SPIRIT DESIGN

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1015: Victorian Railways- V/Line JX / VPCX 3 dome cement wagon.

Thank you for purchasing this kit, and I hope you get many hours of enjoyment from it. Chris Pearce (Spirit Design)

A brand new JX29 with medium size logo circa mid-1960s - Victorian Railways photo.
The medium-sized logo could still be found on some units up till the late 1970s.

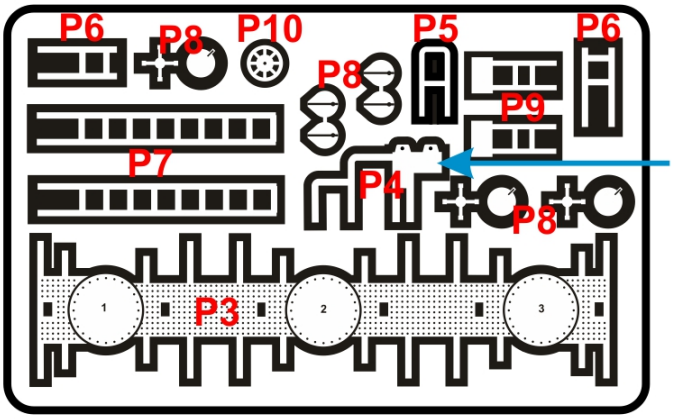
Basic history notes: The JX were constructed to carry bulk cement around the system, and being so successful, eventually, their numbers would swell to 158. Construction periods were from 1963 to 1971 and 1976-1977. Eventually, these wagons were utilised in other states and in the construction of the new Parliament House in Canberra, where they ran as block trains of either 15 or 30 wagon. The last 50 were built as VPCXs.

Loading was through the top hatches, and compressed air was used to help discharge them at destination depots dotted around the countryside. Originally constructed with 3 separate outlet pipes, these were later modified as single pipe discharge units in the mid-1970s. Ratchet-style handbrakes on the first 45 units were later modified so that the entire fleet had the miners' handwheel unit fitted. As there is a large number constructed, there is a small variation in the hatch covers that are applied to the group.

When first issued to traffic, they carried the familiar VR wagon red with the large 'VR' logo in white. Later, under the V/Line era, the VR was replaced with V/line and when painted grey, the new logo 'V/line Freight' adorned their sides after overhauls, although not all wagons received this treatment. During repaints, some units received the smaller 'VR' logo. Originally, all units carried the JX coding that was superseded by the National wagon-coding registry of VPCX progressively from 1979 onwards.

Note: Please read these instructions thoroughly before attempting to build the kit to familiarise yourself with the construction methods! Parts referred to in the text are marked **(P1), (P2),** etc.

Equipment & Materials: Exacto knife (blade no 16 or similar), 800-grit aluminium oxide sandpaper, small flat needle file, MDF PVA, Super Glue and duckbill pliers (all recommended: usual disclaimers).

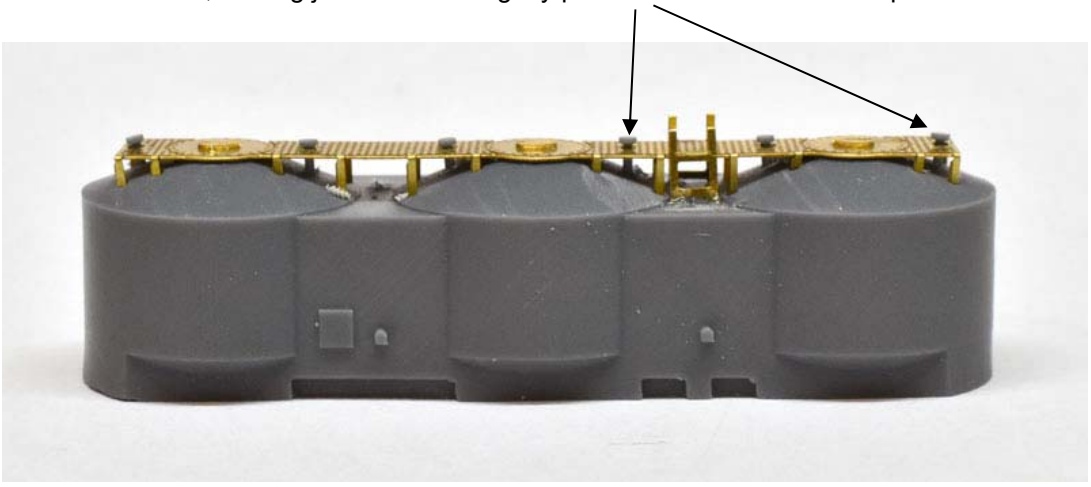


(P1) 3D underframe
(P2) 3D domes
(P11) Large pipes
(P12) small curved pipe
(P13) Tank vertical pipes

Assembly Instructions new 3D kit:

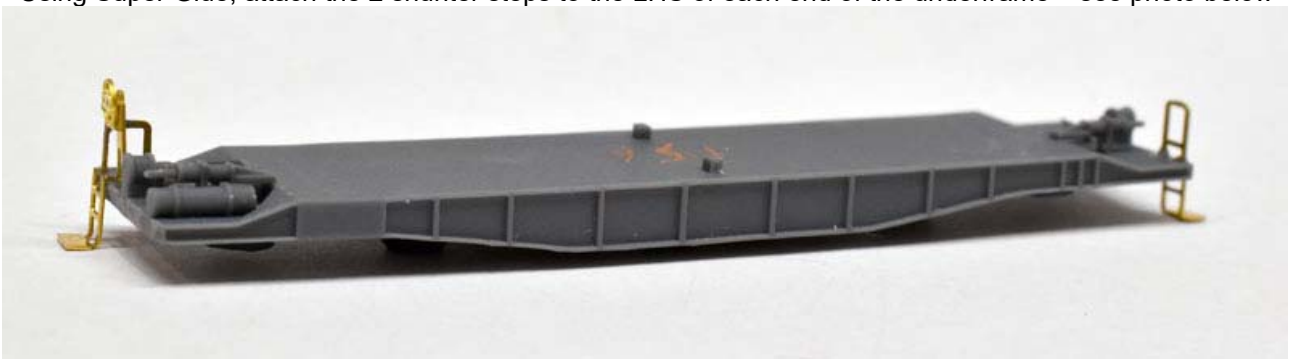
Domes:

1. Using duckbill pliers, bend each of the walkway **(P3)** legs down 90 degrees as close as possible to the main body of the etch
2. Ensure that the etched number 1 on the walkway aligns with the number 1 at the dome's apex **(P2)**. Using tweezers, begin at the number 1 end and carefully insert each left and right leg into the corresponding holes on the dome print. Work methodically from left to right, gently pushing and pulling the legs into place. This step requires patience and is the most challenging part of the kit. Once the walkway is fully seated, apply a small drop of Super Glue underneath the etch at domes 1 and 3
3. **(P6)** The small single-step ladders are glued into the space between domes 1 & 2 after trimming 1.5mm from the long handles, as it was etched too long. The long handles of the ladders lean up against the walkway
4. Glue **(P8)** dome hatch covers of your choice to the circular covers on domes 1, 2 & 3 using the photo below as a guide
5. There are 6 holes in the walkway centre to which the 3D-printed pipes **(P13)** should be inserted and glued from inside the domes, leaving just the head slightly proud. See the arrows and photo below



Underframe:

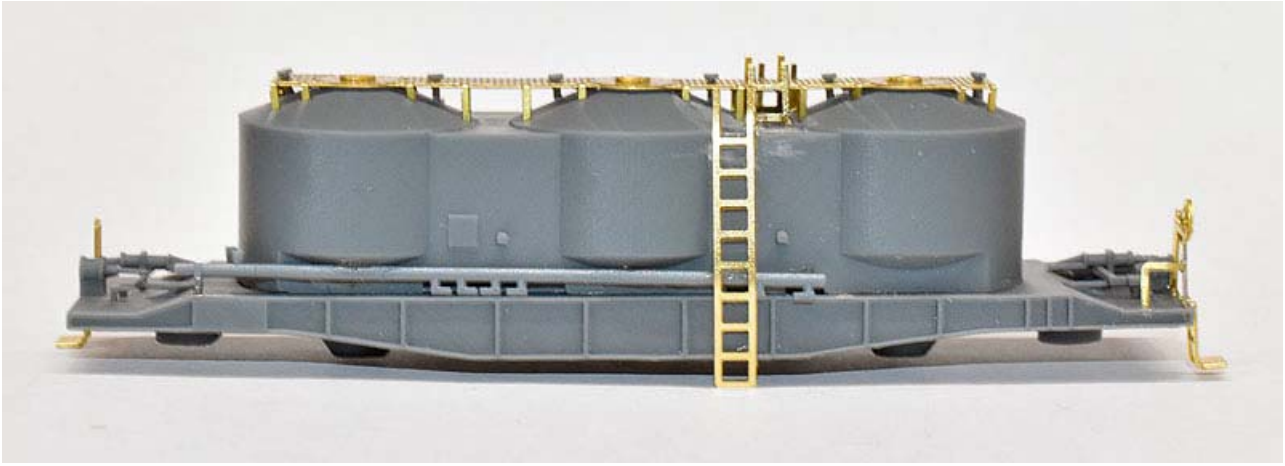
1. **(P1)** Test fit a Micro-Trains bogie pin into the bogie, and if the collar at the widest point does not sit flush with the bogie bolster sand it as this will stop the wagon wobbling if there is too much slop
2. Located under the wagon underframe near the ends are 2 pips for locating MT105 couplers if body mounting (glued) or remove if using bogie-mounted couplers
3. Glue **(P5)** small handrail to the non-air cylinder brake rigging end -see photo below
4. Bend **(P4)** handwheel clutch back onto itself in the direction of the blue arrow above in the parts picture
5. Fold the smaller handrail of **(P4)** 90 degrees so that the bend line is on the inside and glue this into the 4 holes provided in the underframe at the large air cylinder brake end
6. Glue **(P10)** handwheel to the face of the clutch on the hand brake stand **(P4)**
7. Bend the bottom step **(P9)** of the shunter step 90 degrees on the opposite side of the 2 etched lines near the handle top
8. At the rear side top of the shunter steps, there is an etched line on each handle which should be folded down
9. Using Super Glue, attach the 2 shunter steps to the LHS of each end of the underframe – see photo below



Final assembly:

10. Two lugs on the underframe align with the domes. Use MDF/PVA glue to attach the domes **(P2)** to the base **(P1),** ensuring they are centred and square. Dome 1 should be positioned at the handwheel end of the wagon. Make sure the side of each dome with four recessed holes near the base faces the handbrake side. When viewed from the side, the handbrake wheel should be at the right-hand end, with the recessed holes facing toward you.

11. Glue the small 3D pipe **(P11)** into the hole provided in the LHS of dome 3 so that the leg of the pipe attaches to the underframe
12. Glue the long 3D pipes **(P12)** to the side of the domes using the hole in the dome, matching the spigot on the pipe, and line up as per the photo below
13. Glue ladders **(P7)** against the dome separator and the bottom of the underframe near the small ladder (see photos) ***Note glue (P7) after painting and decaling, as it is easier to slide the deal around rather than under the ladder***



Painting general: The completed kit should be given a coat of Steam Era wagon red or an equivalent colour after priming with Tamiya primer. Paint a white square on the wagon end sill where the hand brake is and around the corner. Do the same for the opposite end headstock only. Use prototype photos as a guide.

Note the white squares indicating the handbrake side. Also note the wrap around on the side where the handbrake wheel is.

Depending on the era being modelled, the handrails and the shunter steps were painted white. In other eras, the handrails were all red, or just the very side of the handrail was painted white.

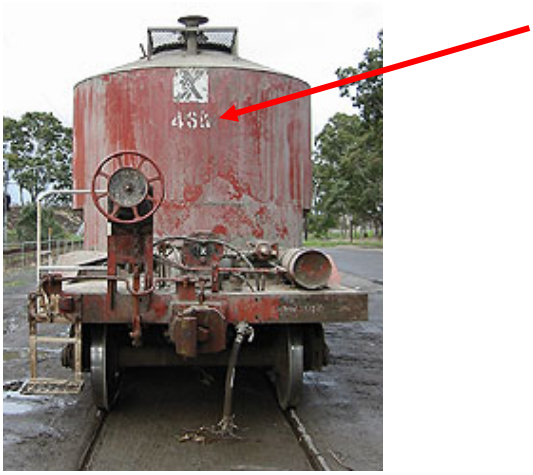
Decals: There are several decals in the kit, some are paper and others are screen-printed.

Screen-printed "VR": Look closely at the decal, and you notice a clear border around the 'VR'. Cut out the decal away from the border, but leave the small numbers attached to the sheet. Once soaked, the neat masking of the decal will come free. Position the decals using your decal solutions as per the prototype photos. The V/Line decals are positioned on the domes, free from the ladder. See photo

Using the photos below, position the small tank numerals relative to their respective ends. Tank 1 is always the non-handbraked wheel end, i.e. 'A' end, and tank 3 is at the handbrake end. It's easier to soak a sheet of 3 numbers and transfer them to the wagon in one application.

Determine your era modelled and select the code boards supplied on paper. Using a small amount of PVA, adhere the code board sheet to each side of the wagon. (see photo above)

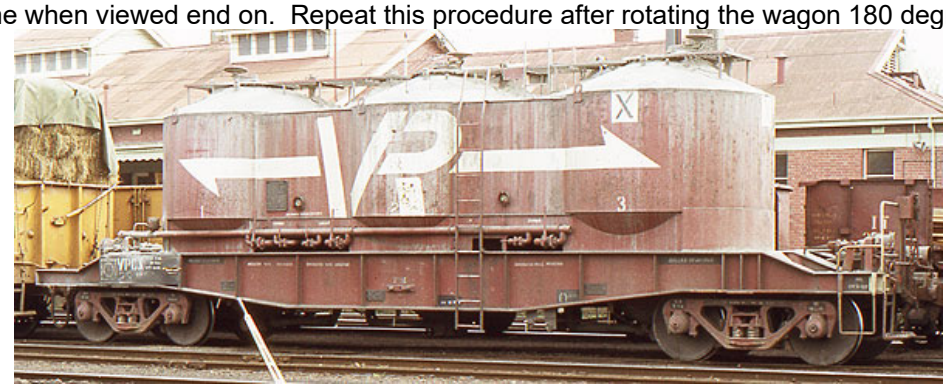
If you are modelling the modern-era VPCX with a check digit, you will also need to place the wagon number with a check digit at the end of tanks 1 and 3 as per the red arrow in the photo below.



JX61 Red shunter steps and RH edge of the handrail is white – 18/2/1977. Photo courtesy Rob O'Regan.

JX62 Red shunter steps and handrails 18/2/1977. Photo courtesy Rob O'Regan.

Using PVA or Microsol, flat adhere the 'X' decals to the RHS dome when viewed side on, and also apply to the end face of the RHS dome when viewed end on. Repeat this procedure after rotating the wagon 180 degrees.



VPCX 23 no check digit. Photo Chris Pearce. Note the white edges of the handrails.

For more information and photos, see: Mark Bau's http://www.victorianrailways.net/ or Peter Vincent's http://www.pjv101.net/index.htm