

## **Brassmasters – Replacement coupling rods for the Bachmann 08**

### **Coupling Rods**

Each coupling rod is in three pieces; a front middle and back, albeit the rods are not handed and can be used either side. Included in the fret are bosses for the coupling rods and if used will enable replica rods to be produced. Half etching on the bosses allows a smooth transition when filed, from coupling rods to the bosses. Each coupling rod has also been designed to have the correct forked joint and can be fitted with a small piece of wire to represent the oil box fillers/covers. Build the coupling rods using a piece of 0.45mm wire (not supplied), a slight squeeze on the wire will allow it to fit centrally in the centre coupling rod until both front and back have been soldered on.

### **Assembly**

Separate the coupling rods from the etch and tin each rod along the face that is going to be soldered and build the laminations using wooden cocktail sticks in the rod holes to align them. Flood the rods with solder ensuring the cusp is covered. Do not forget the little bits of wire for the oil filler caps when putting the laminates together.

When the laminates have been soldered together fit the bosses if required again using cocktails stick to locate the boss and tweezers to assist in alignment.

The bosses of the 08 have been designed with a half etch to allow subtle blending between the rods and the bosses, (see note below) clean up the rods with a file and wet and dry emery cloth/paper. Fit the two halves of the coupling rods together, either with the rivets supplied or piece of wire soldering the wire to the outside faces of the forked joint, having first countersunk the holes slightly. Ensure the rods move freely but there is no lateral movement to distort the wheelbase length.

Open the holes for the crankpins, open them up slowly and carefully with a tapered broach moving up sizes as necessary and do not force the broach into the hole but allow the broach to do the cutting. The final cut may be made with a hand held 2mm drill. With the holes opened up, drill slightly to countersink the holes to remove any burrs.

To fit to the Bachmann model again open up the holes a little bit at a time until a sliding fit has been made on the crankpin bushes, test and adjust accordingly.

Things are tight but the effort is worth while.

The half etch washers have been included to replicate the washers as fitted to the prototype and may be omitted if not required or you are unable to fit them due to limitations with clearance.

Note: **Ultrascale drop in wheel sets.**

Ultrascale wheel sets for the Bachmann shunter come complete with the crankpin and bush cast into the wheel set and ready quartered. Under no circumstances should any attempt be made to remove this bush. The bush has a depth of 0.040" and it is suggested that if using the bosses on the coupling rods the rear bosses should be omitted and if necessary the front bosses when assembled be reduced slightly to give a small amount of free play to the rods when negotiating curves around the track. The amount to be reduced will be dependent on the radii of the curves to be negotiated.

### **Balance weights**

Balance weights have been supplied for both the front and rear of the wheels and can be glued in place with superglue. Milliput can be used to infill between the balance weights if required. The half etch balance weights are for fitting at the rear of the wheels where clearances may be limited. The larger of the balance weights is fitted to the centre driver.