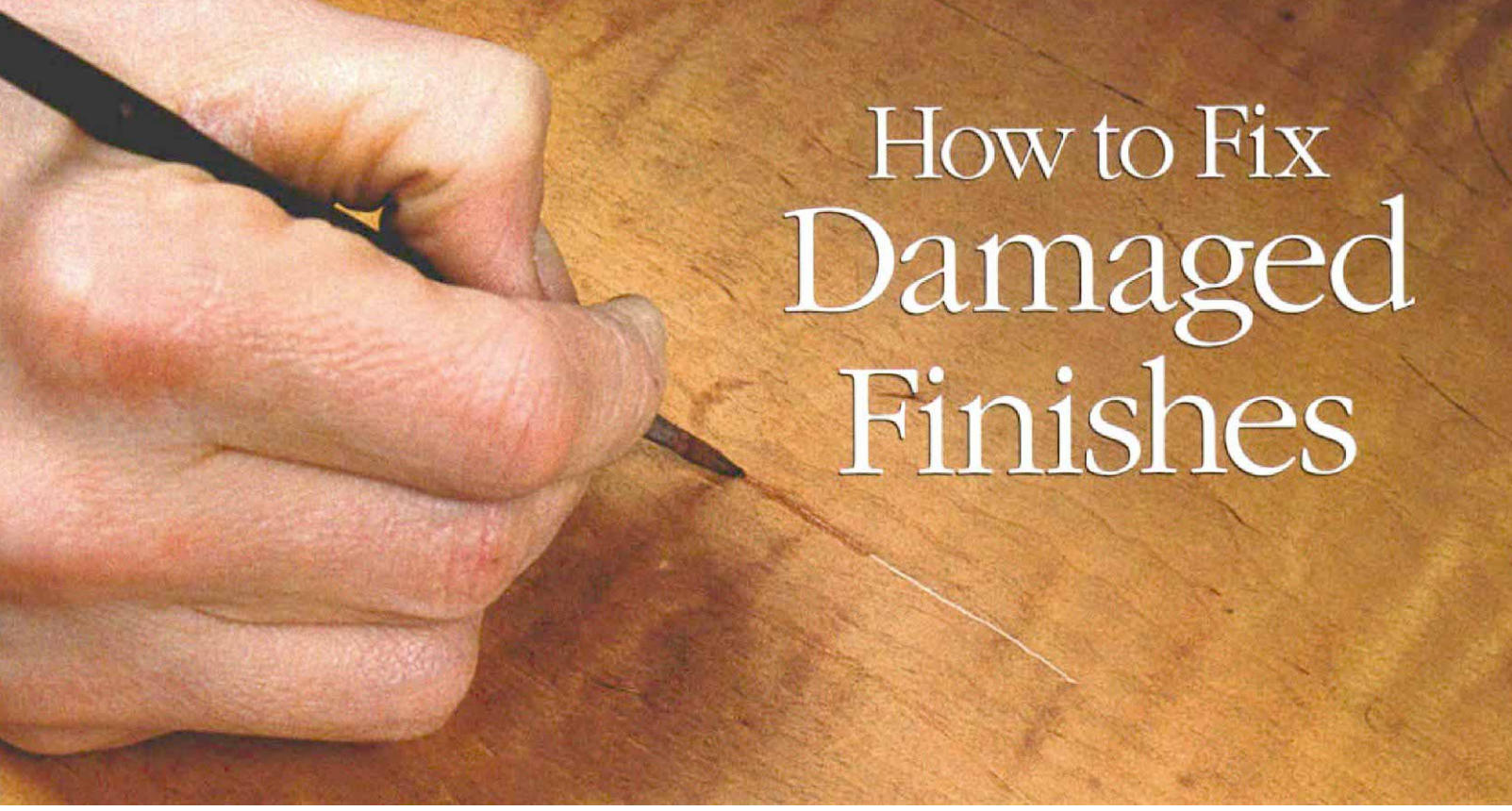
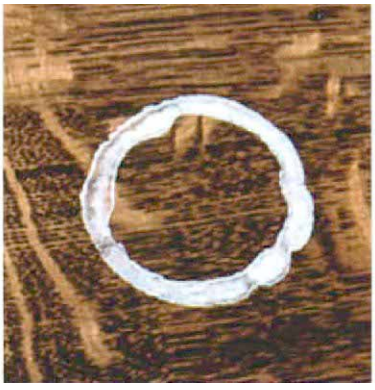


How to Fix Damaged Finishes

Scrapes, scratches, water marks, dents and dull finishes are not fatal

BY JEFF JEWITT



Different wood finishes vary greatly in how well they protect furniture and in how long they last, but they are all subject to the forces of light, moisture, air and general wear and tear. Sunlight, heat and water remain the biggest enemies of finishes, but moving companies, puppies and feisty 2-year-olds contribute their share of damage as well.

To repair an injured finish, you first need to identify which type of finish you're dealing with. Evaporative finishes, such as nitrocellulose lacquer and shellac, are the easiest to repair because any new finish will melt right into the old finish. Reactive finishes, such as varnish, are more difficult because new topcoats don't blend in with the existing ones.

You can identify an old finish with a two-step test using different solvents. Find an inconspicuous spot and dab a little denatured alcohol on the finish. After 30 seconds, press against the dampened area with some tissue paper. If the tissue sticks to the finish, it is shellac. If the alcohol doesn't affect the finish, try the same test with a little lacquer thinner. If the tissue still doesn't stick, the finish is probably an oil-based varnish, a polyurethane or a newer catalyzed finish. Once you know the type of finish and how it was damaged, you can decide what to do to fix it.

A final note: If you think a piece of furniture is valuable, you may want to consult a professional; or you can simply wax it to avoid the possibility of permanent damage to an old patina that may add value to the furniture. □

Jeff Jewitt restores furniture and sells finishing supplies in Cleveland, Ohio. He is a frequent contributor to Fine Woodworking.

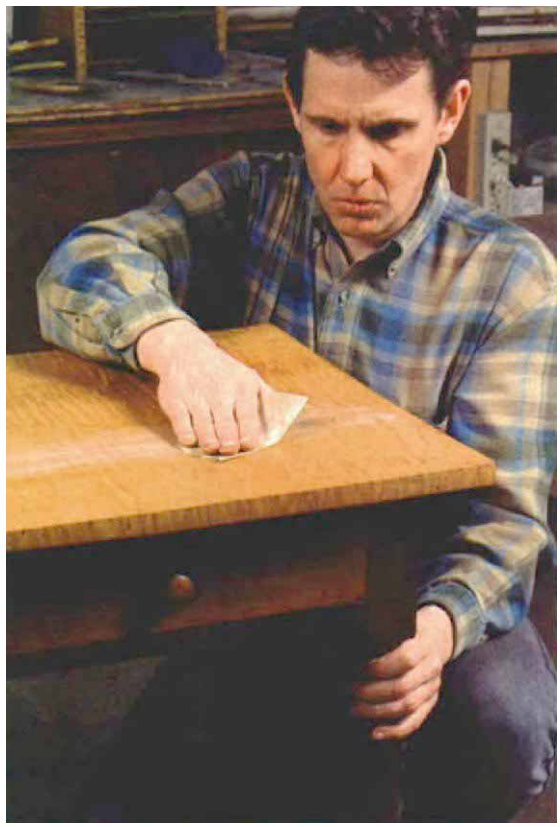
Scrapes, areas of finish and color removed from edges, are generally easier to repair than scratches, which occur in the center of a side or top and must be stripped and refinished. The first step is to determine if it's only the finish that's damaged or if part of the color is gone, too. Wet the damaged area with naphtha. If the wet surface blends in with the rest of the finish, you only have to repair the finish.

If both color and finish are missing, the naphtha will make the scrape appear lighter than the rest of the finish. In this case, you'll need to replace the original color first, then apply finish. The easiest way to replace color is to use a felt-tipped repair pen. The color selection is limited, but you can apply several different colors to achieve a match. A more difficult method is to mix some dry pigment with shellac and paint it in with a fine artist's brush.

On a lightly scratched varnish or polyurethane finish that is thick enough, your best bet is to sand out any scratches first. I usually start with 600-grit paper, but I've occasionally used 400 grit. While the traditional method calls for wet-sanding, I prefer to dry-sand. Wet-sanding gives you a false illusion of finish thickness, and it's possible to go through the finish before you know it. Depending on how deep the scratches are, you may have to sand the entire area to avoid hollows created by working one area too aggressively. Smooth out the sanded finish with fine steel wool to blend it in. You can match any original sheen by rubbing it out with 0000 steel wool or by using rubbing compounds. If the scratch is deep and white, and the finish is varnish or water-based, you'll need to strip and refinish the entire surface if you want a perfect repair.

If a finish is too thin to sand out without going through, simply add more finish. With an evaporative finish, such as lacquer or shellac, some scratches will disappear and blend right in with the new finish, as long as they're not too deep. Fill the scratch with finish by applying some lacquer or shellac with a red sable artist's brush. Several applications with overnight drying may be needed. When the scratch has been filled, sand the built-up layers back to a level surface, then apply more finish to the entire area. When the finish is dry, rub it out to the sheen that you want.

REPAIRING FINISH DAMAGE



Sand out scratches when possible. Minor scratches in the finish will be easier to repair if you scuff the surface of the finish first.

Fill fine scratches with more finish. Fix small scratches in lacquer and shellac by painting in the proper finish with a small artist's brush. Then lay on a coat over the entire surface.

REPAIRING COLOR DAMAGE

***Every mover's* secret.** *Felt-tipped markers add color back to scraped or worn edges.*

This is a developed talent. Mixing dry pigments with shellac for minor color repairs takes some practice and a fine artist's brush.

Photos, except where noted: Susan Jewitt

COLORED WAX FOR AN EASY FIX

Deep *gouges* can be *filled with wax.* *Cut off a small piece of wax and rub it into the depression. Pare away the excess with a piece of wood and buff the surface with a clean rag.*

BURN-IN STICK FOR MORE PERMANENT REPAIRS

More *durable gouge repairs can be made using burn-in sticks.* *They are made from either shellac or lacquer resins, and they melt when exposed to a hot knife.*

Some damage is so deep that your only choice is to fill it as best you can to match the surrounding wood. The most popular fillers are colored wax and burn-in sticks made from shellac or a synthetic resin. Of the two, colored wax is easier to use, but burn-in sticks dry harder, so they're better for areas that will be subjected to more wear and tear.

To fill large gouges with wax, rub the area with the wax, or cut off a small piece and pack it into the depression. Then, using a chiseled spatula made from a small piece of wood, pare away the excess wax until it is fairly level with the surface. Rub the wax level with the surface using the back of a piece of fine sandpaper.

Burn-in sticks are a bit more difficult to use, and it's easy to damage the surface around the gouge if you're not careful. Melt part of a burn-in stick with a soldering iron or burn-in knife, then quickly press down with your finger to push the resin into the depression.

If the resin is shellac and the finish surface is varnish or oil, the repair is best leveled by wrapping a piece of muslin around a small piece of wood, wetting it slightly with alcohol and rubbing the repair until it's smooth.

If the finish surface is shellac or the burn-in stick is made of lacquer resin, level the filler by sanding very carefully with fine sandpaper lubricated with mineral spirits. You'll need to topcoat all burn-in stick repairs with more finish to protect them. While you're at it, you may want to lay on a new topcoat over the entire surface.

Work fast. Quickly press down the hot resin into the depression with your finger.

Smooth it out and blend it in. A piece of muslin wrapped around a small block of wood and dampened with alcohol is a great tool for smoothing out a shellac burn-in stick repair.

WATER AND HEAT MARKS

If the damage from moisture appears black or gray, water has permeated the finish and discolored the wood below. To repair such damage, you must strip the finish, sand the wood and bleach it with oxalic acid, which is available in powdered form at most hardware and paint stores.

If the damage appears as a white ring or a whitish, foggy area, water or heat caused the damage, and it is confined to the finish. The damage may be at the very top of the finish or closer to the bottom (where the finish meets the wood). There is no easy way to know exactly how far down the damage goes, and where it is will affect how successful any repair will be.

Most damage near the top can be rubbed out with some steel wool and mineral oil, rubbing compound or even fine sandpaper. The whitish color disappears fairly quickly, and once removed, the finish can be rubbed back out to the original sheen. If the finish Is lacquer or shellac, a light padding with a rag moistened with denatured alcohol will remove the white spot. Dampen the rag just enough that it feels like the tip of a dog's nose—moist but not dripping wet—and use a back-and-forth pendulum motion to remove the white spot, working with the direction of the grain. If neither of these methods works, the damage was probably caused by heat to the bottom of the finish. In that case, your only choices are to strip off the finish and start over or find a good-looking vase to hide it.

Not *all types of damage are equal.* *The white water ring in the finish will be easy to repair. The black stain, also caused by water, goes through the finish and into the wood and requires more work to repair.*

It takes a little elbow grease, but not much. *Steel wool and mineral oil will usually remove white water rings.*

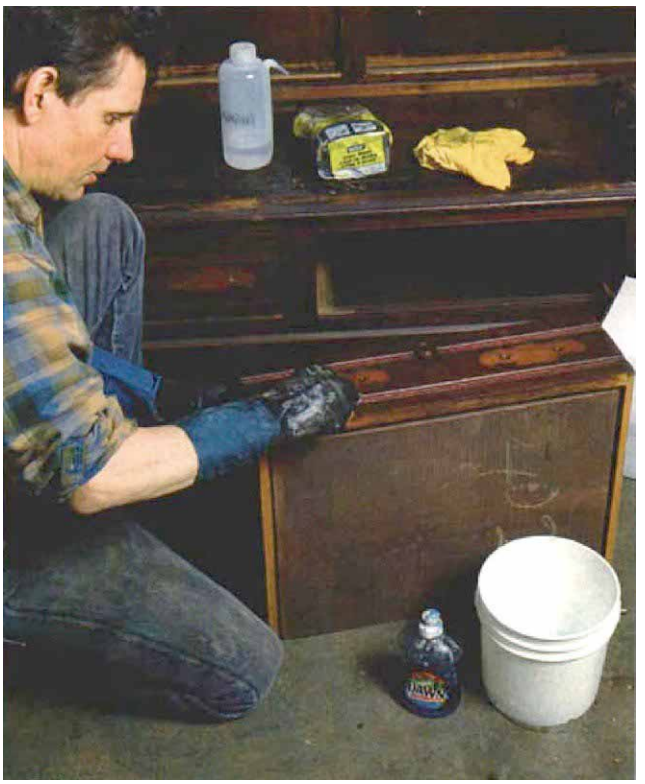
DULL AND DIRTY FINISHES

If a finish appears dull and dry but is otherwise intact, you can revive it with a simple cleaning and a coat of wax.

Start by wiping the finish thoroughly with a clean rag dampened with naphtha. This step removes any oil-soluble grime. Then switch to a detergent to remove water-soluble dirt. The best cleaner I've found is to mix one capful of Dawn brand dishwashing liquid in a pint of warm water. Use a slightly dampened cloth, not one that is dripping wet.

Next, abrade the finish using a dry, no-load, stearated 400-grit sandpaper (such as Fre-Cut or Adalox), then follow up with 600 grit. The goal here is to remove only the very top layer of finish but not to sand all the way through to the wood.

After wiping off the sanding residue with a rag dampened with naphtha, use a natural or dark-colored paste wax-depending on the color of the wood-to bring the luster back up.



Dingy finishes may require cleaning. *A rag moistened with naphtha removes oily dirt; dishwashing detergent removes the water-soluble grunge.*

A coat of wax will do wonders. *This drawer face clearly shows the benefits of a simple cleaning and a coat of wax.*

Photos, this page and facing page: Erika Marks