



*The detailed wagon and van kit*

## The Prototype

The 16t mineral wagon was produced from 1905. Both steel, timber and Flitched (steel plated timber) underframe 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 some 1741 vehicles, some 9% of the total wagon fleet.

Mineral wagons of this type would have seen at least 30 years service and many would have survived post grouping into national 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

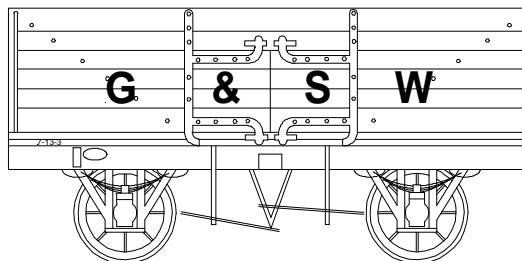
British Railway Modelling, Vol 8, no7, October 2000, P46-49

## Useful address

Glasgow and South Western Railway Association  
Membership Secretary  
Graham Robinson  
4 Clodiorderick Avenue  
Kilbarchan  
Renfrewshire  
TA10 2AY

## Glasgow & South Western Railway London Midland and Scottish Railway, British Rail

### 16t double end door mineral Wagon Flitch underframe 1905 to mid 1950's



For OO, EM and 18.83mm

#### Requires to complete:

- split spoke 12mm wagon wheels
- paint
- couplings
- transfers

#### Assembly

Examine all the parts and familiarise yourself with their assembly. Remove any surplus casting flash and ensure all parts are clean and well fitting. Check the fit of the wheel bearings and bore out the axleboxes if required with a 2mm diameter drill. Secure the wheel bearings in place using Superglue.

Assembly is best carried out using low melt solder or an epoxy resin such as Araldite. Glues like UHU, Multibond or Thixofix can also be used too. For small parts we recommend the use of a Superglue. It is suggested that a mixture of two or more of these methods is used.

Fit the ends to one side, ensuring all is level and square. Cut to size the floor and ensure it fits and glue in place. Note the floor fits between the sides and ends in line with the internal strapping and rests on the buffer beam. 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. If required gently tweak the wagon.

Attach the axleguards to one of the solebars and glue in place on the floor underside. The solebar should be orientated so that the three coach bolts at each w-iron form a vertical triangle. There are lugs to support the solebar on the buffer beam interior to which the solebar can be soldered if desired.

Attach the second solebar in place. Fix one of the axleguards to the second solebar with wheels in place and ensure it is square. The wheels 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 wheels 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. Bore a 0.7mm hole in V's and slide bar block V's. Attach the slide bars to the solebar interior on both sides. Attach the brake shoe assembly to one side and thread the cross shaft (5mm) using the 0.7mm wire supplied. Using the interior V and brake shoe assembly as a guide attach the exterior V to the solebar. Finally attach the brake lever. Repeat for the second side.

Lastly using the supplied fine metal strip place brake safety loops in place. The safety loops should be the shape of a hockey stick with the head facing the outside of the wagon.

#### Finishing

Clean and degrease your wagon prior to painting. We suggest that detergents such as Fairy Liquid, which can contain silicon additives to enhance sparkle are not used as they impair paint adhesion.

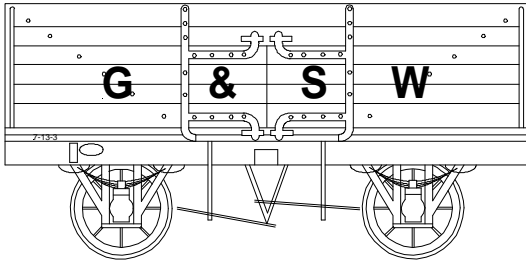
We recommend the use of an etching primer such as Precision Paint PS1 followed by the wagon paint of your choice. Prior to lettering, clean the wagon with a white spirit damp tissue to remove any surface dust. (This is particularly important if dry lettering systems are used).

Matt varnish the wagon after lettering to protect both paint and transfers. Lastly add three link couplings of your choice.

## Livery

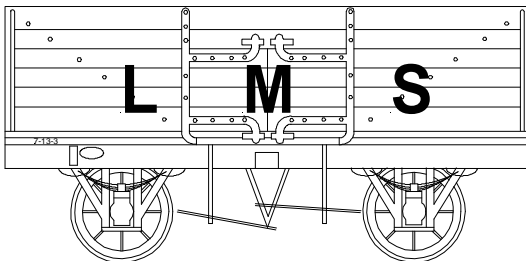
Letter and number your wagon to suit your chosen period. Suitable lettering is supplied by the HMRS and Modelmaster, paint by Precision Paint for the G&SWR, LMS and BR periods.

### Glasgow and South Western Railway 1905-1923



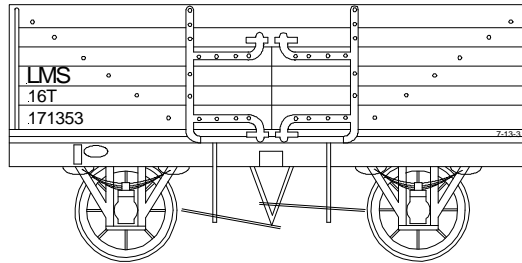
Bodywork, solebars and buffer housing  
Light/medium grey similar to MR light grey, Precision Paint P360  
Underframe/brake lever Black  
Letters and numbers White HMRS sheet 20

### London Midland and Scottish Railway 1923-1937



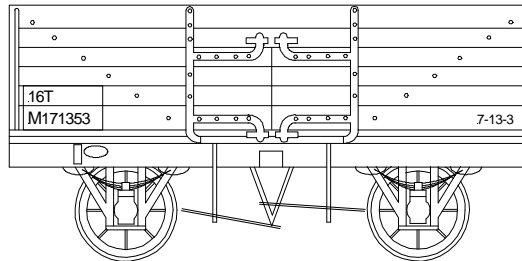
Bodywork grey: Precision Paint P38  
Lettering white, HMRS sheet 6 Model master 4701  
Iron work below solebar black

### London Midland and Scottish Railway from 1937-1948



Body bauxite Precision Paint P39  
Iron work below solebar black  
Lettering white HMRS sheet 6, Modelmaster sheet 4701

### British Rail 1948-demise



Light grey, or bare timber with lettering on a black patch.  
Precision Paint P126  
Lettering and numbers white, HMRS sheet 25,  
Modelmaster sheet 4619

It will be appreciated that many wagons would not have been repainted by the LMS or BR and would remain in a weathered pre-group livery or by that time weathered 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 giving a

number, in the range 170,001 - 191,999. During national ownership an M was added in front of the number.

## 51L

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

GWR and constituents:-

Cambrian Railway

LMS and Constituents:-

Glasgow & South Western Railway, Highland Railway, Lancashire & Yorkshire Railway, Midland Railway, North Staffordshire Railway, Caledonian Railway

LNER and constituents:-

North British Railway, North Eastern Railway

51L models are available through Wizard Model 51L at selected exhibitions and mail order.

The current version of these assembly instructions will be available on the 51L website: [www.51l.co.uk](http://www.51l.co.uk). For further help or information please emails: [peter@51l.co.uk](mailto:peter@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 18.83mm. A full price list, for 50p + SAE can be obtained from: -  
Wizard Models.

PO Box 225, Macclesfield, Cheshire, SK10 4GB

Tel / Fax: 01625-585312

Email: [sales@wizardmodels.co.uk](mailto:sales@wizardmodels.co.uk)

[www.wizardmodels.co.uk](http://www.wizardmodels.co.uk)

Version: 2.00

Issued: September 2001