



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

## VICTORIAN RAILWAYS 'Z' VAN (Smooth doors)

### Prototype Notes

Six wheeled brake vans, generally similar to the Z, trailed goods, passenger and mixed trains on the Victorian Railways since its inception in the 1850's until their withdrawal in the 1980's, only a few years before the withdrawal of all Guard's vans. The prototype for this kit is the standard 8'6" wide, 6 wheeled van first issued to traffic in 1889 and classified D at that time. The kit portrays a van as running in the 1950's and '60s' with 4 windows in the front and back walls of the cupola. The model may be modernised to mid 1960's onwards by blanking out the middle 2 windows with 0.005" styrene or brass. A chimney is also included for a stove for heating in the Guard's compartment, which was a modification from mid 1950 onwards. By the early 1960's most vans had their buffers removed.

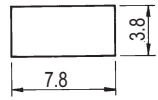
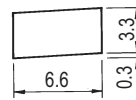
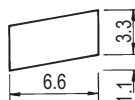
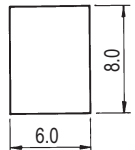
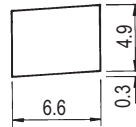
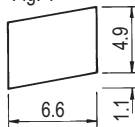


*Model illustrated has been fitted with couplers (not included).*

### Assembly

It is recommended that this kit be assembled with a liquid solvent such as Microscale Microweld or MEK, which should be applied by a small brush. A sharp modelling knife, an assortment of needle files, a #80 drill and small pliers will also be needed. Many of the parts have projections on the backs, which assist in removing the parts from the dies. These projections should be removed with a small set of flush cutting clippers or a sharp knife. Each part is attached to the runner system by a small "gate". When removing a part, cut through the gate, then carefully trim and file any remaining gate to the part. Leave parts on the runners until called for in the instructions and do not twist them off, as they may be damaged. All dimensions on the diagrams are in millimetres.

Fig. 1



Cut pieces of the clear plastic supplied to the dimensions shown on figure 1. Check the sizes in the recess in the back of each window and when a satisfactory fit is achieved put the clear parts aside in a plastic bag for use later.

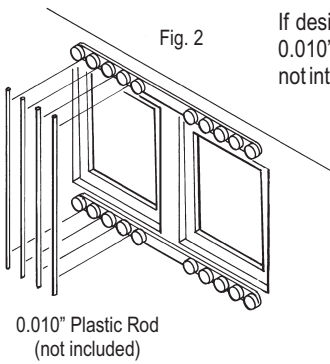


Fig. 2

If desired, bars can be added behind the windows of the van door using pieces of 0.010" plastic rod or wire (not included) as shown in figure 2. Note that these bars will not interfere with adding the clear plastic glazing at a later stage.

0.010" Plastic Rod  
(not included)

Another optional extra is to fit wire handrails between the van section doors. Locating marks are moulded in place which should be drilled #80 or 0.35mm. Bend the wire supplied into a large U shape before bending the end of each U back to insert in the holes. Secure the handrails with ACC.

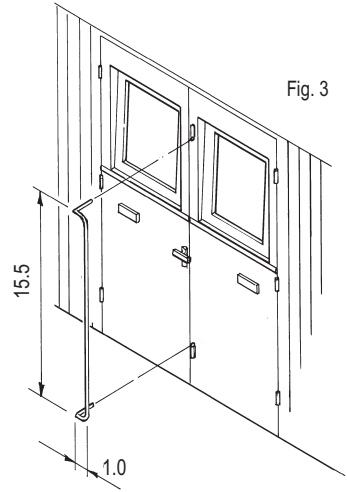


Fig. 3

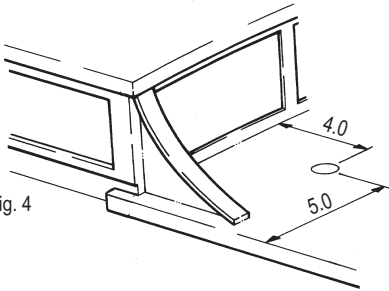


Fig. 4

Cement the sides to the ends to form a box, taking care that the joints are neat and square. Cement the van roof on top of the sides so that the end of the roof butts up against the cupola sides. Take care that the roof overhangs the sides evenly on each side. Cement the inner cupola end on top of the roof against the sides.

Mark the position of the chimney on the roof and assemble the chimney top to the base. The underside of the base is bevelled to match the curvature of the roof, so be careful that the chimney is orientated correctly and vertical, when cementing it to the roof. Cement the cupola braces against the cupola and on top of the roof. Refer to figure 4.

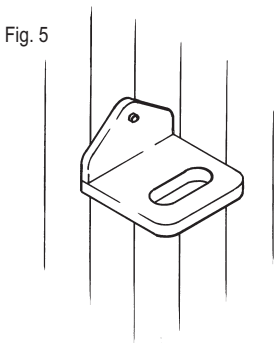


Fig. 5

Cement the three end steps to the 'A' end of the van, immediately below the triangular brackets moulded onto the end. Refer to figure 5

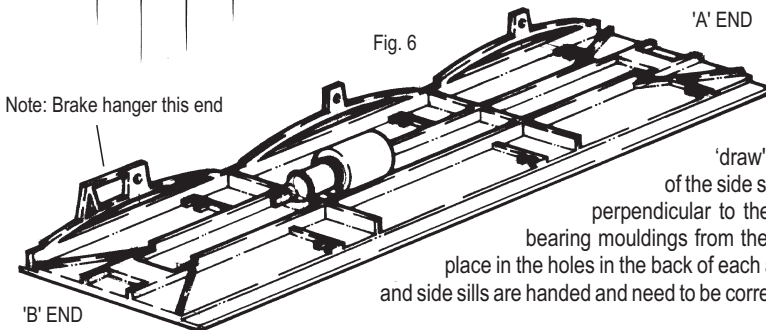


Fig. 6

'A' END

Note: Brake hanger this end

'B' END

Carefully remove the 'draw' or slight bevel from the tops of the side sills, so that they will stand up perpendicular to the floor. Remove the Delrin bearing mouldings from the sprue and press them into place in the holes in the back of each axle box. Note that the floor and side sills are handed and need to be correctly orientated on assembly.

Cement the side sills to the floor with the wheelsets sandwiched between. Make sure that the back of each side sill is hard up against the floor structure, that the wheels turn freely and that the axles are perpendicular to the side sills.

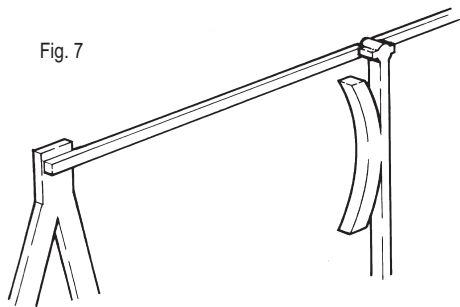


Fig. 7

Cement the brake cylinder to the centre sills with the end of the reservoir butted against the two small stops moulded on the centre sills. The piston rod should point towards the 'B' end.

Cement the brake hanger/shoe mouldings to the floor in the recesses provided. Make sure that there is sufficient clearance to the wheels. Cut sections of the 0.010" x 0.030" polystyrene strip provided and cement them to the lugs at the ends of the brake hangers to represent the pull rods. The last strip should be cemented behind the V hanger at the 'B' end of the underframe. See figure 7.

Test fit the upper step/bracket moulding between the headstocks of the body and trim to fit if necessary.

Cement the lower step to the ends of the step brackets so that the bottom face of the step is flush with the ends of the brackets.

Set aside to harden before cementing each step assembly to the underframe.

Position the parts as shown on the cross-section view, figure 8, and cement the step brackets to the bottom toe of the side sills as well as the axle box springs.

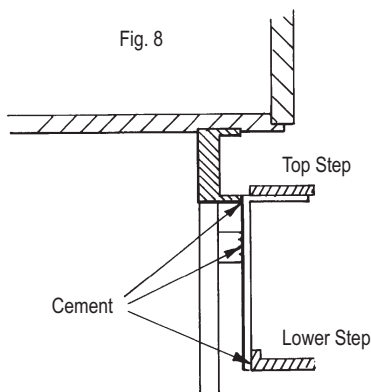


Fig. 8

## Painting and Decals

These vans had a wagon red body, black underframe and a brown roof. We recommend Steam Era Models Wagon Red spraying enamel, Humbrol gloss black and Humbrol matt Dark Earth.

Put masking tape around the inside of the cupola before spraying the body wagon red. Spray the underframe gloss black and brush-paint the headstocks of the body gloss black as well.

Apply the decals supplied, as shown on figure 9. After the decals have set apply a coat of clear flat to seal the finish.

## Final Assembly.

Add the pieces of clear plastic cut to shape earlier to the various window recesses. Secure each piece with a touch of cement applied to the back corner of each piece with a fine brush. Paint the inside of one window grey on each side of the cupola, to represent the guard's sliding sun shade. Now the body can be cemented to the underframe, although it may be necessary to carefully scrape the paint off the mating surfaces before applying the cement. The cupola roof should have the **lower** edges slightly rounded before cementing it on top of the cupola, then brush-paint the roofs with Humbrol matt dark earth. Brush-paint the stove chimney grey.

The underframe is designed to accept Kadée No5 or No58 couplers which may be cemented directly to the floor, after first removing the side lugs from the draft gear box. It may also be necessary to space the coupler out slightly if the model has been fitted with buffers.

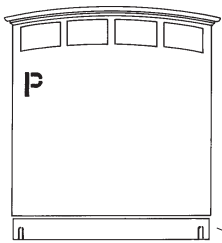
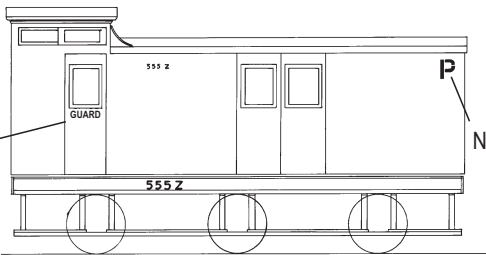


Fig. 9

Note 3



Note 1

Note 2

### Note 1.

The Z code was used to denote an unmodified, unlit van which is fitted with buffers. As a general rule the buffers were only removed when the van was converted to ZL. The word 'GUARD' appears in photos dating up to the early 1960s. The P and inverted 'U' symbols were not used on these vans.

### Note 2.

Forty two Z vans were altered in 1954/55 by the addition of three tons of ballast, dual couplings and locomotive style buffers to make them suitable for use on passenger trains at speeds up to 60mph. These vans were recoded ZP in 1956 and displayed a large P on diagonally opposite corners of the body, which was also painted passenger car red, for quick identification of vans suitable for passenger train usage. The inverted U symbol was not used on the headstocks because these vans were fitted with buffers. About a third of these vans were either scrapped or rebuilt as ZL in the 1960s with the remainder either scrapped or recoded ZD between 1975 and 1977. The colour had also reverted to wagon red as vans passed through workshops after December 1967. Some suitable numbers are: 224, 469, 471, 599, 611 and 619.

### Note 3.

The ZL code indicated a van equipped with long travel draught gear and auto couplings, but no buffers and dates from a rebuild program carried out between 1960 and 1965. The inverted U symbol was put on the ends of the headstocks. By the mid 1980s some vans only carried the symbol on the cupola end of the van.

### Silhouette of mouldings for parts identification

#### Parts List

1. Floor
2. Roof
3. Left side
4. Right side
5. Inner cupola end
6. 'A' end
7. 'B'end
8. Lower step

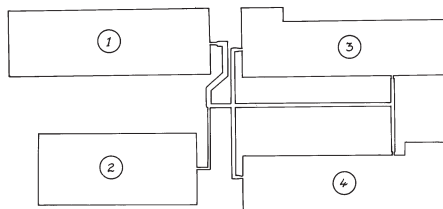
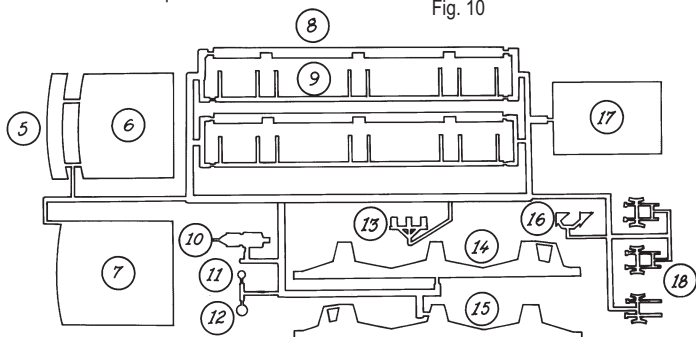


Fig. 10



9. Upper step/brackets
10. Brake cylinder
11. Chimney
12. Chimney base
13. End steps
14. Right side sill
15. Left side sill
16. Cupola braces
17. Cupola roof
18. Brake levers/shoes