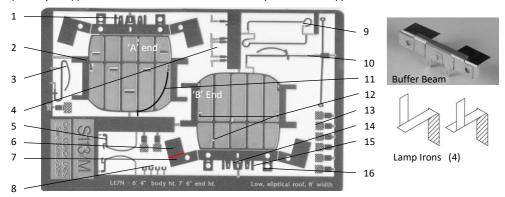


## S113M GWR COACH ENDS FOR TRIPLE ARC ROOF STOCK

Please read the instructions and familiarise yourself with the parts and options before bending, soldering or gluing. Slower curing, thicker, 'gel' superglue is recommended. Except where shown (red line below), half etched fold lines go on the inside of 90° and outside of 180° folds. These ends complement the range of **SHIRE SCENES** etched sides for GWR 2 and 3 axle coaches which offer the sides and, where appropriate, ends are designed to replace those supplied with the Ratio 610, 612 and 613 plastic kits giving greater diversity of available vehicles. They can, of course also be used as aids to scratch building. The S113M ends are for coaches built to the LE7N (Lewis system) pattern. LE7N coaches have a three arc 'elliptical' roof as supplied with the Ratio kits.



**Buffer Beams.** Emboss the rivet detail using the half etched holes on the back as a guide. Fold the buffer plates, bolt straps and coupling face plates (16, 15 and 14) through 180° to lie flat on the front face of the beam. These details may be removed if using buffers and / or couplings that come with their own plates. Fold the mounting brackets (1) back under the beam through 90°. These can (optionally) be used to mount vacuum pipes or steam heat pipes. Fold the 'wings' (6, 7) back through 180° to thicken the buffer beam taking care that the buffer mounting holes align. Fold the tabs (6) back through 90° with the half etched fold line on the outside of the fold (along the red line). These sit on the top face of the Ratio chassis. The picture shows a completed buffer beam (Shire S119) without the ends but with all the beam detail in place.

'A' End. The emergency brake rigging (10) fixes to the 'A' end using the left hand fold back bracket (1) at the bottom and the etched slot in the vertical bead at the middle. The horizontal shaft sits in the mounting brackets (8) which attach vertically in the slots at the top corners of the end.

'B' End. The end steps (13) are fixed in the horizontal slots with the wider one (marked W on the fret) at the top. The handrails (9) are attached as show at (11 – only one shown) with the end of the 'shepherd's crook' on the surface of the roof. The bottom of the vacuum brake pipe (3) is fixed to one of the fold back brackets (1); probably on the left but check the particular vehicle while the top attaches to the end panel; in practice a large saddle or 'P' shaped pipe clip was used on the panel face but consider making a slot at the correct position.

**Both Ends.** The tabs (2) fold back through 90° to attach to the inside of the coach sides. On some coach sides, there are tabs at the ends which fold back to add thickness (approach the thickness of the Ratio sides). These should be removed when using these etched ends. The steam heat pipes (if used) hang below the buffer beam using the fold back brackets (1). Lamp Irons (4) are formed as shown in the drawing and mount through the slots (12 – both ends) as required for the prototype. The shaded tabs fix to the inside; bent up or down as appropriate.

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