

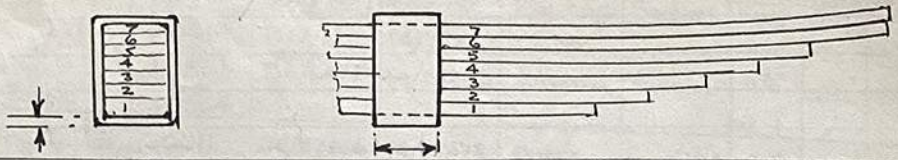
W. PATE.

D. M. UNITS.

BOGIE BOLSTER & SIDE

BEARING SPRINGS.

7 PLATE - SIDE BEARING SPRING.



CLASS.	BUILD.	LOT NO	DRG NO	CAT NO	Plate Section.	Buckle Bottom Plate Section	Spring Nos.
122	Gloucester H.D.	30419	DE/56878	14/32120	1 to 5 = $\frac{5}{8}$ " thick	+ A box recess &) 4" x $\frac{5}{8}$ "	230 New 261
116	Derby H.D.	30363			6 + 7 = $\frac{1}{2}$ " thick.	(4" x $\frac{7}{16}$)	
116	" "	30364					
107	Derby Triples	30611	DE/56476	14/32076	1 + 2 = $\frac{1}{2}$ " thick	4" x $\frac{1}{2}$ "	261 ⁺
107	" "	30612			4 to 7 = $\frac{5}{8}$ " thick.		
100	Gloucester (Power)	30278 [⊕]	DE/56077	14/32096			
100	" "	30444 [⊕]	"	"	1 to 4 = $\frac{1}{2}$ " thick.	3" x $\frac{3}{8}$ "	*222
175	Derby H.D (Trailer)	30365	"	"	5 to 7 = $\frac{5}{8}$ " thick.		
161	Derby Triple (Trailer)	30613	"	"			
143	Gloucester (Trailer)	30279	DE/56251	14/32066	1 to 5 = $\frac{1}{2}$ " thick	3" x $\frac{7}{16}$ "	215
143	" "	30445	+ 24963/B	"	6 + 7 = $\frac{5}{8}$ " thick.	(3" x $\frac{3}{8}$)	
141	Craver Trailer	30504		"			

8 PLATE SPRING

105	Craver (Power)	30503	DE/56719 + 24963A	14/32080	1 to 5 = $\frac{1}{2}$ " thick 6 to 8 = $\frac{5}{8}$ " thick.	3" x $\frac{7}{16}$ " (3" x $\frac{3}{8}$)	217
162	Met-Cam (Trailer)	30257 30260 30273 30468 30502 30589	DE/35899 + 905/17A	14/32045	1 to 8 = $\frac{1}{2}$ " thick	3" x $\frac{7}{16}$ " (3" x $\frac{3}{8}$)	None Indicated.
189 A/G. TRAILER.		30415-6	SC/SW/445	14/32046	1 to 8 = $\frac{1}{2}$ " thick	4" x $\frac{1}{2}$ "	
126 A/G. POWER.		30413-4	SC/SW/425		1 to 8 = $\frac{1}{2}$ " thick	4" x $\frac{1}{2}$ "	

9 PLATE SPRING.

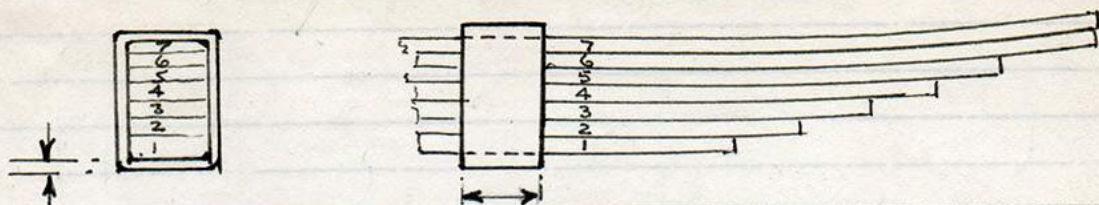
101	Met-Cam (Power)	30252-3 30256 30270-1 30467 30500-1 30587-8	DE/35906A + 906/36A.	14/32054	1 to 9 = $\frac{1}{2}$ " thick.	3" x $\frac{1}{2}$ " (3" x $\frac{7}{16}$)	None Indicated.
102							

⊕ $\frac{1}{2}$ " packer welded to bottom of buckle. + 261 is same as 216 spring, with exception of buckle width. 216 is only 3" width of buckle.

* Spring 222 is similar to 214 but has a greater camber at eye load. See Drg DE/56077 CC65.
Also Spring No 276 incorporates .75" packing replacing No 222 to give acceptable Hornblock Clearance. DRG No DE/57883.

A/Doug	11	SPRING NO	87	240	92	254	102	256	87	92	1	1	1
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7 PLATE - SIDE BEARING SPRING.



CLASS	BUILD.	LOT NO	DRG NO	CAT NO	Plate Section.	Buckle Bottom Plate Section	Spring Nos.
122	Gloucester H.D.	30419	DE/56878	14/32120	1 to 5 = $\frac{5}{8}$ " thick	+ A box Recess &) 4" x $\frac{5}{8}$ "	230 New 261
116	Derby H.D.	30363			6 + 7 = $\frac{1}{2}$ " thick.	(4 $\frac{1}{4}$ x $\frac{7}{16}$)	
116	" "	30364					
107	Derby Triples	30611	DE/56476	14/32076	1 + 2 = $\frac{1}{2}$ " thick	4" x $\frac{1}{2}$ "	261 ⁺
107	" "	30612			4 to 7 = $\frac{5}{8}$ " thick.		
100	Gloucester (Power)	30278 [⊕]	DE/56077	14/32096			*222
100	" "	30444 [⊕]	"	"	1 to 4 = $\frac{1}{2}$ " thick.	3" x $\frac{3}{8}$ "	
175	Derby H.D (Trailer)	30365	"	"	5 to 7 = $\frac{5}{8}$ " thick.		
161	Derby Triple (Trailer)	30613	"	"			215
143	Gloucester (Trailer)	30279	DE/56251	14/32066	1 to 5 = $\frac{1}{2}$ " thick	3" x $\frac{7}{16}$ "	
143	" "	30445	+ 24963/B	"	6 + 7 = $\frac{5}{8}$ " thick.	(3 $\frac{1}{8}$ x $\frac{3}{8}$)	
141	Craver Trailer	30504		"			

8 PLATE SPRING

105	Craver (Power)	30503	DE/56719 + 24963A	14/32080	1 to 5 = $\frac{1}{2}$ " thick 6 to 8 = $\frac{5}{8}$ " thick.	3" x $\frac{7}{16}$ " (3 $\frac{1}{8}$ x $\frac{3}{8}$)	217
162	Met-Cam (Trailer)	30257 30260 30273 30468 30502 30589	DE/35899 + 905/17A	14/32045	1 to 8 = $\frac{1}{2}$ " thick	3" x $\frac{7}{16}$ " (3 $\frac{1}{8}$ x $\frac{3}{8}$)	None Indicated.
189	A/G. TRAILER.	30415-6	SC/SW/445	14/32046	1 to 8 = $\frac{1}{2}$ " thick	4" x $\frac{1}{2}$ "	215
126	A/G POWER	30413-4	SC/SW/425		1 to 8 = $\frac{1}{2}$ " thick	4" x $\frac{1}{2}$ "	

9 PLATE SPRING.

101	Met-Cam (Power)	30252-3 30256 30270-1 30467 30500-1 30587-8	DE/35906A + 906/36A.	14/32054	1 to 9 = $\frac{1}{2}$ " thick.	3" x $\frac{1}{2}$ " (3 $\frac{1}{8}$ x $\frac{7}{16}$)	None Indicated.
102							

⊕ $\frac{1}{2}$ " packer welded to bottom of buckle.

+ 261 is same as 216 spring, with exception of buckle width. 216 is only 3" width of buckle.

*Spring 222 is similar to 214 but has a greater camber at tire load. See Drg DE/56077 CC65.

Also Spring No 276 incorporates .75" packing replacing No 222 to give acceptable HORNBLOCK CLEARANCE. DRG NO DE/57883.

BOLSTER SPRINGS.

Build.	Lot No.	Dwg No	Cat. No	Position.	Section.	DIMENSIONS.			Number.
						Free	O/D.	I/D	
Gloucester H.D.	30419	D17/1413	14/31867	Outer	Timmis.	9 5/8"	9 1/2"	5 5/16"	156
Derby. H.D. (Power)	30363 30364	DE/64779 " "	14/31868	Inner.	Timmis.	9 7/8"	5 1/16"	2 1/4"	155
Derby Triples (Power)	30611 30612	DE/57666 "	14/31878 14/31879 14/31877	Outer Middle Inner.	Round: 1 3/8" dia Round: 7/8" dia Round: 5/16" dia	9.9" 9.9" 9.55"	8.6875" 5.375" 3.278"	5.9375" 3.625" 2.25"	245* 246 247*
Gloucester (Power)	30278 30444	D 5803 D15/1211	14/31831 14/31837	Outer Inner	Timmis Timmis.	10" 10"	9" 4 3/4"	5 1/16" 2 1/4"	86 92
Alternative to Above.		DE/57611 DE/57599 or DE/57604	14/605 14/546 or 14/31916	Outer Inner or Inner.	Round Round Round.	10" 9 7/8" 9 7/8"	8 3/8" 4 3/4" 4 3/4"	5 5/8" 3 1/8" 3 3/16"	241 234 OR 236.
Derby. H.D. (Trailer)	30365	D16/1470	14/31852 14/31854	Outer Inner.	Timmis. Timmis.	9 3/4" 9 15/16"	9 1/2" 5 1/16"	5 5/16" 2 1/4"	107A 108A.
Derby Triple (Trailer)	30613	DE/57667	14/31884 14/31883	Outer Inner	Round: 1 1/2" dia Round: 1 1/16" dia	15.25" 15.25"	9 7/8" 5 3/8"	6.93" 3 3/4"	268 267
Gloucester (Trailer)	30279 30445	D15/1211 "	14/31842 14/31843	Outer Inner	Timmis Timmis.	9 13/16" 9 15/16"	8 3/4" 4 3/4"	5" 2 1/4"	101 102
Alternative to above.		57604 "		Outer Inner.	Round Round.	9 7/8" 9 7/8"	7 1/4" 4 3/4"	5" 3 1/8"	237 236
Craven (Trailer)	30504	DE/37202(g) DE/37202(h)	14/31893 14/31886	Outer Inner	Timmis. Timmis.	9 1/8" 9 13/16"	8 15/16" 4 13/16"	5 1/16" 2 1/4"	}†
Craven (Power)	30503	DE/37202(e) DE/37202(f)	14/31852 14/31854	Outer Inner.	Timmis Timmis.	9 3/4" 9 15/16"	9 1/2" 5 1/16"	5 5/16" 2 1/4"	107A 108A.
Met-Cam (Power)	30252-3 30256 30270-1 30467 30500-1 30587-8	DE/35906 or 906-36.	14/32054	Outer Inner.	Round Round.	11 13/16" 11 1/4"	9 1/2" 5 3/4"	6 1/4" 3 3/4"	
Met-Cam (Trailer)	30257 30260 30273 30468 30502 30589	905/17b 905/17c	14/31900 14/31894.	Outer Inner	Round Round.	12" 12"	9 1/2" 5 15/16"	6 1/2" 4 1/16"	

* In stores catalogue these are in reverse order to that shown in Dwg. DE/57666 i.e.: 245 is shown as inner while 247 is shown as Outer.

† Alternative to both the Inner + Outer Spring is a Single Spring. No CCS 79 to Dwg. No C-A2-3336.

A/G. Power.	30413-4	SC/SW/419 SC/SW/420	14/31905 14/31830	OUTER INNER	ROUND ROUND	1-7 3/8" 1-2 1/8"	10 3/16" 7 1/16"	7 7/16" 4 15/16"	CCS 12 CCS 13
A/G TRAILER	30415-6	SC/SW/444 SC/SW/420	14/31901 14/31830	OUTER INNER	ROUND ROUND	1-3 3/32" 1-2 1/8"	9 13/16" 7 1/16"	7 3/16" 4 15/16"	CCS 14 CCS 13

RND
X-COUNTRY TRAILER

A) DOUBLE NESTS.

DETAILS OF BOLSTER SPRINGS & APPLICABILITY.
DIESEL MULTIPLE UNITS. L.M.R. SPONSORED.

INNER SPRING.				OUTER SPRING				COMBINED LOAD AT 75" T-C-Q	BUILDER	LOT NUMBERS	REMARKS.
SPRING NO	DRAWING NO	FREE HT	LOAD AT 75" T-C-Q	SPRING NO	DRAWING NO	FREE HT	LOAD AT 75" T-C-Q				
87	5803	10"	2.0.0	86	5803	10"	3.0.2	5.0.2	Derby.	30210 CLASS 148	Interchangeable.
240	DE/57611	10"	0-16-32	241	DE/57611	10"	4.3.2.8	5.0.2	do	do	
92	DIS/1211	9.875"	1.13.0	91	DIS/1211	9.875"	2.10.0	4.3.0	Wickham	30258 CLASS 109	Interchangeable.
234	DE/57599	9.875"	1.13.0	235	DE/57599	9.875"	2.10.0	4.3.0	do	do	
102	DIS/1211	9.875"	1.6.0	101	DIS/1211	9.875"	2.4.0	3.10.0	Derby Gloucester C&W	30462, 30464 CLASS 125 30279, 30445 CLASS 143	Interchangeable.
256	DE/57604	9.875"	1.6.0	237	DE/57604	9.875"	2.4.0	3.10.0	do	do	
87	5803	10"	2.0.0	107A	DIS/1470	9.75"	3.9.0	5.9.0	Derby.	30212, 30385 CLASSES 172 175	
92	DIS/1211	9.875"	1.13.0	86	5803	10"	3.0.2	4.13.2	Derby Gloucester C&W	30406-8, 30460-1, 30465, 30498, 30601, 30660. CLASS 108 30276, 30444 CLASS 100	
-	R.9747	9.625"	2.1.0	-	R.9747	9.5625"	3.2.0	5.3.0	Park Royal.	30286 CLASS 103	
-	R.5803	9.25"	1.14.0	-	R.5803	9.0625"	2.14.0	4.8.0	Park Royal.	30287 CLASS 145.	
-	DE/36674	10"	1.7.4.	-	DE/36674	10"	3.6.2	4.14.2	Birmingham C&W	30292, 30295, 30297, 30299, 30300, 30302, 30319, 30405 CLASSES 140 & 160 189	Excluding vehicles now fitted with modified bolster suspension.

DETAILS OF BOLSTER SPRINGS & APPLICABILITY.
DIESEL MULTIPLE UNITS. L.M.R. SPONSORED.

A) DOUBLE NESTS (CONT.)

INNER SPRING.				OUTER SPRING.				COMBINED LOAD AT * 7.5" T.C.Q.	BUILDER	LOT NUMBERS	REMARKS.
SPRING NO.	DRAWING NO.	FREE HGT.	LOAD AT * 7.5" T.C.Q.	SPRING NO.	DRAWING NO.	FREE HGT.	LOAD AT * 7.5" T.C.Q.				
-	DE/57833	16"	1.14.0 at 12.48"	-	DE/57833	16"	3.11.2.4 at 12.48"	5.5.2.4 at 12.48"	Birmingham C&D	30591-2 CLASS 110 (PART)	Also used on Birmingham built vehic. Class 10 & Metro Cammell built vehicles Class 102 & 111 which have been fitted with modified suspension
-	DE/57775	15.75"	2.2.1. at 12.50"	-	DE/57775	15.75"	4-7.3. at 12.50"	6-10.0 at 12.50"	Derby	30521, 30530 30595, 30598 CLASSES 107 & 115	
									Birmingham C&D	30543, 30545. CLASS 116.	
									Pressed Steel	30546, 30548 CLASS 117	
									Cloucester C&W	30421, 30422. CLASS 119	
-	DE/57714	15.625"	1.11.1.5 at 12.112"	-	DE/57714	15.625"	3.4.0 at 12.112"	4.15.1.5 at 12.112"	Derby	30522-3 30531-2 30596-7 30599-600 CLASSES 136 173 & 177	
									Birmingham C&D	30544. CLASS 174	
									Pressed Steel	30547 CLASS 176	
									Cloucester C&W	30423 CLASS 178	
267	DE/57667	15.25"	1.0.2.6 at 11.72"	268	DE/57667	15.25"	3.9.1.4 at 11.72"	4.10.0	Derby	30513 CLASS 161 (PART)	
-	DE/57831	15.875"	1.5.2.6 at 12.5"	-	DE/57831	15.50"	2.15.1.4 at 12.5"	4.1.0	Birmingham C&N.	30693 CLASS 163 (PART)	Also used on Metro Cammell vehicles in Classes 162, 164-5, 168 & 171 which have been fitted with modified suspension

DETAILS OF BOLSTER SPRINGS & APPLICABILITY.
DIESEL MULTIPLE UNITS. L.M.R. SPONSORED

A) DOUBLE NESTS. (CONT.)

INNER SPRING				OUTER SPRING				COMBINED LOAD AT 7.5" T.C.Q.	BUILDER	LOT NUMBERS	REMARKS
SPRING NO.	DRAWING NO.	FREE HGT.	LOAD AT 7.5" T.C.Q.	SPRING NO.	DRAWING NO.	FREE HGT.	LOAD AT 7.5" T.C.Q.				
-	DE/37202 (H)	9.8125"	1.5.0	-	DE/37202 (9)	9.125"	2.5.0	3.10.0	Cravens	30281, 30283, 30285, 30354, 30470, 30504 CLASSES 147 & 170	Spring No. CCS 79, Dwg No. C-A2 3396 can be used as an alternative (See sheet for single nest)
-	DE/35906	11.75"	1.8.3.3	-	DE/35900	11.75"	3.15.3.7	5.4.3	Metro Cammell	30248-9, 30262-6, 30259, 30251, 30263, 30268-8, 30270-1, 30275-6, 30338-9, 30467, 30500-1, 30508-2, 30587-8, CLASSES 101-2, 111	Vehicle in these lot numbers which have been fitted with modified suspension capable of being fitted to Dwg No. DE/57853 (See Sheet 2)
-	DE/35899	11.875"	1.1.3	-	DE/35899	12.00"	3.0.3	4.2.2	Metro Cammell	30250-1, 30257-8, 30260, 30262, 30264-5, 30269, 30272-4, 30277, 30337, 30540, 30569, 30572, 30570, 30589, 30615, CLASSES 144, 162, 164, 5, 168, 171	Vehicle in these lot numbers which have been fitted with modified suspension capable of being fitted to Dwg No. DE/57853 (See Sheet 2)
155	{ D17/1413 DE/64719	9.875"	2.10.0	156	{ D17/1413 DE/64719	9.375"	3.15.0	6.5.0	Derby Glasgow Pressed Steel	30363-2, 30467, CLASS 115 (1st), 30419, 30430, CLASS 122 & 131 30531-2 CLASS 128 30575 CLASS 121	Interchangeable with triple nest comprise Spring Nos 254 & 6 Dwg No. DE/57854

DETAILS OF BOLSTER SPRINGS & APPLICABILITY.
DIESEL MULTIPLE UNITS. L.M.R. SPONSORED.

A) DOUBLE NESTS (CONT)

INNER SPRING			OUTER SPRING			COMBINED LOAD AT X 75"	BUILDER.	LOT NUMBERS.	REMARKS.
SPRING NO.	DRAWING NO.	FREE LOAD AT HGT X 75" T.C.Q.	SPRING NO.	DRAWING NO.	FREE LOAD AT HGT X 75" T.C.Q.				
108A	D16/1470	9.9375" 2.6.0	107A	D16/1470	9.75" 3.9.0	5.150	Derby	30365, 30448 CLASS 175, 190 (Part)	Interchangeable with triple nest comprising Spring Nos 242-4 Dtg To DE/57854
								Gloucester 30420 C+N CLASS 150 Pressed Steel 30519 CLASS 149 Cravens 30280, 30282 30284, 30352-3, 30418, 30469, 30509, 30505 CLASS 103, 102	
159	D17/1415	10" 2.8.0	160	D17/1415	9.8125" 3.12.0	6.0.0	Derby	30211, 30213 CLASS 116 (Part)	Interchangeable with triple nest comprising Spring Nos 245-50 Dtg To DE/57683
-	DE/57713 1st Item	16.5" 1-12-348 AT 13"	-	DE/57713 1st Item	16.5" 2.12.084 AT 13"	4.5.0.32	Birmingham C+N	30295 CLASS 169 (Part)	Fitted only on vehicle with modified suspension

X UNLESS OTHERWISE STATED

DETAILS OF BOLSTER SPRINGS & APPLICABILITY.
DIESEL MULTIPLE UNITS - L.M.R. SPONSORED.

B) SINGLE NESTS.

SPRING N ^o	DRAWING N ^o	FREE HGT	LOAD AT * 7.5" T.C.Q	BUILDER.	LOT NUMBERS	REMARKS.
107A	DIG/1470	9.75"	3.9.0.	Derby	30409-12, 30466, 30493, 30499, 30602 CLASSES 142, 161, 167	
91	D15/1211	9.875	2.10.0	Wickham	30289 CLASS 146	
C.C.S 79	C-A2 -3336	9.84" MAX 9.65" MIN	4.0.0 AT 7.9" MAX 7.54" MIN	Cravers	30281, 30283, 30285, 30354, 30470, 30504 CLASSES 141 1470	Alternative to double nest Dwg No. DF/37252 - see Sheet 3.

* UNLESS OTHERWISE STATED

DETAILS OF BOLSTER SPRINGS & APPLICABILITY.
DIESEL MULTIPLE UNITS W.R. SPONSORED.

11

A) DOUBLE NESTS

INNER SPRING				OUTER SPRING				BUILDER	LOT NUMBERS	REMARKS
SPRING NO	DRG. NO	FREE HGT.	LOAD	SPRING NO	DRG. NO	FREE HGT.	LOAD			
C.C.S.13	SC/SW/1420	14.125"	3 TONS AT 9.563" MAX. 9.094" MIN.	C.C.S.12	SC/SW/419	13.00"	6.5 TONS AT SWINDON. 9.188" MAX. 8.688" MIN.	30196, 30197, 30199, 30200, 30334, 30335, 30515, 30516, 30559, 30560, 30413, 30414, 30606 CLASSES 120, 126, 187.	Ex Gbs/Fdm. X-Country. Ayr Girvan.	
C.C.S.13	do	do	do	C.C.S.14	SC/SW/444	15.00"	3.75 TONS AT SWINDON. 9.781" MAX. 9.219" MIN.	30197, 30198, 30336, 30415, 30416, 30517, 30561, 30537, 30605, 30606 CLASSES 187-2, 180-1, 179.	Ex Glas/Fdm. Ayr/Girvan. X-Country.	
C.C.S.13	do	do	do	C.C.S.15	SC/SW/460	13.875"	7.5 TONS AT SWINDON. 9.188" MAX. 8.688" MIN.	30603, 30604 CLASS 124		

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DETAILS OF BOLSTER SPRINGS & APPLICABILITY
DIESEL MULTIPLE UNITS - W.R. SPONSORED

B) SINGLE NESTS

SPRING NO/	D/R/G NO/	FREE HGT	LOAD	BUILDER	LOT NUMBERS.	REMARKS.
C.C.5.18	SC/SW/ 1/48	12.00" + .00" - .25"	4 TONS FOR 3.50" DEFLECTION	SWINDON	30705, 30706, 30707 CLASSES 182-4	
CCS 22	SC/SW/ 2/36	12.25" + .00" - .25"	2 1/2 TONS FOR 1.75" DEFLECTION	SWINDON	30703, 30704. CLASS 124	

Details of Side Bearing Springs (Application)
 Diesel Multiple Units (L.M. sponsored)

①

SPRING & DRAWING NOS	CAMBER		TARE LOAD T C Q	VEHICLE BUILDER	LOT NUMBERS
	FREE	LOADED			
214 DE/56077	3.5"	1.25"	3.0.2	Derby Gloucester C&W	30406-8, 30460-1 30465, 30498, 30601, 30660 CLASS 108 30278, 30447 CLASS 100.
215 DE/56251	3.188"	1.406"	2.3.0	Derby Cravens Wickham Gloucester C&W	30409-12, 30466 30493, 30499, 30602 CLASSES 142-167 30281, 30283, 30285, 30354, 30470, 30504, CLASSES 141 & 170 30288 CLASS 109 30279, 30445 CLASS 143
216 DE/56476 294 DE/58143	3.344"	1.125"	3.14.1 " " "		30209, 30211, 30213, 30459. CLASSES 114-116 (Part)
* SPRING NO 294 INCORPORATING .75" PACKING REPLACES SPRING NO 216 TO GIVE ACCEPTABLE HORNBLOCK CLEARANCE.					
217 DE/56719	3.375"	1.00"	3.7.0	Cravens.	30280, 30282 30284, 30352-3, 30418, 30469, 30503, 30505 CLASSES 105 & 129
219 DE/56720	3.44"	1.22"	3.5.2	Park Royal	30286 CLASS 103.
220 DE/56721	3.31"	1.25"	2.15.2	Park Royal	30287 CLASS 145.
221 DE/45983	4.125"	1.625"	1.17.0	Wickhams.	30289 CLASS 146
222 DE/56077 * 276 DE/57883	3.75"	1.313"	3.5.2 " " "	Derby Gloucester C&W Birmingham C&W Pressed Steel	30210, 30212, 30365, 30385, 30448, 30463, 30522-3, 30531-2, 30596-7, 30599-600 30619 CLASSES 148, 172-3 175, 177, 185-6, 190. 30420, 30423 CLASSES 150, 178 30544 CLASS 174 30547, 30519 CLASSES 176, 149
* SPRING NO 276 INCORPORATING .75" PACKING REPLACES SPRING NO 222 TO GIVE ACCEPTABLE HORNBLOCK CLEARANCE.					

SPRING AND DRAWING NOS	CAMBER		TAKELAND T.C.Q	VEHICLE BUILDER	LOT NUMBERS
	FREE	LOADED			
228 DE/45984/1	5.125"	2.5"	3.7 0	Birmingham C&W	30290-1, 30293-4, 30296, 30298, 30301, 30592-3 30591-2 30404 CLASSES 104, 110.
229 DE/45984/2	5.00"	2.5"	2.4.1	Birmingham C&W	30292, 30295, 30297, 30299-300, 30302-3, 30405, 30594, 30693, CLASSES 140, 160, 169, 166, 163
230 DE/56878	3.531"	1.188"	3-15-0	Derby	30363-4, 30446-7, 30530, 30595, 30598, CLASSES 116 (P.R.) 115, 130
				Gloucester C&W	30419, 30421-2, 30551-2, CLASSES 119, 122, 128, 131
				Birmingham C&W	30543, 30545. CLASS 118
				Pressed Steel	30518, 30546, 30548 CLASSES 121, 117.
231 DE/57144	3.1905"	1.00"	4.7.2	Derby	30462, 30464, 30521. CLASSES 125 & 127
261 DE/56476	3.344"	1.00"	3.14.1	Derby	30611, 30612 CLASS 107
UN-NUMBERED DE/35899	3.75"	1.25"	2.12.2	Metro- Cammell	30250-1, 30257-8 30260, 30262, 30264-5, 30269, 30272-4, 30277, 30337, 30340, 30468, 30502, 30510, 30589, 30615 CLASSES 144 & 147, 162, 164, 165, 168 171
UN-NUMBERED DE/35906	4.0625"	1.25"	3.7.0	Metro- Cammell	30248-9, 30252-6 30259, 30261, 30263, 30266-8, 30270-1, 30275-6, 30338-9, 30467, 30500-1, 30508-9, 30581-8 CLASSES 101, 102, 111

Details of Side Bearing
 Diesel Multiple Units

A) PLATE SPRINGS

SPRING & DRAWING NO.	CAMBER: (FREE)	RATE.	BUILDER.	LOT NUMBERS.
C.L.S. 4 SC/SW/425	4.5"	.752 ins/ton	Swindon	30196-7, 30199 30200, 30334-5 30515-6, 30532-60, 30513-4 CLASSES 120, 126
C.L.S. 5 SC/SW/445	4.75"	1.033 ins/ton	Swindon	30197-8, 30336, 30517, 30561 30415-6, 30537, 30605, 30606 (Light Bogie) CLASSES 179, 180, 181, 187, 188, 189
C.L.S. 9 SC/SW/467	4.8125"	.782 ins/ton	Swindon	30603-4 30606 (Heavy Bogie) CLASSES 124, 181

B) HELICAL SPRINGS

SPRING & DRAWING NO.	FREE HEIGHT.	LOAD/DEFLECTION.	BUILDER.	LOT NUMBERS.
C.C.S. 19 SC/SW/158 SUPERSEDED BY	11.25" +0 - .25"	2 tons for 3.5" deflection	Swindon	30705-7. CLASSES 182, 183, 184.
C.C.S. 28 SC/SW/168	11.281" MAX. 11.062" MIN.	To stand 8" MAX 7.688" MIN for 2 ton load		
C.C.S. 24 SC/SW/2138	12.00" +0 - .25"	2 tons for 3.5" deflection	Swindon	30703-4 CLASS 123

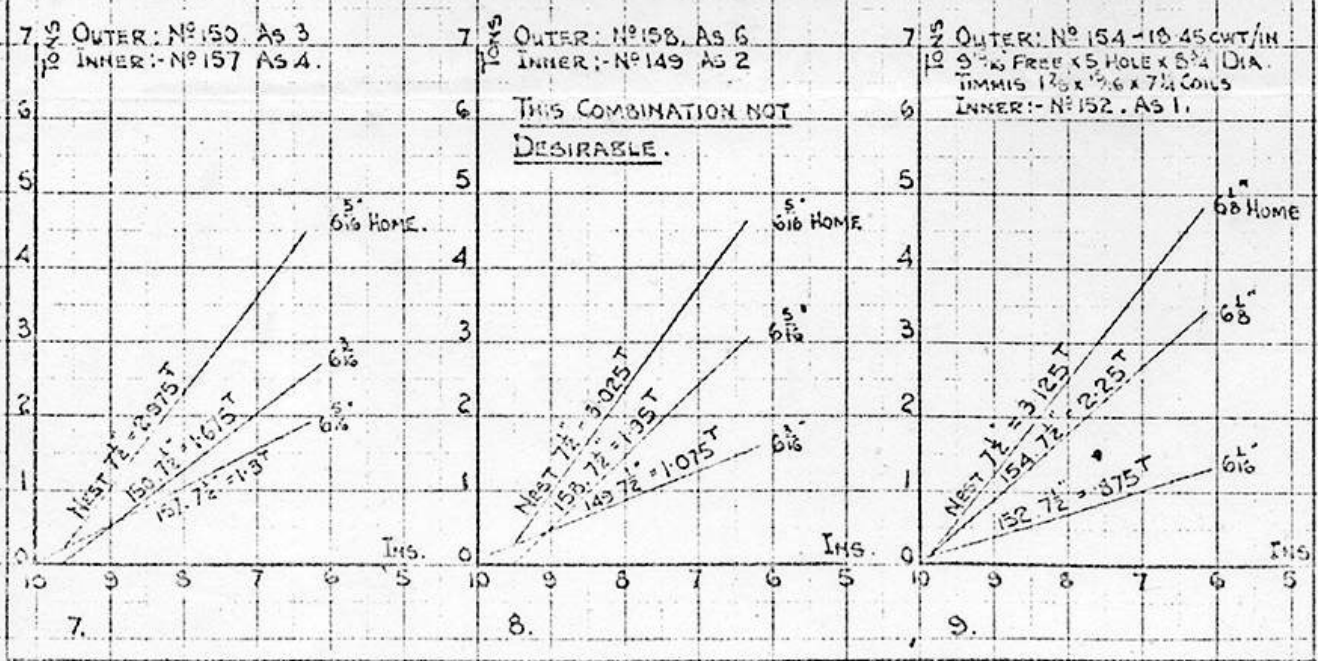
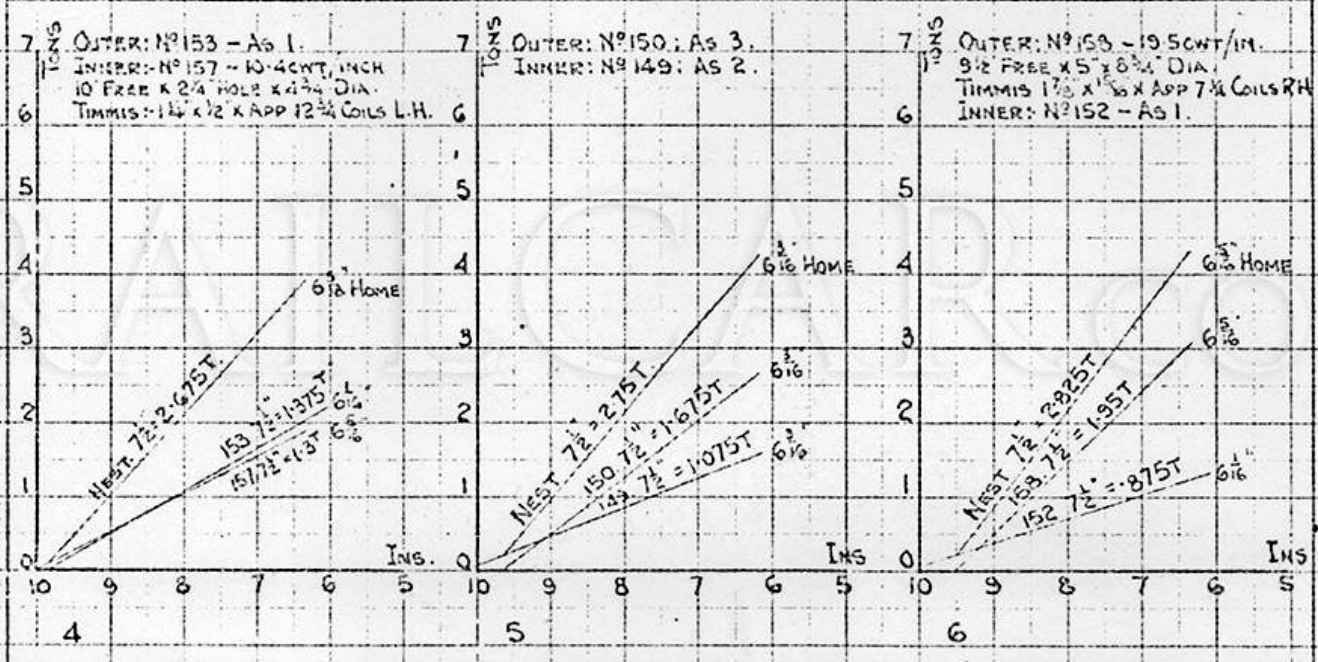
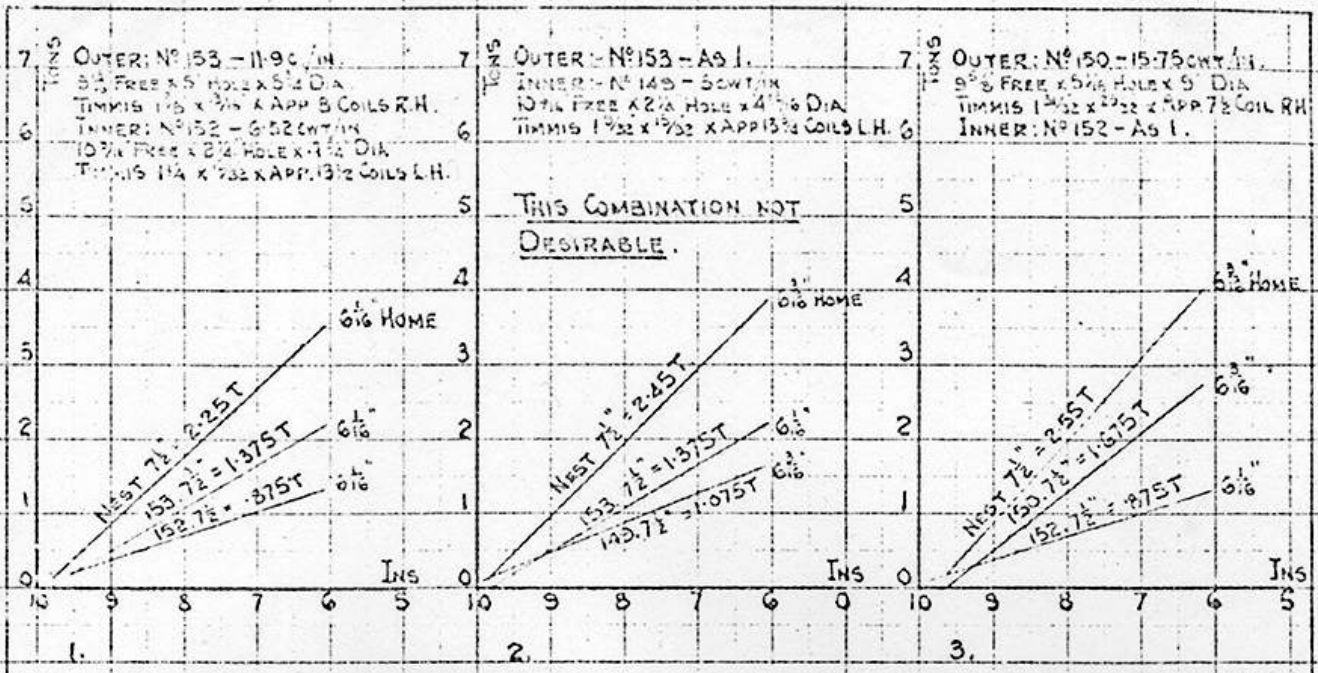
BOLSTER SPRINGS OUTER										BOLSTER SPRINGS INNER											
No	LOAD			HT	SECTION	DRG.	FREE	O/D	I/D	HOME	No	LOAD			HT	SECTION	DRG.	FREE	O/D	I/D	HOME
	T	C	Q									T	C	Q							
84	2	10	-	7 $\frac{1}{2}$ "	TIMMIS	5471	7 $\frac{1}{2}$ "	10 $\frac{1}{8}$ "	5 $\frac{1}{8}$ "	6"	125	1	6	-	9"	TIMMIS	15/2923	10 $\frac{1}{8}$ "	4 $\frac{1}{8}$ "	2 $\frac{1}{2}$ "	7 $\frac{1}{2}$ "
86	3	-	-	7 $\frac{1}{2}$ "	"	5803	10"	9"	5 $\frac{1}{8}$ "	6 $\frac{1}{8}$ "	149	1	1	2	7 $\frac{1}{2}$ "	"	17/1409	10 $\frac{1}{8}$ "	4 $\frac{1}{8}$ "	2 $\frac{1}{2}$ "	6 $\frac{1}{8}$ "
91	2	10	-	"	"	15/1211	9 $\frac{1}{8}$ "	8 $\frac{3}{4}$ "	5"	6 $\frac{1}{8}$ "	152	-	17	2	7 $\frac{1}{2}$ "	"	17/1411	10 $\frac{1}{8}$ "	4 $\frac{1}{8}$ "	2 $\frac{1}{2}$ "	6 $\frac{1}{8}$ "
101	2	4	-	"	"	15/1211	9 $\frac{1}{8}$ "	8 $\frac{3}{4}$ "	5"	6 $\frac{1}{8}$ "	155	2	10	-	7 $\frac{1}{2}$ "	"	17/1413	9 $\frac{1}{8}$ "	5 $\frac{1}{8}$ "	2 $\frac{1}{2}$ "	6 $\frac{1}{8}$ "
107A	3	9	-	"	"	✓16/1470	9 $\frac{1}{4}$ "	9 $\frac{1}{2}$ "	5 $\frac{1}{8}$ "	6 $\frac{1}{8}$ "	157	1	6	-	7 $\frac{1}{2}$ "	"	17/1414	10"	4 $\frac{3}{4}$ "	2 $\frac{1}{2}$ "	6 $\frac{1}{8}$ "
114	3	12	-	"	"	4/2544	9 $\frac{1}{8}$ "	9 $\frac{1}{2}$ "	5 $\frac{1}{8}$ "		159	2	8	-	7 $\frac{1}{2}$ "	"	17/415	10"	5 $\frac{1}{8}$ "	2 $\frac{1}{2}$ "	6 $\frac{1}{8}$ "
116	3	5	-	"	"	4/2534	9 $\frac{1}{8}$ "	9"	5 $\frac{1}{8}$ "		188	1	19	2	9"	"	15/4309	10 $\frac{1}{8}$ "	4 $\frac{1}{8}$ "	2 $\frac{1}{2}$ "	
124	3	15	-	9 $\frac{1}{8}$ "	"	15/2923	10 $\frac{1}{4}$ "	10 $\frac{1}{2}$ "	6"	7 $\frac{1}{8}$ "		3	4	-	8"	"	"	"	"	"	
	7	10	-	7 $\frac{1}{2}$ "	"	"	"	"	"	"	191	2	6	-	8"	"	15/4322	10 $\frac{1}{4}$ "	4 $\frac{1}{8}$ "	2 $\frac{1}{2}$ "	7"
124A	3	15	-	9"	"	15/3439	10 $\frac{3}{8}$ "	10 $\frac{1}{2}$ "	6"	7 $\frac{1}{8}$ "		3	4	-	7 $\frac{1}{8}$ "	"	"	"	"	"	
	5	15	-	8"	"	"	"	"	"	"						"	"	"	"	"	
126	2	12	-	9"	"	15/2923	10 $\frac{1}{4}$ "	9"	5 $\frac{1}{8}$ "	7 $\frac{1}{2}$ "	BOLSTER SPRINGS INNER										
	5	10	-	7 $\frac{5}{8}$ "	"	"	"	"	"	"	No	LOAD			HT	SECTION	DRG.	FREE	O/D	I/D	HOME
150	1	13	2	7 $\frac{1}{2}$ "	"	17/1409	9 $\frac{5}{8}$ "	9"	5 $\frac{1}{8}$ "	6 $\frac{1}{8}$ "		T	C	Q							
151	2	15	-	7 $\frac{1}{2}$ "	"	17/1410	9 $\frac{1}{8}$ "	9"	5 $\frac{1}{8}$ "	6 $\frac{1}{8}$ "	85	2	10	-	7 $\frac{1}{2}$ "	TIMMIS	5471	8 $\frac{1}{16}$ "	5 $\frac{5}{8}$ "	2 $\frac{1}{8}$ "	6"
153	1	7	2	7 $\frac{1}{2}$ "	"	17/1411	9 $\frac{1}{8}$ "	8 $\frac{3}{4}$ "	5"	6 $\frac{1}{8}$ "	87	2	-	-	7 $\frac{1}{2}$ "	"	5803	10"	4 $\frac{1}{16}$ "	2 $\frac{1}{4}$ "	6 $\frac{1}{8}$ "
154	2	5	-	7 $\frac{1}{2}$ "	"	17/1412	9 $\frac{1}{8}$ "	8 $\frac{3}{4}$ "	5"	6 $\frac{1}{8}$ "	92	1	13	-	7 $\frac{1}{2}$ "	"	15/1211	10"	4 $\frac{3}{4}$ "	2 $\frac{1}{4}$ "	6 $\frac{1}{8}$ "
156	3	15	-	7 $\frac{1}{2}$ "	"	17/1413	9 $\frac{5}{8}$ "	9 $\frac{1}{2}$ "	5 $\frac{1}{8}$ "	6 $\frac{1}{8}$ "	102	1	6	-	7 $\frac{1}{2}$ "	"	15/1211	9 $\frac{5}{8}$ "	4 $\frac{3}{4}$ "	2 $\frac{1}{4}$ "	6 $\frac{1}{8}$ "
158	1	19	-	7 $\frac{1}{2}$ "	"	17/1414	9 $\frac{1}{2}$ "	8 $\frac{3}{4}$ "	5"	6 $\frac{1}{8}$ "	108A	2	6	-	7 $\frac{1}{2}$ "	"	✓16/1470	9 $\frac{3}{8}$ "	5 $\frac{1}{8}$ "	2 $\frac{1}{4}$ "	6 $\frac{1}{8}$ "
160	3	12	-	7 $\frac{1}{2}$ "	"	17/415	9 $\frac{1}{8}$ "	9 $\frac{1}{2}$ "	5 $\frac{1}{8}$ "	6 $\frac{1}{8}$ "	115	2	18	-	7 $\frac{1}{2}$ "	"	4/2544	10"	5"	2 $\frac{1}{4}$ "	
183	2	10	-	9 $\frac{1}{8}$ "	"	15/4309	10 $\frac{1}{4}$ "	9 $\frac{1}{2}$ "	5 $\frac{3}{8}$ "		123	1	18	-	9"	"	15/2923	10 $\frac{1}{2}$ "	5 $\frac{1}{4}$ "	2 $\frac{1}{4}$ "	7 $\frac{1}{8}$ "
	4	14	2	8"	"	"	"	"	"	"		3	10	-	7 $\frac{3}{4}$ "	"	"	"	"	"	
190		12	-	8"	"	15/4322	10 $\frac{3}{8}$ "	9 $\frac{1}{2}$ "	5 $\frac{1}{8}$ "	7"	123A	1	18	-	9"	"	15/3439	11 $\frac{1}{8}$ "	5 $\frac{1}{4}$ "	2 $\frac{1}{4}$ "	7 $\frac{1}{8}$ "
	6	10	-	7 $\frac{1}{2}$ "	"	"	"	"	"	"		2	14	-	8"	"	"	"	"	"	

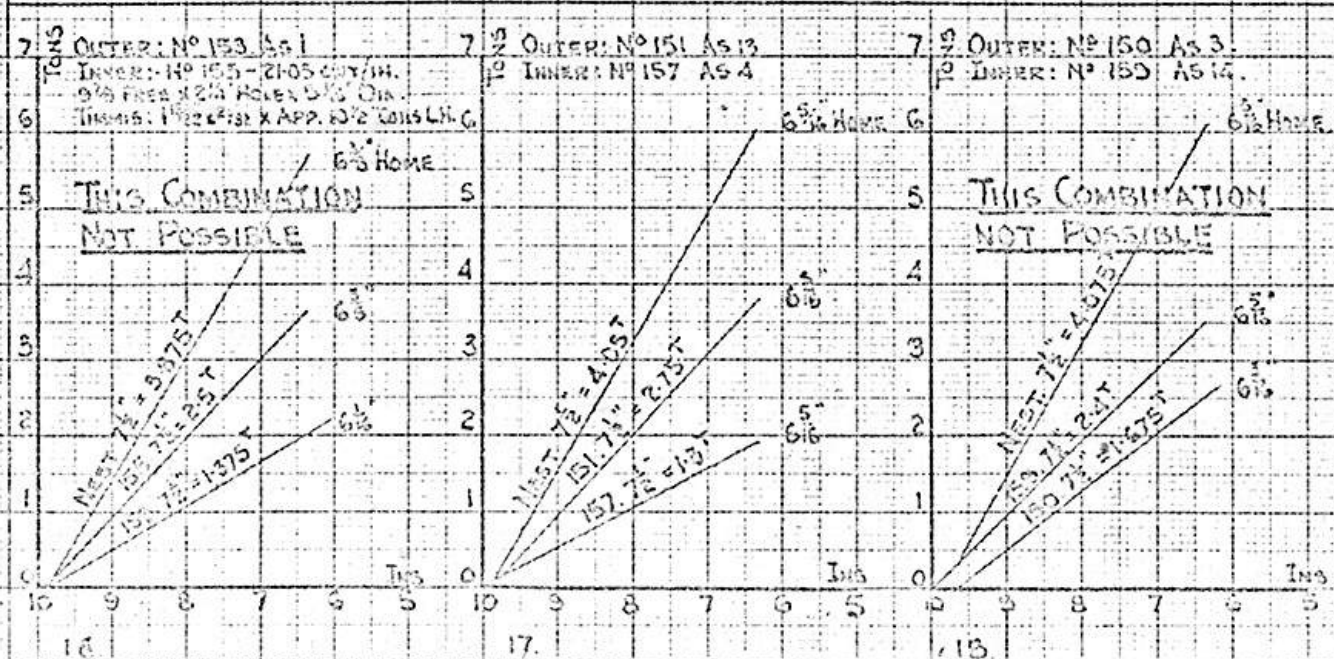
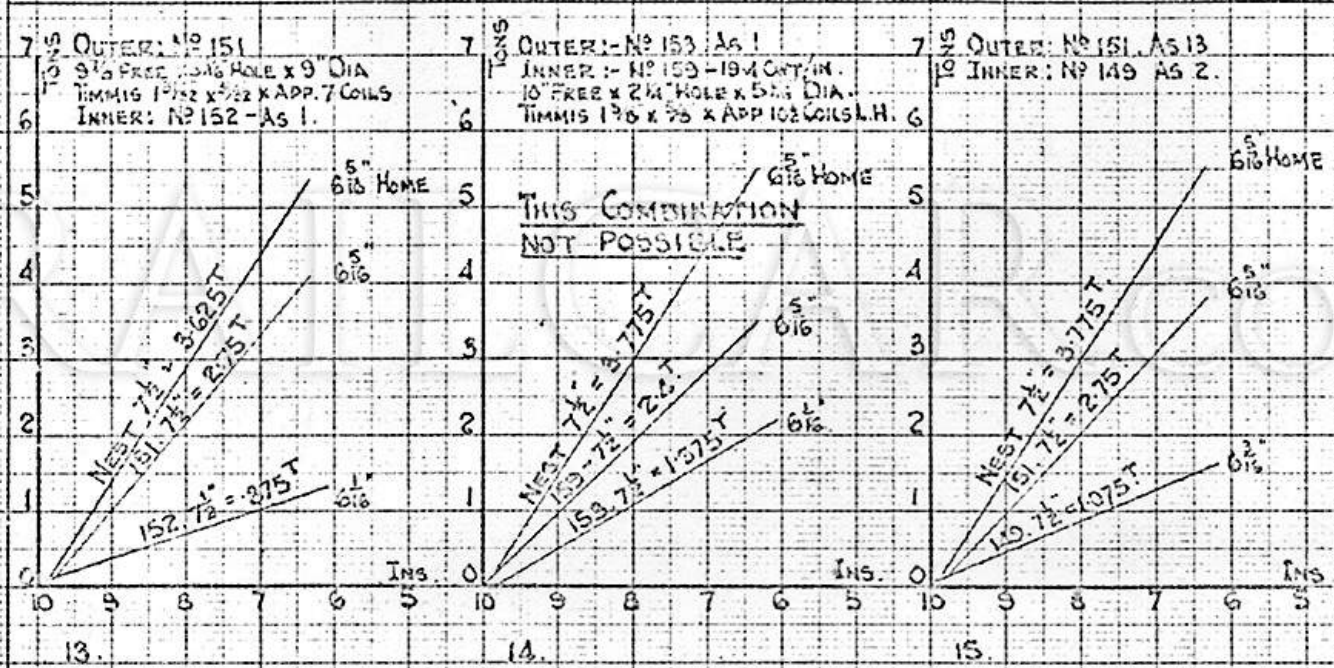
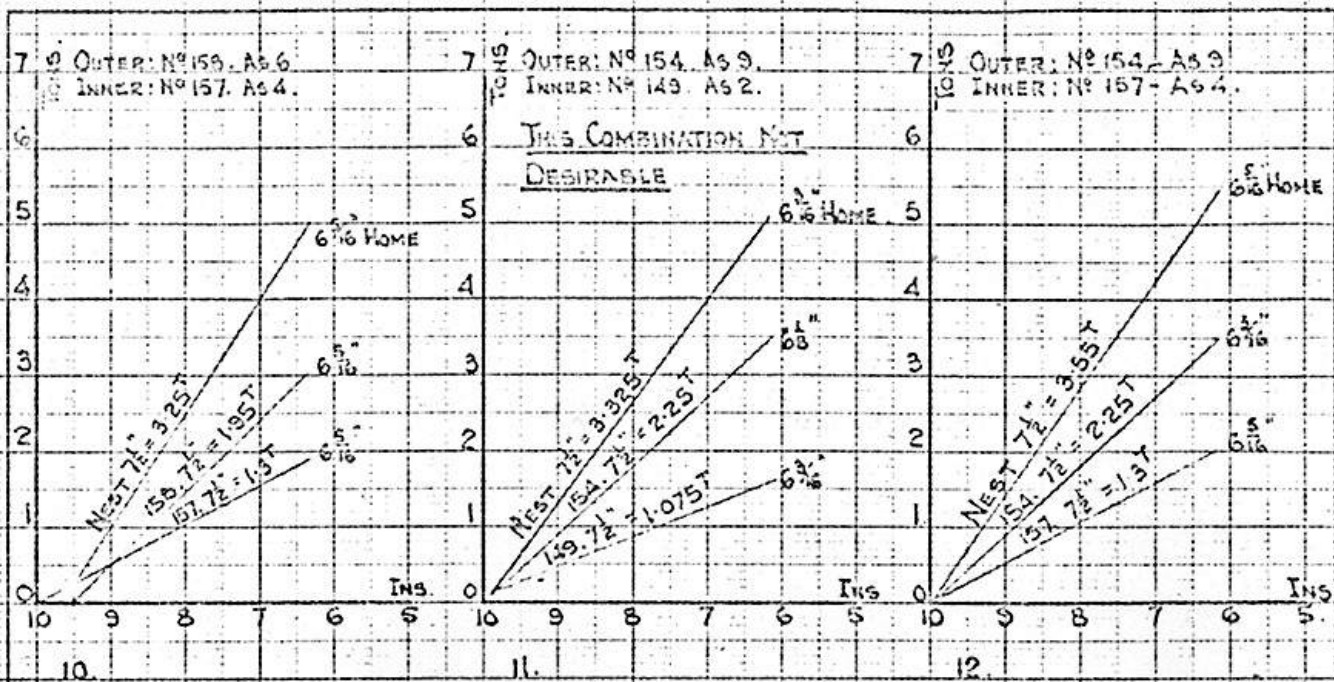
ON FOLLOWING PAGE THESE SPRINGS HAVE BEEN GROUPED IN NEETS BEARING TWO FACTORS IN MIND.
 ① BECAUSE OF BS24/3E/14 THE I/D OUTER AND O/D INNER MUST HAVE $\frac{3}{16}$ " MIN. CLEARANCE.
 ② "HOME" LENGTHS HAVE BEEN MATCHED WITHIN $\frac{1}{8}$ ".

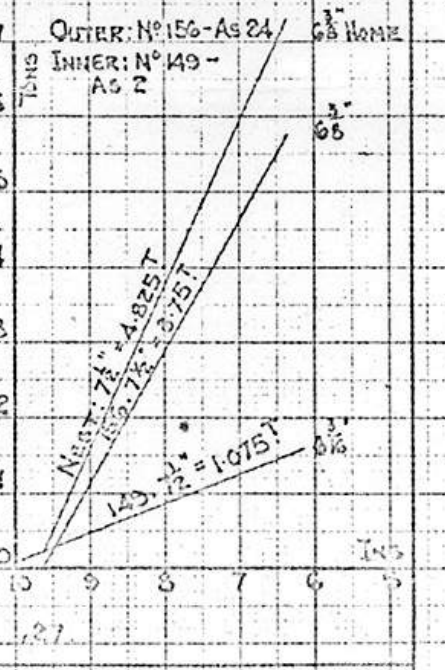
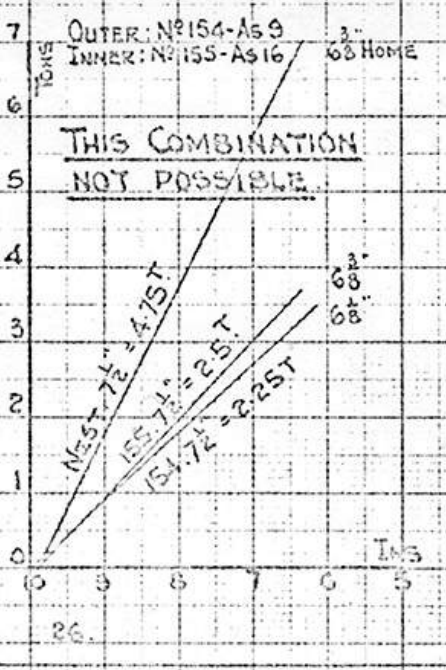
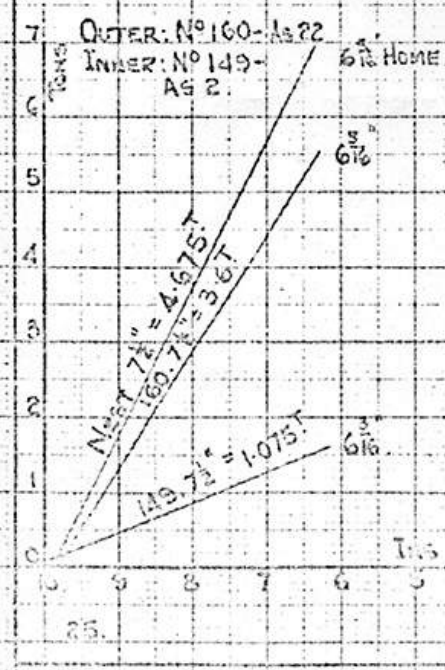
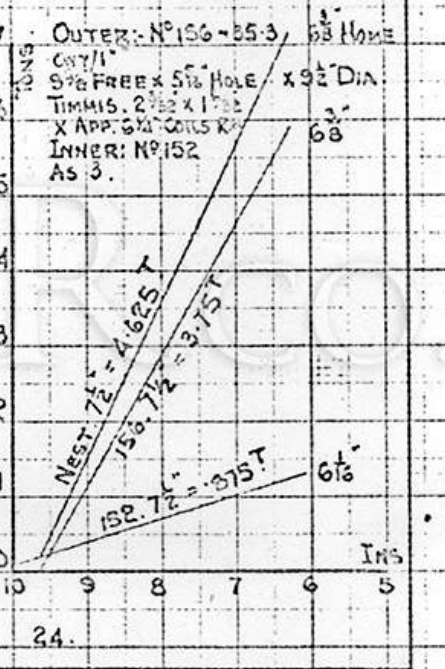
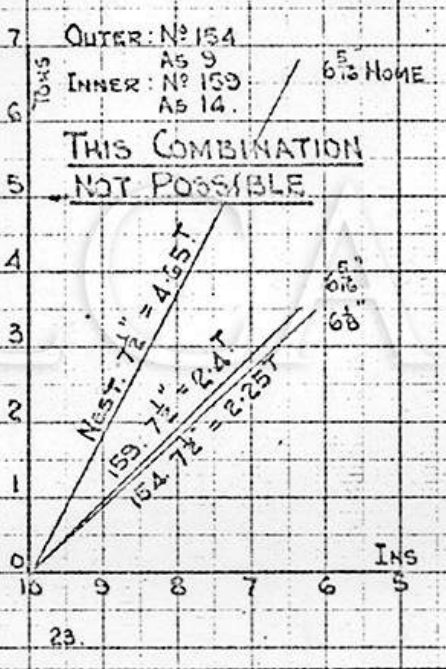
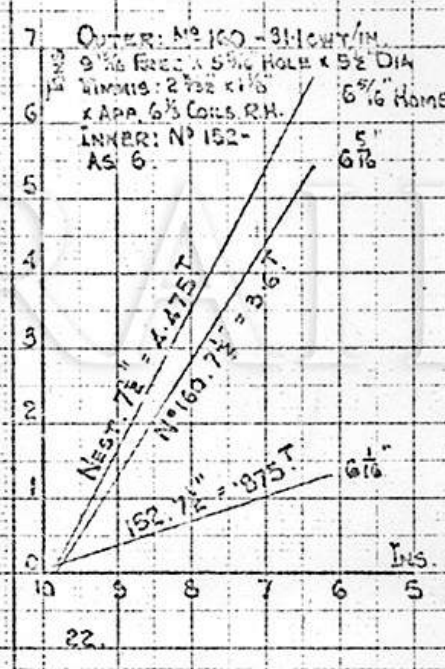
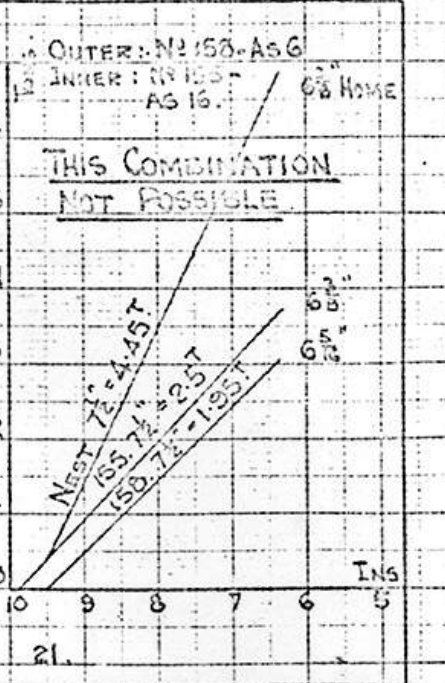
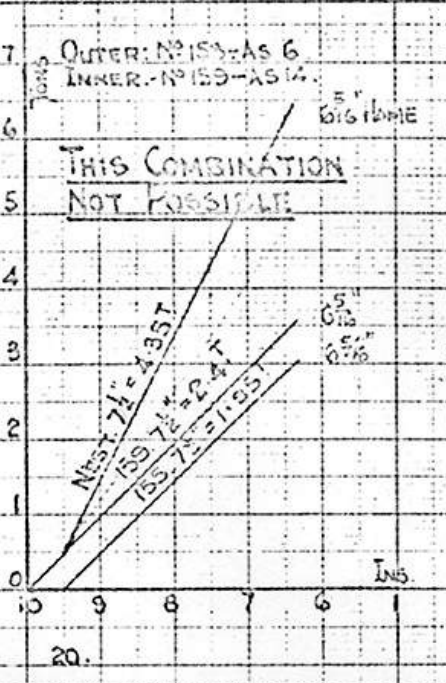
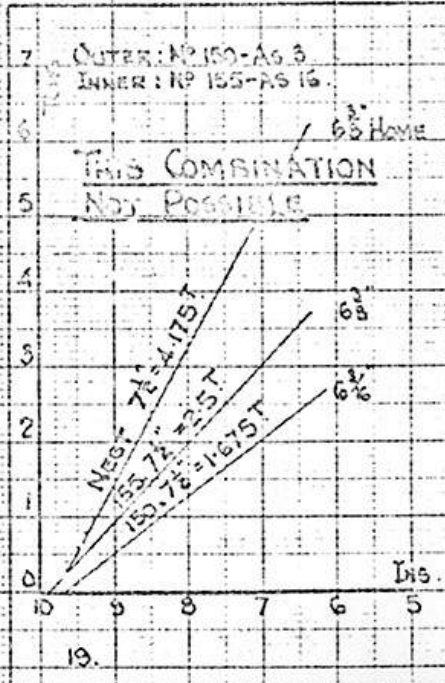
BOLSTER NEST		LOAD AT 7 1/2"			O/D	I/D	GRAPH	BOLSTER NEST		LOAD AT 7 1/2"			O/D	I/D	GRAPH	BOLSTER NEST		LOAD AT 7 1/2"			O/D	I/D	GRAPH	BOLSTER NEST		LOAD AT 7 1/2"			O/D	I/D	GRAPH
OUTER	INNER	T	C	Q				OUTER	INNER	T	C	Q				OUTER	INNER	T	C	Q				OUTER	INNER	T	C	Q			
153	152	1	15	-	8 1/2	6 1/8	1	101	157	3	10	-	8 1/2	6 1/8		107A	152	4	6	2	9 1/2	6 3/8		160	87	5	12	-	9 1/2	6 3/8	
84	152	2	7	2	10 1/8	6 1/8		84	87	3	10	-	10 1/8	6 1/8		84	115	4	8	-	10 1/8	6 1/8		151	115	5	13	-	9 1/2	6 3/8	
*153	149	2	9	-	8 1/2	6 1/8	2	154	102	3	11	-	8 1/2	6 1/8		151	92	4	8	-	9	6 3/8		156	87	5	15	-	9 1/2	6 3/8	
150	152	2	11	-	9	6 3/8	3	154	157	2	11	-	8 1/2	6 1/8	12	160	152	4	9	2	9 1/2	6 1/8	22	107A	108A	5	15	-	9 1/2	6 3/8	
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153	157	2	13	2	8 1/2	6 1/8	4	151	152	3	12	2	9 1/2	6 1/8	13	150	115	4	11	2	9	6 1/8		160	108A	5	18	-	9 1/2	6 1/8	
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150	102	2	19	2	9	6 1/8		151	149	3	16	2	9 1/2	6 1/8	15	107A	102	4	15	-	9 1/2	6 1/8		156	159	6	3	-	9 1/2	6 3/8	34
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84	85	3	10	-	10 1/8	6 1/8		86	152	3	17	2	10	6 1/8		156	149	4	16	2	9 1/2	6 3/8	27	107A	115	6	7	-	9 1/2	6 1/8	
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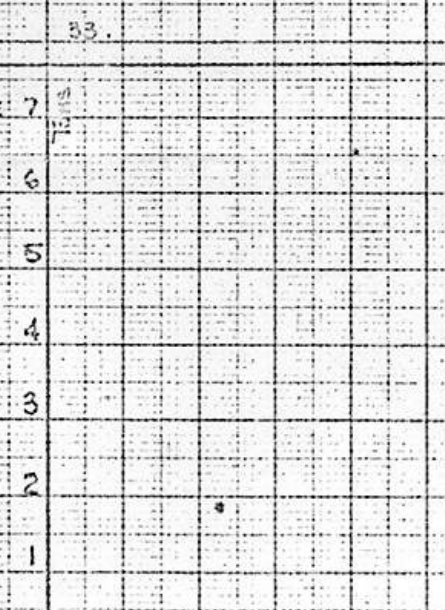
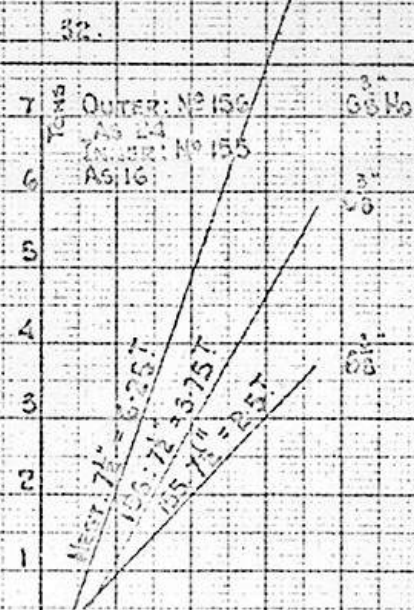
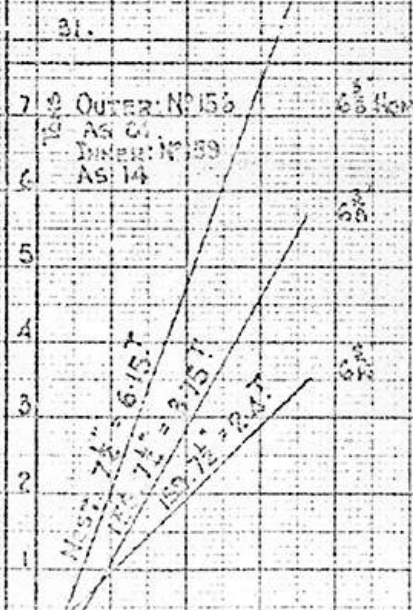
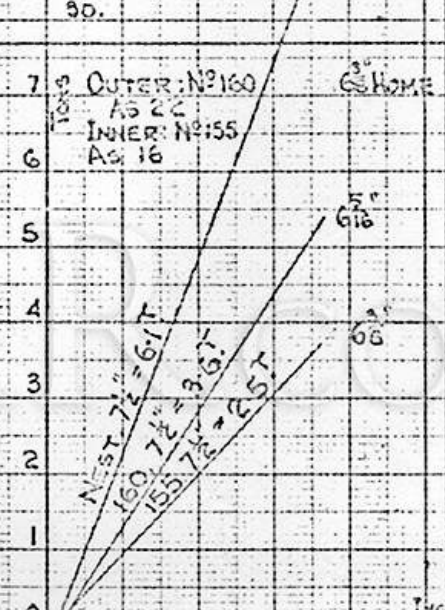
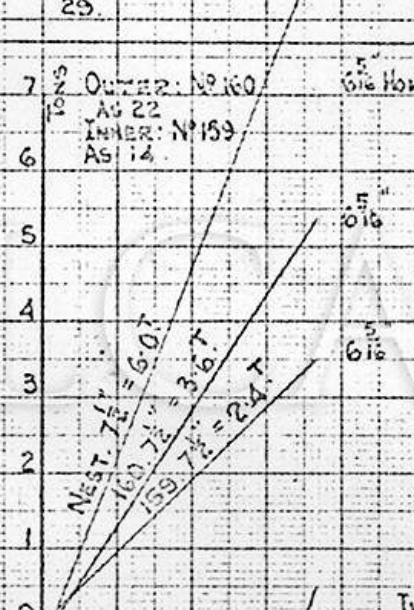
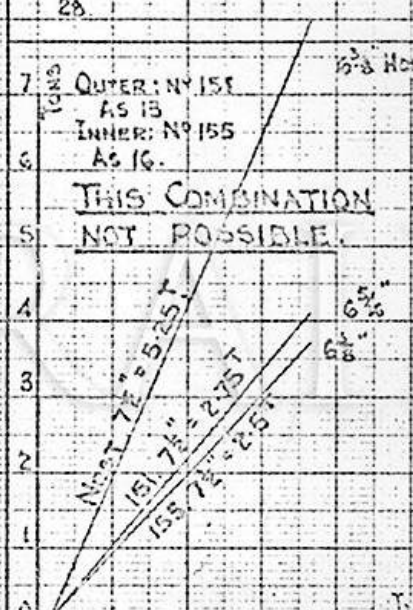
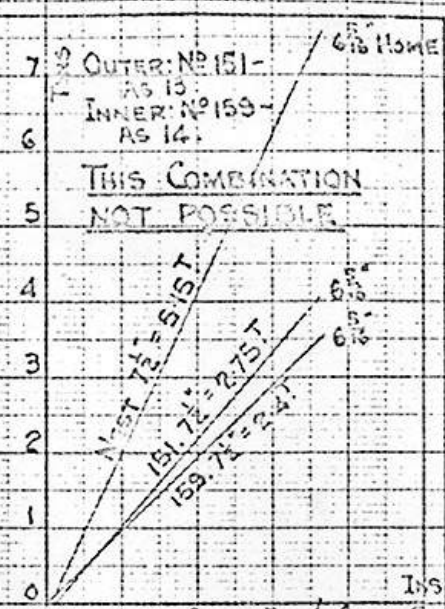
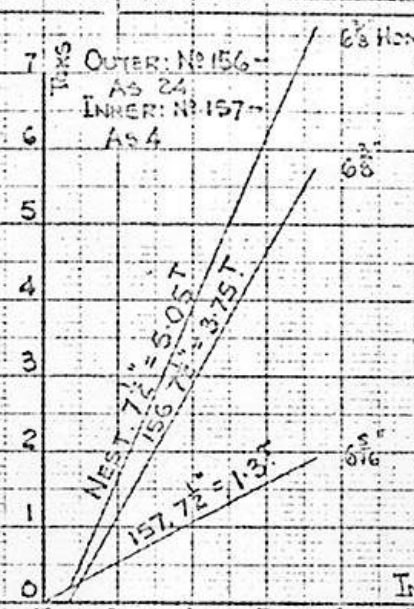
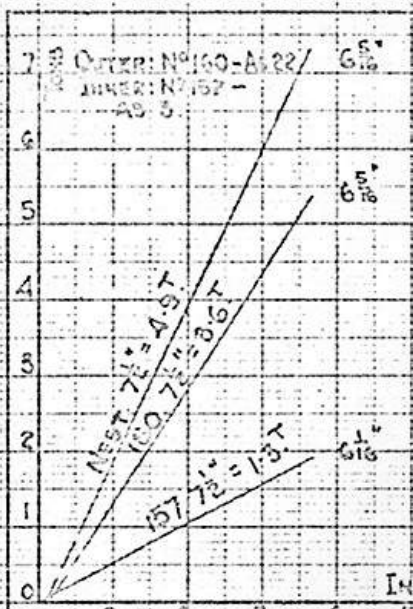
* I, D OUTER AND O, D INNER 1/8" CLEARANCE

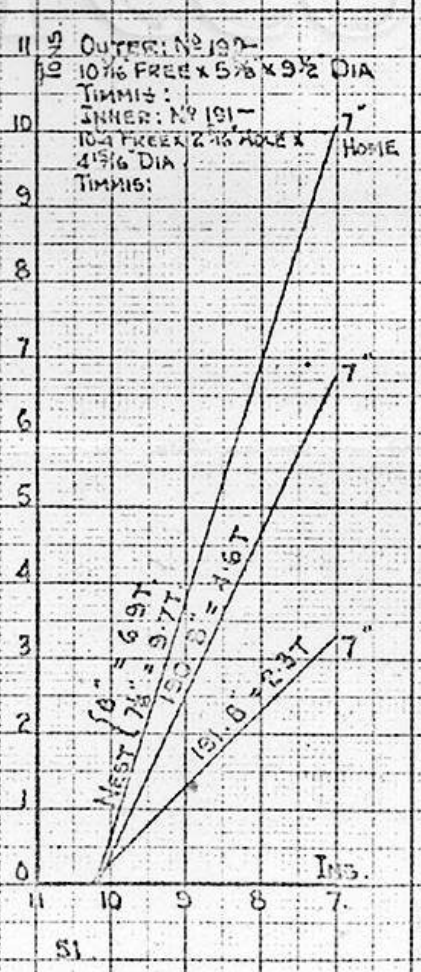
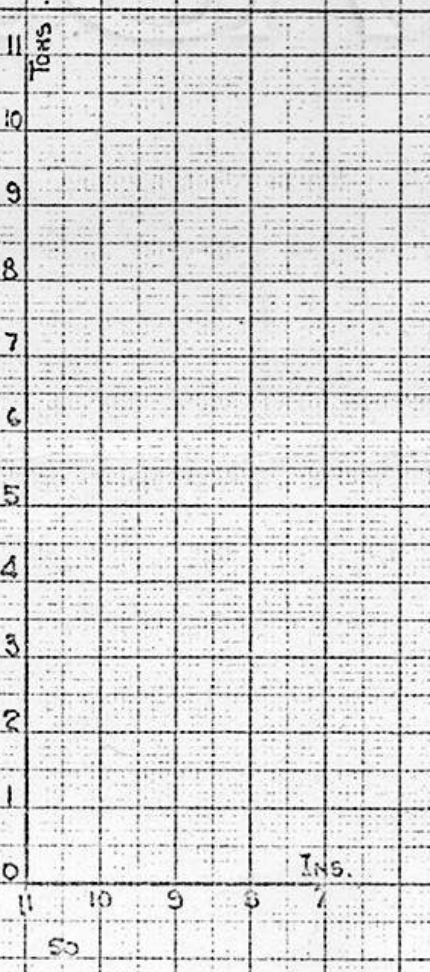
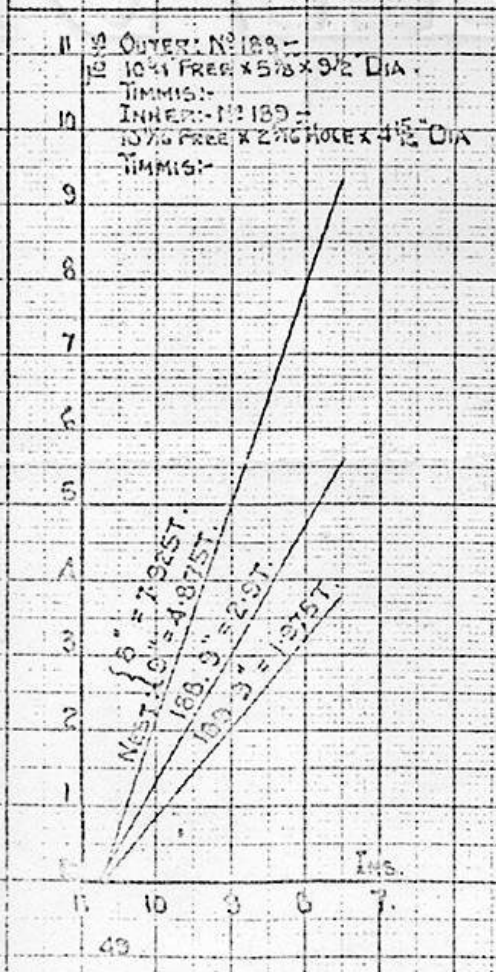
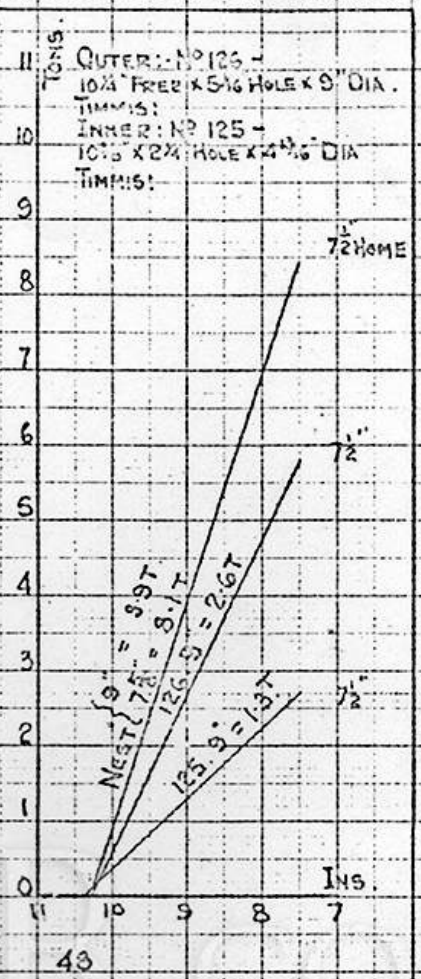
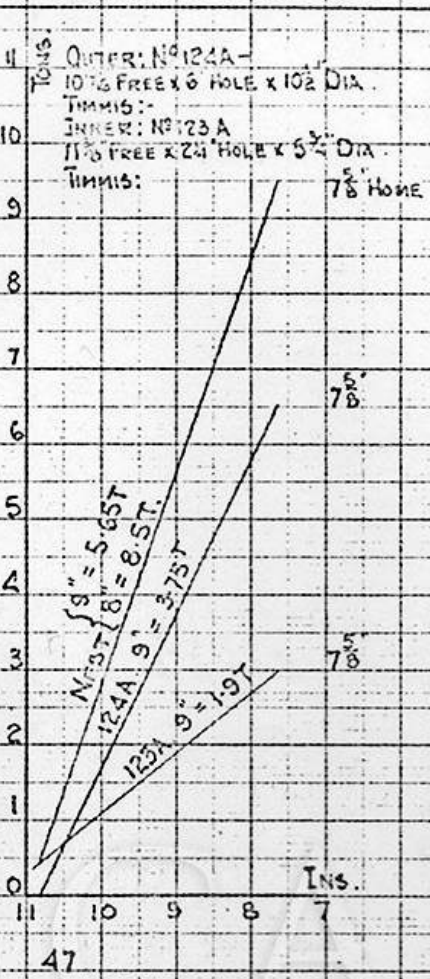
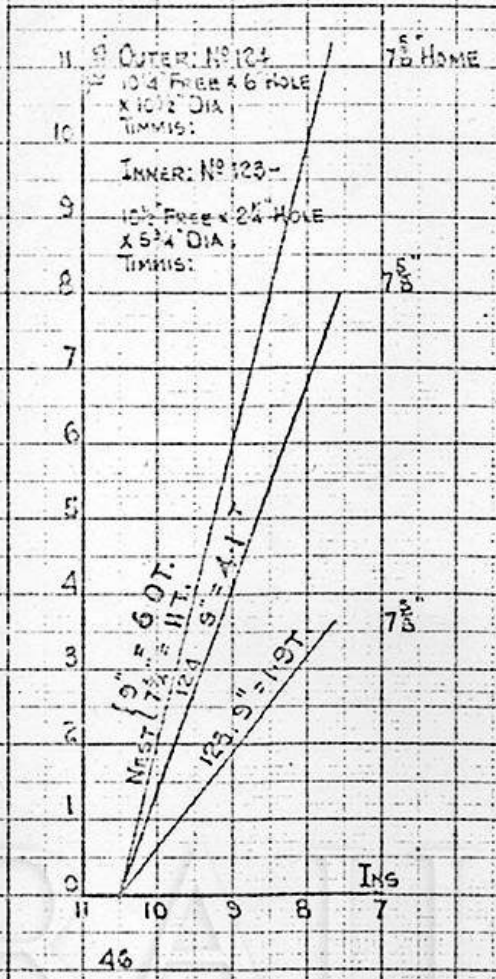
413





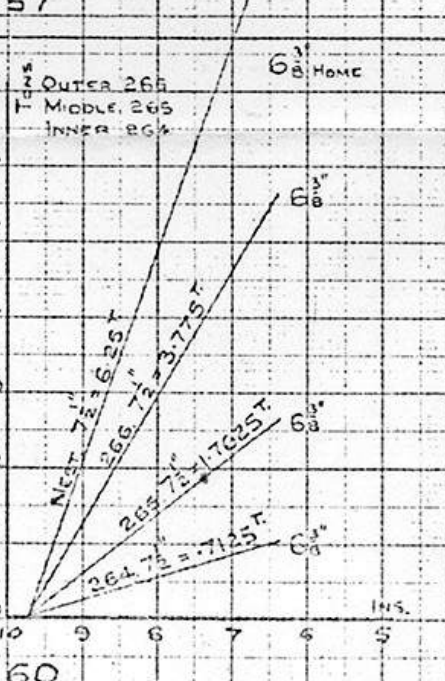
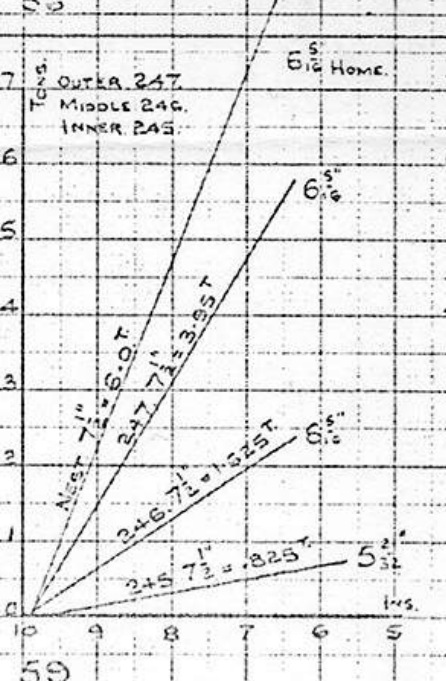
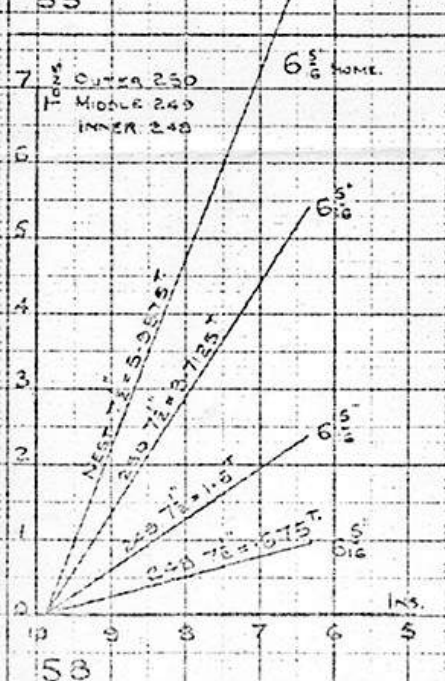
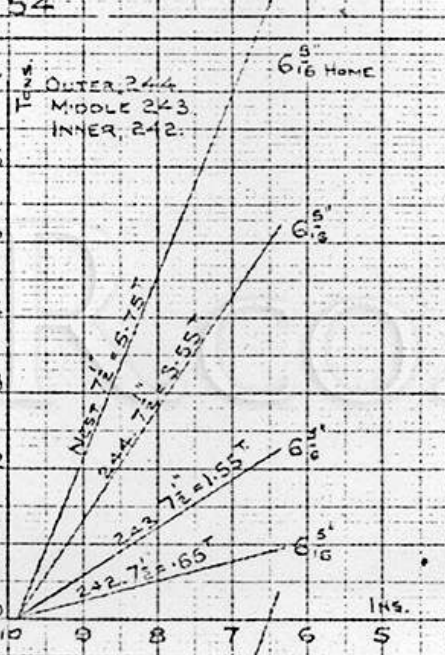
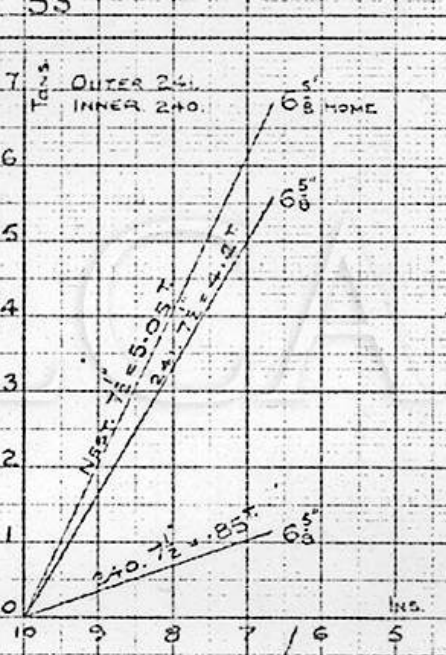
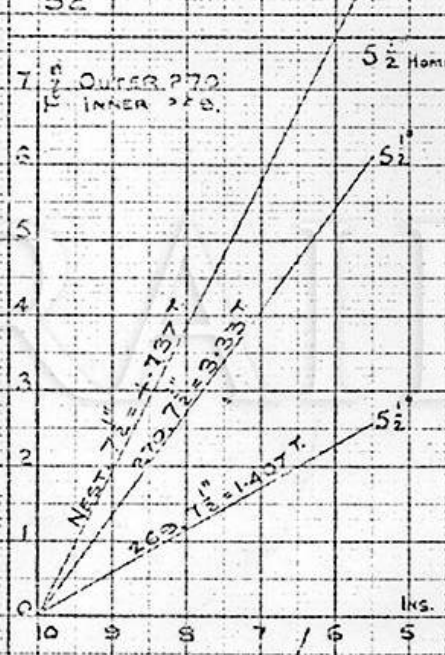
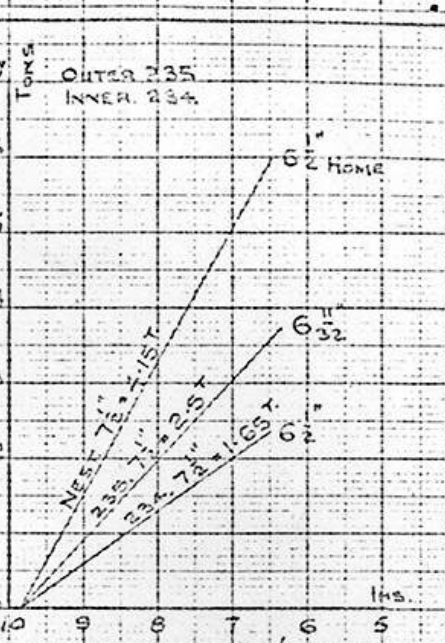
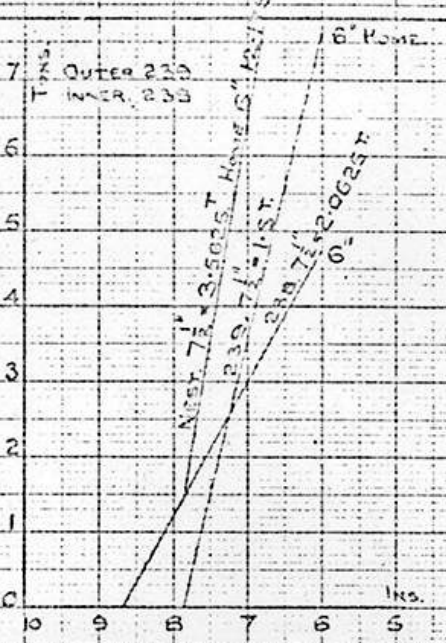
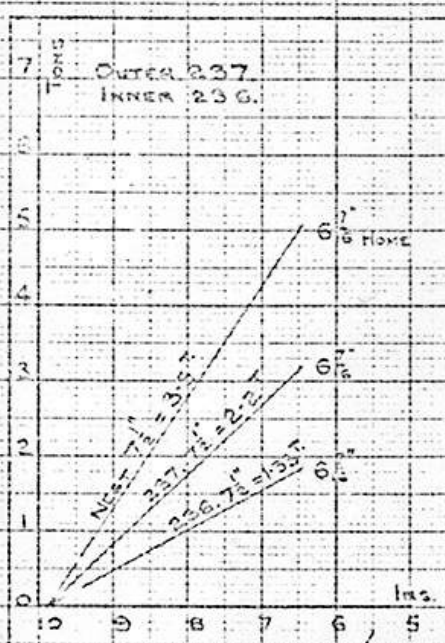


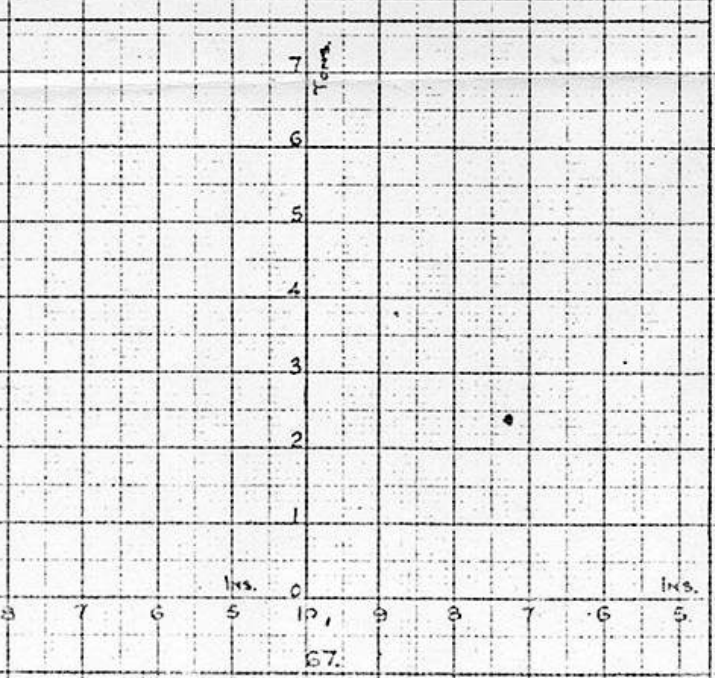
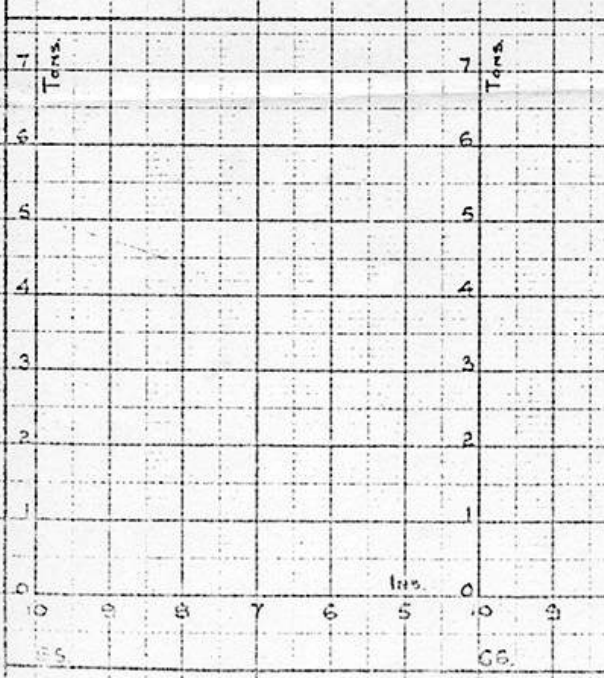
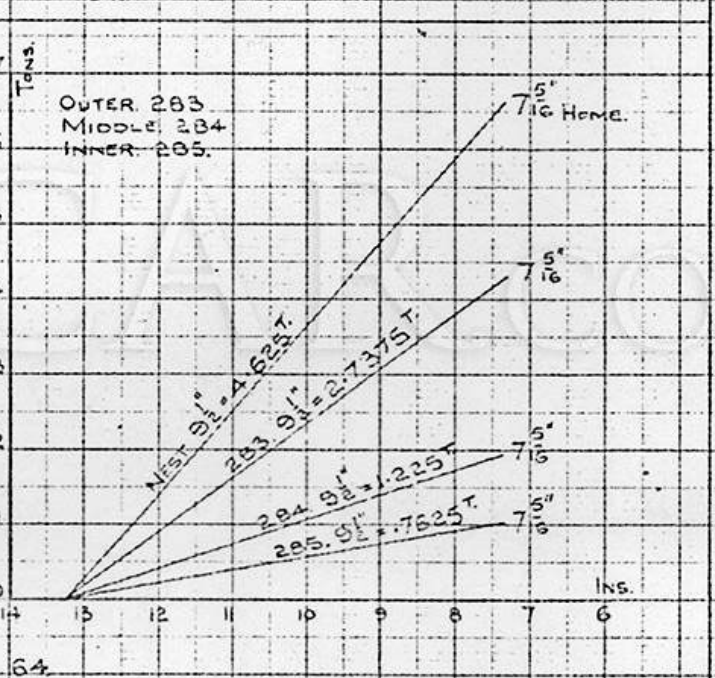
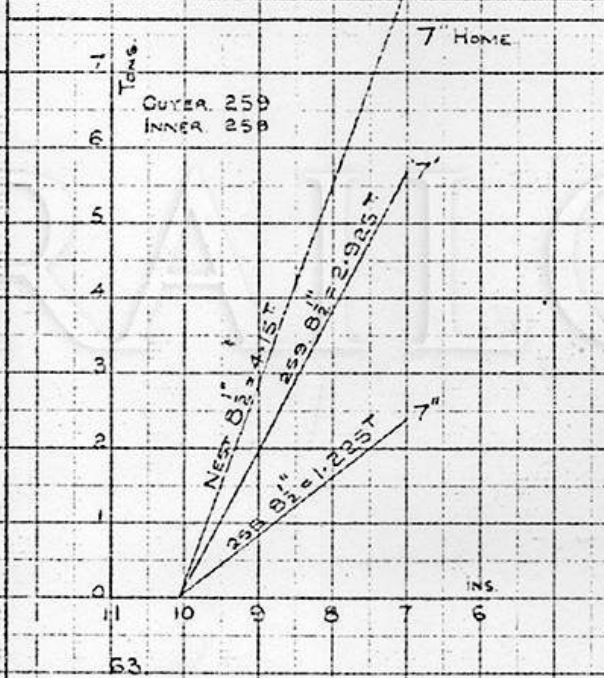
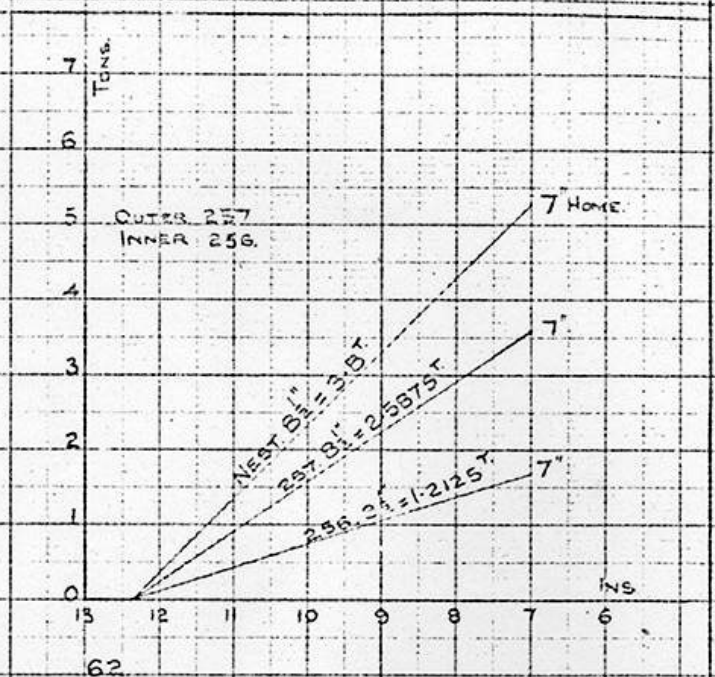
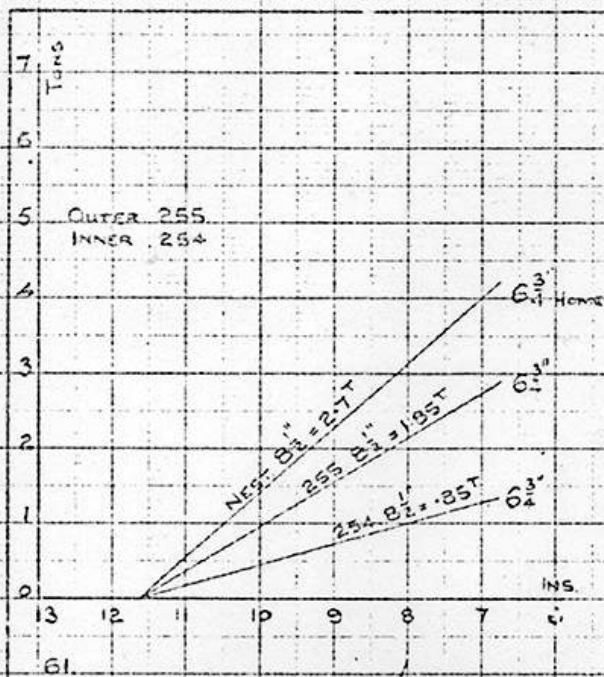


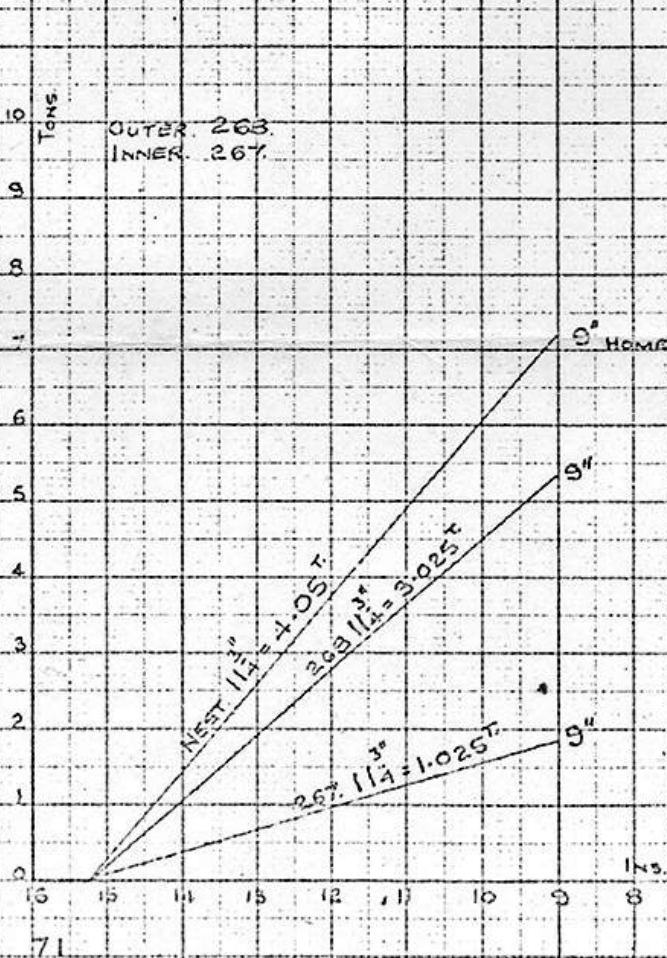
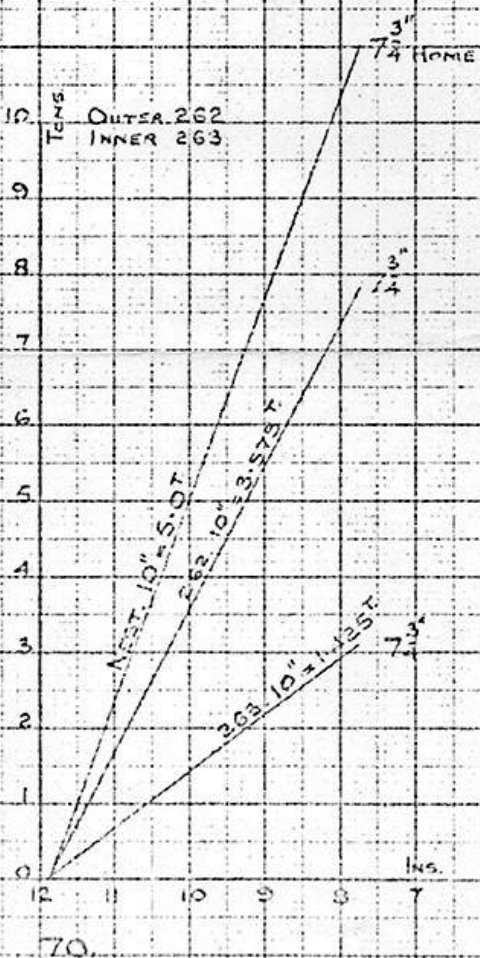
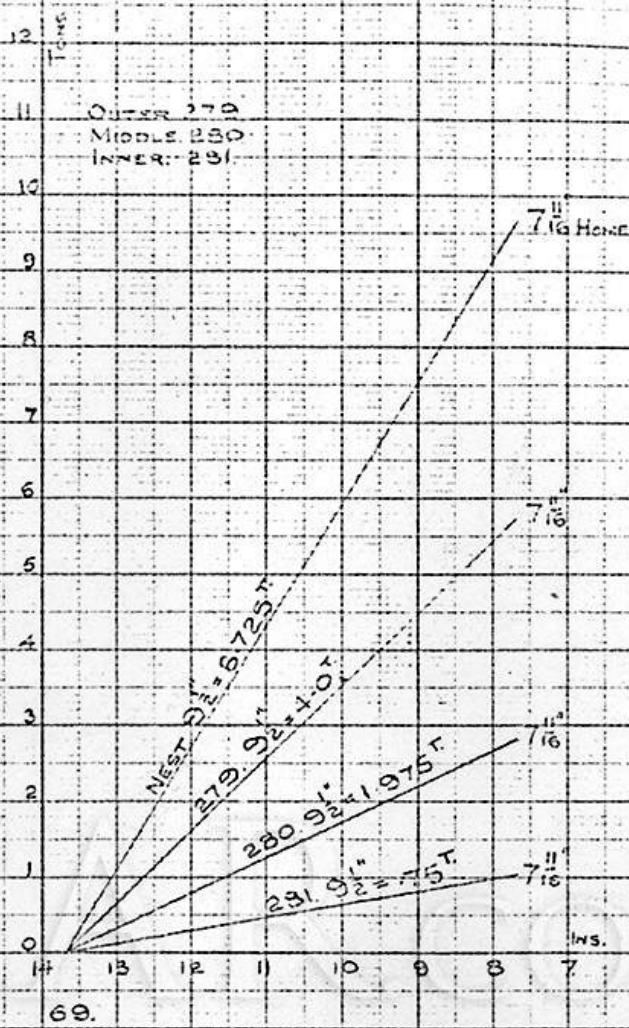
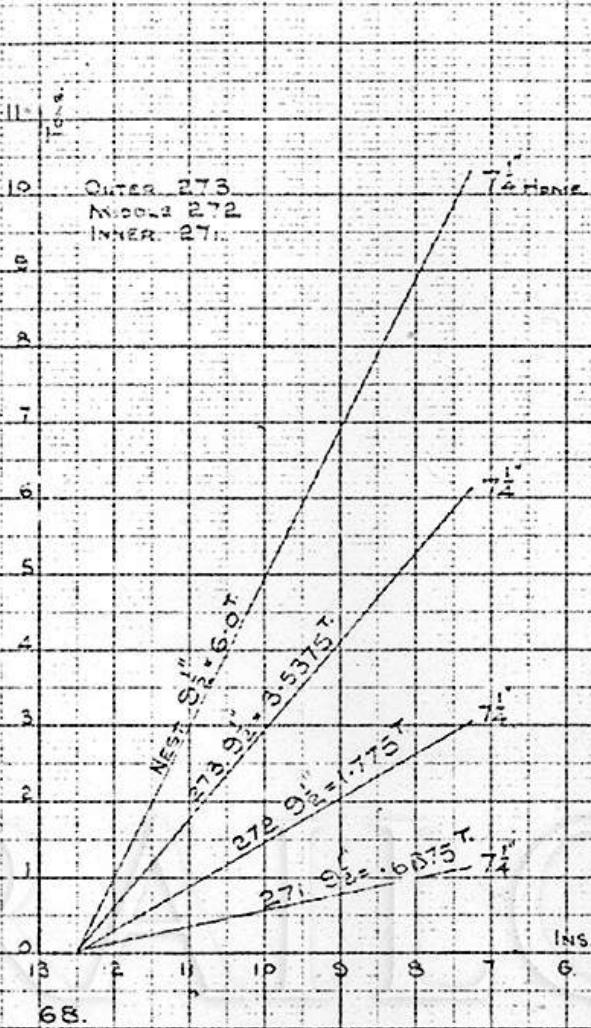


BOLSTER SPRINGS OUTER											BOLSTER SPRINGS MIDDLE											BOLSTER SPRINGS INNER													
No	LOAD			HEIGHT	SECTION	DRG.	FREE	O/D	I/D	HOME	No	T	C	Q	HEIGHT	SECTION	DRG.	FREE	O/D	I/D	HOME	No	LOAD			HEIGHT	SECTION	DRG.	FREE	O/D	I/D	HOME			
	T	C	Q																				T	C	Q										
235	2	10	-	7 1/2"	ROUND	57599	9 7/8	7 1/2	5"	6 1/2"	WITH 234 ALIVE TO 91, 102												234	1	13	-	7 1/2"	ROUND	57599	9 7/8	7 1/2	5"	6 1/2"	WITH 233 ALIVE TO 91, 102	
237	2	4	-	7 1/2"	"	57604	9 7/8	7 1/2	5"	6 1/2"	WITH 236 ALIVE TO 101, 102												236	1	6	-	7 1/2"	"	57604	9 7/8	7 1/2	5"	6 1/2"	WITH 237 ALIVE TO 101, 102	
239	2	10	-	7 1/2"	"	57607	7 1/8	9 1/2	5 1/2	6"	WITH 238 ALIVE TO 101, 102												238	2	10	-	7 1/2"	"	57607	8 1/8	5 1/8	3 1/2	6"	WITH 239 ALIVE TO 101, 102	
241	4	4	-	7 1/2"	"	57611	10"	8 3/8	5 1/2	6 1/2"	WITH 240 ALIVE TO 101, 102												240	-	17	-	7 1/2"	"	57611	10"	3 7/8	2 1/2	6 1/2"	WITH 241 ALIVE TO 101, 102	
243	3	11	-	7 1/2"	"	57644	9 1/2	8 1/2	5 1/2	6 1/2"	WITH 243 ALIVE TO 107A, 108A	243	1	11	-	7 1/2"	ROUND	57644	9 7/8	5 1/2	3 3/8	6 1/2"	SEE 244	242	-	13	-	7 1/2"	"	57644	9 7/8	3 3/8	2 1/2	6 1/2"	SEE 244
247	3	19	-	7 1/2"	"	57666	9 7/8	2 1/2	5 1/2	6 1/2"	WITH 245, 246 ALIVE TO 109, 110	246	1	12	2	7 1/2"	"	57666	9 7/8	5 3/8	3 3/8	6 1/2"	SEE 247	245	-	8	2	7 1/2"	"	57666	9 7/8	2 3/8	2 1/2	5 3/8	SEE 247
250	3	14	1	7 1/2"	"	57683	9 7/8	6 1/2	6 1/2	6 1/2"	WITH 249 ALIVE TO 109, 110	249	1	12	-	7 1/2"	"	57683	9 7/8	5 3/8	3 3/8	6 1/2"	SEE 250	248	-	13	2	7 1/2"	"	57683	9 7/8	3 3/8	2 1/2	6 1/2"	SEE 250
251	1	6	-	8 1/2"	"	57717	9 1/2	6"	3 1/2	6 1/2"	WITH 250 ALIVE TO SCDN 2346																								
252	1	10	-	8 1/2"	"	57720	9 1/2	6 1/2	4 1/2	6 1/2"	WITH 251 ALIVE TO SCDN 2346																								
253	1	6	-	8 1/2"	"	57726	12 1/4	6 1/4	5"	6 1/2"	WITH 252 ALIVE TO SCDN 2346																								
255	1	17	-	8 1/2"	"	57727	11 3/8	6 1/4	4 1/2	6 1/2"	WITH 253 ALIVE TO SCDN 2346												254	-	17	-	8 1/2"	"	57727	11 5/8	4 5/8	3"	6 1/2"	SEE 255	
257	2	11	3	8 1/2"	"	57745	12 3/8	7 1/2	5 1/2	7"	WITH 254 ALIVE TO SCDN 2345												256	1	4	1	8 1/2"	"	57745	12 3/8	4 1/2	3 1/2	7"	SEE 257	
259	2	18	7	3 1/2	"	57748	10 1/2	7 1/2	4 1/2	7"	WITH 255 ALIVE TO SCDN 2345												258	1	4	2	8 1/2"	"	57748	10 1/2	4 1/2	3"	7"	SEE 259	
260	1	12	2	8 1/2"	"	57751	12 3/8	6 1/2	4 1/2	7"	WITH 256 ALIVE TO SCDN 2345																								
262	3	11	2	10"	"	57521	11 1/8	10"	25 6 1/2	7 1/2"												263	1	8	2	10"	"	57521	11 1/8	6"	4"	7 1/2"			
266	3	15	2	7 1/2"	"	57854	9 3/8	8 1/8	5 1/2	6 1/2"	WITH 265, 264 ALIVE TO 105, 106	265	1	15	1	7 1/2"	"	57854	9 3/8	5 1/2	3 1/2	6 1/2"		264	-	14	1	7 1/2"	"	57854	9 3/8	3 1/2	2 1/2	6 1/2"	
267	3	-	2	11 1/2"	"	57667	15 1/2	9 1/2	6 1/2	9"													267	1	-	2	11 1/2"	"	57667	15 1/2	5 1/2	3 1/2	9"		
270	3	7	2	7 1/2"	"	36142	10"	9 1/8	6 3/4	5 1/2"												269	1	8	2	7 1/2"	"	36142	10"	5 3/8	4 1/2	5 1/2"			
273	3	14	2	9 1/2"	"	36142	12 1/2	9 1/2	6 1/2	7 1/2"												272	1	17	1	9 1/2"	"	36142	12 1/2	6 1/2	4 1/2	7 1/2"			
279	3	16	2	9 1/2"	"	36334	13 1/2	8 3/8	5 1/2	7 1/2"												280	1	17	3	9 1/2"	"	36334	13 1/2	5 1/2	3 1/2	7 1/2"			
283	2	11	-	9 1/2"	"	36334	13 1/2	8 1/8	5 1/2	7 1/2"												284	1	3	-	9 1/2"	"	36334	13 1/2	5 1/2	3 1/2	7 1/2"			
285	1	10	2	9 1/2"	"	36325	11 3/8	6 1/2	6 1/2	6 1/2"																									
287	2	9	2	9 1/2"	"	36325	11 1/4	9"	6 1/2	7 1/2"																									
289	4	1	-	9 1/2"	"	57991	11 1/4	9 1/2	6 1/2	8 1/2"																									

THIS IS 155, 156







D.M.U. Side Bearing Springs

		Lot Nos.		
Swindon Inter - City Glasgow / Edinburgh	Motor Bogies	30200 30199 30196	SC/SW/425.	MF
		Lot Nos.		
	Buffet Trailer Bogies	30197 30537	SC/SW/425	MF
Craven		Lot Nos.		
	Trailer Bogies	30198	SC/SW/445	MF.
		Lot Nos.		
Gloucester	Motor Bogies	30503	DE/37202 (a) (217)	CC88
		Lot Nos.		
	Trailer Bogies	30504	DE/37202 (b) (215)	
Derby High Density Sets.		Lot Nos.		
	Motor Bogies	30278 30444	DE/56077 (222) Cat no. 14/32096.	
		Lot Nos.		
Derby Triples.	Trailer Bogies	30279 30445	DE/56251 (215)	CC66 Cat no. 14/32066.
		Lot Nos.		
	Motor Bogies	30363 30364	DE/56878 (230)	
GLOUCESTER H. DENSITY.		Lot Nos.		
	Trailer Bogies	30365	DE/56077 (222)	
		Lot Nos.		
MOTOR BOGIES		Lot Nos.		
		30419	DE/56878 (230)	CAT NO 14/32120.
		7 Plate two at ^{TOP} bottom 1/2" other five are 5/8"		
MOTOR BOGIES.		Lot Nos.		
		30611 30612	DE/56476 (261)	- 4" buckle.
		7 Plate two at bottom are 1/2" other five are 5/8"		
TRAILER BOGIE		Lot Nos.		
		30613	DE/56077 A.	

Metro -
Cammell

Un - Modified
Motor Bogies

Lot Nos.

30271
30253
30256
30252
30270
30467

DE/35906 (a)
Cat No 14/32054.

Lot Nos.

Un - Modified
Trailer Bogies

30257
30273
30468
30260

DE/35899 (a)

Metro -
Cammell

Modified
Motor Bogies

Lot Nos.

30501
30588
30500
30587

DE/35906 (a)
Cat No 14/32054.
*on out power cars these always
appear to droop at ends.*

Lot Nos.

Modified
Trailer Bogies

30502
30589

DE/35899 (a)

RAILCAR.CO.UK

D.M.U. Side Bearing Springs

		Lot Nos.	
Swindon Inter - City Glasgow / Edinburgh	Motor Bogies	30200	SC/SW/425
		30199	
		30196	
	Buffet Trailer Bogies	30197	SC/SW/425
		30537	
		Lot Nos.	
	Trailer Bogies	30198	SC/SW/445
		Lot Nos.	
Craven	Motor Bogies	30503	DE/37202 (a)
		Lot Nos.	
	Trailer Bogies	30504	DE/37202 (b)
		Lot Nos.	
Gloucester	Motor Bogies	30278	DE/56077 (222)
		30444	
		Lot Nos.	
	Trailer Bogies	30279	DE/56251
		30445	
		Lot Nos.	
Derby High Density Sets.	Motor Bogies	30363	DE/56878 (230) 2 - Top Plates are 1/2" thick.
		30364	
		Lot Nos.	
	Trailer Bogies	30365	DE/56077 (222)
		Lot Nos.	
GLOUCESTER HIGH DENSITY.	MOTOR BOGIES.	30419	DE/56878 CAT NO 14/32120
		Lot Nos.	
DERBY TRIPLES.	MOTOR BOGIES	30611	DE/56476 14/32076 261
		30612	
		Lot Nos.	
	TRAILER BOGIE.	30613.	DE/56077A.
		Lot Nos.	

Metro -
Cammell

Un - Modified
Motor Bogies

Lot Nos.

30271
30253
30256
30252
30270
30467

DE/35906 (a)

Lot Nos.

Un - Modified
Trailer Bogies

30257
30273
30468
30260

DE/35899 (a)

Metro -
Cammell

Modified
Motor Bogies

Lot Nos.

30501
30588
30500
30587

DE/35906 (a)

Lot Nos.

Modified
Trailer Bogies

30502
30589

DE/35899 (a)

D.M.U. Bogie Bolster Springs.

		Lot Nos.	
	Motor Second Brake/Lav.	30200	SC/SW/419 Outer bolster spring. 14/31905
		30199	SC/SW/420 Inner bolster spring. 14/31830
Swindon Inter-City Glasgow/Edinburgh	First & Buffet	30197	SC/SW/444 Outer bolster spring. 14/31901
	Trailers	30537	SC/SW/419 Outer bolster spring. 14/31905 SC/SW/420 Inner bolster spring. 14/31830
	Trailer First	30198	SC/SW/444 Outer bolster spring. 14/31901
			SC/SW/420 Inner bolster spring. 14/31830
Craven	Motor Bogie	30503	DE/37202 (e) Outer bolster spring.
			DE/37202 (f) Inner bolster spring.
	Trailer Bogie	30504	DE/37202 (g) Outer bolster spring.
			DE/37202 (h) Inner bolster spring.
Gloucester	Motor Bogie	30278	CB135. Cat No 14/31831 (TIMMIS)
		30444	(† D/5803 (86) Outer bolster spring. (* D15/1211(92) Inner bolster spring. CB135 CAT No 14/31837 (TIMMIS)
	Trailer Bogie	30279	D15/1211(101) Outer bolster spring.
		30445	D15/1211(102) Inner bolster spring.
Metro - Cammell	Un - Mod Motor Bogie	30271	
		30253	
	Un - Mod Trailer Bogie	30256	DE/35900 (b) Outer bolster spring.
		30252	DE/35906 (c) Inner bolster spring.
	Un - Mod Trailer Bogie	30270	
		30467	
Derby Triples	Motor Bogie.	30611	(243) - DE/57666 OUTER BOLSTER SPRING. 14/31878
		30612	(246) - " MIDDLE - - - - 14/31879 (247) - " INNER - - - - 14/31877
	TRAILER BOGIE	30613.	{ DE/57667 OUTER BOLSTER SPRING. " INNER BOLSTER SPRING.

† Alternative in Round Section DE/57611 (241) Outer Cat No 14/605.

* Alternative in Round Section DE/57599(234) or DE/57604(236) Inner Cat No 14/546 or 14/31916.

Metro- Cammell	{	Mod.	<u>Lot Nos.</u>		
		(Motor Bogie	30501	DE/57833	Outer bolster spring
			30588	DE/57833	Inner bolster spring
			30500		
		30587			

	{		<u>Lot Nos.</u>		
		Mod.	30502	DE/57831	Outer bolster spring
		(Trailer Bogie	30589	DE/57831	Inner bolster spring

	{		<u>Lot Nos.</u>					
Derby High		(Motor Bogies	30363	DE/64779	Disg. 17/1413 (156)	Outer bolster spring	Alternative. Spring No. 264 inner 265 middle 266 outer	Cat. No. 14/428 14/429 14/430
			30364	DE/64779	Pg. 17/1413. (155)	Inner bolster spring		
Density Sets				<u>Lot Nos.</u>				
		(Trailer Bogies	30365	D16/1470	(107A)	Outer bolster spring	Cat. No. 14/31852	
				D16/1470	(108A)	Inner bolster spring	14/31854	

D.M.U. Bogie Bolster Springs.

		Lot Nos.	
	Motor Second Brake/Lav.	30200 30199	(SC/SW/419 Outer bolster spring. (SC/SW/420 Inner bolster spring.
		Lot Nos.	
Swindon Inter-City	First & Buffet	30197	(SC/SW/444 Outer bolster spring. (SC/SW/419 Outer bolster spring.
Glasgow/Edinburgh	Trailers	30537	(SC/SW/420 Inner bolster spring.
		Lot Nos.	
	Trailer First	30198	(SC/SW/444 Outer bolster spring. (SC/SW/420 Inner bolster spring.
		Lot Nos.	
	Motor Bogie	30503	(DE/37202 (e) Outer bolster spring. (DE/37202 (f) Inner bolster spring.
Craven		Lot Nos.	
	Trailer Bogie	30504	(DE/37202 (g) Outer bolster spring. (DE/37202 (h) Inner bolster spring.
		Lot Nos.	
Gloucester	Motor Bogie	30278 30444	(DE/5803 (86) Outer bolster spring. (D15/1211(92) Inner bolster spring.
		Lot Nos.	
	Trailer Bogie	30279 30445	(D15/1211(101) Outer bolster spring. (D15/1211(102) Inner bolster spring.
		Lot Nos.	
	Un - Mod	30271 30253 30256	(DE/35900 (b) Outer bolster spring. (DE/35906 (c) Inner bolster spring.
Metro - Cammell	Motor Bogie	30252 30270 30467	
		Lot Nos.	
	Un - Mod	30257 30273 30260 30468	(DE/35899 (b) Outer bolster spring. (DE/35899 (c) Inner bolster spring. ((

Metro-
Carrroll

	<u>Lot Nos.</u>		
Mod.	30501	DE/57833	Outer bolster spring
Motor Bogie	30508	DE/57833	Inner bolster spring
	30500		
	30507		

	<u>Lot Nos.</u>		
Mod.	30502	DE/57831	Outer bolster spring
Trailer Bogie	30509	DE/57831	Inner bolster spring

Derby High

	<u>Lot Nos.</u>		
Motor Bogies	30363	DE/64779 (156)	Outer bolster spring
	30364	DE/64779 (155)	Inner bolster spring

Density Sets

	<u>Lot Nos.</u>		
Trailer Bogies	30365	D16/1470 (107A)	Outer bolster spring
		D16/1470 (108A)	Inner bolster spring