



The 4mm wagon and van kit

NERDF009

North Eastern Railway
London & North Eastern Railway
British Railways

Diagram F9 10T Perishable Goods Van



From 1909 to 1955
For 00, EM, P4 and S4

Features: White metal body and detailing parts, plasticard roof.

Required to complete: split spoke 12mm wagon wheels and bearings, paint, screw couplings, transfers

The Prototype

The North Eastern Railway built 245 F9s in their 1908-16 building program, the first entering service in 1909. British Railways inherited 129 in 1948, and all are likely to have been withdrawn by the mid-1950s.

During their life many were converted into refrigerator, insulated or fish vans, but few details remain of the vehicles converted. Fifty had been converted to refrigerator vans by March 1923 by the addition of interior ice tanks and casing up of the louvres. 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 perishable goods vans, 18 as refrigerator vans, 5 as insulated vans and 5 as fish vans.

During the 1930s the LNER removed the Westinghouse brake gear.

References

British Goods Wagons from 1887 to the present day; Essery, Rowland & Steel
British Railway Wagons; D Rowland, p21
North Eastern Record; Vol 2, p89
LNER Wagons Vol 2; P Tatlow, pp90-91

Acknowledgements

51L thanks Michael Grocock and Clare and David Williamson for their help and assistance in preparing this model.

Interested in the North Eastern Railway?

North Eastern Railway Association
www.ner.org.uk

Assembly

Please read these instructions before starting to build your model. Remove any moulding flash and ensure all parts fit correctly. We suggest wet fine emery paper (1200 grit) to clean up flash marks. Examine all the parts and familiarise yourself with their 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.

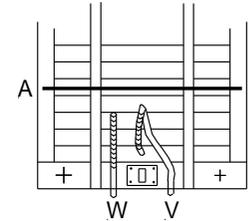
The end handrail holes in the side and end stanchions should be drilled out with a 0.5mm drill, 14.5mm from the bottom of the buffer beam (see sketch opposite).

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. Fix two axleguards to one side, using the solebar detail to ensure the axle spacing is the correct 40mm (1 3/4"). 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

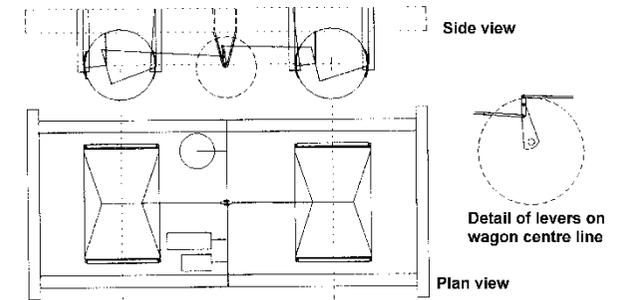
with a flat surface such as a glass sheet. Fit the clasp brake gear in place behind each wheel ensuring the wheels continue to turn freely.

The buffers should now be attached in place, with the bolts 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 handrails, bending the ends at 90° to fit the corner post holes. Using the supplied fine copper wire, form two loops around the handrail 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 as shown; the steam pipe should be fitted to the headstock between the vacuum pipe and right-hand stanchion. Vans operating in the 1930s had their Westinghouse brake gear removed.



Cut the brake cross rod (0.9mm diameter) to length so that it fits between the vees, attaching it loosely in place. Attach the vacuum cylinder, Westinghouse cylinder and associated levers in place (see sketch below). Fit the brake levers; the Morton cam lever goes on the same side as the vacuum cylinder.



Use 0.7mm wire to form brake shoe cross shafts and push/pull rods. The central push/pull rods may also be prepared from 0.5mm wire. (Note: the central lever equalising links are not supplied.) See the sketch above for details. Add brake safety loops by folding up the enclosed etches and fixing in place around the cross shafts, adjacent to each brake shoe.

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. Attach rain strips if required. Finally after painting fit screw 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 Powsides or Letraset dry lettering** rather than waterslide or 'Methfix' transfers.

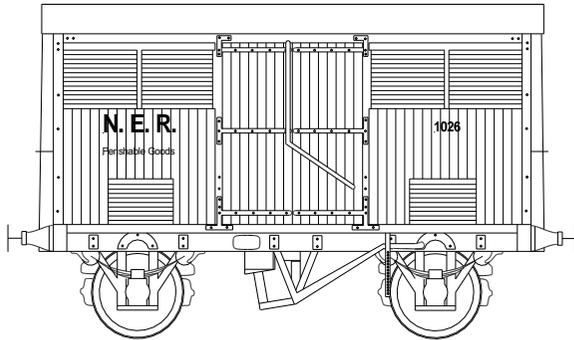
Sample numbers

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

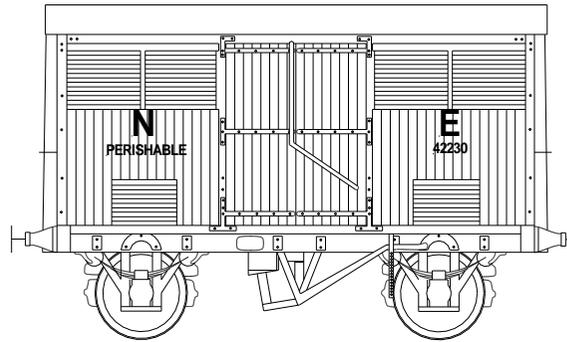
Letter your wagon to suit your chosen period. Suitable lettering is supplied by the HMRS and Modelmaster and paint by Precision Paint for the NER and LNER periods. Many wagons would not have been repainted by the LNER and early liveries could have been around for many years after the demise of their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

North Eastern Railway 1906-1911



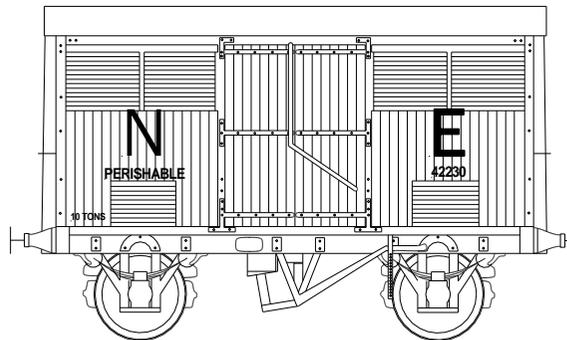
Bodywork and solebars: Indian red, Precision Paint P6
Underframe/brake levers/buffers: black
Insignia: white, Powsides sheet E263

North Eastern Railway 1911-1923



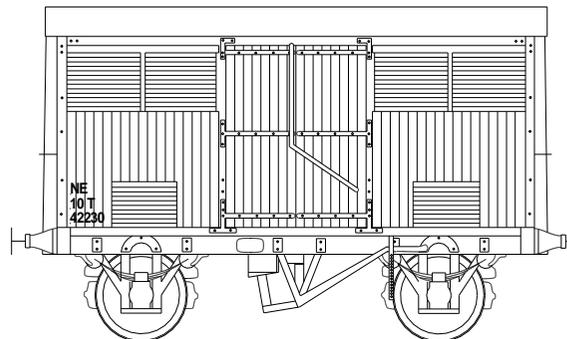
Bodywork and solebars: Indian red, Precision Paint P6
Underframe/brake levers/buffers: black
Insignia: white, Powsides sheet E263, Fox FRH4325

London & North Eastern Railway 1923-1937



Bodywork and solebars: red oxide, Precision Paint P67
Underframe/brake levers/buffers: black
Insignia: white, Old Time Workshop sheet 4702, HMRS sheet 12

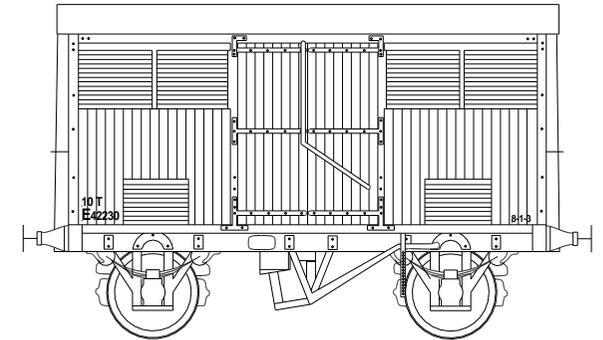
London & North Eastern Railway 1937-1947



Bodywork and solebars: red oxide, Precision Paint P67
Underframe/brake levers/buffers: black

Insignia: white, Old Time Workshop sheet 4702, HMRS sheet 12

British Railways 1948-demise



Bodywork including solebars: bauxite, Precision Paint P127
Underframe/brake levers/buffers: black
Insignia: white, HMRS sheet 25

A more recent version of these instructions may be available on the Wizard Models website. For further help or information please email: andrew@modelsignals.com

51L

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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
Shop: www.wizardmodels.ltd

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