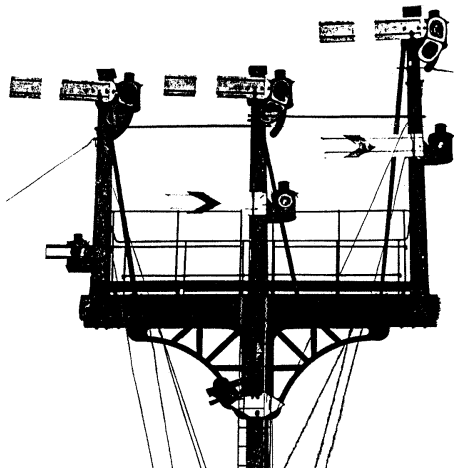


LNWR/LMS SIGNAL BRACKETS



**Suitable for 2 or 3 doll brackets
(equal tee or offset), offset single
dolls, and gantries**

Note: this kit contains bracket and landing components only. For a complete signal, you will need: a base post (S0017); dolls (S0033 series); signal arms (S004 LNWR lower quadrant or S0012 series LMS/BR upper quadrant); finials (SC0010); lamps (SC0030 lower quadrant or SC0011 upper quadrant); and a ladder (S009 series).

Obtain good photographs before starting work. Remember that many changes took place during the lifetime of signal brackets, from their earliest installation by the LNWR, when the signal would have been in the original lower quadrant condition, to later modification when Board of Trade changes were needed, then through the Grouping and Nationalisation, which would have seen the renewal of components with more up-to-date items, including upper quadrant fittings in the later days. These components were also used for completely new upper quadrant signals in the early days of the LMS, sometimes with lattice base posts.

ASSEMBLY INSTRUCTIONS

Burnish both sides of the fret, then tin all parts before removing.

Prepare a length of base post S0017 by removing the top bearing and if reducing height, ensuring that you have a minimum of 13'6" clearance remaining between the rail head and the underside of the proposed cantilever bracket, at any point where it will foul a running line. Cut to length sufficient S0033 dolls, remembering that the bottom of the doll should be level with the bottom of the trimmers. Complete the dolls by adding arms, lamps and finials.

Remove the trimmers from the fret and split them into linked pairs. Fold each pair back-to-back (half-etched lines on the inside) and sweat together. Remove the resulting "tags". Cut the trimmers to length (if required), and file to the correct elliptical end profile.

Tin with low-melt solder what will be the inside surfaces of the trimmers, then solder them to either side of the base post top. It is a good idea to line and pin everything up on a balsa block so the job remains square in all directions.

Solder the bracket flanges to the brackets, and the resulting assemblies to the post and trimmers, with the shorter side being adjacent to the post. Finally, add the landing; the front plank should overhang the front trimmer, with a larger overhang at the rear.

Carefully make holes in the landing to accommodate the dolls. For a junction signal, these should be 7' apart; dolls applying to parallel roads should be at least 10' apart.

Solder in the dolls, using scrap etch to pack any gaps between the dolls and the brackets/trimmers.

All working motion should now be undertaken to a satisfactory stage, before the addition of handrails, so as not to impede access. Small cranks tend to lose their efficiency due to poor bearings, so it is wise to provide small tubular bearings soldered unobtrusively into the bracket frame, and then to put the cranks onto short lengths of nickel silver wire as axles, with a washer soldered on the rear end to give a good movement. The wire linkages will perform that much better. Check the balance weight positions with photographs.

Establish the handrail stanchion positions from photographs, as they do vary a great deal. Drill the landing perimeter at the chosen intervals with a no.76 drill, and

insert scale 3' to 4' lengths of wire (no more than 0.33mm diameter) into each hole, from below, with a short "L" turned on the bottom of each one. A quick solder joint on each one will fix them in place, then they can be aligned by eye, and a handrail of soft iron wire fixed around, one stanchion at a time. Leave a gap between the two stanchions either side of the position where the ladder will be attached. Finally, trim off all excess wire.

Solder the chosen ladder to the front (LNWR signal) or rear (early LMS signal) of the landing, adding two bracing stays from thin brass strip midway up the base post. If using an S009 ladder, the radiused top should be cut near the top of the curve.

Nearly all bracket signals had bracing wires and posts, so don't forget to add these once the signal is installed on the layout.

PAINTING

Clean the signal by immersing in warm detergent water, rinse under a running tap, then allow to dry overnight. Spray overall with primer. In general terms, in LNWR days wood was painted white, and ironwork and the bottom 4' of the base post brown or red oxide. The bracket castings themselves were painted a stone colour. In LMS/BR days, wood was white (with the bottom 4' of the base post black) and all ironwork black. However, there are many exceptions, so beware!

