



## Surface Preparation



## Post Paint Stripper Procedure (Chemical Strippers)

Surface pretreatment is an essential part of the painting process.

1. Remove all stripper residues by rinsing surface with copious amounts of water (preferably hot water).
2. Wash surface with an alkaline cleaner, diluted as specified by the manufacturer, using brushes and ScotchBrite® Pads, Ultra Fine No. 7448 Gray or Coarse No. 7447. **Note:** For extra heavy soil or residue removal use Ajax® or equivalent as received with soft brushes. Seal all seams and make composite repairs at this time.
3. If more than 48 hours has elapsed since alkaline cleaning, or heavy maintenance operations have taken place that soil the exterior aircraft skin, repeat the alkaline cleaning step.
4. Etch aluminum aircraft skins using one of the following methods:
  - a) **Power Abrade** (recommended).  
Power wet abrade or hand abrade using abrasive pads, such as ScotchBrite® or equivalent, and water. Rinse with copious quantities of water. Check for water break free surface in accordance with test outlined in Step 5.
  - or**
  - b) **Acid Brightening** (Optional).  
Apply a phosphoric acid based brightener per the manufacturer's instructions. Start at the bottom of the aircraft, brightening one section at a time. Agitate the acid solution with ScotchBrite® pads or equivalent, then rinse thoroughly with water. Do not allow the acid to dry on the surface. A dwell time of 5-10 minutes is usually sufficient to adequately prepare the aircraft skin. After all sections of the aircraft have been treated, re-rinse the entire surface to ensure complete removal of all acid residues. Check for a water break free surface in accordance with test outlined in Step 5.



Note:  
**Caution**

**Do not allow acid to dry on surface.**

**Some brighteners will produce smut and then require a subsequent de-smutting step.**



## Surface Preparation

*continued*



5. **Water Break Free Test:** During the final rinse, water should form a continuous film over the aircraft surface. If the water forms droplets or "flashes out" suddenly over a large area, the surface has failed the water break test. If the surface fails the water break test, repeat Steps 2 and 4 until a water break free surface is obtained.
6. **Post Etch Treatment:** Treat the exterior aluminum surfaces using one of the two methods below:

**WARNING:** This step is required after Step 4b, "Acid Brightening". Applying primer directly over an acid brightened surface may result in adhesion failures.

- a. Apply chromate conversion coating per manufacturer's instructions to produce a coating that meets the requirements of MIL-C-5541 and MIL-C-81706.
  - or**
  - b. Alkaline clean in accordance with Step 2.
7. Allow aircraft surfaces to dry. Aircraft is now ready for primer application.

**Note:** If surface has been allowed to collect dust or other contaminants, wipe with Methyl Ethyl Ketone (MEK), TR-15, or T0002, using clean rags or rumple cloth.



### Note

If the time between cleaning and primer application exceeds 12 hours, solvent clean the aircraft surface using TR-15, or T0002 or other suitable cleaning solvent. Use clean cotton rags. Rags should not be dipped into solvent cans, as this will contaminate the clean solvent. Either pour solvent onto the rag or, using an atomizing spray bottle, spray solvent directly onto the aircraft surface and wipe dry. Change rags frequently.

**Note:** Primer should be applied within 48 hours of pre-treatment cleaning, or application of MIL-C-5541 chemical conversion coating (step 6a).



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## Safety Precautions

Comply with all local safety, disposal and transportation regulations. Check the Material Safety Data Sheet (MSDS) and label of the individual products carefully before using the products. The MSDSs are available on request.

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