



1035: Victorian Railways Bogie Cattle wagon MM, MF - VSBY.

Requires bogies and couplers to complete.

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



MF13. Courtesy Mel Skinner.

Basic history notes: In 1928 the Victorian Railways introduced a bogie version of their M van coded MM which was built at the Newport Railway Workshops. 25 wagons were completed and these carried the ratchet-style handbrake affixed to an end wall. Initially, they all featured lightweight bar frame bogies, auto couplers and buffers. Transition chains were later fitted for compatibility with other wagons of the time. Each wagon could carry 18 beasts with a central wall separating each half of the wagon and could carry a load of 30 tons. Interestingly the Victorian Railways continued to build 4-wheel versions of the M van instead of more bogie units, it is not known why. In 1933-36 they were fitted with the newer style auto couplers and between 1965 and 1975, as the wagons were due for repairs, they were upgraded to roller bearing bogies and had their permissible speed increased to 65mph. This necessitated a new coding, MF, the F was for fast freight. The MF coding lasted until the 1979 recoding to VSBY. However, not all units received this numbering as some had already been scrapped. Vehicles re-coded were 2-5, 10, 15, 20-22 and 25. By the mid-1980s, all wagons had been removed from the register and were scrapped.

Equipment & Materials: Exacto knife (blade No. 16 or similar), 800-grit aluminium oxide sandpaper, small flat needle file, emery board, and toothpicks for spreading the glue. Fast-drying wood glue like Selleys Exterior PVA (recommended: usual disclaimers).

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. ***Refer to the photos, which illustrate well the correct positioning of all parts.***

The Laser Etch:

1. Cut the side **(P1)** from the surrounding wood by cutting just the tiny bit of wood holding the unit in place
2. Glue the door **(P2)** to **(P1)** so that the small pairs of holes for the door handles line up with each other
3. Repeat the same process for **(P3&4)**
4. Glue **(P5)** to **(P1)** so that its vertical side touches the door **(P2)**. Note: use glue sparingly
5. Repeat the procedure for **(P6)**
6. Repeat the same procedure for parts **(P3, 7&8)** again use glue sparingly
7. Glue the handbrake angle brace **(P10)** to **(P9)** so that its apex is glued to the end wall where the arrow is pointing to on the diagram
8. Glue the end wall brace **(P11)** to the end wall **(P9)**
9. Repeat the same procedure for the end wall **(P12)** and end wall braces **(P13&14)**
10. On each end of each of the brace parts **(P5 to 8, 10&11, 13&14)**, file from a position about 0.5 mm from the end of each angle piece down to a 45-degree taper to the main side or end wall edge. Use a small file and file down and away from you to accomplish this task taking simple light strokes. Do not go back and forward or

you will splinter the wood. See photo of M21 below as a guide. Alternatively use a sharp blade to carefully slice the ends back to 45 degrees

11. Glue an end wall assembly to the **inside** of the assembled side unit making sure that they are 90 degrees to each other
12. Glue the other end wall to the above assembly. Again make sure the end wall is inside the side unit.
13. Glue the other completed side to the above assembly and make sure as far as possible that all 4 corners are square. Use weights or jigs to achieve this
14. Glue the central wall (**P16**) into the centre of the wagon exactly at the midline between the doors, making sure that the height of the contour matches that of the ends, using a ruler to measure the height if necessary. The floor (**P19**) can also be used as an aid to positioning (**P16**) **but don't glue it to the floor or glue the floor into the wagon yet.**
15. The roof struts (**P15**) are glued between the second and third openings in the side assemblies (about 17mm in from each of the ends). Make sure the roof struts don't project above the contour of the end and centre walls. Use a ruler lengthways along the top of the roof to check heights
16. Tip: test fit the floor (**P19**) (**but don't glue it**) into the shell to help square the wagon to 90 degrees all round.
17. Using 12-14mm round rod or Extaco large knife handle roll the roof (**P17**) so that you put a gentle curve in it. This can be accomplished by rolling it on you thigh muscle above your knee
18. Glue the roof (**P17**) to the wagon
19. Once dry, glue the strips provided to the scribed lines (**P18**) on the roof and trim to size when dry
20. Glue the stirrup steps (**P22**) centrally under the main doors located at the centre of the wagon. Use the photo of MF9 as a guide
21. Glue the handbrake assembly (**P23**) to the end wall where (**P10**) was glued
22. Glue a small length of wire bent at an angle into (**P23**) to form the handbrake lever. Also, bend up and glue handrails into the holes provided for the purpose in the doors, sides and ends. The model can also be super detailed with shunters steps and handrails at this point if desired

The Underframe:

23. Glue the bogie bolsters (**P20**) onto the marked locations on the underframe (**P19**)
24. Glue the brake cylinder (**P21**) into the holes provided in the floor (**P19**)
25. For better riding qualities glue 10-14 grams of weight to the floor using Selleys 'Kwik Grip', as it stays flexible. Lead sheeting is a good substitute as it lays flat and is not as easily seen when the wagon is completed.

NOTE do not glue the floor in until the wagon is painted as it allows you to spray up inside.



MM 21 as originally built at Newport workshops. Note the diamond frame bogies.



MF 9 after unloading its cattle. Photo courtesy of Rob O'Regan.



Awaiting the scrapper's torch, an unnumbered MF. Photo Courtesy of Scott Gould.

Bogies and couplers: Use any Micro-Trains or other brand of roller bearing bogies, as these are similar to the Victorian Railways bogies. Couplers (1015 Micro-Trains) are best body-mounted separately. Alternatively, you can trim the couplers from bogies and glue them to the floor using Selleys 'Kwik Grip'.

Painting general: The completed kit should be *lightly coated* with a primer and then given a coat of Steam Era wagon red or equivalent colour from other makers. Also, paint the bogie side frames the same colour and the underframe matt black. Paint white rectangles on the handbrake end and side and on the opposite end same side. Use the above colour photo and that of VSBY15 below as guides. The floor can now be glued into the body.

Decals: Affix the paper decals with Microscale Matt or Gloss medium as it can act as glue, followed by an overcoat of clear. Position the decals as per the photos in these instruction sheets. Decals cover the MF and VSBY eras.

Weathering: Generally it didn't take long for the wagons to become cruddy with all the cattle dung that was about. Use pastels or paint to weather the wagon to your taste. Use the photos as a reference.



Left: MF24 in consist with L and M vans Canal Yard 23/03/1977. Courtesy Rob O'Regan.



Left: The remains of VSBY15 prior to being totally scrapped. Note the 'Y' instead of the 'F' Photo Chris Pearce

For more information and photos see:
 Rob O'Regan's website <http://www.robx1.net/>
 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 chrispearce@spiritdesign.com.au
 Spirit Design ABN 92 510 718 068
www.spiritdesign.com.au

