

W37 BR(W) HAWKSWORTH AUTO TRAILER

Diagrams A38/A39/A40/A43

25 built 1951-1954; withdrawn 1964-1966; 7 preserved

60'

These etched sides and ends can be built into a complete coach using products from our range as supplied in our full kits. Please refer to the panel opposite. Should you prefer they can also be used for scratchbuilding.

These coaches were the last GWR-style auto trailers to be built. They used GWR diagram numbers, designs and control equipment but were built entirely under BR auspices. The body shell was identical for all four diagrams, the differences being in the layout of the interior.

They were in service on many of the ex-GWR branch lines either working as a single coach or with other auto trailers and intermediate trailer coaches. Several worked the Clevedon branch from new until the end of steam working. They could also be seen on the Abingdon, Marlow, and Calne Branches. They worked on the Chalford-Gloucester, Cardiff-Pontypridd, Leominster-Ludlow, Ledbury Junction-Worcester and Exe Valley routes and have been seen as far apart as Paddington and Wolverhampton. W220 and W221, as *Thrush* and *Wren*, worked the Ealing-Greenford route.

Livery

As built the first lot to A38 carried BR crimson and cream. The second lot to A43 should have carried plain crimson but there are reports of some being painted in lined maroon.

Running numbers

A38 W220 - W234: built 1951; withdrawn 1963-1964; 5 preserved
 A39 W220: ex-diagram A38, seating changed in 1952 and given the name *THRUSH*; withdrawn by 1965
 A40 W221: ex-diagram A38, seating changed in 1952 and given the name *WREN*; withdrawn by 1965
 A43 W235 - W244: built 1954; withdrawn 1964-1966; 2 preserved

The lettering for the two named coaches is the same as that for the contemporary catering vehicles.

There is a large amount of information including the history and workings of these coaches in 'Great Western Auto Trailers' part two by John Lewis published by Wild Swan Publications Ltd.

Further information

GWR Coaches 1890-1954	Harris	David & Charles
GWR Coaches Vols I & II	J H Russell	O.P.C.
GWR Coaches Appendix II	J H Russell	O.P.C.
Great Western Way	J N Slinn	H.M.R.S
British Railways Pre-Nationalisation Coaching Stock Vol. 1	H Longworth	O.P.C.

Assembly guide for complete kit

Break out the 'V' hangers and trusses from the underframe. Keep them safe as they will be used later. Drill out the bogie pivot holes 2.5mm at the 43'6" positions, and drill the holes in the 'V' hangers 0.7mm.

Form the upstand on the floor pan. This will be used as a jig for assembly of the body shell.

Sketch 1. Whilst still in the fret, drill out 0.5mm the wire guide holes in the end brackets, ends, end step brackets and sides. Drill out 1.0 mm the hole for the bell spigot. Score the back of the buffer beam in line with the half etched fold line on the end.

Sketch 2. Fold up the tabs on the mounting brackets to right angles and solder an M2 nut on the top over the hole.

Sketch 3. To ensure that the driving end folds along the centre of the window pillars make the fold against a straight edge. Also take care not to damage the long tabs at the top and bottom. Form the ends to match the angles of the mounting brackets.

COMET MODELS components required to complete this carriage are:

Underframe	UW3	Bogies	BW4
Underframe castings	UCW1	Roof castings	RC5
End castings	Special	Roof	C10
Interior	INT5		

Sketch 4. Feed 0.45mm wire through the holes in the mounting bracket tabs and the corresponding holes in the end. There are two half-etched lines on the back to which the top of the tabs should be aligned. Solder the tabs to the end, cut off the excess wire and file the outside smooth. Reinforce the window pillars with a fillet of solder. Re-drill 0.5mm the grab handle holes in the pillars and clean up the faces to ensure the glazing will fit flush to the inside.

Form the buffer beam reinforcement (A) and solder it behind the buffer beam aligning it with the holes for the buffer spigots.

Fold up the end steps (B) and solder them to the ends using 0.45mm wire to locate them. Fix the regulator mounting plates (C) over the triangle at the top of the driving end. Fit the jumper cable mounting plate (D).

Fix the droplight frames to the coach sides.

Sketch 5. Check that the wire guide holes are clear. Screw the end assemblies to the floor pan. Ensuring that the sides are the correct way round (single door to the driving end) locate one end of each side to the end using 0.45mm wire through the sides and long tabs. Bend over the ends of the wire so that they won't fall out whilst you work. Adjust the other end and locate the sides as above. Tighten up the screws, check the alignment and solder together the sides, tabs and wire ensuring that there is sufficient solder to hold the wire in place. De-mount the body shell, cut off the excess wire and file the outside faces smooth.

Sketch 6. Fold up and fix the luggage compartment end ascending steps (E) behind the buffer beam as shown on the underframe plan. Clean off any excess solder and flux from the body shell.

Cut the roof to length and shape it to match the profile of the ends. There should be a slight overlap at each end. File off a short length of the rebate to clear the long tabs on the inside of the coach. With reference to the roof plan, mark and drill 1.4mm holes for the roof vents and fix them in. Fix the roof in place.

On the underside of the floor pan mark the exact lateral centreline. Solder in the solebars then carefully file the overlapping ends until the underframe will fit into the shell. Fit the solebar steps.

Sketch 7. Solder in the queenposts (F), aligning the half-etched line in the top horizontal with the centreline previously marked on the floorpan. Clip off the angled trusses and solder them to the queenposts and the back of the solebar aligned as shown on the underframe plan. A short length of 0.45mm wire should be soldered along the bottom of the queenpost as reinforcement.

Sketch 8. Fold up and solder in place the large battery box (G) and the driving end ascending steps (L)

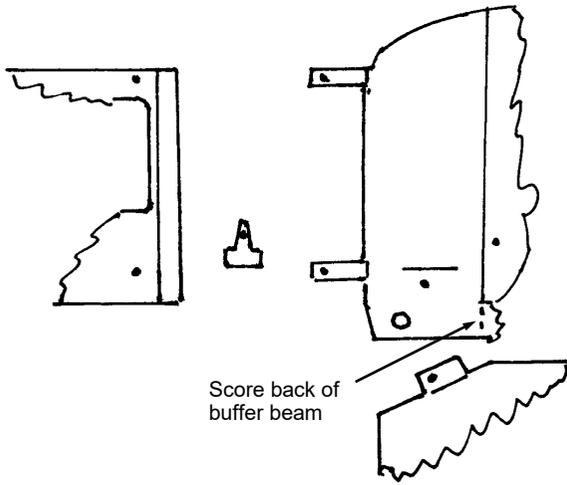
Sketch 9. The passenger steps can be assembled folded back (H) or out (J). The latter should not be used for a running coach as they will foul platform edges. Fold up the step sides and solder in the step treads (K top and bottom). Cut away the half etch sections at the top of the curved arms. Fit them in position by sliding them along the solebar until centred under the passenger door using the body shell as a guide. Solder in place to the underside of the floor pan.

Fix the 'V' hangers, thread the vacuum cylinder arms onto 0.7mm wire and fit to the 'V' hangers. Fit the remaining white metal items, vacuum cylinders, battery boxes and dynamo with reference to the underframe plan.

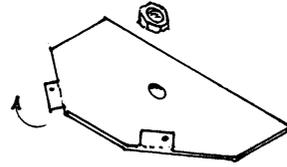
Sketch 10. Fix the tread plates (M) to the buffers and fit them to the ends. Thread the spacing washer (N) over the warning bell spigot and fix the bell to the driving end. Fit the jumper cables to their mounting plates.

SKETCH 1

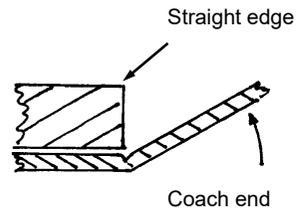
Holes for 0.45mm wire to align parts



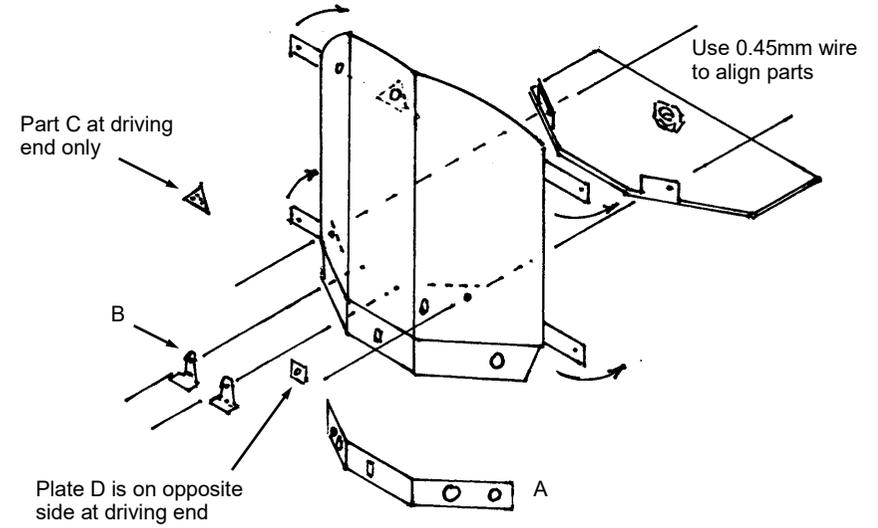
SKETCH 2



SKETCH 3

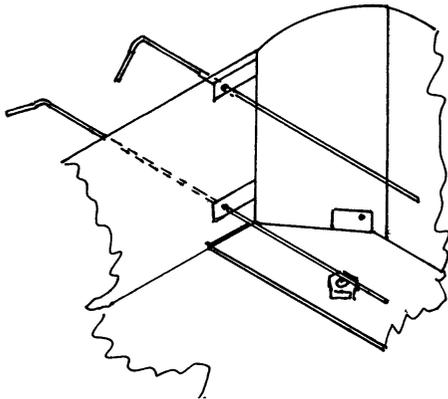


SKETCH 4

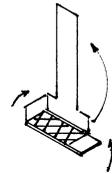


SKETCH 5

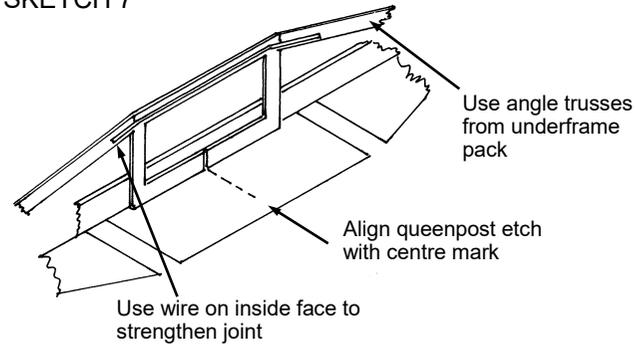
Use 0.45mm wire to align sides to coach ends



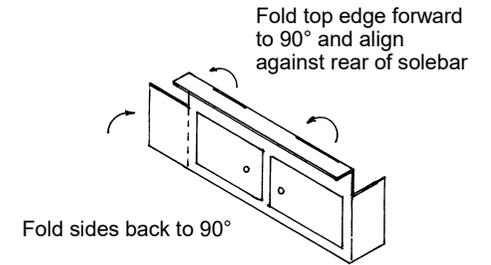
SKETCH 6



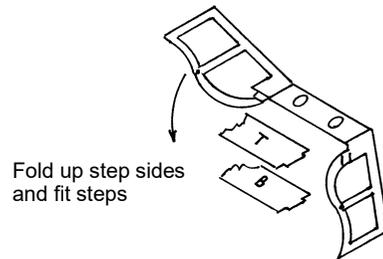
SKETCH 7



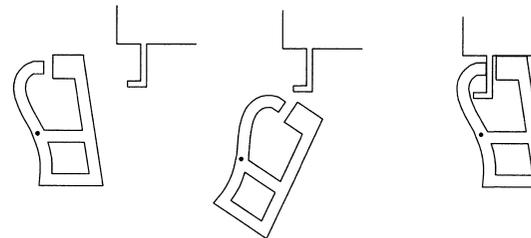
SKETCH 8



SKETCH 9

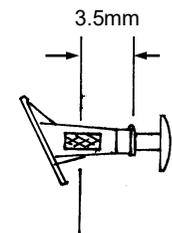


Slide step assembly onto ends of solebars and align with doors then solder in place



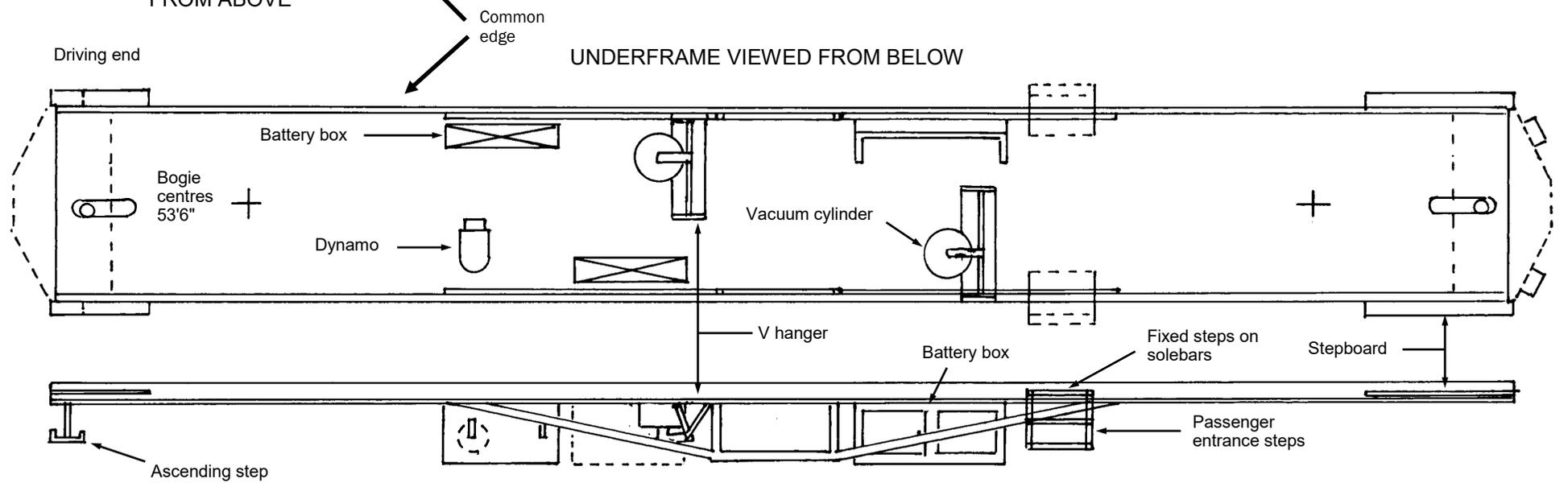
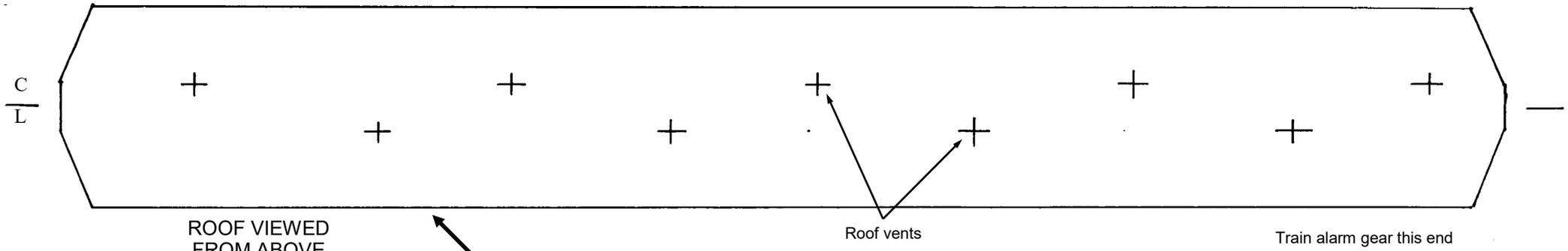
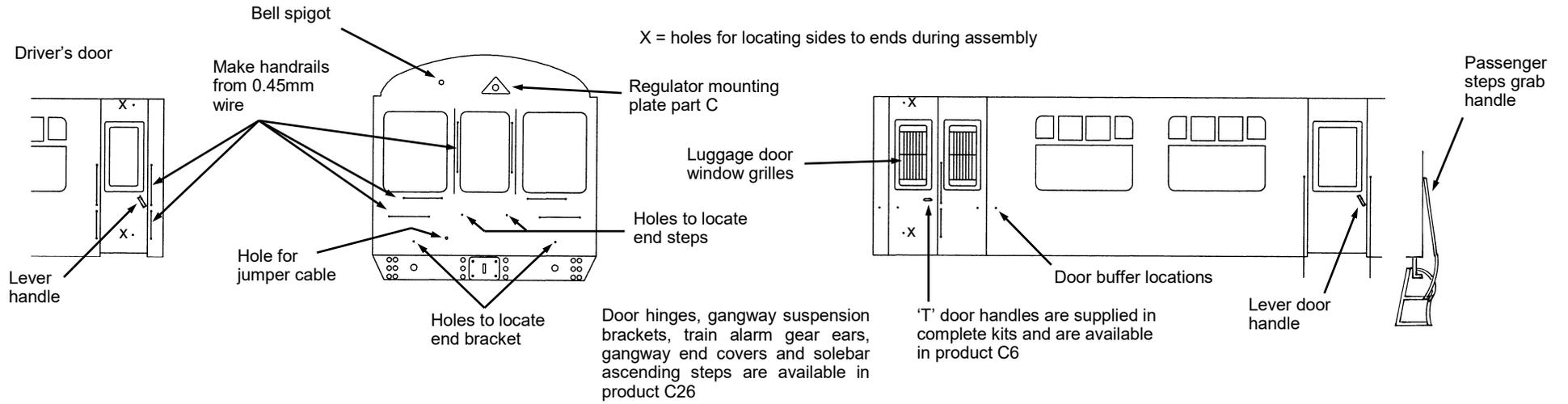
SKETCH 10

Fit tread plates to top of buffers



Tip If the alignment wires are bent to 90° so that they do not fall out during assembly much time and temper will be saved

Hawthorn Auto Trailer



INTERIOR PLANS VIEWED FROM ABOVE



We acknowledge the assistance of the staff and volunteers of the South Devon Railway in the preparation of this product