

Decent Models

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CALEDONIAN RAILWAY 45 FOOT COACHES

DECENT INSTRUCTIONS for a DECENT KIT (including sections on tools, liveries & numbers)

Introduction.

Congratulations on buying a Decent Kit and I have pleasure in presenting what I would like to think are one of the most comprehensive set of instructions ever given with an etched brass kit, no doubt someone will tell me differently. Although they may appear to be rather long I have tried to make them both instructive and easy to read.

The first part, which is intended for the less experienced builder, is a description of tools required, in fact these were all I used to proof build the prototype set of etchings.

Part two is the building instructions.

Part three painting and livery details.

Part four is a list of Caledonian Railway Numbers, followed by the subsequent LMS, and if applicable 2nd LMS number, and finally withdrawal dates.

Obviously this last part is not as comprehensive as I would like, so if anyone has any additional information, or in fact any comments on the kit, please let me have them so that I can incorporate it in a subsequent reprint of these instructions.

The prototypes of these coaches were built between 1894 and 1898, and lasted until the late thirties.

They were the most typical of all Caledonian coaches, being seen all over the system, in trains varying from 3 coach branch line sets, to 8 coach formations on Clyde coast boat trains.

The models are specially designed to be simple to construct, the sides can be fully painted and lined, and all the interior details fitted, before final assembly, while there are spares of smaller etched parts, which are liable to get lost, or damaged.

Authentic C.R. Purple-Brown, Brake End Red and White paints have been specially produced by Precision Paints Co. Ltd; and transfers are in preparation.

Part 1.

HINTS/RECOMMENDED TOOLS & ADHESIVES.

1. Read the instructions and identify all the parts, etched and cast, then read them again.
2. When cutting off smaller parts, try not to whistle; bits tend to blow away! Spares are provided in many instances just in case.
3. Find a scrap piece of hardboard, or formica, and paint it black. This gives you (a) a nice cutting surface and (b) a dark background over which to hold the brass bits (in tweezers, or hand vice), while filing tags off, taking care not to distort anything, and lets you see what you are doing.
4. USEFUL TOOLS.

(A) Soldering Iron, plus

Solder Cream in a syringe (available from Studiolith eg).

N.B. Kits can be assembled without solder, using contact adhesive and "Superglue", but soldering has one big advantage - if you do fit something askew, you can take it off & do it again! Soldering is not difficult; use a fibre-glass brush to clean parts, use above solder cream & suitable iron, and you should have no trouble - all you need is three hands and asbestos finger-tips.

- (B) Needle in a pin-vice, useful for such tasks as gently enlarging small holes (e.g. to facilitate fitting door-handles), use like a drill, brass is sufficiently soft to do this, but don't go too far.
 - (C) Craft Knife, or provided you are careful, us Swann-Morton Scalpels with replaceable blades, to cut through tags, but do be careful, these things are sharp!
 - (D) Selection of Needle Files. To file off tags, always hold etched parts in tweezers or hand vice while filing to prevent distortion.
 - (E) Wooden Cocktail Sticks. These are handy for applying adhesive prettily, or for prodding recalcitrant bits into place while the adhesive sets, they can be re-shaped and re-used.
5. USEFUL ADHESIVES.

- (A) Superglue e.g. "Loctite Gluematic" in a syringe. Useful for fitting smaller bits e.g. door/commode handles, door vents etc., particularly if you have soldered the droplights on and don't wish to do any more soldering in that area.
- (B) Thixofix Contact Adhesive - this particular make allows you to slide things around, for accurate positioning, before the glue sets - very useful for such jobs as fastening the solebar overlay, or for finally applying the roof, or fully painted and lined sides to the assembled ends, where the heat from soldering would ruin the paint, spoil the glazing, melt the white metal ends and generally ruin your entire day.

- (C) "Cow Gum" or, even better "Prittstick" (looks like a white stick in a screw-up container, obtainable from W.H.Smith etc). This is useful for assembling card partitions/seats/door interiors & window straps.

Part 2.

CONSTRUCTION. CALEY 45FT STOCK - all variants.

1. Paint the wheels and inside the bogie side frames; if you don't do it now, you will forget (I always do), and they are much easier done before fitting. Wheel centres are red-brown, rims black and tyres white (in C.R. livery). Don't forget to paint rear of the wheels, and the axles, a dusty brownish-grey colour.

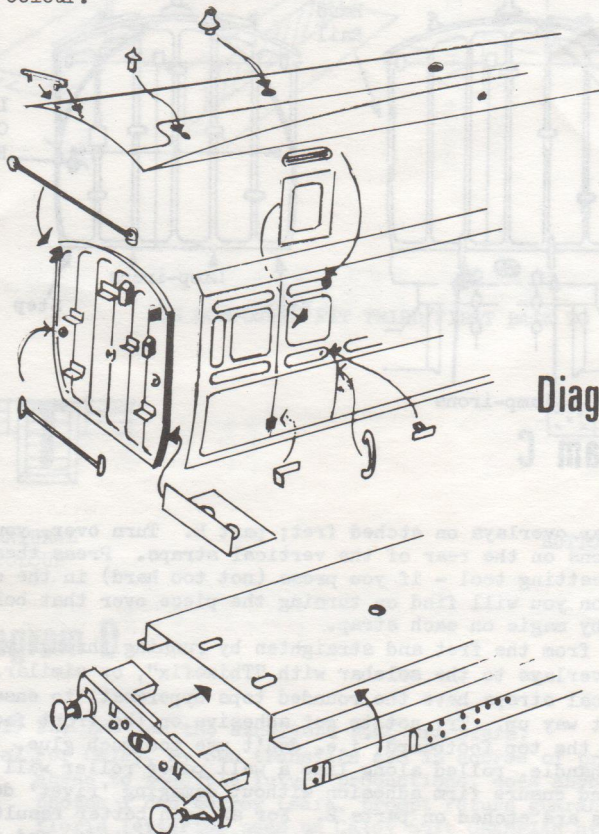


Diagram A

UNDERFRAME.

2. Remove floor unit A, and remove roof-handles from the centre - store these safely. When you have filed off all the tags bend the chassis to shape, see Dia. A. This can be done with bending bars, or in a vice between two pieces of strip, or simply by hand, working gently so as not to cause any distortion.
- N.B. Bend in the following order - bend down the solebars first, then bend out the top footboards, ensure 90° bends each time, and that chassis lies flat and true. If necessary, flatten footboards with a ruler.

- Take buffer/headstock castings. If fitting 3-link couplings (accurate Caley-style hooks are provided), open out slot in buffer-beam, with a needle or something similar. Hold the buffer-beam in a vice and drill small holes to take split-pins which hold the safety-chains. Small chain for these is provided, also safety-chain hooks (4 spares provided). To fit headstocks and buffers, file each side of the casting as required to produce a nice snug fit in the folded underframe and fasten with strong adhesive, Araldite, Superglue etc. Make sure you fit the headstock the right way up - the positions for the etched lamp-irons are indicated on the casting - see Dia. C.

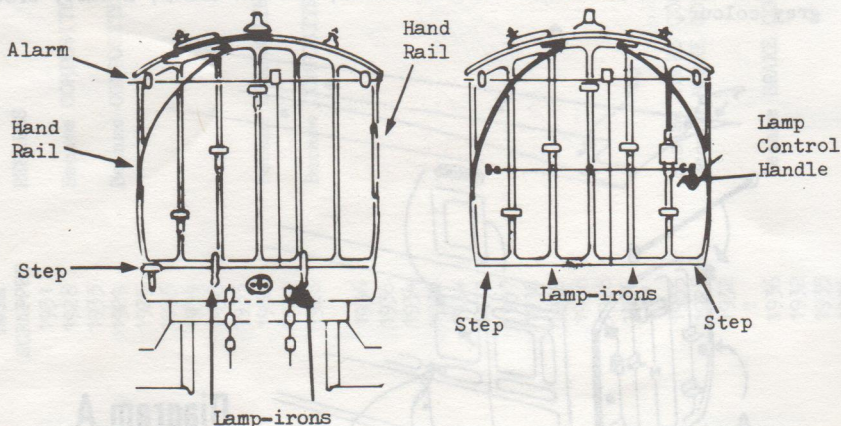


Diagram C

- Identify solebar overlays on etched fret; part B. Turn over, you will find indentations on the rear of the vertical straps. Press these with a scribe, or rivetting tool - if you press (not too hard) in the centre of each indentation you will find on turning the piece over that bolt heads have appeared by magic on each strap. Remove parts B from the fret and straighten by running through your fingers. Fasten these overlays to the solebar with "Thixofix", or similar. Make sure the vertical straps have the rounded tops uppermost, to ensure you fit these the right way up. Try not to get adhesive on the front face of the overlay, or on the top footboard, i.e. don't use too much glue. A pencil or paintbrush handle, rolled along like a wall paper roller will expel surplus air, and ensure firm adhesion without damaging 'rivet' detail.
- Builders plates are etched on parts B. For an even better result fasten separate builders plates on top, this locks most effectively, and is worth doing. When removing these wee bits keep your finger over them while you cut through the tags, or they tend to fly off and vanish - but try not to cut your fingers, it makes a mess.
- Bogies are best done next. Clean flash off the castings, especially round the brake-shoes, unless you want working brakes. Open out hole in bogie top stretcher to clear 8 B.A. bolt, then assemble bogie with contact adhesive or low melt solder, fitting wheels to choice. Depending on wheels chosen, you may have to deepen bearing holes, to accommodate the axle length.
Before fitting the bogies, take the bogie footboards and fit in place -

these are provided on a separate fret - two spares are on the main fret. The support legs for these are of necessity, delicate, be careful to hold in tweezers while filing tags off. Fix top layer, (with the raised ridge on top and to the rear), to the bottom layer. Finally, bend legs to shape - see etched diagram on main fret - and fit to bogies, using Superglue.

If you prefer, as these parts are susceptible to damage, due to their protruding position, you can leave these until all other assembly is done, only fit just prior to painting the chassis, using Superglue.

To fit the bogie, insert 8 B.A. bolt through floor, from above - this should screw tightly into place - if it doesn't, solder or firmly glue into position. Take bolster, drill through (No:49 drill), and thread onto bolt. Now fit assembled bogies onto the bolt, packing with washers as necessary, to obtain correct buffer height.

7. Centre footboards - parts K & L. Fit together, as with bogie footboards, and fasten behind solebars - note registration marks behind the solebar - see Dia. B.

When fixed firmly in place, slowly bend legs out to match up to the footboards on the bogies.

8. Truss-rods, part C. Fit behind solebars, and behind footboard supports, attachment pieces match registration marks - see Dia. B.

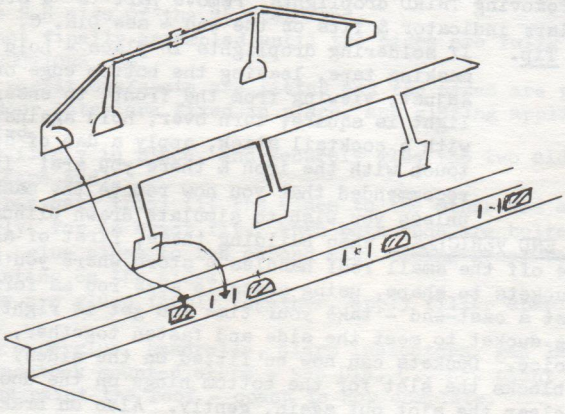


Diagram B

9. Fold-up gas cylinder support bracket & fit to floor, after bending to shape. Fit rod to represent gas cylinders. Underframe is now complete, save for etched steps and lamp-irons, which you can leave until ends are finally fixed to the chassis. Put complete chassis in a safe place and lie down in a darkened room for two days, before doing the BODY.

BODY CONSTRUCTION.

SIDES.

1. File off all tags, ensure bottom edge is straight - (you have to draw a red painted line along it, for C.R. livery). Bend sides in at the top, to the precise angle of the join with the ends (check against the casting). Roll the tumblehome to shape. This can be done using a milk bottle (preferably empty), or spare piece of copper central heating pipe - place side, upside down, so that the bottom edge rests against the bevelled edge of a rule (working on top of a thick magazine), & roll the pipe towards the bottom edge of the coach, pressing down gently - only takes a few seconds.
2. Now find your droplights on the fret, (marked THIRD or FIRST as appropriate). These droplights have, inside them, the commode handles and door-vents. Cut off the small tags, with a really sharp knife, in the following order - cut off the commode handle (2 tags), door-vent (4 tags), then remove remaining tags & file window square. Now remove droplight & fasten inside the door, (writing to the inside), - in the open or closed position, as desired. N.B. If fitting a droplight which is "open", take care not to block the hole for the door-handle, - file the droplight if necessary, otherwise you will wish you had, when you come to handle fitting time!

When removing THIRD droplights, remove part 'O' & store carefully - this is the alarm indicator & fits on the end - see Dia. C.

Tip. If soldering droplights in place - hold in place with masking tape, leaving the bottom edge only exposed. Adjust, viewing from the front, to ensure the droplight is square, turn over, hold against the interior with a cocktail stick, apply a dab of solder cream - touch with the iron & there you are! It is recommended that you now remove the masking tape, unless you wish to simulate drawn blinds.

3. BRAKE END VEHICLES. When building these, first of all remove the duckets - take off the small roof handles & store where you can find them. Bend the duckets to shape, using suitable size rod as former - check the shape against a cast-end - take your time and get it right, then bend the end of the ducket to meet the side and fasten together, with solder/adhesive to choice. Duckets can now be fitted on the sides. If the solder or glue blocks the slot for the bottom hinge on the door next to the ducket, then clear the slot out again, gently. Also on Brake End vehicles, the droplight fitted inside the door, next to the ducket, will need filing to clear the central tag holding the ducket in place, how much, will depend on whether the window is open or closed. This will become crystal clear when you come to it, it takes longer to write this than it takes to do.
4. For brake composite vehicles with staggered centre duckets, remove duckets from separate fret, and proceed as follows;
 - (a) Bend one end only at 90° to the side, then slowly bend the side to match the shape of the end, using rods as formers.
 - (b) Bend second end and solder/glue together.
 - (c) Fit in place on coach side.
5. Now find your tweezers, clean your spectacles & put the cat out - the time has come to fit the bottom door hinges (actually quite easy). These are small, so cut off the fret one at a time & bend to shape with tweezers. Working from the inside, insert through the slot in the side, glue or solder in place.
6. Do commode handles next, fix to sides, one end at a time, using tiny drops of superglue, applied with a sharpened cocktail stick, hold each end till set. When your nerves have recovered, find a small pair of tweezers & fit the door handles, having previously enlarged the holes just sufficiently

to clear the shaft of these tiny T shaped handles.

For all these fiddly bits, hinges and handles, plenty of spares are provided, so you can afford a few practice attempts.

ENDS.

7. To fit cast ends, proceed as follows:
Ends with 5 steps and lamp-gear - drill small holes as indicated in Dia. C., this will enable you to fit lamp operating handle with fuse wire. These handles are delicate, do not fit yet. Also drill handrail holes - see Dia. C. All ends. Draw a centre line in pencil on the inside, from the bottom, upwards for some 10m/m. Remove the brackets, solder the bolts to the brackets. Bend the bracket to shape & fasten securely to the ends, so that the arrow on the bracket aligns with your pencil centre line inside the end. You can now bolt the ends to the floor - for a trial assembly - they are adjustable longitudinally for a precise fit to the sides, at a later stage.

ROOF.

8. Trim the roof, without distorting it, and roll to shape, to fit the ends exactly. Glue or solder the lamps in the central holes and the "HAVOC" vents in the outer holes. Retrieve the roof grab handles (previously removed from the middle of the floor) & fit into tiny holes near the roof end - this can be done with solder cream or superglue. Note when finally fitting the roof that the gas lamp connection lines up with the pipe running up the R.H side of the "5 step" end.
9. The coach is not finally assembled until the sides are fully painted - see PAINTING INSTRUCTIONS now.
10. When interior partitions/seats are fitted and the sides are painted inside and out, all door interiors fixed in place, and glazing applied, the coach can be assembled.
11. Bolt both ends firmly in place, and securely glue the two sides to one end (i.e. the same end).
12. When adhesive has set, trial fit the sides to the other end and adjust ends accordingly, for an exact fit. When both ends are bolted in their final position, glue sides to the second end, taking great care not to spoil your painting on the sides.
13. When sides/ends are glued firmly together, apply filler sparingly if necessary.
14. Now fit, using superglue, handrails, alarm indicators, gas lamp operating handles and headstock mounted steps - see Dia. C., now paint the ends.
15. Finally fit and paint the roof - coach is now complete.

If you like the coach - tell all your modelling colleagues - if you don't like it - tell me.

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Decent Models

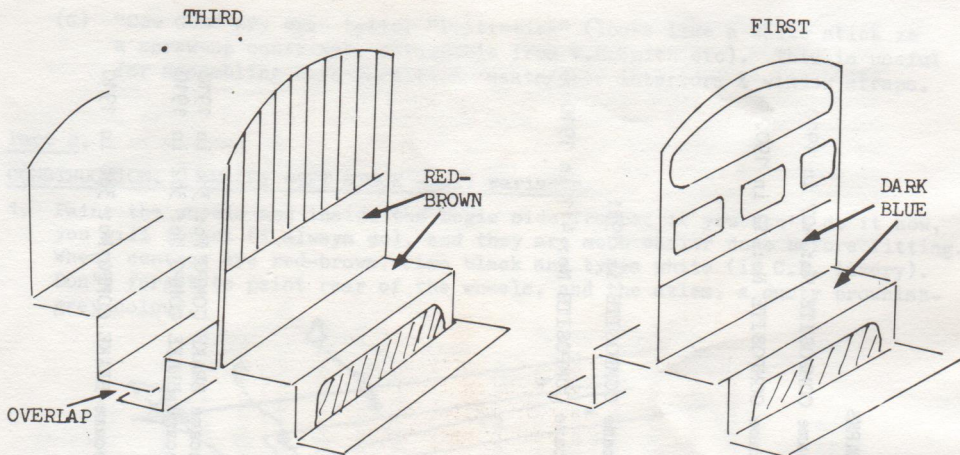
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Part 3.

LIVERY DETAILS/PAINTING INSTRUCTIONS.

1. An airbrush is not essential for a good finish as Precision Paint does brush rather nicely.
2. Apply primer to all parts, including interior, preferably Precision Paints self-etch primer, allow to dry thoroughly hard, at least overnight.
3. These coaches are specially designed to make painting and lining easy, the sides can be fully finished, inside and out, before fixing to the coach.
4. Recommended order of painting is as follows:-
 - (a) Paint complete chassis dark grey, in preference to black, fine detail shows up better. "Rivet" detail can be highlighted using a dry brush technique, applying a dusting of a slightly lighter colour - the writing on the builders plate (they all say 1895), can be picked out in white, or pale grey. Footboards should be a grubby grey-brown.
 - (b) Paint inside the insides with a buff colour to match the card used for the partitions, allow to dry hard.
 - (c) Now paint the exterior of the side, either in C.R. purple-brown with white waist and upper panels, or in IMS lake.
 - (d) If painting in Caley livery, do the purple-brown first, and then do the white as in (e).
 - (e) Slightly thin white paint, till it runs easily. Lay the side on the bench so that it is absolutely flat, then take a small paint brush and drop the white paint into each panel in turn, "eye dropper" fashion.

You will find that the white paint will run round the entire outside edge of each panel very quickly - do all panels and leave to dry - don't move it, make sure there are no "runs" - practice makes perfect, it soon becomes automatic to pick up the correct amount for each size of panel to cover it without flooding, or missing any areas.
 - (f) Window-frames, including droplights, are red-brown/mahogany.
 - (g) Each door vent has a recessed line around it, if you drop a tiny drop of thinned paint in one corner of each of these, the paint will very obligingly run round each vent & line it for you.
 - (h) When the side is painted to your satisfaction, you can then turn your attention to the lining. C.R. lining is a single yellow line around each white panel, with a thin red line down each outside edge of the coach side and along the bottom edge. The lining can be done using a fresh unthinned tin of yellow paint (well stirred), in a springbow pen, touching in the corners with a fine brush or mapping pen, or, for the yellow lining only, you can scratch through the purple-brown colour with a needle in a pin vice, back to the brass. If you don't like painting, let me quote you for doing it.
 - (i) IMS lining is yellow/black/yellow - best way with this is to paint the beading yellow & draw a fine black line down the middle with a very fine pen.
 - (j) The card interior partitions and seats are assembled as in Dia. D. Third class seats are red-brown, (I use a Pantone 180-M), doors natural colour, and the First class seats and door/side panels dark blue (Pantone 300-M looks nice). Please leave a natural border around the "buttoned" panels on First class.
 - (k) Roof interior is white.



FOR COMPOSITE FIT THIRD/FIRST BACK TO BACK



NATURAL
COLOUR



BUTTONED PANELS ONLY
BLUE

Diagram D

LETTERING.

- (l) For LMS use the excellent P.C. transfers.
- (m) For Caley, my own transfers are in course of preparation, - thinking ahead to possible future productions, does anyone have any clear photos I can borrow (safe, prompt return guaranteed) of the more florid lettering used on Caley 65ft GRAMPIAN stock? - I would like to make the sheet of transfers as complete as possible. I would also dearly love to see clear photos of the 6 wheel "Mitchells Tobacco" or "Liptons Sausages" vans.
- (n) For those who enjoy hand lettering, C.R. and the number were usually spaced to Left and Right of the centre door (see Model Railways, May 1975). Each door carries the inscription THIRD or FIRST, the Caledonian crest appeared twice on FIRST, and once on THIRD class. Lettering was gold, shaded to the Left and below in red, with white highlights. There were also delicate gold monograms, a bit too finicky to do properly by hand in 4m/m - they will be in my transfers, of course.
- (o) Roof, when new, was all white, all ironwork on the ends was black.

CALEDONIAN 45FT STOCK.

NUMBERING DETAILS.

VEHICLE	C.R. NO:	BUILT	1st LMS NO:	2nd LMS NO: (1933)	DATE SCRAPPED	REMARKS
<u>FIRST</u>	211	1896	15500		1931	
	212		15993		1928	Became COMPOSITE No: 407 in 1910
	253		15537		1933	
	72	1897	15608		1929	Became COMPOSITE No: 12 in 1907
	263				1925	
	264		15547	10609	1935	
	266		15549		1934	
	277		15558	10612	1938	
	278		15559	10613	1935	
	288	1898	15569	17799	1938	Became COMPOSITE in 1931
	290		15571		1930	
	291		15997		1926	Became COMPOSITE No: 411 in 1910
	<u>THIRD</u>	1002	1898	17059		1936
1003			17060	15379	1936	
1004			17061		1934	
1005			17062		1934	
1006			17063		1934	
1007			17064		1932	
1008			17065	15404	1937	
1009			17066	15405	1936	
1010			17067		1932	
1011			17068	15406	1938	
1012			17069		1928	
1013			17070	15407	1936	
<u>BRAKE THIRD</u>		1160	1897	15972	24786	1935
	1161		15968		1928	Became BRAKE COMPO No: 382 in 1910
	1162		17218		1932	
	1163		17219		?	
	1043	1898	15974	24787	1936	Became BRAKE COMPO No: 388 in 1910
	1044		17101		1932	
	1045		17102		1935	
	1046		17103		1934	
	1047		17104	24179	1938	
	1048		17105		1931	
1049		17106		1928		

VEHICLE	C.R. NO:	BUILT	1st LMS NO:	2nd LMS NO: (1933)	DATE SCRAPPED	REMARKS
	1050		17107		1931	
	1051		17108		1931	
	1052		17109	24180	?	
	1054		17110	24181	1935	
<u>COMPOSITE</u>	104	1898	15694		1931	
	112				1924	<u>Compartments:</u>
	122		15712		1934	
	227		15814		1929	
	239		15825	17803	1937	3rd 3rd 1st 1st 1st 3rd 3rd
	247		15833		1930	
<u>BRAKE COMPOSITE</u>	53	1897	15646		1934	C.R. Order No: H148
	59		15652	24778	1936	Compartments:
	64		15656		1935	
	68		15658	24780	1937	3rd 1st GUARD 1st 3rd 3rd
	103				1927	
	70	1894	15660		1926	C.R. Order No: H109 - 1894
	74	1896	15664		1933	H132 - 1896
	91	1894	15681		1928	
	111	1896			1926	
	150	1894	15740		1933	Compartments:
<u>COUPE</u>	161	1894	15751		1929	
<u>COMPO</u>	165	1894	15755		1929	1/2 1st LAV 1st LUGG. 3rd LAV 3rd 3rd
<u>LUGGAGE</u>	242	1894	15828		1929	
<u>FULL BRAKE</u>	38	1897			1925	C.R. Order No: H147
	46		6335		1934	
	77	1898	6361		1934	
	90	1897			1926	
	109	1898	6384	33645	1937	
	114	1897	6389		1934	
	124	1898	6398		1934	
	137	1898	6409		1934	
	139	1898	6411	33649	1937	
	142	1897	6414		1934	
	162	1897	6431		1929	

VEHICLE	C.R. NO:	BUILT	1st LMS NO:	2nd LMS NO: (1933)	DATE SCRAPPED	REMARKS
<u>45FT 3INS:</u>	98	1898	15688		1935	C.R. Order No: H167
<u>COUPE BRAKE</u>	99	1898	15689		1929	Compartment:-
<u>LAV: COMPO</u>	100	1898	15690		1934	1/2 1st LAV 1st 3rd BRAKE 3rd LAV 3rd
	101	1898	15691		1934	

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Thanks are due to D. Burton, Esq; for all the above prototype data, to Kenley Advertising for the printing and especially to Ann Hartley-Smith for typing all these notes.