

# Sanding Tips

## Avoiding sanding marks or "sand scratches"

Sanding of undercoats or the finish sanding of topcoats and clearcoats should be done in one direction. In other words, sand with the "length" of the vehicle. There are exceptions, most notably the "cross block" sanding of primer surfacers to insure a level surface. Even then the final strokes should go lengthwise. If a surface is sanded in circles or across the "length" of the panel sanding marks will be more visible. If buffing a topcoat or clear coat, the scratches will be harder to remove. When machine sanding with a DA the use of a "soft" interface pad allows the technician to sand with more consistency on flat and contoured areas. This consistency translate into a smoother, more uniformly sanded surfaces.

## Scotch-Brite™ Pads

The 3M™ abrasive pad is constructed of an expanded nylon type material which is impregnated with abrasives. The scratch left by the pad can vary in depth according to the abrasive used in the pad's construction. The scratches left are more random than those left by sandpaper because of the "open" type construction of the pad. The chart below lists the three most popular types of pads used in collision centers and their general usage:

Pad Type	Abrasive Used	Usage
Std. Red pads or Maroon Job Size pads	Aluminum Oxide 360-400 grit	Under hoods, new parts, aggressive cleaning.
Std. Gray pads or Gray Job Size pads	Silicon carbide 800-1000 grit	Lightly scuffing blend areas, prepping plas- tic parts for paint.
Std. White pads or Gold Job Size pads	Aluminum Oxide 1200-1500 grite	Light scuffing or scouring, general light duty clean up.

Simple Do's and Don'ts for Sanding Operations:

### DO

- ▶ Clean the area to be sanded thoroughly before and after sanding. Don't forget wax and grease removers!
- ▶ Use a hand pad-provides a uniform finish. Use a soffhand or sponge pad for very fine sanding.
- ▶ Tear or cut abrasive sheets evenly-rough edges can gouge the surface.
- ▶ Adjust two grades finer when going from dry to wet sanding. Wet sanding is more aggressive.
- ▶ Use clean water when wet sanding
- ▶ Adjust one grade finer when going from machine sanding to hand sanding.

- ▶ Use a guide coat to prevent oversanding. This step helps the technician avoid re-priming work and identifies low spots or areas that were missed during the sanding operation.
- ▶ When using a dual action sander (DA), sand at a low, flat angle.
- ▶ Turn down the speed on a dual action sander (DA) for more control next to body lines or in tight areas.

**DON'T**

- ▶ Use high pressure and speed, it won't save time! This can often cause damage that means re-work!
- ▶ Skip more than three grits finer when sanding. Too big a jump in "cut" takes extra time and effort to correct.
- ▶ Use a hard, inflexible DA pad, they can cause gouging and that means re-work.
- ▶ Use sanding lubricants (dirty water from the wet sanding bucket, etc) that may contaminate the surface.
- ▶ Machine wet sand without enough water. The water keeps the sandpaper clean of sanding residue and helps ensure an evenly abraded surface!

**Final Sanding Recommendations**

The following grits are recommended for final sanding before applying sealers, Concept DCC & CLV Single Stage color, Deltron DBU or DBC Basecoats.

**Wet sanding by hand**

P 600 grit wet	Excellent
P 500 grit wet	Very Good

**Wet sanding by machine**

P 600 grit wet	Excellent
P 500 grit wet	Very Good
P400 grit wet	Good

**Dry sanding by hand**

P 500 grit Gold & Imperial Fre-cut paper	Excellent
P 400 grit Gold & Imperial Fre-cut paper	Very Good

**Dry sanding by machine(DA)**

P 400 grit Gold & Imperial Fre-cut paper	Excellent
P 360 grit Gold & Imperial Fre-cut paper	Very Good

**Notes:**

- ▶ The grits listed here are based on test results with 3M™ brand sandpaper and discs. Other sandpaper manufacturers provide excellent abrasive products as well. Check with your sandpaper supplier to ensure you are using the correct equivalent to the grits listed here.
- ▶ A soft, thick, tapered DA pad or pad "system" is preferred over a thin, hard pad. These soft pads help cushion the pressure that machine sanding produces.
- ▶ These sanding grit recommendations have been tested under the subject topcoat systems and found to be acceptable. Any deviation in these sanding grits, the reduction of the color, or the number of coats of material applied may result in a less than satisfactory appearance.