

1048– Victorian Railways LF bogie sheep wagon

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



L17 at North Geelong - photo courtesy of Geoff Winkler

Basic history notes:

Construction started in 1928 and a total of 50 were built. There are two compartments to each wagon allowing a different consignee to fill an end each. The bogie version of the L wagon allowed it to be utilised on freight around the state and 10 were fitted with BX fast passenger bogies and classed LP. They were in use up to the mid-1980s and received the four-digit coding VSAY.

Their entire life was moving from country towns in block trains to Newmarket and Brooklyn processing plants. Between 1931-33, the entire fleet was converted over to auto couplers. Early in the 1970s, a live sheep deal with Saudi Arabia saw a large number of trains transshipping to Portland for overseas travel. By 1986 very few wagons were left in service as wholesale scrapping had already begun and with livestock trains finally ceasing in October 1986 the remaining units were scrapped.

The kit:

Can be put together in a few hours. Only minimal tools and basic/intermediate skills are all that is required to build a very accurate model of a VR bogie 'LF' sheep wagon. Please read the instructions first to become familiar with the components and the essence of construction. There are a few steps that require close attention and they are highlighted in ***bold and italics!*** Parts referred to in the text are marked ***(P1)***, ***(P2)*** etc.

As this is a fragile kit until components are glued together please take your time and familiarise yourself with the prototype using the webpages listed at the end.

Equipment & Materials:

New/Sharp Exacto knife (blade no 16 or similar), small files, pliers etc. Selly's 'Kwik Grip' water-based, MDF PVA or yellow glue, flat paintbrush 4-8mm wide, Spirit Design fine line glue applicator are required for completion, paints etc. Steel blocks or jig to hold the wagon square whilst assembling the unit.

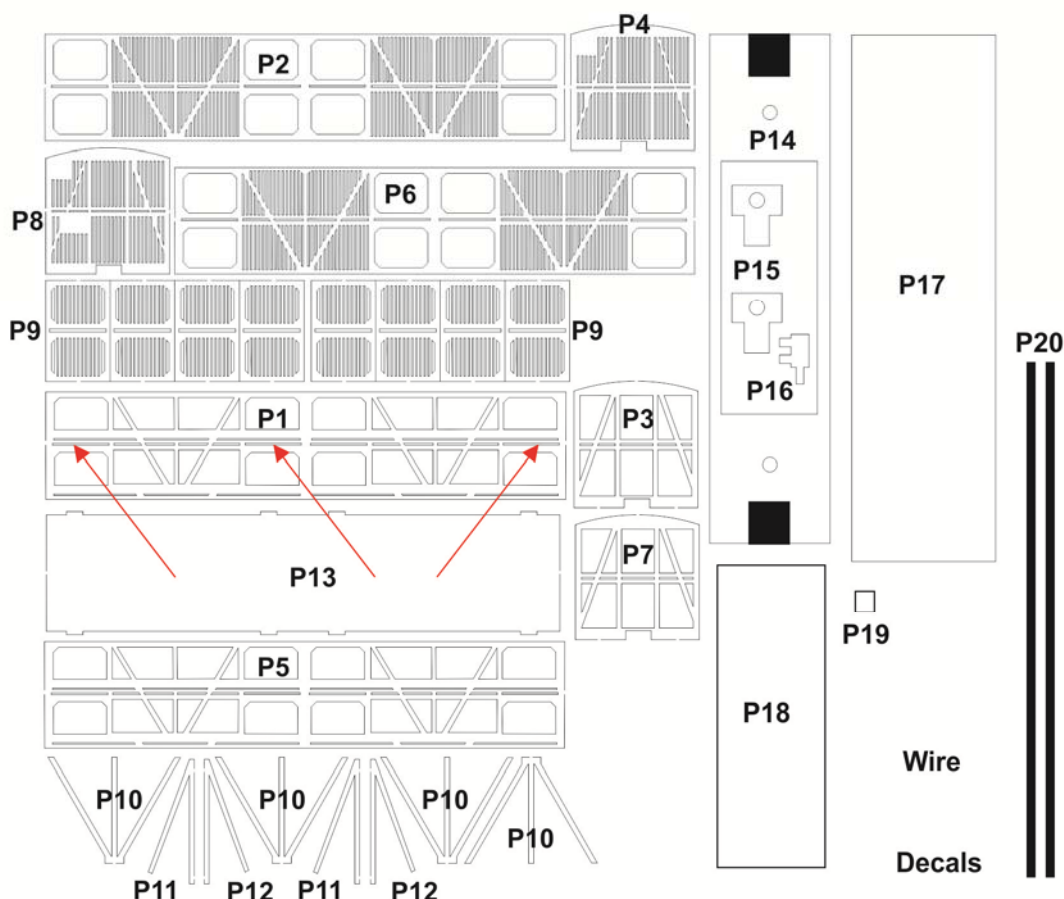
General assembly instructions:

For clarity, the assembly has been shown not painted. You can paint the model after the main bars and wooden components are completed. After you trim a wooden part from the laser etch gently file the tab flush with the wood with a very fine file or smooth sanding stick. ***Note all laser items have staining from the cutting and these should face the builder when assembling.*** Check where all the tabs are located and then proceed to free the item from the etch as tabs are in different spots for timber and card parts. Hold each part up to the light to make sure that part is only being held by the tabs otherwise you may have to scribe the occasional cut line to free it from its surrounding.

Gluing:

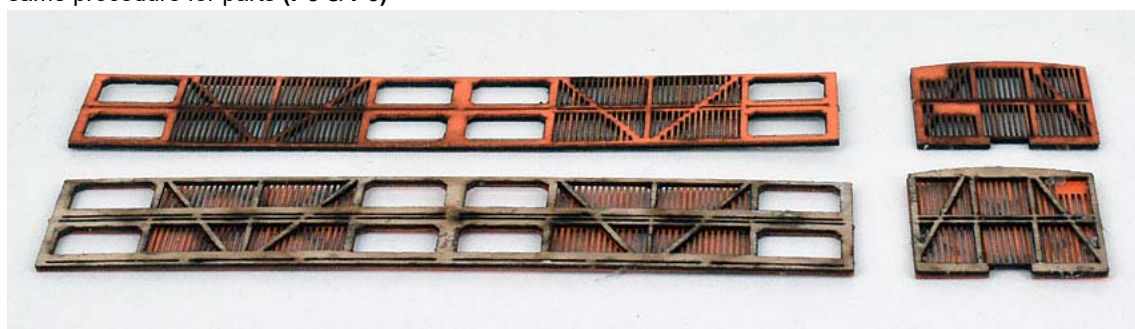
I paint my timber sides with a brush laying on cardboard scrap. I then lift the side off the card and lay the cardboard bars starting at one end whilst squaring it up and then proceed to press the bars along to the opposite end. I then flip the unit over and press the

completed assembly whilst removing excess glue. *Tip: Glue will inevitably stray where it's not wanted but by using the back of an Exacto blade you can gently scrape away the excess whilst wet*



Wagon assembly:

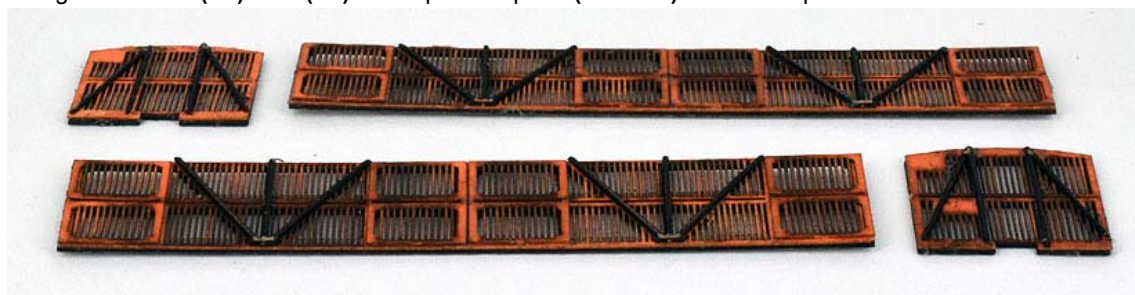
1. Paint the timber side (**P1**) with PVA glue using a flat 4-8mm brush. Paint from the middle outwards and rotate the side around to complete the painting of the glue. Don't worry if you have a few bits of glue adhering to the sides of the wooden frame as it will be covered in the next step
2. Lay the sidebars (**P2**) onto (**P1**) making sure that it is square on one end and then carefully work your way along pressing the cardboard bars onto the timber frame. Make sure the sides are in the same orientation as the (**P1**) ***Note take extra care as you will not be able to twist or wriggle the part once the two come together because of their fragile nature.*** Repeat the same procedure for parts (**P5** & **P6**)



Steps 1-4 showing

front and rear views of parts

3. Apply PVA to the timber end (**P3**) using a flat 4-8mm brush
4. Using care locate (**P4**) onto (**P3**) and repeat for parts (**P7** & **P8**) see above photo



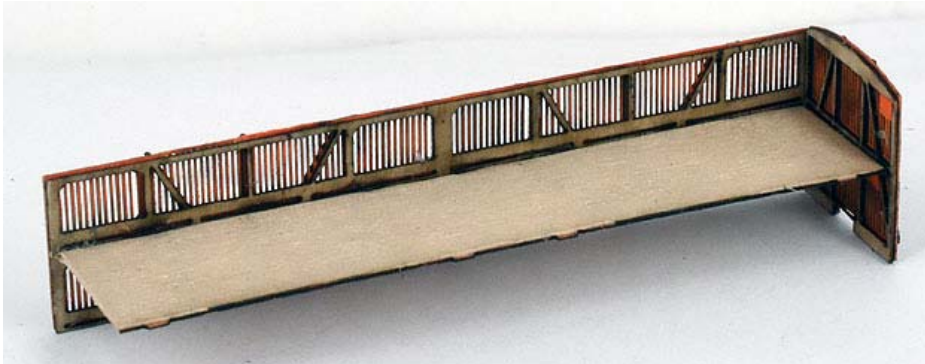
Steps 5-7

5. Using an Ultrafine Glue Applicator (available from SpiritDesign) apply dots of glue around the openings of the side where the doors are and using (P9) the double doors, carefully place them into the position on the door openings. Repeat for all doors of both sides of the wagon. See photo above
6. Glue (P10) onto the side matching the underlying bars. Repeat for all (P10) parts. See photo above
7. Glue (P11) and (P12) to both end walls matching the parts to the orientation of bars beneath. See photo above
8. Glue the end wall assembly to a side making sure that the end wall is on the inside of the sidewall. The top edge of the side should be in line with the curve of the roof and no higher. Repeat for the other side and end wall so that you have 2 'L' shaped halves. **Note the 'V' shape in the side of the walls points towards the wagon floor.** See photo below



Step 8

9. File the 4 nubs of the floor (P13) when looking above it to a 45 degree so that they will fit into the slots of the side. Glue the floor to the inside of one of the 'L' shaped halves. The floor sits in the slot marked on the parts list diagram. See photo below



Step 9

10. Glue the other end wall and side assembly to the above photo's assembly paying attention to line the floor up correctly inside
11. Glue (P18) to the non-coupler side etched part of the underframe (P14) over the central hole. This is to hold the wagon weight in place. (P14) has coupler holes and etched recesses for 1015 MicroTrain couplers
12. Glue (P19) the handbrake block onto the square just below the 1/2 waypoint on the end of (P8)
13. Glue a 5mm 0.3mm brass wire to the handbrake block as per the pictures
14. Glue the weight into the hole provided in (P14) using Selley's Kwik Grip
15. Glue (P15) bogie mounts to (P14) underframe using a round toothpick as an aid to lining up the holes
16. Test fit couplers and bogies to the underframe as its easier to correct any issues before the floor is glued in and then remove them
17. With couplers and bogies removed, glue the floor in. It may be easier to lay the wagon on its side when doing this
18. Glue (P20) to the underside of the underframe between the two headstocks forming a side skirt on the wagon
19. **Spray the wagon and roof Steam Era wagon red or equivalent**
20. Glue the roof (P17) to the wagon using Selley's water-based Kwik Grip making sure there is an even overhang on all sides

Finishing:

21. Paint two white squares on the handbrake side. See prototype photos for reference shots
22. Adhere paper decals as per prototype photos
23. Attach couplers and bogies and weather to taste



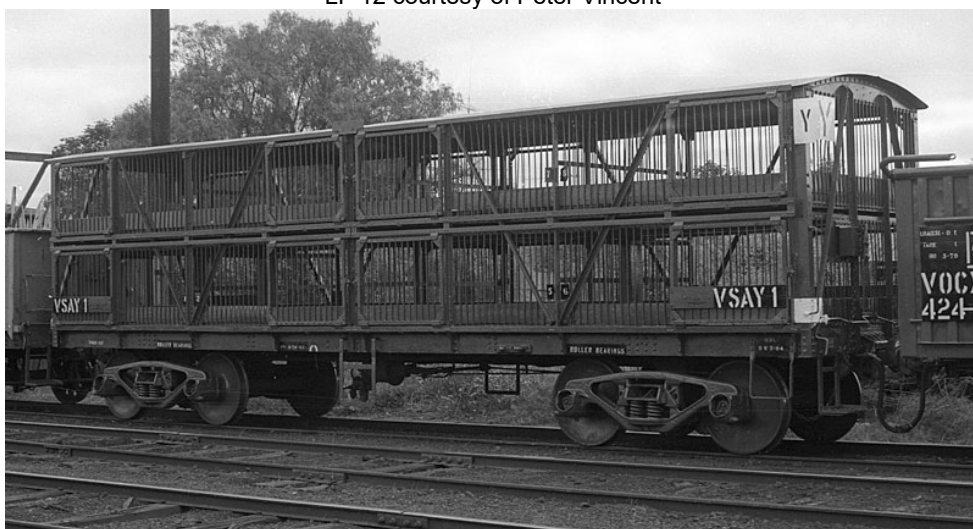
Finished model lightly weathered



9 LF courtesy of Geoff Winkler



LF 12 courtesy of Peter Vincent



VSAY 1

More information and photos see: www.spiritdesign.com.au, Rob O'Regan's website <http://www.robx1.net/> or Mark Bau's <http://www.victorianrailways.net/> or Peter Vincent's <http://www.pjv101.net/index.htm>
 Any alterations, suggestions or queries please contact me. Email chrise Pearce@spiritdesign.com.au
 Spirit Design ABN 92 510 718 068
www.spiritdesign.com.au