



The detailed wagon and van kit

The Prototype

The permanently coupled twin timber wagon was developed in 1882 to combine the features of the double bolster and single wagon. Some 40 wagons, 20 pairs, were initially constructed with an additional 408 wagons (204 pairs) in the 1890's. Some 40 pairs were ordered in 1915 and delivered by 1917 with a further 10 ordered in 1919 and delivered in 1921 or later. There were 227 pairs in service in December 1920. The twin wagon was used for a wide variety of traffic including of timber, and steel section.

Our kit depicts the 1900's version with strengthening to the underframe and sheeting but with the B4 oil axle boxes fitted from 1918. B3 oil axleboxes, produced by MJT, are available from Wizard Models. Grease axleboxes are supplied to represent earlier versions.

Over the years there was little external changes except to the rubbing knuckles which were full width with cross bracing on earlier wagons but 2' 8" in length on later wagons, and the side sheeting which was strengthened. When the side sheeting change occurred is not known but was most probably with the 1915 drawing. Axle boxes on earlier wagons were Attocks grease pattern but wagons ordered in 1917 and 1919 were B2 oil. It is likely that the 1921 build would have been built with B4 axleboxes. In any case it is probable that a change to B4 was made during routine maintenance.

References

"British Goods Wagons from 1887 to the present day" Essery, Rowland & Steel

Lancashire and Yorkshire Wagons Noel Coates, Vol1 P121-133

Acknowledgements

WE would like to thank Noel Coates for his assistance in preparing this model.

The Lancashire and Yorkshire Railway Society

<http://www.lyrs.org.uk>

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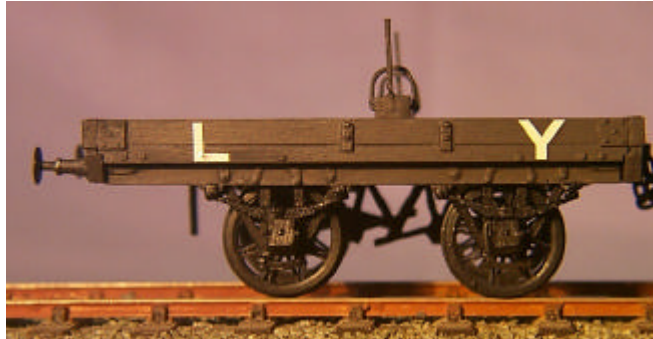
Nottingham.

NG5 6QH

Lancashire and Yorkshire Railway London Midland and Scottish Railway British Railways

NEW

Diagram 36 twin timber wagon
Period: from 1882 to c1955



For OO, EM and P4

Requires to complete:

split or eight spoke 12mm wagon wheels, paint, three link couplings, and transfers.

Assembly

Please read these instructions before starting to build your model. Examine all the parts and familiarise yourself with their assembly. **The sides, solebars and ends are handed.** A drawing is included for your convenience.

Remove any moulding flash and ensure all parts fit correctly. We suggest wet fine silicon carbide paper (1200 grit) may be useful to clean up flash marks.

Assembly is best carried out using low melt solder or an epoxy resin such as Araldite. For small parts use Superglue. To obtain the best results a combination of several techniques will be needed.

Using the fine 0.33mm wire supplied prepare horse hooks and fit. Two horse hooks per side one on each wagon were present. Pip marks may be found on the solebar at the crown plates adjacent to the right hand end of the right hand wagon and the left hand end of the left hand wagon. Bore 0.5mm hole for safety chains in rubbing plate. Using a broach prepare holes in buffer beam to accept buffers.

Attach one of the ends to the floor plate. Two ends are supplied one for the rubbing plate and one for the coupling

hook end. (The end with rubbing knuckles should be adjacent to the attachment pin for the two wagons.) Attach the second end followed by the sides. Attach solebars ensuring there is sufficient clearance between the solebars for the w-irons to rock freely. If not thin the solebars as required. (Alternatively fit w-irons then follow with solebars.)

Attach the buffers to the buffer beam ensuring the bolt heads are at the 12, 6 and 9 o'clock positions. The 51L w-irons should be assembled following the enclosed instructions using the curved bridal bar. OO and perhaps EM modellers may wish to choose a rigid chassis, in which case both w-irons need to be assembled in the non-rocking mode. It may be advantageous to paint the w-irons at this stage. Fit wheel sets we suggest the use of waisted bearings. Place both w-irons on the floor using the crown plate coach bolts for positioning. Check the rail to buffer centre height adding packing (around 0.010 to 0.020") to w-irons as required, to achieve 14 mm. Glue the w-irons in place. (It may be helpful to draw axle centre lines for guidance.) so that the wheel base is 6', 24mm. If the wagon is gently pushed along a flat surface it should run in a straight line. If not one or both of the w-irons are out of line and should be adjusted.

Bore out brake shaft hole in the brake shoe assembly and fit to the interior of the solebar ensuring the brake shoes are in line with the wheels. Note the brakeshoes are fitted to the right hand wagon when viewing the pair. Prepare brake lever, lever guide and V's following instructions with the etched fret. Attach the interior 'V' to the floor ensuring it is 7 mm from the inside of the solebar. This V will need packing (around 0.020"), use brake shoe cross shaft hole for height guidance. From 0.5mm wire form brake cross shaft. Attach exterior V on solebar lining up with brake shoes and interior V, again use cross shaft for guidance. Attach brake lever guide and lever. The lever guide should be 5mm from the buffer beam. Form brake safety loops from the supplied etches. These should be placed adjacent to the brake shoes one per push rod.

Ensure bolster sits smoothly in pivot point on floor. Bore holes for bolster pins, pip marked on bolster, and attach brass bolster pins in place. Prepare shackles by bending half way around a file handle from 0.5mm wire supplied.

After painting and lettering the two wagons should be prepared for attaching together permanently. Fit the safety chains between the wagons. These should be 5 links in length and may be attached to each wagon using a loop of fine wire such as fuse wire. It may be best to blacken the loops prior to fitting. Using the investment cast 'tow bar' supplied attach the wagons together. It is suggested that this is held in place permanently on one wagon probably best using a piece of 0.5mm wire inserted into a hole at the bottom

of the pivot bar and bent to 90 degrees. Alternatively a washer may be used.

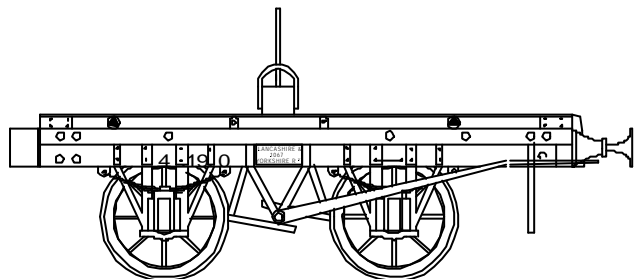
Finishing

Clean and degrease the model, using water and meths prior to painting. For whitmetal parts use an etching primer, such as Precision Paints PS1. Paint the model in the livery of your choice. After painting clean the model using a tissue soaked in white spirit. This is especially important if you are using dry lettering rather than waterslide or 'Methfix' transfers.

Livery

The following information is intended for guidance when positioning transfers please consult the references for detailed information.

Lancashire and Yorkshire Railway (1882-1903)

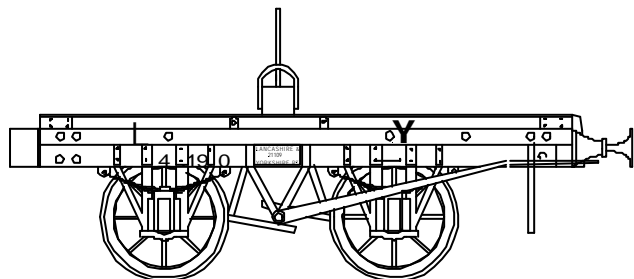


Bodywork, solebars and headstocks: grey such as Precision Paint P557

Ironwork below solebar: Black

Illiterate symbol and tare white HMRS sheet 17

Lancashire and Yorkshire Railway (1903-1923)

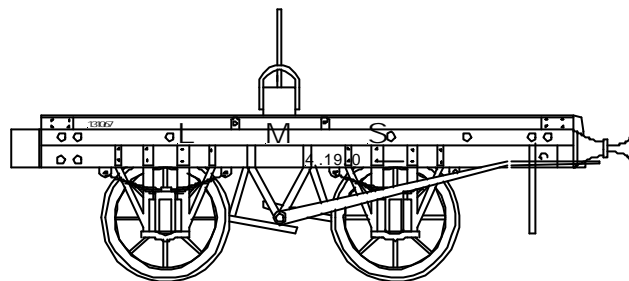


Bodywork, solebars and headstocks: grey Precision Paint P557

Ironwork below solebar: black

Letters and numbers: white, HMRS sheet 17

London Midland and Scottish Railway 1923-1937

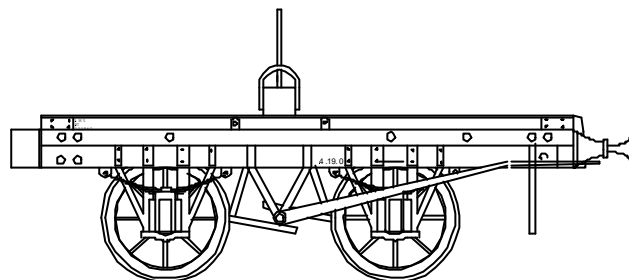


Bodywork grey: Precision Paint P38

Iron work below solebars black Lettering white, HMRS sheet

6 Model master 4701

London Midland and Scottish Railway from 1936-1948



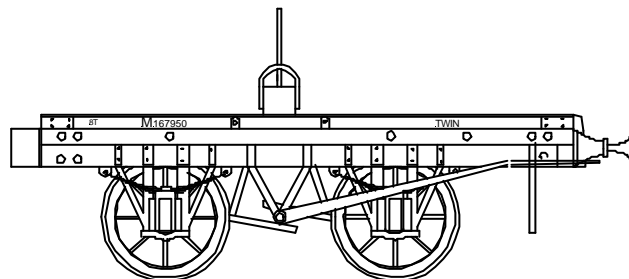
Body solebars and all ironwork: bauxite Precision Paint P39

Ironwork below solebars black

Lettering white

HMRS sheet 6, Modelmaster 4701

British Rail 1948-demise



Light grey, or bare timber with lettering on a black patch.

Precision Paint P 126

Lettering and numbers white

HMRS sheet 25, Modelmaster sheet 4619

Many wagons were not repainted by the LMS or BR and would have remained in a weathered pre-group livery or by that time-weathered timber!

Sample numbers

Little information is available but is known to have included 22093/4, 21107/8, 37949/50 (BR 167949/50) In the LMS period LYR wagons were renumbered by the addition of 130,000 giving a number, in the range 130,000 -1?????. BR renumbered ex LMS wagons by prefixed the original with an M. It was LYR practice to number twin wagons consecutively.

The current version of these assembly instructions will be available on the 51L website: www.51l.co.uk. For further help or information please email: info@51l.co.uk

51L

51L manufacturers a wide range of wagons vans and carriages. Vehicles for the Cambrian Railways, Caledonian, Glasgow and South Western, Midland, London and North Western, Great Western, North British, North Eastern, and Midland Railways are available. The entire range may be viewed on-line at:

www.51l.co.uk

Wizard Models.

Wizard Models stocks a wide range of components, paints, transfers and other necessities for the 4mm modeller in OO, EM and P4.

A full price list, for 50p + SAE can be obtained from: -PO Box 225, Macclesfield, Cheshire. SK10 4GB

Tel / Fax: 01625-585312

Email: info@51l.co.uk

Alternatively try our online shop at

www.wizardmodels.co.uk

Our shop is server secure and is fully searchable with many items illustrated. It is designed for easy use for the modeller working in 4mm.

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