

SLATER'S COACH KITS

SOUTH EAST AND CHATHAM 32FT PASSENGER LUGGAGE VAN (PLV) SR DIA 960

Many vehicles were built by the SECR, SR and BR between 1919 and the last batch in 1951. Although similar in appearance there are some detail differences such as plank widths and profile of metal strapping. Vehicles listed here can all be built from this kit.

The first PLV (built at Ashford Works in 1919) was unlike previous SECR designs. Twenty vehicles were ordered from Bristol Carriage & Wagon Co in 1921 and twentytwo from Ashford Works in 1922. These batches carried four chalking boards per side, one beneath each window. The prototype had only two, one under each outer window.

The SR built large numbers of similar vehicles with end doors (GUV) from 1928. The first batch can be built from this kit.

In 1934 the SR built more PLVs to this design adding ventilator bonnets beneath the chalking plates and steel plates on the top half of the ends. It is possible that some SECR PLVs received this modification.

A list of the various modifications is included.

Date Built	SECR No	SR No	Chalk Panel	Vent	End Plate
1919	132	1972	2	No	No
1921	121-5	1973-1977	4	No	No
1922	136-50	1978-1992			
	152-5/7/8		4	No	No
	160-3/66-70	1993-2016			
1934/35	-	2181-2330	4	Yes	Yes
1935	-	1154-1250	4	Yes	Yes
1936	-	1054-1153	4	Yes	Yes
1937	-	1921-70	4	Yes	Yes
1939	-	1251-1358*	4	Yes	Yes

*The remainder of this batch 1359-98 were the first built with alternate wide and narrow body planks.

Nos 1996,2001,2002,2004 & 2005 were converted to push-pull vans in 1941. Nos 1972-91 fitted with roof brackets for destination boards in 1934/5.

S.R. GENERAL UTILITY VANS

With the success of the PLV, Maunsell proposed a design for a GUV in 1925. This had vents beneath the chalking boards and end doors for aircraft parts, motor vehicles, churns etc. Many pre-grouping vehicles were thus eliminated and standard vans conveyed a range of goods. The Midland Railway Carriage & Wagon Company was given an order for 20 in April 1925 plus a further 30 in April 1926. All were delivered between March & May 1928 and numbered 2023-72. They were an immediate success and Ashford built additional batches. There were length variations on later batches and this kit is not suitable for these.

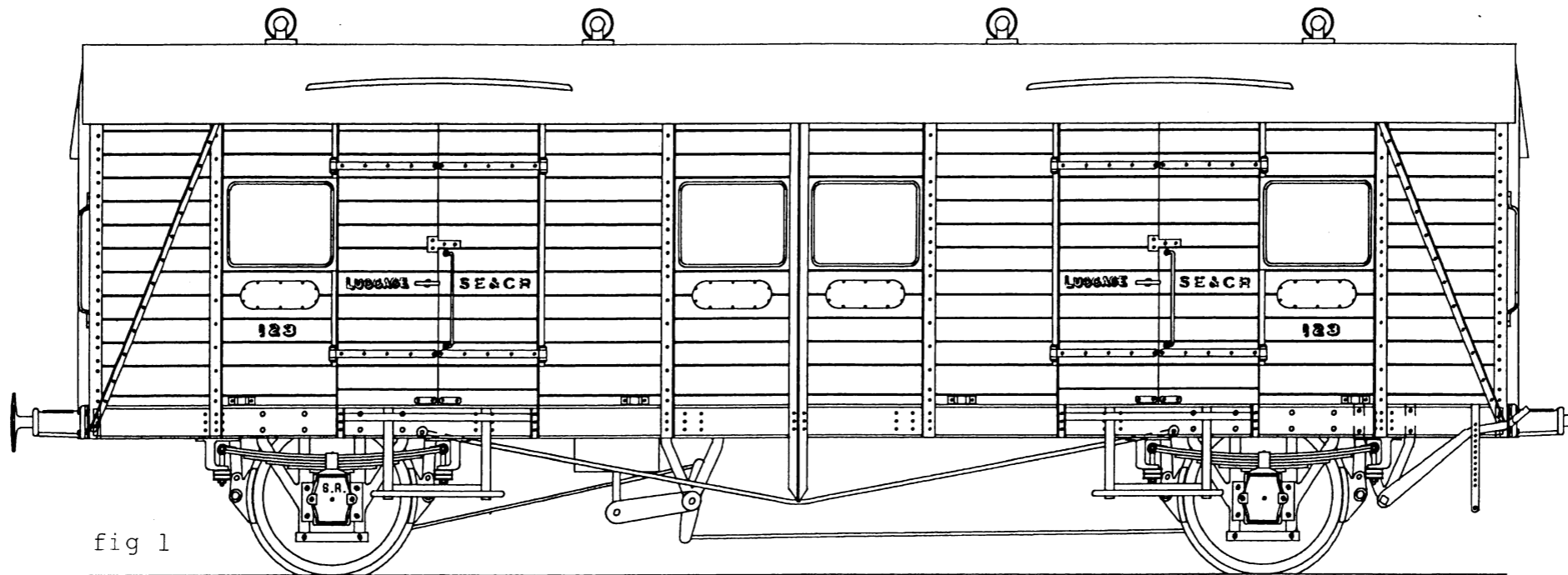


fig 1

Typical PLV as built in 1921-22. Note the position of the vacuum cylinder, the long vertical grabhandles and the absence of vents.

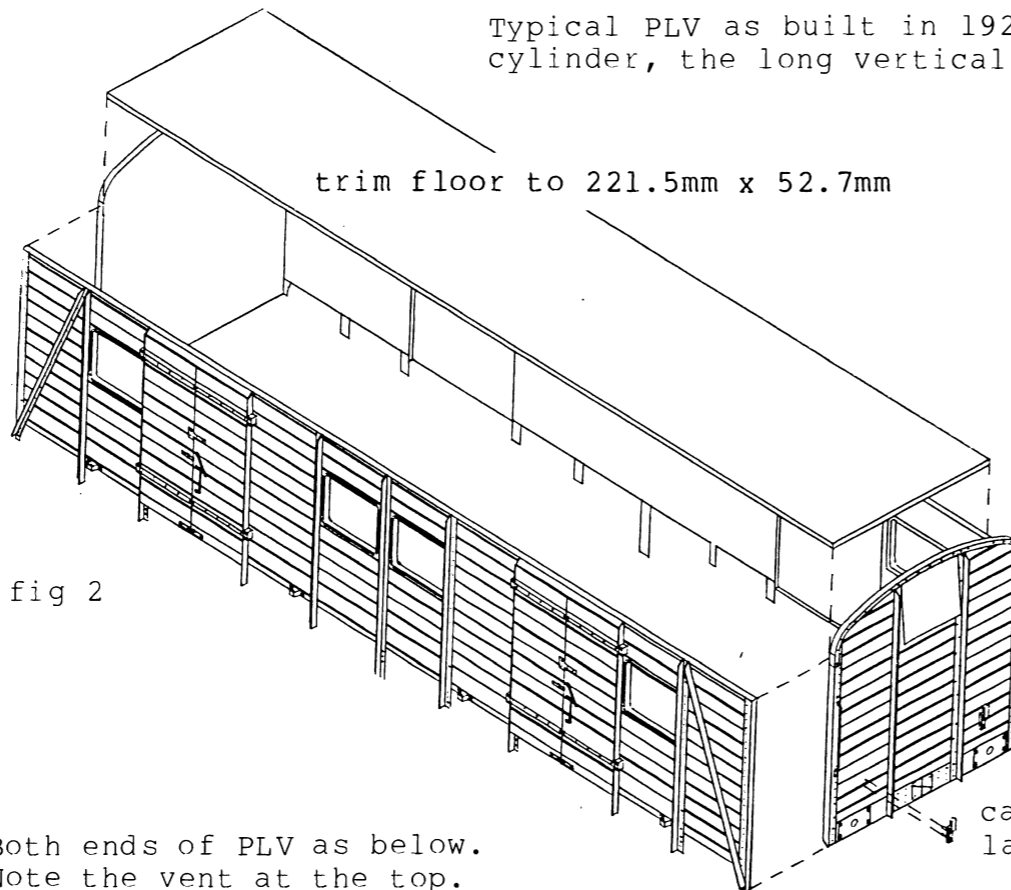


fig 2

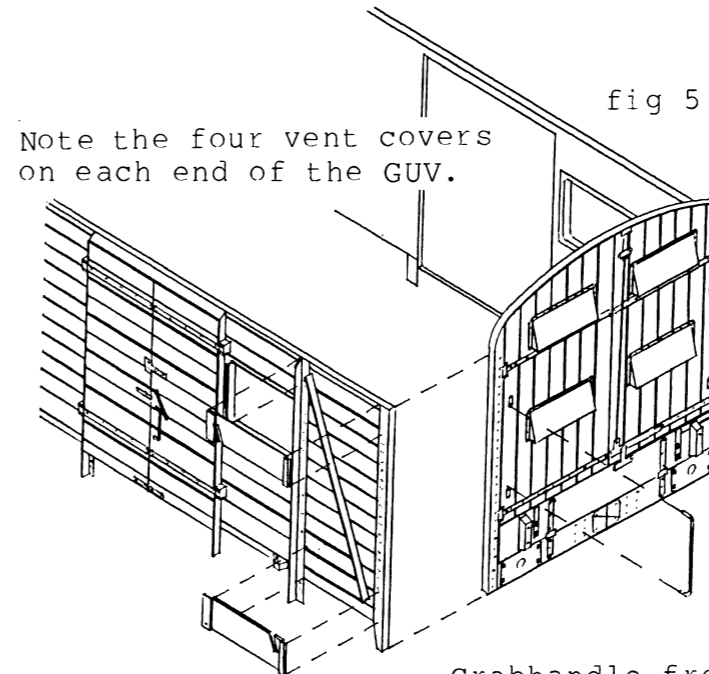


fig 5

Note the four vent covers on each end of the GUV.

Grabhandle from corner plates 0.020" brass wire

Both ends of PLV as below. Note the vent at the top.

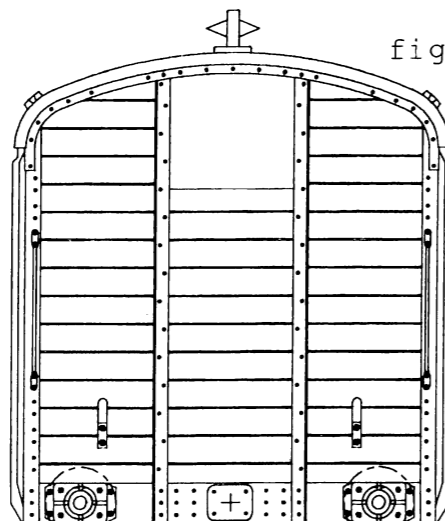


fig 3

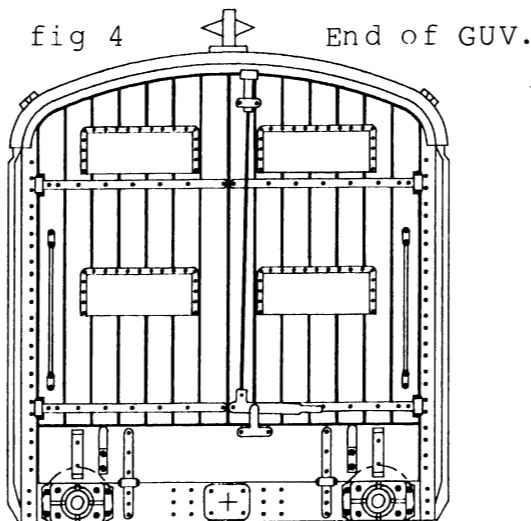


fig 4

End of GUV.

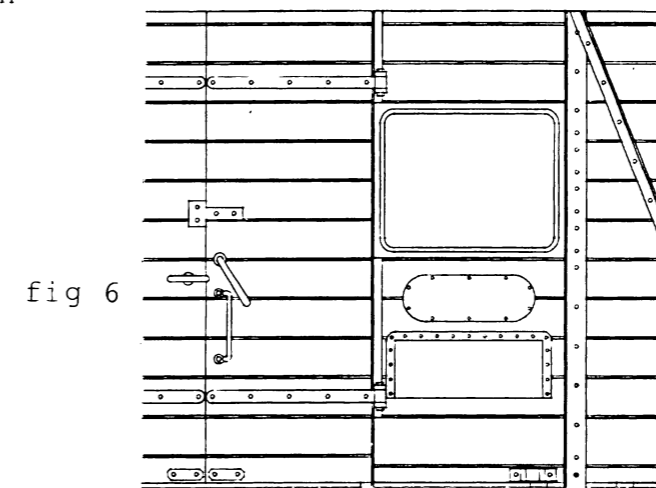


fig 6

Typical detail of door area showing vent beneath the chalking panel.

Some authorities state that apart from one batch they were all 32' 4 1/4" long. However, in a review by the Midland Rly Carriage & Wagon Works published in the Locomotive Carriage and Wagon review for June 1928 all the dimensions quoted are the same as the PLVs. It is reasonable to assume that this is correct.

They were fitted with vac pipes, screw-link couplings and through steam-heat pipe. It was common to see a GUV or PLV in passenger trains especially in the western section. Livery as 'PLV with words General Utility Van and number on solebar to left of middle windows. Later batches were lettered COVCAR on lower right body. In 1949 BR red was used for repaints before reverting to green.

No.2252 painted red 3/52 then green 5/58
No.2254 painted red 1952 but never repainted
No.2257 painted red 3/53 then green 6/56

Withdrawals began 1962; Nos.2241-50 entered departmental use and lasted into the 60s. No 2239 was preserved by the North Downs Steam Railway.

Do study as many photographs as possible. We can recommend the book: SOUTHERN RAILWAY PASSENGER VANS by David Gould (Oakwood Press 1992). It lists examples of vehicles to be found on preserved railways. We are indebted to Messrs M. King and M. Welch (Blue Peter) for their assistance in the preparation of this kit.

ASSEMBLING AND DETAILING THE BODY

Take side and end mouldings. Figure 3 shows the PLV ends with two lampirons. You may wish to fit them now. An end with doors for the GUV is shown in Figure 4. Drill holes 0.020" (0.5mm) in the sides for door fittings. Pre-1939 PLVs probably had long vertical grabirons as figure 1. Later PLVs & GUVs had arrangement shown in figure 11. Assemble the body (planks on ends and sides lining up) and then add the 0.060" (1.5mm) plastikard floor (trim to size shown in figure 2). Form and fit the pair of 0.020" (0.5mm) brass wire handles onto each ends.

FOR GUV CONSTRUCTION ONLY

Refer to figure 5. Note that the corners of the sides are fitted with reinforcing plates (etch part 9). Carefully remove the moulded rivets where the plates fit. Note that to fit the plates it will be necessary to trim the diagonal strapping. Holes in the plates indicate where bolt heads should be added. Drill 0.020" (0.5mm) through each hole into the side moulding. Insert a piece of the 0.020" plastic rod and trim to length. Although rather time consuming the result is worth the effort.

FOR PLV AND GUV CONSTRUCTION

Add destination chalking plates (2 or 4 per side) and, beneath these, the ventilator covers if required. Do refer to figure 6, the list in the historical notes and photographs. A PLV will have one large vent at the top of each end (file top of the vent to match the curvature of the roof).

ADDING THE UNDERFRAME DETAIL

The position of the vacuum cylinder is correct for early batches. For later vehicles (and GUV) move the cylinder as in figure 9. Compare figures 1 & 11. Clear holes in solebars for the cast stepboard supports. You may wish to fit these now and file flush the protruding pins. Solebars can then be fitted. Now fix underframe to the floor centrally between the headstocks. Finally, add microstrip 0.020" x 0.090" (0.5mm x 2.28mm) to the bottom of the underframe members to give the correct channel shape.

Fix plastic axleguards (W-irons) to one solebar and allow them to set. Slide (no glue) brass bearings into holes in the axleguards. Fit the wheelsets into the underframe with the remaining axleguards between locating ribs on the other solebar. Place the vehicle on a flat surface and check that all wheels make contact. Secure the bearings with the wheels centred and free to rotate with no side play. We can supply a set of etched W-irons, available separately (ref: 71545). A superior ride will result from the independently sprung bearings.

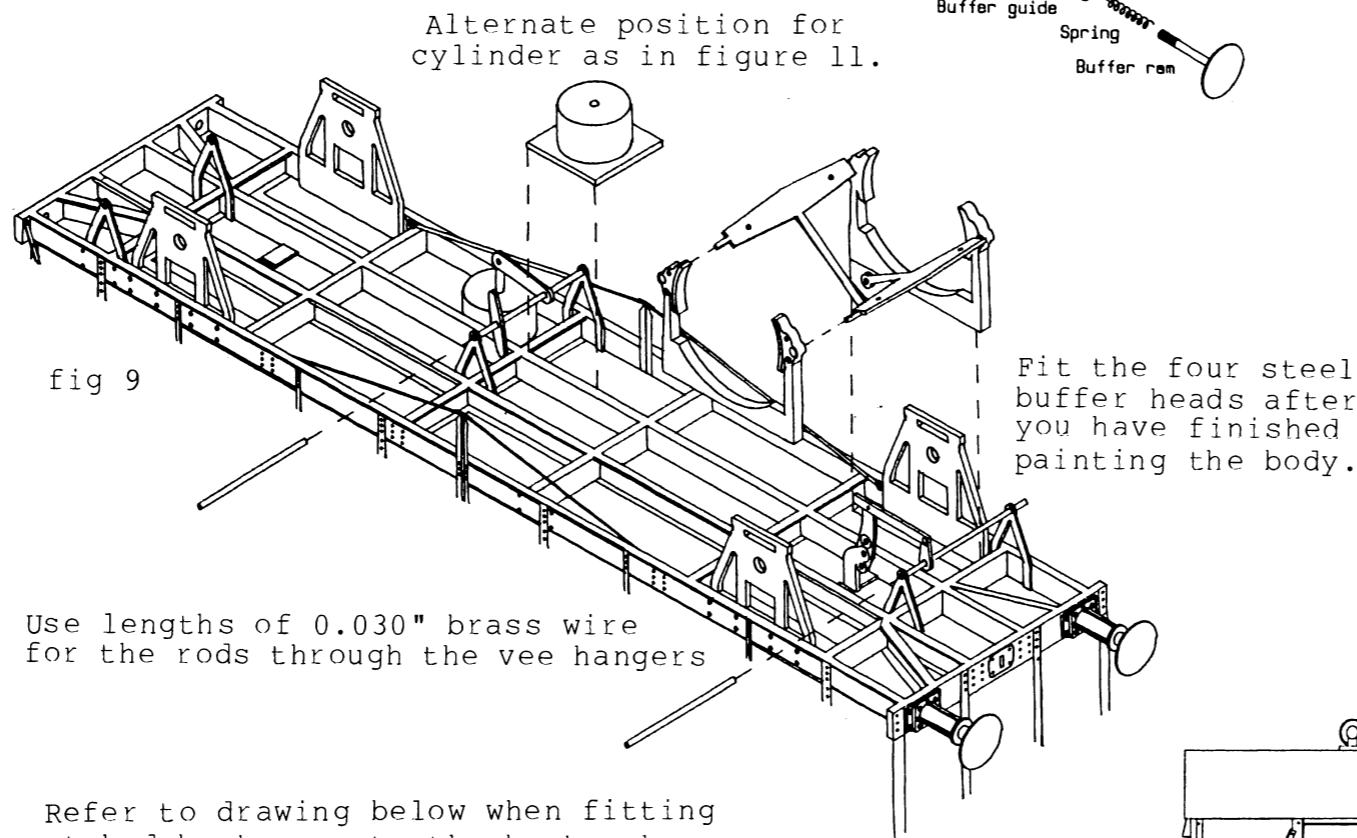
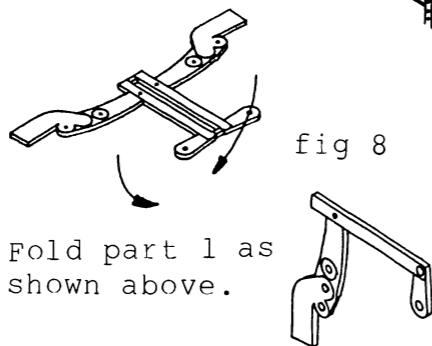
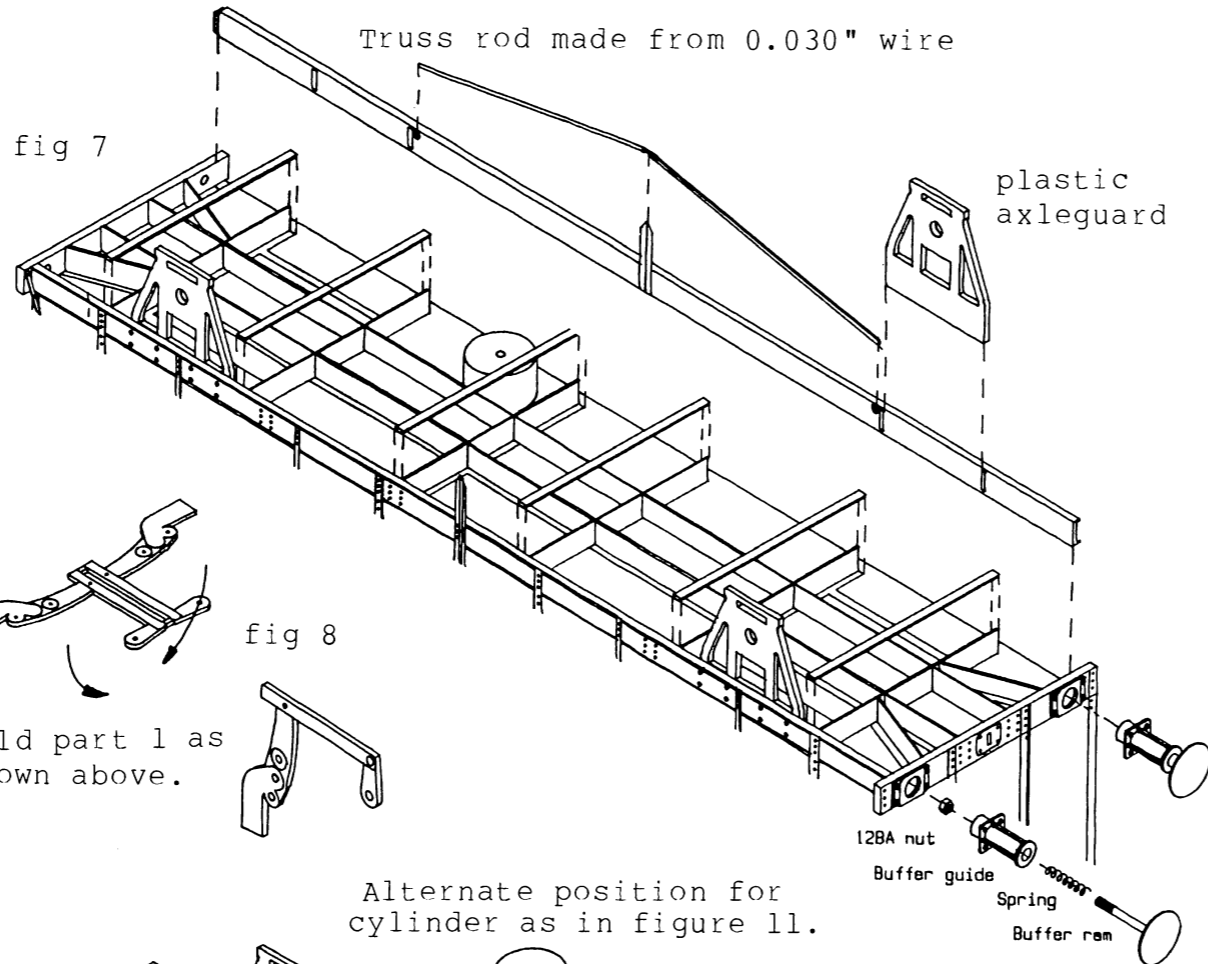
Fit the brake mouldings with the shoes in line with the wheels. You will need to carefully manoeuvre the brake shoes around the wheels.

Now to add brake pull beams and rods. This stage is rather complicated. First add etched Vee hangers as in figure 9. Use 2 for the vacuum cylinder and 2 for each brake lever (part 8). Bend etched linkage (part 1) back on itself as figure 8 and fit as in figure 10. Push a length of 0.040" brass wire through the outer Vee hangers and the crank on part 1. The other end of part 1 sits between locating lugs on the centre line of the underframe. Pass a short length of 0.040" wire through the vac cylinder Vees and parts 3 & 4. Connect the operating arm (part 3) to the cylinder with a short length of 0.030" (0.75mm) wire. The actuating crank (part 4) should be on the centre line of the vehicle. Add pull beams (2 each of parts 5 & 6) with the pegs in the back of the shoes. Note that part 6 (short bar) is nearest to vehicle end. The arm of the pull beams needs to be twisted 90° prior to fixing to part 1.

Add brake levers (parts 7 & 8) as in figure 10. Fit buffer guides into the headstocks but add the steel buffers when painting is complete. Glue the moulded springs/hangers and axleboxes to the solebars. Stepboard supports (if not added earlier) fit into solebar below the doors. Add upper and lower stepboards and the various cast handrails, and door handles to the sides. Fit truss rods 0.030" (0.75mm) wire to the back of the solebar and behind the tip of the queen post.

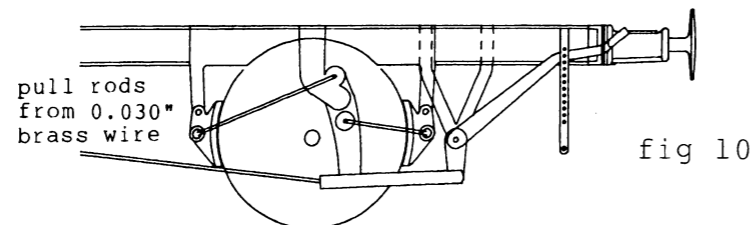
FINISHING THE MODEL

Glazing should be added prior to securing the roof. Don't forget to add the moulded rainstrips 0.216" (5.5mm) from bottom edge of roof and the torpedo type roof vents. Some GUVs appear not to have roof vents. In this case carefully remove the vent bases from roof. Finally, fit couplings of your choice. These vehicles had screw-link couplings; we can supply a set of working couplings (ref: M7023).



Use lengths of 0.030" brass wire for the rods through the vee hangers

Refer to drawing below when fitting etched brakegear to the brake shoes



Notice where the pull beams (parts 5 & 6) connect with part 1. Note also the brake lever and brake lever guard (parts 7 & 8).

LIVERY

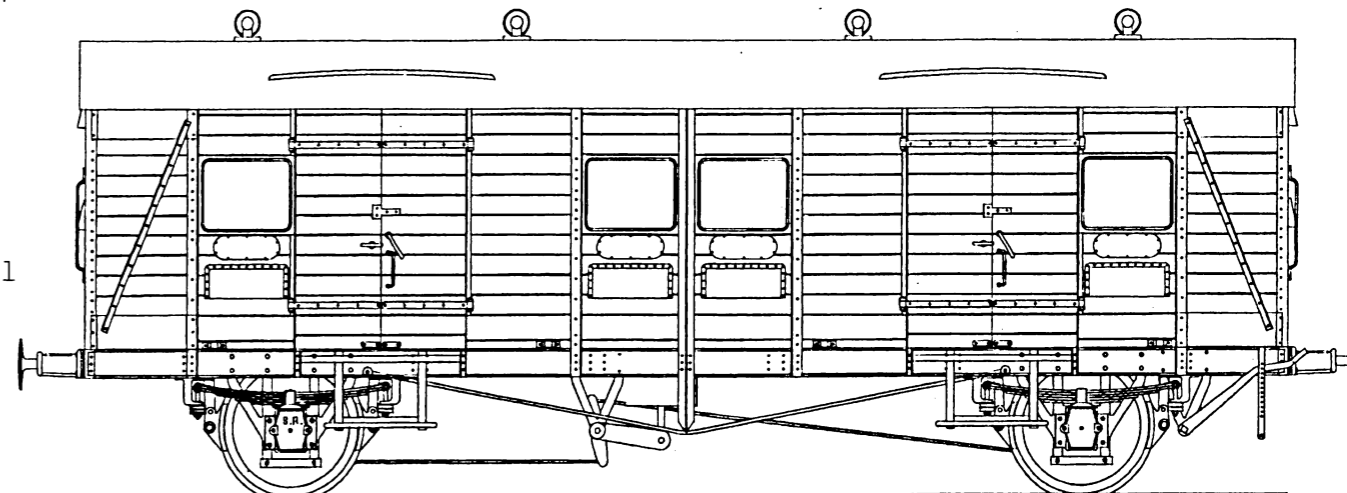
SECR batches were painted dark umber brown with bold yellow lettering. Prototype (no.132), the first to be repainted in SR sage green with gold letters shaded black, was renumbered 1972 at Ashford in Nov 1925. Ends and underframe were black and roof was white. Lettering on solebars and ends was yellow. SR introduced darker (Olive) green by 1929 and some were probably never painted sage. Roof was grey from mid 1930s. Malachite Green was introduced in 1938; many vehicles received this livery. Lettering was

yellow with black border but was soon replaced by 'sunshine' lettering in the 1940s. There were exceptions as No.1957 was painted grey all over in April 1946 and No.1265 in July 1942.

From 1949 BR Crimson became standard but it was a few years before vehicles lost their green livery. No.1082 remained grey until January 1951 and No.1957 until Oct 1949. From mid 1956 a slightly darker green than malachite was introduced but many vehicles were withdrawn in red.

SUMMARY OF SEC 32FT LUGGAGE VANS

SEC No.	Blt.	SR No	Repaint	Remarks (withdrawn)
132	Ashford	1972	11.25	374S, 8.46 re-no 082757, 7.67.
121	Ashford	3	6.26	To 788S, 1948 (1970)
122	Ashford	4	11.25	To 745S, 1947 (c1975)
123	Ashford	5	3.26	To 448S, 1947 (10.61)
124	Ashford	6	11.25	To DS70023, 6.59 (3.70)
125	Ashford	7	7.26	To 1026S, 1948 (3.70)
136	Ashford	8	3.26	To 474S, 1947 (c.78)
137	Ashford	9	3.26	To 859S, 1948 (c.75)
138	Ashford	1980	7.26	To 287S, 8.46 (c.68)
139	Ashford	1	11.25	To 3765S, 8.46 re-no 083237, 4.76.
140	Ashford	2	3.26	Withdrawn?
141	Ashford	3	6.26	To 785S, 1948 (3.59)
142	Ashford	4	3.26	To 367S, 1947 (c.65)
143	Ashford	5	6.26	To 218S, 3.46 (c.74)
144	Ashford	6	6.26	To 385S, 1946 (c.72)
145	Ashford	7	7.26	To 97S, 7.46 re-no 081033, 1958.
146	Ashford	8	7.26	To 373S, 1946 (c.75)
147	Ashford	9	3.26	Withdrawn?
148	Ashford	1990	7.26	To 749S, 1948 (c.75)
149	Ashford	1	7.26	To 251S, 8.45 (c.75)
150	Ashford	2	8.26	Withdrawn?
152	Ashford	3	10.28	To 747S, 1947 (c.84)
153	Ashford	4	8.30	To DS70031, 59 (1973)
154	Ashford	5	6.29	To DS792, 1949 (1976)
155	Ashford	6	5.29	To DS70165, 12.62 (89)
157	Ashford	7	6.29	To 787S, 1948 (1977)
158	Ashford	8	5.29	To 784S, 48 extant 90
160	Ashford	9	6.29	To 1099S, 1948 (c.75)
161	Ashford	2000	7.29	To 449S, 1947 (c.75)
162	Ashford	1	7.27	To DS70166, 12.62 (89)
163	Lancing	2	3.28	To DS70205, 64 (1972)
166	Lancing	3	5.29	To 790S, 1948 (c.73)
167	Lancing	4	6.29	To DS70204, 64 (1976)
168	Lancing	5	6.29	Withdrawn 12.62
169	Lancing	6	7.29	To 446S, 1947 (c.72)
170	Lancing	7	6.29	To 789S, 1948 (1971)
172	Lancing	8	8.29	Withdrawn 6.43
173	Lancing	9	6.29	To 282S, 5.39 (1970)
174	Lancing	2010	7.29	To 751S, 1948 (c.83)
175	Lancing	1	6.29	To 744S, 1947 (c.76)
177	Lancing	2	10.28	To 1035S, 1948 (c.88)
179	Lancing	3	7.29	To 750S, 1948 (1970)
180	Eastleigh	4	1.30	To 786S, 1948 (c.75)
181	Ashford	5	6.29	To 742S, 1947 (c.78)
182	Ashford	2016	5.29	To 743S, 1947 (1978)



not to scale Typical GUV with four vents and corner plates.