



**DISCLAIMER:** This is the process, tools and supplies I used for my parts. I am not a professional painter or prop maker and make no claims this is the best way to do things. This worked for me so I am sharing. Use this guide at your own risk.







### Introduction

This is a step-by-step for finishing the panels you have printed. Feel free to try other methods for finishing and painting. You may find that other brand paints, for example, might work just fine. Or you have really clean 3D prints that require less sanding. I would recommend doing tests if you have not painted plastic parts before. Hope this guide helps.

### Safety tips

- Use a dust mask when sanding.
- Use safety goggles to protect from any flying debris and splattering glue.
- Be sure to paint in a well-ventilated area and use a respirator (not just a dust mask).
- Wear latex gloves when gluing with CA.

### Tools and supplies needed

What it looks like	What it's called	What you do with it
	<b>Dust mask</b>	Use when sanding.
	<b>Safety glasses</b>	Use with power tools and any other process where material can fly around. Also to protect eyes from CA splatter.
	<b>Respirator</b>	Use when painting in well ventilated area.
	<b>No powder Latex gloves</b>	Use when gluing with CA glue.
	<b>Stubby flat screwdriver</b>	Used as a de-burring tool on edges and scraping plastic remnants out of channels.
	<b>Large flat course file</b>	Files seams and any other really rough edges.



What it looks like	What it's called	What you do with it
	<b>Micro flat file</b>	Detail filing in openings and channels.
	<b>Micro triangle file</b>	Filing printed groves in panels.
	<b>Mini pen sander (optional)</b>	Sanding recessed areas. Can also be done by hand.
	<b>Sharpened dowel</b>	To remove painters tape and pressing tape into groves after trimming the mask openings.
	<b>Artists' palette knives</b>	For filling areas with putty.
	<b>X-Acto knife and #11 blades</b>	Trimming out masks for painting.
	<b>Scissors</b>	For cutting filament alignment pins and sandpaper. Note: Mark and use a separate, old set of scissors for sandpaper. Otherwise will dull edges.
	<b>Thumbail</b>	To make a visual cutting guide in the tape when masking the silver panels.
	<b>Insta-Cure Gap Filling CA Glue</b>	Glue parts together.


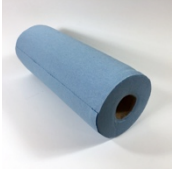



What it looks like	What it's called	What you do with it
	<b>Insta-Set Accelerator</b>	Instantly bonds CA glue.
	<b>Sanding block</b>	Sanding flat edges.
	<b>Orbital sander</b>	Sanding after Bondo.
	<b>150 grit round sandpaper (for sander)</b>	Only used if surface is really rough.
	<b>220 grit round sandpaper (for sander)</b>	Used after Bondo application.
	<b>220 grit sheet sandpaper</b>	After main sanding, post Bondo, to take down any tough areas. Fold to sand groves and channels.
	<b>320 grit sheet sandpaper</b>	Final sanding after primer/paint sanding.
	<b>400 grit sheet sandpaper</b>	Sanding whit paint after masking for silver panels prior to priming.
	<b>3M Scotch® Performance Masking Tape 233+</b>	To mask areas for silver highlights. Do not use the low-tack/delicate surface 3M blue tape as it leaves residue. The standard 3M blue tape <i>might</i> work, but I prefer the green tape.





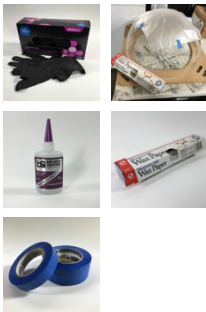
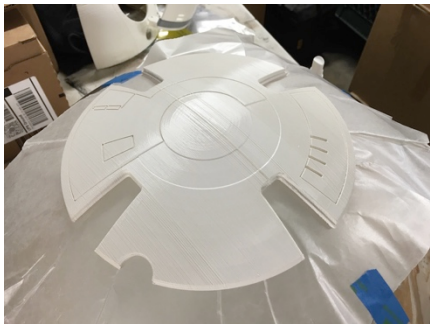



What it looks like	What it's called	What you do with it
	<b>3M blue painters tape</b>	General taping and holding parts. This is NOT the 3M low-tack.
	<b>3M 05095 Acryl-White Putty</b>	Filler for any gaps and rough surface areas.
	<b>Bondo 720 Easy Finish Gray Filler Aerosol Primer</b>	To fill the printing ridges.
	<b>Krylon Flat White ColorMaster Paint &amp; Primer</b>	To do final filling of ridges and final topcoat.
	<b>Krylon 1010A Premium Metallic Original Chrome</b>	For the masked silver panels.
	<b>SprayMax 3680067 2K Semi Matte Clear Coat Aerosol</b>	After all painting 2-part clear coat.
	<b>Transtar Autobody - 2 In 1 Primer Black Oxide - 4613</b>	Primer for masked silver panel areas.
	<b>Wax paper</b>	To protect hemi when gluing panels.
	<b>Hemisphere</b>	Provides correct curvature for gluing. Be sure to use the correct size sphere for your situation.






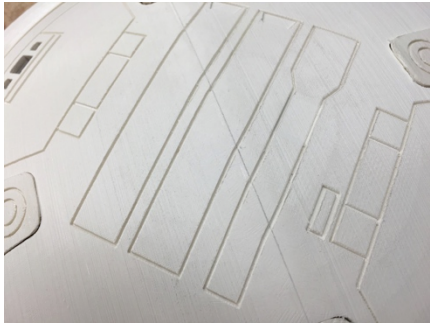






What it looks like	What it's called	What you do with it
	<b>1.75mm filament</b>	Used for alignment pins when joining panels.
	<b>Shop towels</b>	For general cleanup and wiping CA before accelerant.
	<b>Air compressor (optional)</b>	Clean-up panels after sanding. Canned air can work too.

### Step-by-step

Step	What to do	Tools used	What it looks like
<b>1</b>	Twirl X-Acto blade in the pins holes to open them up a bit. Test to make sure the 1.75mm filament fits in them on both sides.		No photo.
<b>2</b>	Hand sand and edges of panels that will be glued together with 220 grit paper and block.		No photo.
<b>3</b>	Put glue on end of filament and insert into hole. Cut of to size and wipe excess glue off. Make sure they are not too long. Test fit with other panel. Repeat for all the holes on one side of the panel.		
<b>4</b>	With the wax taped on the hemisphere, glue along the front, face side on the panel with the pins. Get some glue on the pins as well. Join two halves of the panels and place on the hemi.		
<b>5</b>	While holding them tight with one hand, place a bead of CA along the seam on the face side. Wipe with a shop towel, then spray the kicker on the seam. Hold for about 20 seconds and let sit for a couple minutes.		No photo.

























Step	What to do	Tools used	What it looks like
			
6	Take panel off hemi and flip over. Run a bead of CA down the inside seam. Wipe of excess with shop towel and hit with accelerant. Let glue dry for about 5-10 minutes before filing seam.		No photo.
7	File front seam until it is looking pretty flush with the large file. Also, file and sand with 220 grit paper the rough tab openings where there used to be the supports with the smaller flat file.		
8	File with the small "V" file and sand the groves with folded 220 grit paper where needed. In particular when the groove goes across the main seam. It doesn't have to be perfect. After filing, sanding, painting and weathering it will look fine.		
9	Using the micro pen sander, sand the recessed areas. Doesn't have to be perfect. Some hand sanding will be required as well. Use 220 grit paper.		
10	Using the filler, fill the seam if needed. The CA glue should have done the job of filling, but you may need to fill a bit more. Fill any major printing ridges if needed.		





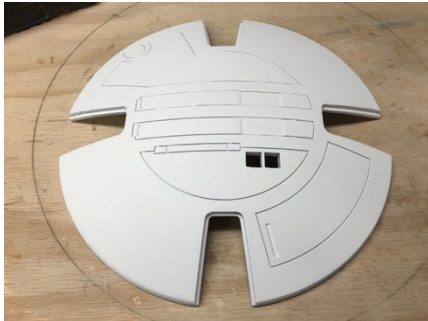



# BB8HOWTO

## Body Panel Finishing v2






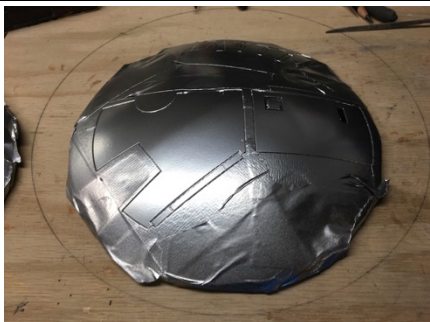

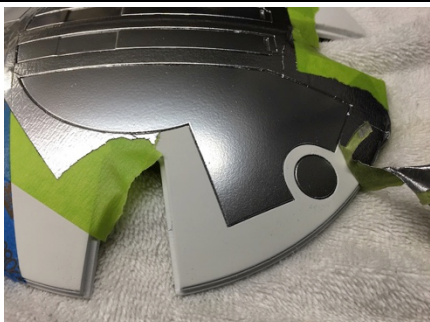
Step	What to do	Tools used	What it looks like
11	Spray 3 heavy coats of Bondo on all the panels. You can also use primer for a similar effect. Rotate as you spray so it gets into all the groves and edges evenly. Let dry for a few hours in good weather. I usually just wait overnight.	 	
12	Using the sander and 220 grit paper, sand the entire surface smooth. Try and get all the printing ridges as flat as possible. You may need to use your fingernail to feel the surface. But doesn't have to be perfect yet.	   	
13	File and sand the rough tab openings where the supports used to be. Yes again. Unless you have a great print in the first place.	 	No photo.
14	Using compresses air, dust it all off.	 	No photo.
15	Paint all the panels with 3 heavy coats of the flat white paint and primer. Rotate while painting like before.	 	
16	By hand, sand it all smooth with 320 grit paper. Hold up to light and make sure there are no printing ridges left to be seen.	 	No photo.
17	Using the micro pen sander, sand the recessed areas again. Doesn't have to be perfect. Some hand sanding may be required as well. Use 320 grit paper.	  	No photo.
18	Using compresses air, dust it all off.	 	No photo.



Step	What to do	Tools used	What it looks like
19	<p>Paint all the panels with 3 lighter coats of the flat white paint and primer. Rotate while painting like before. Let dry overnight.</p> <p>This concludes the white painting.</p>	 	  
20	<p>Mask for the silver panel details with the green painter's tape. Do not use 3M Blue low-tack/delicate surface. This leaves residue. The regular 3M Blue <i>might</i> be okay, but I always go to the green tape for this type of masking over existing paint.</p>		No photo.
21	<p>Using your thumbnail, run it along the grooves for the panels. Just enough to be able to see the grooved for cutting. Don't go too deep.</p>		





Step	What to do	Tools used	What it looks like
22	Cut out the silver panels details with X-Acto. Run the knife along the inside edge of the panel groove. This leaves a little extra tape to cover part of the inside of the groove. Not critical because the weathering will fill all the grooves anyway.		
23	Using a sharpened dowel, run it along the grooves where you just cut.		
24	By hand, lightly sand the areas that will be painted silver with 400 grit paper.		No photo.
25	Paint the panel details with black primer. Let dry for a few hours, assuming good temperature conditions. I usually wait overnight just to be safe.		
26	Paint the details with silver chrome paint. Let dry overnight.		
27	Remove the masking tape. Use a combination of and X-Acto blade and the sharpened dowel. Don't use you fingernails or it might scratch the white paint. Be careful not to touch the silver if you can. This will show fingerprints and dull the silver.  This completes the painting of the panels.	 	



Step What to do

Tools used

What it looks like

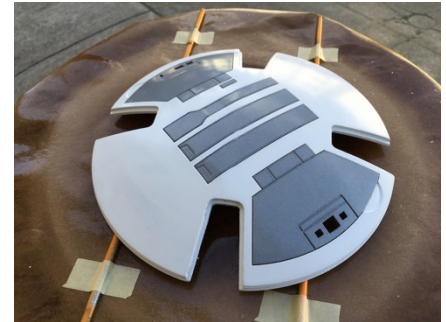


- 28** Clear coat the panels. Be sure to follow the directions on the 2-part clear coat carefully. You might want to have the rings completed at this stage to clear them at the same time. Once the 2-part clear is mixed, you only have 48 to use it. One can will be wasted just on the panels.



Do not use any other standard rattle can clear as it will turn the silver gray and lose all the metallic effect. However, keep in mind, that the 2-part clear will also take away some of the brightness and metallic nature of the silver. This is okay, as the chrome silver is too bright in the first place.

This step completes the panels.

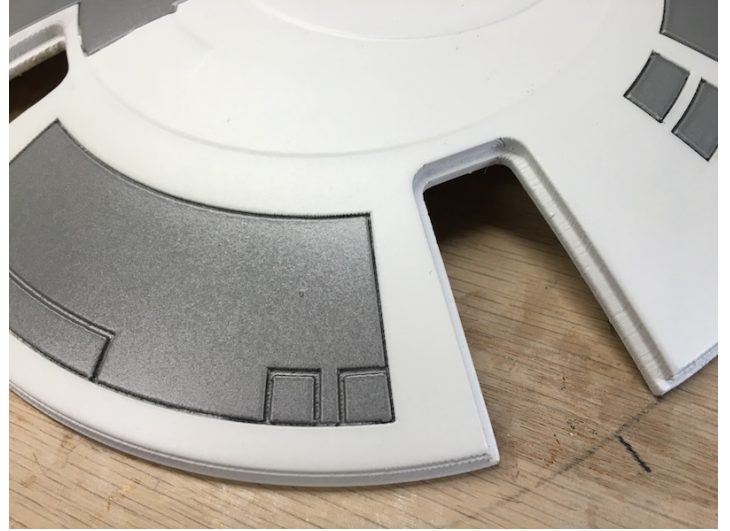
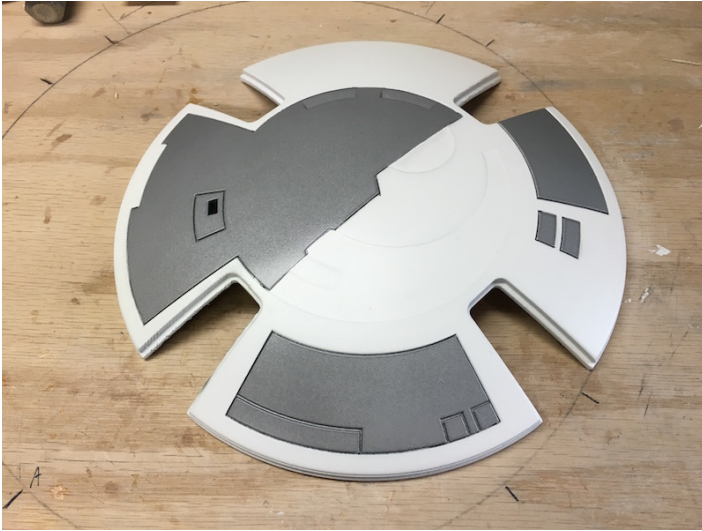


Before and after clear coat.





**The Finished Product**



Created by **Brian Munger**