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## 1890s "PASSENGER" BOGIES Assembly instructions

Test fit the waisted bearings into the etched holes in the bogie frame. The flange of the bearing has to be soldered to the side with the half etched lines - the inside of the bogie (Image 1). These holes may need to be opened up slightly with a round file or preferably a tapered broach if they are too tight.

The tips of the waisted bearings should be filed down slightly to reduce the distance they protrude from the frame (but not to the extent that the bearing surface is exposed).

Over-fold the top round spacer 180° making sure it is on the opposite side of the etch to that with the half etched lines. Solder it to the top of the bolster.

Fold the sides of bogies to 90°. When making these folds, the bend must be made towards the half etched line. Fit the triangular braces into their slots and secure them by twisting the protruding tabs.

When happy that the assembly is square, apply solder along all the etch lines then trim off the excess tab material.

Clean the flash from the bogie side frames. Position the sideframe over the etched bogie frame and ensure the holes in the sideframes fit over the bearings. If they don't fit, slowly open out the top of each hole with a 2.3 mm drill until the sideframe clears the bearings (Image 2).

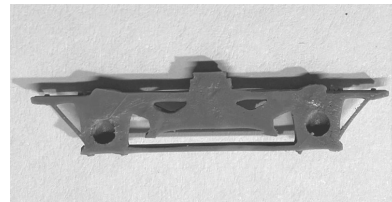
Fit a pair of wheels (RP25-88 with 23.8mm axles recommended) and confirm

that the bogie sits flat and doesn't rock. Glue the side frame castings to the etched frame with either superglue or an epoxy adhesive.

Fix the bogies to the underframe using M2 screws ensuring they are not so tight as to prevent the bogies from pivoting.



**Image 1.** Archbar bogie etch showing correct orientation of the waisted bearings. Tabs on the angle brackets can be twisted with pliers to secure the parts prior to soldering.



**Image 2.** Flash has been trimmed from the sideframe casting and holes have been drilled to clear the waisted bearings that protrude from the bogie frame.



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mark the centres of the axle holes on the back of each casting.

Test fit the waisted bearings into the etched holes in the bogie frame. These holes may need to be opened up slightly with a round file or preferably a suitably sized tapered broach. The flange of the bearing has to be soldered to the side with the half etched lines (Image 1).

The tips of the waisted bearings should be filed down slightly to reduce the distance they protrude from the frame (but not to the extent that the bearing surface is exposed).

Over-fold the top round spacer 180° making sure it is on the opposite side of the etch to that with the half etched lines. Solder it in place.

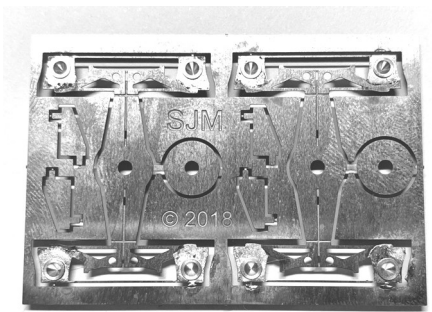
Fold the sides of bogies to 90°. When making these folds, the bend must be made towards the half etched line. Fit the triangular braces into their slots and secure them by twisting the protruding tabs.

When happy that the assembly is square, apply solder along all the etch lines then trim off the excess tab material.

Clean the flash from the bogie side frames. Drill a 1.8 mm hole on the marks you made on the back each sideframe taking care not to drill through the front of the axlebox. With a 2.3 mm drill, open out the top of each hole so the sideframe clears the bearings (Image 2).

Fit the wheels and glue the side frame castings to the etched frame with either superglue or an epoxy adhesive.

Fix the bogies to the underframe using M2 screws ensuring they are not so tight as to prevent the bogies from rocking side to side.



**Image 1.** Archbar bogie etch showing correct orientation of the waisted bearings. Tabs on the angle brackets can be twisted with pliers to secure the parts prior to soldering.



**Image 2.** Flash has been trimmed from the sideframe casting and holes have been drilled to clear the waisted bearings that protrude from the bogie frame.