



The 4mm wagon and van kit

The Prototype

The North Eastern Railway built 245 F9's in their 1908-16 building program, the first entering service in 1909. Many are known to have lasted into service with British Rail.

During their life many were converted into refrigerator, insulated or fish vans. Few details remain of the vehicles converted. It is known that by March 1923 50 had been converted to Refrigerator vans by the addition of interior ice tanks and casing up of the louvers. Of the 233 still in service in 1938, 23 remained as Refrigerator vans, and 26 were allocated to fish traffic. In 1948 106 still ran as Perishables goods vans, 18 as Refrigerator vans, 5 as Insulated vans and 5 as Fish vans.

During the 1930's the LNER removed the Westinghouse brake gear. The date of demise of these vehicles is not known but is likely to have been the mid fifties.

References

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

British Railway Wagons the first half million, D Rowland, P21

North Eastern Record, Vol 2 P89
A Pictorial Record of LNER Wagons P Tatlow, P42

Acknowledgements

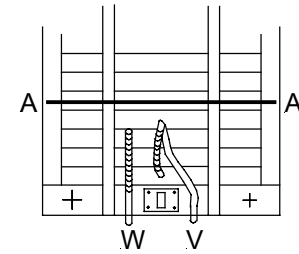
51L would like to thank the following for the help and assistance in preparing this model:-

Michael Grocock, Clare and David Williamson

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 British Rail Diagram F9 Perishable Goods Van



Fix both ends to one side and, ensure all is level and square. Fix the second side in place and again ensure all is level and square. Fit one of the second pair of axleguards onto the solebar with wheel set in place. Ensure the axle is at 90 degrees to the wagon length and the wheels are supported by the bearings yet run freely. When satisfied fix the axleguard in place. If not bore or pack the axleboxes as required. Repeat for the second axle. If required gently tweak the wagon to bring all four wheels are in contact with a flat surface such as a glass sheet. Fit the clasp brake gear in place behind each wheel ensuring the wheels continue to turn freely.

The buffers should now be attached in place. Bolts should be at the 1, 5, 7 and 11 o'clock positions. Cut the floor to size and attach in place. Cut a length of 0.5mm wire to form the end hand rails. Using very fine wire, eg 3 amp fuse wire, form two loops around the hand rail and thread into the previously bored holes in the end stanchions. Solder or glue on the interior surface to secure. Attach the vacuum, Westinghouse and steam pipes. The vacuum pipe should be 3mm to the left of the wagon centre and the steam pipe to the right of the right hand stanchion. Following the attached sketch attach the vacuum cylinder, Westinghouse cylinder and associated levers in place in place.

Cut the brake cross rod (0.7 mm wire) to length so that it fits between the V's, attach in place. Fit brake levers in place. Using the brake rigging from the etched fret complete the brake gear. The push/pull rods may be prepared from the additional 0.5mm wire supplied. (Note: the central lever equalising links are not supplied). Add brake yoke safety loops from supplied flat wire.

Form the roof by cutting the plasticard sheet to size and glue in place. Attach rain strips if required. Finally after painting fit screw link couplings.

From 1909 to 1955

For OO, EM, P4 and S4

Features: White metal body and detailing parts, etched brake yokes and formed plastic roof.

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.

The end handrail holes in the side and in the end stanchions should be drilled out with a 0.5mm drill, 14.5mm from the bottom of the buffer beam, see sketch. Check the fit of the wheel bearings in the axleguards and drill out the axleboxes with a 2mm drill if required. Attach the axleguards to one solebar using the solebar detail for alignment. Ensure the axleboxes are at 40mm centres making all measurements from a common end.

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 the "Pow Sides" or Letrasett dry lettering rather than waterslide or 'Methfix' transfers.**

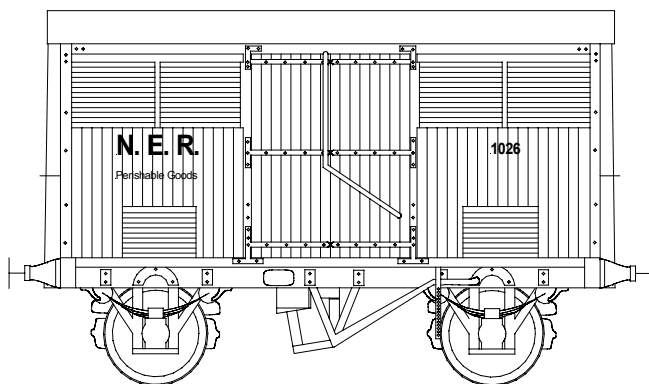
Sample numbers

12, 186, 590, 1026, 7319, 16059, 16615, 20082, 23839, 42258, 60341, 71867, 71700, 75959, 76143, 76154, 76190, 76205, 76212, 76224, (795, 4592 vacuum fitted only)

Livery

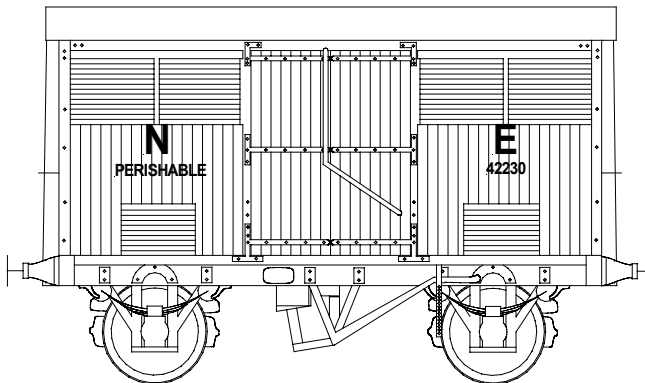
Letter your wagon to suit your chosen period. Suitable lettering is supplied by the HMRS and Modelmaster and paint by Precision Paint for the NER and LNER periods. It will be appreciated that many wagons would not have been repainted by the LNER and early liveries could have been around for many years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

North Eastern Railway 1906 to 1911



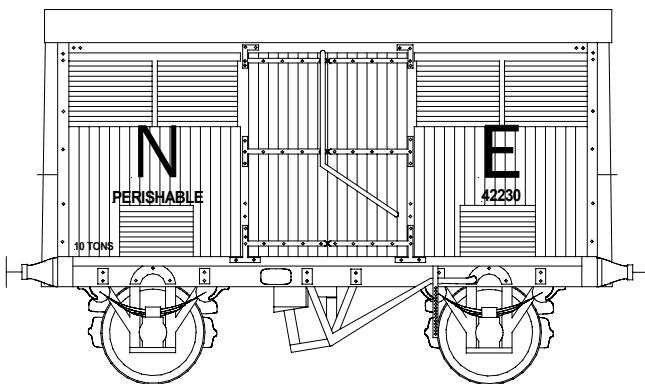
Bodywork and solebars Indian red such as Precision P6
Underframe/brake levers/buffers Black
Letters and numbers white Pow Sides sheet E263

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 FRH4325

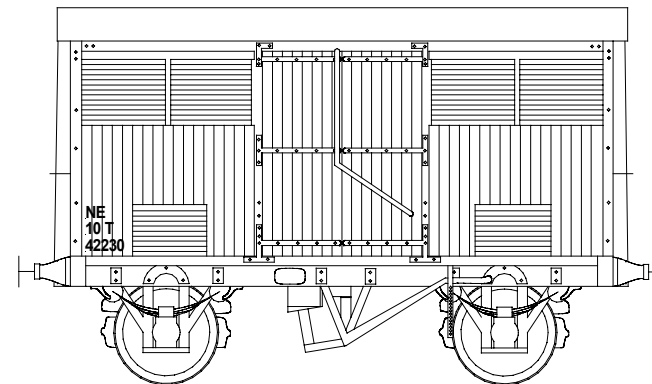
London and North Eastern Railway 1923 to 1937



Bodywork including solebars Red oxide Precision paint P67, underframe/brake levers/buffers, black
Letters and numbers white

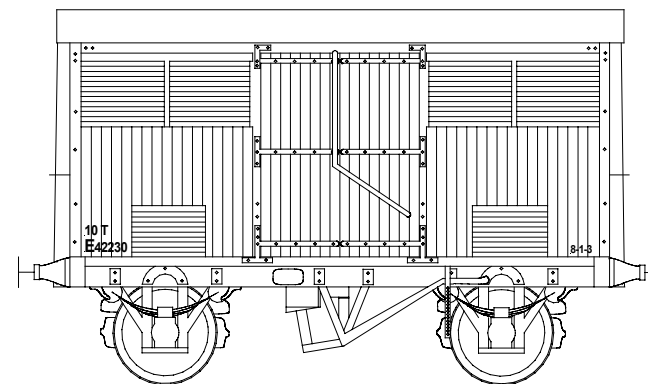
Modelmaster sheet 4702 HMRS sheet 12

London and North Eastern Railway 1937 to 1947



Bodywork including solebars Red oxide Precision paint P67, underframe/brake levers/buffers black
Letters and numbers white
Modelmaster sheet 4702 HMRS sheet 12

British Railways 1948-demise



Bodywork including solebars Red bauxite, Precision Paint P127, underframe/brake levers/buffers black
Letters and numbers white, MRS sheet 25

The current version of these assembly instructions is available on the 51L website, www.51l.co.uk Wizard Models.

PO Box 225, Macclesfield, Cheshire. SK10 4GB
Tel / Fax: 01625-585312

Email: sales@wizardmodels.co.uk

www.wizardmodels.co.uk

Version: 2.00

Issued: April 2002