#### **End details**

Many of these vans had a small trap door at the top of one end. In most cases this door was located furthest from the handbrake, but at least HD50, 51, 67, 86 and 109 had the door at the handbrake end. Parts to represent this detail are included on the etched brass fret.

With all the text on the etched brass panel visible. tin the face of the hinge section. Now fold the panel over 180°, with the half etched line on the outside of the fold, so that the hinges can be soldered to the hatch. Refer to figure 4. Separate the assembled trapdoor from the etched fret, taking care that a section of each hinge projects above the door. Select the end where the door is to be fitted and scrape about 0.3mm from the edge of the top louvre in between the two upright posts.

Secure the trapdoor to the end with ACC. A hole has been etched in the door, so use this hole as a locator and drill through this hole and into the end

Tin the back face of the hinges Scrape this area of the top louvre to allow the trandoor to sit flat Solder hinges to trapdoor. Figure 4.

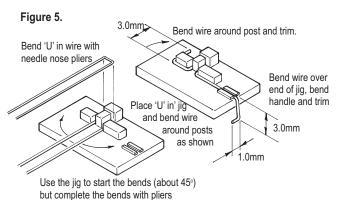
with a 0.35mm or #80 drill. Install the stem of the bracket (4) in this hole and secure it with ACC. Two spares of this part are supplied, in case one or two are lost to the carpet monster.

Form two uncoupling levers from 0.3mm wire, as shown on figure 5. Install the uncoupling levers on the ends of the wagon, secured in the moulded brackets with ACC or little cubes of 0.015" polystyrene (not included).

Install an etched handrail (3) in each pair of holes moulded in the corner pillars. To attach the handrails, apply a small amount of ACC on the end of a pin to each hole and apply the handrails with fine tweezers.

### Handbrake detail

Bend the feet of the brake rigging etch (6) at 90°. For the common version it will also be necessary to make slight adjustments to the etching at the positions marked with a ' on figure 2, so that the hole in the centre lines up with the holes in the etched supports (2). Secure the feet to the floor with ACC, located by the small ridges moulded between the centre sills as a guide. Thread the length of 0.7mm wire through the plummer



block or vee hanger on the handbrake side, through the etched supports and the crank in the centre of the brake rigging. For the common version this shaft finishes flush with the second support, but for wagons numbered from 83 to 99 it should extend across the wagon, to end flush with the outer face of the vee hanger on the second side sill.

Form the handbrake ratchet (7) to shape, as shown on figure 2. Secure the ratchet to the underframe with ACC, locating the bracket at the top between the two raised dots moulded on the floor and positioning the end of the brace in the recess moulded in the back of the side sill.

Bend a loop in the end of the brake lever (8), with the half etched lines inside the bends. Form shallow bends at the half etched marks on the lever, to form a shape as shown on figure 2. Thread the lever through the ratchet and position it over the 0.7mm cross shaft, along with two washers (5). Secure the parts with ACC or low melt solder and trim the wire flush with the face of the outer washer.

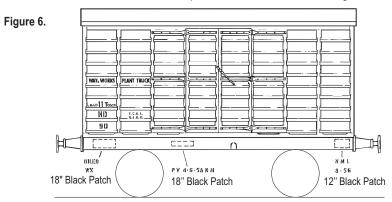
# Couplers

The kit is designed to use Kadee No5 or No58 couplers (not included). Assemble the couplers in their draft gear boxes and clip the ears off each side. Because this van is fitted with buffers it is also necessary to push the draft gear box beyond the face of the headstocks by 1mm. A piece of 0.040" square polystyrene strip (not included) can be cemented to the top of the draft gear box, directly behind the lip, to assist with spacing. If a screw is used to attach the draft gear box it will also be necessary to cement a small scrap of suitable sprue between the centre sills at each end, in order to extend the small block that must be drilled to accept the screw.

# Painting and Decals

The wagon should be painted overall VR wagon red with a matt black roof. We recommend Steam Era Models Wagon Red spraying enamel and a 50:50 mix of Humbrol 33, matt black, and Humbrol 29, matt dark earth, for the roof.

Paint a scale 9" white square on the bottom corner of each end on the hand brake side, as well as the bottom R/H corner of the hand brake side and position the decals as shown on figure 6.



NOTE: There was considerable variation in the placement of lettering on HD wagons and this diagram is representative only. HD vans of this type were numbered 37, 39, 40, 42, 44, 45, 50, 51, 56, 58, 63, 65, 66, 67, 68, 72, 75, 76, 79, 83, 84, 86-94, 97-99, 102, 103, 105, 106, 108-112,

# **To Apply Decals**

- 1. Trim the decals close to lettering to remove excess film.
- 2. Immerse in water for 10 to 15 seconds, then set aside on the model until the decal straightens out.
- 3. Slide the decal into position. If it is necessary to adjust the position, use a small brush that has been dipped in water.
- 4. Use a damp cloth to soak up excess water
- 5. Use a decal setting agent e.g. 'Solvaset' to assist the decals to snuggle down over raised detail such as rivets.
- 6. Apply a flat finish such as Humbrol Mattcote or Estapol Matt to hide the decal film and provide a uniform appearance.

Note: Decals adhere best to a gloss surface.



C/- P.O. Rhvll. Victoria, 3923.

## **VICTORIAN RAILWAYS WOODEN U VAN/HD PLANT TRUCK**

## **Prototype Notes**

During the years 1895-97 one hundred and sixty seven ventilated box vans, featuring wooden, louvred bodies were constructed by Newport Workshops and by contractors, The Braybrook Implement Co. and Robinson and Co. Intended for carriage of perishable goods they were coded U and numbered from 113 to 280, excluding 278. Auto' coupled steel underfarmes were fitted during the early 1930s, but by the 1950s the bodies, which had required a high level of maintenance, were deteriorating. 1953/54 saw 25 vans supply their underframes for use under P explosives vans then being constructed. Further P vans were built on the underframes of wooden U vans whose bodies had been condemned during 1958/59. Forty three of the remaining "Robinson pattern" U vans were recoded HD during 1957/58, for use as Way and Works Dep't Plant Trucks. They lasted in this capacity into the 1970s with steady attrition from 1971 to 1980. The last van to be withdrawn was probably HD105, which was taken off register in 1984. This van was in excellent condition, possibly a pet project for a local W&W depot, and was set aside with a view to preservation. Sad to say this van was scrapped Ca. 1990.



Model illustrated has been fitted with couplers (not included)

## **Assembly**

It is recommended that this kit be assembled with a liquid solvent cement, such as Testor's or Microscale Microweld. Each part is attached to the runner system with a small "gate". When removing a part, cut close to the part, then carefully trim and file the remaining part of the gate. Leave parts on the runners until called for in the instructions and **do not** twist parts off, as they may be damaged. Some parts have hooks moulded on the back to assist with removal from the mould. These should be removed carefully with small side cutters or a sharp knife. A number of details are provided in etched brass, which should be attached to the model with ACC (superglue). Half etched lines are provided where parts are to be folded to shape. As a general rule, where 90° bends are to be made, the half etched line goes to the inside of the fold.

## **Body**

Cut two pieces of 0.4mm wire, each about 15mm long. Make a 90° bend 3.5mm from the end and insert the wire through the hole in the centre between the doors. Use a scrap of 0.5mm polystyrene sheet to space the wire handle off the side and bend the excess wire over on the inside of the body. File a notch in a short length of scrap sprue and secure the wire on the inside, so that the handle is in line with the detail moulded on the side.

Cement a side to an end to form an L shaped subassembly. The small pins moulded on the back of each part assist with positioning. Make a similar subassembly of the remaining side and end. Cement these two subassemblies together to form an open box. Now gently fold the roof with the groove on the underside and position it on the body. Make sure that the overhang is even all the way around and secure with a brush of cement from underneath inside the body.

Assemble the buffers as shown on figure 1. If you are keen you may like to make the buffers operate, otherwise they can be cemented solid. If cementing the buffers solid it Figure 1 will also be necessary to cut each buffer stem about 0.7mm shorter. Bend wire over and secure with scrap of runner Temporary packer of 0.020" plastic to space handle off bodyside 0.040"

#### **Underframe**

Use a sharp knife and/or a large file to remove the shallow step from each edge of the floor moulding. The overall width of the floor should be 27mm.

Detail of buffe

Remove the draft, a shallow angle of about 3°, from the top edge of each side sill. Glue a piece of 180grit aluminium oxide sandpaper to a flat surface such as a piece of chipboard and rub the top edge of each side sill over it. Use a second piece of wood with the edges planed at 90° as a guide. This work will ensure that the side sills are installed at 90° to the floor.

Most of these vans had the hand brake on the side opposite the brake cylinder, however, photos of vans numbered between HD83 and HD99 show the handbrake on the same side as the brake cylinder.

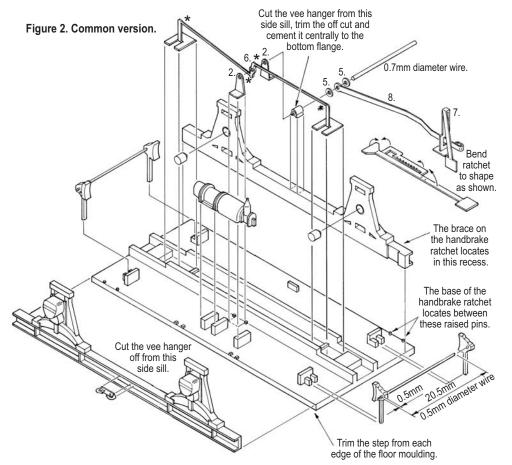
At this stage a decision should be made as to which series of wagons is to be represented; either 'common' or 'HD83-99'.

#### Underframe detail, common version.

For the arrangement of parts refer to figure 2.

Identify the side sill to be used on the handbrake side; it has a shallow recess on the back at one end. Drill a 0.7mm hole through the centre of the boss of the vee hanger on the bottom of this side sill. Cut this vee hanger off the bottom of the side sill, trim the offcut and cement it to the centre of the bottom face of the side sill. Remove the vee hanger completely from the second side sill. Press a delrin bearing into the hole in the back of each axle box.

The floor includes three ribs moulded towards the centre near one edge. Cement the side sills to the floor, with the plain side sill against these ribs and the ends flush with the ends of the floor. Cement the handbrake side sill on the opposite side, with the wheelsets sandwiched between. Cement the brake cylinder to the supports and cement a rope hitch centrally to the web of each side sill.



Before adding any further detail check the fit of the underframe in the body assembled earlier. It will be necessary to remove a small amount from each end of the underframe, which is best achieved by standing the underframe on its end on top of the sanding board and gently rubbing it back and forth with a piece of wood planed at 90° as a guide. Check the fit often and ensure that the same amount is removed from each end of the underframe and the ends remain perpendicular to the sides.

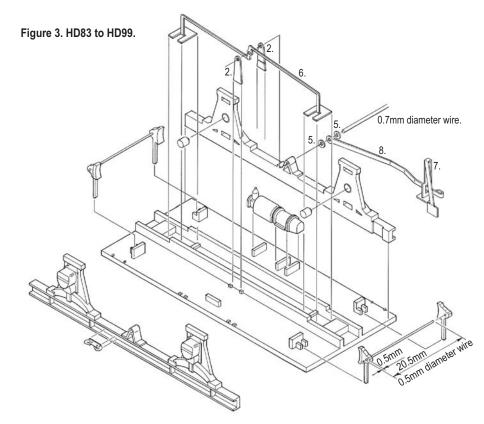
Cut two pieces of 0.5mm wire, each 20.5mm long and smooth the cut ends. Press each end into the holes moulded in a pair of brake shoes, so that the wire projects rom the face of each brake shoe by 0.5mm. Locate each assembly in the lugs moulded on the lower face of the floor and secure with cement. Bend the feet at 90° on the two central brake supports (2) and secure them to the centre sills with ACC. Small ribs are moulded on the surface of the floor to aid with positioning, but also make sure that the holes in these brackets are in line with the hole in the plummer block on the side sill.

The brake rigging etch (6) and the hand brake detail parts (7 & 8) are quite fragile, so it is best to leave these parts off until after the body is assembled and added to the underframe.

### Underframe detail, HD83 to HD99

The sequence of assembly should be broadly as outlined above for the other arrangement, but the side sill with the step in the back surface for the handbrake should be installed on the same side as the brake cylinder. Both vee hangers should have a 0.7mm diameter hole drilled at the indent, but should be left intact on the side sills. It is not necessary to make any bend in the etched brake supports (2). Refer to figure 3 for the arrangement of parts.

Check the fit of the underframe in the body and trim as described above for the common version.



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