The 4mm wagon and van kit

CRD016L

Caledonian Railway
London Midland & Scottish Railway

Diagram 16 14T pig iron wagon
c1890-1935



(photo is of the earlier 8-10T version)

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, and then 14 tons with the fitting of heavy-duty Iracier grease axleboxes and self-contained buffers. Over the years the brake gear would have been modified from the single shoe one side pattern to single shoe both sides and later 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.

The earlier 8/10T version is the subject of 51L kit CRD016E.

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, p49

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

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.

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 it in place.

Fit the buffers with the acute angle on the baseplate to the outside. Fit the single shoe brake gear to one side. Drill a 0.5mm hole through the pip of the right hand end of the spring on the left hand axleguard. Glue a short length of the supplied brass wire (around 3mm) into this hole to form the brake lever pivot. 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 and pivot. Repeat for the second side if required. After painting fit three-link couplings.

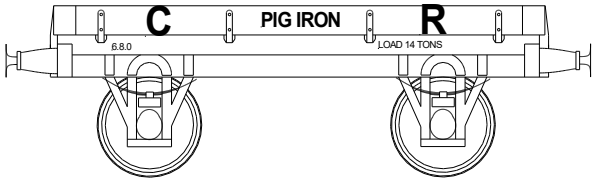
Finishing

Clean and degrease the model, using White spirit prior to painting. For white metal parts use and 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.

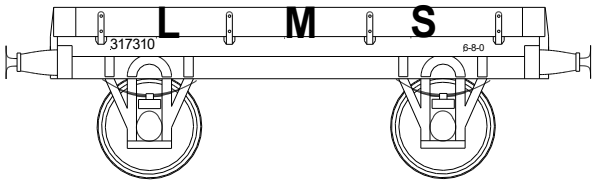
Livery

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 CR livery or bare weathered timber.

Sample Numbers

Information on Caledonian Wagons is limited but the following numbers are known to have existed: 17310, 21061, 23013

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.

Interested in the Caledonian Railway?

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

51L

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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.

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