DuraCoat Instructions

Always wear protective gloves, eyewear, and an approved respirator. Be in a well-ventilated area. Read all warnings and first aid information, and read and follow all instructions when using any DuraCoat® products.

PREPARING THE SURFACE

Disassemble the parts as far as you are comfortable with. Clean/degrease all parts. We recommend using TruStrip or NST, available from DuraCoat. Clean the surface with immersion in TruStrip or by using the TruStrip aerosol within an inch of the surface to "power wash" it. People have used brake cleaner or other cleaners successfully, just as long as the cleaner/degreaser does not leave a lubricating film or residue.

If putting clear coats over blued or stainless surfaces, simply clean/degrease, but do NOT use an abrasive pad. Use a toothbrush and several rags until you have removed all dirt/grease from your surface.

If you are planning to coat a parkerized surface, clean by immersion or by using the TruStrip aerosol. Do not clean it with any abrasive pad. Avoid use of rags to prevent lint in your finish. DuraCoat will "soak" into the parkerized surface for excellent adhesion.

If you are planning on coating bare wood – sand lightly with 220 grit sandpaper only. Wood with oil finish needs to be cleansed by submersion in a degreaser or TruStrip in aerosol, cleaning with several white rags until rags are clean. Sand with 440 grit sandpaper. Wood with a varnish or lacquer finish, degrease with caution. Test the surface to ensure that the TruStrip degreaser does not eat it. If this happens, use rubbing alcohol to degrease. Then sand lightly with 440 grit sandpaper.

Next, we recommend blasting with aluminum oxide, sand as a second choice. **Blasting is not required.** Glass bead blasting is not recommended as this tends to polish surfaces. If you do not have access to blasting equipment, simply "rough up" the surfaces with a scotch brite pad as you are cleaning/degreasing. This "roughing up" will then create a surface that will improve the DuraCoat adhesion. Again, do NOT rough up any parkerized surfaces, or any surfaces you are going to clear coat (stainless or blued). If you blast surfaces, do not degrease again. Simply blow the dust off the surface. Your surfaces are now ready for coating. At this point you may parkerize the surface before applying DuraCoat or immediately begin coating.

Plug or mask areas you don't wish to coat. Both plugs and masking tape are available from DuraCoat. Once your preparation is complete, begin the finishing process by thoroughly mixing your DuraCoat. Shake the container for 3-4 minutes after hearing the

rattling ball. DuraCoat must be mixed with DuraCoat hardener at the ratio of 12 parts DuraCoat to 1 part DuraCoat hardener. Adding more hardener makes a glossier finish. Less hardener makes a flatter finish.
Optimum DuraCoat Hardener Ratio: 1:12 (1 part hardener to 12 parts DuraCoat)

The best way to combine hardener with DuraCoat using measuring spoons is:
4 tablespoons DuraCoat to 1 teaspoon hardener
(or a fraction of, like) 2 tablespoons DuraCoat to ½ teaspoon hardener.

NOTE: Once DuraCoat is mixed with Hardener, there is only a 6-8 hour pot life.

COATING THE SURFACE

DuraCoat can be applied by airbrush, conventional automotive spray gun, HVLP systems or airless paint sprayer. The best temperature for applying DuraCoat is 68-72 degrees Fahrenheit. The parts you are coating should be acclimated to the temperature of the room you are spraying in. Fill your sprayer and you're ready to begin.
Test your spray gun by coating a test piece of metal or plastic.

DuraCoat is ready to spray once mixed as directed. However, there may be times when you need to thin it because of weather or if your spray equipment needs it, such as an airbrush. YOU MUST USE ONLY DURACOAT REDUCER. Thinning DuraCoat with any other product will compromise the coating by creating a chemical imbalance and therefore will not perform as advertised.

If your sprayer does not spray DuraCoat evenly, add DuraCoat reducer (up to 20% by volume), increase air pressure, or both.

Adding DuraCoat Reducer:
- Optimum DuraCoat Reducer Ratio is: No added reducer.
- Maximum Reducer added percentage is: 20% reducer.
- Adding reducer does not affect drying time but thins the spray. (.05 needle, nozzle, and air cap are recommended in HVLP spray guns.)
- **WARNING:** Only use DuraCoat Reducer. Do not use any other reducer as this will cause a chemical imbalance which will compromise the DuraCoat.

One color projects

The DuraCoat should be layered. Spray on with full even passes. When the item is completely coated with the first layer, the surface solvents need to evaporate (flash off). Let the item sit for a few minutes or blow air on it to flash off. Then apply more layers.

On parkerized or blasted surfaces, you may need several layers just to reach the surface as you have just filled up the porous area. Then you need to apply several more layers to achieve the proper thickness. A very tight tolerance area will require you to stop with the first several layers to keep the coating thin. High wear areas will require continued layers.

Multiple colors (layered stencils)

Base coat (first color) is applied as described above in the one color project. Wait a minimum of 2-3 hours to air dry before applying the first set of templates. Use the male templates first. Spray on the second color only enough to hide the previous color, following the flash off method above. Do not attempt to "fill up" the template. Air dry another minimum 2-3 hours before applying the next set of templates and continue with the same process until all colors are completed. After a minimum of 2-3 more hours, you may now carefully remove all templates. Use the female templates to further accent if desired. You should apply the DuraCoat inside the female templates without needing to mask off the remainder of the item. Multiple colors must wait a minimum of 2-3 hours between coats unless you speed up the dry time by baking at 110 degrees for 15 minutes between each coat. Allow the item to cool to room temperature before beginning the next coat. You may choose to work on this project daily instead of every 2-3 hours, but you must have all DuraCoat applied within 7 days to ensure proper adhesion. NEVER bake wood items.

Coating wood surfaces – spray enough DuraCoat to totally hide the wood then stop. Allow to air dry for several hours. You will then note that the surface is rough due the fibers rising. Sand with 440 grit sandpaper to the point of making the surface feel smooth. Blow off the residual dust and recoat again with DuraCoat. Depending on how porous the surface is, you may need to repeat. NEVER bake wood to speed cure.

TIPS

- Spray distance from sprayer to part: 4" to 8", depending on desired effect.
- The optimum thickness is 1mil. A thinner coating will be required on tight tolerance areas and a thicker coating can be applied to high wear areas.
- DuraCoat can be sprayed from 0.25 to 1.5 mil.
- If you make a mistake while coating, simply wipe off with a rag dipped in lacquer thinner. After 2 hours, removal becomes increasingly difficult. If a piece of debris appears in your finish, let dry for a few hours and lightly sand it out.
- If you decide in the future to change colors, you can hand sand with 600 grit sandpaper or lightly blast (without removing the DuraCoat) just enough to "rough up" the surface and recoat with a new color.

CLEAN UP
DuraCoat will harden inside your spray gun so be sure to clean it after every use. It is recommended that you clean your spray gun with a good quality lacquer thinner initially. Follow up with a small amount of reducer to remove all contaminants.

CURE TIME
DuraCoat dries to the touch in 20 minutes and can be handled in an hour. The parts can be reassembled in 24 hours. You can then use your item as normal, but is not ready for extreme duty for 3-4 weeks.

CLEANING ONCE DURACOATED
You may use any normal conventional cleaning compounds and methods within 24 hours after coating. Do not use any strong solvents such as acetone until 3-4 weeks after coating.

TOUCHING UP AREAS (Remember DuraCoat doesn't wear, but you dropped it down the mountain)
Make sure surface is clean using TruStrip and a soft white rag. Lightly sand area with 1200 grit sandpaper, blow off the dust, and spray DuraCoat.

Note: Shelf life of DuraCoat is 18 months if stored in a cool, dark, and dry place. Shelf life of hardener is 6 months if stored in a cool, dark, and dry place. Shelf life of hardener can be extended to 12 months and beyond if placed in a zip lock bag and placed in a refrigerator. Do not store with food. In both cases, the container lids, rims, and threads must be thoroughly cleaned prior to sealing the container and the lids must be on tight.

Call 1-800-830-6677 for technical assistance.

DuraCoat®