



The 4mm wagon and van kit

NERDK001

North Eastern Railway
London & North Eastern Railway

Diagram K1 8T Cattle Wagon
(No. 2A grease axleboxes)



From 1886 to 1935
For 00, EM or P4

Features: Whitemetal body and detailing parts, plastic floor and roof

Required to complete:

Split spoke 12mm wagon wheels and bearings, paint, three-link or screw couplings, transfers

The Prototype

The North Eastern Railway had a sizeable cattle wagon fleet; 3,222 were built between 1886 and 1924 including unfitted (the majority), piped and fitted versions. All were classed under Diagram K1. At Grouping, the LNER inherited a fleet of over 2,000 wagons but by 1940 this had fallen to just 728. BR took over 213 of these.

When first built the unfitted K1 had grease axleboxes, a single brake lever and two brake shoes on one side.

From 1902 Morton Duplex brakes (right and left levers)

were fitted, followed by Morton cam brakes from around 1904. All these versions may be built from this kit. From c1910 oil axle boxes would have been fitted to new or repaired wagons (kit NERDK001A), so very few grease axlebox wagons would have passed to the LNER.

Although unfitted, these wagons often had screw couplings and 4-bolt fitted wagon buffers (51L part no. NERC028).

References

North Eastern Record Vol. 2 p92

LNER Wagons – an Illustrated Overview, P Tatlow, p118

LNER Wagons Vol. 2, P Tatlow pp160-2

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.

Cut the supplied 0.7mm wire to form the “window” bars and fix them into the cast notches.

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 38mm (9’6”). 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 buffers to the ends, with the bolt heads at the 12 o’clock, 6 o’clock and 9 o’clock positions. Cut the plasticard floor (transverse planks) to size and glue in place.

Single side brake version: -

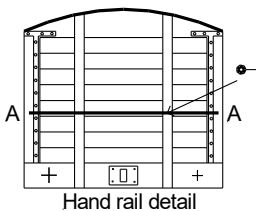
Take a vee and solder it to the outside of the solebar. Add the second vee to the inside of the solebar, using a 0.7mm wire shaft for alignment. Fit the brake shoe/safety loop assembly to the same side of the wagon as the vees, again using the shaft for alignment. Attach the plain right-hand brake lever to the outer vee and solebar.

Morton brakes: -

Add the vees to the inside of the solebars, using the cast detail on the outside for alignment. Fit the brake shoe/safety loop assembly to one side. Form the brake cross shaft by cutting the supplied 0.9mm brass wire to fit between the vees, also passing it through the brake shoe assembly. For Duplex brakes, fit the plain right-hand lever to the same side of the wagon as the brake shoes and the left-hand lever to the opposite side; the levers are thus fitted facing the same end. For cam brakes, the plain right-hand lever again goes on the same side of the wagon as the brake shoes, with the cam lever on the opposite side.

The end handrail holes at the side/end join and in the end stanchions should be drilled with a 0.45mm drill 14.5mm from the bottom of the buffer beam, as shown in the sketch overleaf. Add the handrails from the supplied 0.45mm wire. Use the fine copper wire to form a loop around the handrail, thread it into the hole in the end stanchion and solder or glue it to the interior surface. Paint the interior and add any detail (cattle, straw, lime

wash) now.



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. Add rain strips if required.

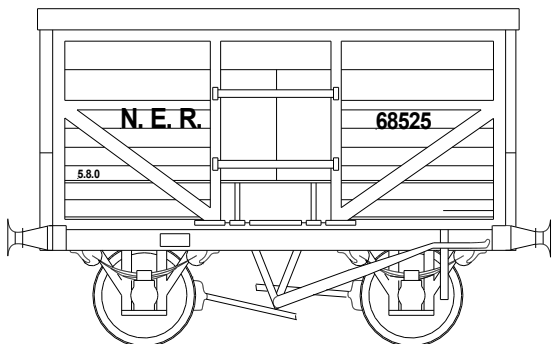
Finishing

Clean and decrease your wagon prior to painting. For whitmetal wagons the use of an etch primer, such as Precision Paints PS1, is necessary, followed by the wagon colour of your choice. Prior to lettering clean the wagon with a white spirit soaked tissue to remove any surface dust. This is particularly important if dry lettering is to be used. Finally protect paint and lettering using matt or satin varnish.

Livery

Letter your wagon to suit your period. Suitable lettering is available from HMRS, Modelmaster and Powsides; paint from Precision Paints for the NER and LNER periods.

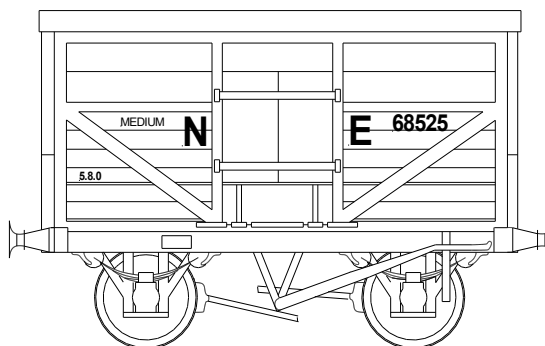
North Eastern Railway 1886 –1911



Bodywork, solebars: NER grey, Precision Paint P530

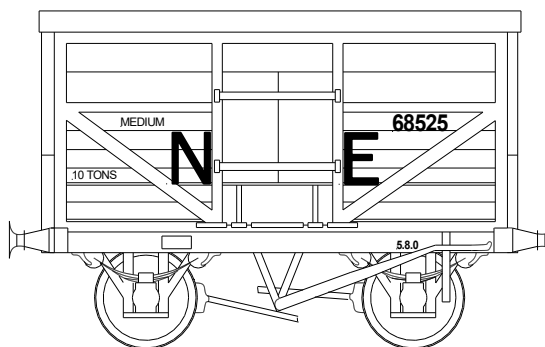
Underframe, brake lever(s): black
Insignia: white, shaded black before and unshaded after 1903, Powsides sheet E264, E263; Fox FRH 4325

North Eastern Railway 1911-1923



Bodywork, solebars: NER grey, Precision Paint P530
Underframe, brake levers: black
Insignia: white, Powsides sheet E263, Fox FRH 4325

London & North Eastern Railway 1923-1935



Bodywork, solebars: grey, Precision Paint P66
Underframe/brake levers: black
Letters and numbers: white, HMRS sheet 12, Old Time Workshop sheet 4702, Powsides E201

Known running numbers include (year of build in brackets):

66501-25 (1899-1902); 3562, 3847, 3848, 7069, 10027, 15417 (1902); 3808, 5730, 7945, 22241, 29412 (1904); 102356-95 (1905); 6321, 30988, 39548, 43983 (1910); 5292, 7259, 8471, 11799, 12138. 60318 (1911); 30350,

37652 (1914); 23130 (1918); 55787, 85720 (1924); 4061, 4278, 37994, 44359, 57394, 74774 (unknown)

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

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

Wizard Models

Wizard Models stocks a wide range of components and other necessities for the modeller in 00, EM and P4.

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Version: 7.01

Issued: September 2025

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