

# How to Paint Your Car – The Written Guide

Content From:

[www.LearnAutoPainting.com](http://www.LearnAutoPainting.com)

&

[www.LearnAutoBodyAndPaint.com](http://www.LearnAutoBodyAndPaint.com)

**“The Best Auto Body And Pant Resource On The Internet!”**

**Optional VIP Membership** Includes Step-by-Step Video Training on all types of body repair and custom painting, private worldwide members forum plus Much Much More!

by Tony Bandalos

**IMPORTANT: LEGAL INFORMATION  
BELOW PLEASE READ!**

**This Free Version E-Book "How To Paint Your Car - The Written Guide" Is protected by U.S. and Worldwide copyright laws and may not be copied, sold or reproduced in any way whatsoever.**

**It may be given away for FREE but not edited in any fashion whatsoever. If done you will be subject to the maximum fine and penalty imposed by law.**

**Including email distribution, Internet, and news groups and reprinting for sale. Any violator will be subject to the maximum fine and penalty imposed by law. Purchasers of the book and course are granted a license to use this material for their own personal use as a learning tool.**

**All earnings, testimonials described in our websites are accurate and to the best of our knowledge and should not be considered „typical results“ as with any business or education program we cannot guarantee your success with this manual. Your results will vary based own desire and motivation that you put into learning. The author and publisher have used their best efforts in preparing this course for the reader.**

**The author and publisher make no representation or warranties with respect to the accuracy, applicability, fitness or completeness of the contents of this manual. This manual is strictly for educational purposes. Therefore, by applying the tactics in this manual you are fully responsible for your own actions. Please check your own State and Local laws and or OSHA for specifics if you decide to paint your car or parts at home or, on your property.**

**There are no resell rights for "How To Master Auto Body And Painting, Like A Pro" You may distribute this manual in any way for free. May not be sold or edited in anyway whatsoever. if done you will be subject to the maximum fine and penalty imposed by law.**

# Introduction

The idea behind creating this written guide was the result of a most commonly seen problem among people who are intending to paint their own vehicle themselves; they do not have the proper and specific information readily available that can make sure of efficiency, accuracy and ease with which one can proceed.

Above all, the idea is supported by the lack of proper information on-line. That is why [www.learnautopainting.com](http://www.learnautopainting.com) and [www.learnautobodyandpaint.com](http://www.learnautobodyandpaint.com) was created: to answer the problem statement. **Learn How to paint a car!, or just how to PIMP it out! :)**

The main objective of this guide is not only to support and provide information to help the first-time painter but also to help in many ways even a professional by providing useful and valuable information.

You may think how is it possible to paint your own car, van, or truck for there are so many techniques to be used while painting a vehicle. Following the information provided in this guide carefully, you can surely accomplish painting your vehicle safely and accurately and it will make it possible for you to develop your skills further.

Don't however, be misled that it is a very simple and straightforward task to accomplish, as many may claim it to be so. It is something very different from just picking up a spray gun and starting the job, it requires a lot of patience, trial and error and most importantly to undergo the right tuition before engaging in the project. The need to keep yourself updated with the latest paint industry information is advised due to changes occurring very frequently. [www.learnautopainting.com](http://www.learnautopainting.com) is designed to fulfill all your needs by providing that up to date information and intuition.

This guide is designed to equip you with advantageous information related to painting a vehicle that can lead you towards producing a professional result. The guide features information on basic bodywork such as dent repair, applying the first coating of primer, surface preparation and final coat of paint and much more with polish and wax.

Whatever may be your requirements, such as repainting your vehicle fully or repairing minor dents, this guide will provide you with the appropriate instructions and information to do the job correctly.

In the entire process you must be aware of all stages and know exactly what has to be done and what you are doing. For example, before starting the job, the body of the vehicle has to be as smooth as possible. To achieve a perfect paint job, preparation is the most important stage; otherwise the result will not

be what you wanted.

Mixing primers, hardeners, and catalysts needs to be done exactly as directed on the product labels. The information in this guide can help you to paint just like the professionals do but only if you too can follow instructions and all of the steps carefully.

Using the right safety equipment while painting is vitally important. During the process of painting a vehicle you will be dealing with chemicals that can be extremely harmful if ingested in any way. Using these paint products can be safe only if they are used with care and common sense.

For this, safety equipment including respirators, rubber gloves and overalls will play a vital role. [www.learnautopainting.com](http://www.learnautopainting.com) will provide you with certain tips on this and you will be aware of which safety equipment is helpful while using the various paint products.

**[To Get Step-by-Step PRO Video Tutorials Click Here!](#)**

## **The Definition of Automotive Painting**

It is a well known fact that a new car leaving the factory has a perfect coat of paint. Over a period of time, the appearance will start to diminish due to driving; this will cause minor scratches and other such problems to occur. These commonly occurring problems are generally solved by touch-up work using a brush from a touch-up bottle to apply the paint to these scratches and other nicks.

However, if there is wear and tear on small body items or trim, a spray can would be more appropriate to get rid of such problems. To get optimum results from a spray can or touch-up, it's required that the spray-can is initially warm. This will help in mixing the paint ingredients and give maximum power to the propellant. Heating of the spray-can should be carried out as per the guidelines given on the label and never heat the can over the recommended safety level and never directly on a flame.

In the case that your vehicle has been involved in a collision, generally the repair work for the various damaged parts or sections would be carried out by using conventional spray guns.

To identify what techniques are to be employed for applying vehicle paint is decided by the amount of coverage needed and the current surface material. For example, to touch-up a small scratch there is no need for a full size spray gun conversely for an entire panel a touch-up brush would not be the most appropriate option. So an understanding of the situation and common sense are required during the planning stages of any painting project.

Preparation plays a vital role in auto painting. To obtain a professional visually acceptable, compatible and durable paint job, it is required to use products designed for the right purpose, so that these can suit the existing paint finishes. The finest paint job will only be long lasting, if various layers of body filler, primer, sealers, and final top coat are compatible.

The compatibility of every product in the paint system is very important, whether in regard to the surface on which it will be applied to or among the different products used in the system. There are many individual products which were not designed as part of a single compatible paint system that can have adverse effects to the color, adhesion and surface flow of that combination.

You need to determine the type of material on the vehicle surface - enamel, lacquer or urethane, before you buy the paint for your vehicle. In the case of newer vehicles, all factory paint jobs are going to be urethane based, as enamels and lacquers are being left behind.

There should be a specific paint code listed on the vehicles identification tag to find out what kind of paint was applied at the factory on your car. In older vehicles, the exact kind and color of paint can be found from the vehicle identification number (VIN), a separate paint and options tag serves the same purpose in newer vehicles. This all helps to easily identify materials when you are planning to match the existing paint.

If the car has been repainted since it left the factory, you will need to obtain the paint code numbers from the paint can used during repainting or if this is not possible, contact the person who performed the paint job to attain the required information from them.

On the other hand, if you are unable to find out what type of paint is on your car, you will have to use lacquer thinner to test it yourself. Take a clean white cloth, wet it with lacquer thinner and rub a spot of hidden paint to see the reaction.

If the color comes off immediately or the spot starts wrinkling, it shows that the type of paint is enamel; if the color wipes off onto the white cloth only after vigorous rubbing, it is a sign of lacquer paint. If nothing wipes off onto the cloth, the paint is probably urethane based.

To find out if the finish on the vehicle includes coats of clear paint over its base color, sand an inconspicuous spot with 600-grit or finer sandpaper. A white sanding residue shows that there exists a clear coat finish and a color residue claims that only a color material was used to paint the body.

Before applying fresh paint on the vehicle, it is really important to find out

exactly what type of paint is currently on the surface. The only exception to this is the situation where a totally new paint system has to be taken into consideration after bringing the vehicle body down to its base metal.

Always keep in mind that applying a new coat of paint which is not compatible with the current coat of paint is of no use to the entire project.

### **Repairing Nicks and Scratches**

#### **Tired Of Reading? Get Inside VIP Here!**

For minor nicks and scratches, you can sometimes polish them out as long as they are shallow enough exposing only paint at their deepest point. You will have to apply new paint if you can visibly see primer or the bare metal itself.

To repair nicks, the use of touch-up paint is an easy and inexpensive method. You can easily attain stock factory colors at auto body paint and supply stores and other auto parts houses. All these touch-up paints match the paint code on the vehicle's identification tag. You can use the small brush commonly attached to the bottle to apply the paint or alternatively any other fine paintbrush.

It is crucial to cover nicks as soon as possible in the case where bare metal is exposed. Oxidation will attack the bare metal where rust and corrosion will begin. This process will continue on under the paint and ultimately cause the paint to peel off. In earlier times, applying dabs of clear fingernail polish to nicks in an effort to protect the bare metal from rust and corrosion was a common practice.

Compared to small nicks, long deep scratches are a more serious problem. Although it is possible to use touch-up paint for minor scratches, touch-up paint is unable to provide efficient results when used in long strokes.

Depending on the type and color of the paint finish, it may be a better idea to use an aerosol touch-up can or a regular spray paint gun for feathering in new layers of fresh paint after carefully sanding scratches smooth.

In How to Paint a Car – Part 1 it clearly demonstrates how to repair vehicle bodywork that has suffered common 'key' damage extending over both the driver and passenger doors.

### **Painting Panels**

Vehicles are composed of a number of separate sections and parts that are welded or bolted together. Professionals concerned with auto painting often refer to these parts as panels, such as quarter panels, door panels and rear body panels.

If there is a lot of body collision damage or the paint job is a simple repaint,

the painters have to spray complete panels in lieu of spraying specific spots. The condition of existing paint, its type and its style are pretty much crucial in determining whether to spot paint the panel or paint the entire panel. The size of the repair area and the ability to blend new paint into the surrounding body paint must also be considered.

If a vehicle had minor dents scattered over the entire bonnet, it would be much easier and the finished look much more uniform and professional if the entire bonnet was completely prepared and painted all at one time. Likewise, it is true for other panels also. There are some situations where you can get away with painting just parts of panels, as opposed to entire units.

Lower panel sections up to featured grooves, ridges, or trim lines on doors, wings or quarter panels are examples of this situation.

With the arrival of base coat/clear coat paint systems', blending has more or less eliminated panel painting. Even with the availability of the correct paint code, the surface properly prepared and the paint applied perfectly, the newly painted panel will most likely not match the rest of the vehicle.

Blending can also be achieved using single stage paint products; however, if you are not well-versed in the art of blending, base coat/clear coat is the best option for you to work with. It is true that the actual color of the repaired area may not match the adjacent panels exactly, but the blend will create such an illusion that the affected area will not appear to have ever been damaged. On the other hand, you can easily spot two adjacent panels that have been painted separately.

While painting panels, color blending and uniform paint feathering are of utmost importance. Your aim is to apply the paint in such a manner that no definite edges are visible. This will allow you to make the area appear as if it had never been repaired or repainted. This is the main reason why some single-panel repaint jobs require the adjacent panels on either side to be lightly sprayed with feather coats of paint—to make them appear similar in color. You will see video footage of this technique being carried out including where to mask the bodywork to achieve this result.

**[The Complete Paint Job – Get Over 50 Hours Over Video Access Click Here!](#)**

In the event of performing a partial paint job, 70% of the time will involve preparing the surface. The remaining 30% will be for the actual paint application. When doing a complete paint job, 95% of the time will involve preparing the surface with only 5% of the time being spent on paint application.

You have to realize that the condition of the body surface prior to applying any paint will have a direct impact on the outcome of the finished paint job. You

will be able to see every single particle of dirt, sanding scratch, pinhole or blemish once the paint has been applied over the top of it. The perfect quality of the surrounding paint will draw your attention to every imperfection. It doesn't matter how many coats of paint you put on, those flaws will still be very noticeable.

Again, it is vitally important that you properly prepare surfaces before you begin the painting process. When you do a complete paint job, all of the exterior body trim has to be

removed from the vehicle. This includes door handles, trim pieces, mirrors, emblems, badges, key locks, radio aerials and anything else that are on the body of the vehicle. This takes less time compared with trying to mask each of the items ready for painting. Remember, if you don't mask such items adequately, you risk covering them with overspray.

Removing all of the trim ensures your paint job will be even and that none of the trim will cause the paint to build-up or be too thin in cover.

The trim on the vehicle should ideally be removed using the appropriate hand tools to remove the nuts, bolts, and screws holding them in place. Only use the proper tool for removing each individual piece. You might have to use an adhesive remover to remove other accessories. It is important that you take your time removing all these items as you don't want to risk damaging or breaking them during the process.

You should have quite a collection of parts once you start taking them off. In addition to the door handles, key locks and trim, you are going to need to remove the light assemblies, the reflectors, grille pieces, bumpers, license plates, mudguards and anything else you see. It is crucial that you devise a system for storing all of these items to prevent them from getting damaged or lost.

It is a good idea to have several storage containers handy to place the parts in as you take them off. This will help you put them back on after the vehicle has been painted without too much trouble. Keep the fastening nuts, bolts, screws, and clips with the piece they belong to for fast and easy reassembly.

Be prepared to spend a great deal of time sanding down every square inch of the vehicle or specifically the area that needs it, before you are ready to use a spray gun. You need to remove every imperfection on the panel so that your paint will have a blemish free surface in which to bond to. Paint is not thick enough to cover up sand scratch swelling or pinholes.

Primers are commonly used for this purpose. You will also need to sand the primer as it needs to be as smooth as possible in order for the paint to be coated evenly and look attractive.



## Color Change Paint Job

There are many factors to be considered before changing the color of a vehicle. It can be a harder process on some vehicles than with others. Keep in mind that a complete color change will require you to paint the engine compartment, door jams and portions of the interior. With most of the sheet metal within the engine compartment not being in view, it would still be quite obvious if the sheet metal was a different color from the rest of the car. You should therefore carefully consider the idea of your vehicle undergoing a complete color change if you don't plan on completely disassembling it.

The engine compartment, in order to be painted correctly, would require you to remove the engine and all of the accessories, thoroughly clean the compartment using a steam cleaner and then carry out the standard sheet metal prep work.

Some people are very skilled with a detail gun and masking procedures and may not have to go to this extent, but it is likely you will need to remove the engine for the best results. If there is no engine in the vehicle that you are working on then of course you can start straight away with the sanding and surface preparation. You will also need to investigate the areas of the interior that need to be removed as well.

### Choosing A Color...

**[Get Instant Access To 50 HOURS Plus Of Step-by-Step Videos Here!](#)**

Choosing the right color of paint for your vehicle is a very important step. Depending on the age of the vehicle and the size of the area to be covered, you will no longer be able to simply walk into a paint store and ask for a shade of blue paint, there are too many shades of blue to choose from for that and you will need to be much more specific.

You will need to pick a specific color chip from a color book. You can also make your paint selection by having the specific paint code to hand. It doesn't matter which color you choose, with modern day cars there are going to be hundreds of variations.

To ensure you will be happy with your paint selection, look at the color under various lighting conditions both indoors and outdoors.

My favorite was is just to look at the cars on the street and figure out what year and model car it is, then when I go to the paint shop I can tell them what color on what car that I like and they will make it instantly.

The process of choosing a dynamic color for your vehicle can be confusing as well as frustrating. Be patient and take your time. Look at various vehicle

magazines to gain some ideas and inspiration. Visit car shows and ask car owners what made them choose their particular paint color.

These people may lead you to some invaluable suppliers and products. They can also help you to identify possible mistakes and help you to avoid making them. There are many things to take into consideration when you are trying to make your color selection:

### **Cost**

For those of you on a budget, always check the cost of a particular color before setting your heart on it. Colors that contain large amounts of red or pearl are going to be more expensive. They are not custom colors, they are regular colors used for new cars. Whether you plan on BC/CC (base coat/clear coat) or SS (single stage, where no clear is applied over it) will ultimately affect cost. The best advice is to pick a color and then visit the paint shop you plan to buy it from. Find out the exact costs of the color, clear, hardener, reducer, and sealer, etc. Don't leave this until the car has been prepped and is ready to paint.

### **Resale Value**

**[“Learn How To Buy And Sell Cars Click Here!”](#)**

It can be fun to choose an unconventional paint scheme, but it will make your car harder to sell down the road. Most people may not share the same taste when it comes to paint schemes. Think about it, it is going to be very difficult to sell a pastel pink Audi TT to a guy in his late twenties! In fact, it will likely be impossible.

### **Does the color "work" with the particular body style?**

Not all cars and colors are a good match for each other. Car companies spend a fortune on marketing and research to come up with the range of colors they offer with each model. This comes down to your own preferences. However, it is not likely you will see a candy apple red Rolls Royce Phantom or a lime green Bentley Continental GT!

### **What do you want the color to do?**

Does your car have features you are trying to hide? If so, then black is the color for you to use. Black is known for being mysterious. Black will also make your vehicle appear smaller. White has the exact opposite affect. While it can hide waves in flat panels, it will show off every line on the body. Everyone will be able to see just how straight the lines are.

Panel fit is very important if you are going to paint the vehicle white. If you have any gaps they will look like black pin stripes. All the other colors out

there fall somewhere between the effects of black and white. Keep in mind lighter colors will have similar effects of white paint and vice versa with darker colors and black paint.

There are thousands of colors out there to choose from, so the process of choosing only one is very difficult. If you find a particular vehicle with the color you like, see if you can get the color code off of it. Checking out new car dealerships is a great way to find cars in various colors. It is also a very simple location where you can get the color code off of the vehicle you want the color for.

Make sure you ask the paint store if there are any alternatives or variations of the color you have chosen to use. These alternatives and variations can be significantly different from the standard color. It is possible the vehicle you saw the color on was painted with an alternative or variation of the color you have the code for.

It isn't a good idea to choose your paint color from a chip book. These chips usually aren't paint but ink. They are close in representing the color but they are not the actual color of the paint.

If possible, purchase a very small amount of the paint color you have chosen. Spray it on an old body panel or piece of metal. This is a great way to find out exactly how the color is going to look before you pay for a large supply of it. In addition to checking out the color, determine how well it will cover the vehicle and if it will be easy to work with.

Colors as well as paint brands can be very different when it comes to how easy or difficult they are to work with. You may find your color selection looks great, but if it takes eight coats to cover the vehicle with you would be better to choose a different color or brand of paint. You can use that information to decide if you want to work with it, change colors or change paint brands. Be careful of cheap paints, they can be transparent. While you will save money per gallon, you are going to need much more of it! If you choose a pearl or metallic color that will model easily, it is a good idea to change the color or the brand.

Once you are sure of the color you are going to use, don't try to save money on purchasing the paint. You need to calculate exactly how much you are going to need to complete the entire paint job. This includes the outside,

inside, dash, door jams, boot, everything. Once you have a calculation add 20% to that figure. If you're not sure how much paint your vehicle will need, ask at your chosen auto body paint and supply store for their estimation. Buy all the paint you need in one go. Purchase a couple of extra gallon cans and use them to mix the paint with. This is the best way to ensure you will have all the paint you will need with no mismatching. You really don't want to run out.

Who cares if you have paint left over at the end? You will have more of a disaster on your hands if you run out of paint before the job is finished. Why intermix? Well, this is a lesson you don't want to have to learn about the hard way. In brief, if you go to the paint store and request three amounts of the same paint formula, you are going to receive three slightly different colors.

This is because many of the toners in paint are very strong where one drop can change the entire color. There are just too many other variables to contend with also, such as if two different types of toner were used on two different tins of the same color.

The colors may not be *that* different and if you chose to paint three different cars with the three amounts you probably wouldn't even see any difference. However, try painting your bonnet, wings and rear quarters with three different amounts of the same color paint and it won't be hard for you will see the difference. Therefore, to avoid this problem altogether, always buy all your paint up front.

If you choose to use a Base Coat/Clear Coat, Single Stage, Lacquer, etc., make sure you paint the entire vehicle with the same system. Don't paint the door jams with SS and the outside BC/CC. It can work, but it rarely does because the formula for the SS and the BC of the some color of paint are usually different. It is a common misconception that the SS is just the BC that you don't put a clear coat over.

You have to choose a color of paint for your project that works or you have just wasted your time and your money. Many of the vehicles you see on the front covers of magazines wouldn't have been chosen if the color scheme was something different. Conversely, many quality cars don't make it onto magazine front covers because they were painted the wrong color. Most of us won't restore more than a few vehicles, some maybe only one, so take your time when picking the color to use for your project.

**[Get Lifetime VIP Member Access Here!](#)**

Painters who have a great deal of experience can envision how a vehicle is going to look painted a particular color. This experience is often gathered from working in body shops, visiting car shows, reading car magazines and from their own trial and error. They can also tell you which colors are

recommended for a particular type of vehicle such as a sports car or a coupé. True auto enthusiasts are everywhere. You can find them in a variety of locations, especially car clubs. Members have an interest in a particular vehicle or they wouldn't join. If you have an older project car that you can't decide on a color for, ask car club members for advice who have an interest in the same make and model of vehicle.

Keep in mind that if there is any chance you will be selling your vehicle down the road you need to choose a color that will make it salable.

### **Matching the Old**

Finding the exact color for blending in repaint areas is very simple for newer vehicles. You will have to look at the vehicle's ID tag color code. This information can be found for you by an auto body paint and supply store member of staff who will examine its VIN or its color and options tag.

You need to be cautious though because sometimes the color codes on the VIN or the options tag doesn't match the color that was sprayed on the vehicle in the factory. Only a small percentage of these errors occur, but play it safe. Tell the person who is looking up the color for you what the basic base color of the vehicle is. This way if the color code is for blue paint and you have a green car you won't be wasting your money on paint you can't use.

If you run into this predicament, choose your color from various paint selection charts. Most automotive paint workers have volumes of OEM paint chips that are organized by year and who manufactures the vehicle. Make sure you understand that similar colors from different years and manufacturers can be very close to each other but different. Ask the person in the paint store to help you confirm that the actual color you are looking at is an exact match for your vehicle. This process has gotten harder with the introduction of more colors.

If a color code has variations, the person who is mixing the paint will always supply the prime formula if the paint is to be used for a complete paint job. If the paint is going to be used for repairs only then you will have to take color chips of each variant and compare them to the vehicle being repaired to find the exact match. Once you have determined the exact color match, it is a good idea to note it for future reference. You never know if you will need to purchase more paint in that color in the future.

Another method used to determine the paint formula on any vehicle is the use of a color spectrometer. This is an expensive tool that in most cases, you won't find with your local paint retailer. However, they may have access to one through a paint distributor so it won't hurt to ask. This is a great alternative if you can't find the exact color match using paint codes.

The spectrometer works by scanning a portion of the vehicle that has the desired paint color you are looking for. The information collected by the spectrometer is then downloaded onto a computer. It will then decipher the paint colors and come up with the matching paint code. The spectrometer isn't 100% accurate all of the time but it works very well on one or two stage paints. Please note that this method was not designed for determining the formula of tri-stage paints or any finish that has special additives such as pearl or metallic.

[\*\*Check Out The VIP Membership Preview Here!\*\*](#)

## **Custom Finishes**

You may decide you want to find out about special custom paint additives. Metallics have seen some great improvements over the years. You can add tiny, micro flakes to take an ordinary color and make it brilliant. Many of the newer cars out there have metallics in the paint. You can check them out at any car dealership or view the various color chips at local auto body paint shops.

Pearl additives are another great way to make any solid color look customized. Pearl additives are made by applying oxide pigments to iron oxide (mica) or to aluminum. These chips are very small and can be painted on one side while remain clear on the other side. The result of pearl additives will depend on the pearl color you select and the angle of the light reflection on the paint job but ultimately the finish can look quite unique.

## **The Use of Consultants**

Should you paint your vehicle or hire someone else to do it for you? This is a tough decision. Take a look at the options you have as well as the expenses involved. It doesn't matter if you are planning on painting the vehicle you use daily or a project car, the fact that you purchased How to Paint a Car – The System shows you have a healthy interest in being able to paint the vehicle on your own.

Painting a vehicle on your own is a highly rewarding experience if you are able to purchase, rent or borrow the proper equipment (to apply the paint and for safety) to do the job properly. You will also need the time and the required work space available to complete the project to a worthwhile standard. It doesn't matter if you are replacing or repairing a wing, painting a new set of alloy wheels, doing a complete color change, the fact that you were able to do the job yourself will improve your self confidence a great deal.

Car owners find it hard to understand why some companies will paint a vehicle for only \$500, yet others charge around \$8,000 or more for a complete paint job. There is no real limit when it comes to paying for a high quality paint job as the labor involved will vary a great deal depending on what you want to have done.

To help explain this issue, a professional paint technician will spend hours of his time sanding surfaces so that they are perfect. They will then apply coats of primer to fill in sand scratches and other minor blemishes. Both body-filler and primer must be allowed to dry completely before any additional filler or top coats can be added.

Painters will commonly use infra-red heat lamps to speed up this drying process or they will place the vehicle in a heat curing oven with a high enough temperature to greatly reduce drying times. Both processes use high amounts of electricity and that overhead cost is figured into the paint job estimate.

Each surface is sanded to perfection. Then color coats are applied and cured with the same infra-red or heat curing oven process. Clear coats may then be sprayed over the entire vehicle depending on the paint system used to give it a show stand shine.

Three coats are often adequate. After the clear coating has dried the vehicle is carefully inspected for any blemishes. Sandpaper of 1200- to 2000-grit is used to smooth out such blemishes. More layers of clear coat may be added at this time if necessary. The amount of preparation work on any paint job is what will increase the price you pay for the end result. However, this prep work is essential to the quality and longevity of the paint job.

Once the painters are satisfied with the paint job, they will buff the entire vehicle or simply the repaired area with a fine polish and a buffing pad. They will then begin the process of replacing all of the parts they took off back onto the vehicle. This job requires care because you can easily damage the parts as well as put a fresh scratch on the new paint job. The final step is cleaning the vehicle so it looks as good as new. Quality body shops will insist on cleaning the vehicle before it is returned back to the owner. This type of service helps ensure the customer is very pleased with the end result and the level of service.

Remember the saying that you get what you pay for? Those body shops that offer you a low cost paint job won't be able to spend the necessary time preparing your vehicle for paint. Their business relies on volume to make a profit; the more vehicles they paint, the more revenue they will generate. The time they spend on preparation is the bare minimum.

If you want your paint job to be completed more thoroughly it is going to cost you more. Inexpensive paint shops use bulk supplies so your color choices will be limited to what they have in stock, generally in 55-gallon barrels. They will generally use enamel based products because they will cover a vehicle with only one or two coats and they don't require to be rubbed out or polishing once the paint has dried.

### **Auto Body Paint and Supply Stores**

Those who work in such places will continually update their product knowledge using information supplied by manufacturers of paint and body repair supplies. Some of the staff may not actually have any first hand experience with painting a vehicle but their technical knowledge of paint products is very valuable.

A beginner to car painting can learn a lot about the whole process from these individuals. It is best to be upfront and honest with the staff and perhaps even bring your project to the shop so they can see it first-hand. This will help them to recommend the best paint system and supplies for you to use on your project.

Be respectful! Don't expect the staff to drop what they are doing to give you lessons regarding painting vehicles. They have a job to do and that entails serving body shops primarily rather than teaching auto painting to the general public. That is our job! It is best to visit an auto body supply store in the middle of the week when they are likely to have more time to spend with you.

Auto body paint and supply stores carry everything you could possibly need including paint guns and sandpaper. They also carry free information sheets and application guides for the various paints they supply. This information comes directly from the manufacturers of the paint. These sheets contain valuable information regarding the application of primer, sealers, tri-stage paint systems and every other product you can imagine using on your vehicle. It would be advised for you to get one on every single product you are considering using.

You will find the individuals behind the counter in an auto body paint and supply store to be very knowledgeable. Take full advantage of it; ask intelligent polite questions. If the store is busy go back during quieter periods.

### **Considerations**

Automotive painting has become a high-tech business. Painters must be aware of personal safety hazards with the various chemicals that are used in paint bases and hardeners. It is very important for them to follow the proper safety procedures and to wear the right equipment including positive-pressure full face respirators, protective hoods, quality rubber gloves and painters' coveralls.

You should always be aware of any potential fire hazards including pilot lights on hot water heaters and home heating elements. The thinners and reducers used in painting are very flammable. Never smoke around them or keep other ignitable sources near your project work space.

The special paint systems that use metallics and pearls can be applied by a novice painter as long as they follow all of the instructions and the tips found on the information sheets.

Again, remember the importance of spending enough time preparing the surface of your vehicle before painting. You should plan on this taking at least a full day or two. Make sure the paint system you are using is compatible with the surrounding paint.



## **Automotive Painting**

### **- Click Here to Get VIP Access!**

Our planet is becoming more and more polluted over time and because of this various government agencies and research institutions have started taking the necessary steps to reduce the amount of new pollution as well as reduce the amount we already have in the environment.

The automotive paint industry has to abide by these same emission standards and has done a great job of reducing pollution that is the result of paint overspray and solvent evaporation.

Volatile Organic Compounds (VOC's) are chemical substances that are released into the atmosphere from paint overspray and solvent evaporation. The VOC's mix with nitrous oxides resulting in the production of ozone. Ozone is one of the main causes of smog.

VOC's are the elements found in cans of paint that evaporate. The pigments and binders being solids, form a film that sticks to the vehicle's surface, leaving the chemical solvents to pollute the environment. The term solvent is the material in paint that keeps the mixture in a liquid form. Lacquer paints contain lacquer thinner and enamel paints as well and urethanes contain reducers. You may be surprised to read that any gallon of paint can end up containing up to 90% solvent!

To comply with the government regulations, body shops use high-tech paint booths complete with down draft ventilation systems. Each booth must be equipped with special filtering systems that will burn off or filter out the VOC's. A new paint application system was developed to reduce the amount of VOC's evaporating into the atmosphere due to overspray.

This new process involves using a high volume spray with low pressure, referred to as High Volume Low Pressure (HVLP). This process results in more paint sticking to the vehicles body and less overspray than conventional spray paint systems. In principle, with more of the materials sticking to the sheet metal surface, less is released into the atmosphere. Paint manufacturers are always looking for ways to develop new paint products to reduce the amount of VOC's entering the atmosphere.

Waterborne paint products are in the works for this very reason, but more research and development still needs to take place. To ensure you are fully aware of the regulations at all times, stay in contact with your local auto body paint and supply store. The staff will get to know quickly about important changes that have taken place in regard to industry standards. They will also have access to the most current information sheets on the various paint products, materials and compatible systems, including those for older vehicles in need of touch up.

## What are the basic ingredients?

Auto paint is made up of pigments, binders and solvents. The pigment is what gives paint materials their color. Binders hold the pigmented materials together so they will attach solidly to the vehicle's surface. Solvents are liquid forms including thinners and reducers that change the solid pigment and binder materials into a form that can be sprayed.

Most of the modern day commonly used urethane and polyurethane paint products have ingredients that help them to dry quickly. This will allow you to spot any blemishes and take care of them soon after color coat application. Urethane is very durable type paint. They were developed to be resistant to the hazards of today's harsh airborne pollutants, acid rain and various other oxidizing elements. [Connect With VIP Members Join Now Click Here!](#)

There are three types of automotive paint to choose from: acrylic enamel, acrylic lacquer and urethane. Acrylic enamel and acrylic lacquer are used mainly for restoration projects. Professional painters recommend urethane products for anyone wanting to paint their own vehicle. A base coat/clear coat is the top choice preferred over a single stage.

While the base coat/clear coat is strongly recommended by professional auto painters, single-stage urethanes are an option. They don't require you to apply a clear coat to add gloss; however any scratches or damage will directly affect the color. Single-stage urethane is mixed with a reducer and a hardener to give the paint durability and a shiny gloss in only one application. The number of coats of paint needed will vary depending on the color you choose to use. Single-stage urethane has to be applied to properly prepared undercoats, the same for multi-stage paint systems.

Urethane is an area that we need to discuss in more detail. Acrylic urethanes are very versatile. They will cover your vehicle in just a few coats, dry fast and can be wet sanded to repair any minor defects or blemishes you detect. The finish will offer maximum resistance to scratches, impacts and ultraviolet light. To improve drying performance, urethane paint products need to be dried using heat. Professional auto painters use painting booths complete with heaters or infra-red lamps to help the urethane cure to its maximum strength in as short amount of time as possible. You don't have to have the best spray booth out there to end up with a high quality paint job but it does help a great deal.

Other benefits of using a spray booth are that it is completely enclosed and cleaner than if you were to spray paint outside in the open. The down draft exhaust system will eliminate fumes and overspray, reducing any health risks as well as making it easier to see what you are working on. A work area that offers you as much light as possible is another additional benefit.

A garage is a great place to paint in. It has to be clean, have good lighting and have enough room for you to manoeuvre around the vehicle easily. You should have lighting above and around you for the best results.

To get rid of harmful fumes and overspray, prop the garage door open on top of a high powered fan, like the ones contained in a 3x3 foot frame. You must make sure the fan is exhausting air *out* of the garage and not so it is blowing air towards your paint job. This is a compulsory requirement; never ever paint in an enclosed garage. If you position the fan towards your paint job, it will just simply blow dirt, debris and maybe even insects onto your newly painted surface. Make sure there are some vents open away from the fan, ideally at the other end of the garage that will let fresh air in. It is best to paint in the morning when the air is at its stillest.

Use an air nozzle on your compressor hose to blow all the dirt, dust, cobwebs, and other debris out of all the nooks and crannies of your garage. Don't forget to do the area above where you will be painting. It is a good idea to do this a while before you start painting. Finish cleaning the garage out by hosing down the floor with water. Both blowing and hosing the garage are essential if you have used this work space to do the filler and primer block sanding.

Getting dust on your new paint job is something you want to avoid at all costs and also getting paint overspray over all the items in your garage. It is a good idea therefore to tape up plastic sheeting like Visqueen to prevent both from happening. Your local home improvement store will have plastic sheeting.

When a vehicle is at the factory, urethane paint jobs are baked at a temperature of at least 450 degrees Fahrenheit. This is possible because the vehicle bodies are bare. None of the plastic pieces have been installed yet that would melt at such high temperatures. This baking process helps the paint pigments and additives harden and improves their adhesion qualities to body surfaces.

When it comes to repaint jobs, most auto painters use heaters or lamps at temperatures less than 140 degrees Fahrenheit for approximately 30 minutes. A higher temperature could damage the engine computers or melt the plastic assemblies. The various product information sheets will give you specific information regarding the heating times and temperature ranges. There are several paint manufacturers who make their own brands of urethane products including DuPont, PPG, Glasurit, House of Kolor, and Metalflake. These manufacturers are adamant about two things:

1. Painters must only use those products included together as one paint system. This means if you plan to use Glasurit paint on your car, you must also use their brand of reducer, hardener, sealer, primer, cleaner and paint for the entire project. You can't mix various products that are

from different brands. They are all designed to be used as part of the same paint system. You are asking for trouble if you mix and match different brand paint products. If you do, it may be likely that your vehicle will have a paint job with damage that can't easily be repaired.

2. Painters must agree to use the recommended safety equipment. We have already discussed proper ventilation for your work area. In addition, you need to wear a respirator with a protective hood, rubber gloves, and coveralls. These safety recommendations are clearly stated on all of the paint and paint product labels. Some even tell you the specific type of respirator you should use while applying that particular material.

To ensure your vehicle has a paint job with a deep shiny finish and paint that sticks well to the body, make sure you follow the recommended surface preparation instructions. Failure to do so could result in the new paint drying to a separate film that could be peeled off in long sheets.

Don't forget that cured urethanes offer you a durable, hard paint finish. This may prevent new paint solvents from being able to penetrate the surface to give you quality adhesion. You will have to scuff the paint with medium grade sandpaper or with a Scotch Brite pad before you apply the new paint in order for it to bond properly with the old paint. You can confirm this information with an auto body paint and supply store worker regarding the specific job you are working on.

### **Special Effect Additives**

**[Too Much Text? Watch all this on video Click Here!](#)**

As we discussed, there is such a large selection of colors to choose from that you can easily make your vehicle stand out from the crowd. You also have the option of using additives that you mix with the paint to provide special effects. The two most common additives are metallic and pearl.

If this is your first experience with painting a vehicle, you may want to stick with a basic solid color. However, if you are repairing for e.g., door damage then you may have no choice but to include metallic or pearl to match the existing paint color.

### **Metallic Paints**

If you take a look at most of the newer cars today, they come with fantastic metallic paint finishes. These newer paint jobs include tiny metallic flakes that are so small; you will have to look at the surface very closely to distinguish their presence. With a fabulous color base, metallic particles offer extra shine

and gloss to many paint schemes, adding character to vehicles.

You may need a special spray gun to apply these tiny flakes. Select one that has a larger than normal orifice. This is to prevent the spray gun from getting clogged up with the flakes. This is very important if you are planning on purchasing a new spray gun for a metallic paint project.

Paint codes that auto body paint suppliers use include all the additives necessary to make new paint mixes match the original. These paint codes will therefore include metallic flakes.

Before applying the metallic paints, you will need to shake the paint containers thoroughly before you fill the spray gun cups. This will ensure that the metallic particles are evenly distributed throughout the solution.

Most professional painters shake their paint gun after they finish each pass. This helps make sure the particles are evenly dispersed so the finish will be uniform.

### **Pearl**

**[Learn how to paint pearls, flake and candy's Click Here!](#)**

Have you ever seen a custom car and thought it was white and then realized it was actually an entirely different color? There is a good chance that the particular vehicle has had a paint job that included a pearl additive mixed in with the paint.

The materials consist of tiny chips of synthetic inorganic crystalline substances that are painted on one side and left clear on the other side. You can purchase concentrates of pearl at auto body paint and supply stores.

### **Clear Coat**

Clear paint is sprayed over the top of some color coats. It forms a protective film that can be polished to perfection without disturbing the underlying base of color regardless if you choose pearl or metallic.

You will find that most custom paint jobs require protective coats of clear paint to be applied. This is done so any polishing or waxing that you do won't directly touch and harm any color blends, metallic flakes, pearl additives or custom graphics. Certain clear coat products contain chemical ingredients that will prevent the sun's rays from fading the color.

### **Base Coat/Clear Coat**

A base coat/clear coat paint system is also referred to as a two-step paint

system. The first step is color application and the second step is applying the clear paint. Base coats of color are applied to achieve coverage, keep in mind the number of coats will vary depending on the color. You can then expect to

use at least two or three coats of clear. You will then sand and buff this surface to bring out a wonderful shine.

### **Support Products - [Watch Step-by-Step Videos Here!](#)**

The entire process of painting cars would be a lot smoother and less technical if there was just one paint product used on all paint jobs. With the various paint bases that are used to add color to a vehicles body, it is very important that you use other paint products as specified to ensure the color lasts, the paint sticks and the sheet metal is protected.

Manufacturers are required to provide with all their paint products, information sheets as well as guides detailing the proper application processes. This includes all sealers, primers, paint removers and cleaners. All of the mixing instructions and flash times are there to be referred to, likewise for the paint.

A complete paint system will feature all of the necessary products to complete the entire paint job. Paint manufacturers will design their wax and grease removers, primers, thinners, retarders, reducers and paints to be 100% compatible with each other.

The mixing sticks from each manufacturer are calibrated so that products all blend well together when mixed. This ensures a paint product that will provide a durable color, is the exact color you wanted, ensures metal protection and paint adhesion.

Paint support chemicals are the undercoat products you will need to prepare the body surface for paint. These will also include the additives that are designed to be mixed with paint to overcome certain problems.

It is in your best interest to be honest with paint and supply store workers about the type of paint job you wish to apply to your vehicle as well as your painting experience, or lack of it if that is the case. This gives them the opportunity to share their technical knowledge with you and help you solve further unknown problems.

### **The need for Wax and Grease Remover**

Primer and paint will not stick to dirt, wax, or grease. This is why you will have to take your time to remove all such debris from the surface of the vehicle being repaired using wax and grease remover. This will leave the surface as clean as possible. You will need to be meticulous in this area. It is important you do this after you wash the vehicle, before you sand it, after you sand it

and between undercoats and top coats. Remember that each paint system will come with its own recommended products.

It is essential that every part of any surface area that is going to be painted is spotlessly clean. If not, you are risking having debris on the surface that will ruin the professionalism of your paint job. It is important that you read all the

label instructions and follow them accordingly. This includes wearing rubber gloves and the recommended respiratory devices.

It may make life easier for you if you pour the wax and grease remover into a spray bottle. If you decide to do this, make sure you label the bottle clearly because this is a clear liquid that is hard to identify.

To get the best results cleaning, use a cloth that is dampened with wax and grease remover to wipe surfaces down. Next, use a clean, dry cloth to remove any lingering residue or moisture. Make sure both of the cloths you are using are clean and free of all contaminants such as wax, polish, oil and anything else.

### **Tack Cloths**

Most painters take the time to wipe the body surface with a tack cloth just before the actual painting begins. Tack cloths are made from a material that allows it to pick up very fine particles of lint, dust, and debris. This process of wiping the surface down with a tack cloth will make sure there is no debris left behind that will result in paint finish imperfections and blemishes. A tack cloth is very important if you don't have ideal surroundings for your paint job to take place in. Remember to only rub the tack cloth gently against the surface you are going to paint.

### **Thinners, Reducers and Retarders**

The liquid parts of each paint mixture have to evaporate if the paint pigments and binders are going to cure and harden into a solid unified substance. As previously mentioned, the agents that will turn solid pigments and binders into spray-able liquids are grouped and referred to as solvents. Thinners, reducers, and retarders are types of solvents.

Solvents are designed to be used under specific climate and temperature conditions. They are classed depending on the rate at which they evaporate, them being either slow, medium or fast. You might have to use a particular solvent depending on the level of humidity in your area. In principle, fast evaporating solvents are used in cooler temperatures and slow evaporating ones used in warmer temperatures.

All paint products are designed to be sprayed under temperatures of 70

degrees Fahrenheit and under 40% humidity. These are the same testing conditions found in the lab when creating such products. There are labels on all thinners, reducers, and retarders that include the temperature range in which they were designed to be used. This will help an inexperienced auto painter to choose the correct one for the job.

Body paint and supply store workers should be familiar with the atmospheric as well as the climatic conditions in their area. This knowledge will help you to achieve a paint job with the best finish possible. They want you, their

customer, to be satisfied with the products you purchase and therefore continue to buy from them again in the future. You can therefore trust that their advice on the various products and application techniques is reliable. Paint has already been mixed with an amount of solvent when it is in a tin, but you will need to add additional solvent for it to be sprayed. Mixing sticks are used for this. Always make sure you follow the product label instructions for proper use.

Mixing sticks are calibrated to be used with particular bases and solvents. It is important that you use a mixing stick that is designed for the brand of paint product you are using.

### **Removing Paint from a Vehicle – [GET VIP ACCESS CLICK HERE!](#)**

Paint is removed from a vehicle in one of three ways:

- Sanding,
- Media Blasting,
- Chemical Stripping.

To remove paint from certain areas, auto body repairers would use a coarse sanding disc on a high velocity sanding tool. If the paint that has to be removed has been neglected and has long since started to rust, it will likely require media blasting. Both of these methods will remove the paint as well as the undercoats and anything else in the way of getting to the bare metal.

Chemical strippers, which will also remove paint down to the bare metal, work by loosening the paint materials so you can gently scrape it off with a plastic squeegee or a putty knife. Chemical strippers are commonly used when undertaking a complete new paint job rather than for repairing local damage and touch ups.

### **Sanding**

An electric or pneumatic sander works very well for small localised repairs. Using a sander makes it is very simple to remove paint from the particular area that will require undercoat and paint application. You will want to use a 36 or 40 grit sanding disc for efficiency. Don't worry about the deep scratches



that you leave behind, you will use these as the bonding base for filler.

### **Media Blasting**

Media blasting would be the ideal method of paint removal; if for example, you were working on a small removable part from a vehicle. This method is also much faster compared with a hand held sander. Media blasting is also a very efficient and effective way of removing paint and primer from a shell or chassis.

There is a down side to both media blasting and when using a hand held sander. If you stay in one particular area for too long, you will cause heat to build-up due to friction which can warp the metal. You will then have to repair this area before you can continue preparing the vehicle for paint.

### **Chemical Stripping**

Chemical paint removers work very well on vehicles that need a complete new paint job. It is a good choice if the body of the vehicle is in a good condition and you don't want to worsen it by causing warping or other damage that can take place with sanding and media blasting.

Be careful when you use a chemical stripper as it can cause damage to nonmetallic components including rubber moldings and plastics if they aren't carefully removed from the vehicle. If you use chemical strippers as directed you will end up with a clean and shiny body surface.

### **Primer**

Primers are materials that are applied over bare metal once it has been properly prepared. They are classed as one of the undercoats which also include epoxy primers and sealers.

Once sheet metal has been coated with epoxy primer, primer will cover the minor flaws and scratches caused by sanding. Make sure you use a primer that is made by the same manufacturer as the rest of the paint products in your paint system. Primer contains solids giving it the ability to cover up imperfections and allows the surface to be sanded until it is smooth.

Primer is only to be sprayed on a surface in an effort to fill in very small sand scratches and tiny blemishes. It is the final step for smoothing the body surface to perfection. The undercoats you put on after the primer are used only to seal the base materials from absorbing paint solvents and to increase the overall adhesive ability of the paint.

Make sure you buy enough sandpaper of the various correct grades to smooth the primer after application. For the first coat, apply primer and then sand it with 150-grit sandpaper. For the second coat sand it with 320-grit and

then finish it with 500-grit.

Most painting professionals would use a guide coat; generally black enamel from a spray can, over the primer. Once you have sprayed on the guide coat, you would sand it down using 800-grit wet and dry sandpaper along with a sanding block until the entire guide coat has been removed from the vehicle. You can see this Entire process being demonstrated on a 2003 Honda CRV of the **'VIP Membership Club'**.

### **Epoxy Primer**

Epoxy primer is waterproof and is used to protect bare metal from the process of oxidation. You should need to apply one or two coats. Painters use these kinds of primers on bare metal before they would apply anything else; being waterproof they firstly protect the bare metal. They also adhere very well to the metal and provide a perfect base product for undercoats and paint.

### **Sealers**

Sealers are used to protect the undercoats from the materials and the solvent found in the various top coat products and gives them a high adhesive ability. A sealer also helps ensure a uniform color match is achieved.

If you will be applying new paint over an existing paint surface, it is vital that you use a sealer. This is even more important if you aren't sure what brand of paint is currently on the vehicle's finish. Most of the sealers don't require any sanding once they have been applied and cured. They form a barrier between the undercoat and the top coat.

Sealers are a great product for any project where new paint will be sprayed over factory finishes that have been baked on at a temperature of approximately 450 degrees Fahrenheit. Those types of stock paint jobs are very hard and durable, therefore the new paint will have a difficult time penetrating the surface and sticking to it properly.

Using a sealer will make the difference between an adequate and an excellent quality paint job. Make sure you discuss the right type of sealer product to use with your paint system with a paint and supply store worker. You will also need to follow the information on the application guide and information sheet regarding proper mixing and other important information provided by the manufacturer.

### **Special Additives**

Additives are used to prevent or eliminate several types of problems that may present themselves as you are painting your vehicle. These additives include fish eye eliminators, chip resistant coatings and special additives that are used on flexible components.

**Join VIP & See Exactly What You Need To Do To Move forward With Your Project!**

### **Fish Eye Eliminators**

Fish eyes are very small surface blemishes that look similar to small circles of popped paint bubbles. You will be able to see them form the instant the paint touches the surface of your vehicle. These flaws are the result of silicone residue that doesn't allow the paint to settle evenly. The result is material that encircles around the silicone and forms a volcano like shape.

You will experience problems with fish eyes if you extensively use silicone based vinyl dressings on body side moldings and on other trim. The

excessive dressing applications give off random overspray that penetrates the surrounding paint surfaces to become embedded in the finish.

The best way to avoid dealing with fish eye issues is to properly wash the entire vehicle before you begin any of the paint prep work. After the vehicle is clean and dried, apply wax and grease remover to get rid of any remaining residue. If you plan to repaint the entire vehicle you may want to use a more aggressive cleanser to wash the vehicle down with.

In extreme cases where a thorough cleaning still won't take care of fish eye problems, manufacturers of paint products have developed paint additives that will master the problem and will allow paint to flow and cover evenly. Some paint manufacturers label their fish eye eliminating products under specific names such as Glasurit's Anti-Silicone Additive. It is very important that you only use an additive product that is designed to work with the paint you will be using on your project.

### **Flexible Additives**

Most of the newer cars out there have flexible urethane bumpers, spoilers, mud guards and body kits painted to match the rest of the vehicle. The paint products used to paint these pieces are the same type used to paint the body of the vehicle. However, due to the flexibility of such parts a special type of additive is mixed in with the lacquer or enamel paint. This allows a thin film to bend and conform along with the body shape without any cracking, peeling or chipping taking place.

Using this type of additive is very important if you want the painted finish on those flexible parts to be durable. The use of flex additives is necessary for lacquers and enamels but they are not required for urethane products.

### **Additional Items... Spray Out Cards**

A spray out card is a very handy tool that helps ensure proper paint coverage is achieved. The card is black and white with some written text on it. Prior to spraying any paint on your vehicle, apply some of the paint to the spray out card as you would on your vehicle. Use the same overlap pattern, spray gun settings and the amount of time between coats.

Make sure you apply enough coats to the spray out card so that the black, white and text are completely covered. The number of coats it takes for that to happen represents the required number of coats you need to put on the vehicle. The spray out card is also a great way to test and match the color.

### **Stir Sticks**

While your paint products have been thoroughly mixed at the factory, you will personally still need to stir them. All paint retailers provide stir sticks at no charge, just let them know how many you want.

### **Paint Strainers**

A paint strainer is used to filter out impurities and grit. Professionals will always strain the paint as it goes into the spray gun cup. It is important to strain the primer, sealer and top coats to avoid dirt or debris from entering the spray gun.

### **Clean-Up Thinner or Reducer**

To clean your spray gun, ask a paint supplier what product they recommend. It will be cheaper and more economical not to use your paint thinner or reducer for this purpose, instead use a less expensive product. There are specific products available to make clean-up fast and easy.

Before you begin the paint job, thoroughly research what you will need to do in order to prepare your specific vehicle's surface as well as all the paint products you will need to do the job correctly, safely and to achieve the best possible result.

If you start the project without systematically going through these processes you will end up having some serious delays that will only frustrate you throughout the process. It will result in more time being invested to get the project completed and lots of extra work to correct mistakes.

## **Using the right Tools, Materials and putting Safety first**

It is going to be more or less impossible to complete a professional looking paint job without having the right tools, materials and equipment available to hand. You will have to buy, borrow or rent the items needed to properly

prepare the auto body surface and then paint it.

You will find a huge selection of tools for painting and repairs at your auto body paint and supply store. The merchandise they offer is designed for commercial use, so expect it to be of heavy duty and of the highest quality. While this equipment will be expensive, you can expect the products to last a very long time as long as you take care of them properly.

You may decide it is more cost effective for you to purchase your equipment from a tool outlet or any other of the various retailers. They will offer less heavy duty products that will therefore cost less than their commercial use counterparts.

You also have the option of renting the items from a local rental shop. Think carefully though about purchasing your own paint spray gun; this way you know it has been taken care of and that it will work properly.

### **Your Work Area**

If you want the best possible smooth, blemish free paint job with a deep glassy shine, consider renting an auto spray booth or spending time to develop your own paint booth in your garage or workshop.

There are stricter guidelines and regulations being implemented for the auto paint industry regarding how and where auto paint can be sprayed. Using HVLP is helpful however painters in particular regions in the US for example, have to use high-tech spray booths that are equipped with down draft venting systems as well as mechanisms that will capture overspray.

Take a look in the phone book yellow pages and search for 'auto body repair and painting'. You may be able to locate paint booths available for rent advertised in there. You should also check with your local auto body paint and supply store and even make some phone calls to various body shops in your area to find out who offers paint booths for rent.

Remember, if you decide to paint your vehicle at home, it's essential that you provide a proper work area either in your garage or workshop.

To recap: The essential elements of a paint booth or a paint spraying area are that they must come with adequate lighting, enough room to maneuver around the vehicle easily and be sufficiently clean; these three alone will have a tremendous impact on the quality of the paint job. If the area is not cleaned properly, you will end up with dust and debris on your paint job. You will also need a way of hanging the various parts ready for paint and an air supply to spray the paint with.

It cannot be stressed enough about the importance of proper lighting. You will

need light to help you locate imperfections so that you can correct them before they get painted over. Good lighting helps you to see all the areas you are painting so you can cover them properly first time around and therefore reduce the need later for touch-up. Make sure your home lighting set up won't result in giving off excessive heat in localized areas that will affect the paint and leave blemishes.

This is the reason why most paint booths offer fluorescent lighting fixtures that remain much cooler than other sources of light.

You can hang small parts on welding wire or on coat hangers. Larger pieces can be supported on work benches or other similar types of platforms. Instead of spraying paint in an open garage and having everything in site covered in flecks of overspray, protect those items by hanging up sheets of clear plastic. Make sure you don't hang any of the plastic too close to light fixtures; the heat from the light bulbs will cause the plastic to either melt or ignite.

### **[Become A Special VIP Member Here](#)**

As discussed previously, place a large fan near the front of the work space to help ensure proper ventilation is achieved. One option you could try is to cut a hole in the plastic and place the fan in the hole to bring in fresh air from the outside. Always remember to leave the garage door open a little to help with

ventilation and make sure any breeze from the outside won't blow directly in through the open garage door. If this could pose a problem, arrange to paint early in the morning when breezes are minimal.

### **Safety Regulations**

For your benefit, the manufacturers of most paint products are responsible for making their products environmentally safe as well as user-friendly. The manufacturers of such products continually work to reduce the amount of VOC's in the various products. There is not a lot that you personally can do to reduce the amount of VOC's in the actual paint itself, it is very important therefore that you follow the laws regarding the proper use and disposal of these products.

### **Protecting the Environment**

Your local paint supply worker will be able to give you the latest information regarding paint laws in your area. Any paint related product that they sell will be compliant with these laws. It is only common sense to keep the chemicals you are using to yourself. Don't frighten your neighbors by telling them you are working with dangerous chemicals, especially if they frown upon your auto painting project to begin with. These chemicals are regulated because of the dangerous threat they pose to human health as well as to the environment.

Make personal health and safety and that of those around you your highest priority.

What should you do with the leftover paint products after you finish the job? The answer to that depends on where you live. It should be obvious to you that pouring it onto the ground is definitely not acceptable. You will find safe disposal instructions for each product on those very important information sheets already mentioned.

### **Personal Protection**

The government may not really care if you chose to spray paint your vehicle in your own garage, but your body will. While there are no laws which mandate whether you wear the proper safety equipment, choosing not to will eventually cost you your life!

Paint manufacturers have to list the necessary safety equipment, including breathing masks and skin protection required and all necessary precautions on all product labels. They also have to include the same precautions on their safety information sheets. It is of the utmost importance that you follow this information carefully. The minimum safety equipment you should use while painting would be to use a half-mask that utilizes charcoal cartridges.

Any paint product that contains isocyanate's; an epoxy primer or any other product that requires it to be mixed with a hardener, will require you to use complete safety protection. The reactivity of isocyanate's makes them harmful

to living tissue. They are toxic and are known to cause asthma in humans, both through inhalation exposure and dermal contact.

Exposure to isocyanate's and their vapors are to be avoided. Isocyanate's can be inhaled as well as absorbed through tear ducts and through pores in the skin. You will need to use coverall's, rubber gloves, goggles and a hat to protect your body when you use these types of products.

If you are thinking of making auto painting your chosen career, you would be wise to use a fresh air supply hood. This covers up your entire head and face. You connect it to its own air compressor which supplies you with fresh air while you are painting. Use it with coverall's and rubber gloves to give you the best possible protection while working with isocyanate's. Be aware that the cost of a fresh air hood could make it too expensive for you to purchase when you are getting ready to paint your first vehicle.

Paint products pose the biggest threat when they are being atomized while being sprayed from a paint spray gun. (Atomization occurs when the spray gun breaks up the primer, sealer, paint or clear into smaller particles, allowing them to lie evenly on the panel being paint sprayed.) They can be almost as dangerous when being sanded after they have dried. It is important therefore that you always wear a filtered mask while sanding.

## **Sanding**

Paint products were not made to fill in any cracks or crevices. They will simply sink into these imperfections to magnify their depth and their roughness. You will end up having to spend enough time sanding coats of primer or the existing paint surfaces to get them as smooth as possible.

## **Sandpaper**

Sandpaper is rated based on its coarseness. Low numbers are the coarsest while the higher numbers are much finer. You can get sandpaper starting from 36-grit to rough up body filler to 2,000-grit for final wet sanding. Sheets of sandpaper can be bought that measure a foot square for you to cut or fold depending on your needs. Make sure you purchase enough sandpaper to complete the job. One sheet is often not enough for more than one small general repair.

You may not be aware of the multitude of various types of sandpaper products available on the market. The choice used to be between open coats or wet and dry sandpaper. Now you will also find various backings and shapes to use on various sanding tools.

## **Sanding Blocks and Boards**

A sanding block or board works best to give you a flat, even sand. Choosing to use only your hand will result in low spots or grooves because of the irregular shape of your hand. Sanding blocks and boards, because of their flat

and rigid base will allow the same amount of pressure to be dispersed across the sanding surface.

You will find sanding blocks and boards for sale at auto body paint and supply stores as well as most auto parts stores. It's important to remember to make sure the sanding block and the body panel shape are compatible. You may need to use a variety of sanding tools to achieve this so use whatever you can to help you attain a smooth finish.

## **Sanding Machines**

A Sanding machine will consist of a pneumatic or an electric hand sander. You don't always need to use one, especially if you are working on a small job. A sanding machine will significantly reduce the amount of time you spend on this particular task if you are going to be painting the entire vehicle or if the vehicle has undergone some body repair. Make sure you know how to operate it; a sanding machine will unnecessarily damage a vehicle if it's being operated by an inexperienced person.



Dual action (DA) sanders are the backbone of professional auto paint shops. They are designed to hold a circular pad that moves in orbital directions rather than just spinning in a circle at high speed. They have speed controls so you can adjust them for your particular sanding needs. You can also use an assortment of sandpaper grit discs for initial sanding to fine finishing for example.

Large tools work well for body repair jobs while smaller ones help with paint preparation work. You will find DA's available at your auto body paint and supply stores and various tool places on-line. Check our website for resources.

## **Masking**

It doesn't matter how skilled you are in painting with a spray gun, make sure you mask off any areas that aren't being painted with masking tape and/or masking paper. You would soon realise that it takes much longer to clean up overspray than it does to mask off such areas.

## **Tape**

You may not realize it, but there is a huge difference between the rolls of masking tape found at hardware stores and those made specifically for use with automotive paint jobs. The difference in what you use will affect the end result of your paint job. Regular masking tape hasn't been treated to endure auto paint solvents and paint can penetrate the weak tape and ruin the finish.

The adhesives of regular masking tape weren't designed to be removed easily from surfaces. You may end up with some residue remaining from the tape on your vehicle.

You must only use masking tape designed specifically for auto painting, regardless of the size of project you are doing. You are asking for trouble if you use anything else.

There are seven different widths of masking tape to choose from: 1/8, 1/4, 3/8, 1/2, 3/4, 1 and 2 inch. They are all available at your auto body paint and supply store. Typically, as a beginner, you would want to use the 3/8, 3/4, and 2-inch widths. The smaller widths are for masking those items that can't be removed. The wider sizes you would use on areas too small to require masking paper.

## **Paper**

Professional auto painters only use treated masking paper for masking with. Newspaper is inexpensive but it is too porous and will allow paint to seep through to the surface underneath. You can purchase rolls of quality automotive paint masking paper from an auto body paint and supply store.

## **[Check The Video Course Out Here!](#)**

The widths range from 4 inches up to 3 feet, the most frequently used being 12 inches. The paper has been chemically treated to prevent any paint or solvent from penetrating through.

Professional painters use masking paper and tape racks designed to allow the paper to be pulled off with tape already attached to the edge. This enables masking to be completed faster and easier.

### **The Air Compressor**

You could buy the most expensive auto paint products available and spend endless weeks preparing your vehicle's surface to perfection. You may even be using the best spray paint gun available but ultimately end up ruining your entire paint job because of relying on an inefficient air compressor or using a holding tank loaded with moisture and oil residue.

It is vital to the success of your project that you have access to a clean, dry and controlled source of air pressure. Even the tiniest particles of water, oil or rust will find their way from the holding tank into a spray gun nozzle unless they are captured along the way. If these particles accumulate and then leave the spray gun nozzle, you will have blemishes on the surface of your paint job. If painting is only your hobby, then a small compressor will be sufficient. Make sure it has a compressor rate of 5 horsepower or greater. This will offer you plenty of compressed air without it having to run continually.

The harder a compressor has to work to maintain the proper amount of pressure, the hotter the air supply will become. This will allow moisture to be introduced into the air system through condensation inside the piping. You need an air compressor that can build up a reserve of compressed air and then shut off for long enough to cool down.

Since the amount of room in your garage or workshop can be limited, an air compressor with a vertical tank would be a good option. Even if your air

compressor has wheels, find a permanent location for it and secure it in place. Make sure it has a long enough hose to reach anywhere in the work area that you may need, minimum of 25 feet to paint a car but 50 feet works best.

### **Volume**

You can determine the size of air compressor that will work best for you by comparing the cubic feet per minute (CFM) of air needed with your spray gun and the application of specific paint products to the CFM rating on the compressor you are thinking of using.

If the compressor is able to meet the required CFM, then you will be fine.

However, if you need 14 CFM for your spray gun and the two horsepower compressor you have has a maximum of 9 CFM then you will have to rent or borrow an air compressor with a CFM rating of 14 or more.

You will also need to make sure your compressor has adequate capacity. For example, a five horsepower compressor with a twenty gallon tank supplies enough air for a conventional spray gun, but it may not be able to meet the demands of a HVLP spray gun. That will cause you to stop, before you have finished applying an entire coat of paint in one sitting, to allow the air supply to catch up. The same five horsepower compressor with a thirty five gallon tank would eliminate this problem when using a HVLP paint spray gun.

## **Pressure**

### **Learn Exactly How To Pimp Your Project!**

Air hoses will create a pressure drop similar to the resistance in electrical wiring. The longer and smaller the hose you have the more pressure you will lose between the compressor and the end of the hose. This drop in pressure can be as much as 10 psi per 25ft of length using a 3/8 inch hose. All the more reason to use a better compressor.

To make sure you have the right amount of air pressure reaching the tip of your spray gun, hold the trigger on your gun wide open while you adjust the air pressure regulator. The control gauge may show 40 psi while the gun is idle but once you pull the trigger it may drop to 30 or 35 psi. It is very important that paint is applied at the right psi rating as indicated on the product container label or in the literature that came with the application guide.

Another reason you may get a false pressure gauge reading is due to the size of the air hose used to supply your paint gun. Small diameter hoses will endure friction loss and cause pressures to drop once they reach the paint gun 25ft away. A 1/4 inch hose would be too small for standard production paint guns. Using a 5/16 inch diameter hose would be better however, if you are using a HVLP spray gun it is recommended you use a 3/8 inch inside diameter air hose.

## **Dry Air**

Compressing air separates water from it, turning humidity into water droplets. For this reason, you will need a good water trap at the compressor outlet. Having it located about 25 feet from the outlet will give you the best results. You should also place another one at the end of the hose near the paint gun. Your air compressor will have a water outlet on the tank; make sure you drain it regularly.

Ideally, you should place a copper or galvanized pipe running downhill from the compressor towards the water trap. This will help the accumulated moisture in the heated air to move downhill towards it. The hot air will have time to cool while inside the pipes therefore allowing the moisture in the air to condense into droplets. These droplets would then be captured and held in the trap as a liquid.

You should connect your air compressor to your piping system using a short, flexible air hose. This will allow you to easily disconnect the air compressor from the piping system if you need to relocate it for various jobs.

Of course, you don't want water in the air that you will be using to spray paint with. You don't want any other particles to get in there either. All air compressors have an air intake port that comes with a replaceable filter. For best results have a few extra filters to hand so you can change them frequently. The air compressor will likely be in the garage area where you will be doing most of the painting. This means the compressor is taking in air that is filled with paint overspray. If you check the air compressor's filter after you complete your paint job, you will be surprised at what you find. For the best results, place the compressor where it will take in the cleanest air it can.

**[Get Inside VIP Here...](#)**

## **Spray Paint Guns**

Sata, Sharpe, and DeVilbiss are three popular brands of automotive spray paint guns. You can use equipment from any of these manufacturers and expect good results. There are two types of spray guns to choose from. The standard model is the largest and has a one quart capacity cup. The smaller gun, called a detail gun, offers a 6 or 8 ounce capacity cup. It also comes with a trigger assembly mounted on top. The standard gun comes with a handle grip trigger.

You will find various spray paint guns with all the accessories at any auto body paint and supply store. The prices start as low as under £100 and are more expensive depending on the brand name and quality. You may also choose to purchase an air valve that attaches to a spray gun's in-line with the air supply. These valves will help you to fine tune the air pressure at the gun to enable you to achieve perfect spray patterns.

Professional auto painters rely on their paint guns to give them a uniform spray pattern with each use. They clean their guns thoroughly after every use. You need to take spray gun quality into consideration when you are trying to

decide on which one to purchase. You are better off saving your money for a top-line spray gun than settling for a lower quality model. Cheap paint guns

result in ineffective spray patterns. They are also harder to find replacement parts for. You should think seriously before you purchase your paint spray gun and opt for quality and a model that is durable and results orientated.

It is advantageous to discuss spray guns with someone who has first-hand knowledge in the area. The product literature will likely suggest a setting for the inlet air pressure; however first-hand, real-world experience may suggest otherwise. Inlet air pressure settings are vitally important when operating a HVLP spray gun. Go out of your way to find someone who has sufficient experience with using the paint spray gun you are considering purchasing and ask them for their secrets.

### **Conventional Spray Paint Guns**

Most conventional spray guns will require an air pressure of 60 psi or higher. This amount of pressure will blast the paint at the surface resulting in up to 65% of the material escaping as overspray. That additional air pressure will also disturb dirt and debris and allow it to fall into the fresh paint.

### **High Volume Low Pressure (HVLP)**

Government agencies, auto paint manufacturers, auto painters and paint equipment companies have addressed the problem of VOC's, paint overspray and material waste as contributing factors to atmospheric pollution and are therefore currently looking for a solution to this pollution problem. One effective solution to help reduce the amount of VOC and paint overspray pollution significantly, involves the use of a High Volume/Low Pressure (HVLP) spray paint system.

The early HVLP spray paint systems incorporated a turbine system that replaced the conventional air compressor. This concept wasn't widely accepted thanks to the turbine system causing the air pushing the paint onto the vehicle to be too hot. The result was the paint dried too fast. A better solution was to develop a HVLP spray paint gun to use in conjunction with a conventional air compressor. The concept was familiar to experienced painters. It also justified purchasing an air compressor for the novice.

HVLP works by increasing the amount or volume of paint that can pass evenly through the spray gun's ports and nozzle. This means a low amount of pressure is only needed to propel the paint material.

The result is paint being given a better chance at sticking to the surface of the vehicle and up to 50% less material being wasted as overspray. Since the cost of paint material is expensive, a quality HVLP spray gun will more than pay for itself in just a few paint jobs. This reduction in overspray is very important to any part-time auto painter who is working out of his home garage or workshop.

It is recommended that a HVLP spray gun has an air pressure of 10 psi at its tip. Don't confuse this with the air pressure at the inlet of the spray gun where the hose connects. The inlet pressure may sometimes need to be near 60 psi to obtain the right tip pressure; this will of course depend on the design of the spray gun.

A spray gun may be classified as siphon feed or gravity feed in addition to being either a conventional or HVLP model. A siphon fed gun has a paint cup that is mounted below the air nozzle. The design requires more air pressure in order to get the paint out of the cup. A gravity fed spray gun has a paint cup that is mounted above the air nozzle to allow gravity to do some of the work for the air pressure. The result is that a lower inlet of air pressure is required.

## **Paint Gun Maintenance**

### **VIP Members Testimonials**

Spray paint guns need to be consistently cleaned and maintained to work properly. Very small air and material passageways become clogged easily by bits of dry paint and debris and it can be very difficult to clear such blockages. You must form the habit of cleaning your spray gun after every use. Each spray paint system will have specific cleaning solvents allotted as part of the entire paint system. Make sure you check with an auto body paint and supply store worker to find out the correct cleaning solutions to use with the system that you are using.

When you're about to start the process of cleaning your spray paint gun, put on rubber gloves and a respirator. You should wear rubber gloves any time you are handling thinners, reducers, hardeners or any other paint products that contains chemicals.

If you don't have access to a cleaning cabinet, fill your gun cup partially full with solvent (thinner). Next, swish it around and then empty it. This will remove the majority of the remaining paint product. Refill the cup again with the solvent and this time spray it through the unit. This will clean out the inner passageways.

You will then want to fill the cup  $\frac{1}{4}$  full with solvent and spray it through the unit once again. Make sure you then clean the cup thoroughly. Next spray further solvent through the gun head and make sure nothing but perfectly clean solvent comes out, this will demonstrate that you have gotten everything out. Once you are sure the interior ports and passageways are clear, run clean, dry air through the unit to remove deposits of solvent.

There are brushes available designed specifically for spray paint gun cleaning, especially for the housing, air caps and other parts. Under no circumstances use a sharp object to clear a clogged air cap or port. By not

following this rule, you can put small scratches on spray gun parts that will interfere with its spraying performance.

To finish on; use a clean cloth dampened with solvent, to remove paint drips and splashes from the exterior surfaces. Hang the paint gun in a vertical position for proper storage once you have dried it with a clean cloth.

### **Your Overall Safety**

The respiratory protection that you wear is quite simply to protect you from inhaling dangerous chemicals, such as isocyanate's found in paint hardeners. For your own health and safety, you should become very knowledgeable about all respiratory protection available to you. The most cautious painters choose to use what's called a full-face fresh-air respiratory system. While they can be inconvenient to wear, they offer you the very best in personal safety.

Make sure you read the respiratory package labels as they will list the types of materials the filter will protect you from and those it won't. Auto body paint and supply stores offer a variety of filter masks and fresh-air systems to choose from. It must be stressed again; learn about respiratory protection, it will save you from serious chemical harm.

Particles of paint overspray can enter your body through the eyes via moist tear ducts; the way of osmosis. It is advised therefore, by paint manufacturers, that you always wear goggles while painting or a full face respirator.

Paint chemicals can also enter your body through the pores in your skin. To combat this, paint manufacturers have developed special coveralls that can be used once and then thrown away. They are great for preventing paint chemicals from coming into contact with your skin. In addition, the material used to make the coveralls is lint free so you won't have to worry about any lint falling off your clothing and onto the paint.

### **Collision Repair**

One likely reason you will have to do paint work on your car will be the result of a minor wing dent. One option is to pay a body shop to take care of the repair for you. However, it is very likely you can handle doing such a repair job on your own. Since you purchased How to Paint a Car – The System, you probably won't mind getting your hands dirty?

**Wait! This was book given to you free!! It was previously sold for \$57.00!**

Slightly damaged panels can be straightened. Don't worry if your straightening skills aren't the best, you can still do a satisfactory job. Deeper dents would take more layers of filler. Remember that you can't apply a single thick layer of filler. If the area is damaged beyond your repair skills, you can replace the

panel. The basic tools for doing bodywork include an air file, a DA sander, small grinder, dead blow hammer, body hammer, sandpaper and a pry bar. The best way to learn how to use these tools is to start using them. Experience will come with trial and error. Since the panel is already damaged, why not use it to practice on?

### **Straightening a Panel**

The process of straightening a panel involves reversing the deformation. It is more complex than simply hammering the dent out from the other side. Instead work from the outer perimeter of the damaged area towards the point of impact. This can be tricky if there is more than one area of impact. A dent in one portion of the panel will generally cause another area on the same panel to bulge out. Make sure you try to hammer this bulged area back into alignment first before you start hammering the actual dented area back into place. If you attempt to straighten the dent first it will cause the metal in the bulged area to stretch.

Aim to straighten the panel to within 1/16 of an inch of its original form. You can then use a thin layer of plastic body filler to cover up any remaining imperfections.

Unless you are able to finish the panel without using any filler, the repaired area needs to be left slightly lower than the undamaged area surrounding it. This is done to keep the body filler from building up above the surrounding area. Never apply body filler at more than 1/8 of an inch thick at its deepest point. Doing so will result in the filler either sagging or cracking. The following is one achievable method to help you repair those dents in no time at all.

- You will need to pull out the dent in the sheet metal in order to straighten it. This is made easier if you weld small metal rods to the sheet metal using a Rosspot or a stud gun. The rods should measure approx 1/8 of an inch in diameter and 2 ½ inches long.
- Using a slide hammer, slip it over the rods one at a time. You can then hammer out the dent using the slide to get the sheet metal back into its original position. You may need to tap the metal back in a bit if you accidentally hammer it out too far. The slide hammer is then moved over to the next rod. It does take practice to read the dents and know exactly where to apply the right amount of pressure.
- Once you have done this, check your work. You need to ensure every part of the panel is as close to its original shape as possible. You also don't want the panel to be too high in any areas. Any high spots need to be hammered back into place and any low spots need to be filled.



### **Become A Special VIP Member Here!**

- After all the pulling is done the rods can be cut off as close to the body as possible. You can accomplish this using a pair of diagonal cutters. The remaining stubs are easy to grind down using a coarse sanding disc.
- Next you will need to smooth the surface using body filler. After that, add a light coat of glazing putty for the final surface. Don't worry about any slight high spots; they can easily be guided back into place with the use of a small hammer. You will find that older vehicles have thicker sheet metal compared with newer vehicles; which have panels that are a lot thinner and more flexible. Adjust the amount of effort you use to straighten the panel depending on the age of the vehicle.
- Use a flexible spreader to apply the filler to any low spots. Be careful to prevent air bubbles from forming. After the filler hardens it can then be sanded and shaped using 80 to 100 grit sandpaper.

### **Replacing a Panel**

Sometimes the damage to the panel is more severe than it first looked and you may find your efforts to straighten the area weren't effective. In these instances, as long as you can remove the panel, you have the option of replacing it.

It is possible to cut a replacement panel from a different vehicle and then weld it into place. If you decide you want to replace the panel, you have several options. You can purchase a new sheet metal replacement panel from the manufacturer, obtain one from an after market dealer or visit a scrap yard. Any dealer's body shop would attain the replacement panel direct from the vehicle's manufacturer; therefore the panel would be completely brand new.

This is the most expensive option open to you but being brand new the panel would be far easier to work with, saving you time and upheaval that way. Joy with after market panels can be a little hit and miss; it depends on the manufacturer. These panels come with the proper mounting holes and recesses. They will look the same as the original panels being replaced however, any problems you may experience with the panel fitting incorrectly will not be discovered until after you begin attempting to install it. There are some excellent after market parts available so ask around before you purchase.

If you decide to purchase a replacement panel from a scrap yard, choose the one with the best sheet metal to fit your vehicle. It makes no practical sense to purchase a replacement panel that is in a worse condition than the one you already have. It is very unlikely that you will find a door or wing that fits your vehicle perfectly and is the same color, but that is something you can take

care of on your own.

Any part you take from another vehicle will need to be tested for paint type and to ensure it is compatible with the paint system you will be using. Make sure you conduct these tests prior to installing the part on your vehicle. You might also decide to have it chemically dipped or media blasted at this time. Regardless of what method you use for obtaining a replacement panel, make sure the mounting brackets, emblems or trim on your vehicle are usable for the replacement parts, if not try to have them included with your order.

If you don't immediately see the process for taking off the panel you are replacing, examine a repair manual for your vehicle to find out how or ask at a local body shop. Pay attention as you remove the damaged panel; you will learn how to install the new one.

For the best results, apply the primer undercoats before you install the panel. This will ensure that all the parts of the panel can be coated easily with epoxy primer. The top coat should only be applied once the panel is secured on the vehicle, this will allow for precise blending with adjacent panels.

## **Rust Repair**

Rust repair may at times be more necessary than collision repair, more so in particular geographical circumstances. If you spot rust you will need to find

out if it is only on the surface or if it is corrosion that permeates through the entire panel.

Surface rust can easily be removed by sanding it off and then applying epoxy primer. If the rust has gone through the sheet metal you will need to perform more extensive repairs before you apply any paint. This can be done by media blasting or by using a chemical stripper followed by applying epoxy primer. You will then need to follow up with an application of high-build primer. More severe rust issues will need to be restored with the use of patch panels welded onto existing bodywork.

**[Learn Rust Repair Tactics All On Video!](#)**

## **Rust Removal by Sanding**

In order to remove surface rust from solid sheet metal, use a sanding block with 80-100 grit sandpaper. Once all the rust is gone, wipe the panel down with wax and grease remover, do this regardless of whether you are down to bare metal or whether paint is still showing. Next coat it with epoxy primer. You will find that you have sanding scratches from the course grit sandpaper left behind. These will give the epoxy primer an excellent surface to adhere to.

Always remember to take care of any dents by repairing or filling them and then applying a coat of high build primer before you block sand.

### **Rust Removal by Panel Replacement**

For panels that are damaged beyond repair because of the spread of rust, you are better off replacing it with a new panel. If you are replacing a complete panel such as a door, the process is the same for collision repair as it is for rust repair. It doesn't matter if you decide to use new and expensive factory replacements, cheaper after market products or used parts; what is important is that you search for the best products that will fit your price range.

The surface preparation process may be slightly different, compared with the rest of the vehicle, when you use new replacement panels. Make sure you clean such panels with wax and grease remover before you do anything else. You will have to scuff the surface using a Scotch Brite pad otherwise the primer and paint won't adhere properly to it.

You should ask an auto body paint and supply store worker for their recommendation on the best undercoat product to apply to the panel that is compatible with your adopted paint system. It's important to remember that any application of primer undercoats should be completed before you install the panel onto the vehicle and you should only add the top coat once the panel has been installed and aligned making it easier for you to blend the paint in properly.

### **Installing Patch Panels**

Patch panels are generally used in the restoration of vintage vehicles; however they are being used on later model vehicles as today's vehicles are

lasting longer than ever. A patch panel is the best way to repair a portion of a panel such as the lower part of a door or a portion of the main body including the rear quarter panel that is beyond all other means of repair.

For those of you working on an everyday vehicle, it is very likely a patch panel for your application will be available. Don't worry if the available patch panel is not large enough to cover the entire area that has to be repaired, it may still be useful for repairing the elaborate body lines of the repair area.

To install a patch panel, you will of course have to remove the damaged metal in order to weld the patch panel into that location. It is important that you compare the new panel to the area being replaced so that you know how much of the old metal to remove.

A range of tools such as a plasma cutter, die grinder, reciprocating saw or tin snips can be used to remove the damaged section. Once you've removed the damaged section, set the patch panel into place checking it for proper

alignment, followed by clamping it in place and then weld. The type of weld you want to use will depend on the panel you are replacing, the type of welder you have available and your welding skills.

Once you have finished welding, clean the patched area with wax and grease remover, apply epoxy primer and finish the bodywork to the area around it. Follow up with a primer and then block sand as needed before you apply sealer and top coats.

### **Getting it back to being straight**

The objective to any type of bodywork is to get the wings, bonnet, doors and any other parts as straight as you can. The panels should be straight if that is how they are designed to be and any curved panels need to be left as smooth curves.

### **Using Body Filler**

While you won't notice it in the beginning, after you apply a fresh coat of paint, any dents remaining will stick out like the proverbial sore thumb. You can repair up to 1/8 of an inch deep minor door dents using body filler. You can scuff the dented area down to the bare metal or to the epoxy primer. For the best results mix the right amount of body filler and corresponding amount of hardener and apply it to the dented area using a spreader. Make sure you read the instructions for the type of filler you are using so that you know exactly how to work with it. You can always apply a second coat of filler if necessary to the area.

Rough shape it with coarse 80- or 100-grit sandpaper, then sand the entire area with finer sandpaper until it is blended in with the surrounding area.

### **Aligning Panels and Fitting Gaps**

It can be tricky to get panels to fit with each other when you install them on a vehicle. Check to see if the gaps between the panels are the same width consistently. You need to make sure a panel doesn't stick out further than one next to it. Some vehicles just have better panel fit when they are made in the factory. However, it is your job to get them to fit well. By not rushing and paying attention to this task will ensure it looks great after you paint it.

It will take some adjusting to get consistent gaps across the entire vehicle. You may have to add or remove material from the panels to accomplish the task. Professional body shops attempt to get the gaps between the panels to be the same thickness as that of a paint stir stick. Many of the newer vehicles have gaps that are up to three times as thick as a stir stick. Make sure yours is consistent throughout.

Be careful not to get the panels too tight in areas where you have applied body filler. You want to get the surface smooth without too much build up of filler. This is achieved by making sure the area being filled isn't higher than it was intended to be and thus heightens the surface of the surrounding area. As previously mentioned, the correct surface height is very important before application of body filler.

### **Getting it flat**

Since you have the panels straight and aligned properly, are you ready to paint? That will depend on a number of factors: Do you see any other minor dents or blemishes present on any panels? Do the doors have vertical lines in them? This is all the more important if somebody crashed into the door panel. Finally, is the overall texture of the vehicle a little rough?

If you answered yes to any of these questions, then you have some more work ahead of you before you are able to start spraying paint. Take out that sandpaper again and a sanding block and work on the vehicle until all those imperfections are taken care of.

### **Sanding with a Long-Board**

Any vehicle with a long wheel base (LWB) will bridge the high and low spots of a road surface; resulting in a more comfortable and smoother ride for the occupants. The same philosophy applies when you opt to use a long sanding board above a short sanding block. The key to achieving the straightest and flattest possible surface for painting on is to use a long sanding board or block with progressively finer sandpaper.

### **Sanding Body Filler Repairs**

No matter what type of surface you intend to paint over, it may be body filler or an existing paint finish, sanding is going to be needed. Remember that any

remaining blemishes or imperfections on the surface will be magnified after you add the top coats.

The top layers of body filler are sanded primarily using 80 to 150 grit sandpaper. This will flatten out the rough spots and get the surface on its way to being smooth and even. Next use 240 grit sandpaper to make the finish even smoother and flatter. You must always sand using either a sanding board or block, never just your hand as already explained why not.

Every few minutes stop and feel the surface with your hand to get an idea of how much progress you are making. If you can feel any irregularities, you can be sure they will be seen more prominently once you paint it so keep on

sanding. Don't stop until the entire area is faultlessly smooth and flat; it needs to blend perfectly with the surrounding surfaces.

For the best results, operate the sanding boards and blocks in all directions rather than just moving them back and forth. Rotate the board or block to make the operation easier. This sanding technique simply ensures that the surface is sanded smooth and free of grooves, valleys or patterns.\

After you have flattened the area using 240 grit sandpaper to remove all of the high spots and other surface imperfections; use 320 grit sandpaper to remove any left over sanding scratches and minor imperfections.

So far you've been shaping the body filler to get it flat and blend in with the other surface areas. By moving onto finer sandpaper grades, you are now striving to get the texture as smooth as possible. You can get most of the finishing sanding done quickly and uniformly using a DA sander. You should practice first on an old spare panel if you aren't familiar using a small DA sander.

Once you are satisfied with your filler repair, use 320 grit sandpaper to develop a well defined visual perimeter around the entire repair area. The rings around the repair area in some circumstances may expose a band of bare metal approximately one inch wide maybe, then bands of roughly equal width exposing the primer, sealer and paint. Your objective here is to develop a smooth wall between the top surface of the body filler and the top surface of good paint.

This will allow fresh applications of undercoat material and the final coats of color in thickness that is equal to the rest of the paint finish. This will give you the best blend, color tint, and texture. This process is referred to as 'feathering in'.

### **Cleaning Sanded Surfaces Prior to Undercoat Application**

After completing sanding or scuffing of the surface being repaired, make sure you take the time to clean it thoroughly. You will need to remove all surface debris. Most painters use an air hose to blow away the layers of dust left behind from sanding. Then they use wax and grease remover to clean the

surface with. Again, it is very important that you only use a wax and grease remover that is deemed part of the paint system you will be using. Don't forget to wipe the vehicle down again in the paint booth right before you start spraying on paint with a tack cloth.

### **Applying Primer**

Primer products are used on parts of body work that have sustained repair

work or have minor, shallow sheet metal scratches on them. Never use primer as a substitute for body filler; any layers that are applied too thick will shrink making the sanding scratches and other imperfections even more noticeable. Once you have sanded and smoothed the top coat of glazing putty, apply two to three coats of a primer onto the area. Once dried, smooth the surface with 320 grit sandpaper. Next, finish sand with 500 grit sandpaper.

Sometimes the multiple coats of primer don't produce the results you were hoping for with minor surface blemishes still showing through. This is nothing to worry about, simply apply a few more light coats of primer and then sand down with 320 grit and 500 grit sandpaper once again.

### **Get The HOTTEST VIP Training On The Net!**

To help you keep control of the progress of primer sanding, spray a light layer of 'guide coat' or flat black paint over the surface. If auto painting is your hobby then apply the 'guide coat' a little heavier compared with a professional.

As you are sanding the area down using wet and dry 800 grit sandpaper, low spots will stay dark and high spots will lighten as you sand off the guide coat from them.

It is important that you mask off and protect any area of the vehicle that you won't be painting. Since the primer will be sanded, you won't need to apply it in a painting booth, which makes life a lot easier for you. However, you will still want the environment to be as clean and free of dust as possible.

The amount of solid material in primer remains high enough so that it can flake off the masking paper and onto the work surface. For this reason it is vital to remove the masking paper that you used when applying primer. The dust from sanding is going to accumulate on the surface of the vehicle as well as in the gaps between the doors and boot lids regardless, this will require a thorough cleaning before you apply any coats of color. Once you have applied and sanded the primer materials and cleaned off any sanding dust from the vehicle, you can then begin the masking process ready for applying the sealer and the actual paint.

### **Successfully Applying Primer**

To start with, make sure you mix the primer and reducer as instructed. You will want to ensure you attain proper coverage from using it. Use a calibrated mixing cup and make sure you read the instructions before you do any mixing to get the ratio of primer to reducer correct.

Stir the primer mixture thoroughly. Then, place a paint strainer in the spray paint cup and pour the primer into it. You should never pour any kind of paint product into a spray paint cup unless you have a strainer in place. You can

get hold of a strainer for free from where you buy your paint products. If you don't use one you risk having to buy a new paint gun if any debris gets into an area of the gun that you can't clean.

Spray the primer onto the vehicle wearing a respirator, remember your personal safety at all times. It is important that you hold the spray gun at right angles to the surface as you go along, whilst holding the air line in your other hand safely away from the vehicle. Since all the vehicle trim will be out of your way, you will be able to apply an even coverage. As you spray the lower edges of the vehicle, it is important that you bend over or kneel down if need be, so you are able to clearly see what you're doing.

Avoid spraying all the way up to the masking paper. This can leave a harsh line in that area. The method is to taper the primer from a heavy application at the actual repair to a thin dusting prior to reaching the mask line.

You will need to apply primer to the inside of all trim openings such as the inside of door handles and the petrol cap opening. It is important therefore that you clean and scuff these areas just as you would do any other area of the vehicle. While this can be meticulous work, the end result will speak for itself.

### **Preparing Fiberglass**

To repair fiberglass you will need to use resin, catalyst and fiberglass mat products, unless your vehicle is made from a product called Fiber Reinforced Plastic (FRP). Those vehicles will require specific repair materials that are unique to their physical make up as well as their chemical design.

There are auto body technicians that prefer to cover a finished fiberglass repair with a coat of glazing putty to reduce the problem of air bubble induced pin holes. Pin holes are a common hazard found on the surface of resins. Unless you have to abide by any special product instructions, primer is mixed and applied to fiberglass repairs using the same method as for sheet metal surfaces.

### **Surface Preparation**

You will need to prepare the body surface in order for it to be ready for paint; this is regarded as auto body surface prep. Painting a vehicle is simply down to series of stages. The efficiency of each stage is determined by how smooth the previous stage went before it. If you do poor workmanship anywhere along the way it will have an adverse affect to the bottom line. Keep this in mind as you work to complete each stage to the very best of your abilities. If a mistake happens take the time to rectify it. Don't rush *any* of the stages,

always keep the end goal in mind; a professional looking paint job that you will



be genuinely proud of for years to come.

## **Part Removal**

Experienced auto painters and automotive enthusiasts will always be able to detect if a vehicle has been repainted. It is the desire of all auto painters to do such a thorough and meticulous paint job that no one has any idea the vehicle has been near a spray paint gun, unless it's an obvious and outlandish custom paint job.

Tiny parts of paint overspray that manage to get onto window mouldings, door handles and light assemblies are a tell tale sign that a vehicle has been worked on. A closer inspection of the vehicle surface may also reveal some sanding scratches that would indicate that some degree of bodywork has been performed. A buyer may suspect that the vehicle has possibly been involved in an accident and the damage repaired. Whatever he/she believes to be the reason; the car will no longer be so attractive to buy.

To make sure that no overspray is able to accumulate anywhere on your vehicles accessories and trim, it would be a sensible option that you carefully remove and store all of them. This is the best way to prevent overspray concerns and paint build-up along the edges of trim.

For those difficult accessories that you aren't sure how to remove, ask a service manager from a local dealership, a professional auto body repair shop or an auto paint shop.

Don't risk breaking parts when willing assistance is readily available. You can also get the information you need from a factory repair manual for the make and model of vehicle you are working on. You should be able to obtain one from the dealership for a late model vehicle. You can also get them from an auto part store, if all else fails browse around on the Internet for one. Before you buy, flip through it and make sure it has the required information you need. These manuals are very handy to keep for any future problems you may encounter.

It won't take long for you to see the benefits of removing the vehicle accessories and parts. This stage is completed much faster than masking, however don't rush through it. Have a sensible plan ready for removing and storing each item.

Large boxes work well for this. It is simple to label the boxes for each section of the vehicle. Put screws, bolts and nuts back on the part it came from once you remove it so you'll know exactly where they are when it's time to put everything back on the vehicle.

[\*\*Click Here For VIP Access!\*\*](#)

## **Vehicle Trim and Accessories**

You will find that most of the accessories and parts from a vehicle including door handles and mirrors are secured in place with screws, nuts and bolts. Some newer model vehicles use adhesives to hold the emblems, badges and trim in place. It is a good idea to examine each item before you try to take it off so you can determine exactly how it is mounted. You don't want to have to buy new to replace broken pieces.

You will find that some door handles can be removed by loosening a heavy duty screw found horizontally across from the handle on the edge of the door. Other door handles are secured by a couple of screws or nuts; you will need to access these from inside the inner door cavity. To gain access to the handle support you'll need to take off the interior door panel.

You'll need to examine the interior door panels on your vehicle, which are usually secured either with screws or clips, to determine how they are secured in place. If you can't find any screws around the perimeter of the panel then it is likely it is held in place with plastic clips fastened securely into retainer mounts. You can easily pull them loose. Before you do, make sure you remove the armrests and window and door handles first.

After you have removed the interior door panel, you will see a piece of plastic or similar material between the panel and the door skin. This is the vapor barrier. It is designed to prevent water from entering the vehicle after it has leaked past window trim moldings. It is very important that you don't damage vapor barrier. It's very easy to simply roll them up to the top of the door and tape them away safe.

For light assemblies, these are generally secured with screws found on the back of the housing assembly. You can remove the rear light units from inside the boot area or by pulling them out from the outside. Grilles can be a little trickier to remove. Look for screws around the perimeter of the grille section. Entire grille assemblies are usually made up of a series of parts which can be removed as one unit so long as you remove the correct screws. Most grilles have parts that are held together with clips that you would have to remove also.

It's important to leave the headlights in if possible; this will prevent the current light beam setting from being disturbed. If you need to remove them however, remember not to touch either of the screws that have springs underneath them. These are the directional adjustment screws that adjust the headlights in all directions.

You shouldn't have any problems removing the bumpers on older vehicles;

they have support bolts which are easily located. Newer car bumpers aren't as easy. Take your time when removing a bumper from a vehicle and get help if you need it due to these parts often being extremely heavy. You definitely don't want a bumper to fall on you while you are under the vehicle loosening the bolts so take the proper precautions.

If you will be painting the door edges then you are going to have to remove the weather stripping. You'll need to take a closer look at it first to see how it is secured into place. Sometimes you will find that it is held in place using adhesive, therefore an adhesive remover will have to be used. It may appear to be substantial enough to be pulled straight off however it is better to be safe than sorry and opt for the adhesive remover.

## **Paint Removal**

**[Click Here To Paint Like A PRO!](#)**

The amount of old paint that you are going to have to take off depends on the condition of the paint, whether or not the vehicle requires any body work and how far-reaching the paint job is going to be. You can apply new paint over old paint once the existing finish has been sanded so that the oxidized paint material has been removed. You should plan to leave yourself with a smooth, flat surface.

In addition, you don't want to apply new paint over anything that is lacquer based. If the original paint is lacquer based, then you will need to sand the areas to be painted down to bare metal. You will then need to use an undercoat that is compatible with the top coat you plan to use. This is to ensure you don't suffer any complications in getting the new paint to stick. For any vehicle that needs bodywork done to it, you'll need to take the repair area down to bare metal so that the filler material has the best chance of bonding properly.

The decision to paint is simple if your vehicle needs bodywork or it has serious paint imperfections. If the paint looks dull or oxidized however and you wish to repaint it to make it look visually appealing once again, ask yourself these questions:

Is the paint currently on the vehicle too thick to support a new finish?

Does the body suffer from rust anywhere?

Will you need to paint the entire vehicle or just some of the panels in order to finish the job?

You will need to figure out how much painting your vehicle is going to actually need, if you're not sure how much, ask at your nearest auto paint and supply store for their opinion.

It is a good idea to purchase a stripping disc kit that has stripping discs and a cushioned backing pad. This will attach to an angle sander (a buffer) with high speeds of up to 6,000 rpm. They will strip the paint quickly and effectively without generating excessive heat and due to their design, they won't damage body panels. They are recommended for use after a chemical stripper has been used to remove most of the old paint however this isn't compulsory.

From previous, you will find a variety of chemical strippers at your local auto body paint and supply store.

A high speed rotary sander with a coarse disc will remove paint quickly. These are perfect prior to bodywork because they leave rough sanding scratches on the surface, excellent for filler to bond to. A high speed sander and a coarse disc will also do an excellent job of removing rust.

Remember that high power sanding tools will generate a lot of heat. If the tool remains in one location for too long then the friction can cause enough heat to warp the surface. The risk is higher on newer model vehicles because of their thinner panels.

### **Media Blasting**

Sand blasting, also referred to as media blasting, is another great way to remove old paint quickly from a vehicle, especially those hard to reach places. This method also works very well on older model vehicles with cases of surface rust. There'll be a lot to clean up after you blast but it will be well worth the effort.

A sand blaster works by combining pressure with a compatible media. Be careful not to apply too much pressure with the harsh media otherwise the sheet metal will warp along with other damage. To be safe, remove all of the exposed accessories and body parts from the vehicle; the process of sand blasting will take off chrome as well as paint and deface glass.

The manufacturers and suppliers of sand blasting products provide charts that indicate the proper media and pressure you should use for the various types of jobs. To use it on vehicle parts and bodies, a suitable range would be from number 40 (0.016 inch) down to number 12 (0.004 inch.)

The media size and the pressure at which the material is blasted at are the two key factors you must consider with media blasting. Make sure you have the correct pressure settings or you will cause unnecessary damage to the vehicle's body. You'll also need to protect yourself from the sand blasting media; always wear heavy duty gloves, long sleeves and a sand blasting hood.

It would be a good idea to wear a NIOSH approved respirator as well. You can purchase the respirator, gloves, sand blaster and the media from any auto body paint and supply store. Sand blasting equipment for home use that siphons media from a bucket start at less than \$40. For a first rate unit, you can expect to pay more than \$200.

### **Chemical Stripping or Dipping?**

If you wish to start with clean metal before you begin the repainting process, using a chemical stripper would be ideal. The chemical stripping process will remove all of the layers of primer, paint, wax, grease, dirt and anything else

that can be found on the vehicle. After the stripping process is done you'll have a shiny, bare metal surface to work with.

One drawback of dipping a metal body or component is that the rust removal agent will get into all of the minute surface areas; exposing them to the environment. Try to access all these areas and apply epoxy primer. This is a very successful way to eliminate rust.

Unless you are dipping only a single layer of sheet metal, then you won't be able to apply epoxy primer to all of the bare surfaces. It won't pose a problem in a dry climate however, in a humid climate; rust will surely form on the areas of bare metal that are left untreated.

Always use the proper safety equipment when you are using any kind of paint stripper. This includes a respirator and gloves. After all, if these products are potent enough to remove paint, just think of what they can do to your body. Use 100 grit sandpaper or a ScotchBrite pad to scuff the panel with. This allows the stripper to soak into the paint by breaking open the seal. Apply the stripper only as directed by the manufacturer.

Give the stripper plenty of time to work on the paint. You can start to scrape the paint off as it starts to loosen and bubble up from the surface. Use a putty knife to scrape the paint off with. If only the top coat comes off, you will need to apply more stripper to get through the other layers.

Once the entire surface is stripped bare, you will need to neutralize the stripper with plenty of water. If you don't do this, any remaining stripper will attack primer and paint coats that you apply from this point onwards. Once you have neutralized the area with water you will need to completely dry the surface. Next, wipe it down with wax and grease remover and then coat it with epoxy primer. This will prevent rust from forming on the bare, clean sheet metal.

It is advised that you have the entire body or a single panel stripped down to bare metal by a professional that is an expert in this line of work. Inquire with

any auto restorers in your area to recommend a professional to you. It is your responsibility to completely disassemble the vehicle parts before you take them to be stripped. Be as thorough as possible. It is important that you find out if body filler is on the vehicle. You can do this by using a magnet or a grinder. Of course, a magnet won't stick to body filler.

Once you know that there is body filler present and it is more than 1/8 of an inch in thickness, you will need to grind it away before taking the vehicle to be stripped. If it is under 1/8 of an inch thick then it should come off during the stripping process. Try never to forget that only metal objects should be placed into the chemical dipping tank.

## **Sanding**

You will be guaranteed that once you have completed the necessary bodywork, prepared the surface for paint and wet sanded the finished painted surface; you will know the body of your vehicle extremely well.

You need to always make sure that you scuff the old paint surface before you apply any new paint. The purpose of scuffing is to dull any shiny surfaces so that any new layers of paint material will have something to adhere to. This is even more critical if you're dealing with a factory paint job that was baked on at approx 450F. The result will be that your new paint will flake off because it has nothing to bite onto when adhering to the surface. A super hard, baked on factory finish isn't going to allow anything especially paint to permeate it easily, so ensure that you always scuff the existing surface. You can see this being done thoroughly in How to Paint a Car – Part 1 as an example.

### **Tired Of Reading? – Video is The BEST Way To Advance Quickly!**

A fine grade Scotch Brite pad will work a treat for scuffing baked-on paint finishes. They leave behind a rough finish that works well for fresh coats from your paint system to adhere to effectively. You can just as easily use 500 to 600 grit sandpaper to scuff shiny paint finishes. Ensure that you scuff and sand in all directions to maximize the process.

## **Getting the Surface Smooth**

Prior to the painting process, you will have to work at getting all of the repaired body panels as smooth as is humanly possible. You can only accomplish this task by block sanding any areas that feel rough. This could be a small area or the entire vehicle. Take a slow walk around your vehicle and pay very close attention to the surface, use your hands to feel your way around; your finger tips may pick up on something that your eyes don't. Any imperfections that you discover at this point are going to be magnified once you add new paint.

## **Fine Sandpaper**

After you have finished using say 400 grit sandpaper on your vehicle, some sanding scratches may remain that will show up clearly when you paint over them. These will need to be taken care of with finer grade sandpaper such as 600 grit.

If you require an extremely elaborate paint job finish, try block sanding the entire vehicle using 800 grit and then 1000 grit sandpaper. It obvious that for the greatest results, steadily work your way up through the grades of sandpaper. Please note that if you went from 400 grit to 1000 grit sandpaper, the process is going to take you much longer than it should, so allow each grade to do its own individual work.

### **Applying Primer and Sealer**

Epoxy primers and sealers do not have to be sanded unless you develop runs or imperfections when you're applying them. If this happens, use fine grade sandpaper to correct your mistakes and then touch-up with a new coat of material. As previously explained; epoxy primers are sprayed onto bare metal in order to provide a waterproof protection to them.

Most auto restorers will apply epoxy primer products to bare metal prior to removing the old paint and rust. Some prefer to apply body filler directly to bare metal and then seal the repair after they've applied and sanded primer. For body panels or vehicles that are going to receive an entirely new paint job, their surfaces are essentially ready for paint. This is also the case with bodywork that has been scuffed. Therefore, primer and sealer materials should be treated as normal top coat applications and should be sprayed in a spray paint booth after masking.

For bodywork that has been scuffed, you will just need to mask the area and apply sealer. After the sealer has cured you can apply the paint. Make sure you follow all directions from the sealer manufacturer.

If only a portion of the vehicle is going to be shot with primer or sealer, use large strips of masking paper to protect those unaffected areas from overspray. In using the minimum recommended pressure, fan the spray gently when covering up all the bare spots. You will want to feather into adjacent areas by releasing the paint gun trigger slowly towards the end of each pass. You can see this being done in 'How to Paint a Car – Part 1'; notice how the professional painter flicks his wrist at the end of each pass to help perfect uniformly applying the paint.

### **Masking**

To keep any unwanted paint from ending up on the body areas in the vicinity

of those you are painting, protect them with masking paper and tape. Never cut corners when it comes to masking, it is much easier to do this then to have to deal with masses of overspray.

While some paint overspray can be cleaned off or simply painted over, trim pieces and other body items tainted with thin strips of paint overspray will not be as easy to rectify. Anyone looking at purchasing your vehicle will see those areas of paint on the trim pieces and body accessories if they look closely enough.

To a potential buyer, this overspray indicates that the vehicle has been repainted. They may wonder whether it has also seen extensive bodywork from a collision or advanced rust. A less than perfect finish may cause a prospective buyer to simply turn around and walk away.

Besides color matching, the process of masking is one of the most detailed tasks involved in auto painting; it will certainly represent your most precise work. Get yourself off to the best possible start by using only tape and paper products that are specifically designed for auto painting. Take your time devising a plan for masking with and always pay close attention to detail.

Before you mask the outside of your vehicle, wipe it down with wax and grease remover because masking tape will have trouble sticking to dirty surfaces. You certainly don't want to deal with the mess resulting from masking paper and tape coming loose whilst you are spraying primer or even paint.

### **Outlining**

It isn't easy to perfectly lay a strip of  $\frac{3}{4}$  inch masking tape along the edges of trim and body parts. Tight curves prove the trickiest due to the tape bunching up and folding in these areas. This can result in flat spots instead of a smooth and even contour. The process of masking rounded items is made even more difficult when sheets of masking paper are attached to strips of tape. To follow a body line accurately with masking paper and tape is not easily achieved.

All professional painters rely on quality workmanship and efficiency in order to make a living. It would be a waste of time to mask trim and body parts when they can be removed in less than five minutes.

To make the task easier still, when masking an area of window trim, rather than struggling with tape and a sheet of paper, professional auto painters would first place a thin  $\frac{1}{8}$  to  $\frac{1}{4}$  inch strip of plastic Fine Line masking tape down along window trim edges. Fine Line tape is designed for masking body part edges next to body panels that are going to be painted. Next, they attach wider strips of masking tape and paper to the Fine Line; the Fine Line will give you more room for error because you are only applying the masking tape to the Fine Line tape, a less precise task compared with masking up to window



trim edges. This process is easy because of the manageable size and texture of the Fine Line tape.

As a substitute for Fine Line, you could use ¼-inch paper masking tape. It will work well along straight sections but tends to bunch up and fold around corners. The texture of paper masking tape is somewhat rough so be careful of any tiny gaps forming along the masked edges. If this happens then paint materials may build up and produce spots of overspray.

## Windows

It is extremely difficult to paint around the windows of a vehicle and not get overspray onto the belt moldings or any of the trim pieces that surround the glass. The best way to avoid overspray is to remove all of the glass and trim. Prior to this, don't forget to mask off the interior compartment. Other than that, as already described above, use Fine Line tape to outline the outer trim and molding edges beside the panels you are going to paint. Attach some strips

of wider masking tape and paper along the plastic tapes width. You must make sure that there are no gaps between the inside edge of the Fine Line and the wider tape.

### **Ready For Complete VIP Video Access?**

You will only need to use one strip of masking paper to cover windows with, just make sure it is wide enough to reach from the top to the bottom. Fold the paper as needed to make sure that it fits neatly along the sides. Use strips of tape to hold the paper in a position that is secure as well as covering any gaps. A single sheet of auto masking paper will prevent any paint from seeping through to the surface underneath. If you use a different type of material for masking with, it is possible that you may have to apply two or even three layers.

You won't always find masking paper that comes in the width you need to fit your windows shape perfectly. You might end up with a tight fit along the edges and some excess bulging in the middle. To prevent excess bulging, try folding the excess masking paper until it lies down flat. This will make the masking job tidy as well as prevent the paper from being disturbed by air pressure blown from a spray paint gun.

As you mask, keep in mind that paint will cover everything it comes into contact with. Even small slits between the tape and the masking paper will result in paint getting onto the surfaces underneath precisely where it shouldn't. If the paper edges aren't securely taped down in place they will blow open during paint spraying and permit mists of overspray to get underneath. It is very important therefore that you run lines of tape along the entire edges of the paper to prevent this from happening. This is even more

crucial if the edge of one piece of masking paper is overlapping another.

Windscreens and rear view windows are usually quite large. You might have to use two or three pieces of paper placed horizontally across the glass to ensure complete coverage. To remind you once more; if you decide to leave trim pieces in place then use Fine Line tape around the outer edges before you begin working with wider tape and paper.

### **Trim, Emblems and Badges**

It is best to remove all of the trim before you apply paint and then reinstall it after the paint is completely dry and the rubbing out or buffing has been completed. The reason you need to wait is to avoid any compound build-up on the trim during the polishing.

On a number of vehicles, the metal trim around windscreens and rear windscreens sticks up above the vehicle body. This gap is to your benefit; insert masking tape with the sticky side up into this area. Gently manipulate the tape strip back and forth until it won't go any deeper into the gap, and then simply fold it over onto the top of the trim section. You will likely need to stand on top of something quite sturdy in order to reach the top trim pieces. You would also be wise to ask someone to assist you from the other side. Do the same on the sides and the bottom section.

Applying tape to other types of trim does not require any other special skills other than just patience and attention to detail. It is very important that trim edges are covered and that tape doesn't protrude onto body surfaces, this will only shield the paint from reaching the surface where it is needed and cause blemishes.

Take your time when inspecting every inch of your masking work after you feel you've finished. You may have to lie on the floor to get the bottom portion of the trim masked properly.

Just as you do with trim pieces, remove emblems and badges before you begin painting; it will be virtually impossible to mask around them. They will be secured in place via various means such as with clips, pins, screws, adhesives or double-backed tape. Be very cautious when taking such items off a vehicle. Too much pressure will cause them to break. You may have to carefully pull away one edge to determine exactly how the emblem or badge is secured in place.

If you don't see how to remove these items, consult with a professional who would know such as someone from a professional body paint shop. While you should remove emblems and badges during most situations, there are times when you can leave them in place, such as:

- If you are only spraying clear coat paint,
- Or when you are spot painting using a very light melting coat close to their edge.

It is important in this instance to mask properly otherwise overspray will build up on the edges.

To be sure that emblems and badges are completely covered, mask carefully around their edges before masking the face, making sure none of the tape extends to the painted surface. Fine Line tape would be ideal for this situation. It will take practice, so don't be frustrated if it takes you more than one attempt.

To make it easier for you, consider covering the emblems with wide strips of tape first. Next, use a sharp razor blade to cut the tape along the edge of the emblem at the point where it meets the painted body. Do this delicately with light pressure so you won't cut deep into the paint or leave a gap along the masked off area.

### **Door Locks and Handles**

Obviously, door locks and handles are secured right next to painted door panels so you will therefore need to use the same type of precision masking for them as for emblems and badges. For best results, mask the entire door handle using just tape. Use  $\frac{3}{4}$  inch tape to mask the perimeter and then 2 inch tape to cover the handle completely. Be creative to cover the door handles on your particular vehicle if the design is somewhat less standard.

Of course the best decision would be to remove the door handles from the vehicle altogether. You would still need to cover up the small opening on the outside of the door caused by removing the door handle, before you apply primer. By not doing this, primer would only end up inside your vehicle. The masking needs to be done for this from the inside. Use two pieces of overlapped masking tape to cover up the opening. Other people may choose to leave the interior door panel in place to prevent any paint from getting inside of the vehicle. This is viewed as a very unprofessional and lazy way to do the work. The petrol filler opening has to be masked from behind in the same manner as the opening (for the handle) in the door. Key locks are very simple to mask, just cover them with a strip of 1 or 2 inch wide tape and cut the excess off around the edge of the lock using a sharp razor blade. Use your fingernail to force the tape securely into place before cutting and make sure the entire lock area is completely covered.

### **Door jambs**

It is not uncommon for novice painters to forget about masking the door jambs before they begin spraying undercoats or top coats. This will result in

overspray getting into the door jamb areas, including the inner side of door edges. It can be very difficult to clean up this overspray mess. In the movie you will find out have to mask a door jamb like a professional.

The best way to mask the door jamb is to open the door of the vehicle and then place tape along the inner edge of the door. Attach masking paper to this piece of tape and fold it over to the inside the door. This is going to protect the door jamb and the door post from overspray getting in through the gap between the doors. Always take your time when masking this area; it will save you a lot of wasted time later on. You certainly don't need the hassle of sanding off overspray from the door jambs.

It is common practice for painters to coat the door jambs and the edges of the doors first before commencing with the rest of the vehicle body. Once these areas have cured you can close the doors and paint their exterior portions without worrying about overspray. You can also choose to mask the door jambs after they have cured. This will help you to keep the surface finish in these areas even, smooth and blemish free.

It is easier to paint the interior side and perimeter edges of doors while they are off the vehicle. After they have dried you can assemble the windows and latch mechanisms, install the doors and spray their exteriors in quick succession.

### **Other Exterior Features**

It would be a benefit to remove the radio aerial if it extends from a panel you're going to paint. Depending on the model of vehicle; radio aerials often

unscrew from their base. If you decide to leave it in place, sandwich it between two vertical strips of tape. This is a simple and easily applied method that can be easily removed afterwards. When covering the base of the aerial; simply take your time and confirm that all parts of the base are covered.

Use overlapping strips of 2 inch tape if you decide to mask rear lights and side lights. Make sure you overlap each strip by at least  $\frac{3}{4}$  of an inch to prevent paint from leaking through seams.

For most vehicles you will find the process of removing the rear lights much easier than masking them effectively. Most rear lights are going to hinder the flow of paint to the very edge of the panel it's close to. Remember to carefully disconnect the electrics from the housing before you try to take them out.

Once you have removed the rear light, if you don't mask the recessed area it will become covered in paint. If you don't prep the area carefully, the paint will eventually flake off making you look like a complete amateur. Therefore, remove the rear light housing and mask the recessed area from its entrance. This will save you from the pointless task of preparing an area that would simply go unnoticed. You really don't want to be wasting precious time doing

anything that is unnecessary.

Where bumpers are concerned, you are going to have to remove them in order to paint those areas around them. If you don't plan to paint those areas then simply mask the bumpers with tape and paper.

Any types of vinyl graphics, stripes or decals are not easy to take off or store and because of their frailty they are usually destroyed during the removal process. If replacing them is not an option, you are going to have to mask around them when you plan to paint close to or around them. If you are using a two or three step paint system involving clear as a final finish coat, remove the masking after you've applied the color coat to let the vinyl graphics, stripes, decals and everything else be coated with clear coat. This will simply help to ensure the entire panel is left smooth and uniform without an edge or a lip.

If you are not going to remove the grille, mask it with wide strips of paper attached to the top of the unit whilst using  $\frac{3}{4}$  inch masking tape to secure the paper on the sides. You won't need to mask the individual contours or sections of the grille. You *will* have to remove the grille if you are going to paint intricately close to the grille. Don't make your life difficult by masking the grille; this will hinder your paint gun maneuverability. While you are masking, always keep the ease by which you are going to execute your paint job in mind.

For wheels, most paint shops have special covers designed to protect them from paint overspray. You can purchase plastic tire and wheel covers, they simply fit efficiently over wheels and tires. Try at your local auto paint and supply store for such covers. In the end, you could simply mask wheels and tires as you would for any other item on the vehicle. If you do end up with

overspray on the tires or wheels however, use a compatible thinner or reducer with the paint system you are using to remove it.

You should know that polished wheels won't look the same after you've dirtied them with overspray. Obviously, masking polished wheels will save you the expense of having to have them re-polished to restore their original shine by a professional wheel restorer, adding to the end cost of your paint job. Make sure you use enough paper to completely cover them and don't be shy of using plenty of tape; you will want to prevent the seams from opening under the air pressure of the paint gun. Of course you have the option of removing the wheels completely from the vehicle to prevent overspray from ever reaching them.

Just to remind you, it is absolutely essential that you clean the area of the vehicle that you will be applying masking tape to with wax and grease remover. This must always be done before you start masking the vehicle.

Tape will have a difficult time sticking to surface contaminants.

### **Unaffected Body Areas**

Even the best HVLP systems produce paint overspray. This being said, plan to mask every inch of your vehicle that you don't intend to paint. This doesn't mean that you need to mask individual trim on the opposite side of where you are going to be painting. Most body shops rely on large sheets of plastic sheeting to cover everything beyond the immediate painting area as demonstrated in **'The VIP Course'**. This plastic sheeting is held in place by tying a knot in the plastic at either end of the vehicle to keep it taut and in place. You could also hold the plastic in place by using tape. Take these precautions to prevent air pressure from blowing the plastic loose which will only stir up particles.

### **Paint Application**

The way you apply the paint is as important as the quality of the paint you use. It is a good idea to use an old door, roof panel and bonnet or boot lid to practice laying on the paint smoothly and evenly. Practice holding your paint gun very importantly at right angles to the work surface. Keep practicing with cans of inexpensive paint until you are familiar with the techniques required for uniform paint coverage. As soon as the paint dries, practice wet sanding, rubbing out and buffing. These areas will be described later.

Remember that as well as developing your own skills, you will be learning how to properly operate your equipment. Your practice panel will allow you to make mistakes such as runs, drips and irregularities instead of on your vehicle.

Another thing to consider before mixing the paint and filling your gun is to highlight certain time-frame recommendations. You should also consider other important criteria that came with your paint system so you can easily refer to it

during your job. Prepare an outline with all of your painting and drying steps in sequential order, you can then tick off each step as you complete it. This approach will help you to remember what you have done, what you need to do and how much time you have left to do it. Organization is paramount during auto painting.

Always mix paint products according to label instructions and apply them at the recommended air pressure. Experiment with different fan patterns and pressure settings. This will enable you to discover which combinations work better for intricate work in confined spaces and which work better on large panels.

You would also benefit by practicing how to use your dual action (DA) sander

to remove coats of paint on your practice panel. Try putting a deep scratch in your practice panel and repair it using the same techniques demonstrated in 'How to Paint a Car – Part 1'. Make sure you are skilled in using the various power tools and chemicals you will use to fix your car before you use them on your vehicle. Practice, practice and then practice some more. Once you have the practice panels looking great you can then start on the real thing.

## **Paint Mixing**

Advances in technology make the paint products on the market today very user-friendly. Auto painting is a systematic process; if you prepare the surface of your vehicle properly, mix all products correctly and apply them properly, then you will be left with an excellent paint job. The proper mixing ratios are included with product information sheets. Calibrated mixing cups and measuring sticks are available at your auto paint and supply store.

Mixing the correct shade for your vehicle is an exact science. Therefore you should allow the staff at your local auto body paint and supply store to measure drops of color tint to 1/10 of a gram to get you the exact color you want. Color shade mixing is really a job you should leave to the full-time professionals. They will follow stock vehicle color codes or codes attained from paint chip catalogs. This service they provide forms part of the paint system you purchase.

Paint materials are shipped in concentrated form for transporting and quality control purposes. This also keeps the heavy pigments and solid materials from settling. Painters therefore need to add solvents to the paint so that they can be sprayed. The atmosphere in which you spray the paint will affect the types of thinners and reducers you will need to add to the paint, so bare this in mind.

As well as diluting transportable, concentrated paint with solvents to produce a spray-able form of the paint, you will need to add specific quantities of hardener to the products that require it. Remember that once you mix in the hardener, the hardening process will begin straight away. As a result, catalyzed paint has a limited shelf life; your paint systems instructions will explain all of this.

To make sure you end up with the right paint mixture, read the instructions that came with your paint system, the spray gun and the air compressor. These will provide you with information regarding the mixture ratios you will require.

If you have any questions at this point, ask your paint supplier before you mix anything. This will help ensure you have the right mixture for your application, climate and equipment. Paint manufacturers have designed calibrated mixing sticks to help you with the actual mixing process.

According to the mixing directions, pour a volume of paint into a clean, empty cup with straight sides. Don't use the actual spray gun cup. Fill it up to the appropriate number on the appropriate paint system mixing stick. Next pour in solvent until the fluid level in the cup is level with the corresponding number on the same mixing stick. Use a mixing cup with calibrations printed on the side if you don't feel comfortable using a mixing stick.

If you need a 2 to 1 ratio of paint to solvent, pour paint into a cup up to the number two on the stir stick or on the side of the cup. Then add reducer until the mixture reaches the number one over on the next column. If you need more paint for a large job, simply mix the ingredients up to a higher number following the ratios your particular system and circumstances indicate.

If your paint system requires mixing paint, solvent and hardener, you will need to use a mixing stick or cup with three columns instead of two; one for each ingredient. Pour the paint up to the desired number on the paint column, the solvent to the appropriate number in that column and hardener to its corresponding number. Mixing sticks and cups provide a very accurate way of mixing paint, solvent, and hardener. You must always follow the manufacturer's recommendations and instructions to be assured of a quality blend of mixed paint products.

After you have blended your paint products, the mixture has to be stirred for a further few minutes with a stir stick. Don't use another object for stirring with. You can pick up stirring sticks for free where you purchase your paint. Don't forget to ask for some when you purchase your paint system.

Next, place a paint filter over the opening of your spray gun cup and pour in the mixture. Never pour any paint mixture into your spray gun cup without having a filter in place; anything could be poured in with the paint mixture and clog up the spray gun. This will result in a great deal of extra work to unclog the paint gun and to fix the paint surface.

Your paint product is now ready to be sprayed. Make sure you put the screw caps back on containers of solvent, hardener and paint. It is important that you keep your paint mixing station clean and in order at all times. This will prevent unnecessary evaporation or any accidental spillages. Some paint products and colors contain a lot of heavy solids that can begin to settle at the bottom of paint gun cups in less than 10-15 minutes, causing the color to

change. Therefore don't allow yourself to be distracted after you have poured the paint mixture into the spray gun cup and it's waiting to be sprayed.



## Spray Gun Controls and Test Patterns

**[Join VIP & Get Instant Access To Over 50 HOURS Of Videos!!](#)**

Paint companies recommend specific spray gun set-ups for applying their products with. This would indicate a specific fluid tip and air cap that should be used with the particular paint product that would be available from the dealer of the spray gun. This is another reason why you should purchase your spray gun from a paint supply store instead of from a tool store that sells a variety of tools without servicing any of them. These settings are available from information sheets and application guidelines or from your auto body paint and supply worker.

Most full-size production spray paint guns have two control knobs located on the upper rear section of the spray gun housing. They control the volume of paint that exits the nozzle and the airflow or fan spray. Material control is usually adjusted by the knob that is in-line with the air nozzle, whilst the airflow is adjusted by the remaining knob.

Refer to the literature included with your spray gun or ask your paint spray gun supplier if you have any questions regarding adjusting or cleaning your spray gun. This is yet another reason for purchasing a spray gun from an auto body paint and supply store instead of from a general, discount store. A properly adjusted spray gun will give you professional results and will last a very long time if you clean and maintain it correctly.

You are going to have to practice in order to learn how to make proper spray patterns and volume. Various paint products and their reduction ratios will spray differently, especially with different recommended air pressures, so get hold of an old panel and use it to perfect your skills.

Many painters keep test panels in their spray paint booths or they use sheets of wide masking paper taped to a wall, either will provide you with an excellent facility in which to practice or test on. They would spray paint onto the test panel and then make adjustments to the gun to get the right pattern and volume. Don't start the actual painting until you are sure you have the correct setting on your paint gun.

Occasionally, during your paint job, you may notice a flaw in your gun's fan pattern. To check it, turn to your test panel and shoot a clean section with a blast of paint. If it doesn't look right, check the controls and the air pressure. If the pattern is still flawed disconnect the paint gun from the supply hose and clean it thoroughly. The chances are that a small port or passageway has become clogged and must be cleaned before you can continue spraying paint.

As you move around your vehicle the surfaces that require paint are never the same for long and at times become more confined or difficult to reach, as on some front end sections. In this instance, you must reduce the air pressure or

change the fan sprays to hit a smaller area. You can make these adjustments again by practicing on your test panel.

Holding racks are very useful when painting separate sections of dismantled bodywork, as shown in the movie. These racks are designed to tilt and adjust for the part that needs to be painted. They are commonly used in body shops but possibly too much of an investment for the average person painting their first vehicle. If you get lucky enough to find a second-hand rack still in great condition, it could turn out to be a very useful tool to add to your collection.

Check with your auto body paint and supply store; they may be able to point you in the right direction for getting hold of one.

If you can't get hold of a rack then you could try making your own, failing that make the most out of lying down or hanging up the parts to be painted. You will need to situate them so that you can comfortably access all of the part(s) for painting. This won't always be possible but do what you can to make your life easier. After you feel you have painted all of the surfaces, take a second look at it from various angles to make sure you haven't missed any.

### **Maneuvering the Spray Gun**

Realize that having a good quality spray paint gun and paint are essential to completing a professional looking paint job but they are not everything. The way you apply the paint is equally as important.

You should always hold a paint gun at right angles to the surface being painted from a distance of 6-10 inches. You will need to check what the recommendations for your particular spray paint gun is.

If you can't achieve this by standing then you will have to use step ladders for high up areas or kneel down for lower areas. This will prevent excess paint build-up causing runs and dry spots. Your free hand should be holding the air hose to keep it away from surfaces you are painting.

If you tilt the spray gun toward the surface it will result in a non-uniform fan pattern and don't use the spray gun in an arc or else the paint will be applied in varying thicknesses to the surface; with paint going on wetter and thicker where the nozzle is closer to the surface and drier and thinner where it is farther away.

If the outer layers of thick, wet paint dry before the underlying layers, the

solvent evaporating from beneath will leave imperfections in the finish. At the far end of the arc the paint will be applied too thinly to provide adequate coverage or it may be too dry by the time it hits the surface. The result will be something that resembles overspray rather than a proper coating of paint.

The only time painters would arc the spray gun is on small spot repaints. These spots call for full coverage in the center and less paint around their feathered perimeter as it blends with the existing paint. Practice this technique on a test panel before attempting it on your vehicle.

Automobile roofs, bonnets and boot lids lie in the horizontal plane. This means that you should hold the paint gun horizontally when making smooth, even and uniform passes. Depending on your height and location of some panels, you may have a hard time reaching the middle of some larger panels. You would be well advised to remove the panel in order to be sure you get an even coat.

As shown in '[LearnAutoPainting.com's VIP Member Course](#)', the silver body parts being painted in the garage on holding racks makes the job for the painter a lot easier.

Referring to the car bonnet, once he has painted up to the middle of the bonnet he walks around to the other side and continues painting until the bonnet is finished. In doing so, there is no chance that by leaning over the panel he will accidentally catch the freshly painted surface with an item of his clothing, thereby leaving blemishes on the surface.

To prevent paint from dripping on the panel being painted, it would be a wise move to apply tape around the top of the cup to hold the lid firmly in place. Depending on the design of your spray gun and the paint cup, this may not be necessary. The paint cup may attach itself to your gun by screwing it on from its base.

If this is the case, tape around where the two meet once the cup is screwed in tightly. This is a good idea even for those spray guns that are advertised as never to drip.

Hold the paint gun so that the nozzle is perpendicular to the surface. This is very important. Do whatever it takes to ensure a right-angle position. Moving from one panel to another in a smooth, steady and even walk will take practice to get it right, so make sure you do indeed practice using your test panel or paper.

Your fan spray should overlap the previous spray by half. The centre of the first pass should be directed along the masking line with half of the paint on the masking paper, the other half on the body surface. The second pass should be directed so that the top of the fan rides along the

masking line. Each pass should then overlap the previous one by half, maintaining each pass at the same speed and at 6-10 inches away from the surface.

Start by painting the edges of an area first and then the main surface. This way overspray will help to cover the main area where you can then apply less paint if necessary.

If you apply paint at the appropriate thickness first to the main surface and then paint the edges, the extra paint from the overspray may cause imperfections on the main surface.

If you decided not to practice applying paint onto an old test panel, you may discover runs and flaws when you come to inspect your work. Runs are the result of too much paint being applied to a surface at any one time. You may be holding the paint gun too close to the surface or fanning the spray too slowly. Whichever mistake you are making, make adjustments to your application until the paint is smooth and even.

As shown several times throughout '[The VIP Video Course](#), you must remember to use wax and grease remover to remove all surface contaminants before every application of any stage in your paint system. It doesn't matter if you are painting a small or large area. You must then spray the entire surface with an air hose to dry the surface, making sure that no wax and grease remover or any other moisture is left on the surface.

## Spot Painting

The thing to remember about spot painting is that there is an indentation on the surface that has to be filled where you removed the old paint materials. While it may only be 1-3mm deep, it has to be filled with new sealer and primer, along with paint blending in with the surrounding surfaces. This will ensure that the surface is left smooth, flat and without flaws.

Right-angle application of all paint products and controlled spraying must remain at all times no matter whether repairing a minor body repair or a complete repaint. The difference lies in the amount of paint you will need and the technique for blending new paint into old finishes.

You don't want to end up with a raised line that separates the newly painted section from the old surface when you are spot painting. To avoid this issue, professionals mask an edge with tape that is rolled over upon itself. This is to keep the paint from forming a solid line along the edge of the tape, a close up of the tape folded in such a way is shown in close up during part one of the movie. This technique will help to feather in a great blend.

To advance from this technique, you may wish to reduce your paint mixture to

a 3:1 ratio ready for melting. After spot painting the area, remove the rolled over strips of paper and tape, empty the paint gun cup to about ¼ of an inch full and add ¾ of an inch of reducer to the mix. This blend will loosen earlier paint and allow a tint of the new paint to melt in. It will be very hard to distinguish where the old paint ends and the new paint begins. If you end up with any nibs left in the paint, depending on the type of paint you are using, wet sand them smooth.

Before you attempt this type of spot repair on your vehicle, talk it over with an auto body paint and supply store worker. It may not be wise to try this technique unless you have reached a certain level of experience and/or confidence with spray painting. It all depends on the brand and types of products you use, the paint that is already on the vehicle, the color and any additives such as metallic or pearl that you will be using. Each case is unique with no strict set of rules to follow.

### **Full Panel Painting**

Automobile and paint manufacturers advise auto painters to repaint complete sides of vehicles, even if the only problem is a minor body panel repair. This type of overkill repaint involves those vehicles factory painted with pearl, metallic or other special additives. Your local auto body specialist can help you determine what is right for your project.

You should do fine when required to paint a single panel or more with any non-custom type paint products. You can begin and end masking on definite body design breaks, such as the perimeter of doors. You will be able to see what needs to be painted; everything else can be masked. This is shown in the movie on the black Audi where only the two doors are painted, leaving the rest of the vehicle to be masked.

If your vehicle is old, you may be concerned about matching the new color with the original color. A complete buff job on the original paint surface will often make it appear just like the new paint that you just sprayed onto doors, wings, etc. In normal cases, you must spray a blend to feather in the new paint with the original.

Feathering in is similar to the melting in process described above. Melting in describes the process on a single panel whilst feathering in is blending the surrounding panels to match the one that was repaired or refinished. One way to blend in panels with a compatible paint finish, after a panel has been completely repainted is to remove the masking from the surrounding panels and spray a light coat of heavily reduced paint with reducer onto the existing paint to form a feathered edge. These feathered edges may extend out to 6 inches.

If the paint finish is incompatible for melting, you will have to rely on a perfect

color match between adjacent panels, obtaining the correct color code has been discussed earlier. Check with your auto body paint supplier to see if your new paint can be feathered into the existing paint using this process.

### **Flash (Dry) Times**

As the solvents evaporate and the pigments cure, this is when paint dries. It is extremely important to remember that you cannot spray additional coats of paint until the solvents from the first coat and each additional coat have had enough time to evaporate. If you spray a new coat of paint over one that has not had time to flash, you will trap solvents underneath the new layer. These

solvents will penetrate up through the overlying material causing any number of imperfections and irregularities on the top coat such as blistering and cracking.

Flash times are clearly indicated on all information sheets and application guides for all paint products, so make sure you abide by them carefully. Be aware also that second and final coats may require longer flash times than initial coats. Understand the directions for the individual paint system you are using as paint systems are not all the same. These same rules apply for undercoats, top coats and clear coats.

### **Clear Coat Finishes**

**[Get VIP Auto Body Domination Access Here!](#)**

Along with offering better protection to the various paint finishes, clear coats reduce the amount of color material that is necessary to obtain a professional looking finish, thereby reducing the amount of solvent you will need to use. This helps manufacturers to stay within the guidelines set out by the government. In addition, clear coats are frequently used to feather in repaints along adjacent panels and old paint perimeters.

You would apply clear as you would apply the other coats in the paint system; making sure you watch your technique so that every pass is uniform. You won't need to be as concerned about clear coat overspray as you would with color coat overspray, being clear it will be invisible once it has dried. Of course, don't apply the clear coat until the last color coat has been given enough time to flash completely.

After each coat of clear has had enough time to flash, you can lightly wet sand out any dust, dirt and/or nibs before you go on to apply the next clear coat. For collision repairs you should only need to put on two to three coats of clear involving minimal sanding. Painters of custom show cars sand with very fine sandpaper between each and every coat of clear.

This gives it that mirror finish that will need many, many hours of labour and will cost thousands of pounds if you hired a custom car painter to finish your vehicle to the same exquisite standard. Taking the time to sand between each clear coat will mean the difference between a good paint job and a highly professional looking one.

### **After Applying Paint**

After the vehicle is painted and you are satisfied with the results, there are a few other tasks you need to undertake to ensure the overall quality of the work. After the paint has dried, wet sand down nibs until they are smooth and remove all of the masking tape carefully to prevent paint edge peeling or other damage to the finish. Make sure you fully understand the concept of wet sanding and buffing before you remove the masking material. We will cover these areas in a little while.

Un-catalyzed enamels won't cope with wet sanding or polishing. What you see is what you will get unless you decide to sand down to the substrate a completely cured but blemished panel and repaint it.

Specific lacquer and urethane paint finishes can be wet sanded and polished to remove nibs, flatten orange peel and smooth out blemishes. This work is normally carried out on clear coats instead of on actual color coats and may require additional light applications of clear afterwards. This is why professionals will rarely remove the masking from a vehicle until they are pleased with the entire paint job and are sure that they have taken care of all imperfections.

### **Drying Times**

If automotive paint isn't left to dry in a clean, dust free environment it will be ruined by dust, dirt and debris that will stick to the wet painted surfaces. Professional painters will force dry freshly sprayed vehicles in special paint drying ovens, usually paint booths equipped with heating units, until enough time has elapsed for the material to cure completely. They will always abide by paint manufacturer's recommendations. Force drying can also be achieved by using portable infra-red heaters.

Factory paint jobs complete with urethane paint products and those that are fit for force drying are baked on body surfaces at approximately 450F. This can only be achieved when the vehicles are in a stripped down condition. Plastic, rubber and vinyl parts would otherwise melt. You cannot force dry vehicles that are still equipped with these items above 160F.

You must be aware of the initial flash times of paint before you begin using any force drying methods, including heat lamps. Most paint products will need

to rest for at least 15 mins or more enabling the majority of solvent materials to evaporate. If you were to apply too much heat too soon, the solvents would evaporate too quickly, leaving behind blemishes.

### **Wet Sanding**

Before you start wet sanding, you must ensure your painting system is compatible with the process. You should include this issue when discussing your paint needs with your auto paint supplier. Every manufacturer of auto paint has a set of guidelines for painters to follow. You may be advised to waive wet sanding and polish instead to achieve a perfect finish; it all depends on the type of product you are using. Please note that wet sanding will give you the best results on clear coats that are then polished.

You may have to apply epoxy primer to keep moisture from reaching the base metal. These parts may be wet sanded to get them as smooth as possible before you apply color coats and clear. You will want to use progressively finer sandpaper (1500 to 2500 grit) soaked in water. Make sure you sand in a circular motion using light pressure on the sanding block.

When sanding down small nibs of dirt or dust instead of using what would turn out to be a cumbersome sanding block, fold the sandpaper around a one inch wooden paint stir stick to attack the surface blemishes more readily. You will only need to apply light pressure for this type of delicate sanding. Frequently dip the sandpaper into a bucket of water to keep the paint surface wet and reduce the amount of material build-up on the sandpaper.

Add a small amount of washing-up liquid soap to the water as a way of helping to lubricate the sandpaper. You should also soak the sandpaper in water for 15 mins prior to wet sanding. Only use sandpaper designated wet or dry to wet sand with; if sandpaper isn't waterproof then it will simply fall apart and be useless.

Base coat/clear coat paint systems generally call for a number of coats of each. Only wet sand on the clear coats, so you don't disturb the underlying color coats. As already mentioned, the benefit of wet sanding clear coats is that it will bring out a much deeper shine and gloss when followed by controlled buffing and polishing.

Just to confirm, if you've completed a lot of wet sanding to get rid of surface blemishes, you may need to apply new coats of clear. This is why you should leave masking material in place during wet sanding.

### **Removing Masking Material**

You must on all occasions remove masking materials in a controlled and sensible manner to prevent surface finish damage. As we discussed earlier, paint contains solids that can build-up on the surface of a vehicle. If you have



applied several coats of color and clear, the sheer paint thickness will form a film of paint that will continue over the top of the masking tape. Whatever you do, don't tear the tape straight up or it could result in flakes of paint being removed from the surface or peeling along the edge of masking tape.

To prevent this from happening, pull tape away from the newly painted body area and back over itself to create a sharp angle at the point where the tape leaves the surface. This sharp angle will cut through the paint film, eliminating the risk of damaging the finish. It's very important that you follow this because if you unfortunately damage the paint while removing the masking tape you will have to sand and repaint that area once again.

## **Rubbing Out and Buffing**

**[Learn To Colorsand & Buff Like A PRO Here!](#)**

Not every type of paint system incorporates polishing or rubbing out. However, polishing a catalyzed urethane (base/clear coat) or cured lacquer can make the finish look brilliant, lustrous and deep shining.

You will find many types of polishing compounds available for new paint finishes. The best selection of compounds can be found at auto body paint and supply stores. Some of them are designed to be applied by hand while others using a buffing machine as demonstrated in the movie.

To polish by hand, use a coarser compound compared with the type of compound you would use with an electric or pneumatic buffer. Foam pads work best with prescribed compounds and buffing machines limited to slow rpm's. Pads made from a cloth material are better suited for other compounds and faster machine speeds. Make sure you use what is appropriate for your paint.

Rubbing compounds comprise of a relatively coarse polishing grit material. They are designed to quickly eliminate any surface blemishes and flatten paint finishes. Due to these compounds containing grit they will leave behind light scratches and swirls. You will therefore need to buff or polish the paint finish using a very fine grit material. If you are dealing with a dark color on your vehicle, you will want to use a very soft finish buffing pad and wax.

Some paint finishes including those with hardening agents may appear to be dry but it doesn't mean that they are ready for buffing. Follow your paint systems flash time guidelines and allow enough time for the solvents to evaporate completely before supplying them with polishing compound.

If you are to rub out and polish by hand, make sure you use a soft, clean cloth and that you always follow the directions on the product label. You may prefer to apply polish in a straight back and forth motion from the front to the back of

the vehicle, instead of in circular patterns. This method may reduce the chance of creating swirls.

You will need to gain some experience using a buffing machine on your practice panel(s) before you use it on your new paint job. The secret is to always keep the machine moving or you will risk burning the paint; polishing down to the primer or even to the bare metal. A buffer with a maximum speed of 1450 rpm would be ideal for a beginner. Obviously, machines capable of faster speeds require more experience. Be careful however, even the slower 1450 rpm buffing machines are still capable of causing paint burns. Keep on buffing until the entire compound is gone, leaving a shiny finish.

You will need to be extra cautious if you are buffing close to ridges, gaps and corners. If you buff those surfaces, the buffing force is expended over a very small area and thus concentrated; this will burn through the paint very quickly. To be safe, rather than buffing over the top of these areas, run it up to their edge and then stop. If you are a novice with the buffing machine, you would be wise to mask edges, ridges and corners with strips of masking tape to protect them against accidental buffing burns. You could then remove the tape and buff them by hand.

When buffing in tighter areas such as around door handles, in order to reduce the threat of paint burns, throttle the machine on and off to lower the rpm. Apply plenty of compound over the area; don't waste the compound but bear in mind that too much compound is far better than the consequences of having too little. For confined spaces simply apply compound by hand with a soft, damp cloth.

To prevent items on your clothing such as buckles and zips from scratching the car as you work around it, wear an apron. Even better, avoid wearing clothing with these hard, sharp features altogether.

Power buffers have a tendency to throw spots of compound all over your vehicle, clothes and surrounding work area. To reduce the amount of mess, cover surrounding garage furniture with sheet plastic. Wipe away buffing compound that has splattered onto your vehicles surface as soon as you can to prevent any damage to the new paint. Paint surface damage will occur if the compound has time to dry.

### **Overspray**

Polishing and buffing can remove very light remnants of overspray from body work. Where extra heavy overspray is prominent, you will need to use a strong polishing compound to help remove it. For severe problems, consult with your auto body paint and supply store worker.

Overspray on chrome can be removed using chrome polish. Heavy

concentrations may require you to also use steel wool. To avoid overspray problems on any accessories altogether, mask them properly using plenty of tape. This will ensure that the paper edges are secured and that no puffs of spray paint can reach underneath.

To remove paint overspray from glass, use the solvent that forms part of your vehicles paint system. You can either gently wet a clean cloth with a little solvent to rub off any overspray or if that doesn't work use fine steel wool with solvent. In extreme cases; use a razor blade to gently scrape off the overspray.

A warning to you; some newer windscreens are made with acrylic ingredients that even fine steel wool will scratch. Check with a professional such as a dealership service department if you aren't sure whether your vehicles windscreen is solid glass or an acrylic.

## **Part Replacement and Reassembly**

Since you have produced a professional looking paint job, you will not want to finish the job poorly by refitting dirty parts back onto the vehicle. Now is the time to detail (clean and polish) each part before you put it back on, unless you did this as you took the parts off? This also includes detailing the engine compartment, interior and/or boot so that any lingering sanding dust is removed from the vehicle.

To complement your new body paint and give a new look, smell and feel to your vehicle; clean all of the windows on both sides, vacuum any dust from

the dashboard, scrub the tires, polish any chrome, groom the interior, free the engine compartment of any grease and tidy the boot space.

To avoid making any mistakes whilst refitting detailed parts, you must install them systematically. Before starting, examine the panel or section that you wish to install the parts to and figure out the exact sequence for refitting. For example, in order to fit door handles, you will need access to the inner side of the door. Therefore, before replacing the interior panel, install the door handles first. By being systematic, you are eliminating the risk of having to reattach parts and scratching the paint in the process.

### **Glass**

Special attention and care is required for glass; it's breakable and heavy enough to do damage to a vehicles surface. By the time you begin reinstalling glass, the new paint finish should have cured. In order to protect the vehicle from accidental bumps that may cause scratches or other noticeable damage,

it may be an idea to lay strips of wide masking tape along the edge of the window frame. Only ever use automotive masking tape; multi-purpose tape may leave an adhesive residue behind. Prior to reinstalling a fixed glass unit, make sure that the window housing is free from contaminants such as dust and debris and completely clean.

To avoid galvanic corrosion (galvanic corrosion occurs when two dissimilar metals are placed in contact with each other in the presence of an electrolyte, such as salt water, resulting in the unintentional formation of a galvanic cell and concomitant chemical reaction of the metals involved), any metal clips holding glass panels in place should be mounted correctly and should not come into contact with sheet metal body panels. To avoid chipping or scratching the paint, be extra careful installing metal clips too.

Even the smallest chip to paintwork can start the rusting process by allowing moisture and air to reach the surface of the metal. Once it starts and is not dealt with right away, the result will be more severe metal rust damage such as bubbles or cracks. Rust will go undetected and grow in areas that are hidden such as behind trim pieces.

### **Are You Ready To Start Painting & Pimping Projects Like A PRO?**

Apart from recognizing the importance of paint chip avoidance, you should be equally as concerned about ensuring watertight seals are left around all window perimeters while installing glass. Water leakages create ideal conditions for corrosion damage to metal paneling and will cause rot and/or mildew to affect the interior upholstery.

In case you are inexperienced with auto glass installation, it would be wise to consider hiring a professional to complete the work for you. There are specialists out there that provide a mobile service and would happily come out to lend you a hand. You can buy the tools and materials you will need to remove and install fixed glass units from most auto body paint and supply stores. Just make sure that

you fully understand how to use the products before you attempt to remove and/or install a glass unit. To assist you in removing and/or replacing heavy glass units, have a helper nearby.

If you are at all doubtful about tackling such a job regardless of what the reason may be, consider hiring the services of a professional auto glass fitter. The cost involved is nothing compared to the cost of replacing a broken glass unit.

### **Trim**

Use a multi-purpose cleaner and a soft brush to scrub vinyl and rubber trim sections clean. After cleaning, apply an adequate coating of vinyl dressing to

them once they are dry. Then with the help of a soft cloth or very soft brush, rub-in the dressing, not forgetting to wipe off any excess.

Before attaching any trim pieces, make sure that you have all of the clips and retainers near to hand and that you know where they need to go and how they fit to the vehicle and to each other. Have someone to assist you when replacing extra-long pieces; this will help to prevent bends or wrinkles in the trim and gives you much more control during the installation; reducing the chances also of scratching the paint.

To install belt moldings around windows, only use a plastic tool designed for this purpose and not a screw-driver or any other inanimate hard metal object. The proper plastic tools for this task are available at auto body and supply stores as well as auto glass shops.

To avoid any scratches, chips or nicks to the paint finish; install door handles and key locks with extra care since these come into direct contact with painted body panels. In a lot of cases, hardware is separated from the body surface by the use of seals. Do not replace an old, worn, cracked or damaged seal, instead wait until you have a new one and use that.

On many vehicles, the screws, nuts or bolts used to secure door handles in place are accessed through openings on the inner side of the door. To tighten/unscrew the fasteners, you'll have to reach through the opening; always use hand tools that are of the correct size for the job. After you've secured the door handles and key locks, finish the job by attaching the link cables that run to the latch mechanisms.

## **Grille**

Almost all grille sections will be secured with the help of screws of some sort. As opposed to nuts, many are tightened into metal clips. In order to support the grille section sufficiently, these clips will need to be positioned correctly. Be aware of the way you place the clips; they can slide around and cause scratches to the metal supports to which they are fastened. Similarly, to be effective screws must line-up with the center of these clips. To install them in the required order, make sure you've already determined the way the pieces fit together.

You should take this opportunity to clean and polish grille assemblies while they are off the vehicle, like with other exterior trim pieces and accessories. Clean any difficult to reach places using a soft toothbrush and/or cotton buds, wax metallic parts where needed and touch-up paint any visible nicks using a fine artist paintbrush. If you find any painted parts looking old and worn, do a little sanding and repainting to bring them up looking new again.

## **Bumpers**

With older vehicles, it is relatively easy to take off and reattach bumpers as the bolts attaching them are in clear view and there is usually enough room to reach them easily. On the other hand, the bumpers on newer vehicles can require some intricate dismantling and installation procedures. These bumpers can be a combination of a number of different parts and each part must be installed correctly. Otherwise, the entire unit may not sit flush with the rest of the body design.

The front bumper assemblies on certain vehicles can be very large; encompassing the entire nose of the vehicle. Seek the help from someone when installing them. To achieve a perfect positioning of the bumper, move from fastener to fastener tightening gradually as you go along. Again, this is where a helper will prove invaluable; he/she can manipulate the unit into place whilst you tighten the fasteners.

### **Emblems and Badges**

Use a soft toothbrush and a mild cleaner to remove accumulations of polish, wax and/or dirt from tiny corners and impressions of emblems and badges to bring these items up looking like new once again. Ensure that their fastening mechanisms are still intact. Plastic emblems are fragile and many times their plastic pins or supports will crack when you are dismantling them from the vehicle. If this happens to you, replace them with new ones. You can purchase decorative body items including new emblems and badges from dealership parts departments.

### **Vinyl Trim**

The chances are that you removed vinyl trim during spot painting, unless you masked carefully along their edges. You can buy replacement vinyl stripes in various colors and widths. Decals are available from dealership parts departments and any auto body paint and supply store.

Make sure that fresh paint has cured as per recommended guidelines before you attach any vinyl trim. Then clean those areas thoroughly where you expect to attach the trim using a clean cloth dampened with wax and grease remover. Follow carefully any instructions that come with the vinyl material.

The pieces of trim that are already cut to size have to be correctly positioned before you peel off any of the backing paper. This is so you can make any necessary adjustments to ensure the piece fits once you remove the backing. To secure the trim in place, tape it to the panel using pieces of masking tape, then move the masking tape around where necessary until it secures the vinyl tape exactly where you need it. If you've made a mistake and attempt to remove the trim after you've stuck it to the panel, you may damage the piece when trying to pull it off.

## Miscellaneous

Any other parts not already mentioned that you have taken off the vehicle, should leave you with some idea as to how to put them back on again. To protect painted body areas adjacent to parts you're reinstalling, remember to always use strips of masking tape.

With part replacement, always plan ahead and try to estimate where it will be likely that you may scratch or chip paint finishes. To maximize the degree of protection offered to newly painted parts, use whatever means necessary to achieve this, think of your newly painted finish as being sacred and nothing must damage it in any way.

## Cleaning, Detailing and Maintaining

If you've spent any time sanding the body work of your vehicle, you will probably find that sanding dust has managed to find its way into the interior, the boot and the engine compartment; it will somehow find its way into the most unlikely of places.

You can remove with ease large accumulations of dust on or around the dashboard using a vacuum cleaner fitted with a soft brush attachment. A soft cloth, toothbrush or cotton swabs are ideal for cleaning corners and confined spaces. Use the vacuum cleaner's narrow tip attachment to remove dust and debris from tight spaces around seats and the center console and don't forget to clean the seats using appropriate upholstery cleaner.

Proceed by taking a cleaning cloth and dip it into a bucket of warm water containing a small amount of cleaner and use it to cleanse steering wheels, stained sun visors, door panels and anything else that looks dirty. It will surprise you to see the amount of dirt that accumulates on your cleaning cloth once you start wiping down these areas. Auto paint and supply stores will sell every auto interior cleaning product you can imagine so take your time and make sure you only buy what you will need.

## Long-term Paint Care

Modern day catalyzed paint products are much more durable and longer lasting than the materials used in the past. However, without routine care and attention you cannot expect their finish to look like new forever. You will have to regularly wash and wax the vehicle and polish when needed.

There are paint products on the market which claim that they never require wax, however most auto experts and professionals would not agree with this. They believe that applications of wax helps to provide increased paint

longevity and make washing the vehicles exterior much easier.

Cars are made to be driven and in doing so daily, nicks and/or small chips will start to appear sooner or later. In addition to regularly maintaining your vehicles shine, you must repair these minor paint problems immediately. If you forget; oxidation will occur on exposed metal and this will eventually affect adjacent metal areas and continue to spread further a field undetected underneath the paint surface.

### **Washing, Polishing and Waxing**

Car cleaning products are available through any number of auto part stores, retail park outlets and even a number of select supermarkets. Almost all brands will work in harmony with the finish on your vehicle. Just make sure you follow the directions on the label of any product before use.

Washing your car in sections is an excellent way of preventing minute scratches or other blemishes happening to the paint. Try washing the bonnet, roof and boot areas first, then the vehicle sides and then finish with the lower front and rear end panels.

When detailing your vehicle you may come across small surface blemishes in the paint; simply use a small touch-up brush along with the same paint to rectify the situation. If you also discover small spots of dirt on the freshly painted surface, remove them with a small dab of rubbing compound applied to a clean cloth. After the dirt is gone, remember to wipe any remaining rubbing compound residue off the bodywork.

As previously discussed; if you find any paint overspray on any windows, use a paper towel or a clean cloth slightly dampened with reducer to remove it. If this doesn't work, a very fine Scotch-Brite pad or even a razor blade will remove it. After applying paint reducer to the overspray area, you must remember to remove any traces of the chemical with a thorough use of window cleaner.

If at any time your wash cloth falls on the ground or when you find that it is dirty; rinse it off immediately with clear water before dipping it back into your wash bucket. You must ensure that your wash water is kept clean and free of debris at all times.

Polish and wax are both referred to as paint finish maintenance materials but each however, has its own purpose. Polish does not normally carry with it any long-lasting protective additives. Its purpose is to clean and shine paint finishes and removes oxidation and any other type of surface contamination. On the other hand, wax protects the paint finishes that have been cleaned and polished; it does no cleaning or shining on its own. To help you remember: Polish Cleans/Wax Protects.



In general, most auto body paint and supply stores will stock the largest selection of auto polish and wax.

You should find informative labels on all polish products explaining the type of paint finish it is designed for. For heavy oxidation problems the polish will contain much coarser grit compared with polish designed for a new car finish. The labels should also mention if the products are intended for buffing machine use. It is not recommended that you use polish containing a heavy concentration of coarse grit with a buffing machine. The reason being; the combination of power buffing along with the higher polishing strength can increase the risk of paint burning quite dramatically.

Always pay close attention to all product labels and to help you choose the correct polish and wax for your vehicles paint system, seek the advice of a knowledgeable auto body paint and supply store worker.

### **How long before Washing?**

Allow plenty of time for the paint solvents to evaporate and/or chemically react completely before you wash your vehicle. Normally, you would be safe to wash newer paint finishes containing hardener additives after only one or two days; just use a mild automotive soap in a gentle manner. Before washing, polishing or waxing any new paint finish, confirm with an auto body paint and supply store worker the exact paint drying times of the system you are using.

### **How long before Waxing?**

It would be ideal if you waited 60 to 90 days before applying wax to your freshly painted vehicle. The length of time you will have to wait will depend on your local current weather conditions and will vary accordingly. During the summer, 90 days should provide enough time for paint solvents to evaporate completely with temperatures being warm and humidity low. On the flip side, cool and wet weather will require longer waiting periods; as solvent evaporation activity is reduced.

A thin light coating of fine quality auto wax will form a protective seal on top of the paint finish. Although this thin coating isn't permanent, it will still prevent solvents in the paint from evaporating. As a result, a slow pressure build-up will form within the paint, which may lead to blistering on the paint surface.

So we now know that waxing too soon following new paint applications can cause unexpected damage to the surface and will offer no protection as first intended. Remember that this is wax and not polish.

Be aware of cosmetic paint finish products that are advertised as cleaner waxes; combining polish and wax ingredients. You should only use

combination polish & wax products until the paint has cured for at least 60 90 days; depending on climatic conditions. Just as with the wax-only products; the wax ingredients in these combination products will form a light seal over the paint surface and trap solvents underneath.

## Repairing Small Nicks

**[Start Pimping Your Projects Now! - Instant Access!](#)**

Small nicks and paint chips can annoyingly find their way onto new paint finishes much sooner than you would expect. This problem is simply unavoidable on vehicles driven daily and sooner rather than later thanks to any other careless mishaps; your new paint job will start to look in need of new repair.

Fortunately, providing the small nicks are only small and the paint job isn't too unconventional, it is possible for you to repair small nicks with a minimal amount of fuss. All you will need is a small quantity of touch-up paint, a fine artists paint brush and some masking tape.

Follow this 10 step process to carry out this procedure successfully:

1. Use wax and grease remover to clean the damaged area.
2. Mask off the nick(s) closely.
3. Ensure that the touch-up paint is thoroughly stirred or shaken up.
4. Dab the tip of the paint brush into the paint to retrieve just a very small amount of paint and apply it to the nick.

Do not attempt to fill-in the entire depth of the nick at this stage. Wait a while to allow the first dab of paint to set-up and then simply repeat the process.

5. Continue this process until the paint has filled the nick to just over the height of the main finish or it looks as if you've applied too much paint.

6. Allow this new paint to cure; making sure that you do not touch it for approx seven to ten days.

7. After a long drying period, mask the nick again but this time mask to a wider area.

8. Then gently smooth down the nick area using 1200 grit wet sandpaper.

You will want to do this until the surface of the new paint is down to the same level as the surrounding finish. The masking tape protects the surface surrounding the repair area from unnecessary sanding. Remove the masking tape as soon as you have smoothed down level the newly painted dabs of paint with the surrounding finish.

9. To further blend the repair into its surrounding area; use polish. Progress to a finer grade polish if any polishing scratches appear.

10. Before waxing, allow the repair to cure for a further 14-21 days.

In finishing, whilst you have your vehicle stripped down ready for paint, why not make good use of your time and start detailing the extras? This extra effort will give you dual benefits: it will improve the bottom line of your paint job and it will do a lot to prolong the life of many of the accessories.

If automotive paint job finishes are maintained, protected and not abused, they should last for many years. By frequently washing your vehicle, maintaining an effective wax protective layer and limiting the amount of exposure to ultraviolet rays, these will all add greatly to the longevity of your paint job. There is no doubt that modern day catalyzed paint systems are more durable than earlier types of paints, however gross neglect will inevitably fade their shine and luster eventually and even cause them to oxidize. It is you alone who must maintain your vehicles paint finish in an immaculate condition at all times.

If it helps you to determine exactly what it were designed to do, read carefully the labels of any car wash soap, polish or wax product that you are using. If this fails, consult with someone who is an expert in this area.

### **Ready For VIP Access?**

Pick up a quality car cover made from materials that breathe easily to provide overall paint protection to your vehicle, especially if your vehicle is going to sit out in the sun for long periods of time. The longer you keep your vehicle out of the sun, the longer its shine will last. If you cannot afford to buy a car cover don't panic, simply park in the shade.

From beginning to end, automobile painting can be interesting, illuminating, fun and ultimately rewarding. You will have saved a lot of money by doing the job yourself and will also have gained a lot more personal satisfaction than you ever could receive by simply dropping your vehicle off at a paint shop.

Years of experience is required to become a professional automobile painter. However, with a little bit of passion and desire to learn how to do it yourself, you too can accomplish professional results as long as you stay focused, understand the basics and have no fear of failure. Good luck to you!

# **WARNING: Must Read!**

## **IMPORTANT CONCLUSION...**

**P**ainting a car or any kind of cool project is VERY Exciting and fun.

You just need to know the proper steps.

Although this book covered 99% of everything you need to know I know It may still be confusing just to jump into the game just by reading this manual. Maybe not! Maybe you're all set and ready for painting :)

When I was a kid watching my father work and paint cars, he used to tell me “Watching is the key” watch all that I do, without actually doing it...

Then you'll automatically understand the steps and know exactly what you need to do next.

**REMEMBER, We are here to HELP YOU get started!**

**We have over 50 HOURS of Step-by-Step video training** that covers all types of auto body and paint repair including...

**-How to install custom body kits on ANY car or truck  
-How to paint with single stage, base clear paints, candy's, pearls and even flakes PLUS SO Much MORE! Take a look at our trainings! We even have a section of videos where I show you how I made \$5,000 in a month selling used car parts on Ebay. - Just those two videos are worth the investment.**

**We show you simple rust repair strategies as well as advanced sheet metal and spot welding tactics all on video via a “Private VIP Membership Site”**

**\*\*Check Out Our Documented Testimonials Click Here!**

**Watch Our VIP Presentation Here!** Hope you enjoyed this manual!

**Tony Bandalos**

**P.S.** I hope to see you as a special VIP member soon!

**P.P.S. Do you want to learn how to make fast money by learning how to buy and sell cars for fast profits?**

I have been buying and selling cars since I was 15 years old. I started flipping small 50cc mopeds at 12-13 years old and moved on to cars at 15.

It was to the point where I was making so much money my friends and people around me were just amazed at what I was doing.

**I also created a course that teaches the complete newbie how to get into the used car business without needing a dealers license, without having HUGE capital, without age limits or sexual status... male or female can do this and my system proves it works for many members from across the world!**

It works in any country. It's simple and **it will make you an extra 5 figures per year** if you follow the simple plan that many successful members still use today in this economy.

**In fact, THIS ECONOMY SETS THE STAGE for YOU to make HUGE Profits!**

Used car prices keep going up. I show you EXACTLY how to position yourself in the market, give great deals and make fat bank!

**For more info on buying and selling cars just visit:**

**[www.HowToBuyAndSellYourCars.com](http://www.HowToBuyAndSellYourCars.com)**

**And get your FREE Bikini report!**

You'll be happy you did

To yours in profits!!!

Talk Soon,

Tony Bandalos :)