*The 4mm wagon and van kit*

**CRD016E**

## Caledonian Railway
London Midland & Scottish Railway

## Diagram 16 8/10T pig iron wagon
**From c1890-1935**




**For 00, EM, P4 and S4**

**Features:** White metal body, white metal buffers with steel heads, etched brake levers
Required to complete: split spoke 12mm wheels, bearings, paint, 3-link couplings, transfers

## The Prototype
Pig iron wagons were essentially a short haul, heavily loaded, extremely robust carrying bed for a most uncompromising traffic. Their area of activity would have been the industrial heartlands of Scotland, moving pigs from furnace to rolling mill. When required, these wagons were also used for a variety of traffic including barrels, crates, cotton bales etc.

First built before the turn of the century, these wagons were introduced as an 8 ton wagon, which was later uprated to 10 tons. Over the years the brake gear would have been modified from the single shoe one side pattern to single shoe both sides and perhaps to the conventional either side pattern. Wagons repaired or built after 1911 were required to have a two-lever system but it is unlikely that many were altered.

A later 14T version featured heavy-duty Iracier grease axleboxes and self-contained buffers, and this is the subject of 51L kit CRD016L.

At least 1300 diagram 16 wagons were produced of which 550 were 8/10T and 750 are thought to have been 14T wagons.

## References

"British Goods Wagons from 1887 to the present day" by Essery, Rowland & Steel

"Caledonian Railway Wagons and non-Passenger Coaching Stock" by Mike Williams, pp113-115

## Interested in the Caledonian Railway?

**Caledonian Railway Association:**
http://www.crassoc.org.uk/

## 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 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 can also be used. For small parts use superglue. To obtain the best results a combination of several techniques will be needed. Carry out a dummy run before starting assembly.

The axleboxes for this vehicle are 'handed'. The left hand axlebox, i.e. that adjacent to the brake shoe, includes the brake lever pivot hole at the right hand end of its spring. Ensure that this axlebox is fitted at the left hand end of the wagon if a single shoe brake is fitted. It will be appreciated that not all wagons had brakes on both sides of the wagon and in consequence you are supplied with three normal axleguards and two with a pivot hole.

Check the fit of your chosen wheel bearings in the correct axleguards, drilling out if necessary. Just tack them in place for now, in case they need to be adjusted later. Fix two axleguards to one side, aligning the W-irons with the crown plate detail on the solebar. The holes in the axlebox casting and pins on the solebars will help in this respect. Check that the centres are 36mm. Now assemble the body: properly join the 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 size and fix in place.

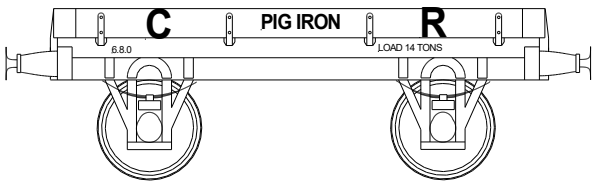
Fit the buffers with the rib to the outside. Fit the single shoe brake gear to one side. Glue a short length of the supplied brass wire (around 3mm) into the axleguard pivot hole. Form the brake lever guide according to the enclosed instruction sheet. Place the lever guide on the solebar to the left of the spring hanger and secure to the solebar. Fix the lever to the guide and pivot. Repeat for the second side if required. After painting fit three-link couplings.

## Finishing
Clean and degrease the model, using white spirit prior to painting. For white metal parts use an etching primer, such as Precision Paints PS1. The model should be painted using the livery of your choice. After painting clean the model using a tissue soaked in white spirit. **This is especially important** if you are using dry lettering such as that available from the Caledonian

Railway Association rather than waterslide or ‘Methfix’ transfers.

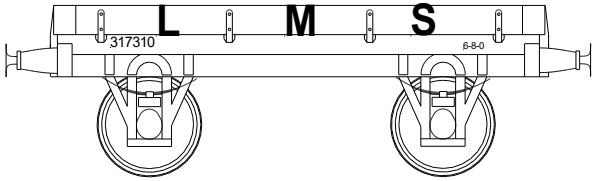
## Livery

### Caledonian Railway c1890-1923




Bodywork, solebars and buffer housing: red oxide, Precision Paint P436
Underframe/brake lever, solebar iron work: black
Insignia: white, HMRS sheet 20, Caledonian Railway Association.

### London Midland & Scottish Railway 1923-demise




Bodywork and solebars: grey, Precision Paint P38
Iron work below solebars: black, Precision P975
Insignia: white, HMRS sheet 6, Modelmaster 4701

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

## Sample Numbers

Information on Caledonian Wagons is limited but the following number is known to have existed: 20065.

The LMS renumbered Caledonian wagons by the addition of 300000 to their original number giving numbers in the range 300001 to 352999.


## Acknowledgements

51L thanks Ronald Cockburn and other members of the Caledonian Railway Association for their help and assistance in preparing this model.


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

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

## Wizard Models

Wizard Models 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: info@wizardmodels.ltd
Shop: www.wizardmodels.ltd



Version: 6.01 Issued: October 2026



**© Wizard Models Limited 2026**