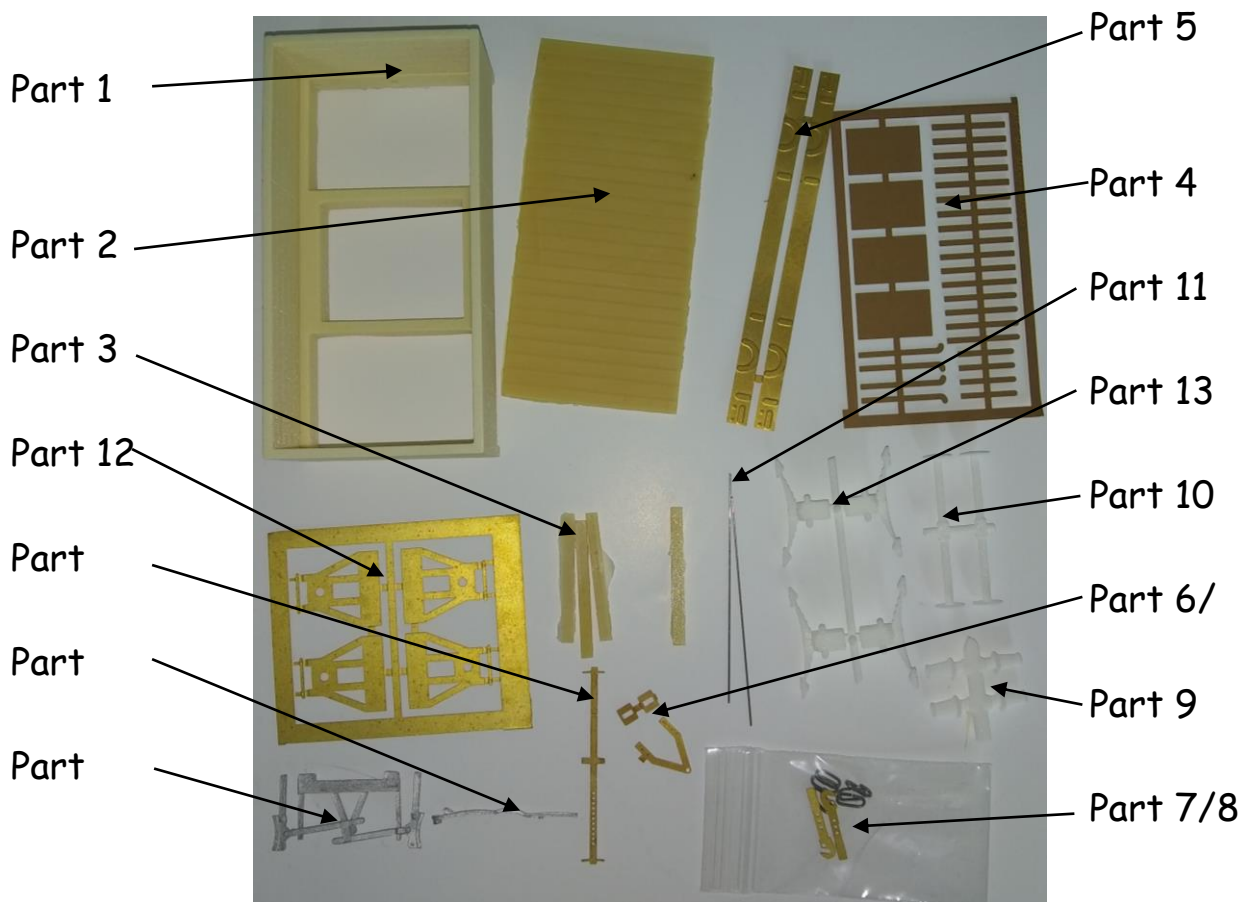


Furness Railway Wagon Co.

Midland Railway/LMS 8ton Manure wagon

Wheels, paint and transfers required to complete.

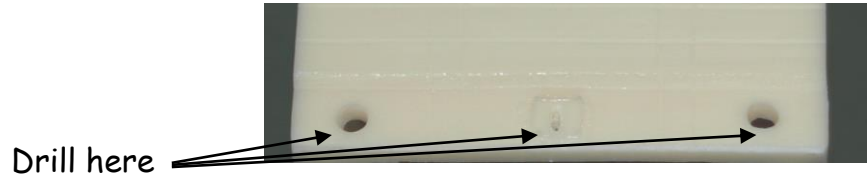
The Parts.



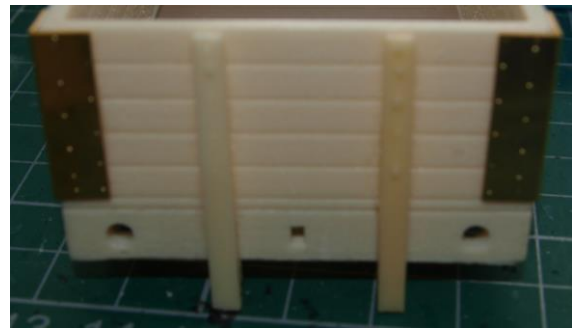
Some white metal parts are being replaced are being replaced with either 3D printed plastic or etched brass

Wagon Construction.

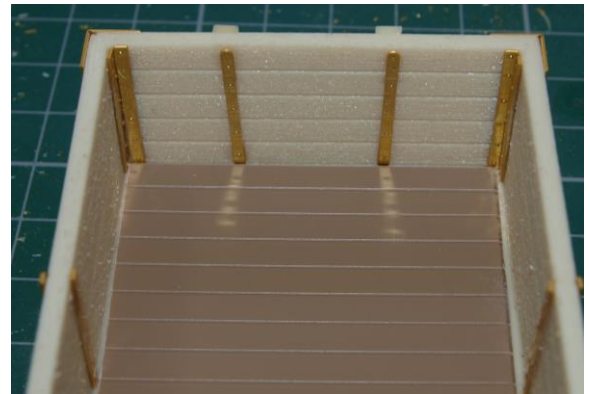
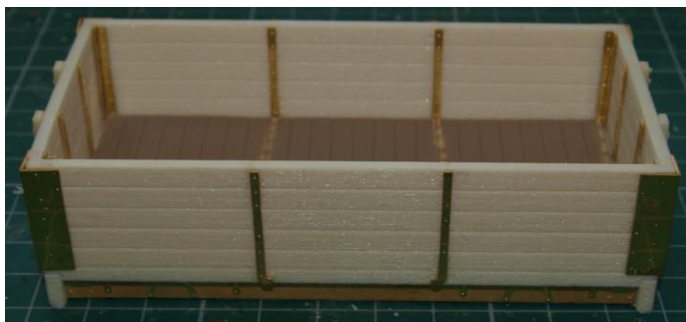
1. Clean up the wagon body (part 1) by removing any excess material.
2. Drill out the holes, both ends, for the buffers and coupling hooks as shown.



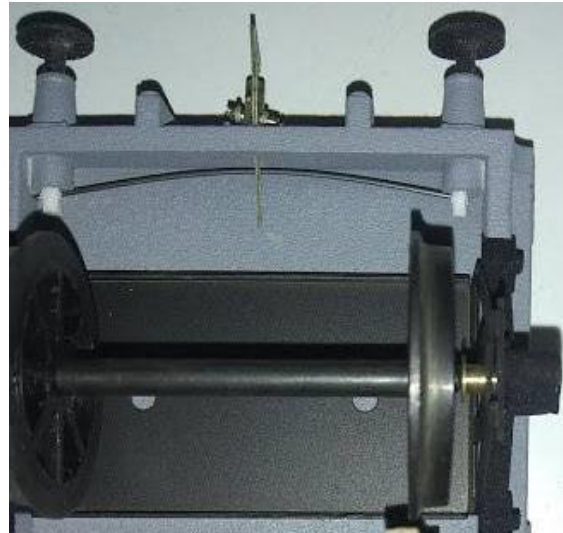
3. Next clean up and fit the floor (part 2).
4. Attach the end support castings (part 3). Then File the tops of the end supports until they are flush with the curve. If you are building the wagon with the flat ends file off the bottom of the supports.



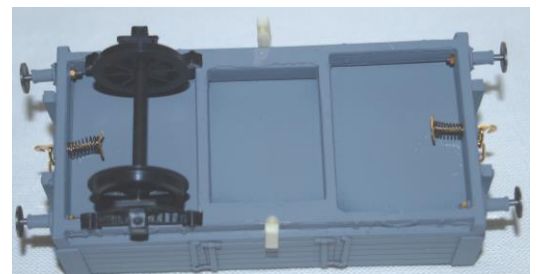
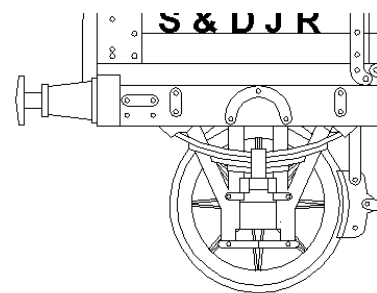
5. Fit the etched strapping (part 4), sole bar plate (Part 5) and coupling reinforcing plate (part 6), as shown. Care is required not to get too much glue on the strapping as this could cover the strapping.



6. Next, assemble the links (part 7) on to the coupling hook (part 8) and push through the slot. Then fix the four buffers guides (part 9) into the holes in the buffer beam using two part epoxy. Next open up the holes in the ends of the buffers heads (part 10) with a 0.5mm drill. Now push in the buffers through the guilds. Next push the spring wire (part 11) through the hole in the hook closest to the back of the coupling hook and through one of the buffer heads. Then slide it back and into the second buffer head. As shown. Repeat for the other end.

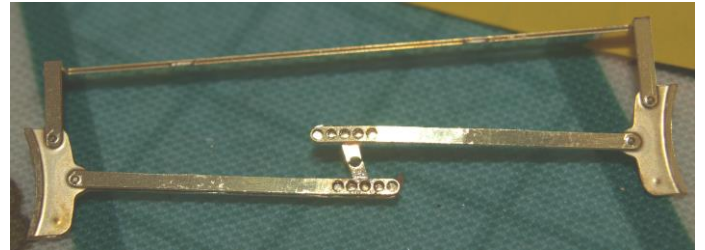


7. Assemble a wheel set consisting of: 2 etched W-iron's (part 12), 2 axle box/springs (part 13) 2 x bearing's and 1 x wheel/axle unit, do not glue the bearings into the W-irons. Again using two-part epoxy resin, glue the assembled wheel set onto the sole-bars so that they are square and line up with the crown plates as shown on the drawing.

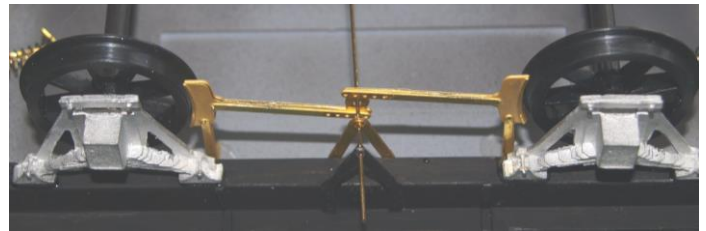


8. Repeat for the other wheel set. Use a straight edge across the back of the wheels to aid getting these parallel and square to the chassis.

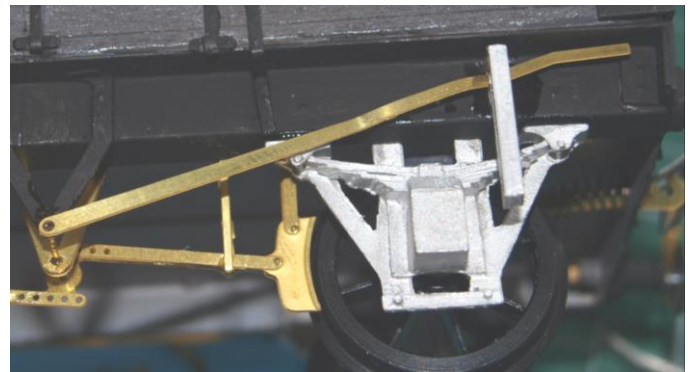
9. Laminate the brake block etch (part 11) Then glue the brakes etch to the inside of the sole-bar as shown making sure that the brake block does not foul the wheels.



10. Fit the brake 'V' hangers (Part 12) to the sole bar lining them up with the brakes.



11. Now fold up the brake ratchet (part 13) and fit to the outside of the sole bar



12. Now you are ready to paint your model in the livery of you choice.



History of the Wagon

Between 1894 and 1898 the Midland railway built 102 of these wagons. They were basically the Midland's standard goods/mineral wagon but without any side or bottom door. These wagons would have been sent empty to large yards which handled a lot of live animal traffic and then shipped out full to where ever the manure was needed.

Due to the nature of the traffic these wagons would not have suffered the same levels of damage as a mineral wagon so most of these wagons would have been absorbed into the LMS. It is feasible that some of these wagons lasted into early British Railways when their numbers would have been prefixed with a letter 'M'.

When originally built these wagons would have been painted Midland light grey. As the wagons aged they would have been repainted with midland smudge which can not be defined as it was made up on the day. The wagons would however not be grey for very long as they would have become stained from the manure and general grim etc.

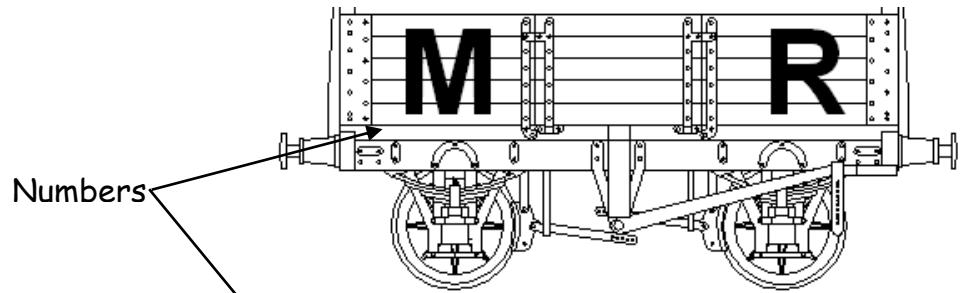
The LMS/LNER would have also been painted grey from 1923 to 1935 and then painted bauxite from 1936 to 1948.

In British Railways days, the wagons would have reverted to a shade of grey, if they got painted at all.

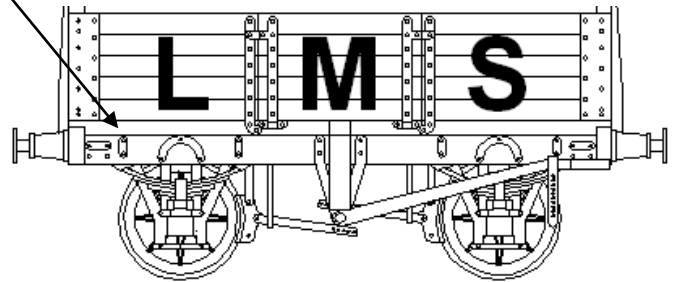
Only known running number : 76417 tare 5.0.0

Liveries

Midland Railway
Livery Circ
1894-1923



LMS Early Livery
Circ 1923-36



Furness Railway Wagon Co.

Midland Railway /LMS 8ton manure Wagon

1. Construction Manual,
2. One wagon body casting (resin),
3. One wagon floor (Plasticard),
4. One brake gear etch,
5. One brake ratchet etch,
6. One short brake lever casting,
7. Four W-iron/axle box castings,
8. Four buffer plate casting,
9. Two etched 'V' Hanger,
10. Four buffer heads,
11. Four buffer guides
12. Two pieces of coupling hook wire,
13. Six coupling hook links,
14. One set of etched coupling hooks,

We recommend Haywood Railway's or Slaters 3'1" spoked wheels.

Transfers are available from Slater's Plastikard or on the HMRS LMS pre-grouping,