



BY APPOINTMENT
TO HER MAJESTY THE QUEEN
RADIO MANUFACTURERS
ROBERTS RADIO CO. LTD.

The Roberts RM 33

VHF, MW & LW TRANSISTOR MAINS RADIO

Technical Data



Specification

SEMICONDUCTORS

5 transistors
2 integrated circuits
3 diodes
1 bridge rectifier
3 varicap diodes

WAVE BAND COVERAGE

VHF MAN 87.5-104.5 MHz
VHF PRESET 5 Presets each covering above range
MW 525-1630 kHz
LW 150-265 kHz

POWER OUTPUT

2W nominal, continuous sinewave

LOUDSPEAKER

136 x 70 mm, 12 ohms impedance

POWER SUPPLY

240 V 50 Hz mains

Dismantling

1. Remove volume and tuning control knobs and three screws securing cabinet back, disconnect telescopic aerial.
2. Remove six screws on underside of cabinet.
3. The main chassis and power unit chassis may then be removed from rear of cabinet.

SETTING UP VHF TUNING VOLTAGE

(Note: Voltages are positive with respect to tuner can *not* chassis.)

1. Switch to VHF (Manual)
2. Slacken screw on drive spindle of R6
3. Set pointer to HF end of scale using TUNING control.
4. Set voltage on TR1 collector to 12.3 Volts by means of R13
5. Adjust R6 by means of screwdriver slot at rear of control to give 12 Volts on R6 slider.
6. Tighten screw on R6 drive spindle.
7. Check that voltage on slider of R6 has remained at 12 Volts. Correct small errors (not greater than 0.1 Volts) by means of R13.
8. Set pointer to LF end of scale using TUNING control.
9. Adjust R7 to give 2 Volts on slider of R6.
10. Repeat operations 7-9 if necessary.

ALIGNMENT

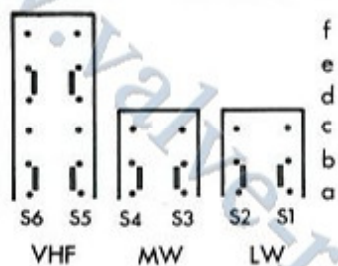
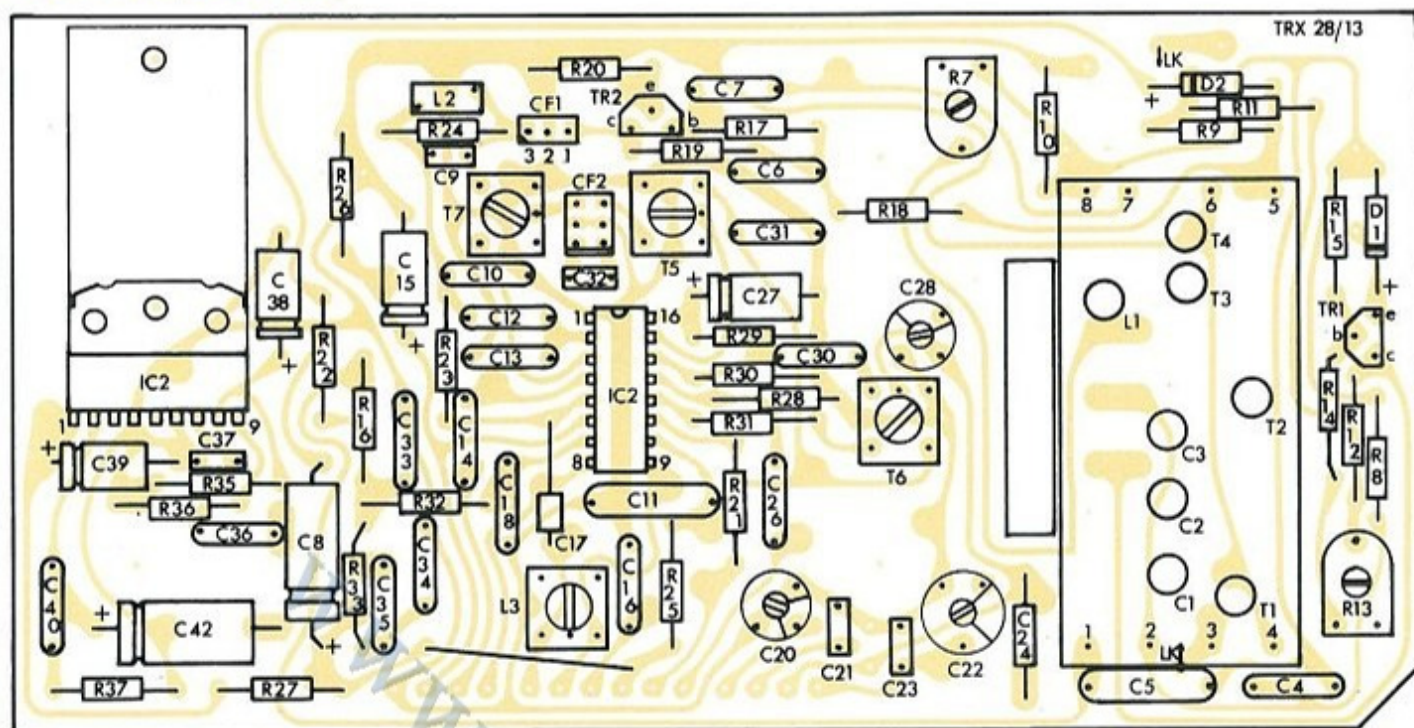
ENSURE:— With Gang at max pointer coincides with datum marks at right-hand end of scale

WAVE-BAND	POINTER	SWEEP/SIGNAL GENERATOR			INDICATOR	CONNECT	ADJUST	INDICATION
		INJECT	FREQUENCY	MOD				
1 MW	HF Cal Mark	Across L4	470 kHz	25 kHz Deviation	O'scope Sensitivity 100mV/Div	Junction R32 & 33 & Chassis	T5 & T7	Max O/P & Symmetry (Adjust I/P to maintain picture height of 4 Divs)
2 MW	HF Cal Mark	Via Coupling Loop	1500 kHz	30% AM	As 1	As 1	C28 & C20	Max O/P
3 MW	LF Cal Mark	As 2	560 kHz	As 2	As 1	As 1	T6 & L4	Max O/P
4 LW	HF Cal Mark	As 2	261 kHz	As 2	As 1	As 1	C22	Max O/P
5 LW	LF Cal Mark	As 2	156 kHz	As 2	As 1	As 1	L6	Max O/P
6 VHF (man)	RH end	Aerial I/P tag	Approx. 87.5 MHz	1 MHz Deviation	O'scope Sensitivity 200 mv/Div	As 1	L3*	Symmetrical S curve. (Adjust I/P to give picture height of 5 Divs)

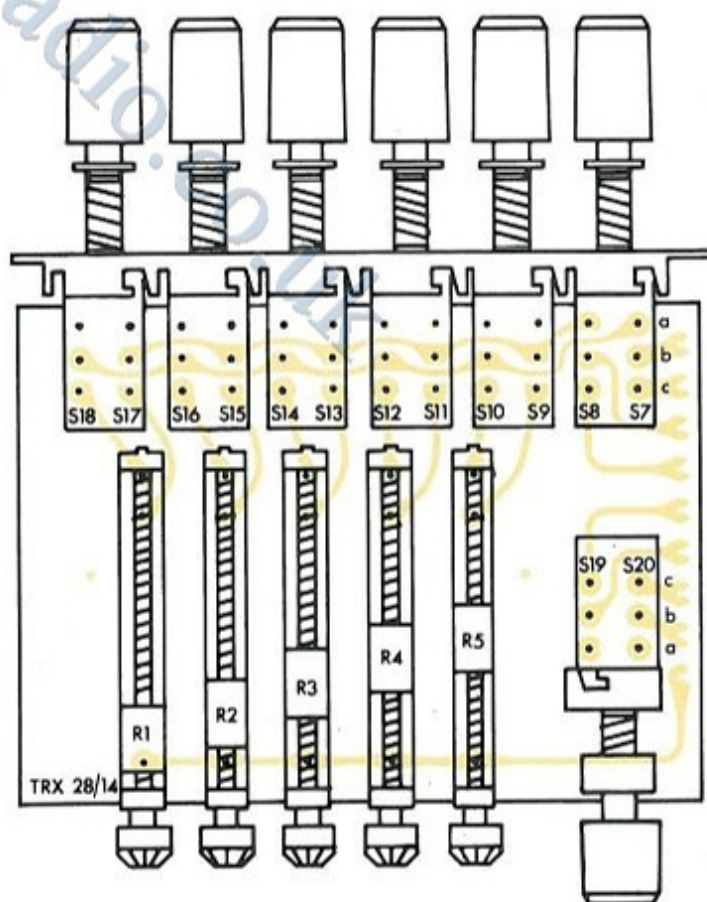
*Note for step 6 S/C C15 (Disable Interstation Muting) & S/C C5 (Disable AFCL).

The FM Tuner unit is prealigned in the factory and, since specialised equipment is required for this purpose, no instructions are given. In the event of any fault remove the complete module and return to Roberts Radio for replacement.

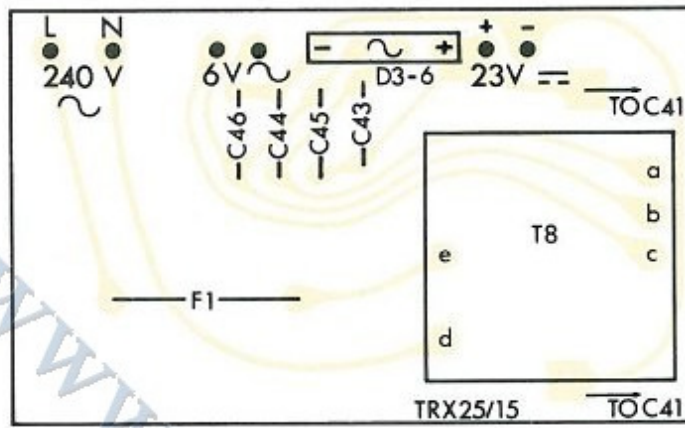
MAIN BOARD LAYOUT



PRESET TUNING BOARD LAYOUT



POWER SUPPLY BOARD LAYOUT



CORD DRIVE DIAGRAM

