

- GENERAL INSTRUCTIONS -

These are general instructions which cover the following kits -

HS HCX HFL SHG BHG LHG PHG FHG

Specific differences are shown on the attached diagram sheet so check this carefully during assembly.

PLEASE READ INSTRUCTIONS THOROUGHLY BEFORE COMMENCING ASSEMBLY

Should any part be missing or damaged, contact Lloyds Model Railways for a replacement.

General: As with any task, the right tools make for an easier job and a better result. The following tools are therefore recommended:

Large flat file

Razor saw and small mitre box

Set of jewelers' files

Small blade screwdriver

Craft knife

0.5, 1.6, 2.5mm drill bits

Pin vice

Sheet of Grade 0 glass paper and sheet of Grade 240 wet and dry paper

ASSEMBLY

The two main construction methods are:

- (a) Low melt solder - Low melt solder is an excellent medium for use with white metal kits. It is quick and easy providing a much stronger joint than can be achieved with glue. It has the added advantage of easily repairing minor casting flaws, and because of the relatively low temperature, many parts can be held in the fingers while soldering. Brass to white metal joints can also be made. Low melt soldering requires the correct type of soldering iron (e.g. Dick Smith T2000). These irons have temperature control, as low melt solder requires around 200 degrees centigrade. You must use special low melting point solder, such as that available from Carrs and Weico. DO NOT ATTEMPT TO SOLDER ANY CASTINGS WITH A STANDARD SOLDERING IRON!

- (b) Glue - Superglue and Plastibond are two types of glue suitable for use with this kit. Some modellers prefer to superglue major joints first then "fillet" the joint with Plastibond. Small detail parts are best glued with Superglue.

CONSTRUCTION

Whether you choose to glue or solder, you must first gently wash the castings in warm soapy water to remove mould release residue.

Carriage sides and ends: The main area where cleaning up is required is the top edge of the carriage sides where there is inevitably some flash from the feed sprues. Use a broad flat file to remove the feed sprues, then place a sheet of 240 grade wet and dry paper on a flat surface (Pyneboard or Masonite makes a good surface to work on). Gently rub the carriage side back and forth to ensure that the top is flat. Be careful not to overdo it, you only need to obtain a straight edge for the roof to sit on. Any flashing in the windows can be easily removed with jewellers' files. Some windows may have a small feed sprue inside; if so, carefully remove this with a craft knife. Drill handrail holes (0.4mm) as shown in diagram. Lastly, check the side for straightness and, if necessary, gently straighten. Complete the assembly of sides/ends and, when complete, check again that all is straight and square. Fit handrails and buffers. At this point, a gentle brush with a suede shoe brush will polish the car as preparation for later painting.

Roof. The roof fits in between the ends so measure carefully before cutting to length using a razor saw and mitre box. Lightly sand roof with Grade 0 glass paper. Glue the roof in position and use Plastibond or automotive "spot filler" to ensure a neat joint at ends. If necessary, lightly sand to ensure a smooth joint. Using a paintbrush, apply diluted Aquadhere (30% water) to the roof and cover with shiny gift wrapping paper (rice paper). Use a piece larger than the roof and gently press down and smooth out, especially on the "rain drip" o~ bead along either side of the roof. Put aside and allow to dry. When dry, use a sharp 6" jewelers' file carefully along the corner edge of the sides and ends to neatly remove the excess paper. If any section is loose, simply paint again with a little Aquadhere. This method results in a pleasing finish and neatly covers any joins. Mark and drill (1.2mm) for roof vents as shown in diagram.

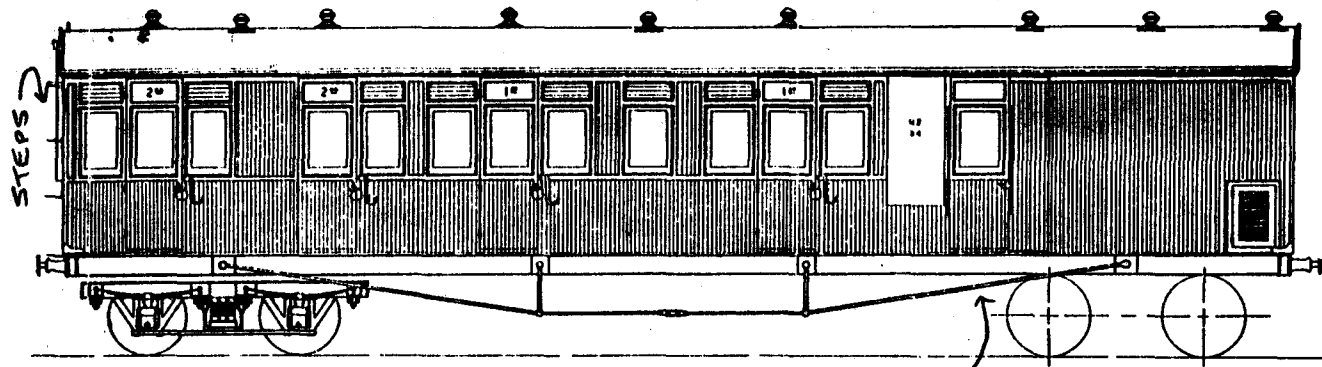
Floor. The floor fits between the buffer beams and locates on the bottom cross beam of ends. Measure car and cut floor to be a neat fit using a razor saw and mitre box. Drill holes (1.6mm) for bogies and underbody detail as shown in diagram. HCX and HFL only: fit etched steps as per diagram - place floor on car body and mark location of steps on floor, then use a craft knife to trim edges of floor to clear the steps. For SHG & BHG see diagram. Attach underbody detail, do not glue floor in position until carriage has been painted and window glazing fitted.

Bogies. See diagram. Before glueing the bearings into the axle boxes, check that they will fully seat in the hole - some bearings may have a small "spigot" left on the end which should be filed off. Using a very small dab of superglue, fix brass bearings into sideframes. Clean out cent re hole of bolster with a 2.5ram drill bit~ and fix bolster to one sideframe. Now for the fun part! Place wheelsets in bearings and locate remaining sideframe. Hold together, place on flat surface and fasten remaining sideframe. Place bogie on track and, if necessary, gently adjust so that all wheels sit squarely on the track. Check that axles spin freely. Bogies can be painted (brush or airbrush) with wheels in place.

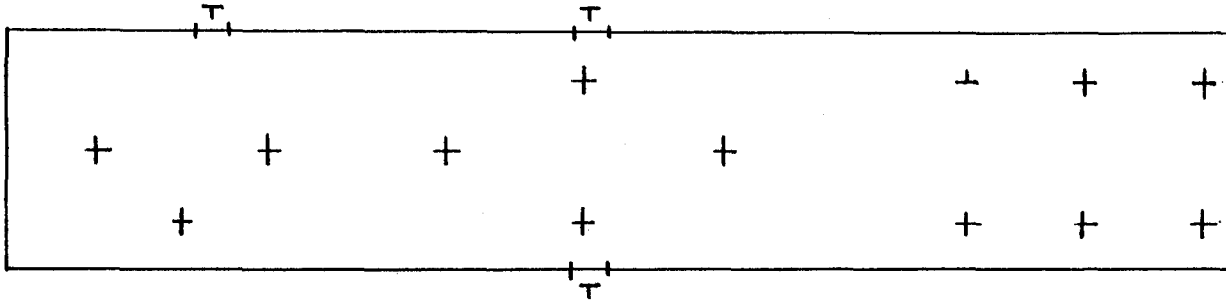
Painting. Carriage body can be given a very light "dust" coat of primer grey (Holt's grey auto primer in the aerosol can available from K Mart auto etc is ideal for this) to show up any areas which may need spot filling or smoothing before final colour coat. For HS, HCX & HFL, door hinges and locks should be highlighted in black. For HS & HCX, highlight "S" shaped door handles in gold. Apply lining, decals and clear lacquer. Brush paint steps, buffers, truss rods etc. Add window glazing (Selleys Acrylic Quick Grip is very good for this as it will not "frost" glazing material as can superglue); use sparingly. Paint inside of toilet windows white (or use "Write on" freezer tape). Paint floor and underbody detail. Attach bogies with screws supplied; do not overtighten, bogies must be able to pivot freely. Finally, glue floor to body, or glue a nut to underside of roof and use a long bolt through floor to secure.

Also available as white metal kits: CHG, HG, KKG, CX (mansard and elliptic roofs), SRC, PV & CV plus a full range of white metal detailing parts - roof vents, brake handles, battery boxes etc. Send SSAE for full listing.

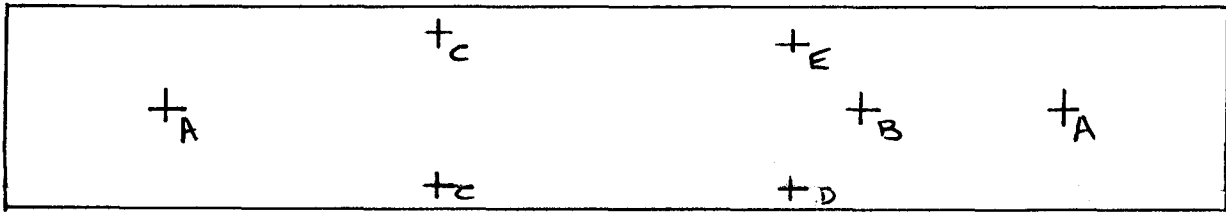
Lloyds Model Railways
PO Box 57
Latham ACT 2615



Note: Truss rods on model shortened to clear bogies.



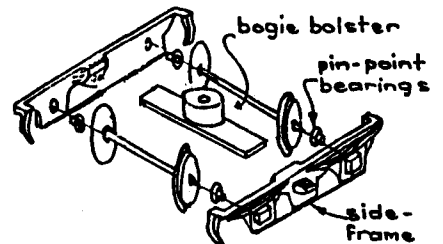
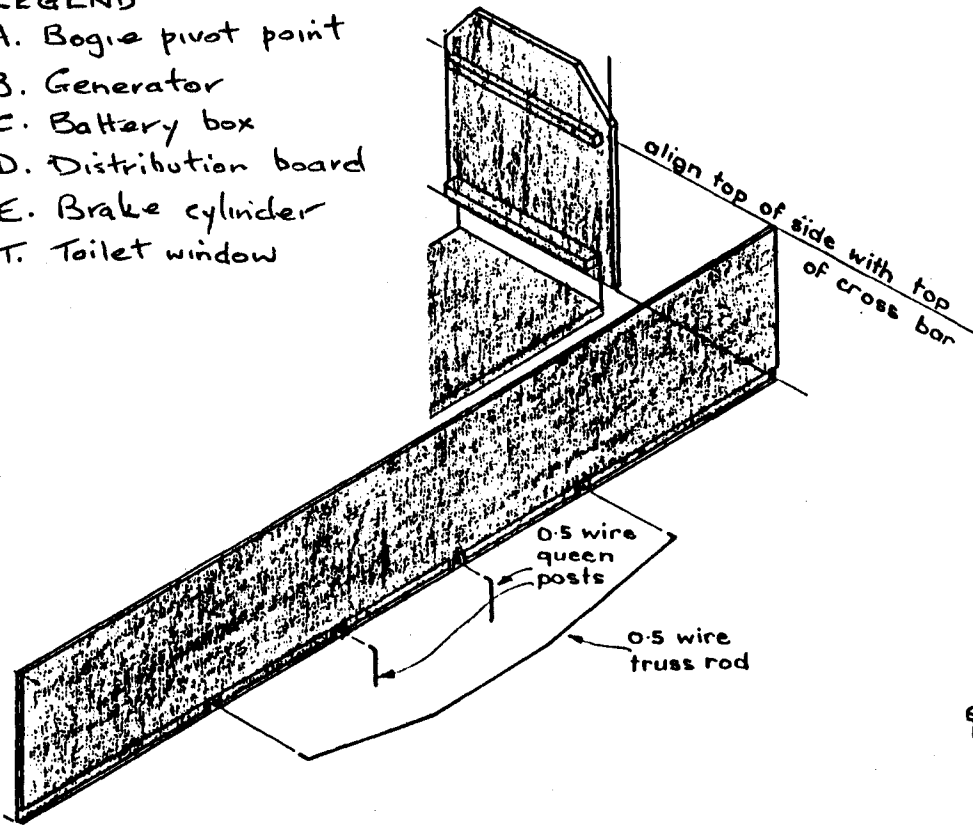
Roof detail
(from above)



Under body detail
(from below)

LEGEND

- A. Bogie pivot point
- B. Generator
- C. Battery box
- D. Distribution board
- E. Brake cylinder
- T. Toilet window



BOGIE ASSEMBLY