

Transistor Table

Transistor	Emitter (V)	Base (V)	Collector (V)
TR1 OC44 ..	1.1	1.0	7.0
TR2 OC45 ..	0.5	0.8	7.1
TR3 OC45 ..	0.9	1.1	7.1
TR4 OC81D ..	1.1	1.2	8.6
TR5 OC81 ..	—	0.2	8.9
TR6 OC81 ..	—	0.2	8.9

CIRCUIT ALIGNMENT

Equipment Required.—An A.M. signal generator; a high resistance 0-2.5V D.C. voltmeter; an R.F. coupling loop constructed by winding 3 turns of insulated wire to a diameter of 10ins. with a 430Ω resistor connected in series; a 0.5μF capacitor and an 820 ohm resistor wired in series for use as a generator terminating network; a 1μF capacitor and a bladed type trimming tool for the I.F. transformer cores.

The identity of the equipment connecting points referred to in the instructions which

Resistors

R1	56kΩ	B2
R2	10kΩ	B1
R3	3.9kΩ	A1
R4	68kΩ	A2
R5	680Ω	A2
R6	1.2kΩ	A2
R7	22kΩ	B2
R8	4.7kΩ	B2
R9	1kΩ	P2
R10	3.9kΩ	H2
R11	8.2kΩ	A2
R12	5kΩ	C1
R13	2.7kΩ	C1
R14	39kΩ	C1
R15	680Ω	C1
R16	12kΩ†	C1
R17	560Ω	C1
R18	1MΩ	C2
R19	4.7kΩ	D2
R20	100Ω	D2
R21	4.7Ω	D2

Capacitors

C1	157pF	B1
C2	20pF	B1
C3	18-56pF	A1

C4	8μF	A2
C5	250pF	A2
C6	0.01μF	A1
C7	240pF	A1
C8	20pF	B1
C9	111pF	B1
C10	250pF	A2
C11	0.25μF	A2
C12	0.1μF	B2
C13	56pF	A2
C14	8μF	A2
C15	250pF	B2
C16	0.25μF	B2
C17	18pF	B2
C18	0.01μF	B2
C19	100μF	C2
C20	0.47μF	D1
C21	100μF	D1
C22	2,000pF	D1
C23	100μF	C2
C24	0.1μF	B1

Coils*

L1	1.25	B1
L2	7.5	A1
L3	1.5	C1
L4	—	A1

L5	—	C1
L6	—	A1
L7	—	A1
L8	2.3	A1
L9	3.0	C1

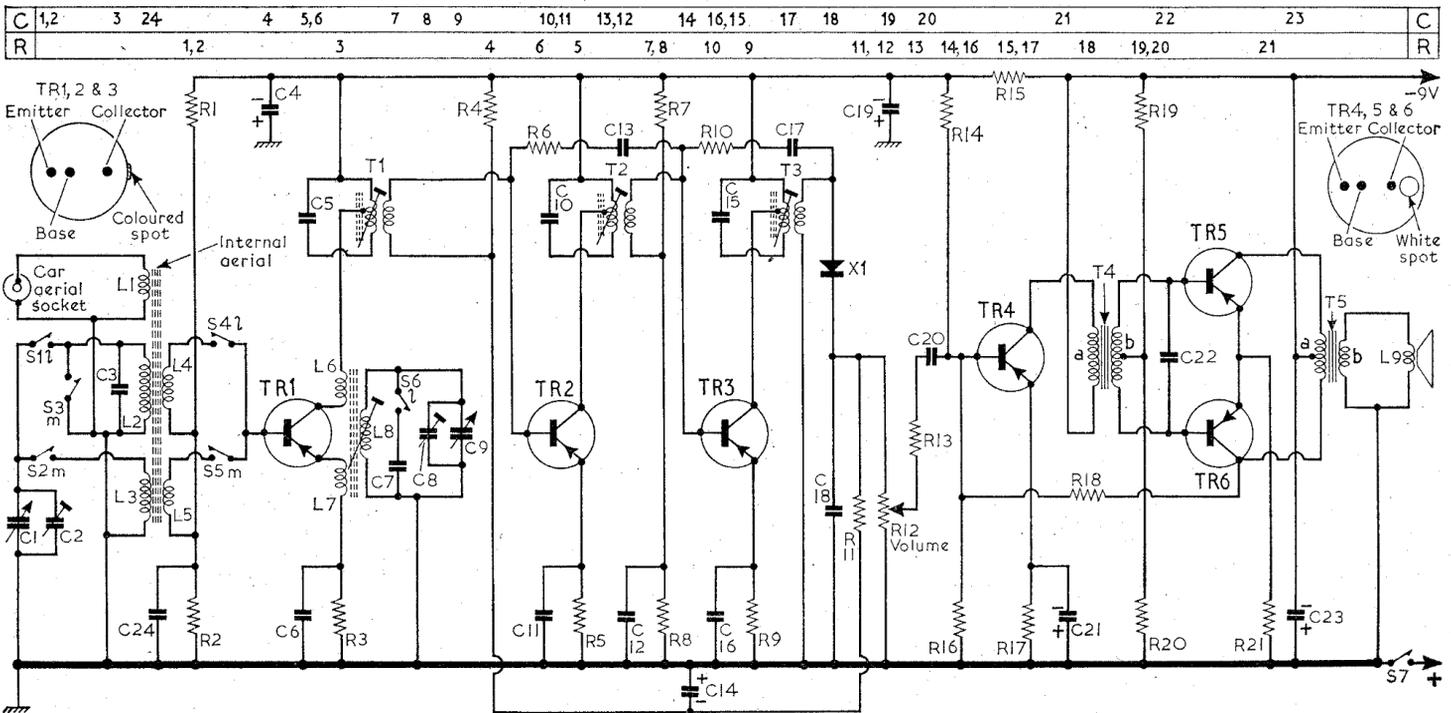
Transformers*

T1	—	A2
T2	—	A2
T3	—	B2
T4	{ a 115.0 } { b 86.0 }	D2
T5	{ a 4.0 } { b — }	D2

Miscellaneous

X1	OA70 or GEX34	B2
S1-S6	—	A1
S7	—	D1

*Approximate D.C. resistance in ohms.
†6.8kΩ in receivers fitted with G.E.C. transistors.



follow, are given in the illustration of the foil side of the receiver panel below.

- 1.—Connect the D.C. voltmeter as an audio output meter across the volume control **R12**. Switch receiver to M.W. and turn the volume control to minimum output.
- 2.—Connect the signal generator via the 0.5μF capacitor and 820 ohm resistor network to the base of **TR3**. Feed in a 470 kc/s signal and adjust **T3** (location reference B2) for maximum output on the D.C. meter.
- 3.—Transfer the signal generator to the base of **TR2** and adjust **T2** (A2) for maximum output.
- 4.—Shunt **C24** (B1) with the 1μF capacitor. Transfer the signal generator to the base of **TR1** and adjust **T1** (A2) for maximum output.
- 5.—Rotate the tuning gang to the maximum capacitance position (fully meshed). Feed in a 540 kc/s signal and adjust **L8** (A1) for maximum output.

- 6.—Rotate the tuning gang to the minimum capacitance position. Feed in a 1,640 kc/s signal and adjust **C8** (B1) for maximum output.
- 7.—Repeat operations 5 and 6 until no further improvement can be obtained. Remove the 1μF capacitor from across **C24**.
- 8.—Connect the signal generator output leads across the R.F. coupling loop and place the loop about 2 feet distant from the ferrite rod. Tune receiver to the 500m mark on the scale. Feed in a 600 kc/s signal and adjust **L3** (C1) for maximum output.
- 9.—Tune receiver to the 250m mark on the scale. Feed in a 1,200 kc/s signal and adjust **C2** (B1) for maximum output.
- 10.—Repeat operations 8 and 9 until no further improvement can be obtained.
- 11.—Switch receiver to L.W. and tune to 1,400m on scale. Feed in a 214 kc/s signal and adjust **L2** (A1) for maximum output.

Switches.—S1-S6 are the waveband rotary switches which are housed in a two-way rotary unit shown in location reference A1, where individual switch sections can be identified. In the switch drawing and on the circuit diagram, suffix letter *m* means closed on M.W. and suffix letter *l* means closed on L.W. **S7** is the battery on/off switch and is ganged with the volume control **R12**.

Battery.—9V Vidor T6007, Ever-Ready PP7, or equivalent.

Modifications.—In earlier receivers **R20** was 82Ω not 100Ω.

DANSETTE - RT222