

# D35-C Build guide



## Contents:

(in order of appearance)

1. Contents
2. Change Log
3. User notes
4. Licensed distributors
5. Bill of materials and required tools
6. Print guide
7. Assembly tutorial
8. FPS combos (SG)
9. FPS combos (International)
10. Special thanks
11. Addendums

## Change Log:

(Newest to oldest, top to bottom)

**10/7/2025 1438hrs** - Added Beta V1.3.1 Print orientations, files updated on printables

**10/7/2025 1035hrs** - Added Beta V1.3.1 BOM

**22/2/2025 1913hrs** - Released Beta V1.1 Ram and Backend in STL format with correct orientation

**20/2/2025** - V1.1 Step file bug fixes

Changes ~

- One-piece grip (Combined receiving end, grip, and frame into one print)
- Free-floating ram
- Rounded Mag release button for easier mag drops
- Removed unnecessary O-ring Holes in the receiver's (Now renamed to frame) collet
- Renaming some initially misnamed instances
- BOM changes for Beta V1.1

Dev notes:

I will update the build guide and release STLs in due time, with addendums on what parts need to be changed from V1 to V1.1

**1/1/2024** - Printables Beta launch, hardware kit pending, Aluminium bar schematic added

**29/11/2024** - Assembly completed, Guide pending beta

**28/11/2024** - All assembly images added, Beta STLs added to Gdrive, V1.3 PreBeta files removed

**27/11/2024** - BOM, Print guide, FPS combos, special thanks updated

**12/11/2024** - Cover photo updated to V1.5 (Beta V1)

**20/10/2024** - Cover photo updated, added V1.3 PreBeta .stp file and whole blaster stl file to Gdrive

**7/9/2024** - PreBetav1.1 BOM updated

**6/9/2024** - Document created

# User Notes

**NOTE: This is the beta instructional guide; everything still needs to be finalised, and content may be added, replaced, or removed depending on what is deemed necessary.**

D35-C is a top slide prime 3d printed springer pistol blaster that accepts standard worker nightingale slim angled talons. It is meant to be a compact version of the original Desmond hand cannon. This blaster will be released under the **CREATIVE COMMONS ATTRIBUTION-NONCOMMERCIAL-SHAREALIKE 4.0 INTERNATIONAL** licence. This document serves as a one-stop guide for building, tuning, and maintaining your D35-C pistol.

You mustn't place any body parts between the moving parts of the blaster during operation. Yaow07 does not assume any responsibility for injuries resulting from the misuse of the blaster.

This blaster easily exceeds 100fps; you are always reminded to wear proper eye protection when playing with foam dart blasters.

You are welcome to personalise your D35-C with the provided step files. However, should you wish to **publish the files online (be it customised parts or a mod kit) or use the design for commercial gain**, you must abide by the following

## Legal

You are free to copy and redistribute the material in any medium or format, and to remix, transform, and build upon the original design. The licensor cannot revoke these freedoms as long as you follow the licence terms:

1. Attribution — You must give appropriate credit, provide a link to the licence, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.
2. NonCommercial — You may not use the material for commercial purposes unless provided with expressed permission by Yaow07 Foam Dart Blasters.
3. ShareAlike — If you remix, transform, or build upon the design, you must distribute your contributions under the same license as the original.
4. No additional restrictions — You may not apply legal terms or measures of any kind that legally restrict others from doing anything the licence permits.

You may contact me at [yaow07fdb@gmail.com](mailto:yaow07fdb@gmail.com) or any other contact I have provided you for any questions regarding licensing, issues you have encountered with your D35-C, or if you wish to add information regarding spring and barrel FPS combinations below.

## 法律注释

欢迎您使用提供的步骤文件来个性化您的 D35-C。但是，如果您希望在线发布文件（无论是定制部件还是模组套件）或使用该设计来获取商业利益，您必须遵守以下规定。您可以自由地以任何媒介或格式复制和重新分发材料，并在原始设计的基础上重新混合、转换和构建。只要您遵守许可条款，许可方就不能撤销这些自由：

1. 归属 — 您必须给出适当的信用，提供许可证的链接，并表明是否进行了更改。您可以以任何合理的方式这样做，但不得以任何暗示许可方认可您或您的使用的方式。
2. 非商业用途 — 除非得到 Yaow07 Foam Dart Blasters 的明确许可，否则您不得将这些材料用于商业目的。
3. 相同方式共享 — 如果您重新混合、转换或构建设计，您必须在与原始版本相同的许可下分发您的贡献。
4. 无额外限制 — 您不得应用任何类型的法律条款或措施来合法限制他人执行许可证允许的任何行为。

如果您对 D35-C 的许可或遇到的问题有任何疑问，或者如果您希望在下面添加有关弹簧和枪管 FPS 组合的信息，您可以通过 [yaow07fdb@gmail.com](mailto:yaow07fdb@gmail.com) 或我为您提供的任何其他联系方式与我联系

(这是用谷歌翻译翻译的)

## Licensed Distributors

(Refers to shops that have been greenlit for the sale of hardware kits or full builds)

| Company/Individual                  | Location/Country | Listing Link      |  |
|-------------------------------------|------------------|-------------------|--|
| Yaow07 Foam Dart Blasters carousell | Singapore        | (Pending listing) |  |
| IdealFoamBlaster                    | Singapore        | (Pending listing) |  |

## Bill of Materials:

Version Beta 1.3.1

| Item name                                            | amt. |
|------------------------------------------------------|------|
| Hobby barrel (13ID 16OD) 20cm                        | 1    |
| SBL Spring                                           | 1    |
| Aluminium bar 12.7x2.9x305mm                         | 2    |
| Polycarbonate tube (25.6ID 28OD) 100mm               | 1    |
| M3 5mm pan Phillips screw                            | 6    |
| M3 8mm pan Phillips screw                            | 1    |
| #10 M3 10mm thumbscrew                               | 2    |
| M3 16mm pan Phillips screw                           | 4    |
| M3 25mm pan phillips screw                           | 1    |
| M3 30mm pan Phillips screw                           | 2    |
| M3 100mm pan Phillips screw                          | 2    |
| M3 110mm pan Phillips screw                          | 1    |
| M3 Flange lock nut                                   | 1    |
| M10 washer (14OD 10ID 1TH)                           | 1    |
| M3 nut                                               | 8    |
| M5 30mm Pan Phillip screw                            | 1    |
| M5 90mm pan phillip screw                            | 1    |
| M5 nut                                               | 2    |
| 20x24x2 O-ring                                       | 2    |
| 12.7x16.7x2 O-ring                                   | 1    |
| 16x19.6x1.8 O-ring                                   | 1    |
| 4mm OD spring 10mm long (Catch spring)               | 2    |
| Lynx takedown pin (Clevis pin with ball detent 33mm) | 1    |

## Tools Required:

- Phillips's head #1 screwdriver
- Blue Loctite
- Needlenose pliers
- Silicone grease
- File

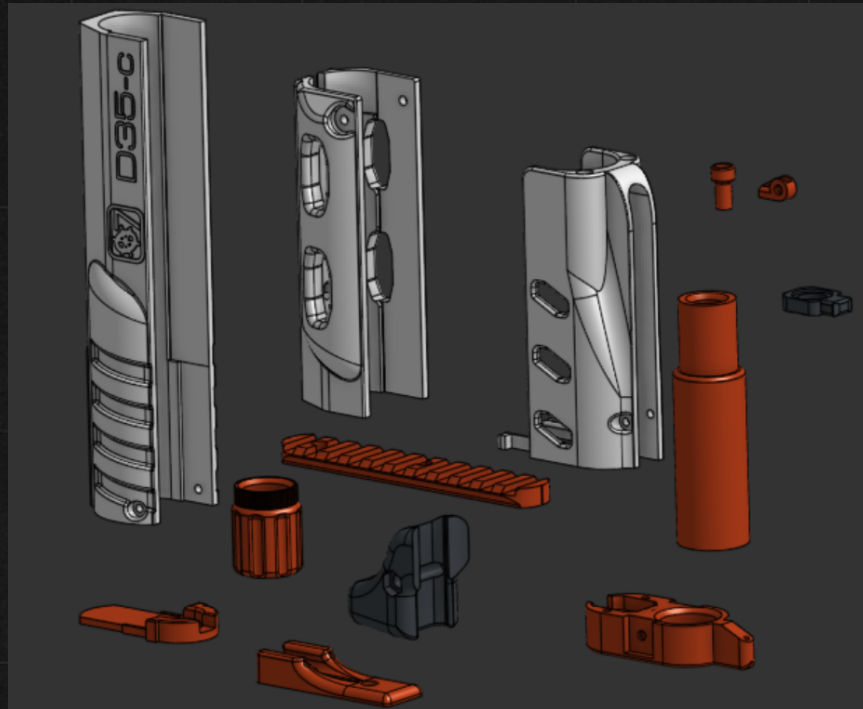
### Things to note:

- #10 M3 10mm thumbscrew can be substituted for a regular M3 10mm screw, however, it means your blaster will lack the tool-less takedown function
- Lubricate the catch washer and flange nut on the plunger for smoother trigger use; otherwise the spring load will induce high friction making it difficult to release the catch

## Print Guide

The prints should already be oriented in the positions below when you place them into the slicer; however, do double-check to ensure the files are oriented correctly before printing!

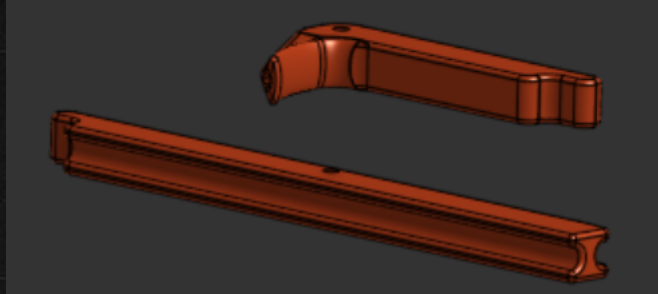
You are **advised NOT** to print this blaster in full black.



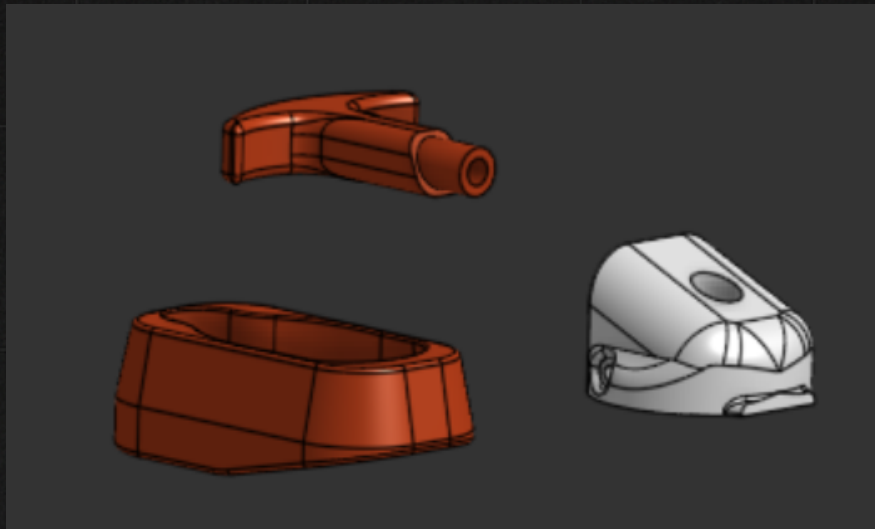
4 walls, 20% infill



5 walls, 20% infill (Note that stringing within the turnaround may cause airflow difficulties that reduce FPS)



5 walls, 50% infill (Trigger supports touching build plate)



4 walls, 20% infill, supports touching the build plate

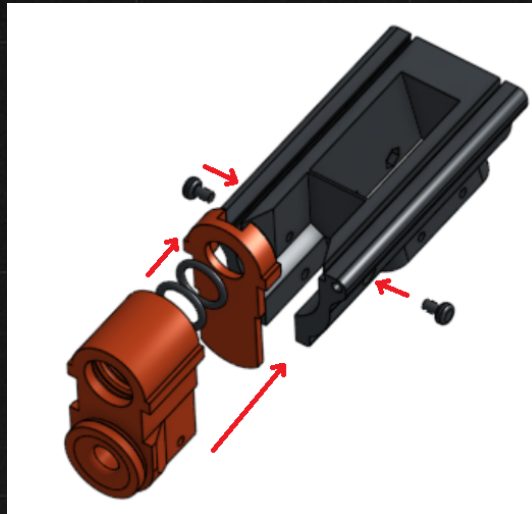


5 walls, 20% infill, Supports everywhere, 85° overhang angle

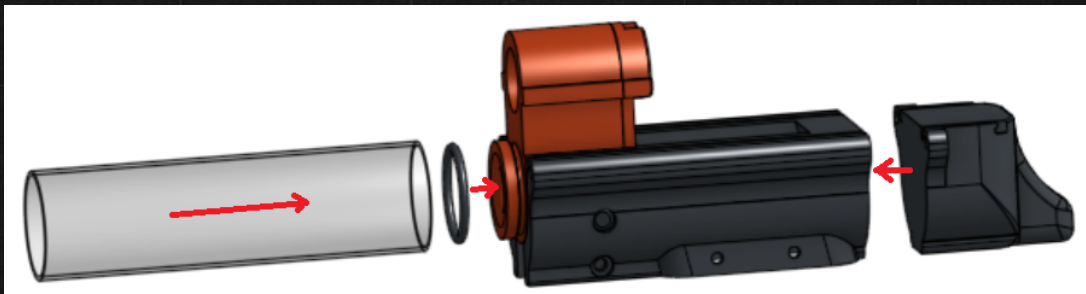
# Assembly tutorial

(OUTDATED PENDING V1.3.1 CHANGES)

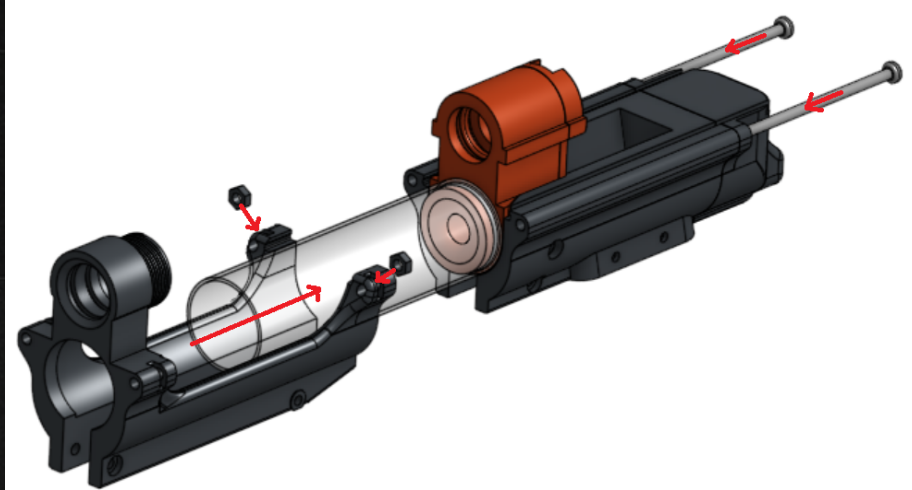
## 1. Pistol frame



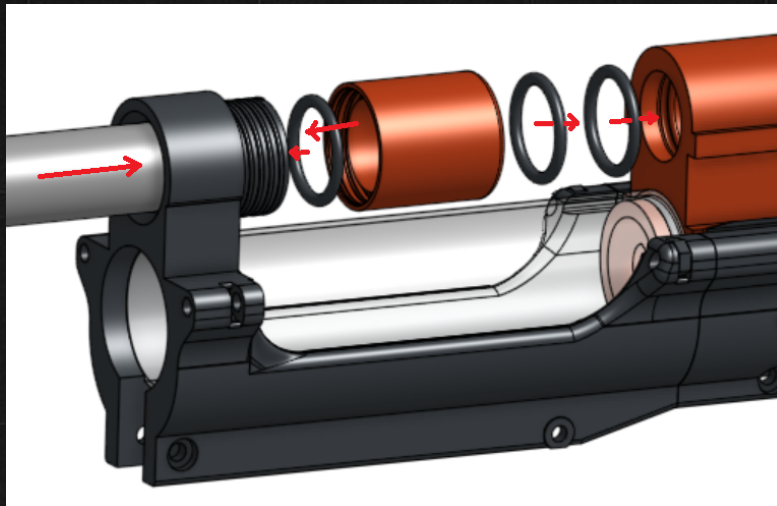
Fit 2 12.7x2mm Orings into the turnaround and seal with dart guide, slide turnaround into frame and screw in x2 M3 5mm screws.



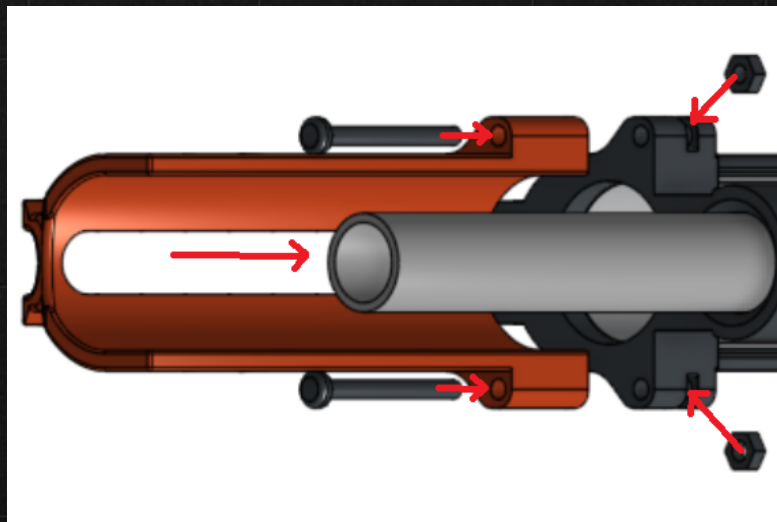
Attach plunger tube Oring to turnaround, mount plunger tube; align receiving end to frame



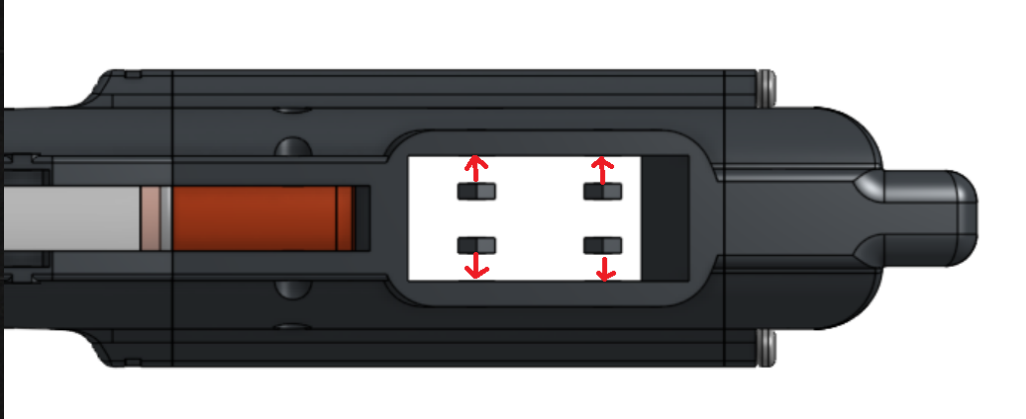
Mount receiver to frame, slot in M3 nuts and screw in M3 100mm screws



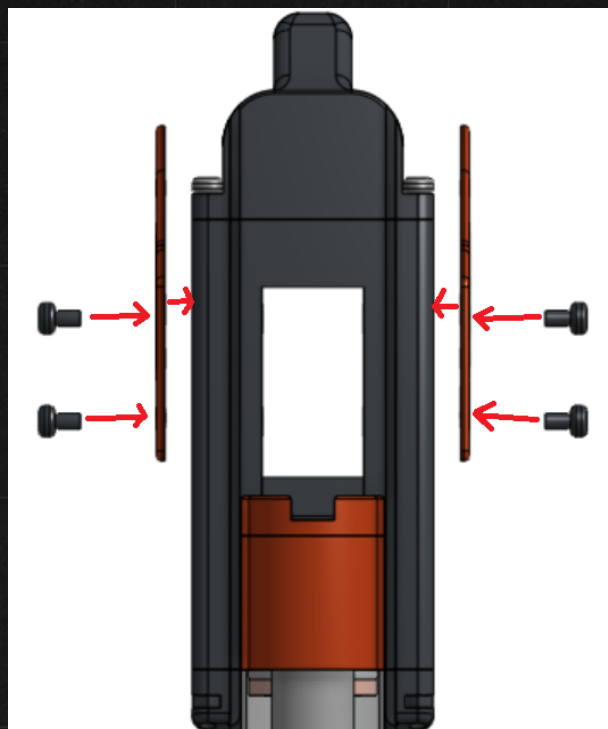
Slide 16x1.8mm O-rings into turnaround, slide barrel into collet and wrap 13x2 mm O-ring around it, push barrel into turnaround then screw collet to lock barrel in.



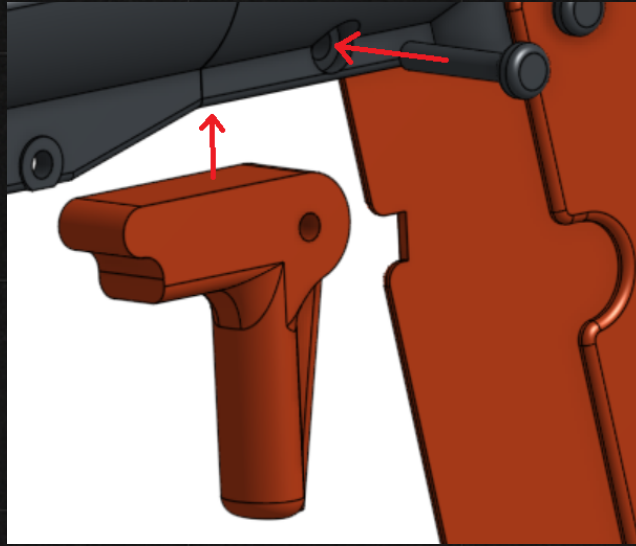
Align the front receiver print, insert M3 nuts and screw in the M3 30mm screws.



Insert M3 nuts into holes at the grip area.



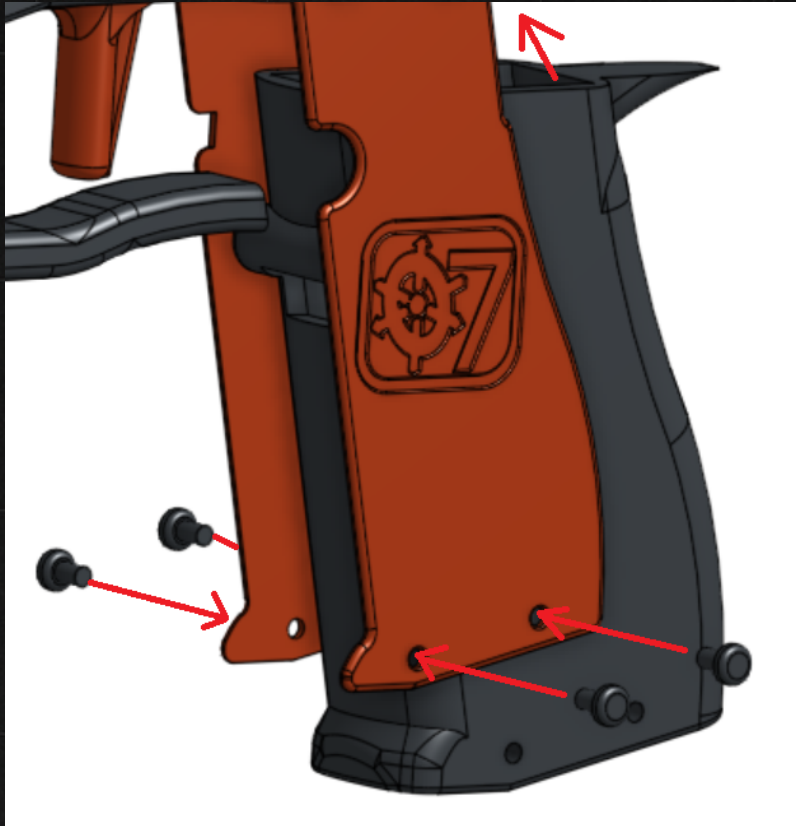
Screw grip plates into the frame with M3 5mm screws.



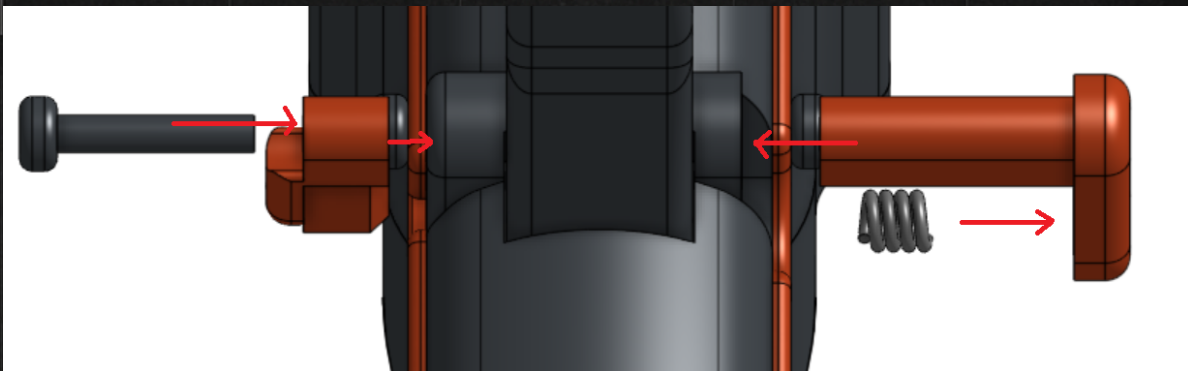
Insert trigger, screw in M3 16mm screw (Note do not over tighten)



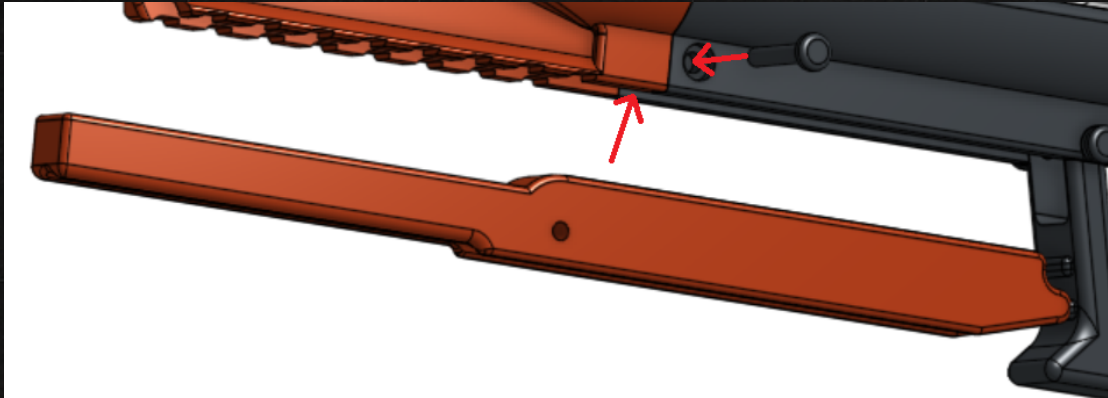
Insert the trigger guard into the receiver, and screw in M3 5mm screws.



Slot grip in between grip plates, ensure trigger guard aligns with hole, screw in M3 5mm screws



Insert the mag release spring into the release button print, slot in retention and button and screw in with M3.

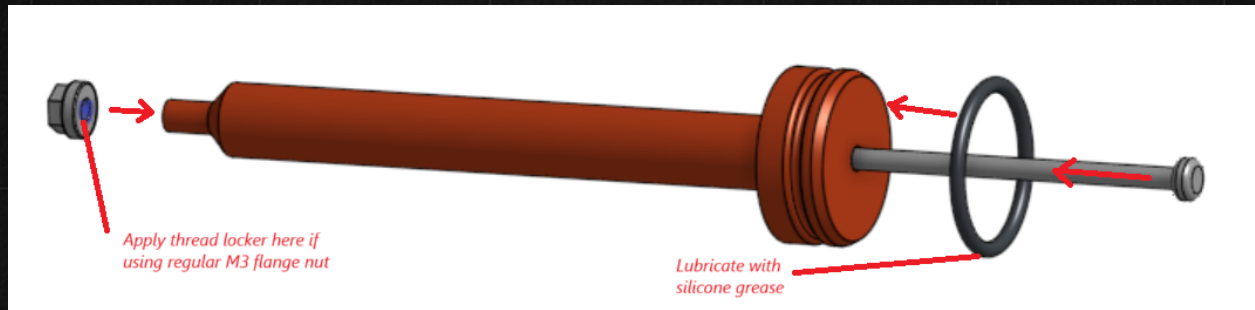


Insert sear print, screw in M3 16mm screw.

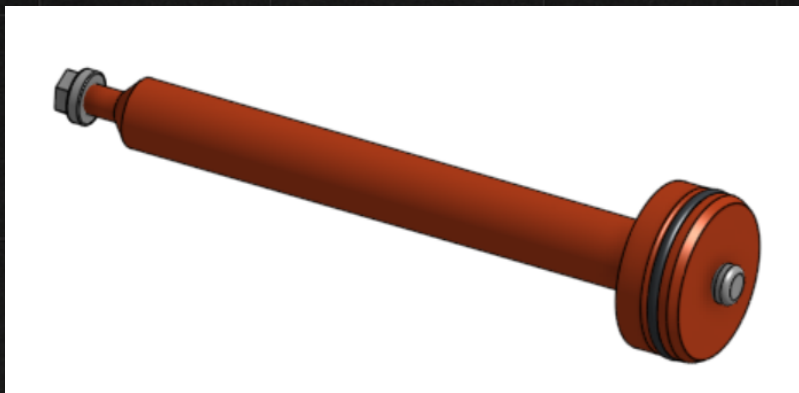


The base pistol frame is complete!

## 2. Plunger

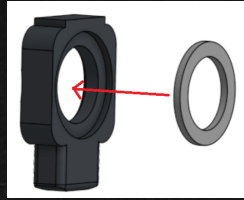


Screw in M3 110mm screw into plunger print, attach m3 flange lock nut to the end of the screw (Use blue Loctite if using regular flange nut); Slot on Oring and lubricate with silicone grease.

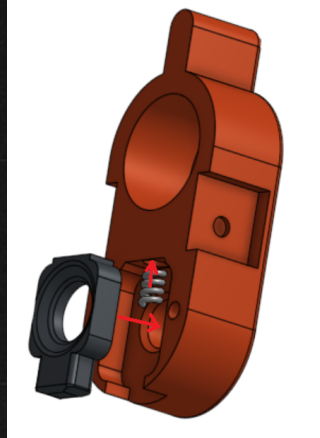


Plunger Done!

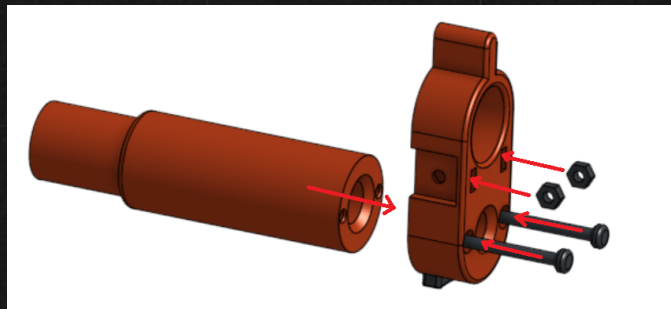
### 3. Catch block



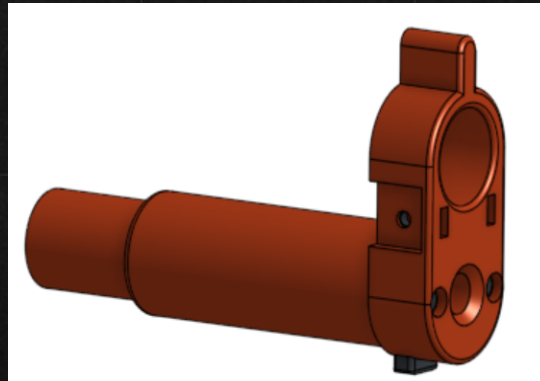
Insert the M10 washer into the catch.



Insert a 4mm outer diameter catch spring, and push the catch into the slot.

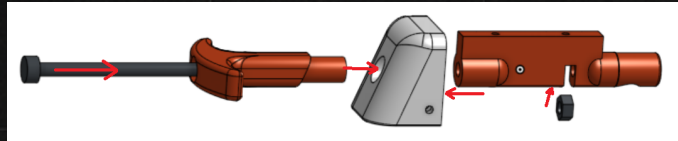


Align spring rest with assembled front end. Screw in M3 30mm screws. Slot in 2 M3 nuts and ensure they align with holes on the left and right of the print

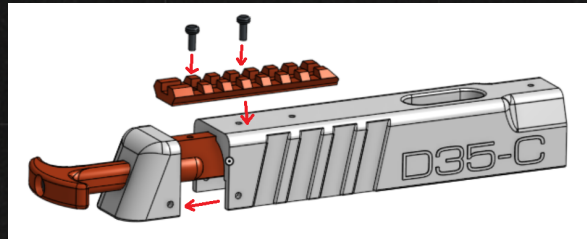


Frontend done!

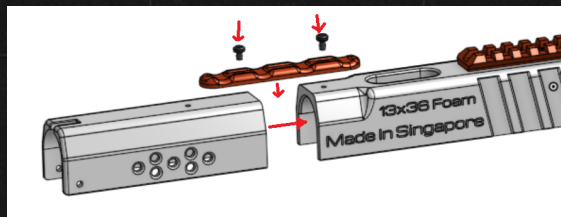
#### 4. Top slide



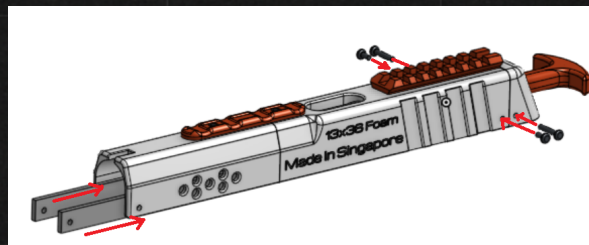
Align backend, T-pull and ram prints, insert M5 nut and screw in M5 100mm screw (Substitute M5 100mm with M5 50mm if not using T-pull mod)



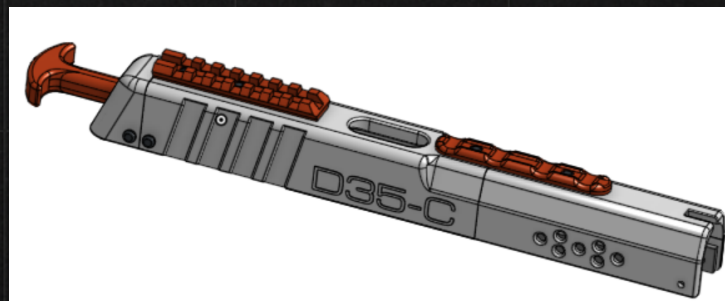
Slide on the back top print and place the Picatinny rail on top, screw in M3 16mm screws.



Align front top print and slide assist print. Screw in 2 M3 5mm screws.



Slide in aluminium bars screw M3 5mm screws into the back top print and M3 16mm screws into the backend print

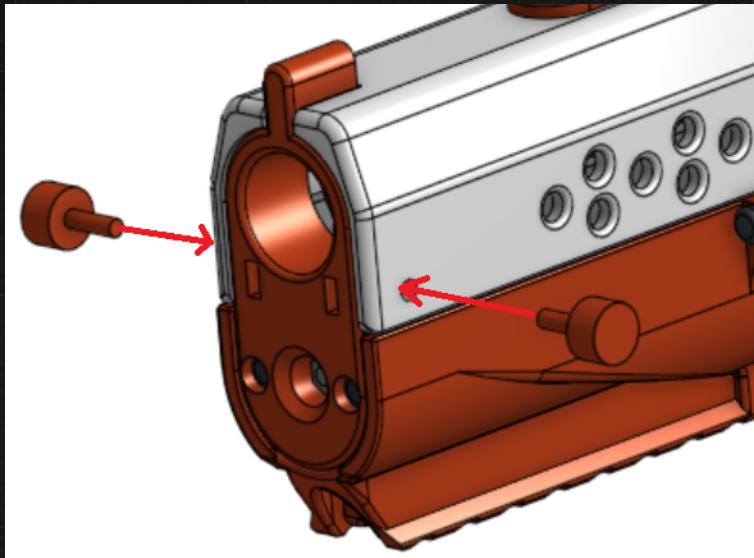


The top slide is complete!

## 5. Field strip/assembly



Slide parts in as shown.



Screw in M3 10mm thumbscrews



Have fun!

## FPS Combos [SG]

(For people living in/near Singapore where high humidity will affect blaster velocities; FPS combos are under the presumption you have full or close to full air seal)

| Barrel   | Spring | SCAR/BCAR   | FPS |  |
|----------|--------|-------------|-----|--|
| 13cm BLU | SBL150 | Worker SCAR | 150 |  |

## FPS Combos [International]

(FPS combos are under the presumption you have full or close to full air seal)

| Barrel | Spring | SCAR/BCAR | FPS |  |
|--------|--------|-----------|-----|--|
| ~      | ~      | ~         | ~   |  |

## Special thanks

Thank you to my parents, I literally wouldn't be here without you lol.

Yvonne

Desmond

I cannot find it in myself to build blasters without having the supportive community of Nerfsg behind me! If I missed you I'm sorry kek.

(in no order of importance)

Joseph Lyza aesthetics

Karlok

Dylan D<sup>2</sup> Maker

Gavinfuzzy customs

Skiji Omar

Chang jun

Harrods

Jia Jun Piggy

Alex Zaruko

Francis IdealFoamBlasters

### Other helpful individuals

Sillybutts

Dan Orion blasters

AMSPawn06

Eric Moose



# Addendums:

(Work in progress)

