

Expert Detailing Tech

Paint Refurbishing Tech

WHEN YOU FIND YOUR MUSTANG BETWEEN SHOW-CAR SHINE AND BARE-METAL BASKET CASE, PAINT RESTORATION MAY BE THE ANSWER

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Before



After

HAS THE PAINT FINISH ON YOUR MUSTANG REACHED CRISIS MODE? PERHAPS IT'S SHOWING THE EFFECTS OF TOO MANY YEARS OF NEGLECT, OR HAS SIMPLY LOST ITS LUSTER. IF YOU DON'T HAVE TWO BIG ONES TO SPEND ON A CHERRY PAINT JOB, AND DON'T WANT TO TAKE IT TO A GENERIC SPRAY SHOP, IT MAY BE TIME TO CONSIDER REFURBISHING THE EXISTING PAINT. WHILE YOU MAY ONLY THINK OF A PAINT DETAILING AS INVOLVING A THOROUGH WASH AND WAX, MODERN PAINT RESTORATION IS THE SPECIALTY OF THE BEST CAR CARE PROFESSIONALS. IN OUR CASE BOB GECO, OWNER OF BOB GECO'S AUTO APPEARANCE CARE IN LOS ANGELES WAS THE LOCAL PRO WHO TOOK OUR 1989 MUSTANG'S ORIGINAL, 15-YEAR-OLD PAINT AND BROUGHT IT BACK TO NEAR SHOWROOM CONDITION.

Although the condition of the existing ticket-me-please red on this LX 5.0 was amazingly good considering its mileage and age, not even the loving care of its mature original owner could keep it in car-show condition. Since the goals for this project car include keeping costs down while making a proud daily driver, we decided to keep it original and go for the paint restoration.

Depending on the condition of your car, this type of paint refurbishing can postpone a total repaint for several years. Exactly how often a thorough refreshing needs to be done depends on how well the car is maintained through regular washing and waxing, and the type of environmental conditions it is subjected to, such as acid rain, or just being parked outside all the time. Whether you bring it to a professional such as Bob, or tackle the job yourself, the same process can bring your car's paint back to life.

WASH

The first step following paint repairs is to hose the car down and make sure it is cool to the touch—and stays that way—by washing it in the shade. This is followed by the three-stage environmental, or fallout, wash. The products you will use for this include alkaline remover, acid neutralizer and a pH-balanced car wash (follow the directions, of course, for your particular products). During the application process make sure they stay wet and reapply where necessary so they don't dry before they can be rinsed off.

After the alkaline remover is applied, rinse and chamois the car dry. Next, apply the acid neutralizer and let that sit for about five to ten minutes. Hose that off and then use the pH car wash, which will neutralize everything again. Bob likes to use a silicone-blade squeegee to quickly remove the rinse water.

Here are a few expert car washing tips to consider:

- * Always wash from the top of the car down, and clean your mitt or sponge frequently to keep lifted particles from scratching the paint. Wash your mitt in a washing machine using white vinegar to help remove the dirt and fluff the mitt.

- * Do NOT use dish or laundry detergents to wash your car. Automotive washes are developed to rinse safely and not remove organic wax or other coatings you may have put on your car. Dish and laundry detergents are meant to remove wax and coatings, which you obviously don't want to do.

- * As you wash a particular section of the car, hose it off—again, working from top to bottom.

- * Use two mitts to wash your Mustang—one for the top and sides, and another to handle the grungy areas like the wheels, rocker panels and lower sections.

- * Once the car is washed, quickly wash the wheels and tires, applying a cleaner to the plastic wheelwells with a soft brush to remove any dirt. The cleaner we like is Red Hot made by Auto Magic—a good all-purpose cleaner available through the company's Web site.

TRIM REMOVAL

Once the car is completely washed and dried, the next step is to remove additional items such as wiper blades. While this is not absolutely necessary, it's a good idea to remove some external items like the front cowl, particularly on Fox Mustangs. Removing the cowl also gives you the chance to do some cleaning to remove any leaves or debris that may have accumulated underneath. Another



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OUR SEVEN STEP PAINT REFURBISH PROCESS

1) Basic, regular wash to remove dirt prior to applying touch up paint to scratches and rock chips. Carefully dry with several clean, lint-free cotton towels.

2) Apply touch up paint as needed using an applicator to carefully brush on light coats that will dry quickly and completely. Results will vary depending on the nature of the scratches and chips, and the color of your car. Your local auto parts store or dealership can provide the correct, color-matched touch-up paint. Be

sure the touch-up areas dry and set completely before proceeding with the restoration.

3) Apply a quality, three-stage environmental wash that includes an alkaline remover, acid neutralizer, and pH-balanced car wash, such as the Value Guard Auto Preservations System used in this article. This cleanses the paint by removing any industrial and environmental fallout, such as bird droppings and mineral-rich water deposits. Use an alkaline remover to neutralize any alkalinity in the

paint. A mild acid neutralizer (not the same as used in wheel cleaners) can safely remove fallout such as brake dust or mineral deposits that may be embedded in the paint. Next, use a car wash to bring the paint back to a 7.0 pH-neutral finish.

4) Dry the car and apply Clay Magic from Autowax. Clay safely removes surface fallout without removing paint. Apply and use Body Shine #49 Clay, working the clay one section at a time. This lesser-known technique is the key

to getting great results. See the related sidebar for more details.

5) Machine polish using 3M Finesse-It Two and 3M 05996 foam polishing pad glaze. Both products are used with a foam buffing pad supplied by Meguiars.

6) Hand polish using Zymol HD Cleanse prewax cleaner to remove the hairline buffing marks resulting from the machine polish.

7) Apply a fine, non-abrasive, quality carnauba automotive wax and buff to a brilliant shine using microfiber towels.

item we will remove from this particular car is the front headlights and sidemarkers since this Fox body's headlights are quite dismal. A new headlamp kit from Latemodel Restoration Supply in Dallas did the trick (see sidebar on page 46).



KEEP THE CLAY IN A BUCKET OF WARM WATER BETWEEN USAGE TO HELP CLEANSE IT AND KEEP IT PLIABLE. AFTER WORKING THE CONTAMINANTS FROM THE PAINT USING THE CLAY AND LUBRICANT, SQUEEGEE THE SURFACE TO REMOVE EXCESS LIQUID AND LUBRICANT.

SURFACE PREP

Following the three-step wash sequence it's time to remove the more difficult grunge from the paint surface. We do this using a clay bar to remove contamination and give the paint a deep cleaning. Regular washing only goes so far, so it is recommended that you deep clean with a clay bar prior to a good hand polish and applying a couple light coats of carnauba wax. Although we put our Mustang through a fallout wash to neutralize the acids in the paint, this doesn't remove the residual fallout from the top surface. That's what we are doing with the clay.

Here we are using a red clay from Auto Magic, which is a little more aggressive than their blue clay. We selected this grade because we have a significant amount of contamination on the car. We will switch off clays as we determine how much bite we need to remove the contamination and smooth out the surface of the paint.

A spray lubricant made specifically for the clay procedure helps the clay bar slide along the surface. It's almost like color-sanding the car, but the clay is actually removing contaminants, will not pick up paint, and will not pick up clearcoat. The lubricant also prevents the clay from scratching. Working in sections, just keep going until you get it as smooth as possible, then move on to the next section.

Keep the clay in a bucket of warm water between usage to help cleanse it and keep it pliable. After working the contaminants from the paint using the clay and lubricant, squeegee the surface to remove excess liquid and lubricant.

Interestingly, you can also use the clay on surfaces such as glass, plastic, or chrome to remove contaminants that are stuck to these materials.

MACHINE POLISHING

Polishing takes paint restoration to the next level following a thorough clay bar cleaning. Paint cleaners, applied with a buffer and by hand, are used to remove oxidation and light scratches. Of course, one can only go so far with this procedure since there is not a lot of paint on Ford products.

Before using the buffer, tape off or mask sensitive areas like moldings, and also leave corners and edges for gentle hand polishing. Since rubber moldings

THE LIGHT STUFF

When performing a full-court-press paint-refurbishing project, you really need to remove as much trim and other items as you can in order to hit as much painted area of the car as possible. While you're at it, you might as well pull your lights. Most Fox Mustangs, if they haven't had it done already, are in need of new illuminators, as time and wear tends to turn the lamps opaque and otherwise nasty looking. And besides, why go to all the trouble of freshening up your topcoat only to leave these coals sitting on the diamond pile? For the back side, we used LRS's Headlamp Cleaning Kit to brighten the taillamp assemblies.



1. For our replacement lights we contacted Latemodel Restoration Supply for our new headlamps and side marker lights. We selected the six-piece headlight kit (PN LRS-13007-KIT) for 1987-1993 Fox Mustangs. The kit comes with a one-year warranty, and sells for \$119.95.

2. Our kit required the re-use of the original headlamp seals and adjusting plates. Latemodel Restoration Supply does, however, sell a 12-piece light kit that includes everything in the six-piece kit, plus two bulbs, seals and adjustment plates (PN #LRS-13008-KIT) for \$159.95.

3. Thanks to the new lamps and refurbished paint, this pony has just shaved 15 years off of its appearance.



are susceptible to burning by a rotary buffer, Bob taped off the quarter-window molding, top moldings above the doors, the sunroof moldings, door handles and around the keyhole entry. Also, proceed carefully and slowly so that the polisher does not catch any moldings in the process.

Paint cleaners are used because they break down into smaller particles, essentially delivering a fine polish to the paint while removing as little of the paint surface as possible. At this stage, professionals will use mechanical devices such as orbital

buffers or rotary polishers. Orbital buffers are better for amateurs than rotary/high-speed polishers because the latter can allow the novice to over-do it and remove too much paint.



HAND POLISHING

Once you've satisfactorily hit the paint with the buffer, it's time to apply some elbow grease by hand polishing, or hand glazing, the paint. Use a gentle polisher designed for final hand application to remove ultra-fine scratches or light haze left from the machine polishing process. Apply the polish with a cotton fiber foam applicator and gently wipe off using microfiber towels. Buff it on and off in small sections until the entire car has been polished.

IS YOUR AUTOMOBILE'S FINISH CONTAMINATED?

Contamination on automobile paints from the 1950s through the early 1970s is generally removed with polishing compound or cleaner and hand-rubbing the paint smooth or using a machine buffer or polisher and a wool-buffing pad. This can be at the price of removing one to two mils of paint, but these vintage automobiles had six to eight mils of base coat paint on them when they came from the factory.

Automotive paint has changed more in the last ten years than in the previous 100. Today's cars can sport three-stage, special effects, mica pearl metallic color tones and special graphics packages that use a clearcoat as the top layer of protection. Clearcoat keeps the shine and colors from fading. It also has ultra-violet blockers to keep the base coat from oxidizing. The factory's clearcoat totals two mils minimum, which is no thicker than a heavy-duty garbage bag.

If you use a compound or cleaning method on any car produced after the early 1970s, you have taken off one-half to all of your clearcoat finish, as well as the protection for the underlying paint color and shine. This can cause other problems and even void the manufacturer's paint warranty. Interestingly, most new automobile finishes are contaminated with fallout before they ever reach the dealership.

How can you tell if your automobile's paint is contaminated? It is difficult and sometimes impossible to see the contamination (such

as rail and brake dust), but you can feel it. Simply, rub the palm of your hand over the paint with a sandwich bag, cigarette cellophane or a candy wrapper. The paint may appear shiny and smooth, but if it feels rough in some spots or over the entire automobile, your paint has been contaminated. Sometimes you can see the problem—appearing as small rust-colored spots. The contamination can cause pitting in the clearcoat if it is not promptly and properly removed. If your clearcoat becomes pitted, it is impossible to repair the damage without having the automobile repainted.

Are there other alternatives to remove the contamination? Yes, but we need to first understand what contamination is. Contaminates can be rail dust (more than 70 percent of all new cars travel by train or are stored near a railroad), brake dust (from the softer brake pads now being used), industrial fall-out, environmental pollution, paint overspray, water and/or mineral spots, volcanic ash, bugs, acidic bird droppings, sap, et cetera. Contaminates are not just on top of the automobile's paint—they are imbedded in the clearcoat. These specks cannot be removed by washing or scrubbing. Only a compound with an abrasive polish can do the job. Problem is, abrasive polish can only be used a few times before too much of the clearcoat is removed, resulting in a finish too thin to protect the sheetmetal.

One way to minimize clearcoat contamination is detailing clay, which picks it up out of the

paint's finish. It comes in a bar shape and is used with a lubricant spray. Remove the plastic wrapping from the sticky clay bar and place the clay bar in a bucket of warm water to soften the clay and keep it clean. The best clay bar is pliable and can be folded and kneaded. They'll remain fresh, never dry out, and can be used repeatedly. (Inferior clay bars can actually damage your automobile's paint.)

Start the clay process with a clean work surface as described in this article. Flatten the clay in the palm of your hands and break off a useable size. Spray the special lubricant on the clay and place the wet clay on the car's dry, clean surface. Wipe the clay back and forth until the bar glides effortlessly. Restrict your work area to a three-foot square section per application, using only the weight of your hand to remove the contaminants.

You will notice that the lubricant spray activates the clay to pick up and absorb the contaminants imbedded in the clearcoat finish. Remember to fold and knead the clay bar to keep it clean. When finished using the clay, spray more lubricant on it and store it in an airtight plastic container.

The final step is to squeegee the car again to remove excess lubricant. Use the squeegee in one direction only, either back or forth on the top and flatter surfaces, and going down the parallel sides of the car. Dry the car with a microfiber towel and then apply a cleaner wax or separate clearcoat paint cleaner and polish wax. —Bob Geco

WAXING

Finally it's time for a good waxing to protect that paint you've worked so hard to clean. This is done by applying two or more light coats rather than one heavy coat of the highest quality carnauba wax you can locate. The higher the carnauba content the better the wax. Apply and remove in small sections at a time, letting the wax sit for only a few minutes before hand buffing out. The longer you leave the wax on the more effort will be required to remove the excess. Buff to a deep, fine gloss with microfiber towels and enjoy looking in the mirror! ■



POST PAINT RESTORATION MAINTENANCE

Detailing expert Bob Geco recommends washing your car weekly with a quality automotive shampoo. Ultimate protection comes from waxing the car every two to three months with a high-quality carnauba wax, and treating your car to a hand polish twice a year.