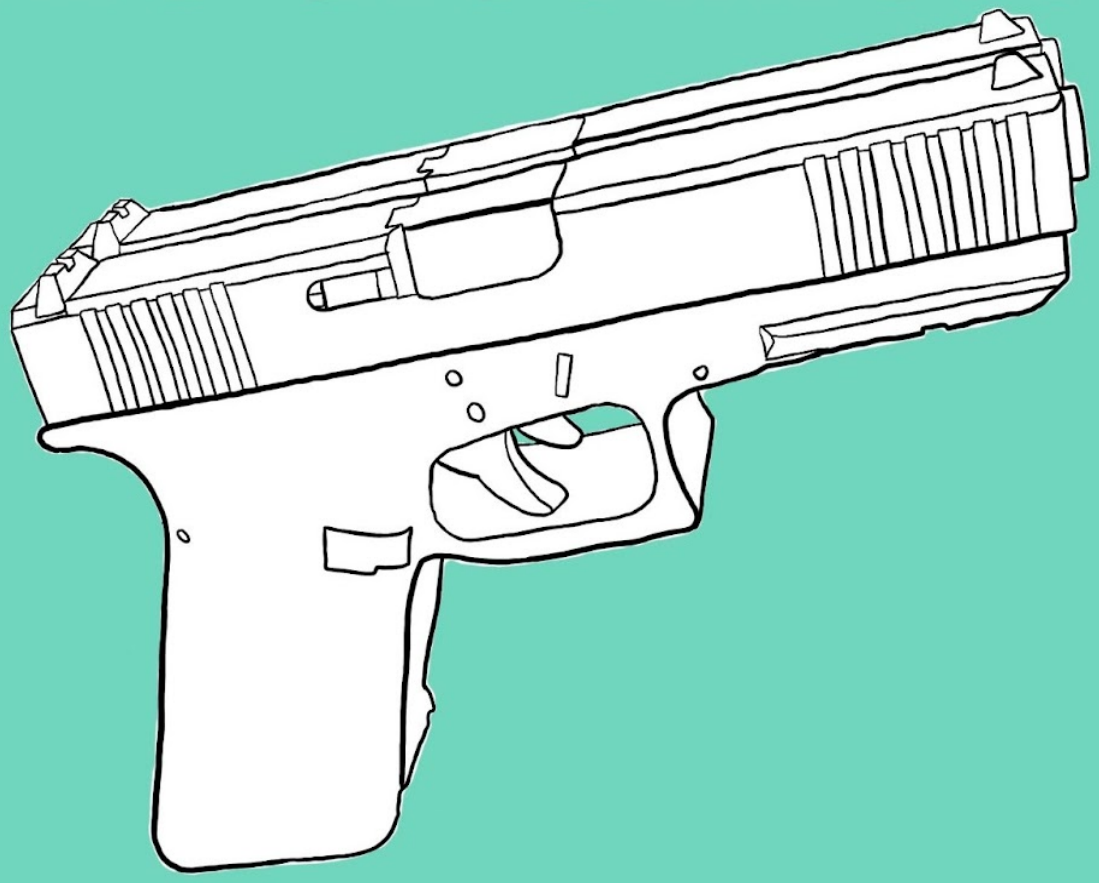
The Glocknofsky



DESIGNED BY IPRINTSHIT

Preface

The Glocknofsky is a double barrel frame for the Glock 19 and 17, designed by iprintshit and ***Nofsky Industries***; based on the FMDA frame. This design was inspired by the movie Green Hornet and was meant to be a meme. Try to have fun and don't take things too seriously! You can refer to the original DDXX.2 assembly PDF for more thorough documentation. Make sure to look over every document before printing!

The documentation shows a DD17.2 frame being assembled, but the steps and process are the same for the DD19.2 frames.

Glocknofsky Documentation

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Shopping List

This list will cover what supplies you will need for a DDXX.2 build. You will need some basic tools, such as a 3mm and 4mm drill bit, some screwdrivers/punches, a mallet, a drill, and optionally, a pair of needle-nosed pliers.

Glocknofsky pin kits will soon be found on www.nofskyindustries.com. Optionally, you can use two sets of regular pins, or fashion your own diy glocknofsky pins.

Glock Parts Kits

The big-ticket items for this build will be 2 glock parts kits. Some sources for kits are aftermarket shops like JSD, used auctions (like Gunbusters on Gunbroker), the occasional police "trade-in" parts kits sales and sometimes when outfits like BigTexOutdoors have OEM uppers for sale. Ebay can be a good source as well. While full kits can be hard to find sometimes, it is possible to put together a kit from various parts/companies. JSDSupply sometimes has good deals on aftermarket kits, but their QC can be a little hit or miss - they will stand behind their product and make it right if you contact them, though. Zaffiri Precision is also a good source.

You will need: 2 Glock slides, 2 barrels, and upper parts kits (recoil spring assembly, firing pin safety and spring, striker assembly, channel liner (if your slide doesn't have one), extractor and extractor spring assembly, rear plate, and sights (if your slide doesn't have them)). You will also need a complete Glock lower parts kit – this will be a trigger housing, trigger bar/trigger, slide stop, slide latch spring, slide latch, magazine catch, magazine catch spring, as well as a LOCKING BLOCK. I emphasize locking block because some kits that claim to be complete don't include them. For the DD19.2, you will need a Glock 19 Gen 3 "Three Pin" locking block (Glock part number 7894).

Glock Rail Kits

There are several vendors who offer rails – the most popular are Avesrails.com and Riptiderails.com. Both are planning on carrying the necessary rails for this build. Spookyrails.com may offer them in the future, as might other outfits. The old version front rails (FMDA G19) will work in this frame.

Build Tutorial

I recommend you read this section in its entirety while building your Glocknofsky. It's a fairly easy process, but the following section should save you from wasting any time due to silly mistakes.

REFER TO THE README FOR BASIC PRINT INFORMATION

Step 1: Lay out your Parts/Prep Work

This step is simple – gather up all your parts and lay them out. Make sure you have all the parts you need (this is covered in the previous section of this document). Remove ALL supports from your printed frame – as a little tip, you can view everywhere supports will be printed on your frame by viewing the layer-by-layer view in your slicing software. Every place that your slicer indicates is support material should be removed prior to starting.

One thing to make sure of before starting is that your frame isn't badly warped – the top of the frame (the area the slide will sit above) should be very close to perfectly flat. If it is bowed up or down, you may have trouble assembling your frame – I recommend you restart your print with more attention paid to print settings (specifically cooling settings, you need less cooling fan if you are having warping).

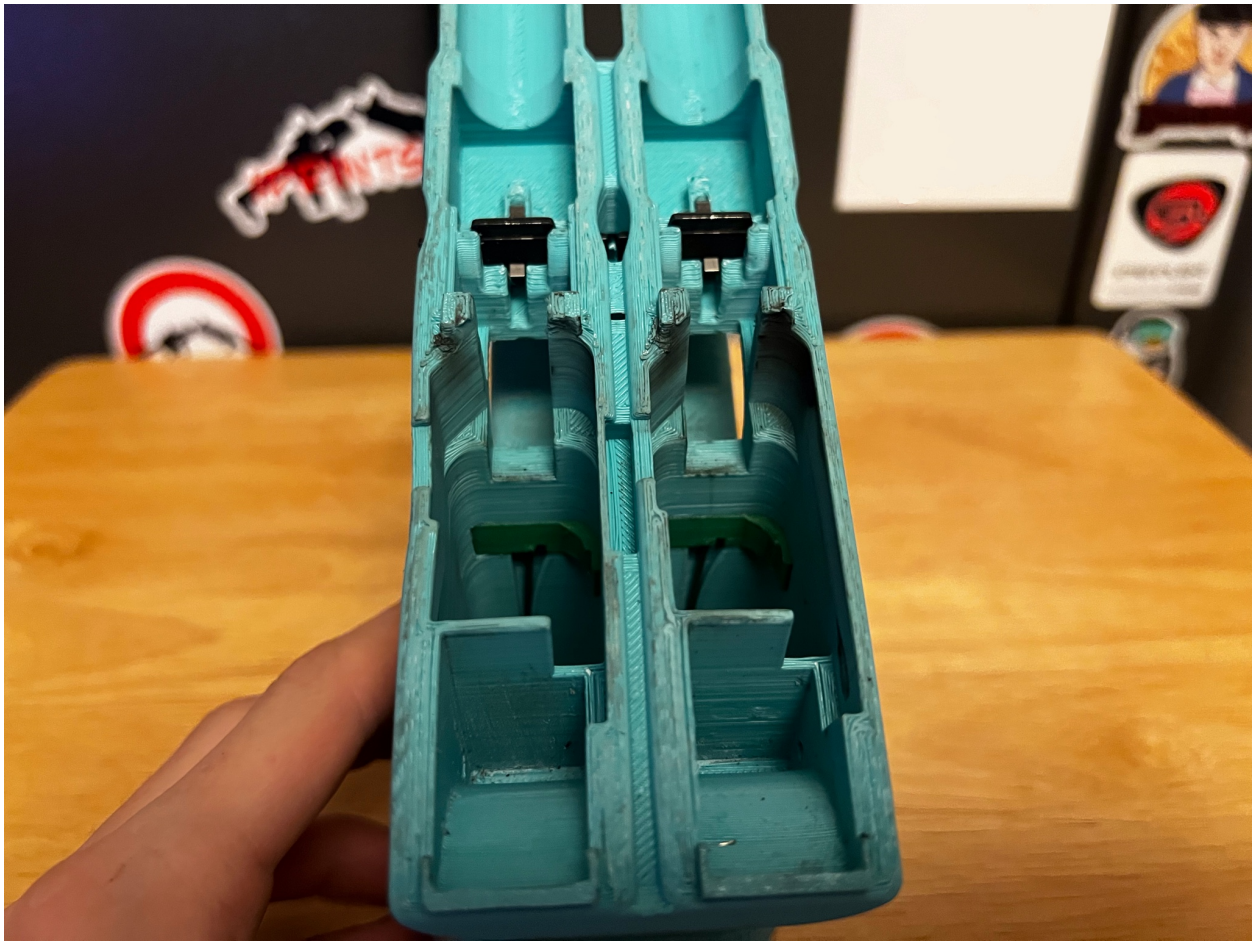
It is very important that you remove ALL of the support material from the rear (trigger block) pockets, the middle (locking block) pockets, and the front (rail block) pockets. Even a small amount of support interface material will prevent you from installing your parts, so you must scrape all of it out. I recommend using a small screwdriver and just prying/scraping with it to get all the support material out of the frame. Don't worry too much about scratching the frame in these areas – when the parts are installed, you won't be able to see the scratches.

Next, you can/should clearance all of the pin holes in the frame.

Step 2: Install Magazine Catch

Take your magazine catch springs and your Glocknofsky magazine catch, as well as your frame. These three parts should be very easy to install, provided you removed all support material already and followed the print settings recommended in the readme.

Starting with just the magazine catch, insert it into the frame. It should insert easily (with only a little drag against the frame) and move freely. If it drags a lot or is hard to move, remove it from the frame and ensure ALL support material is removed from the magazine catch slot in the frame.



If for some reason your magazine catch doesn't move freely even after ensuring all supports are removed (and you are sure you followed the print settings in the readme), you can use a rat-tailed file and a screwdriver to remove a little material from the slot until the magazine catch moves freely (this shouldn't be required and is a sign that your settings are wrong/printer isn't dialed in).

After installing your magazine catch, grab your magazine catch spring and (optionally) a pair of needle-nosed pliers. Push both springs into place, and use the needle-nosed pliers to rock them into place.

Step 3: Install Front Rail Blocks

Take your frame and front rail blocks, as well as the front rail block pins/screws. You should be able to drop the front rail blocks right into the frame – if it's a little tight, take a screwdriver and scrape the corners of the rail block pockets to ensure they are square (watch the video for how exactly to do this, if needed). If you got all the supports out of the bottom of the pocket, the pin hole for the rail and frame should line up – install your pin/screw. If you are using a roll pin, realize that roll pins have to compress to fit into the hole – it might take a little elbow grease and a proper roll pin punch to get a roll pin installed.

Next, check two things: the top of your rail blocks should be parallel to the frame itself. If it isn't, this could be due to warp in the frame (check if the frame itself is straight, refer to the start of this section if it isn't). If the frame looks straight, then you should ensure that there is no support material remaining underneath the rail blocks. Once you've ensured the rail blocks are as parallel as they can be, take your slides (it can be the whole slide assembly or just the slides) and guide it onto the rails. Ensure that the slides aren't rubbing hard on the rails or the frame itself. If it rubs hard on either (so much that you can't get the slides to push very far onto the rail) you don't have the rail blocks installed straight enough (something underneath it) or the frame is badly warped. If you have issues with the slide assemblies fitting check if the slide without the barrel or recoil spring installed still has the issue.

Step 4: Install Slide Latch Systems

Use the original Glock gen 3 slide latch spring for your frame. Using the tool of your choice, press down on the spring and slide the latches into place.

Step 5: Install Rear Rails, Trigger Mechanisms, and Locking Blocks.

Take your locking blocks, rear rail units, and trigger blocks/trigger bars/trigger assemblies. Start by placing the locking blocks inside it's recess in the frame and pushing it in as far as it will go. It should be a snug fit, but not too tight. Assuming you properly removed all the support material from this pocket, the locking blocks should insert far enough that you can see clear through the pin holes in the frame and locking blocks. If the locking blocks aren't all the way inserted into the pocket, these holes might not line up.

After ensuring the locking blocks can seat fully, remove them from the frame. Because they are a little snug, you might need to use a screwdriver to pry them out – you can do this easily by placing the screwdriver under the middle of the locking blocks from the front of the frame and levering against the slide latch springs.

Next, place your rear rail units into the rear pockets of the frame by itself. If you've removed all the supports from the pockets, you should be able to push straight down on the rails and they should click into the bottom of the pocket. Once they are fully inserted you should be able to see through the rear pin holes in the frame. If the holes are close to lining up, but aren't quite perfect, ensure all support material is removed. If it is, then you may just have a slight misalignment of your frame and rails – you can and should correct this by drilling through the rails while they are in the frame in a later step. AVOID PINCHING THE REAR RAIL UNITS CLOSED! You can bend the rear rail units easily, and should avoid doing so. Don't pinch the top of the unit together for any reason. When removing the rear rails, use a screwdriver to pry them upwards while levering against the top deck of the frame – don't bend the rails to remove them.

After ensuring the rear rails fit correctly, remove them. Take your triggers/trigger bars/trigger housing assemblies. The trigger housing assemblies should be placed inside the rear rail units. You will hold these parts together while inserting them both into the rear rail pockets at the same time.

After pressing the rails and trigger blocks firmly into the rear pockets, check the alignment of the pin holes again. There's a chance the pin holes won't line up perfectly – because you're stacking tolerances from several different parts made via different processes, this is the one pin hole that just might not line up perfectly for you. If the holes don't want to line up, you can take your 3mm drill bit and run it through the holes (be VERY certain to hold the trigger blocks and rails firmly into the bottom of the pockets while drilling, set the drill to spin slow, push it into the hole slowly, and be VERY certain you keep the drill straight while doing this). While you might remove a little material from the trigger blocks and rails, the pockets themselves are what constrains their wiggle/movement – the pin itself only keeps them from falling out of the frame. So drilling these holes (as long as you do it as I described) will not harm function. Some Polymer80 frames need this same thing done to them as the holes just won't want to line up.

If you think you have your pin holes lined up without drilling (or if you drilled it to line them up), take your rear pin, and install it into the frame. It should push in fairly easily if

you drilled. If you didn't, try using a punch to install it. Wiggle the rails and trigger blocks when pushing the pin in to help them line up.

Give the rail units and the trigger blocks a wiggle. The trigger blocks might rock a little front to back, as might the rails. Neither should be able to twist left or right. A little front to back wobble is normal and acceptable.

Next up, ensure your triggers are sitting down inside of the pockets in the frame. They should just naturally sit here.

Pick your locking blocks back up and fully insert them into the pockets while the triggers are still sitting in their place.

Take the trigger pins (they should be sort of dumbbell shaped) and insert it into the frame. If you have trouble getting them to install, remove the locking blocks and using your 3mm drill bit, push the drill in and out of this top hole while spinning the drill. This should loosen up the holes enough for the pins to fit. NEVER drill through the locking blocks. ALWAYS make sure you hold the triggers out of the way when drilling these holes again.

Next, take your slide stops and insert them between the left side of the triggers and the frame (it goes between the left side of the triggers and the frame). The springs on the top of the slide stops will go UNDER the top pin in the locking blocks – ensure that the springs stay under this pin at all times. Make sure to install the left-most trigger pin first.

Finally, you will take your last pin and insert it from the RIGHT side of the frame (you can insert it from the left, but it's more difficult). You may have a little trouble getting everything lined up – wiggle the pin forwards and backwards to help it line up with the locking blocks. If you can't get the pin to start, you will have to remove the slide stops, the top pin, then the locking blocks and take your 4mm drill bit in the drill. Move the drill back and forth while drilling to loosen the holes in the frame up a little. NEVER drill through the locking blocks. ALWAYS make sure you hold the triggers out of the way when drilling these holes again.

As you push the pin past each component (frame, triggers, slide stops, locking blocks), stop and make sure the next component is lined up (applicable for the triggers and slide stops, since they can move around without the pin being installed).

Push the pin all the way. Before you push it past the slide stops, make sure the springs on the slide stops are underneath the little (top) pin in the locking blocks and not over the top of them. The big (bottom) pin should feel like it “clicks” into place once you’ve fully inserted it.

Step 6: Slide Prep, Install, and Function Test

This step is easy. Remove the backplates on your slides, and install the Glocknofsky backplate rings. Take your slide assemblies, and guide them back onto the frame. Line up the cutouts in the slides with the rails. You may need to guide the slides past the rear rails with some care and attention (the slides will be loose enough on the front rails that it won’t be guided straight into the rear rails, so you will have to align them). If your slide latches or barrels are out of spec, you may have to push down on the slide latches slightly to get the slides to go on all the way.

At this point, rack the slides, dry fire, hold the triggers down, rack the slides, release the triggers, dry fire again. The slides should be fairly easy to rack. You can use a little grease or oil on the rails to allow things to move a little more smoothly if things are tight. After a little test firing everything should break in nicely. The next section will guide you through some basic troubleshooting.

Generic FAQs/Troubleshooting

Q: What sort of round counts should I expect? What ends up breaking?
A: Thousands, even if you print in PLA+. If you magdump more than 150 rounds without a cooling break on a PLA frame, you will melt the spring seat and the frame will stop working right – so don't do excessive mag dumps without allowing time for things to cool if you print in PLA. In Glass-Filled Zytel, you can assume that heat resistance will be on bar with a factory Glock frame.

Q: What sort of reliability should I expect?
A: Reliability on my builds has been great. From what I've seen, reliability with these sorts of builds depends on the parts you use. With OEM parts and OEM mags, these frames run amazingly. Aftermarket slides, barrels, and other parts you can sometimes run into little issues like failures to eject or extract.

Q: What can I do about the rough finish where supports were touching the frame?
A: Get a cheap soldering iron from Amazon and use it to remelt the rough patches. It's very easy to do, leaves a nice, smooth finish, and takes little time (especially when compared to sanding).

Q: Why can't I get the slide on?
A: You likely don't have your rails installed correctly – go back and ensure they are installed properly. Also ensure the frame isn't warped – if your frame warps badly enough, the rails won't line up.

Q: Why is it hard to rack the slide?
A: A couple things could be causing this. You might just need a little grease/oil on the rails and some time to break the gun in – you can do this by

manually racking the slide or by live fire. It could be that your rails are out of spec or damaged when you installed them – ensure there are no burrs/sharp edges on the rails. Another thing to check is if the slide rubs against the frame at any location – if the frame warped during printing, it can rub on the slide and cause issues. This warp will show up at the muzzle end of the frame, especially at the bottom of the 'U' shape on the slide. If the slide drags on that area, you can take sandpaper or a Dremel tool and remove a little plastic so that the slide doesn't drag any more. If you have to remove a ton of material, you may want to reprint your frame with settings that will combat that warp (less cooling fan).

Q: What parts work?
A: Anything that should work with a Polymer80 or factory Glock frame – this is based on 3rd Gen Glock parts.

Q: What mags work?
A: Stick with OEM mags when possible. PMAGs work decently. I've had Danny Meatball mags (3d printed) outperform PMAGs in terms of reliability in these frames, though close attention to settings must be paid when printing Danny Meatball mags and they do wear out faster than PMAGs.

Q: I printed upright. What should I do to smooth out the underside of the frame?
A: It's best to use a soldering iron. A cheap one from Amazon will do fine. Get it hot and use it to melt the rough areas to a smooth finish. Start slow and get a feel for how the plastic will melt, then move across the bottom of the frame and smooth everything out. This method is quick, easy, very effective, and will actually make your frame just a little stronger. Avoid using this method with ABS, has harmful fumes could be released. This method should be safe with PLA/PLA+, Nylon, PETG, and several other polymers.

Q: What filament should I use if I want a really strong frame?
A: Glass filled Zytel, printed hot (290-300C). Use a soldering iron to melt all the outside layers of the frame together. Doing this will leave you with a frame that is very comparable to OEM in terms of durability/resistance.

Glocknofsky Specific FAQs

Q: Why the fuck did you make this?
A: Go watch Green Hornet

Q: Can I use different calibers on the same frame?
A: No! But yes? They will both cycle by themselves, but when trying to shoot both sides simultaneously, the different recoil forces cause unreliability.

Q: How do I remove these slides?
A: I made a tool! Press down the tool and pull down the lever on one side at a time.

More FAQs can be found in the original documentation.

Acknowledgments

For questions, please contact iprintshit. Odelok was also instrumental in the development of this model. He is able to answer questions but will be much harder to find in the wild. A special thanks to Comeoutandpla (The ppls favorite) for doing an incredible amount of printing and testing during the beta. He and MaineMike were fantastic advocates for this project, and pushed the project to completion while iprintshit's ADHD made him work on other things. They have very much earned their status as Beta Badasses. A thank

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