

General Description: A portable transistor radio for the reception of Medium and Long waves. Sockets are provided for the connection of an external aerial and earphone. An integrated circuit is used in the I.F. stage.

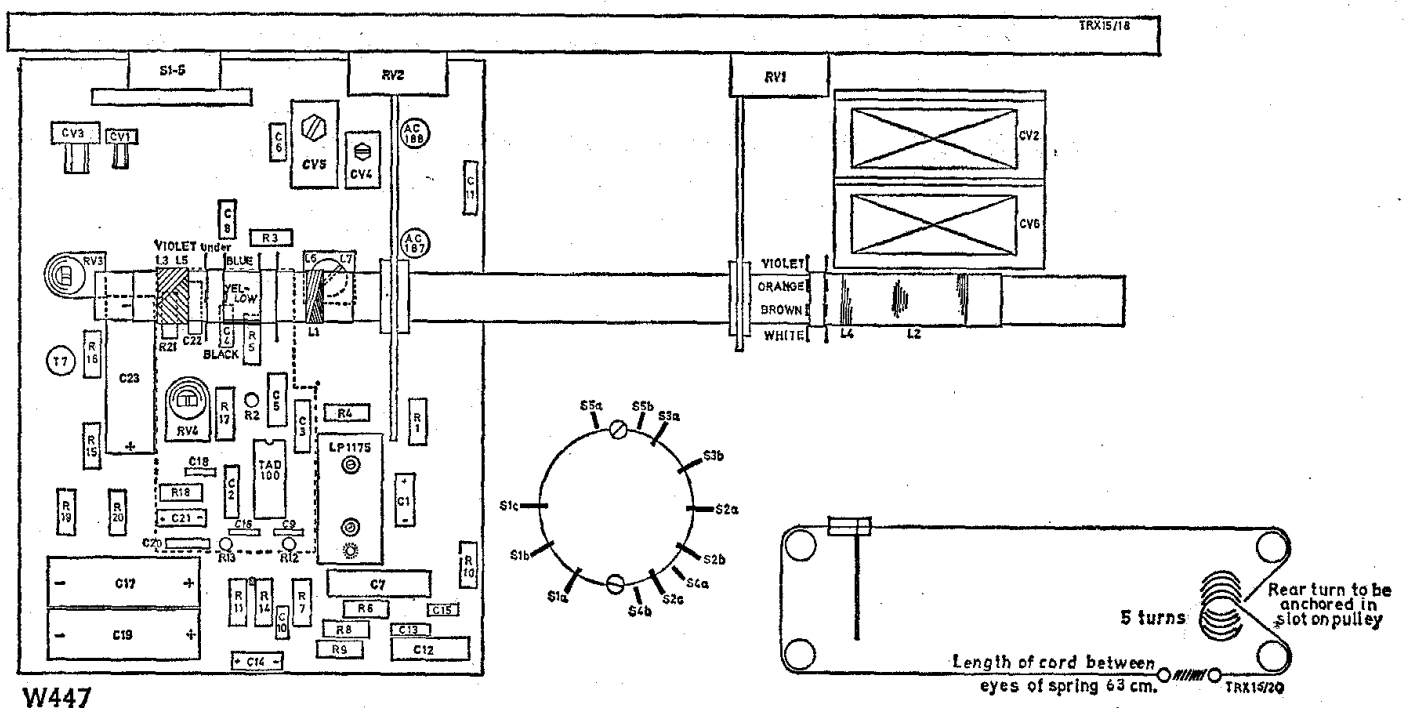
Battery: 1 Ever-Ready PP9.

Waveband Coverage: M.W. 186–555m (1613–540kHz); L.W. 1155–2000m (260–150kHz).

Loudspeaker: 5 × 3-in. Elliptical, 5 Ω impedance.

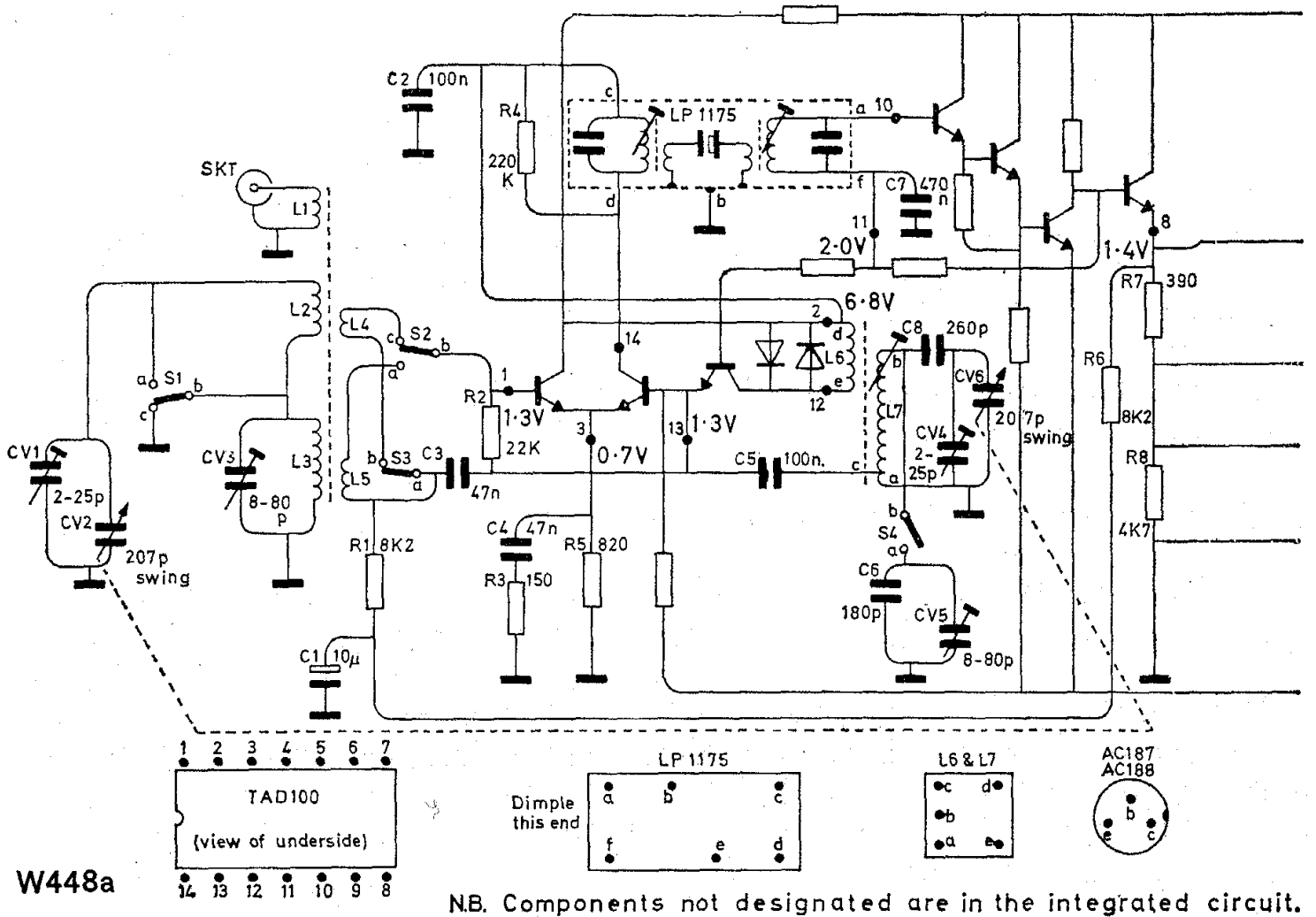
Socket Facilities: 3.5 mm miniature jack socket for external earphone (300–1000 Ω impedance). External aerial socket (car type).

Dismantling: Remove battery. Remove two screws at either end of the chassis. The complete chassis may then be removed from the top of the case to the extent of the speaker leads.



(W447) COMPONENT LAYOUT AND DRIVE CORD—MODEL RIC 2

Adjustments: All the following adjustments are carried out with a battery voltage of 9 V measured across C19: (1) Connect a voltmeter between junction C23/R21 and chassis and, with volume at minimum, adjust RV4 to give 5.0 V. (2) Connect a milliammeter in the red flex link (LK) under the print board and adjust RV3 to give an output stage quiescent current of 3.5 mA at 20°C. Allow 1 minute and recheck this figure. (3) Observing a sine-wave output on an oscilloscope adjust RV4 for symmetry at onset of clipping.

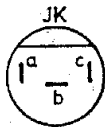
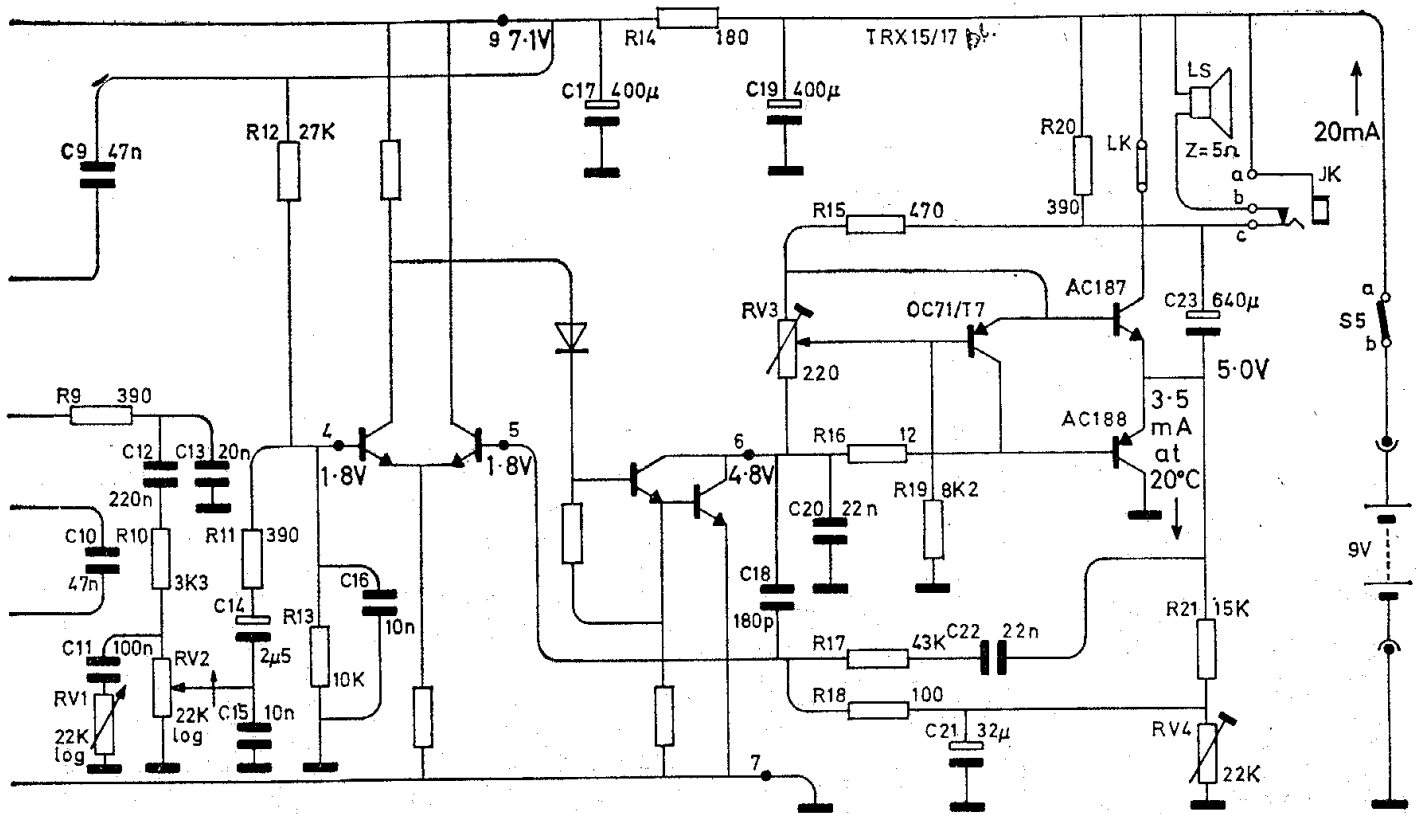


(W448a) CIRCUIT DIAGRAM—MODEL RIC 2 (Part)

Alignment

I.F. Alignment: The I.F. transformers have been accurately aligned to the ceramic resonator frequency (470kHz nom.) and no attempt should be made to realign them unless suitable display equipment is available to ensure a symmetrical response curve.

R.F. Alignment: Check that with gang fully meshed, the pointer coincides with the high wavelength end of the tuning scale. Connect an output meter in place of, or an A.C. voltmeter across, the loudspeaker. Output should be kept as low as possible to prevent A.G.C. action masking the alignment peaks. To avoid disturbance to the circuit all signals should be fed in via a coupling coil. Calibration marks are provided on the scale at 221 m and 517 m.



Resistor values in ohms
Capacitor values in Farads

Voltages measured with respect to battery -ve
(no signal input; volume at minimum)

W448b

(W448b) CIRCUIT DIAGRAM—MODEL RIC 2 (Continued)

Operation	Waveband	Pointer Setting	Input	Adjust	Indication
1	M.W.	221 m	1360kHz	CV4, CV1	Max. output
2	M.W.	517 m	580kHz	L7	Max. output
3	L.W.	221 m	248kHz	CV5, CV3	Max. output

The following operations should be carried out with the chassis in position in the case

4	M.W.	517 m	580kHz	L2	Max. output
5	L.W.	517 m	156kHz	L3	Max. output

Operations 1 and 3 should then be repeated with the battery in position to check the setting of CV1 and CV3