

THE ROBERTS R 900

FM/AM Mains Battery Portable

Technical Data



Specification

SEMICONDUCTORS

3 integrated circuits
2 transistors
3 diodes
1 bridge rectifier

WAVEBAND COVERAGE

LF 150-265 kHz
MF 525-1610 kHz
VHF 88-108 MHz

POWER OUTPUT

BATTERY 1.5 W (THD 10%)
MAINS 4.0 W (THD 10%)

LOUDSPEAKER

114 mm round, 4 ohms

BATTERY

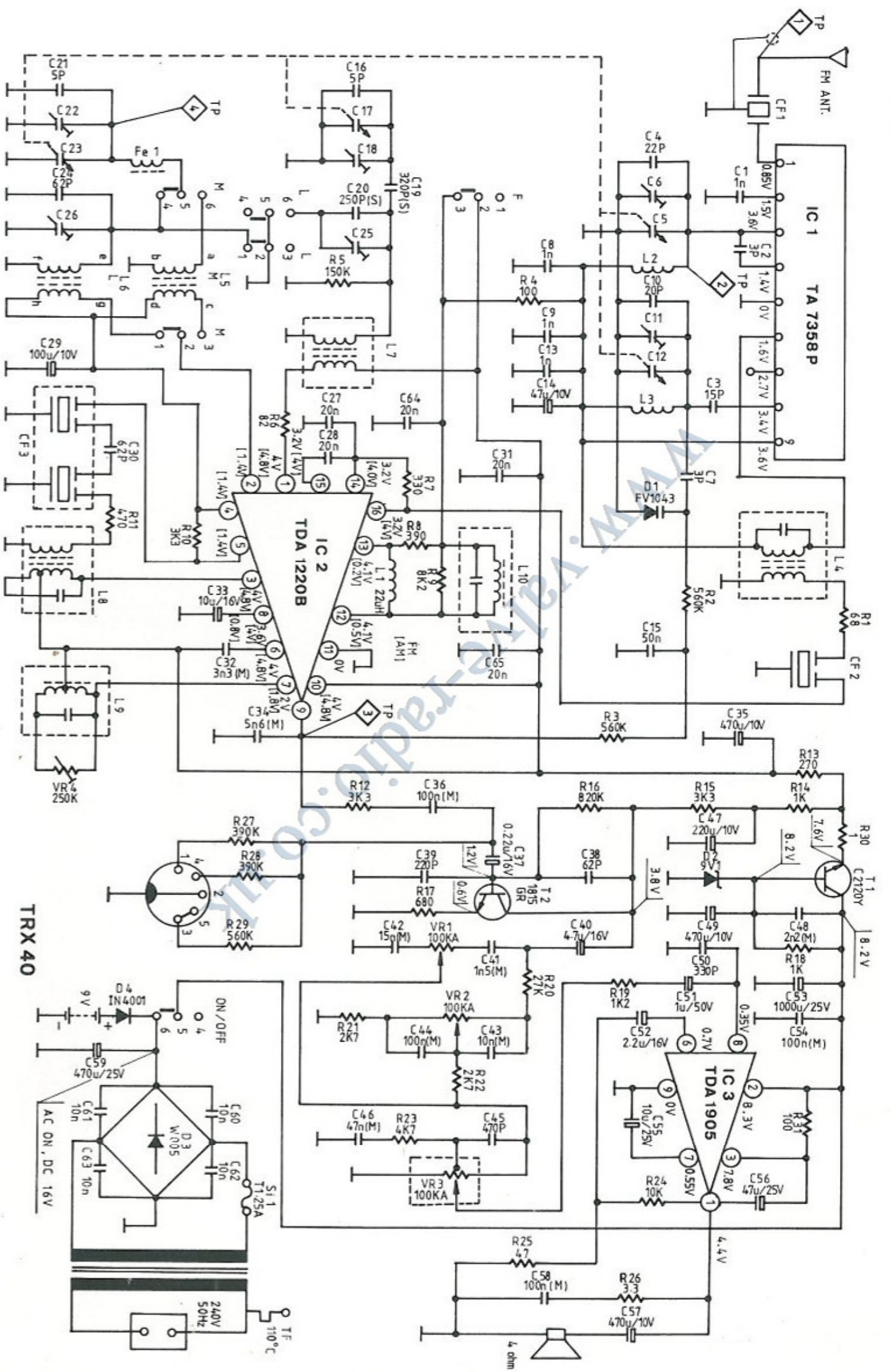
9V PP9-VT9 Type

MAINS SUPPLY

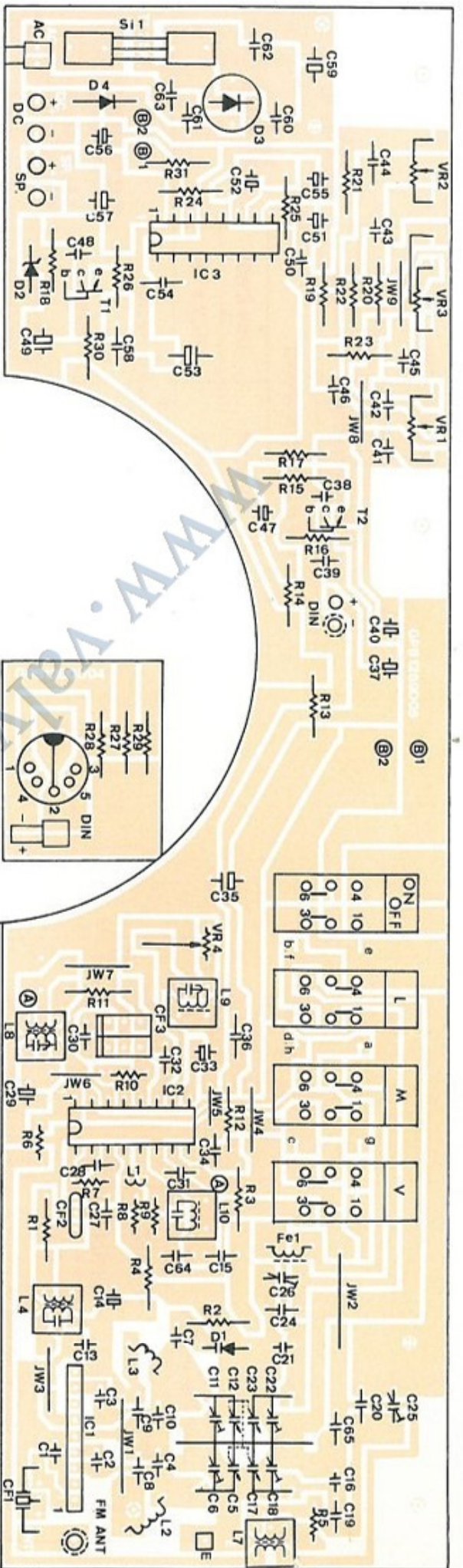
240V-50 Hz

Dismantling

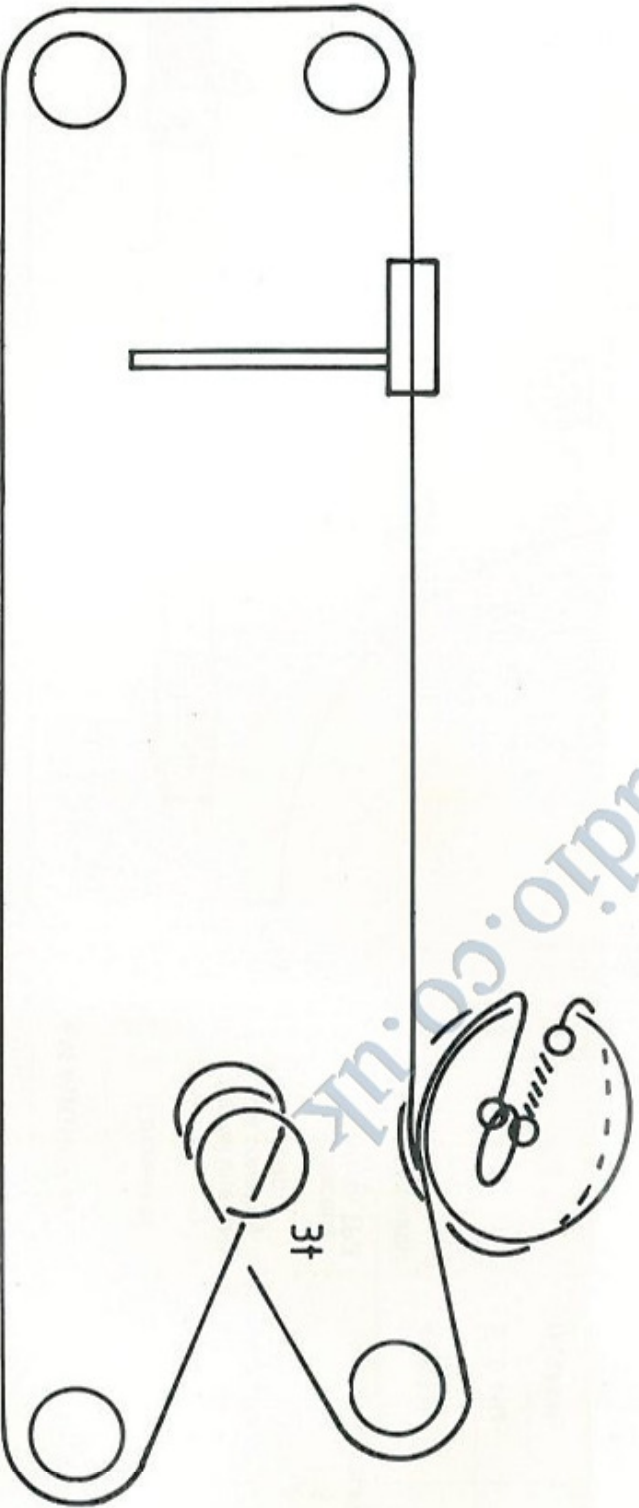
1. Remove base, disconnect loudspeaker, remove battery lead clamp, disconnect leads from DIN socket (2 pin plug), remove screw securing lower end of telescopic aerial.
2. Remove flange head screw at either end of case (above handle fixing).
3. Ease chassis out from top of case to extent of leads. Disconnect power leads (2 pin plug), chassis may now be removed.
4. Power unit is secured by two flange head screws in case end and one nut in case back.



COMPONENT LOCATION

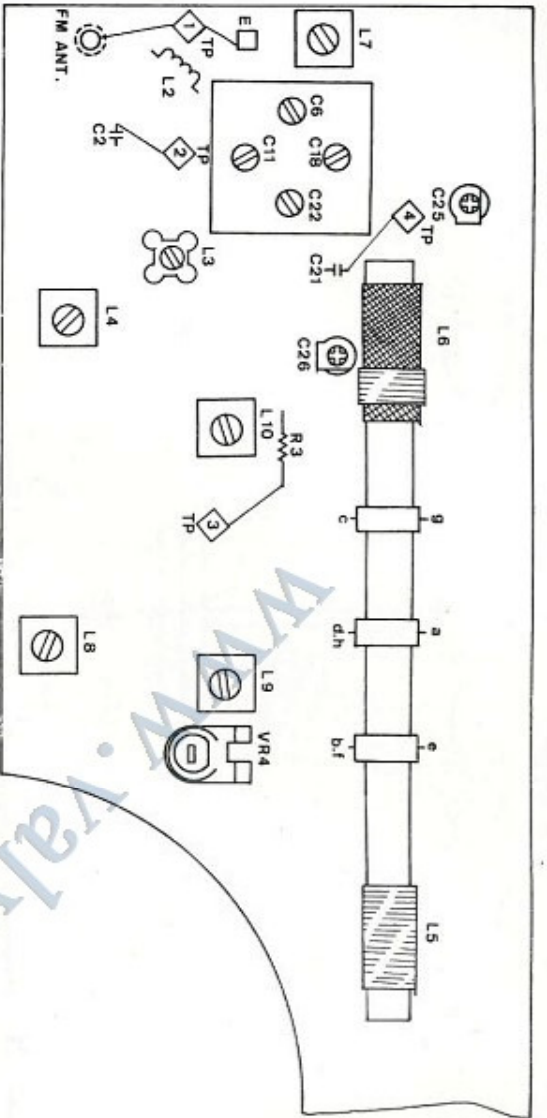


CORD DRIVE DIAGRAM



ALIGNMENT

WITH GANG AT MAX POINTER SHOULD COINCIDE WITH DATUM MARKS AT LEFT HAND END OF SCALE



FM ALIGNMENT			
STEP	Connect to	Frequency	Pointer Max. output adjust
1	Sweep generator via 10pF to TP2	10.7 MHz	L4
2	Oscilloscope via 100n to TP3	Repeat alignment 1 and 2 until 's' curve is symmetrical	L10
3			L3
4			L3
5	Signal generator to TP1	108.3 MHz	C11
6	Oscilloscope to TP3	Repeat alignment 4 and 5	
7		90 MHz	L2
8		106 MHz	C6
9	Repeat alignment 7 and 8		

AM ALIGNMENT			
STEP	Connect to	Frequency	Pointer Max. output adjust
1	Signal injected via coupling loop	468 KHz	L8
2	Oscilloscope via 100n to TP3	Repeat alignment 1 and 2	L9
3			
4	Signal generator to TP4 1 mV	468 KHz	VR4 for 20mV at TP3
5	Repeat alignment 1 and 2	520 KHz	L7
6		1620 KHz	C18
7		Repeat alignment 5 and 6	
8	Signal injected via coupling loop	600 KHz	L5
9	Oscilloscope via 100n to TP3	1400 KHz	C22
10		Repeat alignment 8 and 9	
11	Repeat alignment 11 to 13	147 KHz	C25
12		170 KHz	L6
13		250 KHz	C26
14			

The company reserves the right to amend the specification without notice.

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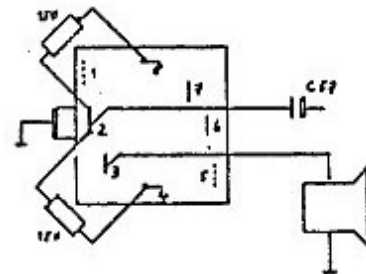
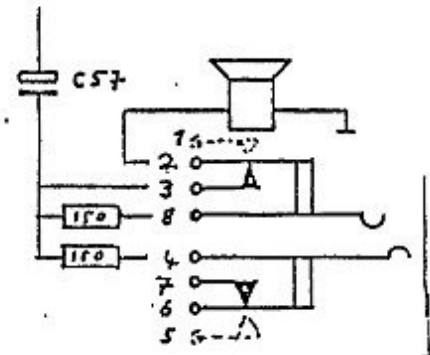
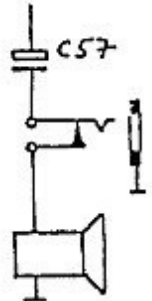
Technical Data

SUPPLEMENT

- 1) First production receivers were fitted with a 3.5mm jack socket.
- 2) 7001 up. C66 added. 10nF ceramic IC3 pins 2-4.

Serial No. 12001 up

- 3) The 3.5mm jack socket changed to 6.35mm with series resistors to limit output into low impedance phones.
- 4) R27, 28 and 29 are changed to 47k.



From serial no. 13566

- 5) C53 not fitted
- 6) C59 1m0/25V

When earlier receivers are being serviced:

- a) Remove and discard C59
 - b) Remove C53 and fit in C59 position; in the event of increased noise, fit 2u2/25V in C53 position
 - c) Sever print between ON/OFF Sw pin 3 & LW Sw pin 4
 - d) Sever print between ON/OFF Sw pin 3 & LW Sw pin 1
 - e) Fit wire link on LW/SW pin 4-pin 1
 - f) Fit wire links on ON/OFF Sw pins 3-6 & pins 2-5
- 6) Serial Nos. 14379-14902 inclusive do NOT incorporate (3)
 - 7) Serial No 17001 up PCB GPB 1269D16

Print modified to parallel both sections of ON/OFF Sw.

C53 becomes 220u/25V

- 8) SERIAL NO 26726 up Loudspeaker change 91450450201 (roll surround) becomes 91450450202
- 9) C53 becomes 2u2/25V

R900. ON/OFF. & . POWER. SUPPLY. MODIFICATIONS

THE FOLLOWING APPLIES TO ALL RECEIVERS WITH SERIAL NOS. PRE 13566:

- 1) REMOVE AND DISCARD C59
- 2) REMOVE C53 (1mO/25V) AND REFIT IN C59 POSITION

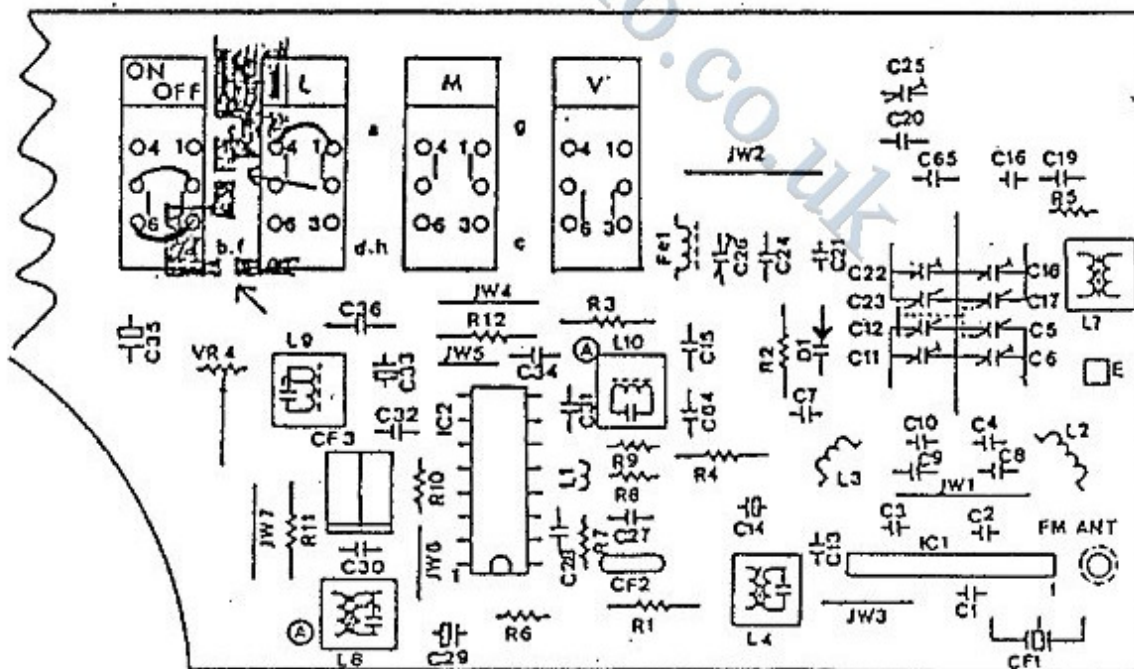
AND ON ALL RECEIVERS UP TO SERIAL NO 17000:

- 3) CUT THRO' PRINT ON EITHER SIDE OF PIN 3 OF ON/OFF SWITCH AS SHOWN BELOW
- 4) BRIDGE ACROSS REAR TWO SECTIONS OF ON/OFF SWITCH (Pin 2-5 & 3-6)
- 5) BRIDGE ACROSS FRONT SECTION OF LW SWITCH (Pin 1-4)

ON RECEIVERS WITH PCB NUMBER GPB 1269D16:

- 1) CHECK THAT C53 IS 2u2 - CHANGE IT TO THIS VALUE IF NOT

CUT THRO' PRINT IN 2 PLACES WHERE ARROWED.



BRIDGE ACROSS REAR TWO SECTIONS OF ON/OFF SWITCH
AND FRONT SECTION OF L SWITCH