

**BARLEY PIT WORKS**

**Wood Valley Works**

### **Lynton and Barnstaple Carriage 17**

This kit builds a 1/19 16mm scale model of the Lynton and Barnstaple carriage 17. The Kit has been designed to be as easy to assemble as possible but does contain some fiddly and delicate parts, as such this is not a kit for beginners. If you are in need of any help or assistance please contact Barley Pit Works or Wood Valley Works, we want you to get the most you can out of our models and will endeavor to answer your questions.

We recommend that the parts are painted before assembly. We use a sanding sealer before priming and painting as this helps prevent any furring from the wood. Use light coats of paint and sand smooth between coats. To give a clear line for painting the sides white and red, place the overlay on the side and mark where the bottom of the beading is, mask 1mm above this mark and the beading will cover the line.

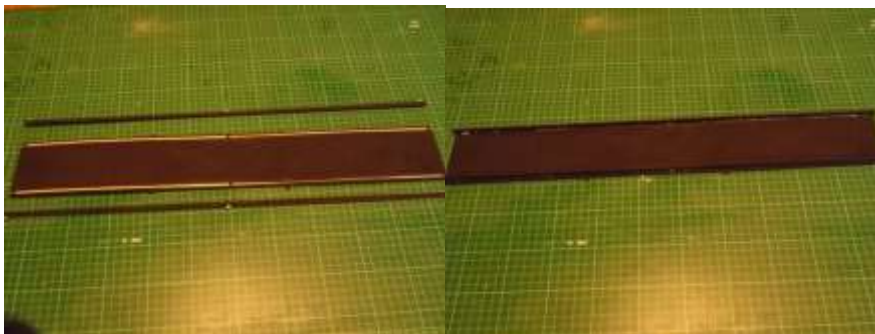
Couplings are NOT provided in the kit. DJB Engineering have kindly reintroduced their scale L&B chopper couplings to go with our carriages. These really help finish off the carriage, however, it is up to you to choose the couplings you want.

Barley Pit Works are able to offer a full building service for these kits should you require it.

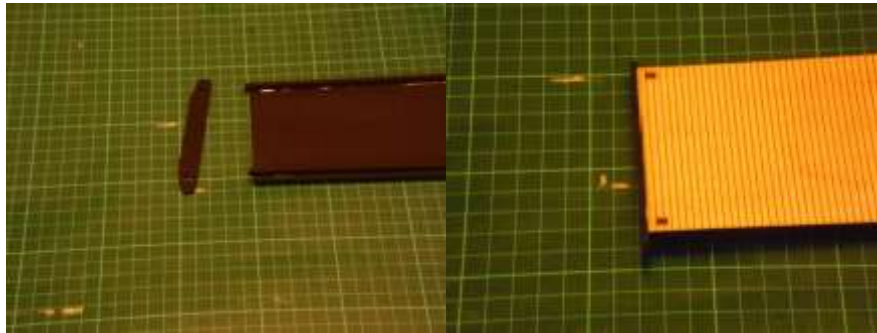
This kit contains white metal and brass parts, care should be taken when cutting/sanding these parts. Gloves and a dust mask are recommended.

#### **Body:**

- 1: Take the solebars and fit these to the underside of the floor. The planking is on the top of the floor.



2: Glue the inner buffer beams onto the ends of the floor. These are tabbed onto the solebars to aid alignment.



3: Glue the outer buffer beams to the face of each of the inner beams (double up the thickness). The floor section is now complete.



4: Take the 2 sides and 2 ends. The sides are tabbed to both the ends and to the floor. Where tabbed to the floor the sides will only fit one way round. When all fitted together the ends should sit flush with the bufferbeams.



IT IS IMPORTANT AT THIS STAGE TO CHECK THE BODY IS SQUARE AND FREE FROM TWIST. IF THERE'S ANY TWIST, WHILE THE GLUE IS DRYING LEAVE THE MODEL ON A FLAT SURFACE IN A WARM ROOM WITH A COUPLE OF HEAVY WEIGHTS ON TOP OF THE MODEL. THIS IS BEST LEFT OVERNIGHT TO DRY.

5: Glue in the partitions.



6: Slot the ducket to the side using the tabs, DO NOT GLUE YET!



7: Fit the ducket wrapper by slotting the wrapper into the coach side at the top of the ducket. Gently bend the wrapper to shape using the ducket sides as a guide. Glue the wrapper to the sides once shaped – superglue is best for this task.



8: Starting with the sides, carefully apply glue to the overlays. Fit these one at a time and make sure it is stuck before moving on to the next. Once both sides are stuck the end overlays can be fitted.



9: Using the Jig provided the ducket overlays can now be fitted.



10: Fit the droplights from the inside. The edges of these are slightly chamfered due to the manufacturing process and should easily be a push-fit. If these don't easily fit try turning them around. Should you want any of the drop lights open then cut the bottom away before slotting them into the openings.

11: Glue the whitemetal door vent castings above the doors.

12: Glue the Brass door handles and grabhandles to the doorframes.

13: Glue the brass footstep brackets to the solebars. There are 6 standard brackets and 2 handed brackets per side. These should be spaced out evenly across the length of the carriage.

14: The Step Boards can now be fitted.

15: Cut out the end steps and the brackets from the brass etch. Take the steps and carefully clamp 3mm of the shorter side into a vice. Making sure everything is square, bend the steps to for a lip. The backets are half etched so bend easily. These can either be superglued or soldered together.

16: Glue the end steps to the guards end of the carriage.

17: Using the rod provided bend up some handrails to match the end steps.

18: Lamp irons are provided on the brass etch should you wish to fit them.

### Roof:

1: The toof underframe is all slotted for easy assembly. This needs gluing and **MUST** be square.



IT IS IMPORTANT THE UNDERFRAME IS ASSEMBLED AS PER THE PHOTOS OTHERWISE THE ROOF WILL NOT FIT THE CARRIAGE.

2: Use steam to soften the ply sheet provided for the roof. Do not force the roof into shape or it may snap.

3: Fit the roof to the frame using the etched lines on the underside of the roof as a guide. Make sure the frame is fitted straight and square as this allows the roof to clip into the coach body.



4: Fit the white metal Lamp tops centrally on the roof using the centre of the doors as the correct spacing.

#### Bogies:

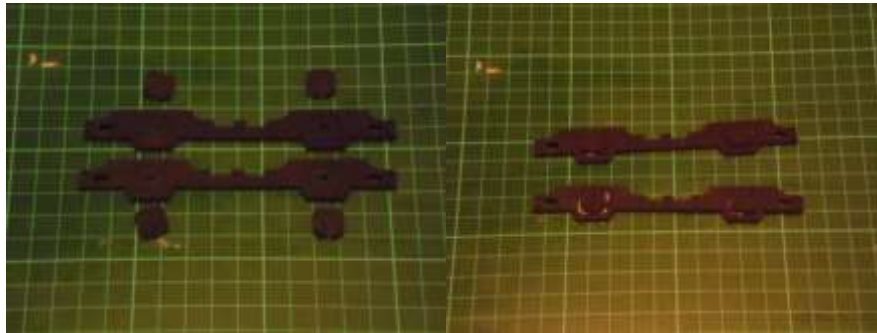
1: Remove the parts from the frames using a sharp knife/ scalpel. Clean/ sand the edges until smooth.



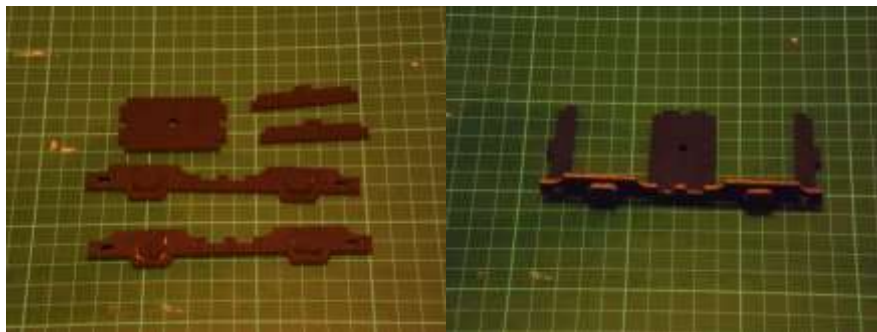
2: Press the brass bearings into the inside (no etched detail) of the bogie sides.



3: Glue the square axlebox covers to the outside of the bogies. Use the etched outline to fit them square.



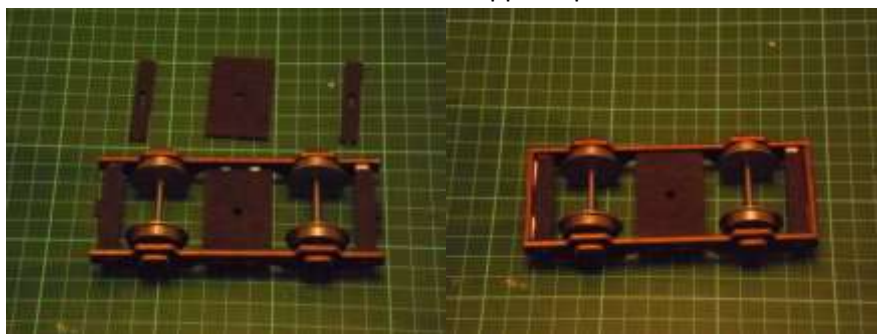
4: Take the 2 end spacers and the centre spacer and glue these using the tabs to locate.



5: Now fit the wheelsets in the bearings and glue the other bogie side to the spacers to secure the wheelsets.

6: Turn the bogie upsidedown and glue in the central support spacer. This should help hold the frames square and parallel.

7: Glue on the end support spacers.



8: Take the remaining spacer and glue over the top of the central spacer.



The 2 remaining discs are packing mounts for fitting the bogies. These can be glued on or left loose.

The bogie is mounted to the carriage by taking the mounting plate (the rectangular part with the hex hole in the centre) and gluing this to the underside of the carriage 95mm from the end. This fits between the solebars. The hex hole is sized to take the M4 bolt provided. The bolt is then secured by gluing the large disc over the bolt.



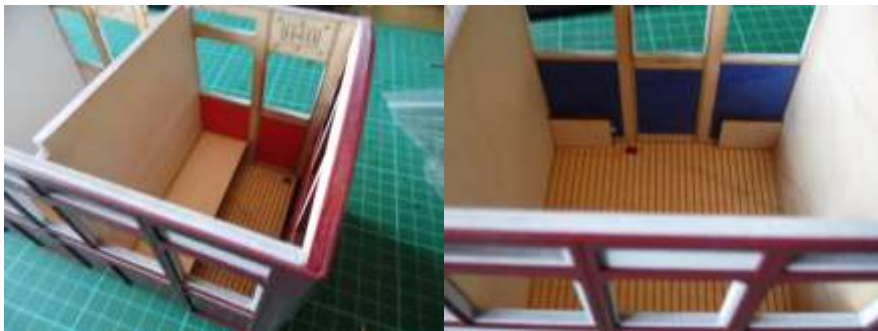
Interior:

1<sup>st</sup> class

1: Take the small plain rectangles and glue one to the side where the seat will be fitted. These form the seat legs.



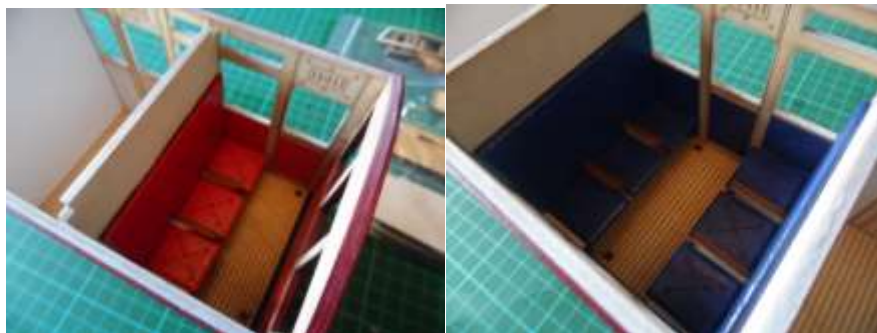
2: Glue the seat bench across the legs.



3: Glue the backrests to the partition – There must be a 1mm gap at both ends to allow the glazing to fit.



4: There are 3 cushions to go along the bench. There must be an armrest between each cushion and a gap at either end.



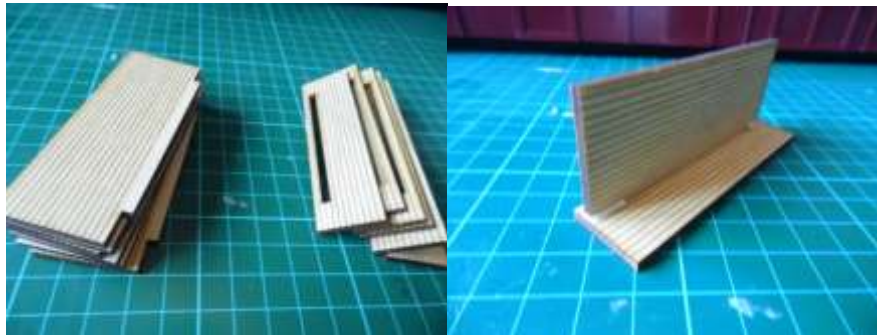
5: Glue the armrest cushions to the tops of the armrests.

### 3<sup>rd</sup> class

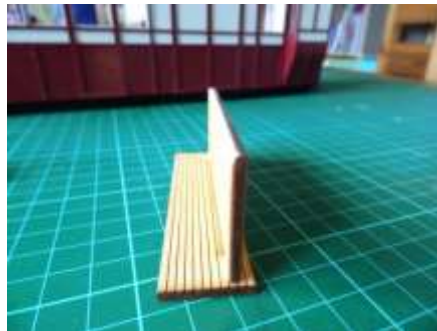
1: Take the square(ish) legs and glue one to each of the sides where the seats are to be fitted. The angle needs to be to the top and sloping towards the partition.



2: Take the seat base and slot the back into it. Fix in place with glue. The back is deliberately 1mm shorter than the seat base.



3: Sand the top edge of the backrest to be a  $\frac{1}{4}$  round.



4: Glue the seat to the legs.



5: Cut the brass shelf brackets out and glue these centrally to the hat shelves. The hat shelves have the smooth side facing out.

6: Glue the hat shelves above the seats. They fit in between the small top window and the main side window.



### Glazing:

Take the glazing strips provided. These can be easily cut with a pair of sharp scissors. Measure the distance between the partitions and cut a length off the strip. This slides down the carriage side and rests on the seats. Trim until the glazing fits flush. Glue the glazing into place using PVA glue.

