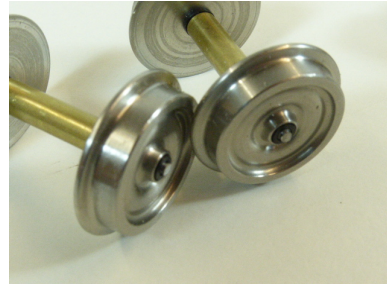
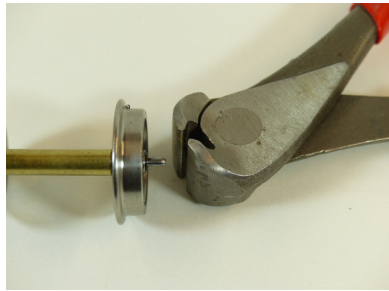


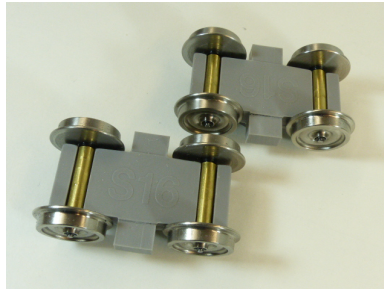
1.

With strong end cutters, hacksaw, slitting disc on a Dremel etc. cut off the excess axle protruding from the wheel faces. Grind or file back to the wheel face, or just fractionally short.



2.

With a SMALL drop of glue, place the wheel sets into the bogie bodies. Epoxy is best as it less likely to run into the axle tubes!!



3.

The back of the side frames may need a light sand to remove any excess resin. This is best done on a piece of 80 grit sand paper. With a scalpel, pick out any excess flash that remains.

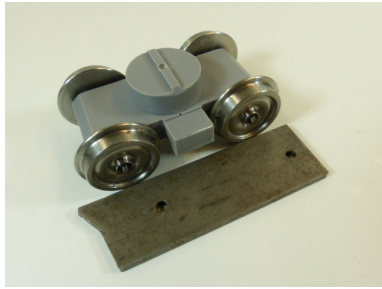


4.

Gluing the bogie side frames on is made easier if a packer piece of the correct thickness is placed in front of the wheels first and used to set the height of the frame. Add a dot of super glue to the 'wing' of the bogie, place the side frame onto the packer and slide the side frame up to the bogie, making sure it is lined up correctly to the wheels.

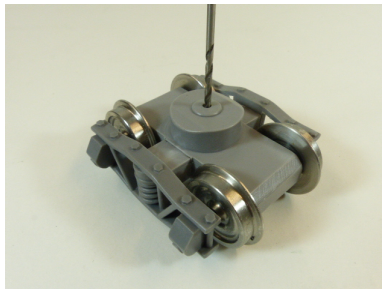
We recommend these packer heights:-

32mm arch bar side frame 3.25mm / 45mm arch bar side frame 4mm



5.

Drill a 2.5mm hole into the bogie body for the screw.

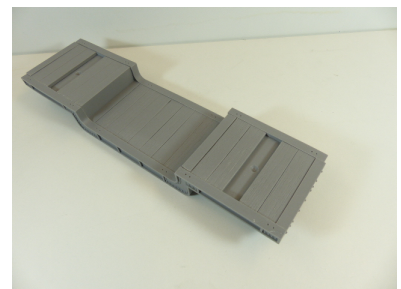
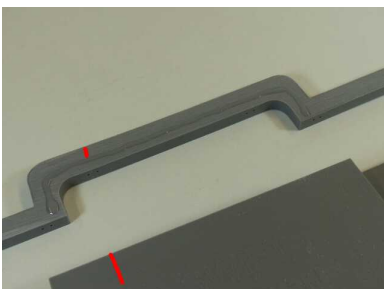


6.

Make sure the side frames fit tightly to the main body. If there is any extra resin in the way, sand or scrape it off. Make sure all of the gluing surfaces are roughed up with sand paper.

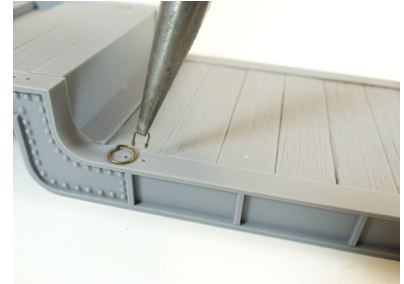
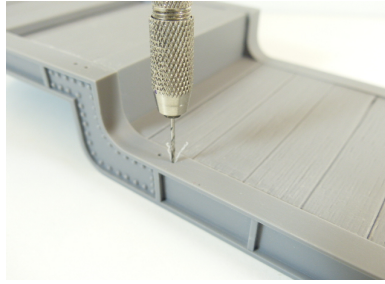
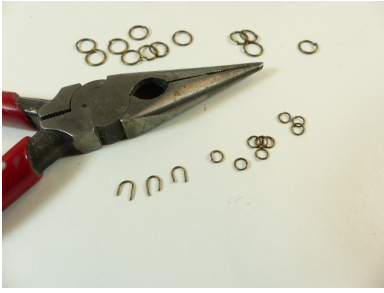
Place the wagon body up side down on a flat surface. Offer up the side frame to the main body making sure the body and frame are flat down and are centred correctly. You can centre them by eye if you look through the main body. Make a mark for reference.

Run a very small line (or small dots) of thick super glue to the middle section of the side beam and using the mark you made push the side frame onto the body, hold until glued. Hold the body in your hand the right way up and line up one outer end for height. Hold this position, flip over and run a small amount of thin super glue to bond.



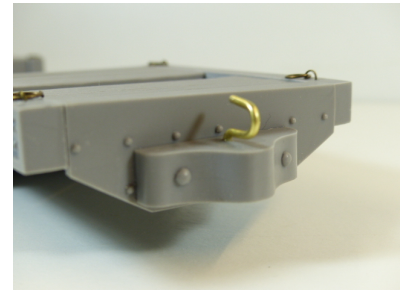
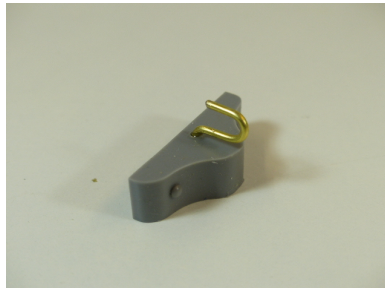
7.

With a small pair of pliers, flatten out at the split all of the smaller rings to form a 'U'. Drill a 1mm hole into each of the marked spots along both side frames, about 2-3mm deep. Place a large ring in the middle of two drill holes. pick up a 'U' with the pliers and dip the tips into some thick super glue, then push the 'U' into two drilled holes to 'capture' the large ring.



8.

Drill a 1.7mm hole in the marked dot on the coupling casting. Bend up the brass wire to your preferred hook shape and glue into the coupling. Sand the surfaces to be glued to form a 'key', and glue the coupling into place.



9.

Drill a 3.5mm hole at each end of the main body for the bogies. Screw the bogies to the body. Make sure the 'bar top' bogie is free to move in all directions EXCEPT sideways, and the 'ball top' bogie is free to move in all directions. Make sure the screw heads are below the surface of the body!

Both planks are marked 'A' or 'B'. If needed, sand or file these planks so they are a nice fit in their respective slots. Depending on what your plans are for this wagon, push fit, glue or 'Blu-tack' the planks home. If you glue, make sure you only use a spot at each end and NO glue gets into the screw head!

