

DD43.I

Assembly Guide

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SECTION I: INTRODUCTION

It is my pleasure to present to you the DD43.1. The first DIY rail system and specification for the popular single-stack Glock 43 platform.

FMDA had initially designed the “3d Printable G43 SS80 Frame”, which made use of the Glockstore’s SS80 rear rails, and front rail locking block combination piece. This was great at the time, and enabled custom builds based off Glock’s single stack offering.

But then a new problem arose as single-stack builds based of the G43 were growing in popularity. With only Glockstore offering a front rail block and rear rail stamp, users quickly became concerned with this bottleneck. “If only one manufacture or vendor was selling these essential parts to building this gun, what happens when they disappear or are no longer made?”

Of course, this happened. As of writing, other developer teams have made their own SS80 remixes based off FMDA’s frame, and the Glockstore is now dry on SS80 rail sets.

I have been working intimately with Aves Rails, who I cannot thank enough for their support and investment with the manufacture, evaluation, and testing of these specifications.

FMDA’s original frame was altered to accommodate the inclusion of the front rail block, and rear-rail stamp, as well.

The front rail block is familiar to those who have built other Glock platforms before- such as the DD17.2, DD19.2, or DD26.2. The design calls upon the simple approach used by FMDA’s and IvanTheTroll’s in these pistols.

The rear rails are another matter entirely. A specification was defined so that they could be made at home or sent to a machine shop for fabrication. While the original model was made to accommodate SS80 front and rear rails, the specification defined is NOT compatible with the original SS80 product, nor FMDA’s original model. These new rear rails introduce some enhancements, with some key ones being that tugging/racking upwards on the slide will now engage the striker, and “bottoming out” the trigger will no longer bind the trigger bar on the rail.

My hope for you, dear reader, is that by the end of this guide, you will be able to properly and safely assemble a DD43.1 of your own, and that you get to enjoy the fruits of our collective efforts, or maybe someday create an aesthetic remix of your own!

Vinh Nguyen

SECTION II: TOOLS AND SHOPPING LIST

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

- Gunsmithing Punch Set
- Stick Files
- Narrow, but not needle nose, pliers

The following tools may help, but are not required:

- Flathead screwdriver

You can check out a comprehensive shopping list at www.vinhstoolbox.com.

SECTION III: PARTS KIT CHECKLIST

In order to successfully build your DD43.1, you will need the following parts that specifically pertain to the firearm.

Please note, that assembling the slide is outside the scope of this guide. Please refer to *The Rouge Banshee's* how-to video for guidance on how to put your slide together: <https://youtu.be/FdfPRiQLf4A>

Be sure you are buying the specific parts for the Glock 43 when you are shopping. These terms are shared between different variants of Glock pistols.

UPPER PARTS

A complete slide parts kit, or a complete slide assembly should compose of the following:

- Slide
- Spring Cups
- Safety Plunger & Spring
- Complete Extractor with LCI
- Extractor Depressor Plunger and Spring
- Recoil Spring and Guide Rod Assembly
- Cover Plate

LOWER PARTS

A complete lower parts kit should compose of the following:

- Slide Lock
- Slide Lock Spring
- Trigger Housing Pin (*Rear*)
- Trigger Housing
- Disconnecter
- Trigger and Trigger Bar
- Trigger Pin
- Slide Stop Lever
- Magazine Catch
- Magazine Catch and Spring
- Locking Block – **NOTE: be sure to check that your lower parts kit has this. Most do not include the locking block!**

RAILS

The following should be included with your rail set:

- Front Rail Block Pin
- Front Rail
- Rear Rail

A frequent question here is “Where do I get the front rail block pin?”- this is included with your front rail set, and is typically used to hold the rail in the protective housing it ships in.

MAGAZINES AND ACCESSORIES

Don't forget you will also need:

- Magazine – *ETS Clear Magazine for Glock 43 is recommended*
- Holster – only if you intend to carry your gun



SECTION IV: ASSEMBLY

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.

PREPERATION



Remove any debris from the openings on the frame.

A round stick file helps to smoothen the holes.



Don't force your file through if it doesn't go through all the way.

Stop, and continue on the other side.



Ideally, the holes should not have any left over debris and filament stuck in them.

INSTALL THE MAGAZINE CATCH AND SPRING



Insert the magazine release spring into the slot in the magwell.

A set of firm, and stout pliers can help align and press in the spring.



Insert the magazine release, and ensure the spring secures into the slot on the release.

If you are right-handed, insert the release (button-side first) from the righthand side. Vice versa, if you are ~~wrong~~ left-handed.



It may help to use a broad flat-head screw driver to guide the spring into the slot.

INSTALL THE REAR RAILS AND TRIGGER HOUSING



Insert the rear rails into the frame.



Assemble the trigger housing and trigger bar.

Did your trigger housing have its disconnecter already installed? If not, insert the disconnecter into the slot on the housing.



Insert the trigger housing down between the rails, while ensuring the trigger clears the trigger hole.



Install the trigger housing pin into the frame to secure the rail and housing.

ASSEMBLE THE FRONT TRIGGER ASSEMBLY



Insert the slide lock lever to the left of the trigger shoe.



Place the locking block on top of the trigger, ensuring that the trigger shoe and slide lock lever are in-between the “legs”.



Install the trigger pin beginning on the righthand side of the frame.

Start by tapping in slowly, ensuring that the pin clears the locking block and trigger shoe.

Take a punch and align the slide lock lever hole to line up with the pin, then gently tap the pin through.



Check to make sure that the slide lock lever has a high range of motion.

It should “catch” between the slots of the pin.



TIP: The pin will be correctly positioned when you hear a “click”, indicating that the slide lock has engaged the slot on the pin.



Insert the slide lock spring into the slot.



Insert the slide lock at an upwards angle and use the slide lock to press down on the slide lock spring.



Be sure not to kink the spring when doing this.



Insert the front rail block downwards into the frame.



Secure it in place against the frame by punching in the front rail block pin.

ATTACH THE SLIDE ASSEMBLY AND PERFORM A FUNCTION CHECK



Insert the slide onto the front rails.

Be sure your recoil spring is correctly aligned and seated between the barrel and slide.



Press the slide back onto the frame and slotted onto the rear rails.

If your parts are brand-new, you may have to pull down on the slide lock as you insert the slide.

Rack the slide all the way back.



Insert the magazine and proceed to function check steps.

FUNCTION CHECK

Verify your firearm works by evaluating each of the following functions.

BE SURE YOUR GUN IS STILL UNLOADED.

Check that your chamber is empty, and that there are no rounds in the magazine.

- Empty Magazine Slide Lock:
 - o Pull the slide back.
 - o It should catch on the slide stop lever on an empty magazine.
- Trigger Break:
 - o With the slide in battery, pull on the trigger.
 - o The striker should release.
- Trigger Reset:
 - o With the slide in battery, and the trigger already fired, hold the trigger down, and rack the slide. Gently release the trigger.
 - o The trigger should have a tactile or audible reset. *(This may vary with aftermarket or competition triggers.)*

When you have completed the function check, the assembly process is complete.

Be sure to remove your magazine and store your firearm in a secure and safe place.



SECTION V: TROUBLESHOOTING

You may encounter certain problems with your firearm either during usage or assembly.

- Can't insert rails or locking block
 - Be sure that the pockets are entirely free of debris.
- Slide won't hold open when the magazine is empty
 - Check that the slide lock lever is engaged on the ridges of the trigger pin

