

Elysium Carlyle Droid SMG Replica

<https://www.etsy.com/nz/shop/KiwiModels>

Assembly

Note: all m3 nut inserts should probably be held in place with a small dab of glue after the nut is put into place. Just so they don't fall out. Careful to not get glue on the nut thread.

Note 2: You should **dry run the assembly** to make sure everything fits and you're happy with tolerances & fit before using glue. (m3 inserts are an exception, they are find to glue in to hold in place)

Note 3: I prepared, painted, weathered & clear coated (using gloss for gold, and matt for black parts) all of the pieces before this assembly. Do it in whatever order you'd like, but what you see here is a fully finished model being assembled.

Note 4: the fake screws (small M3 x 4mm) can be glued in pretty much anytime - or just before painting/weathering. It's up to you. If you put them in too early though, you risk sanding them as you're prepping the model. I suggest you sand/prep/prime the parts first, before heading to assembly.

Once the gun body is together and ready for paint, then would be a fine time to glue those fake screws into place.

Note 4b: For sticker locations, see the end of this doc

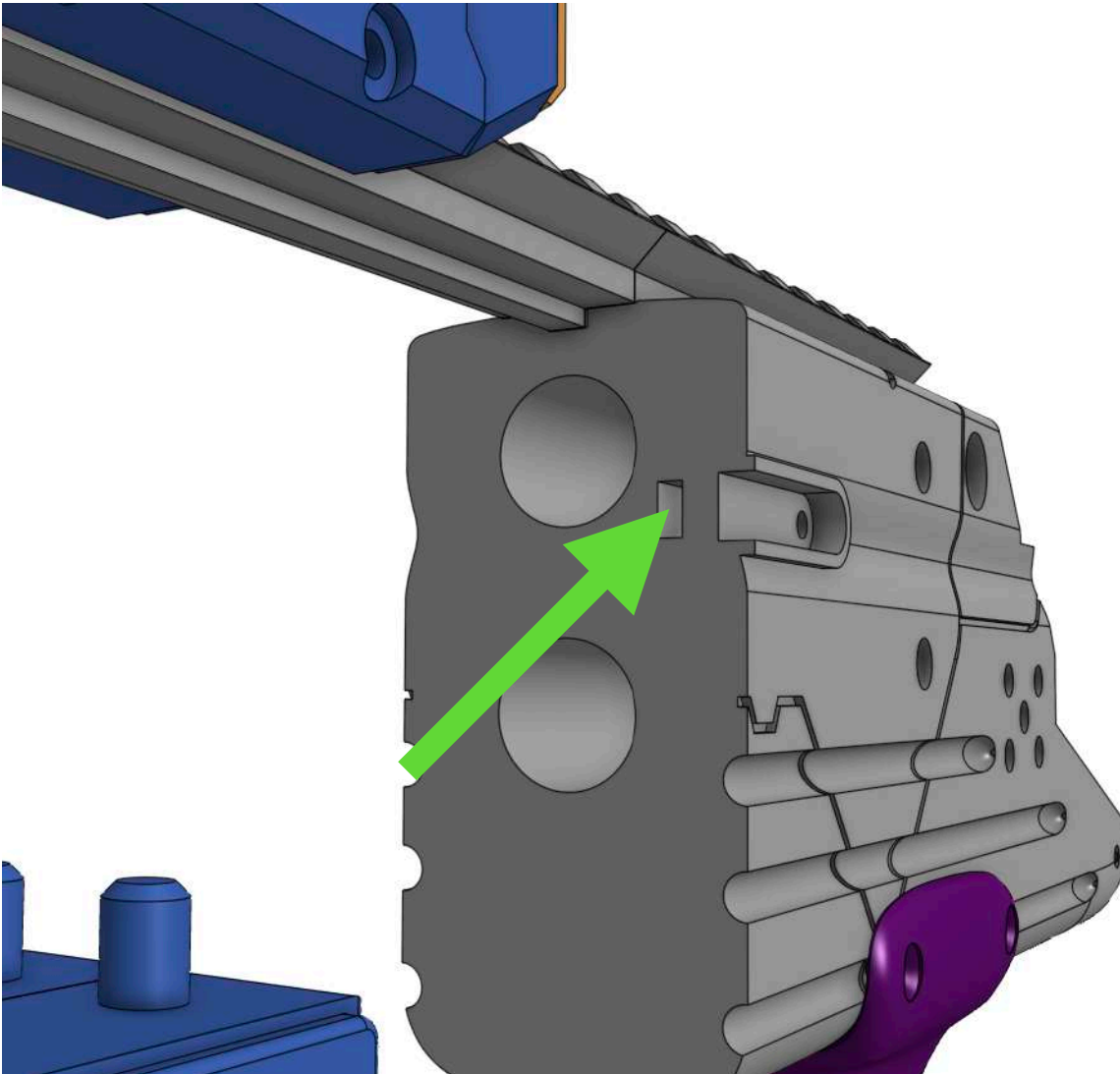
Note 5: If you want more detail than is sensible, see my build thread @ TheRPF

<https://www.therpf.com/forums/threads/making-the-carlyle-elysium-smg.360991/>

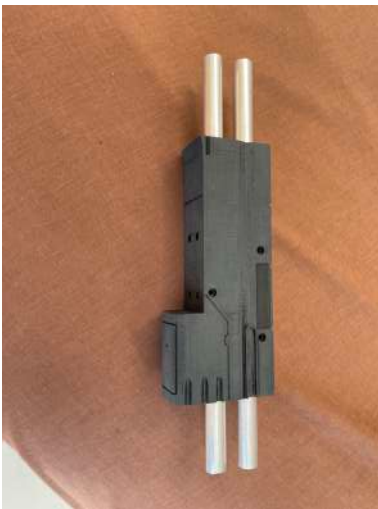


Main Gun Body

Insert 1 x M3 nuts in the front gun body piece
This allows you to screw in the *charge handle* later on.

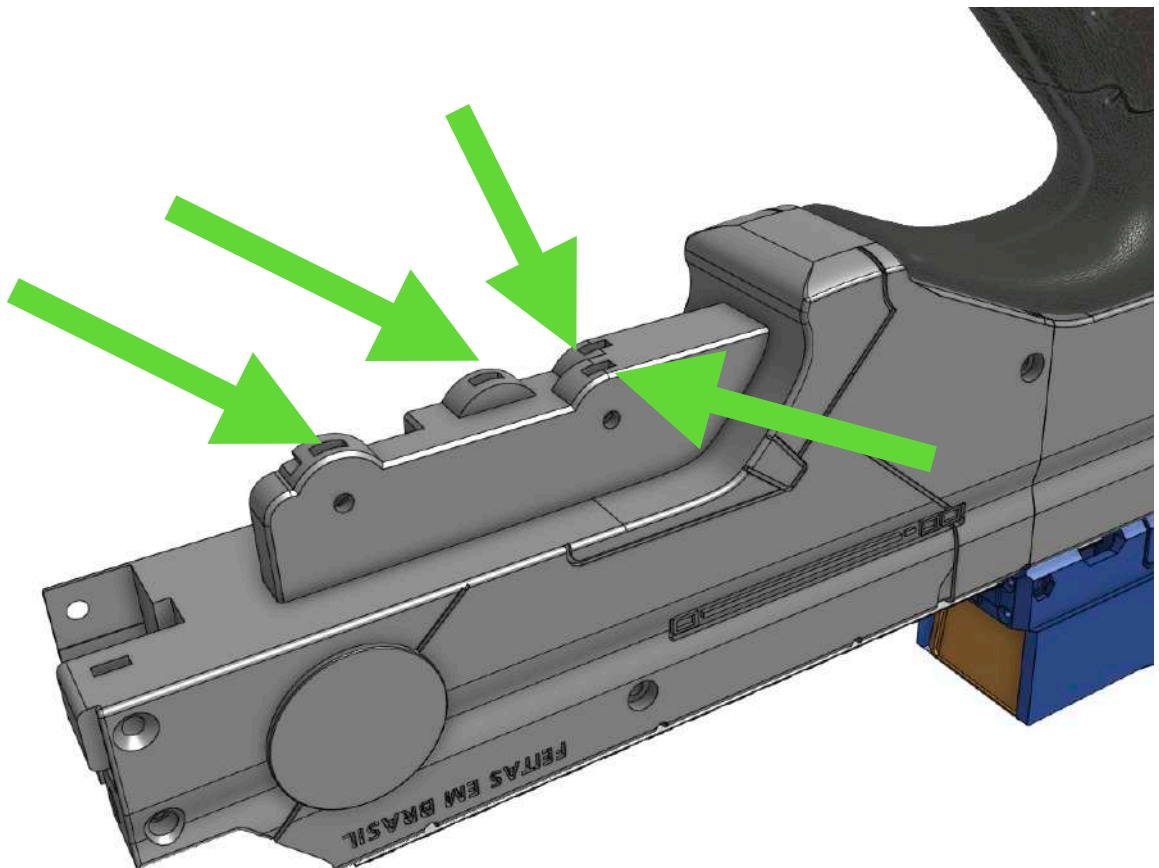


Put 2 x 325mm x 16mm tubes through body parts (the rifle, not yours)
They should be tight. You may need to file the inside of the tubes to be able to slide them enough.

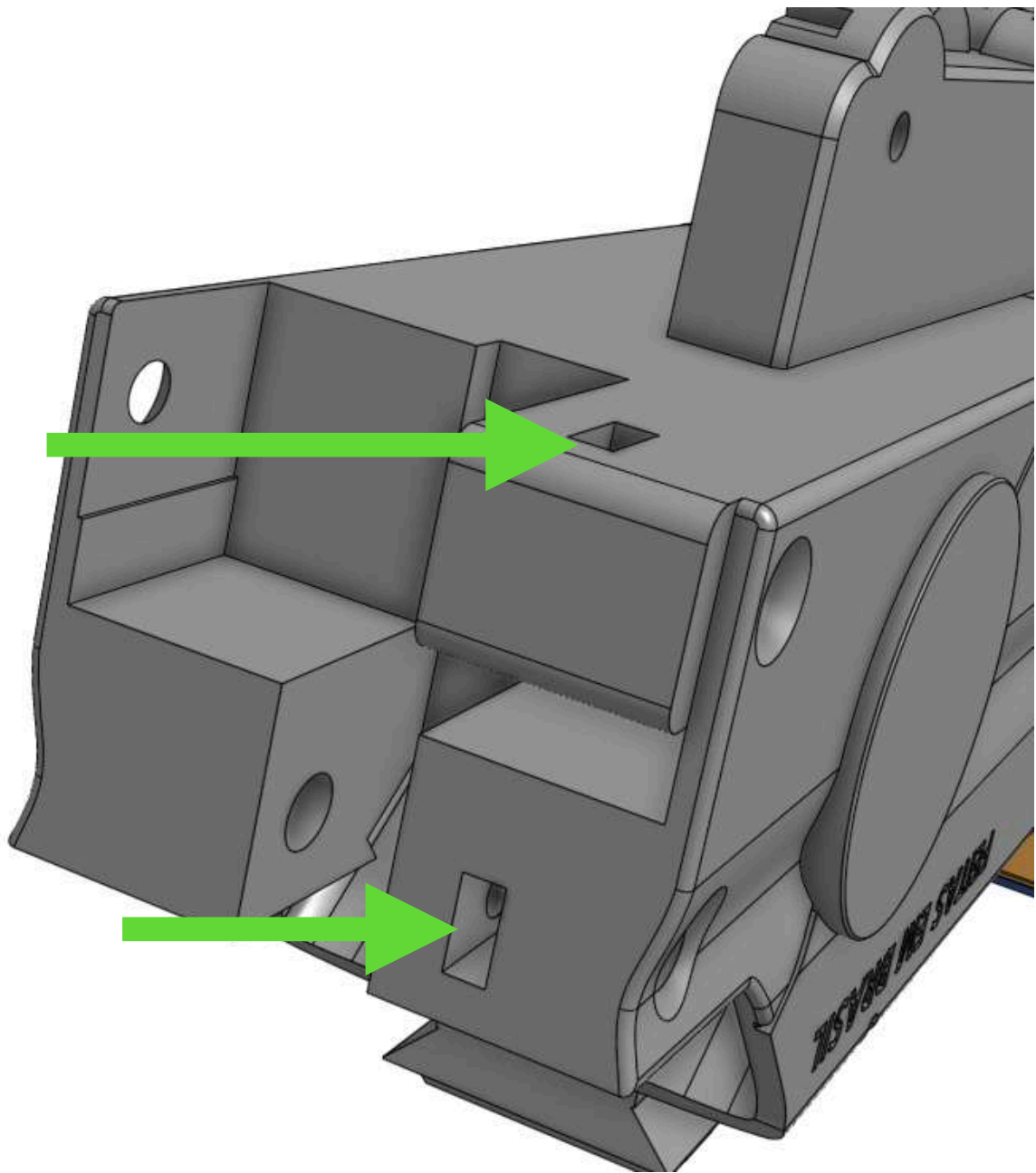


Glue & clamp the body parts together (again, the rifle, NOT yours!), let sit for 24hrs.
Note: actual distance of the cavity is 333.7mm. 325mm is used to give a bit of clearance.

Insert 4 x M3 nuts on the rounded 'handle attachment points' (rear of rifle), so that you can attach the handles (aka: thingies)



Insert 2 x M3 nuts into rear of rifle body, for rear stock attachment



Bask in the glory!

Rails

At this stage it is a good idea to mount the rails on the top of the body. I chose to do it at this point so that I could hold the gun body in the vice, with a long (and stiff) metal object on top, to make sure that I could lightly clamp the rails, **so there was no bend**.

Also, at this point you've got the least amount of "other stuff" attached to the model, so it's easier to clamp from the bottom.

Here I have used epoxy to glue in the rails, and then **lightly** clamped the spirit level (yellow thing) along the top.

The gun is barely held by the vice. I am using plastic jaws and the blue shop cloth (can be anything) to protect the side of the gun body.



Lower Assembly: aka: Trigger & Rear Handles

Join Finger guard pieces (glue), then add in (glue) the trigger itself and glue to the finger guard



Glue in the finger guard + trigger part to the body of the rifle. Make sure it gets as flush as possible to the body of the rifle. Test fit first and sand/file where necessary.

Note: If you have pre-fitted the M3 x 4mm bolts to the gun body, you will need to file down the front two locator pins to fit. If you have not, then you will need to slightly drill this later to get those bolts in. There's a very small overlap between those pins, and the fake body bolts.



Note how there is **no gap** between the trigger (RHS pic) and the gun body.

Rear Assembly

Screw together Handle parts (2 x 25mm m3 cap head + 2 x m3 nuts for other side). Make it loose for now.

Slip the Handle over the joined trigger part, above

Note: There are optional holes for 6mm rods if you wish. It's not 100% necessary, but they will make it impossible for the handle to move. Anywhere.



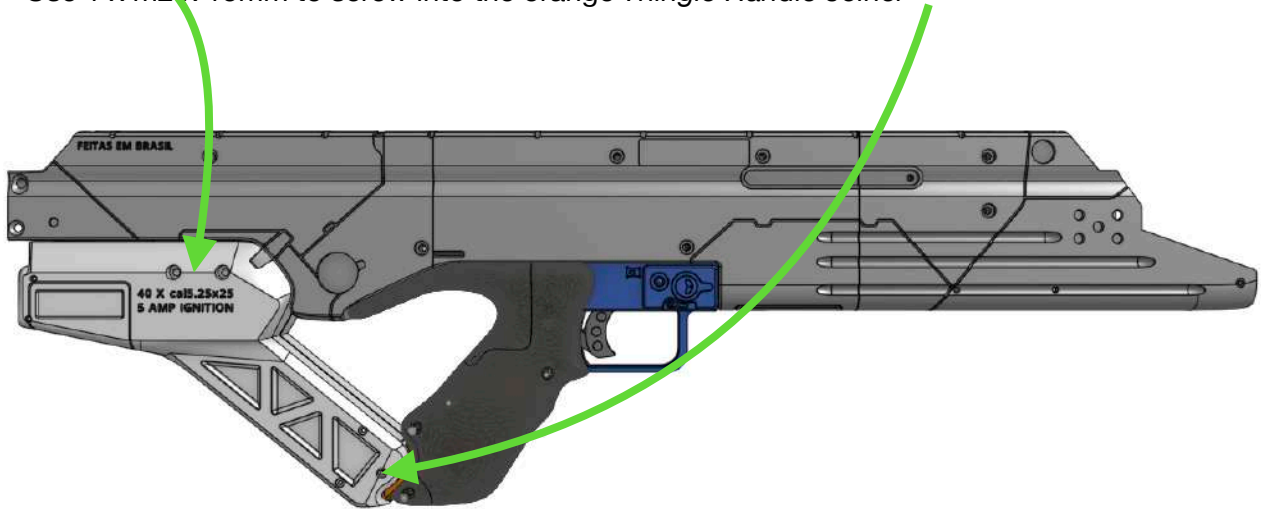
Insert 2 x **M2** nuts into the (orange in the pic) *Thingie Handle Joiner*.
Yes. M2. Small. Tiny.

Insert the *Thingie Handle Joiner* into the rear handles. Tighten the handles enough so that everything stays put. The joiner does NOT have any screws that go through it, to the front part of his handle assembly. It sits in place by friction & fit tolerance.



Attach the rear handles (thingies) to the gun body. These slide over the *Thingie Handle Joiner*, and are a tight fit.

- Insert 2 x M3 x 20mm cap head hex per handle
- Use 1 x m2 x 15mm to screw into the orange *Thingie Handle Joiner*



You should now have a complete lower assembly!

(Yes I know I've got the stock on in the above pics. You'll just have to imagine that it's not there :)

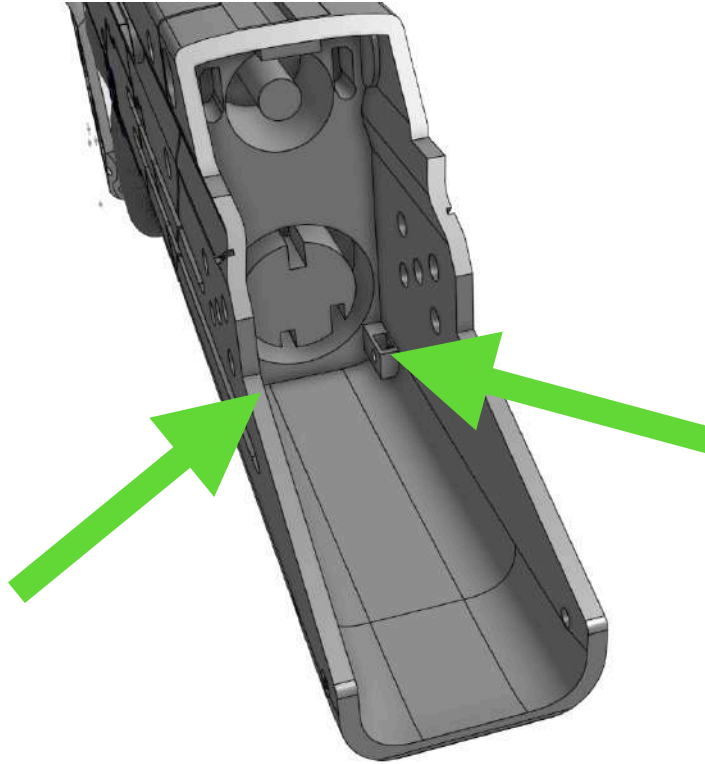
Fit the rear stock into the back of the body.



Use 2 x M3 x 30mm countersunk to screw the rear stock to the gun body.
The two countersunk holes on the left hand side of the body are "fake" (use 2 x 4mm countersunk, glue them in)

Front Grips

When screwing together, don't be too tight. Just enough to hold.

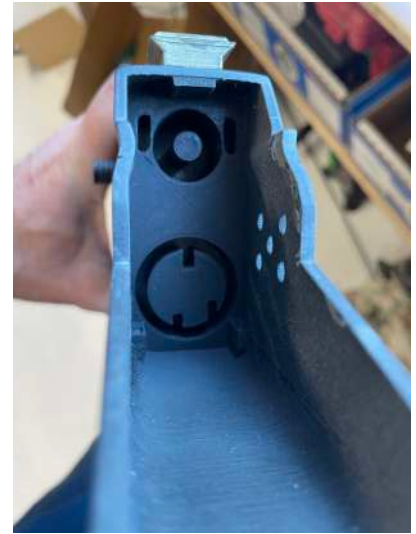


1. Glue two M3 nuts into the front captive nut holders (the front fixing points, for the front handle)
2. Screw the rear two in with 2 x M3 20mm. **There is no thread here. The tolerance is set to that you can slowly, carefully, self tap with a machine screw.** Or, you can use a M3 tap to put in a thread into the plastic.
3. Screw fronts in with 2 x M3 6mm



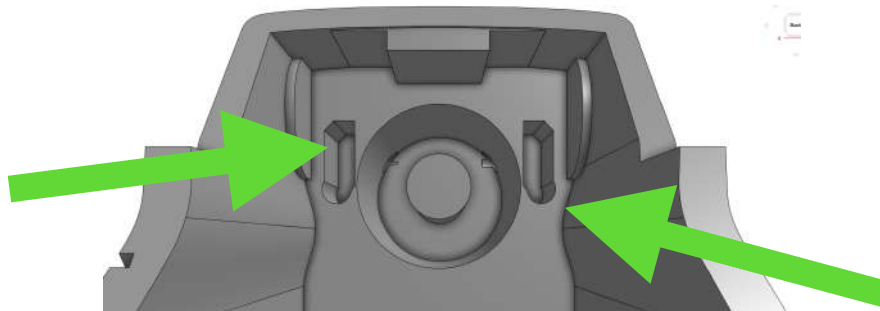
Barrels

Glue the front barrel pieces to the front of the gun.



In the above, I just glued both barrels in place all at once, and let gravity do its thing. Again, the gun body is barely held in that vice.

CAREFUL: here, be careful to not get glue on the two oblong holes to the left and right sides, where the “cage” inserts go (read next section).



30m later...

Tricky Bit

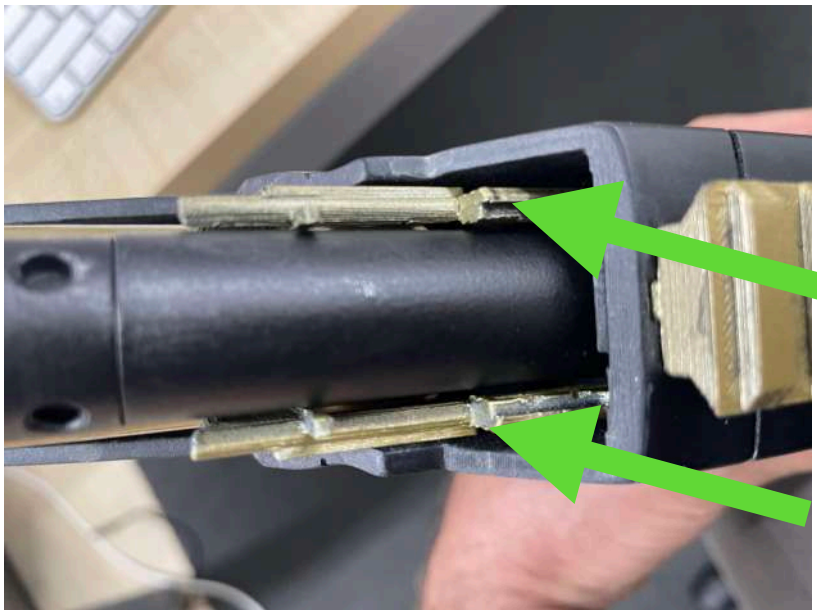
This next part is a bit ... fiddly.

We're going to attach the front "cage" to the barrels. They more or less just "sit" there and are glued into place.

There are oblong holes in the front of the gun that receive each cage side.

Test fit the whole thing first without glue, to make sure everything lines up.

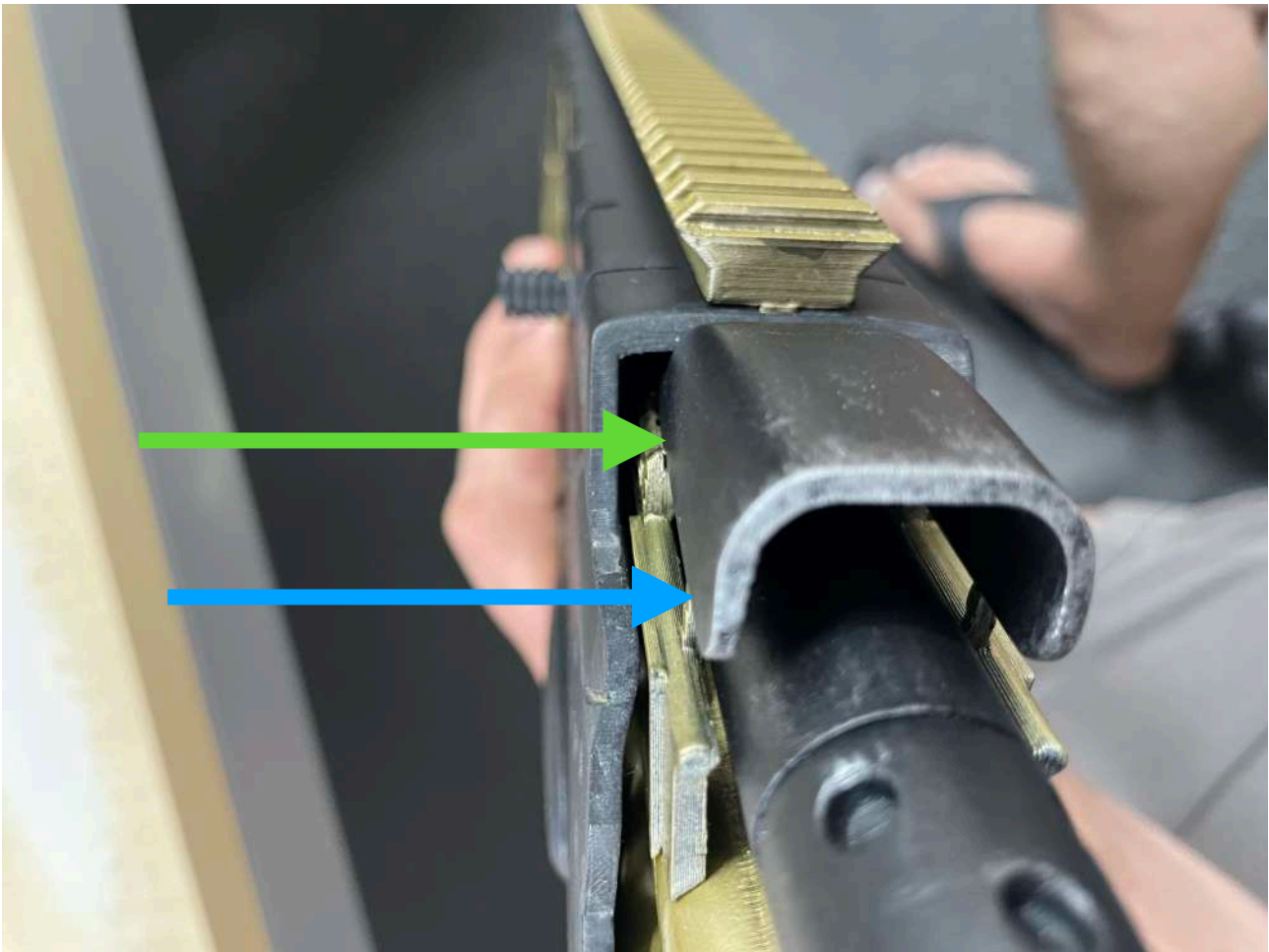
1. Glue the cages in, such that their 'feet' rest on the front barrel. In the pic below these are the small gold bits either side of the black barrel.
 1. Probably best to do this in an upwards orientation.



2. Wait for the glue to dry
3. Now you can turn the model horizontal

4. Glue the front ... “cap”? Top thing. Hat?

1. This is the tricky bit. It sort of just “sits” inside the cages. There’s a very small “ledge” it sits on. Like so:



Notice how the black “hat” part is sitting **inside** the cage. This is also the case on the other side. The hat is then sitting on top off the little feet/legs of the cage at the front (blue arrow)

I have glued both the back (ledge) and also at the front (front feet/leg/blue arrow area).

5. **Optional:** Glue the cages to the front barrel, using just a small amount of glue (so it does run down the barrel)
 1. When I glued mine in, I decided **not** to glue the front feet that rest on the barrel. It seems strong enough (mine is going to be hung on a wall). If however you’re taking it outside and/or expecting others to handle it, I **would** glue these front ‘feet’

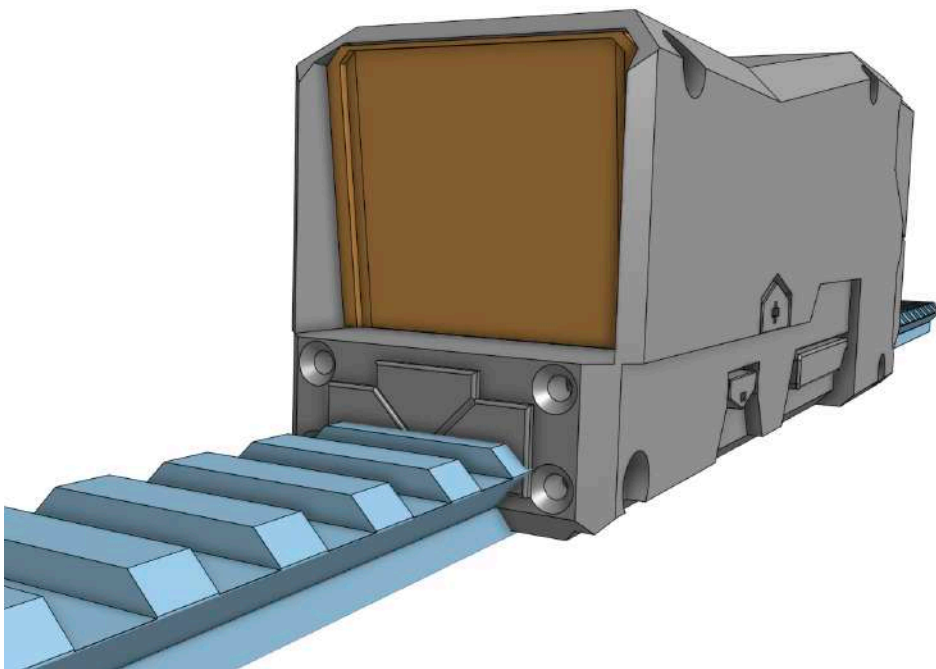
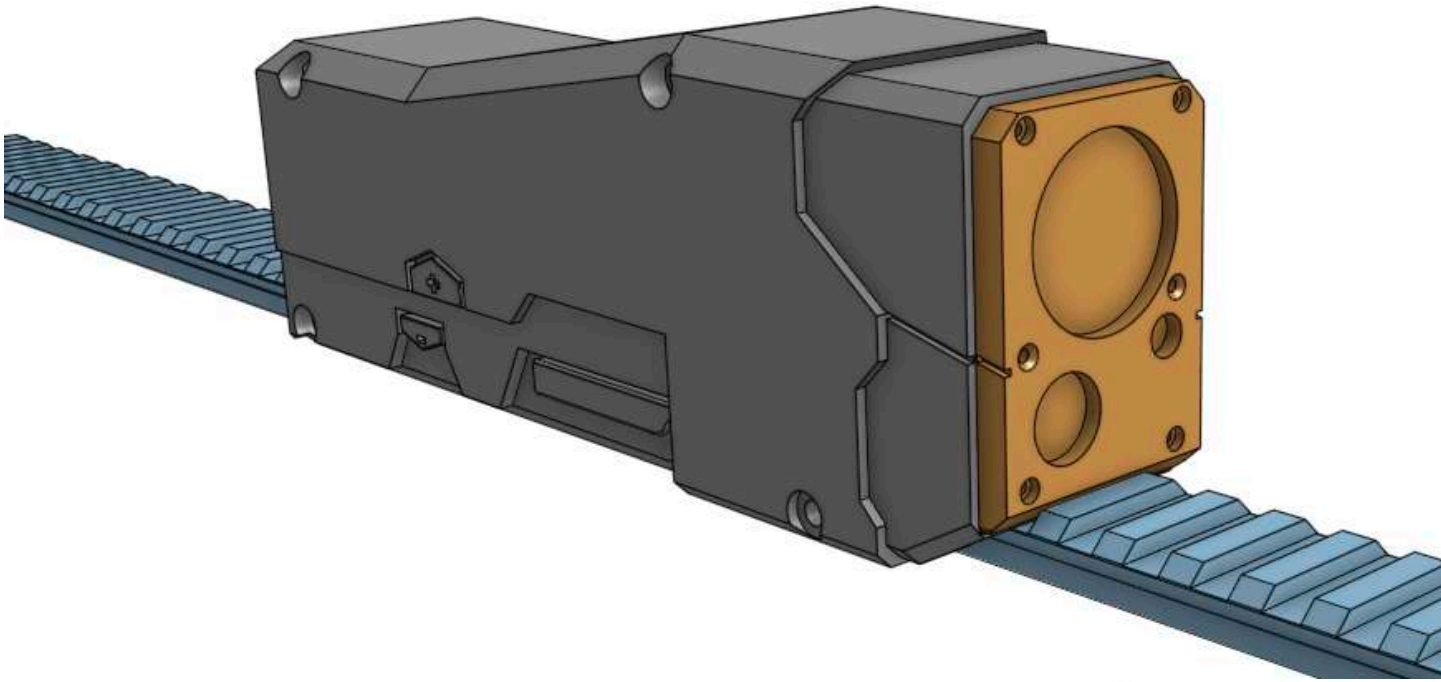
Congratulations - you’re nearly there!
Only thing to do is the sight!

Sight

The sight comes in three parts, and is done this way in case you want to paint/finish them differently (it's easier to work with as separate pieces)

Simply glue these together.

We'll fix the sight to the rail shortly (right now it'll just slide)



Fixing the Sight

Up to you how you do this.

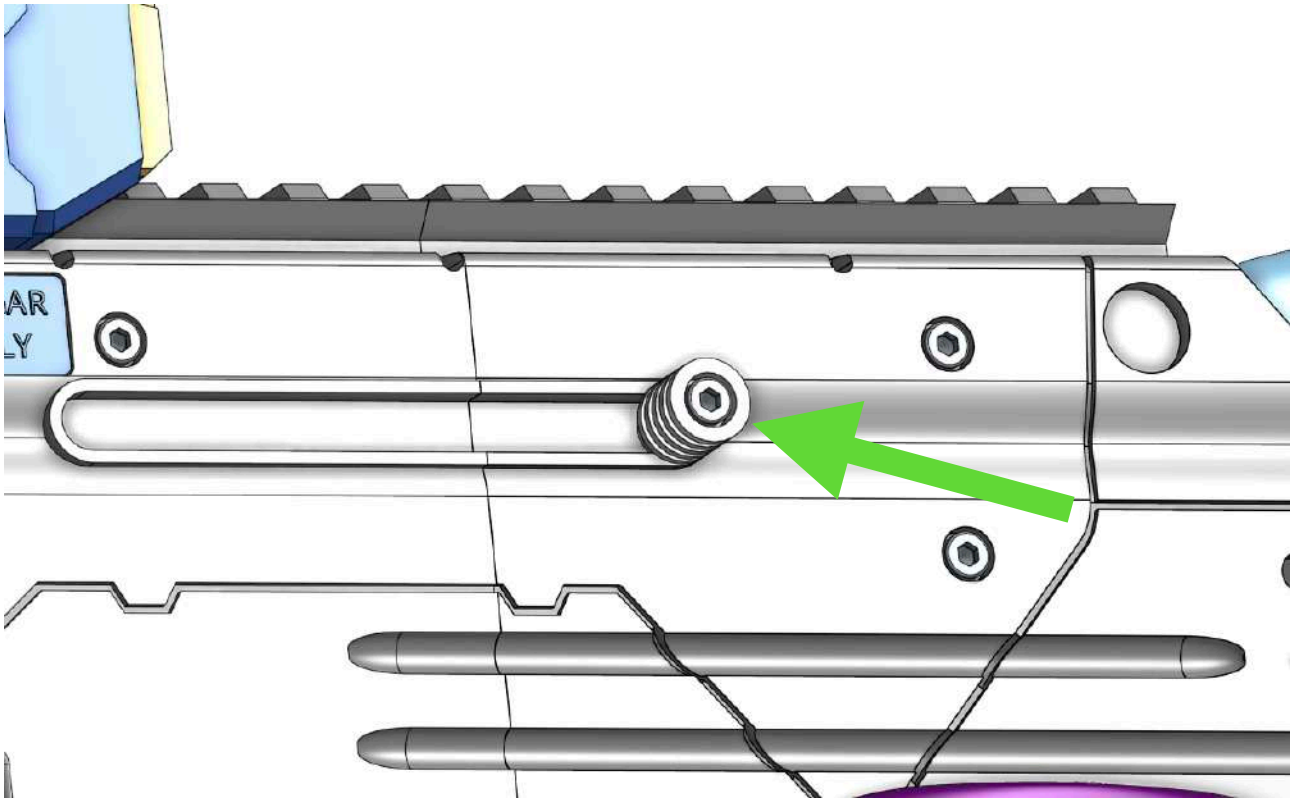
You could:

1. Just glue it in place if you don't care that it never moves again
2. Get it where you want it and drill a 3mm hole at the rear of the sight (this is suitable for cap head hex screw). Make sure to go through the site and into the rail behind (as there's no thread in the sight itself). Then carefully screw in a M30 x 10mm (i.e: thread into the plastic). This way it's removable if that's something you want...

Bits and Pieces

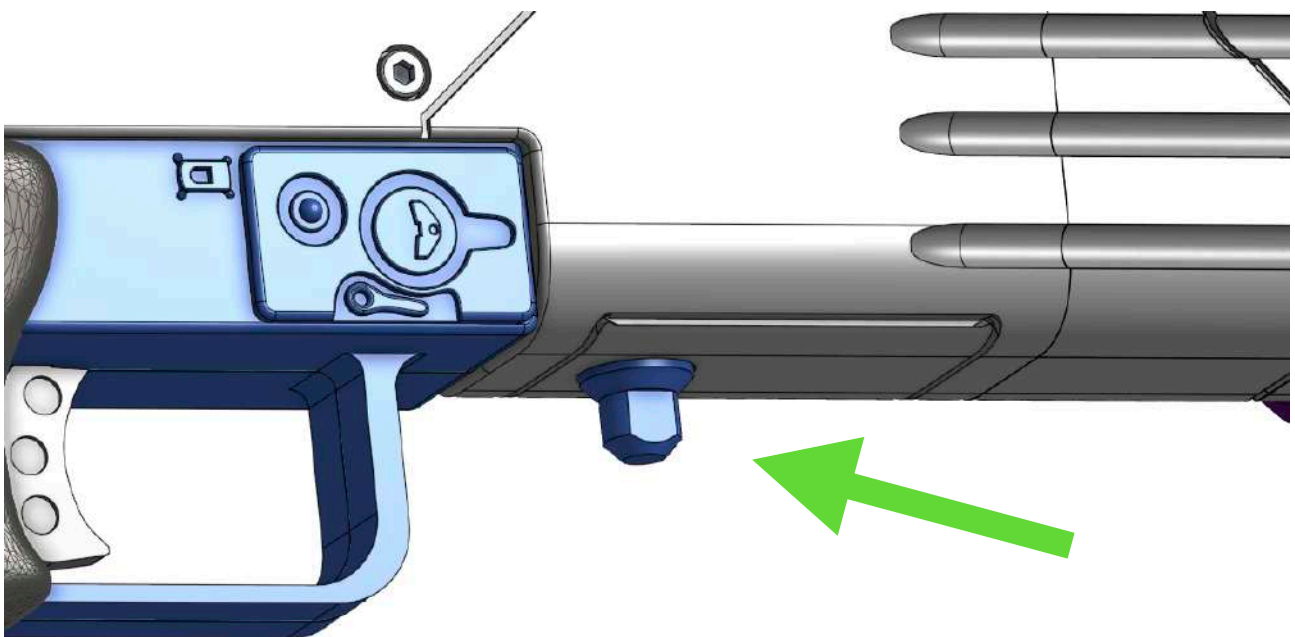
Charge Handle

Use 1 x M3 20mm cap head hex, through the charge handle, and into the captive nut.



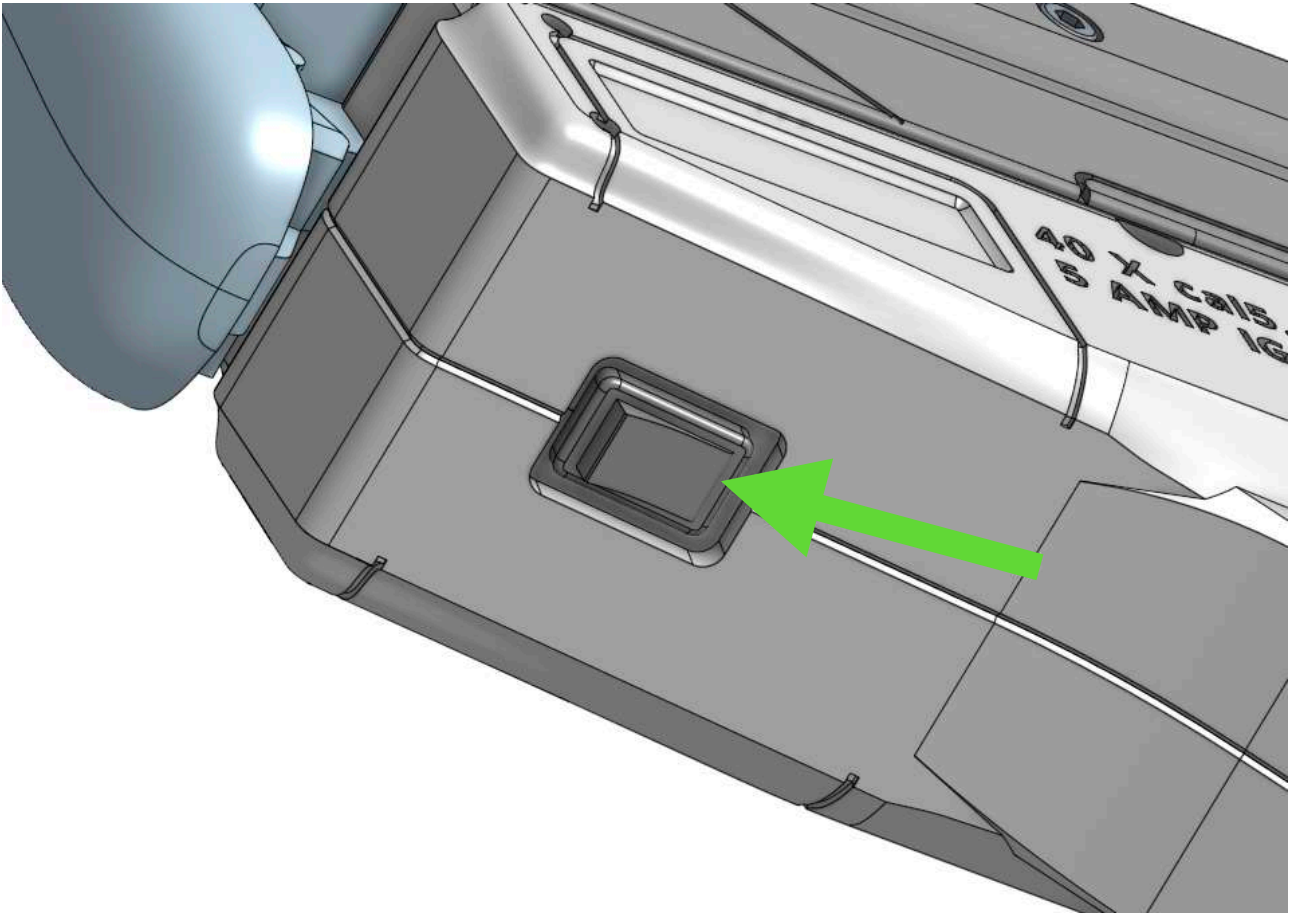
Lower Knob

Glue this in, no fixings needed.



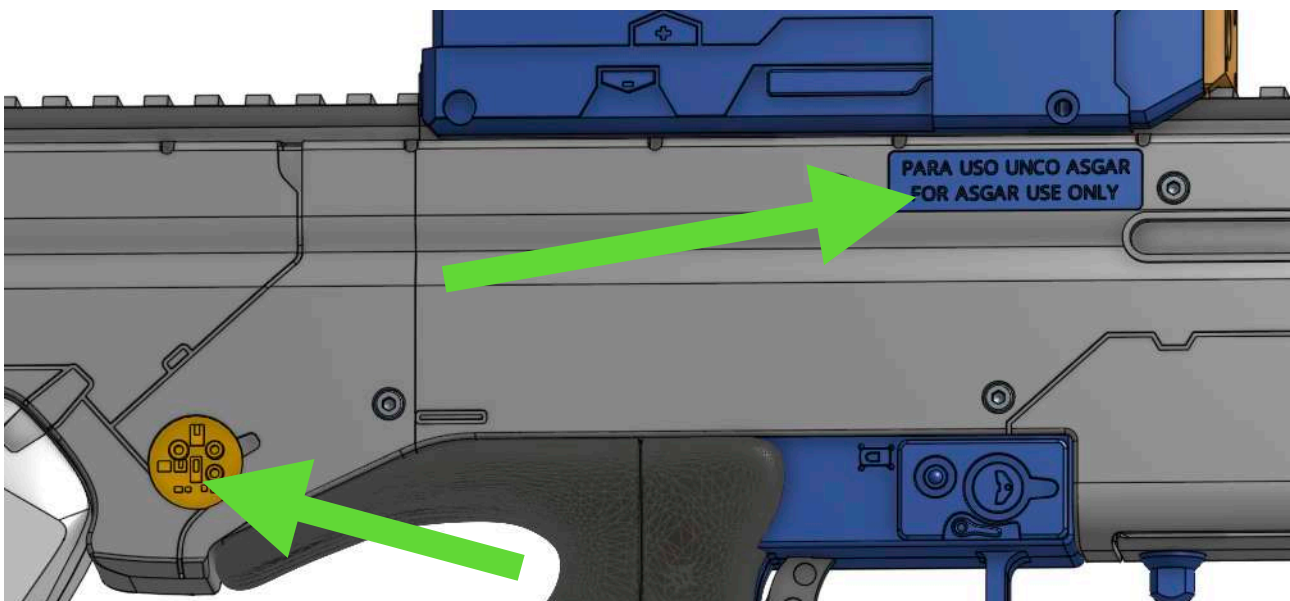
Dummy Switch

Glue this into the bottom of the read handles (things) just in front of the rear stock.



Round Circuit Detail / 3D Printed Labels

These can be glued into the various positions



Congratulations

You're done!

Now you can run around the house, going “pew pew pew!”

Stickers Included

- 1 x GKR vinyl
 - 2 x BATMIJ vinyl (1 spare)
 - 2 x GRĀBZÇ stickers
 - 2 x Danger stickers
 - 4 x Warning Triangle stickers
 - 4 x D Circle (vinyl) (one is a spare)
 - 2 x E7 (vinyl)
 - 2 x 750mj Star (vinyl)
- 1 x Medium Tack Reusable Transfer Tape

For the most part I've made the vinyl such that you could use it as a positive or negative.
For my own build, I went with just vinyls and sprayed them (the GKR specifically) to get the same color as the rear handles (the gold).

Stickers (Danger, GRĀBZÇ and Yellow Warnings):

- Consider clear coating these before use if you intend to clear coat the entire model at the end. It'll improve their finish.

Sticker Locations (from original)





