Decent Models

38 Basford Lane, Charlton Kings,

Cheltenham, Glos. GL53 8DW

Tel. (0242) 515605

CALEDONIAN RAILWAY
DRUMMOND 6-WHEEL COACHES

THE PROTOTYPE

The development of these carriages dates back to the arrival at St Rollox in 1882 of Dugald Drummond.

At that time, the Caledonian had a pressing need for new rolling stock,and no doubt Drummond's forceful personality was instrumental in persuading the Board to loosen the purse strings.

The design of these carriages was closely based on the early Drummond stock built by the North British.

These Drummond vehicles became the foundation from which all subsequent Caledonian designs were developed.

Westinghouse brakes and gas lighting were standard fit, although some brake-vans (and the Killin Branch brake--composite) were oil-lit.

Construction was rapid at first, but by 1889 had lessened, as new building was by then being concentrated on the new bogie stock. Small batches of 6-wheelers were built into the early 1890's, notably the 5-compt thirds with 4 lavatories. Finally in 1894 two Picnic Saloons were built, with simplified panelling, similar to the Lambie 45' stock.

A typical branch line train would consist of a 4-wheel Brake Third, 6-wheel Third, 4-wheel First and 4-wheel Brake-van, usually white-panelled (see Livery notes). The 6-wheel (and 4-wheel) carriages were also used to form local sets in the Central Area (Cathcart Circle, Edinburgh local). A typical local set would be 12 vehicles (all brown) either all 4-wheel or 6-wheel, usually comprising 4 firsts, 6 thirds and 2 Brake-thirds.

By the turn of the century, 4 and 6 wheel carriages were disappearing from the Central Area local train formations, with the exception of the Cathcart Circle, where they lasted until 1925.

LIVERY DETAILS

Livery in Drummond's time was all over purple-brown, with panels lined out in gold or yellow, edged on the outside with red. After the adoption in 1890 of the white upper panels, most of the 6-wheel, and some of the 4-wheel stock were so painted, but many local area sets retained the all-over brown, notably the Cathcart Circle and Edinburgh local trains. There were, for instance, no white-panelled 4-wheel Thirds.

Underframes were black, roof (when new) white. Also see painting diagram.

INTERIOR FINISH - CALEDONIAN

Third-class compartments are Teak finish, on doors and side-panels also the partitions above the seats. Running across the partitions, just above the seats, was a very small "FLEUR-DE-LYS" design in red.

The only exception to the above is in the Third saloon, (but not the Family Saloon) where the side/door panels were trimmed in buttoned material to match the seats.

Third-class seats were in a very dark wine colour (Pantone 209).

In First-class compts. the raised wooden framing was Walnut with inset panels finished in Maple. The large inset panel above the luggage racks was finished in white Lincrusta.

Seats and buttoned side/door panels were a very dark Blue (Pantone 276) with a narrow strip of lace running along the top of the seat back. First-class compartments had dark blue carpets. These are available in photographically reduced form, in full colour, for 7mm modellers who wish to add a touch of class to their models. A word of thanks is due here to John Smith Esquire for the loan of a full-size carpet.

Sample numbers and building dates etc. are provided as an Appendix.

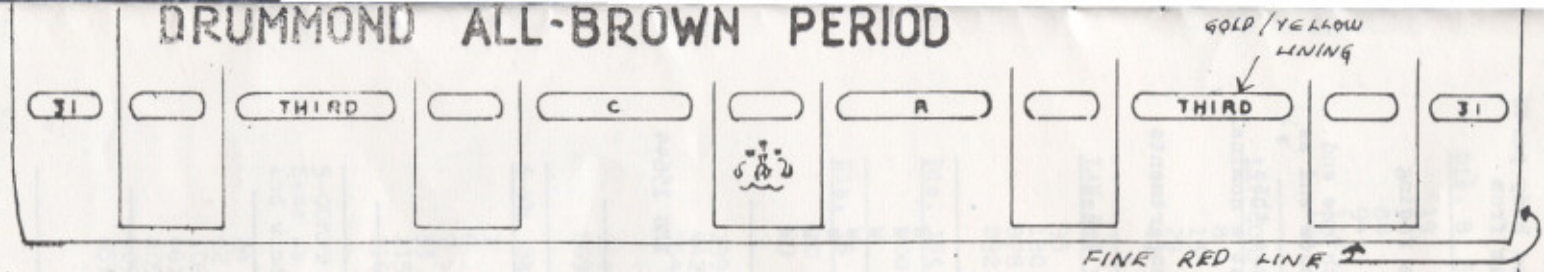
THE MODELS - 6 WHEEL

The aim of this range of models has been to produce the complete range of prototypes even down to one-off conversions.

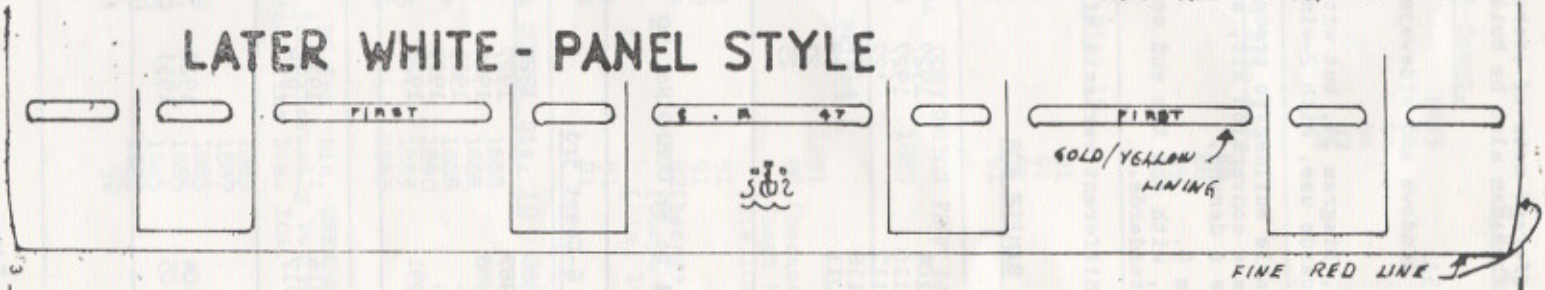
The range consists of the following:-

5-COMPARTMENT FIRST -	Diagram 8
4-COMPARTMENT BRAKE COMPO -	Diagram 10
4-COMPARTMENT BRAKE COMPO (Coaches converted in 1910 from THIRD)	Diagram 10A
4-COMPARTMENT BRAKE COMPO (one-off conversion from Brake-3rd, oil-lit for Killin Branch).	Diagram 11
5-COMPARTMENT LAV. COMPO	Diagram 13C
6-COMPARTMENT THIRD	Diagram 14
5-COMPARTMENT LAV. THIRD	Diagram 15
4-COMPARTMENT BRAKE THIRD	Diagram 16
2-COMPARTMENT FAMILY SALOON	Diagram 50
2-COMPARTMENT THIRD (PICNIC) SALOON	Diagram 51

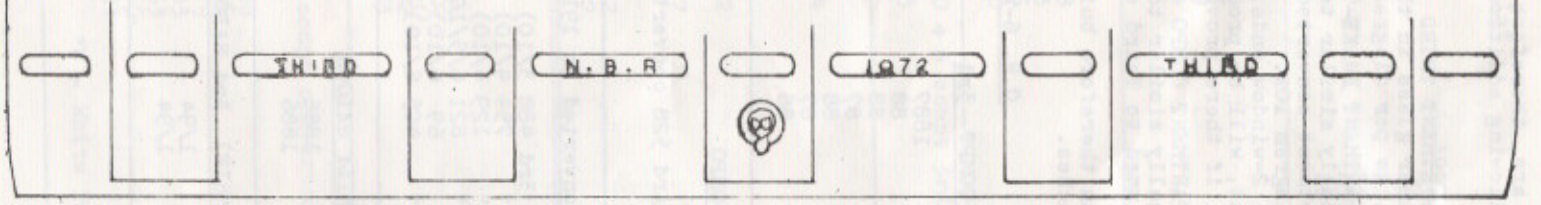
DRUMMOND ALL-BROWN PERIOD

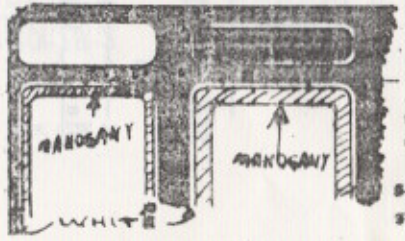


LATER WHITE - PANEL STYLE



Decent Models





NOTE.
WHITE OUTLINE AROUND DROPLIGHT & WINDOW FRAME. DOOR VENTS SOMETIMES WHITE, STILL LINED YELLOW.

LETTERING
GOLD ~ SHADED RED TO THE LEFT, AND BLACK SHADING TO RIGHT & BELOW
C.R. VEHICLES ~ LINED PANELS IN GOLD OR YELLOW - FINE RED LINE ON COACH OUTLINE - SEE ABOVE. BODY PURPLE-BROWN, WHITE PANELLED LATER. UNDERFRAME BLACK. BRAKE-END RED.

There are, therefore, 10 different sets of etched body parts but the following additional coaches can also be built from these:-

a) 4-COMPARTMENT THIRD Dia. 15A.
Fit clear glass in the Lav. windows and sideways facing seats, as per diagram.

b) 5 COMPARTMENT BRAKE-THIRD
Externally similar to THIRD, Diagram 14, but with one end compartment converted for Guards use, with 2-window end as per Diagram 10A.
NOTE. 2-window ends, to enable builder to produce this variant, will be produced as a conversion kit, at a nominal price, if there proves to be a demand.

c) 5-COMPARTMENT COMPO Diagram 9.
Externally similar to First, with the two end compartments re-trimmed to Third class standards.

You can therefore build 13 different variants of these 6-wheel coaches.

C.R. 6-WHEEL - SAMPLE NOS

Dia. 14 5 COMPT 3rd

30	1887	16104	1927	W
36	88	16110	1927	W
43	88	16117	'27	W
93	87	16116	'27	W
138	88	16211	28	W
254	87		27	W
596	88		25	W

KILLIN Bk COMPO

Dia. 11.
Built as Third 528 converted 7/91 to Bk COMPO No. 50 LMS 15644 OIL-LIT.

Dia. 10A Converted in 1910 from 6-Compt 3rd

400	(ex 3rd 488 3/10)	15986	1928
401	(" 754 4/10)	15987	1927
402	(" 129 4/10)	15988	1926
403	(" 821 6/5/10)	-	1925
404	(69 6/10)	-	1925
405	(" 405 6/10)	15991	1928

Dia. 50 FAMILY SALOON

17	1886	15316	1929
18	1886	15317	1928

Dia. (LAMBIE) 3rd SALOON

4	1/94	15304	1928
5	1/94	15305	1931

C.R. 6-WHEEL 1st

Dia. 8 5-Compt.

19	1883	15361	1927	W
52	84	15382	27	W
88	84	15408	27	W
94	84	15414	27	W
114	87	-	25	-
183	84	15483	28	W

LAV-COMPO DIA. 13C

8	88	15604	27
13	88	15609	26
29	89	15624	27
42	91	15636	27

LAV 3rd Dia. 15

95	91	16168	27	W
180	91	16253	28	W
878	91	16936	1930	W
892	91	16950	1928	W

Dia. 15A. CONVERSION FROM LAV COMPO → 4 compt 3rd

400	1889	16473	1927	W

Dia. 16 Bk 3rd

10	1891	16084	1926	W
69	86 (became (Compo 404 (dia.10A)	-	25	-
199	91	16272	27	W
442	91	-	25	W
754	92(became (Compo 401) (Dia. 10A)	15987	27	-
864	91	16922	27	W
869	91	16927	27	W

6-Wh Bk COMPO Dia. 10

1	1888	-	1925
6	1888	-	1925
7	1888	15603	1928
33	1890	15627	1927
215	1883	15802	1928
216	1883	15803	1929

5-COMPT BK 3rd Dia. UNKNOWN

Same as 3rd externally but one end compt converted to Bk, with end windows like Dia. 10A.

24	1885	16098	1927	W
42	1887	16116	1928	W
106	1885	16179	1927	W
461	1885	16533	1925	W
805	1885	16863	1927	W
807	1885	16865	1926	-
853	92	16911	1928	W*

*W - White Panelled

5 COMPT COMPO Dia 9
Converted from 1st, all white panelled.

No	CONVERTED	BUILT	LMS NO	SCRAP
396 (ex 78)	Nov 1910	1884	-	1924
399 (ex 81)	July 1911	1884	15985	1927
392 (ex 82)	Oct 1910	1884	15978	1927
398 (ex 83)	Feb 1911	1884	15984	1927
393 (ex 96)	May 1910	1884	15979	1927
394 (ex 101)	May 1910	1884	-	1925
395 (ex 174)	May 1910	1884	-	1926

CALEDONIAN RAILWAY DRUMMOND 6-WHEEL CARRIAGES

BODY INSTRUCTIONS

Several coaches in this comprehensive range of kits have etched interior partitions, seat ends, side panels etc. For these coaches, you will find individual data sheets in the box.

The following are general notes covering the basic construction - written with the aid of a complete trial build by the designer. Proceed as follows:-

1. Identify the body-chassis attachment tags on the bottom edge of the body sides. Remove the sides from the fret, leaving these tags intact and unbent.

2. While the sides are still flat, solder the 3rd or 1st-class droplights, as appropriate, behind the doors. These can be fitted in the open or closed position. If fitted to simulate an open window, you may have to re-drill the holes for the door or commode handles. If fitted in the closed position, ensure they are fitted the right way up - the bottom cross-piece is deeper.

3. You can now form the tumblehome on the sides. Tape a ruler to the bench, bevelled edge up, place the side (preferably upside-down) against the edge of the ruler and roll the tumble-home with a piece of tubing (I use copper central-heating pipe).

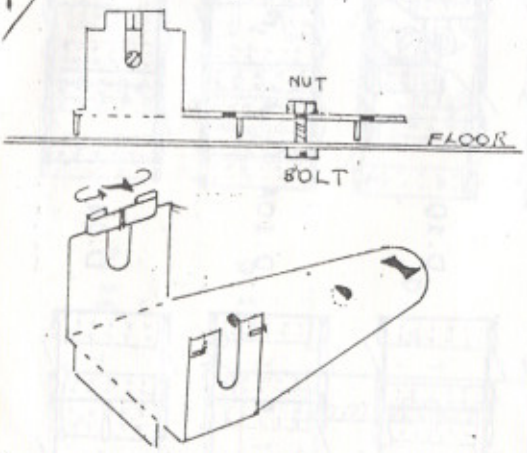
4. Now form the top and bottom folds and re-adjust the tumble-home if necessary. Do not bend down the body/chassis attachment tags, as yet.

5. Detach the ends, form the tumblehome, check the fit against the sides and solder the body together. (But see also para. 11).

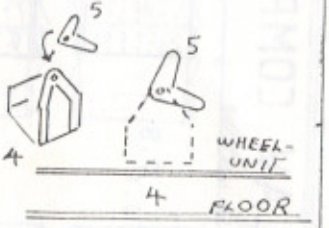
6. DIAGRAM 10A/DIAGRAM 9

Note that for Dia.10A, although two Third class compartments were converted to First class, you still have to fit 3rd-class droplights and door vents. The same applies in reverse to Dia. 9.

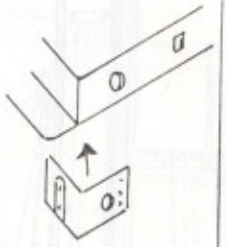
1



2

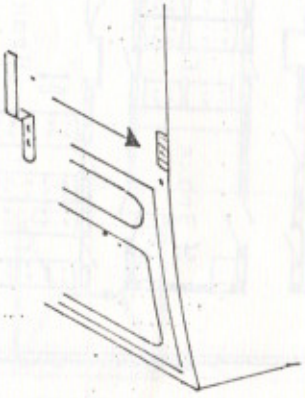


3

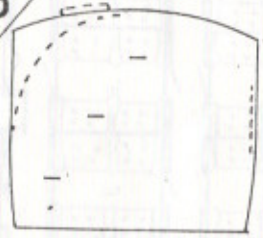


4

5

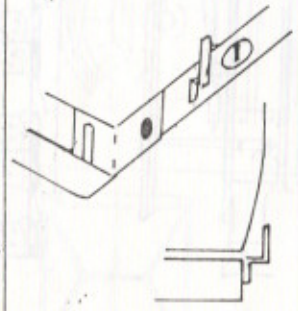


6

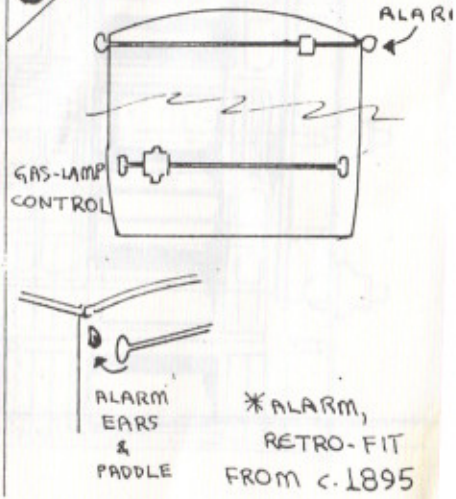


HANDRAIL DETAIL

7

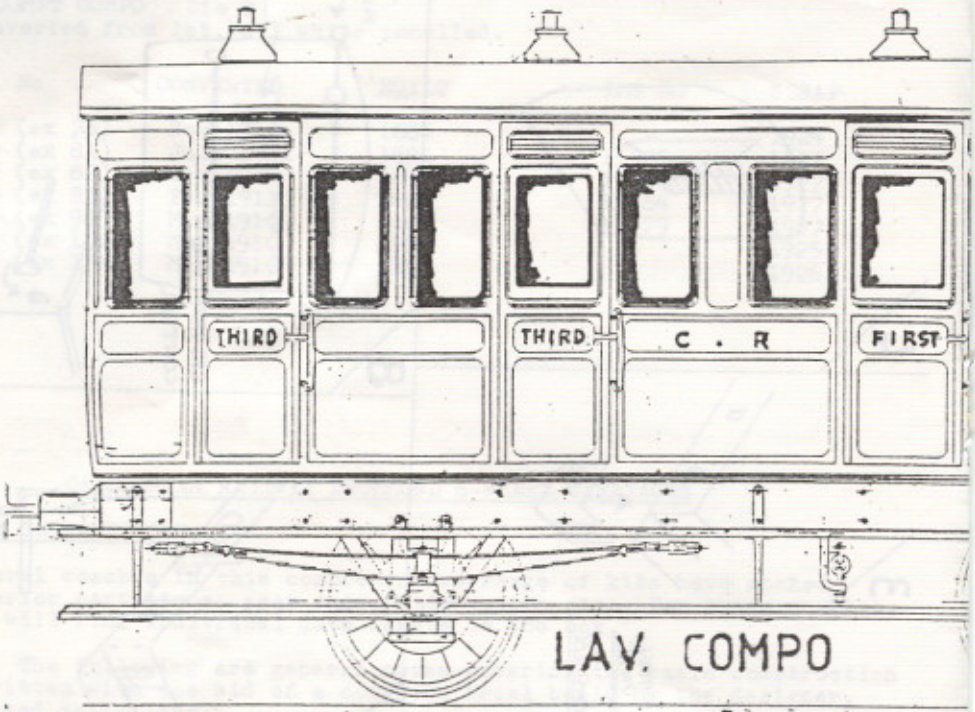


8

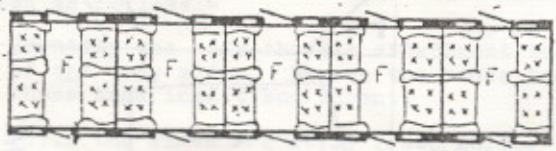


*ALARM, RETRO-FIT FROM c.1895

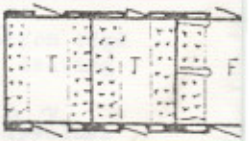
C.R. 6 - WHEEL

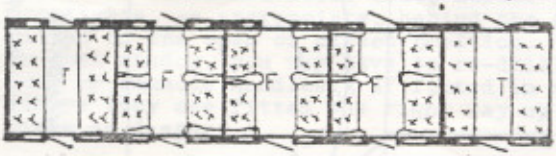


LAV. COMPO

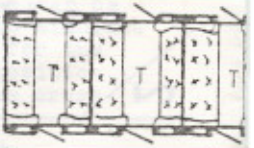


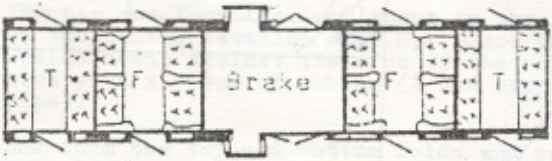
D.8 :



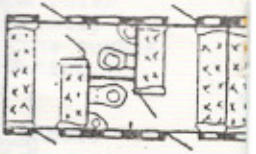


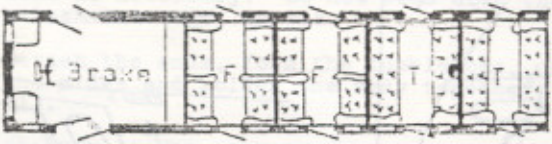
D.9 :



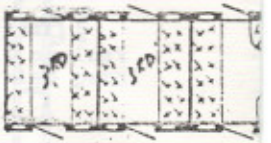


D.10

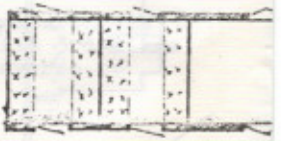


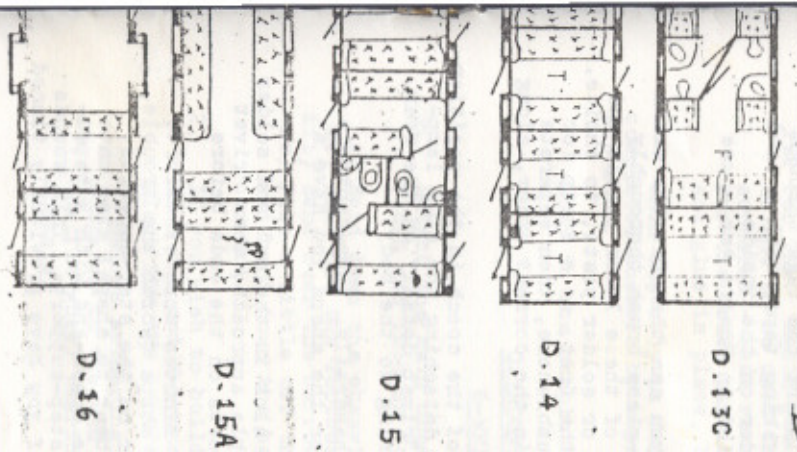


D.10A



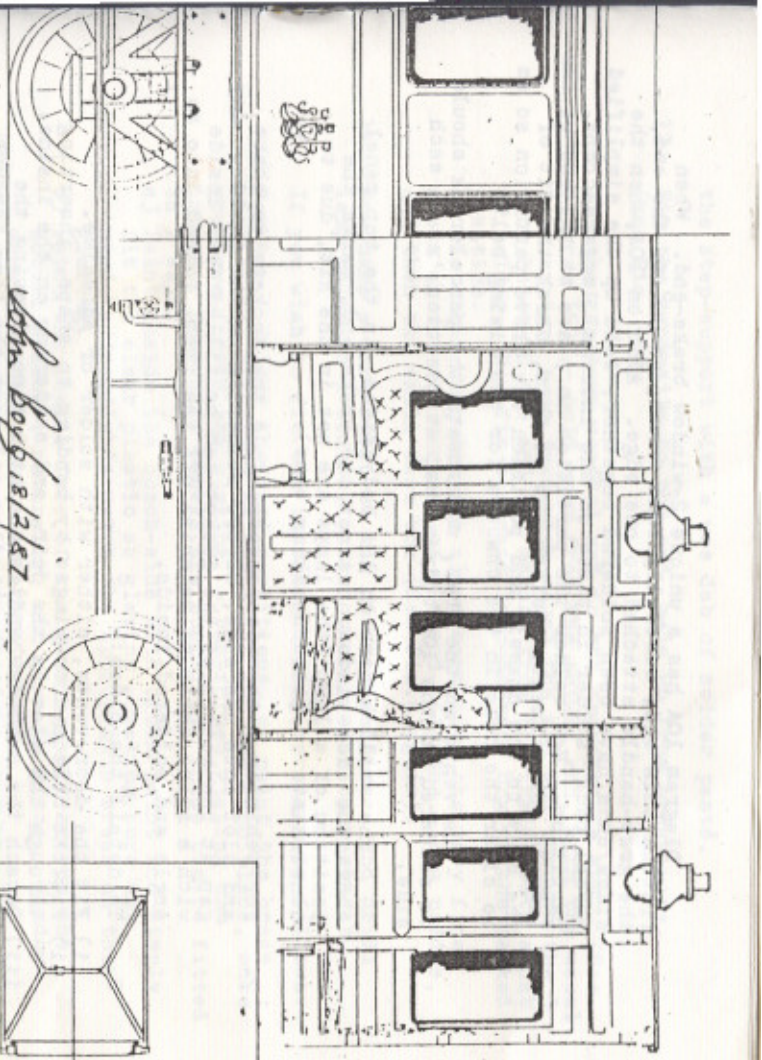
D.11





7mm ROOF	253 × 61 mm
4mm ROOF	145 × 35 mm

John Boyd 18/2/87



(FROM ABOVE)

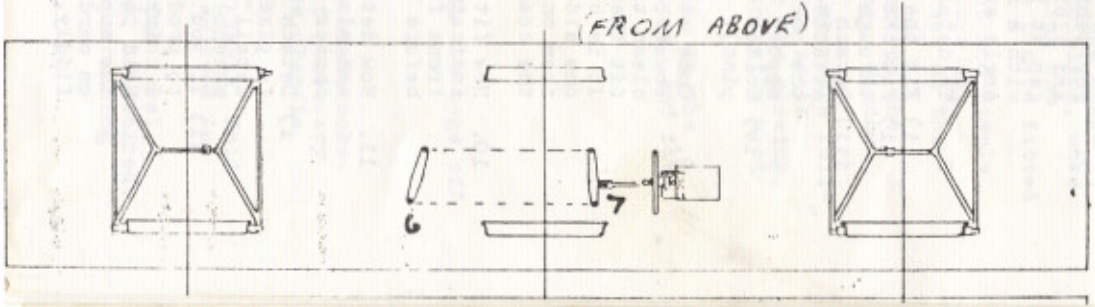


Diagram 10A has a unique 2-window brake-end. When fitting this end, carefully bend round, at 90° to the end, the grab-handle attached to one edge. Also on 10A, when the sides/ends have been soldered together, fold up the simplified parcel rack, solder in place on the internal luggage-compt. partition. Now solder the partition in place at the end of the luggage compartment. Before you do this, check the fit of the body to the chassis and position the above partition so as to clear the hole in the chassis for the fixing bolt.

The vents on the fret, underneath the parcel-rack should be soldered on the 10A body-sides, at position 'x' on each side.

The small square on 10A body-sides, in the top panel above the side-window, nearest the brake-end, marks the position of a lamp (the lamps are not in the kit, due to constraints on pattern-making time).

7. For vehicles with side-duckets, fold the duckets to shape and slot into the side, before soldering on the inside. Any gap at the bottom of the ducket can be filled from inside with a spare strip of material off the fret, folded into an angle and soldered inside.

8. To detail the sides:-

i) Fit the door-vents, either with solder or adhesive.
ii) Fit the bottom door-hinges by bending to shape, inserting through the slot in the door, and soldering on the inside.
iii) Detach the commode-handles one at a time, leaving the attachment tags on the handles. Insert the tags through the holes, hold the handle with masking tape, with a card spacer behind the handle, and solder on the inside.
iv) Solder on the door-handles (supplied in 7mm/in 4mm - use pins).

9. Once all this soldering is done, you can then fit the extra lower panels. If you have a fibre-glass brush thoroughly clean the coach side and the rear of these lower panels and fit them with Thixofix, superglue or solder paste, to choice. It is best to separate them from the fret, as a strip for one side of the coach, form the tumblehome, then separate them one at a time and fit them, in the correct order, along the coach side.

10. Now fit a lamp-iron on each side of the coach, in the position indicated - see Dia. (5). Before detaching the side lamp-irons from the fret, impress the "rivet detail" on the rear, before bending to shape and soldering to the body.

11. Now detail the ends, with steps, handrails, lamp-controls and alarm-gear as appropriate. For the steps you have a choice of methods:

i) Detach the step, pass through the slot in the end and solder in place. If you choose this simple approach, then "rivet detail" the rear of the step-supports on the ends before assembling the body.
ii) If you wish to put in a couple of minutes more of effort, to produce more authentic-looking steps (worth the trouble, I think), then first of all solder on the step-supports. Hold those with tape, place the (bent to shape) step onto the support, hold it away from the coach-end with a taped-on card-spacer and solder to the step-support. This sounds fiddly, but is easy, especially if you have previously tinned

the step-support with a wee dab of solder paste.

12. Fit the handrails to the end, made up from brass wire. (see Dia. (6).

13. Fit the gas-lamp control rod to the appropriate end. (See diagram (6)) - hold away from the actual end, with the usual card spacer, pass fuse-wire round the rod and through the 3 tiny holes in the end and secure from the inside with a dab of solder. Now fit the cast lamp-control box in the marked position.
On the other end, fit the alarm-ears into the very fine slots at the top corners of the end, fit the alarm paddle, and then the small cast box (See Dia.6 again).

14. Now make a card roof, to the given dimensions, and drill lamp holes in a central position over each compartment.

15. If you wish to fit the interior detail, proceed as follows:-

i) For 4mm. Colour the card partitions, or paint the brass partitions, depending on the coach and fit into place, once you have fitted the glazing, - vac-formed glazing cum interior door/side panels are supplied. These can be fitted in 2 ways.
   a) Paint inside the coach-side with brown paint and simply fit the clear plastic as glazing - making sure the windows/droplights match the appropriate areas on the glazing.
   b) Paint the inside face of the glazing, all except the actual windows, naturally, and glue in place. Window-straps are supplied, for extra detail.

ii) For 7mm. Again you have card partitions, but they are full-height to be used in conjunction with the wooden seats supplied - same remarks apply,as for above, to the glazing. For the brass partitions, I sandwich these with balsa wood and glue in place, before inserting the seats.

When the body is fully painted, glazed etc. clip to the completed chassis by means of the four attachment tags, and fit the roof.

Body is now complete.

CALEDONIAN RAILWAY DRUMMOND
6-WHEEL COACH CHASSIS

1. Detach the main chassis from the fret, file all the tags off flush and fold as follows:-

i) Bend down the chassis sides.
ii) Bend out the footboards.
iii) Bend over the narrow fold at the bottom of the headstocks.
iv) File a little off the end of the headstocks, if necessary and bend down the headstocks, solder inside the chassis corners.

2. If you wish to build a straightforward rigid chassis, fold down the end W-irons, and solder the separate W-irons in place for the centre-axle.

Before soldering the centre W-irons, check for level, compared to the end units and adjust, by filing, if desired. Now fit wheel bearings and wheels, to give you a running chassis.

3. If you wish to build a slightly flexible chassis, with simplified brake-gear, then proceed as in 2. above, but do not fit wheel bearings or wheels, but proceed as follows:-

i) Detach the centre wheel-unit, this being the funny looking bit near the pivoted end-units, underneath the phrase "headstock lamp-irons" on the fret. Fold into a basic U-shape, and solder the bend lines for added strength.

ii) Fold down the tag, running across the centre-line of the chassis, again solder the bend line. Now fold down the other four transverse tags. Fit the wheel-unit over these tags - it should slide from side to side. Remove the wheel-unit, having checked the fit onto the tags and strengthen these with solder. Bend down, towards the floor, the half-round spacers on the outside edges of the wheel-unit and carefully replace it over the tags, again check that it still slides from side to side.

iii) Detach pivoted wheel-unit 'A', fold to shape, as in Dia.(1). Fold down the sides and solder the bend-lines. Fold down the brake-shoes and solder likewise. Now fold down the spacing tags - two half-round on the centre-line and a straight edged one on the end.

iv) Now treat unit 'B' similarly. Fit wheel-units 'A' and 'B' to the correct ends of the coach by sliding over the centre tag, coming up through the centre-unit, and pass a bolt down through the floor and through the corresponding hole in 'A' and 'B' - secure with a nut, but not too tightly.

Fold the bottom (if the coach is the right way up) of the centre tag into an S-shape, to retain the inner ends of 'A' and 'B'.

4. Fit the wheels (running in inside bearings) into the slots in the wheel-units, and bend round the retaining straps.

5. Now for the brake-gear. Because of the design of the model chassis, as opposed to the full-size, the brake-gear is considerably simplified, and is meant purely to give the effect, without pretending to be correct in every detail. Take a deep breath and proceed as follows:-

i) Detach brake-rods and solder the outer ends of the triangle to the slots in the inner brake-shoes, so that the centre leg points in towards the axle, and horizontal to it.

ii) Detach brake-rods '2', twist the centre leg so that it is at 90° (i.e. vertical) to the two outer ends, and solder to the outer brake-shoes, so that the centre leg points towards, but runs below, the axle. (See drawing).

iii) You can, if you wish, now connect pieces '1' and '2', with piece(s) '3', but you then cannot remove the wheels without unsoldering it - so that choice is up to you.

You can stop there, now, unless you are building a vehicle with centre brake/luggage compartment i.e. those with side-duckets. In this case, you can if you wish, press on and fit brake-gear pieces 4, 5, 6 and 7, as follows:-

a) Fold piece '4' as in diagram on the etch, see also Dia.(2), solder '5' to it (see drawing) and solder both to wheel-unit 'A', in marked position. It helps to poke fuse-wire through the corresponding holes in '4' and '5', before soldering together.

b) Detach pieces '6' and '7'. Slide on to pins pushed through matching holes in the floor. One end of '7' solders on

to '5' protruding from '4' (you think you are confused - you try and write this!). Solder '7' to '5', then '6' to '7', via a length of straight brass wire - pack '6' up from the floor at this point, so that this connecting-wire is parallel to the floor, about level with bottom of the solebar.

Before fitting '4' - '7' study the drawing first. The final touch is to withdraw the pins from all the holes in the floor save the hole marked '6' leave this pin in place and solder the end of brake-rod '6' to it for support - don't forget, also, to solder the head of the pin to the floor.

6. Having recovered from the brake-gear, now detach the solebar overlays, and impress the "rivet-detail" on the rear, with a punch. This is where the underframe starts to look nice and will cheer you up no end. It also frees several small frames containing various small bits and pieces needed later - store these safely.

Also be careful not to bend the footboard legs at this stage.

7. Fit the overlays to the chassis sides. This can be done using solder-paste (sparingly), Thixofix or even superglue.

8. Detach the footboards from the fret, bend up at the rear and solder to the ends of the support legs (now bent out horizontally). Take care to align the axle-box slots with the axles, exactly.

9. Find the four chassis corner-plates on the fret, impress the "rivet detail" on the rear of each, detach one at a time, bend to shape and fit to the chassis. Now fit the buffers, opening out the buffer-holes in the headstocks as required.

10. Solder coupling-hook sockets to the headstocks and fit your chosen couplings.

11. Fit safety-chains to the headstocks, with etched safety chains on the end.

12. Fit the spring/axlebox castings, then finally fit the head-stock lamp-irons, see Dia. (7) - chassis is now complete.

If you wish, you can fit the separate builders plates to the solebars.

PAINTING THE CHASSIS

As I use an airbrush, I simply protect the buffer-heads and wheel-tyres with masking fluid and then spray the whole thing a grey-black colour.

You can then dry-brush the builders plates and gas-pressure gauge with thin white paint.

You can improve the appearance of the Mansell-wheels by painting the centre of the wheels red-brown, leaving the rims black, and painting the tyres off-white.

Once all the above is painted, as a final touch of class, fit the coach identification plate (on the body fret, in most cases) onto the chassis. This looks nice if you fill the background in

black or red and polish the raised lettering, before lacquering it.

Thank you for buying the kit, if you are pleased with the finished appearance of it, perhaps you would like to contact the supplier or designer with suggestions for future kits (who wants Caley Fullmans?).

John Boyle

Decent Models.
February 1987.

Thanks are due to Duncan Burton again, for the prototype information.