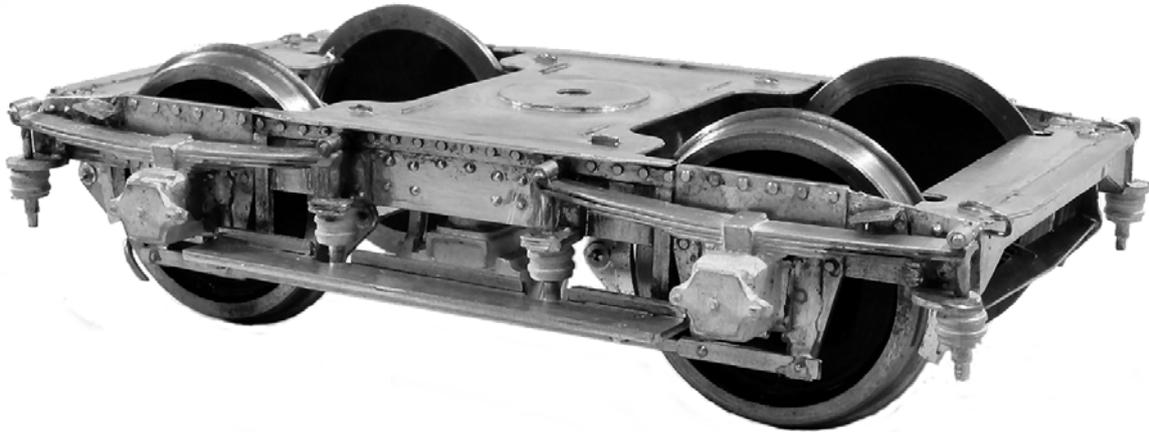


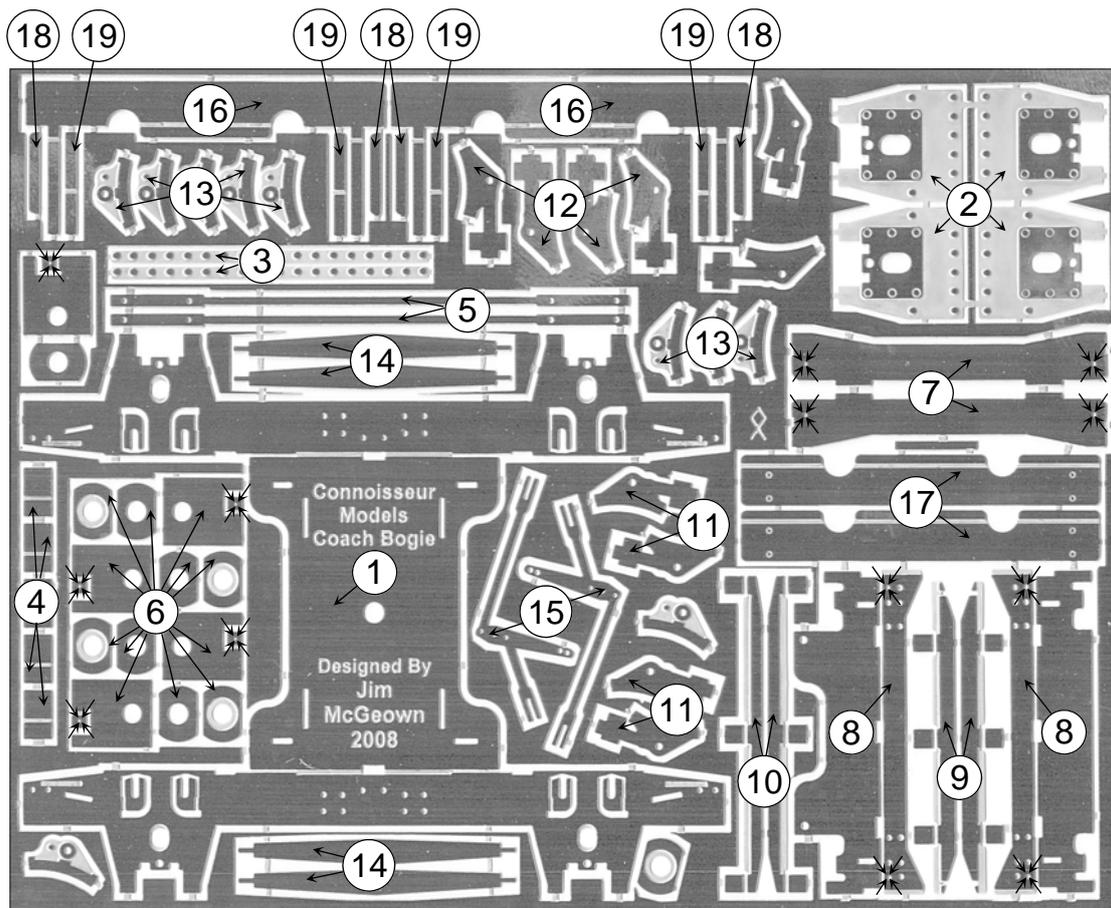
CONNOISSEUR MODELS

Coach Bogie Designed For Queen Marry Brake Van

Requires 4 Axels 3'7" Dia Disc Wheels (2 X Packs Slater's Plastikard Cat No 7125 Coach Wheel)
Available from Old Road, Darley Dale, Matlock, Derbyshire, DE4 2ER, Tel 01629 734053



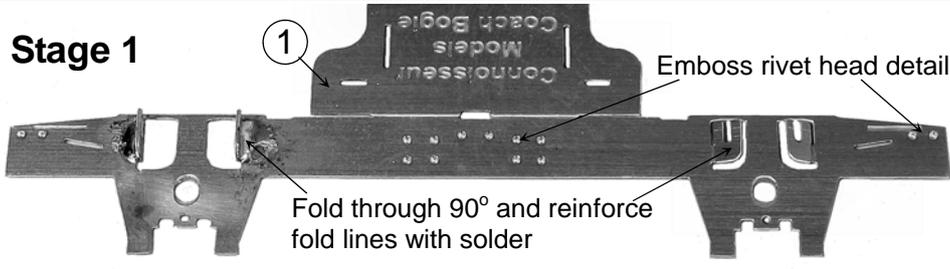
The bogie is designed so that if desired it can be built with sprung wheel suspension. The instructions show this but if a solid bogie is desired simply fit the wheel bearings into the holes in the side frames without modification. Fit bearings so that they centre the axels and solder solid using a flat surface to ensure everything is square.



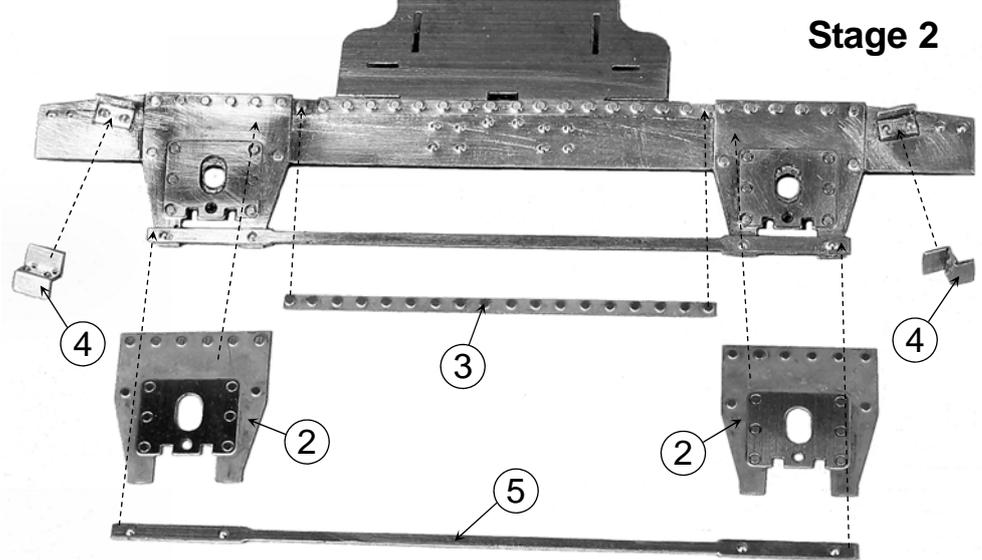
✱ = Run a fine drill (about 0.6mm dia) through these holes before removing any parts from fret. This is to ensure that during construction the fine spring wire can be threaded freely through these holes.

Connoisseur Models, 1 Newton Cottages, Nr Weobley,
Herefordshire, HR4 8QX, Telephone 01544 318263

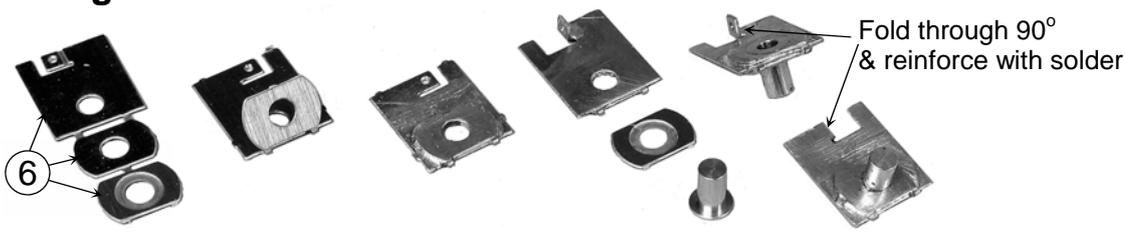
Stage 1



Stage 2



Stage 3



Stage 4

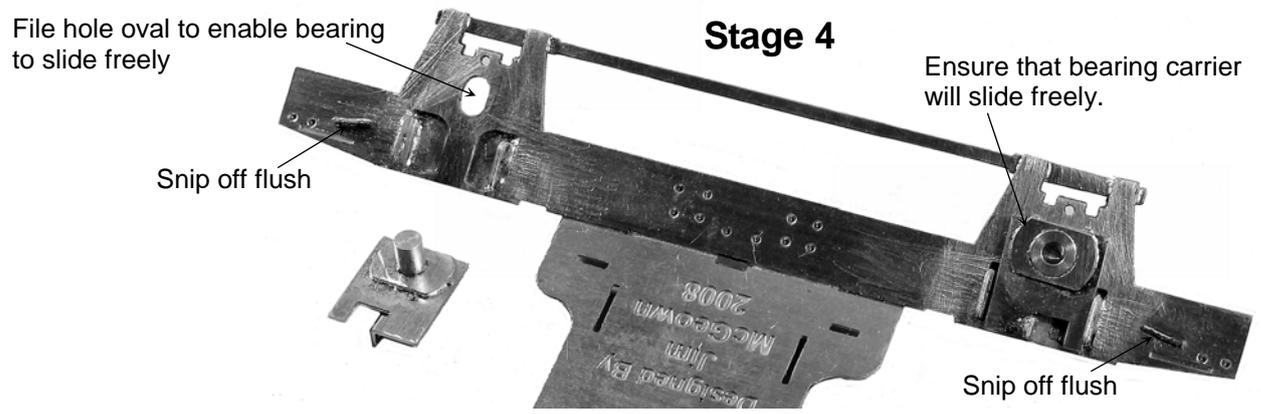
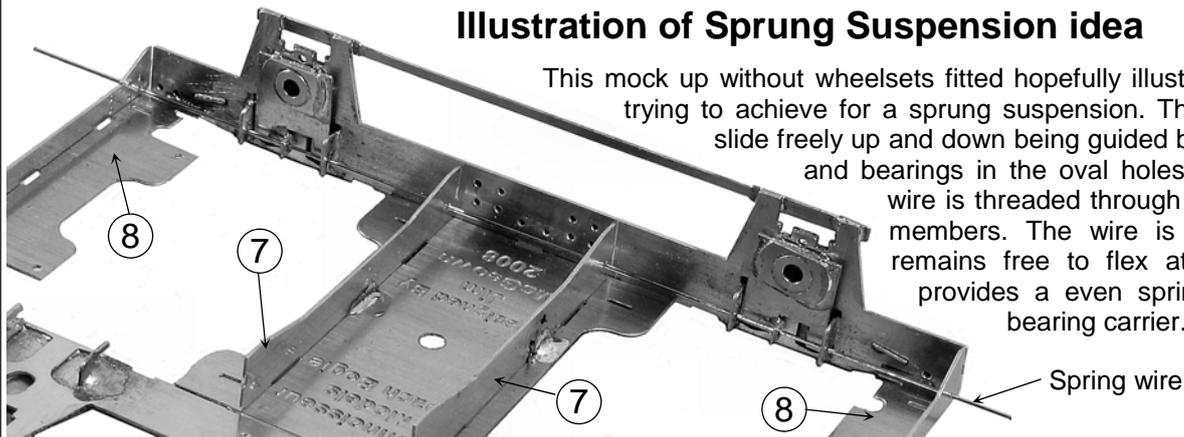
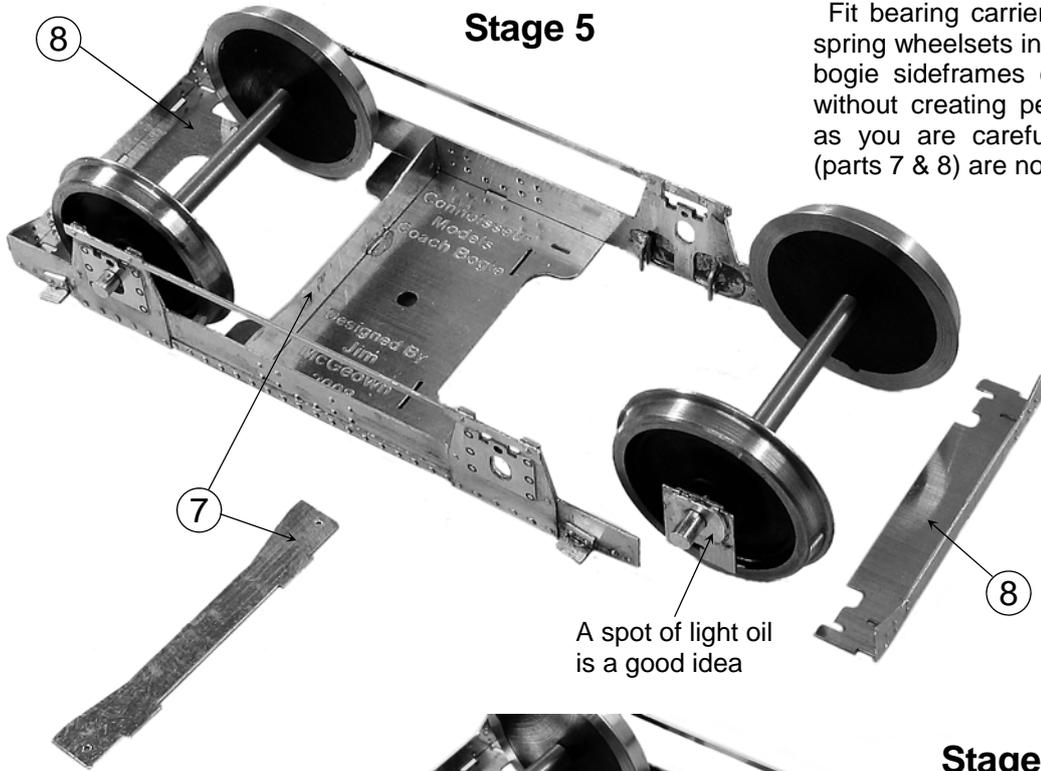


Illustration of Sprung Suspension idea

This mock up without wheelsets fitted hopefully illustrates what we are trying to achieve for a sprung suspension. The bearing carriers slide freely up and down being guided by the fold out tabs and bearings in the oval holes. The spring steel wire is threaded through holes in the cross members. The wire is not soldered but remains free to flex at each hole. This provides a even spring force for each bearing carrier.



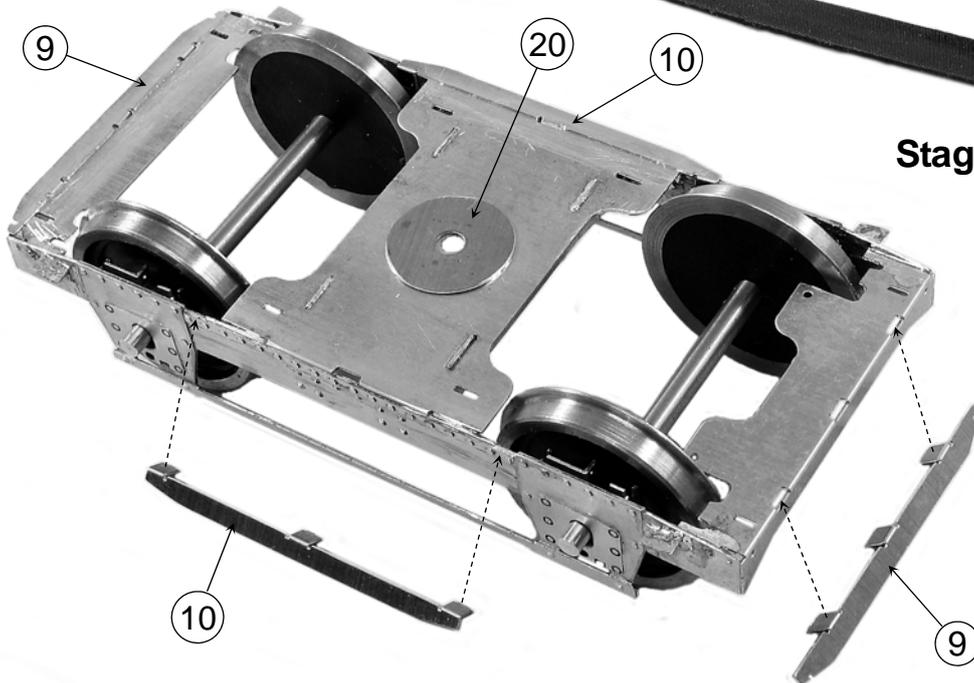
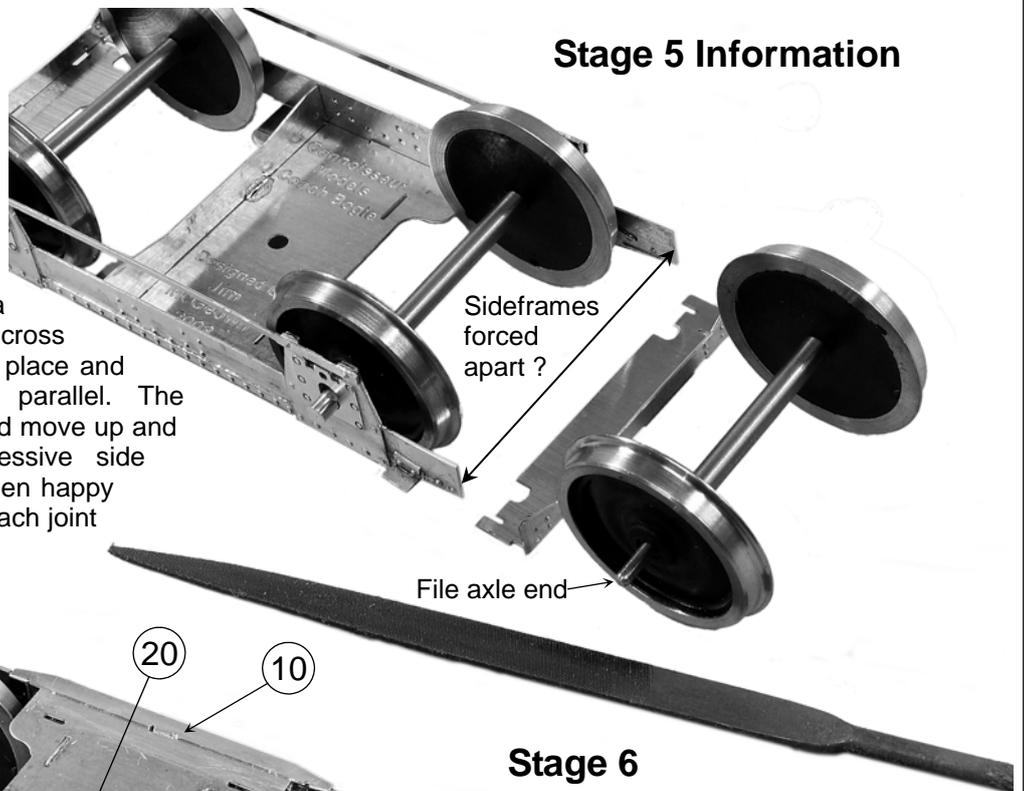
Stage 5



Fit bearing carriers over axle ends and then spring wheelsets into place. To achieve this the bogie sideframes can be gently flexed apart without creating permanent distortion as long as you are careful and the cross members (parts 7 & 8) are not soldered into place.

Stage 5 Information

If it is found that the wheelsets are forcing the sideframes outwards slightly or preventing the bearing carriers from moving freely. File the pointed axle end down (go gently as you don't need to remove much to make a significant difference) until the cross member (part 8) fits snugly into place and with the sideframes running parallel. The bearing carriers/wheelsets should move up and down freely but without excessive side movement at the axle ends. When happy solder all joints solid. Check at each joint that everything is still square.



Stage 6

Thread spring wire through cross members and bearing carriers. Long nosed pliers or tweezers are useful to manipulate the wire through each hole.

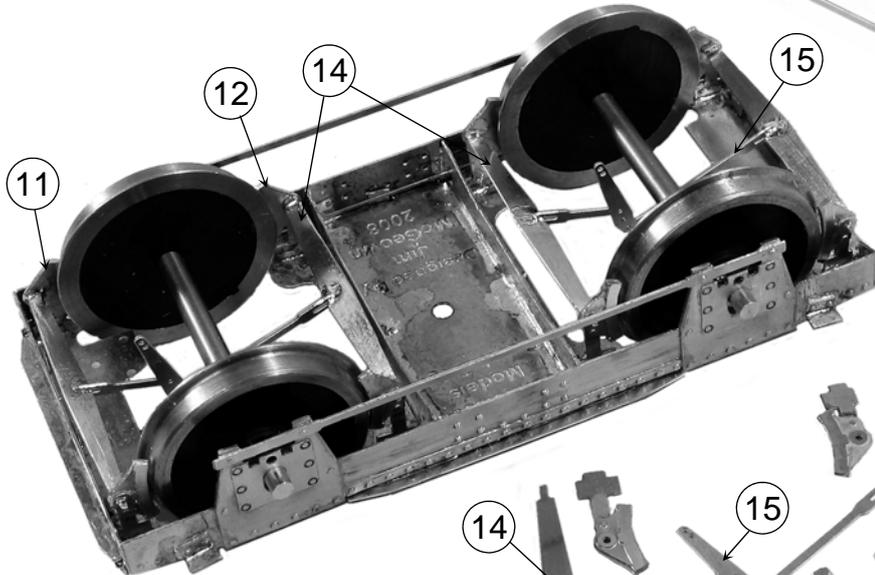
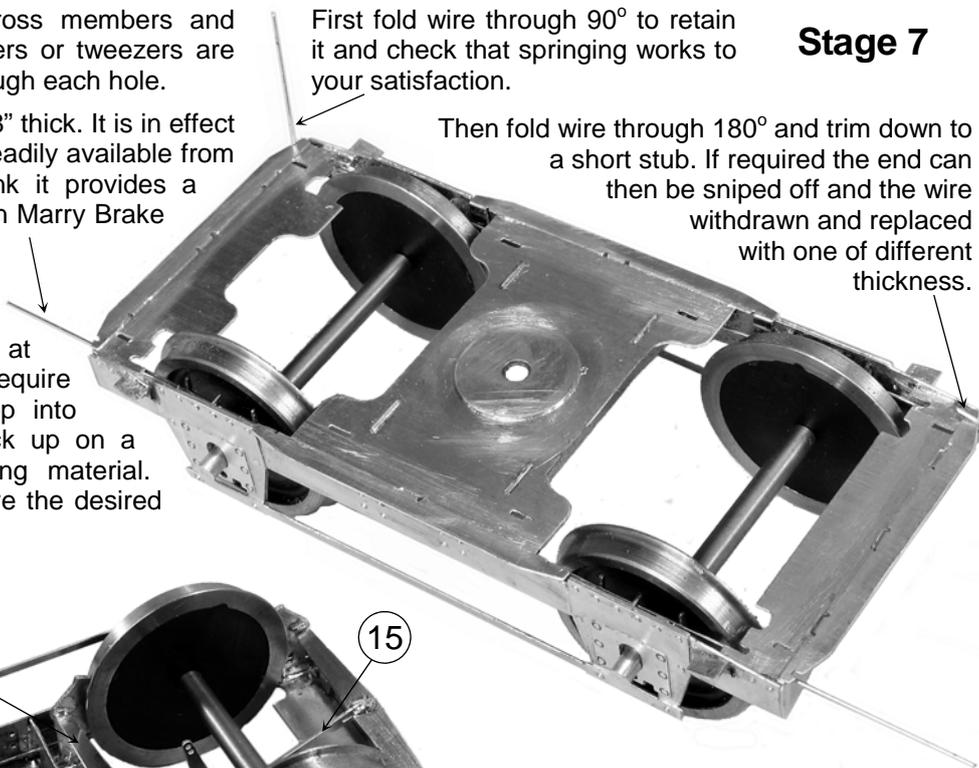
The spring wire included is 0.018" thick. It is in effect electric or acoustic guitar string readily available from musical instrument shops. I think it provides a suitable sprung ride for the Queen Marry Brake Van kit.

Different thickness guitar strings are readily available normally in 0.002" increments at very modest cost. So if you require lighter or heavier springing. Pop into your local music shop and stock up on a range of this excellent modelling material. Then experiment until you achieve the desired ride for your vehicle.

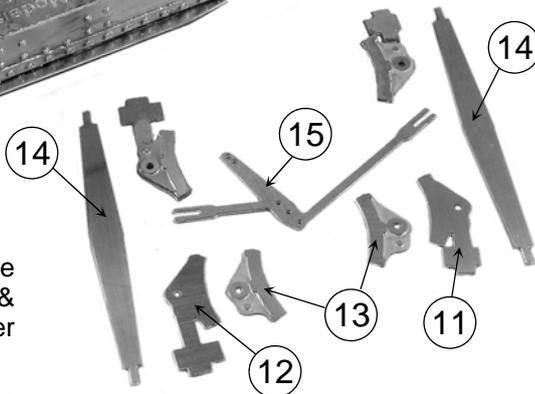
First fold wire through 90° to retain it and check that springing works to your satisfaction.

Stage 7

Then fold wire through 180° and trim down to a short stub. If required the end can then be sniped off and the wire withdrawn and replaced with one of different thickness.



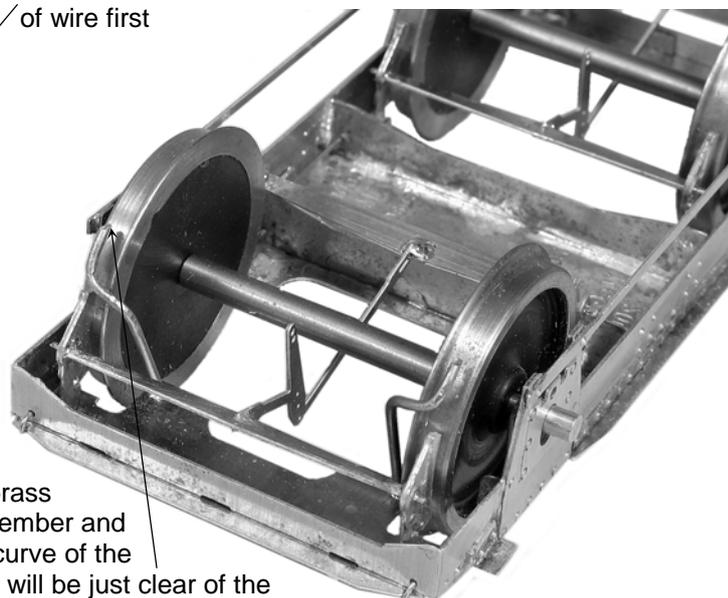
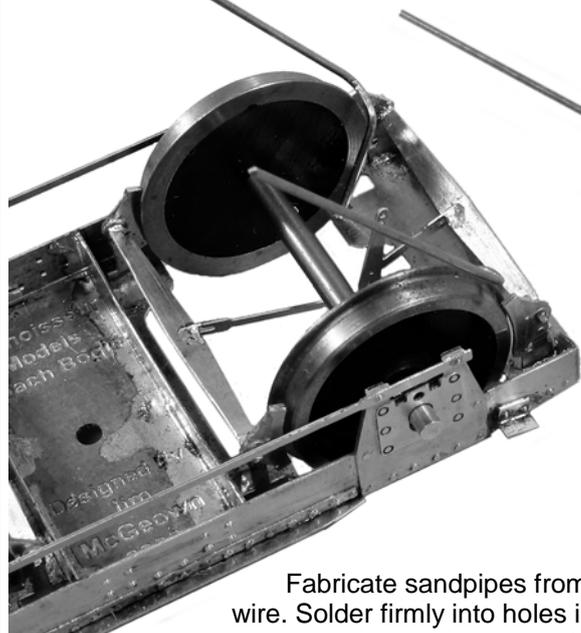
Stage 8



Use overlong length of wire to make manipulation & positioning easier

Stage 9

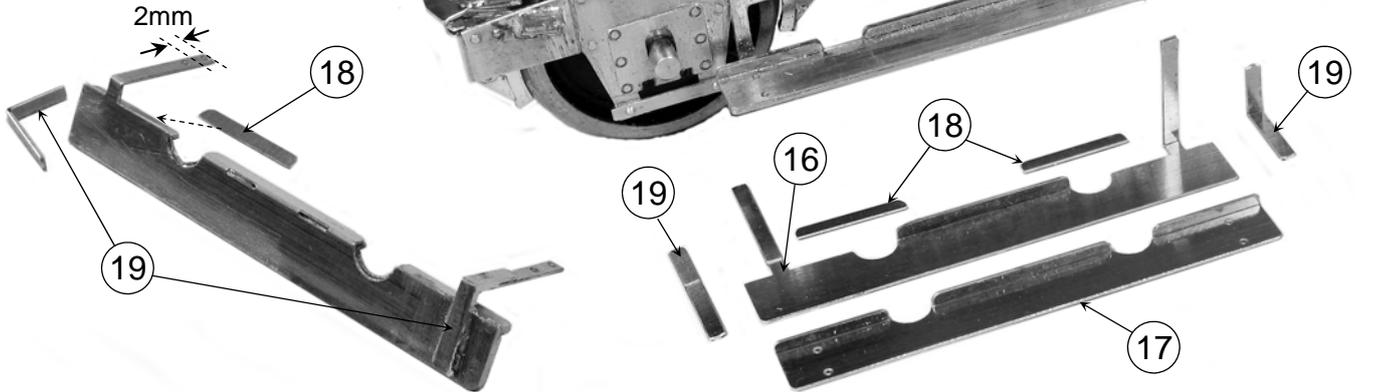
Form set at centre of wire first



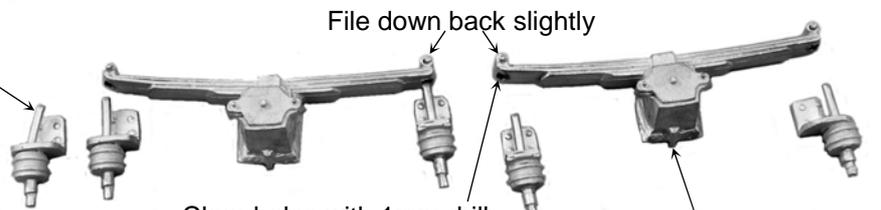
Fabricate sandpipes from 0.9mm brass wire. Solder firmly into holes in cross member and then tweak top part with pliers to follow the curve of the wheel tread. Then snip off at an angle so that they will be just clear of the rail head when springing is fully depressed.

Stage 10

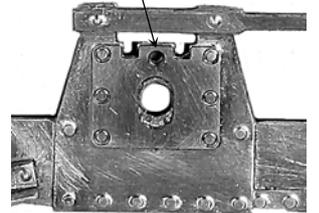
Reduce the length of each footboard support leg by cutting off 2mm.



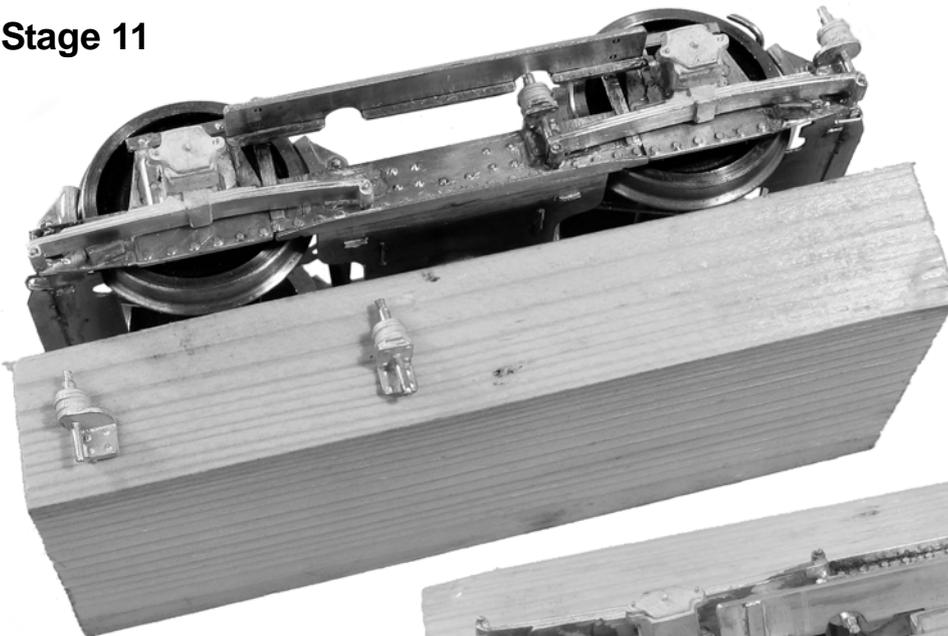
Gently bend straight any distortion on spring hanger castings. I should have included more castings than required so pick out & use the best ones



File location peg down to $\frac{3}{4}$ mm long. Clear hole with 1mm drill for location peg.



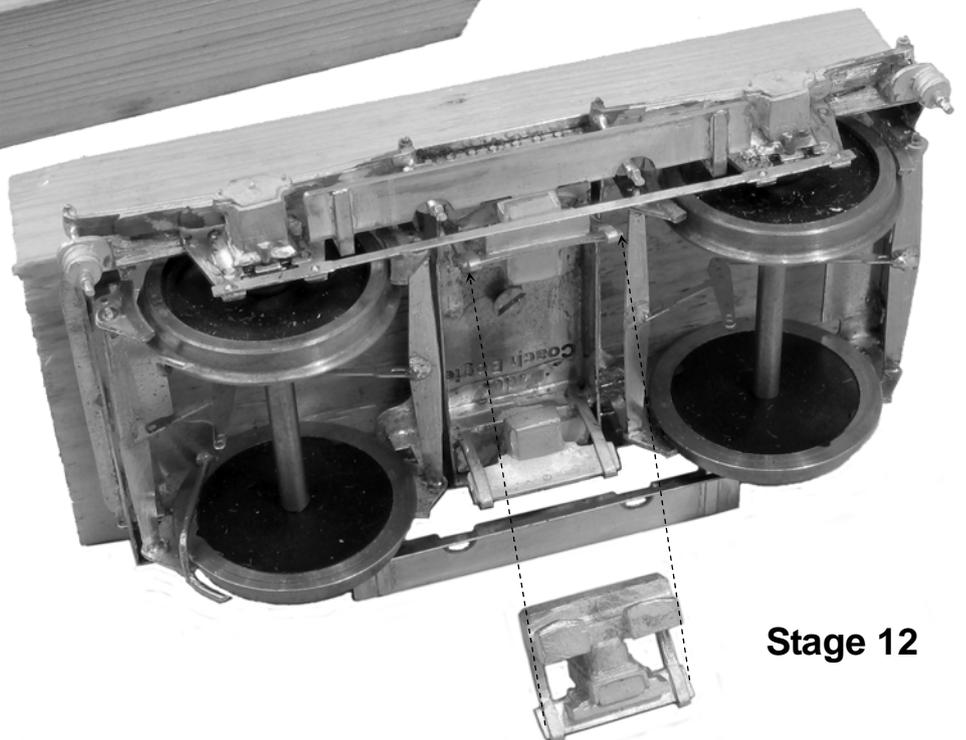
Stage 11



Fit axle box & spring casting first then spring hangers.

I temporarily screw the bogie to a offcut block of softwood so that its held solid and upright.

I can then hold the castings firmly in position with a knife point as they are soldered solid.



Stage 12