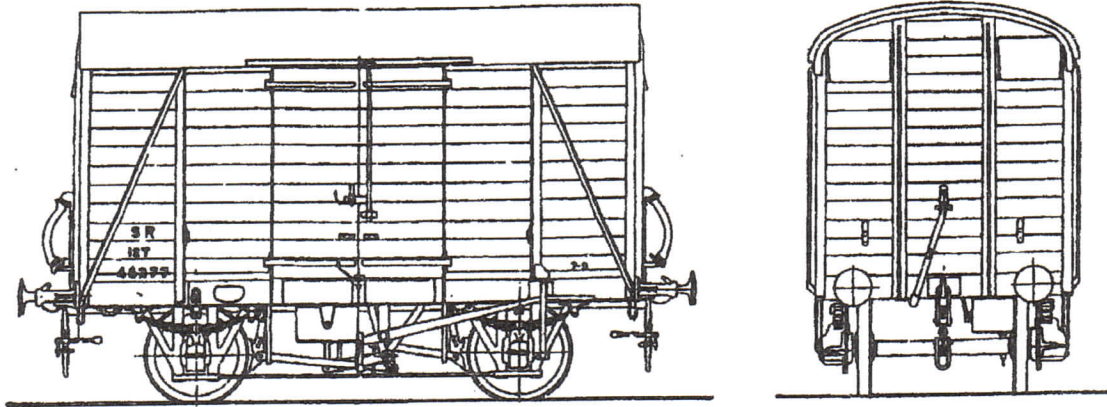


N GAUGE SOCIETY WAGON PROJECT No. 21
SOUTHERN RAILWAY/B.R.S.R. 12 TON BOX VANS - A TWIN KIT PACK



HISTORICAL NOTES

Production of the 'standard' Southern goods van, with its unusual and distinctive elliptical roof shape, began in 1929 and continued with little change in general appearance until production ceased in 1951.

Initial vans used the standard R.C.H 9ft underframe, but from 1936 a 10ft underframe was used and it is in this form our models are represented.

Whilst the general body shape remained unchanged, three distinct and different methods of construction were used. From 1936-39, the vans were built using even width 6" planking. 1939-45 saw the introduction of alternate pairs of 5" and 3 5/8 " width planking, and from 1945-51 came a final change to plywood construction.

GENERAL NOTES

Whilst referred to as a 'twin kit pack' which enables the modeller to complete two vans from the three alternative types, there are in fact all the relevant parts to build the body of the third van with only chassis and buffers missing. The decision to offer the kit in this fashion was made purely on the ground of cost. If you do wish to build the third van, the additional parts required to complete it are carried as standard items in the Society shop.

ASSEMBLY INSTRUCTIONS - TOOLS

This kit is very straightforward to assemble, requiring only a minimum of tools as follows:

- 1) A sharp modelling knife to remove parts from their carrying sprues and general cleaning up.
- 2) A couple of needle files also for cleaning up parts.
- 3) A 0.75mm drill bit and pin vice to clear holes in the buffer housings to accept the turned brass buffer heads/shanks provided.
- 4) A razor saw and preferable, though not vital, an engineer's square or similar for cutting the roof to length.

- 5) A sheet of fine grade emery paper for final cleaning up and fitting of parts.
- 6) Liquid polystyrene cement (Humbrol or Daywat polystyrene recommended) and a fine paint brush to assemble parts.
- 7) Thin grade cyano acrylate (super) glue to secure buffer heads/shanks in their housings.

ASSEMBLY INSTRUCTIONS - GENERAL

As with all kit construction, it is vital to read carefully the following notes on the suggested order of assembly. Ensure you understand fully where each part fits and refer frequently to the drawings and diagrams. If followed carefully and time taken during assembly to allow glued joints to fully harden, you will end up with fine models.

Ensure parts are cut from the sprues rather than twisting them off and that these attachment points, together with any mould part lines or flash, are removed using the files and emery paper before construction begins.

SUGGESTED ORDER OF ASSEMBLY

With three body types to choose from, we strongly suggest you only remove the parts relevant to one body type at a time.

Take one of the ends (1) and attach to one of the sides (2). Check the side is the right way round, i.e. with the stanchions projecting beyond the sides at the bottom (see Fig. 1).

Repeat this procedure for the opposite end (3) and side (4). Again ensure parts are correctly placed. Once done, the two sides and end pairs may be glued together. With all glued joints still soft, now is the time to carefully make any final adjustments necessary to ensure all is square and true.

The roof (5) may next be cut to length. Cuttings guides will be found marked on the underside of the roof which, once separated, should have the cut end dressed with a file to remove any burring. When fully satisfied, glue in place ensuring equal overhang to all sides.

The floor (6) may next be tried for fit. It is likely this will need slimming down, which is best achieved by rubbing the edges of the floor over a piece of emery paper, frequently trying for fit until it slips into the van body to rest on the location ledges inside the van ends and with the underside of the floor, flush with the bottom of the sides.

When satisfied with the fit of the floor, remove it and drill a ventilation hole in the centre (this to allow excess glue to evaporate harmlessly). Next secure the ballast weight (X) found in the chassis kit to the top side of the van, ensuring it is centrally placed. We suggest evostick or similar for this job because once the model is finished, the weight will be inaccessible should it come loose!

The van floor may now be glued in place.

FIG 4 - COUPLING MODIFICATIONS



To ease vertical coupling remove 1mm of plastic (shown hatched) from the top of the coupling shank

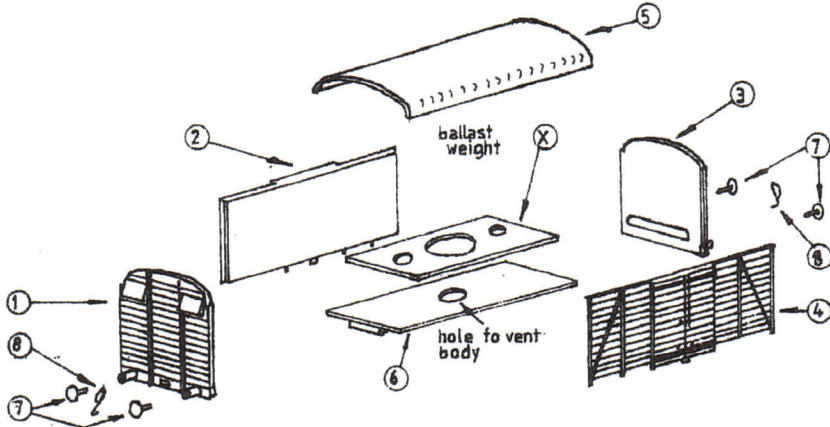


FIG. 1 - EXPLODED DRAWING INDICATING THE FIT OF PARTS NOTE WHILST THE DRAWING SHOWS THE EQUAL PLANKED VERSION, ASSEMBLY METHODS ARE IDENTICAL FOR ALL THREE VAN BODY TYPES



FIG. 2 - SHAPING THE VACUUM PIPE

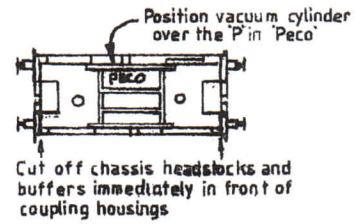
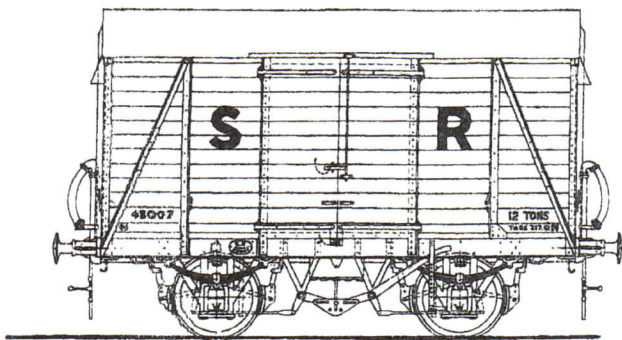
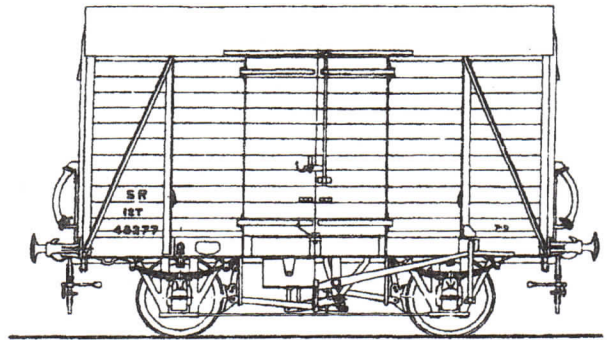


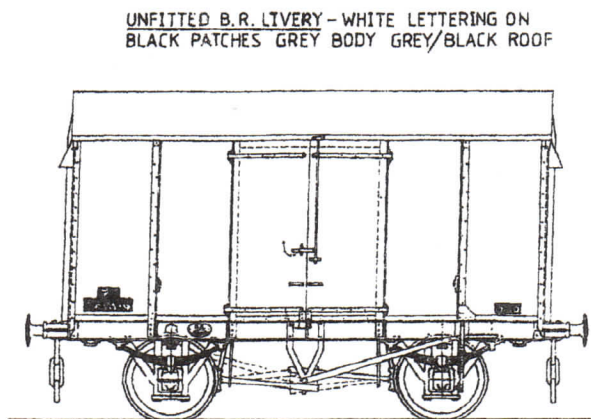
FIG. 3 - MODIFICATIONS TO CHASSIS



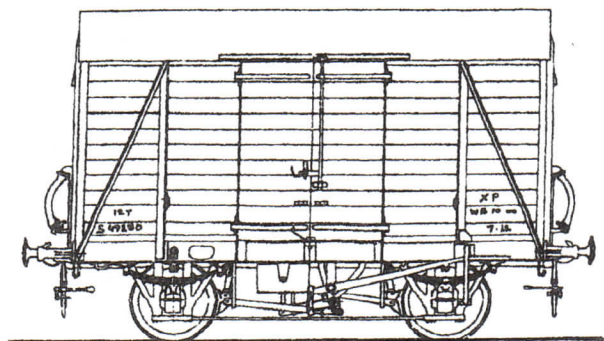
EARLY SOUTHERN LIVERY - WHITE LETTERING ON AN UMBER BROWN BODY & WHITE ROOF



LATER SOUTHERN LIVERY - WHITE LETTERING ON AN UMBER BROWN BODY & WHITE ROOF



UNFITTED B.R. LIVERY - WHITE LETTERING ON BLACK PATCHES GREY BODY GREY/BLACK ROOF



FITTED B.R. LIVERY - WHITE LETTERING ON BAUXITE BODY WITH A GREY/BLACK ROOF

The buffer housings require opening out to accept the brass buffer heads provided. This should be done using an 0.75mm drill held in a pin vice or at low speed using a mini drill. Take your time and use a sharp drill so avoiding damage to the housings. Once these holes are opened out, the buffers (7) may be secured in position with a spot of superglue placed on the shank and pushed into place, ensuring equal projection of the buffers from their housings in all cases.

Vacuum pipes (8) may next be fitted, if required. **NOTE** - The pipe upstand on these vans is fixed at a slight angle, commencing from just inside the left hand end stanchion at the bottom to the centre line of the van end at the top. This may be represented on the model by gripping the 'pipe upstand' in a pair of pliers and twisting the 'hose' until the correct angle is achieved. When satisfied, glue in position (see Fig. 2).

The model superstructure is now complete and if your patience allows, we recommend the model to be painted, lettered and varnished prior to fitting the chassis, purely because it is easier to do at this stage (refer to notes on painting, livery and numbers).

THE CHASSIS

As supplied, this model is intended to utilise a Peco loft wheelbase steel solebar chassis for which only minor modification is required to fit, as follows.

- 1) The two rings of plastic found on the top of the chassis around the body/chassis fixing holes, together with the mould injection pip found in the centre of the chassis, must be removed to leave a smooth flat surface.
- 2) The moulded headstocks and buffers must be removed by cutting immediately behind the headstocks (see Fig. 3).

Once done, try the chassis for fit and adjust as necessary until it slips easily into place without forcing.

Next place the couplings in their housings (pins pointing down) and then replace the body on the chassis to check the couplings lay horizontal and that there is sufficient lifting action to allow coupling/uncoupling to be achieved easily. Some modification to the back buffing face of the coupling may be required to achieve this (see Fig. 4).

When fully satisfied, the chassis may be glued in position.

The vacuum cylinder (9) may be glued in position, if required, and this should be positioned over the 'P' in the Peco wording found on the underside of the chassis.

Finally, pop the wheelsets in place and your van is ready to enter the paint shop.

PAINTING

Prior to painting, the body should be gently scrubbed in warm, soapy water and left to dry thoroughly.

Body colour may next be applied in two or three thinly applied coats.

The roof may then be painted again with two or three coats.

Lastly, paint buffer heads and vacuum pipes, if fitted, in suitable colours.

Lettering may then be applied, the designated Modelmaster sheet for Southern vans is highly recommended.

Finally, paintwork and lettering should be protected with two thin layers of matt varnish.

LIVERY

Early Southern - Body umber brown. Roof - white when new, but quickly changing to black through all shades of grey in use! Underframe and buffers black. Lettering - white (see drawing for position).

Late Southern - Painting as above. Lettering - white (see drawing for position).

British Railways Unfitted Body - grey. Roof - dark grey. Underframe and Buffers - black. Lettering - white on black patches (see drawing).

British Railways Fitted Body - bauxite, Roof - grey, Underframe and Buffers - black. Lettering - white (see drawing).

A selection of numbers correct for each of the three body types is listed below, but if required a **full** list of numbers may be obtained from the Society shop in return for a stamped addressed envelope.

EVEN PLANKED

47001-47100 (V.F.)
48277-48322 (V.F.)
49140-49167 (V.F.)
49169-49230 (V.F.)

UNEVEN PLANKED

49427-49951 (V.F.)
64921-65280 (V.F.)
44719-44988 (H.B.)
54001-54250 (H.B.)

PLYWOOD

50901-51000 (H.B.)
51351-51400 (H.B.)
54251-54500 (H.B.)
56501-57010 (H.B.)

(V.F. - All Vacuum Fitted

H.B. - Handbrake to 1956, vacuum braked thereafter)

And that's it. We do hope you have enjoyed building the models in this kit, and that having achieved a great success, you may wish to try others in our ever expanding range.

Good Luck!