

# Badge Holder Plus

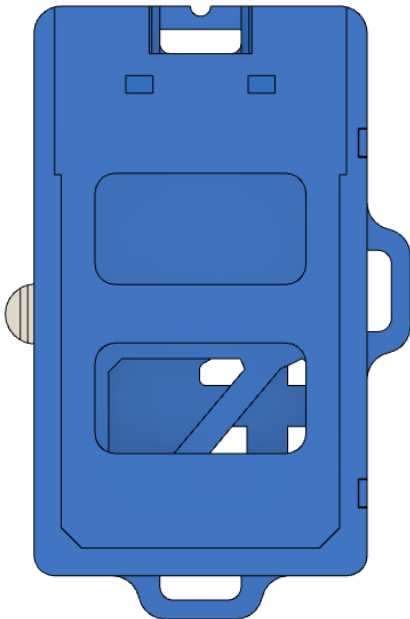
## Disclaimer

*This product is a Do it Yourself (DIY) product. This means that you will receive the printed parts only, and you will have to assemble and glue them together, unless you select to have it pre-assembled. Most accessible glue is super glue. Assembly instructions are provided in this document. Additionally, until further notice, the magnetic version will not be provided.*

*The badge holder is still being developed and improved; your product might look slightly different from the pictures shown here. However, functionality will remain. Consumer 3D Printing Technology has lots of variability which results in products not being the same amongst themselves. The variability of printing, materials and assembly can also produce minor cosmetic defects; however, they do not affect functionality.*

## Overview

The Badge Holder Plus is a DYI product aimed to have all the individual badging needs in one place, specifically for those individuals with a special program badge. It is packed with optional features and colors so you can have the one that better suits your needs. Main features include carrying your main badge, carrying your special program badge and a backpack to carry two additional cards. All parts are 3D Printed in ABS or PETG (based on availability) plastic with an Original Prusa i3 Mk3S+ 3D Printer. All the parts are designed using Autodesk Fusion 360.



## How to Request

Complete the request form [HERE](#). For reference when completing the form, the model shown throughout this document has the following characteristics:

- Primary Color: Blue
- Secondary Color: White
- ~~Magnetic: Yes~~
- RSA Holder: Yes

**Important-**When you submit your request you are automatically acknowledging and accepting the following:

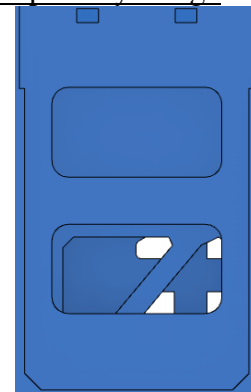
- ✓ This is not a sale; this is a reimbursement for the materials and resources cost
- ✓ You will reimburse in accordance with the costs shown below in the form of cash using US currency
- ✓ Reimbursement and delivery of the Badge Holder will be made in person only
- ✓ You will follow the Safety provisions shown in the Safety Section, the Instructions for using it and the Assembly/Gluing Instructions
- ✓ Broken product due to misuse will not be replaced
- ✓ I shall not be held responsible for any incident related with this product, even if it was not mentioned anywhere in this document

## Material and Resources Cost to Reimburse

	DIY	Pre-Assembled
<del>Any Option with Magnets</del>	<del>\$9.00</del>	<del>\$11.00</del>
Any Option without Magnets	\$6.00	\$8.00

## Features

1. Holds your primary Badge



It has a primary pocket specifically designed to hold in place your primary badge visible all the time. The badge holder does not interfere with any of the functionality embedded in your badge. Two card stoppers are located at the top to prevent your card from sliding out.

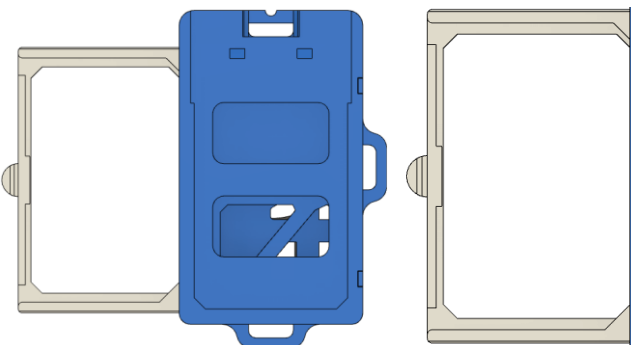
# Badge Holder Plus

## 2. Has a holder for your RSA key fob (Optional)



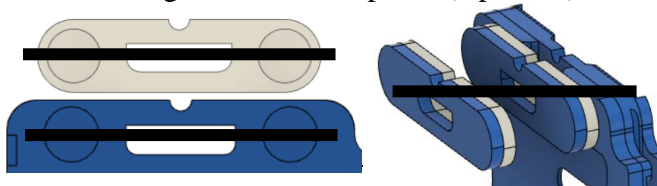
You no longer need to carry your key fob somewhere else, now it can be part of your badge holder. This is an optional feature.

## 3. Holds your program badge



It has a dedicated pocket for your program badge specifically designed to show it when needed and stow it when not. Do not pull it hard, you could break it.

## 4. It is magnetic mount capable (Optional)



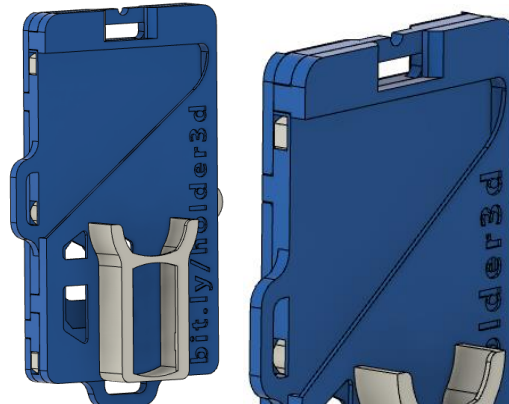
The body has two holes to fit two strong neodymium magnets to hold the badge holder on your shirt without an additional clip or lanyard. There are two magnets holders each containing two magnets. One magnets holder goes inside your shirt while the other outside. This allows you to separate the badge holder from the outer magnet holder, to badge in, without displacing the magnets holders on your shirt. There is a notch at the top of the badge holder and the magnets holders for easy alignment and orientation. This is an optional feature.

## 5. It supports traditional mounting



You did not like the magnet mounting? Do not worry, it has a cutout to support traditional mounting options like clips or lanyards. This feature is present regardless of whether you have magnets or not.

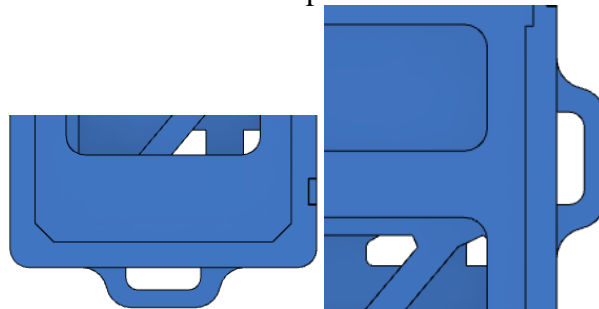
## 6. It has a backpack



You can have up to two extra cards in the same place, especially the PKI card. The shape of the cutout prevents the cards from falling from the backpack, even if you only have one, while still allowing to put them in and take them out with ease.

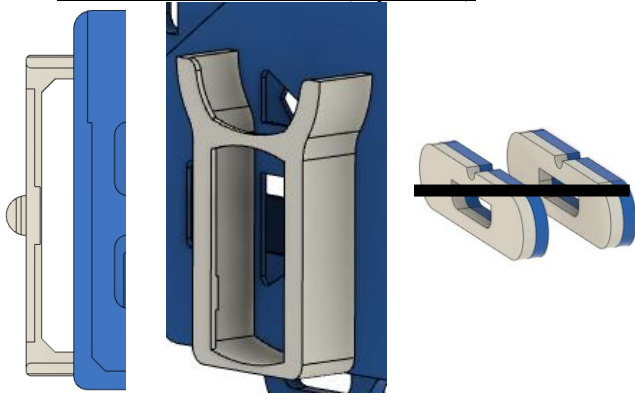
## 7. It has two multipurpose hangers

These multipurpose hooks are for you to use it as you need. They can hold locker keys, desk keys or additional badges. They also allow you to use the badge holder in a different configuration (upside down or sideways). Use them as you wish within the constraint of the design. Do not overstress them, if you do you will break them. If you have the magnetic version, make sure the weight of what you hang is not much. The magnets might not hold all the weight if it is too heavy and could cause the badge holder to fall and break from the impact.



# Badge Holder Plus

## 8. It can be dual colored (Optional)



You can select up to two colors for your badge holder. Match your favorite sports team, or other entity colors. In the pictures above the main color is Blue and the secondary color is White.

The colors available are shown in the table below.

Color	Visual Representation	Color	Visual Representation
White		Silver	
Black		Gold	
Light Blue		Red	
Blue		Nuclear Green	

*\*The colors might look slightly different in the real product due to screen or printer resolution. In case of running out of material, a brand-new spool of material will be used for which the color could vary slightly as well.*

## Safety

- ~~• The magnetic version has strong magnets which is not recommended for people with pacemakers. Please do not order with magnets if you, or the intended user, has a pacemaker or other similar device.~~
- The material used for the parts is ABS or PETG. The solvent to glue parts together is Plastruct Bondene, Methyl Ethyl Ketone, Acetone or Super Glue. All the mentioned materials can cause health complications if inhaled, ingested, or contact the skin. Do not use your badge holder to relief your stress by chewing it. Additionally, keep out of children. If you need to sand it, use a respirator mask.
- ~~• Magnets could erase magnetic information on cards. Do not place the magnetic parts directly to magnetic strip cards.~~
- ~~• Magnets holders and magnets can pose a choking hazard. Keep out of children.~~
- Do not pull the sliding portion too hard, you might break the product.
- Do not expose product to Acetone, Plastruct Bondene, Methyl Ethyl Ketone or any other plastic solvent. ABS and PETG chemically reacts with them, and your product will be damaged.
- While ABS and PETG are high temperature materials, exposing them to extreme temperatures could soften and bend them, which could affect functionality. It is not recommended to leave them in the car while is hot outside.
- Exposure to UV light could cause cosmetic discoloration and brittleness.

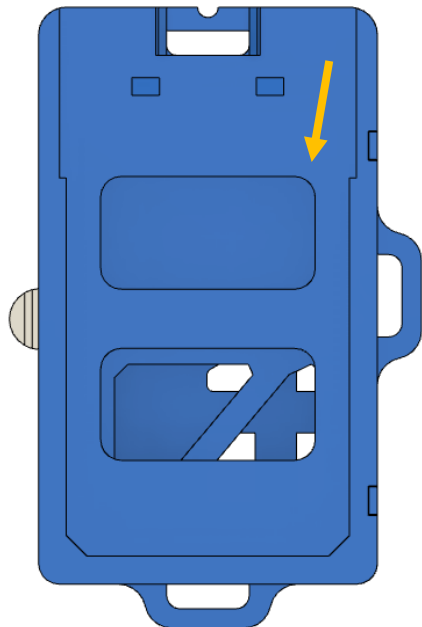
## Acknowledgements

The initial design was created by Ray Spall using SketchUp. I borrowed the concept and redesigned it from scratch with new measurements and modifications to better suit my needs and desires. He might have additional designs and alternatives that might better suit your needs. If you are interested feel free to contact him at Ray.Spall.210@gmail.com.

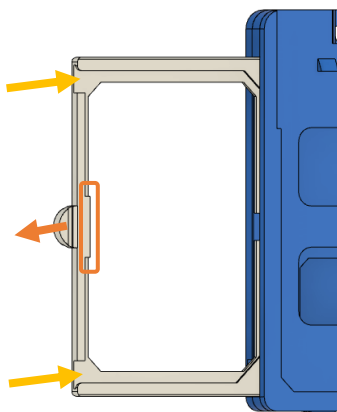
# Badge Holder Plus

## Getting Started (Use Instructions)

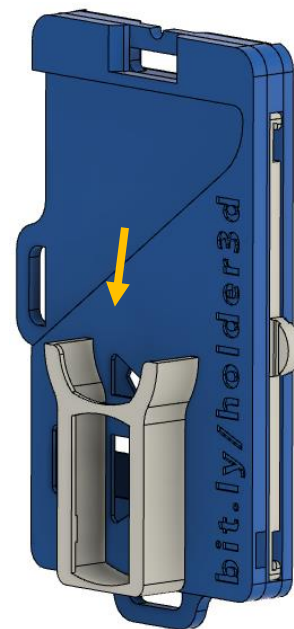
Insert your main badge through the slot in the front from the upper part. This is designed to put the badge in once and leave it in, constant insertion and removal can break it.



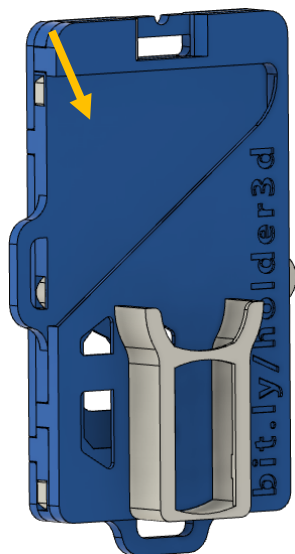
Pull the sliding secondary badge holder out and carefully insert your special program badge through the opening on the side by slightly bending the card to clear the middle barrier. Then slightly pull the handle outwards so it slightly bends and the badge clears the small front cover and sits flush with the back (shown in orange). This is designed to put the badge in once and leave it in, constant insertion and removal can break it. When sliding it out do it carefully, sliding it out too hard can break it.



Carefully insert your RSA key fob in the key fob holder at the back from the top. (as applicable)



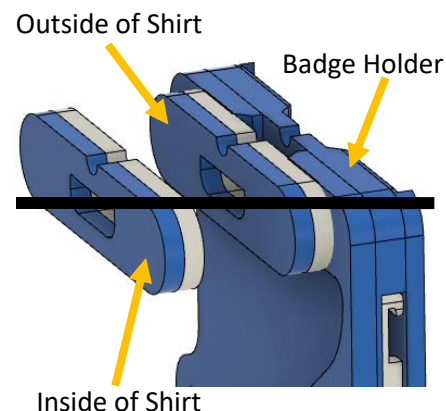
Insert your additional cards in the backpack from the top in a downward motion. Only push in one at a time. Do not put more than 2 standard cards, if you try to put more you will break it.



To take the cards out, pivot the corner of one card slightly to the side, grab the protruding corner of the card with your fingers, bend the card a bit to clear the top and slide it out.



~~Put a magnet holder inside your shirt and hold it with the other magnet outside of the shirt. Then place the badge holder near the outer magnets for it to attract and get secured to it and your shirt. (as applicable)~~



*Thank you for getting this product and supporting it!*

# Badge Holder Plus

## Assembly/Glue Instructions

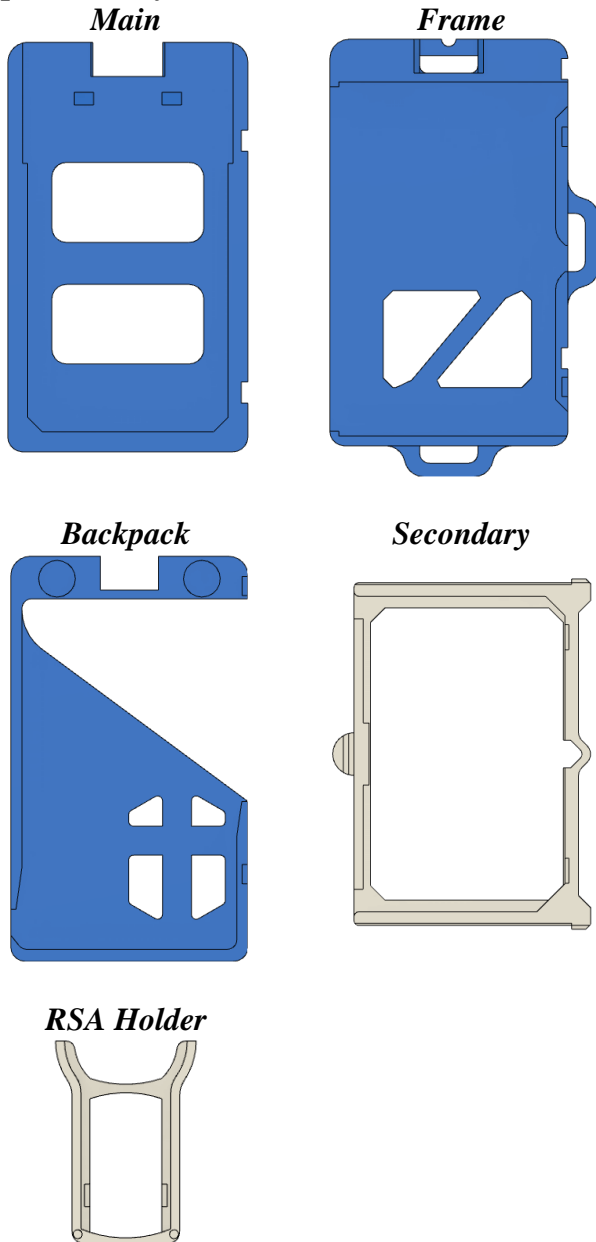
### Step 1: Getting Necessary Items

Required Items	Recommended Items
Badge Holder Pieces	Respirator Mask
Glue (Super Glue, Epoxy* or MEK**)	Gloves
Sandpaper	Wet Cloth
	Glue MSDS

\*Applicator needed (stick or similar)

\*\*Applicator needed (brush or syringe)

### Step 2: Identify the Pieces



### Step 3: Sand Mating Surfaces

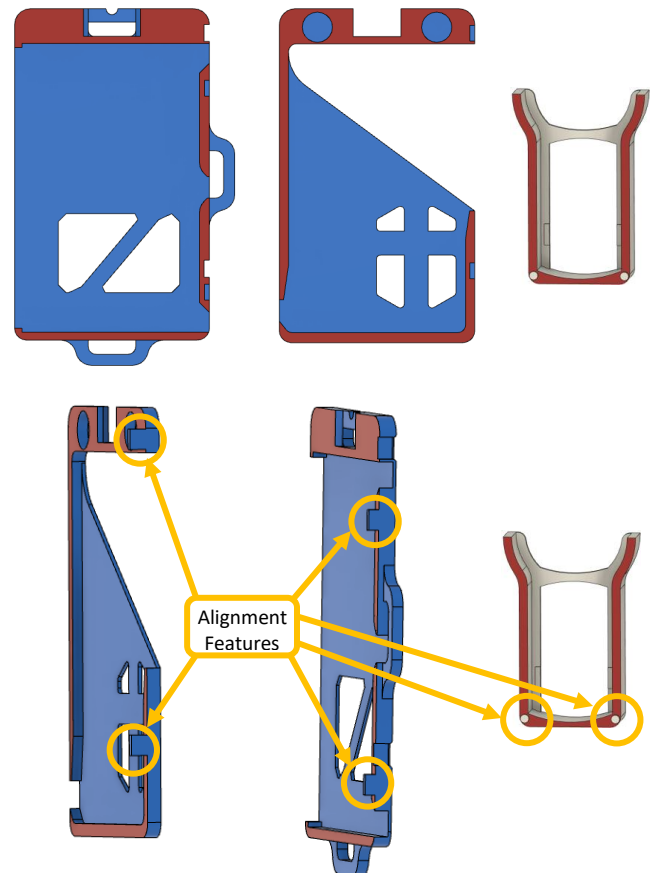
Lightly sand the surfaces shown in red of the Frame and Backpack pieces (shown below). The sanding is to ensure the mating surfaces are completely flush to each other for gluing. Clean the surfaces from the dust created by sanding using a wet cloth.

#### CAUTION

Be careful with the alignment features, they can break off easily. If you break them off, the badge holder will still be functional, their only purpose is to help during assembly.

#### WARNING

Do not inhale the dust particles. Use of a mask is recommended.





# Badge Holder Plus

## Step 4: Apply Glue to Backpack

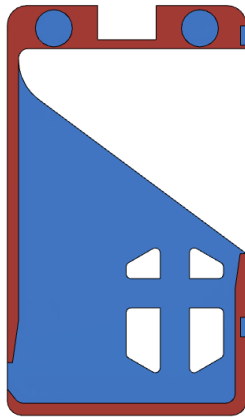
Apply glue (Super Glue, Epoxy, or MEK) to surfaces shown in red of the Backpack (shown below). If using MEK, it is easier to use a syringe or a brush as the applicator.

### WARNING

Do not inhale glue material vapors. Use of a respirator mask is recommended. Refer to its Material Safety Datasheet for more information.

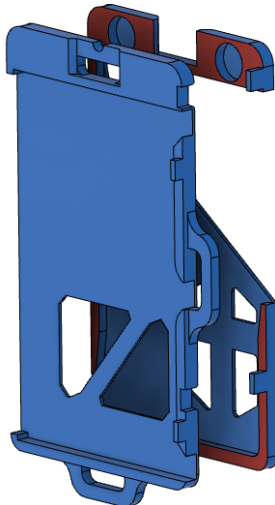
### WARNING

Do not let the glue material contact your skin. Use of gloves is recommended. Refer to its Material Safety Datasheet for more information.



## Step 5: Assemble Frame onto Backpack

Carefully place the Frame piece onto the Backpack that has glue applied. Use the alignment features for easier assembly and alignment. Clean any excess of glue.



## Step 6: Apply Glue to Frame

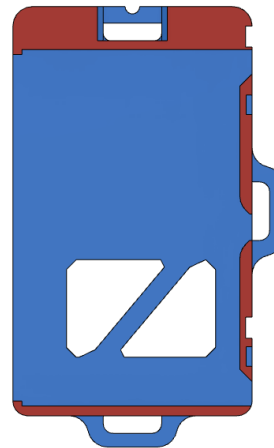
Apply glue (Super Glue, Epoxy, or MEK) to surfaces shown in red of the Frame (shown below).

### WARNING

Do not inhale glue material vapors. Use of a respirator mask is recommended. Refer to its Material Safety Datasheet for more information.

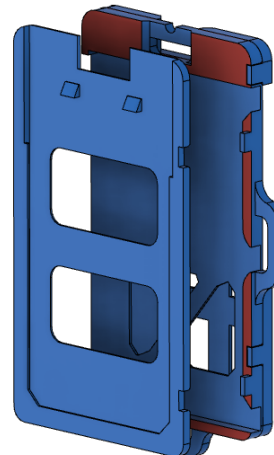
### WARNING

Do not let the glue material contact your skin. Use of gloves is recommended. Refer to its Material Safety Datasheet for more information.



## Step 7: Assemble Main onto Frame

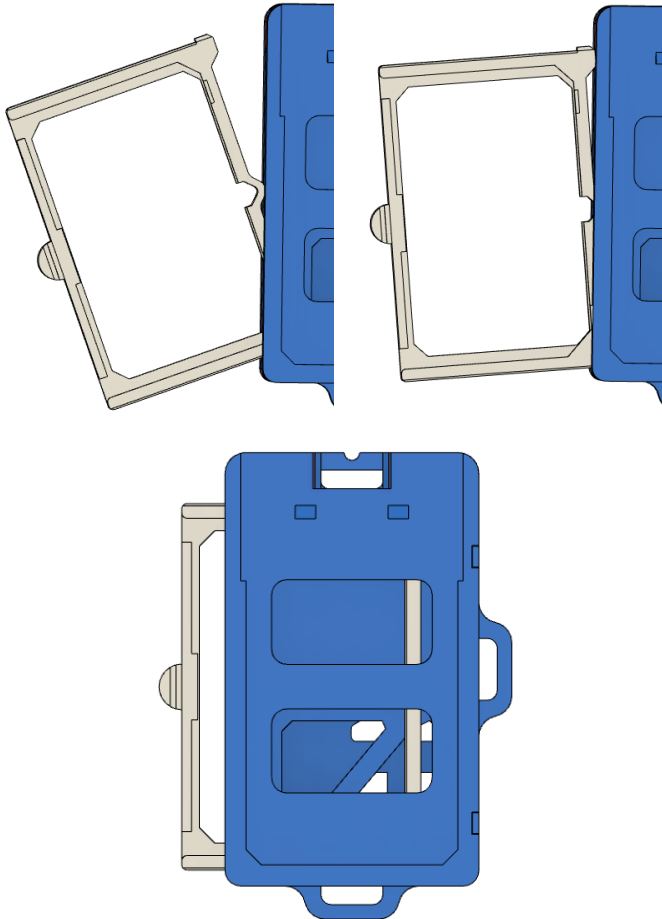
Carefully place the Main piece onto the Frame that has glue applied. Use the alignment features for easier assembly and alignment. Clean any excess of glue.



# Badge Holder Plus

## Step 8: Insert Secondary into Pocket

Carefully insert the Secondary piece into the pocket created by the Frame and the Main pieces. Start by inserting the bottom part of the Secondary piece. Since the back frame of the Secondary piece is curved to make it slightly flexible, carefully push the top part in and then insert the rest of the Secondary piece into the pocket.

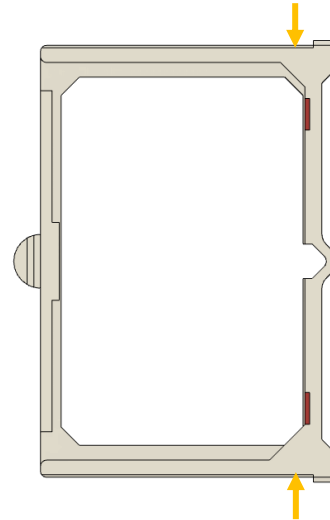


## Step 9: Verify Stiffness of Sliding Motion

While holding the badge holder, carefully slide the Secondary piece in and out. If it is too stiff, remove the Secondary piece by carefully pressing in the areas shown below. This will slightly bend the Secondary piece enough to clear the stops and be able to pull it out.

### CAUTION

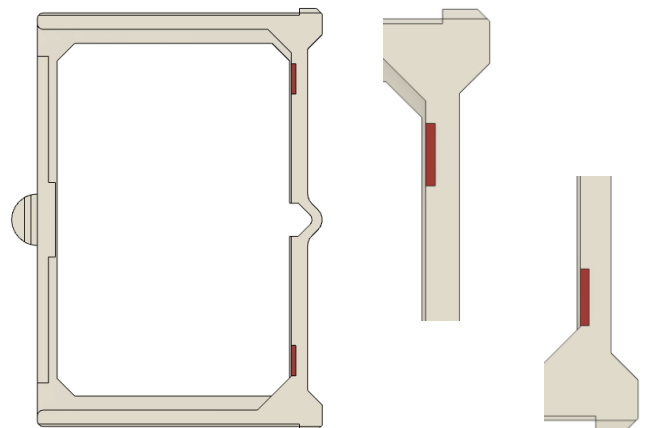
Do not press too hard, if you do you can break it and render the piece useless



After pulling out the Secondary piece, lightly sand the surfaces shown in red of the Secondary piece (shown below). This will reduce the friction of the Secondary piece against the Main piece. Then repeat Step 8. Repeat process until you achieve the desired stiffness.

### WARNING

Do not inhale the dust particles. Use of a mask is recommended.



# Badge Holder Plus

## Step 10: Apply Glue to RSA Holder

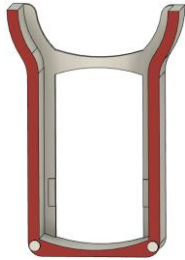
Apply glue (Super Glue, Epoxy, or MEK) to surfaces shown in red of the Backpack (shown below).

### WARNING

Do not inhale glue material vapors. Use of a respirator mask is recommended. Refer to its Material Safety Datasheet for more information.

### WARNING

Do not let the glue material contact your skin. Use of gloves is recommended. Refer to its Material Safety Datasheet for more information.



## Step 12: Assemble RSA Holder onto Backpack

Carefully place the RSA Holder piece onto the Backpack. Use the alignment features for easier assembly and alignment. Clean any excess of glue.

