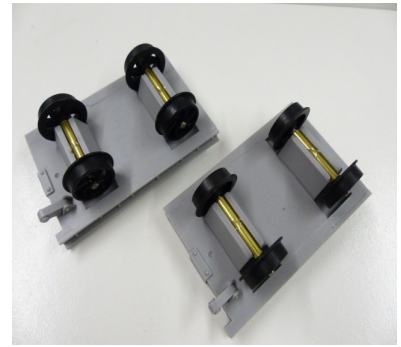


1.

File off the moulding pips from the wheel flanges. File the ends of the tube smooth and de-burr. 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.

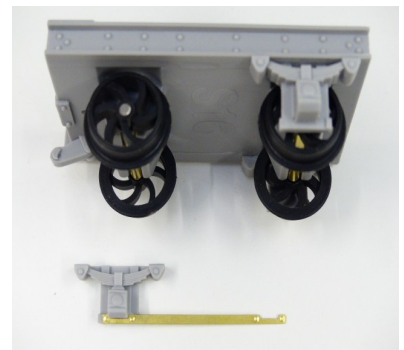
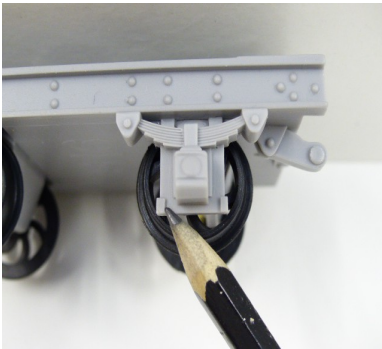
There are a number of half etched dots on each sheet brass parts. These are rivet marks and will need to be punched or pressed out with a rivet press or other suitable tool. The picture below is of our Midland Railway Centre rivet press being used on a Tin Turtle roof. This press is available from (www.midrailcentre.com)



3.

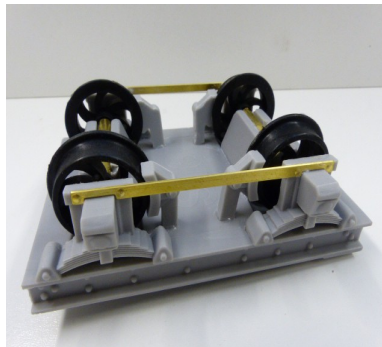
Trim down the piece of casting being pointed to with the tip of the pencil in the first picture. It is only the 'inboard casting' that needs to be trimmed. On the opposite 'W' iron to be fitted, trim off the same part so you have a handed pair.

Cut out a bogie bar from the etch, press the rivets and glue it to the 'W' iron assembly onto the bogie. We have found it much easier to assemble this way as you have 3 points of contact for alignment.



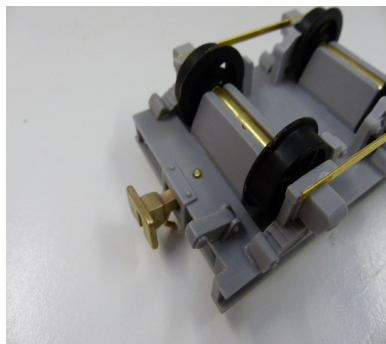
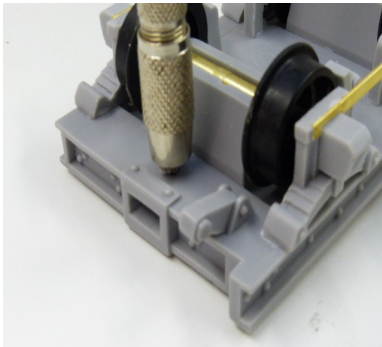
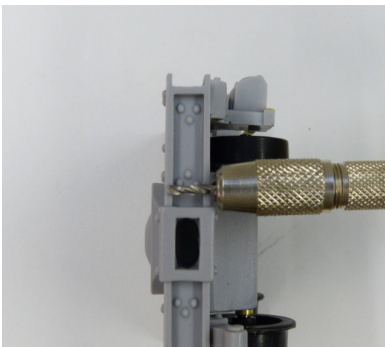
4.

Glue the brake blocks as per the picture.



5.

Set a 1.6mm drill in a mini drill, so that it cannot break 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.



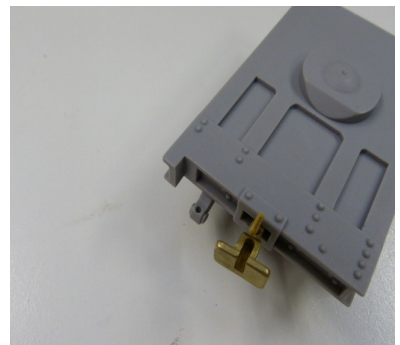
6.

Cut out the brake handle etchings and press the rivets. Bend up the triangle part to 90 degrees. We have found that the best way to bend the long vertical is to place it in a vice with a 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.



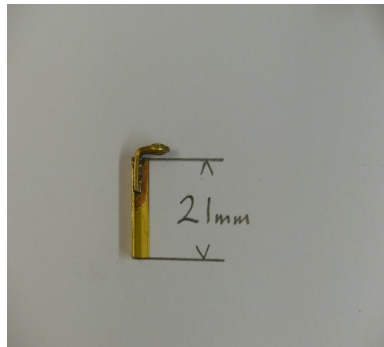
7.

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.



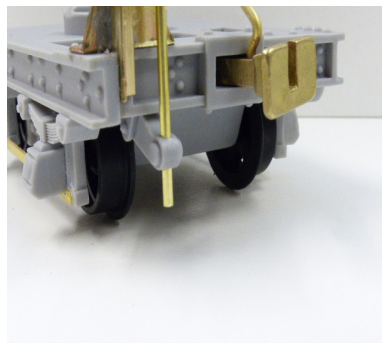
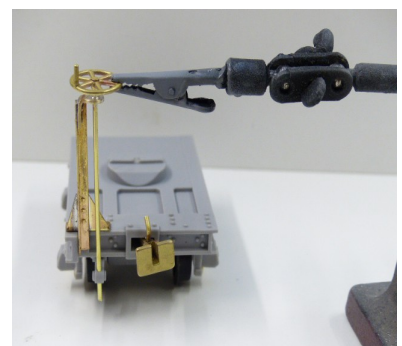
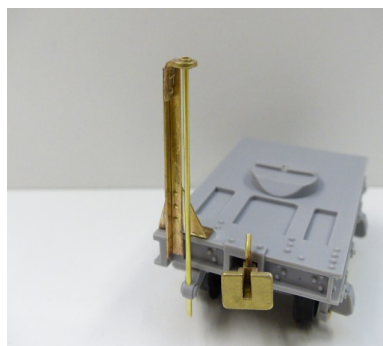
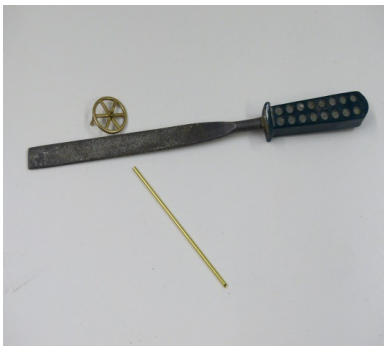
7a.

If you are building the generator van this is the hand wheel stanchion (21mm).



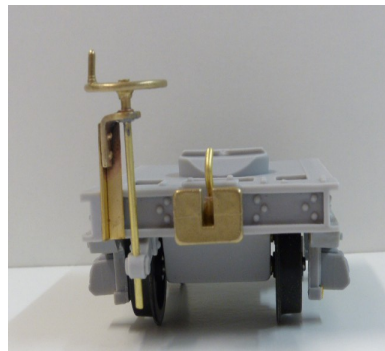
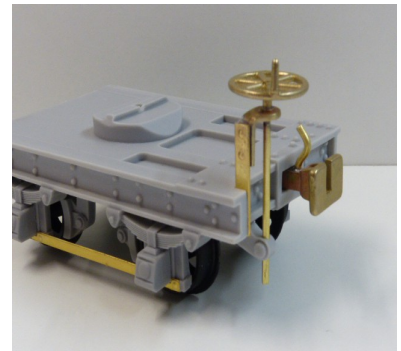
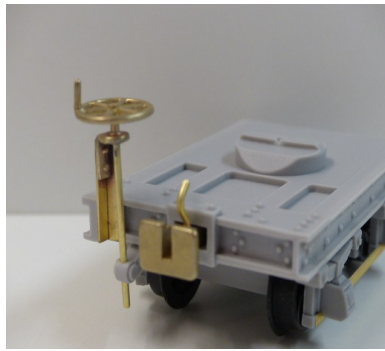
8.

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.



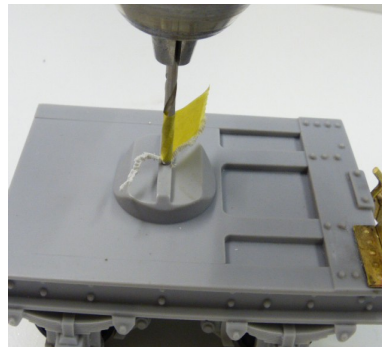
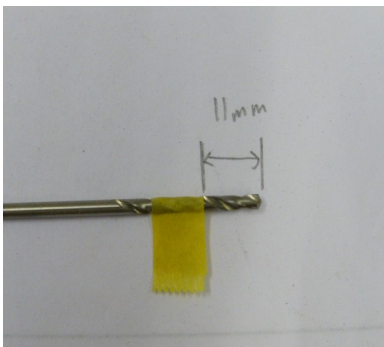
8a.

These pictures refer to the generator van hand wheel and stanchion.

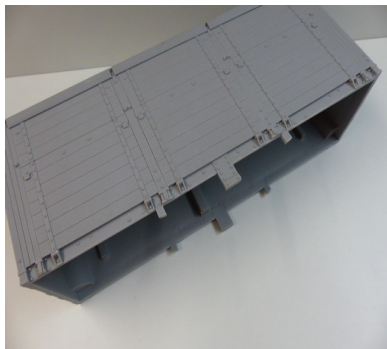
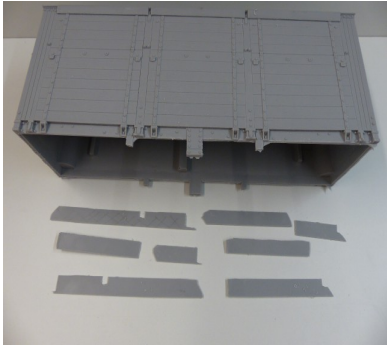
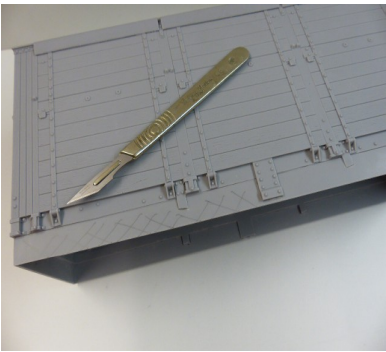


9.

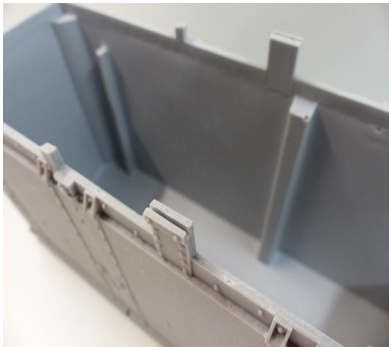
Mark up a 2.6mm drill to 11mm and drill for the pivot screw, fit screw. That's the bogies finished.



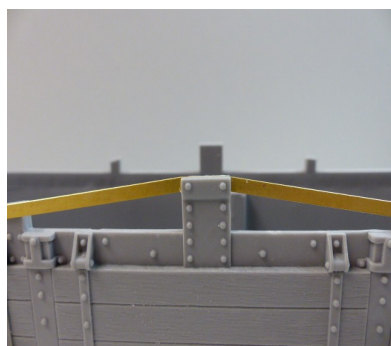
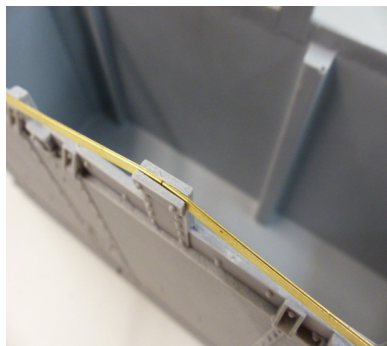
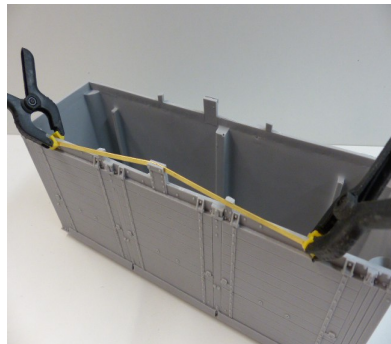
10.



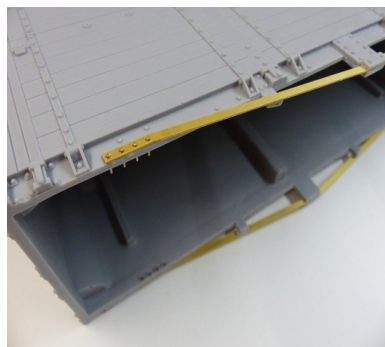
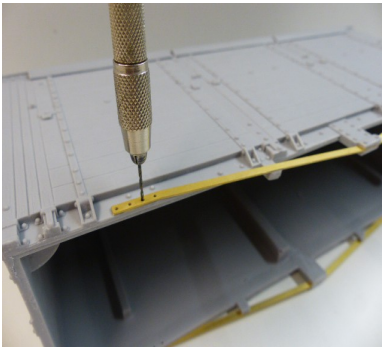
11.



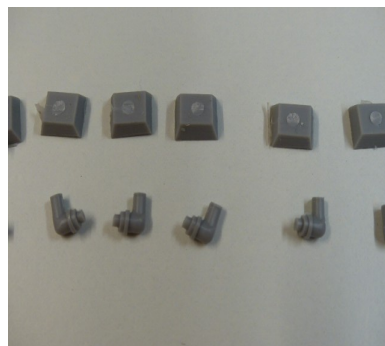
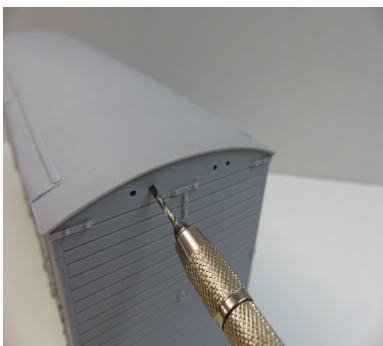
12.



13.



14.

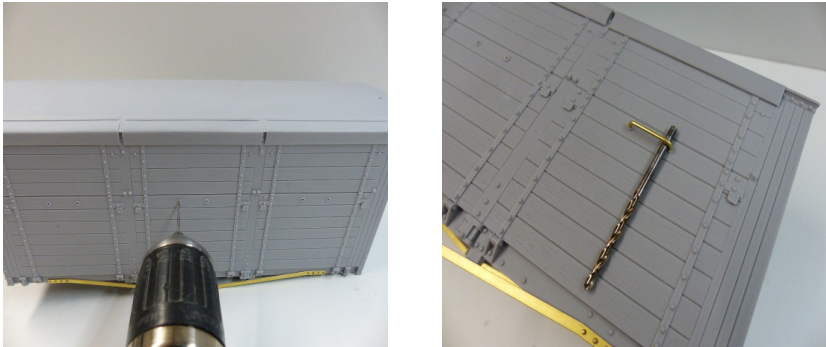


15.

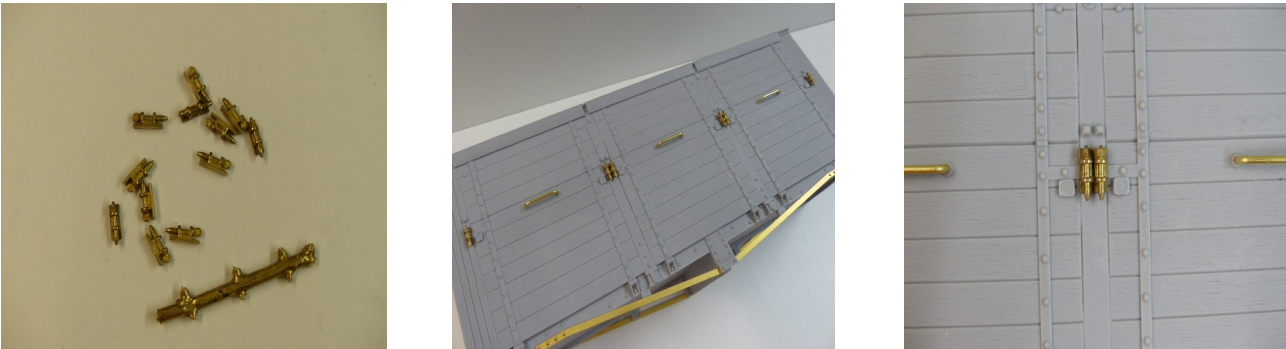
Because this body is exactly the same as the machinery van (as it was in real life) it does not have a hole on the ends for the starting handle hatches. This needs to be cut out by the builder. Study the first picture in this step as to positioning of the hole. Lay the hatch onto the body and mark with a scalpel or sharp pencil. Cut out these holes in any way you are happiest. We did ours by chain-drilling with a 3mm drill and filing to the marked out lines.



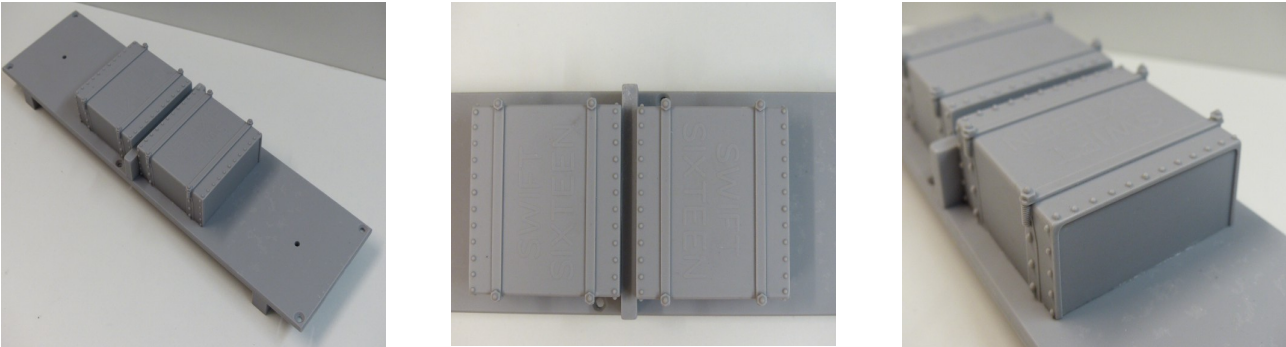
16.



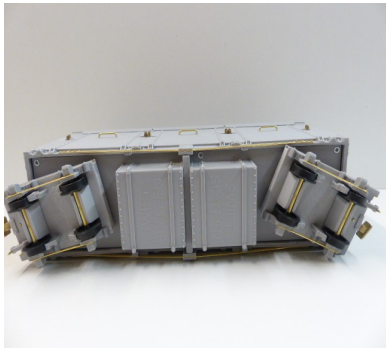
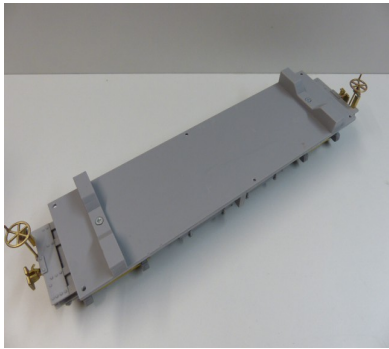
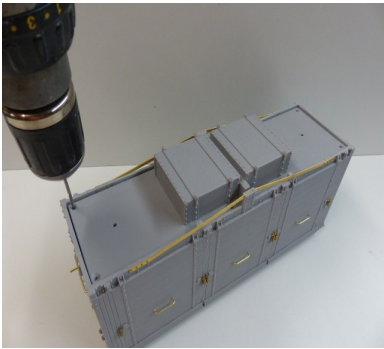
17.



18.



19.



20.



21.

