

## Plastic Preparation for paint and Metalize finishes

Goal: Remove all seam lines and ejection pin marks to prepare plastic for paint and or metal finish.

These steps are basic modeling techniques to prepare plastic scale models for painting. The main focus is on applying a metal finish to the plastic. In order to get the desired results...

(Smooth clean finish free of blemishes and to look like a real metal part)

With metalized finishes every scratch or mistake on the plastic surface will be magnified. No place to hide those mistakes!

### Tools Needed but not limited to:

Various sanding tools that include.

400, 600 and 800 grit sand paper and sanding sticks

Flexi-File for curved surfaces

X-acto Knife with various blades (Basic craft tool set)

Black Pastel Pencil

Mr Surfacer 500 & Paint brush applicator

Body putty or Hobby putty

Basic tools to wash parts (dish soap and tooth brush)

Primmer Mr Surfacer 1200, tamiya White Primmer or favorite primmer (Must protect plastic)

Patients

1. Study the instructions and verify from a mock up of the model what parts will be in full view. This will save you a lot of time and un needed work.
2. Start off by removing the seam lines with whatever means works for you. A X-acto knife with a #11 blade works great using the back side of the blade to scrape away the seam lines. For round parts I like to use a Flexi-File. <http://www.flex-i-file.com/index.php> Be careful to rotate the part to avoid any flat spots to maintain a rounded surface.
3. Along the seam line you will see a ejection pin mark. On a flat part the ejection pin marks are quite noticeable. Again from step one it is critical to verify what ejection pin marks will show up in the final assembly. These have to be removed if you expect to enter to model in a contest or more important the real subject would not have these marks and left un attended the finish project would not look as good.

You have two options to remove a ejection pin mark, sand it away or fill it in with a body filler. It first depends if the ejection pin mark is concave or raised, as to how to address the problem area. Not to mention how accessible is the area.

TIP: For white plastic it is sometimes hard to see problem areas. Use a Pastel Black pencil or shavings and rub the part to better see the seam lines and ejection pin marks.

- A. Raised ejection pin marks can be sanded or scraped away. When scraping be sure the area does not show the scrape marks. Additional sanding with a 600 or even a 800 grit paper may be needed. When sanding try to use the finest grit you can. This can save on how deep the scratches are from the sand paper. Remember the goal is to not leave any trace of work that has been done on the plastic.

- B. A concave ejection pin mark is the most challenging to completely remove. If it is not too deep sanding can be done. Start off with a 400 grit paper (Dry) and finish off with a 600 grit. For those hard to reach places scraping with a flat X-acto knife blade is preferred. Onto those real deep marks... time to fill them in. We can use a putty that may shrink. And then sand it flush. Another approach is to fill the ejection pin mark with plastic! Mr Surfacer 500 is not a true putty but more a liquid plastic. Use a paint brush or other means to fill the area. Let it dry and sand flush with a fine grit paper 600 the 800 grit.
- Another technique is to use a punch set and sheet styrene plastic sheet. Use the punch set with the correct diameter to make a round styrene filler. Use a standard liquid glue to weld the styrene into place. Sand flush to finish.
4. Time to check your work! After all the final sanding is done you will need to wash the parts. Let air dry! Once dry apply a light coat of grey primer. Once dry inspect the parts for any problem areas. Again it is critical for metal finishes that all scratches or imperfections be removed. Paint will not hide the scratches. For problem areas re-do steps discussed and apply another light coat of primer followed by another inspection.

Final Notes:

Cannot stress enough how critical it is to ensure you have a smooth finish and take your time preparing the plastic. If you leave one scratch it will show up later and you will have to start all over again. Better to take your time and do an excellent job first. The application of the metalized paint will then be easy and you will get the results you desire, parts that truly look as if it were a metal not plastic part.

**Reference:**

Flex-I-File <http://www.flex-i-file.com/index.php>

Mr Surfacer <http://www.swannysmodels.com/Surfacer.html>

Micro Punch Set <http://www.micromark.com/MICRO-PUNCH-SET,8603.html>

X-Acto Set <http://www.xacto.com/Product/X5282>

Working with Alclad 2 [http://www.modelersite.com/Jun2002/English/Alclad2\\_Eng.htm](http://www.modelersite.com/Jun2002/English/Alclad2_Eng.htm)

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