

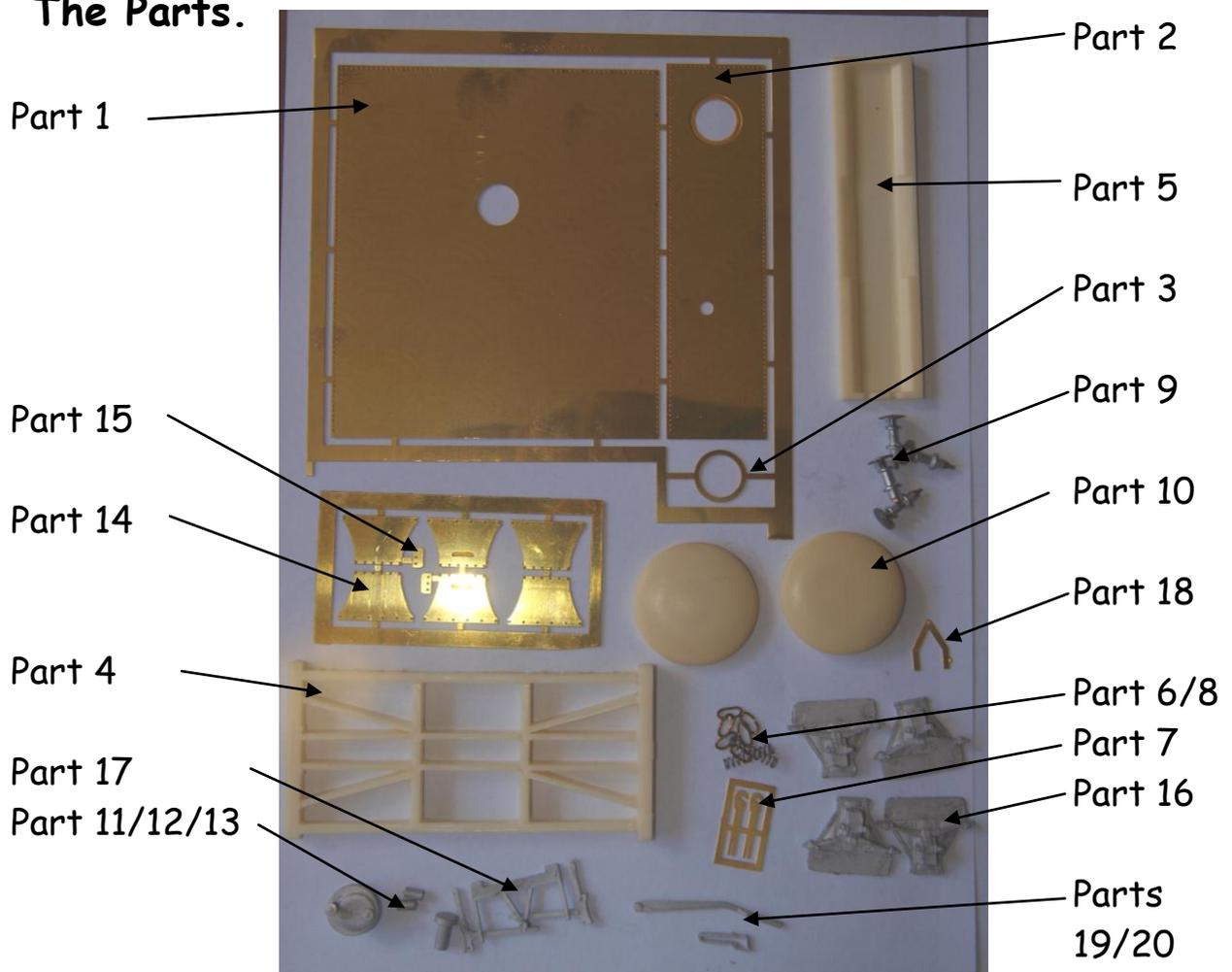
Furness Railway Wagon Co.

Midland Railway/LMS/BR Diagram D838 10ton Creosote Tank

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.

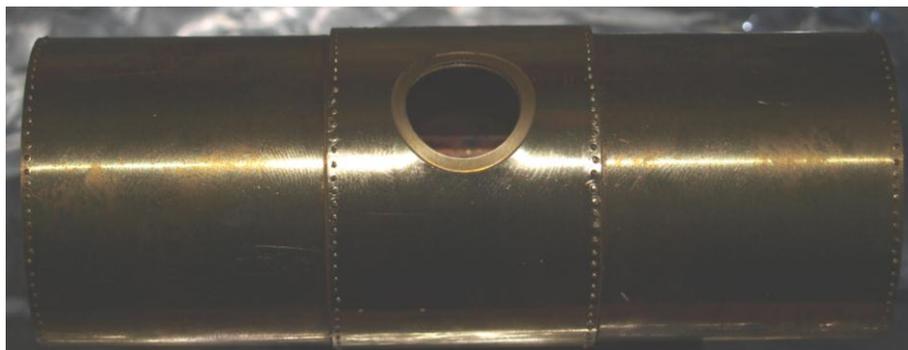


Tank Construction.

1. Punch out the rivets on the main tank etch (part 1) then roll in to a cylinder. You will require rolling bars for this task. It is also a good idea to use some card or plastic sheet when rolling to protect the rivets.
2. Once rolled solder or glue along the half etched strip. It is important to get this as tight as possible as this will save you time later on.
3. Next file off the centre section of the lip where the tank is joined. This will allow the central tank over lay section (part 2) to fit.



4. Punch out the rivets on the tank overlay etch (part 2) then roll in to a cylinder. Again you will require rolling bars for this task. It is also a good idea to use some card or plastic sheet when rolling to protect the rivets.
5. Using the holes in the two sections and the half etch lines on the main tank section position the tank overlay on to the main tank section and secure by either soldering or using superglue.



- Next punch out the rivets on the filler cap retaining ring (part 3) and secure in the half etched recess on the top of the tank.



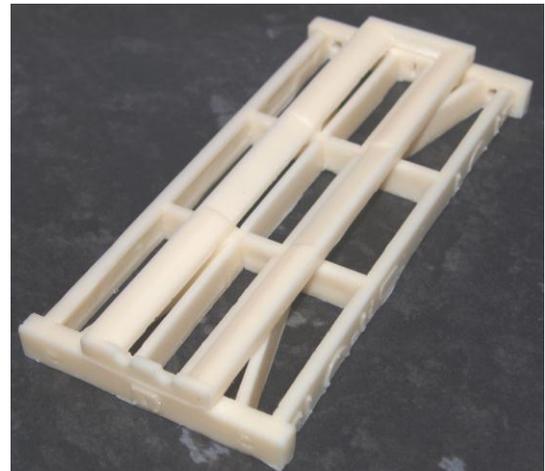
- Next drill out holes for the hand rails. Then bend up wire to fit and glue into position.

Chassis Construction.

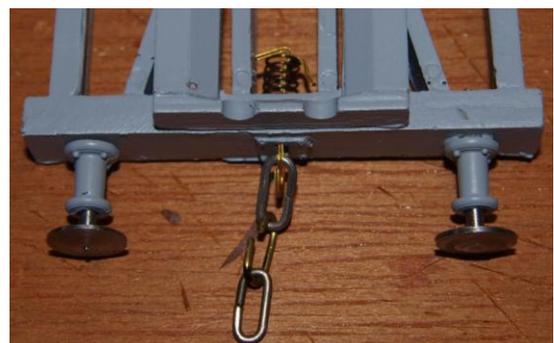
- Clean up the wagon chassis (part 4) by removing any excess material. Drill out the holes, both ends, for the buffers and coupling as shown.



- Cut away the flash on the tank cradle (Part 5) and then glue centrally into position on the chassis.

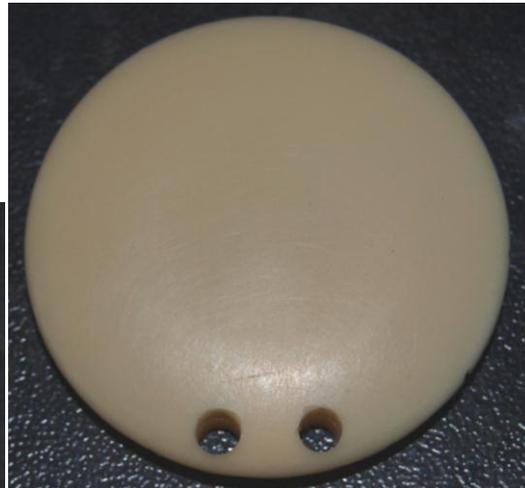


- Next, assemble the links (part 6) on to the coupling hook (part 7) and push through the slot. Now push the



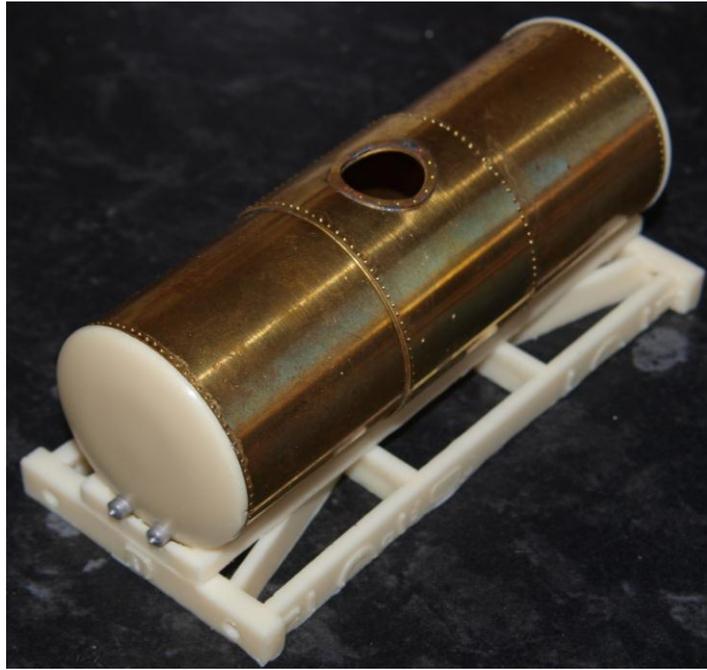
spring (part 8) over the back of the back of the coupling hook and bend the tags over to secure the spring in place. Then fix the four buffers (part 9) into the holes in the buffer beam using two part epoxy as shown. Repeat for the other end.

4. Fit the two ends (part 10) into the main cylinder. Don't glue them in just yet! Then sit the tank on the chassis. Again don't glue them in just yet!
5. Using the end of the tank cradle which has the two notches out mark on one of the tank domes where the notches are. Then remove the tank from the chassis and then the end from the tank.
6. Drill out the end where you have just marked out as shown.

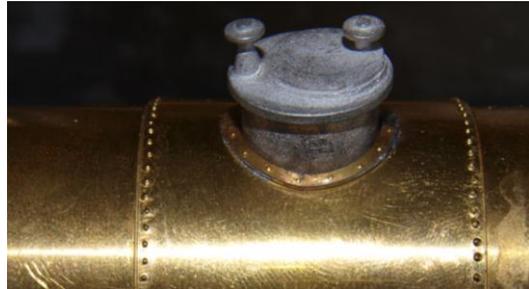
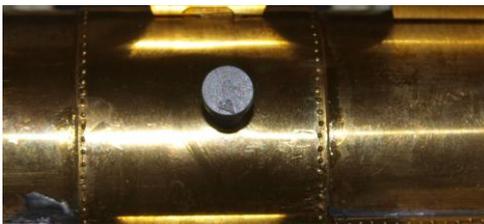


7. Next fit the two relief valves (parts 11).

8. Fit the two ends into the main cylinder making sure that the end with the holes drilled in it has the holes at the bottom of the tank. You may want to use the chassis as a guide as the valves will now fit in to the notches in it.



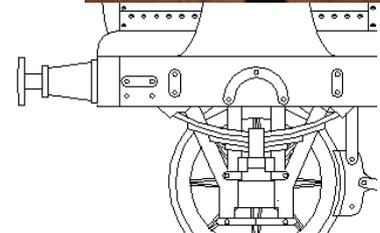
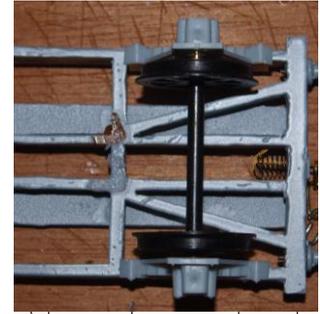
9. Glue the tank drain (part 12) and filler cap (part 13) into position.



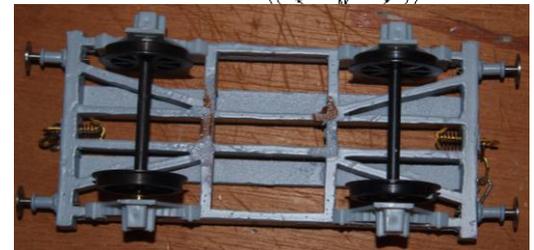
10. Next fit the tank supports (part 14) to the side of the tank. Then attach the step (part 15) to the centre tank support. If you want to paint the tank a different colour to the rest of the wagon, don't attach the supports to the chassis.



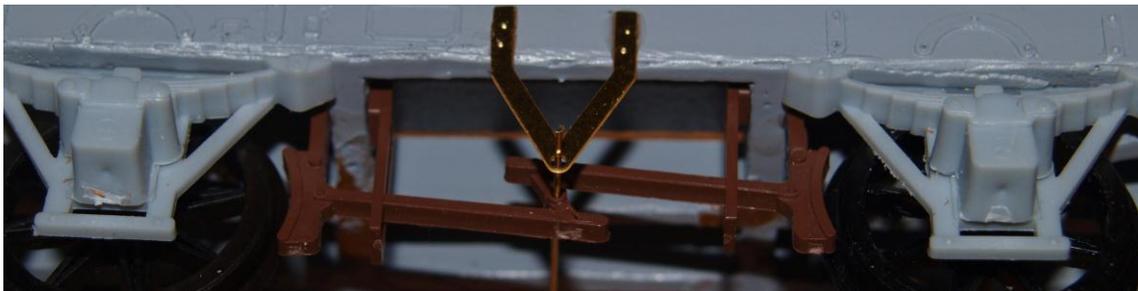
11. Assemble a wheel set, 2 x W-iron's (part 16) 2 x bearing's and 1 x wheel/axle unit, do not glue the bearings into the W-irons at this stage. Again using two part epoxy resin, glue the assembled wheel set onto the sole-bars so that they are square and line up with the rivets as shown below.



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. Glue the brake gear casting (part 17) on to one side of the wagon only. Then Glue the outside V-hanger (part 18) into position on the sole-bar and to the spigot of the brake gear casting.



10. Next fix the brake lever (part 19) and ratchet casting (part 20) to the sole-bar and to the outside V-hanger as shown.



Final Assembly

1. Glue the base of the tank into the cradle previously glued to the chassis. You might want to do this after painting.
2. Finally paint the model in the livery of your choice.



History of the Wagon

Very little is known about these tank wagons all six were built in one batch around 1900. The wagons were ordered from the company's own wagon works at Derby. These wagons were built on the Midland's standard 9ft wooden under-frame with a riveted steel, cylindrical tank on top.

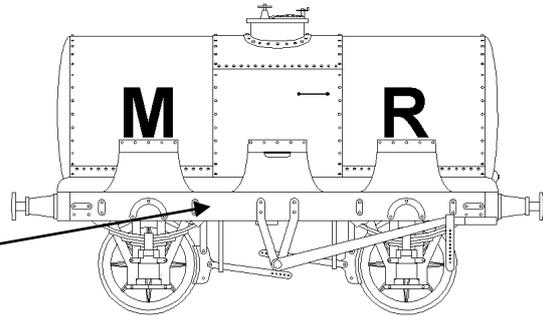
Between 1900 and the late 1920's these wagons were solely used for the transportation of Creosote around the Midland's, and then the LMS's, system. In the early 1930's the wagons, were gradually, converted to fuel oil tankers.

The recorded numbers for these wagons are; 19, 20, 21, 22, 33 and 34. All of the wagons were absorbed into the LMS. It is possible that all of these wagons managed to last into early British Railways in one form or another. However, one of these wagons remained in its original condition on the Keighley Worth Valley Railway for many years and has been recently moved to the railway museum at Chesterfield.

In Midland Railway days the wagons would have had their tanks painted gloss 'Indian-Red' with their sole-bars, frames and cradles painted firstly light grey but they would have been repainted with Midland smudge which can not be defined as it was made up on the day. The wagons would have also been painted grey from 1923 to 1935 and then painted bauxite from 1936 to 1948. In British Railways days, the wagons would have reverted to a shade of grey. In all liveries below the sole-bars would have been painted black.

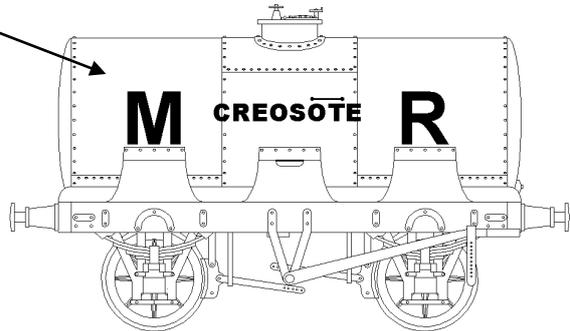
Liveries

Midland Railway
Livery Circ 1900

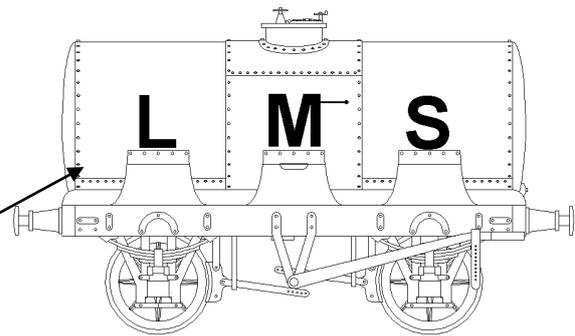


Numbers

Midland Railway
Livery Circ 1913

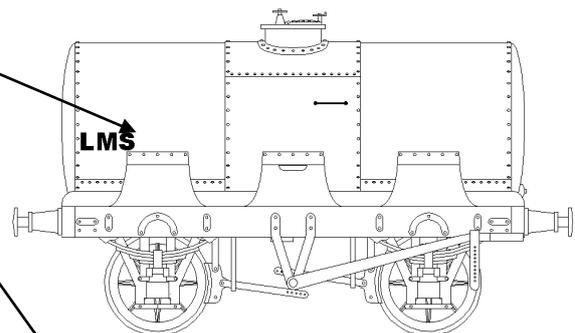


LMS early Livery
Circ 1923-36

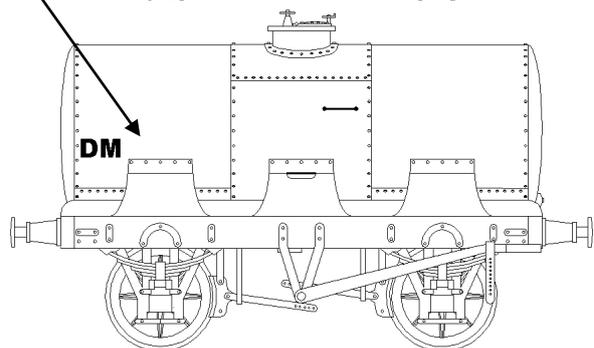


Numbers

LMS Late Livery
Circ 1936-47



BR early Livery
Circ 1947-57



Furness Railway Wagon Co.

Midland Railway/LMS/BR Diagram D838 10ton Creosote Tank

1. Construction Manual,
2. One wagon chassis casting (resin),
3. One cradle casting (resin),
4. One tank etch,
5. One tank support etch,
6. One brake gear casting,
7. One brake lever casting,
8. One brake ratchet casting,
9. Four W-iron/axle box castings,
10. Four buffer plate casting,
11. One etched 'V' Hanger casting,
12. Four buffer assemblies,
13. One filler cap casting
14. One drain casting,
15. Two safety valve casting
16. Two coupling hook springs,
17. Six coupling hook links,
18. Two coupling hooks,
19. brass wire.

We recommend Haywood Railway 3'1" split spoke wheels. Transfers are available from POWSides, Slater's or on the HMRS LMS pre-grouping sheet.