

DECCA**“DEBONAIRE”****Model TP44**

General Description: Six-transistor, two-waveband portable receiver with co-axial socket connection for external aerial.

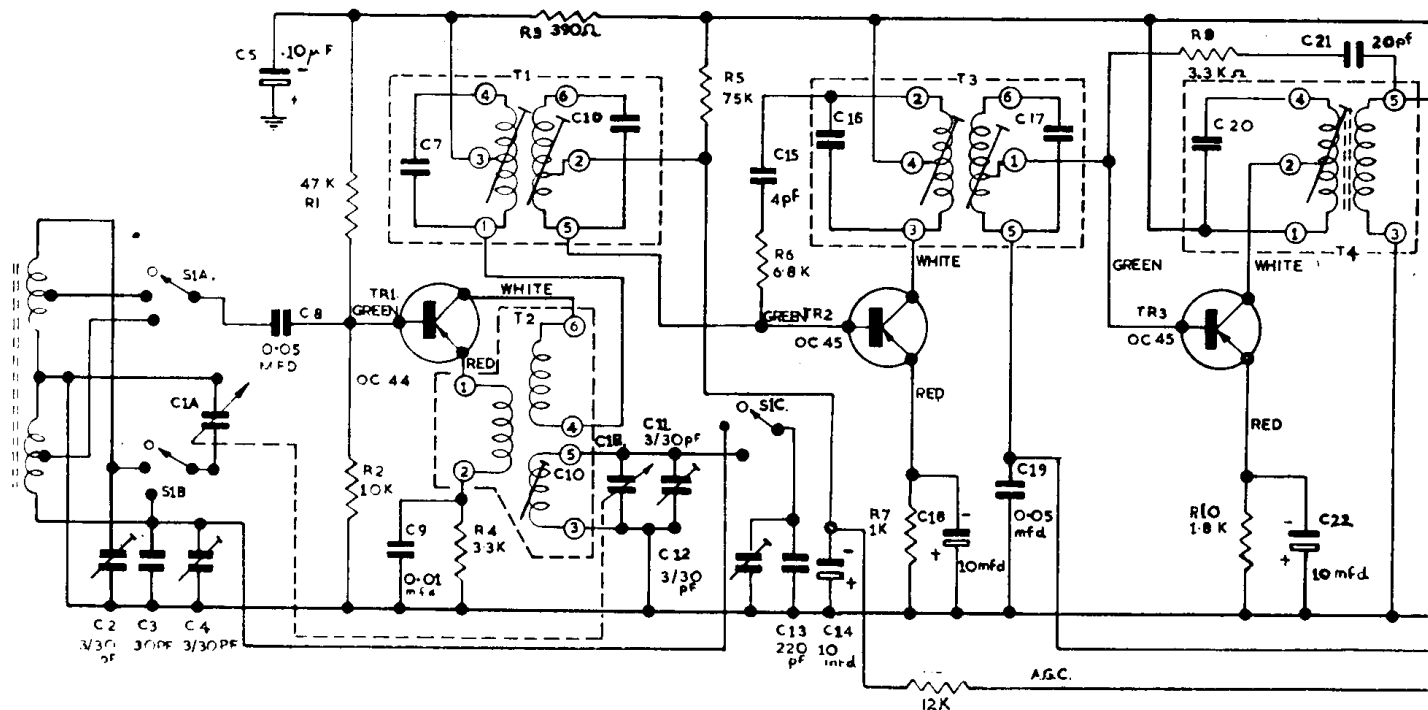
Power Supply: Two 6-volt batteries (PP1 or equivalents). No-signal consumption 12 mA.

Transistor Analysis: Following readings taken on Avo Model 8, 10- or 25-volt ranges under no-signal conditions, volume control minimum, positive lead to chassis.

	TR1 OC44	TR2 OC45	TR3 OC45	TR4 OC81D	TR5 OC81	TR6 OC81
Emitter voltage .	1.4	0.8	1.2	1.5	6.1	Very low
Collector voltage .	8.0	8.2	8.6	11.5	12.3	6.1

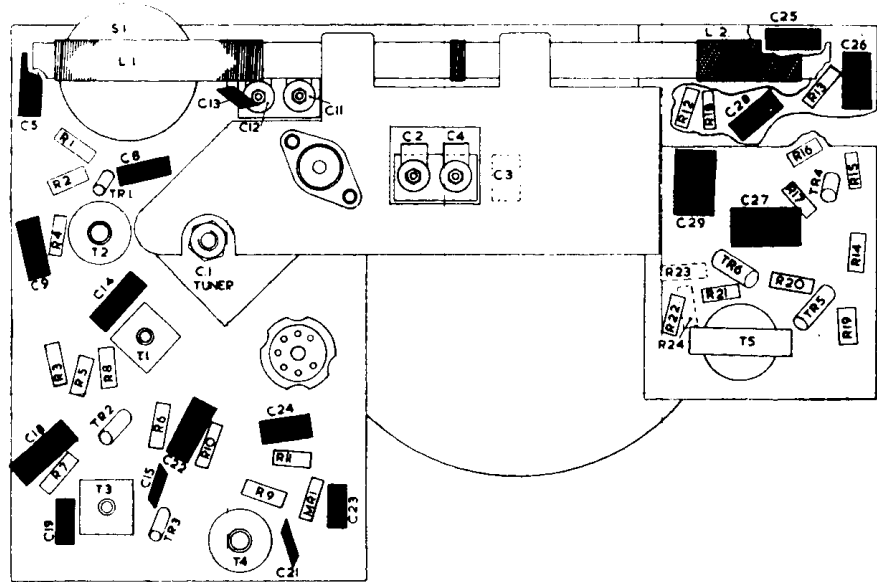
Note that standard wiring code is used: green base; white collector; red emitter. TR5, TR6 must be matched pair. OA70 detector diode.

Alignment Procedure: Output readings taken with meter across speaker coil on low A.C. range. *I.F.:* Inject 472 kc/s. across L1 with set on M.W. (gang closed), keeping input low. Peak top and bottom cores of T1 and T3 and peak single core of T4 reducing input as necessary. Repeat adjustments. *R.F.:* Inject 652 kc/s. to aerial socket via 1k resistor, tune to 460 m. and adjust T2 then L1. Tune to 230 m., inject 1300-kc/s. signal and adjust C11 then C2. Repeat sequence of operations. *L.W.:* Inject 170 kc/s. as above, tune to 1750 m. and adjust C12. (As there may be some oscillator pulling when tuning C12, take care to adjust L2 and C12



CIRCUIT DIAGRAM—

COMPONENT LAY-OUT



for maximum signal at correct tracking point.) Tune to 1250 m., inject 240-kc/s. signal and adjust C4. Repeat sequence.

Servicing Notes: Take great care not to scratch or chip the paint covering on the transistors. When soldering use reasonably sized pair of pliers as heat sink. Electric soldering-irons should be earthed, as irons often have a very slight leak when hot, and the resultant current can damage a new transistor.

Component Notes: Loudspeaker impedance 25 ohms. On some models C30, shown dotted in circuit diagram, has been added in base circuits of output stage. This may be either 500 pF. or 1000 pF. and has been added to neutralise phase-shift effects of T5 when necessary. C3, C13, R20, R22, R23, R24 5%. C21 2%. C15 4 pF. $\pm \frac{1}{2}$ pF. RV1 5k linear potentiometer.

