

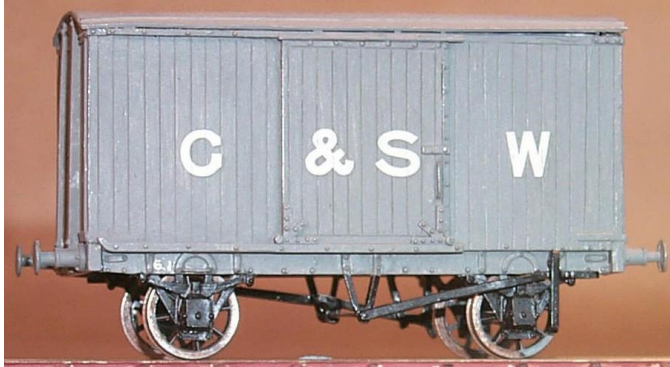


The 4mm wagon and van kit

GSWD028

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

### Diagram 28 10T Covered Goods Wagon



From 1918 to mid 1950s  
For 00, EM, P4 and S4

**Features:** white metal body, etched brake levers, steel headed buffers

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

### The Prototype

The 11' wheel base 10 ton van was built from around 1918; by 1922 there were 449 10 ton vans in service. In 1922 the total covered wagon fleet comprised 1362 wagons, some 7% of the total fleet. During this period significant changes to brake gear and possibly axle boxes took place. This kit is supplied with both grease and oil axle boxes and a choice of either single shoe both sides brake gear, either side brake gear or Morton cam brake gear.

Wagons of this type would have seen at least 30 years' service, surviving Grouping and most probably entering into the era of national ownership.

This van was a common sight in goods yards throughout Scotland and Northern England. Photographic evidence exists of similar examples in the Leicester area in 1921.

### References

British Goods Wagons from 1887 to the Present Day; Essery, Rowland & Steel  
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](http://www.gswra.org)

### Assembly

Please read these instructions before starting to build your model. Examine all the parts and familiarise yourself with their assembly. Remove any moulding flash (remember to remove the casting feed in the centre of the brake shoes) and ensure all parts fit correctly. We suggest wet fine emery paper (1200 grit) to clean up flash marks. Carry out a dummy run before assembly. 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. For small parts use superglue. To obtain the best results a combination of several techniques will be needed.

Using a 0.35mm diameter drill, drill holes for the sliding door handrail, which are pop marked between the door catch and corner plate.

Check the fit of your chosen wheel bearings in the axleguards, drilling out if necessary. Just tack them in place for now, in case they need to be adjusted later. The kit is supplied with a choice of either grease or oil axleguards (the latter has a bolt head on the axlebox cover plate). Fix two axleguards to one side, using the detail on the solebar to ensure the axle spacing is the correct 44mm (11'). Now assemble the body: properly join one end to the side with the axleguards, and tack the other end to the other side. Bring the two halves together and tack them to each other. Ensure all is level and square, and properly make the three remaining

joints. Take one of the remaining axleguards and tack it to the body, trapping a wheelset in place. Ensure the wheels are firmly supported and run freely (adjust the bearings if needed – use 8BA washers as packing if they are too far apart), and that the axle is horizontal and perpendicular to the side. Do the same for the last axleguard and wheelset, ensuring that the axles are parallel to each other. When satisfied, properly fix the bearings and axleguards in place. Again, check that the wagon is level and square. If not a gentle tweak will ensure that all four wheels are in contact with a flat surface such as a glass sheet.

Cut the plasticard floor to shape and glue it into the wagon interior. Bend two lengths of 0.3mm wire to form the door handles and glue or solder in place. Fit the buffers to the ends.

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.

**Single shoe, both sides brake** (original pattern from around 1918 on). Bore a 0.7mm hole in the slide bar vee and attach to the inside of the solebar. (The alignment pegs match the holes on the interior of the solebar.) Place the single shoe brake assembly on the slide bar adjacent to the vee so that the push rod lever and vee are in line and the brake shoe is adjacent to the wheel. Attach an etched vee to the outside of the solebar in line with the interior vee. Thread a short length of 0.7mm wire into the vees and brake shoe assembly to form the brake shaft. Fit the etched brake lever and guide, followed by an etched push rod safety loop. On G&SWR stock these were usually 'hockey stick' shaped pointing outwards adjacent to the brake shoe. Repeat everything for the second side.

**Either side brake, plain levers** (1922 onwards). Assemble the brake gear as above substituting the double shoe brake assembly for the single shoe. Ensure the brake gear is activated in a clockwise direction (the right-hand push rod should point downwards). Attach a safety loop around each push rod as above.

**Morton Cam brake.** Attach an etched vee to the outside of each solebar as described above. Attach the double shoe brake assembly in place on one side only so that it is activated when the brake cross-shaft moves in an anti-

clockwise direction (the right-hand push rod should point upwards). Thread the 0.9mm cross-shaft between the two vees and through the brake assembly and trim to length leaving approximately 1mm projecting beyond each vee. Add the etched brake levers and guides, ensuring the Morton cam lever is adjacent to the brake shoes and the plain lever is on the opposite side. Attach a safety loop around each push rod.

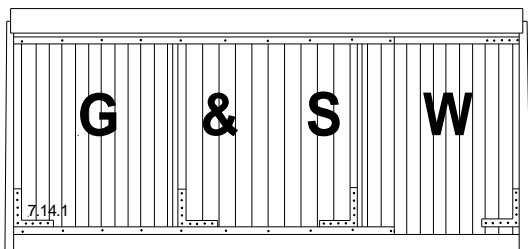
Lightly score along the embossed roof plank lines – this will cause it to form a gentle curve. Offer up the roof to the body and trim it if required. Fix the roof in place. Once set, cover with a sticky label or solvent weld paper on top, trimming the edges to fit. Add rain strips if required.

## Finishing

Clean and degrease your wagon prior to painting. Do not use washing up liquids because they contain chemicals to enhance brightness, 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 wagon with a white spirit soaked tissue to remove any surface dust. **This is particularly important if dry lettering is to be used.**

## Livery

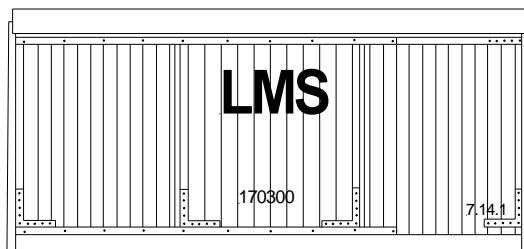
### Glasgow & South Western Railway (1918-1923)



Bodywork, solebars: light grey such as Precision Paints P360

Underframe, brake gear: black  
Insignia: white, HMRS sheet 20

### London Midland & Scottish Railway (1923-1937)

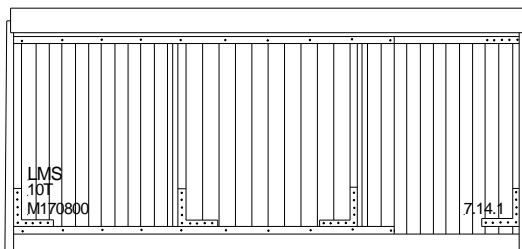


Bodywork, solebars, headstocks: light grey, Precision Paints P38

Brake gear: black

Insignia: white, HMRS sheet 6 or Old Time Workshop sheet 4701

### London Midland & Scottish Railway (1937-1948)

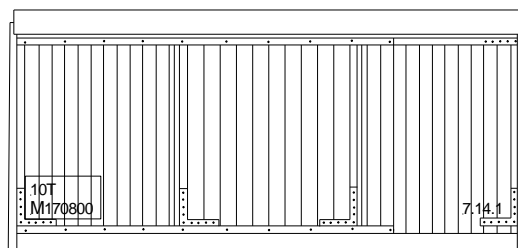


Bodywork: bauxite, Precision Paints P39

Brake gear: black

Insignia: white, HMRS sheet 6 or Old Time Workshop sheet 4701

### British Railways (1948-demise)



Bodywork: unpainted or light grey, Precision Paints 126

Insignia: white on a black patch, HMRS sheet 25 or Modelmaster sheet 4619

## Sample numbers

Little information is available, the only confirmed number being 12880. At the Grouping, GSWR wagons were renumbered by the LMS by adding 170,000. British Railways prefixed the LMS number with an M.

## 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

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](mailto:andrew@modelsignals.com)

## 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](mailto:andrew@modelsignals.com)

[www.wizardmodels.ltd](http://www.wizardmodels.ltd)

Version: 6.00

Issued: September 2020

© Wizard Models Limited 2020