BROWN VEHICLES ON THE BURFORD BRANCH **- Martin Goodall**

'Siphon F' (Diagram O7)

In 1906, the GWR adopted a new style of construction for Milk Vans, replacing the open-slatted sides with a fully enclosed body, having louvred ventilators in the upper part of each side. The change also marked the abandonment of the 6-wheel underframe. The first vehicles, ordered on Lot 1124 in March 1906, were 40 feet long and were bogie-mounted. These were designated 'Siphon F' (Diagram O7).

The GWR built six Siphon Fs, numbered 1543 to 1548, whilst at the same time building 18 examples of a shorter 28'6" version of the same style of van, on Lot 1125, mounted on a 4-wheel underframe. The latter were designated 'Siphon C' (Diagram O8), and it was this design which was built in quantity, leaving the solitary lot of 40-foot vans as the sole representatives of Diagram O7.

The relative rarity of the Siphon Fs has not diminished their appeal as a subject for models, and the former availability of a plastic kit from N & K C Keyser greatly boosted their popularity with modellers. As with the Low Siphon I built earlier, I am willing to bet there are still quite a few of these kits lurking in dark cupboards up and down the land, still waiting to be turned into models.

I have never regarded dimensional accuracy as being all that important in model-making. I generally reckon that a model is acceptable if its linear dimensions are within, say, plus or minus 5% of the scale figure. This rule of thumb is useful in accommodating variations of a few millimetres in the length of rolling stock. For this reason, I was not particularly concerned about the precise length of the K's Siphon F kit. If it looks right, it is right – but there's the rub; the K's Siphon F did not look right. The problem lay in the apparent stretching of the centre panels on each side between the two inner pairs of doors, which produced a noticeable change in the angle of the diagonal framing.

I was aware of this before I bought the kit, and I ordered a third side from K's so that I could cut out and replace the offending panels. This has the result of shortening the vehicle by 6mm, but the 155mm length of the model is still within my 5% tolerance, and is preferable in my view to the irregular appearance of the unaltered sides.

I decide it would be best to make the necessary cuts in the centre of each pair of doors (*Figure 1*). This avoided cutting through the door hinges, and any slight mis-match between the parts when rejoined would be less noticeable where it coincided with the line where the two doors meet. A sharp trimming knife proved to be adequate for this operation, without having to resort to the use of a saw. I found it best to deal with the slight cleaning up of the cuts afterwards by gentle scraping with the edge of a knife blade, rather than with files.

Most of my models have an 'A' side and a 'B' side – not that the 'A' side is ever perfect, but it is less imperfect than the other side (!) In the case of this model, the second side is very much "D-minus'", so much so that I did not even bother to paint or letter that side or to add any details, such as door handles and hand grabs. The problem arose from my initial re-assembly of the sides, when I added some fairly substantial styrene sheet backing to reinforce the joints. The rejoined sides were put aside to set hard – for approximately 15 years. During

this time, they acquired a fearsome warp. In fact, one of the reasons for neglecting this project for so long was that the warp made itself apparent fairly soon, and it was this which put me off further work on the vehicle.

Eventually, I got round to tackling the problem and, after applying a fair amount of solvent, I was able to prise the styrene sheet backing off the mouldings and separate them into their component sections. One of these, however, was still warped, and so I hit on the bright idea of clamping it to a metal plate and pouring boiling water on it. This worked perfectly – except for one snag; the G-clamp was screwed up rather too tight, so that when the boiling water was applied, the area of the moulding immediately under the clamp was distorted. This affected both the louvres and the lower body framing, and effectively ruined the appearance of that side of the model. Having no more spare side mouldings (bearing in mind that I had already used part of the spare side to provide the replacement panel on the 'A' side), I had the choice of abandoning the model or completing it with one very sub-standard side. On many layouts, including my own, you always see the rolling stock from the same side, and you do not even catch a glimpse of the other side; so I decided I could live with the problem, and carried on with the assembly of the model.

At this point you may be wondering how you can tackle the problem of the widened central panel when you have only a single kit, and no spare side. If you are prepared to take the same approach as me, and just treat the 'B' side of the model as a blank back, then you could substitute a piece of plain styrene sheet for that side of the vehicle, and use the second side to provide the panel you need to replace the central panel on the 'A' side. That is what I would do if I were tackling the project again without a spare side. No doubt there are many people who simply could not bring themselves to do this, but I am inclined to take an increasingly cavalier attitude towards such matters. After all, film-makers and theatre designers do this sort of thing all the time, so why shouldn't we?

As I have explained in previous articles, I am no enthusiast for adding fine detail to models, but there were one or two minor alterations which I found it worthwhile to make to this model. I generally leave moulded door handles and hand grabs in place on plastic models, but in this case they really did not capture the appearance of the prototype items, so they were carefully pared off with a sharp craft knife, and holes were drilled No.76 to take etched or turned door handles and brass wire hand grabs. The door handles were left off until after painting, but the wire hand grabs were added at this stage, as they were to be painted the same colour as the vehicle, rather than being left as bare brass.

In order to avoid staff getting trapped inside the van with the doors closed, the GWR provided a hand hole above each door handle to enable staff to release themselves from inside the van. This feature was reproduced by drilling holes above the door handles and opening these out to a rectangular shape with a square needle file.

I did not like the appearance of the solebars and footboards, which were moulded integrally with the sides, so these were cut off. The floor from the kit was shortened to fit the slightly reduced length of the vehicle and was turned upside down. Without any strengthening behind the joints (to avoid any repetition of the warping problem), the assembled sides were a bit flimsy, but this no longer mattered after the body had been assembled round the floor, with a false roof added for extra strength.

Replacement solebars and footboards were made up from styrene strip, 30-thou thick for the solebar itself, 10-thou for the lower flange of the solebar and 20-thou for the footboards.

The cast bogies supplied with the kit were put in my spares box (which is more of a 'black museum', really), and were replaced by MJT torsion bar suspension units (2222 for the 9-foot wheelbase), with cast American bogies sides (MJT 2231).

The shortening of the vehicle which had resulted from the alteration of the sides required some adjustment to the location of the bogies. The distance from the headstock to the outer wheel of each bogie was 3'2½", and I positioned the bogie centres so as to preserve this dimension. 30-thou styrene sheet was used to pack the central recess in the floor where the bogies were to be mounted. Slight filing of the bolsters was necessary to get the buffer height correct. Due possibly to slight inaccuracy in my fitting of the floor to the body, it also proved necessary to add a piece of 12-thou brass from the etch on one side of the bolster at the 'fixed' end to level up the body and prevent any wobbling motion when the vehicle is running.

A minor cosmetic addition was made to the bogies by gluing etched footsteps to the outer ends of the bogie sides. I cannot recall the origin of these etches; they were spares and probably came from Mallard. Suitable etched steps are now available from the Frogmore Confederacy.

The moulded underframe fittings supplied by K's were frankly a bit of a joke; so a Mallard twin gas tank casting (441 011) was mounted cross-wise under the floor. As a result of the overall wheelbase of the vehicle having been shortened, the gas tanks had to be located slightly inboard of their proper position. The space available was a bit tight, as the gas cylinders could not be allowed to impinge too far into the area where the brake levers were to be mounted. The gas cylinders were therefore fixed so that when the adjoining bogie was turned to its maximum limit on a slightly less than 3-foot radius curve, the end of the bogie just touched the cylinder. Gas feed pipes were then bent up from wire and glued in place over the ends of the cylinders (secured to the insides of the solebars).

The brake gear now had to be added amidships, comprising a cast brake cylinder, a pair of V-hangers, with cross-rod, and a further pair of 'odd-leg' V-hangers for the brake levers, also with a cross-rod. My notes do not reveal the precise origin of these fittings, but I believe they may have been supplied by Tony Hammond. I tend to keep items like this in stock, and select what I need as I build models, hence my slightly vague recollection as to their precise provenance. The brake gear was completed with a representation of the pull-rods going to the bogies, made from wire, which disappear inside the bogies and which in practice have not been fixed at that end, so as not to interfere with the movement of the bogies.

MJT 2ft passenger-type buffer housings (2308S) were glued in the headstocks, into which large sprung buffer heads were fitted. Vacuum and steam hoses were both of the suspended type (so as not to foul the end-opening doors). Like other fittings, they were already in stock, and in this case were probably from Dart Castings.

The kit roof had to be slightly shortened to fit the shortened body of the vehicle. An equal amount of plastic was taken off each end, so as to preserve the symmetry of the rain strips. These were 'beefed up' with the addition of 10-thou by 30-thou styrene strip. The moulded lamp tops were removed from the roof and cast gas pots were substituted. Finally, the gas

pipes were modelled using brass wire, not forgetting the small styrene strip mounting pads. A published photo in one of Russell's books showed the arrangement of the piping. This is a detail which is well worth including in a model, as we tend to look at our models from above, which makes the absence of roof details rather obvious.

This vehicle was sprayed brown on the 'A' side only, when the whole batch of Brown Vehicles was painted. I decided to finish this model in the post-1934 livery, and so the ends were painted black (as explained previously). The reason for choosing the post-1934 livery (apart from the fact that I rather like the 'shirt button' totem) was that it is impossible to get the standard size of 16-inch 'G W' transfers onto the lower panels of the vehicle. The GWR had to paint this lettering in a sub-standard size to make it fit. I had some difficulty in finding out exactly how the numbering and lettering was arranged on the side of these vehicles, and in particular whether the 'Siphon F' branding was actually carried. In the end I decided to leave this out, not least because it could not be fitted on the model.

After painting and a spray of Dark Earth weathering, a consignment label was stuck to the label clip, and a representation of the spring steel clip was pencilled in. Finally, turned brass door handles from Blacksmith Models were glued in place, and Smith's Fittings screw-type couplings were fitted in the headstocks.