

NPR-002 RNAD Crew Van

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
- Soldering iron (optional)

Prototype Info

These utilitarian vans were built by Hudson in the early 1980s for service on the extensive 2' 6" lines at RNAD munitions depots around the UK.

Following rationalisation of RNAD installations, disposal sales have resulted in many of these vehicles appearing on preserved lines around the country. Notable current locations include Amberley Museum, Leighton Buzzard and the Lynton & Barnstaple, Corris and Talylyn Railways.

About the kit

This kit is comprised of a 3D printed underframe and a fret of etched nickel silver parts for the body and bogie detail. We recommend soldering of the metal bodywork for the most robust assembly, although it is perfectly possible to get a good result with glue. Ensure the underframe is separated from the body during soldering work.

Where glue is required we recommend sparing use of liquid superglue, ideally using a bottle with a thin applicator nozzle. Notes on particular details of application are given below.

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.

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

Construction Notes

Bogies

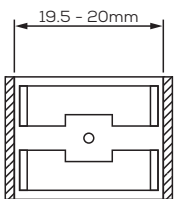
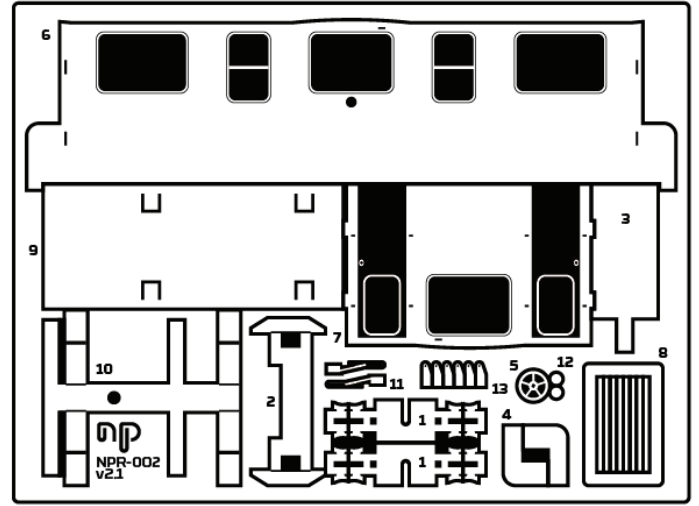


Figure A

None of the brake parts supplied with the bogies are required. Modify the bogie frames before assembly. With a sharp craft knife trim off the stretchers between the axle boxes, then turn upside down and trim the ends down following **figure A**. Finally round off the corners of the frame using a file or emery board. Insert the wheelsets by gently springing the frames apart.

For both bogies, take a brake gear part (1) from the fret and carefully fold the brake shoe detail back 180° and glue or solder it

Detail Parts • NPR-002 v2.1



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|-----------------------|---------------------------|
| 1. Brake gear | 8. Handrails x 8 |
| 2. Bogie steps | 9. Roof |
| 3. Underframe tool | 10. Roof vent fixture |
| 4. Seat ends | 11. Windscreen wipers x 2 |
| 5. Brake wheel | 12. Lamp x 2 |
| 6. Main body part | 13. Lifting eyes x 8 |
| 7. Door end body part | |

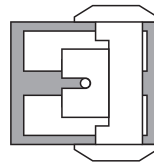


Figure B

to the backing part. Then fold down the brake shoes and glue the gear on the top of the bogie making sure the cut out aligns closely with the mounting hole.

For the bogie that will be under the van doors, take the step part (2) and carefully form the double fold on each side. Slide the part over the bogie and glue so it is flush against the brake gear part (**figure B**).

Underframe

The 3D print for the underframe has been prepared in an ultrasonic cleaner to remove the wax residue from the printing process and should not require further cleaning. You may need to check the locating slots for the body are open sufficiently. For this take part (3) from the fret and gently press the prong into each slot until it slides in smoothly. Discard this part after use.

Take the seat end parts (4) from the fret and glue them to the ends of the seats closest to the brake stand.

The brake wheel (5) glues on to the spindle on top of the brake stand. This is quite fragile so you may wish to wait until final assembly before fixing it. To strengthen the join you can also touch the tip of the spindle with a soldering iron to melt it flat against the wheel after fitting.

Body

Take note of the option to fit lifting eyes in the *Further Details* section of the instructions and open out the half-etched slots inside the end of the body if using. Using bending bars or long nose pliers, fold the main part of the body (6) at the fold lines, starting with the small ends which form the door recess and seat ends. Check for squareness and fit over the underframe. It should slide closely over the seats and locate in the slots mentioned earlier. Remove from the underframe and set aside.

Take the door part of the body (7), ensuring that the tags are fully removed from the locating tabs on each end as they will fit tightly against the seat units later. Then fold up with bending bars or pliers. Carefully remove the handrails (8) from the fret and fold up, they are fixed on a sub-fret to make handling them easier and spares are provided. Slot the handrails into the door surround and solder or glue from behind, using a scrap of paper to hold them

away from the body as they are fixed on.

Check the two parts of the body fit together using the tabs and slots and then, when you are happy that they are square and flat on the underframe, glue or solder them together.

Roof

Take the roof (9) and gently roll it to the shallow curve required, frequently checking for fit on the body. A round handled scalpel is approximately the right radius to roll it against making gentle pressure with your fingers along the whole length of the roof at once.

When you are happy with the fit of the roof fold down the vent tabs slightly using eg the tip of a small screwdriver.

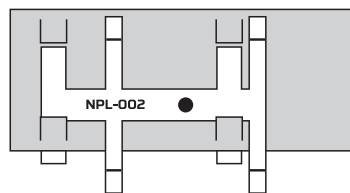


Figure C

Take the vent fixture (10) and fold over the vent tops (the wider half etch lines on the opposite side to the NPL-002 lettering) and glue or solder them in place. With the roof upside down and the lettering facing up, gently slide the vents through the slots in the

roof on one side until the vents on the other side are clear of their slots (figure C). Using the flexibility of the vent arms, push the fixture back the other way easing the last two vents through their slots.

Centralise the fixture on the underside of the roof and then glue or solder the vents to their tabs. Fold down the ends of the other arms and you should find the roof is now a close fit into the body.

Further details

Carefully fold the windscreen wipers (11) and fit into the slots above each end window. Glue or solder in place from behind. Fix the lamp unit (12) in place in the half-etched recess on the non-door end, a spare is provided or you could laminate both pieces together.

Some vans had lifting eyes (13) fitted below the roof but these may have been removed in later use so consider them optional. If using, fix a lifting eye on each side of the door end flush with the top of the body, checking the fit of the roof is preserved. Open out the half-etched slots inside the non-door end and glue or solder a lifting eye in place from the inside. Note that the angled part of each lifting eye points upwards.

Glazing

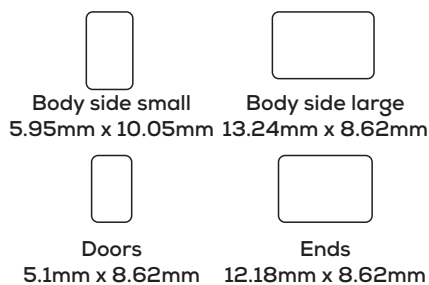


Figure D

Refer to the window size templates (figure D) which are printed actual size. Using thin, clear styrene sheet, either cut pieces slightly over-size and glue behind the window openings, or cut precisely to size and insert into the openings.

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.

Painting and finishing

Paint bogies and underframe. Avoid painting the outsides of the seat units as the body will fix here.

According to your preference, paint the body and roof separately and then glue together, or solder them together first and then paint.

In RNAD service the vans appear to have mostly worn a yellow livery with wasp stripes below the windows on each end. Under-frame was yellow or black. Window frame are aluminium so can be let unpainted. The interior was off-white with black or brown vinyl seat cushions and backs.

In preservation various colours have been observed, including the original scheme, mid-grey and dark green so most colour schemes would be plausible in a freelance setting. See the Narrow Planet website for photo references.

Assembly

Screw the bogies into the underframe from below. You will find the screws self-tap in to the resin but you may wish to fit the nuts supplied for security.

Sparingly apply glue to the outsides of the seat units and then slide the body in place over them, pressing on the sides to help the joint form. If the roof is not already fixed, now glue it in place using the folded down tabs.

Weight

If you wish to add more weight to the van we recommend a liquid lead and PVA glue mixture in the cavities under the underframe, applied AFTER the body is glued on.

Couplings

The kit is designed for Greenwich couplings which are compatible with all "Bemo" types of coupling. By mounting them on the bogies you should find they are at the correct height of 6mm above rail level. Greenwich couplings are available from Parkside Dundas and Meridian Models.

Acknowledgements

We would like to thank Geoff Loynes, Steve Thorpe and Kes Jones of the Talylyn Railway, Neil Rushby of the Corris Railway and Mike Hitchen for their kind assistance in gathering prototype information.

Thanks to Chris Clark and Marcus Alexander 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.

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.

If you have any queries about the model or instructions please get in touch.

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NPR-002 • first issue • April 2014