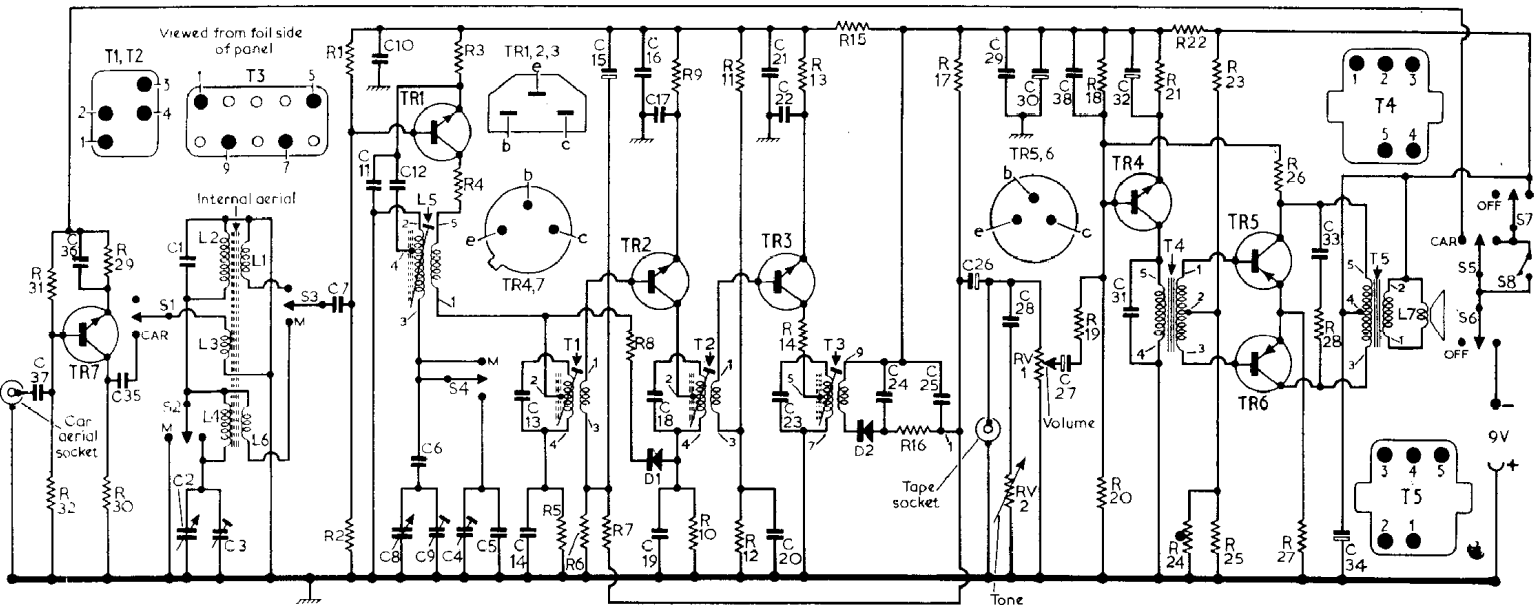


C	37	36	35	1,2	3	7	10,11,12,8,6,9	4	5	13,14	15	16,17,18,19	21,20,22,23	24	25	26	29,28,30,27,38	31,32	33	34	C		
R	31,32	29,30		1,2		3,4	5	6	7	8	9	10	11,12	13,14	15	16	17	RV2,RV1	19,18,20	21	22,24,23,25	26,27,28	R



Resistors

R1	6.8kΩ	A1
R2	18kΩ	A1
R3	2.2kΩ	A1
R4	180Ω	A1
R5	560Ω	A1
R6	82kΩ	A2
R7	12kΩ	A2
R8	820Ω	A1
R9	270Ω	A1
R10	2.2kΩ	A2
R11	6.8kΩ	B1
R12	12kΩ	A2
R13	1kΩ	B1
R14	100Ω	B2
R15	39Ω	B1
R16	470Ω	B1
R17	18kΩ	B2
R18	18kΩ	B1
R19	1kΩ	B2
R20	39kΩ	B1
R21	1kΩ	B1
R22	470Ω	B1
R23	2.7kΩ	B1
R24	VA1040	B1
R25	100Ω	B1
R26†	1MΩ	B1
R27	2.2Ω	B1
R28	100Ω	B1
R29	10kΩ	B1
R30	18kΩ	B1
R31	47kΩ	B2

Capacitors

C1	39pF	B2
C2	15pF	A2
C3	20pF	A2
C4	20pF	B1
C5	180pF	B1
C6	215pF	A1
C7	0.02μF	A1
C8	208pF	A2
C9	20pF	A2
C10	0.25μF	A1
C11	0.01μF	A1
C12	0.01μF	A1
C13	360pF	A1
C14	0.04μF	A1
C15	6.4μF	A1
C16	0.1μF	A1
C17	0.04μF	A1
C18	360pF	A2
C19	0.04μF	A2
C20	0.04μF	A2
C21	0.1μF	A1
C22	0.04μF	B2
C23	360pF	B1
C24	0.01μF	B1
C25	0.01μF	B1
C26	4μF	B1
C27	2.5μF	B2
C28	0.01μF	A1

Coils and Transformers

L1	—	B2
L2	—	B2
L3	—	A2
L4	—	A1
L5	—	A2
L6	—	B2
L7	3Ω	B2
T1	—	A1
T2	—	A1
T3	—	B2
T4	—	B1
T5	—	B1

Miscellaneous

S1-S7	—	A1
S8	—	A2
D1	AA119	A2
D2	AA119	B1

Transistor Table

Transistor	Emitter (V)	Base (V)	Collector (V)
TR1	BF195	5.6	4.9
TR2	BF194	6.5	5.5
TR3	BF194	5.1	4.3
TR4	BC108	5.4	4.4
TR5	AC128	0.03	0.15
TR6	AC128	0.03	0.15
TR7	BC108	6.2	5.1

Quiescent current 18mA.

Capacitor Values

Capacitor	Value
C29	0.04μF
C30	200μF
C31	2000pF
C32	64μF
C33	0.1μF
C34	200μF
C35	0.01μF
C36	0.02μF
C37	0.01μF
C38	0.02μF

Coils and Transformers

L1	—	}	B2
L2	—		
L3	—		
L4	—	A2	
L5	—	A1	
L6	—	A2	
L7	3Ω	B2	
T1	—	A1	
T2	—	A1	
T3	—	B2	
T4	—	B1	
T5	—	B1	

Miscellaneous

S1-S7	—	A1
S8	—	A2
D1	AA119	A2
D2	AA119	B1

† Omitted from later models.

TRANSISTOR ANALYSIS

Transistor voltages given in the table in col. 1 were obtained from information supplied by the manufacturers, they were measured under no signal conditions on a 20,000Ω/V meter, and are negative with respect to chassis. The receiver was switched to m.w.; "CAR" press-button depressed, and a single point co-axial plug was inserted in the external aerial socket.

1.—Switch receiver to m.w., and tune to low frequency end of band (tuning gang at maximum capacitance). Check that cursor is aligned with datum marks at low frequency end of scale. Connect dummy aerial to junction of C7, and S3, and feed in via dummy aerial a 470kc/s a.m. signal. Adjust T1, T2 and T3 in that order for maximum output. Disconnect dummy aerial.

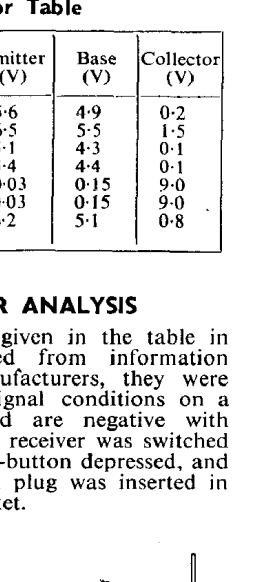
2.—Terminate dummy aerial with a single point co-axial plug, and insert plug in external aerial socket. Switch receiver to m.w., and depress "CAR" press-button. Tune receiver to 500m, and feed in via dummy aerial a 600kc/s a.m. signal. Adjust L5 and L4 (slide along ferrite rod), for maximum output.

3.—Tune receiver to 200m and feed in a 1,500kc/s a.m. signal. Adjust C9, and C3 for maximum output.

4.—Repeat operations 2 and 3 for optimum calibration and tracking. Seal L4 on ferrite rod, also capacitors C9 and C3.

5.—Switch receiver to l.w.; maintain "CAR" press-button in the depressed position, and tune receiver to 1,400m. Feed in via the dummy aerial a 214kc/s a.m. signal, and adjust C4 and L2 (slide along ferrite rod) for maximum output.

6.—Seal L2 on ferrite rod, and disconnect signal generator.



CIRCUIT ALIGNMENT

Equipment Required.—An r.f. signal generator amplitude modulated 30 per cent at 400c/s; a standard dummy aerial, and a non-inductive trimming tool.

Switch on signal generator and allow 15 minutes to warm up. Set volume and tone controls to maximum. Throughout the entire alignment procedure attenuate the input signal such, that the audio output is just audible, thereby preventing the alignment peaks being masked by the a.g.c. action.

1.—Switch receiver to m.w., and tune to low frequency end of band (tuning gang at maximum capacitance). Check that cursor is aligned with datum marks at low frequency end of scale. Connect dummy aerial to junction of C7, and S3, and feed in via dummy aerial a 470kc/s a.m. signal. Adjust T1, T2 and T3 in that order for maximum output. Disconnect dummy aerial.

- 2.—Terminate dummy aerial with a single point co-axial plug, and insert plug in external aerial socket. Switch receiver to m.w., and depress "CAR" press-button. Tune receiver to 500m, and feed in via dummy aerial a 600kc/s a.m. signal. Adjust L5 and L4 (slide along ferrite rod), for maximum output.
- 3.—Tune receiver to 200m and feed in a 1,500kc/s a.m. signal. Adjust C9, and C3 for maximum output.
- 4.—Repeat operations 2 and 3 for optimum calibration and tracking. Seal L4 on ferrite rod, also capacitors C9 and C3.
- 5.—Switch receiver to l.w.; maintain "CAR" press-button in the depressed position, and tune receiver to 1,400m. Feed in via the dummy aerial a 214kc/s a.m. signal, and adjust C4 and L2 (slide along ferrite rod) for maximum output.
- 6.—Seal L2 on ferrite rod, and disconnect signal generator.

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