ESTABLISHED ON THE NORTH YORKSHIRE MOORS RAILWAY

Specification for fixing main body panels on Gresley coaches.

All rebates are to be cleaned and painted before panel fitting starts. The face side of the panel is to be decided by the annual rings of the panel, which must run so as the outer edge of the tree faces outwards on the coach (see **fig. i**).

The lower panels must be fitted and fixed before the upper panels.

fig. i (Right) The correct orientation of the end grain of the panels.

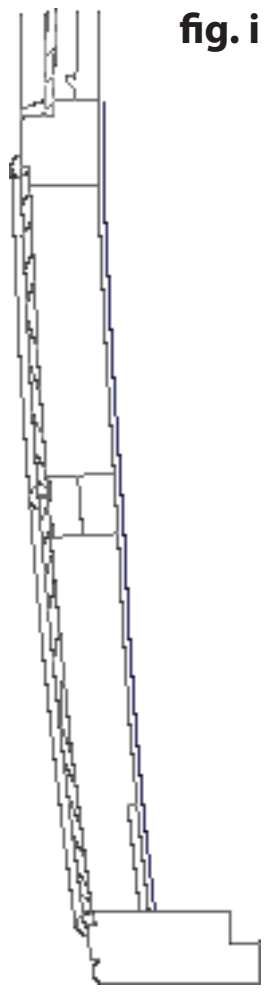

fig. i

The top and bottom edge of each panel must be selected so as the majority of the grain points from left to right (as shown in **fig. ii** below).

fig. ii Below - the Grain must point from left to right.

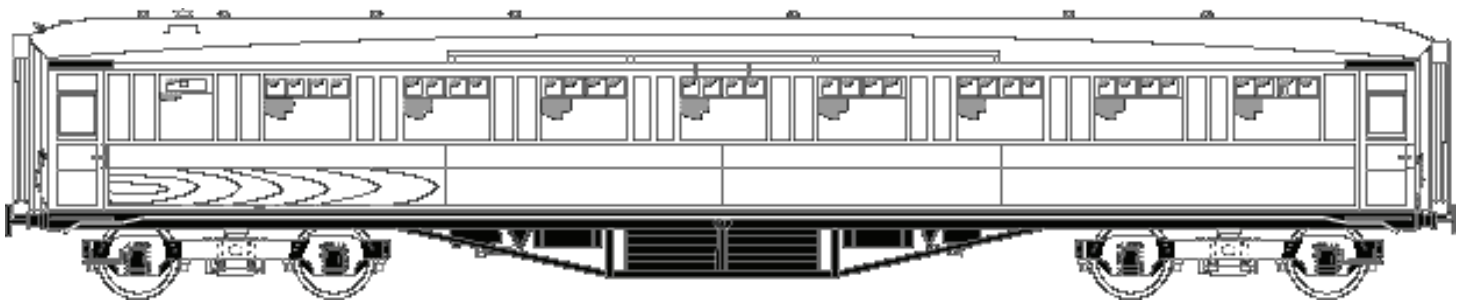

fig. ii

The bottom edge of the lower panel must be a tight fit in the rebate in the bottom side of the coach, as must the top edge of the upper panel in the rebate in the waist rail. On coaches where the body is sat on cushions the lower panel should be approximately 17¾" wide and the upper panel approximately 13¾" wide.
On coaches where the bottom side is sat directly on the solebar then the lower panel should be approximately 19" wide and the upper panel approximately 13¾" wide.There must be a gap between these panels, where they meet on the waist batten of 1 / 8 ". Once fitted the end grain of the panels must be sealed with one coat of either gold size, varnish or a cellulose timber sealer. The panels must be fixed using 1" brass panel pins along the top and bottom edges only with spacings of 4", no pins should be any closer than 2" from the end of the panel. Under no circumstances must any pins be put in the ends or in the middle of the panel. When both an upper and lower panel have been pined on then they must be examined inside the coach to ensure they are tight up each pillar and half pillar. If either panel is not tight then they shall be cramped back using a length of board screwed to the waist batten with blocks pushing the panels back to the pillar (see **fig.iii** right).

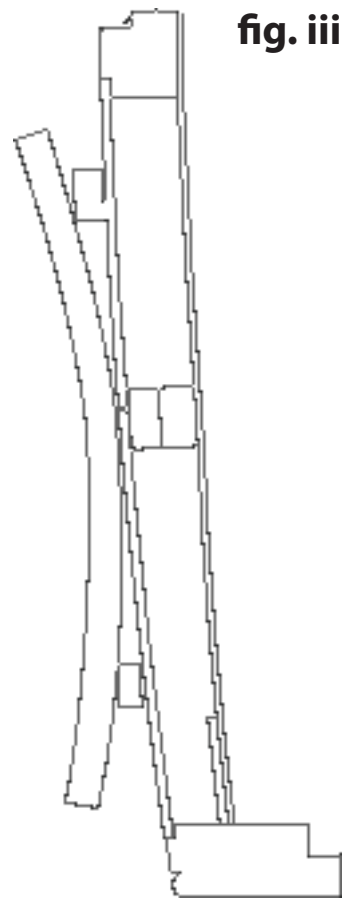

fig. iii

fig.iii Right - cramping panels on to a pillar.

The panels will have softwood glue blocks (ex. 1½"x 1½") fixed between them and all frame members except bottom side (rail), using a either a polyurethane or resourcinol based waterproof wood adhesive. The space between glue blocks shall not exceed 3".

All vertical joints between panels shall have a ¼"x 3 / 8 " strip of Teak fixed to the centre of the pillar by three 5x1" Brass CSK wood screws.

All joints between panels and frame members will be covered by 1"x 3 / 8 " half round mouldings. Vertical mouldings between panels will be pinned through the centre of the ¼" Teak strip and horizontal mouldings will be centred on the gap between panels. Mouldings on door pillars will go 3/8" onto the panel, taking care not to pin through the panel. The top 1" moulding will be fixed 15/8" down from the glass rebate on the waist rail. The bottom 1" moulding will be fixed ½" onto the panel. The mouldings will be bedded on with Teak coloured acrylic frame sealer. The Mouldings shall be fixed with 1½" Brass panel pins, spaced no further apart than 2". The corner joints in the mouldings shall be mitred and other joints shall be spooned out (see **fig. iv** below).

Panels on the four end corners of the coach shall be fixed with 5x1" brass CSK. single thread woodscrews spaced at 4" intervals along each edge, no screws shall be put in the end grain or middle of these panels. The panels shall be cramped as necessary and glue blocked.

fig. iv

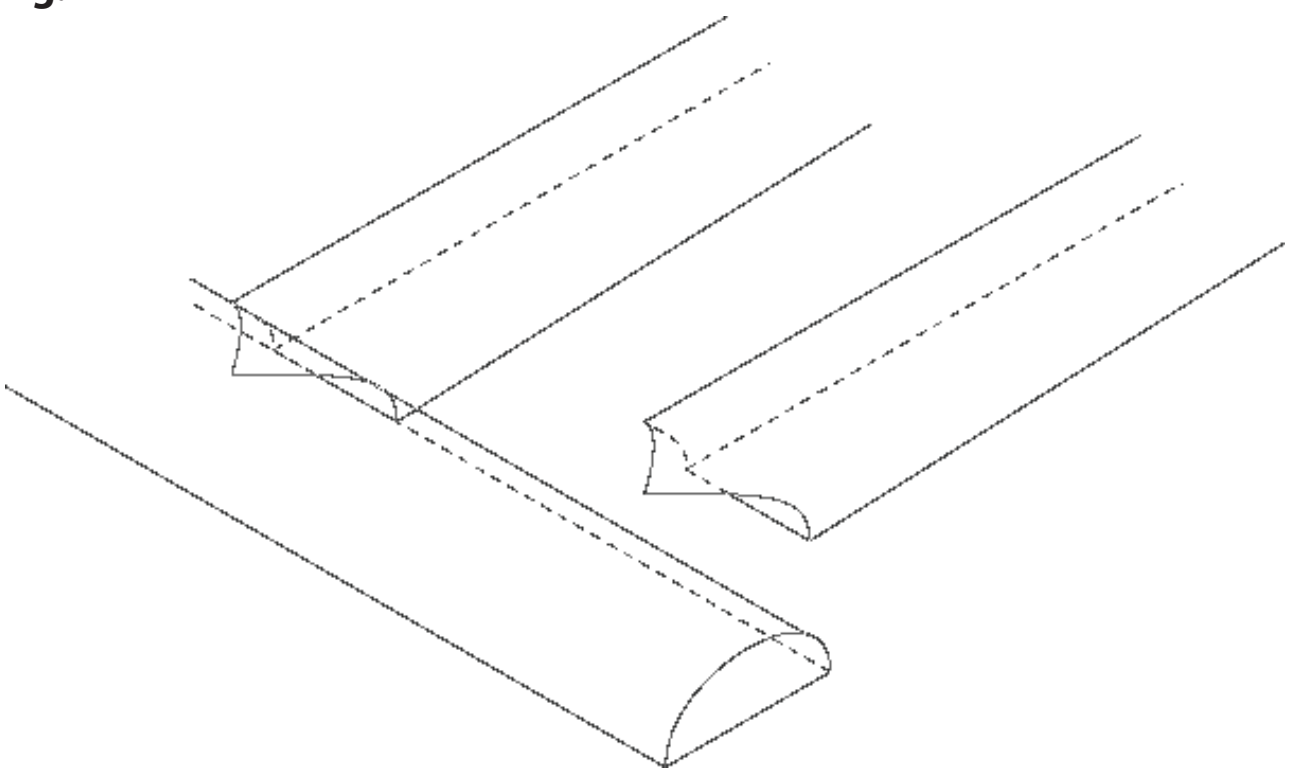

fig.iv Spoon joints in half round mouldings

The inside of all panels and frame members shall be given one coat of aluminium wood primer and then a coat of an intumescent sealer or one coat of sealer and one coat of intumescent paint (coating to be of sufficient to give ½hour fire protection).

On L.N.E.R.C.A. contracts all the specifications mentioned on this page shall be followed except where agreement is made in writing before that stage of work commences.