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1031 - Victorian Railways KC wagon and 2 LCL containers

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

Basic history notes: The Victorian Railways in 1952 introduced a new steel container service for its customers, which attracted considerable attention. These units were very similar in design to the steel ones SAR and NSWGR had introduced early on their Railways. The units were probably based around overseas practice as NYC (New York Central) pioneered the use of these units in 1921 and by 1922 had standardised the box shape with side strapping and door access at one end with the roof matching their steel boxcars of that era. The LCL (Less than Car Load) was made from rust-resistant 16-gauge steel (probably Corten steel). The unit was 7-foot wide x 8 foot long and 7 foot 9 15/16 inches tall.

The main strength of each unit was 1/4 inch and 1/8 inch steel braces surrounded by the 1/16 inch corrugated sidings. Internally they had provisions for hanging with hooks and tie-off points and the floor was fashioned from steel-framed supports upon which Oregon timber was bolted to. Each unit weighed 19cwt and could carry 5 $\frac{1}{2}$ tons later being raised to 6 tons.

They were introduced to stop the risk of goods being pilfered and could be padlocked for extra safety. Apart from the benefits of less pilfering, there was also less handling of the consignment, which reduced the chances of goods being broken. The service was such a success that demand soon exceeded supply and the Victorian Railways jointly with NSWGR ended up making a fleet of over 350 ordinary, insulated and grain carrying containers.

To cater for this new trade the Railways originally carried the units in HY wagons similar to GY's until a conversion program had built enough KC's (1954-55) and QC (1959) bogie wagons. The KC's were made from cutdown IY 4 wheel wagons whose bodies had reached the end of their lives but whose underframes were still quite serviceable. When first in service, they carried the code of K but soon were recoded KC with an odd numbering group. Numbers in the class were 87-106 and 112-121.

They were seen around the Victorian Railways system carrying all manor of LCL containers be they the 7ft box or cylindrical type to the 14ft box or gas units. They make a very interesting model, as these units with the advertising U vans were the most colourful on the VR system.

Gradually their importance waned with the adoption of the more modern 20ft, 40ft and 48ft containers and heavier road traffic. The need for dedicated 4 wheel wagons was at an end and by the mid-1980 all were withdrawn from service.





Photo 1: KC wagons with various LCL loadings. Photo: 2 Tallow LCLs on a KC wagon. Photo 3: Loading an insulated LCL onto a truck. Photo 4: Unloading Tallow at Dynon. Photo 5: 14ft LCL and standard LCL on a KC wagon. Photo 6: Typical LCL in the yellow paint scheme. All photos by DOI except no4 by Rob O'Reagan.

Brass etch notes: when removing any item with an Exacto knife please take care. Cutting should be done on a self-healing mat using a few score marks rather than the cut once method. Make sure that the brass is clean before soldering by using a brass cleaner like Tarnoff, very fine wet and dry sandpaper or using a fine wire brush in a Dremel to lightly polish the surface front and rear. Depending on your skills, some soldering is required but you could use superglue or Selley's water-based Kwik Grip to glue items on. It is up to you the modeller to decide your skill level. It is assumed if you use solder, you will also be fluxing the joints with Carr's Red label flux or equivalent.

KC wagon Floor.

- 1. Remove the floor base from the brass etch with a sharp hobby knife using the instructions above
- 2. Fold up the base ends towards you. i.e 90 degrees
- 3. Remove two 'L' shaped container lugs from the brass etch and fold up towards the etch lines so that the small sidepiece and large sidepiece touch each other. You may want to solder these first before putting them on the floor. These are soldered into the right-hand corners of the unit when looking down from overhead. The smallest lug is positioned towards the sill end
- 4. Fold up the floor deck various support lugs and solder the etch lines or use glue
- 5. Remove two 'L' shaped container lugs from the brass etch and remove the squarest (largest) piece from the brass etch so that you only have two parts to the container lug. The small lug faces the sill end of the unit and is soldered into place. The interior of the deck should not be fouled by any lugs. Repeat the same for the opposite end container lug
- 6. Cut the base of the shunter step-free from the brass etch but do not remove the piece securing the ladder part of the step to the brass etch yet. Fold the base of the step 90 degrees and solder. Now you can remove the other securing tab from the brass etch. Repeat for the other shunter step. The smaller stirrups steps on the etch sheet are not for this wagon but are a common feature on other VR wagons. Feel free to use these on your other models. These can be made the same way as in step 6
- 7. Glue or solder the shunter steps to the left-hand end of the deck. You may need to use a small wooden block as an aid so that you don't bend any of the other items already secured to the deck
- 8. Finally, clean off all excess solder and glue the wagon deck to the underframe

The completed deck of the KC should look similar to this one.



Deck and underframe before painting.

Paint and decals.

The KC wagon was painted with standard VR wagon red all over. Steam Era models wagon red is the best match for this. The brass deck of the wagon is best lightly sanded with 800-1200 grit sandpaper. This not only enhances the appearance of the finished paint job but also acts as a key to holding the paint more firmly to the brass.

The code board for the unit is located on the left-hand side of the underframe sill. As a normal decal is extremely hard to see or place in this position, a coloured printed paper decal has been provided. Cut around the class number and code and insert it into the underframe with a bit of PVA or Microscale clear acting as the glue behind the board. Weather the whole wagon to your taste using paint, chalks or weathering powders.

Prototype photos courtesy of Peter Vincent, Rob O'Regan and the Victorian Railways.

LCL instructions: Wash each unit in warm water with a drop or two of detergent to remove any mould release agents or any other grease that may have come in contact with the unit when handled. Once dry paint golden yellow Humbrol 69. Fit decals to each side of the container as per the photos after briefly soaking them in lukewarm water. The left-hand side Melbourne Sydney decals are for the front/door side of the unit and the right-hand side ones are for the back. **Note: Narrower decals go on the rear of the container.** Weather to your taste using either paints, pastels or chalks.



Left, the grain/barely version of the LCL. These units are the same as the ordinary LCL's with added doors and a roof hatch for loading and unloading

Below an ordinary and an insulated LCL on 1QC circa 1960's.

