COACH FITTINGS – Whitemetal Buffers

Code RG4	Description GWR large round head square shank Coach Buffer (standard from 1925)	Picture
RG4A	GWR oval head square shank Coach Buffer (1906-1925 standard)	op II
B1C	GWR oval head round shank Coach Buffer (pre 1906 standard)	
CBR161	GWR Oval head, round body, Dean Coach Buffer	
B1CA	GWR round head round shank Coach Buffer	
BR20 CBR108	GWR 'B' set centre Buffer & coupling unit for permanently coupled sets	
BR23 CBR136	GWR 'B' set short round head Buffer, suits inner ends of Society/Kirk kit of diagram E147 Brake Composite pairs, also suits close coupled suburban sets	E of
R3G	GWR Auto Coach oval head Buffers [A31 bow ended Coach] Handed	
BR8 WBR37	GWR round head, round body, Buffer 1'-8½" fitted wagons, brown NPCS vans	
SS9	SECR flat cut oval Coach Buffer	
JB1	LSWR Coach Buffer	
CBR122	LSWR Coach Buffer	
CBR121	LB&SCR Coach Buffer	

${\bf COACH\ FITTINGS-Whitemetal\ Buffers}$

Code R2F	Description SR 2 rib round head Buffer CCT/Utility Van	Picture
CBR156	SR Coach Buffers large body oval head	
CBR157	SR Coach Buffers large body round head	Para O
SS4	SR round Coach Buffer	
BR24 CBR127	MR, S&DJR round head Coach Buffer	
RS2	MR, S&DJR bogie Coach oval head Coach Buffer	IIII
RS6	MR, S&DJR 4 and 6 Wheel round head Coach Buffer	
BR22 CBR114	LNWR round head Coach Buffer	
CBR115	LNWR oval head Coach Buffer	THO
RS16	L&YR oval head bogie Coach Buffer	IIII
SS3	LMS round head Coach Buffer without step	
BR6 CBR6	LMS round head Coach Buffers with step	

COACH FITTINGS – Whitemetal Buffers

Code BR7 CBR7	Description LMS oval head Coach Buffers with step	Picture
HB51	NER round head Coach Buffer (and fitted vans)	
CBR179	LNER (Gresley) Coach Buffers pre 1930 extended (Coaches with buckeye couplings and Buffers, both LNER and BR, have the Buffers extended for use with screw couplings when the buckeye is dropped and retracted out of the way for use with buckeyes)	THE
CBR180	LNER (Gresley) Coach Buffers pre 1930 retracted	
CBR181	LNER (Gresley) Coach Buffers post 1930 clipped top extended	1 = 0
CBR182	LNER (Gresley) Coach Buffers post 1930 clipped top retracted	
CBR183	LNER (Gresley) Coach Buffer base plates for CBR179-182	
BR5 CBR5	BR Mk 1 Coach Buffers, oval head (extended position) (Coaches with buckeye couplings and Buffers, both LNER and BR, have the Buffers extended for use with screw couplings and retracted out of the way for use with buckeyes)	
CBR221	BR Mk 1 Coach Buffers, oval head (retracted position)	-6.7
SS5	BR DMU round head self contained Buffers "Alan Searle's sketch, and my SP casting of a self contained Buffer, look different from the casting in the pot which looks like SS4, I suspect something's been mixed up?" NS	
CBR238	Large head Buffers Oleo Hydro-Pneumatic long (1' 8") DMUs and some bogie wagons	

COACH FITTINGS – Whitemetal Gas/ Vacuum Tanks

Code R1L	Description Short Cylindrical Gas Tank, 4.5 mm x 12.9 mm	Picture
RIM	Medium Cylindrical Gas Tank, 3.7 mm x 20 mm	
RQ8	Long Cylindrical Gas Tank, 4.6 mm x 21 mm	
RS5	S&DJR, MR Gas Tank Bogie Coach, 5.4 mm x 19.75 mm	
RS8	S&DJR/MR 4/6 Wheel Coach & Van Medium Gas Tank, 5.35 mm x 15.25 mm	
RS9	S&DJR/MR 4/6 Wheel Coach & Van Short Gas Tank, 5.25 mm x 11.8 mm	
RS17	L&YR Medium Gas Tank, 5.65 mm x 23 mm	
RS18	L&YR Short Gas Tank, 5.4 mm x 8.9 mm	6

[25/July/2011]

COACH FITTINGS – Whitemetal Under Fittings

RQ1 and or Coach under-fittings set. "I think R1D started out as the R1n coded
R1D items, intended for PC silk screen LMS Coaches, and RQ1 was the RQ
codes for GWR toplights and included RQ5 corridor connections and
RQ6 V hangers, but by 1985 R1D had gone and RQ1 contained R3E
and RQ3 dynamo, pair each RQ2 and R3D vacuum cylinders, pair each
RQ7 and R1N battery boxes, pair each R1M, R1L and RQ8 gas tanks,

Now sold as parts

RJ1 and RH1 ventilators." NS

Code Description

BR32 Westinghouse air brake cylinder

CBR165 The central connection goes to a triple valve and air reservoir tank, the outer pair to

the brake linkages

"The GER, NER, GNoSR, CR, LB&SCR were the principal air braked lines, The Rhymney, LC&DR, LT&SR, SoA&MJR and the Isle of Wight were also air braked. The NBR started dual fitting in 1906 and started conversion to vacuum in 1911. The MR and the G&SWR had used it during the latter quarter of the 19 Century but had dropped it for domestic use by 1900 although they both retained some for through

working and the MR retained it on the LT&SR." NS

R1N Coach Battery Boxes Without Brackets

JB2 LSWR Coach battery box With Brackets

CBR111 LNWR Coach double battery box

CBR112 LNWR Coach single battery box

CBR53 LMS Coach battery box

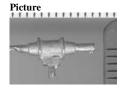
CBR159 LNER Coach double battery box With Brackets

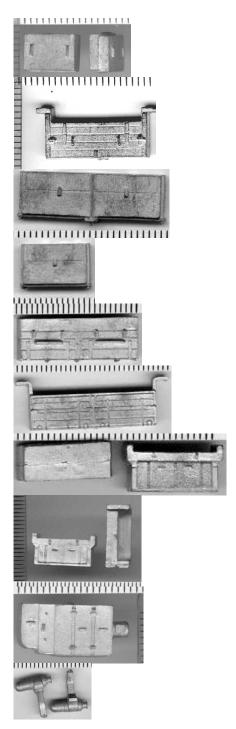
CBR146 BR Mk 1 Coach battery box With Brackets

CBR163 BR Mk 2 Coach battery box With Brackets

CBR164 BR Mk 2 Coach ventilation unit, also used on some Mk 1 stock

CBR113 LNWR Coach Dynamo





COACH FITTINGS – Whitemetal Under Fittings

Code RQ3 ex R1K	Description Coach Dynamo With Brackets	Picture
CBR55	BR mark 1/LMS Coach Dynamo	
CRM1	Coach Dynamo parallel body (Metropolitan Vickers), LNER, Roger Marsh	
CRM2	Coach Dynamo radius body (Stones), LNER, Roger Marsh	J
CBR125	LMS BR Mk 1 Coach lighting resistance box	
CBR54	LMS Coach lighting regulator	
CBR138	Mk 1 Coach lighting regulator (also late LMS)	
CBR134	LNWR Coach queen post [for u/f trussing]	WW E
SS10	SE&CR Coach Queen posts [for u/f trussing]	
RS35	Clasp Brakes - 10.5 mm Coach wheels	
CBR39	Mk 2 Coach, a, b, c under fittings, 7 items	in a firstiff

COACH FITTINGS – Whitemetal Under Fittings

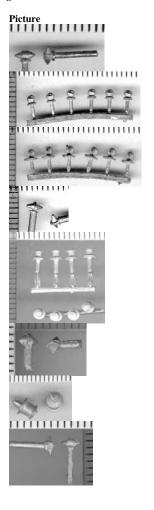
Code CBR137 Mk 2 Coach d, e, f Coach fittings

CBR154 BR Mk 3 Coach fittings

CBR154 BR Mk 3 Coach fittings

COACH FITTINGS – Whitemetal Roof Fittings

	COACH FII TINGS – Wnitemetal Roof FI
Code WBR142	Description Goods van torpedo vent, suits some Coaches
RH1	Shell Roof Ventilators
RJ1	Torpedo Roof Ventilators on base
HE5	Torpedo Roof Ventilators Baseless
RP1	Gas Lamp Tops
CBR242	LSWR Torpedo Vents
BR33 CBR166	LB&SCR oil lamp top
CBR94	LMS Coach torpedo vents (oval)
CBR128	"Lamp fittings. Daytime; Vacant bung holder plus bung in lamp base MR/S&DJR Bung Holder BR130 or MR Bung Holder BR140 Plus MR/S&DJR Bung in Lamp Base BR129 Night time and tunnels; bung on bung holder plus oil lamp in lamp base MR/S&DJR Bung on Holder BR143 or MR Bung on Holder BR141 Plus MR/S&DJR Oil Lamp BR139 Modernised; Optional redundant Vacant bung holder plus gas lamp and plumbing MR/S&DJR bung holder BR130 or MR Bung Holder BR140 MR/S&DJR Gas lamp BR128" NS MR/S&DJR Coach gas lamp top
CBR129	MR/S&DJR bung in oil lamp base
CBR130	MR/S&DJR bung holder, vacant
CBR139	MR/S&DJR oil lamp in lamp base
CBR140	MR bung holder, vacant





${\bf COACH\ FITTINGS-Whitemetal\ Roof\ Fittings}$

Code CBR141	Description MR bung holder & bung
CBR143	S&DJR bung holder & bung
CBR131	LNWR Coach gas lamp top
CBR132	LNWR Coach gas lamp to side roof mounting
CBR133	LNWR Coach torpedo vent (Large)
RS14	L&YR Gas Lamp Tops, small diameter, fairly tall, early Coach
RS15	L&YR Gas Lamp Tops, Large diameter, squat, later Coach
CBR167	BR Mk 2 Coach roof vents
CBR169	BR Mk 1 Coach roof vents, dome type



COACH FITTINGS – Whitemetal Corridor Connection

Code R1F Ex RQ5	Description Corridor Connections, British Standard Scissors, LMS, GWR (until 1925 when they switched to suspended British Standard) plus others but not generally SR, LNER or BR who used 'Pullman' gangways - except on a few Coaches intended for through workings to the British Standard areas.	Picture
CBR189	Corridor Connections, BR Mark 1 Coach 'Pullman' gangways	
CBR123	LMS Coach guard's lookout ducket, period I Coach's	
CBR124	LMS Coach guard's lookout ducket, periods II & III Coaches	
R3C	GWR Auto Coach Gong	

COACH FITTINGS – Whitemetal Coach Ends

	COACH FITTINGS – Whitemetal Coach En	ds
Code WS11 Ex RK3	Description GWR Siphon H [to convert the R1A Stewart Hine outside framed Siphon G etch] or Monster ends, with doors. No Buffers.	Picture
No Number found - but sold	SR Maunsell Coach ends with 'Pullman' gangways, pair of each No Buffers.	
RE1	LMS period 3 Stanier Plain Suburban Coach ends, both with steps and a vacuum pipe, 1 end with communication cord linkage. No Buffers.	
RE2	LMS period 1 vertically planked gangwayed Coach ends with steps and headless Buffers	
RE3	LMS period 1 vertically planked gangwayed Brake Coach ends, 1 as RE2 and 1 with windows, headless Buffers.	
CBR222	LNER Gresley Coach ends & Corridor connections 'Pullman' gangways, pair of each. Intended for use with 3SMR MTK LNER Coaches. No Buffers nor headstock.	
CBR40	BR Mk 2 Coach Ends & corridor connections, pair of each. No Buffers nor headstock.	

COACH FITTINGS - Plastic Roofs

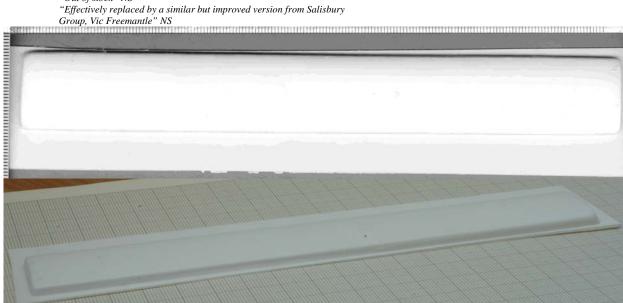
Picture

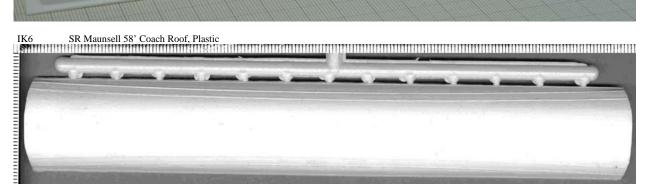
Code Description IK2



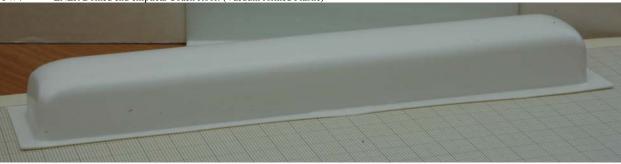
DM2 LSWR 61' Elliptical Coach Roof: (Vacuum formed Plastic)

"Out of stock" NS





PW4 LNER Domed end elliptical Coach Roof: (Vacuum formed Plastic)



COACH FITTINGS - Plastic

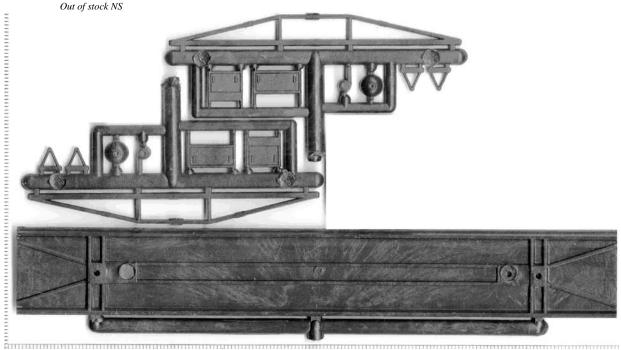
Picture Code Description GWR 57' coach floor, Plastic from the 'Kirk' E147 B set



IK4 GWR flat coach ends, Plastic from the 'Kirk' E147 B set



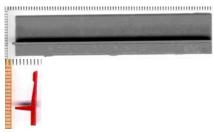
IK5 GWR 57' coach Underframe, Plastic from the 'Kirk' E147 B set



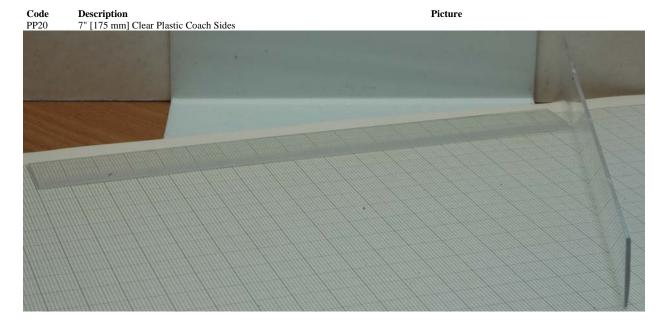
GM17 SR Van Ends, as fitted to even plank bogie luggage vans [GBL] but without the corridor connections Out of Stock? NS



PP12 Coach Seating Units-Plastic 4 off 3" [75 mm] Sections on one sprue



COACH FITTINGS - Plastic

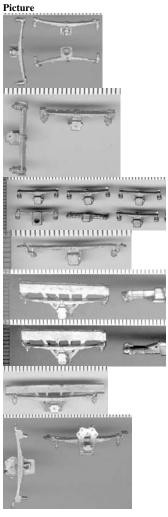


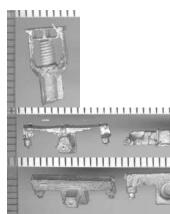
${\bf COACH\ FITTINGS-Mike\ Trice\ Etched\ Compensation\ Units}$

Code MT4 7030/3	Description Etched brass Stepboards LNER 8' 6" Bogie The etch provides the most common size of LNER step boards for use with Gresley 8' 6" bogies. Two differing size of end step boards are included. "Remove the components from the fret and clean up any remaining tabs. Fold the steps along the half etched crease line through 90 degrees with the crease line on the inside of the bend. Strengthen the joint with solder as required and then solder or glue the steps into their corresponding positions on the bogie sideframes. Note: The number of stepboards used varies from prototype to prototype. Check drawings or photographs to determine size & location." NS	Picture C: 992 MJT SCALE COLLPONEUS 70:30 1
MT7 2225/3	Etched brass 7' 0" Wheelbase Bogie Compensation Unit	
MT5 2224/3	Etched brass 8' 0" Wheelbase Bogie Compensation Unit	
MT3 2223/3	Etched brass 8' 6" Wheelbase Bogie Compensation Unit	
MT6 2222/3	Etched brass 9' 0" Wheelbase Bogie Compensation Unit	
MT8	Etched brass 10' 0"Wheelbase Bogie Compensation Unit	Rer 222/3 COACH COMPENSATION PO' WHEET BASE UNIT
2221/3		Ref 202 / 3 La

COACH FITTINGS – Axle Boxes & Springs

Code BR26 CBR104	Description GWR Bogie axlebox & spring Intended for RL1 Mallard Dean 6' 4" etched swing link bogie
R2D ex R1G CBR147	SR 4 wheel utility van Axlebox & Long Spring, J hanger [intended for R2A Stewart Hine etched Kit of SR CCT]
RS4	Fox Bogie Coach Axlebox & Spring "[Originally for D&S NER etched Fox bogies, also supplied with Blacksmith S&DJR etched 8' 0" Fox Lightweight bogies - which also require RS3 bolster springs" NS]
RS7	S&DJR, MR 4/6 Wheel Axlebox & Spring, J hanger
MS1 ex B1B	MR 4/6 Wheel Coach/van axle guard & long spring with cast W iron [MS1 and BR25 are not the same]
BR25 CBR135	MR 4/6 Wheel Coach/van axle guard & long spring with cast W iron
HB8 Ex Hoyle	LNWR 4/6 Wheel Coach spring & axle box, suits some NSR
RS11	L&YR Coach Bogie bolster single coil Spring [for Mallard etched bogies]
RS12	L&YR Bogie Coach External Axlebox & Springs [for Mallard etched bogies]
RS13	L&YR Bogie Coach Internal Axlebox & ends of Spring [for Mallard etched bogies]

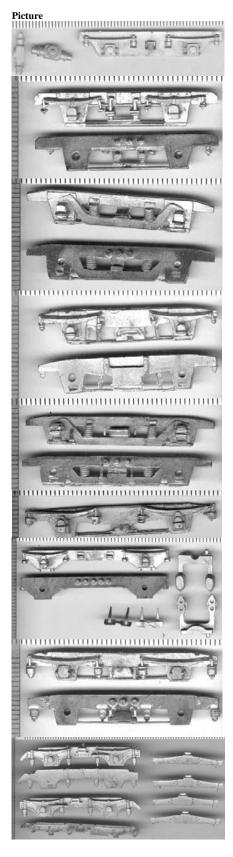




WHITEMETAL - Coach Bogie Side Frames

"Use with RR2 cast stretchers or MT3 / MT5-8 etches or 3SMR etches C/EB210 [7'], 240 [8'], 255 [8' 6"], 270 [9'] or 300 [10']" NS

Code CBR172	Description AEC railcar 8' 6" bogie side frames & gear boxes
RR1	GWR 7' Collett Coach Bogie, single bolster
R3B	GWR 8' American Coach Bogie
R3F	GWR 8' Collett Coach Bogie
RIH	GWR 9' American Coach Bogie
RG1	GWR 9' Churchward 'Fishbelly' Coach Bogie, Light Bolster
RF2	GWR 10' Dean Coach swing link 'suspension' Bogie "[can be shortened to 8' 6" by cutting out 1 and 2 half pegs from the middle] with scroll irons [to be separated and attached to coach body, pointing down] and volute springs [to be joined together with the 'pivot' hole in the middle and placed under the bogie, dimple side up, dimples aligned with the scroll irons." NS "Contractor built coaches for the Manchester & Milford, and Port Talbot Dock & Railway used the 8' 6" Dean bogie." NS
RF1	SR 8' Maunsell Lynes Coach Bogie (Loco Hauled Stock & EMU's Including some BR)
CBR170	SR Electric stock 8' 6" bogie side frames & third rail pick up skates

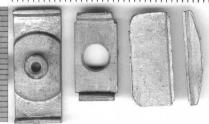


$WHITEMETAL-Coach\ Bogie\ Side\ Frames$

Code RM1	Description MR (and Scottish Joint Stock) Bain 8' Coach Bogie [The M&CR may have been similar]. Earlier Midland coaches used Clayton 8', 10' and 6 wheel bogies. A few, mostly 59' catering vehicles used a Fox pressed steel bogie.	Picture
CBR109	LNWR 8' Coach bogie, side frame & bolster detail. Standard 8' bogie, no truss rods, 12" solebar, 5' springs, coil bolster springs,1901 axlebox lid to aid inspection of bearing. "[From 1911, the solebar was shallower as on Brynkits 3CA101]" NS	
CBR110	LNWR 9' Coach bogie, side frame & bolster detail, 1905 version, no truss rods, 12" solebar, 5' springs, coil bolster springs,1901 axlebox lid "[From 1911, the solebar was shallower as on Brynkits 3CA102]" NS	
CBR52	LMS 9' Coach bogie, side frame & bolster detail	
RIC	Fox's Patent Lightweight pressed steel 8' Coach Bogie, coil bolster spring. Late LSWR, LB&SCR, GCR, GNoSR, H&BR, GER, HR, CR, G&SWR The S&DJR and early LSWR used a lightweight Fox but with a transverse leaf bolster spring. Very late LSWR coaches used something completely different. The LB&SCR used Fox bogies for the (first) R. Billinton period from 1890 but Panter switched to a built up bogie under Marsh from 1905 with the elliptical Balloons.	
RM2	Fox's Patent Heavyweight pressed steel 8' Coach Bogie, transverse leaf bolster spring. SE&CR, LB&SCR, GNR (minus the tie rod), ECJS, NER, NBR, L&Y, Barry. Also very similar to some MR {the 59' catering vehicles}	
	"The instructions have always claimed M&NB Joint Stock and M&GSW Joint Stock but I don't believe them" NS	Mo Para Com
	"Some recent castings have inserted wire tie rods for robustness in Bruce Hoyle's style." NS	
HB42	LNER 8' 6" light Gresley Coach bogie	
HB92	Fox's Patent 7' Coach Bogie [for NER CCT]	5 F 3 - 3 F 2
JH1	LNER 8'0" light Gresley Coach Bogie "[like the Bec Esanel LNER heavy Gresley bogie, it was supposed to be 8'6" but is not]" NS	
CRM5	LNER 8' 6" light Gresley Coach bogie, Roger Marsh pattern	ALCON A STANFORM
CRM6	LNER 8' 6" heavy Gresley Coach bogie, Roger Marsh pattern	See AGA
CRM7	LNER 8' 0" heavy Gresley Coach bogie, Roger Marsh pattern	
		V S V

WHITEMETAL - Coach Bogie Side Frames

Code HB	Description BR Commonwealth 8' 6" Coach Bogie	Picture
CBR192		
HG6	BR B4 8' 6" Coach Bogie [Second generation casting by Bruce Hoyle] Note that the small loose bit [It is a traction bar] has to be fixed 'handed' The B4 bogie uses 3' 0" wheels rather than the 3' 6" of most coach bogies.	
CBR126	BR Mk 1 Coach bogie side frames (with separate bolster springs)	
CDD155		
CBR155	BR Met Cam 101 DMU etc. 8' 6" diesel bogie side frames (uses 3' 0" wheels rather than the 3' 6" of most coach bogies)	PIRALITA
CBR192	BR 8' 6" Commonwealth bogie	
CBR144	Class 150-156 DMU bogie side frames	
CBR171	Pullman 10' pressed steel coach bogie side frames & Pullman gangway corridor connection for the 1928 Metropolitan Carriage & Wagon 'Queen of Scots' and SR. Many other 1920's Pullmans used the bogie, but some of those, such as the LMS CR section, used British Standard Gangways. Masters by Andrew G. Barnes	
RR2	Standard Bogie Pivot - Stretcher Set: (No Sideframes) 2 Rubbing Plates 2 Stretchers (centre) 2 Stretchers (coupler end) 2 Stretchers (inner end)	360 0



WHITEMETAL - Coach Bogie Side Frames



Three Millimetre Society
Information Leaflet SK1
October 1970 - November 2003 tweak
Construction details for the Society Bogie Kits [with RR2 cast stretchers]

The Kit consists of the following:

4 Side frames

(RF2 GWR Dean Bogies only)

4 Suspension volute spring brackets [to be joined together with the 'pivot' hole in the middle and placed under the bogie, dimple side up, dimples aligned with the scroll irons]

Scroll irons [to be separated until there are 8 and attached to coach body, pointing down]

RR2 (which used to be supplied with the bogie sides)

- 2 Stretchers (centre)
- 2 Stretchers (coupler end)
- 2 Stretchers (inner end)
- 2 Rubbing Plates

First drill the dimples in the stretcher about 1/16" deep with a 1.25mm, or No. 56 drill. Do this also to the dimple in the suspension spring bracket (Dean bogies). Size the axlebox holes with a 1/16" drill (or other size to suit axles / bearings in use) and fit bearings. (Dean bogies, Join the four spring brackets together in pairs.)

Assemble the side frames to the stretcher, inserting the axles at the same time to check that they fit. If all is well, fasten the frames to the stretcher preferably with Araldite. Check for squareness and clamp in position while the adhesive sets. The end stretchers may be fitted with Araldite or, with care, by Soldering. 70° Lowmelt Solder is recommended.

The-rubbing plate is of the correct width to fit between the solebars of G.W. clerestory coaches [Not sure which this refers to, the only contemporary clerestory kit uses an etched 6' 4" Dean bogie] and close for many other types. The top surface of this item gives the correct floor level for the coach when assembled [provided you use a floor of the thickness Stewart expected], The bogie is retained on the spigot by an 8BA screw, which can be screwed into the hole without use of a tap. For the Dean bogie, the suspension brackets form a retaining plate which is screwed firmly to the end of the spigot, the arms carrying the spring 'buckets' projecting underneath, and clear of, the side frames. This arrangement will be suitable for curves of reason able radius, but if difficulty is experienced on sharp curves the spring unit may be attached to, and swivel with, the bogie. For other types of bogie a large washer should be fitted under the 8BA screw.

To shorten the 10' Dean Bogie to 8' 6", cut off the upper spring lugs from the side frames (in between the bogie axlebox springs). Cut the frame in half with a piercing saw and file out the centre until the second and fourth locating pegs are half filed away and can become a single new central peg. Using this and the two outermost pegs as a location, Araldite the side frame to the stretcher; then proceed as above.

In the 30 years since this note was first produced, etched brass compensated stretchers from Mike Trice sold by the Society and rigid etches from 3 SMR have largely replaced RR2 as the construction methods of choice.

SCH [Stewart C Hine, tweaked by Nick Smith] aeb/G8416

$WHITEMETAL-Vacuum\ Cylinders$

The distinction between a coach vacuum cylinder and a wagon vacuum cylinder is a bit moot; coaches tended to have larger cylinders, but some things had a single cylinder while others had a pair of smaller cylinders.

Code	Description	Picture
RQ2 [ex R1E]	Vacuum cylinder, 6.3 mm diameter	
R3D	Small Vacuum Cylinder, 5.25 mm diameter	
BR19 CBR107	GWR Early Coach vacuum cylinder, 5.6 mm diameter	
BR15 CBR57	LMS Coach vacuum cylinder, riveted body, 5.35 mm diameter	
BR16 CBR95	LMS Coach vacuum cylinder, plain body, 5.75 mm diameter	
BR17 WBR105	GWR Freight stock vacuum cylinder, 4.25 mm diameter	
BR18 WBR106	GWR Early freight stock vacuum cylinder, 4.3 mm diameter	
HG9	Vacuum Brake Cylinder, BR wagon, 6.2 mm diameter	