

C204 – A3/A4 Connecting Rods

The replacement rods were originally designed to go with the Brassmasters' EasiChas for the Hornby A3 and A4 and Alan Gibson or Ultrascale replacement wheelsets. However, they can also be used to replace the original rods on the Hornby locomotive or with any other model of a Gresley A3 or A4.

The prototype rods had thick bosses and overlays for these are provided on the etch. However, thicker bosses can lead to clearance problems in model form, so you may wish to miss off the inner or both boss overlays.

Brassmasters also produce replacement coupling rods for the A3 and A4; these are available separately.

1. Each side is manufactured from three etches. There are also front and back overlays for the boss.
2. Cut one set of rods from the fret, the two outside parts [1 & 2] and the centre section [3].
3. If using Markits wheels find the largest drill that will pass through the crankpin holes; if using the original Bachmann wheels, Alan Gibson or Ultrascale wheels, open the crankpin holes using a 1.5 mm drill. Using the same drill, drill perpendicularly into a scrap piece of wood. Leave the drill in the hole in the wood. Tin the mating surfaces of the three etches and place over the drill. This holds one end of the rod accurately ready for soldering. It is critical to align the three parts exactly in order to make one rod so take some time tweaking.
4. Place a little flux along the edge of the rod and apply heat; the solder on the soldering iron will run between the rods and join them. **The secret is to apply only a little solder at a time.** Solder will fill the "cusp" and give the impression of a solid rod. Repeat for the whole length of the rod.
5. Repeat for the other connecting rod.
6. There is a boss to be fitted [4] each side of the connecting rod. Apply each boss holding in place with a cocktail stick and solder in place using the same technique as for joining the rods. Clean up each rod with files.
7. Carefully blend the bosses into the face of the rods.
8. Open up the crankpin holes in order that the rod will either rotate on the crankpin screw (if using Markits wheels) or on the crankpin bushes (if using Hornby, Alan Gibson or Ultrascale wheels). This can be done with a reamer, broach or a fine Swiss file.
9. Drill out the hole at the little end to suit the pin being used to attach the rod to the cross head.

