



The 4mm wagon and van kit

HRD036

Highland Railway

London Midland & Scottish Railway
British Railways

Diagram 36 8T Twin Timber Wagon



c1900 to 1950s
for 00, EM, P4 and S4

This pack contains one 'pair' consisting of two wagons

Features: white metal body, etched W-irons and brake levers, white metal buffers with steel heads

Required to complete: split spoke 12mm wheels, bearings, paint, screw couplings, transfers

The Prototype

The Highland Railway had a range of timber and bolster wagons. Originally built with removable non-swivel bolsters, later wagons were equipped with swivelling bolsters from new. Numerous alterations occurred including the fixing of end sheeting and perhaps drop doors at one end. However, photographs show the original three-bolt buffer and 'scotch' brake on both sides of the wagon in both LMS and BR liveries.

This kit depicts the 8 ton version, which may be built with swivel or non-swivelling bolsters and open ends.

Twin wagons were used for a wide variety of traffic, in pairs, threes or in fact any number as the need arose!

They were normally used for timber and other short loads when the bolster or stanchions were used.

Wagons in the centre of loaded rakes had their bolsters

removed, as they also had when used for road vehicles or similar flat loads. Removed bolsters were stored diagonally on the wagon floor. This wagon was a not uncommon sight in goods yards in Northern Scotland and on occasions in Southern Scotland and Northern England. Twin wagons were long lived and saw an active life of over 50 years.

References

Carriages and Wagons of the Highland Railway, Hunter
Highland Railway Carriages and Wagons, Tatlow

Interested in the Highland Railway?

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

Acknowledgments

51L thanks Peter Tatlow, John Deakin and other members of the Highland Railway Society for their assistance in preparing this kit.

Assembly

Please read these instructions before starting to build your kit. Examine all parts and familiarise yourself with their assembly. Remove any moulding flash and ensure all parts fit correctly. We suggest wet fine emery paper (1200 grit) to clean up flash marks. Assembly is best carried out using low melt solder or an epoxy resin such as Araldite. Glues like UHU, Multibond or Thixofix may also be used. For small parts use superglue. To give the best results a combination of several techniques will be needed.

Fit the floor to one of the sides ensuring all is level and square. Secure one headstock in place followed by the second side and lastly the second headstock. Again ensure all is square. Bore out the horse hook holes to accept 0.45mm wire. Place one end of a short L shape in each hole; the free end should be rounded and face the wagon end.

Assemble the etched brass W-irons following the enclosed instructions, using the straight bridle bar. We suggest the W-irons are painted before fitting the

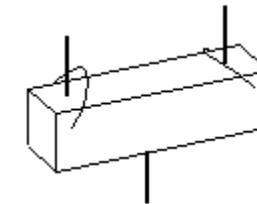
wheels.

The buffers should now be attached in place - note that they are handed! Viewing the wagon end, the right-hand buffer fillet should be at the 3 o'clock position with the rest at 12 o'clock. The left hand buffer fillet should be at the 9 o'clock position with the rest again at the 12 o'clock position. The buffers supplied may have two rests in which case the second one should be removed.

Place both W-irons on the floor using the crown plate coach bolts for positioning. It may be helpful to draw axle centre lines for guidance; the wheelbase is 36mm (9'). Check the rail to buffer centre height adding packing to the W-irons as required, to achieve a height of 14 mm. If the wagon is gently pushed along a flat surface it should run in a straight line. If not, one or both W-irons are out of line and should be adjusted. Finally, add the axleboxes.

Fit the brake shoe next to the left hand wheel on each side of the wagon. Make up the brake levers and guides following the enclosed instructions and fit to the wagons. The lever guide should be just to the right of the axle guard, and the brake lever length should be trimmed to fit inside the headstock.

Taking the bolster bore two 0.7mm holes in the upper surface in the pop marks adjacent to the ends. Cut two lengths of 0.7mm wire, each about 10mm in length, to form the bolster pins. The pins should slightly taper. If the bolster is to be fixed in place, bore a 0.7mm hole in the lower surface at the central pop mark and also a central hole in the floor, pop marked on the underside. Insert a short length of 0.7mm wire into the bolster.



Form the bolster shackles from the supplied 0.45mm wire. It is likely that the shackles were round in shape and so can be formed by wrapping the wire around a needle file handle. Bore holes in the bolster sides (pop marked) and fit.

If the wagon is to have a swivelling bolster a metal rubbing plate should be fitted to the wagon floor using the supplied microstrip. Using the central hole draw a circle (10mm diameter say) on the floor with a pair of

compasses. Using the circle as a guide glue two lengths of microstrip to the floor with solvent. (Note the exact size and position of the rubbing plate is unknown). Fit couplings to complete - although unfitted, these wagons had screw couplings to limit longitudinal movement. Wagons operating in the early days may also have had safety chains fitted either side of the coupling hook, probably made of 5 links of chain and a hook.

Repeat all the above for the second wagon.

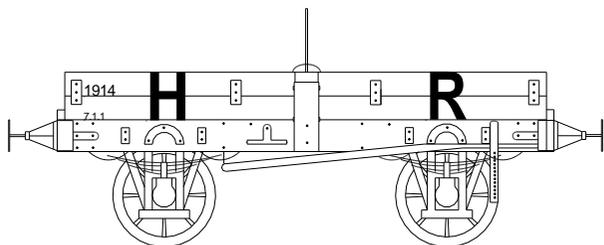
Finishing

Clean and degrease your wagons prior to painting. Do not use washing up liquid because chemicals to enhance brightness are added which are detrimental to paint adhesion. For white metal wagons the use of an etch primer such as Precision Paints PS1 is necessary. Follow by the wagon colour of your choice. Prior to lettering clean the wagons with a white spirit soaked tissue to remove any surface dust. This is particularly important when dry lettering is to be used.

Livery

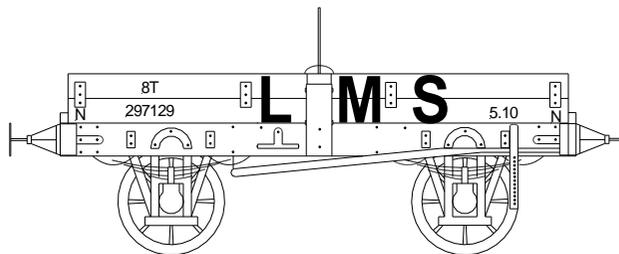
Letter your wagon to suit your chosen period. Suitable lettering is supplied by the HMRS and Modelmaster and paint by Precision Paint for the LMS and BR periods. It will be appreciated that many wagons would not have been repainted by the LMS or BR, and early liveries could have been around for many years.

Highland Railway 1900-1923



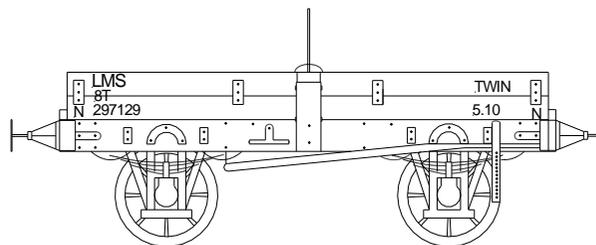
Body, solebars: Indian red
Underframe, brake gear: black
Insignia: white, HMRS sheet 20

London Midland & Scottish Railway 1923-37



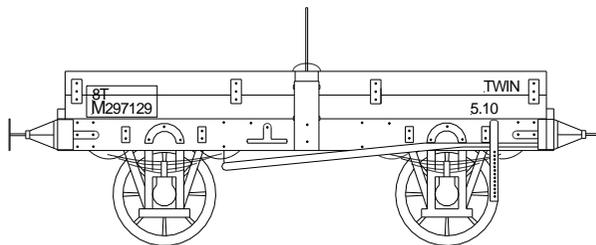
Bodywork, solebars and all ironwork: grey, Precision Paints P38
Insignia: white, HMRS sheet 6, Old Time Workshop sheet 4701

London Midland & Scottish Railway 1936-1948



Body: bauxite, Precision Paints P39
Insignia: white, HMRS sheet 6, Old Time Workshop sheet 4701

British Railways 1948-demise



Light grey, or bare timber with lettering on a black patch:
Precision Paints P126
Insignia: white, HMRS sheet 25, Modelmaster sheets 4626, 4627

Sample numbers

Information on Highland Railway wagons is limited and few photographs exist. HR numbers are known to have included 3019-3038 (built 1920); 297053/069/129 in the LMS period; and M297053 in BR days. The LMS renumbered Highland wagons using the first available number in the range 292000-299999. In the BR period the LMS number was prefixed with M.

A later version of these assembly instructions may be available on the Wizard Models website. For further help or information please email:

andrew@modelsignals.com

Wizard Models

Wizard Models has a wide range of locomotive, carriage and wagon kits for the following railway companies:
GWR and constituents: Cambrian Railways
LMS and constituents: North Staffordshire, Lancashire & Yorkshire, Glasgow & South Western, Caledonian Railway, Highland Railway
LNER and constituents: Great Central, North British, North Eastern, Hull & Barnsley

Wizard Models also stocks a wide range of components and other necessities for the modeller in 00, EM and 18.83mm.

Wizard Models Limited
PO Box 70
Barton upon Humber
DN18 5XY
Tel: 01652 635885

Email: andrew@modelsignals.com
www.wizardmodels.ltd

Version: 4.00

Issued: August 2021

© Wizard Models Limited 2021