

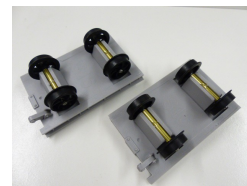
Note

In order to make this model as simple as it can possibly be and so construction time is at its shortest, the body has been cast in one piece. Due to the difficult shape and complexity of this casting you may have the odd air bubble along the edge of the canvas. These are very easy to fill with a spot of car body filler on the tip of a scalpel blade. This is not a model fault, but a by-product of a complicated casting.



1.

File off the moulding pips from the wheel flanges. File the ends of the tube smooth and de-bur. Assemble the wheel sets with a drop of car engine oil on the axles. Glue the wheel sets into place.



2.

Trim off the flash found on the 'W' iron and brake castings. Glue one 'W' iron per side, making sure they line up with the rivets on the side frame, and they overhang the side frame 1mm or so.



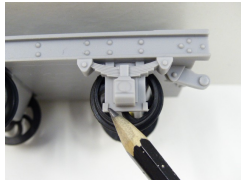
2a.

There are a number of half etched dots on each sheet brass parts. These are rivet marks and will need to be punched or pressed out with a rivet press, or other. The picture below is of our Metal Smith rivet press being used on a Tin Turtle roof. This press is available from www.metalsmith.co.uk



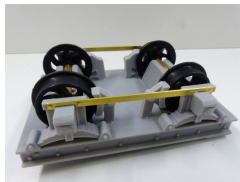
3.

Trim down the piece of casting being pointed to with the tip of the pencil in the first picture. It is only the 'inboard' casting that needs to be trimmed. On the opposite 'W' iron to be fitted, trim off the same part so you have a handed pair. Cut out a bogie bar from the etch, press the rivets and glue it to the 'W' iron that is not yet glued to the bogie. Once dry, glue the 'W' iron assembly onto the bogie. We have found it much easier to assemble this way as you have 3 points of contact for alignment.



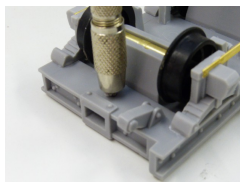
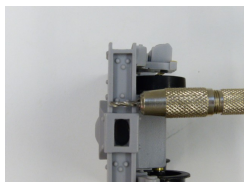
4.

Glue on the brake blocks as per the picture.



5.

Set a 1.6mm drill in a mini drill, so that it cannot brake through to the top side of the bogie casting. Drill the dot on the underside of the coupling pocket. Cut off the buffers and drill a 1.7mm hole all the way through the rear dot and half way through the front dot. Bend up two hooks from the brass rod and solder into position. Fix the buffers using a short length of brass wire with a spot of glue to hold in place.



6.

Cut out the brake handle etchings and press the rivets. Bend up the triangle part to 90 degrees by closing the etched channel. Bend up the long hand wheel post, make sure it is bent up by closing the etched channel. We have found that the best way to bend the long vertical, is to place it in a vice with FLAT SMOOTH jaws with tweezers, and simply close up until square. Line up the three rivets, make sure that the assembly is square and solder.



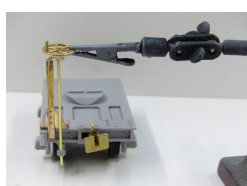
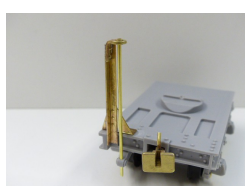
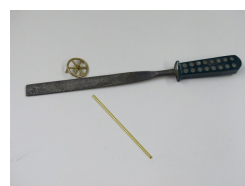
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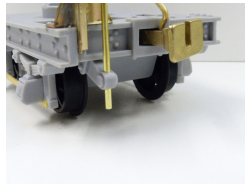
Run a 2mm drill through the cast hole in the wheel bracket casting to clean it up. Solder the bracket to the top of the post. Drill a 1.6mm hole in the bogie brake arm casting. Glue the assembly onto the bogie with epoxy or strong super glue, make sure the surfaces are roughed up so that the glue can grab.



8.

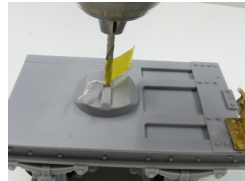
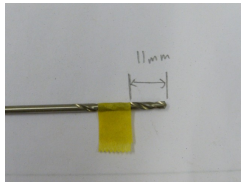
File up the end of the brass rod and the hand wheel rod, so that the wheel rod fits the hole well. Fit the brass rod and hand wheel into position and solder. We have found that holding the wheel in a 'handy hand' (as we call it) makes lining up and soldering much easier. Trim the brass rod at the bottom to about 6mm.





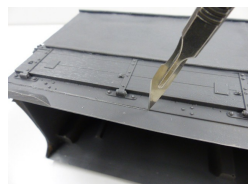
9.

Mark up a 2.6mm drill to 11mm and drill for the pivot screw, fit screw.



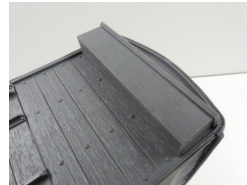
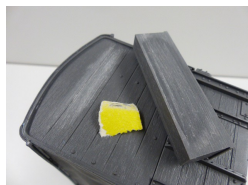
10.

Remove the flash from around the bottom of the body casting with whatever tool you are most happy with. We find that scribing about 5 times with the BACK of a scalpel blade and simply snapping off is the cleanest and best way. Once the flash is off, you can clean up by using the scalpel as a scraper, finish off with a sharp file.



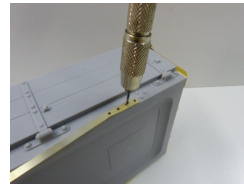
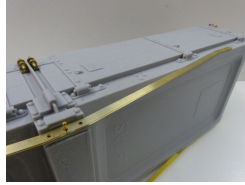
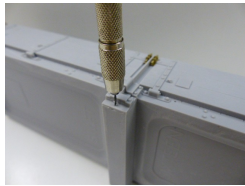
11.

Carefully sand off the surface of the wagon ends where the boxes need to be so the glue has something to bite to and glue the boxes into place.



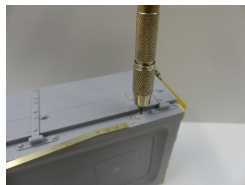
12.

Drill the dot found in the middle of the wagon body with a 1mm drill to about 6mm deep. Place a rivet in it half way. Cut out and glue into place the long wagon bars using the middle pin as a guide. Once the bars are glued in place, drill all the holes, (now marked by the brass) and put a glued rivet in each hole.



13.

Cut out the door stops and bend up using straight and rounded pliers. Drill the top hole as marked with a 1mm drill. Fit the door stops using the same method as the long bars. A quick tip here is to drill the lower holes at a slight angle to avoid breaking through the bottom of the wagon.



14.

Screw the bogies onto the chassis. The 'bar top' should be free to move round and front to rear, but NOT side to side as it is to control body roll. The 'ball top' can be as free as you feel happy with as it is to compensate for track movement. Put the chassis onto the body, with a 2.5mm drill, drill out the six fixing screw holes. Screw the chassis into place, do not over tighten the fixing screws, they only need to 'nip' the chassis and hold it in place.

