



STEVENS & Co. 27ft LATTICE SIGNAL POST

As used by the
LSWR, LC&DR,
SR, BR(S),
H&BR,
NBR,
GNoSR, Caledonian,
G&SWR and
overseas railways



Stevens & Co. supplied lattice posts to many pre-grouping companies, most notably those shown above. The SR also used them, until the switch to rail-built posts in the mid-1930s. They were also found in lesser numbers on the NER, LNWR, SECR, LYR, and the CLC, with the odd one or two on the GWR.

ASSEMBLY INSTRUCTIONS

General:

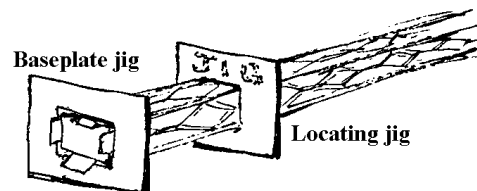
You will need a 25-50W soldering iron or resistance soldering unit, 188° solder and flux, minidrill and slitting disc, various files, pliers, drills etc, and tinsnips and small scissors for cutting out the frets. In these instructions left- and right-hand mean as viewed from the front of the signal. A selection of prototype photographs will help, and these should be easy to find, as this type of signal post was very common.

Burnish both sides of the frets before removing any parts. It may help to tin some of the smaller parts before removal. Grip the smaller parts in smooth pliers when filing off tags to avoid bending them.

The Post:

The post as supplied will build into a signal 27ft high. For a shorter post, build it to the full height first, and then cut it to size afterwards.

Lightly tin the lattice edges on all four sides, on both sides of the fret. Cut out the two post halves, but don't bother filing off the remains of the tags - being staggered, they help to locate the post halves when soldering. Use flat-nosed pliers to correct any distortion caused by cutting out. Accurately fold each half-post to 90°, **with the half etch on the inside**. Solder along the inside of the bend to fill the gap as much as possible, although complete coverage is not vital at this stage.



Tin both sides of one of the square baseplate jigs (the ones with the four etched slots) and

remove it from the fret. Cut out at least two locating jigs from the fret, and remove the triangular pieces from their centres.

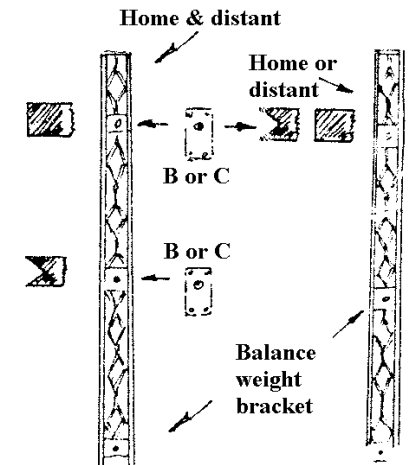
Bring the two half-posts together, and slip on the jigs to hold them in place, ensuring the two halves are level. Place the tags on the bottom of the post into the baseplate jig and solder up. Now make the two long joints along the post, applying light pressure from pliers to help close the gap. When done, remove the locating jigs and discard. Tidy up the joints, file the top of the post level, and file off the tags projecting underneath the baseplate. Don't worry about any remaining small gaps along the post corners - these can be filled in before painting with 145° or 70° solders, which have better gap-filling properties than 188° solder.

Cut the post to length if required, removing material from the bottom of the post, not the top.

To use a larger baseplate to mount the signal on the layout, scribe a longitudinal centre line along it. Orient the post so a side with the three rectangular bearing plates is facing you (this becoming the front of the signal), then solder it around 15mm from one end of the baseplate, square in all three planes.

Fittings:

For an upper quadrant signal, attach 1/32" arm bearing tube(s) to the left-hand side of the post at right angles to the vertical post axis. The top most arm's bearing position below the post top seems to vary between 1-4mm, so check with photographs of your chosen prototype. Any second arm bearing should normally be placed 15mm (SR) or 18mm (LMS, LNER) below this. Leave the bearing tube overlong at the rear, but use the minidrill and slitting disc to trim the front so it projects just under 1mm in front of the post.



Lower quadrant signals should have their 0.45mm brass axles placed directly into the etched holes, after fitting the motion plates "B" and "C" (they are identical) to both front and rear faces of the post as shown. Form the bolt heads on each plate before fitting.

The balance weight bracket "A" may be ignored, and replaced by those on the signal arm frets.

Finishing the Signal:

The signal can now be completed by adding the balance weight, ladder and any landing, lamp bracket and lamp, and finial. Suitable components are available in the MSE range. Do not fit the arm until after the painting stage.

Painting:

Degrease the post by washing in detergent water and leaving to dry. Spray overall with white car primer, mounting the arm in its bearing to avoid painting the spindle and inside of the bearing tube. The bottom 12mm (4") of the post should be painted black, and the landing a weathered wood colour. However, do check with your photographs, as there is a lot of prototype variation.