Scottish Distillers Polybulk

N GAUGE SOCIETY

NGSK 0091

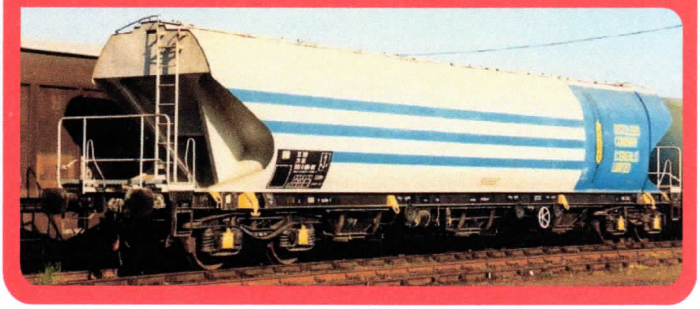
Period: (era 8, 9)

1900 1950 2000

Intermediate

Kit features injection-moulded parts, one-piece plastic bogies, pre-printed sides and photo-etched details

With Decals



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To complete this kit you will need:
Plastic Cement, Cyanoacrylate Glue, Paint & Varnish

The Prototype

By the late 1970's, grain traffic had been falling for many years. British Rail decided to act - in 1981 launching a new fleet of air-braked Polybulk wagons running under the "Grainflow" banner in a distinctive green and grey livery. The wagons were a success, and in 1983 a second batch was ordered. (Both these types can be produced from N-gauge Society kit 9.)

Impressed by this, Distillers acquired its own fleet of 40 Polybulks and painted them in an attractive mid-blue and white livery with a yellow "sheaf of corn" motif. Initially they were lettered "Scottish Malt Distillers", but in the mid-1980's the wording changed to "Distillers Company (Cereals) Limited."

Until 1991 the Distillers Polybulks tended to run from the East of England to Scotland in "Speedlink" services, while in more recent years the wagons have seen use in various EWS Enterprise trains in various parts of the country conveying a variety of powdered goods such as Lime. Nowadays these wagons usually appear heavily weathered and faded, although underneath the muck the white and blue livery can still be seen.

The cover photograph shows Polybulk 70 9280004 at Whitemoor Yard, March in June 1986.
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General Notes on Construction

Naturally the N-Gauge society wants you to achieve the best result you can. These simple guidelines should help:

* *Read the instructions through fully before you begin.*
* *Make sure you understand each step before applying glue - carry out a dry run first with all parts.*
* *To fold etched components, place the fret on a flat surface, place a steel rule across the fold line and, using a scalpel, gently ease up the component to be folded.*
* *Clean any flash/moulding pips off plastic parts.*

But above all....TAKE YOUR TIME!!

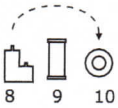
Getting Started

First, read the instructions thoroughly all the way through and be sure you are confident that you have identified all the parts.

Bonus Etched Components
As well as the parts you will need for this kit there are some extra parts: "a" is a valve cover for LPG tanks and "b" are 5' by 1' catwalks. There are also some spare 5-spoke brakewheels.

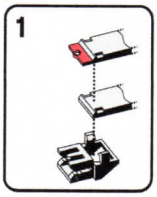
Small Plastic Brake Parts on roof sprue:
The small detail parts (8, 9 & 10) moulded on the sprue next to the roof are needed at the end and should be part-assembled once the roof moulding has been removed.

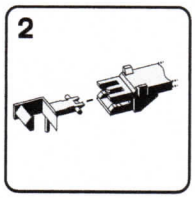
Glue part 10 to part 8 (distributor) while the latter is on the sprue. Part 9 is the brake cylinder.



Assembling the bogies

This wagon is supplied with one-piece bogies and NEM couplers. To fit the pocket, remove part of the moulding shown in red and snap in place. A drop of liquid poly will secure. When dry push-fit coupler.





Now fit the wheels and test run. If they bind try squeezing the bogie sides and turning the wheels; if the wheelsets feel a little loose then remove, squeeze the frames gently, and replace.

The bogies can be secured with the moulded pins provided. It may be necessary to open up the fixing hole in the pivot slightly.

Etched parts

Etched components should be removed from the fret carefully with scissors or a sharp knife. Try to avoid distorting. There are spares provided for the very small parts in case of loss. Etched parts should be fitted to plastic with liquid poly or cyano.

Painting, Fitting the Cut-Out Sides And Finishing

Prime the model with matt white.
The body should be gloss or satin white and the solebar and underframe matt black. For those without an airbrush, Halfords stock a range of car aerosols that give a good finish. Ford *"Glacier White"* is a good match.

Small details and bogie axleboxes should be picked out in yellow, and the 5-spoke brakewheels in white..

Remember, the sides are glued in place once cut out - they are NOT waterslide transfers!

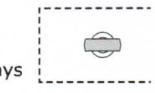
Decide which version of the Distillers' livery you wish to use. Why not practise on the sides you don't want?

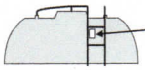
The vertical lines are to enable you to simulate weld seams. Mark each line top and bottom with a pin, then turn over and using a steel rule score between each pair of holes with a darning needle or similar.

Cut out the bodysides with a fresh, sharp blade and cut with your steel rule positioned over the printed area to protect it. When cutting the curved ends, cut from the centre of the curve outward. The dashed horizontal lines are upper cut lines for those who are not modifying the contour of the moulded body.

Make sure your hands are clean and dry, then roll the sides over a suitable former. When the desired contour is achieved (ie the side sits in position with no obvious bulges or gaps) put a thin layer of fresh aerosol or contact adhesive on the hopper, position the sides and press home.

Fit the bogies with the retaining pins used lengthways





If required, overhead warning flashes can be fitted at each end inside the rungs of the ladder as shown.

Congratulations! Your model is complete!

3. Assembling the Plastic Body

Diagram 1

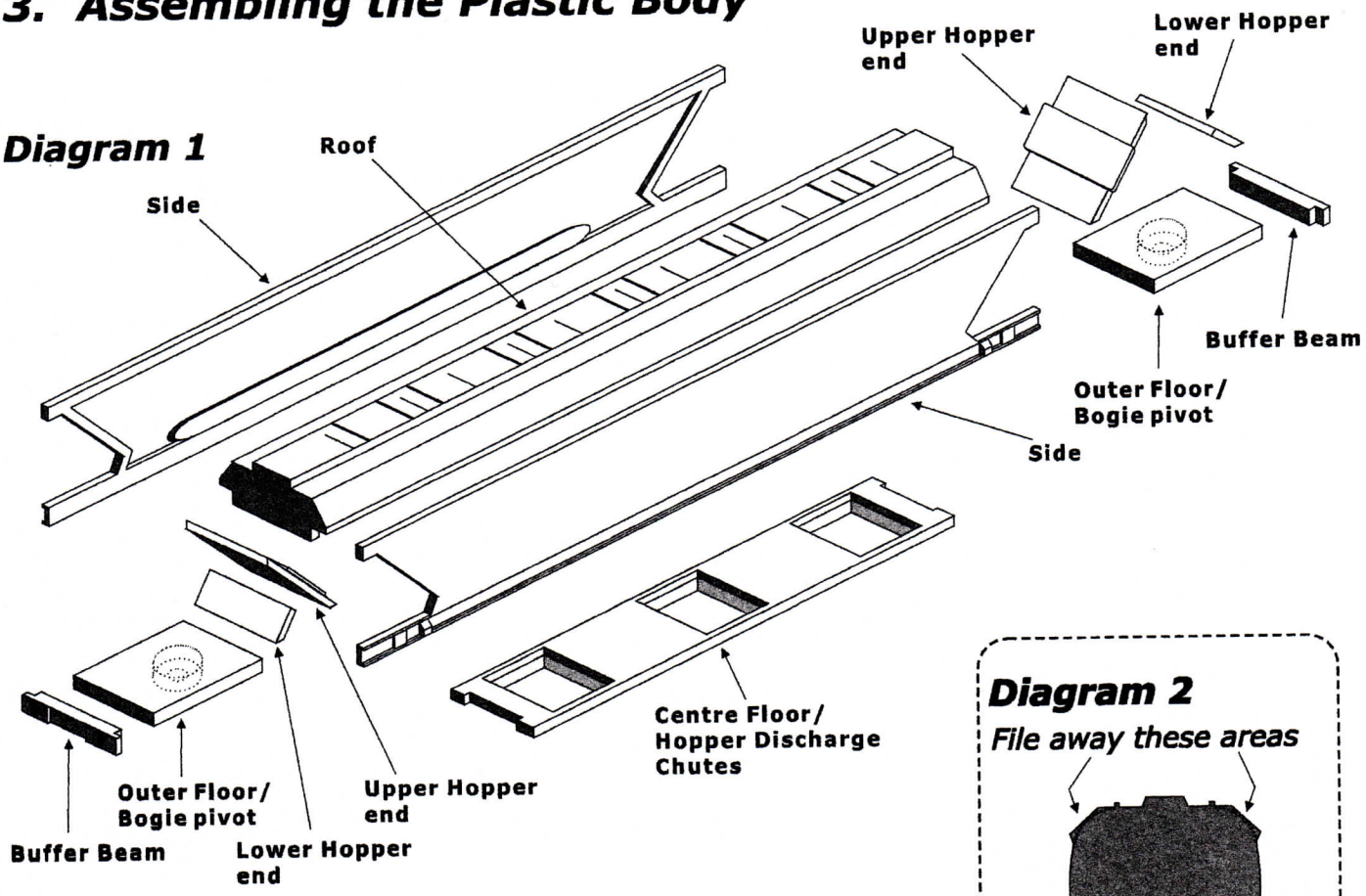


Diagram 2

File away these areas

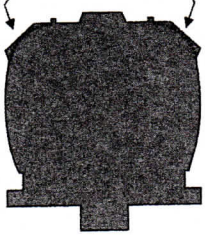


Diagram 1 shows how the plastic parts fit together.
Allow a few minutes for the glue to set between each stage.
It is recommended that you work in this order:

Glue one of the sides to the roof. It is advisable to maintain pressure while the glue sets to ensure the side does not bow out in the middle. This can be done with magnets on a metal tray (biscuit tin lid), small blocks of wood or with your hands if they're steady enough!

Fit upper hopper slopes at each end (the locating plate should be toward the top) then fit second side, followed by buffer beams. The fitting of the buffer beams should confirm all is square.

The lower hopper slopes and outer floor/bogie pivot parts should be fitted next. Try a dry run first, and ensure that each floor is level and the top is aligned with the top of the solebar.

Note that the bogie pivots should be offset toward the centre.

Lastly, fit centre floor/hopper discharge chutes centrally. This completes the body structure.

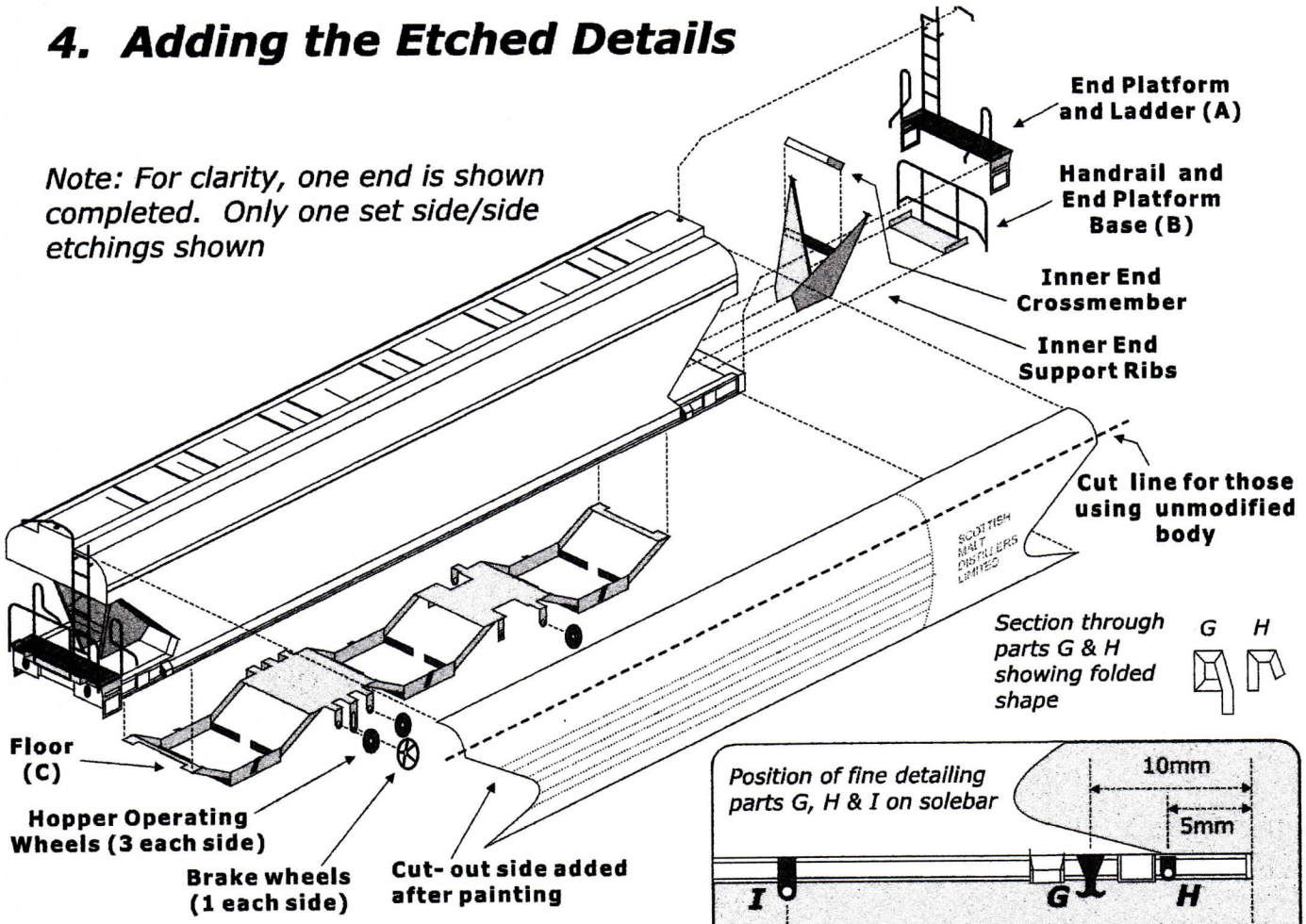
When all is set, drill the buffer holes.

Optional:

The upper sides of the Distillers' Polybulks have a more "curved" profile than the Grainflow vehicles. This can be replicated by filing the area down as shown in Diagram 2. Refer to the photograph. A modification can also be made to the buffers - file a little off the top and bottom of the buffer head to create the more "continental" type fitted to this wagon.

4. Adding the Etched Details

Note: For clarity, one end is shown completed. Only one set side/side etchings shown



Use cyano to glue the etched parts in position, unless instructed otherwise.
Half-etch lines are usually inside folds, but check against the diagrams.

First, fold up inner ends. Cut a piece of strip styrene to length to form the inner end cross member as shown. The ends should fit snugly against the inner slope of the main hopper. *TIP: Use liquid poly instead of cyano here and gently push in. The glue should melt the plastic allowing the parts to seat themselves.*

Drill 0.3mm hole 0.5mm in from each end on the centre of the roof.

Fold and fit end platform base (part B) centrally, overhanging the buffer beam by approx. 0.75mm.

Fold up the end platform/ladder assembly (part A). The small grab handles should be tweaked as shown, and the roof top handrail section "joggled" so that the centre strut fits in the hole drilled earlier. When fixed in place, the platform should overhang the buffer beam such that the ladder is vertical.

For the floor (part C) first fold over the end of the brake changeover lever, so etched detail is outward. Here, scoring with a knife will make for a cleaner fold. Next, fold the small diagonal locking levers over 180°. Now fold down each of the six hopper gear supports and fold the securing arms back inwards. The etched handwheel support tabs (labelled 1 for brakewheel and 2 for hopper operating wheels) can be folded down. Fix floor in place. For extra strength, glue the securing arms to the moulded hopper bottoms.

Glue the brake air cylinder onto the floor in the gap marked "X" and the brake distributor assembly in the gap marked "Y", and fit the buffers (*modified if you wish.)*

Fit etched brakewheels (5-spoke) and hopper operating wheels (solid disc) as shown. Finally fold and fit small loops (H & I) and lashing hooks (G).

Your Polybulk is now ready for the paintshop. (The cut-out sides are fitted after painting.)