

TECHNICAL INFORMATION SHEET No2

Basic Lining and Lettering Techniques for BR Style Carriage Livery

Preface:

This technique was described to us by an ex Derby works painter, and is designed for use on a Mk1. It involves very slight deviations from the published BR measurements for the lining, and the omission of the black lining around the lettering, which makes things slightly easier for those less experienced (like me!). The techniques are demonstrated on a maroon liveried coach (actually a Mk2), similar techniques can be used for crimson and cream. A much simpler method is possible for blue/grey.

1. Equipment Required

- A chalk line (available from builder's merchants)
- Powdered chalk (builder's merchants)
- A Chinagraph pencil, or piece of chalk (art shops)
- Ruler, pencil, tracing paper
- A Computer, wordprocessor and printer!
- Black and 'Oxford Ochre' signwriting paint (Wrights of Lymm - <http://www.stonehouses.co.uk>)
- A decent 1/2" brush, and a largish modellers/artists brush
- An assistant to help with the chalk line
- 'Cellux', or Cellulose masking tape - 12mm - Wrights of Lymm again.
- A tape measure

2. Lining - First Marking Out

Try to line and letter a coach within a day or so of the paint being dry, it will stick better, and the final varnish will also.

On Mk1s the lining initially had a 1 1/2" gap between it and the window glass, top and bottom. When window frames began to be fitted these gave a convenient guide for this, and the lining would usually be immediately below or above the window frames.

If you are painting a Mk2, or pre-nationalisation vehicle, use the relative positions from a Mk1 for reference.

We now need to consider line dimensions, an emotive subject! There was certainly some variation, but

- the top line was meant to be a 3/8" (9.5mm) ochre line above a 3/4" (19mm) black line,
- the bottom line a 3/8" ochre line, above a 3/4" black line, above a 3/8" ochre line .

In order to make the process significantly easier, we are going to make the ochre lines the same width as the Cellux tape; 12mm. This is a bit more than 3/8", therefore the black line is increased slightly to compensate and keep things in proportion.



Some of these lines now need to be applied to the coach side in chalk. For the lower lines we will need the top and bottom, the outer limits of the ochre. For the top lines we will just need the top of the ochre.

Make sure that all your windows line up as you are going to use them as a datum. Take some measurements, or stretch the chalk line down it - tight - and see if they line up. If they don't you are going to have to work out which are in the best place and leave a gap, or overlap the frames, for the other windows. Note that toilet windows are sometimes of a different type, with larger frames, and are often slightly misplaced. The gutters, or the bottom of the sills, may be straighter.

The top of the lower lines will therefore be around the bottom of the frames, and the bottom 44mm below it. The top of the upper lines will be 32mm above the top of the frames.

Firstly make some marks with the Chingraph pencil or chalk at the edges of the windows near the ends of each complete panel, to mark the ends of both lines. To strike the whole coach length at once would probably result in too much sag of the chalk line.

We then join these up with the chalk line. Stretch out the chalk line between marks, get it as tight as absolutely possible, then pull the line away from the coach and let go to 'ping it' to make a chalk line. If you are holding one end and your assistant another is should be enough to do this from one end. If some bits don't strike, fill these in with another ping. If you get two lines, dust one out, or try again. Its possible to extend to coach ends, say, by part bridging over an existing line and striking again.

Once you have these in place, stand back, and have a look at them. Try looking along them from the coach end, to make sure that they are straight. Have another go if you are not happy, or make some adjustments to the marks you started with.

2. Lining - Taping



Using the Cellux tape, mask up to the outside of your lines, as demonstrated. At the top just mask up above your single line. Finish the line on the apex of the curve at the end of the coach, and mask the ends also. Rub out any air bubbles near the paint edges, else you will get paint creeping underneath. Dust off any chalk marks once the tape is in place. Note this is on a Mk2 coach, so the windows are a bit less deep!

3. Lining - Painting Ochre

Fill in between the tapes. With the top line, just paint down from the upper tape at least 12mm, but dry brush out your lower edge, so it won't show through the black. Remove the tape as soon as you have finished. Try to pull it back almost flat on itself, this minimises the tendency to pull maroon paint off. If the tape is left on too long it will dry out and can be very difficult to remove, so don't mask up and then leave it for another day! If it gets wet it will tend to separate, and leave red gum behind when removed - don't worry, leave this until the paint has dried, then rub it off with a cloth.



4. Lining - Masking for the Black

Once the ochre is dry, mask up over the outer 12mm areas of the ochre on the lower line top and bottom, and the upper edge on the top line, ie where you want the ochre to remain. The outer edge of the tape should run along the outer edge of the ochre. Then mark out and chalk line the lower edge of the upper black line, 32mm below the top of the ochre, and tape it as before.

The remaining uncovered areas can then be painted black, and then the tape can be removed.

5. Lettering - Making Tracings

Lettering was 5" below the lower line, in theory. Use photos or the Parkin book for reference. Sizes varied, and the spacing also, with a bigger space between the letter and numbers.

USE	SIZE	LETTER/NUMBER & WORD SPACING	LETTER SPACING, & NUMBER SPACING
Doors, eg 'GUARD', 'KITCHEN'	2"	1 3/8"	5/8"
Number, eg M9404	4"	2 3/4"	1 1/2"
Side, eg RESTAURANT CAR	6"	4 1/8"	1 7/8"

The Font used is Gill Sans, so the first requirement is to have this on your wordprocessor. Note that the BR '7' had a horizontal bottom to the tail, true Gill Sans has the tail of the 7 cut off at right angles. Print out your requirements to size, and make tracings of them. Note that printer settings can usually be set to 'draft' to save ink. It is helpful to indicate where the lining is on the tracing, remember 5" below. This will help to get the numbers horizontal on the coach side. Then dust chalk on the back of the tracing.



6. Lettering - Marking out on the Coach side



Fix your tracing in position on the coach side using a bit of Cellux tape. Check it's in the right place and horizontal. Then using a pencil and ruler, go over the lines so as to transfer the chalk to the coach.

7. Lettering - Taping

Remove the tracing paper, and tape up the ends of the numbers/letters, this will help produce crisp right angles. Note that any curves should project slightly above or below the top and bottom of straight letters.



8. Lettering - Painting

Using your smaller brush, fill in between the chalk lines. You can see that I decided to mask up a bit more of the 4s and the M! Its possible to go further than this, and cut angles with a knife on the coach. Remove the Cellux tape before the paint is dry, but wait until it is dry before dusting off the chalk.

9. Completion

Varnish the coach, to protect the maroon paint and lining and lettering, , ideally within a day or two.



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