



# DRAWER HPV

HIGH POOP VOLUME

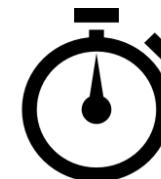
Introducing the new HPV Drawer, designed to tackle a common issue with a dash of creativity! Who hasn't struggled with printer 'poops' during those long, intricate prints? Well, here's the fix!

I've crafted a spacious internal drawer capable of holding up to 13 liters of 'poops' in one go. And if that's not enough, I've thrown in some extra outlets to ensure all the mess ends up right where it belongs - in the nearest bin!

This manual is here to guide you through assembling the drawer step by step. Once you're done, you'll be ready to tackle your prints with more peace of mind and less chaos. Enjoy putting together your new accessory and embrace worry-free printing!



5d23h34m



1h37m



MEDIUM



I have other projects in the works, and if you enjoy what I produce or simply appreciate my work and how I do it, you might consider supporting me. Of course, it's not an obligation, just a friendly suggestion. LOL See you soon!



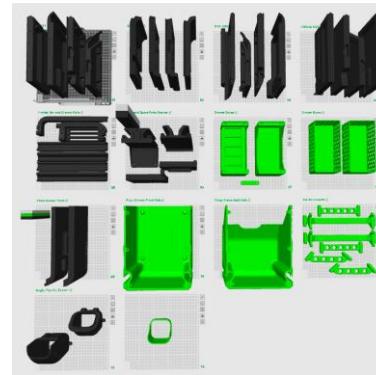


Here are some suggestions and responses to questions I commonly receive:

- ▶ **First and foremost, an important suggestion:** while I understand that filament prices can sometimes be excessively high, I strongly advise against using low-cost filaments for this print. It needs to last long, so use high-quality filaments.
- ▶ **What material do you suggest for printing?**  
I typically use PETG, however, if you're looking to save money, you can print everything in PLA+ except for the Pipe and the Poop drawer, for those parts where heat resistance is indispensable use PETG, or ASA or ABS, I leave the choice up to you.
- ▶ A piece of advice I'd like to offer is to print everything at the standard speed. Going too fast can cause material retraction, which could lead to misalignments of the pieces or assembly inaccuracies.
- ▶ Additionally, it's important not to reduce the infill percentage below 10%. Doing so might not provide sufficient support for the screw holes, and they could break during screw tightening.
- ▶ Usually, I print using 3 perimeters everywhere, but if you want to save material, you can try printing with 2 perimeters while keeping the top and bottom at 3.
- ▶ All parts of the drawer have been printed, checked, and if necessary, modified to achieve precise fits that do not require glue for fixing. If they seem too loose or too large to you, you likely have a calibration issue with your printer, so I recommend checking and possibly recalibrating it.
- ▶ I understand that the positioning of some pieces on the plates might seem suboptimal or unnecessarily using supports. In my defense, I can tell you that quality or structural reasons observed during printing guided my choices.

**Some clarifications regarding the print file.**

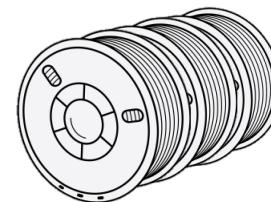
In the file, you'll find the structure divided and grouped by sides on the different plates. I did this to simplify understanding of the model and its structure. However, I suggest splitting the plate prints in half; it's likely to waste less material in case of errors or problems during printing.



Filament	Model	Support	Flushed	Tower	Total
1	1103.44 m	48.44 m	5.93 m	3.59 m	1161.40 m
	3370.68 g	147.97 g	18.13 g	10.98 g	3547.75 g
2	527.32 m	14.05 m	4.58 m	0.43 m	546.37 m
	1610.81 g	42.91 g	13.98 g	1.31 g	1669.02 g
4	0.22 m	0.80 m	17.59 m	1.72 m	20.33 m
	0.66 g	2.44 g	53.75 g	5.26 g	62.10 g
<b>Total Estimation</b>					
Total time: 5d23h34m					
Total cost: 158.37					

Filaments and hardware :

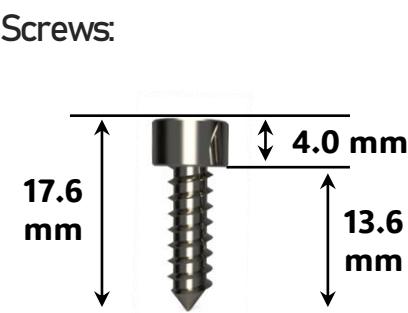
Filaments:



**PETG**

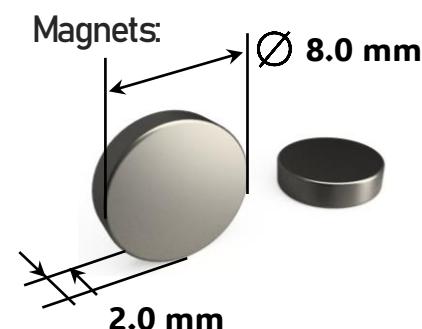
**5.8 KG**

Screws:



**65 Units**

Magnets:



**50 Units**



**ARE YOU READY?  
LET'S START ASSEMBLING THE MAIN BODY RIGHT AWAY.**



# Left side Assembly Instructions



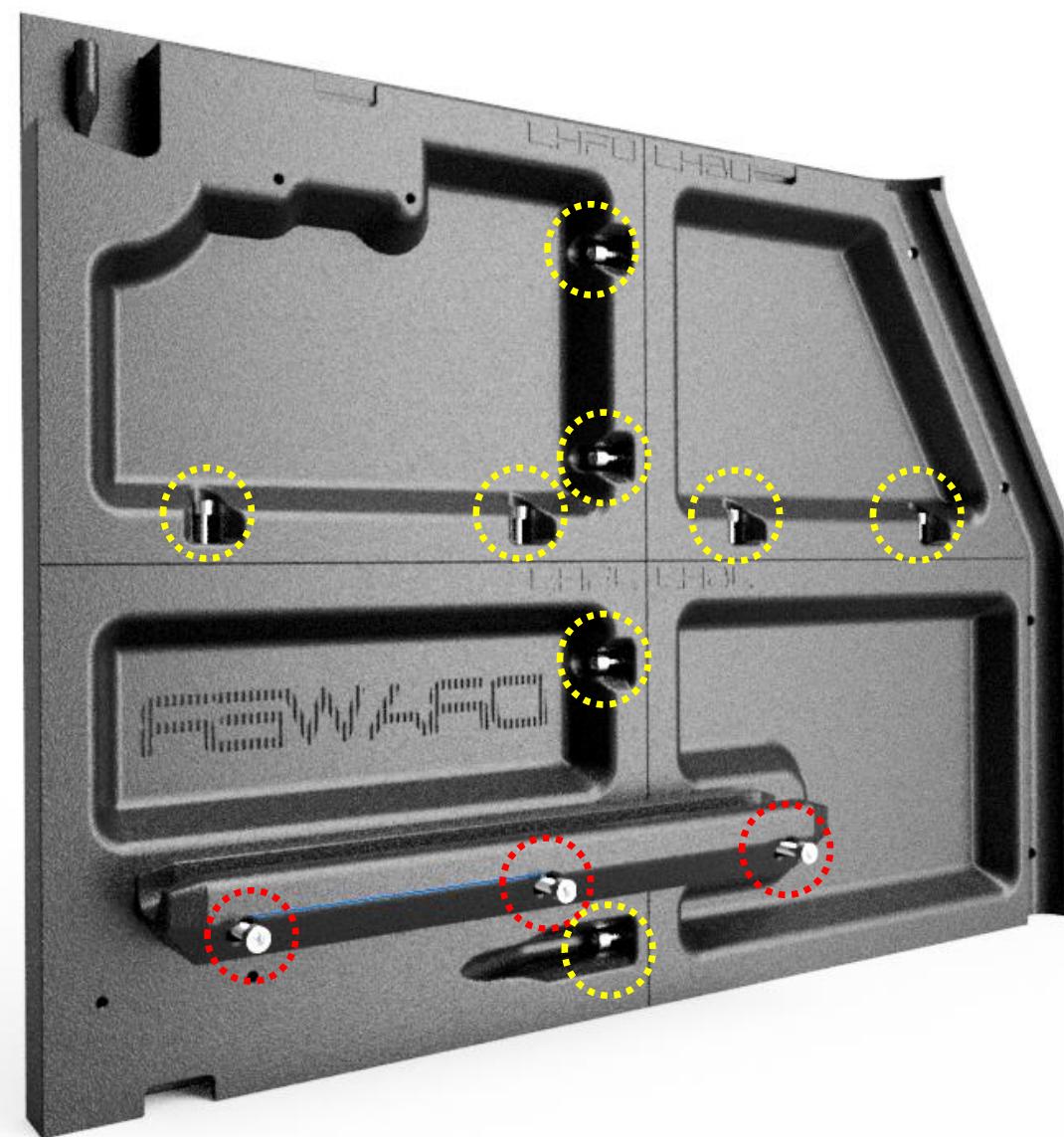
Parts and Required Hardware

**STEP 01**  
**5'**



Insert and tighten the screws highlighted in yellow first, then insert and tighten those highlighted in red. After that, take the piece and set it aside to move on to the next piece.

It's not necessary to overtighten the screws, as this could cause damage. Be careful not to tighten them too forcefully or with excessive strength.

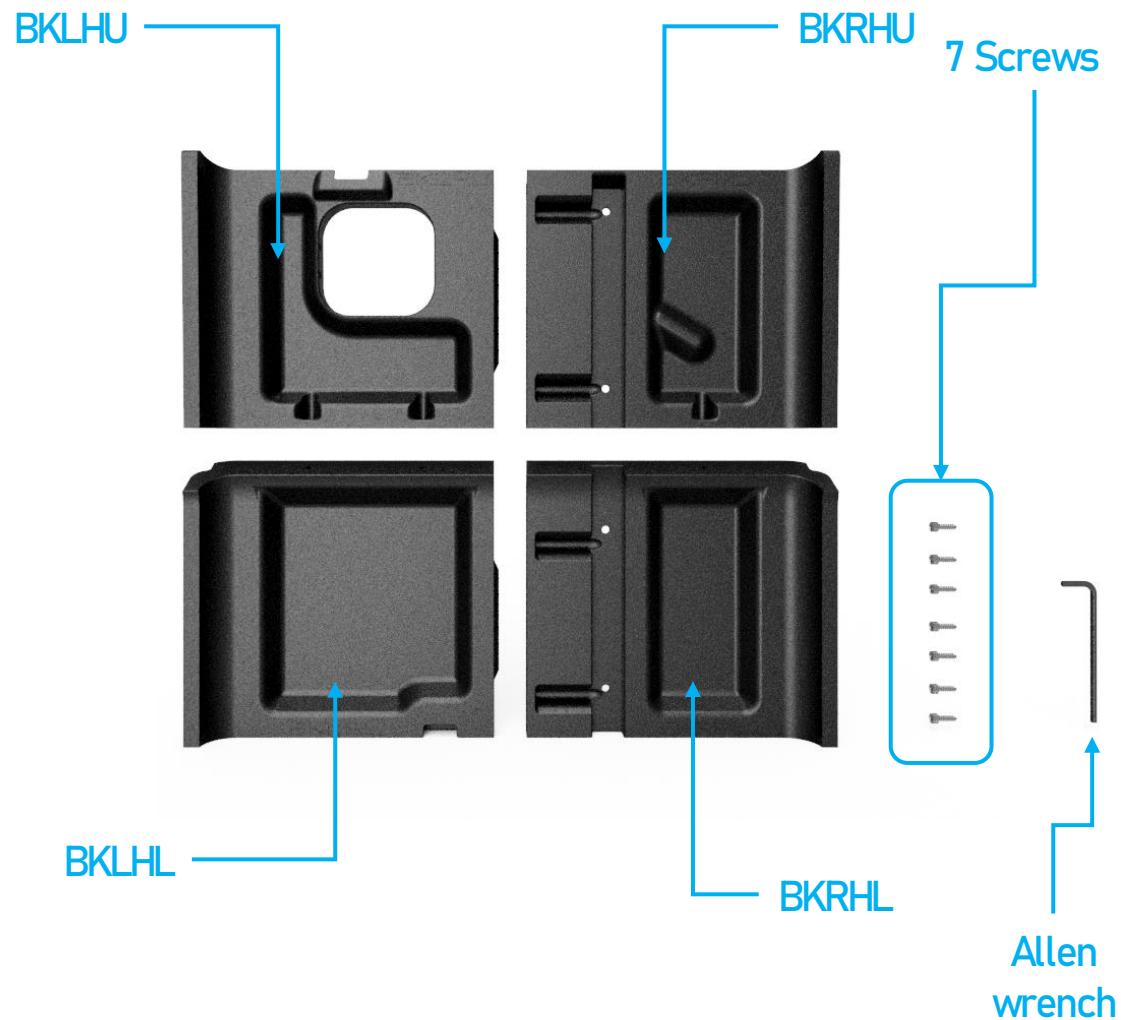




Parts and Required Hardware

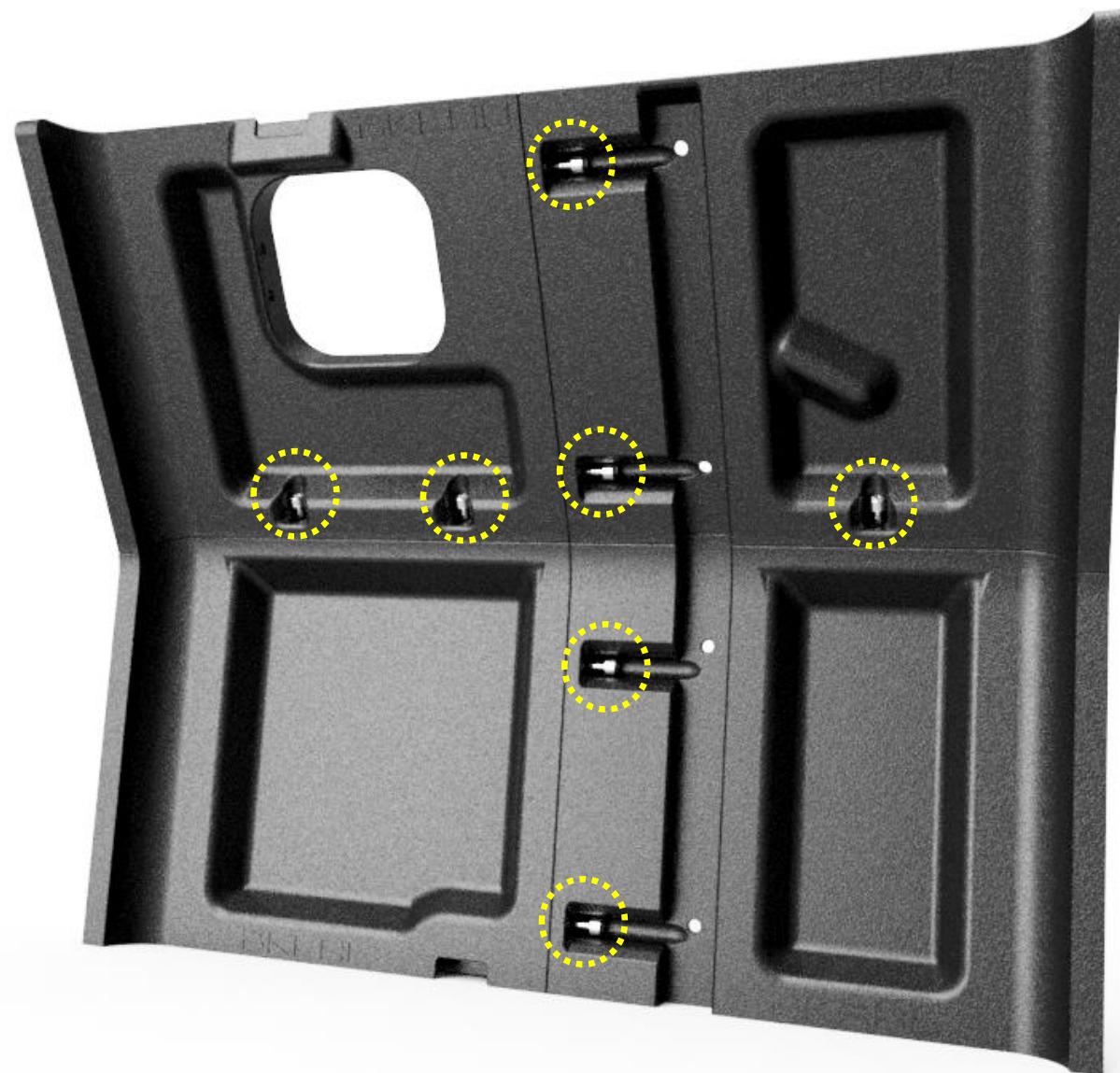
**STEP 02**

**5'**



Insert and tighten the screws highlighted in yellow. After that, take the piece and set it aside to move on to the next piece.

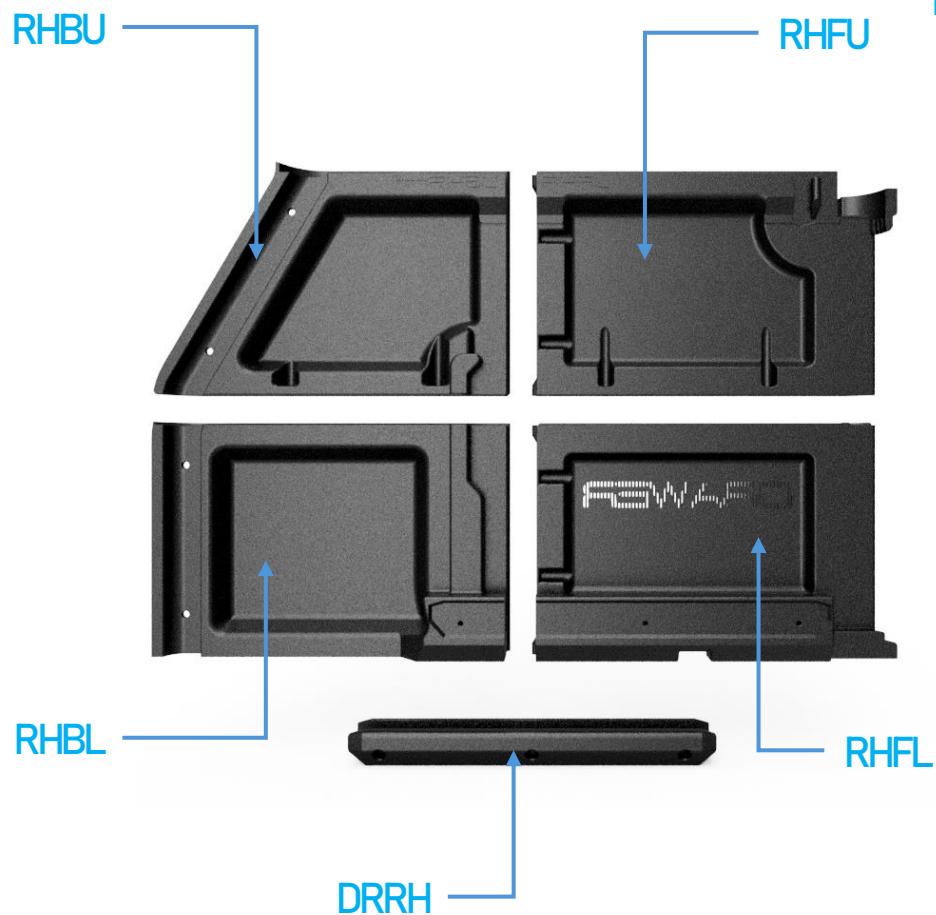
It's not necessary to overtighten the screws, as this could cause damage. Be careful not to tighten them too forcefully or with excessive strength.



# Right side Assembly Instructions



Parts and Required Hardware

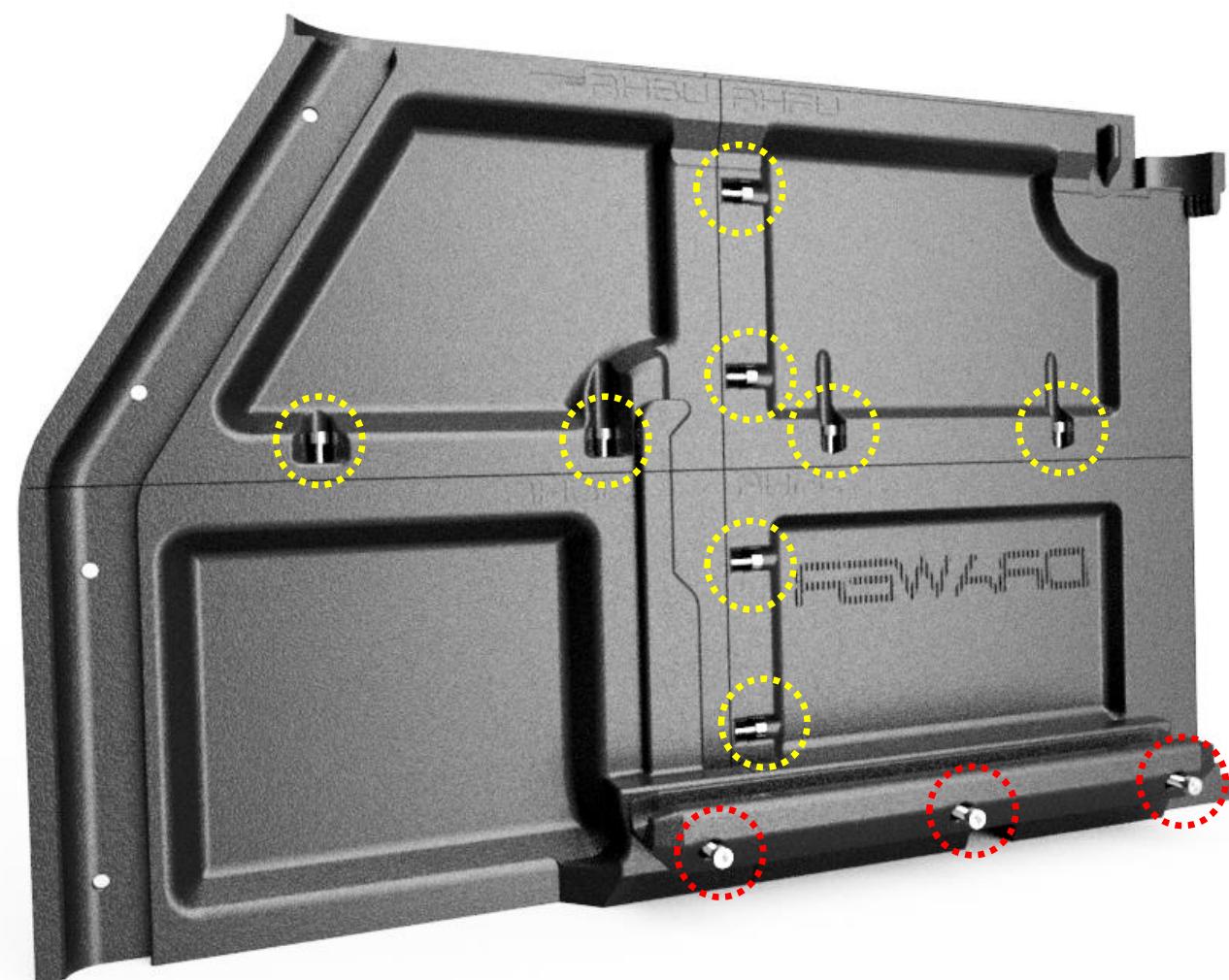


**STEP 03**  
**5'**



Insert and tighten the screws highlighted in yellow first, then insert and tighten those highlighted in red. After that, take the piece and set it aside to move on to the next piece.

It's not necessary to overtighten the screws, as this could cause damage. Be careful not to tighten them too forcefully or with excessive strength.



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# Center side Assembly Instructions

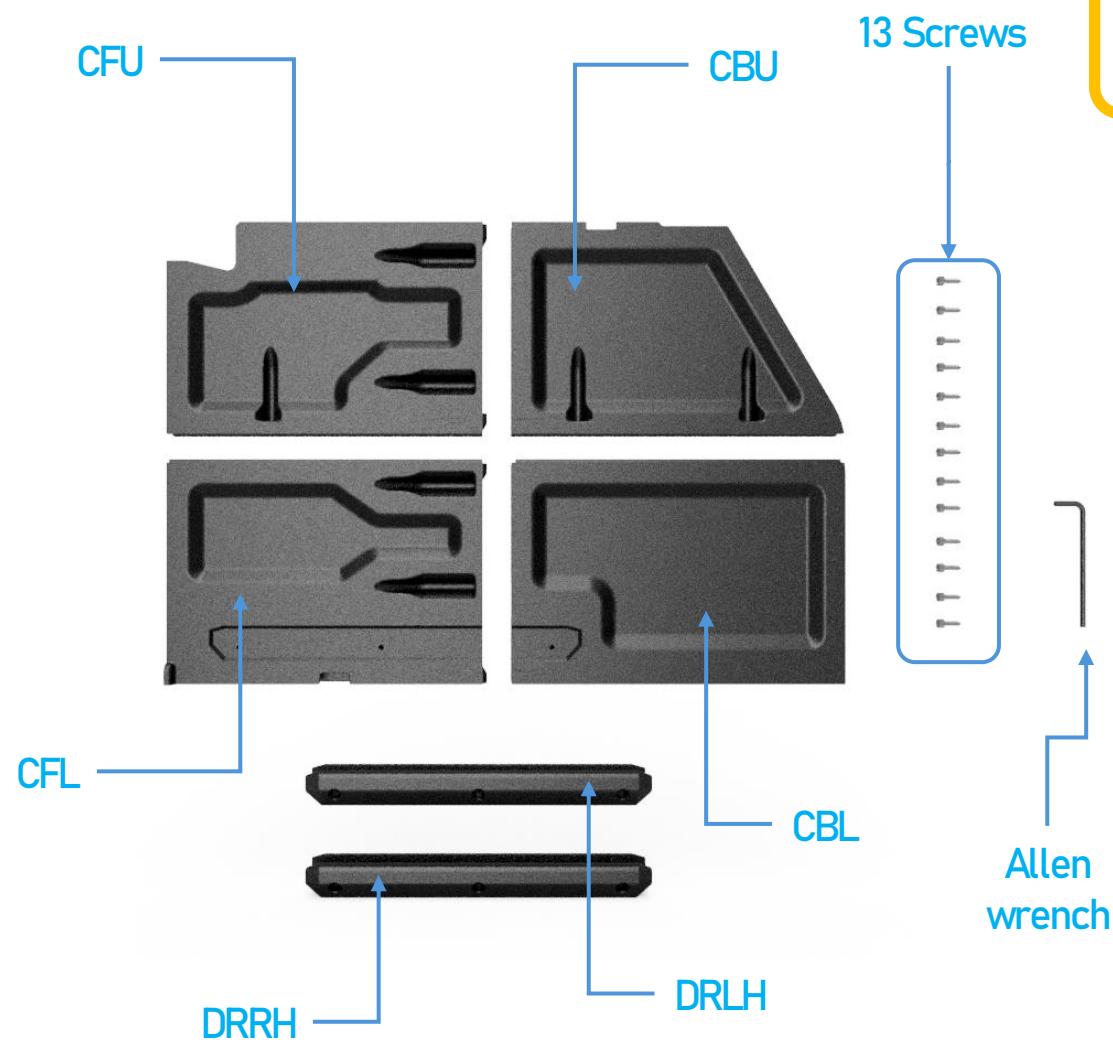


Parts and Required Hardware

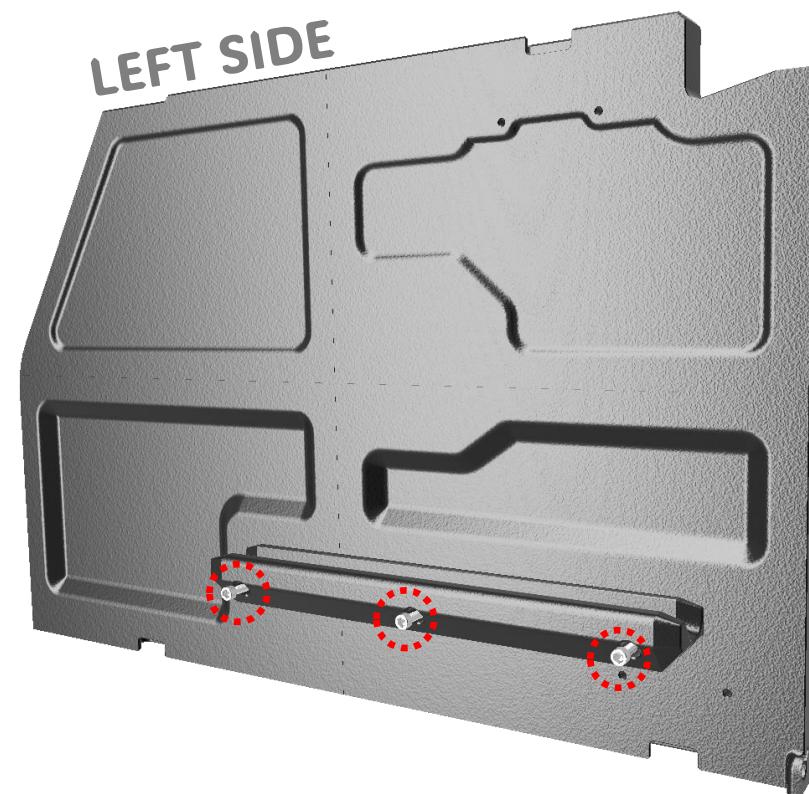
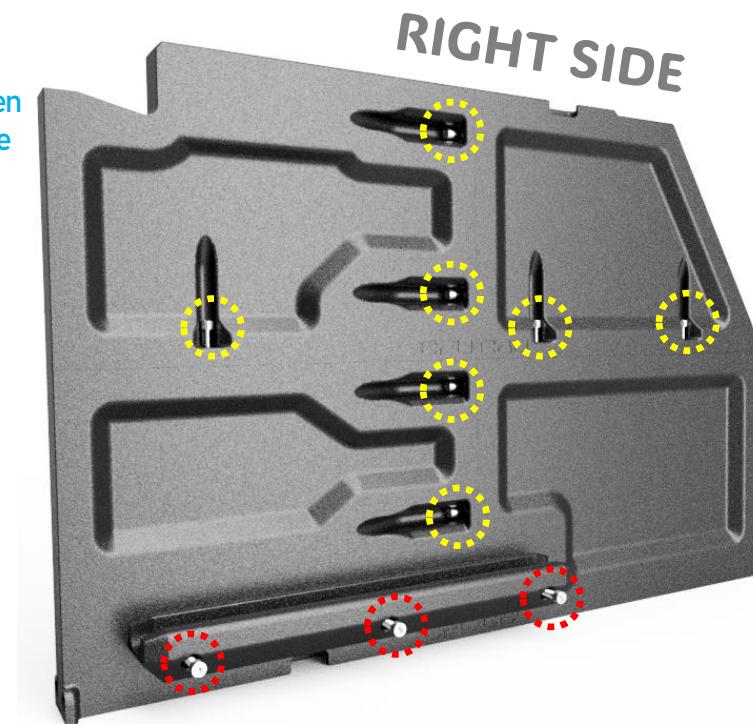
## STEP 04 5'



Insert and tighten the screws highlighted in yellow first, then insert and tighten those highlighted in red. After that, take the piece and set it aside to move on to the next piece.



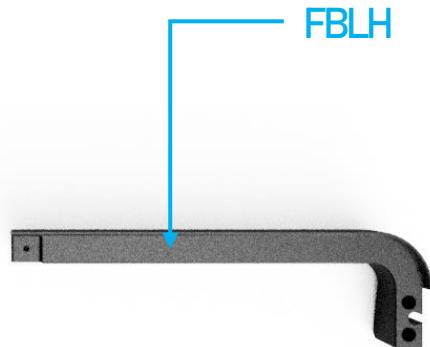
It's not necessary to overtighten the screws, as this could cause damage. Be careful not to tighten them too forcefully or with excessive strength.



# Front Bar Assembly Instructions



Parts and Required Hardware



1 Screw



Allen wrench

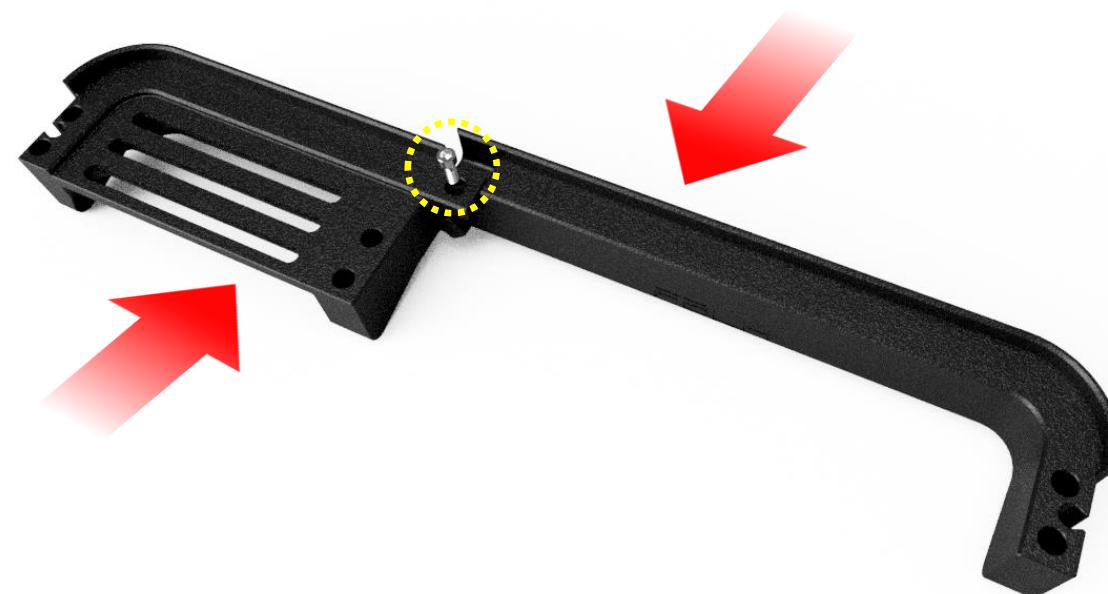


**STEP 05**  
**1'**



Fit the two pieces together at the center using an arrow dovetail joint. Then, insert the screw into the upper hole and tighten everything securely.

*It's not necessary to overtighten the screws, as this could cause damage. Be careful not to tighten them too forcefully or with excessive strength.*



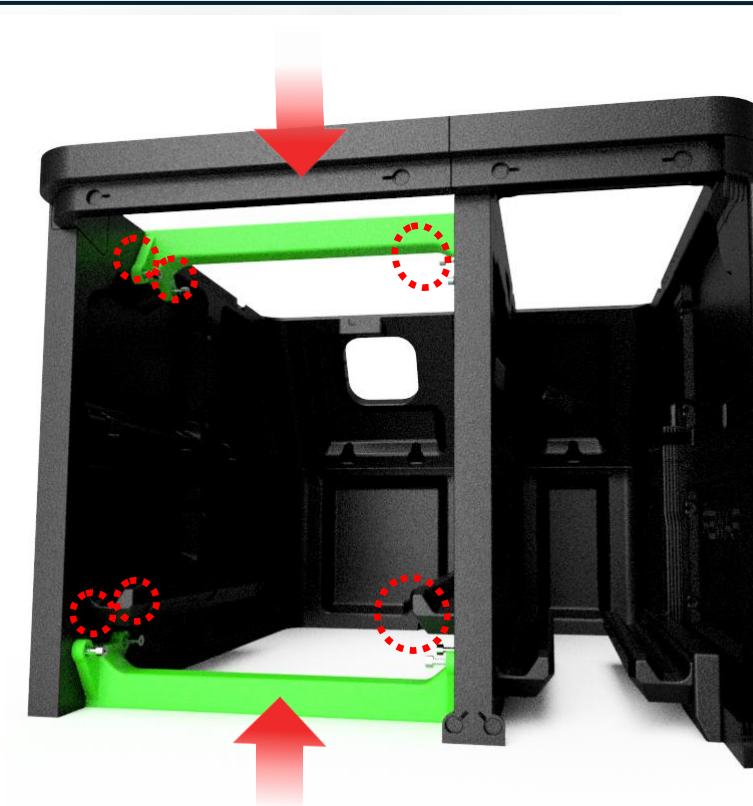
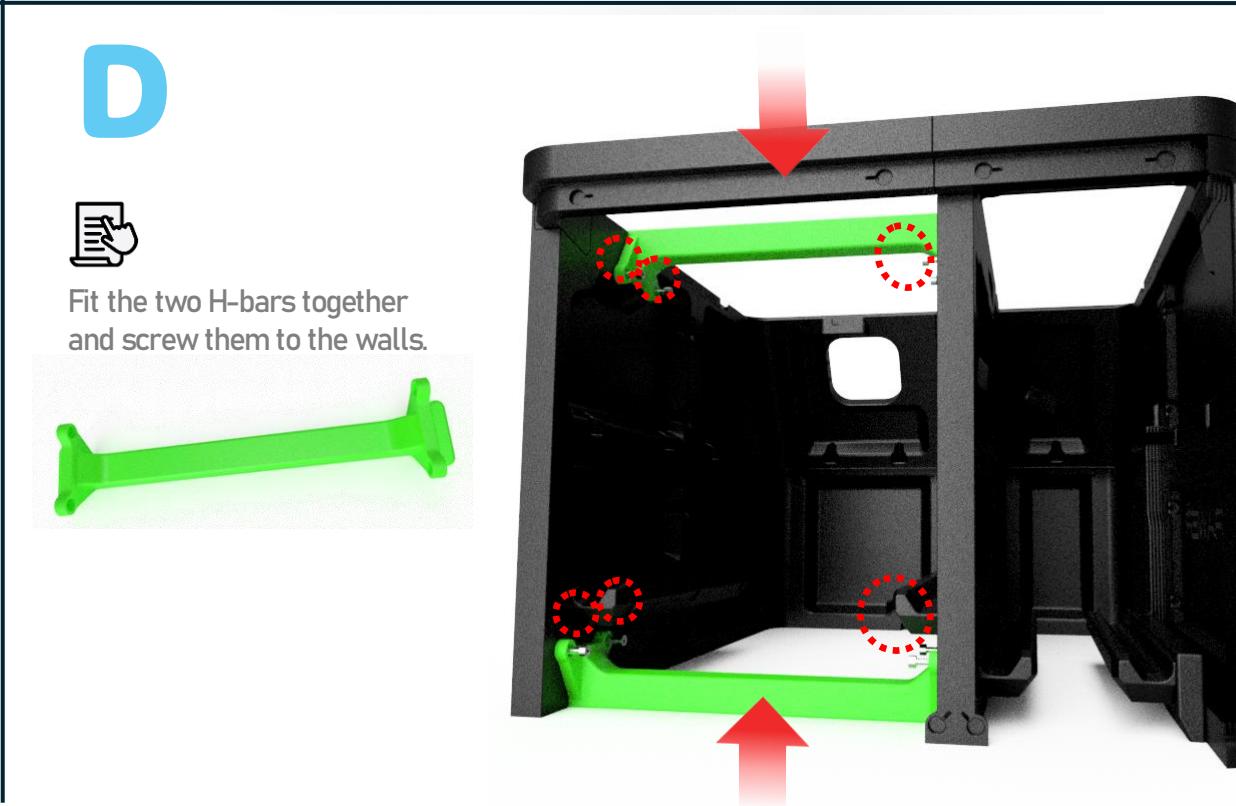
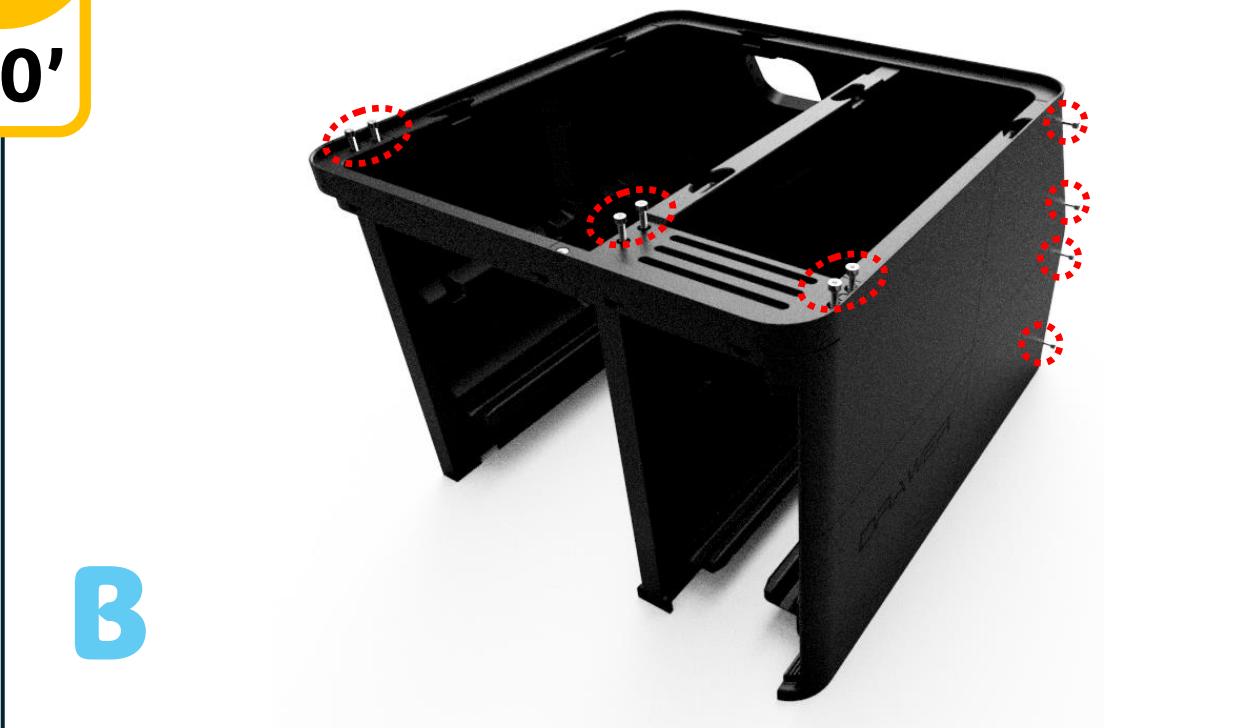
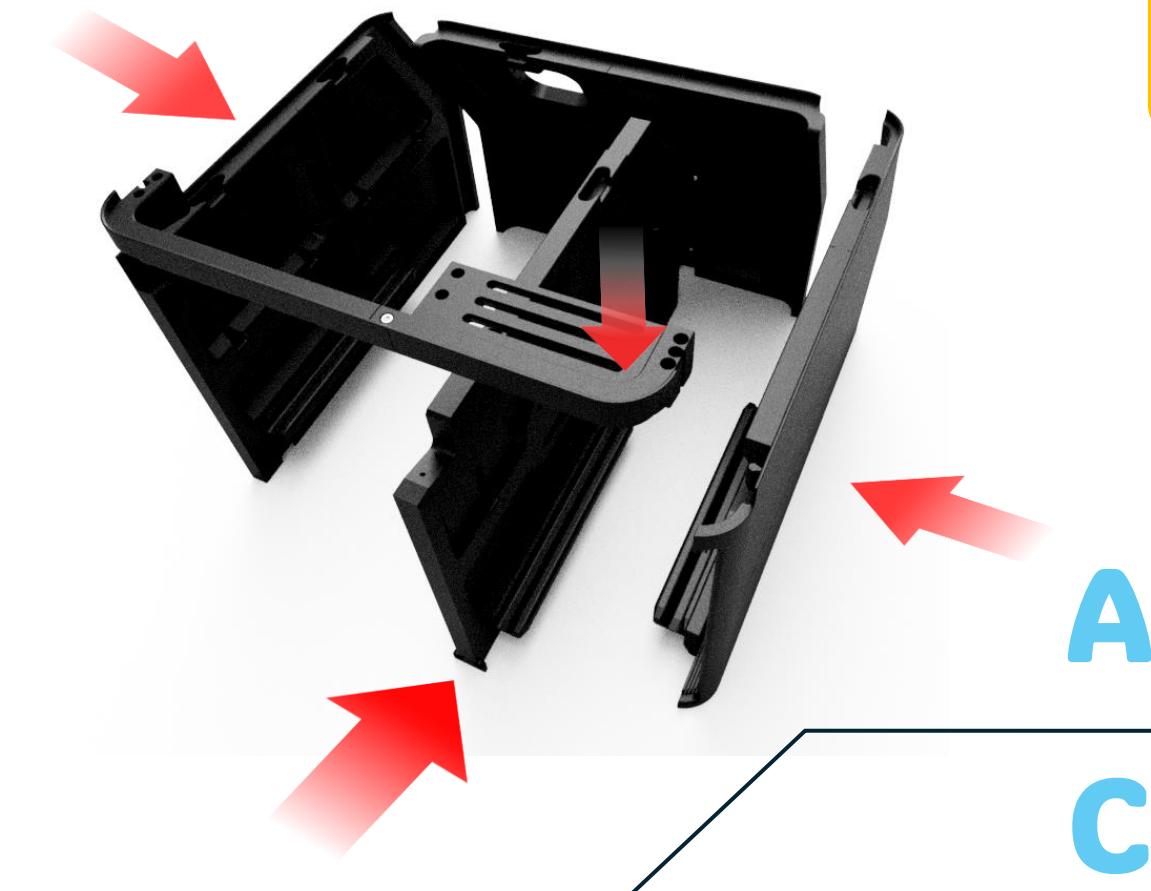


Bring the parts you just assembled closer together and start fitting the upper front bar.

## STEP 06 10'

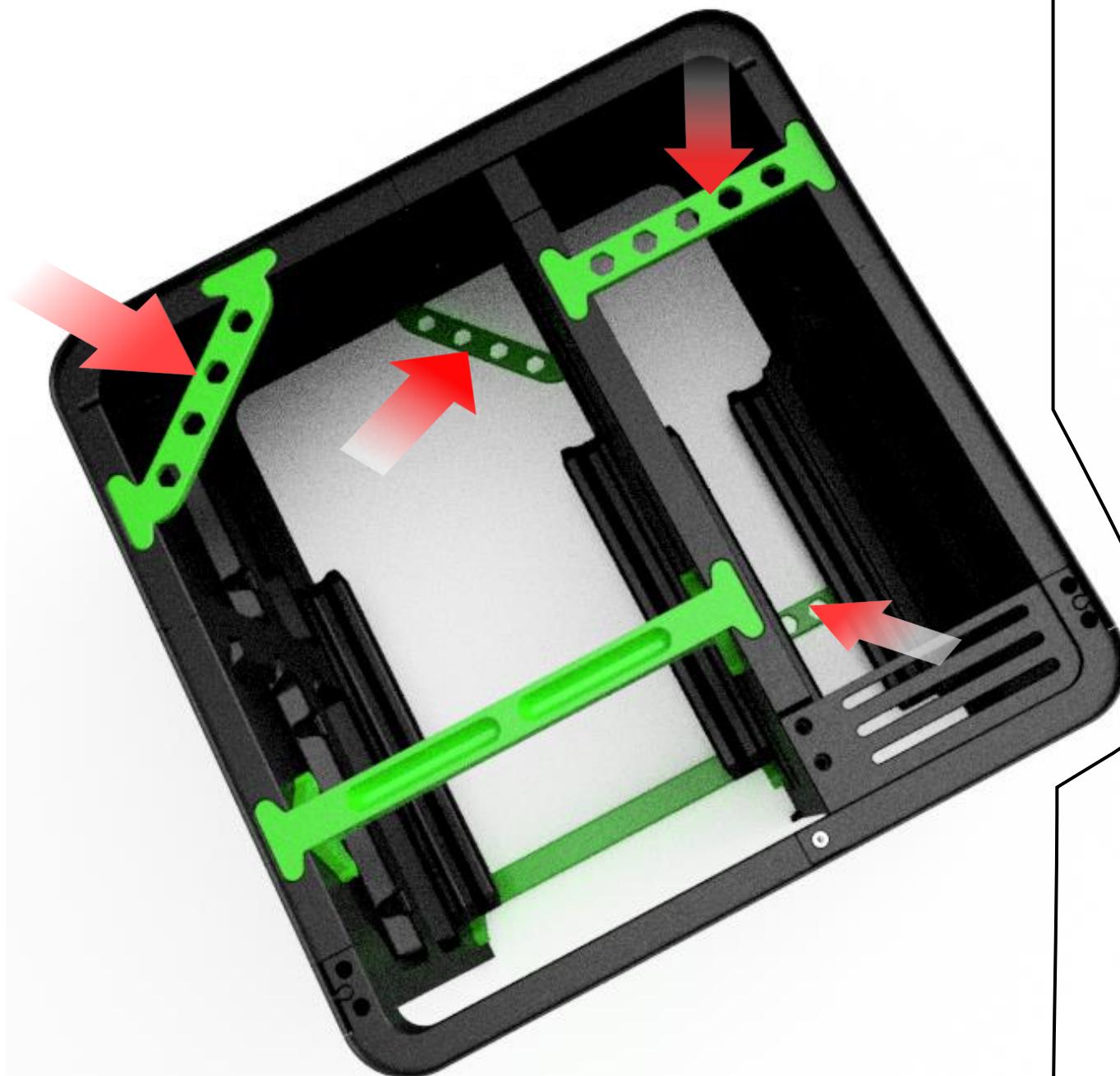


Insert all the screws and tighten them in the indicated sequence.



STEP **07**  
2'

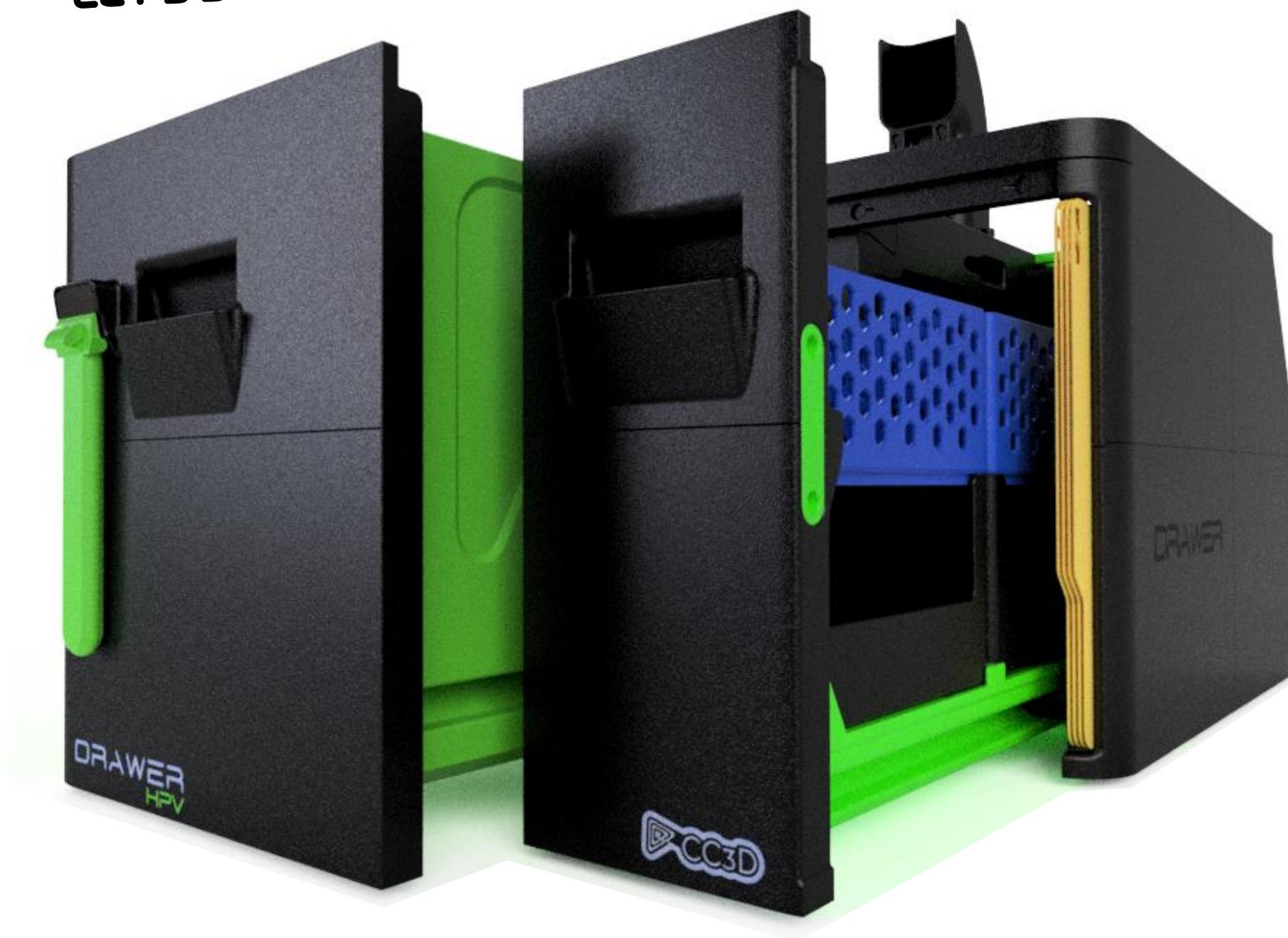
Complete the structure with the reinforcement bars as indicated by the arrows.  
The pieces should fit together, and no glue is necessary.



**GREAT JOB,  
THE FIRST PART IS DONE!  
NOW, TAKE A BREATH,  
HAVE A SIP OF WATER,  
AND WHEN YOU'RE READY,  
MOVE ON TO  
THE NEXT STEP!**



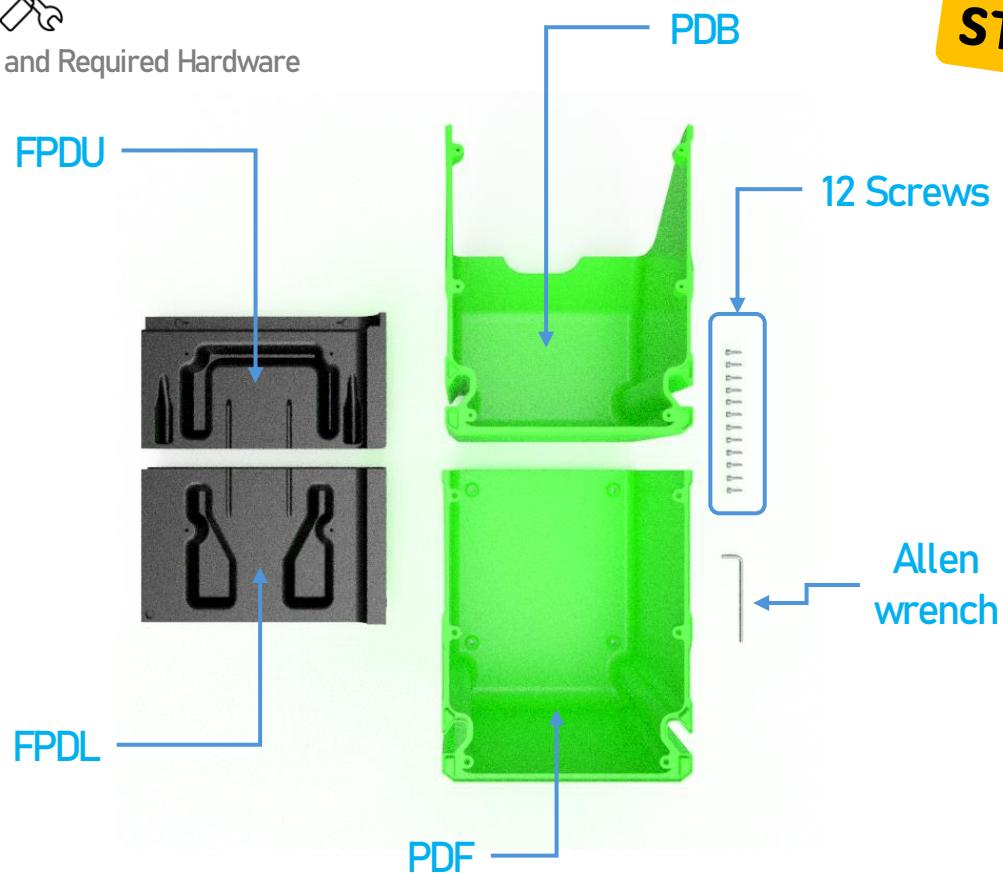
**IF YOU'VE RESTED ENOUGH AND YOU'RE READY TO GO,  
LET'S START ASSEMBLING THE DRAWERS RIGHT AWAY.**



# Poop Drawer Assembly Instructions



Parts and Required Hardware



**STEP 08**  
**10'**

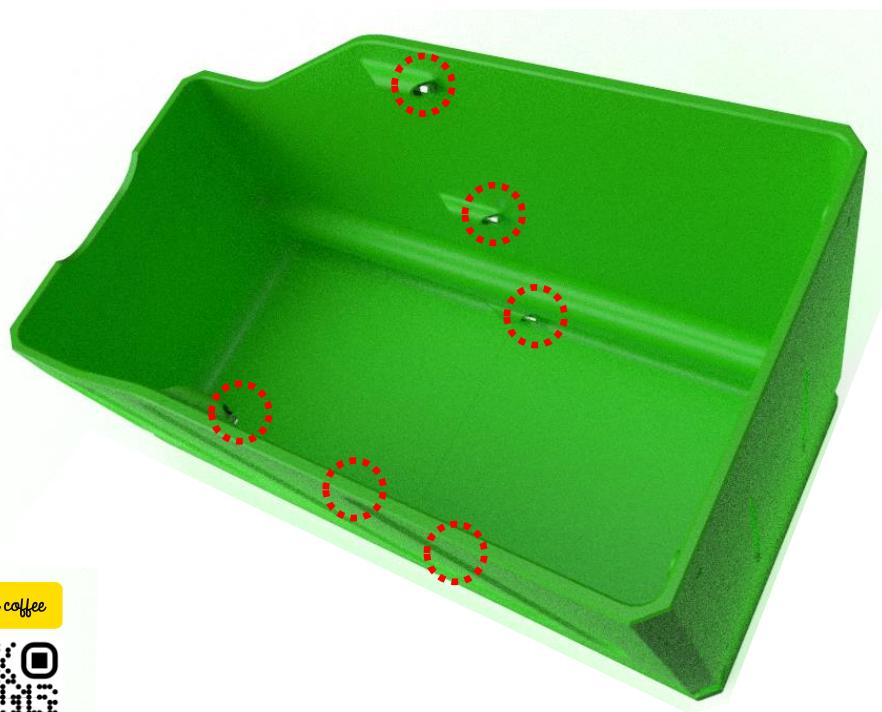


Join the pieces together and secure them with 2 screws as highlighted with the red circles.



**A**

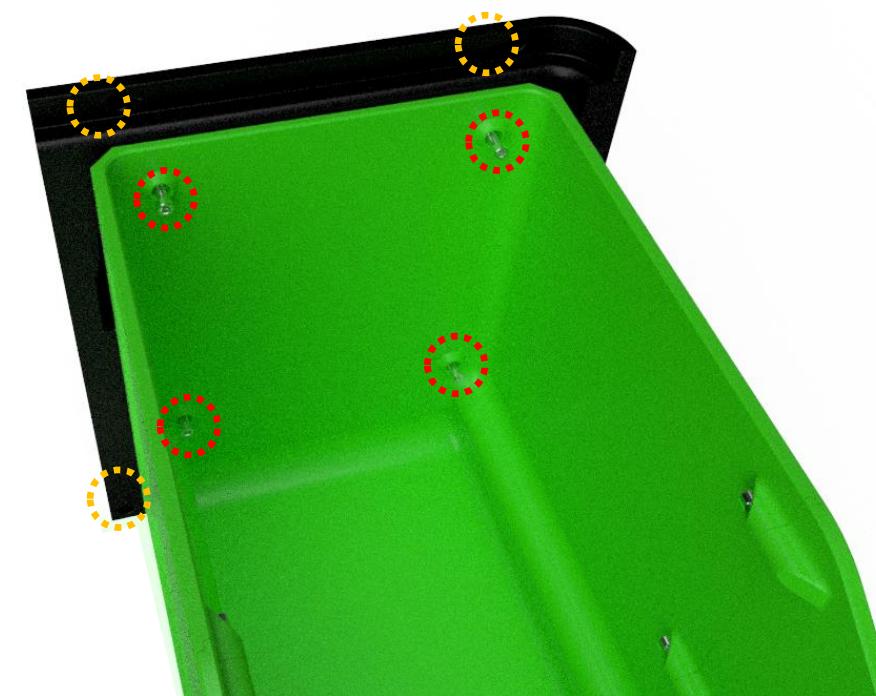
Join the pieces together and secure them with 2 screws as highlighted with the red circles.



**B**

Join front with the drawer together and secure them with 2 screws as highlighted with the red circles.

If you're wondering about the holes highlighted in orange, they're for attaching the magnets. You'll find similar ones on the top front bar and on the bottom center wall as well.

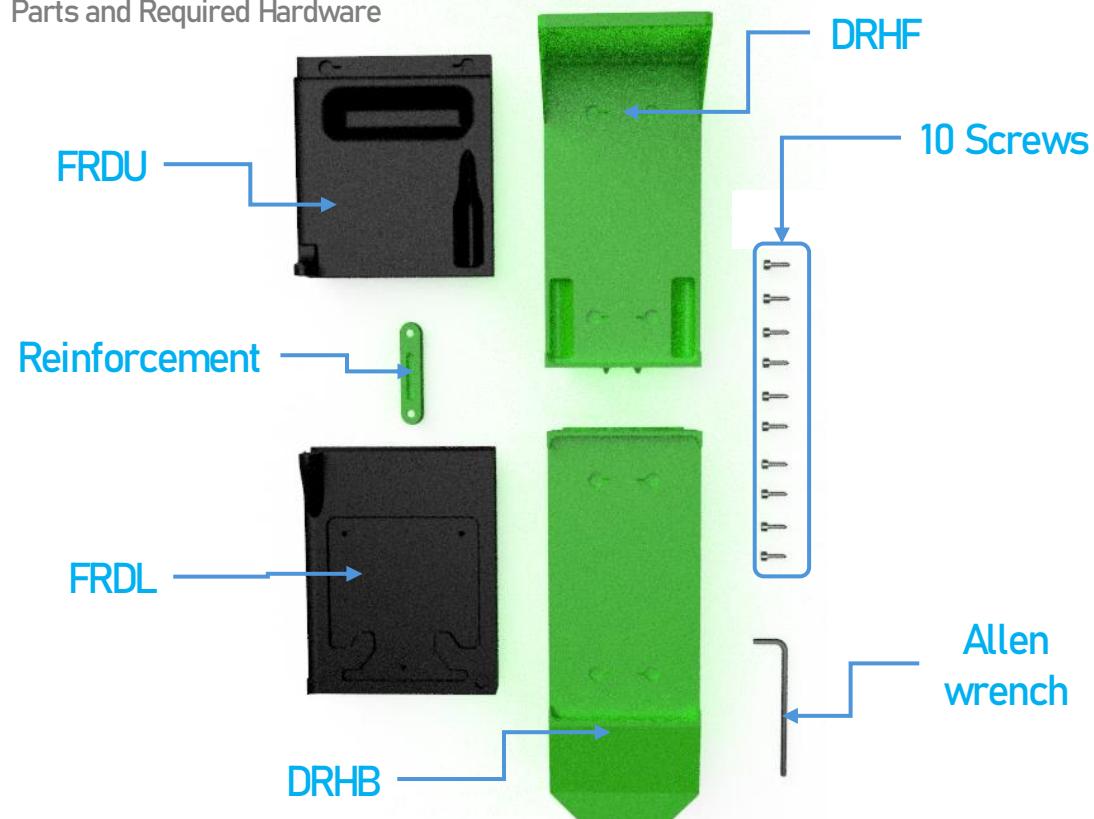


**C**





Parts and Required Hardware

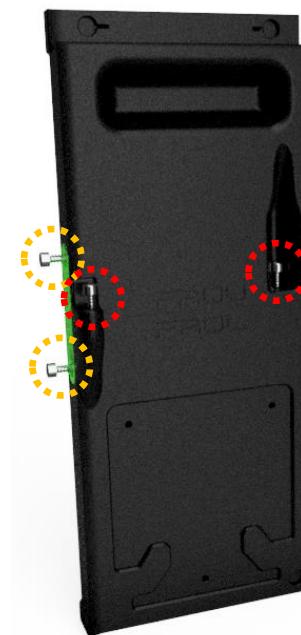


## STEP 09

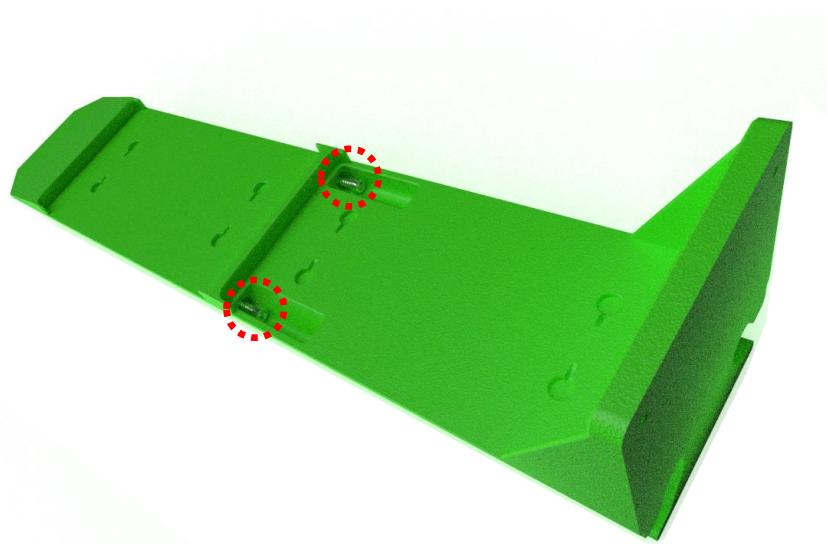
### 8'



Bring the two front parts together and insert the screws highlighted in red, then tighten them. Next, insert the green side reinforcement, insert the screws, and tighten it.



Bring the two sides of the drawer frame closer together, insert the screws into the highlighted holes, making sure to note there's one also at the bottom, and tighten the screws to securely join the pieces.



To secure the drawer frame to the front panel, insert the screws highlighted in red, ensuring there's one also at the bottom of the frame.

As previously mentioned, the holes highlighted in orange are for the magnets; you also have 8 more on the top part of the frame, to attach the boxes,



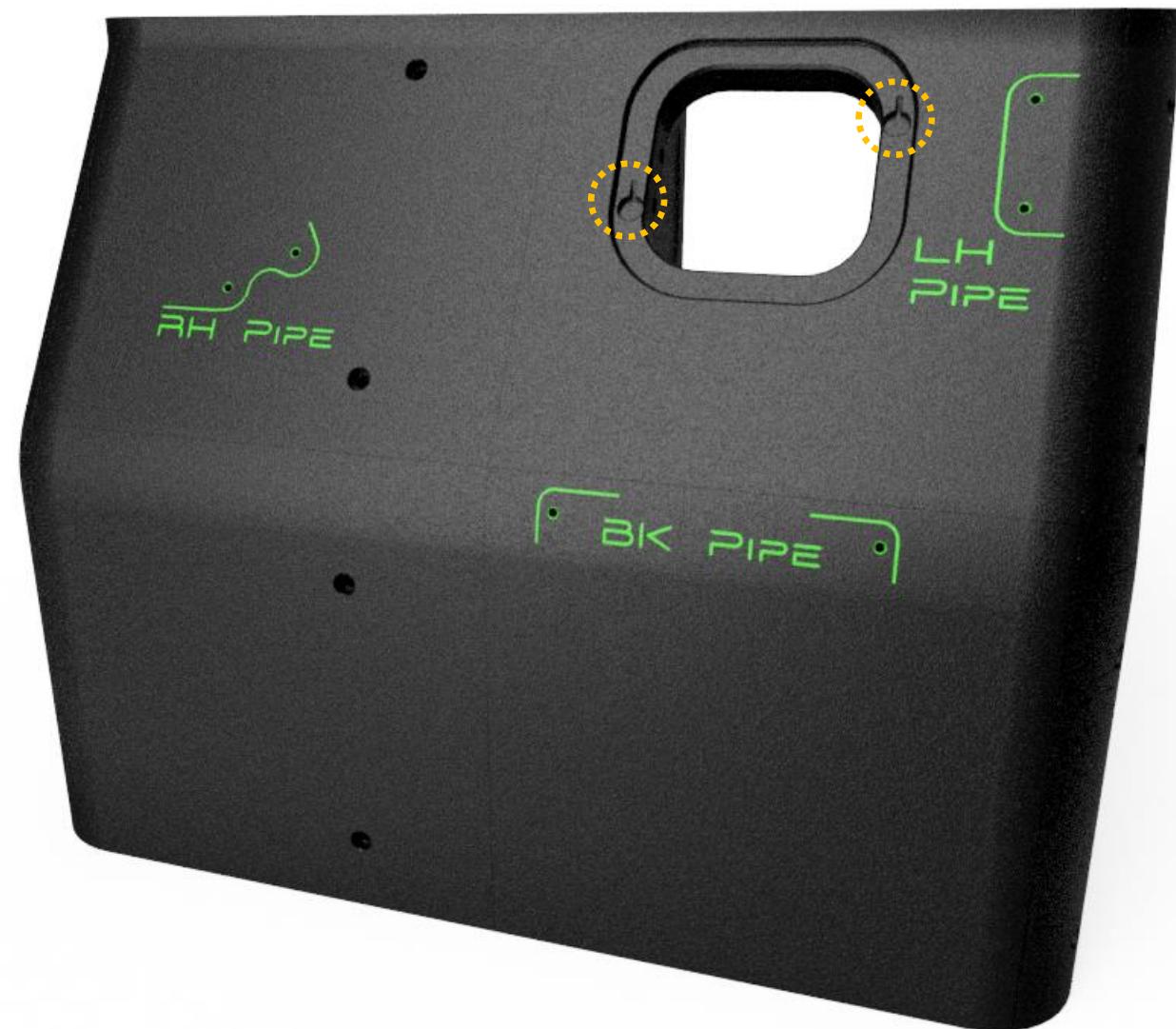
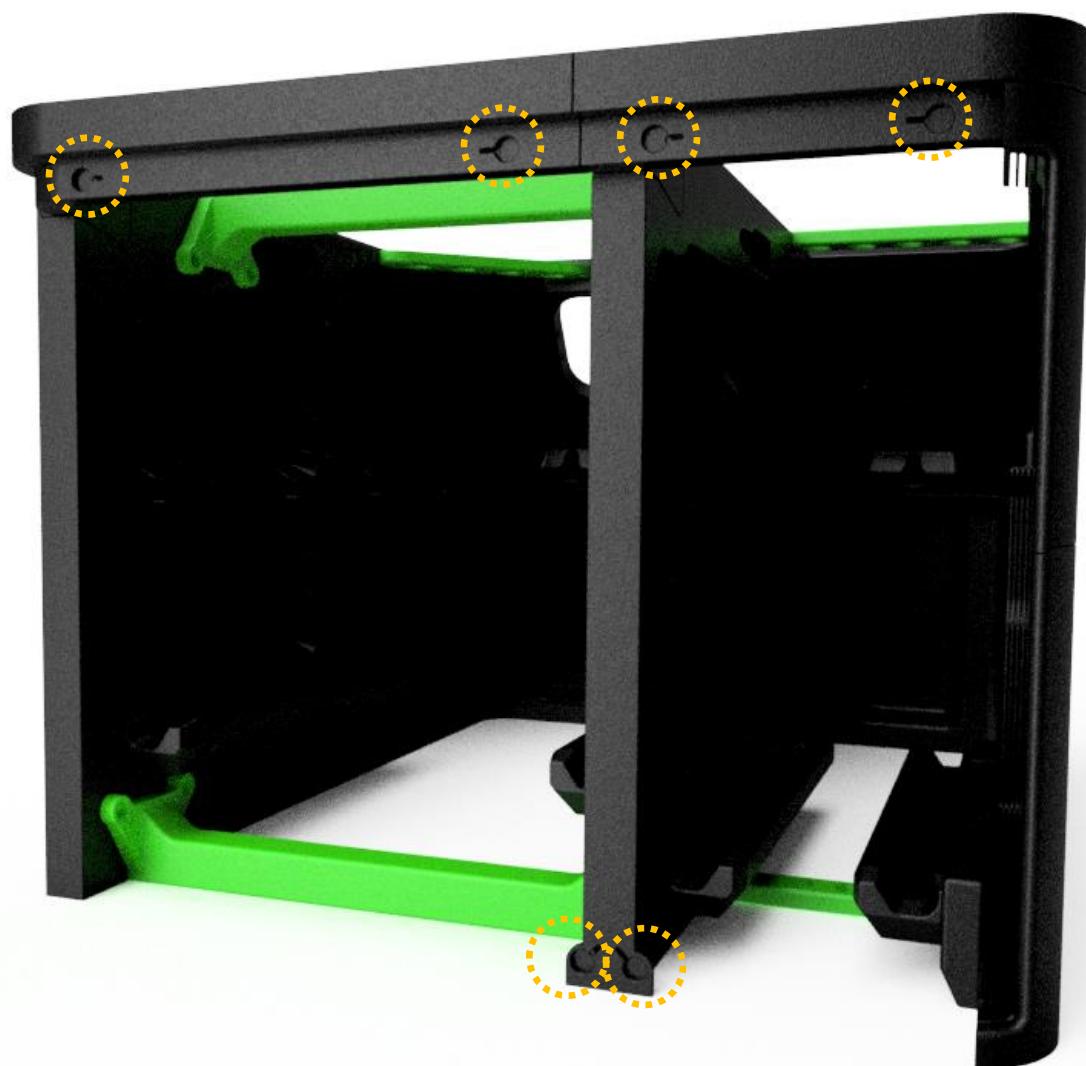
# The Magnets Assembly Instructions



I'll show you where to attach the magnets on the main body, just make sure to always check the correct orientation before gluing.

And if I mess up, as I often do, I've added a notch next to the holes to make it easier to remove the magnet and fix the mistake. LOL

**STEP**  
**10**  
**10'**



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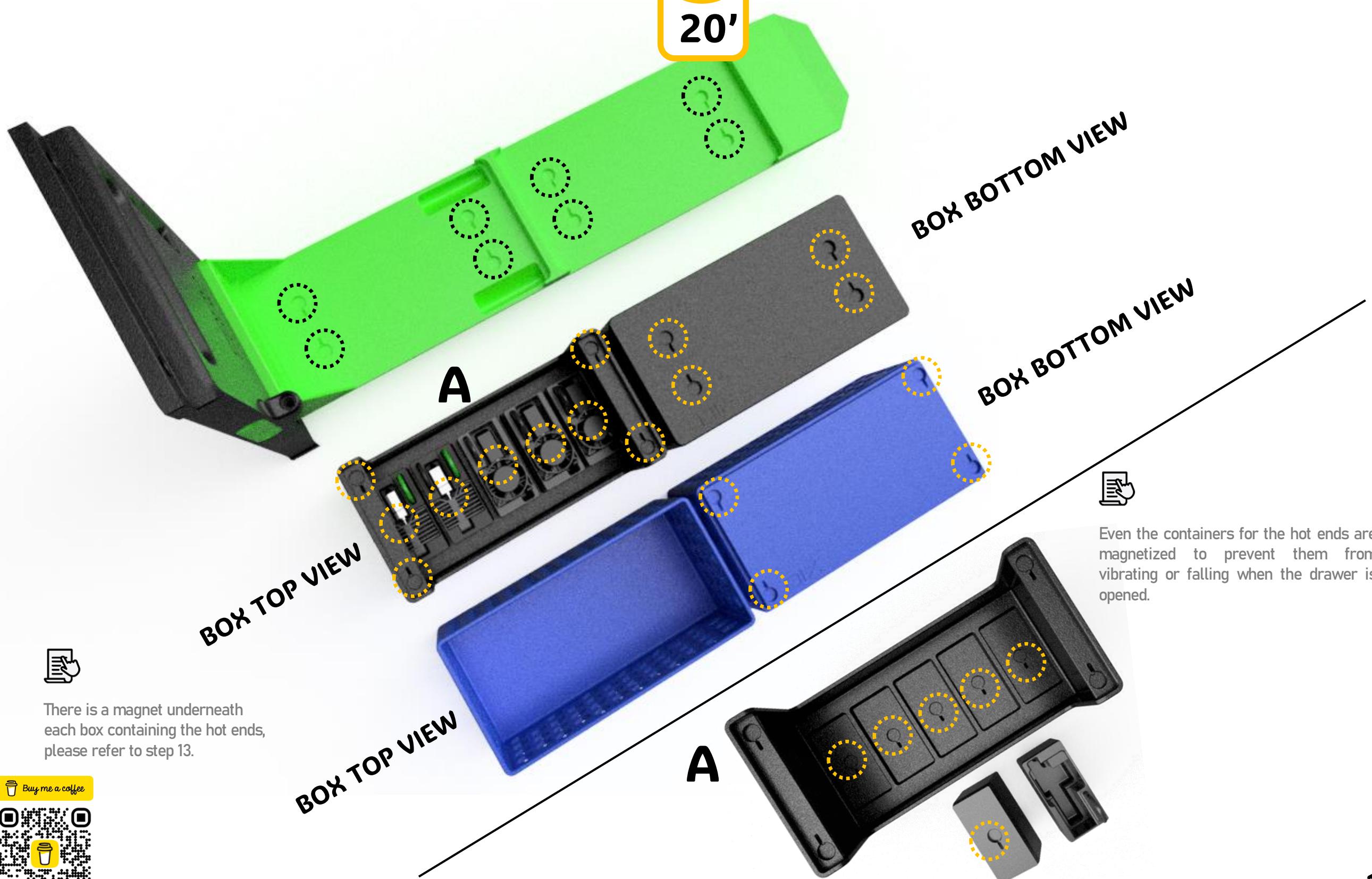
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Here is the positioning of the magnets within the spare parts and tools drawer.

**STEP 11**  
**20'**



There is a magnet underneath each box containing the hot ends, please refer to step 13.



Even the containers for the hot ends are magnetized to prevent them from vibrating or falling when the drawer is opened.

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# The Magnets Assembly Instructions



Here is the positioning of the magnets on the poop drawer. Magnets are the only means to attach the boxes to the drawer frame

**STEP** **11**  
**5'**



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Here you can see where to apply the magnets to keep the pipe attached to the drawer and the back wall of the printer.

**STEP 11**  
**10'**



Yes, I know they might seem like overkill, like using mountain magnets for a pipe, but trust me, they're necessary to securely attach it both to the drawer and especially to the printer.



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STEP 12  
1'



The final piece to install is the Pipe PD, facing inward toward the poop drawer.





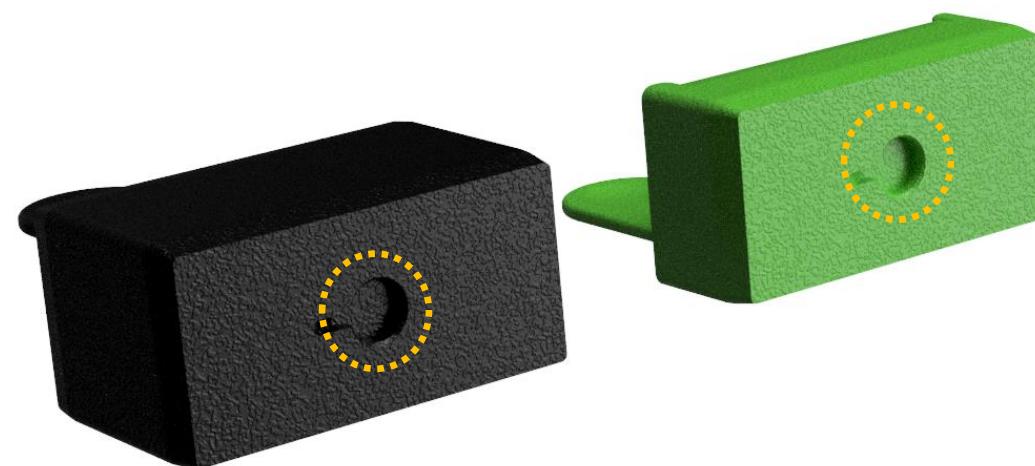
Regarding the hot end containers, the drawer has a box that can hold 5 of them, and there are 2 types available: one for the complete hot end and one for the partial hot end. Since you can print 2 boxes for the hot ends and I don't know the mix of hot ends you have, I'll leave it up to you to decide how many to print.

## STEP 13

4'



Here is the positioning of the magnets on HOT END box.



## The conclusion of the assembly instructions.



This project has been an incredible journey, and I couldn't be prouder of the final result.

First and foremost, I want to express my deepest gratitude to you for believing in and purchasing this model.

When I started this project, I knew it would be a challenging task. I wanted to create not only a high-quality product but also an assembly guide that was clear, detailed, and accessible to everyone. I spent days studying the design details, testing and refining each individual component, and writing and rewriting the instructions to ensure they were as straightforward as possible to follow.

I gave it my all because I wanted to offer you the best. I understand that assembling a new product can be frustrating and complicated, and I wanted to do everything possible to make this experience as enjoyable and stress-free as possible for you.

Now, looking at the final product, I sincerely hope it meets your expectations and satisfies your needs. Every single detail has been carefully thought out and crafted to ensure the best possible experience. I hope you can see and appreciate the love and dedication I've put into this project.

I'm aware that questions or doubts may arise during assembly, and I want to reassure you that I am always here for you. Just keep in mind that I am a One Band Man, and it may take a few hours to get a response. I apologize in advance for this. I wanted to ensure that your journey with my product is as enjoyable as possible, from start to finish.

Your support means the world to us, and I look forward to hearing your feedback and experiences with our product.

Thank you from the bottom of my heart.

Enrico





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