

**-=Begin Transmission=-**

**+Blessed is the Mind Too Small For Doubt+**



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**Original Document Follows:**

+++++++ Initiate Build Protocol +++++++

The



standard pattern Boltgun can be turned into the Sniper Pattern Bolter:



## **Standard Template Construct Pattern: Bolter Sniper Upgrade and Complete Model - for P1/X1/A1 & A1Mini Models of STC Generators**

**Origin: Terra**

**Date of File Recovery: M2.25.09**

**Author: Techpriest Level 4 - Ratjob**

### **Abstract:**

**Greetings Battle Brethren! This Techpriest lives to serve! This One has recently finished decrypting and repairing the STC files of one of The Emperor's most Holy Creations! A relic from the Golden Age, this STC has been scrubbed free of warp entities and Xenos filth. Sanctified by the Magos, it is finally ready to be released to your Armorers and Techpriests. But be warned! There are a few things every acolyte tasked with this holy assembly should know and be aware of. Consider the Litanies of assembly:**

**“The model shown in this assembly guide was printed on a BambuLabs P1S with AMS system attached. It was printed with BambuLabs PETG HF and BambuLabs PLA Matte that was dried at 65°/55°C (respectively) for 9 hours in a Hamilton Beach food dehydrator modified to accept Filament. The build plate was a BambuLabs Textured PEI plate that was washed with dish soap frequently and handled carefully using rubber gloves when contacting the plate.**

**If you choose to change filament type, build plate type, or even printer type then make sure that you have carefully considered all of the factors that can affect print quality. If warp demons interfere with your prints, refer to the Litanies of STC Generator maintenance:**

**“Dry Your Filament! Clean Your Build Plate! Calibrate your Flows!”**

**In addition, if you are using PETG, This Techpriest suggests monitoring your first layers as they are laid down, potentially even slowing down the print speed temporarily to 50% to ensure the first layer adhesion is sound. BambuLabs printers have a one-click option for this from their software.**

**Prepare your Cyanoacrylate adhesive polymer, razor knife, clippers, and forceps! For it is time to assemble the Grimdark Boltgun!**

**Be wary! As many of the tolerances in this build are deliberately tight, you may find that using your razor knife to loosen up some parts is necessary. This all depends on your STC generator's individual specifications, as well as the filaments, temperatures, environmental conditions, and speeds you choose to run. Be vigilant, and enjoy this most Holy Relic of the Golden Age of Humanity.**

**-Techpriest Level 4 @ratjob**

**This Build Guide Covers Multiple Models**

# **1st Model - Complete Kit: Ratjob's Grimdark Boltgun**

**Plate 1 - Grip and Trigger, use a 7 or 8 mm diameter spring for the trigger.**

**Plate 2 - Receiver, Rear Housing, Mag Release Linkage and Bolts, use a 8-10mm diameter spring and an M3 x 20mm screw.**

**Plate 3 - Rear Housing Panels and Fasteners**

**Plate 4 - Right Sided Shell Ejection Door Assembly. Use a Tension spring or rubber bands as well.**

**Plate 5- Bipod Parts, Telescoping Stock Parts, use an 8mm compression spring as well.**

**Plate 6 - Optics, Barrel, Tubes for Telescoping stock**

**Plate 7 - Front Grip Parts and Top T-Handle**

**Plate 8 - Side and Top Panels, Bipod Feet**

**Plate 9 - Rearmost Side panels (Right hand sided charging)**

**Plate 10 - Top Panels and Rail**

**Plate 11 - Frontmost Side Panels**

**Plate 12 - Front Block, Optics Covers, Suppressor, and Telescoping Stock Parts**

**Plate 13 - Magazine Topper and Dummy Rounds**

**Plate 14 - Magazine and Fasteners**

**Plate 15 - Extra Fasteners**

# Full Grimdark SniperBuild:

## Step 1 - Grip and Rear Housing

Use the 5 trapezoidal tabs to join the two halves of the clamshell grip. This is a very tight tolerance, so make sure you give them a good mashing together to get the two halves to join without gaps.

Glue a 7x15mm compression spring into the recess in the rear of the trigger, and fit it to the grip. Ensure smooth travel, adjust fitment as necessary with hobby knife or sandpaper.

Use the M3 plugs or the M3 Screws to connect the Grip and Trigger to its corresponding slot in the bottom of the rear housing. Make sure the trigger performs as desired before cementing this join.

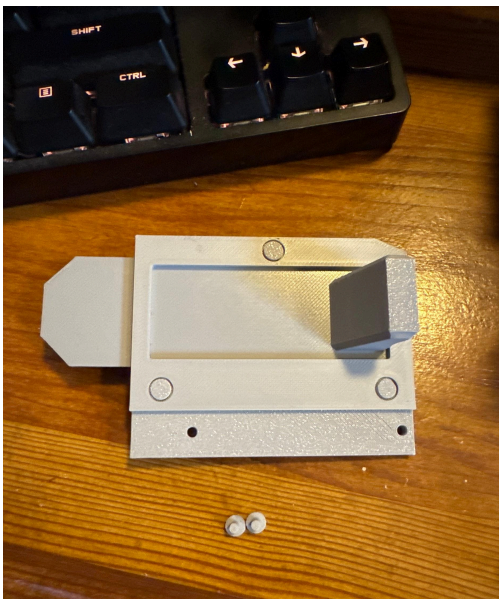


## Step 2 - Shell Eject Doors

Make the Shell Eject Door using the charging handle, a 3D printed Bolt, the Flat panel with the Hex hole in it and the small post that has a hole in it for the spring attachment. Glue the post into the rear of the panel and allow it to dry thoroughly:



Attach the tension spring to the eject door and the frame, adjust your spring length with clippers as necessary so the door will rest in a closed position. **\*Rubber bands can be used instead of springs\***



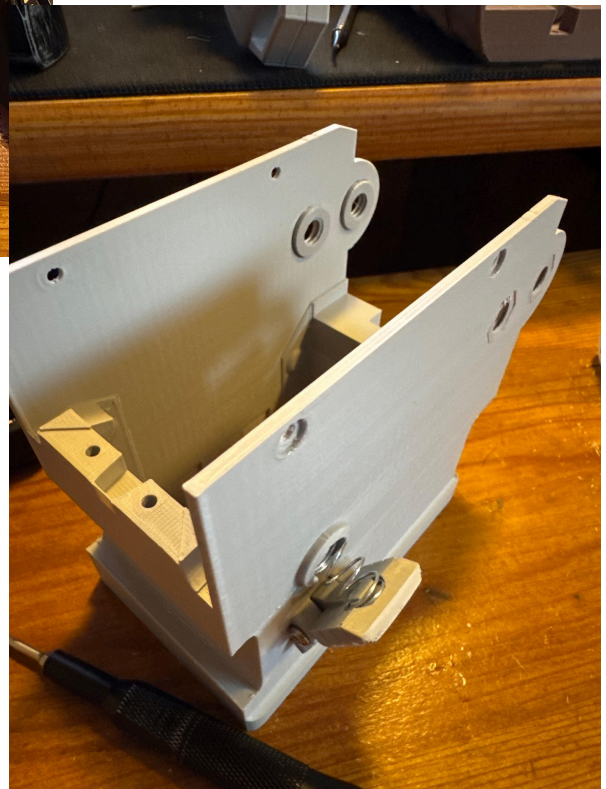
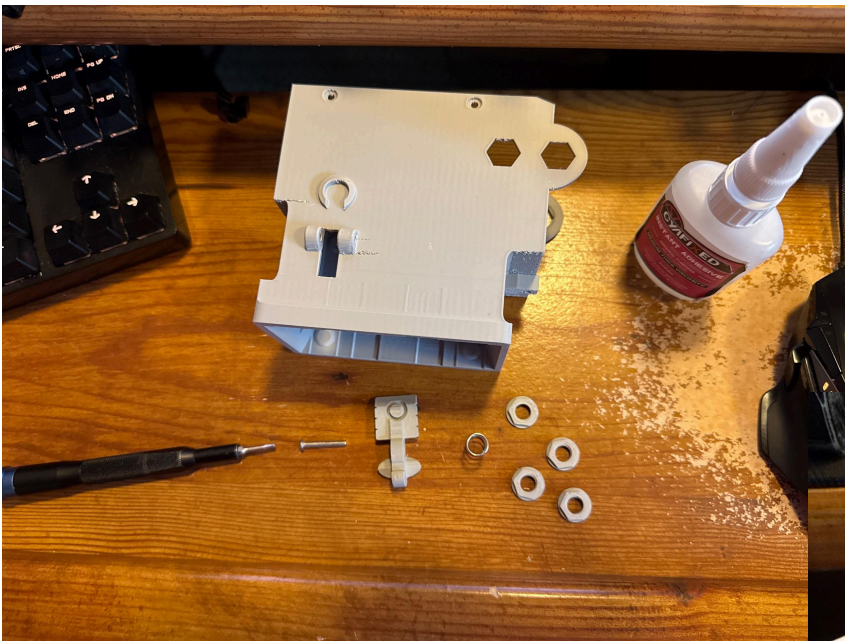
Sandwich the eject door and charging handle between the halves of the eject door and use the three M3 plugs that have larger and flatter heads to create the shell eject door frame. It is intended to have the eject panel / charging



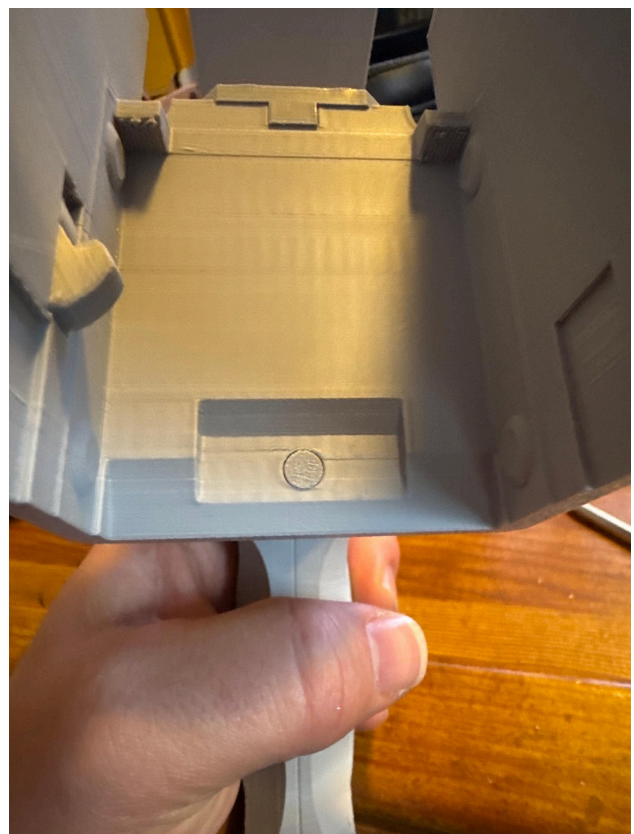
panel slide in the slot so make sure the fitment is good on these parts before cementing them. Set this part to the side until it is ready to attach to the Upper receiver with two additional Flattened M3 Plugs.

## Step 3 - Receiver

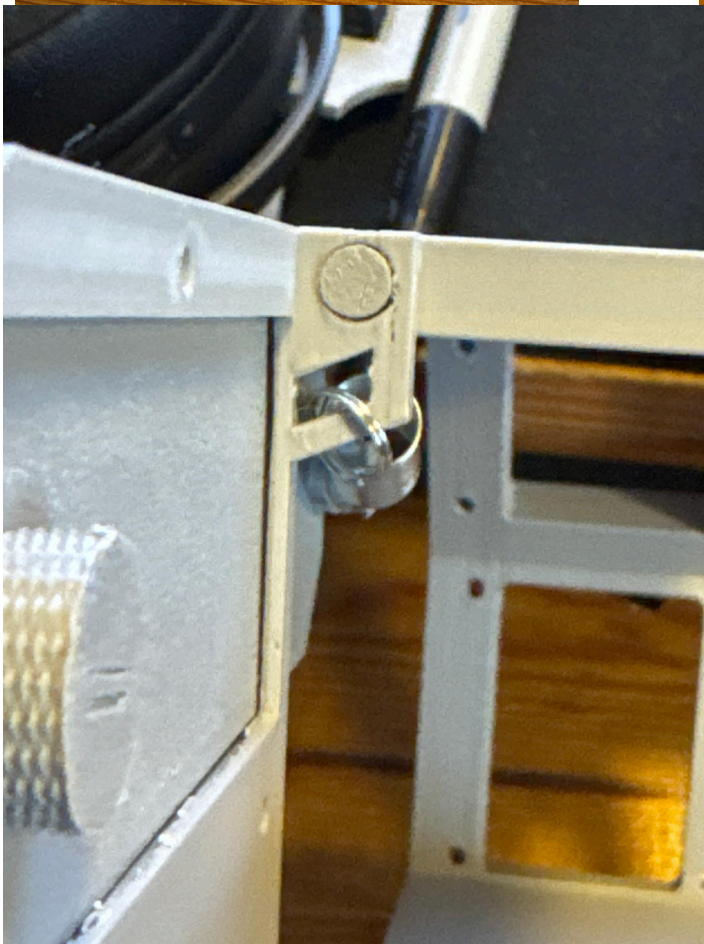
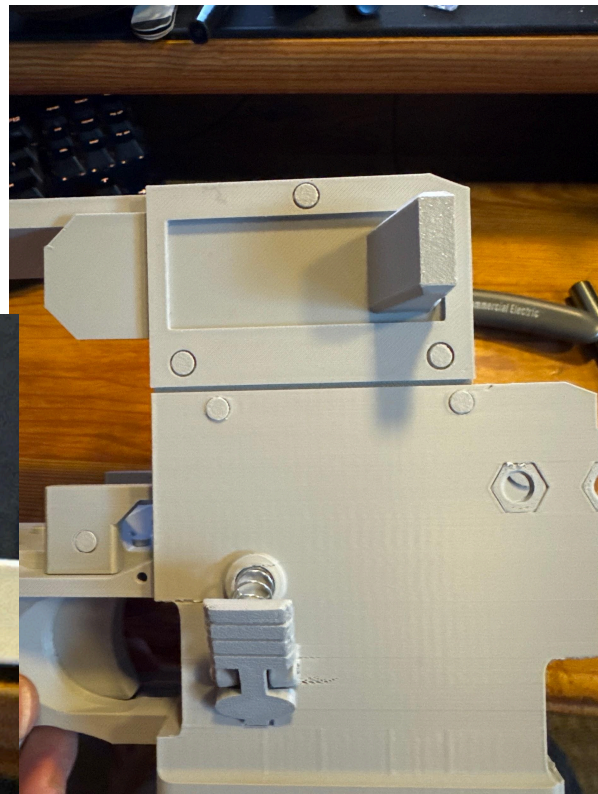
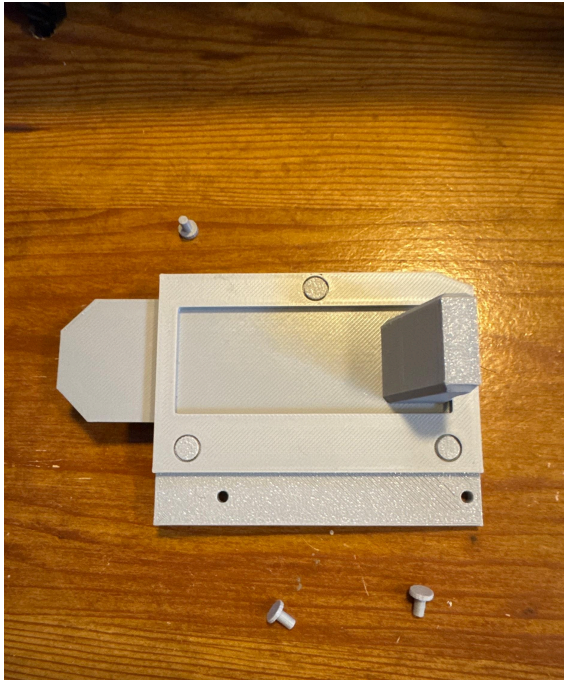
Use the longer M3 Screw and the 10x15mm spring to attach the magazine eject lever to the side of the upper receiver. You may want to shave and adjust this fitment so that it is smooth and does not catch on the receiver. Also glue 4 of the flattened nuts into the front of the upper receiver, these will be attachment points for the printed bolts to attach the front grip and the top covers.



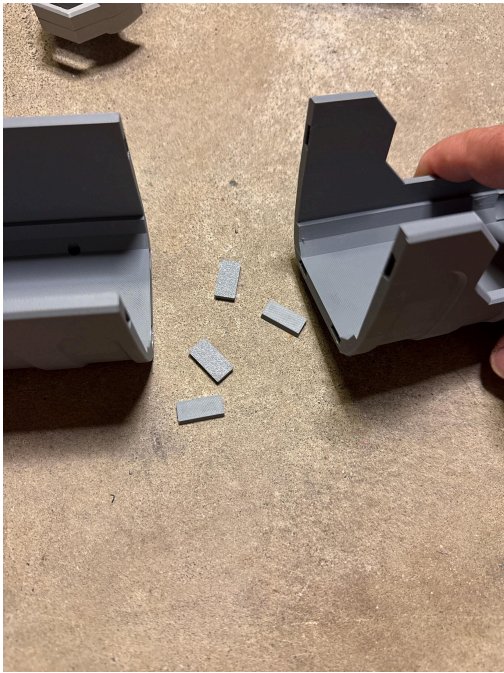
Connect the Upper Receiver to the Grip and Rear Housing using the bracket and four M3 plugs or screws as well as a single M3 plug or screw to connect the trigger frame to the Upper receiver within the magazine well. Three of the M3 Plugs should be the longer lengths ones, these are used in the sides of the bracket and at the bottom where the receiver attaches to the grip frame. The standard size M3 plugs are used in the top of the bracket connecting to the Upper Receiver.



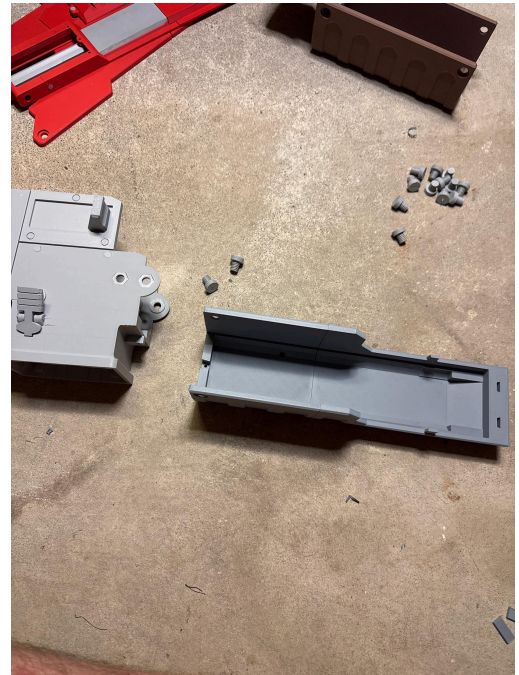
Connect the Shell Eject Doors to the Upper Receiver and Rear Housing using a standard M3 plug to connect to the Rear Housing, and two of the flattened head M3 plugs to attach the Eject door assembly to the Upper receiver. If you spring loaded the Shell Eject door, it should move freely and return to its rest position:



## Step 4 - Bolter Sniper Front Grip & Bipod



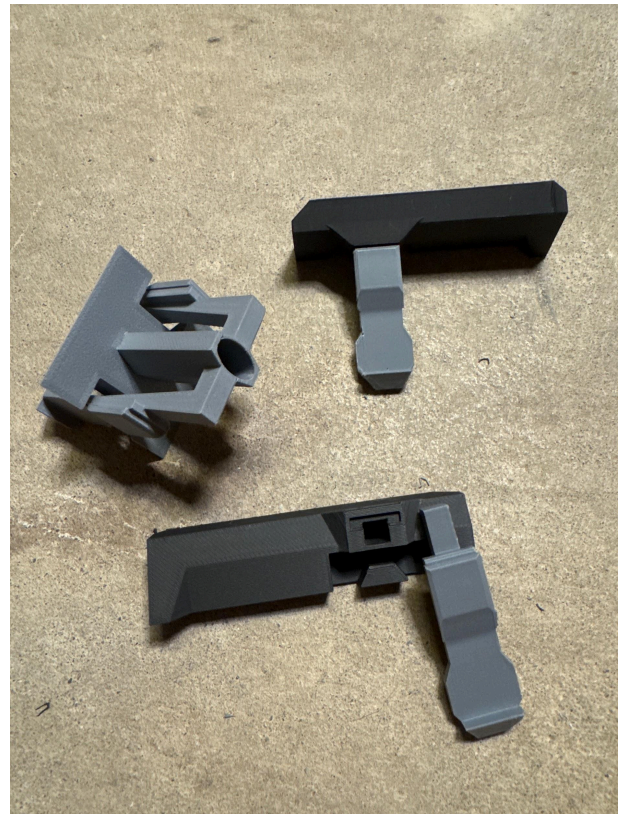
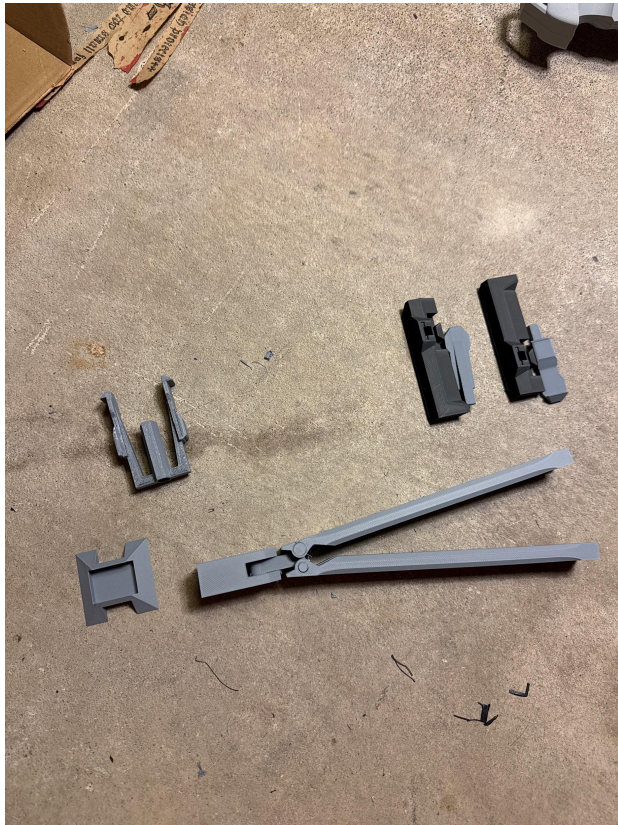
Attach the new Front Grip to the existing receiver with M3 screw and printed bolts.



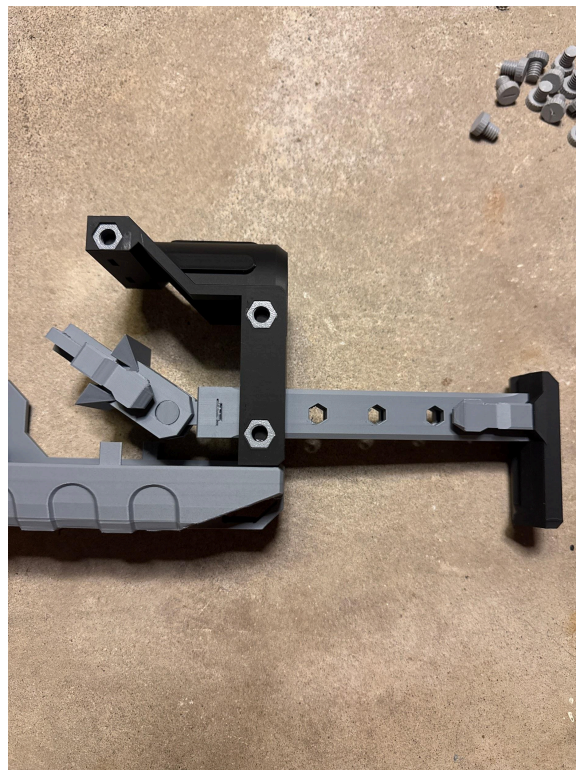
Assemble and Connect the front block panel. Glue 6 printed nuts into the part and 2 trapezoidal tabs on bottom.



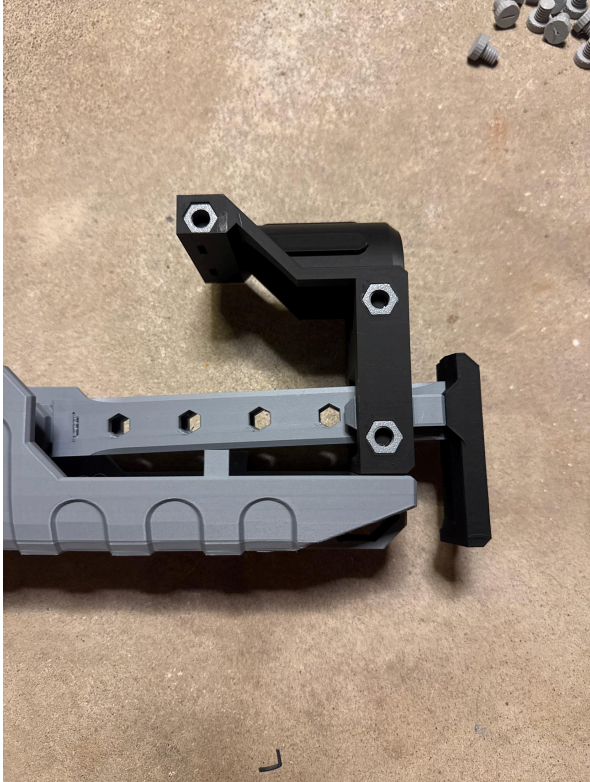
Build the bipod by Gluing the clips to the bipod feet and the bipod "crown"



Insert the bipod into the front block and then glue the crown in place. Also glue the bipod feet on.



Stowed bipod:

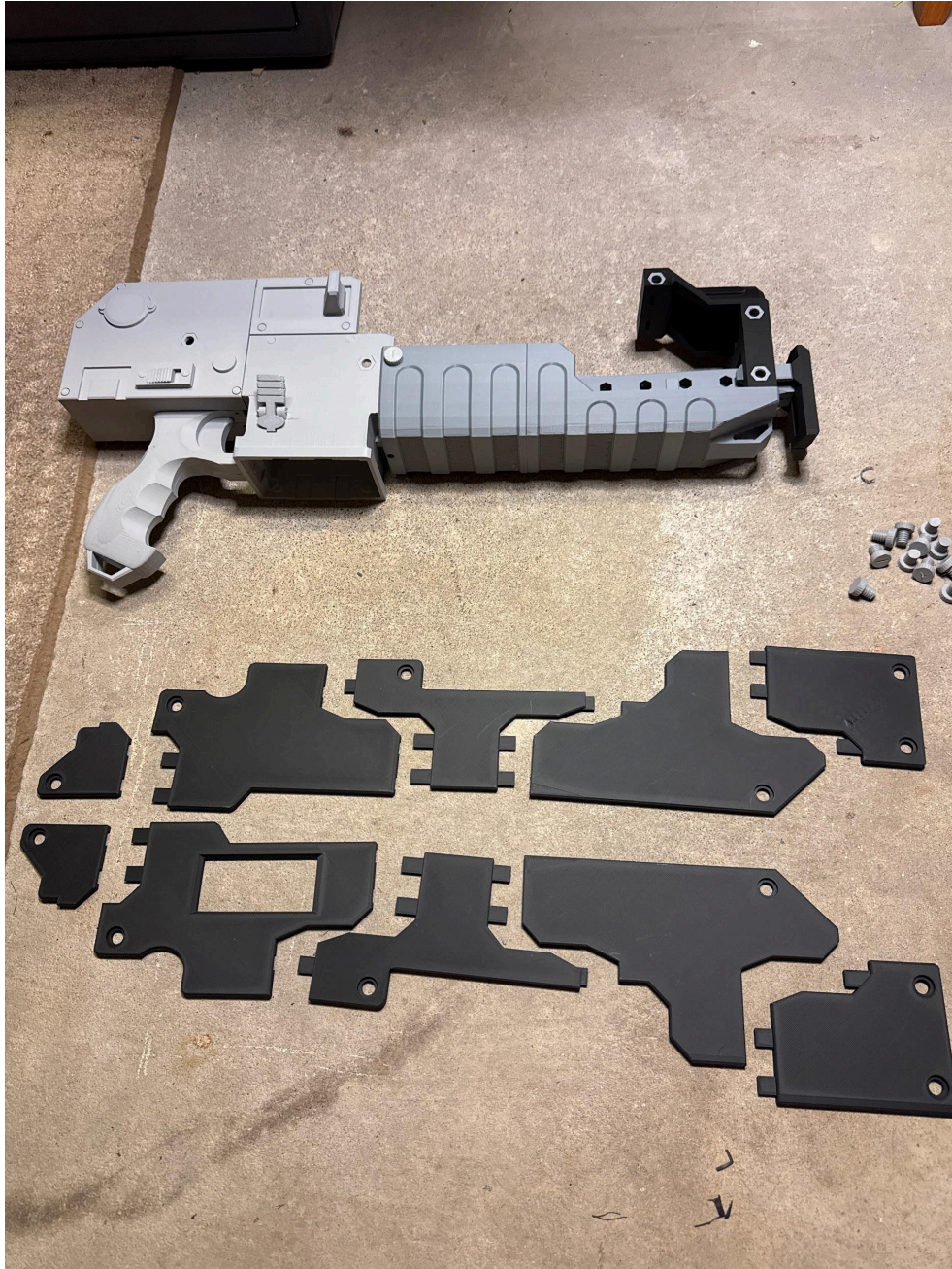


Extended bipod:



## Step 5 - Assemble the Side and Top Panels

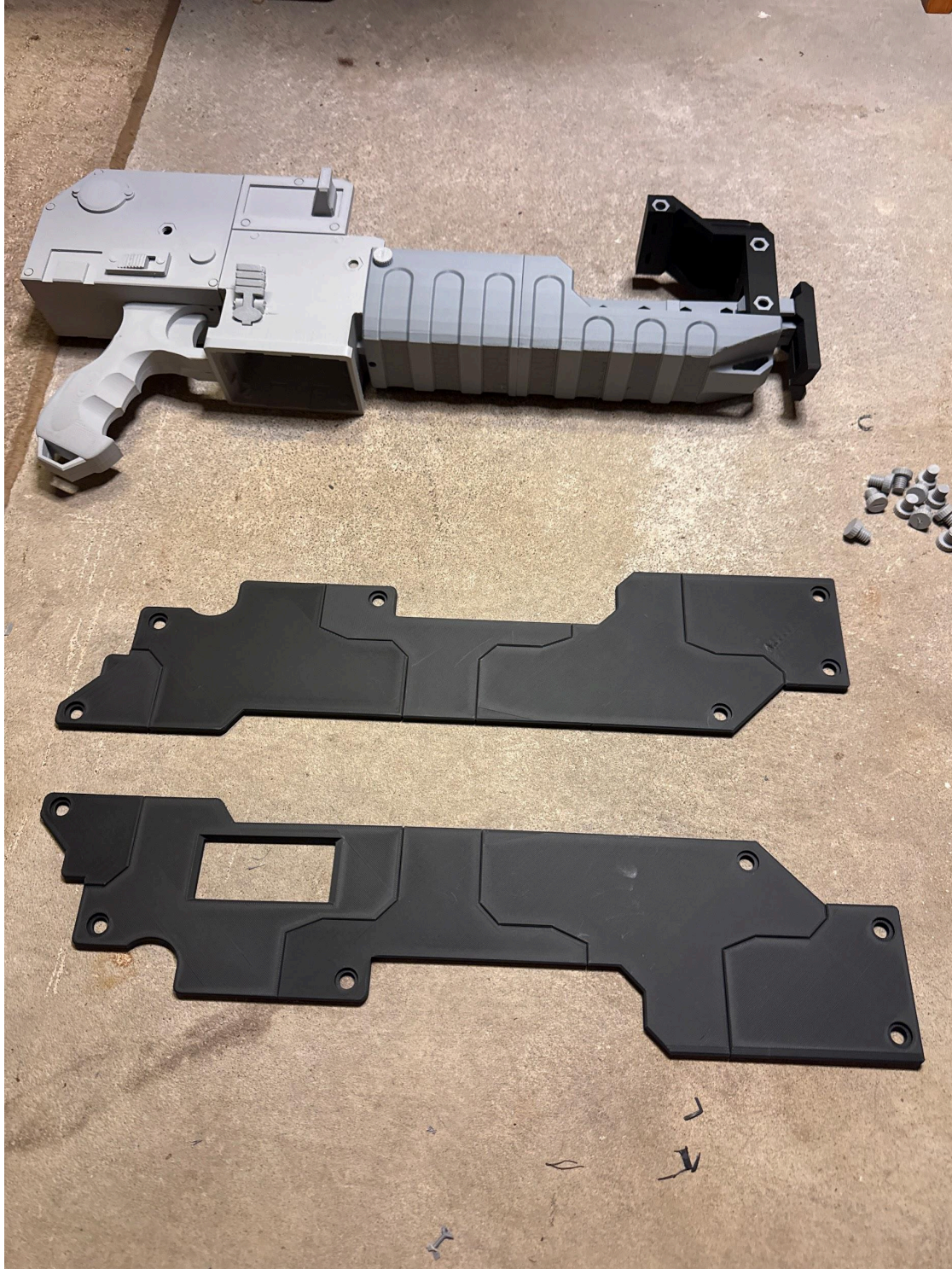
Now assemble and attach the side panels:



There are multiple ways to have made your Grimdark Bolter Mk.1 with respect to the charging handle. Be sure to print the corresponding side panels for this upgrade. The key differences are in the rear panel:



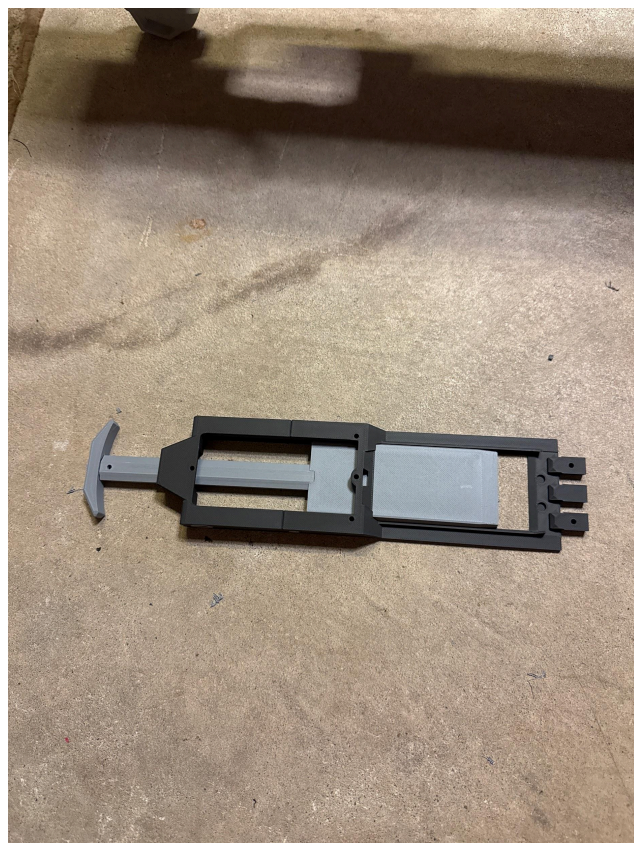
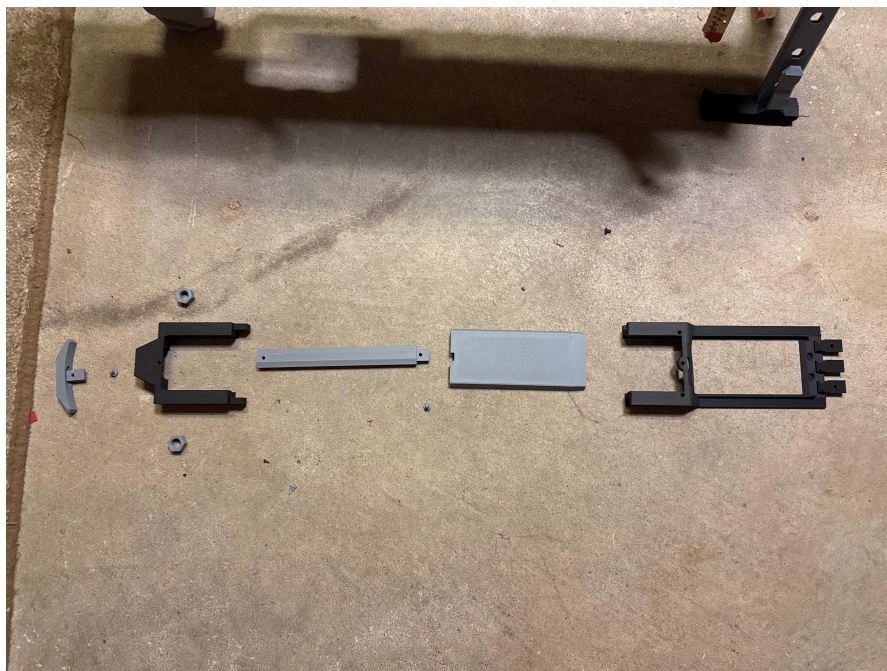
Bolter Mk.1 has options for the shell eject door, R, L or Both sides of the Bolter.

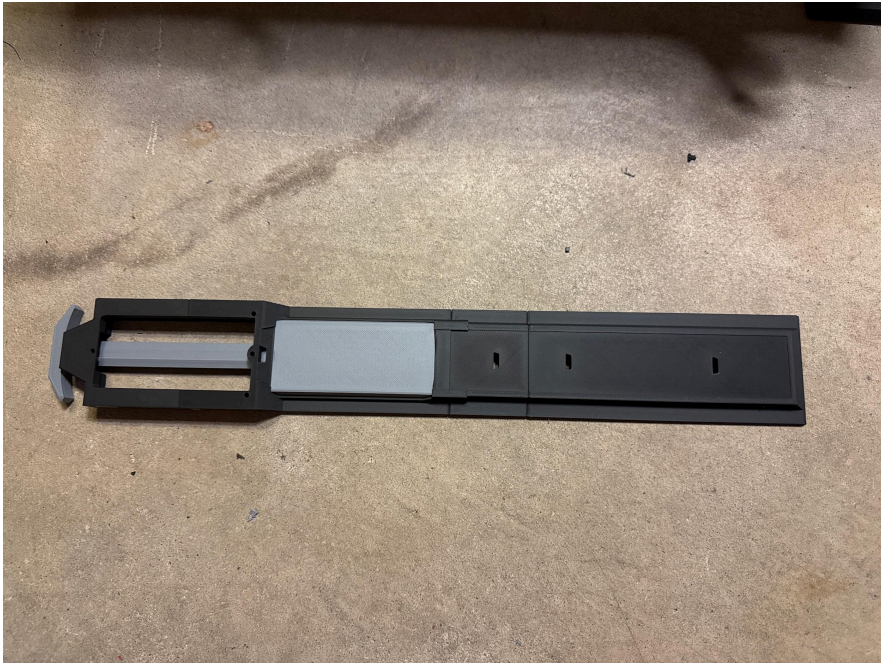
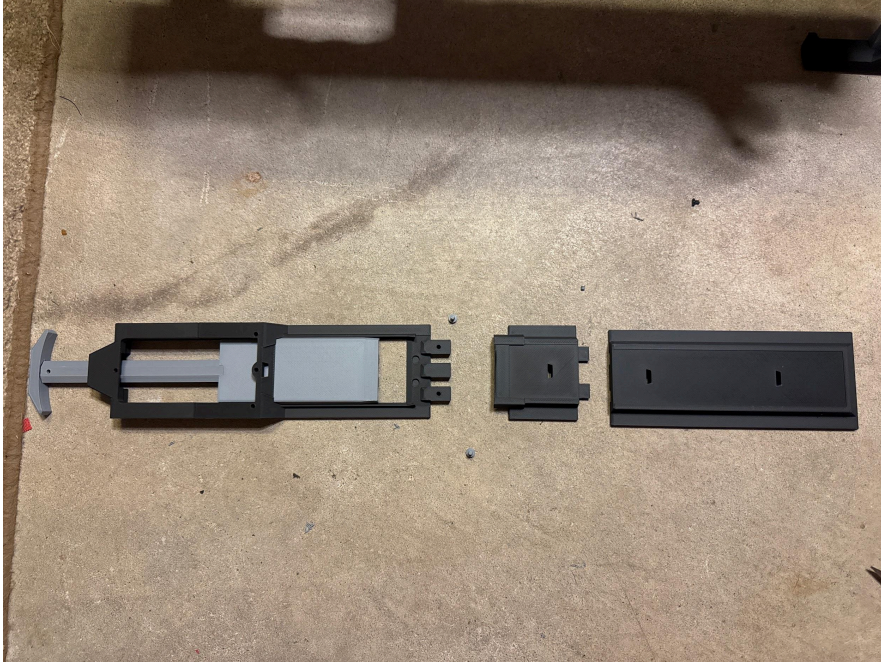


Attach the finished panels to the main bolter using the printed bolts from your Grimdark Boltgun Mk.1. If simply upgrading your Mk.1 Boltgun to a the Sniper, you will only need the frontmost panels, not all of the side panels for the Bolter.

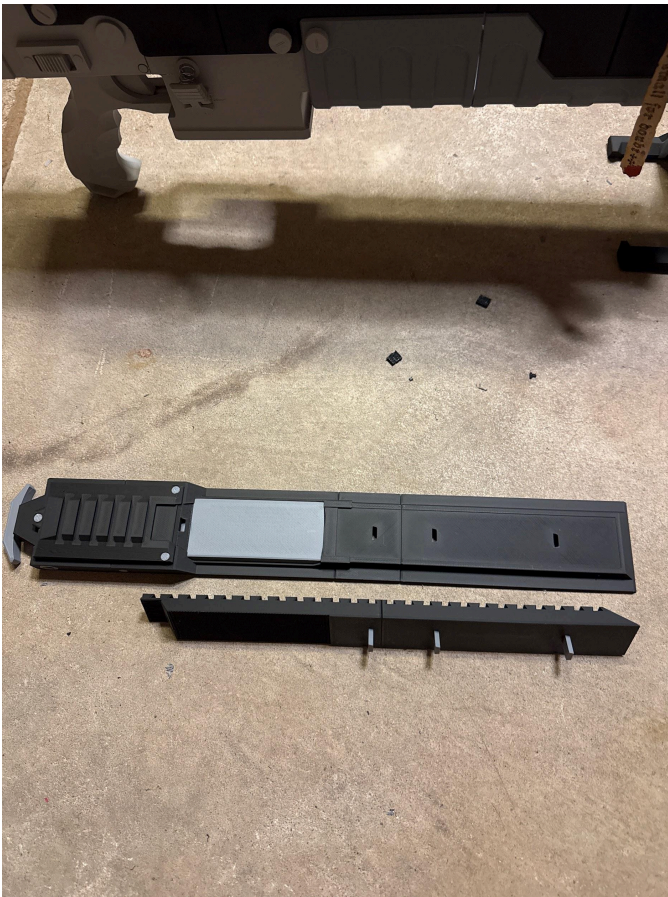


Assemble the top cover in stages. It is almost identical to the Grimdark Bolter Mk.1. Make sure to build the T handle into the rearmost section.

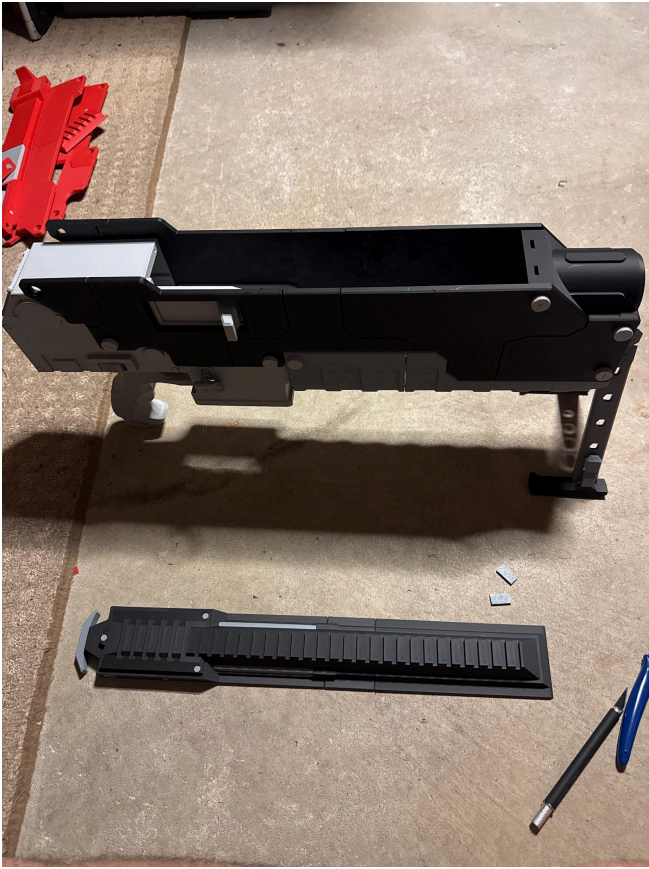




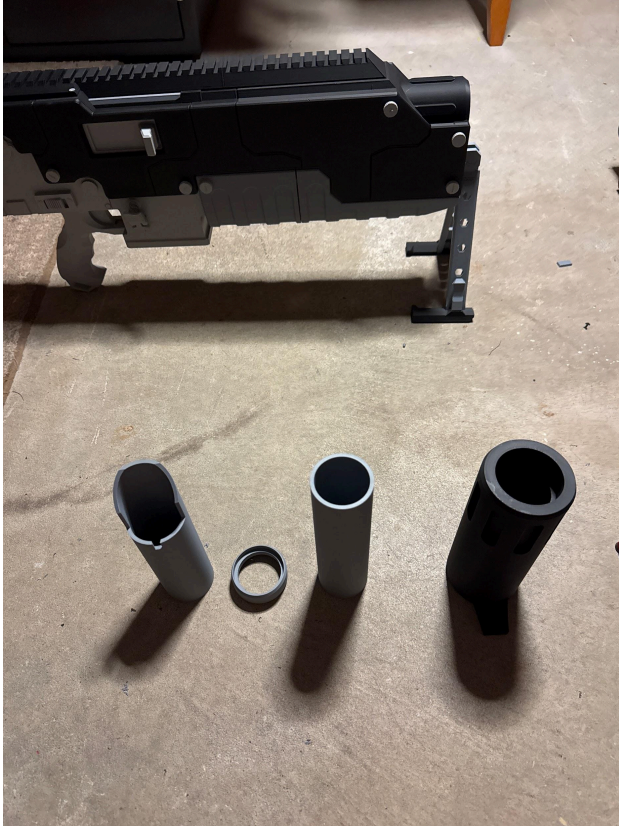
Note: The picatinny rail section that goes over the sliding door slots into the rear picatinny rail section, so be mindful of this when assembling.



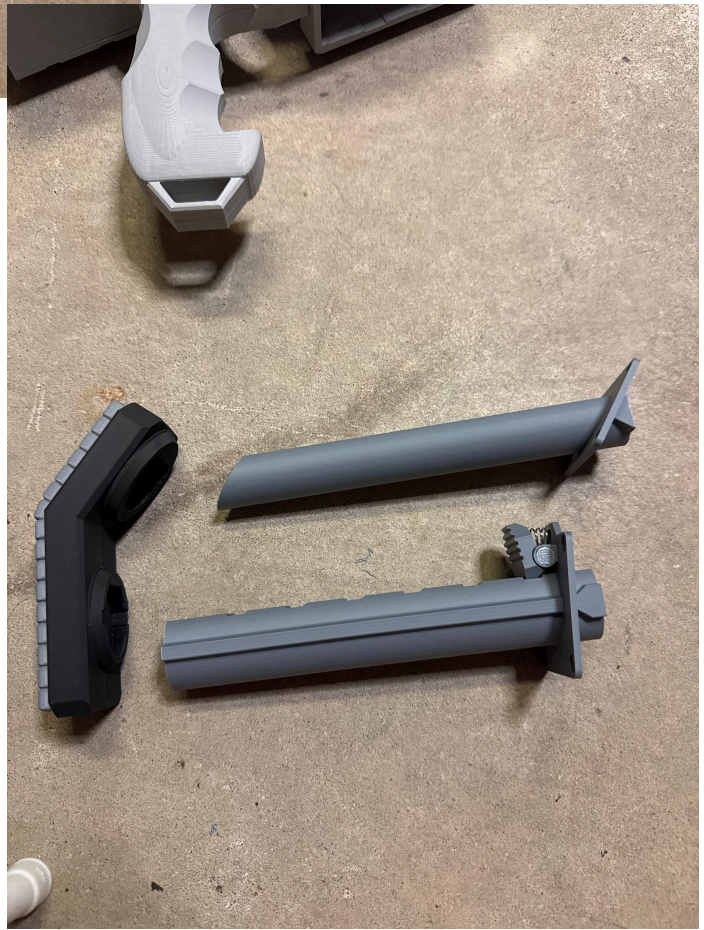
Attach the top rail to main body



## Step 6 - Barrel



# Step 7 - Telescoping Stock



A single Spring is used to make this part function, it is about 7mm in diameter and about 10mm long



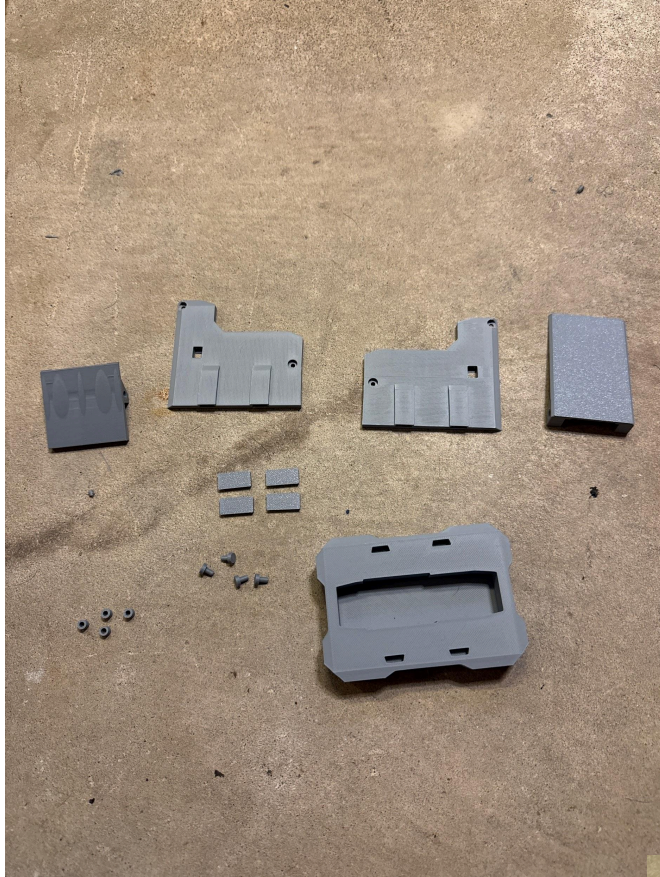


Attach to rear housing of bolter with plugs or screws.

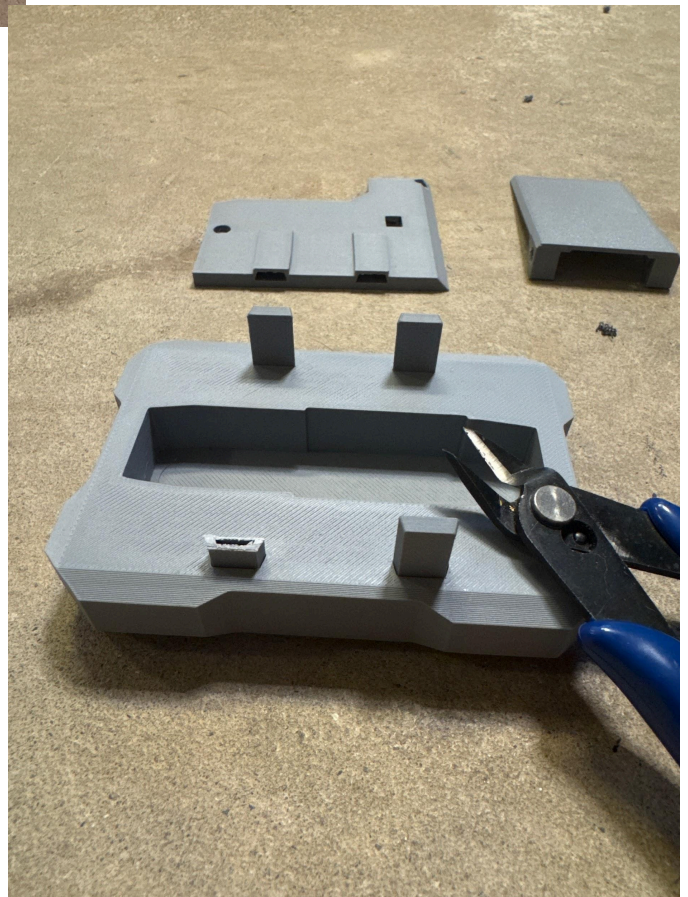


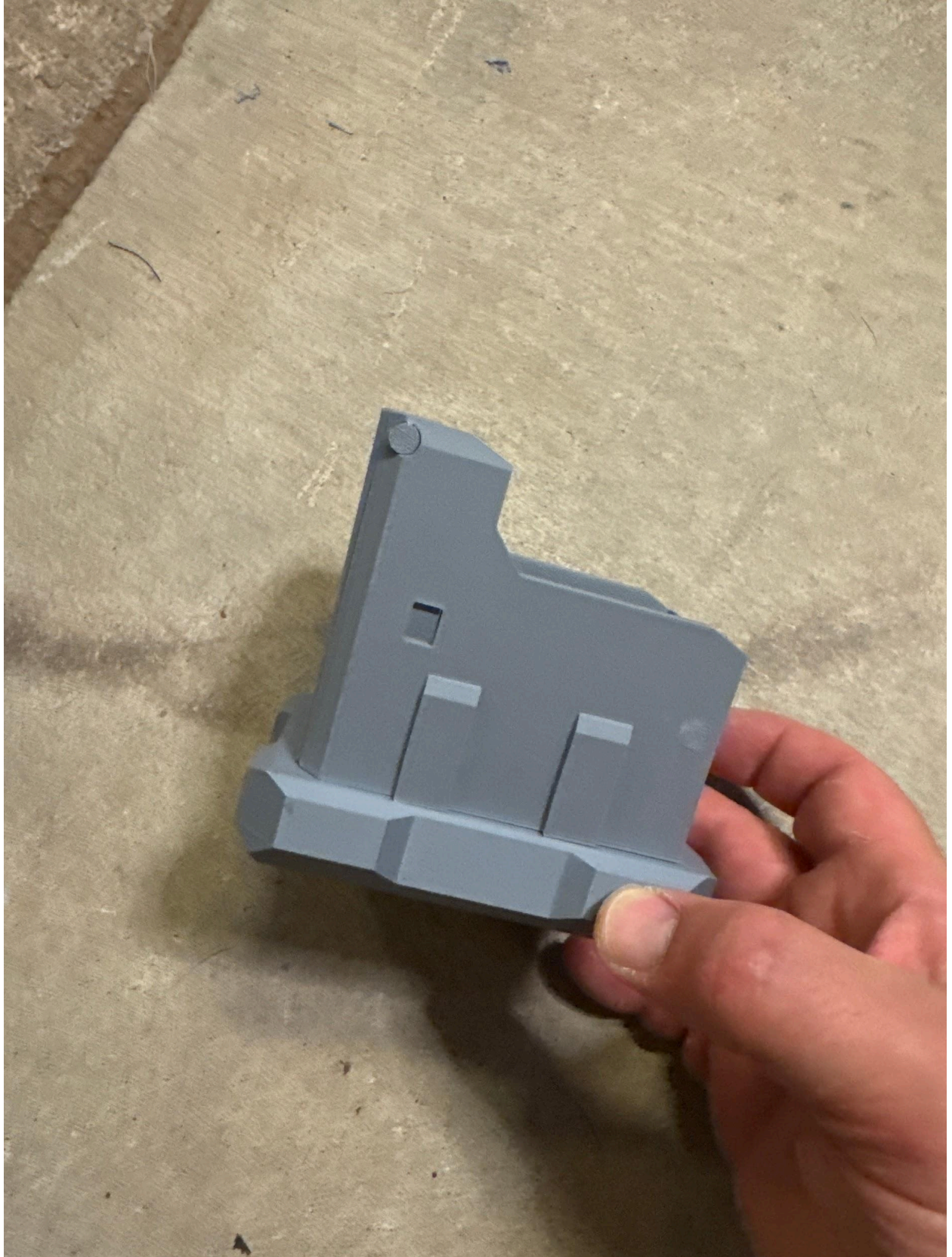
## Step 8 - Magazine

Build the magazine with the tabs, plugs and bushings:



Use snippers to shorten the tabs as necessary

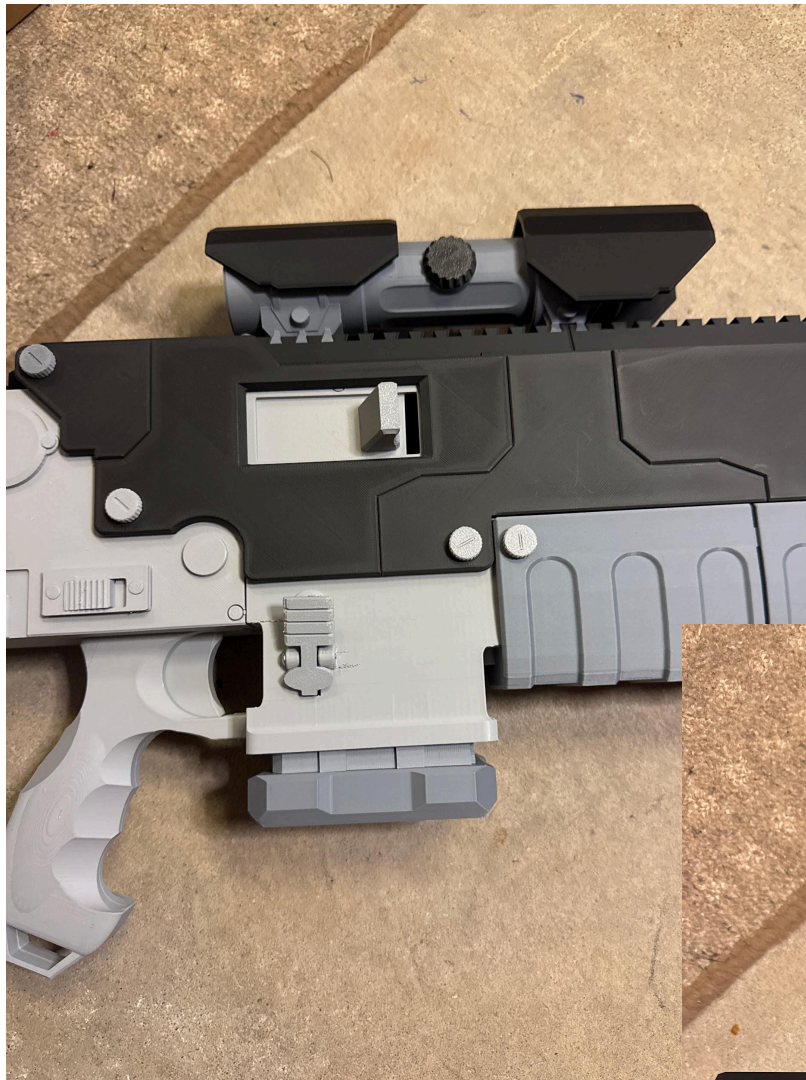




Glue is friend on magazine

## Step 9 - Optics

Scope goes together easy with trapezoidal tabs and glue, then slots into top rails, which may need some slight work with hobby knife to make the bits fit





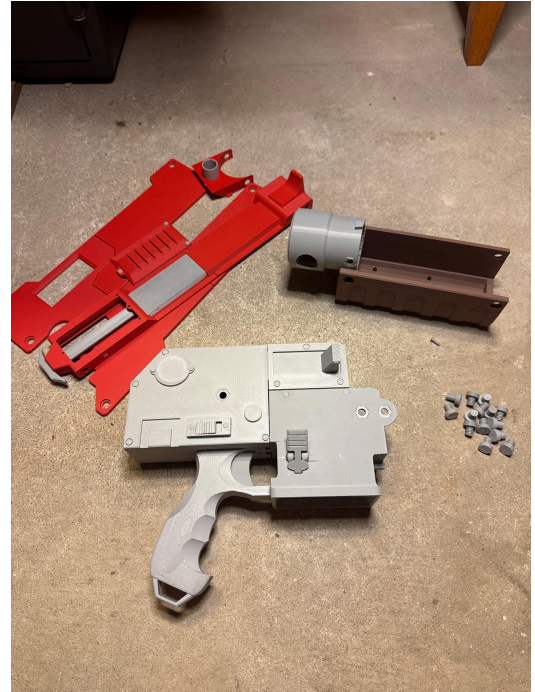
## **Model 2 - The Bolter Sniper Upgrade Kit**

**Follow all above instructions in this guide starting on step 4.**

To take your existing Grimdark Boltgun and turn it into the Sniper Rifle, Start with your Grimdark Boltgun Mk.1 and break it down to the Grip, trigger, rear housing and receiver / shell ejection system:



Clean your new parts and then follow the above guide starting on Step 4.



## **3 - The Telescoping Stock Upgrade for Ratjob's Grimdark Boltgun**

**Follow the instructions in Step 7 to build and attach a telescoping stock to your Original Mk.1 Bolter.**

