

# Rumney Models Screw Couplings

## Notes

This set of instructions covers the screw coupling kit B.96. This is designed to provide functional (non-working) screw couplings. They are similar to other manufacturers designs but etched on something a bit thicker to try and end up with something a little more realistic. There are sufficient parts for two wagons.

Read through the instructions first and familiarise yourself with the components. Drawings and photographs taken during the construction of the test etches are included to attempt to make my waffle clearer.

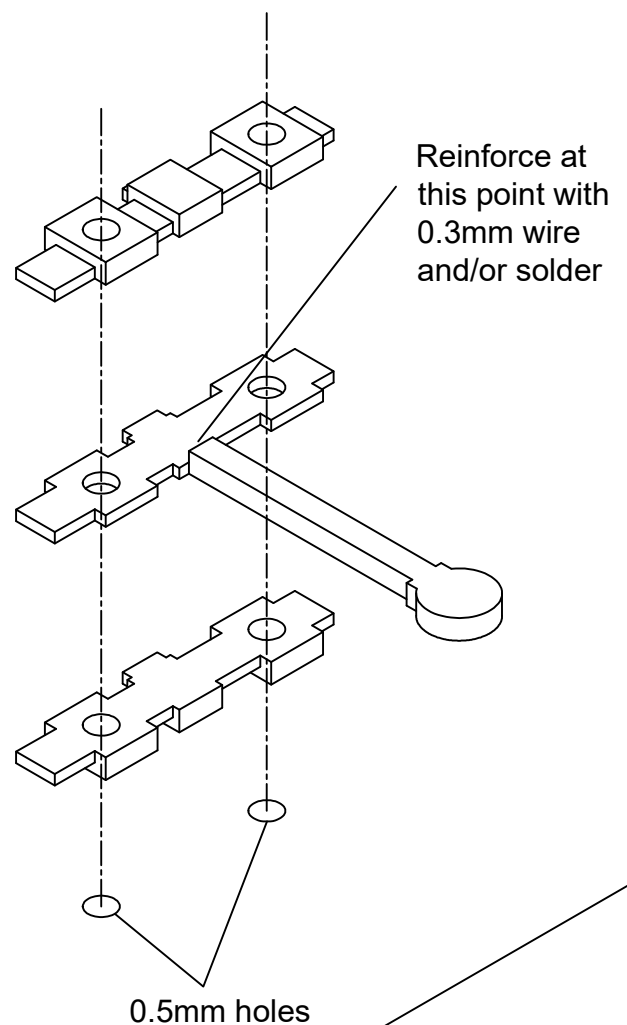
Everyone has their own soldering methods. I use a temperature controlled soldering iron with predominantly 145° solder and La-Co paste flux.

Check all holes before removing parts from the fret. The drawing process for etching if you use a CAD program, as I do, is extremely accurate but the actual etching process itself not an exact science. If the fret is slightly over etched then there is no problem but if they are under etched the holes will need enlarging. I find that this is easiest to do before removing parts from the fret. All holes are 0.5mm on this fret.

There are 2 parts to each coupling, a screw link and shackles. The screw link comes in 3 parts which are designed to be laminated together. The shackles are arranged in pairs of different lengths to cater for different radii that the vehicles fitted with these need to cope with. The shortest pair are about the right length for two wagons with 1' 8.5" wagon buffers that are nearly touching. These should be used cosmetically! The other pairs of links will give greater distances between buffer faces in increments of 1mm.

You may wish to consider step soldering to prevent everything getting jammed up when soldering the shackles to the screw links. If so use something like 220°C solder for the screw links and 145°C solder for final assembly.

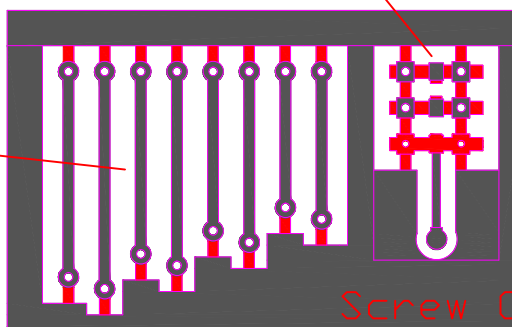
Fig. 1



B.96

Screw link

Shackles

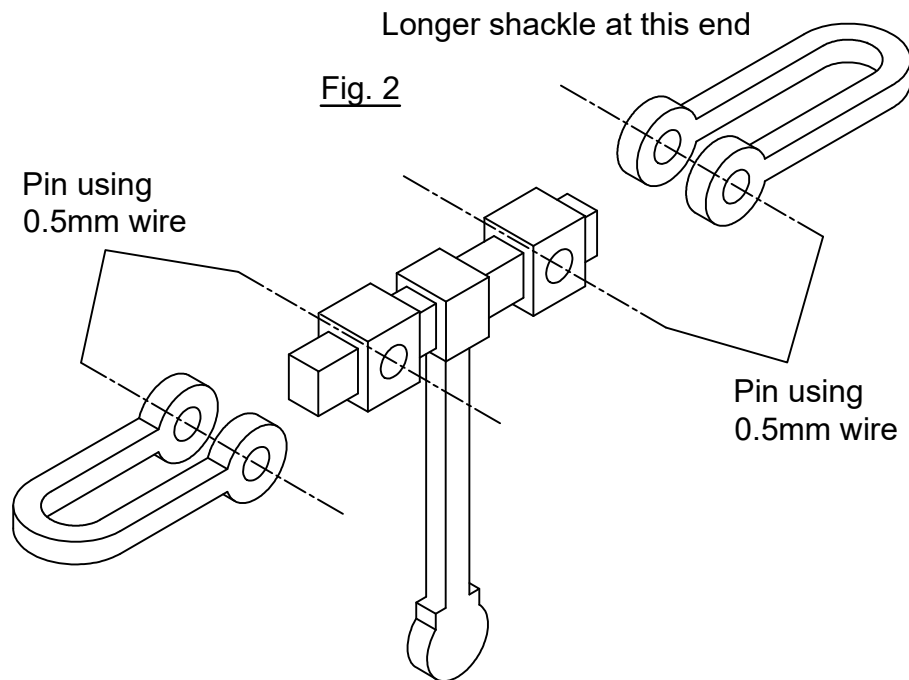


## Construction

The first job is to assemble the screw links. They are designed to be soldered together whilst pinned to a scrap piece of wood or mdf. Whilst not very proper I used 0.5mm drill bits to pin the parts. This meant I could remove the drill bits if they got soldered up by simply drilling through the screw links. Alternatively I'm sure there are bits of pencil lead of the correct diameter that could be used.

Whilst attached to the fret use one of the layers of the screw link to drill a pair of 0.5mm holes into a piece of wood. Remove the parts from the fret, clean up the connecting tags and layer the three parts up as per Fig.1 with the tommy bar in the middle and pin to the jig. Solder the three parts together.

The joint where the tommy bar attached to the screw link is quite vulnerable and will need reinforcing. I soldered a piece of 0.3mm wire in place to achieve this. Remove the pins and open out the holes for 0.5mm wire if required.



Check the hole size in your desired pair of shackles, they should be a tight fit onto 0.5mm wire. Remove from the fret and fold up as per Fig. 2. I used a pair of round nose pliers. There should be a gap of 1mm between the sides of the shackle and the holes should be opposite each other.

You will then need to join the shackles and screw link together. Note which end the longer of the two shackles goes (see Fig.2). This is the shackle that will attach to the coupling. Use 0.5mm wire to pin the parts in place. Use a very quick dab of a small amount of solder on the point where the wire meets the outside of the shackle to secure them.

The coupling can be blackened before fitting but remember that you can't blacken solder so clean up as much it as possible.

Justin Newitt  
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