By Diane Selkirk

Making an Older Hull Look Like New

Careful filling of dings and gouges is the first step in a process that will put the shine back into your hull's finish

Elizabeth B. Wrightson

Over time the gelcoat on any boat oxidizes and fades and the cumulative dings and scratches start to affect the boat's appearance. Painting fiberglass is a boat job many boatowners choose to leave to experts, but it isn't overly difficult. The key is to use the correct tools and prepare the surface of the hull properly. A few simple techniques, combined with modern repair and painting materials, will allow you to produce a gleaming hull (and save money, too).

Preparing the surface

The first step is to remove all vinyl lettering, decals, and any gear that hangs down on the surface of the hull. Scrub the hull's surface to remove accumulated salt and dirt. Pay special attention to the toerail area, where trapped dirt can run down the side of the hull after cleaning.

When you rinse the hull look for areas where water is beading up, an indication that there is residual wax. All wax residue, grease, and oil must be removed; they can prevent repair materials from bonding to the hull, and most paints won't stick to them.

To remove wax and other contaminants you'll need acetone, xylene, or a good proprietary solvent; xylene evaporates more slowly than acetone and is less expensive than proprietary wax-removing compounds. Wearing heavy rubber gloves and using clean white rags, start at one end of the hull and wipe down small areas with the solvent. Wipe from the cleaned area into the next section, using a fresh area of the cloth for each section. Don't wipe back into a previously cleaned area, and change rags frequently to avoid contamination. After the hull has been entirely cleaned with solvent, check for any remaining wax residue by lightly spraying the hull with water. Any area that shows water beading needs additional cleaning.

Taking a shortcut can be a fatal mistake. Don't assume that sanding down the hull to expose a clean gelcoat surface will save work and time. Sanding a dirty hull will grind grime and grit into the surface, contaminating it and possibly resulting in paint delamination.

Filling and fairing the hull

Scratches and dings are a part of sailing. A bad docking job on a windy day or an encounter with an errant mooring will create small scars and blemishes that must be repaired before paint is applied. The goal with a damaged area is to open up the crack or ding just enough so that filler will adhere to exposed new material. You can use a sharp chisel to open up these areas, but a Dremel tool with a variety of attachments will make the job go much more quickly. Select a grinding attachment slightly wider then the crack in the hull. Wearing good eye protection, gently grind away the old material to create a shallow V-shape in the gelcoat (Photo 1). Always grind away as little material as possible, and fair all ground edges into the hull. Filler compounds tend to shrink slightly, and a hard edge could lead to a hairline crack. When all the damaged spots have been ground and opened, clean away all accumulated dust and wipe down the surfaces again with a dewaxing solvent and clean rags.

Premixed fillers, such as 3M's Premium

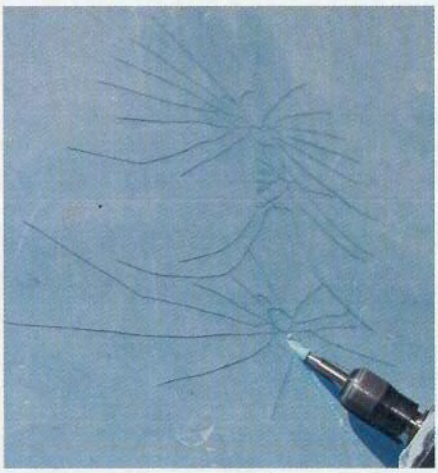

Photo 1: Cut a shallow V in a gelcoat crack with a Dremel tool and a grinding attachment

Marine Filler, are slightly more expensive than mix-it-yourself epoxies, but they are easy to apply. Mix small batches of filler and apply with an oversized flexible spreader. Spread the filler evenly over the voids, and make sure there are no air spaces or low spots. If the void is deeper than ⅜ inch, apply two or more thin layers of filler. Overfill the area so you can sand the surface smooth when it is dry (Photos 2–3).

When the filler has hardened, sand the entire hull with 80- to 150-grit sandpaper. Use the finest grit you can for the hull. If the grit is too coarse, the hull will have fine scratches that can be difficult to hide; if it's too fine, the smooth surface won't produce an adequate anchor for the paint. Sandpaper grit selection will depend on the condition of the gelcoat.

Priming

Priming the hull accomplishes two objectives. First, when the hull is painted in a single flat color, it is easy to see any imperfections that were missed during the filling and fairing process. Primer paints contain more solids than finishing paints and can fill light scratches that are too small to grind out. Second, the primer prepares the gelcoat to accept paint. Gelcoat by itself is

Letter with a Stencil

To make a stencil for painting on your boat name, select a font on your computer and a letter size that suits your boat. Print out the characters, a few at a time if necessary,

and tape the sheets together. Using the computer printout as a template, use an X-acto knife to cut the letters or numbers from the stenciling material.

Stencil glue, paintbrushes, and Mylar film for the stencil are available from craft stores. When you're ready to use the stencil, spray the back with stencil glue and position the stencil on the hull. Rub it with a soft cloth to make sure it adheres to the hull. The glue dries tack-free, so you can reposition the stencil if necessary.

Gently apply a light coat of paint inside

the stencil. Keep the brush very dry, and as one coat dries add another light layer of paint. A dry brush will ensure that as little paint as possible will leach under the stencil. Once the paint is lightly cured, gently remove the stencil and clean up any excess paint with a cotton swab that has been soaked in paint thinner. Finish the job with additional layers of paint, as necessary.

Photographs by Gatehouse/Selkirk

Photos 2–3: Spread the filler evenly over voids and overfill so the dry surface can be sanded smooth

porous, and a finish paint will occasionally crater if it is applied directly to an unprimed gelcoat surface.

Before painting make sure the area is as dust-free as possible. Wash the boat thoroughly once again, including the deck and rigging, which may contain hidden dust. Spray the ground in the work area to keep the dust down. Using a solvent that is compatible with your paint system, wipe down the hull with clean rags, then use good-quality extended-life masking tape to mask off the area to be painted as well as all hardware within the painting area.

Primer paint is thick and easiest to apply in cool temperatures. It's easiest to paint with a helper. One person rolls on a thin coat of primer, and the second person "tips," or brushes away, the excess primer.

Photo 4: Roll on the finish paint over the primer (here finely sanded), then tip off with a brush to ensure a smooth surface

Lightly load a high-density ⅛-inch foam roller approved for polyurethane applications with primer and apply a thin coat over a small area. As you roll on the paint, your helper uses a good-quality foam brush and light, even strokes to smooth the primer perpendicular to the direction used to roll it on. If the roller goes up and down, the tipper should brush from side to side, away

from the newly painted surface toward the tipped-off area. Do not overwork the primer; keep it adequately thinned for smooth application, and work with small quantities in the paint tray. Keep the lid on the can while you're working. Clean both the roller and brush frequently to ensure they don't become overloaded with paint.

When the primer has dried, sand the entire hull with 120-grit sandpaper. Fill any remaining voids with filling compound. When the compound is dry, fair in the areas with 150-grit paper, and then do a final sanding with 220-grit paper. Wash away the dust and wipe down the hull with solvent again. Now you're ready for the final finish coats.

Finish paint

I like to use a one-part polyurethane paint. Even though it's softer than two-part polyurethanes and not as long wearing, it is easy to apply and easy to touch up. One-part polyurethane paints are nearly translucent and require two or three coats to get good coverage. Use the same rolling and tipping method you used for the primer to apply the finish paint. Apply thin, even coats and alternate the direction for rolling and tipping with each coat. Allow each coat to dry, then sand lightly with 220-grit sandpaper and rinse the surface well with water after each sanding (Photos 4–5).

For best results paint on a dry morning when the ambient temperature is between 60°F and 80°F. Painting late in the day is not a good idea because the moisture in the air can react with the paint and cause a loss of gloss; painting when it's too hot or cold affects both drying time and ease of application.

Photo 5: The author's boat, with three coats of one-part polyurethane paint applied

One-part polyurethane paints will take several days to cure and reach maximum abrasion resistance, so be careful if you plan to launch and dock immediately after painting.

Since leaving Vancouver, British Columbia, six years ago, Diane Selkirk and Evans Gatehouse have been cruising aboard their 30-foot cutter, Ceilydh.