

Furness Railway Wagon Co.

Great Eastern Railway/LNER/BR

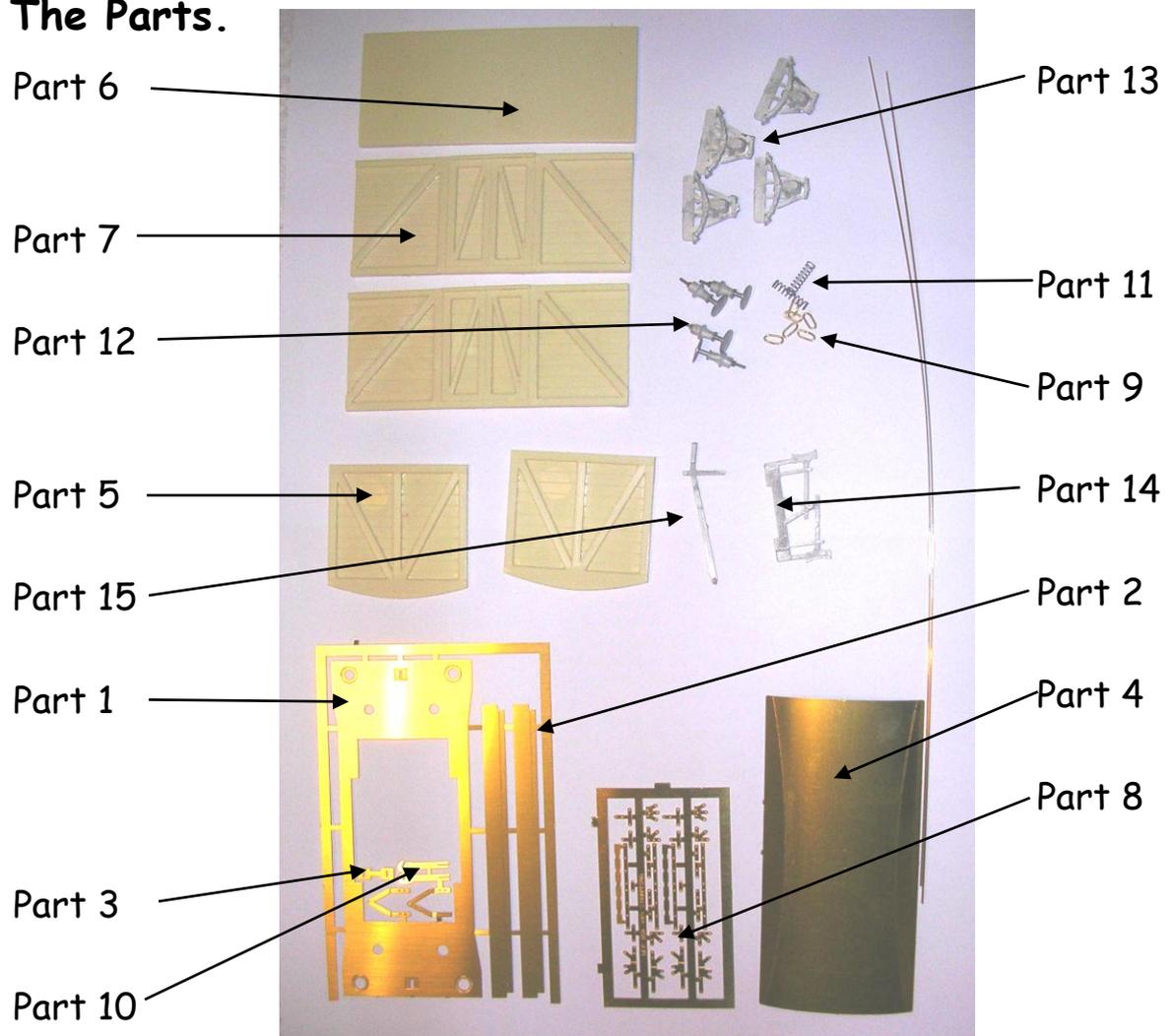
1888 Diagram 13 10ton

Box Van Steel Under-Frame

Wheels, paint and transfers required to complete.

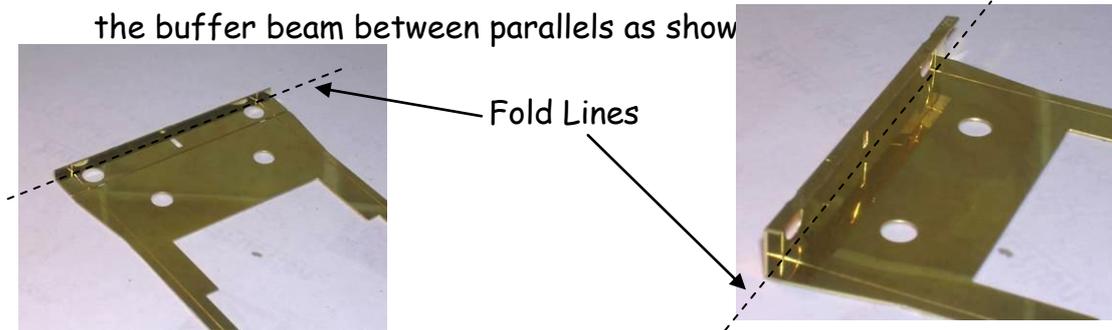
Please note that to aid the folding of the various parts score all the halfetched foldlines that are to be folded.

The Parts.



Chassis Construction.

1. Remove chassis (part 1) from the etch and fold up the bottom of the buffer beam between parallels as show



2. Next fold up the buffer beam completely as shown. Make sure that the resulting U shape is square so as to fit the sole bars. Repeat for the other end of the chassis.
3. Remove the sole-bars (part 2) and punch out the rivets. Next fold up the bottom of the sole-bars between two parallels. Make sure that the resulting shape is square.



4. Click one of the sole-bars in to the half etch slot that runs between the two buffer beams. Solder into position using 188C solder. Make sure that the sole-bars are actually soldered inside the buffer beam. Repeat for the other sole-bar.



- Next remove the buffer beam reinforcing plates (part 3) and punch out the half etched rivets and tin the back of each piece with 188C solder. Now sweat the plates onto the half etched square in the front of the buffer beam.



Buffer beam reinforcing plates

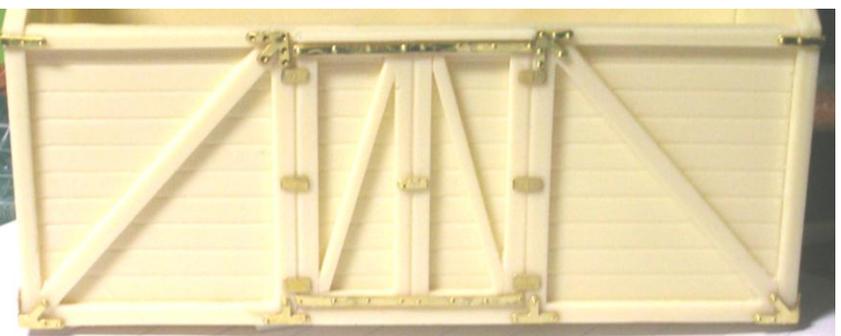
Final Assembly of van.

- First solder wire in to the half etched slots in the roof (part 4).
- Wash and Clean up the castings making sure that the casting fit together before gluing.

- Fit one of sides (parts 5) to the floor (part 6), making sure that the ends of the sides line up with the floor and are square. Next fit the ends (Parts 7) of the to the sides and floor, as shown. Then fit the last side to complete the box.



- Next punch out the half etched rivets on the strapping etch (Part 8) and fit as show.



5. Next fit a piece of wire over the door as shown.

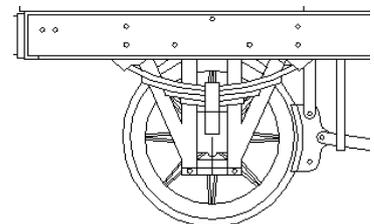


6. Position the top of the wagon in the middle of the chassis then glue the chassis to the top.



Next, assemble the links (part 9) on to the coupling hook (part 10) and push through the slot. Now push the spring (part 11) 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 12) into the holes in the buffer beam using two part epoxy.

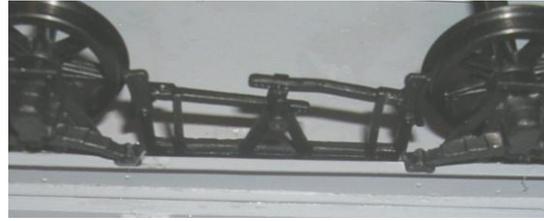
7. Drill out the w-iron castings to suit the bearings of your chosen wheels. Assemble a wheel set, 2 x W-iron's (part 13), 2 x bearing's and 1 x wheel/axle unit, do not glue the bearings into the W-irons at this stage. Again using two part epoxy resin, glue the assembled wheel set onto the sole-bars so that they are square and line up with the rivets as shown in the drawing.



8. Repeat for the other wheel set. Use a straight edge across the back of the wheels to aid getting these parallel and square to the chassis.

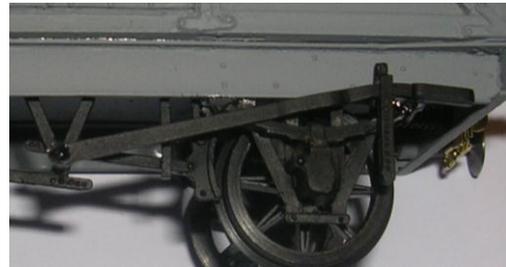


9. Place the brake gear casting (part 14) against the inside of sole-bar and slide down into the chassis with the spigot pointing outward.



You may require to chamfer the casting so that it clears the solder filet between the chassis and the sole-bar. Glue the casting into position using two part epoxy resin; this will give you opportunity for adjustment. Position the casting with care centrally between the rivets on the sole-bar.

10. Next fix the brake lever and ratchet casting (part 15) to the sole-bar as shown below.



11. Finally fit the roof, making sure that it is square. Paint the model in the livery of your choice.



History of the Wagon

Between 1888 and 1903, the Great Eastern Railway Company ordered a total of 1,990 10ton general merchandise box vans from the company's own wagon works at Temple mills. The wagons were built with outside frames with cupboard style doors mounted on a steel under-frame. Some of the vans built after 1902 were fitted with vents on the top corners of the ends, while others were fitted with automatic braking to allow them to run with passenger trains.

The wagons were used to convey general merchandise to and from East Anglia although some of the wagons were photographed as far away as northern Scotland and south west England.

The wagons were issued the following running numbers by the Great Eastern Railway: 1509 (Brake one side only), 5534 (piped), 6798 (converted to Whitewash Truck), 20101-21000, All but 20 of these wagons were absorbed into the LNER. These would have been renumbered by adding 600,000. Some of these wagons managed to last into early British Railways mainly as dept stock with two examples being preserved. In Great Eastern Railway days the wagons would have been painted:

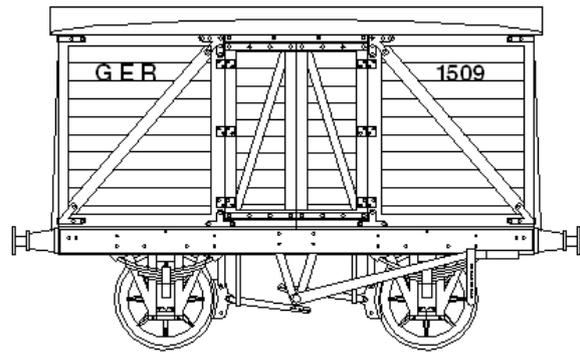
- Slate grey for un-ventilated stock.
- Light French grey for ventilated stock
- Red Oxide/Dark Red outer panels on the Ends (Pre 1912) or Light French grey with a large 'V' in Red Oxide/Dark Red painted on the Ends for Vacuum fitted stock.
- All had White/light grey roof and everything below the sole-bars and the buffers in black.

The wagons in revenue service would have also been painted grey from 1923 with the fitted wagons being painted bauxite. Those wagons in

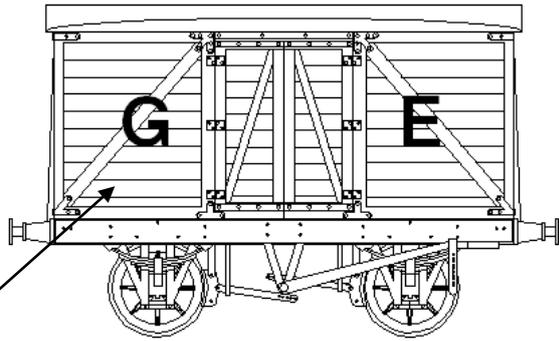
departmental service would have been painted Oxford blue or Green depending on their use. In British Railways days, the wagons would have probably not repainted unless there was a change in use.

Liveries

Great Eastern
Railway Livery
Circ 1900

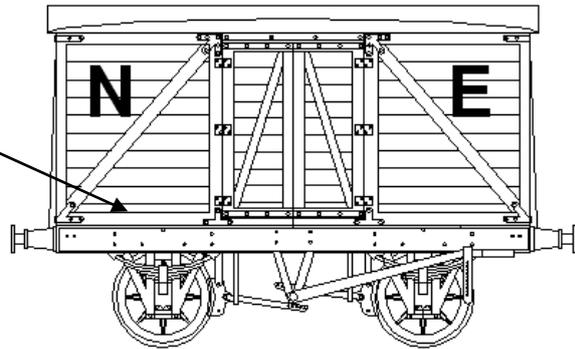


Great Eastern
Railway Livery
Circ 1912



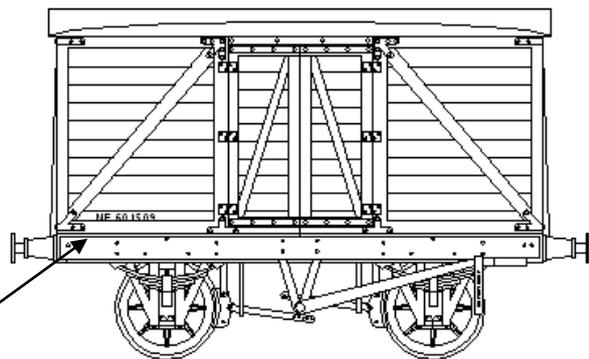
LNER early
Livery Circ 1923-

Numbers

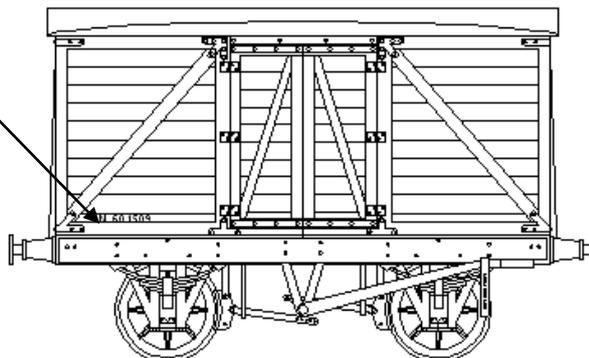


LNER Late Livery
Circ 1936-47

Numbers



BR early Livery
Circ 1947-57



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1888 Diagram 13 10ton

Box Van Steel Under-Frame

1. Construction Manual,
2. One Brass chassis etch,
3. One rolled etched brass roof.
4. One Brass Strapping etch
5. One brake gear castings,
6. One brake lever castings,
7. Four W-iron/axle box castings,
8. Two wagon side casting (resin),
9. Two wagon end casting (resin),
10. One wagon floor Casting (resin),
11. Four buffer assemblies,
12. Two coupling hook springs,
13. Six coupling hook links.
14. Two lengths of 0.7mm brass wire.

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

Transfers are available from POWsides.