

# Canopy Tips: Install, Care & Handling



### **General Instructions:**

Ok, you've got your canopy, now what? The info below should get you through the process pain and worry free.

Try to resist the urge to remove the protective film from the canopy. If you remove the film, more than likely one or more of the following will happen: (1) You, or a 'helper' will bang it with a tool. (2) Paint, or some other airborne chemical will get on it. (3) It will get dusty, and wiping the dust off will cause scratches. (4) Someone will will cut or grind something nearby, spraying metal chips onto the canopy

## Cutting

When it's time to cut the canopy, peel back the film at the edge and tape the edge down with clear packing tape to keep the plastic chips/dust out. Apply blue painters tape around the edge and use a sharpie and a flexible straight edge to lay out the cut lines. It's easy to see your line on the blue tape, even with safety goggles on. Make sure the canopy is in a relaxed position, not twisted or flexed. Make sure you don't cut too much off! Take your time. The best tool is a thin abrasive wheel on a 4" grinder. A 40 grit metal cutting wheel works great. When cutting, only go as deep as necessary; do not bury the wheel, it can bind and crack the canopy. DO NOT USE A SAW of any kind! You WILL crack the canopy. Make sure to support the piece you're cutting off; a long, dangling piece can crack the canopy when you're nearing the end of the cut. Once you're done cutting, dress the edge to remove stress risers.

## P Drilling

There are special drill bits for plexiglass, but they're not necessary. Use a standard bit modified by dulling the outside corner of the cutting tip. This keeps the bit from cracking the plastic as it exits the hole. There's a very good video by the EAA (Google: "EAA drilling holes in plexiglass") showing how to modify the bit. Make sure to practice on a piece of scrap to see if the bit exits smoothly. Be sure to use LIGHT pressure. Make sure the canopy is relaxed when you drill it; if it's forced into a bend while you drill, there is a risk of cracking. Use a wood backing to slow the drill bit exit. If you drill the canopy for fasteners, be sure to drill the holes oversize. The canopy is going to expand and contract at a different rate than the frame. You do not want the threaded part of the fastener to touch the canopy. Follow the kit manufacturers instructions if provided. If there is no specific direction, i.e. "Attach the canopy..." and screws are to be used, rubber bushings made from thin wall rubber hose will make a nice cushion between the edge of the hole and the fastener. DO NOT use LOC-TITE on fasteners near the acrylic, it will cause crazing.



#### Gluing

If you plan on gluing your canopy on, we strongly recommend using the Sikaflex system. There are many good articles on this subject. Just Google "aircraft sikaflex".



#### **Cleaning & Scratch Removal**

Try to avoid repeatedly cleaning your canopy during the attachment process. Every time you brush it off, you're creating small scratches. When it is time to clean it, first get the loose stuff off by giving it a shot of compressed air. Follow up with a lot of water and a non-abrasize mild soap and a new wash mitt. For stubborn substance such as grease or oil, you can use mineral spirits ONLY. Blow most of the water off with compressed air. Use soft cotton flannel for final drying. For bug removal 'Novus' line of cleaning products is excellent. Novus has excellent scratch removal products as well. Look for Novus 2 for light scratches and Novus 3 for heavier scratches. Follow the instructions for best results.

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