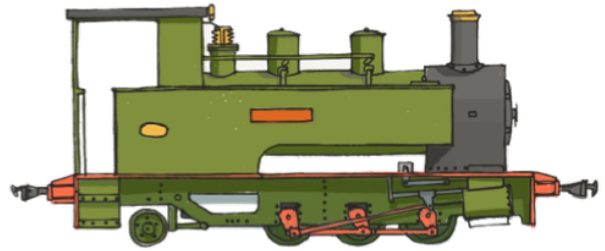


Bowaters

MODELS

specialising in distinctive 16mm models



Bowaters Models – BMC Series Instructions



Requires:-

- Accucraft Chopper Couplings (Z1 or Z2)
- IP Engineering Large Laser Cut Bogies (Own choice of gauge)
- A A3 piece of Craft paper

Required Tools

- Fine Sandpaper/Emery paper or boards
- PVA Glue
- Superglue
- Sharp Craft Knife

Prototype Information

The Lloyd's Paper Company needed a number of specialist wagons for carrying the huge quantities of raw materials needed to serve the paper mill in Sittingbourne, Kent. At first, they were equipped with a small number of bogie flat wagons and 8 Ton wagons (known as Pulp Wagons) which were identical except they had end pieces to hold the bulky raw materials better. In time, the fleet grew to well over 400 wagons with higher capacity 10 Ton and 14 Ton Pulp Wagons serving a massive network at the original Sittingbourne Mill, a new mill at Kemsley and a purpose built dock at Ridham. When the railway closed, a small number were loaned to the Sittingbourne and Kemsley Light Railway for Preservation. A number were sold off the line to form the stock at the Great Whipsnade Railway and to provide additional rolling Stock at the Welshpool and Llanfair Light Railway.

In 1957, 5 Butterley Wagons were converted into 5 Staff Coaches No. 641, 657, 658, 659 and 660 which were formed of 3 different designs. In Preservation, an addition 3 coaches were converted by the railway into Passenger Coaches.

About the Kit

The kit is a wooden kit comprising of a set of Laser cut wooden parts.

Chassis Fitting

This kit is designed for IP Engineering Large Laser Cut Bogies. These are assembled as per the instructions with no modifications required. On the top chassis piece, normally distinguishable by the laser cut detailing on the top surface, flip it over so the detailing is facing down. Then draw a straight line down the centre of the piece lengthways. This is needed so that once the chassis has been assembled, the correct position of the Bogies can be achieved. They should normally be added once the chassis has been assembled and should be placed 70mm along the line from each end of the wagon.

Couplings

This kit is designed to take Accucraft Chopper Couplings (available separately as their part number Z1/Z2). These should be attached into the small flat recesses left on the ends of each chassis. These have been positioned so as to be at the correct height for the 16mm Association standard coupling height. They will also perfectly match the standard coupling height of the Accucraft Leader, Superior and Excelsior Locomotives.

Instruction notes

With these instructions, there are images which show various stages of the construction of the coach kit. They are of the Prototype BMC-003 kit which isn't representative of the kit you have brought. They are for reference purposes only.

Painting

In Lloyds and later Bowaters service, all wooden bodied wagons were painted light grey with the steel sections painted black. Numbers were normally hand painted onto the wagons in white. The exceptions to this rule were the later Butterley built Pulp Wagons which were of all steel construction and as such were painted all over black. These had their numbers located on the ends hand painted in white as before but were also fitted with number plates on the chassis sides. The coaches were painted in a mid to dark shade of green with the window frames and siles being painted white. The Frames and ends remained painted black after the Coach conversion. The interior was painted cream with the seats painted in Varished brown. It is recommended that the interior of the Coach is painted before assembly. The exterior can be painted after assembly.

General Assembly Notes



1. Check all the components are there before proceeding with the rest of the kit. There should be the following contents:-
 1. Body
 1. 4 Sides
 2. 2 Ends
 3. 1 Base
 4. 4 Ceiling supports
 5. Seating components
 6. Body detailing (Depends on the kit)
 7. Foot step components (Depends on the kit)
 8. Several Roof components
 2. Chassis
 1. 3 Chassis pieces
 2. 3 V hangers
 3. 2 Headstocks (not shown above) consisting of 8 uprights, 2 base plates and 2 curved tops

Part 1:- Chassis

1. The chassis consists of 3 separate pieces. 2 with a hole in the middle and 1 with Laser cut detailing on one side. The two pieces with a hole in the middle should be glued together making sure everything is kept in line. Once this has dried, then the piece with the Laser cut detailing (detailing face up) should be glued on top of the pair already glued together to form a 3 layered piece.
2. Once the chassis has dried, then the bogies can be glued in place into the recess on the underside of the chassis making sure they remain in the centre of the wagon.
3. The couplings can then be glued in place at either end of the wagon leaving you with a rolling chassis.
4. The kit features 3 brake hangers (3 V pieces) which can be glued onto the underside of the chassis. The two larger ones are placed centrally lengthwise along the inside of the chassis with one on each side. The smaller one can be glued 1 third of the way down on either side to the right of the central brake hanger looking onto the side of the wagon sideon. If you wish too, there are two laser etched holes on the centre of the larger pair of brake hangers which can be drilled out and have wire inserted though to give some additional detail underneath.
5. The Chassis can then be painted Black and left to dry. The two headstocks can be painted Black as well. See Part 4 for assembly notes.

Part 2:- Body



1. Starting with the sides, glue the two separate parts of the sides together with the etched detailing facing outwards. This should give a two layer side piece. There are two of these sides per Coach. The BMC-001 kit has two different sides with the BMC-002 and BMC-003 having two identical sides.

2. At this point, the windows can be installed. These are left for the modeller to source and fit in the recesses on the back of the two side pieces.
3. For each window, there is a small thin piece of wood which is glued into place on the underside of each window in a similar style to a Windowsill similar to the kind you'd find on a house. On the BMC-002 and BMC-003 kits, there is an addition longer piece which should be glued halfway between the two windows on each side (see the picture to the right)



4. At this point you can move onto the interior. The interiors of the coach is formed of Bench like seats. The Seat supports are glued onto the tops into the laser cut guides on the underside of the seat tops. The flat edge should be parallel with the edge of the seat top with the chattered side set back from the other edge.

There are two of these on the BMC-002 and BMC-003. The BMC-001 kit has a section of these which form a broken circle in a rectangle.

5. Once all the seats are assembled, they can be glued onto the base of the Coach body. The BMC-001 kit would have the seats placed all around the edges of the base with a gap in the middle of one side for the door.

The BMC-002/BMC-003 kit has the seats down the two long sides of the kit with the seats placed with the gap for the door at different ends. If building BMC-002, the seats would be placed with the gaps on the left hand side of the base. If building BMC-003, the gap is at the opposite end (see the image to the right).



The steps with go onto the side of the coach can also be assembled at this point. The U section goes at 90 degrees to the longer flat section which forms the set.



6. Once the seats have been attached to the base, one of the sides can be attached to the back of the seating unit. This can be followed by attaching one of the ends to the end of the base. Once the two body pieces have dried, the other two parts can be glued into place.



7. Once the sides have all dried, the roof supports can be glued into place on the top of the body. Although there are 4 parts provided, you can use 3 as per the image provided.



8. The Roof can then be attached at this point. The separate lengths of wood are glued onto the supports so that the complete roof is covered leaving no gaps. Once the wood has dried, you can glue a piece of Craftpaper on top of the roof to form a covering to seal any gaps. This can then be cut down to provide a neat finish around the edge.

9. Once that is complete, you can then paint the exterior of the coach body either into Bowaters colours or the colours of your choosing.



Part 3:- Final Assembly

1. The Coach body can be glued onto the chassis between the two laser etched lines on the floor of the chassis.



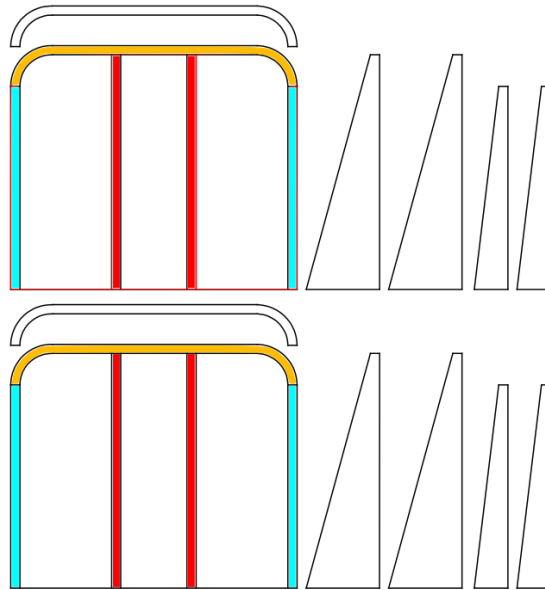
2. The two headstocks can be glued into place on the ends of the wagon so they are flush with the ends of the coach body. For assembly notes, see part 4.

3. The door steps can then be glued into place alongside the doors on the body. These should be painted Black before being glued onto the Chassis.



Part 4:- Headstock Assembly

1. The headstock assembly is made up of a number of flat pieces which are shown below. It features of 4 uprights per headstock, one base plate and one curved section over the top.



2. The two larger headstocks fit onto the centre slots in the middle (coloured red) with the two smaller ones (coloured blue). The rounded section at the top is then attached (coloured orange).