

# STEPHEN JOHNSON

## 2AD Bogie Assembly Instructions

Clean any flash from the urethane sideframe 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 sideframes. Small holes have to be opened up with a round file or preferably a tapered broach.

Remove the sideframes from the etched sheet. Some etch lines have to be overfolded as shown in Photo 1. Solder a bearing into each hole with the flange to the inside of the sideframe (Photo 1).

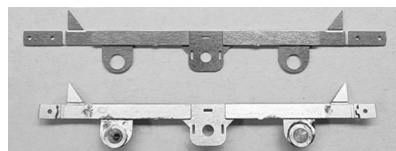
Fold and solder the bolster and end beams as shown in Photo 2. Fold the tabs and gussets at the end of the solebar to 90° and fit the sideframes to the bolster as shown in Photo 3.

Insert a pair of 10.5 mm diameter spoked wheelsets with 23.8mm axles into the bogie. Align the holes in the end beams with the holes in the ends of the solebars using short pieces of 0.45 mm wire. Solder the end beams to the solebars. Make sure the axles are still parallel and the bogie doesn't rock.

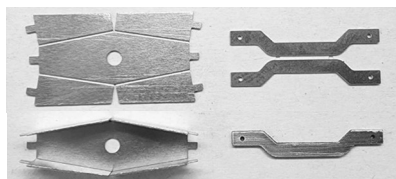
Centre punch the middle of each axle hole marked on the back of the casting and drill a 1.8 mm hole. Open out the top of each hole with a 2.3 mm drill to allow the casting to clear the bearing flange. Take care not to drill through the axlebox and test fit regularly to avoid removing more material than is necessary (Photo 4).

Glue the side frame castings to the etched frame with either superglue, epoxy or acrylic contact adhesive (Photo 5).

STEPHEN JOHNSON MODELS  
PO Box 31  
RED ROCK 2456



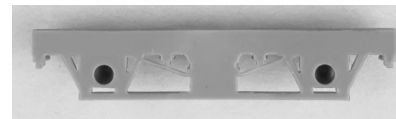
**Photo 1.** The tabs above the solebar have been overfolded i.e. the tab was bent 180° away from the etch line to form a double thickness. The tabs at the end of the solebar have also been overfolded. Solder the bearings and the overfolded tabs to the frame.



**Photo 2.** The bolster and end beams are folded and overfolded as shown above.



**Photo 3.** Secure the sideframes to the bolster using twist tabs. Place the bolster-sideframe assembly on a flat surface and make sure the sideframes are parallel and square to each other. Solder the parts together and file off protruding tabs.



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



**Photo 5.** Assembled bogie

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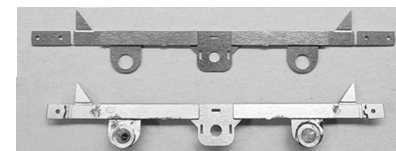
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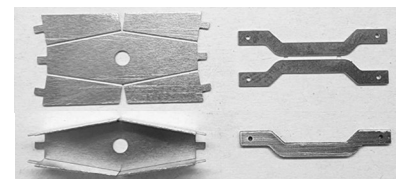
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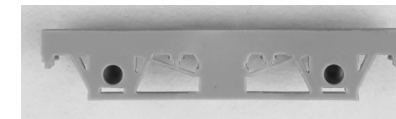
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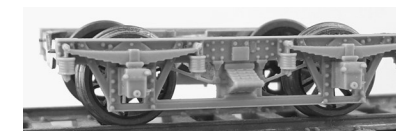
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