

All About Canopies

By Glen Martin

Canopies made basic:

For years, I tried everything to mask and paint canopies. I tried masking tape, I tried black electrical tape. I even tried slopping the paint on and removing the excess over the canopy framing with a wooden tooth pick. Nothing worked for me until I tried bare metal foil. If you decide to do this, bare metal foil can be your friend but you must take several steps to make this work. The key to using this method is to take your time and have patience when doing it. If you rush the application, you are in trouble.

If you follow the following steps, canopies can be a very easy thing. This is by no means the be all to end all.

Prep work on the canopy:

1. Remove the canopies from the sprue tree carefully! Use a pair of sharp edge cutters, preferably sprue cutters.
2. Carefully trim any sprue nubs from the canopy with a sharp No.11 bladed x-acto knife.
3. Apply a piece of Tamiya tape next to the nub area to protect the surrounding clear plastic from abrasions and scratches.
4. Work in one motion, be careful not to sand too deeply.
5. If the canopy is showing scratches, Micro mark sells a set of 6 sanding pads that you can use to polish the plastic down to remove the scratches. These come in 2400, 3200, 4800, 6000, 8000 and 12000 grit. A good example of using these pads is on a canopy that has a seem right down the middles, such as a Hasegawa canopy.
6. When you are satisfied that the canopy is thoroughly prepared, spray the canopy with a non-abrasive cleaner such as plastic eye glass cleaner. Eye Glass cleaner is specially formulated not to cause the clear plastic to craze or scratch. You should use an eye glass cleaner cloth to gently buff and wipe off the cleaning fluid.
7. Let part air dry for 15 minutes. This will allow the part to be completely dry.
8. Pour Future floor polish into a clean, lint free container and dip the part in the future and count to ten. Pick a spot on a lint free table

space, preferably a finished table top and allow the part to dry. Drying time will take place over a 2 day period. I personally like to wait a minimum of 3 days for the polish to be rock hard. If you leave a thumb print at this stage, remove everything and soak the canopy in denatured alcohol to remove the future and repeat the process from the beginning. Denatured Alcohol EATS future! A sparkling canopy that has been dipped in future is needed to be successfully masked and painted.

9. When you lay the canopy on the table to dry, make sure you touch the canopy on something to remove the excess polish before you allow drying. You have about 15 seconds before the future starts to air dry so be quick about this part. I like to move the canopy around on the table top, pushing it along the edges of the frame with a clean instrument. This allows the canopy to "shed" excess polish in the process.
10. Cover the canopy with another lint free cover by placing it over the canopy, just like trapping a bug. In doing so, you keep dust from settling on the canopy for the next couple of days while it dries.

Masking the canopy:

- 1) When the canopy is dry, remove the canopy and apply a patch of bare metal foil to the canopy. Push the foil down on the entire canopy, frame in all. If you press with your finger tip and burnish the foil down with a q-tip, you will see the framing underneath.
- 2) Take your sharp No.11 blade and cut the canopy lines with your knife. Here is where the tricky part starts. You have to have nerves of steel to do this. Make sure that your knife is lined up with the framing and start cutting slowly. Cut the foil by dragging the knife in one direction. Angle and cut the corners but do not press too greatly down or you'll go through the plastic.
- 3) After you have completely cut all the frames, take you sharp pointed No.11 blade and lift from the corner and pull up the foil over the frame, leaving the clear part of the canopy covered. Do this for the whole canopy and remove one frame at a time.
- 4) Once you have done this, you are ready for painting.

Painting the canopy:

- 5) Determine the inside of the canopy framing to be painted. All canopy framing has a base inside framing color that typically matches the cockpit sidewall and floor coloring. If you don't do this, the framing will stick out like a sore thumb.
- 6) Tape over the inside of the canopy to block out overspray if any.
- 7) Paint the framing color
- 8) Paint the framing outside color.
- 9) Seal the canopy with a gloss coat or flat coat, whatever is needed to match the base finish requirements of your overall paint job.

The first time I used this method was on the Revell 1/48 scale A-6E intruder kit. I was fortunate enough to win 2nd place at the Atlanta Regional in either 2000 or 2001 as my memory is not correct on dates. This does work and will make your next model look like a winner. You still need to do your work on the model in other areas but the canopy is typically the first thing a judge will look at. If your canopy is sloppy, your model will be over looked.

Final Clean-up of canopy:

- 10) Once the canopy has been allowed to dry for a day, you can remove the clear part masking. Take your No.11 blade and starting in a corner, gently lift up the corner of the bare metal foil. Grab with a pair of needle tweezers to lift and remove the entire mask.
- 11) Remove the inside tape that you applied to block overspray.
- 12) Taking a product called Goo-Gone, A commercial goo degaussing agent, apply some to a Q-tip and "scrub" the clear part of the plastic. Bare Metal Foil leaves a sticky residue and you must remove this residue to complete the process. Just wipe and wipe until you remove the goo from the clear part. Don't worry, Goo-Gone will not hurt Acrylic paint or the Future coating on the plastic canopy.

Installation of Clear Parts

- 13) Always dry fit. If you don't, you are asking for trouble.
- 14) If you can, use Elmer's white glue. This stuff dries dead flat and will be very hard to see where you've applied it.
- 15) Use this stuff sparingly. A little will go a long way and will adhere pretty well. It's a tough bonding agent.
- 16) If you have gaps under the edge of the canopy and the aircraft framing, you can use this glue to fill in areas around the gaps. Allow to dry and then work at the dried glue with a moistened tissue or paint brush to wear down the glued area. This will allow you to work in a smoothed area that will look as if it's part of the aircraft skin.
- 17) Lightly touch up and paint and you're done!