



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. Many hundreds of D1 were built.

Between 1889-1894 the number 6 round faced grease axle box was used changing to the number 2 grease axle boxes, in the 1894 to 1903 period. Thereafter oil axle boxes were used. Originally built with two shoe one side brake gear, the D1 was built with single shoe each side or two shoe one side Morton duplex, with levers at the same end from around 1897. From 1906 the Morton cam brake was used. From 1909 D1 wagons were fitted with the new steel bolster. Wagon brakegear, axleboxes and bolsters could be up rated during repair and it is possible that some wagons were fitted with the Patent swivelling bolster. This kit includes brake gear components to produce a variety of types, with a choice of bolsters and axleboxes.

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 and substantial numbers were passed over to the new LNER. Some 1887 remained in service in 1955. 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

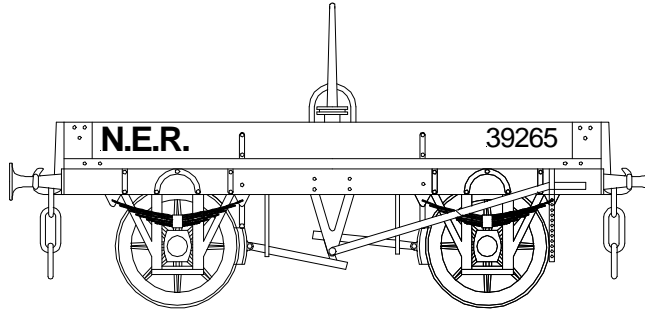
Acknowledgements

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 D1 Single bolster wagon
Period: from c1889- late 1950'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. 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 again 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 two of the bolt heads next to the outside of the wagon. 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.

Brakes

This wagon can be made with either one shoe each side or two shoe one side Morton Duplex brake levers(levers at same end) or two shoes one side Morton Duplex or Morton cam brake levers.

a) One shoe each side brake gear.

Attach the single brake shoe to the slide bar on the inside of each solebar. Ensure the shoes are adjacent to the wheel and operating on opposite wheels ie 180 degrees apart. Attach both V's to the inside of the solebar so that the V and push rod lever holes line up with the brake cross rod. Cut from the 0.5mm wire the cross rod ensuring it is long enough to protrude around 1mm beyond the V's at each end. Attach left and right handed brake levers so that when depressed the brake is activated. From the fine flat wire supplied prepare brake push rod safety loops. These were generally a U shaped bar which prevented a fractured push rod fouling the running line.

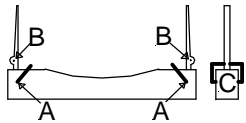
b) Two shoes one side Morton Duplex brake gear.

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 0.5mm 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.

Using bolster of choice bore holes (0.5mm) for the shackles, **A** and the etched bolster post, **B**. Shackles may also be formed the 0.5mm wire supplied these should be a U shape as viewed in C. Fit bolster in place at the centre of the wagon using

epoxy resin or other adhesive. Attach etched bolster pins in place.



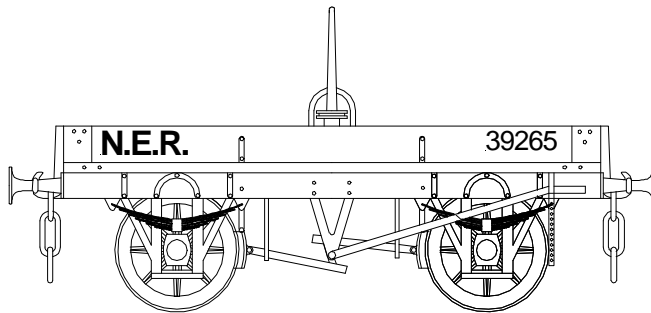
Finishing

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

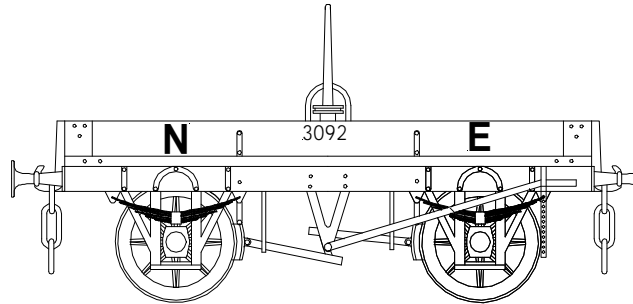
Letter your wagon to suit your period. Suitable lettering is available from Fox Transfers, HMRS, Modelmaster and Pow Sides and Paint from Precision Paint for the NER and LNER periods.

North Eastern Railway To-1911



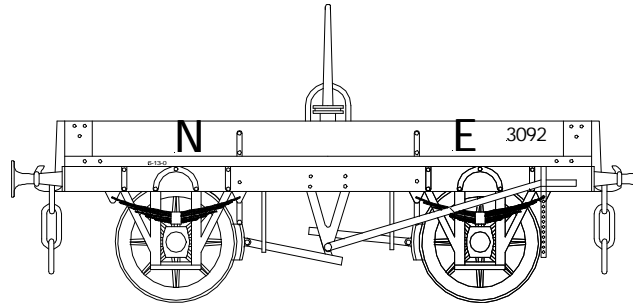
Bodywork, and solebars	NER grey
Precision Paint P530	
Underframe/brake lever	Black
Letters and numbers	white, unshaded from 1903
Pow Sides sheet E262, Fox FRH 4325	

North Eastern Railway 1911-1923



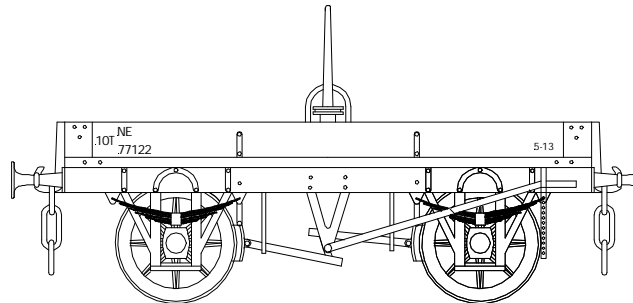
Bodywork, and solebars	NER grey Precision Paint P530
Underframe/brake lever	Black
Letters and numbers	White Pow Sides sheet E262, Fox FRH 4325

London and North Eastern Railway 1923-36



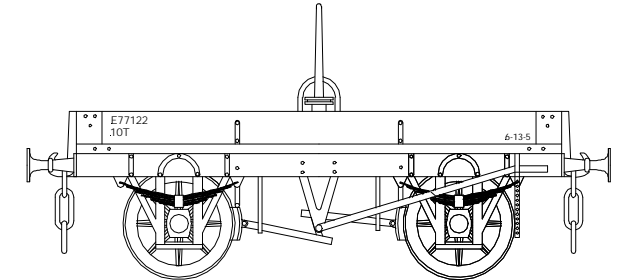
Bodywork, and solebars	grey Precision Paint P66
Underframe/brake lever	black
Letters and numbers	white HMRS sheet 12, Modelmaster Sheet 4702

London and North Eastern Railway 1937-47



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

British Railways 1948 -demise



Bodywork, and solebars	grey or unpainted wood
Precision paint P126	
Underframe/brake lever	black
Letters and numbers	white on black patch
HMRS sheet 25	

Sample Numbers

(Build and withdrawal dates where available in brackets)

3200 (89, 12),	3263 (88-06),	3434 (89-1),
6794 (94-18),	12827 (91-15),	13201 (94-19),
13184 (91-17),	17415 (89-21),	20536 (89-14)
20605 (91-16),	25075 (94-19),	25164 (94-18),
37763 (91-10),	39199 (*89-17),	39420 (89-14),
43948 (89-11),	43957 (91-16),	43985 90-16),
11032 (91-10),	44090 (89-14),	62284 (89-20),
62445 (89-19)	62513 (89-16),	62536 (89-14),
62665 (90-16),	71648 (89-180),	74462,
74511 (89- ?)	74512,	74561 (90-?),
77122 (1921-?)	78213,	78312 (92-?)

For further information contact 51L.

51L

51L models are available through Wizard Models / 51L. For the most up to date version of these assembly instructions or information on 51L models contact the 51L website:

www.51l.co.uk.

Lists of items stocked by Wizard can be obtained by sending 50p and a SAE to:

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