

FERGUSON

Model 357BT

General Description: Six-transistor (plus crystal diode), two-waveband, personal portable receiver with provision for earphone.

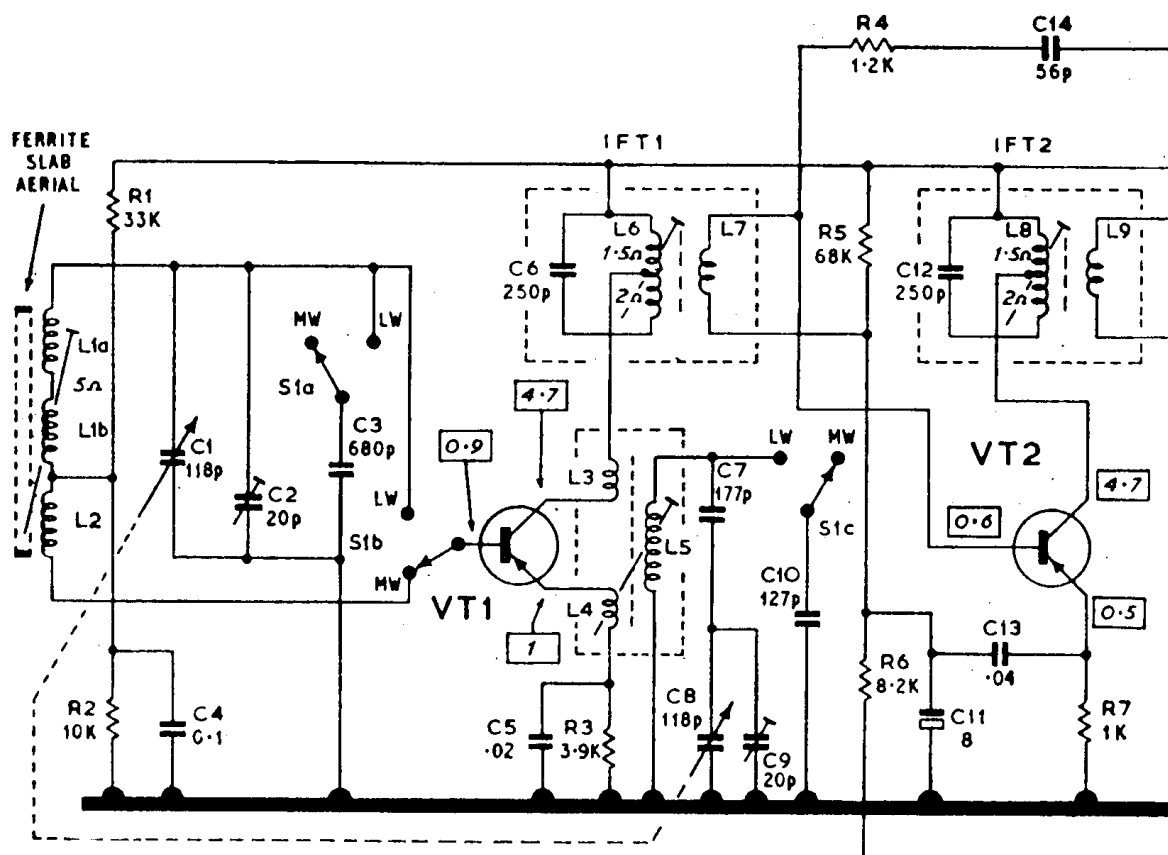
Power Supply: 6-volt battery (four $1\frac{1}{2}$ -volt cells). Suitable cells include U12, D14, T5, DL25, BA6102, T13, T14, V0028, V0030. Consumption (no signal) 8.5 mA., (average) 15 mA.

Wavebands: M.W. 187–517 m.; L.W. pre-set around 1500 m.

Transistors: (VT1) OC44; (VT2) OC45; (VT3) OC45; (VT4) OC81D; (VT5, 6) OC81. Crystal diode (W1) OA70. Typical voltages shown on circuit diagram measured with 20,000-ohms/volt meter.

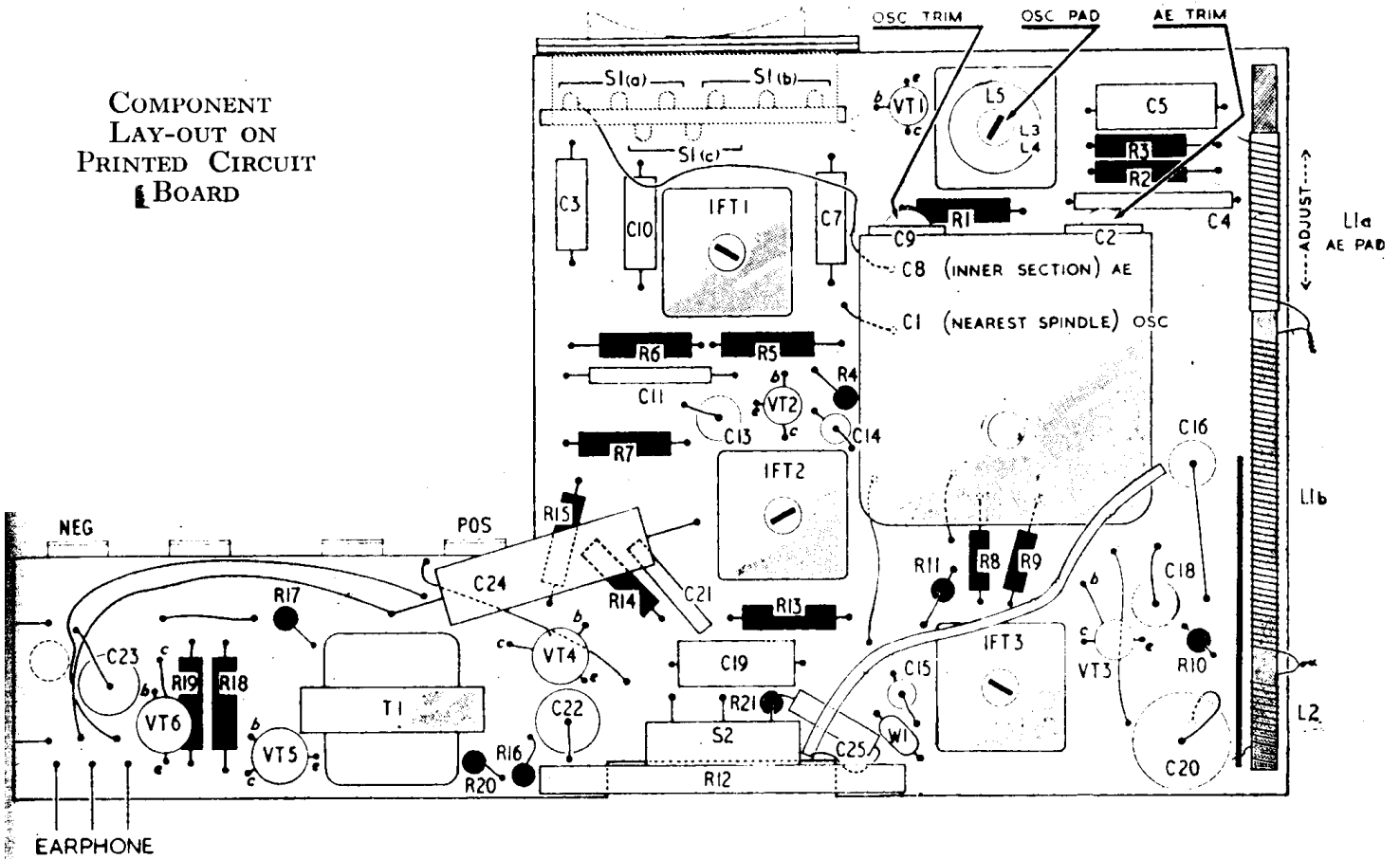
Notes: To check oscillator operation, measure voltages at emitter and base of VT1. Failure to oscillate is indicated when base voltage is more negative than emitter. Should output stage fail, check switch associated with earphone jack socket. Adjust tension of spring contacts if necessary.

Dismantling: Remove cursor tuning disc with aid of stout cord placed around knob boss. Prise off rear casing shell and remove carrying handle. Free self-tapping screw and fibre washer. Printed panel is seated in four supporting moulded lugs. A little cellulose adhesive is applied during assembly. These seals should be broken and the volume-control side of the casing prised outwards so that the edge of printed panel may be lifted slightly to clear lugs. Opposite edge of printed panel associated with wave-change switch may then be released in similar manner (support slider switch with thumb to avoid unduly straining wafer contacts). Flexibility of case is sufficient to enable side to be prised outwards to clear slider button provided some care is taken. Printed panel with wave-change switch button may then be withdrawn. On replacement, cellulose adhesive should be reapplied to supporting lugs.



CIRCUIT DIAGRAM—

COMPONENT
LAY-OUT ON
PRINTED CIRCUIT
BOARD



Alignment Summary: I.F. 470 kc/s. (IFT3, 2, 1); M.W. 560 kc/s. (L5); 1600 kc/s. (C9); 700 kc/s. (L1a); 1300 kc/s. (C2).

