DD43X/48 Assembly Guide

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SECTION I: INTRODUCTION

After my DD43.1 rail spec was released, ChairmanWon quickly got to work creating a frame that was compatible with the Glock 43X (and subsequently Glock 48).

The 43X and 48 use the same parts as the 43, apart from the magazine release and slide lock. We've even added support for the Shield Arms S15 magazine release.

It is very fulfilling to see derivative work quickly spin off from the rails. ChairmanWon modeled the 43X frame from scratch, then incorporated the necessary geometry to support the rails and internals. Everyone knows that he does exceptional work with his modeling and texturing- you should expect this release package to be of the same pedigree you come to expect from him.

I anticipate seeing more and more creative and exciting spins and remixes from the community. We hope you enjoy printing and using this 43X.

Vinh Nguyen

SECTION II: TOOLS AND SHOPPING LIST

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

- Gunsmithing Punch Set
- Metric Drill Bit Set
 - o 3mm Drill Bit
 - o 4mm Drill Bit
- Stick File
- Narrow, but not needle nose, pliers

The following tools may help, but are not required:

- Flathead screwdriver

You can check out a recommended shopping list of tools Vinh keeps at his desk at www.vinhstoolbox.com.

SECTION III: PARTS KIT CHECKLIST

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

Please note, assembling the slide is outside the scope of this guide. Please refer to The Ronge 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 or Glock 42 or Glock 43X/48 when you are shopping. These terms are shared between different variants of Glock pistols.

Building a DD43X/48? Note the appropriate lower parts that are different, which are the slide release, and magazine release.

UPPER PARTS

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

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

LOWER PARTS

A complete lower parts kit should compose of the following:

- o Slide Lock
- o Slide Lock Spring
- o Trigger Housing Pin (Rear)
- o Trigger Housing
- o Disconnector
- o Trigger and Trigger Bar
- o Trigger Pin
- o Slide Stop Lever
- o Magazine Catch
- o 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:

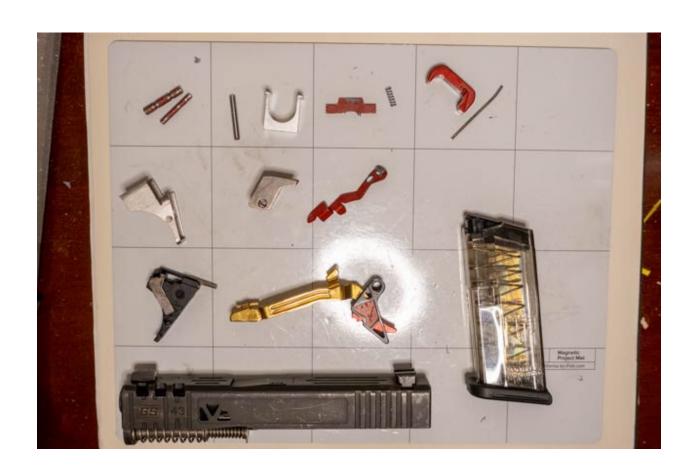
- o Front Rail Block Pin
- o Front Rail
- o Rear Rail
- o Rear Rail Pin
 - O Your plastic rear rail pin in your parts kit will NOT be compatible. You **MUST** use the included rear rail pin, which is identical to the front rail pin.

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

MAGAZINES AND ACCESSORIES

Don't forget you will also need:

- o Magazine
 - o OEM Glock 43X/48 magazine
 - o Shield Arms S15 Magazine *and* Magazine Release
 - o DO NOT mix and match Shield Arms and OEM Glock magazines.



SECTION IV: ASSEMBLY

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

REMINDER: While you may see photos below for the DD43.1, the instructions are the same for assembling the DD43X/48 as with the DD43.1.

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:

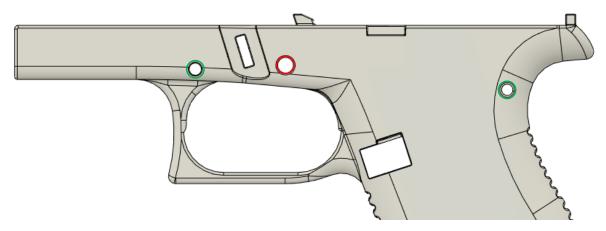
- 1. **Keep live ammo away.** Use snap caps or dummy rounds to verify function of your firearm. Never keep live ammo around your workspace, and certainly never mix them with your dummy ammo.
- 2. A clean gun is a safe gun. Never leave your firearms uncared for to foul or dirty up. Debris can cause malfunctions, 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 remove pesky debris.



Use a drill bit (with your hands) to deburr and chase out the highligted holes above.

- GREEN 3mm Drill Bit
- RED 4mm Drill Bit

TIPS:

- Do not use a power drill.
- Be gentle and work slowly to ensure the holes are clean and rounded.
- Insert the bit straight in- don't cant the bit or enter at an angle.

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 disconnector already installed? If not, insert the disconnector 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 top the trigger, ensuring that the trigger shoe and slide lock lever are inbetween 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.
 - 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
 - o Be sure that the pockets are entirely free of debris.
- Slide won't hold open when the magazine is empty
 - O Check that the slide lock lever is engaged on the ridges of the trigger pin
- "Where do I get the front rail block pin?"
 - o This is included with your rail set, and is typically used to hold the rear rail in the protective housing it ships in.
- Reset is inconsistent or unattainable
 - O We've seen this happen commonly with frames that are "too tall". You will need to check your z-steps- this problem will occur if you are overshooting your z-steps by over 0.1mm. (Print a calibration cube and adjust your printer accordingly.)