

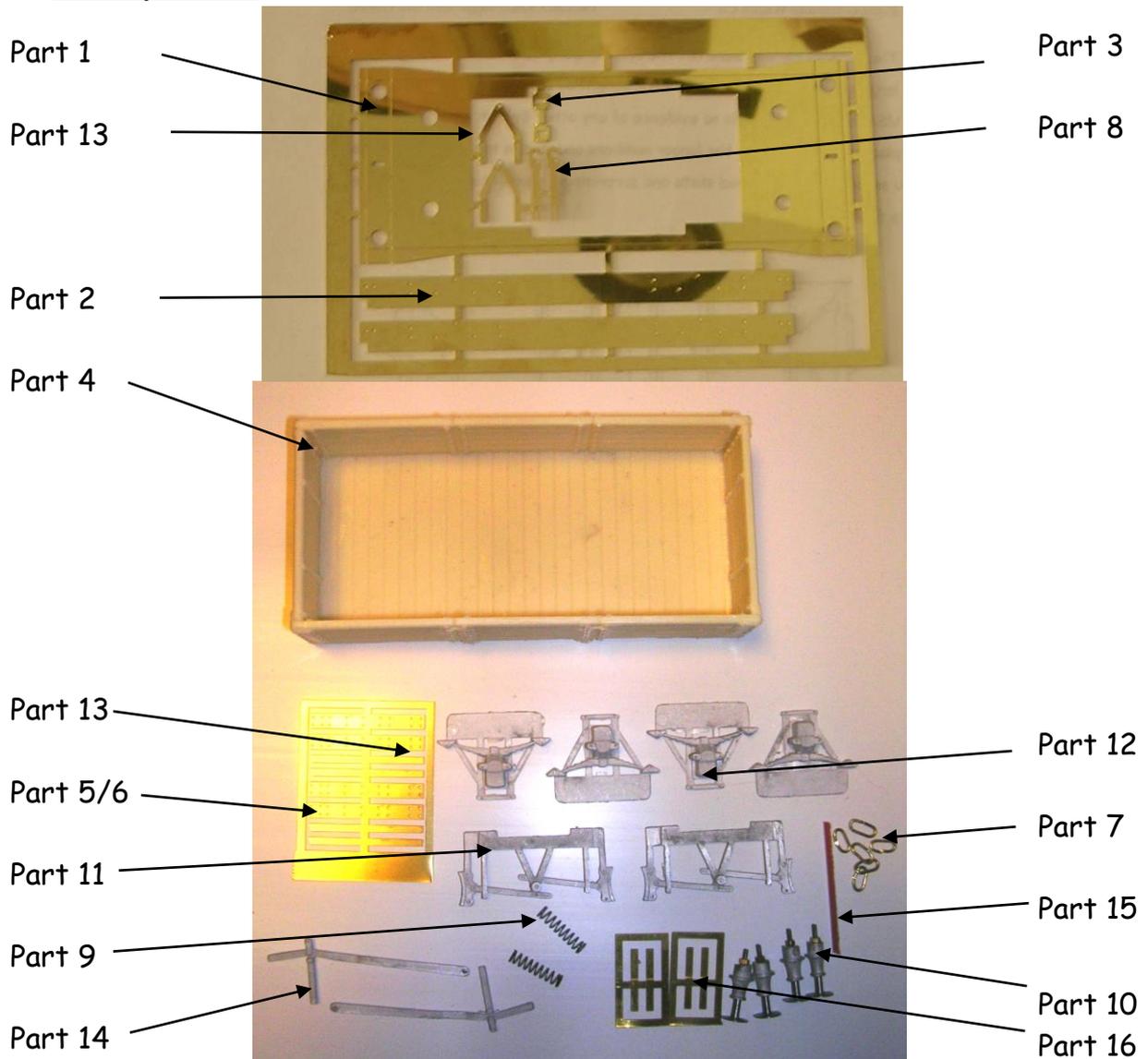
# *Furness Railway Wagon Co.*

Lancashire Derbyshire and East Coast Rly/  
Great Central Rly/  
East and West Yorkshire Union Rly  
10ton 5PLK Mineral Wagon With Steel Under-  
Frame

Wheels, paint and transfers required to complete.

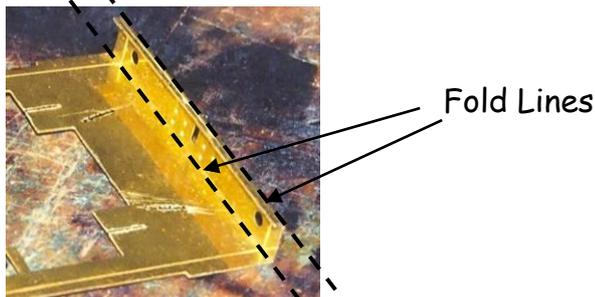
Please note that to aid the folding of the various parts score all the half-etched foldlines that are to be folded.

## The parts.



## Chassis Construction.

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

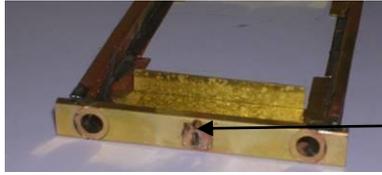


3. Remove the sole-bars (parts 2) and punch out the rivets. Next fold up the bottom of the sole-bars between two parallels. Make sure that the resulting shape is square.

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.



5. 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, as in photo.



Buffer beam reinforcing plates

## Final Assembly.

1. Position the top of the wagon (part 4) in the middle of the chassis and glue together.



2. Next remove the 'L' section bars from the etch (parts 5) and punch out the half etched rivets as shown. There are eight 'L' sections with this kit. If you are building the E&WYUR wagon then you will need 'T's on the ends of the wagon. However if you are building the LD&ECR you have a choice of fitting 'L's or 'T's. Please note that the 'L's are handed and you will need a right and a left handed 'L' for each end of the wagon. The 'T's are made up from two 'L's placed back to back. As shown.



3. Attach two of the 'T's or 'L's section bars to the end of the wagon as shown. Then repeat for the other end.



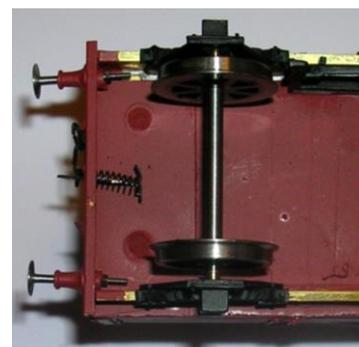
4. Next, assemble the links (part 7) on to the coupling hook (part 8) and push through the slot. Now push the spring (part 9) over the back of the back of the coupling hook and bend the tags over to secure the spring in place. Then fix the four buffers (part 10) into the holes in the buffer beam using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



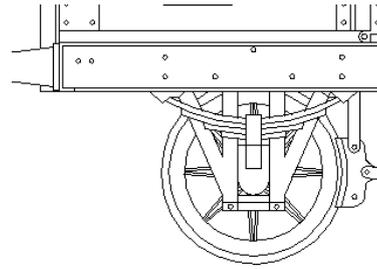
5. Place the brake gear casting (part 11) against the inside of sole-bar and slide down into the chassis with the spigot pointing outward. You may require chamfering the casting so that it clears the solder filet between the chassis and the sole-bar. Glue the casting into position using two part epoxy resin, this will give you opportunity for adjustment. Position the casting with care centrally between the rivets on the sole-bar. Repeat for the other side of the wagon.



6. Drill out the w-iron castings to suit the bearings of your chosen wheels. Assemble a wheel set, 2 x W-iron's (part 12), 2 x bearing's and 1 x wheel/axle unit,



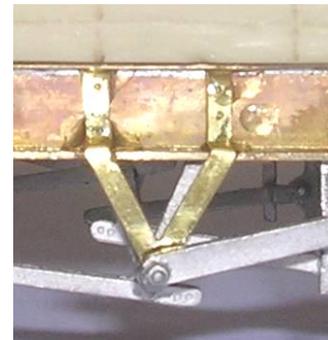
do not glue the bearings into the W-irons. Again using two part epoxy resin, glue the assembled wheel set onto the sole-bars so that they are square and line up with the rivets as shown in the drawing.



7. 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.



8. Punch out the half-etched rivets on the outside V-hanger (part13), fold up, and glue into position on the sole-bar and to the spigot of the brake gear casting. Repeat for the other side of the wagon.



9. Next fix the brake lever and ratchet casting (part 14) to the sole-bar and to the outside V-hanger as shown.

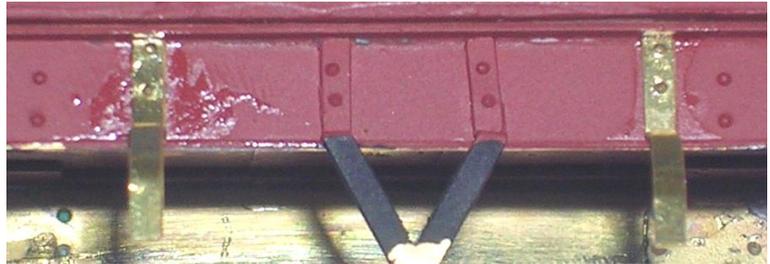


Repeat for the other side of the wagon.



10. Next take the plastic strip (part 15) and cut a square. Then glue it onto each of the doors as shown.

11. Now fit the etched door stops (Part 16) onto the sole bars. These would normally be fitted inline with the door strapping so that it would hit the stop rather than the brake lever. As shown.



12. Finally paint the model in the livery of your choice.



## History of the Wagon

This kit represents a 5 plank mineral wagon, with a steel under-frame, built for both the Lancashire Derbyshire and East Coast Railway and the East and West Yorkshire Union Railway in 1896. At about the same time these wagons were being built it is known that the Taff Vale and Barry railway companies both bought wagons from G.R Turner, of Langley Mills, to a similar design.

When the LD&ECR was founded in 1896 its wagon policy followed designs developed by the Great Eastern Railway of having their wagons built with wooden bodies on steel under frames. The company did not build its own wagons and subsequently relied on commercial wagon works for their supply.

These wagons were originally painted chocolate brown and there is some debate if the iron work, above the sole bar, was picked out in black as some photos show it highlighted and others don't.

However these wagons did not stay in their chocolate livery for long as in 1907 the LD&ECR was taken over by the Great Central Railway and would have been repainted soon after into light grey. After 1923 these wagons would have followed the standard LNER paint scheme. Known LD&ECR numbers are 601-680 and Great Central 31903-82 these having 500,000 added to them by the LNER.

Information about the wagons owned by the East and West Yorkshire Union Railway is patchy to say the least. It is not known how many were built and who built them. There are four known photographs of the wagons, two in E&WYUR livery and two in early LNER livery. The wagons were painted grey for most of their lives as it is debatable if any of

Furness Railway Wagon Co.    **LDECR/GCR/E&WYUR/LNER/BR 10ton 5PLK  
Wagon**

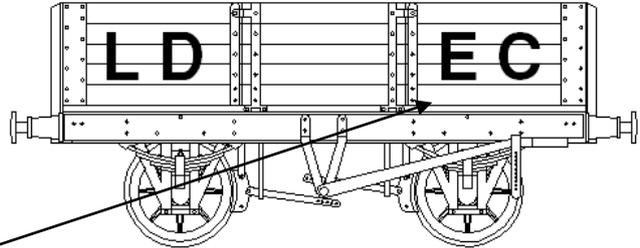
them survived past 1936. Known E&WYUR running numbers are 126 and 129 and 4111911 and 428743.

These wagons were used to convey coal and general goods and would have been seen everywhere in Britain.

At least one of the LD&ECR/GCR wagons managed to last into early British Railways. In British Railways days the wagons would have been grey or even unpainted wood.

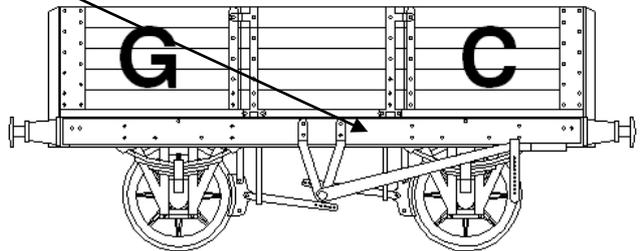
## Liveries

Lancashire Derbyshire  
and East Coast Railway  
1898-1907

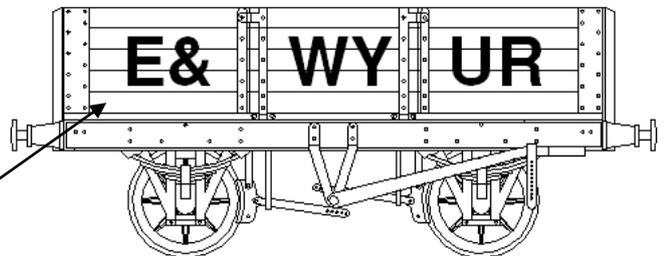


Numbers

Great Central Railway  
1907-1923

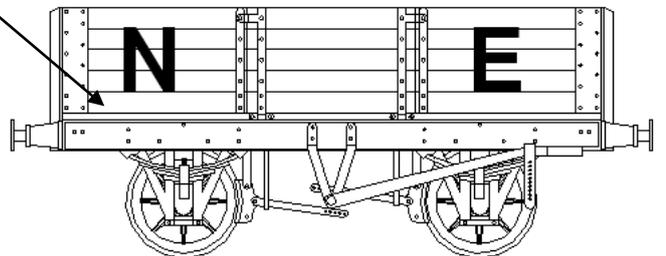


East and West  
Yorkshire Union  
Railway



Numbers

LNER early Livery  
Circ 1923-36



## *Furness Railway Wagon Co.*

### Check list for RCH 10ton 5PLK Mineral Wagon With Steel Under-Frame

1. Construction Manual,
2. One wagon body casting (Resin),
3. One Under-frame etch,
4. One End supports etch,
5. Two door stop etches,
6. Two brake gear castings,
7. Two brake lever castings,
8. Four W-iron/axle box castings,
9. Four buffer assemblies,
10. Two coupling hook springs,
11. Six coupling hook links
12. One piece of plastic strip.

We recommend Slater's 3'1" closed spoke wheels.  
Transfers are available from Dragon, Individual  
Letters from HMRS.