

## **2mm Scale Association replacement chassis for Farish BR CCT**

### **Historical Notes**

The BR 4-wheel CCT vans (diagram 816, six lots) were constructed at Earlestown Works between 1960-61. Number range was 94101-94922. Their life was relatively short, as in 1983 BR took the decision to withdraw all 4-wheel parcels stock, and the last were withdrawn from revenue service in 1988. Some however remained as engineers stock.

There were detail differences between individual vans in such items as axleguards and footboards, the latter often being removed in later years. This kit has been developed from measurements of a specific van at the Magnapp's farm railway museum in Essex.

### **Assembly instructions**

#### **Parts required**

1 x 3-745	BR CCT chassis etch
4 x 2-041	Rolling stock axle bearing cups
2 x 2-004	7mm Coach wheels
4 x 2-160	Coach Buffers
1 x 2-454	BR dynamo
1 x 2-453	BR Voltage regulator
2 x 2-346	Turned brass vacuum cylinders

0.3mm brass or nickel silver rod  
paints and transfers.  
solder and tools

#### **General**

This kit is designed for adults. It should not be given to children under 16.

Certain parts of the etch are very delicate, and therefore care is needed when cutting both them and adjacent parts out. Spares are provided of certain small or delicate items.

Although I suppose it would in theory be possible to assemble the kit using superglue, for these instructions soldered construction is assumed.

Unless otherwise indicated, fold lines for 90 degree folds are on the inside of the fold, for 180 degree lines on the outside of the fold.

Parts on the etch are numbered. An enlarged picture of the etched fret is provided for clarification. Study this and the instructions carefully before beginning assembly.

#### **Underframe**

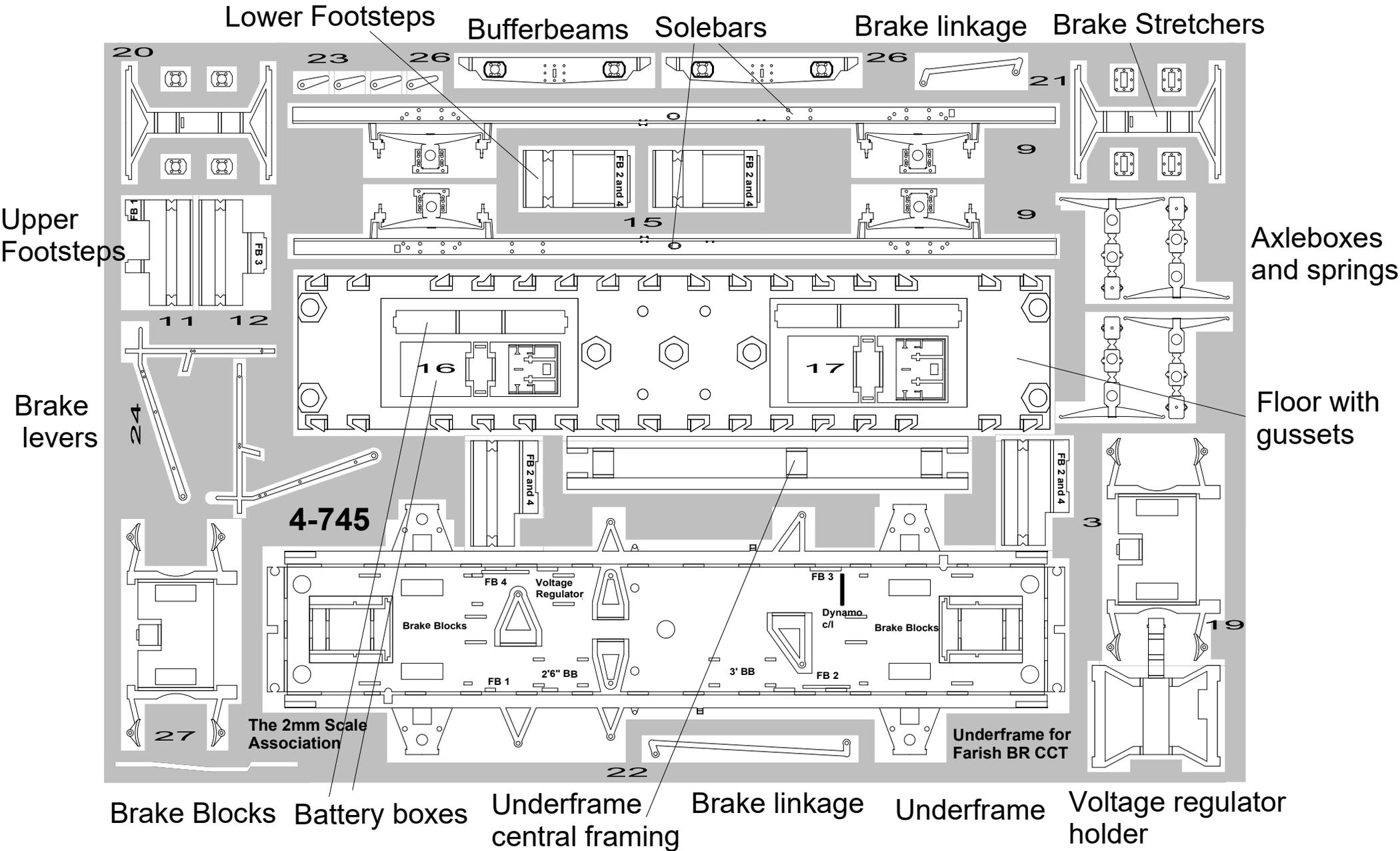
1. Fold up the main underframe unit, solebar supports first then bufferbeam supports.
2. If you will be using DG or similar couplings fold up the mounting box at each end of the underframe.
3. Solder on the two solebar overlays (part 9) by aligning over the axle bearing cups. Check with the body that these slide between the triangular strengthening pieces.
4. Fold up the four axleguard/spring etchings (part 10) into a Z shape and solder the three layers together. Now solder in place, again by aligning over the axle bearing cups, ensuring they are square.
5. Decide if you will be fitting footboards to your model – these were often removed in later years. Cut out the four upper footboards (parts 11,12,13,14). There are three different types, and where they are to located is labelled on the underframe. Fold the profiled section over 180 degrees and solder to the lower section – or simply cut it off

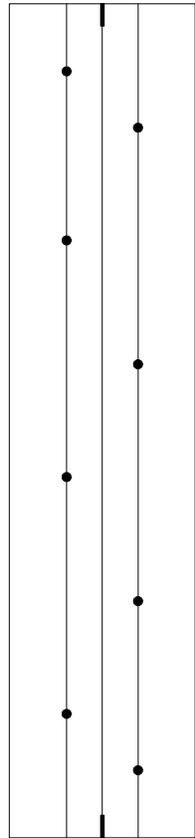
- if you don't wish to include it. Fold down the locating lugs. In turn, solder each footboard in place, making sure it is accurately located.
6. Similarly fold up the two lower footboards (part 15) and solder in place. For strengthening reasons, no fold lines are included on this part, but it is simply folded 90 degrees directly at the rear of the footboard, making sure you have the profiled surface facing upwards.
  7. Fold up the two V hangers from the underframe.
  8. Cut out, and fold up the underframe central framing and solder in place on the underframe.
  9. Fold up the 2'6" and 3' Battery Boxes (parts 16 and 17). Each is formed by two U sections, one inserted and soldered inside the other. When this has been done, locate the battery boxes in the indicated places on the underframe and solder in place.
  10. Fold the voltage regulator carrier (part 18) into a U shape. You may wish to strengthen the folds with solder. Carefully fold the square sections at the end into a Z shape to form the end box, and file off the tags. Solder the completed assembly into its indicated place on the underframe.
  11. Fold the brake blocks into a U (part 19), and fold up the locating tag. Fold the brake stretchers (part 20) into a channel shape, and locate in place between the brake blocks, and supported by the locating tag. Solder the completed assemblies in place on the underframe.
  12. Locate the two vacuum cylinders in place in the holes provided in the underframe, and solder in place. Thread 0.3mm brass wire through the three sets of V hangers, the brake rodding and two vacuum cylinder levers (parts 21, 22 and 23). Leave rod protruding from the two outer V hangers for the brake levers. See Figure 2 for details of the brake rodding.
  13. Fold up the two brake levers (parts 24 and 25), noting that they are not identical. A template is provided on the etch for the horizontal shape, then the ratchet section is folded. The brake levers are attached to the underframe at the V Hanger, in the slot in the solebar, and at the bottom of the axleguard.
  14. Cut out the bufferbeams (part 26). If desired, solder on the etched overlays for buffer and coupling mounting plates (parts 27 and 28, spares are provided). These are probably best done whilst still attached to the etch. Fold the end wings of the bufferbeam around, and solder the bufferbeam to the underframe ends, ensuring by use of a flat surface the top surface is flush with that of the underframe. Test fit to body to ensure a snug fit.
  15. Fold down the V shaped protrusions from the floor – these form the characteristic strengtheners welded to the solebar on the prototype. Use a small screwdriver, and check by eye that they are all vertical. They are quite robust.
  16. If mounting floor to underframe using bolts (size 10BA recommended) then solder these in place inside the body over the holes provided at ends and in centre.

## References

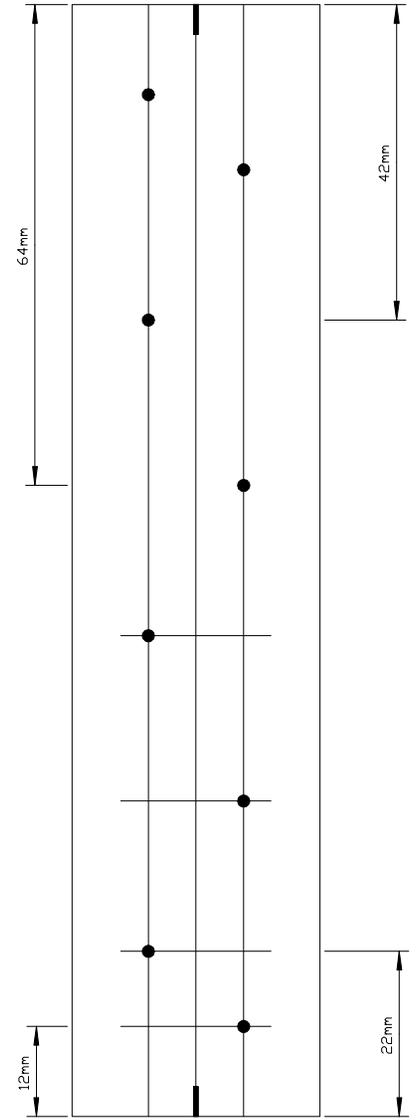
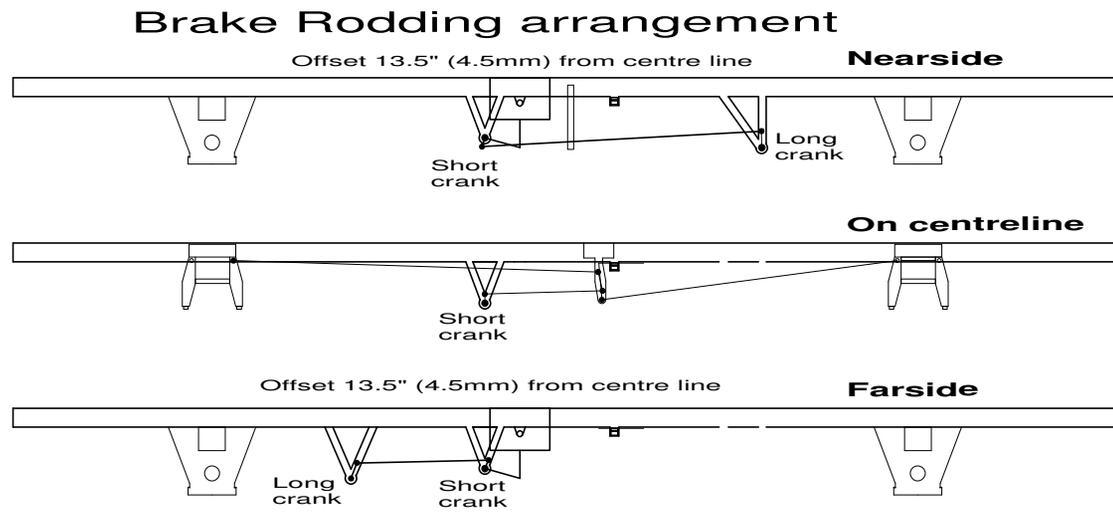
1. Model Railway Journal No 10, page 246, Wild Swan Publications
2. British Railways Mark 1 Coaches, p189-192, Keith Parkin, Pendragon/HMRS
3. British Railways Coaching Stock in Colour p44, Robert Hendry, Midland Publishing
4. British Railway Non-Passenger Coaching Stock, pp50-52, Geoff Gamble, Cheona Publications
5. BR General Parcels Rolling Stock pp12-13, David Larkin, Blandford Barton

# Replacement underframe for Farish BR CCT

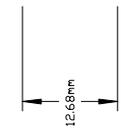


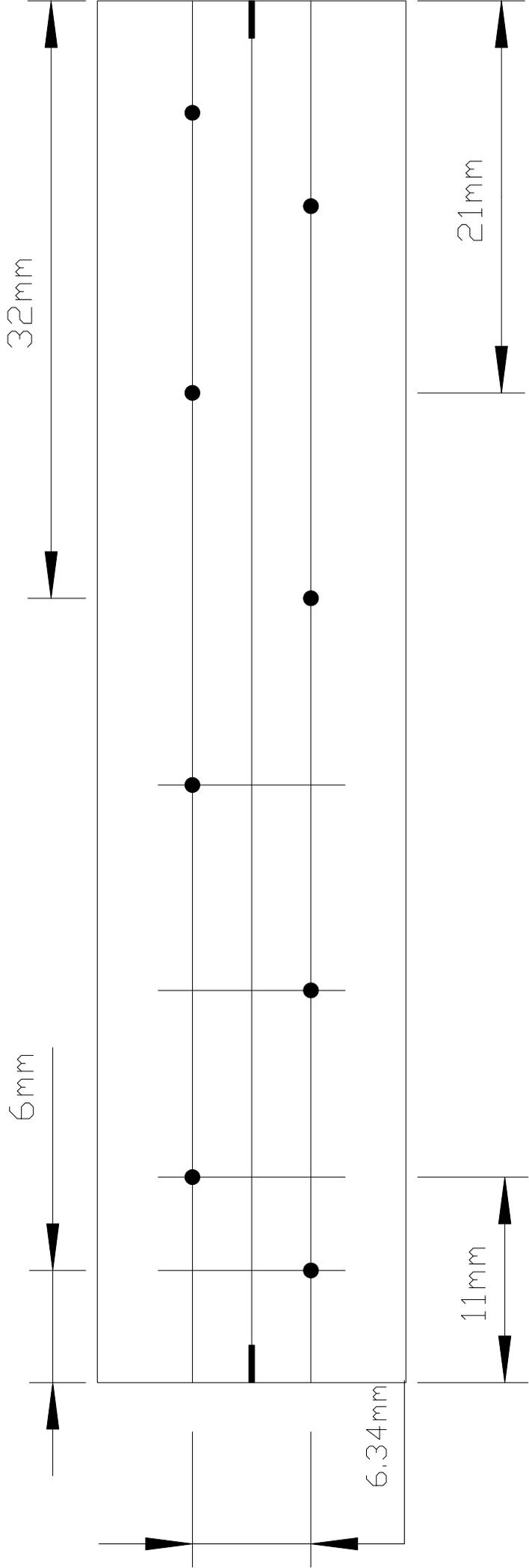


Roof layout  
Full Size 3mm scale

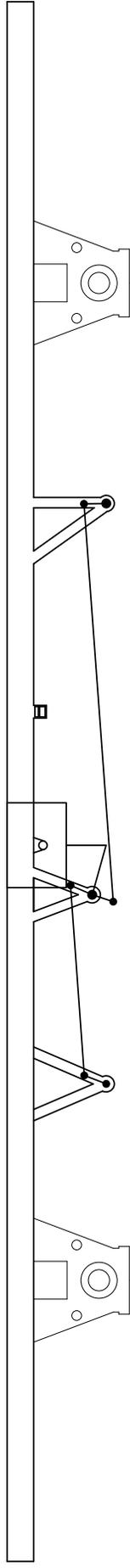


Roof layout  
Full Size 4mm scale





**Figure 1 - Roof layout**



**Figure 2 - Brake Rodding**