



*The detailed wagon and van kit*

## The Prototype

Single bolster wagons were used to carry out all manner of long loads including bulk timbers, rails, fabricated steel work and boilers. Generally they ran in pairs but could be seen in threes, fours and even fives as traffic required.

The NER introduced the single wagon with 'patent swivelling bolster' in 1902 and allocated it to D2. Over the next two years some 300 wagons were built. These wagons were built with the number 2 grease axlebox, Morton Duplex break gear and the original pattern wooden bolster. It is probable that D2 wagons were up rated during repair and given oil axle boxes, steel bolsters and possibly Morton cam brakes. The life of the D2 wagon was around 25-30 years.

It could be that some D1 wagons were modified to D2 by the addition of swivel bolsters and it may be that such a wagon was photographed in 1952.

In 1911 the NER owned 8400 single wagons of which 300 were rated 10tons and 6099 rated 8tons. The NER had more single wagons than any other LNER constituent. Some 8400 were passed over in 1923 of which 2717 were rated 8t and 5725 at 10t. On retirement many single wagons were transferred to internal user work on the docks at Tyne Dock, Hartlepool, Hull and Middlesbrough.

## References:

British Goods Wagons from 1887 to the present day, R Essery, D Rowland & W Steel

A Pictorial Record of LNER Wagons, P Tatlow P84

The North Eastern Record Volume 2, P 86-87

## Interested in the North Eastern Railway?

Contact the North Eastern Railway Association.

The Membership Secretary

c/o 8 Prunus Avenue

Willerby

Hull. HU10 6BH

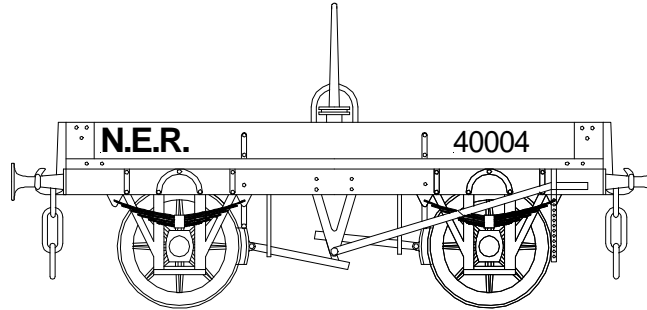
## Acknowledgements

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

Michael Grocock, Claire and David Williamson.

## North Eastern Railway London and North Eastern Railway British Rail

### Diagram D2 Single bolster wagon with patent swivelling bolster Period: from 1902-c1940



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. 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. Carry out a dummy run before 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.

Examine all the parts and familiarise yourself with their assembly. Fit one side to the floor plate followed by one end, ensure all is square. Attach the side followed by the second side using one end to check alignment. Fit the first end and ensure all is square. Attach second end and ensure square. Assemble the w-irons following the enclosed instructions.

Fit the buffers in place with the bolt heads at the 5, 7 and 11 o'clock positions. Ensure the w-irons are etch primed and painted black prior to attaching to the floor plate. In OO modellers will choose to assemble the w-irons in the non rocking mode. In EM or P4 it may be useful to allow the w-irons to rock. (The wagon has a 7' 6" wheel base.) With w-irons in place check the buffer centre to rail top height, this should be

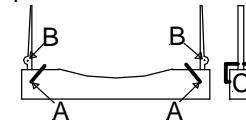
14mm. Pack the w-irons as required to achieve 14mm. It is suggested that about 1mm is required. Fix w-irons in place and check they are parallel and square. Gently push the wagon along a flat surface, it should follow a straight line. If not one or more w-iron is out of line and requires adjusting.

Attach the axlebox castings to the w-irons. The bearing hole will need opening up using a 2mm drill. We suggest that the top of the spring hanger is slightly filed away if a rocking w-iron is required at one end. If using Morton duplex levers plan to have the rocking end of the wagon adjacent to the levers. Alternatively open out the bearing hole in the axle box to allow for bearing movement and attach the spring to the solebar.

This wagon can be made with either the Morton Duplex brake (levers at same end) or Morton Duplex cams brake levers. Attach the brake shoe assembly to the slide bar on the inside of one solebar. Attach a V to the inside of the solebar so that the V and push rod lever holes line up for the brake cross rod. For the second side attach the V. Cut from the 0.7mm wire supplied a cross rod ensuring it is long enough to protrude beyond the V's by around 1mm at each side.

If using Morton Duplex levers ensure the levers are at the same end and that the lever causes the brake shoes to activate when lever is depressed. For Morton cam brakes attach the cam lever to the opposite side of the wagon to the brakes. From the fine flat wire supplied prepare brake push rod safety loops.

Attach the swivel plate to the centre of the wagon floor. Using your bolster of choice bore holes (0.5mm) for the shackles, **A** and the etched bolster post, **B**. Shackles can be formed from 0.5mm wire or use the castings supplied. The shackles should be a U shape as viewed in C. Bore a hole in the centre of the swivel plate, and in the underside of the bolster (diameter 0.7mm). Use a short length of wire (0.7mm) to attach the bolster to the swivel plate. The bolster may be attached permanently or allowed to move as desired. Attach etched bolster pins in place.



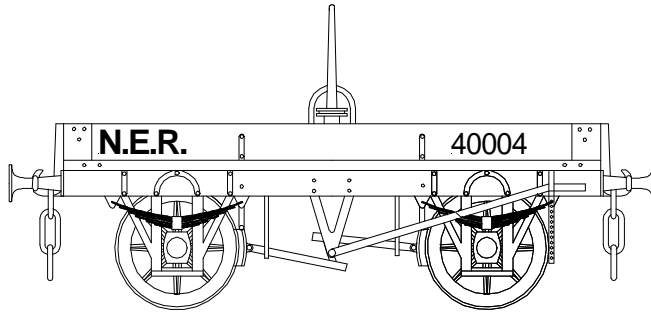
## Finishing

Clean and degrease the model, using white spirit before painting. For whitmetal 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 intending to use dry lettering** such as that available from Pow Sides rather than waterslide or 'Methfix' transfers. After painting and lettering fit three link couplings.

## Livery

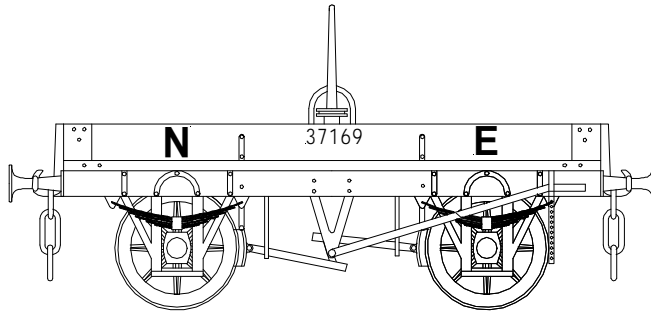
Letter your wagon to suit your period. Suitable lettering is available from Fox Transfers, HMRS, Modelmaster and Pow Sides and Paint from Precision Paint for the NER and LNER periods.

### North Eastern Railway To-1911



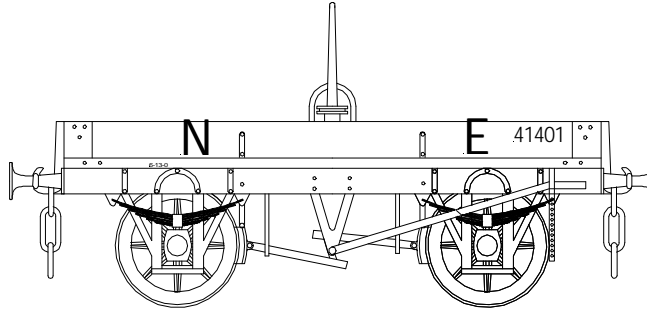
Bodywork, and solebars      NER grey  
Precision Paint P530  
Underframe/brake lever      Black  
Letters and numbers      white, unshaded from 1903  
Pow Sides sheet E262, Fox FRH 4325

### North Eastern Railway 1911-1923



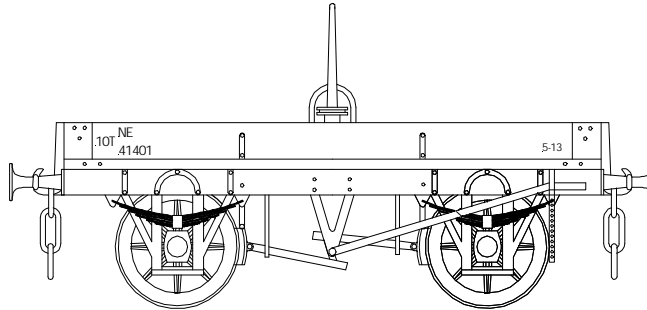
Bodywork, and solebars      NER grey Precision Paint P530  
Underframe/brake lever      Black  
Letters and numbers      White Pow Sides sheet E262,  
Fox FRH 4325

### London and North Eastern Railway 1923-36



Bodywork, and solebars      grey Precision Paint P66  
Underframe/brake lever      black  
Letters and numbers      white HMRS sheet 12,  
Modelmaster Sheet      4702

### London and North Eastern Railway 1937-demise



Bodywork, and solebars      grey Precision Paint P66  
Underframe/brake lever      black  
Letters and numbers      white HMRS sheet 12,  
Modelmaster Sheet      4702

### Sample Numbers

359, 3502, 3503, 3522, 3525, 12007, 37169, 40004, 41242, 41401, 41896, 420045, 62138, 65232, 65314, 62665

## 51L

51L has a wide range of locomotive, carriage and wagon kits for the following railway companies

GWR and constituents:-

Cambrian Railway

LMS and Constituents:-

Glasgow & South Western Railway, Highland Railway, Lancashire & Yorkshire Railway, Midland Railway, 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](http://www.51l.co.uk). For further help or information please email: [info@51l.co.uk](mailto:info@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](mailto:sales@wizardmodels.co.uk)

[www.wizardmodels.co.uk](http://www.wizardmodels.co.uk)

Version:

1

Issued:

April 2002