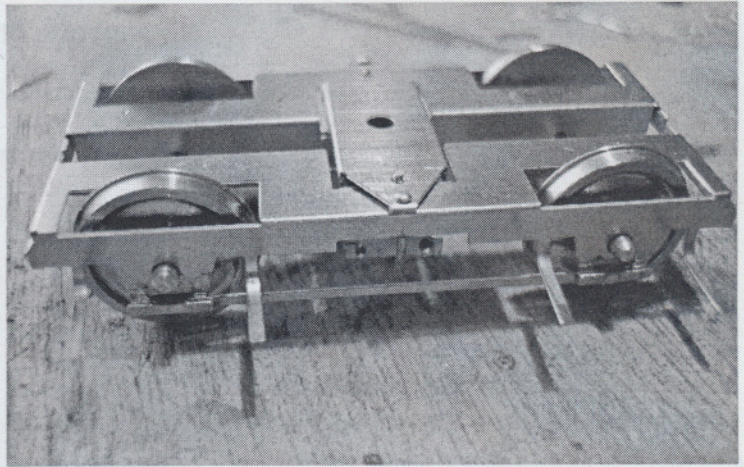


the countersinks and place 0.4mm card spacer to maintain gap between bolster and side frame. (The etch frame can be used if required).

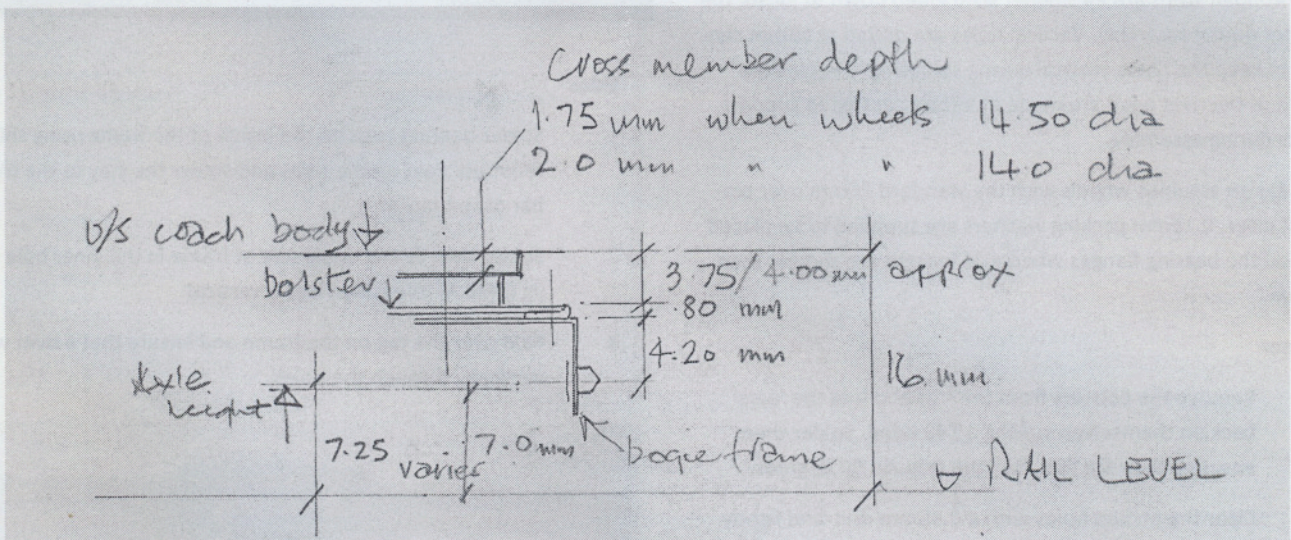
2. Invert the side and place over the rivet simultaneously inserting the inside rivet in the inner hole in the jig.
3. Solder toe of outer rivet in the bent over tag on the frame.
4. Repeat for the other side.
5. Thread the brass pins through the bracket holes and solder one end only at diagonally opposite ends.
6. Remove from jig and insert wheels and place on a flat surface, still inverted. Hold sides together and solder remaining ends of torsion bars ensuring that axles have no end float but still revolve freely.
7. Trim torsion bar ends to within 0.5mm of outside of brackets to leave space for cosmetic bolster spring detail.
8. Trim inner rivets to within 0.5 to 1.0mm above bolster.



4. Cut and place 3mm diameter tube 2mm long over the 2.5mm tube at the other end and check ride height. When satisfied solder the 3mm tube in place.
5. If your bogie has no stepboards remove the stepboard brackets from the sideframes otherwise bend them up using a large radius.
6. Solder tie bars to the bottom of the frame and fold over the keeps and solder them in place. File off the fold over tabs.
7. If required, after mounting your cosmetic bogie sideframes fold up stepboards and apply to the stepboard brackets. These are designed so that they can be used as either a long or short version. For short versions cut using the mark on the underside of the stepboard.

Coach underframe

1. Prepare 2 lengths of the 2.5mm diameter tube.
2. Assemble the tube to the coach underframe with an M2 screw and solder the nut and tube in place. Remove screw.
3. Place crossmembers over the tube trimming the ends to suit the solebars. Bend up the supports on one end and strengthen with solder. Check height which should be 2mm



Sketch drawing showing height dimensions of bogie, bolster and support.

Note:

Exactoscale wheels 14.5mm diameter,
 Studiolith/Gibson wheels 14.4/14.3mm diameter,
 Ultrascale wheels 14.1/14.0mm diameter.

Items not supplied:

- Wheels
- Wheel bearings