



*The detailed wagon and van kit*

### The Prototype:-

Mineral wagons were the largest portion of G&SWR wagon stock and were used to transport coal from the burgeoning Scottish coal industry. There were 8, 10 12 and 16 ton versions of the end door wagon. By 1910 there were 250 16t mineral wagons in service, 1% of the wagon fleet. The 16t mineral wagon fleet had increased by 1922 to some 1741 vehicles, some 9% of the total wagon fleet.

The 16t mineral wagon was produced from around 1905. Both steel, timber and Flitched (steel plated timber) underframe versions were built. This kit represents a steel underarm version with a Morton cam brake and three bolt buffer as built by a number of outside builders including Pickering's and Hurst Nelson.

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 and iron ore throughout industrial Scotland and could have been seen in England and Wales.

### References

HMRS Journal Vol 15 No 9 p 296  
British Railway Modelling, Vol 8, no7, October 2000, P46-49

### Interested in the Sou-West

Glasgow and South Western Railway Association  
Membership Secretary  
Graham Robinson  
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## Glasgow & South Western Railway London Midland and Scottish Railway British Rail

### 16t double end mineral wagon steel underframe 1905 to mid 1950's



for OO, EM and P4

### 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 in the axleguards and bore out the axleboxes if required with a 2mm diameter drill.

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 be used.

Fit the ends to one side, ensuring all is level and square. Trim to size the floor and fit in place on top of the buffer beam and in line with the interior strapping. It may be useful to trim the floor to fit around this strapping. Fit the second side check all is square using a flat surface such as a glass sheet. If required gently tweak the wagon to bring buffer beams into contact with the surface.

Attach the axleguards to one solebar using the coach bolts for guidance. The solebar is orientated with the three coach bolts attaching the w-iron forming a vertical triangle. Fit one sole bar in place ensuring it is seated on the floor between the lugs on the buffer beam interior. Attach the second sole bar in place. With one wheel set in place check the axleguard fit and when square fix. Repeat for the second axleguard. Ensure the wagon is square, a gentle tweak may be required to bring all four wheels into contact with a flat surface such as a glass sheet.

Fit the buffers to the ends with the two bolts on the inside the single bolt facing the wagon side. Attach the brake slide bar and V assembly in place in the centre of the solebar interior. Attach the brake shoe/ assembly in place on one slide bar so that the brakes are activated by movement in the **anti clockwise** direction. Ensure the brake shoes are not fouling free movement of the wheels. Thread a short length of 0.7mm wire across the wagon through both V's and the brake shoe assembly to form the cross shaft. Add a brake lever to each side of the wagon ensuring the Morton cam lever is on the brake shoe side of the wagon. Lastly using the supplied fine wire place brake safety loops in place. The safety loops should be the shape of a hockey stick with the head facing the wagon side.

### Finishing

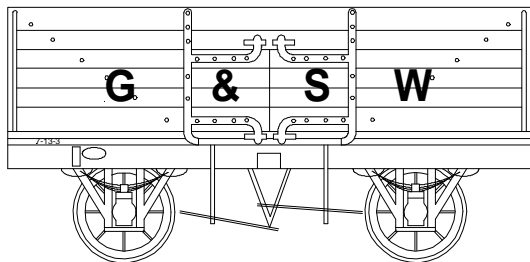
Clean and degrease your wagon prior to painting. We recommend the use of an etching primer such as Precision Paint PS1 followed by the wagon paint of your choice. Prior to lettering clean the wagon with white spirit damp tissue to remove any surface dust. This is particularly important if a dry lettering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

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

## Livery:-

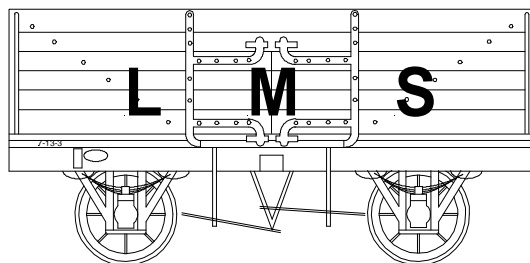
Letter and number your wagon to suit your chosen period.  
Suitable lettering is supplied by the HMRS and Modelmaster and paints manufactured by Precision Paint for the G&SWR, LMS and BR periods.

### Glasgow and South Western Railway 1905-1922



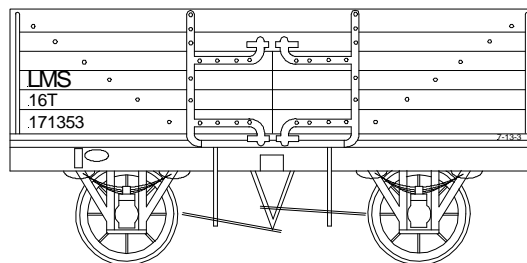
Bodywork, and solebars;  
Light/medium grey similar to MR light grey, P360  
Underframe/brake lever: black  
Letters and numbers: white, HMRS sheet 20

### London Midland and Scottish Railway 1923-1937



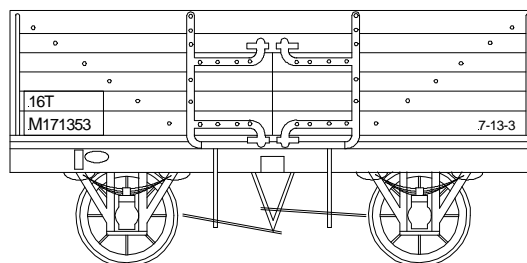
Body, solebars and all iron work: grey Precision Paint P38  
Breakgear :black  
Lettering: white, HMRS sheet 6, Modelmaster 4701

### London Midland and Scottish Railway from 1936-1948



Body solebars and all iron work: bauxite Precision Paint P39  
Brake gear : 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 17703, 17708 and 17910. 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 the wagon number was prefixed M.

## 51L

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

GWR and constituents:-  
Cambrian Railway, Great Western Railway

LMS and Constituents:-  
Glasgow & South Western Railway, Highland Railway, Lancashire & Yorkshire Railway, Midland Railway, Scottish Joint Stock, 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: [info@51l.co.uk](mailto:info@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: [info@51l.co.uk](mailto:info@51l.co.uk)

Alternatively lists may be downloaded from our secure server on line shop at:  
[www.wizardmodels.co.uk](http://www.wizardmodels.co.uk)

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