

One of the benefits of working with resins is the possibility to renew a panel after periods of use. The following guidelines will help to repair light scratches if present on 3form panels. It may be possible to remove heavier scratches from 3form Varia™, Chroma, *ecoglass* PC, Alabaster and PEP products with patent or polished finishes only. The general process for repairing all 3form products is with sanding and polishing.

Light scratches may be removed from *Varia* panels with the following finishes; sandstone, stucco, topo, and pixel. When removing light scratches it is extremely important to use a foam pad to keep from ruining the surface texture.

This process will be most easily accomplished by a person trained in the automotive paint industry who uses the 3M Perfect-It™ 3000 paint finishing system. It may be possible to refinish these panels with different types of polishes, but these guidelines were developed specifically for use with the *3M Perfect-It* system.

## RENEWING 3FORM PANELS:

### Sanding/Polishing Process

#### 3000 GRIT SANDPAPER (USE ON GLOSS/PATENT SURFACES ONLY)

To remove light scratches from a 3form panel use 3M Trizact™ Hookit™ II Foam Discs (02075) with a *3M Hookit II* Painter's Disk Pad (05251). 3000-grit sand paper will effectively remove the scratches from your 3form panel. Spray the panel surface with clean water before using the sander. Use just enough water to dampen the surface and the sanding pad. Use 40-50 psi for this sanding process. Depending on the depth of scratches it may be more efficient to use 1500-grit sand paper. Use the sandpaper until all of the scratches have been removed or all of the 1500 grit scratches have been removed. The surface of the panel should look semi-polished.

#### RUBBING COMPOUND

Following sanding use *3M Perfect-it* Extra Cut Rubbing Compound (06060) with a *3M Superbuff™ III* Buffing pad (05703). Apply a small amount of compound to the surface of panel before using the wool pad. Apply medium pressure to remove the scratches from the sanding process. When the scratches have been removed, use light pressure and work the residual compound back into the pad. Use a clean soft cloth to remove any remaining compound. Inspect the surface for sanding scratches, and repeat above process if necessary. Only some compounding swirls will still be visible.

#### SWIRL MARK REMOVER

The next step is to use *3M Perfect-It 3000* Swirl Mark Remover (06064) with the *3M Perfect-It* Foam Polishing Pad. (05725) Apply a small amount of compound to the surface of panel before using the wool pad. Apply medium pressure to remove the swirl marks. Once the swirl marks have been removed, apply light pressure and a head speed of 1800 rpm to polish. Use a clean soft cloth to remove any remaining polish or residue. The surface of the panels should be polished and swirl marks should be nearly eliminated.

#### FINAL POLISH

If desired, the panels can be polished further with *3M Perfect-It 3000* Ultrafina SE compound(06068). Use in conjunction with the blue-colored *3M Perfect-It* Ultrafina foam polishing pad (05733). This will remove any remaining swirl marks and will bring the panel to its highest shine and clarity.

Mechanical buffing causes frictional heating that can burn or melt resin-based panels. Use caution to make sure that you are not damaging the panel. Always use clean, soft cloths when cleaning these panels as squeegees can mar or scratch the material. *3M* has a video of this polishing process on their website, <http://>

www.3m.com/automotive. For any additional questions call 801-649-2613. If unsure about this process, test a scrap piece of material first

## Flame Polishing Process

### MATERIALS NEEDED

Grainger products

Master Micro-torch - 1WG61

Refill canister - 3W799

### INSTRUCTIONS (ONLY FOR USE ON VARIA WITH PATENT FINISH OR ON EDGES)

To prepare for edges for flame polishing, sand away all machine saw marks using a 150 grit sandpaper. Once machine marks are removed sand with 220-grit paper, and finally 400-grit sandpaper. This can be done by hand or with a dual action (DA) polisher.

To flame polish, use a butane torch. Turn flame to lowest setting. Keep flame 1-3" away from the material. Use a quick sweeping motion. Always keep the flame in motion. If you keep the flame concentrated on one spot for a prolonged period of time burning, melting or bubbling may occur. Continue to sweep the flame across the surface until the material is polished. Practice on a scrap piece of material before working on finished panels.