

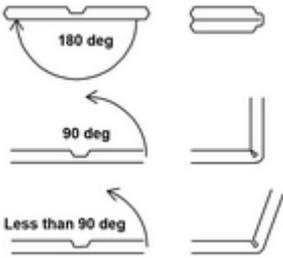
# CC57B Davis & Lloyd 5' 6" Rigid Bogie.

## Introduction:

## Safety warning.

This kit is suitable for adults only. There are small and/or sharp components. The castings and recommended solders contain lead. Observe appropriate hygiene precautions; do not eat or handle food without first washing hands. The tools and materials recommended also require the care in handling; protection for the eyes and face (dust mask) must be applied when cutting, soldering and using a mini-drill.

The components on the etched sheets are all held in position by half etched tags. The fronts of the sheets have the identifying text and should be "face up" for cutting of tags.



It is recommended that a small sharp craft knife is used to remove the components from the frets; Use a hard base surface, such as an off-cut of chipboard or MDF, on which to perform this cutting. Ensure that the blade of the knife used for cutting the tags is regularly changed as soon as there is evidence of wear (I use a small snap-off type knife, which is quick for providing a fresh cutting edge).

Folds and bends are used extensively in the kit, and these fall into two basic types:

Folds of 180° are made with the ½ etch "channel" on the outside. 90°, or less, are made with the ½ etch "channel" on the inside. Most of the bends and folds can be made either with finger pressure or with smooth faced pliers. Some need a degree of support to avoid distortions. Always take care to maintain a degree of accuracy with these folds as they can influence the final alignment of the bogie, especially the clearances between the brake shoes and wheels.

## Assembly.

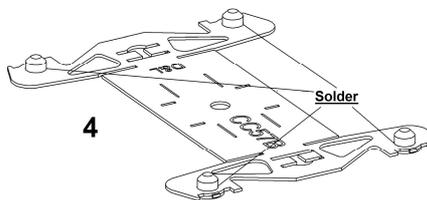
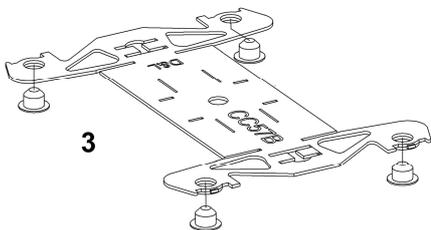
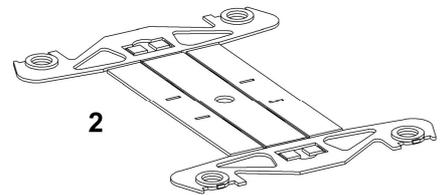
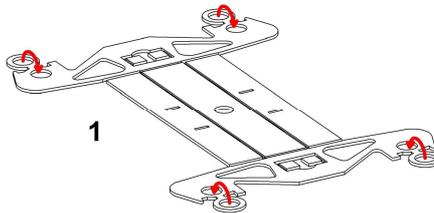
The kit consists of:

- 1 x Etched sheet containing 2 etched frames.
- 4 x Pewter side frame castings.

Required: 4 x 12mm Ø wheel-sets on 26mm pinpoint axles, 8 x 2mm shouldered pin point bearings, and pivot arrangements to complete. The mounting pivot hole is a nominal 2mm Ø.

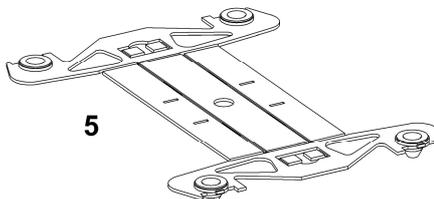
An additional kit CCXB is available for those who wish to use bogie mounted NEM style couplings.

1. Remove the frames from the etched sheet and carefully clean up any tag residues with a fine needle file; the outer face of the etched frame has the CC57B and/or D&L text. Fold over the bearing spacers 180° on to the inner face, and compress with smooth face pliers.
2. Check that the holes are aligned, by gently rotating the shank of a 2mm drill or 2mm rod; it is not necessary to enlarge them.
3. Insert bearings (2mm Shouldered pin point type – not provided) from the back face (through the folded spacers, then the outer frame), and invert the side member; if you position the bearings face down on the work surface, you can press them directly through the aligned spacers and outer frame.

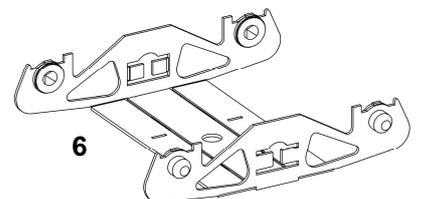


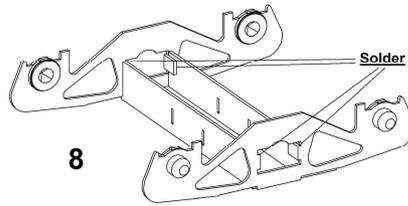
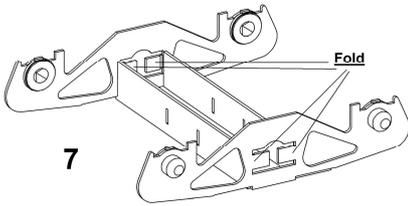
4. Ensure that the bearings are fully located by pressing down on the outer face of the side-frames; apply flux and solder (not too liberally) in position from the plain outer face, on the underside of the bearing. It is not necessary to totally laminate with solder, but only to retain the bearings; excess solder may restrict a snug fit of the castings.

5. Fold up the two side-frames so that they are at 90° to the central platform or bolster. These are folded first so that the side-frames are free to overcome a tendency to spring back a little.



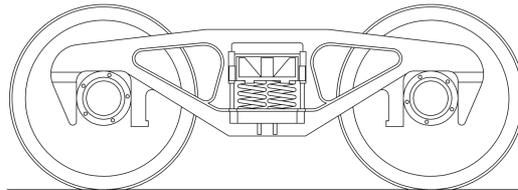
6. Fold up the two sides of the bolster so that they are at 90° to the platform. Take care to avoid splaying the first folds on the side-frames.





7. Fold inwards the re-enforcing flaps at 90° in between the bolster sides, and compress the folds firmly against the bolster sides with pliers.
8. Apply flux and a good fillet of solder to each of the re-enforcements, allowing it to flow into the joints and folds between the bolster and side frames.

9. The finished frame must now be thoroughly cleaned to remove all traces of flux.
10. Check the squareness of the frame, normal way up, on a flat surface, and correct if necessary (unlikely) by twisting carefully. Check the fit of wheels in the frame. There should be a very small amount of end float. The correct wheels are 12mm dia. with plain or 3 hole discs.



11. Offer up the Pewter side-frame castings to check the fit of the bearings in the casting holes. The centrifugal casting process is subject to variation in shrinkage. Consequently it may necessary to increase the diameter of the casting bearing holes with a 2.2mm or 3/32" Ø mm drill in a pin chuck before they will fit without force. Also remove any residual flash with a scalpel to generate a clean casting. This is the most appropriate time if you wish to add the optional coupling extension CCXB. Finally secure the cosmetic side frames with contact adhesive or cyanoacrylate, and the bogies are ready for painting.
12. Distortion during fitting the wheel-sets can cause excessive play in the bearings; this can easily be corrected by pressing both ends of the outer frames in line with the bearings. Finally check on a flat surface that the frame has not twisted; carefully correct if necessary.

email: [stensonmodels@btinternet.com](mailto:stensonmodels@btinternet.com)

Website: [www.stensonmodels.co.uk](http://www.stensonmodels.co.uk)