

STEPHEN JOHNSON MODELS

PO Box 31 RED ROCK 2456

DEAN BOGIES Assembly instructions

Clean any flash from the side frame castings. Position each casting over the etched bogie frame and mark the location of the axle holes on the back.

Check the waisted bearings fit into the etched holes in the bogie frames. Small holes may need to be opened up with a round file or preferably a tapered broach.

Remove the four sideframes from the etched sheet. The etched lines have to be folded as shown in Photo 1. Solder the bearings into their holes with the flange to the inside of the sideframe (Photo 1).

Fold and solder the bolster and end beams as shown in Photo 2.

Solder a sideframe to the bolster as shown in Photo 3. Repeat for the other side.

Insert a pair of 10.5 mm diameter spoked wheelsets with 23.8mm axles in the frame. Using short pieces of 0.45 mm wire, align the holes in the end beams with the holes in the ends of the sideframes. Solder the end beams to the sideframe and check that the axles are still parallel.

File down the tips of the waisted bearings to reduce the distance they protrude from the frame (but not to the extent that the bearing surface is exposed). Centre punch the middle of each axle hole marked on the back of the casting and drill a 1.8 mm hole. Open out the top of each hole with a 2.3 mm drill to allow the casting to clear both bearings. Take care not to drill through the axlebox and test

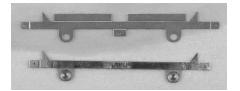


Photo 1. The tabs over the etch lines in the upper image have to be overfolded i.e. the tab has to be bent 180° away from the etch line and back onto the frame to form a double thickness. Solder the bearings and the overfolded tabs to the frame. Fold the tabs in the lower image upwards to 90° (as shown in Photo 3) and solder the joins.

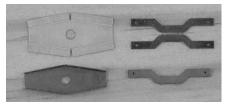


Photo 2. Fold and solder the bolster as shown in the images on the left. Overfold and solder the end beams as shown in the images on the right.

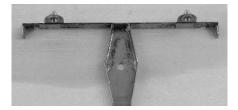


Photo 3. Place the bolster on a flat surface and hold a sideframe against it so that the end of the bolster fits in the recess created by the overfolded tabs. Once satisfied it is square solder the two parts together. Repeat for the other sideframe.



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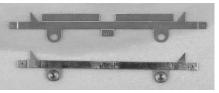


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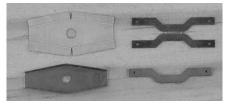


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fit regularly to avoid removing more material than is necessary (Photo 4).

Glue the sideframe castings to the etched frame with either superglue, epoxy or an acrylic contact adhesive.

Using superglue, secure the inner half of the dampers to the back of the decorative sideframes (Photo 5).

Bend truss rods from 0.45 mm diameter wire (Diagram 1). Glue these to the grooves in the bottom surface of the dampers with superglue (Photo 6).

Paint and weather the assembled bogies.

Fix the bogies to the underframe with M2 screws ensuring they are not too tight and the bogies are able to rock from side to side.

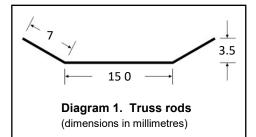




Photo 4. Holes are drilled in the back of the sideframe so it will fit over the waisted bearings protruding from the frame.



Photo 5. The assembled bogie showing how the inner half of the damper has been superglued to the back of the sideframe.



Photo 6. Truss rods are bent from a length of 0.45 mm wire. They are glued into grooves underneath the two dampers on the sideframes.

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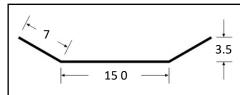


Diagram 1. Truss rods (dimensions in millimetres)



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Photo 5. The assembled bogie showing how the inner half of the damper has been superglued to the back of the sideframe.

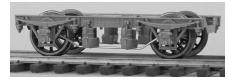


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