

I am a retired Architect and was brought up within sight (almost) and sound of Oakworth station on the Keighley and Worth Valley Railway. My first railway journeys were made in my pram (Silver Cross in British racing green – a near match for BR loco green) in the guards van on that line. One of my earliest memories is declining the chance to “cab” one of the Ivatt Class 2 tank engines on the pull/push trains. I didn’t like the look of what seemed to a toddler to be enormous flames coming from the firebox door. My first model railway was a Triang TT set that outgrew my bedroom and moved into a small garden shed. As a teenager I became involved in the KWVR and spent many a happy day getting dirty and as a loco cleaner where as a junior member of the loco crew you usually got a chance to wield the shovel. The firebox door didn’t seem as terrifying then.

College, marriage, and a growing family curtailed my time in active steam preservation, but a return to my home village of Oakworth led to my joining Keighley Model Railway Club in 1980.

It was not long after that I was invited to join the club’s 7mm group who were then exhibiting their Leeds Road layout. I had been harbouring an interest in 7mm narrow gauge for a while and was able to put this into practice with the group’s next layout Ravensbeck with which I was involved in from the beginning. It was then that my interest in standard gauge wagons developed, particularly after the narrow gauge element of Ravensbeck was removed to create a bigger fiddle yard. We did actually run a proper narrow gauge demolition train at the last exhibition in that form. As a group we then went on to develop and build Runswick Bay, and more recently Coverdale.

I am currently building for myself a small 7mm scale diorama type layout that combines standard gauge, two-feet (14mm gauge), and two feet six inches (a compromise at 18mm gauge) elements.

The Keighley 7mm Group standards are 32mm gauge finescale and my first wagons were pre-grouping types built from plastic kits. I then graduated to white metal kits and took the plunge and started scratch building, the latter using various combinations of sheet metal, thin plywood, and plastic. More recently I have been building kits from laser-cut plywood and laser-cut MDF. I have always wanted to have a late BR steam era freight train and my recent kit building has been looking to achieve this. I have also been dipping my toe into the pool that is 7mm scale ready-to-run.

A few of my recent kit-building projects are shown below:



I was recently invited to contribute an article on wagon kit building to be included in a new publication by the Gauge 0 Guild. This was to serve as part of an introduction to 7mm scale modelling. The article was to be short and concise and no more than two pages. I decided that a brake van would be an appropriate example, as it should cover most techniques involved in plastic wagon kit building. The article outlines my basic approach and methodology and the text and photographs are appended as follows:

The model is built from a Slater's plastic kit for an LMS/BR 20 ton Goods Brake Van. The kit allows the modeller to build a number of different versions – I chose a BR built version to Diagram 1/505, one of a vacuum piped batch built at Derby in 1949. It is worth researching your chosen model before starting, especially through photographs, as although modern plastic kits can be quite comprehensive some items such as not included or mentioned in instructions. It is also vital to READ THE INSTRUCTIONS and trial fit parts together before final assembly. Plastic kits can be built using common craft tools. A decent knife is recommended – I use a scalpel with a 10A blade, and if you are planning to build a few plastic items, a sprue cutter can be very useful. I use a liquid polystyrene cement applied with a fine brush and generally attach metal parts with superglue, the latter applied with a cocktail stick or fine wire. I also use UHU, particularly when fixing a roof where there is an interior but be warned that it has a tendency to string so should be used with care. Your finished model should be level, and square so a flat surface such as glass and small set squares are recommended.

The following sources were used for reference:

"British Railways Wagons-The first half million" by Don Rowland.

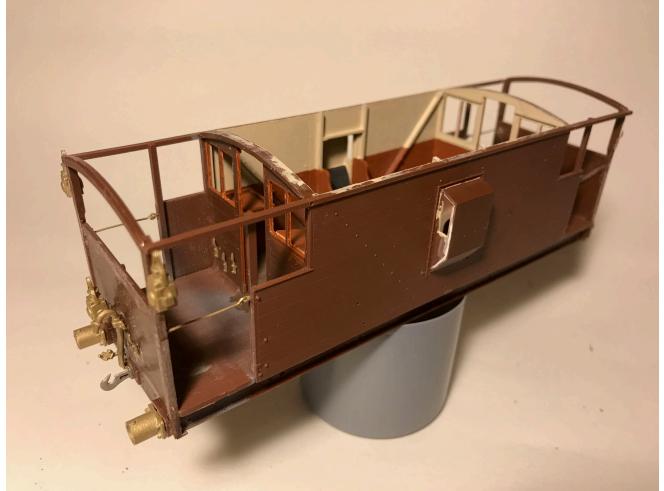
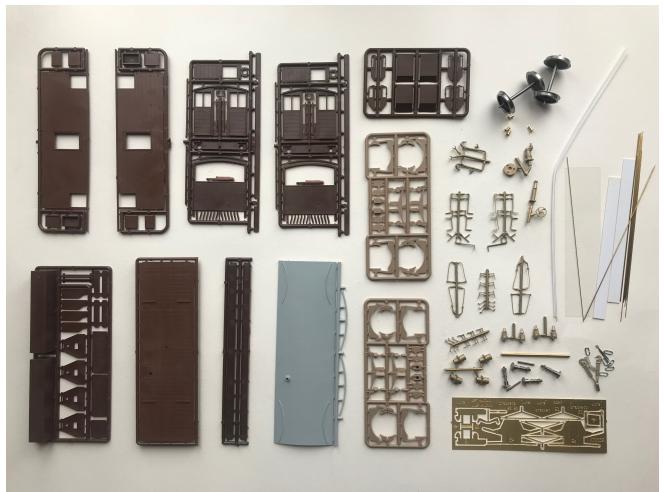
"An Illustrated History of LMS Wagons" by R. J. Essery.

Paul Bartlett's website – paulbartlett.zenfolio.com – a really useful source of rolling stock photos.

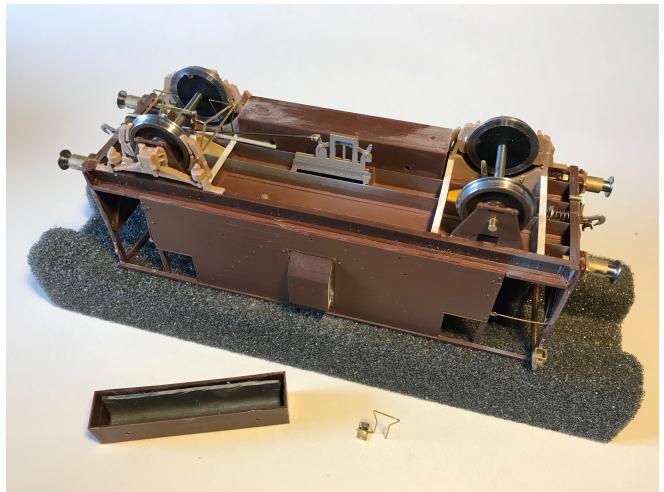
The kit as supplied is a mixture of plastic, etched brass, cast brass parts, brass wire, and plastic strip, with steel wheels and brass bearings. The axle assembly is rigid but Slater's do supply compensation units. I chose to model it rigid – providing care is taken to achieve a level and square underframe, I have had no problems with long wheelbase rolling stock. The vacuum pipes supplied are particular to the prototype but ordinary three link couplings are supplied. I chose to fit Slater's screw couplings

I decided to model the interior and most parts are provided. I added the framing around the duckets and the desk legs. The sides and ends were positioned using a square edged aluminium block to ensure a good fit. Internally BR brake vans were painted the main body colour below 3' 6" and stone above and it is easier to paint and weather the interior before the second side is fixed. There should be the van number over the duckets but I chose to omit it. I wanted open doors and added brass wire "hinges" to fit the doors later. I find it easier to fit coupling hooks before fixing the headstock. The actual couplings are fitted later but make sure items such as vacuum pipes do not get in the way.

I find it easier to drill and fit the veranda safety bars before fitting the outer ends. I fit the cast brass parts and then apply superglue on a cocktail stick, quickly mopping up the excess with tissue and when dry removing any residue with a small fibreglass brush. I soldered the tail lamps to the brackets before fixing as I felt this would be more durable.



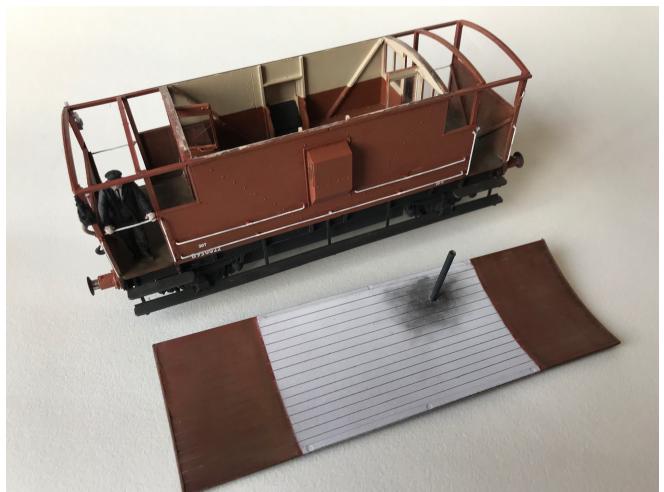
Some form of support with a bit of give to sit the model on is beneficial – I use a PECO 00/H0 loco cradle. When fitting the wheelsets, I fix three “W irons” solid, ensuring the liquid cement has hardened, and then tack the fourth until I am sure that all is level using a flat piece of glass then fix solid. I pack out the wheel bearings from the axle guards with two fibre washers to ensure that the wheelsets are square to each other. Some form of weighting is necessary. I use lead sheet and the ballast pockets are an ideal location. Ventilation holes are recommended if gluing anything that results in a sealed space. I added strapping to the brake gear pull rods from brass wire.



A jig is provided to assemble the horizontal handrails and brackets. I found it easier to glue the etch to a piece of wood, drill out the holes and hold the brass wire in place with blu tack or similar. I solder the wire to the brackets, fit the assembly and apply superglue in-situ as before. The interior is then masked with tape prior to painting.



The main body is sprayed with Halfords Red Plastic Primer (I use grey for unfitted wagons). The body is then masked with tape and the underframe sprayed with weathered black from a spray can. The main body colour is then brush painted in enamel using a large flat brush followed by the detail areas. The plastic glazing is then fixed using jeweller's glazing cement. The glazing to the duckets is fixed to the outside and I paint around the edge using a long thin brush in body colour to simulate the frame. The roof is now fixed. The guard is a Modelu figure primed and then painted using cheap craft shop acrylics paints, blending the paint when still wet.



Weathering is carried out with reference to photographs of the prototype. I use a variety of enamels, enamel washes, and powders. I generally apply the paint or wash and then remove most of it with a tissue or cotton bud, always wiping downwards. I let this dry and then repeat until the desired effect is achieved. I also employ dry brushing. I try not to hurry the weathering process and like to sit back and appraise each stage. The go-to reference on weathering is “The Art of Weathering” by Martyn Welch and there are many fine examples on his website – martyntwelch.com

