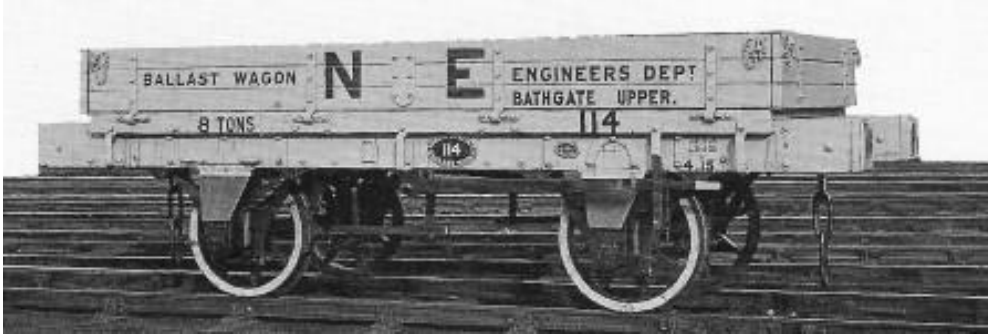


Livery Details

North British Railway

The body of these wagons were painted red oxide, including the solebar and headstock. All running gear below the solebars and brake gear were painted black. Lettering was white with black numbers for the build/repaint date in the inverted crescent.



Photograph from 'Wagons on the LNER NORTH BRITISH No.1, by John Hooper
There are several photographs of these wagons on the NBRSG digital photo archive. The one above of 114 being a hybrid of NBR and LNER lettering, photographed in 1923 at Cowlairs.

LNER

As these were service vehicles, the LNER would have painted these wagons in Oxford blue including the solebars and headstocks. All running gear below the solebars, brake gear and buffer housings were painted black. Renumbering by the LNER was done by adding 770000 to the original NBR number, lettering and numbers were white.

British Railways

It is unlikely any wagon survived to be used in BR revenue.

NBR transfers designed for this wagon can be obtained from Old Time Workshop (4820)
www.oldtimeworkshop.co.uk

Provided Dia. 30B wagon number plates on the etch:

NBR : 2790, 2805, 2852, 2895, 2903, 2910, 2947, 3009

LNER : 772795, 772797, 772805, 772834, 772852, 772903, 772947, 772961, 773009, 773015

8 Ton Ballast Truck Assembly Instructions

General Construction Notes

Please read the instructions carefully before beginning the construction of this kit. Care should be taken with the etched parts when removing these from the fret, as edges may be sharp. Unless otherwise stated all half etched lines will go to the inside of the fold.

A few basic tools are required to prepare the parts before assembling the kit. Flash on the castings and etch tabs can be removed with a small file. A pair of fine nosed pliers to bend and shape etched parts.

The construction of this kit will require the use of several methods of joining parts together. Wherever possible it is preferable to solder metal parts together. Adhesives such as Araldite and Superglue are also required during the assembly of this kit and the choice of these is purely personal.

Throughout the assembly, ensure that the edges to be joined are clean, free from flash, filings or grease before assembling.

Care should be exercised when using a file or drilling resin as the dust particles produced are known to be an irritant.

Look over the resin body for any distortion or moulding flash. On those that I examined, I found no evidence of distortion but if you do, the body should be immersed in a bowl of very hot water, straightened and left to cool. Any flash was limited to the underframe including the remains of the mould feed under the floor.

I recommend adding ideally 60g of weight to improve the running of the completed kit. There is limited space available below the underframe if running the wagon empty, so you may prefer to have the wagon carrying a permanent load of spoil/ballast.

These wagons are described in "NBR Wagons, some design aspects" (185W), by G.W.M. Sewell, on page 14 and a drawing of the longer wheelbase Dia.29 in illustration 10. "LNER Wagons Volume 3" by Peter Tatlow, pages 114 & 115 as well as "Wagons on the LNER NORTH BRITISH No.1" by John Hooper. pages 68 & 69.

HEALTH WARNING

**Another reminder that when using a file on resin, a fine powder is created and care should be taken to avoid inhaling it.
The cast resin feed points will need to be removed at the start of the assembly.**

There are six round pips to remove, one underneath each dumb buffer and one in the middle of the solebar. The remains of the casting feed are under the floor.

They can be removed with a sharp craft knife, followed by a gentle pass with a fine file.

If you wish to add the etched bang brackets for the drop sides (3 per side) you will need to remove the moulded bolt head on the kerb rail. There are six etched bang plates on the fret and these should be folded with the half etch on the inside to shape

If you wish to add representation of the horses hook to the solebar, remove the two moulded bolts on the straight plate over the left axle only. Next to either end of the straight plate, drill 0.5mm Ø hole and insert a short length of 0.45mm brass wire (not provided), bent at 85° to represent the horse-hook used for shunting. Cut any exposed wire flush at rear of solebar to avoid fouling the W-irons.

Two lengths of 28mm length bullhead rail (not provided) are required for detailing the floor.

Note : you have the option to assemble the chassis rigid or compensated.

While some may consider compensation unnecessary, I would recommend that it is used.

The MJT assembly instructions are included but if you do not wish to use the compensation, fold both W-irons with the extensions down and discard the pivoting base.

My assembly shown on the NBRSG website, takes advantage of the compensating option, therefore I have left the extensions down on the fixed axle and folded them flush with the base on the rocking axle. I have also added a small strip of 40thou plasticard (not provided) between the raised tabs of the fixed W-iron as this gives a more substantial gluing area when fixing to the wagon floor.

Check that the W-irons fit in the space between the solebars and that the rocking W-irons has clearance to rock! Once happy that the W-irons fit, glue them in place using the crown plates on the solebar for their position, ensuring that the axles are parallel to each other.

Using a 2mm Ø drill bit, clean out the hole in the white metal axlebox/spring where it goes over the pin-point bearing and clean up the rest of the casting. The casting can be attached to the fixed W-iron in its entirety but you will need to decide where you wish to cut the casting if you have chosen rocking W-irons :

Option 1) cut between the axlebox and spring, separating them. Clean up the underneath of the spring and file a small rebate in the top of the axlebox. This will clear the spring when the W-iron rocks. (Recommended as the axlebox dust protecting covers will hide the join)

Option 2) cut the hangers off the spring, attach the spring and axlebox to the W-iron then glue the hangers to the underneath of the solebar, assuming you have not lost any!

Add the four etched brass axlebox dust protecting covers and glue to the underneath of the solebar. If using compensation, ensure the cover does not interfere with the rocking of the w-iron. In service, it was not unknown for a cover to be damaged and removed from the wagon so you may wish to consider omitting the odd one if assembling several kits.

Before removing the fulcrum from the fret, drill out the pivot holes 0.5mm Ø. The fulcrum is located at the midpoint of the solebar for attaching the brake lever to the brake.

Before removing the brake etch from the fret, with a 0.5mm Ø drill, open out the etched holes at the brake shoe end. When folding over, 0.45mm Ø brass wire will be used in these holes for alignment.

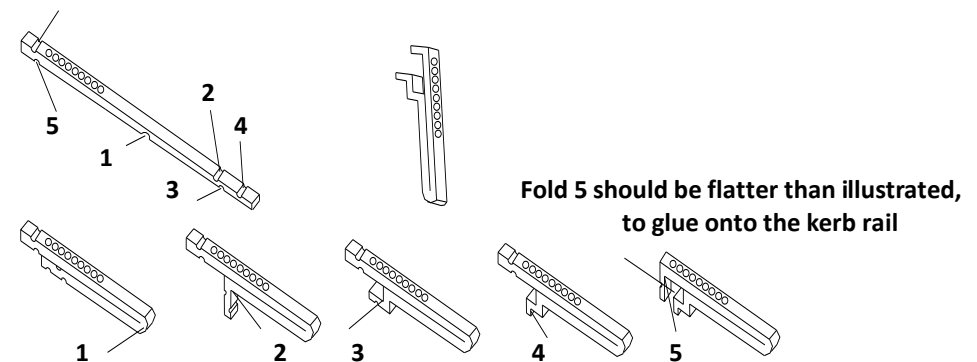
I do not recommend drilling out the opposite end as the brass is really too thin and there is a high risk of "bursting" the etched hole. If you do wish to drill these out, then use maximum 0.4mm Ø drill, selecting the middle of the three holes on the 'wear adjuster' and when folding, use 0.33mm Ø brass wire for alignment at this end.

Note that the plain length is susceptible to bursting when drilling.....so take care.

Insert brass wire through the holes (or eye) for alignment, fold over at 90° both sides around the base mount. Now fold over 180° the top layer. Solder all together.

Once assembled, the assembled etched brake shoe should be aligned against the left wheel. You will need to add a small packing piece of 30 thou plasticard between the etch and the wagon floor to position the brake shoe correctly.

The etched brake lever and guide are built as per the originating 51L instructions, the sequence of folds being numbered in order. All folds are made with the half etched line to the inside and are 90° except fold 1 which is 180°. Drill a 0.7mm Ø hole approximately 2mm from the bottom of the solebar where the guide is to be placed. Ensure guide fits in this hole having soldered the bend points to strengthen them and trim flush any exposed length of guide that is behind the solebar as this will foul the W-Irons.



Bend up the brake lever so that it would clear the axlebox when depressed down and form the end handle. Insert a short length of 0.45mm Ø brass wire through the fulcrum and fix brake lever in place. Additionally secure brake lever to the brake lever guide.

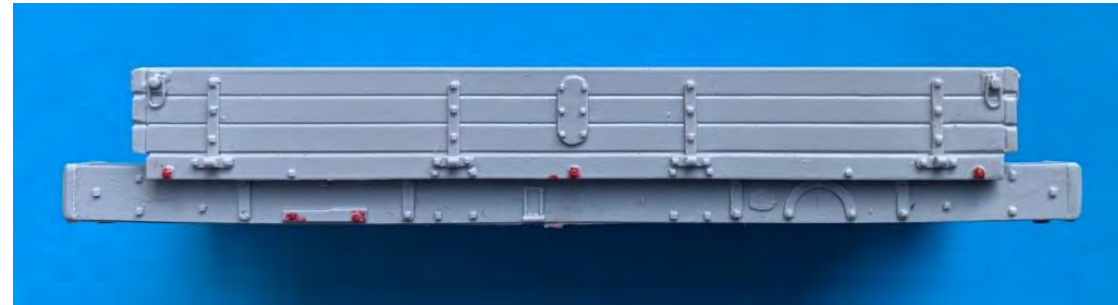
Add your own preferred couplings. Wheels should be 12mm 8 spoke open



There are six round pips to remove, four underneath each dumb buffer and two in the middle of the solebar.
The remains of the casting feed are under the floor.
(Marked in red)

If you wish to add the etched bang brackets for the drop sides (3 per side) you will need to first remove the moulded bolt head on the kerb rail, 3 per side.
(Marked in red)

If you wish to add representation of the horses hook to the solebar, remove the two moulded bolts on the straight plate over the left axle only.
(Marked in red)
Drill 0.5mm Ø hole and insert a short length of 0.45mm brass wire (not provided)



This shows a completed kit : (repeat for other side)

Three etched bang brackets fitted to kerb rail
Brass wire used to create horse hook on solebar above left w-iron
Brake lever fulcrum hanger glued centrally underneath the solebar
Assembled etched brake shoe against left wheel
Etched brass axlebox dust protecting covers

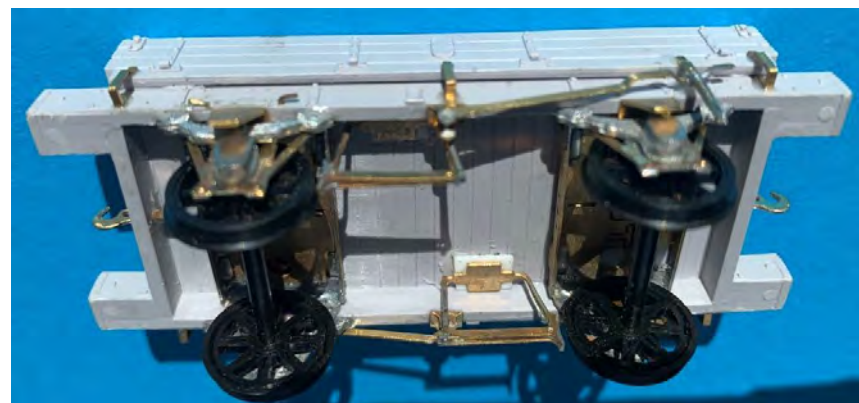




Stages of folding and assembling the brake shoes



Inside of wagon showing the length of bullhead rail across the end, covering the strapping.



View underneath of completed wagon

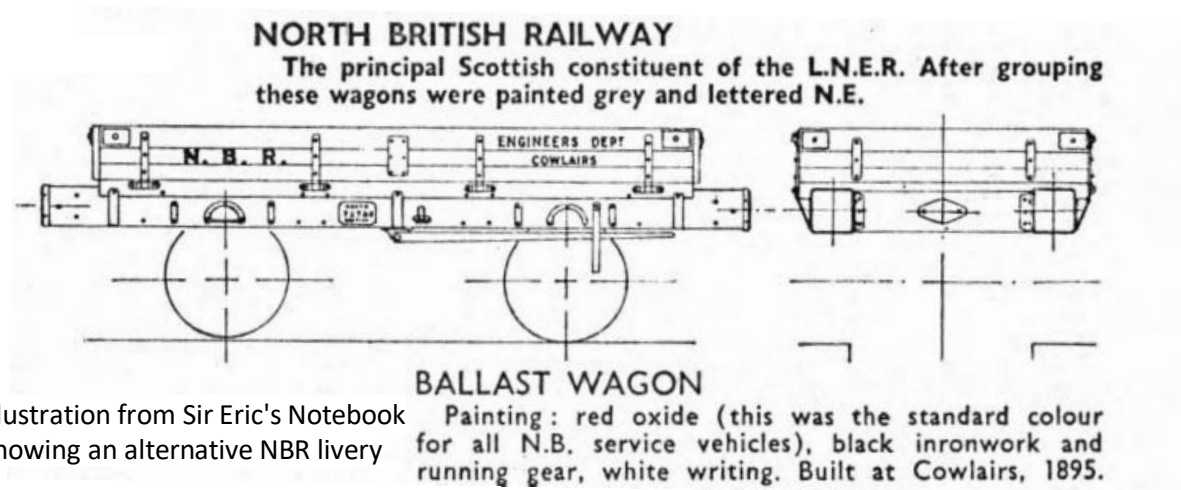


Illustration from Sir Eric's Notebook showing an alternative NBR livery

