

Transistor Table

Transistor	Emitter (V)	Base (V)	Collector (V)
TR1 OC44 ..	1.5	1.4	7.0
TR2 OC45 ..	0.7	0.8	7.0
TR3 OC45 ..	0.9	1.0	7.0
TR4 OC71 ..	0.6	0.7	1.4
TR5 OC81D ..	1.3	1.4	8.5
TR6 OC81 ..	4.5	4.65	9.0
TR7 OC81 ..	—	0.15	4.5

CIRCUIT ALIGNMENT

Equipment Required.—An a.m. signal generator; an output meter with an impedance of 25 ohms or an a.c. voltmeter; a length of insulated wire formed into a coupling loop for r.f. alignment; a 0.1 μ F capacitor and a narrow-bladed-type trimming tool.

If, alignment may be carried out with the receiver in or out of its case, but the r.f. oscillator and aerial circuits should only be re-aligned with the receiver in its case.

During alignment adjust the input signal so that the output does not exceed 50mW (1V a.c. across the speech coil), to avoid a.g.c. action.

Resistors

R1	39k Ω	B1
R2	10k Ω	B1
R3	3.9k Ω	B1
R4	56k Ω	B1
R5	680 Ω	B1
R6	1.2k Ω	B1
R7	8.2k Ω	B2
R8	22k Ω	B1
R9	4.7k Ω	B1
R10	820 Ω	B2
R11	3.9k Ω	B2
R12	2.2k Ω	B2
R13	1k Ω	B2
R14	8.2k Ω	B2
R15	1k Ω	B2
R16	33k Ω	B2
R17	100k Ω	B2
R18	820 Ω	B2
R19	560 Ω	B2
R20	2.7k Ω	B2
R21	100 Ω	B2
R22	2.7k Ω	B2

Capacitors

C1	10pF	B1
C2	0.1 μ F	B1
C3	0.01 μ F	B1
C4	200pF§	B1
C5	250pF	B1
C6	12 μ F†	B1
C7	56pF	B1
C8	0.1 μ F	B1
C9	250pF	B1
C10	0.047 μ F	B2
C11	18pF	B1
C12	0.1 μ F	B2
C13	250pF	B2
C14	0.01 μ F	B2
C15	0.047 μ F	B2
C16	0.022 μ F	B2
C17	100pF	B2
C18	100 μ F	B2
C19	100 μ F	B2

C20	100 μ F	B2
CT1	40pF	B1
CT2	—	B1
CT3	40pF	B1
CT4	—	B1
CV1, CV2	—	B1

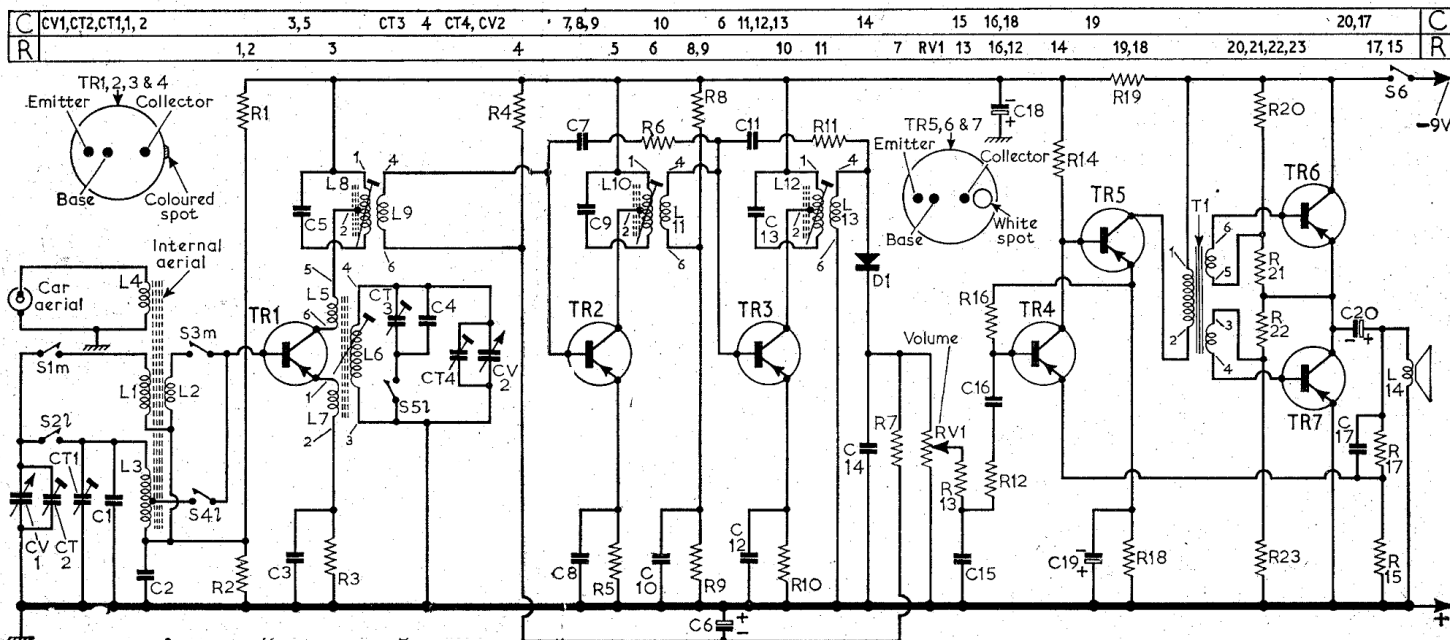
Coils*

L1	—	A1
L2	—	A1
L3	35.0	A1
L4	3.7	A1
L5	1.8	A1
L6	2.3	A1
L7	—	A1
L8	5.6	A1
L9	—	A1
L10	5.6	A1
L11	—	A1
L12	4.3	A2
L13	—	A2
L14	25.0	—

Miscellaneous

T1	a 280 Ω b 36 Ω c 36 Ω	B2
D1	OA70	B2
S1-S5	—	A1
S6	—	A2

*Approx. d.c. resistance in ohms.
§Or 210pF. †Or 10 μ F.



- 1.—Switch receiver to m.w. and rotate the tuning gang to maximum capacitance. Set the volume control to maximum output.
- 2.—Connect the output meter in place of the loudspeaker or connect the a.c. voltmeter across the speech coil. Connect the signal generator via the 0.1 μ F capacitor to the base of TR1.
- 3.—Feed in a 470kc/s signal and adjust L12, L10 and L8 for maximum output.
- 4.—Disconnect the signal generator from TR1 base and connect it directly across the coupling loop. Place the loop adjacent to the receiver with its axis in line with the ferrite rod aerial.
- 5.—With the receiver switched to m.w. and the tuning gang fully closed. Feed in a 525kc/s signal and adjust L6 for maximum output.
- 6.—Fully open the tuning gang. Feed in a 1,570kc/s signal and adjust CT4 for maximum output.
- 7.—Repeat operations 5 and 6.

- 8.—Set the tuning scale at 500m. Feed in a 600kc/s signal and adjust L1 for maximum output.
- 9.—Set the tuning gang to 230m. Feed in a 1,300kc/s signal and adjust CT2 for maximum output.
- 10.—Repeat operations 8 and 9.
- 11.—Switch receiver to l.w. and fully close the tuning gang. Feed in a 155kc/s signal and adjust CT3 for maximum output.
- 12.—Set the tuning scale to 1,670m. Feed in a 180kc/s signal and adjust L3 for maximum output.
- 13.—Set the tuning scale to 1,110m. Feed in a 270kc/s signal and adjust CT1 for maximum output.
- 14.—Repeat operations 12 and 13.

PERDIO - PR25
PR36 (Fanfare)
PR37 (Carnival)