

Furness Railway Wagon Co.

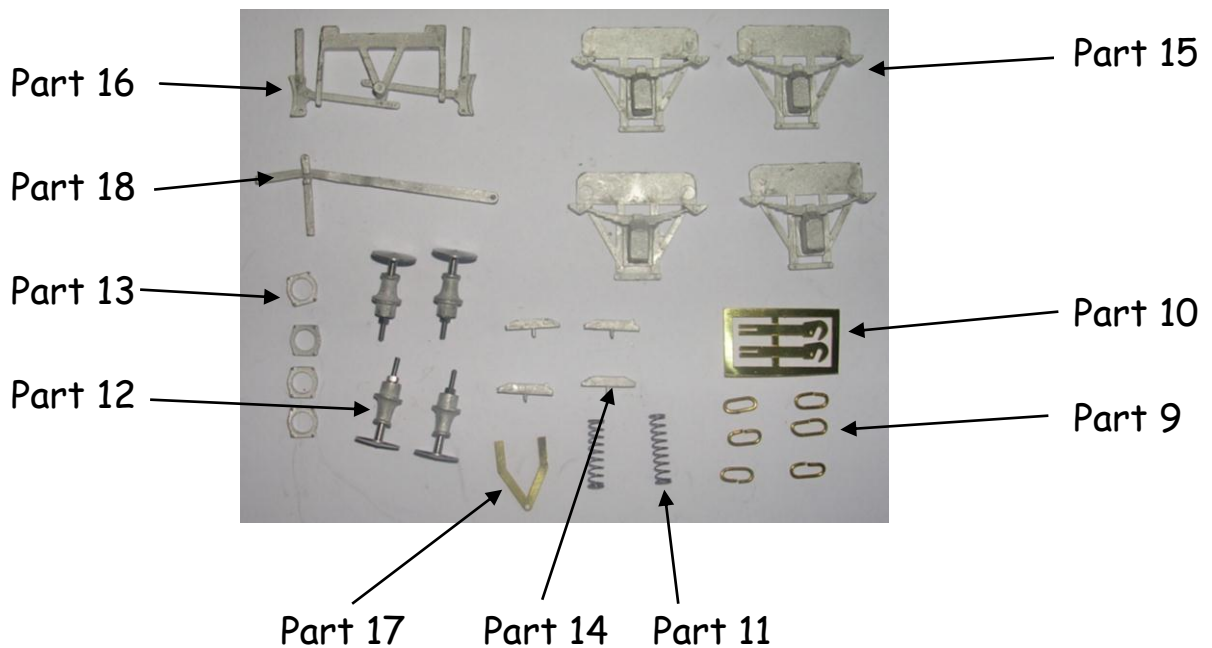
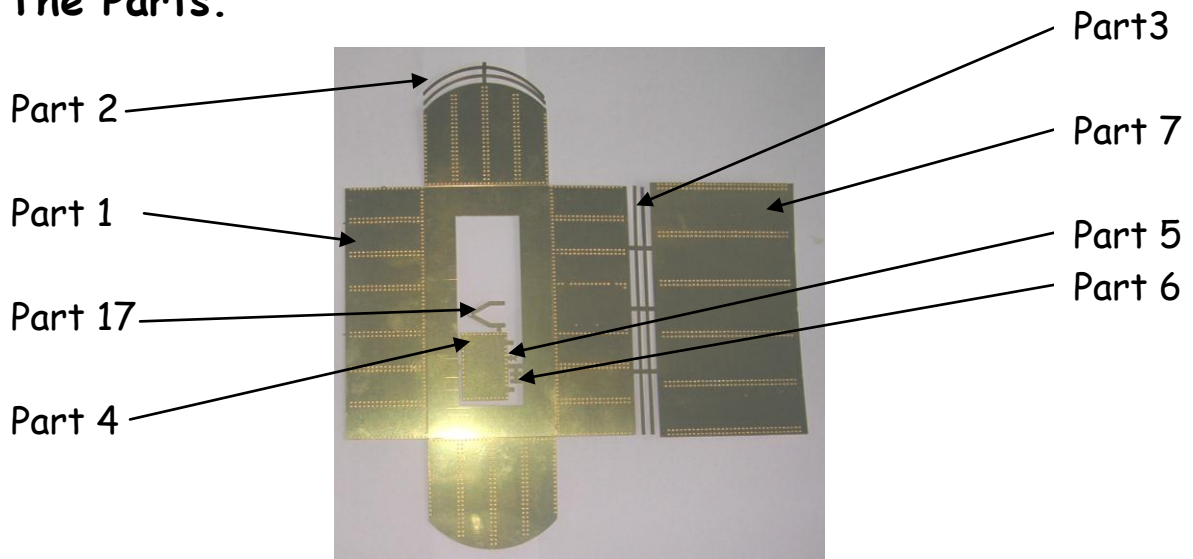
Midland Railway/LMS D384 6ton

1881 Gunpowder Van

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.

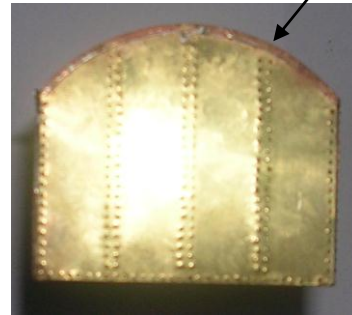
The Parts.



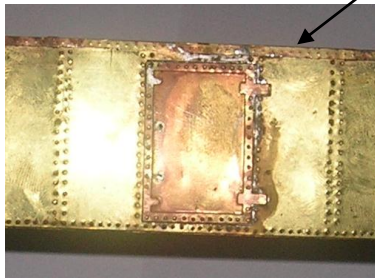
Van Body Construction.

1. First remove the Part 1 (the body) from the etch. Punch out the half etch rivets. Please note that the sides and ends can be removed separately as they are only held together with a very small amount of material and as such are quite fragile until soldered.

2. Next remove parts 2 and 3 (edging strips) from the etch. Solder the edging strips onto the body. Make sure that the strips are parallel to the body.



Edge strip
(part 2)



Edge strip
(part 2)

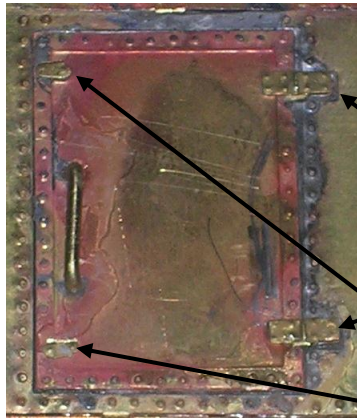
3. Next remove part 4 (the door) and punch out the half etch rivets. This is then soldered into the half etched recess as shown.

4. Once all the parts are soldered to the body, fold up it up and solder the corners. It is also a good idea to run a solder fillet down the inside of the body where the floor meets the sides and ends for extra strength as shown.



5. Next take part 7 (roof) and punch out the half etch rivets in the raised banding. This rivet punching should roll the roof to its correct shape. However it may require to be rolled a little more to

achieve the correct shape. Then solder the roof onto the van body, being careful not to disturb the edge strips.



6. Next attach part 5 (door hinges) and part 6 (door latches) to the pads on the door as shown.

Hinges

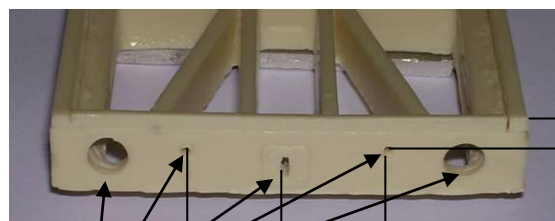
Latches

7. Then fold up the door handle, which is made from the wire supplied and attach it through the holes as shown.

Chassis Construction.

1. Clean up the wagon chassis (part 8) removing any excess material.

Drill out the holes, both ends, for the buffers, coupling hooks and end stops as shown.



Drill here

11

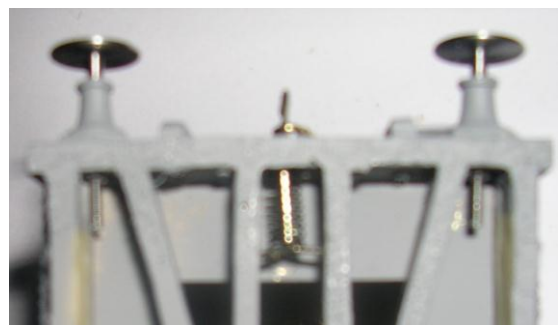
11

2.5

from top of buffer beam,

8. Glue the top of the van to the chassis making sure that the ends of the buffer beams are square with the ends of the van.

9. 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

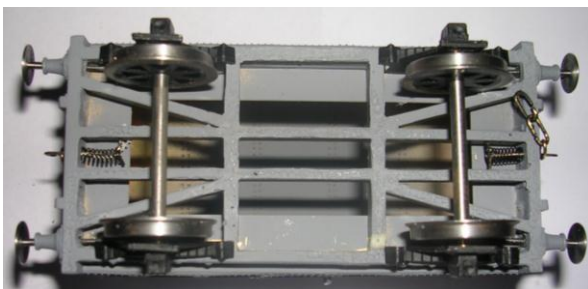
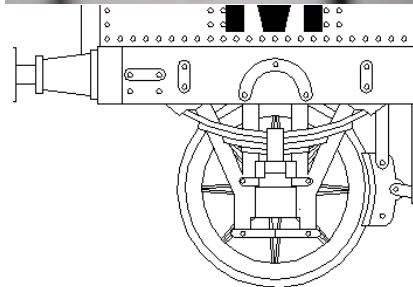
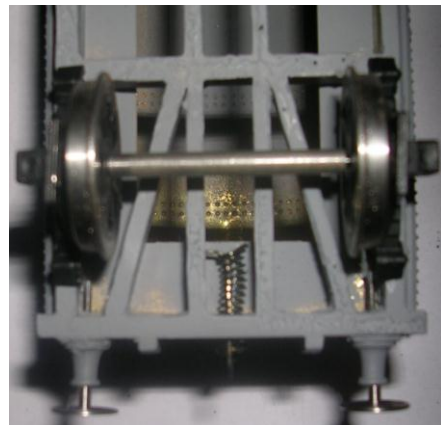


hook and bend the tags over to secure the spring in place. Then fix the four buffers (part 12) into the cast buffer plates (part 13), note curved edges to top/bottom. Then fix this assembly into the holes in the buffer beam using two part epoxy as shown. Repeat for the other end.



10. Next, fix the four end stops (part 14) to the buffer beam. Once fixed, in position, file off any excess material under the line of the buffer beam.

11. Assemble a wheel set, 2 x W-iron's (part 15), 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.



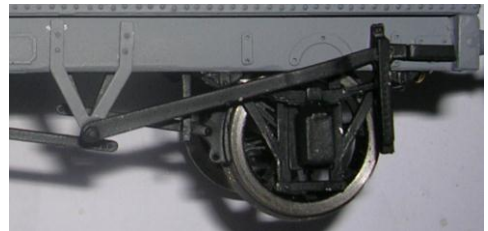
12. Repeat for the other wheel set. Use a straight edge across the back of the wheels

to aid getting these parallel and square to the chassis.

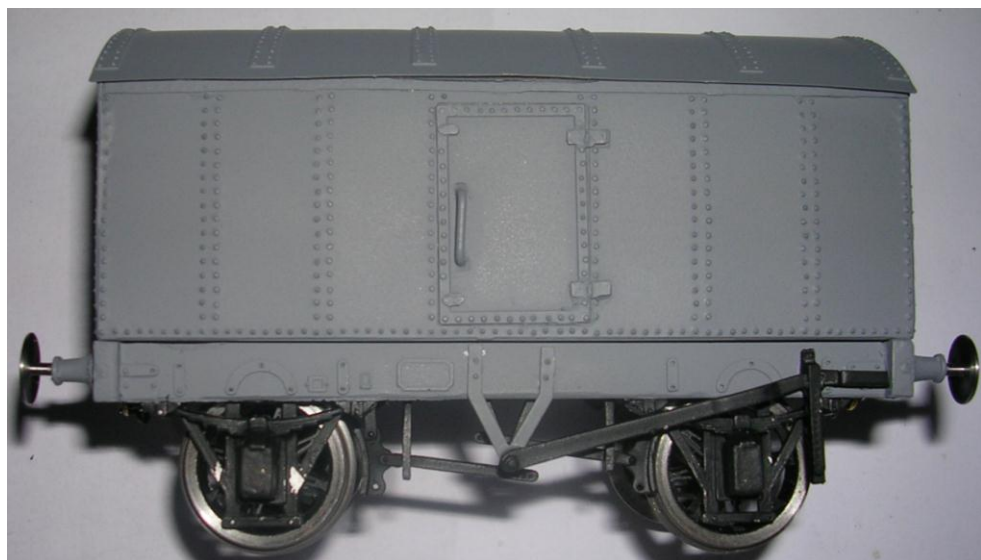
13. Glue the brake gear casting (part 16) on to one side of the wagon only as shown.



14. Punch out the half etched rivets on the outside V-hanger (part 17) and glue into position on the sole-bar and to the spigot of the brake gear casting. Next fix the brake lever and ratchet casting (part 18) to the sole-bar and to the out side V-hanger as shown below.



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

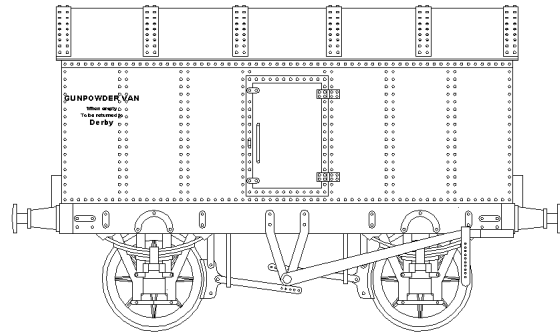


History of the Wagon

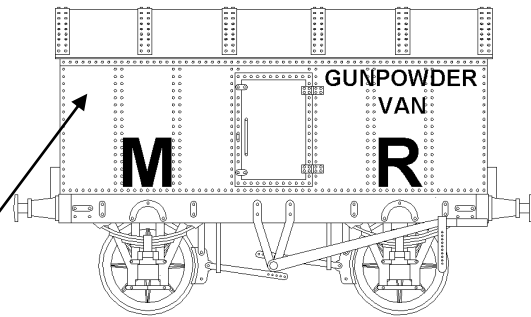
Although the movement of gunpowder and explosives was quite common on the Midland Railway system, the railway company only had a very small number of gunpowder wagons. The company only ever ordered two types. The first type, this kit, numbered five wagons, was ordered from the company's own wagon works at Derby between 1881 and 1893. The design of these wagons was built with a standard 9ft chassis with a riveted steel top. These wagons were different as they only had a door on one side which reflect the practice of using wagon turntables. These wagons were supplemented in 1904 by another fifteen wagons built to a larger design. The recorded numbers for these wagons were; 522, 1679, 1898, 7599 and 18208. Most of the wagons were absorbed into the LMS but it is very doubtful that these wagons managed to last into the late 1930's. In Midland Railway days the wagons would have been 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 however not been grey for very long as they would have become stained black from soot or coal dust or white from the limestone depending where they were rooted. The wagons would have also been painted grey from 1923 to 1935.

Liveries

Midland Railway
Livery Circ 1881

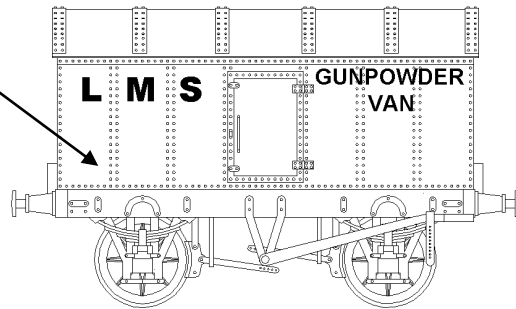


Midland Railway
Livery Circ 1900



Numbers

LMS early Livery
Circ 1923-33



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Midland Railway/LMS D384 6ton 1881 Gunpowder Van

1. Construction Manual,
2. One brass etch.
3. One wagon chassis casting (resin),
4. One brake gear casting,
5. One brake lever casting,
6. Four W-iron/axle box castings,
7. Four buffer plate casting,
8. Four buffer assemblies,
9. Two coupling hook springs,
10. One coupling hook etch,
11. Six coupling hook links,
12. Four Van end stops,
13. One piece of 0.7 wire.

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

Transfers are available on the HMRS LMS pre-grouping sheet.