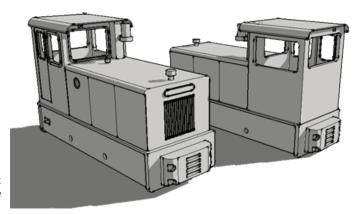
Prototype Info

NPL-001 RNAD 99hp Baguley-Drewry

This design of loco was built by Baguley-Drewry in the early 1980s for service on the extensive 2' 6" lines at RNAD munitions depots around the UK. As well as the 99hp design represented here, there was a smaller 60hp version which we intend to produce later.

Following rationalisation of RNAD installations, disposal sales have resulted in many of these locos appearing on preserved lines around the country. Notable current locations of the 99hp design are the Statfold Barn Railway, Whipsnade Zoo and the Talyllyn Railway.



Thank you for purchasing this Narrow Planet kit, we hope you enjoy building and operating it. Please read through the instructions thoroughly before beginning assembly.

Tools required:

Sharp craft knife or scalpel Razor saw Tweezers Flat nosed pliers Bending bars or engineer's square Emery paper or boards

About the kit

This kit is comprised of a 3D printed plastic body shell and a fret of etched nickel silver detail parts. Minimal folding of these parts is required and they can all be glued in place. We recommend sparing use of liquid superglue for assembly, ideally using a bottle with a thin applicator nozzle. Notes on particular details of application are given below.

As none of the etched parts need to be fixed to each other the order of assembly is not critical, however it makes sense to start with the most robust to avoid handling the model too much once the more delicate parts are in place.

Due to the nature of the 3D printing process, some support material may still be present on bottom-facing edges of the body shell, particularly inside the cab windows and the front grille cut out. Check the coupling slots in the buffer blocks as these often have a support strut inside. The plastic used has similiar properties to the ABS commonly used in injection-moulded kits and may be easily cleaned up with a sharp knife and fine emery boards.

Please note this is a scale model for adult collectors, and not intended for children under 14 years of age.

Chassis fixing

The kit is designed to fit a Kato 11-104 'tram' chassis. The mechanism is known for its good running qualities, and while the wheelbase is over-scale the side skirts on the loco mean this is not visible. Other versions of the chassis may fit but the 11-104 has the thinnest side frame detail.

To modify for fitting, carefully cut off the plastic ends with a razor saw down to the metal part of the chassis (approximately 46mm long). Trim down the axlebox and spring detail on the chassis until it is a sliding fit into the body. Locating pips inside the body should allow the chassis to clip in directly. We recommend detailing and painting the body before fitting the chassis.

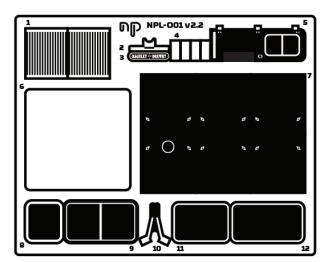
Couplings

If you examine the buffer blocks you will see that the second-tobottom slot is opened out all the way through. This slot is at the correct height to mount a Greenwich coupling at 6mm from the rail, and is wide enough to take other etched coupling designs.

Assemble the Greenwich couplings according to their instructions

and push into the slots. Either trim the tail and glue in place, or use one of the holes in the tail with a pin glued into the underside of the body to allow the coupling to pivot, depending on your preference.

Detail Parts • NPL-001 v2.2



- 1. Radiator grille
- 2. Exhaust bracket
- 3. Baguley-Drewry badge
- 4. Lifting points
- 5. Cab door
- 6. Cab roof

- 7. Bonnet panels x 6
- 8. Cab door-side window frame
- 9. Cab off-side window frame
- 10. Windscreen wipers x 2
- 11. Cab front window frame
- 12. Cab rear window frame

Carefully remove each part from the fret as required using a sharp knife on a cutting mat or similar hard surface, and clean up the tags.

Assembly Notes

7 • Bonnet panels • Ensure tags are carefully completely removed. These half-etched parts may be slightly curved on the fret so bend back to true with finger pressure. The panels fit in the recess between the footplate and the overhang of the bonnet top. Check the panel with the hole is fitted over the corresponding indent in the loco side. **1 • Radiator grille •** Carefully fold top and bottom tabs to 90^ª and push into the grille opening until flush with the bonnet front. Once you're happy with the fit glue in from the inside. The piece is delicate and the fit is tight so carefully remove material from the print if needed. A spare grille is included in case of mishaps.

3 • Baguley-Drewry badge • The badge should be equidistant from the top of the radiator grille and the top of the bonnet. Spot a little glue on to the bonnet front and apply with tweezers. Make final adjustments to the position using the tip of the tweezers or a dressmaker's pin.

6 • Cab roof • Take care rolling down the corners, the curves of the cab are strong enough to roll against as a former using bending bars or an engineers square. Once formed the roof should be a press fit onto the cab, if you don't want to glue it down. We recommend forming the roof before adding any other detail to the cab, but fitting it later.

5 • Cab door • The door should be fitted slightly open. Fold the small tabs on the left side to over 90° and glue to door frame, run glue down opposite inside against door frame. Optionally add a short length of wire bent to 90° to the door handle hole.

8, **9**, **11**, **12** • Window frames • Carefully position each frame on the cab and then spot glue along their edges, capilliary action should draw it under the frame. Smooth any excess along the edge of the frame with a pin if neccessary. Note that part 9, the off-side window, should be positioned with the thicker part of the frame to the rear of the cab.

10 • Windscreen wipers • Carefully fold the tabs on the ends of the wipers and slide into the locating holes above the front and rear windows. Note the wipers are handed and should be angled to the right on the front and the left on the rear. Once in place spot glue into the joint and where the wiper touches the window frame.

2 • Exhaust support • Note that the folds are on opposite sides of the piece. Slide the bracket around the exhaust upright and line up to the pipe section. Spot glue into the joints.

4 • Lifting points • (Optional) • Fold to 90^a and glue to the buffer beams, equidistant from the edges and the buffer blocks.

Painting and finishing

In RNAD service the locos had an all over 'hazard' yellow livery with wasp stripes on the buffer beams and buffer blocks and were generally kept in good condition. Side skirts under the footplate are black or very dark grey. Front and rear window frames are black rubber. Side frames and door window frame are metal. Identification was stencilled in black and the interior of the Baguley-Drewry bonnet plate should also be black. Once this is painted and dried, a light touch with an emery board over the plate will bring the top surfaces back to bare metal.

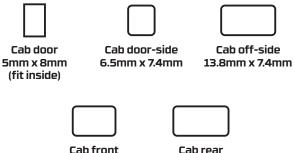
Some locos have retained this livery in preservation, while others have been repainted so if you are modelling a preserved line you can probably get away with anything you like.

Any sort of primer would be beneficial before a top coat, but the 3D printed body should take paint without a problem. You may wish to try a test on the underside of the body first. If painting the loco yellow try to use a light coloured primer, ideally white.

Glazing can be added with clear styrene. It can easily be attached to the cab interior, or the more adventurous can cut it exactly to size for flush glazing (the door glass can just be glued behind as the thickness isn't an issue here).

To cut glazing to size, cut a rectangle and then chamfer the corners slightly. Refer to the diagram for the sizes of each window. Some trimming may be required to get a good fit, but better to cut slightly too large and trim down than make it too small. Use PVA to hold the glazing in place, or any other glue that dries clear.

Cab glazing sizes



Cab front 10.8mm x 7.3mm Cab rear 14.1mm x 7.3mm

Acknowledgements

We would like to thank James and Peter Smith for their kind assistance in gathering prototype information (and letting us drive one).

Thanks to Chris Clark, Jim Owers and Chris Ward for their help in development of the kit and display models.

Thanks to members of the 009 Society, Greenwich & District Narrow Gauge Railway Society and NGRM-Online for their feedback and support in the production of our first kit.

About Narrow Planet

Narrow Planet was founded in 2010 and offers a custom etching service for unique nameplates, works plates and number plates for your model railway locos and stock. In any size or shape from 2mm:ft to 16mm:ft scales. Many manufacturers' styles are available, our full range and ordering information can be found on our website.

This model is our first kit in 009 and hopefully more will follow. If you have any queries about the model or instructions please get in touch.

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