



## Shire Scenes GWR Coach Components For 4mm (1:76) Ratio Plastic Kits.

In the late eighties Teddy Francis, founder of Shire Scenes, came up with the idea of providing alternate sides in etched brass for the popular Ratio GWR 4 wheel plastic coach kits. The latter had provided an easy entry point for GWR modelers of the turn of the Century thro' 1950's era as the little four wheelers were synonymous with the ubiquitous and well-liked GWR branch line. Ratio supply three types of coach in two lengths. They are of the three-arc (elliptic) roof style, the later Dean variant and, for our purposes, one of three distinct styles constructed from the 1890's to just beyond the turn of the century.

Teddy realised that the popularity of the Ratio coaches was based on the relative simplicity of plastic kit construction. The nearest alternative, then and now, is a full brass kit with the incumbent need to bend most and solder all components. (Some can be glued but may have limited durability in layout use). The range of alternate sides was therefore planned to be compatible with the two Ratio chassis lengths and suitable for superglue construction. This involved some compromises. The Ratio coach ends were used initially. As the plastic sides are about 1mm thick Ratio absorbed this scale 3" by narrowing the ends whose outer mouldings were, in fact, derived from the plastic sides. This was compensated on the thinner (scale 1") Shire brass etches by providing a fold-back tab on the extremities of the sides that thus made up 2" of the scale 3" deficit on each sides.

The Ratio chassis comes in two sizes. Long; 30' under-frame with 19' wheelbase (ref 613) and Short; 27' with 19' wheelbase (ref 610/612). Shortening the Ratio 613 chassis (in particular) accommodates some additional coach lengths. Again, plastic construction made this both possible and quite simple. Many of the GWR four wheelers had wheelbases, between 18' 6" and 19'. Some were 6 wheelers with the centre axle removed for branch working. The exception in the range is the W1 (S102) postal van, which 'fits' the shorter Ratio chassis, but actually had a shorter wheelbase, 16' 0". This requires additional surgery. ). The GWR believed in standardisation but, in the area of four wheel coaches it seems, rarely practiced it. Teddy added five sides to the initial Shire range of ten where compromises extended from chassis to body dimensions. Three of these were types whose prototypes had the earlier full arc roofs and shorter (lower) body sides. Two were 'metro' coaches that had 'elliptical' roofs but wider ends with an additional panel. They were also lower overall from rail to top of roof arc.

Shire later produced alternate brass ends for the Ratio kits as the plastic ends had moulded-on detail which many modelers felt was shown up by the separate surface detail on the brass sides. Full arc ends were also provided but these proved less popular as another dimensional compromise had crept in.

To understand this we need to reflect on the three types of Dean GWR 4/6wheel non-clerestory coaching stock that Shire produces. Dimensions up to and including the waist moulding were common to all three types but above the waist the full arc coaches had shorter (2' 0" high) windows and 9" eaves mouldings with concomitantly deep ventilator bonnets. The earliest type had, as observed, full arc roofs. Later coaches had the elliptical 'Ratio-style' roof and higher widows with 7" eaves mouldings. Overall the body of these was 3" higher than the earlier type. This emerges as 4" when the arc vs. elliptical roof dimensions are taken into account. The third type were the Holden 'Metro' coaches built for inner London service and cascaded into the regions between 1904 and the end of the '20s. These had characteristic curved door headers and were 6" wider than the other two types (8' 6" vs. 8' 0") and thus the ends were quite different in form.

John Lewis of the Great Western Study Group (*et al*) wrote a defining classification of these coaches in 1981 and we have used it to differentiate between the types and to ensure dimensional fidelity in new products.

## The Lewis system.

The older Dean designs were Low Arc roofed with 9" eaves and Narrow (8' 0") body width, thus LA9N. The later designs were Low Elliptical roofed with 7" eaves and Narrow body width, thus LE7N. Holden 'Metro' coaches (late design) were Low Elliptical roofed with 4" eaves, Metropolitan stock with Wide (8' 6") bodies, thus LE4MW. There were several other variations and of course there was the whole range of clerestory vehicles but Shire does not yet produce kits for the latter. The Shire range - with anticipated new item or revised items - is set out below with the above designations and comments thereto.

### Shire range of GWR coach sides and accessories. 2010.

#### S101 Diagram V5 Full Brake Van, pattern LE7N.

Uses the Ratio 610/612 short chassis. Popular and accurate.

#### S102 Diagram W1 postal van pattern LE7N.

If the Ratio 610/612 chassis is used the wheelbase is too long. However, by 'cutting and shutting' the longer 613 chassis (whose axles are the correct distance from the ends for diag W1) near prototypical dimensions can be achieved. Wheelbase was 16' 0".

#### S103 Diagram T36 three compartment brake third. LE7N

Uses the Ratio 613 (long) chassis. Popular, accurate and attractive 'large guards compartment' coach.

#### S104 Siphon C.

Elliptic Roof. Milk/perishables van. Complete with ends. Popular and easy to build

#### S105 Diagram U12. Four compartment 'Brake Composite' (Centre Luggage Composite)

There are several issues with this vehicle. For a start, Diag. U12 was not a guards vehicle, it was a 'centre-luggage composite' It was also an LA9N pattern coach. As such it would have a full arc roof, 9" eaves and shorter pattern windows. It would sit some 3" lower than LE7N vehicles. A drawing of Diag.U12 in J H Russell's *A Pictorial Record of Great Western Coaches Pt 1* (Page 47) contains dimensional discrepancies that may have found their way into the Shire product. However, the inclusion of luggage compartment droplights on the Shire etch may be fictitious as neither U12 nor the similar but longer 6 wheel U16 had them originally. This item will be re-tooled. It is not certain whether a correct-pattern U12 will be produced or an LE7N coach of similar appearance. The existing stock will have to be 'bled out'. If the modeller is prepared to accept the 2" discrepancy in the eaves and the c2" discrepancy in the window height (the other inch seems to have been lost in the lower paneling) then the use of a full arc end will go some way to correcting the problem. It may also be possible to lower the body overall and raise the wheel bearings a combined total of 1mm to adjust rail to roof height to the prototypical 11' 2". The droplights may be filled with card or scrap brass.

#### S106 Diagram S17. Five compartment 3<sup>rd</sup>, 'Metro' LE4MW

The body is 3" (1mm) too high. This seems to have been distributed across the windows and paneling below the eaves and waist. Another problem presented is the width. This (and to an extent the height issue) can be resolved by using the new Shire Metro ends (S143/144 Summer 2010) which offer the correct width, number of panels and ride height for these vehicles. The ride height is important as they were noticeably lower (at 11' 2¼" rail to roof) than contemporary LE7N coaches (11' 5¼") with which they were mixed in provincial service. The sides will be re-tooled in 2010 to the correct profile. Ends will be supplied with the kit,

#### S107 Diagram T59. Five Compartment Brake 3<sup>rd</sup>, 'Metro' LE4MW

Same comments as for S106 except that the new ends for this vehicle (supplied) will have windows, per the prototype. Re-tooling for late 2010.

#### S108 Diagram G20, Saloon. LE7N

The Shire sides are based on a photograph, figure 67 in J. Russels's *G W Coaches Pt. 1*, one of two types depicted on page 59, both clearly in departmental service. The diagram G20 'or thereabouts' is attributed to the other vehicle. shown in diagrams 65 & 66 on that page. In *Coaches Appendix Part 2* there are several drawings of saloons from pages 30 thro' 34. Figures 78 and 79 show six wheeled vehicles, identified as diagrams G19 and G20. These

have similar window patterns to the 'Shire' Saloon on page 59 of *G W Coaches Pt. 1*. Removal of the central axle later in life would not be inconsistent with observed GWR practice. The transverse gas cylinder might also correct be correct for a 6 wheel vehicle. However, on figure 67 of *G W Coaches Pt. 1* the lower and waist mouldings are uninterrupted between the outer door panels. (Vestigial marks can be seen suggesting, perhaps, that the mouldings have been altered). The Photo in *G W Coaches Pt. 1* is dated 1945 and Appendix 2 states that all G20's were condemned by 1939 and G19s by 1935. The Appendix has drawings rather than more reliable photographs. GWS at Didcot have restored a saloon to which Diag. G20 is attributed. It is mounted on a 6-wheel chassis but this has been obtained from a much later departmental van. The GWS team has restored the mouldings so the coach is pretty much in 'original' condition. Shire has thus decided to re-tool S108 to this earlier configuration and investigate the accuracy of supplying 'window' ends per the similar Diag. G19 - which was so equipped.

**S109** Mink (V6) Cattle Wagon conversion.

**S110** Wooden doors, alternate for V6 'Mink (iron)

**S111** Doors and decal for V6 Iron Mink Gunpowder Van conversion

*Note: There are width issues with the Ratio kit but this is, at least, an exhaustively researched area.*

**S112** **Diagram T20 Four compartment Brake Third. LA9N**

Comments for S105 apply. The drawing in *Russel Part 1* (page 37) is of a vehicle with a 6' 3" high body (solebar to gutter) and this discrepancy seems to have flowed from (or driven) windows of incorrect height and eaves panels of less than 9" depth. This is a nice etch and we will hold back on re-issuing it for the time being.

**S113** Coach ends. LE7N pattern.

These are in the process of being re-tooled. See separate note.

**S114** Coach ends LA9N pattern.

These had been de-listed but will be re-tooled along with S113. See separate note.

**S115** **Diagram R1 Four compartment first. LA9N**

This side is being withdrawn and replaced with an appropriate 'U' diagram LE7N vehicle. This will influence the decision on S105

**S121** **Diagram V2, Full brake. LA9N NEW summer 2010**

Short passenger brake, requires surgery to Ratio 610 base

This coach side was originally produced as a substitute for those supplies with the Colin Waite V2 brass kit. As it was necessary to provide ends also Shire investigated the possibility of creating a Ratio kit-bash 12' chassis for the vehicle, much in the same way that the S102 (W1) chassis needs to be modified. Additional surgery to axle-boxes and the addition of clasp brakes may also be necessary depending on the era modelled.

**S124** **Diagram T29 (ex F19 Slip) 3 compartment brake 3<sup>rd</sup>, LA9N. NEW late Autumn 2010**

This kit represents one of several late-phase variants of converted 6-wheel slip coaches. It is based on coach number 388, the vehicle that operated on the Brixham branch (amongst others) and has, typically for this diagram, the compartment nearest to the guards end converted to guard/luggage accommodation. The life of these vehicles was complex and may have involved several phases. It seems clear, for example, that Diagram U17 was an earlier 6 wheel composite version of this coach. The original vehicle is recorded as number 112, built 1876 and altered to a brake composite in 1882 and later to a 4 wheel composite then to a brake third in 1903. It was cascaded down to workmen's or departmental service in 1928 and condemned in 1929. We may do an 'original' version to Diag F19/U17.

**S126** **Diagram T49, Four compartment brake 3<sup>rd</sup>. LE7N NEW Autumn 2010**

This is the coach rebuilt by the GWS at Didcot in 2009/10. It has guard's projections at the end of the vehicle that makes for an unusual and distinctive profile. This will be the first new side offered by Shire for over a decade. Fits the Ratio 613 'long' under-frame and will include brake crank detail under the guards end per the prototype.