

RESTORING FADED PAINT

BY PAUL STENOQUIST

IT'S BEEN a long cold winter, and you've been curled up, warm and dry, at the hearth. Your car, meanwhile, has been outside taking it on the chin. And it looks it. A little neglect (Hey! It's too cold to wash the car!) and a lot of acid rain and road salt have dulled your machine's once-brilliant shine. Your mission, on the first warm day of spring, is to resurrect that paint job.

Ultraviolet rays and corrosive salt fade and discolor the surface of automotive paints. Usually, however, the damage is only superficial. By removing the top layer of paint with a product that is compatible with the type of finish on your car, the original luster and color of the finish can be restored.

Resurrecting even a severely dull and faded paint job is certainly within the realm of things possible, but there

are limits. First, the more faded and oxidized the surface, the harder you'll have to work to refurbish it. Second, if the layer of paint is too thin, you may rub all of the finish off before you find good paint. Of course, with a complete repaint being the only viable alternative, you have little to lose.

Dirt removal

This procedure, largely unknown to owners of cars with severely damaged paint, is known as "washing the car." For some of us, it's a drastic measure but a necessary one. It's also a practice you'll want to continue after the paint has been restored as it helps remove airborne chemicals and muck before they damage the surface.

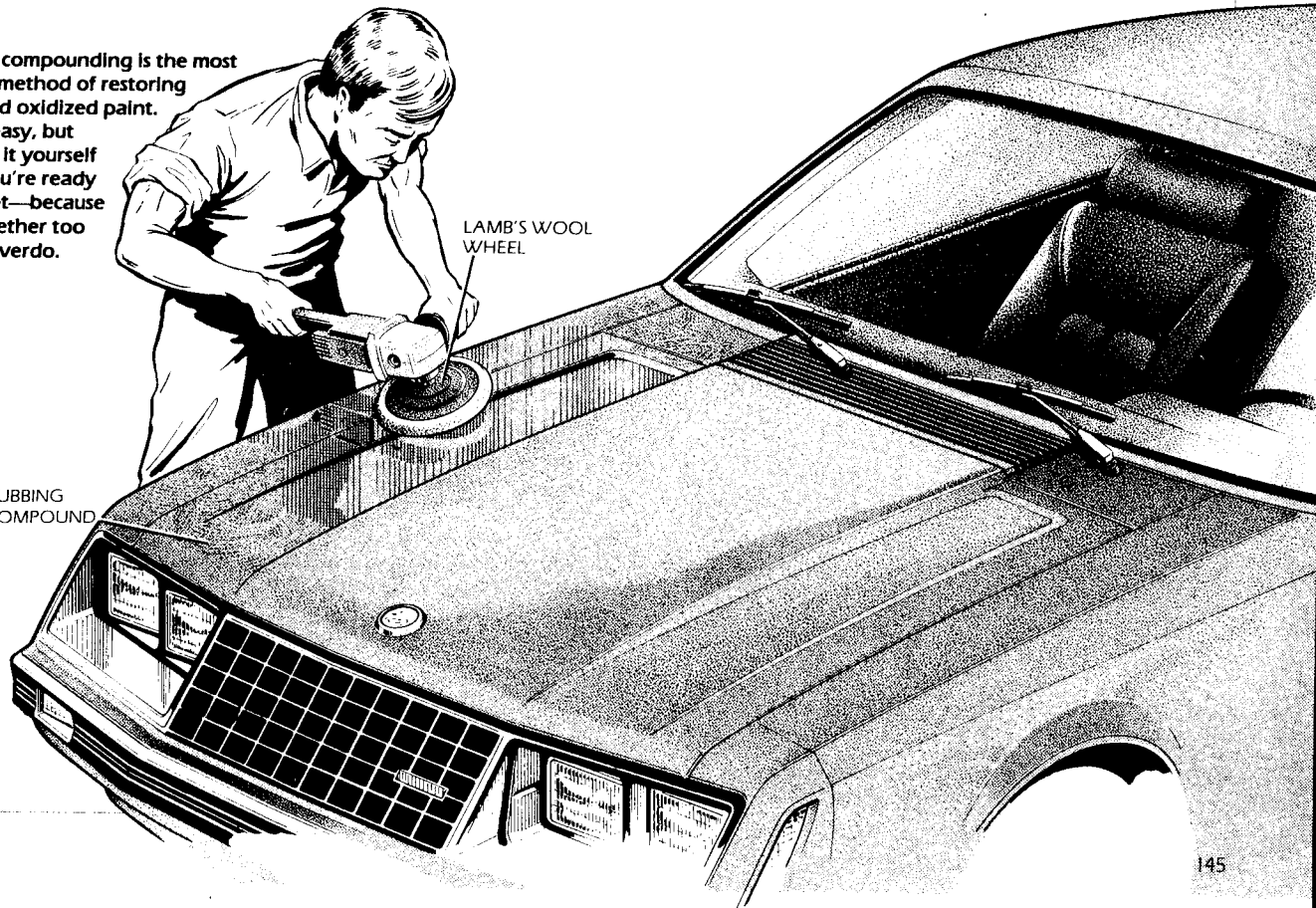
Do a thorough job, using a non-detergent soap that won't remove more oil from the paint. When washing a

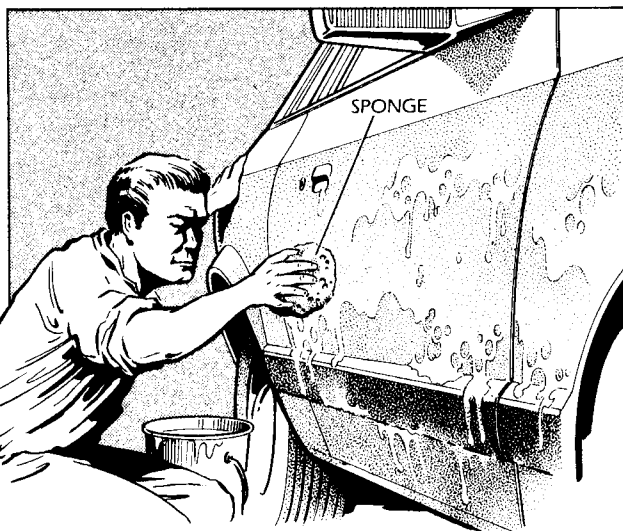
car that has already been waxed, this type of soap will not remove all of the wax—heavy detergents will. Soaps that are specially formulated for washing cars are available at most auto parts stores. One of our favorite nondetergent soaps is the widely available Murphy's Oil Soap. Liquid soap made for washing dishes by hand is okay, but it may remove some oil. Don't use liquid or powdered laundry detergent.

Before washing the car's body, blast the wheel wells and underbody with a strong stream of water to remove road salt and other corrosive substances. If you're working at a carwash with a high-pressure wand, you can begin by spraying soap underneath, then rinse it off. After cleaning the underside, check for corrosion. And, if you find potential rust spots

Machine compounding is the most efficient method of restoring faded and oxidized paint.

It looks easy, but don't try it yourself unless you're ready to repaint—because it's altogether too easy to overdo.





1 Nondetergent soap removes dirt and restores the paint's shine.

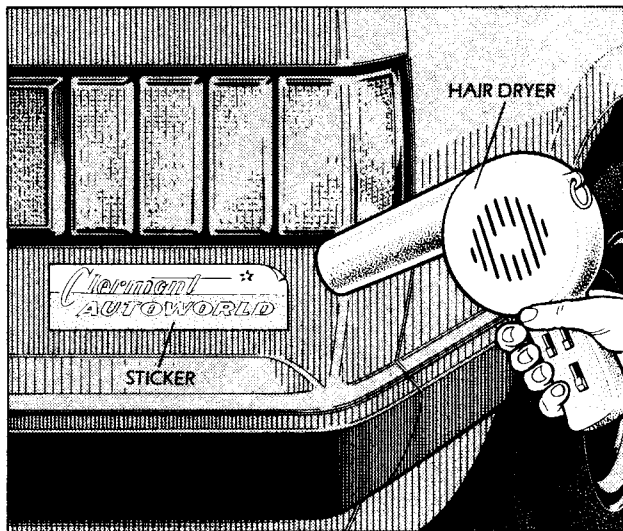
under the car, clean them up and apply an aerosol rustproof.

Wash upper body surfaces in the shade. Have a hose on hand with a shutoff nozzle. Mix the soap in a bucket of lukewarm water. Use a big sponge and apply soapy water liberally (Fig. 1). Wash the roof first. Once the roof has been thoroughly cleaned, rinse it (Fig. 2) before proceeding with the hood and deck lid and, finally, the bodysides and the front grille area and rear panel. Rinse every time you finish a section, so the soap doesn't have a chance to dry. Each time you rinse, rewet the surfaces that you rinsed previously. If you're rinsing or soaping up with the high-pressure wand at a commercial carwash, keep it well away from the painted surface.

Here's how to use a chamois to dry the car thoroughly. Soak the chamois in water for a few minutes and then

wring it out completely. As you wipe up water from the surface, wring the chamois out from time to time. As you work, you can tell when the chamois is saturated as it will begin to leave droplets on the surface. Once your paint has been restored, drying your car with a chamois is just about all you have to do to restore the luster.

Once the car is dry, check carefully for remaining spots of tar or other foul muck and remove same with a rag and a bottle of bug-and-tar solvent. This chemical cleaner is available at most auto parts stores. If the rear panel and bumpers are defaced with old peeling stickers, now would be a good time to remove them, as you'll probably be able to blend in the paint underneath them (which is less faded than the rest of the car) when you compound or polish. A hair dryer can sometimes help loosen the sticker's adhesive (Fig. 3).



3 Sometimes hot air helps loosen stickers or woodgrain vinyl trim.

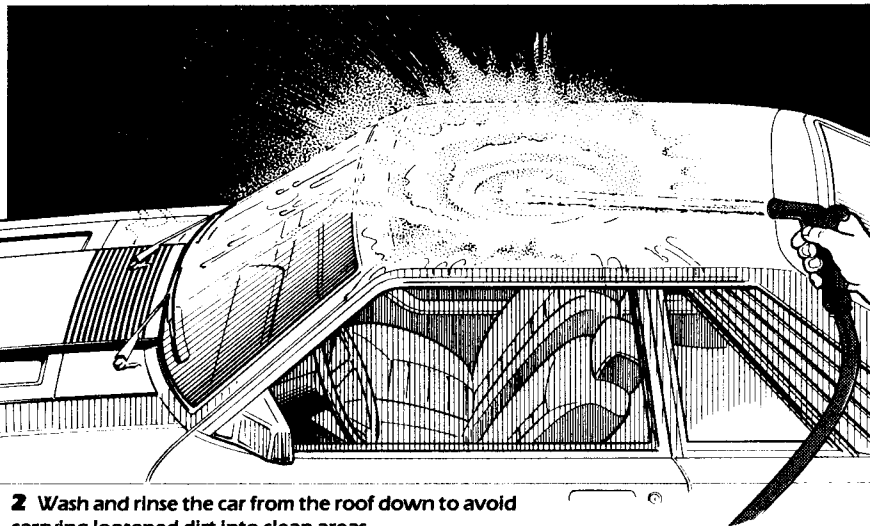
Assessing the damage

With all road dirt removed, you can evaluate the condition of your car's finish. How you deal with various problems depends, in part, on what type of paint was used to finish the car. If it's metallic without a clear coat on top, avoid using any type of abrasive cleaners. Metallic paint surfaces are not uniform from top to bottom—so if you rub off the top layer, you'll be left with a mess. A nonabrasive polish, used before waxing, can remove dirt and oxidation without removing paint. But don't confuse nonabrasive polish with polishing compound. Any product referred to as a compound or cleaner wax contains abrasives that can ruin metallic finishes.

An example of a nonabrasive polish that is suitable for metallic finishes is Turtle Wax Metallic. Most other manufacturers of automotive wax sell similar products that are marked as suitable for metallic finishes.

Depending on the thickness of the top coat, clearcoat/basecoat finishes can sometimes be damaged when abrasive cleaners are used. If you remove all of the thin clearcoat over the base, a respray will be necessary. While these finishes aren't as susceptible to damage as the conventional metallic types, they still call for caution. Don't use an abrasive polish if you can restore the sheen with a nonabrasive. If you must use an abrasive to restore your clearcoat, try a cleaner wax rather than straight polishing or rubbing compound.

If your car has a finish other than metallic or clearcoat/basecoat, you can usually restore its original lustre with polishing compound or rubbing



2 Wash and rinse the car from the roof down to avoid carrying loosened dirt into clean areas.

compound. These products actually grind off the top layer of paint, leaving like-new paint below. In some cases where aggressive paint removal is necessary to restore a nice finish, you could end up removing too much paint—even if you're careful. But if your paint is in really bad shape, repainting might be the only alternative anyway.

If your paint is just slightly dull but has a relatively smooth surface, hand polishing will probably be sufficient to restore the luster. There are a number of polishing compound products available on the shelf of your neighborhood auto parts store that are intended for hand application. These usually differ from machine-applied products in that they are much more liquid and not as difficult to remove. They are not likely to remove too much paint as their abrasive power is limited by the application method.

Not all manufacturers use the same nomenclature for their products. For example, polish and polishing compound are usually not the same thing. Some products described as polish contain no abrasives and can be used on clearcoat paints—others may be nothing more than polishing compound in a more liquid form. Some have names that confuse the distinction. So don't rely on the name alone. Make sure you read the label before purchasing polish or polishing compound. If the label doesn't tell whether abrasives are included, rub some onto a painted surface (not necessarily your car) and look for color to be transferred to your cloth.

If the paint is severely faded and its surface resembles primer or is heavily scratched, compounding will be necessary. The product used for this operation is called rubbing compound. For the inexperienced, compounding is probably best done by hand, but it's a big job. Some of the rubbing compound sold in retail auto parts departments is intended for hand application only and should not be applied by machine, as severe rub-through can result. Rubbing compound for hand application is available in both paste and liquid form. Liquid types are easier to use, but you won't get as much compound for your money.

Machine compounding is easier and safer than hand compounding—but chances of damaging the finish are in-



4 Before you compound, use masking tape to protect raised edges.

creased considerably. It's not a job recommended for the uninitiated unless the only alternative is repainting.

If you do decide on machine compounding, use rubbing compound specifically formulated for machine application. You can buy it at an auto parts store that specializes in body shop supplies. It will be available in different abrasive grades, and if you're trying machine compounding for the first time, use a light grade, which will cut more slowly.

The counterman can also help you select the right type of polishing pad. A lamb's wool pad is most often used for compounding. You'll probably need two to finish the job. You can rent a power polishing machine at most tool rental stores.

Hand polishing

Whether you're using an abrasive hand-applied polishing compound on

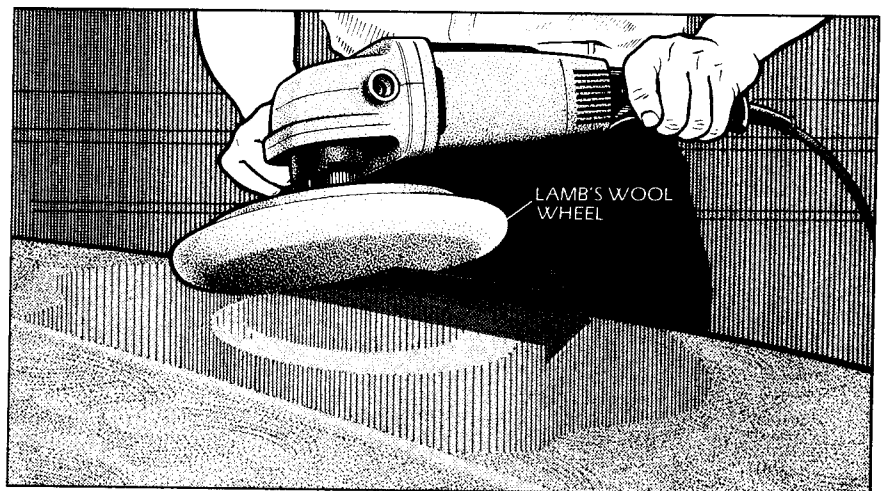
faded conventional paint or a nonabrasive polish on clearcoat or metallic paint, work in the shade or wait for a cloudy day. Apply the polish to a small area—about 2 ft. sq. If an applicator pad didn't come with the polish, use a piece of soft terrycloth. The instructions on the product package may tell you to dampen the applicator.

If you're using abrasive polishing compound, you should start to see some of the removed pigment on your applicator. Work with a very light touch when polishing edges. It's easy to rub right through the paint on a raised edge. Use a clean, soft, terrycloth rag to buff the surface.

Hand compounding

As noted above, hand compounding is hard work. A lot of elbow grease is required to do the job right. Do a 2-ft.-sq. area at a time. If the damage is severe and includes relatively deep scratches and substantial discoloration, begin by lightly wet sanding the area with 600- or 800-grit wet-dry sandpaper folded into quarters. Keep the paper fully saturated with water and don't get carried away. This is not recommended for clearcoat/basecoat or metallics, or unless you're at the last-resort stages of trying to rescue a loser. Before you begin, apply a thin strip of masking tape to raised edges and creases.

Apply the compound with a soft terrycloth rag that has been folded into a pad. Or, if the product came with an applicator pad, use that. Using medium pressure, apply the com-



5 Hold the leading edge of the pad slightly above the surface of area being compounded.

pound with straight back-and-forth strokes (Fig. 4). Following the directions, remove the compound with a dry rag.

If the surface isn't glossy once the compound is off, you haven't removed enough paint, and should repeat the compounding part of the procedure.

Once you've finished all other body parts, remove the masking tape from the edges and creases and compound these areas. Avoid applying compound with any significant degree of enthusiasm on raised edges to avoid rub-through. If you do rub all the way through the paint, refinishing is the only satisfactory fix.

Machine compounding

As we've already said, rub-through is a considerable risk when compounding a car using a professional polishing machine. However, machine compounding is much faster and considerably more effective than hand compounding. So if your paint is a total disaster and you're not willing to spend what *could* be all weekend trying to compound it by hand, you might want to do the job the way the pros do it. Remember, however, that machine compounding removes quite a bit of paint and if the paint is thin, you may have to repaint the car.

Make sure you wear old clothes, as the compound will fly all over when you turn on the machine. You'll also need safety goggles and a dust-type respirator. These are not optional. Compound can seriously damage your eyes and lungs. Don't take chances.

Before you begin, take some pre-

cautions to prevent rub-through. Since raised surfaces rub through first, apply a thin strip of masking tape to creases, raised edges or sharp corners on painted surfaces of the body. This will help reduce the likelihood of excessive paint removal.

When you're ready to start, read the instructions on the rubbing compound package and mix the paste with water if the instructions so indicate. With most types of rubbing compound, you should periodically add water to the mix as you work to compensate for evaporation and for the tendency of the compound to become less liquid toward the bottom of the container. Apply compound to a 2 x 2-ft. area of the car with a medium-sized paint brush or just toss a handful in the center of the area you're working on. Use just enough to achieve uniform distribution.

Without turning the polishing machine on, spread the compound evenly over the area with the polishing machine's pad. Don't apply compound directly to the polishing pad.

Drape the cord to the polisher over your shoulder, away from the spinning wheel, as it will take only a heartbeat to wrap the cord around the shaft if it touches the pad's edge. The polisher will rip itself out of your hands, and do a remarkably destructive whirligig death dance on your hood.

Turn the polisher on and smoothly stroke the area to be compounded left to right and then right to left. When moving the machine from left to right, lift the right half of the pad a little bit. When you stroke from right to left,

lift the left half of the pad a bit. In other words, the leading edge should be slightly above the surface of the area being compounded (Fig. 5). Each full stroke should overlap the stroke directly above or below by about half its width. Don't apply pressure as you stroke. Instead, just rest the machine against the surface. Let the weight of the machine do the work.

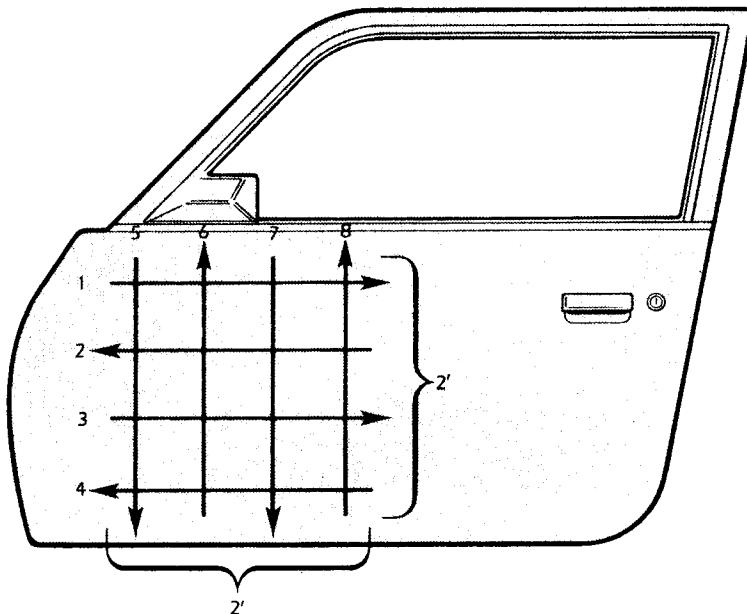
Once you've fully covered the area with horizontal strokes (it should take about four strokes), repeat the procedure using vertical strokes, but don't apply more compound. Figure 6 illustrates how eight strokes cover a 2 x 2-ft. section of door. If the compound is all used up before you've finished, you didn't use enough. If there's a lot of compound left on the surface, you used too much. In other words, by the time you've finished compounding vertically and horizontally, the compound should have disappeared and you should see a glossy surface. Or at least a glossier surface. If the damage is severe, and you're using the recommended fine-grade compound, it might take more passes. Patience is called for, as you can't go back after you grind down to the primer.

As you work, you'll have to clean the pad from time to time to prevent buildup of compound. To do so, lay the machine on the ground, pad facing up and turn it on. Grip the machine firmly and scrape compound buildup from the pad by passing a dull screwdriver over the pad as the machine runs. Move the screwdriver from the outer edge of the pad toward its center.

After you've compounded all exposed areas of the paint surface, remove the masking tape from the raised edges and corners and compound these spots by hand. You'll also have to hand compound areas under the edge of bumpers or spots that can't be reached with the machine.

Protecting the finish

Once the car has been compounded or polished, rinse it thoroughly with warm water and dry it with a chamois. To make your car shine as brightly as it would if a professional detailer had restored the finish, apply pure carnauba wax. Be sure to allow sufficient time for the car to dry. The carnauba will provide a layer of protection. It is essential that the wax does not contain any abrasive or it will remove more paint. Rub a bit between your fingers before you use it. As with the compound, apply wax to one small area at a time. Polish with a soft cloth.



● To compound a 2 x 2-ft. area, stroke horizontally. Then repeat vertically.