# **Clear Seas Vinyl Scratch Removal Kit Instructions**

# **Tools Required:**

- (1) Drill (rated at approximately 1000 rpm) or power buffer
- (1) Spray bottle approximately 10 ounce capacity (for clean water)

#### **List of Contents:**

- (1) 4.75 inch diameter Back-up pad for a drill or power buffer
- (1) TufBuf Polishing Pad
- (1) White Sponge Pad(1) 8 ounce Micro-Gloss #5(1) 8 ounce Final Finish
- (1) Flannel Cloths (1) Instructions

### **Preparing for the Best Results:**

Lay the vinyl piece flat on a soft, clean surface. Always keep the work surface and restoral materials clean. Begin by flushing the vinyl with water to remove any surface dirt. Contamination can causes scratches.

Read the instructions carefully and review the kit contents before starting.

#### The Process:

- 1. Attach the back-up pad to the drill or power buffer, then attach the TufBuf to the back-up pad. Apply approximately 1 tablespoon of Micro-Gloss #5 to the surface and spritz with water. Start the drill or buffer **after** contact with the surface. Buff the surface for 2-4 minutes per square foot, using an even sweeping motion. At regular intervals, sweep perpendicularly to the previous motion in order to minimize the chance of distortion. Keep the vinyl damp while polishing in order to avoid heat generation and scratching. Wipe surface clean with dry, flannel cloth and check for scratches by visually inspecting the surface. If damage is still visible repeat step 1.... **Using Micro-Gloss**.
- 2. Attach the white sponge to the back-up pad. Apply approximately 1 tablespoon of Final Finish to the surface. Start the drill **after** contact with the surface. Buff the surface 2-4 minutes per square foot, using an even sweeping motion. At regular intervals, sweep perpendicularly to the previous motion in order to minimize the chance of distortion. Wipe surface clean with dry flannel.
- 3. Clean sponge, TufBuf pad and flannel cloths with mild detergent, rinse and air dry for future use.
- 4. Use Micro-Gloss #5 and Final Finish by hand as a cleaner for periodic maintenance.



# MICRO-SURFACE

# LIQUIDS



# MICRO-GLOSS™

A general purpose water-based liquid abrasive which uses a 1-micron aluminum oxide abrasive crystal to achieve a fine finish on acrylics, plastics, polycarbonate, fiberglass, wood, silver, gold, copper, brass paint urethanes, laquers, and polyesters to name a few. This unique liquid removes hairline scratches, haziness, and halos untouched by other products. Contains no fillers or wax that could cause yellowing. Remove scratches and imperfections with Micro-Gloss and buff back to optical clarity. Micro-Gloss will remove a 4000 Micro-Mesh or 1500 CAMI scratch pattern. Approved as safe for use on inside and outside surfaces of f-16 aircraft. Approved for use by Boeing, Spec D6-52021. Use by hand or machine with a TufBuf lambswool polishing pad or foam sponge pad. Available in 1 oz, 2 oz, 4 oz, 8oz, or gallon containers. NSN# 5350-01-334-8997.

#### MICRO-GLOSS#5

The same as above, but with a 5 micron aluminum oxide crystal. Use when a more aggressive cutting action is required. Follow up with regular Micro-Gloss. Available in 1 oz, 2 oz, 4 oz, 8 oz, and gallon containers.

#### MICRO-FINISH

The final step to remove any residual haze. Use this special polish to brighten and give a pristeen finish. Available in 2oz, 4 oz, 8oz, and gallon containers.

#### FINAL FINISH

A soft vinyl conditioner which combines a high-quality carnuba wax with a soft cutting liquid abrasive. Use as the final step on vinyl convertible windows and boat side curtains. Available in 2oz, 4oz, 8oz, and gallon containers.

# **ANTI-STATIC CREME (Not Pictured)**

This liquid contains a protectant and is designed to remove static electricity that could cause dirt and dust to be drawn back to your newly polished surface.

#### **Tools to Use With Our Mechanical Kits**

#### WE DO NOT INCLUDE POWER TOOLS WITH OUR KITS

For our "mechanical" kits: Heavy Damage Removal Kit, Light Damage Removal Kit, Maintenance Kit, Polycarbonate Kit, Leading Edge Kit, Clearseas Acrylic Kit and Clearseas Vinyl Kit, you will need power tools that are not sold with our kits. Not including tools allows us to keep the price of the kits to a minimum.

#### TOOLS FOR SANDING

**For best results,** we suggest using a RANDOM ORBITAL sander for the sanding portion of the process. The exception to this rule is when using our Leading Edge Kit - for this kit, you will only use a rotary polishing buffer.

RANDOM ORBITAL sanders are also know as DUAL ACTION sanders. The sanding head spins in a random pattern making blending easier. These are also referred to as "finishing" sanders.

The random orbital that you choose to use needs to be rated at approximately 10000 RPMs and needs to have variable speed options. You will actually adjust the sander down in speed, approximately half way or until you can easily control it with one hand. You will need the 10000 RPMs for power, but the lower variable speed for control as you work.



# TOOLS FOR BUFFING

The buffing portion of the restoral process is performed using a right angle polisher. This is also known as a rotary buffer. This is the same type of buffer you would use on your automobile to buff the clear coat paint. The pad spins in a stationary orbit.

The buffer that you choose to use should be rated at approximately 2500 RPMs. It is important to keep in this range so that you have enough power to do the job, but not so high of RPMs that you would generate a great deal of heat. It is easier to generate heat with a polisher than with a sander. Heat generation can cause distortion, orange peel, and burning. This is why it is important to always use lubrication, preferably water, when possible.

Unlike with the sanding portion of the process, for most jobs, the standard back-up pad that comes with your buffer will be sufficient to do the job. If you're working on a particularly soft material or are having problems reaching a high gloss finish, then attach an interface pad onto your standard backup pad to give yourself the necessary added cushioning. Most industrial supply stores will carry inexpensive, 5" interface pads. Remember to purchase one that is "Loop to Hook" meaning, the loop on one side of the interface pad connects to the hook facing of your standard buffer and the hook side of the interface will be what you attach your loop backed polishing pads to.



Right Angle Polisher with polishing pads.

All of our kits are supplied with accessories to fit 5" tools. All the Micro- Mesh discs and polishing pads are supplied with LOOP backing so you can get the most value from each kit. All discs and pads can be washed and used over and over.

Sanders and buffers are available as both pneumatic (air) and electric. \*\*We always caution people when using electric tools on wet surfaces.

#### **BACKUP PADS**

Your sander and/or buffer come with a standard "backup pad" when you purchase it. This back-up pad is what you attach the Micro-Mesh sanding disc or polishing pad to. The back-up pad is sometimes referred to as a "backing plate" or "sanding pad", depending on who you speak with. We refer to it as a "backup pad." This pad is made of foam and has either a "hook" surface or "smooth" surface on which to apply the sanding discs or polishing pads. If you have a back-up pad with "hook" you will need to attach LOOP backed sanding discs. If you have a back-up pad with a "smooth" face, you would attach PSA (pressure sensitive adhesive) backed discs.

The foam in the backup pad on most sanders and buffers that come standard on your tool are usually medium to hard in density. Our mechanical kits all feature our specially made extra soft back-up pad. This back-up pad will easily conform to curvatures and allow you to

polish your part to a high gloss finish. The harder the backup pad the more in contact you will be with the part you are finishing and provide a coarser cutting action. This is not what you need when polishing softer material to a high gloss finish. The softer the back-up pad, the easier it will polish.

The back-up pad included with our kit has a male shank with a 5/16" x 24 thread count. There are many good sanders on the market today that will fit this back-up pad. We do not recommend one sander over another.

#### When and IF to Use a Cordless Drill

If you're uncomfortable using power tools or do not have access to air or electricity hookup, you can use a cordless drill for both the sanding and buffing portions of our restoral process, with satisfactory results.

The exception to this rule would be when using our HEAVY DAMAGE REMOVAL KIT. Any sanding done coarser than with our MICRO-MESH 1500 requires that you use a random orbital sander. A cordless drill simply does not have the power you need for coarse sanding.

We recommend that you have a cordless drill that is completely charged and an extra battery set to go prior to beginning your work. We also caution that when in use, keep the drill parrallel to the workpiece at all times and adjust the speed so that the drill provides a smooth action. Any "skipping" or "jumping" on the work piece will cause "chatter" marks.

The Light Damage Removal, Maintenace and Clearseas Vinyl and Acrylic kits are available with a special, extra soft back-up pad that is on a mandrell that will fit into your cordless drill. This is provided in the kit. You will have to choose the Light Damage Removal DRILL Kit in order to get this back-up pad. If you order the Light Damage Removal Kit - you will receive a back-up pad for a random orbital sander. The same is true for the Maintenance Kit. Make sure and look at the back-up pad in the picture of the kit you are purchasing to make sure you're getting the correct one.Â

