

# Tales from Barlow Works

## Lining panel coaches using lining inks

These notes follow a recent modelling workshop we had at the clubrooms where we had a chance to try lining out some panelled coach sides using opaque drawing inks.

### The inks

The inks we were using were Magic Color acrylic inks made by Royal Sovereign Ltd, the addresses on the bottles say either made in Manchester M17 1SD or London N22 5QL. Also essential is the cleaning fluid which is made to compliment the inks. Both should be available to order from art shops or at the bigger exhibitions. The inks are used in what are called technical pens, the ones that draughtsmen used to use before CAD came along and still available, made by companies such as Rotring etc. The pens come in a variety of nib sizes and this allows us to get a consistent line width.

On a lot of panelled coaches the raised beading was painted black and the sides of the beading were painted a contrasting colour, quite often yellow. It is possible to use the ink to do the black on the beading but I tend to use a permanent ink felt tip pen (overhead projector pens are ideal) as it is easier to use. The problem is that it is very difficult to remove the felt tip if you slip off the beading so be careful.

### Rulers

Also required will be a ruler. I tend to use a see through plastic ruler but check to make sure that any measurement markings on the side of the ruler do not go to the edge or a wavy line will result, always check before buying. I then put a couple of strips of masking tape along the flat side of the ruler. This raises the edge slightly to stop the ink going underneath by capillary action and also helps to stop the ruler slipping. I then prepare a second ruler just the same as the first but then cut it up into different lengths as sometimes the long ruler will not lie down properly onto the surface detail and a shorter piece will be better.

We will also require some cotton buds and cocktail sticks for correcting any mistakes later.

## Preparing the sides and lining

The coach sides will need to be painted with the main body colour first. If possible this needs to be either acrylic or cellulose paint. The reason for this is that these paints are impervious to the ink cleaning fluid so if we make any drastic mistakes then the whole of the lining can be removed with the cleaning fluid and the paint underneath will be unaffected. Also if the lining is done with enamel paints using a bow pen or tubular lining pen, the same applies as the enamel thinners will also not affect the main body colour.

There are a number of acrylic car body colours that approximate to the more common railway colours so it is often possible to obtain a match. If not then paint a sample from say the precision range of colours (remember to use the same undercoat colour you intend to use on your finished model first, e.g. a red primer will make a red top coat a rich deep colour but a grey primer will make it lighter) and take it to a car paint specialist. They will be able to match an acrylic colour to any sample you have and a lot are able to put it into an aerosol for you. If not then the paint will have to be applied by airbrush and specialist facemasks and extractors will be required so this is outside the scope of this article. Buying a car spray or specialist aerosol is the best option. Remember to always spray in a well ventilated place.

And finally, to the lining. If the panelling has a black top then I do this first, either with the permanent marker or with black ink using a ruler. You will find that there are places where the black does not cover, usually where there are door hinges and door stops. Do not worry as these can be touched in with black paint and a very fine brush later.

Select the required pen thickness and put a few drops of the required colour into the cartridge, if yellow lining is required I usually mix the ink 5 drops of yellow to 2 drops of white as this takes the edge off the bright yellow and looks more natural. Make sure that the ink is flowing well on a piece of paper and also when lining keep stopping to wipe the nib clean and make sure that the ink is flowing properly.

With the coach side in front of you start from left to right along the top edge of the panel keeping the pen at a slight angle and into the edge of the panel. Take the line round the curve and stop there. Do all the lines on the side like this and then turn the side through 90 degrees and continue the line around the panel. Keep turning the side through 90 degrees until you finally arrive back at your starting point. Do not line from right to left as this will shove paint into the pen nib and block it up. Obviously, if you are left handed then all this will be reversed. It is often not necessary to use a ruler as the pen will naturally follow the edge of the panel. Finally if there are any smudges or thick lines, they can be corrected using a cocktail stick dipped in the cleaning fluid and the offending line carefully corrected.

## **Finishing**

Finally when the coach sides are fully lined the transfers need to be applied. Waterslide and pressfix transfers can be applied without problem but the methfix type of transfers can cause a problem as the meths mixture will attack the ink lining. It may be possible to varnish the side first before fixing the transfers but I have still found that the meths mixture can make the inks run so I now only use pressfix. Finally a coat of varnish will seal everything in and protect the finish.

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