

BLENHEIM



Thank you for buying this locomotive kit from Boot Lane Works, please read all the instructions carefully before assembly.

Tools & Adhesives

I recommend a few tools to help you assemble your kit –

- Modelling Knife (I use a scalpel)
- Tweezers, Pliers, etc...
- Normal & Needle Files, various shapes
- Wet & Dry abrasive paper (the mixed selection from Halfords is very good)
- Selection of small twist drills, including 1.5mm & 2mm diameter
- A 90-degree angle (I use a set block, but a small set-square works well)
- I personally, can't manage without my small, tapered reamer, look for them on eBay! TAKE CARE WITH THE REAMER - MAKE A SMALL CUT, TRY, AND CUT AGAIN

I also recommend the following adhesives –

- Super Glue

 I use Gorilla Super Glue
- Dichloromethane, A liquid solvent for the acrylic *I use E.M.A. Model Supplies "Plastic Weld"*

The kit consists of 3D printed parts in both filament and resin.

THE ACRYLIC IS DELICATE, AND WILL SNAP IF NOT TREATED WITH CARE
THIS IS A LIGHTWEIGHT MODEL AND SHOULD BE TREATED AS SUCH

Good results can be obtained from rattle spray paints; Halfords is a very good source.

These instructions relate to both 32mm & 45mm versions, there are subtle differences in the kits, but the build process is the same.

Please refer to the part images at the end of the instructions for identification.

THE BODY

I recommend the body is built first.

Start with the Floor and the two Body Ends, the ends drop over the floor and butt up to the edge of the floor. Use a square to ensure the ends are at 90° to the floor.

With the ends in place, lay the body on one side and offer a Body Side to the model. The sides are flush with the floor and sit under the roof line lip of the ends.

With the body ends and sides in place, the 1mm panel overlay pieces can be offered up.

This time start with the 1mm side overlay pieces. The end should be offered up, after the side are fixed into place.

It is possible that you might want to paint the panel overlay pieces separately, and attach them after painting?

The doors consist of a 2mm piece, and a 1mm overlay. The two are glued to each other and fit in the doorway from inside the body. The short length of 1.5mm brass rod can be cut and bent to create the handle.

Two longitudinal seats are provided. There are two seat rests for each side, glue them to the inside of the ends, and place the longitudinal bench across them.

I covered mine with material from an old coat!

There are two lengths of 2mm acrylic for side windows, and two smaller pieces for door windows. I suggest these are glued into place with PVA, as the vapour from superglue stains the acrylic (see the image at the top of these instructions!)

THE ROOF

I have provided eight roof supports.

I suggest that one is attached to the inside of each Body End, as extra support.

I recommend that you glue two supports together to create three in total, and place them evenly along the top edge of the body.

There is a piece of 0.5mm styrene as roof, this can be formed over the body and roof supports. My own personal method of forming a roof is to place the whole model upside-down, with the roof supported on two lengths of 25mm timber. I then add weight to the model (house bricks) to push the model down onto the roof and the timbers, thus forming the curved shape.

THE CHASSIS

Start with a Sole Bar and add the three Frame Stretchers. These have two lugs on each end that locate in corresponding holes in the Sole Bars.

Add the second Sole Bar and try to keep the whole assembly square! However, the Steps will square the whole chassis up!

The Steps fit under the Sole Bars at either end of the chassis and have two slots that locate with two lugs on the Sole Bars.

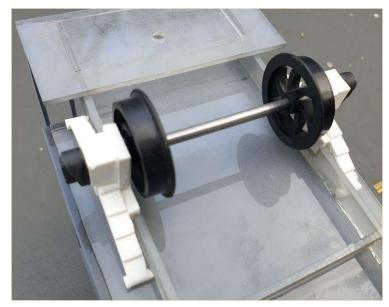
With the Bars, Stretchers and Steps all fixed together the assembly becomes reasonably rigid.

I suggest the chassis is painted at this stage?

The chassis can now be offered to the underside of the body, there are corresponding lugs & slots to

FINISHING





Clean the four springs/axle-box prints. They have some support material as part of the print process. You need to remove this support material to leave a print like the one in the image.

Open the hole in the spring/axle-box, to accept the brass bush.

The spring/axle-box print (and bush) can be offered to the corresponding slot on the Sole Bar. A small amount of superglue will hold the print in place.

Attach two springs/axle-boxes to one side and allow the glue to set.

Fit the wheels to the stainless axles, you need a 28mm "back to back" measurement for 32mm gauge, and 40mm "back to back" measurement for 45mm gauge.

Now, repeat the process for the spring/axle-box prints, and add the wheelsets when you attach the prints.

Add a tiny amount of oil on the bearing.

There are four resin printed axle-box keeps that should be attached to the end of the spring/axle-box prints. The curved part of these keeps, is to the underside of the keep.

Rudimentary couplings have been supplied but am all too aware that customers often prefer to provide their own couplings.

Finally, add the handrails to either end of the carriage balcony.

These are obviously, very delicate and should be handled with care. Before and after the build!

(32mm only – there are four small Detail Supports that fit under the body and attach to the steps – optional)

Further information and support can be obtained from our website & Facebook Group.

bootlane.org.uk

Thank You Andrew & Jacqui

