BR UNDERFRAME AND BOGIE INSTRUCTIONS

Underframe

1. Cut out and fold up the main underframe unit (part 1), solebar (side) supports first then bufferbeam (end) supports. On the 57' underframe, remove the handwheel supports, which are provided only for the BR GUV.

2. Cut out and fold up the main trussing unit (part 2). It may be necessary to shorten the ends of the trussing by around 1mm to clear the bogies. Cut out the cross members (parts 4 and 5) and insert into the slots on the trussing units. Finally fit the cover plate (part 3) on top of the trussing, folding down the parts that cover the cross members.

3. Fold up the voltage regulator carrier (part 6), and solder in place on the underframe where marked. The part on the end is folded up in a Z-shape to form a three thick layer, representing the fuse box.

4. Fold up the battery boxes, into two U shapes, one fits inside the other to form the box. Solder in place on the underframe. On the full brake, the battery boxes were opposite one another, on most other coaches diagonally opposite.

5. Fit the cosmetic solebars and footboards (found on the main body etch) in the slots provided on the underframe unit. Most non-corridor stock had continuous footboards, whereas corridor coaches had footboards under each door, specific to each coach type. On corridor brake stock, a lower footboard is often provided. This has to be folded through 90 degrees. The carrying arms should be angled slightly back from the vertical.

6. Solder the bufferbeams in place. Overlay parts (10 and 11) are provided to be soldered on to the bufferbeams.

7. Fix in place the buffers, vacuum cylinders, dynamo and voltage regulator.

8. Thread brass wire through the V hangers, and include the vacuum cylinder actuating rods (parts 8). Fix in place.

9. Solder two nuts (10BA or M1.6 recommended) above the bogie pivots for later bogie fixing

Bogies

1. Cut out the functional bogie stretchers, and solder the axle bearings in place. **Do not** fold up the stretcher at this point.

2. The etched bogie layers are built up on the stretcher one at a time, using the axle bearings as location points. Solder them to the stretcher first, and only cut them from the fret **after** this. There are six layers, as follows: inner side, outer (cosmetic) side, springs, inner axlebox, middle axlebox, and outer axlebox. Note that the springs and axleboxes are set at the correct wheelbase, so both can be soldered at once to the side, aiding their correct location. The spring layer has an additional central part that folds through 180 degrees to produce a better representation of the central springs (file off the tabs after folding up and soldering this section).

3. The inner side has small footboards. If fitted to your prototype, fold them out. Otherwise remove them.

4. Having performed Step 3 for both sides of the bogie, the stretcher may be folded up and soldered. Insert wheels and test for free running. Remove them again.

5. If desired, coach brakes (Association part 2-198) may be fitted.

6. Spacing washers are provided to set the bogie at the correct height. Using these, and bolts, mount the bogies on the underframe.