



The 4mm wagon and van kit

GSWMWF

Glasgow & South Western Railway
London Midland & Scottish Railway
British Railways

16T Double End Door Mineral Wagon Flitch Solebars



(photo is of a steel solebar wagon)
1905 to mid 1950s
For 00, EM, P4 and S4

Features: whitemetal body, etched brass brake levers, white metal buffers with steel heads

Required to complete: split spoke 12mm wagon wheels, bearings, paint, three-link couplings, transfers

The Prototype

The 16T mineral wagon was produced from 1905. Steel, timber and flitched (steel plated timber) solebar versions were built. The flitch and timber solebar versions were built in house and the steel by outside contractors. This kit represents a flitch underframe version with either side brake gear.

Mineral wagons were the largest portion of G&SWR wagon stock and were used to transport coal and iron ore for the burgeoning Scottish coal and iron industry. By 1910 there were 250 16T mineral wagons in service, 1% of the total wagon fleet. By 1922 the 16T mineral wagon fleet had increased to 1,741 vehicles, 9% of the total wagon fleet.

Mineral wagons of this type would have seen at least 30 years' service and many would have survived into BR ownership. They were commonly seen transporting coal throughout Scotland and could have been found in England and Wales.

References

HMRS Journal; Vol 15 No9 p293
British Railway Modelling; Vol 8, no7, October 2000, pp46-49

Interested in the Sou-West?

The Glasgow & South Western Railway Association
www.gswra.org

Assembly

Please read these instructions before starting to build your model. 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. UHU, Multibond or Thixofix glues can also be used. For small parts use superglue. To obtain the best results a combination of several techniques will be needed.

Check the fit of the wheel bearings and bore out the axleboxes if required with a 2mm diameter drill. Fit the ends to one side, ensuring all is level and square. Cut the floor to size and glue it in place. Note the floor fits between the sides and ends in line with the internal strapping and rests on the headstock. It will require trimming to fit around the internal strapping. Fit the second side and check the body is square using a flat surface such as a glass sheet. Gently tweak the wagon if required.

Orient a solebar so the two rings are at the bottom and attach the axleguards using the three coach bolts set in a triangle for alignment (9/36mm wheelbase). Glue the solebar to the floor ensuring it is seated between the

lugs on the headstock interior. The solebar can be soldered to these lugs if desired. Fix the second solebar in place. Fix one of the axleguards to the second solebar with wheelset in place and ensure it is square. The wheelset should be firmly supported and run free; if not either pack or bore out the axleboxes. When satisfied fit the second axleguard in place with wheelset in place. Ensure the wagon is square using a glass plate. A gentle tweak may be required to bring the four wheels into contact with the glass surface. Fit the buffers to the ends with the two bolts on the inside and the single bolt facing the wagon side.

Prepare the etched brake levers and guides following the enclosed instructions. The lever guide will be positioned to the left of the right hand spring hanger.

Open out 0.9mm holes in the brake shoe assembly and the cast slide bar vee. Attach the slide bar centrally to the solebar interior. Attach the brake shoe assembly, ensuring the brake gear is activated in a clockwise direction (the right-hand push rod should point downwards). Attach an etched vee to the outside of the solebar in line with the interior vee. Thread a short length of 0.9mm wire into the vees and brake shoe assembly to form the brake shaft. Fit the etched brake lever and guide, followed by two etched push rod safety loops. On G&SWR stock these were usually 'hockey stick' shaped pointing outwards adjacent to the brake shoe. Repeat everything for the second side.

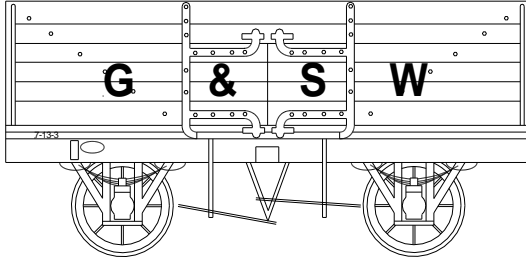
Finishing

Clean and degrease your wagon prior to painting. We suggest that detergents such as Fairy Liquid, which can contain silicone additives to enhance sparkle, are not used as they impair paint adhesion. We recommend the use of an etching primer such as Precision Paints PS1 followed by the wagon paint of your choice. Prior to lettering, clean the wagon with a white spirit dampened tissue to remove any surface dust. This is particularly important if dry lettering is to be used). Matt varnish the wagon after lettering to protect both paint and transfers. Lastly add three-link couplings.

Livery

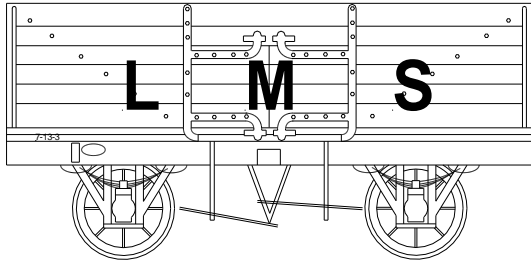
Letter and number your wagon to suit your chosen period. Suitable lettering is supplied by the HMRS and Modelmaster and paint by Precision Paints for the G&SWR, LMS and BR periods.

Glasgow & South Western Railway 1905-1923



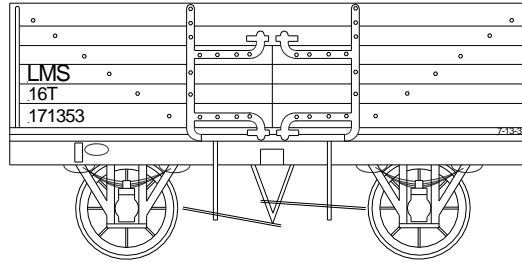
Body, solebars, buffer housings: light/medium grey similar to MR light grey, Precision Paints P360
Underframe, brake levers: black
Insignia: white, HMRS sheet 20

London Midland & Scottish Railway 1923-1937



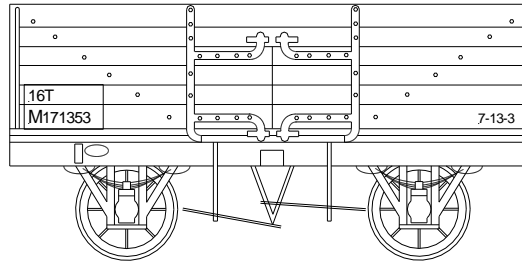
Body, solebars: grey, Precision Paints P38
Ironwork below solebars: black
Insignia: white, HMRS sheet 6, Old Time Workshop sheet 4701

London Midland & Scottish Railway 1937-1948



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

British Railways 1948-demise



Body, solebars: light grey, or bare timber with lettering on a black patch, Precision Paint P126
Ironwork below solebars: black
Insignia: white, HMRS sheet 25, Modelmaster sheet 4619

Many wagons would not have been repainted immediately by the LMS or BR and would remain in a weathered version of their previous livery or even weathered bare timber.

Sample numbers

Little information is available but is known to have included 18226. In the LMS period G&SWR wagons were renumbered by the addition of 170,000. BR prefixed the LMS number with M.

A more recent version of these assembly instructions may be available on the Wizard Models website.

For further help or information please email: andrew@modelsignals.com

51L

51L has a wide range of locomotive, carriage and wagon kits for the following railway companies

GWR and constituents: Cambrian Railways
LMS and constituents: Caledonian Railway, Glasgow & South Western Railway, Highland Railway, Lancashire & Yorkshire Railway, Midland Railway, North Staffordshire Railway
LNER and constituents: Great Central Railway, Hull & Barnsley Railway, North British Railway, North Eastern Railway

Wizard Models

Wizard Models stocks a wide range of components and other necessities for the modeller in 00, EM and P4.

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

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

Version: 5.00

Issued: December 2020

© Wizard Models Limited 2020