SUCCESSFUL BUFFING WITH ROTARY TOOLS

Types of Rotary Tools. The final polishing process for most applications will require using a rotary tool with a lambswool cutting pad or foam finishing pad. Rotary tools spin in a single circular motion at higher rates of speed than a random orbital sander.

You can use either air driven pneumatic rotary tools or electric. Pneumatic tools are lighter in weight but do require an air source. Because of their light weight they are preferred by professionals who do large frequent polishing jobs. Electric rotary tools are heavier, but more portable. Both types provide a good finish and are acceptable for use with our products.

Cordless Drills. If using a cordless drill for this process, make certain that it is well charged and have a back-up battery charged and available. We encourage you, if you are inexperienced, to practice using the drill to buff an old surface prior to using it on the actual item to be polished. This will get you familiarized with the action of the tool so that you can avoid possible skipping, grabbing and jumping of the tool across the surface. The more you practice with the tool, the easier this will become and the better chance you will have of a successful outcome.

Rotary Speed and Action. We recommend using a rotary tool rated around 1200 rpms. Keep in mind that the buffer head of the tool's continual spinning over a single point on the work surface causes both heat and friction. The heat and friction, in turn cause a burnishing effect that enables it to smooth the finish, removing defects such as swirl and orange peel. The down side to this is that you can also quickly damage a finish if not using the tool correctly.

Proper Preparation. Prepare the surface by spritzing first with water. It is helpful to spritz your buffing pad with water as well. This will help them absorb the compounds during the process. We recommend that you make contact with the work surface before turning the tool on.

Technique. Work in a brightly lit area but not in the sun. Always keep the tool parallel to the work piece. Make sure not to dip or slant the tool into the surface at an angle. Be very careful not to polish sharp edges that could lessen pad life or loosened areas that could fly off and hit yourself or someone else.

Use long, sweeping, back and forth motions and with light pressure, guide the tool. Let the tool do the work. Do not apply more pressure than necessary to guide the tool. Excessive pressure will result in smearing, orange peel and distortion. Make sure you keep the tool moving so that you are not concentrating on a specific area long enough to burn your surface.

Do not allow compounds to dry onto the surface as you are buffing. This could cause scratching on delicate surfaces. If you notice that the compound is beginning to dry, stop and mist the surface with water, then continue on.

The Importance of Cleanliness. This may not seem important but is vital. If you use several different compounds and have not thoroughly rinsed a pad prior to using the next compound, you could quickly ruin your

finish by causing random scratches from surface debris or left over compound on the pad. Keep all wiping materials, equipment and work areas clean.

BufTB
5/1/09

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 hook-up, 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