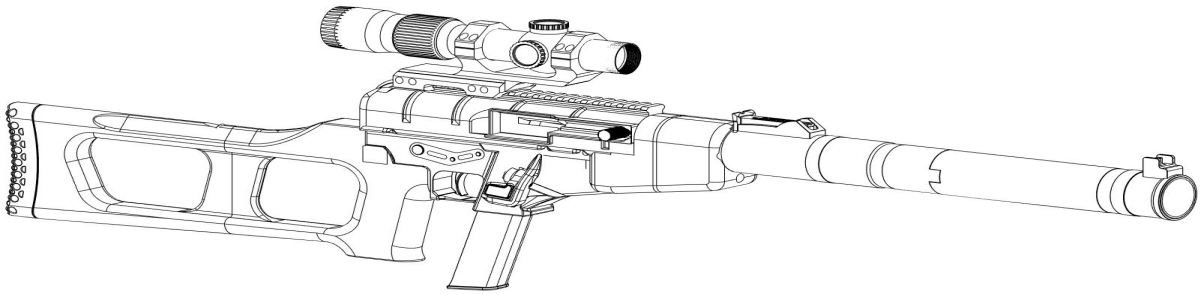


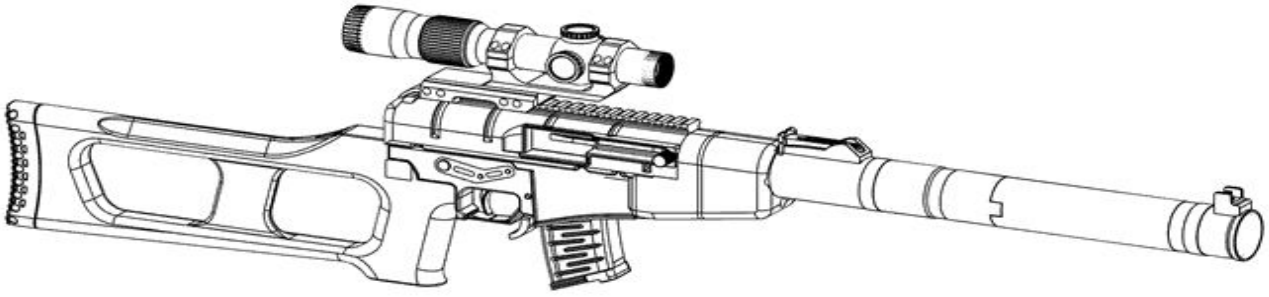
Section III: Magazine Comp.

This release has 2 mag types: Glock mags with the side release and VSS sten mags. You will need to decide before the build which one you want to make.

Below is the glock mag variant.



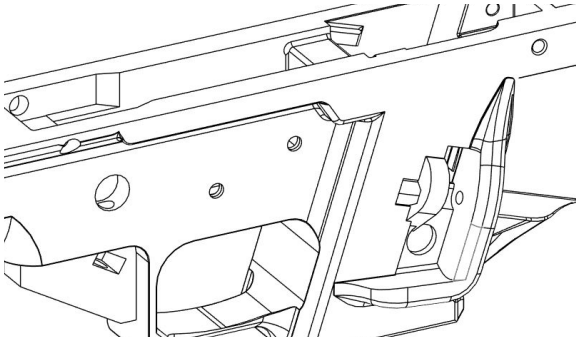
Below this text is the VSS sten mag variant.



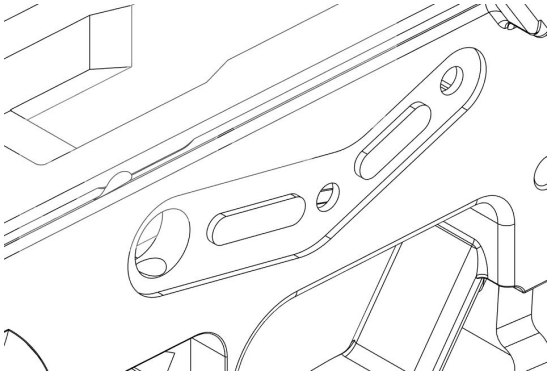
Section IV: Extra Instructions

YOU CAN ONLY PICK ONE FROM EACH ROW OF 2

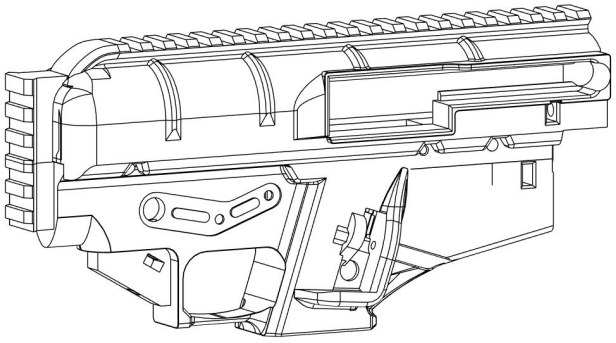
UNREINFORCED VARIANT



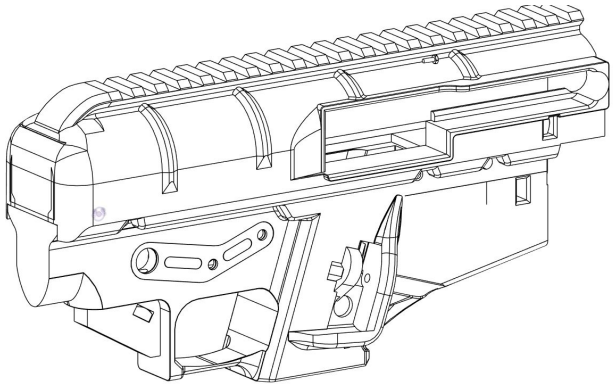
REINFORCED VARIANT



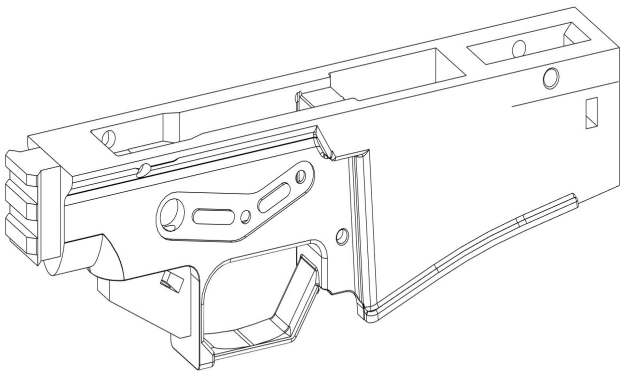
AS VAL VARIANT



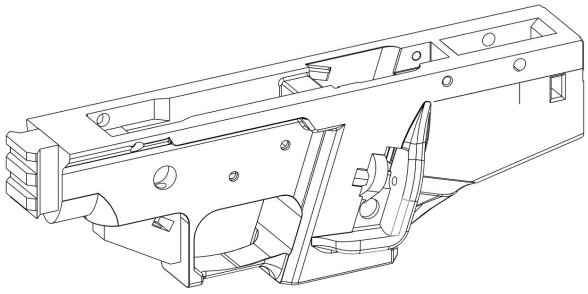
VSS VARIANT



STENISH MAG VARIANT



GLOCK MAG VARIANT



Section IV: Print settings and orientation

As a general rule, all components of this firearm should be printed at 100% infill with a reasonable number of walls. Use common sense—it's not rocket science. However, there are exceptions for this build, which I'll list below.

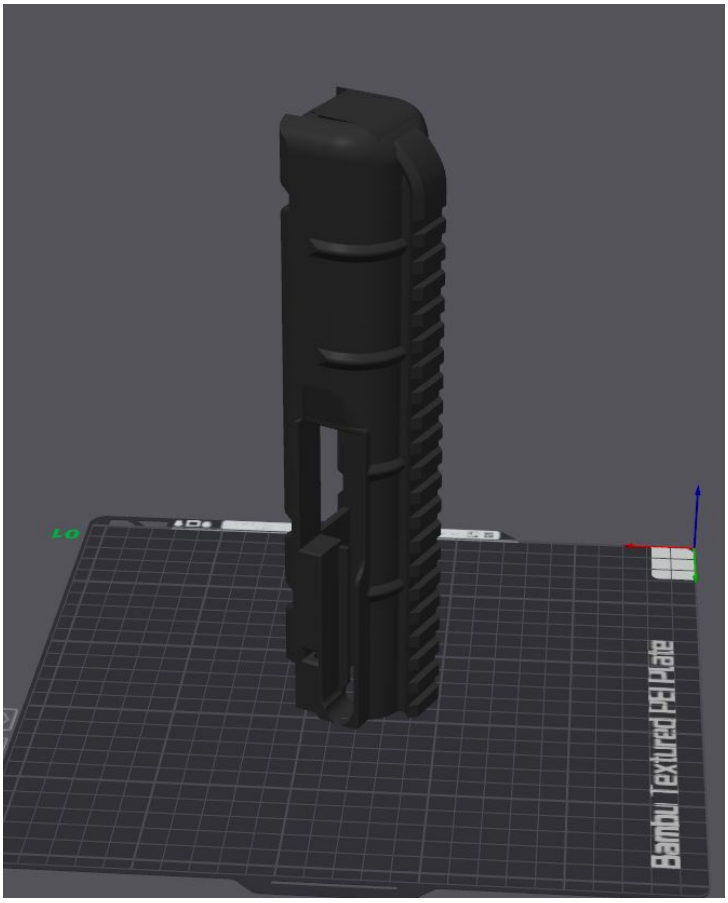
Please review them carefully.

The **THREE EXCEPTIONS** for this build are the **TPU short stroke buffer block and BUTT PAD**. It should be printed in **TPU 95** with at least 7 top and bottom walls and about **40% INFILL.**

The other exception is the **stock**, it should be printed around **50% infill** for a good amount of strength

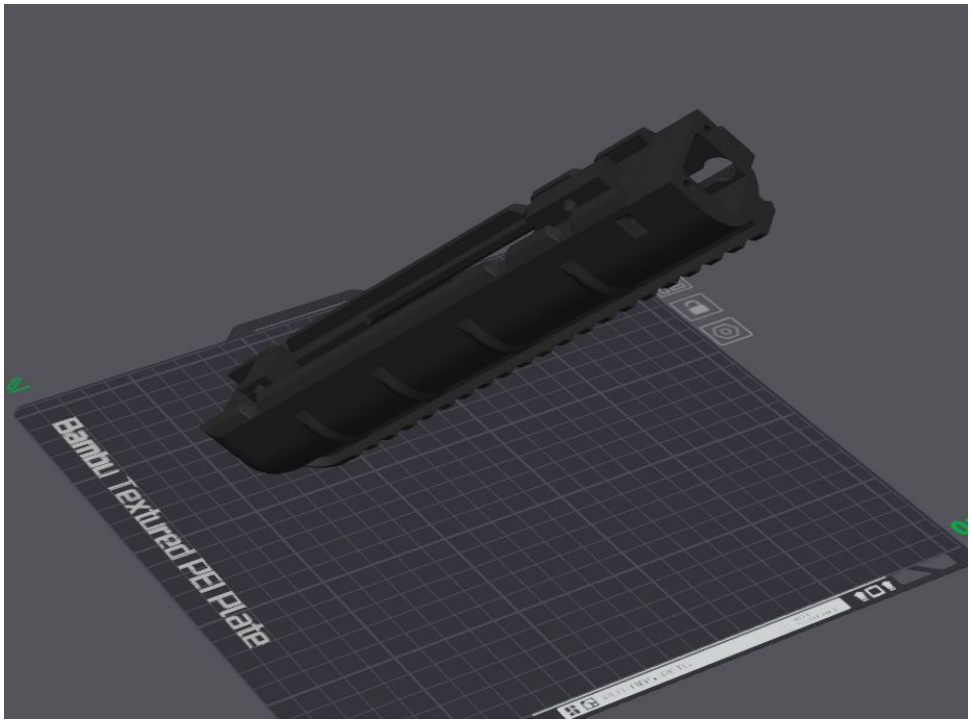
The proceeding pages of this section will be picture references of the print orientation.

Section IV: Print Orientation



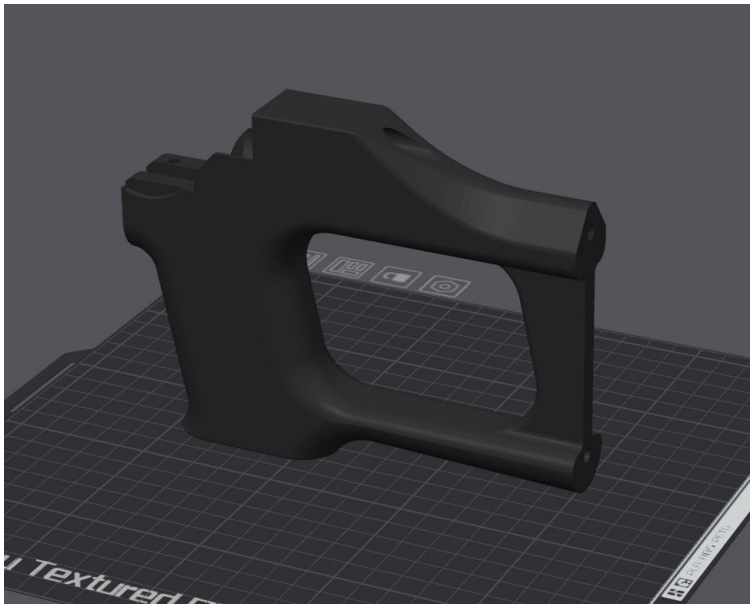
OR

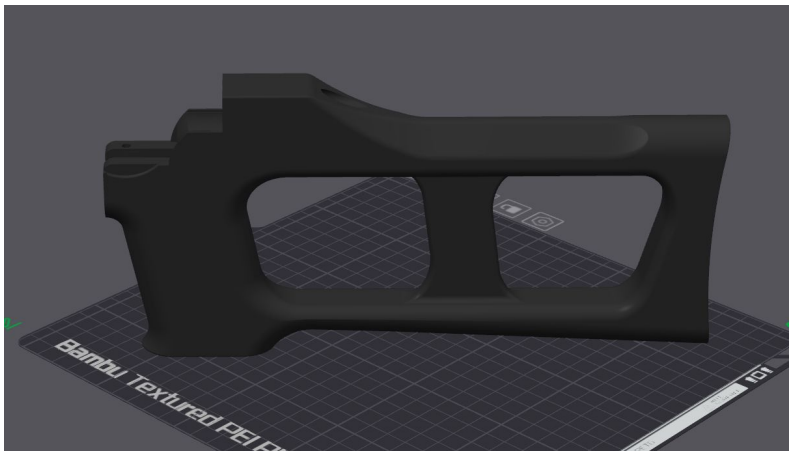
(Only use this orientation for ender sized printers. Do not exceed 45 degrees of tilt)

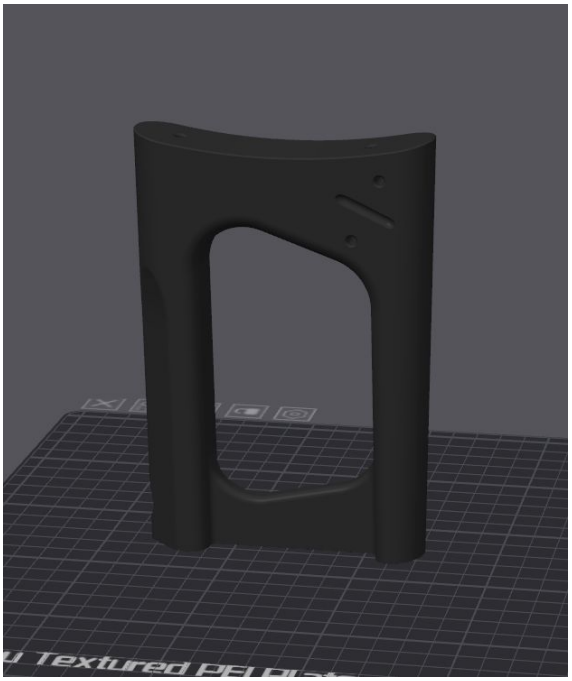


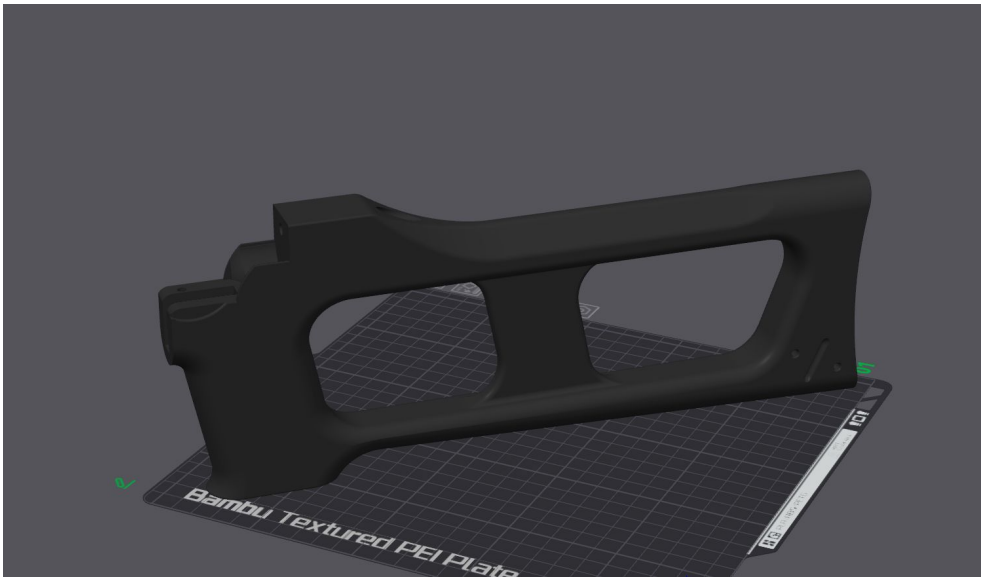
It's very important that you do not have supports inside the cavity of the upper

Section IV: Print Orientation

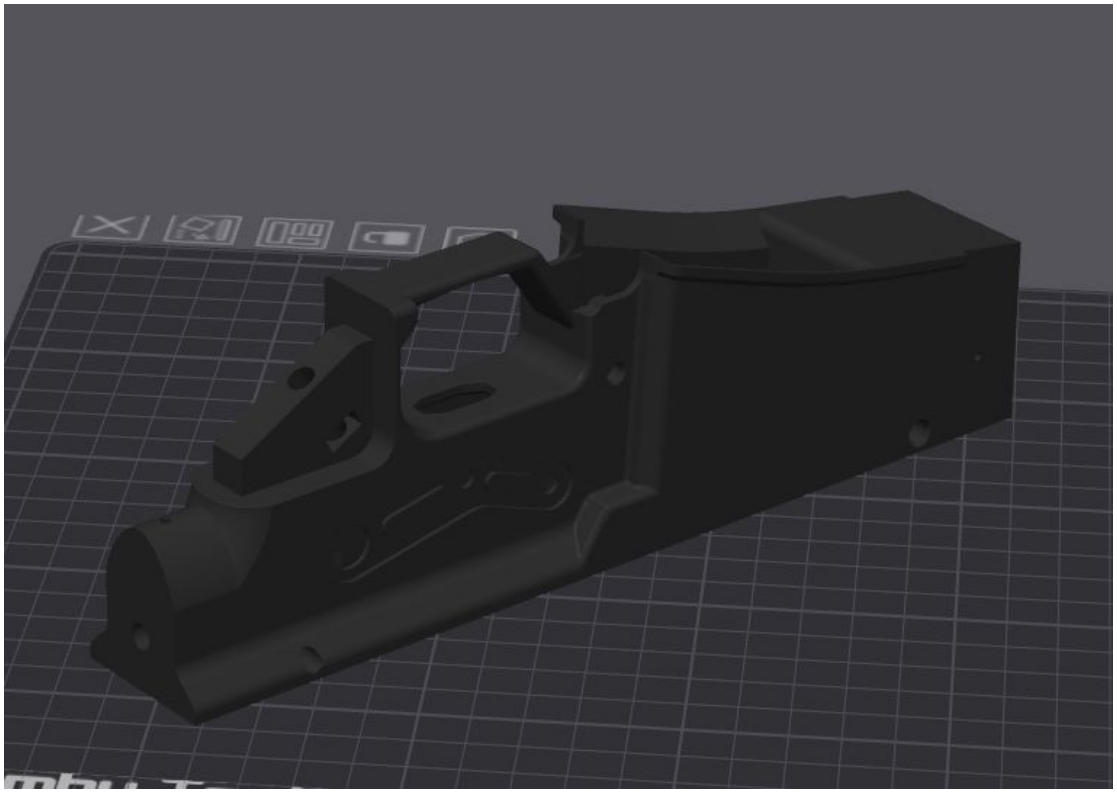


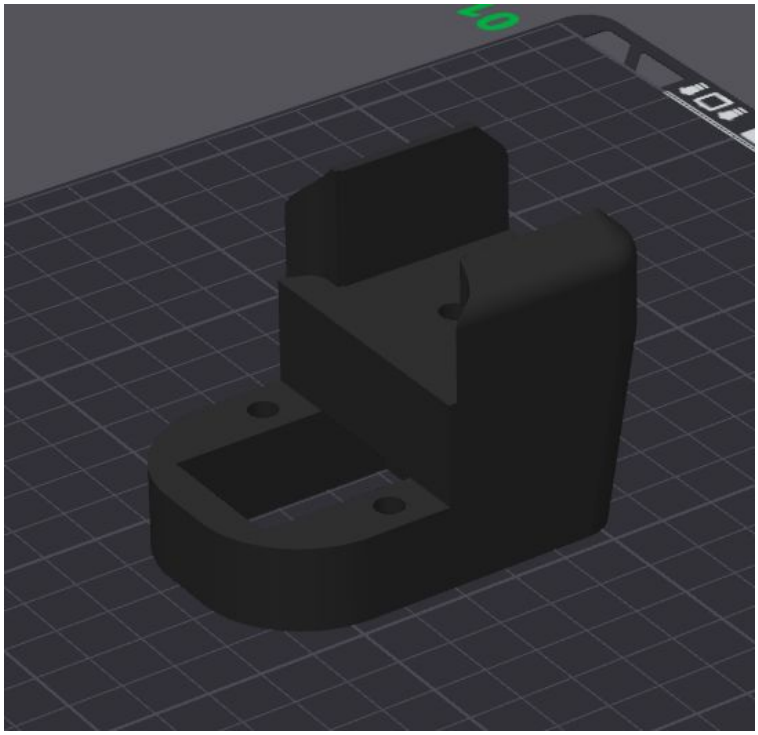


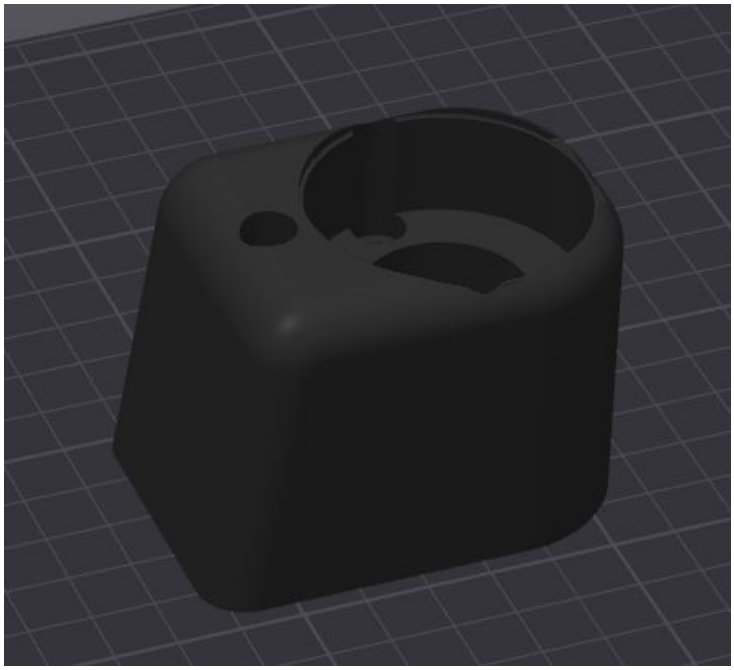




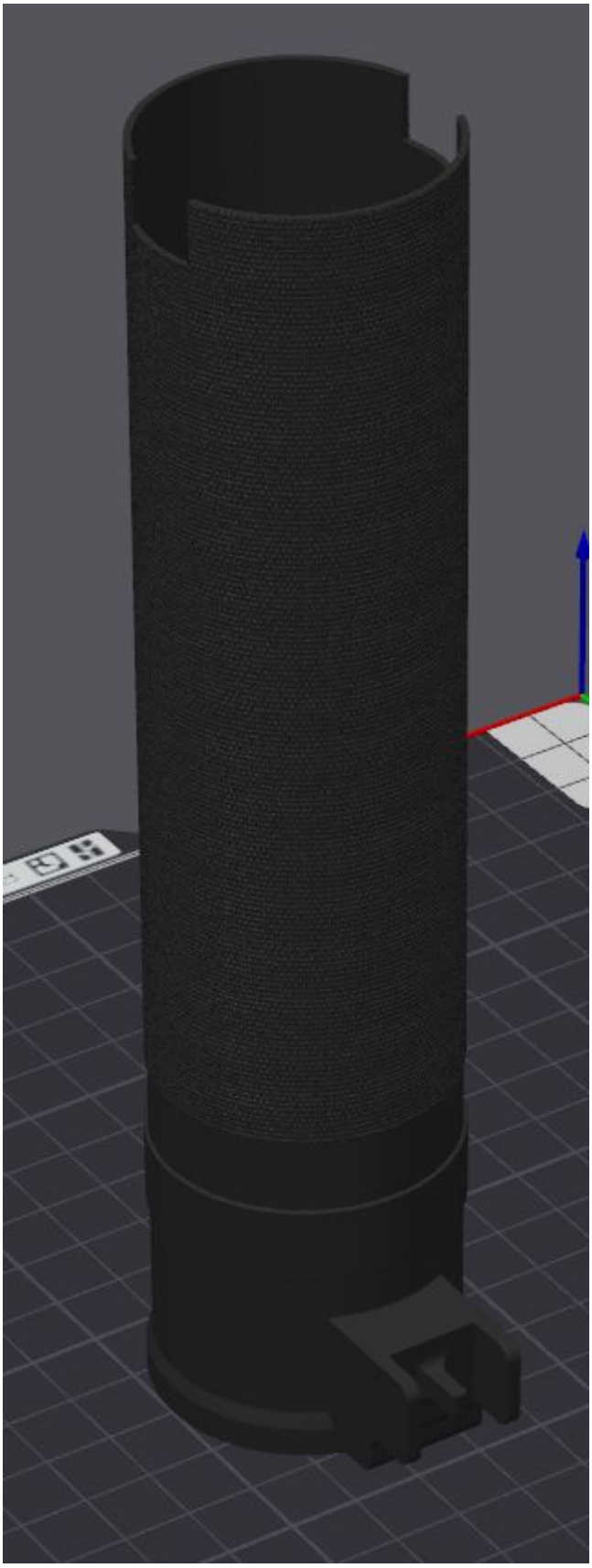
Section IV: Print Orientation







Section IV: Print Orientation



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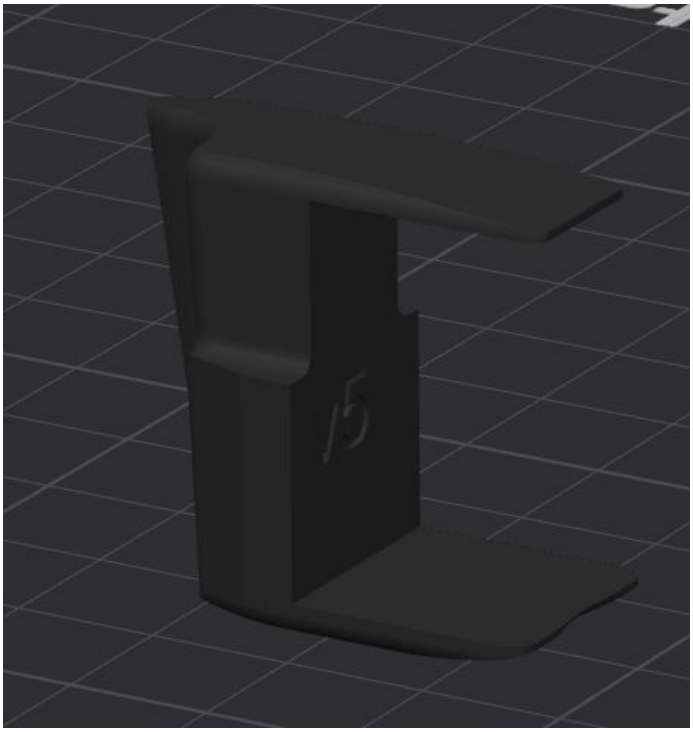
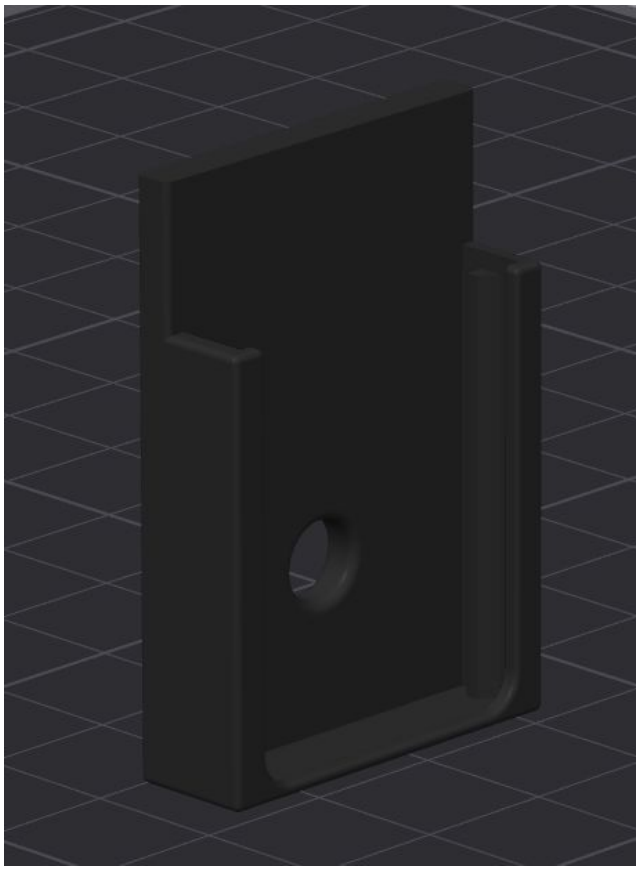




Section V: Assembly

These safety tips are generalized so that they can be followed for any kind of 3DPG build. Regardless, you should read over them and add as needed.

In this section, we will cover the settings you should print your frame and assembling it.

Safety first

Putting a gun together is no joke. Firearms are dangerous tools that must be treated with care and respect. **You are responsible for your safety, and those surrounding you** when you work with or operate firearms. Fellow developers or engineers cannot be responsible or liable for what you do or don't do.

As a general reminder, here are some rules to keep in mind:

1. **Always treat a gun as if it is loaded**. Remove the magazine and check the chamber yourself to verify the gun is unloaded.

2. **Keep your firearm always pointed in a safe direction.** Never point your gun at anything you don't intend to destroy.

3. **Be aware of what is in front and behind of your target.**

But specifically, for working on your firearm, you should remember the following too:

1. **Keep live ammo away.** Use snap caps or dummy rounds to verify function of your firearm. Never keep live ammo around your workspace, and certainly never mix them with your dummy ammo.

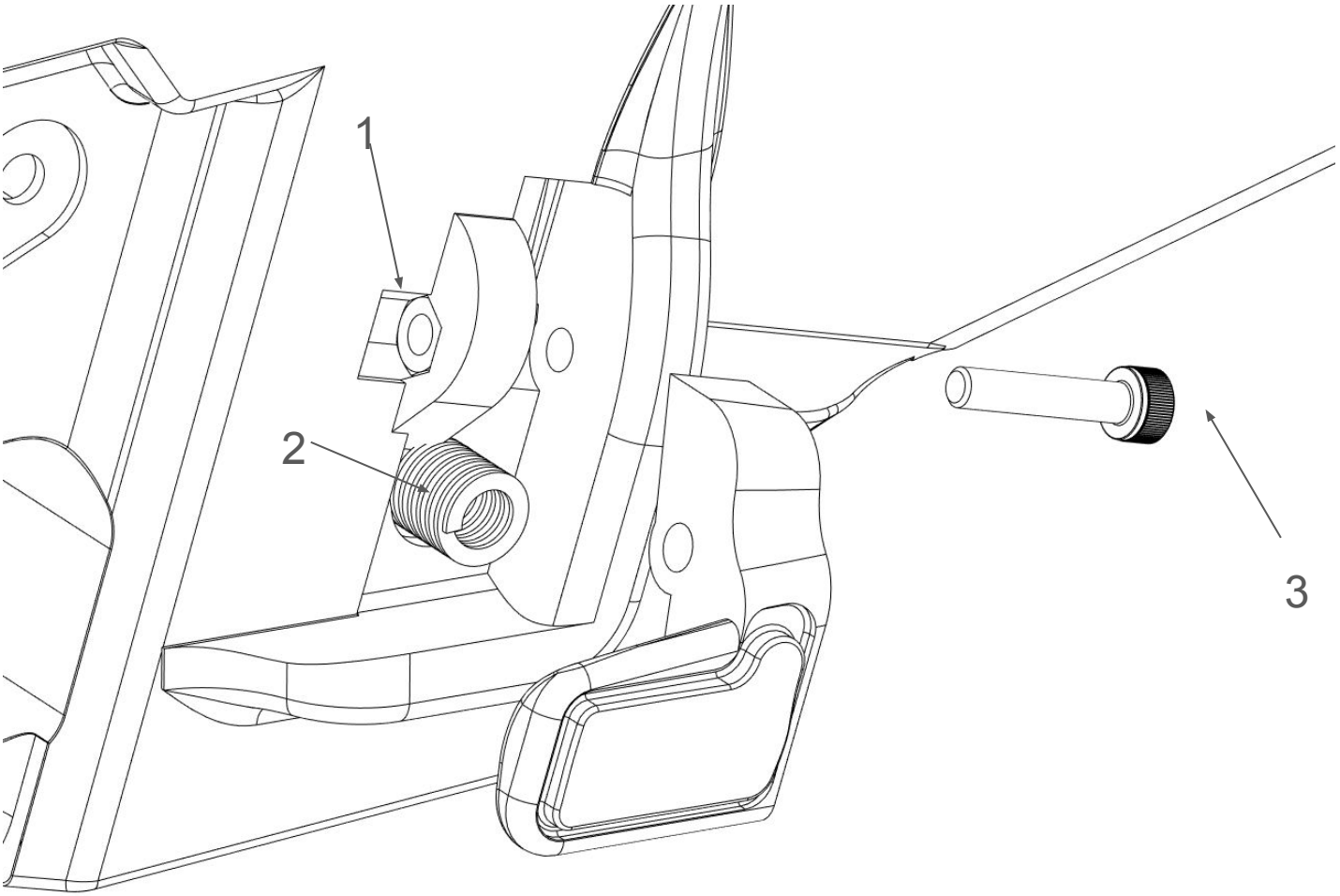
2. **A clean gun is a safe gun.** Never leave your firearms uncared for to foul or dirty up. Debris can cause malfunctions, which can be dangerous.

3. **Always read and follow directions.** Don't ignore a warning or follow instructions out of order.

4. **Use prudent judgement.** If something doesn't add up- use common sense. Stop, inspect, and re-evaluate your previous actions and procedures.

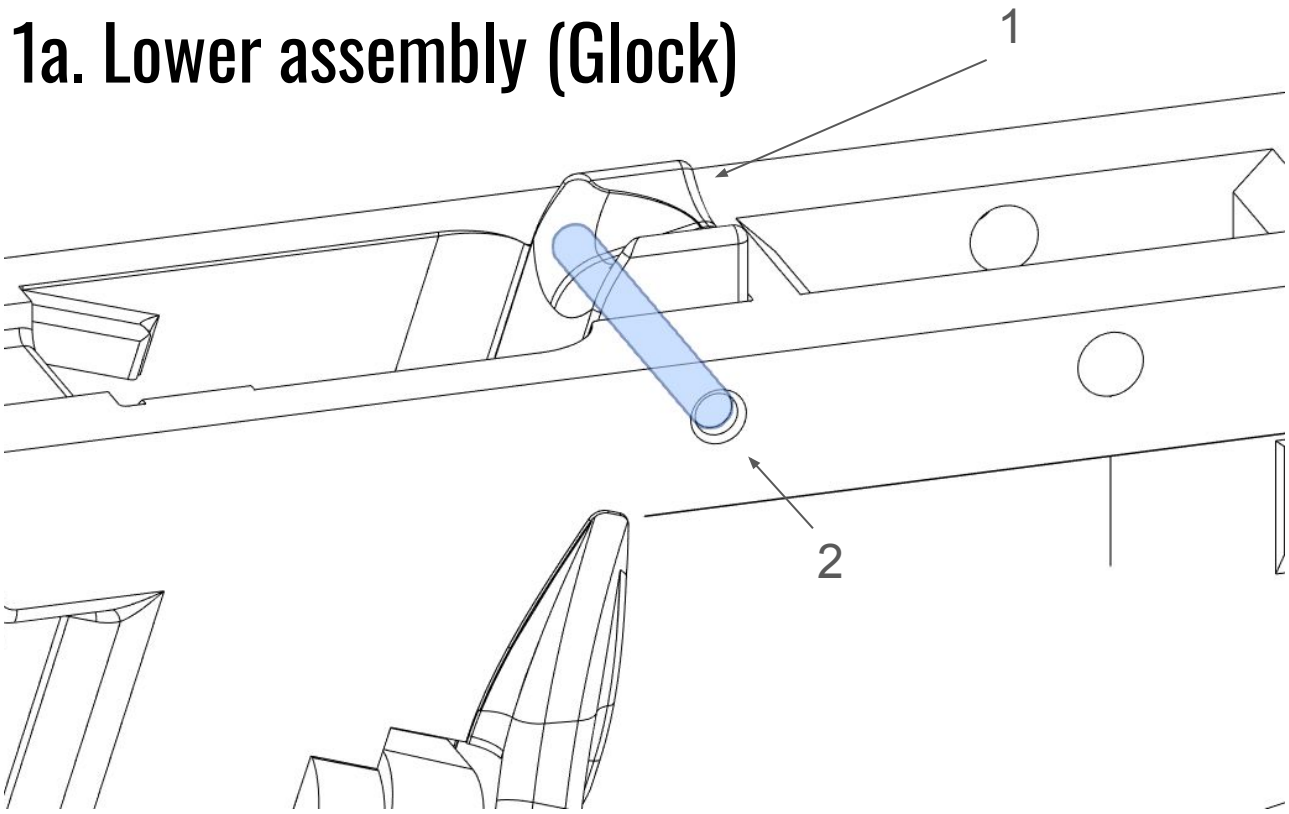
Section V: Weapon Assembly

1a. Lower assembly (Glock)



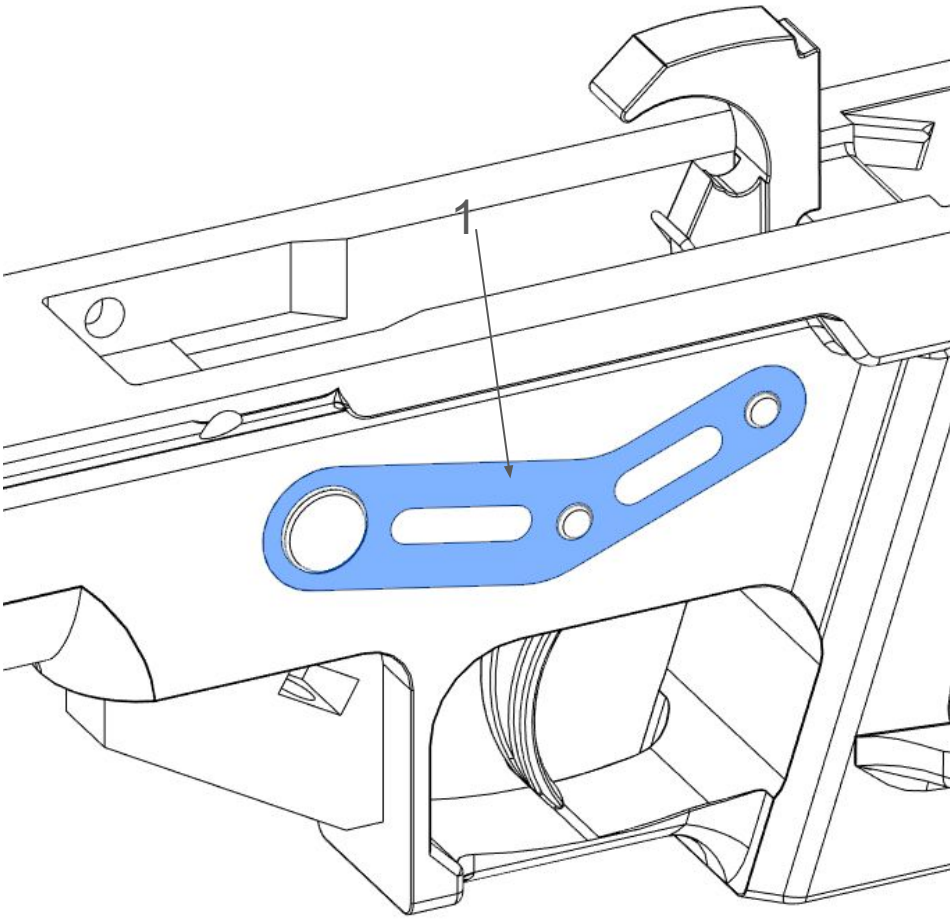
1) Get Your M3 Nut and place it in the mag catch. Next, position your spring in the hole profile on the side of the receiver. Then, Push the mag catch into place and slot the M3 x 15mm SHS through the hole and tighten it to secure your magazine catch.

1a. Lower assembly (Glock)



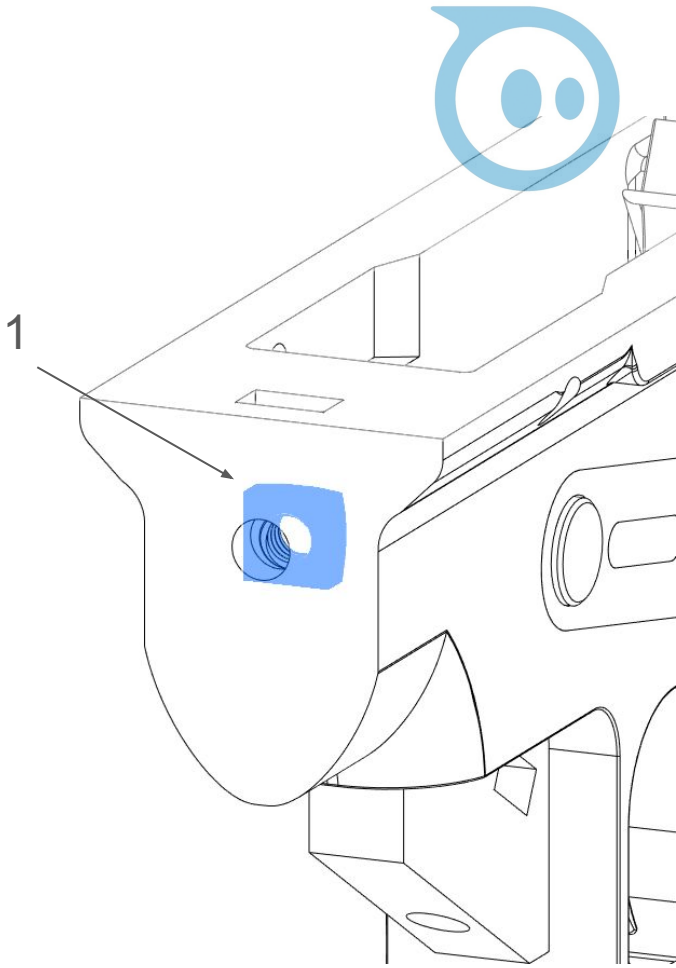
2) Get your 3 x 32mm Dowel pin and feed ramp and install them into the lower

3) Install your DB Reinforcement plates (optional) and your ar-15 FCG. Save the safety spring for a later step

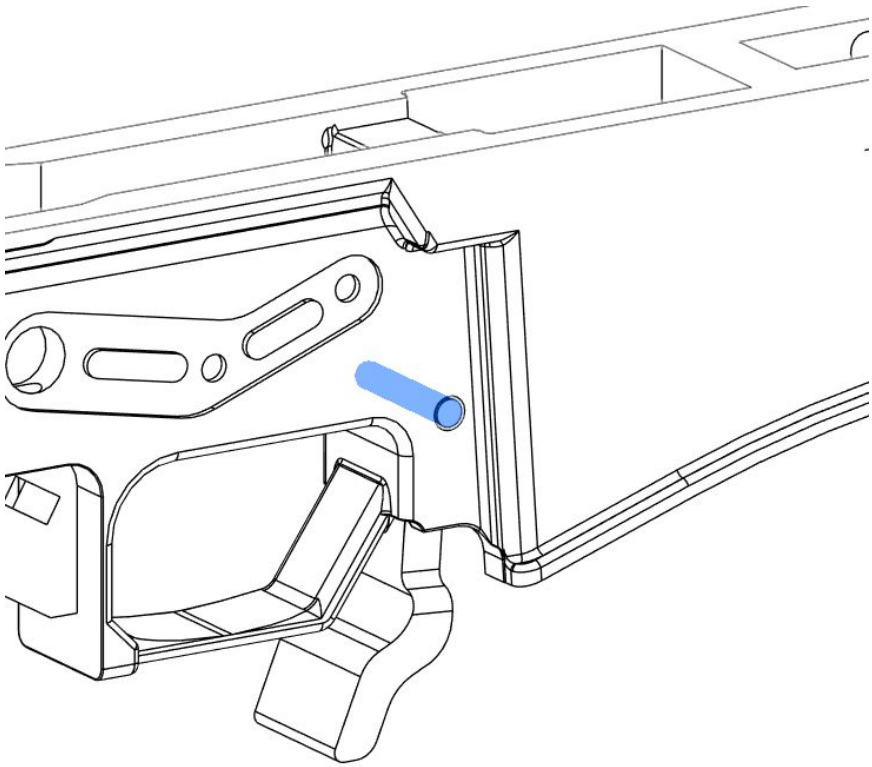


1a. Lower Assembly (Glock

4) Insert your M5 square nut through the top hole. It should bottom out in just the right spot for later. In the case that this nut gets stuck during assembly. Turn the receiver over and there is a hole for you to poke it out the other side



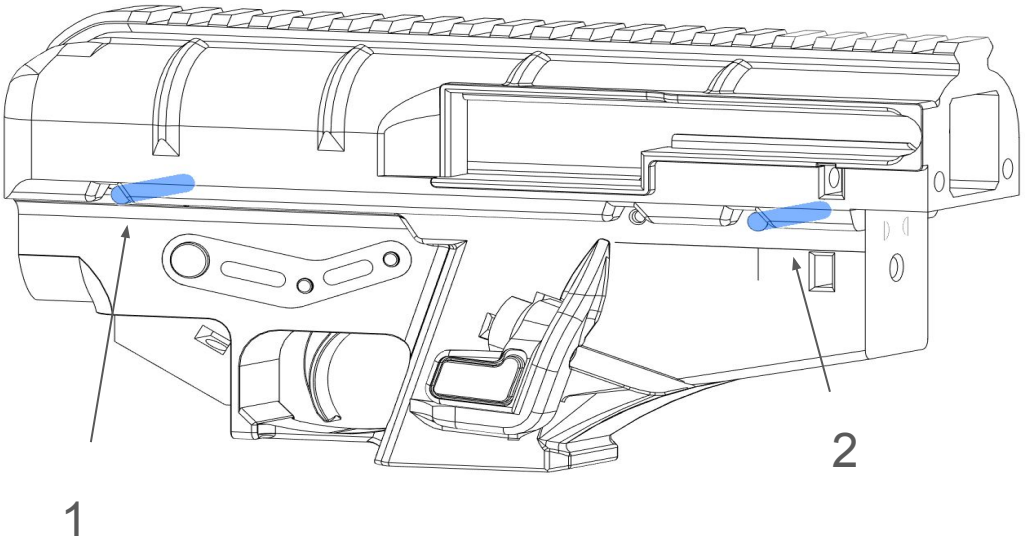
1b. Lower assembly (Sten)



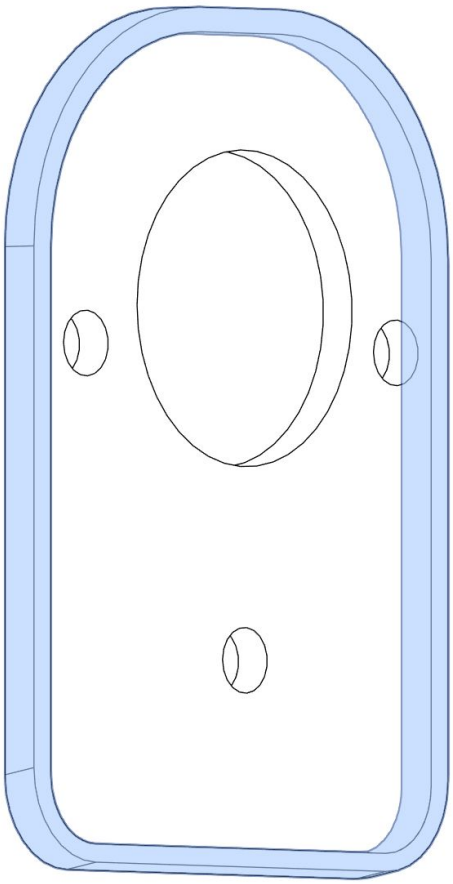
1) Push the magazine catch up in there with the spring set in place on the catch detent. (super glue can help) Insert your 4mm Dowel pin through the side hole to fix it into place

2. Upper Assembly

1) Next mate the upper and Lower together and connect them using 2 5x32mm dowel pins

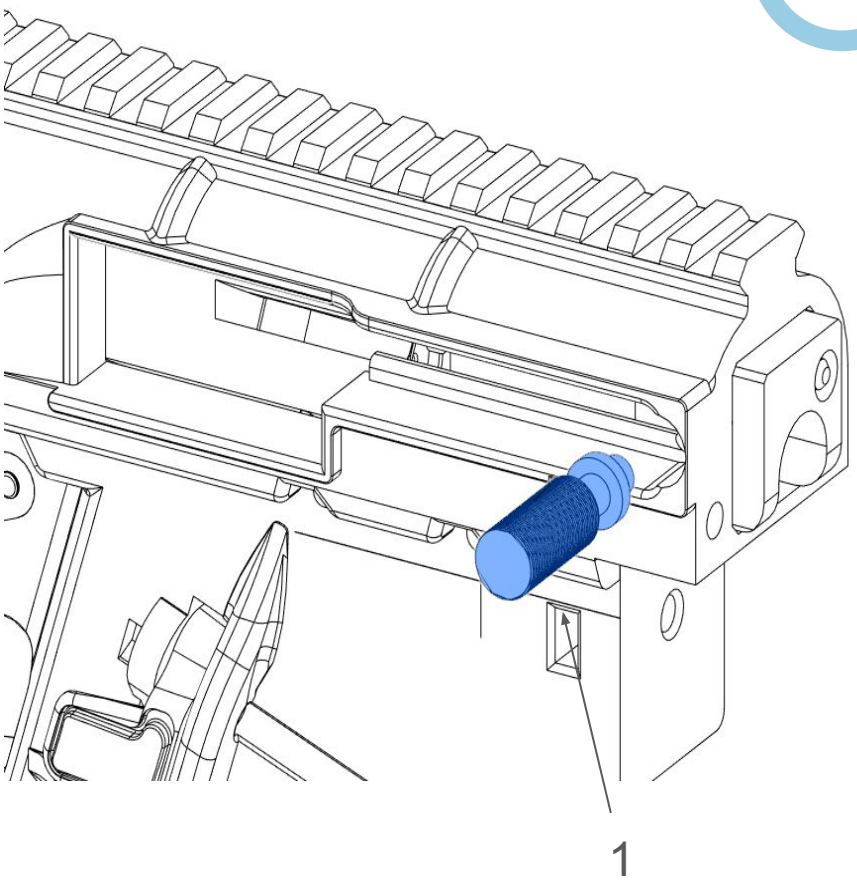


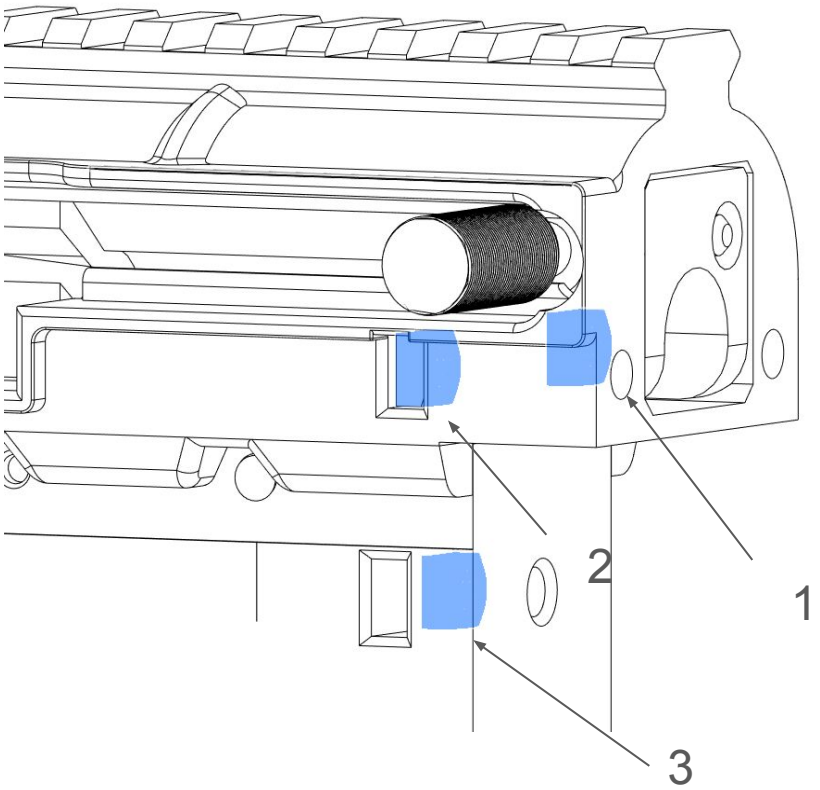
2) Next Put the shroud onto the trunnion SCS plate (i know it looks like its reversible but it isn't, it only goes on one way)



2. Upper Assembly

3) This is probably the hardest instruction **so read thoroughly**. Install the TPU buffer onto the mac bolt before installation. Then you will slide the bolt into position. Before fully seating the bolt align the charging handle hole to the provision made on the upper. Insert the charging handle through the hole and then fully seat the receiver

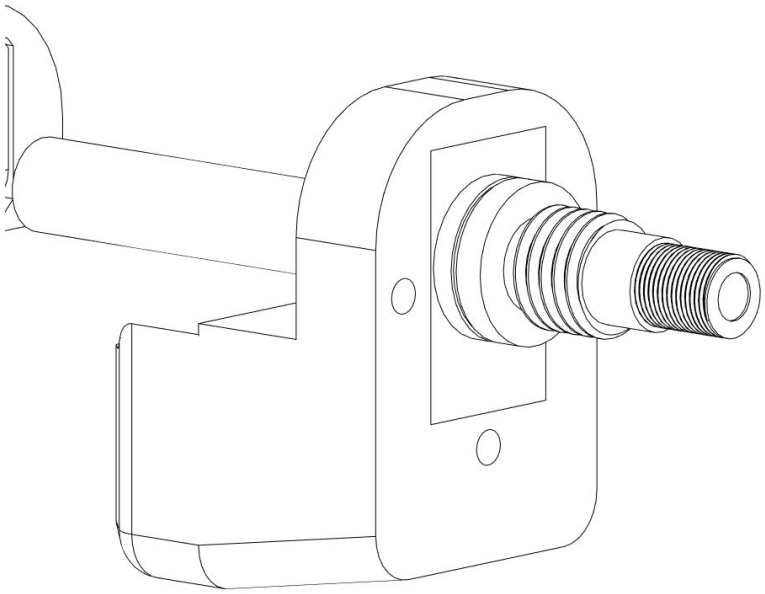


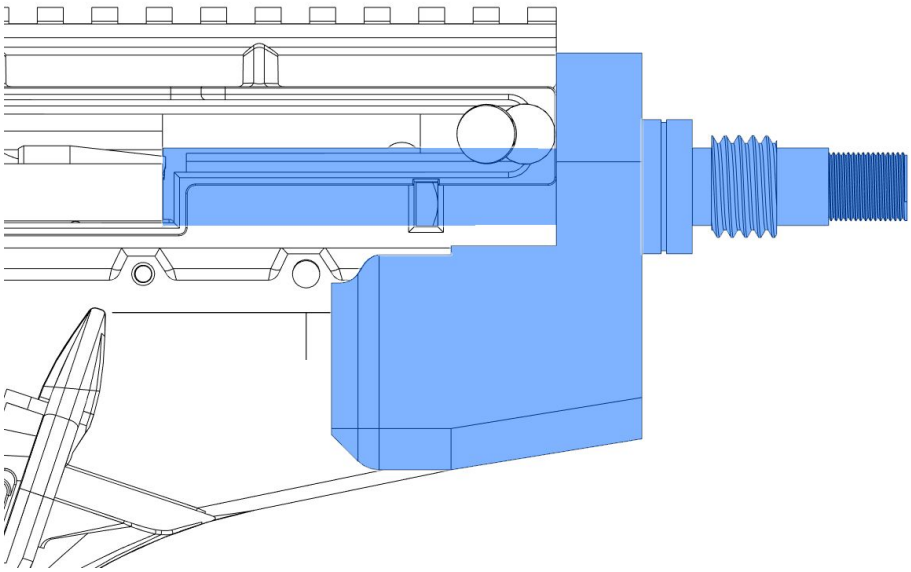


4) Next you will insert 3 M5 square nuts. 2 will go into the upper and 1 will go into the lower

2. Upper Assembly

5) Prior to assembly you should have your external trunnion and barrel put together. If not, do so. Insert the trunnion block into the trunnion carrier. If you find the carrier too tight to fit go into your slicer and oversize it 1% or so to accommodate for different tolerances. Results will vary due to different manufacturers

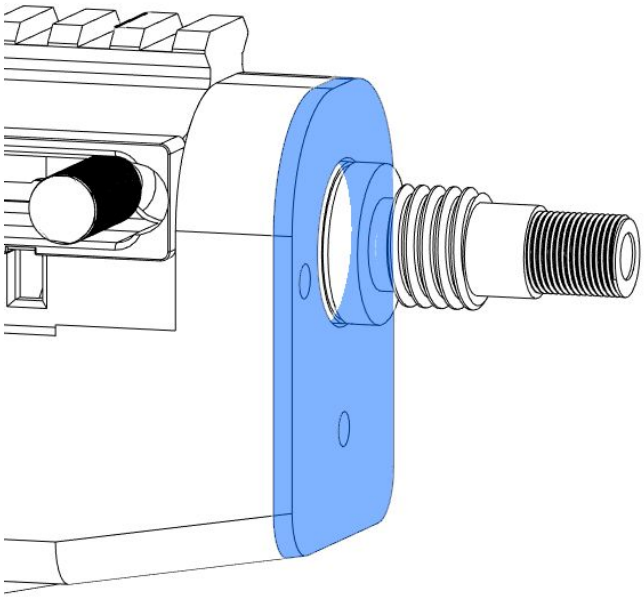


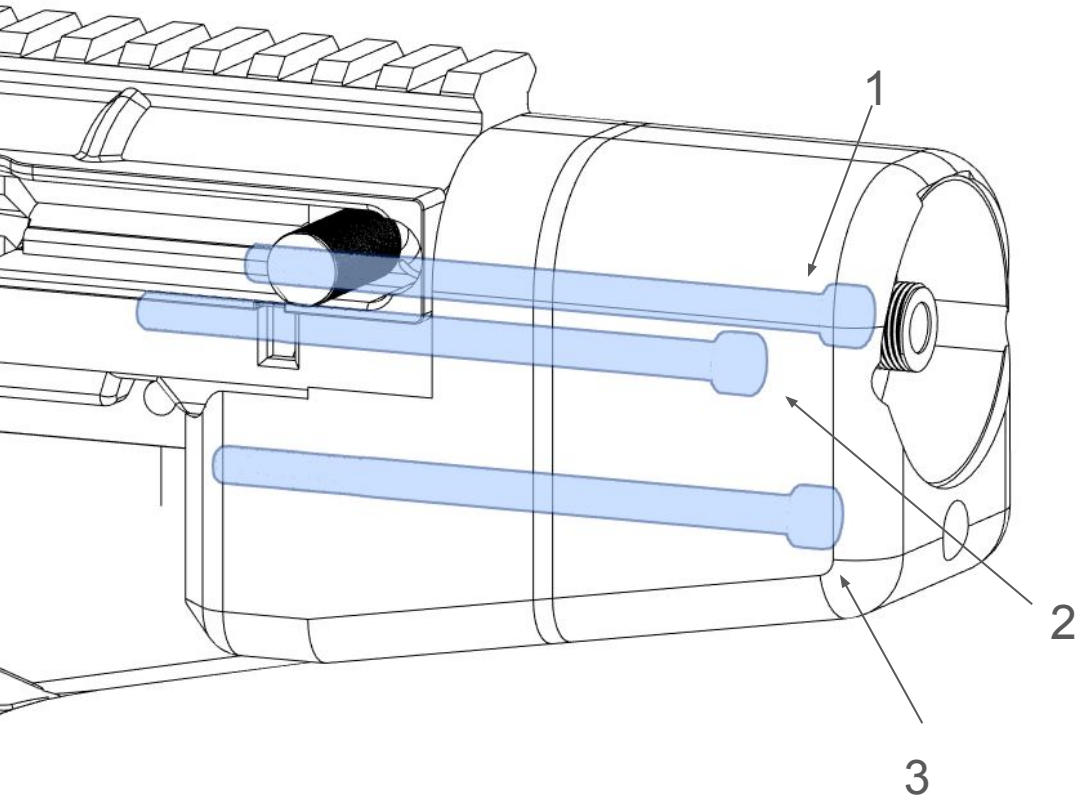


6) Now align the barrel and slide the carrier and barrel back into the bolt

2. Upper Assembly

7) Put your reinforcement plate with shroud in position and ensure your holes are aligned

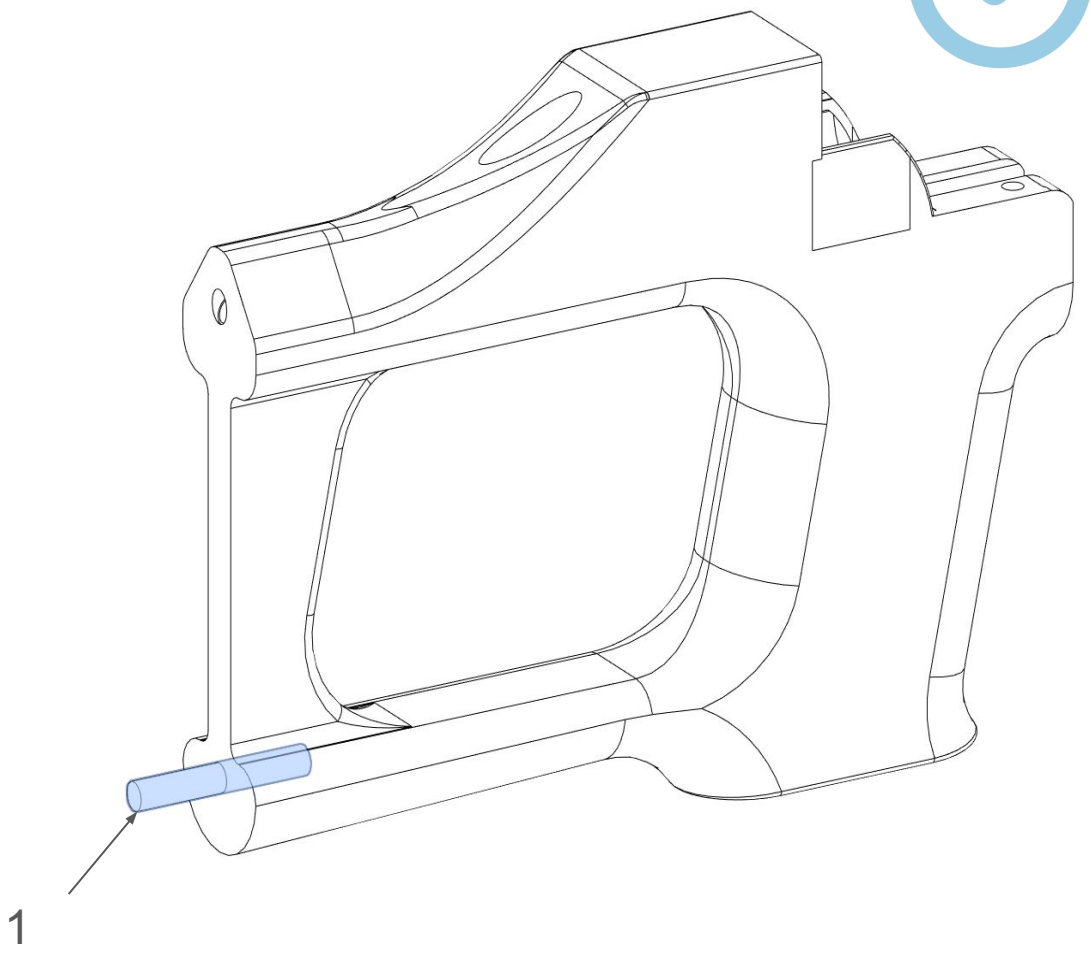


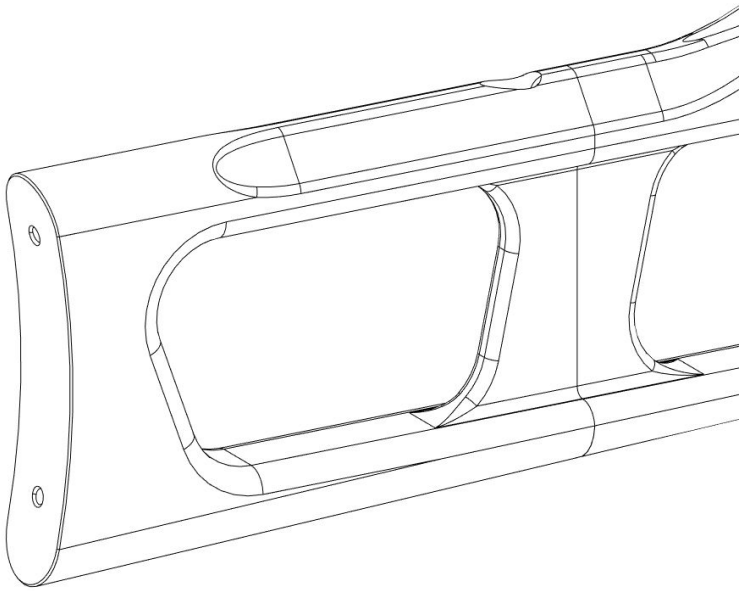


8) Depending on your suppressor option. Put on the accompanying forend and secure it into place by inserting 3x M5 x 90mm SHS into the upper and tightening them

3. Stock assembly

1) Take the front of your stock and insert a 5 x 35mm Dowel for indexing the rear

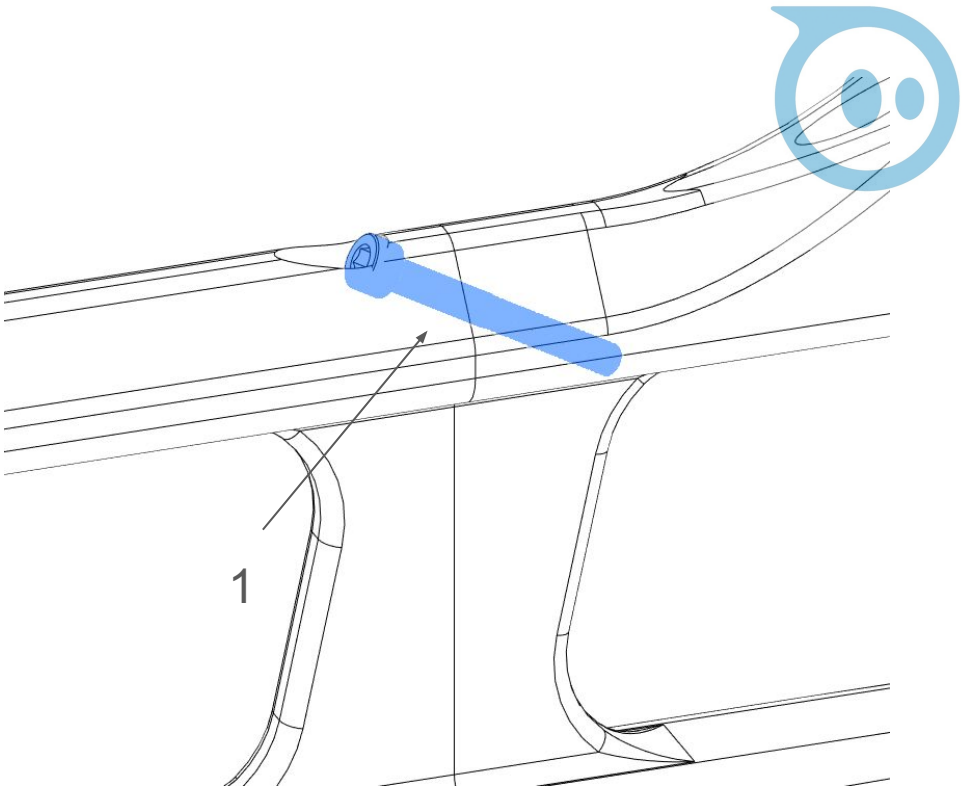


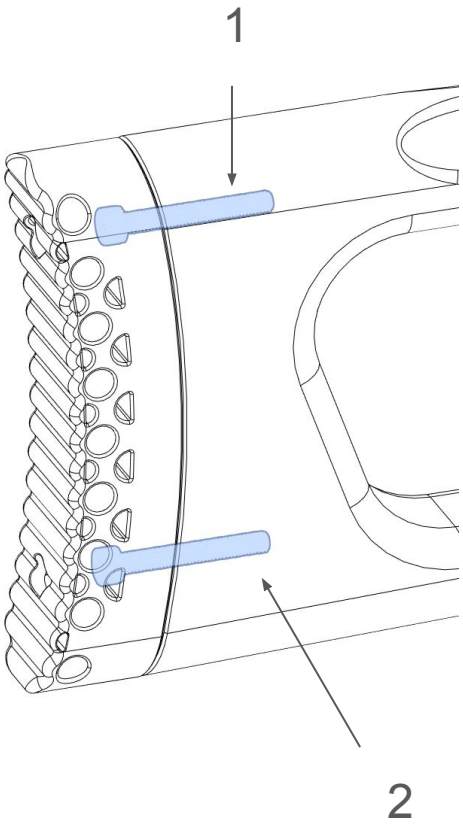


2) Put the rear stock on with it indexed with the dowel pin

3. Stock Assembly

3) Install M5 x 40mm SHS through both stock ends

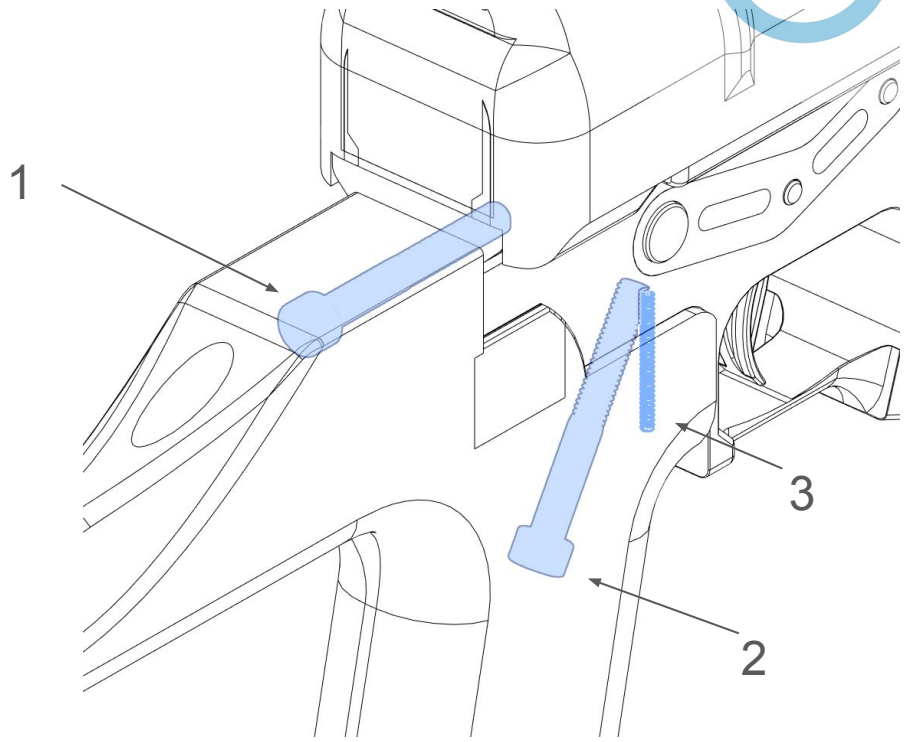




4)Install 2 M4 x 30mm SHS through the buttpad to secure it to the stock

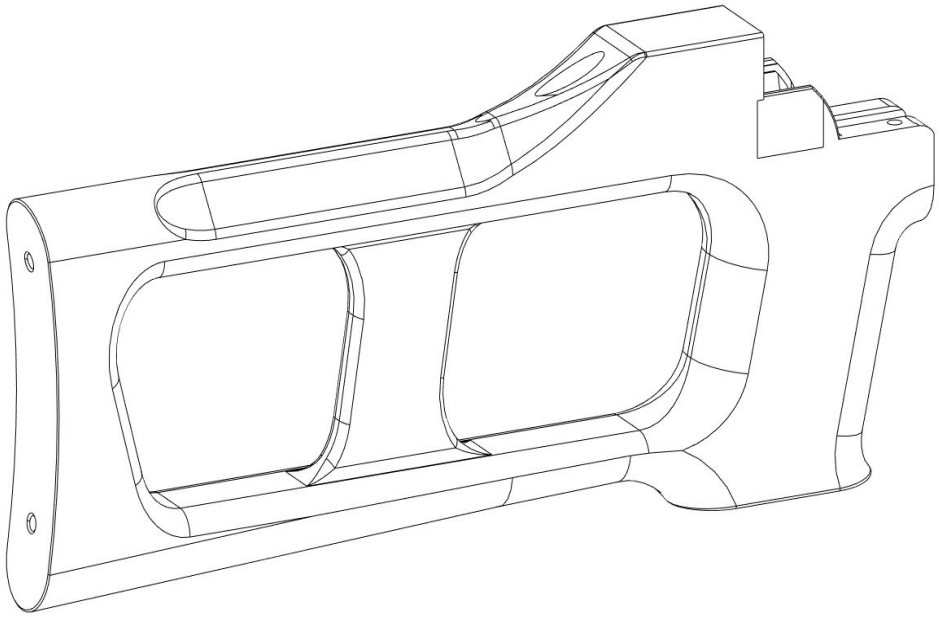
3. Stock Assembly

5) Now install your selector spring and 2
M5 x 40mm SHS. One through the back of the stock and one through the bottom of the grip



3a. Stock Alternatives

1) There are 2 options of Single piece stocks. There is a shorty and a long boy. The shorty will work as a single print on an ender 3 print bed. If you want the full size there is a single print full size that will fit on a bambu printer size. This gives a better look and less hardware

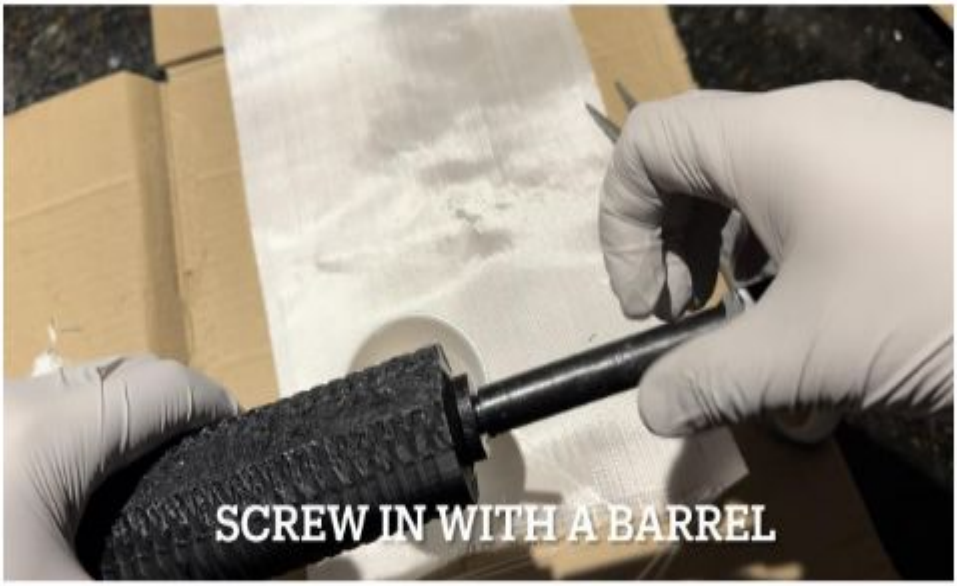


Section VI: Suppressor assembly

Option 1: Thread adapter

1) Epoxy in washer if using Form 1 FIRST (wont fit after). Otherwise, the first step is to apply epoxy resin to threads.

2) Using a threaded barrel, screw in a thread adapter. Options are 1/2x28 to ¾x16 or 5/8x24 to 3/4x16.



Section VI: Suppressor assembly

2) There is a nonstick coating on the inside of the CF tube from the factory. This needs to be removed for the epoxy to stick. Use a wire brush and also acetone/isopropyl alcohol to remove this.

3) Slather the chopped fiberglass reinforced epoxy over the print

Section VI: Suppressor assembly

4) Insert suppressor into CF tube. This is permanent, cannot be retrieved.

Allow for a full cure. 24 hours would be the bare minimum, 48 hours recommended

1)After your suppressor is inserted DO NOT CUT TO SIZE.
2)Thread it Onto your weapon and mark the top dead center
3)Scuff the outside of the suppressor leaving the mark visible
4)Coat the inside of your shroud with epoxy and slide it onto the carbon fiber tube.
5) Align Your top dead center marks with the middle of the iron sights
6) Allow it to dry for 24 Hours
7) If properly done you will have a sexy VSS Shroud on your ftn
8) Cut excess carbon fiber tube off

Section VII: Notes on fitment and possible modifications

NOTES ON FITMENT: This gun is very optimized for fdm but there are things to consider. On the upper receiver it is **IMPERATIVE** that you do not print it with supports on the internal 4 walls where the bolt rides because it will NOT work if there are supports. Another note is the trunnion carrier, it may be tight depending on which place you buy the external trunnion, so you may need to scale it up 1%.

Supports should be used very mindfully, if you are not very good at knowing how to block supports or guide them I suggest watching a tutorial.

If you have issues you can always find me on X, DD chat, elsewhere. I'm a one man band and pretty responsive, just don't ask me some dumb shit like why is my printer stringing

FUTURE IMPROVEMENTS:
This design is a really good base. I toyed around with the idea of making a BLOCK frame for it but it can be adapted to a bunch of use cases.

My one last rant i want to go on is the suppressor, one of you out there can absolutely make it integral, it's not that hard, its just out of the scope for this project, if you have serious machine capability or money to throw away reach out to me. Lastly the suppressor could be better, i toyed with the idea of making 2 cores that screw and epoxy together with large printed threads to fill in the empty space in the tube. Check my odyssey @PKA, it may be there by the time you read this. Anyways, thanks for making my design and shii

Section VIII: Troubleshooting

1. The bolt is not seating or going forward/ gets stuck
You need to lubricate the upper well till it slides well and if still doesn't work you need to reprint it scaled up 1%

2. Glock mags are not catching
Usually non OEM mags have this issue of not catching quite right, i'm not sure of a good fix for it but most all mags should run good

3. My trunnion plate is sticking out a lot
You likely have it backwards, they are not reversible, put it back together with it flipped and the shroud inverted so it flows well

4. My trunnion is not fitting in the carrier because its too small
Reprint the carrier with a 1% upscale and it'll fit