

MILL LANE SIDINGS

MLS058 Hydrochloric Acid Jar Wagon

Requires Peco NR-119 9ft Wheelbase wooden type solebars chassis kit to complete

The Prototype

Two of these unusual wagons were built by the prolific wagon building company Charles Roberts & Co Ltd in 1909 for Chance & Hunt Ltd of Oldbury. The 12 ton capacity wagons were numbered 114 and 115. They were built specifically for the conveyance of hydrochloric acid; not surprisingly, this is a dangerous substance, and it was carried in eight earthenware jars, the lids of which look like hatches in the top of the wagon. Basically, these wagons are a wooden box in which to contain the jars. At first glance, they look like a standard coal wagon but they are slightly taller than usual and, of course, there are no doors in the sides or end. For reference, see 'Private Owner Wagons Volume Two' by Bill Hudson, page 90.

General Notes On Construction

Only a few basic tools are required . a sharp craft knife, some wet 'n' dry sandpaper and tweezers.

Most glues such as PVA, epoxy (e.g. Araldite) or superglue will join the main parts, while a liquid polystyrene glue such as Plastic Weld (intended for ABS, Perspex, etc.,) can be used on the end stanchions.

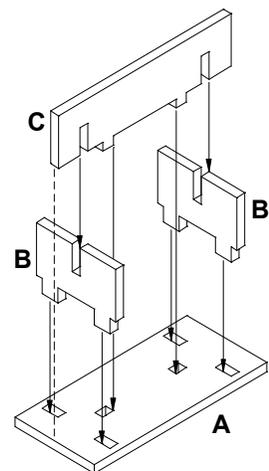
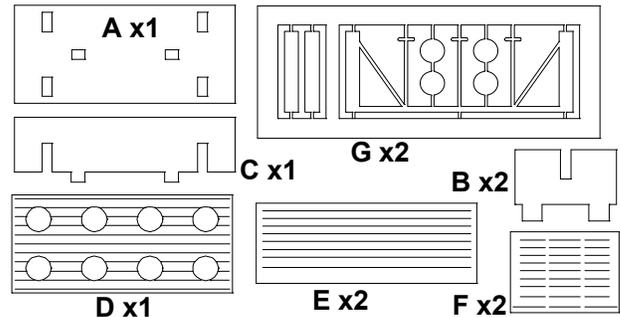
The strapping, corner plates and hatches (part G) are cut from self-adhesive card. Carefully push out any waste between the shape that may be present but leave the strapping on the fret as this makes it easier to remove the self-adhesive backing and to position over the body. When removing the self-adhesive backing, start from one corner and draw it off very carefully to avoid damaging the part. The adhesive will stick almost instantly, so there is only a little room for adjustment.

Please note that some details are omitted from the drawings for simplicity, particularly the chassis but this does not mean that the details should be removed from the model.

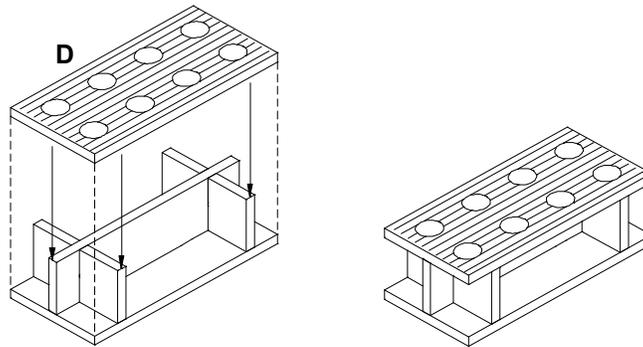
Constructing The Wagon Body

1. Build the internal structure for the wagon. Glue both part B into part A and then glue part C to parts B and A. Note that the tabs on part B that go through part A will protrude underneath by about 2mm and that this is intentional.

Parts List

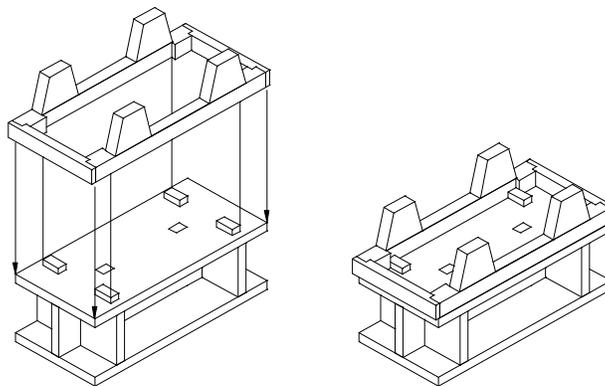


2. Glue part D to the top of the internal structure. There are no tabs to locate this part so make sure that the edges of part D are square with the edges of parts B and C.

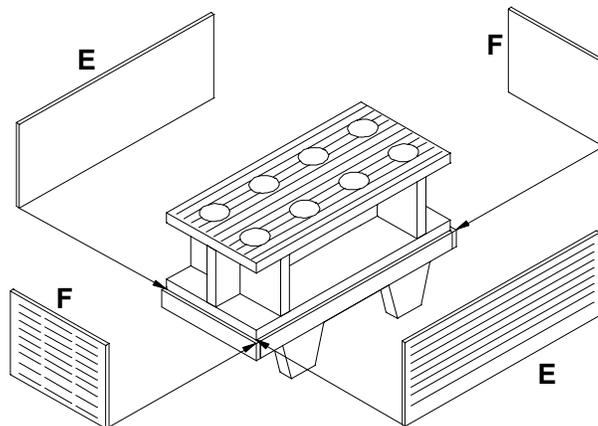


3. Construct the Peco NR-119 9ft wheelbase wooden type solebars chassis kit as per the instructions included in the kit apart from the following. The prototype wagons only had brake shoes on one side only so omit one of the part that contains the brakes. It is advisable to wait until the kit is completed and painted before adding the coupling pockets with their couplers.

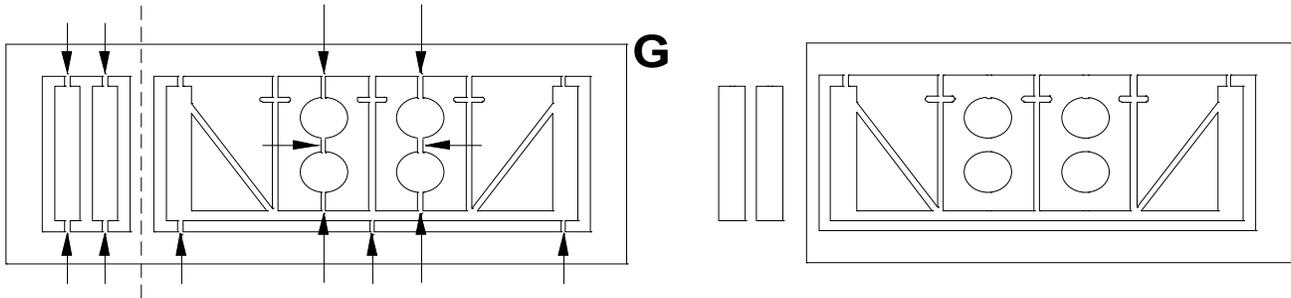
4. Glue the chassis under the wagon body. Note that the four protruding tabs from part B should locate the chassis centrally; if the fit is too tight, use a file to remove a little material from either the face of the tabs or the chassis itself until it fits.



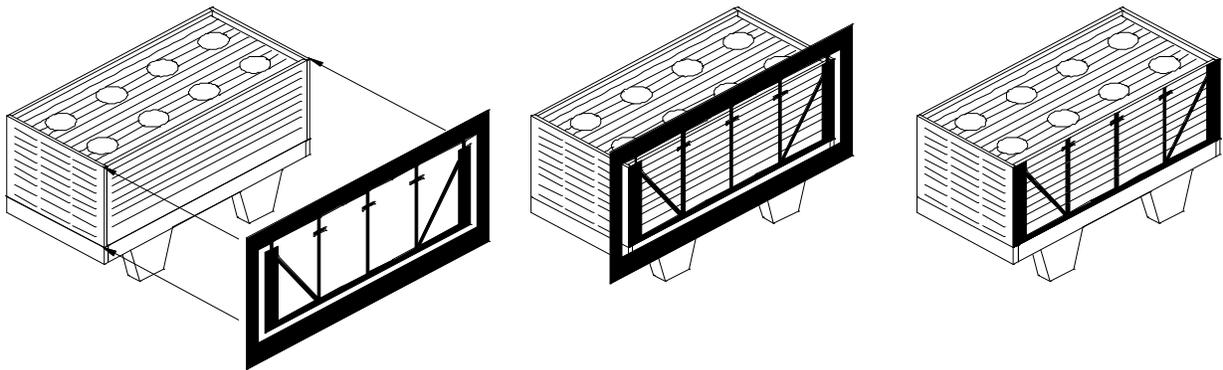
5. Glue the sides (part E) to the wagon body. Make sure that the sides are the correct way up - the bottom has the wide gap between the plank lines. The sides sit on the ledge where the top of the chassis protrudes fractionally from under the wagon body. Make sure that the edges of the sides are flush with the ends of the internal structure of the wagon.



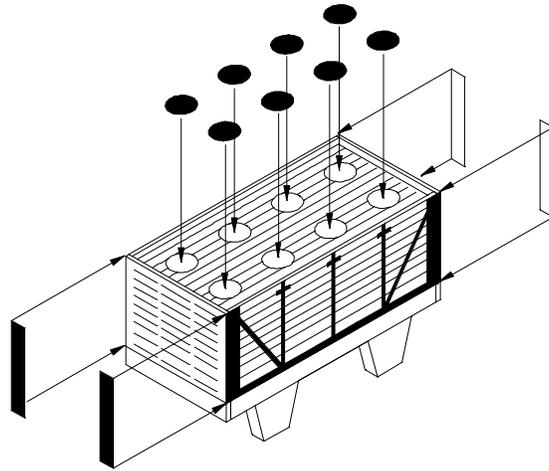
6. Glue the ends (part F) to the wagon body. Make sure that the ends are the correct way up - the bottom line is slightly wider. The ends sit on the ledge where the top of the chassis protrudes fractionally from under the wagon body. Make sure that the edges of the ends are flush with the edges of the sides.
7. Part G contains a number of separate parts as follows. On the left are two rectangles which will form the corner plates on the ends. Cut off this section of part G as denoted by the dotted line then separate the parts by cutting off the tabs denoted by the arrows. The main section contains four circles which will form the hatches on the top of the wagon; remove these by cutting off the tabs denoted by the arrows. Finally, remove the tabs at the bottom of the strapping as denoted by the arrows.



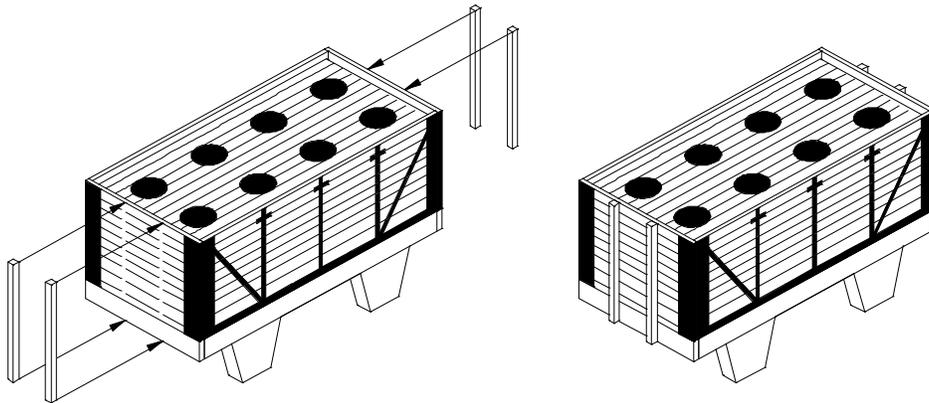
8. Fit the strapping pieces to the sides. Carefully remove the backing from the strapping itself; leave the backing on the supporting fret as this makes it easier to handle. Stick the strapping to the sides so that the bottom line is flush with the bottom of the sides and the ends are flush with the wagon ends. Several dry runs are recommended before actually removing the backing.
9. Once the strapping has been stuck to the body, use a sharp knife to cut the outer edges of the tabs at the top where they meet the fret; this puts less stress on the parts that are stuck to the body. Cut the tabs on a hard surface such as a piece of plastic or glass; the rubber self-healing type mats are surprisingly soft and this can pull the parts off the body before the cut is completed. Finally, cut the remaining part of the tabs flush with the top of the side.



10. Add the second half of the corner plates to the ends of the wagon body (remove the backing paper and stick them on). There may be a slight gap between the two halves of the corner plates and this can be filled with a bead of glue applied using a cocktail stick. Add the eight hatch pieces to the top, again removing the backing paper and sticking them into the circles etched on the top piece.



11. The end stanchions are made from the piece of 0.75mm square plastic section included in the kit. Cut this into four pieces approximately 15mm in length and glue them onto the ends. The etch lines for the planking on the ends have been omitted where the end stanchions will go and this acts as a guide for where to fit them.



Transfers

12. The transfers are full body-side transfers designed to fit directly to the wagon side. Paint the side of the wagon white as the transfers are printed on to clear transfer film so that the white on the body shows through where the white lettering is. A coat of gloss paint on the sides will help the transfers to adhere better.
13. Soak the transfers in warm water for 30 seconds and then use a cocktail stick to carefully pull them off the backing paper onto the wagon.
14. Use a cloth to gently dab off any excess water. Use a transfer setting solution such as Micro Sol so that the wagon body detail shows through the transfer. If the transfer does not sit well around some of the raised detail such as the strapping, it is possible to cut the transfer after it has dried so that it lies flatter and touch up with black paint any white that shows as a result.
15. Once the transfer and any transfer setting solution have thoroughly dried, seal the transfer to protect it using matt varnish.

Painting

16. The remainder of the wagon (top, ends and chassis) should be painted black.