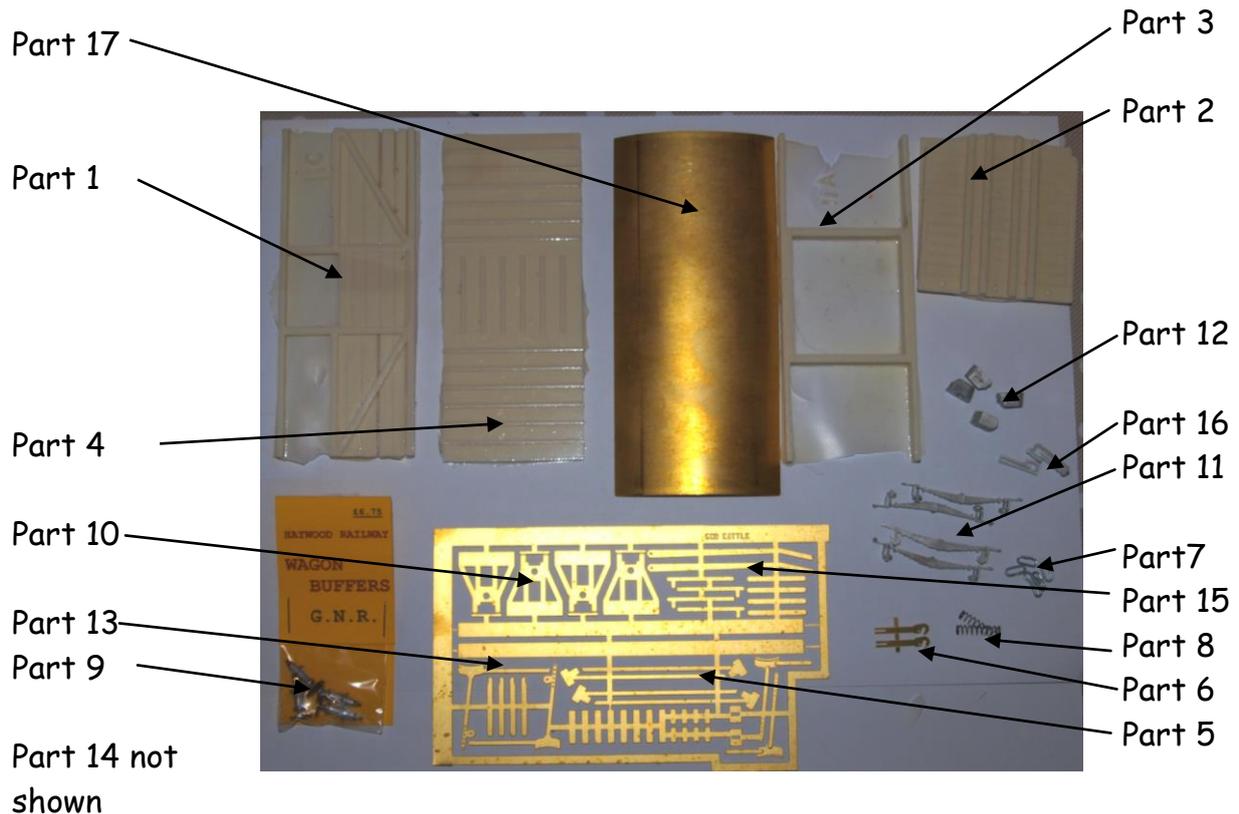


Furness Railway Wagon Co.

GNR/LNER/BR Large Cattle Van

Wheels, paint and transfers required to complete.

The Parts.

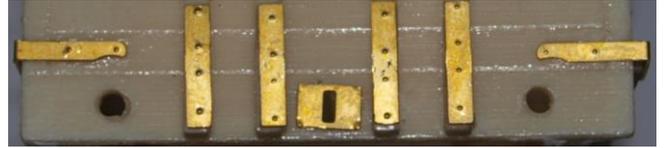


Assembly of van.

1. Wash and clean up the castings making sure that the castings fit together before gluing.
2. Take the outer side castings (Part 1) and remove all of the flash from the in-sides of the casting as shown. This is there to protect the casting in transit as parts of it are weak until the structure is complete.

3. Next drill the holes in the up-right beams and the ends (part2) to enable wire to be threaded in later.

4. Next drill out the holes in the buffer beams for the coupling hooks and the buffers.



5. Now it is a good idea to dry fit the sides, ends, chassis (part 3) together. Make sure that the sides fit between the ends and flush with the chassis. Once you are happy with the fit, fix in to position with superglue.



6. Then fit the floor (Parts 4) again make sure that it fits between the sides and ends. This is large and will need trimming to fit.



7. Next fit the etched strapping (part 5), as shown. Care is required not to get too much glue on the strapping as this could cover the strapping.



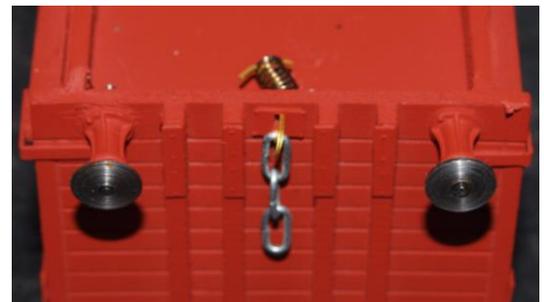
8. Next punch out the rivets on the sole bar etch (part 7) and attach.



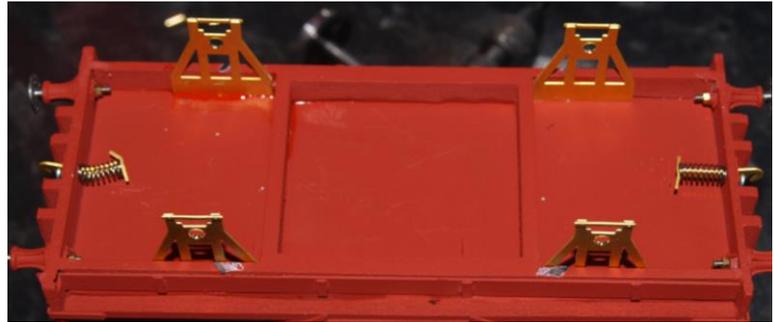
9. Next fit the wire into the hole that you previously drilled in the sides and ends



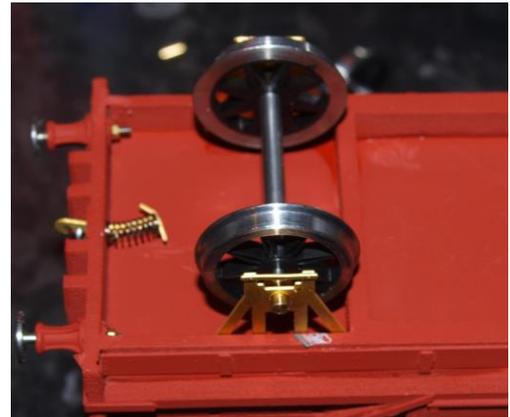
10. Next, assemble the links (part 6) on to the coupling hook (part 7) and push through the slot. Now push the spring (part 8) over the back of the back of the coupling hook and bend the tags over to secure the spring in place. Then fix the four buffers (part 9) into the holes in the buffer beam using two part epoxy.



11. Now take the 'W' axel guards (part 10) and fold over the axel box retaining bars at the bottom then glue to the inside sole bar as shown.



12. Assemble a wheel set, 2 x bearing's and 1 x wheel/axle unit. Slide the assembly into position and make sure that the wheels are free running. There is no need to glue the bearings into the bearing extension castings. Repeat for the other wheel set.



13. Now fit the spring castings (part 11) to the sole bar and the back of the W-irons and the axel box covers (part 12) to front of the W-irons.



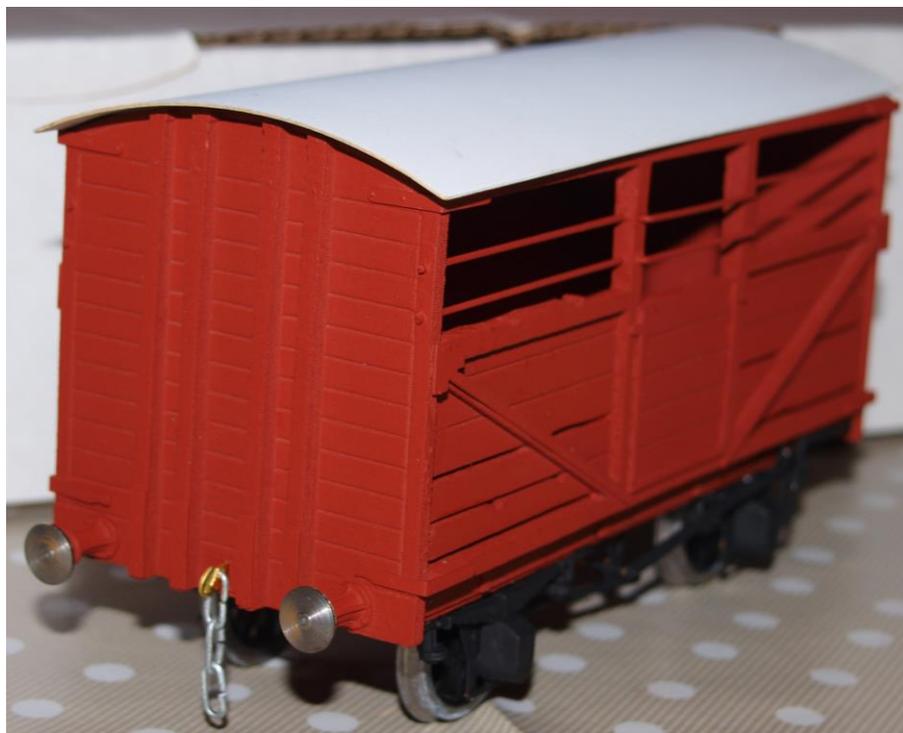
14. Next take the etched brakes (part 13) punch out the rivets and solder together. These can then be mounted on to the chassis next the wheel as shown. Using the etched 'V' hangers (part 14) against the bottom of sole-bar and next to link arm of the etched brake assembly. Glue the casting into position using two part epoxy resin, this will give you opportunity for adjustment.



15. Next fix the brake lever (Part 15) and ratchet casting (part 16) to the sole-bar and to the outside of the 'V' hanger as shown.



16. Finally fit the roof (part 17), making sure that the end line up and are square. Paint the model in the livery of your choice.



History of the Wagon

This represents the Great Northern Railway's standard, large, cattle van. 474 were built in batches between 1885 and 1910, at their Doncaster works. 305 were taken into LNER ownership in 1923, all but 6 had been scrapped by 1947 and all would have been scrapped by 1955.

The only variation in the building of these vans was the braking systems. The standard vans were, originally, with a push rod brake, on one side only. This was later updated to a single brake block on each side, with a common cross shaft, with two brake levers pointing in the same direction. Some of the vans were also fitted with Automatic Vacuum Brakes (AVB), while others were through piped for AVB and Westinghouse Airbrakes.

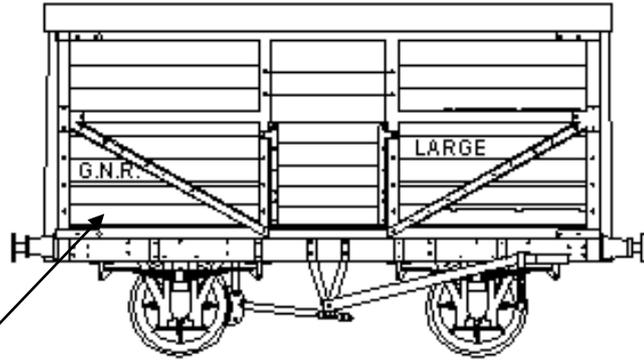
These vans would have been a common sight in goods trains from Scotland, Southern England. They would have been marshalled at the front of goods trains so that the shock to the cattle was less.

The GNR's livery was red oxide above the sole bars and black below. Lettering was simple with a large 'G' 'N' in white on the side of the wagon. LNER livery copies the practice of the GNR apart from the base colour was mid grey rather than red oxide. However in 1936 the LNER reverted back to red oxide. Those of the wagons that managed to survive past 1947 would have been eventually grey if they were lucky.

No running numbers are known at this time.

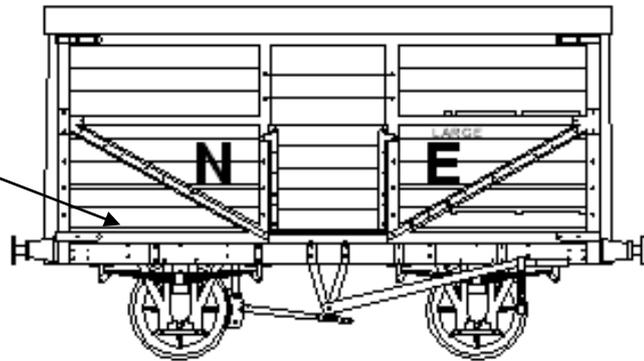
Liveries

GNR Livery
Circ 1914

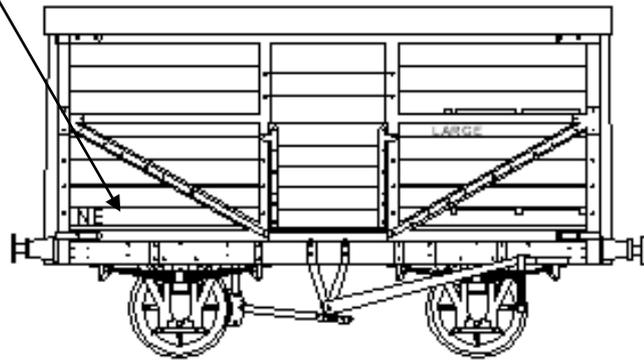


LNER Livery
Circ 1923-1936

Numbers



LNER Livery
Circ 1936-1955



Furness Railway Wagon Co.

GNR/LNER/BR 6ton Large Cattle Van

1. Construction Manual,
2. One rolled etched roof.
3. One Brass Strapping,
4. One brake etch,
5. One Brake ratchet Castings
6. One Brake pivot etches
7. Four outside axle box castings,
8. Four inside axle box castings,
9. Four spring castings,
10. Two wagon out side castings (resin),
11. Two wagon inside side castings (resin),
12. Two wagon end casting (resin),
13. One wagon floor Casting (resin),
14. One wagon chassis Casting (resin),
15. Four buffer assemblies,
16. One coupling hook etch,
17. Two coupling hook springs,
18. Six coupling hook links.
19. Two lengths of brass wire.

We recommend Haywood Railway's 3'1" split spoke wheels.

Transfers are available from POWsides.