

LRP Ltd.

LEATHERIQUE RESTORATION PRODUCTS LTD.

“Simply The Best Since 1968”

Leather: The Care and Feeding ‘Myths and Legends’

LEATHERIQUE RESTORATION PRODUCTS

Inside story on why leather goes bad!

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Fords, NJ
By George Pavlisko and Ty Peck

Table of Contents

ABOUT LEATHER
..... 1

**SPLITTING AND COLORING THE
SKINS .. 3**

**SURFACE COLORING THE
LEATHER 4**

SURFACE COLORANTS
..... 5

QUALITY OF LEATHERS
..... 7

WHY LEATHER GOES BAD
..... 7

**GOOD LEATHER OR BAD
LEATHER 8**

What to do about it

MAINTENANCE OF LEATHER ,
..... 9

OLD AND NEW
• To clean and condition leather
..... 9

**COMPLETE LEATHER REFINISHING
AND
RESTORATION**

**STEP ONE: Conditioning and
cleaning**

STEP TWO: Prepping

**STEP THREE: Repairs and Filling of
cracks**

STEP FOUR: Recoloring your leather

Application of Leatherique

**Professional
Dye by Brush, Spray, and Wipe
dyeing
FINAL FINISHING AND CURING
REFINISHING VINYL**

ABOUT LEATHER or Why Leather Goes Bad

GENUINE LEATHER . . . The word alone invokes imagery and fantasies of opulence: “King of Fabrics — Mark of Luxury” — the unmistakable aromatic fragrance that is derived from individual tanning processes, the luxurious suppleness and sensuousness, all excite our senses. Genuine leather cannot be imitated and has no substitute for strength, durability, and restorability. Because leather is a natural product that was once living and is now unable to care for itself, it requires maintenance, just as our skins do. Proper maintenance will help your hides stay like new for many generations.

Our earliest ancestors learned that the hides from other animals offered protection from the elements, warmth, and lasted indefinitely. There are many opinions and specials on the interesting facets of this “original” upholstery material.

A B O U T L E A T H E R

Leather is actually extremely durable and restorable. When Robert Ballard discovered the wreck of the Titanic, among the artifacts that were recovered intact were leather satchels, shoes, and wallets. The leather in the wallets actually protected and kept intact the currency enveloped in them. Many methods have been used to treat and preserve leather, depending on the climate and region, including animal fats, vegetable oil, minerals, alum and even smoke to dry and tint hides.

Tannin was one of the advances of leather tanning, perfected by the ancient Egyptians and used also as part of their embalming process. The process is based on the fact that tannin, a bitter ingredient found in vegetation, will combine with the proteins of the skin, forming a chemical compound that resists decay. Hemlock and oak liquors and extracts are used more than any other tanning preparations.

Prior to the industrial revolution, our world led an agrarian, or farm based existence, so leather tanning was a cottage industry performed by families and guilds of specialized tradesmen. By the early 19th Century, the Industrial Revolution revolutionized tanning, and large tanneries were formed. The historic Connolly Leather Tannery began at this time, and the historical Wimbledon-based company, which was in business for over 130 years graced not only Rolls Royce, Bentley Jaguar, and Ferrari motor cars, but was found on the distinguished red and green seats of the British House of commons, the House of Lords, and many luxury hotels world wide. Their tanning process incorporated natural tanning methods, with traditional extracts of mimosa bark and dried fruit from the myrobalan tree to infuse the leather with the heady fragrance Connolly was famous for. The destruction of so many pastoral herds in the UK during the mad cow disease helped with the demise of this distinguished quality tannery. For more information on Connolly see our website for the article written by Krysti Pavlisko in 1995.

The commercial leather industry has grown, and hides have become more abundant and more in demand. Hides have become the by product of a growing population as demand and increased consumption of beef, hogs, and other animals satisfies the world’s hunger.

Because the ancient vegetable tanning method is so time consuming (it takes several months), modern tanners use chromium salts to produce the same results in less than 24 hours. This chrome tanning method was known as early as 1856, but it was not practical until it was perfected by the American inventor August Schultz in

To prepare the skins for tanning, they are sprinkled with salt or immersed in brine within a short time after the animals are killed. This process preserves the skins by partially dehydrating them and by killing certain bacteria. The salting process, however, does not preserve the skins indefinitely, so they are tied into bundles and shipped to the tanneries.

The tanner begins by cleaning the skins thoroughly. They are put in soaking vats of cold, clean water for from one to seven days, so that the salt is dissolved, the dirt is loosened and the skin is restored to a soft

condition.

After the skins are rinsed to remove the loosened dirt, they are put into the “fleshing machine,” consisting of spiral knives set in a revolving cylinder, to remove any flesh or fat that might be adhering to the flesh-side of the hide. This machine leaves a comparatively smooth surface; any flesh still remaining is removed with a knife.

Next, to remove the hair, the skins are again placed into vats, this time containing chemicals to loosen the outer layer of skin in which the roots are embedded so that the hair may be easily removed.

From two to seven days later the skins are fed into the “unhairing machine,” which is similar in construction to the fleshing machine except the knife edges are dull. The squeezing action of the dull knives removes practically all the hair and its roots. Any hair remaining is pulled out by hand.

In order to remove the chemicals used in the unhairing process, the skins are subjected to yet another bath called the “bating bath,” containing an extract of pancreatic glands and an ammonia compound. This also dissolves certain proteins, making the skin soft and pliable.

SPLITTING AND COLORING THE SKINS

Before the skins are dyed to the desired color, they are usually split by machine into several layers and thicknesses. “Top Grain” is so called because it is the original surface — or first layer, as the name implies. “Split Grain” or “flesh splits” are the subsequent layers. These layers should actually be labeled as suede, but over the last few years these suede splits have been rolled through presses to create embossing and finishing that resembles the original surface pattern of the hide or even to imitate the grain pattern of other animals and exotic lizards.

Thicker top grain leathers are used for upholstery (particularly automobile) and thinner leathers are used for furniture and wearing apparel where a softer “hand” (draping ability) is desired.

If the skins are to be colored throughout, the preliminary coloring operation is carried out in drums or with rollers. The hides are impregnated with either natural or synthetic dyes. When a hide is colored throughout its entire thickness, it is known as “vat dyed” — although it is not necessarily soaked in a vat. Usually it is passed through a series of rollers which apply an aniline (alcohol base) dye. These colors are somewhat limited, though, and usually these “vat dyed” hides are eventually surface coated.

When the dripping -wet skins are removed from the drums or rollers, they are first put into machines that wring out most of the moisture, and then they are placed in dryers. Most modern tanneries employ conveyers that carry the skins through drying chambers in which the temperature and humidity are carefully regulated. When they are dry they become stiff once again and must be flexed and softened with oils in a machine which accomplishes this. The process is called “fatliquoring.” It strengthens and softens the fibers of the leather and enables it to be stretched and dried without becoming stiff once again and thus unmanageable

SURFACE COLORING THE LEATHER

Not all leathers are vat dyed, but nearly all leathers are surface coated. This is done to protect the surface, and extend the life of the hide. Even a grain of sand worn into the natural fibers of leather can wear a hole. Hides that are not surface coated with a colored finish are waxed to create a more natural, but still protective finish.

Solutions containing casein or synthetic resins are applied to the leather surface by means of spray guns or seasoning machines, in which a rotating brush applies the finishing solution to the surface of the leather.

Polishing is done with lustering or burnishing machines in which cylinders of glass or metal rub or compress the surface.

Ironing machines, like those found in laundries, are sometimes used for this purpose; in other cases machines operated by hydraulic pressure give the desired luster.

This lengthy and complicated process turns animal skins into one of the world's most durable materials. Endless uses, including luggage, clothing, upholstery and automobile interiors, are all enhanced in both value and appearance by the words "Genuine Leather." But to maintain both its beauty and durability, leather requires regular cleaning and conditioning.

A LITTLE MORE ABOUT SURFACE COLORANTS...

Prior to World War II, most leathers produced were finished with a surface sprayed lacquer process. Colors were dark and limited in number. Usually these colors faded quickly and oxidized into unpleasant hues. These lacquered surfaces were thick and durable, and often remained intact. However, the leather still became dry and stiff. It was to preserve and restore these Pre War automobiles that the Leatherique process was developed by George Pavlisko, an avid collector and restorer of pre war automobiles, and his chemist friend Ty Peck.

By the late 1980's, it was found that the tanning process involving nitrocellulose lacquer was harmful to the environment, many lawsuits were filed for pollution of the environment, and the EPA required tanners to alter their finish methods.

If your vehicle predates 1990 and nitrocellulose lacquers were used in dyeing the leather, here is what's happening to the surface: Nitrocellulose lacquers were brittle surface colorants generally used on the exterior metal surface of the automobile body. Flexing agents or plasticizers were added to keep them from cracking. The coloring of leather required additional plasticizers for added flexibility. There was a delicate balance which had to be maintained. Although the addition of plasticizers increased the flexibility of the lacquer, the durability decreased. The surface became more subject to wear and abrasion, and the actual adhesion of the lacquer to the leather diminished. It loosened where flexed and chipped away. Because these colors were generally sprayed on the surface, they were further reduced with thinners for even application. The actual thickness of the lacquer finish was extremely thin. Thicker applications would create a loss of suppleness and inhibit the leather's ability to "breathe."

Plasticizers were also unstable; they underwent a chemical change and migrated into the atmosphere — or, quite simply, disappeared. What remained on the leather surface was a stiff, brittle, non-porous coating, which in itself is bad enough. However, it further restricted the ability of the leather to flex and breathe, and actually accelerated the deterioration process. Once begun, this aging process progressed more and more rapidly.

If old leather is not properly cared for, a sudden flexing will sometimes result in actual cracking like folding old, dry cardboard. Old seats have actually been known to “shatter” or develop a hole when pressed or sat upon.

Other things are also happening to the leather. Recall those oils that were added during the fatliquoring finishing process? Well, they migrate as well. The omnidirectional fibers which were once plump and flexible are becoming thinner and more rigid. Instead of flexing and stretching with use, the fibers are getting tight and compact and tend to tear when stretched. Like bending a piece of metal repeatedly in the same place, the structure weakens and the metal breaks. This same process is happening in these “wear creases” in the color finish of leather; the leather eventually weakens in these flexed areas and separates. Instead of a surface crack, there is now an actual split in the leather.

Without proper maintenance, and depending on climate, storage and use, this deterioration process can happen in as little as two years.

QUALITY OF LEATHER

In the dead heat of the summer sun and the freezing winds of winter, the cattle are exposed to the elements. They aren’t harmed by it, they just develop a “thicker hide.” Exposed to barbed wire, shrubs, brush, insect bites, gored with cattle horns, leather develops natural “characteristic markings” (scars).

While some people who are uneducated in actual production of hides disparage the differences between American leather vs European leather, from experience based on three generations of leather expertise, we can confirm that all leather is universally the same molecular structure. Quality leather can be made from North American cows from the cold regions of Canada, the sunny south of the US, or from Water Buffalo in India. It can be manufactured from snakes that slither or swim, or ostriches or kids (baby goats). Some parts of the world are still tanning their hides with ancient processes, but these hides are used primarily for tourist souvenirs and novelty items.

Most hides manufactured world wide since the 1990’s have polymer coating finishes for leather and vinyl which never become stiff and brittle and wear extremely well. It was this cutting edge co-polymer technology that was originally developed by George Pavlisko and Ty Peck in 1960. This understanding of leather and it’s proper care have made **Leatherique Professional Leather Restoration Products** the world’s foremost expert on leather care, leather finishes, and maintenance products in the world. Our premise was simple, to create coatings that would be durable, allow leather to breathe, but even with these coatings, the leather beneath will eventually dry out if not cleaned and conditioned periodically. Our most important lesson at this point should be to realize that leather was once a living, organic material, that is now unable to produce for itself what it needs to remain in it’s like new state. Leather has become such a coveted material because of its’ natural and individual beauty, it’s luxurious hand and drape, and its’ comfortable characteristics of being able to breathe to regulate to it’s surrounding temperature.

WHY LEATHER GOES BAD

We appreciate that leather is outer protective epidermis of an animal, treated to stop decomposition, soaked, rolled, dried, oiled, stretched, split, dyed, dried again, softened and colored.

The natural spongy leather fiber structure is omnidirectional — it has no particular direction or pattern. It will stretch in all directions with no particular grain pattern or stress. Over time, the natural tensile strength and elasticity that the hide once had becomes diminished. The surface coating, sitting over leather fibers that are becoming less plump eventually develop omnidirectional spider web cracks — not yet visible to the naked eye.

Repeated flexing and stretching eventually causes the color surface coating to chip away in certain areas and eventually the natural leather color beneath becomes visible. Usually this appears to be a crack in the leather. It is not a “crack,” though; it is merely the absence of surface colorant running in a patterned direction (wear creases). Also, in upholstered pieces like motor vehicles or furniture, many fabrics act like 600 grit sand paper. Demin, cords, chinos constantly rubbing against the finish can break it down, and create wear, decrease of the finish, and then as the fragile fibrous leather fibers become exposed, it is worn down to become holes and tears. Time, heat, UV rays of the sun, wear and use also dry the actual hide, causing it to become less resilient. Because leather is fibrous, it also absorbs anything that it comes in contact with. Dark colored clothing can transfer dyes to lighter shades of leather. The dyes from leather belts, jackets, or purses can also transfer to the fibrous spongy leather. This is another reason to keep your hides nourished and plump with a leather conditioner formulated to actually be absorbed into the hide, not just sit on the surface.

Darker colors usually show the light color of the natural leather beneath, and light leathers do the same, except that having lost the protection of a resistant color coating, the exposed leather attracts dirt and oils and soon gets dirty and looks like a dark “crack.” Here is where the vat dyed leathers have a slight advantage: the color beneath the surface coating, although usually not exactly the same color, is close enough that these creases or “cracks” are less obvious — but still detrimental.

THE MYTH OF LEATHER MAINTENANCE

OLD AND NEW

Leather hides are each different and distinct. We call look at them as art, and appreciate them as one would appreciate natural marble, granite, and fine wood. Because leather was once a living organism, it needs to be maintained just any other living organism does. While products like lemon oil may be acceptable for wood, oil and water are enemies to leather. Oil based products tend to sit on the surface of leather and while they create a temporarily shiny surface that makes you feel you’ve done something, you are can be causing harm to your leather. The oils can be absorbed by stitching, and cause it to deteriorate, also heavy oil molecules are heavier and denser than the fine leather fibers, and can cause them to separate. Too much water is also harmful to leather, as our customers who’ve accidentally left windows or sun roofs open and been subjected to shriveled leather! Our Leather Rejuvenator is a scientific blend of leather specific proteins and collagens that are actually absorbed by the leather fibers to nourish, plump it, restore tensile strength. It contains no petroleum oils, vegetable oil, silicones, or waxes that can clog your leather’s pores and prevent it from being able to breathe. The reason we use fine leather in our upholstery is because it breathes, conforms, and adjusts easily to body temperature.

Not all conditioners are alike. In fact, one of the leading brands on the market contains about 90% water with the balance petroleum oils and artificial fragrance! When applied to the leather surface, it appears to “soak

in” rapidly, but in fact it is the water on the surface that is evaporating leaving only a thin film of oil to make the surface appear slick and temporarily shiney. Silicone based products are among the worst offenders to leather. The silicones impregnate the hides, soaking into the pores of the leather fibers and causing the hides to become stiff . The silicone also causes a “hazing” on your windows, and door seals over time, and can be difficult to clean. Saddle soap is also too harsh for use on anything but saddles. It was formulated to clean sweat and trail dirt out of thick full grain leather. On finished leathers, it removes surface color, and it is also drying to leather.

C L E A N I N G & C O N D I T I O N I N G L E A T H E R

To clean and condition new or aging leather...

It is the job of soaps and cleaners to emulsify dirt. Most of them do that very well. However, on leather, because it is a porous material, the emulsified “mud” will be absorbed directly back into the fibrous leather, causing the hides to appear dingy, lack their original luster and hand. (Some liquid cleaners are very strong and tend to streak the finish if applied in uneven concentration.)

The first step to your initial cleaning on new leather, or leather that you’re properly cleaning for the first is to massage in a film of Leather Rejuvenator. You can use your hands so you become tactilly aware of where your leather is more dry. The top of the back deck is an area that is often neglected in interior maintenance. So begin your massage from the top of the back deck and work down, complete the back seat bottoms. Then massage the Rejuvenator on the front seats, starting from the top and working down, pay attention to the shoulder areas that get exposure from the sun.

Allow the Rejuvenator to sit and be absorbed into the hides several hours on a sunny day, or overnight. Warmth makes the leather fibers relax, and drink in the proteins and collagens greedily. Park the car in a sunny spot, and roll up the windows to create a steam room to allow the Rejuvenator to fully penetrate into the hides.

Once the leather fibers are plump, by their own nature, they will expel any dirt to the surface. Then apply your Prestine Clean to a soft cloth, towel, or sponge, and gently clean the surface. For upholstery older than two years, follow up with another coat of Rejuvenator, allow it to soak in. Older, thicker hides such as Connolly found on Rolls Royce, Bentley, Jaguar, Ferrari, Lamborgini, Astin Martin, or quality European hides such those on Mercedes, BMW, Saab, Volvo, Citroen, and other European Marks will require three or more coats. While it is contrary to the commercial products to condition first, once you’ve done the process, you will be amazed at the difference. And when you think about it, it makes perfect sense. Remember you should treat your leather as well as you treat your own skin.

After the first six months of use, upholstery leather begins to lose its natural oils. This occurs particularly in perforated areas or places where the leather is joined together with stitching. These “punctures” in the surface coating are natural “release” areas where the leather begins to lose its preservatives and softeners. This is also the area where the Rejuvenator will enter the hides first, and migrate laterally under the finished surface.

You can finish with a thin film of Rejuvenator massaged into the hides, allow it to be absorbed, then buff to a natural finish.

Once your leather is healthy, future maintenance is much easier and less time consuming. In warmer climates that get a lot of sun, or for older vehicles with thicker leathers, use a thin film of Rejuvenator 3-4 times per year, followed by Prestine clean. Use Prestine Clean each time you dust and detail your car. Prestine Clean can be used on all the interior, vinyl, pvc plastics. We have lots of window tinting companies who will advise their customers to use Prestine Clean on the window trim to keep it supple and extend it's life. Prestine Clean is also perfect for bumper maintenance, and to keep tires healthy and supple, without the fake looking glazed donut look that is achieved by silicone sealers on tires. In temperate climates, or for newer cars, reapply 2-4 times per year.

Leather Furniture and upholstery

As we've learned, all leather is basically the same molecular structure. While tanning and surface coloring methods may differ, maintenance is similar. You want to keep your leather well nourished, plump, and healthy so it can breathe, and stay clean. Because leather furniture may not be exposed to as much temperature change, massage Rejuvenator onto all the surface twice a year, allow it to sit overnight to be absorbed, then gently clean with Prestine Clean and a soft cloth. Use Prestine Clean each time you dust your furniture. Pay particular attention to any areas that face windows or get direct sunlight. UV rays are drying to leather, and can fade furniture and carpets. If your leather furniture is becoming faded, or if armrests or seating areas have become worn or scratched, your surface can easily be refinished. Lightly damaged areas can be wipe dyed, which is a simple process of re-staining and building up layers as necessary, or completely refinished as outlined below. Colors can also be enhanced or altered to fit your décor. One of the wonderful things about leather is it's versatility, durability, and ease of recoloring.

COMPLETE LEATHER REFINISHING AND RECOLORING

As we learned, it is normal for the surface color of any leather item to wear. This occurs most often in sporty low slung cars such as Ferraris, Porsche, Corvettes, Jaguars and similar high performance cars. The natural abrasion of fabric wearing against the finished surface wears away color, particularly on the drivers bolster. Arm rests are also high wear areas. On SUV's and trucks, wear also occurs as you again slide over the bolster upon entering. It makes most sense to restore these seats as they wear. Once the surface colorant is gone, and the fibrous, spongy leather is revealed, it is easily abraded and worn.

If the leather item is worn to the point where a hole or tear has developed, you can often have your local upholstery shop replace just the worn panel with a piece of whatever they have on hand, and as you'll be restoring the color, you can easily redye the new panel to match.

New upholstery is very expensive, and with proper maintenance, including conditioning and clean, and maintaining your surface color, your leather can look like new for the life of the item. Generally, leather surface colorants deteriorate faster than the actual leather, and the protection of the hides are maintained by keeping the finish intact.

STEP ONE: CLEANING AND CONDITIONING WITH LEATHER REJUVENATOR AND PRESTINE CLEAN

Always begin with welly conditioned and cleaned leather. As you work with your leather, it needs to be in as close to it's original state as possible. Remember that leather restoration emulates the last steps of the original process of leather finishing. This first step is the most important, and should not be over looked. **Follow the steps for conditioning.**

STEP TWO: REMOVING THE SURFACE GLAZE

You'll need Leatherique Super prepping agent, large bucket, 400 to 600 grit wet or dry sand paper, optional: high quality lacquer thinner for pre '91 project only

2A In an earlier chapter we discussed the different finish processes for leather. If your project is pre 1991 you may use a premium lacquer thinner. Use the best thinner you can find, to eliminate any residual chemicals that can contaminate your new hide or new finish. Apply the quick-dry lacquer thinner with soft paper towels. Remember, the surface glaze is only a thin coating and comes off easily. Be careful when working around stitching so that you do not weaken the threads. Also be careful not to roughen up the surface and create a "suede" appearance. If you are doing a complete restoration on an older project, you will want to reapply a generous coat of Leather Rejuvenator to the leather at this point. Because the surface glaze has been removed, your Rejuvenator will more easily be absorbed into the hides to nourish them and prepare for the next step. After you break the surface of the lacquered finish with the thinner, proceed with the next step.

2B This step applies to cars newer than 1991 which are very compatible with your new Leatherique finish, a co-polymer water base. Pour your Leatherique Prepping agent, an environmentally safe, non flammable, non toxic agent into a large bowl or bucket. Dip your sand paper into the prepping agent, and clean the surface. You will be removing the glazed finish only. Wipe with soft towels or paper towels. Let the leather dry at least 24 hours, or 48 hours in humid conditions. If any seams need re-stitching, this would be time to have that done. At this point the leather should be pinchable, pliable, and feel wonderful. It will look matte, and unfinished.

STEP THREE: MAKING REPAIRS OR FILLING CRACKS

If the leather appears to be in good condition now that the color has been removed, it may not even be necessary to fill cracks. The cracks that were in the surface color have been minimized with the light wet sanding, and the Rejuvenator has plumped the hides. Your **Leatherique Professional Leather Dye** will recreate a new, original finish. If you can run your finger over any remaining cracks or scars, apply **Leatherique Crack Filler**. Using a flat edge tooth pick, the edge of a business card, or a small plastic painters spatula, apply the crack filler in layers into the crack. The **Leatherique Crack Filler** will seep into the lowest level of the crack, filling it from the bottom and seeping into all the fibers to prevent future cracking. Refill as necessary, allowing the filler to dry thoroughly before refilling. Be careful not to get the filler onto the surface of the leather or it will tend to obliterate your grain. If the leather is split, or if a crack is deep enough and it appears as though it will split through eventually, we recommend a *mechanical repair*. Reinforce the tear with a patch from under the tear. Cut a piece of leather or vinyl, larger than the tear you are reinforcing. Use a toothpick to pop the patch, fuzzy sides together, into the split. Then using a toothpick affix the patch with heat resistant contact adhesive. Our customers recommend liquid nails for showers and baths. Or you can remove the upholstery and glue the patch from behind. If the tear is this severe, or if there are several, we recommend having a local upholstery shop replace the panel. Most shops will charge about \$25 to \$35 as they can use a scrap of whatever hides they have available. You would then prep and redye the patch as you would the rest

of the interior. For high wear areas like drivers bolsters, this repair makes the most sense.

Once the mechanical repair is made, use **Leatherique Crack Filler** to fill the the resulting “scar” and when dry, sand smooth as necessary.

STEP FOUR: RECOLORING THE LEATHER

After the leather is completely dry, proceed with your final step! It is important to stress the fact that the leather must not be damp because the **Leatherique Professional Leather Dye** must penetrate into the leather in order to form a good bond. If the leather is not dry, the moisture in the leather will prevent the **Leatherique** from adhering properly. **DO NOT** clean or wipe with any lacquer thinners as that may loosen and unsettle any **Leatherique Crack Filler**.

APPLICATION OF LEATHERIQUE PROFESSIONAL LEATHER DYE — BRUSH, SPRAY, WIPE

After surface is dry and wiped with soft cloth to ensure surface is dust and contamination free, begin your recoloring process. We recommend a soft acrylic (artificial bristle) artists brush. Natural bristles tend to be non-uniform and can cause streaking. Avoid cheap brushes as the can leave unsightly fibers in your work. We do not recommend sponge brushes as they tend to leave bubbles in your dye. Begin in an inconspicuous area to get a feel for the application. Your **Leatherique Dye** can be thinned with bottled water if too thick. Several thin coats look more natural than one heavy coat.

Once the first coat has dried to the touch, (about 15-20 minutes), a second coat can be applied. If necessary, apply a third coat or touch up spots where the color seems to be uneven. We suggest waiting over night for any additional coats.

The second (or third) light coat will give excellent color coverage and will result in a minimal amount of surface colorant. This will avoid that painted vinyl look that most other solvent-base spray paints seem to leave.

SPRAY APPLICATION

When spraying, use a narrow “fan” and air pressure of about 25 p.s.i. Apply a thin film and allow it to penetrate into the leather while drying. Follow up with a second and third coat. Several thin coats will look more natural than one heavy coat. Heavy application of dye can result in “puddeling” in seams and welt areas, and will look artificial and unnatural.

NOTE: If spraying a red color, you will need to spray your first coat “dry,” and build up color coverage with subsequent dry coats. Due to the EPA, the chemical content of red has changed over the years, and it not as strong as it was in years past. Red requires more coats for complete color coverage. We also do not recommend using bright Red as your choice for a color change. Darker reds are acceptable for color change.

WIPE DYING

Another method of **Leatherique Professional Dye** application that was perfected and popularized by one of our Ferrari customers named Mike Charness back in the early 90's is a technique called "wipe" dying. Mike's complete process is outlined on our website, and is recommended for highly grained leathers where you wish to keep the grain pronounced. This technique uses a cheesecloth or a terry type cloth. This application uses friction to work the **Leatherique Professional Dye** into the surface of the leather. This method is also often used by folks who show their cars at concours or car shows, to have an always perfect finish. Remember it is natural for leather to wear on drivers bolsters and arm rests. With this technique you can touch up high wear areas as needed.

FINISHING AND CURING

When thoroughly dry, buff lightly with a soft dry cloth to remove any surface pigment and to bring out the natural low-luster sheen of your new leather finish. **Leatherique Professional Dye** contains a special wax that buffs up to a dirt-resistant surface.

The **Leatherique Professional Dye** dries to the touch in about 20 minutes. As with any new finish, allow the surface to cure for about 48 hours. Your new surface will become fully cured in about 4 weeks.

Because you have thoroughly conditioned your leather back to a like new state when you began the **Leatherique** process, there will be no need to recondition for 6-9 months. Use your **Prestine Clean** and a soft cloth for your maintenance cleaning and dusting. **Prestine Clean** is a cleaner and light conditioner in one step.

REFINISHING VINYL, PVC Plastic and other trim pieces

Unlike leather, which is a natural organic product, vinyl and other imitations are of chemical composition which often contain petroleum by-products. Impregnated with plasticizers, they generally remain supple for quite a long time. After long periods of time, older vinyls and plastics can be softened with the application of Vaseline Petroleum Jelly. This method works well on vinyl dashes. Just massage the Petroleum Jelly onto the vinyl, allow it to steam in car parked in a sunny spot with the windows up, then buff with a soft cloth. Surface blemishes such as rips or tears and holes can be repaired in the same manner as with leather, and they can be refinished. If the tear is on a drivers bolster, we recommend having the panel replaced, then recolor with **Leatherique Professional dye**.

For best results when recoloring vinyl, use the same color as on the original finish. We do not recommend successful color changes for vinyl as the permanent color is all the way through the material.

Use our **SUPER PREPPING AGENT** and light wet sanding to clean the vinyl surface. Allow to dry thoroughly, then spray, brush or wipe on your new **Leatherique Professional Dye**. (The use of laquer thinner or any strong solvent to clean vinyl IS NOT recommended. These cleaners have a tendency to dissolve or "melt" the vinyl surface, leaving it sticky and unworkable.)

When spraying, use about 25 p.s.i. air pressure, a narrow fan, and apply a full wet first coat; avoid runs or puddles. If necessary, when dry apply subsequent coat(s) for good color coverage. Clean equipment with warm, soapy water.

FURTHER INFORMATION

Leatherique's knowledgeable, courteous staff will ensure your Leather Dye order is prepared to your customized standards, color and sheen. If your interior is less than exemplary, give us a call and we will be glad to assist you with Rejuvenator Oil, Prestine Clean, or with instruction and products to re-finish your interior.

Leather is a very durable product and has survived a broad range of applications over the centuries. If you take the time to give your leather the same kind of love and care, and use the same type of natural products, your leather item will remain a valued treasure for generations.

If you have any questions, comments, or special applications which require more information, please contact us, we're here to help!

Leatherique Professional Leather Restoration Products

"Simply the Best Since 1968"

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