

ACME ENGINEERING

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ACME Penrhyn open workmens' coach in 7/8" scale assembly instructions.

You will need good quality P.V.A wood glue, epoxy adhesive, fine sandpaper, craft knife, pliers, two squares, (Or anything which is exactly square) and a flat surface to work upon. The wooden parts are supplied in a very clean-cut condition, but will need the small pips found on each edge removing with either a smooth file or fine sandpaper. I also find rubber bands and small Bulldog clips very useful

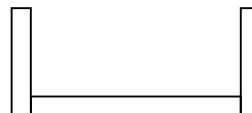
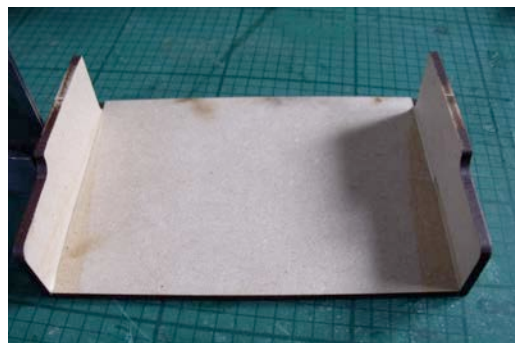
Step 1: Mark out the floor for the inner sole bars.

Measure up the underside of the floor and draw a centre line along the floor's length. Then draw two parallel lines 3.55cm either side of the centre line. This marks the position of the two inner sole bars. (See later in instructions.) Glue the two sole bars which have brake gear brackets along each outer edge, on top of the floor, as shown.



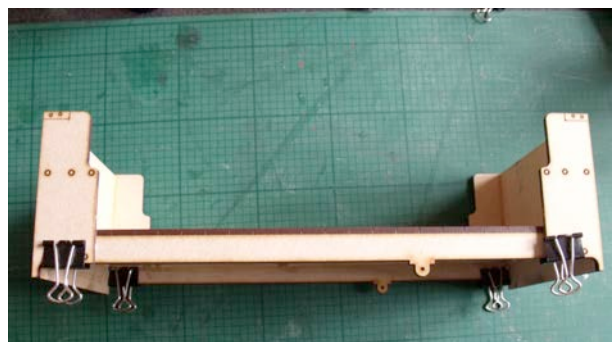
Step 2: Assemble the ends

Take one side and two ends. Glue together as shown, making sure that end braces are lined up at the top.



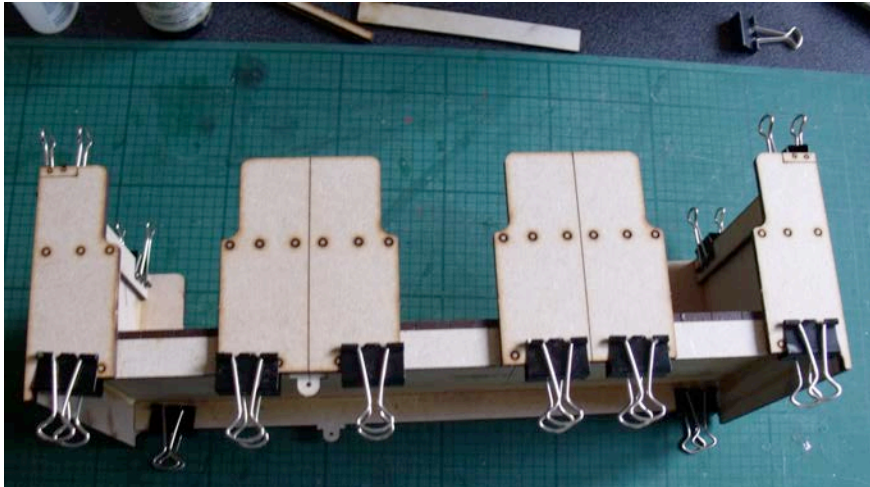
Step 3: Fit the ends to the floor.

Line up as shown in the photo opposite



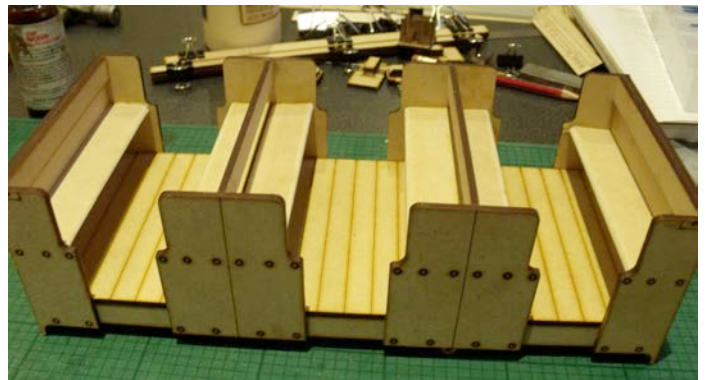
Step 4: Fit the double seat ends.

Mark a point 5.9cm from each end along the centre line. Then draw two lines at right angles. These are the centre lines for the two double seat ends. Glue the double seat ends in position, making sure that they are square to the floor.



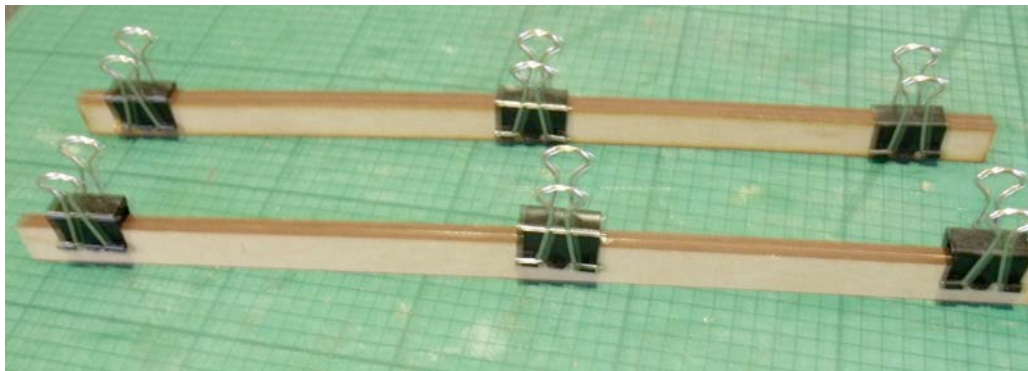
Step 5: Fit the seat supports, seats and backrests.

Glue these in and clamp up with rubber bands as shown.

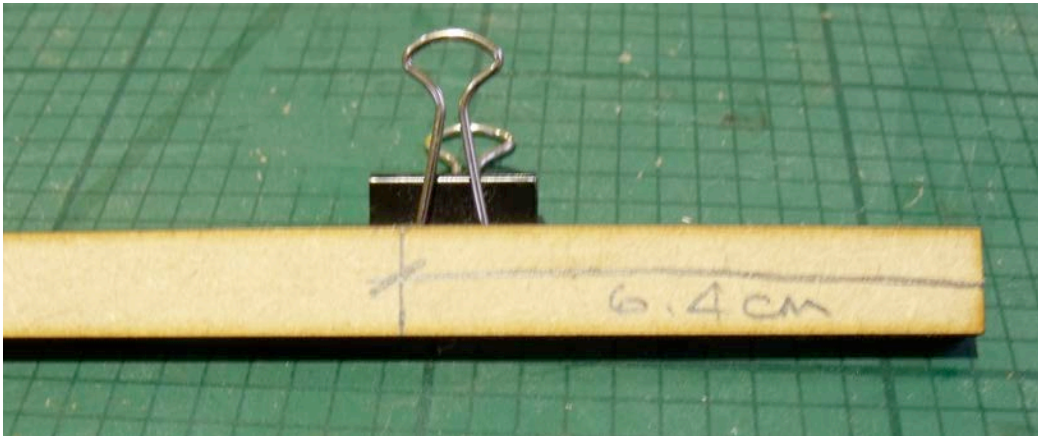


Step 6: Assemble sole bars

Glue together two plain sole bars. Repeat this, so that you have one pair

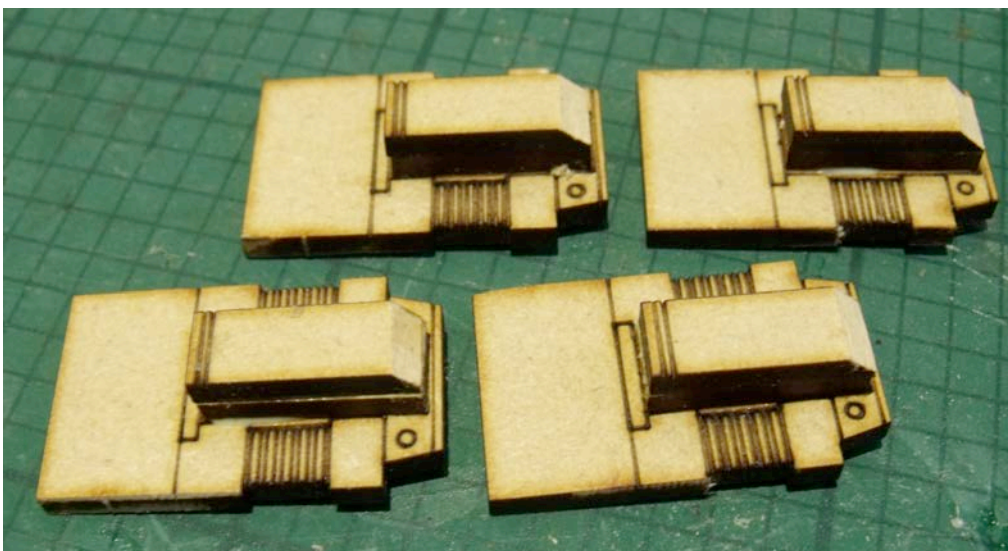


Mark 6.4 cm from each end. This is the centre line of your axle boxes.



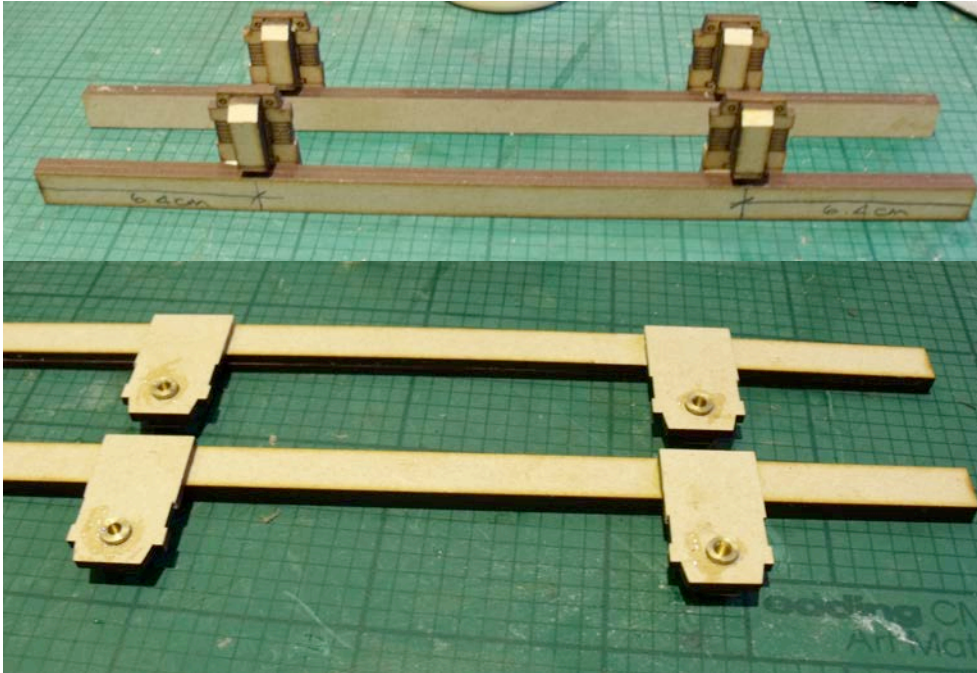
Step 7: Assemble the axle boxes

There are four components to each axle box. The right hand item below has the first two wooden components glued together, with the axle bearing glued in place with epoxy resin adhesive. The cover can be chamfered as shown on the left hand side and is glued over the axle bearing. Make up all four axle boxes.

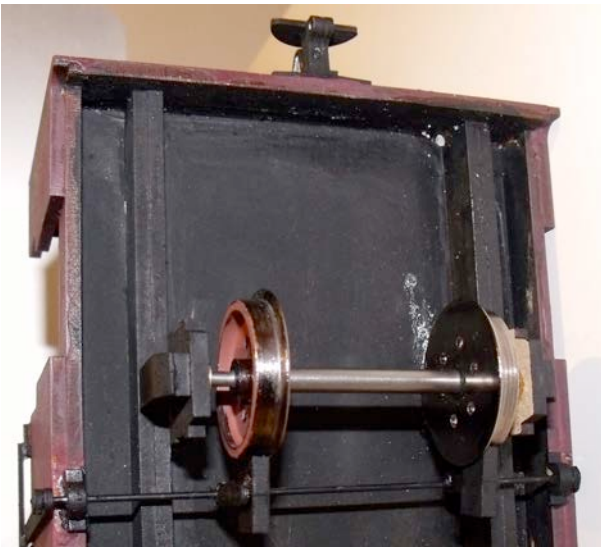


Step 8: Glue the axle boxes to the outer sole bars

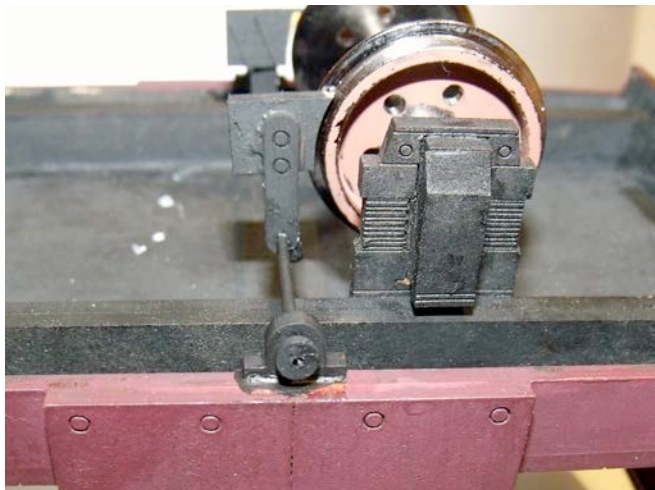
Glue the axle boxes to the sole bars, using the 6.4cm mark you drew in step 6 as the centre line of each axle box.



Step 9: Fit and glue the outer sole bar/axle box/wheel assembly to the underside of the floor.

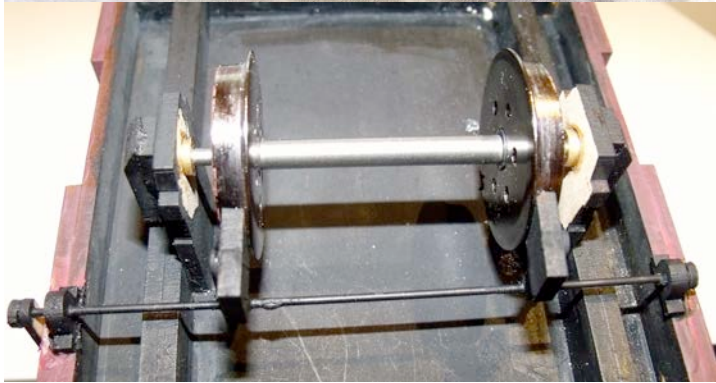
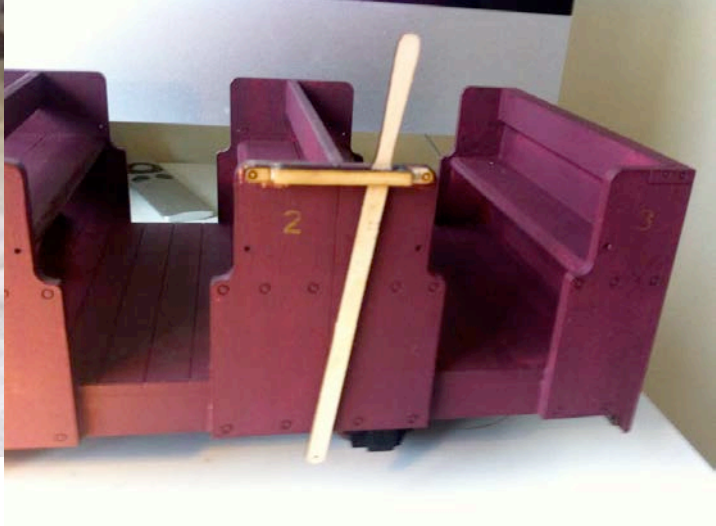
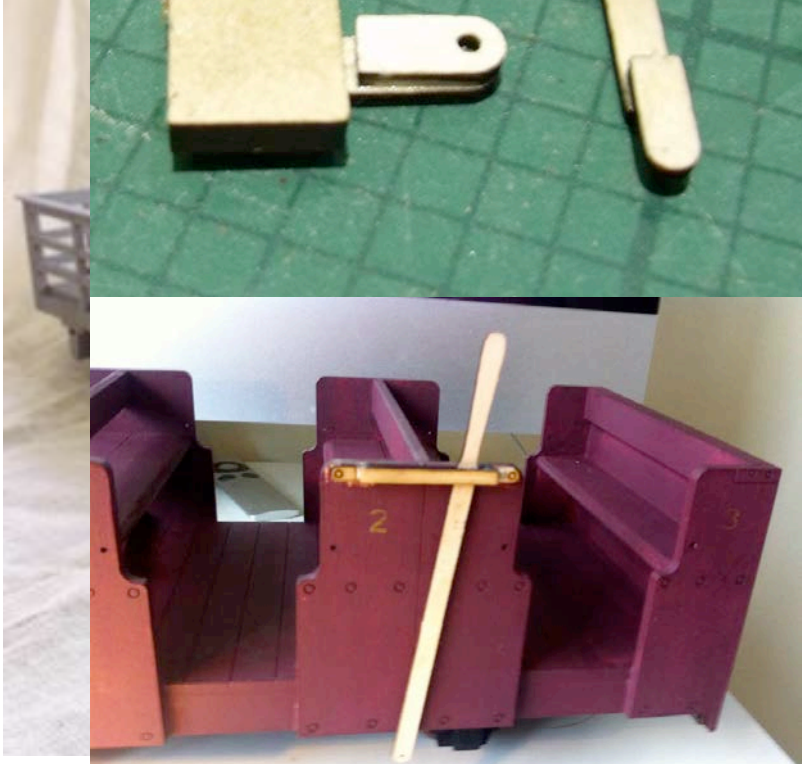
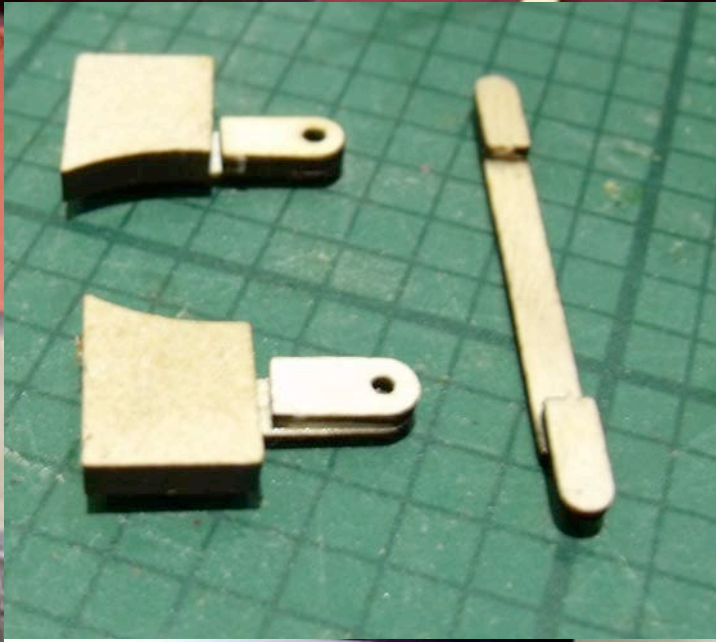
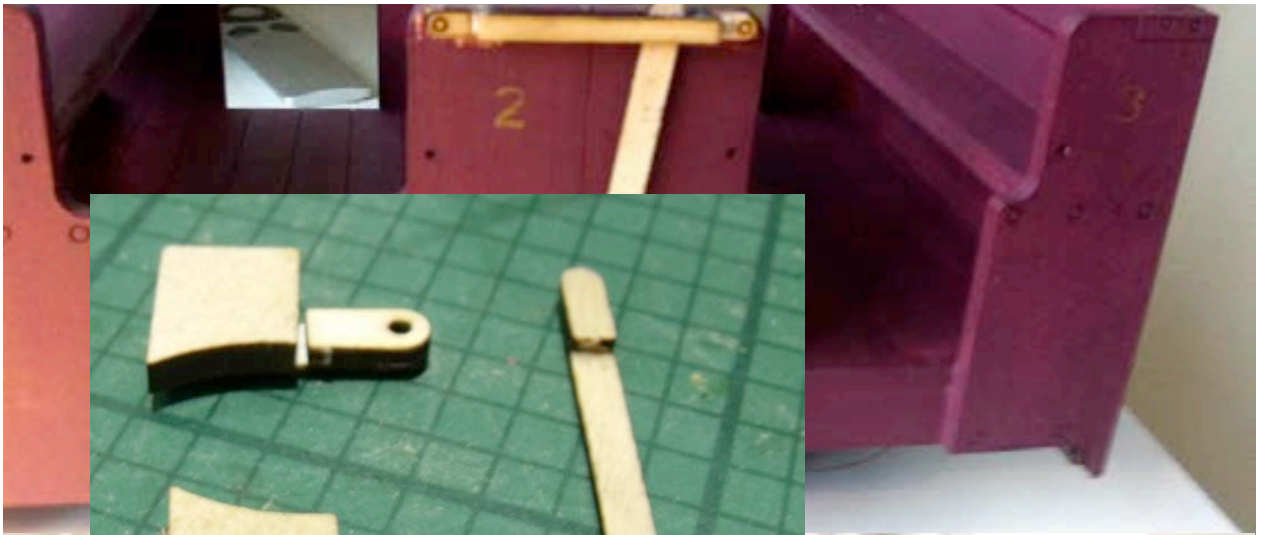


Stand the outer sole bars with the axle boxes upright. Fit the wheels and glue the whole assembly to the underside of the floor, using the lines you drew in step 1 as a guide. Make sure that the wheel sets have end float.



Step 10: Assemble and fit the hand brake assembly.

Using the steel rod and brake parts fit to the outer sole bars.



Step 11: Assemble and fit the couplings.

Two types are included, dumb buffer and Penrhyn types. Please see the supplementary instructions.

Step 12: Congratulations. Now you're ready to paint the coach.

The correct body colour is Brinjal from Farrow and Ball, shade number 222. Buy a test pot from Homebase or any good paint supplier. If you lightly coat it in places it gives the appearance of faded and worn paintwork. I painted the under frame and brake lever matte black.

Now that you've built one, your next will be easy. Have you seen our slate wagons, both in Ffestiniog and Penrhyn versions?

If you have any questions or suggestions about our products and instructions, then we'd love to hear from you.

Thanks

Mike Ousby

ACME Engineering

1, The Coppice,

Beardwood,

Blackburn,

Lancashire,

BB2 7BQ

Tel 01254 664433

Email: sales@acmesteam.co.uk

Web: www.acmesteam.co.uk

