



Paint prep and procedures for your S-21 **Outbound**

*****Disclaimer *** RANS Designs Inc. is not responsible for any adhesion issues or paint failures due to misuse of products or procedures. This is to be used only as a guide. Refer to your specific product data sheets to help achieve the best finished product.**

Tip: - Properly prep metal for painting, sand all surfaces prior to riveting to avoid hard to reach areas and to ensure best adhesion of paint under all rivet heads.

The first step to prepping aluminum panels is to remove any decals, sharpie marks or printed ink writing with lacquer thinner or MEK. Inspect the panels for any dents, dings, gouges or scratches and any bad rivets and make the necessary repairs as needed.

Using a DA (dual action sander), prep aluminum surface for sanding with a 3m 7446 - Dark Grey pad, called a Blending Pad (180-220) 150 grit, this pad can be attached to a DA hook-it pad, by cutting the 3m Scotch Brite into a matching circle and applied to the backing pad. Using light pressure on the surface of the panel, this method is safe for going directly over rivets and not removing any material off the face of the rivet. Staying clear of rivets, you can also use a 180 grit DA sheet of paper to sand between rivet rows and any open areas. For any hard-to-reach places with sander, a folded over sheet of 180-320 sandpaper can be used along with Scotch Brite 7447 - Maroon pad, called General Purpose Hand - (320-400) 320 grit or 6444 - Brown pad, called Extra Duty Hand - (280-320) 240 grit

For plastic surfaces carefully sand with 320-600 grit DA sandpaper or Scotch Brite 7448 - Light Grey, called Ultra Fine Hand - (600-800) 800 grit or 6448 - Green, called Light Duty Hand Pad - (600) 600 grit

After panels and surfaces have been prepped, blow off and wipe down with solvent based cleaner OMNI MX 190 or One Choice SX330 or compatible brand of Wax and Grease Remover and a Lint free cloth, followed by another round of Water based wax and grease remover, PPG One choice SWX350 or KLEANSTRIP PREP-ALL water-based panel wipe

Prepare for paint. After everything has been blown off and wiped down, use a tack cloth, Premium Tack Cloths - Bond Crystal Brand, to wipe all surfaces to remove any dust, dirt and particles. This same tack cloth can be used between coats of etch, sealer, and



base coat and before single stage paint or clear coat is applied. If you use the same tack cloth, keep it in a clean area.

If any repairs are needed, use a body filler or glazing putty to repair dents and dings. Prime using PPG OMNI MP282, High Build 2K Primer-Surfacer. Refer to the PDS (product data sheet) for the procedure, followed by the cleaning steps above prior to moving forward.

All the plastic surfaces must be prepped with an adhesion promoter such as KLEAN-STRIP Bulldog Adhesion Promoter or other comparable brands.

At this time all metal surfaces can be sprayed with an etching primer, such as PPG One Choice SX1071 ECOBASE 5.5 Etch Primer. Mixed 1:1 with SX1072 Etch primer catalyst. A two-coat process with proper dry times. Follow the PDS.

Next, using a sealer such as PPG OMNI MP23X Series 2K Urethane Sealers, available in white, gray and dark gray. This two part product can be used on top of the etching primer listed above. Follow the PDS.

Sealer can be top coated with:

PPG Omni.

MTK Acrylic Urethane Single Stage

MAE Acrylic Enamel

MAE Acrylic Enamel with Hardener

MBC Acrylic Basecoat

MBP Omni Plus Acrylic Urethane Basecoat (used in our facility)

Follow any PDS for applicable paints.

Use the tack cloth listed above between coats and before single stage or clear coat to achieve best results and finish.

If you use a base coat system you can now clear your aircraft or parts using Omni MC270 Production Clear or other compatible clear coats. Follow the PDS.