

End details

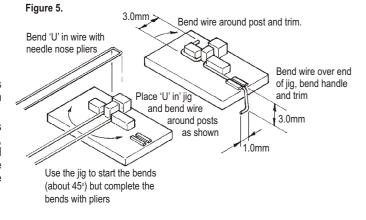
If desired, use some 0.010" x 0.040" Polystyrene strip (not included) to add flanges to the end stanchions.

Assemble two shunter's steps from parts 8 and 9 or 10. Wagons were fitted with steps with wooden step treads (10) when the buffers were first removed around 1957. The step treads made from expanded metal mesh date from about 1968. If building this version, bend the edges of the etched step (9) up at 90° before attaching the step tread to the frame with solder or ACC. Attach the shunters' steps to the ends with ACC, as shown on figure 4.

Brass etchings are supplied for the handrails, which fit in holes moulded in the ends and into the holes drilled in the bracing earlier. Use part (2) for the upper horizontal handrail and part (1) for the vertical handrail and the lower horizontal handrail. 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.

Uncoupling levers Form two uncoupling levers

to shape from the 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



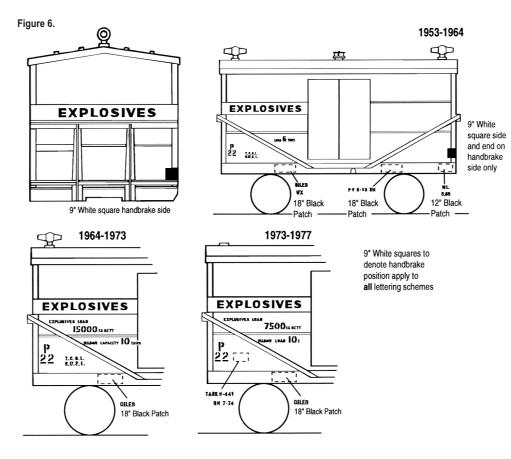
Painting and Decals

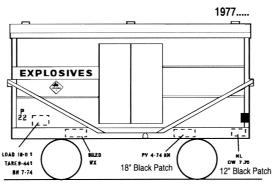
(not included).

These vans had a bright red body, including the roof, and a black underframe. We recommend Humbrol #19 Bright Red and #21 Black. Because the red has limited covering power the flanges of the end stanchions (if fitted) and the stress mark down the centre of the roof should be undercoated with grey (Humbrol#40), to ensure a uniform colour to the body.

After the paint is dry, lower the body over the underframe and secure with a brush of cement around the edges. Use a fine brush and black paint to paint the headstocks, the base of each end stanchion and the bracket with waybill clips below the LH end of each side.

Decals are provided for both metric and imperial load/tare and codes. Refer to figure 6 for the placement of lettering.





To Apply decals

- Trim the decals close to lettering to remove excess film.
- Immerse in water for 10 to 15 seconds, then set aside on the model until the decal straightens out.
- 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.
- Use a decal setting agent e.g. 'Solvaset' to assist the decals to snuggle down over raised detail such as rivets.
- 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.



VICTORIAN RAILWAYS P EXPLOSIVES WAGON

Prototype Notes

Twenty five explosives vans were built at Newport Workshops during 1953/54. Coded P and numbered 1-25 they utilised the underframes from wooden U vans whose bodies had been condemned. These new vans were designed to replace the existing fleet of explosives wagons, which dated from the previous century. A second batch, numbered 26-45 were built in 1958/59, but differed in some details, such as the diagonal side bracing and the bracing of the ends. A further six vans, P46 to 51, were constructed in the early 1960s and were generally similar to the second batch.



Model illustrated has been fitted with couplers (not included).

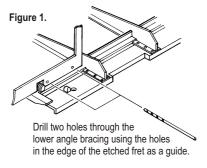
Assembly

It is recommended that this kit be assembled with a liquid solvent cement, such as Testor's or Microscale Microweld. Some parts have hooks moulded on the back to assist with their 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.

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Body

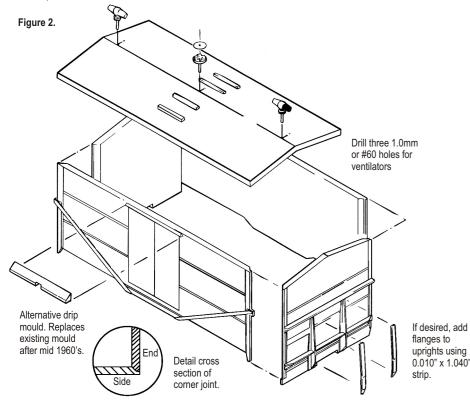
Two holes need to be drilled in the angle bracing above the headstocks on each end for a handrail. Holes have been etched in the perimeter of the etched brass fret to act as a template. Position the fret as shown on figure 1 and use a #80 or 0.35mm drill in a pin vice to drill holes through the etching and plastic moulding. A vertical handrail and uncoupling lever detail are moulded at the RH end of each side. If you intend to replace these items with an etching and wire respectively, carefully shave these items off the end of each side. Small grooves are moulded on the back of the side at the handrail position, so make sure that these grooves extend all the way to the



end of the side. The grooves will form small holes to locate an etched handrail when the end is cemented to the side.

These vans were originally constructed with a small drip mould above the doors. Evidently this was insufficient and some time in the 1960s a sheet metal cover of more generous dimensions was added. If it is desired to represent this later design the existing drip mould should be carefully shaved off the side, together with a small amount of the door securing clip, to allow the separately moulded cover to be installed.

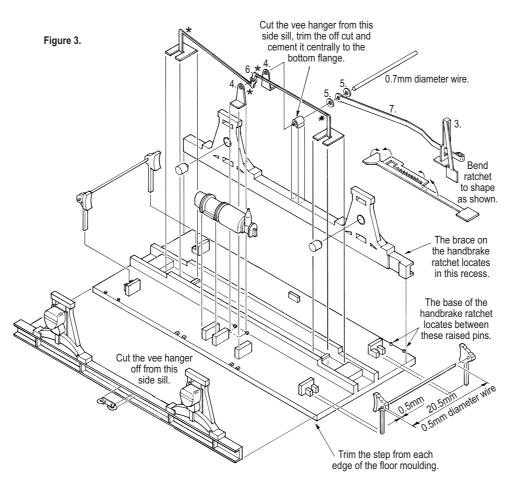
Cement one side to an end to form an 'L' shaped subassembly. Repeat for the other side and end and allow a few minutes for the joints to gain some strength before cementing the subassemblies together to form an open box.



Gently fold the roof, with the groove on the underside, so that the angle of the two roof panels matches the ends of the body. Position the roof on top of the body and ensure that there is an even overhang all around the body. Secure with a brush of cement around the edges from underneath.

Use a 1.0mm or #61 drill to open up the three holes along the centre line of the roof. Cement a torpedo vent in each of the outer holes and a Fletner vent in the centre hole. If the model is to represent a van post 1968 the ventilators should be cut off, but leave the bases cemented to the roof. These bases represent the blanking plates fitted at this time.

If the vents are left in place then battens should be added to the roof, as shown. The moulded battens have small recesses moulded in their feet which locate over small raised dots moulded on the top surface of the roof. If the battens are not fitted then the raised dots should be carefully removed with fine wet and dry sandpaper.



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.

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.

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.

Check the fit of the underframe in the body. It will be necessary to trim a small amount from each end of the underframe. The easiest way to do this is to rub each end of the underframe over the sanding board. Take care that the ends remain perpendicular to the side edges and check the fit in the body often. It will also be necessary to file a small, shallow, bevel on the top edge of the floor at each end, to allow the bottom face of each end of both side sills to be flush with the bottom of the headstocks.

To simplify painting, **do not** cement the underframe in the body at this stage.

Underframe Details

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 from 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 (4) 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.

Bend the feet of the brake rigging etch (6) at 90°. It will also be necessary to make slight adjustments to the etching at the positions marked with a * on figure 3, so that the hole in the centre lines up with the holes in the etched supports (4). 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 on the handbrake side, through the etched supports and the crank in the centre of the brake rigging so that the shaft finishes flush with the second support.

Form the handbrake ratchet (3) to shape, as shown on figure 3. 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 (7), 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 1. 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 No.5 or No.58 couplers (not included). Assemble the couplers in their draught gear boxes and clip the ears off each side. Attach the couplers to the floor with cement and/or #2 x $\frac{1}{4}$ " pan head screws (not included), using the dimple moulded between the centre sills at each end of the floor as a guide for drilling suitable holes.

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