



The detailed wagon and van kit

The Prototype

The North Eastern Railway had a sizeable fleet of cattle wagons, unfitted, piped and fitted; all of which were grouped under Diagram K1. At grouping the LNER inherited a fleet of 2,000 cattle wagons, by 1940 this had fallen to just 700. The majority of these vehicles were unfitted the LNER having a preference for long fitted wagons rather than the medium length favoured by the NER.

The NER started to produce fitted wagons from c1905. Initially they were allocated to specific stations and were legended accordingly. Fitted cattle wagons were allowed to be used at the front of passenger trains and frequently appear in formation photographs. In the 1930's the Westinghouse brake arrangements were removed from many vehicles leaving just the vacuum brake.

This kit represents the fully fitted version, with both vacuum and Westinghouse brakes and Morton cam brake levers.

References

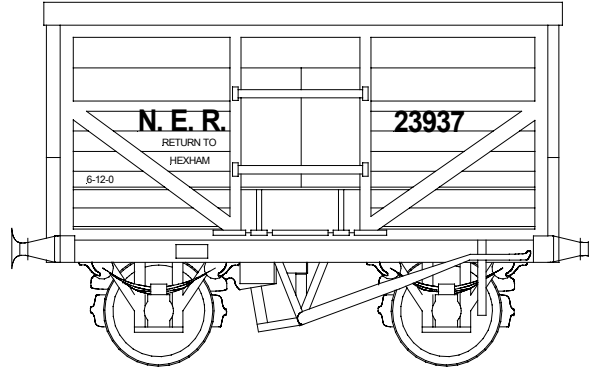
British Goods Wagons from 1887 to the present day
Essery, Rowland & Steel
North Eastern Record, vol 2 P85

Interested in the North Eastern Railway?

Contact the North Eastern Railway Association.
The Membership Secretary
c/o 8 Prunus Avenue
Willerby
Hull
HU10 6PH

North Eastern Railway London and North Eastern Railway

Diagram K1 fitted cattle wagon
from 1905 to 1940's



For OO, EM and 18.83mm

Requires to complete:

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

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) may be useful 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.

Familiarise yourself with the assembly of all parts and undertake a dummy run before commencing construction.

Cut the thick 0.7mm wire to form the interior bars and attach in place on the side interior. The end handrail holes in the side and in the end stanchions should be drilled with a 0.45mm drill, 14.5mm from the bottom of the buffer beam, see sketch.

Attach the axlebox/axleguard to the solebars using the solebar detail for alignment. Ensure the axleboxes are at 38mm centres. All measurements should be taken from a common end. Fit the clasp brake gear in place behind each wheel ensuring the wheels continue to turn freely. Check the fit of the bearings in the axle boxes, open out using a 2mm drill if required.

Fix both ends to one side and, ensure all is level and square. Fit the second side in place with wheel sets in place. If the body fit is correct and the wheels supported in the bearings Superglue the bearings in place. If not bore out or pack the bearings as required. Fix the second side to the ends. If required gently tweak the wagon to bring the wheels into contact with a flat surface such as a glass sheet.

The buffers should now be attached in place. The bolts should be at the 1, 5, 7 and 11 o'clock positions. Cut the floor to size and attach in place. Using fine wire, eg 3-amp fuse wire, form a loop around the hand rail thread into the end stanchion hole and solder or glue on the interior surface to secure. Attach the vacuum, Westinghouse and steam pipes.

Following the adjacent sketch attach the vacuum cylinder and Westinghouse cylinder in place. Cut the brake cross rod (0.7 mm wire) to length so that it fits between the V's, attach in place with levers.

Using the brake rigging from the etched fret complete the brake gear. The push/pull rods may be prepared from the additional 0.3mm wire supplied. (Note: The central lever equalising links are not supplied.) Fit brake levers in place. Add brake yoke safety loops from supplied flat wire.

Paint the interior either white pre-group or weathered timber post group. Form the roof by cutting the plasticard sheet to size and glue in place. Attach rain strips if required.

Isometric sketch of typical NER dual fit brake gear, viewed from side.

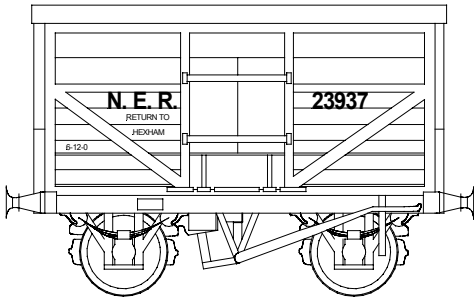
Finishing

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 "Pow Sides" or other makes of dry lettering** rather than waterslide or 'methfix' transfers are to be used.

Livery

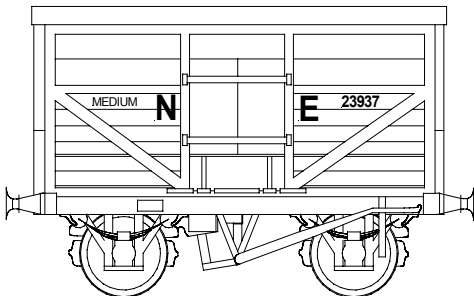
Letter your wagon to suit your chosen period. Suitable lettering is supplied by the HMRS and Modelmaster and paint by Precision Paint for the NER and LNER periods. It will be appreciated that many wagons would not have been repainted by the LNER and early liveries could have been around for many years after the demise of their original owners.

North Eastern Railway 1905-1911



Bodywork, solebars and buffer housing
Crimson Lake Precision Paint P529
Underframe/brake levers black
Letters and numbers probably gold

North Eastern Railway 1911 to 1923



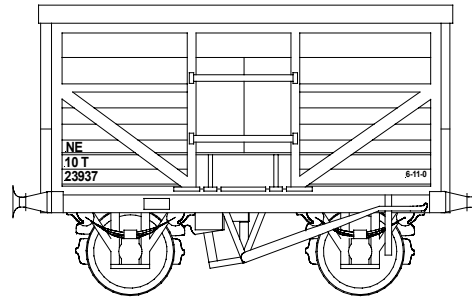
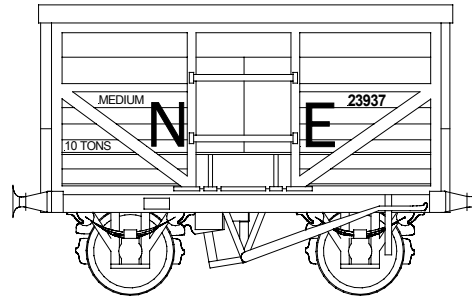
Bodywork and solebars Indian red such as Precision P6

Underframe/brake levers/buffers Black
Letters and numbers white Pow Sides sheet E263, Fox FRH 4325

London and North Eastern Railway 1923 to 1940's

Bodywork including solebars red oxide Precision Paint P67

Underframe/brake levers/buffers black
Letters and numbers white
Pow Sides sheet 4702, HMRS sheet 12



Above 1923-1936, lower 1936-1940's

Sample numbers

Are believed to include:
Date in brackets indicates build date if known.
23937(1905 Hexham), 10887 (1905 York), 19217 (1905 Starbeck), 18315(1906 Carlisle), 6474 (1906 Newcastle), 9729 (1906 Darlington), 14846 (1907)

Acknowledgements

51L would like to thank the following for the help and assistance in preparing this model:-
Michael Grocock, Clare and David Williamson

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. For further help or information please emails: 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
www.wizardmodels.co.uk

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