

# Preparation

First of all you need to make the decision whether you are starting with bare metal or a pre-painted surface. Preparation is the KEY part to any restoration, so make sure you spend plenty of time on this.

## Bare Metal Preparation

When you start with bare metal you will need to key the surface to enable the primer to stick. This can be done with a scotch brite pad or sandpaper. Then you need to prepare the surface for your primer. This is a crucial stage to get rid of any contaminants. We recommend you use a surface cleaner, specifically Prep Clean 2802. To use Prep Clean, generously wet a clean lint-free cloth with the Prep Clean and clean/degrease the surface. While the surface is still wet use a second clean lint free cloth to remove the Prep Clean and contamination trapped within it. Always use two cloths, using only one will increase the chances of redistributing the surface contamination rather than removing it. Cloths for use with Prep Clean should be replaced regularly and often to ensure that an efficient pre-cleaning process is maintained. (Read more here.)

Immediately before applying your paint use a tack cloth; this adhesive cloth is designed to pick up any dust and loose dirt.

When applying paint to bare metal you should use an etch primer first. Etch primer is 'stickier' than Filler primer so therefore adheres better to the bare metal. We do then recommend applying a filler primer to add extra protection against rust.

The process we recommend is:

1. \*Etch Primer
2. \*Filler Primer
3. Undercoat
4. Top coat
5. Clear Coat

*\*Please note Etch Primer and Filler Primer use totally different thinners!*

You need to key the paint in between coats with wet and dry P600-800 - this enables the paint to adhere.



## Pre-painted Surface Preparation

When you are starting with a pre-painted surface you will need to flat back the paint. This is to get rid of any imperfections, i.e. micro-bubbles to form a flat surface. Make sure you key the surface so that the primer adheres.

Then you need to prepare your surface for the primer application. This stage is crucial to get rid of contaminants. The best product for this is Prep Clean 2800. To use Prep Clean, generously wet a clean lint-free cloth with the Prep Clean and clean/degrease the surface. While the surface is still wet use a second clean lint free cloth to remove the Prep Clean and contamination trapped within it. Always use two cloths, using only one will increase the chances of redistributing the surface contamination rather than removing it. Cloths for use with Prep Clean should be replaced regularly and often to ensure that an efficient pre-cleaning process is maintained. (Read more here.)

Immediately before applying your paint use a tack cloth; this adhesive cloth is designed to pick up any dust and loose dirt.

The process we recommend is is:

1. Filler Primer
2. Undercoat
3. Top coat
4. Clear Coat

You need to key the paint in between coats with wet and dry P600-800 - this enables the paint to adhere.

If what you want is not here, then please see our other primers that are listed on our website. If you can still not find the product you are looking for then get in contact with us.



## Coverage

In a controlled condition, the coverage for the Coach Enamel is 10 square metres per litre. However, through our experience completing tasks in our Coach Enamel, the coverage for spraying is around 10 square metres, whilst the coverage for brushing is about 7-8 square metres. This is because the paint is naturally applied thicker with a brush.

With this information you will be able to work out how much paint you need for your job.

## Drying Times

Coach Enamel:

Touch Dry – 3 Hours @ 20°C

Hard Dry – 12 Hours @ 20°C

Full Dry – 24 Hours @ 20°C

## Application

If you are a novice, have a practice first! It is important that you practice whichever application process you choose to use. Practicing brushing/rolling will allow you to develop the best technique for you and practicing spraying will ensure you are using the correct amount of thinners and psi.

### Brushing

All of our products, with the exception of the Etch Primer and metallic colours, are primarily designed to be applied by brush. It is important you acquire a good quality synthetic brush. A 1, 2 or 3 inch are more than sufficient for most panel work. Apply with relatively fast brush strokes, horizontally first (side to side), covering a small area of about 30" square each time; make sure each area is even. Once the brush is empty immediately refill it and then repeat the process, brushing into the area you've just covered. As soon as a section is covered lay the paint off vertically (top to bottom) by very gently stroking it to smooth it out and remove blemishes. This is done at approximately 90 degrees to the first coat. It is also important to note that the enamel must be of a certain thickness to be able to lay off otherwise the brush just takes the paint off the surface leaving streaks and visible brush marks – always practice before you start! Do not be tempted to put too much paint on the surface being painted as it may sag whilst drying. Do this from start to finish very quickly and then keep on going in the same fashion until the area to be painted is complete; always brushing back into the section you've just covered.



## Rollering

Rollering follows a very similar process. Acquire a good quality roller and brush. Apply the paint evenly with a gloss roller in sections about 3x3 roller widths. Make sure you are rollering into each section when you go onto the next – this is important to ensure the layer of paint will be even. You will need to lay the paint off top to bottom by very gently stroking it down with the brush. This will remove any air bubbles or blemishes. The laying off process could be done in larger sections – but the area still needs to be wet or else it may take some of the paint off. It is also important to note that the enamel must be of a certain thickness to be able to lay off otherwise the brush just takes the paint off the surface leaving streaks and visible brush marks – always practice before you start!

## Spraying

(Assuming you are familiar to the general techniques of spraying.)

To apply coach enamel by spraying it will need thinning but only by around 5-10%. There is no hard and fast rule as a number of factors come into play, such as temperature of the paint, the air temperature, size of nozzle and spraying air pressure. From a practical point of view, for the first spray of the job, fill the paint reservoir half full and add a small amount of thinner, mix well and spray using around 40psi onto a test piece. If the result looks uneven and 'bitty' then you have not quite thinned it enough, a side effect will probably be very little spray dust coming from the gun as well. To rectify add a little more thinner, mix well and try again. If the result is a good even coat with an even coverage you have achieved the result you need for a good job.

If you have used too much thinner you may find the paint on the test piece will sag immediately, or the paint will look translucent and very thin. As a secondary effect you may also get an excess of spray dust.

A tip worthy of thought is to start with the paint reservoir being half full so that you can either add more paint or thinner, whichever is deficient. Once you are familiar with what thinning you need, for the rest of the task, you can fill the reservoir to a level you are happy with. This thinning can vary day by day. The only other thing which is worthwhile mentioning is try not to overspray a previously sprayed area (such as edges or fiddly areas) as this could create a thick area of coating which may result in sagging (a long run).

# Painting conditions

Always avoid painting in direct sunlight, breezy, or windy conditions.

Wherever possible work indoors if you can where you can control the air movement and temperature. If the area you are working in is dusty, clean it thoroughly and wet the floors before starting to paint. This will minimise the risk of dust settling on your newly painted surface during the application or drying period. If painting in cold conditions where heat is required use dry heaters only, avoid paraffin heaters as they cause condensation which could cause the paint to 'bloom'. Keep the temperature as even as possible, leaving any heating on until the paint is dry.

The key to good Coach Painting is do it on a pleasant, still day or week if it is a big project. It is always best to plan your project to ensure you have sufficient time to see the entire paint process through.



## Run/Sag in paint

If you find a run or sag when the paint is initially dry/drying don't rub it down as it is likely to still be wet underneath. Instead slice the top off it with a sharp blade and leave it to dry again. The next day you will be able to rub it down successfully and re-coat either the immediate area or if required the whole panel. Always use the biggest brush you can handle for the job, a 2 inch or 3 inch is more than sufficient for most panel work.

## Extra information

Generally speaking, most primers are porous in nature. If your vehicle or component has been living outside or exposed to the weather for any length of time in damp conditions painted only in primer, moisture may have penetrated the primer and cause problems later. You are best to remove it or flat it back and start fresh to prevent any risk of moisture coming out when the top coat has been applied. This can lead to micro blistering of the paint work. This can also happen when painting in high temperatures as it can cause solvent entrapment due to the surface of the paint drying too fast, or, if it is painted in damp conditions, it can also cause blistering as the trapped liquid is drawn to the surface.

## Filling imperfections before Coach Enamel

How we do it... Firstly scrape all the paint off the damaged areas and then using a small rotary wire brush in a drill to get as much corrosion out of the pits as possible. Then Etch Prime this. Etch primer is a cellulose based product. Next buy some Cellulose Stopper or Fine Surface Filler (just another brand name). Apply with a scraper or similar then rub down so you have a flat surface. Then over-spray with etch primer again, the reason to do this is that how the surface looks at this point will indicate what it will look like after the topcoat is done. If you are happy with how it appears, over-paint with undercoat or topcoat, whichever is your intention. If the result shows blemishes, apply more stopper, rub down when dry and then etch prime again, and again until you are happy with the result. Don't be tempted to put a layer on too thickly as it will dry a lot slower than thin coats.

