

# SERVICE INFORMATION FOR THE

# COSSOR

# RADIO RECEIVER TYPE CR1202U



## DESCRIPTION

The CR1202U is a mains-operated table model covering medium long wavebands and housed in a blue moulded cabinet. The design features a printed circuit and a high impedance loudspeaker.

## SPECIFICATION

### Valve Functions

V1	UCH81	Frequency changer.
V2	UBF89	I.F. Amplifier/Detector.
V3	UCL82	A.F. Amplifier and Output.
V4	UY85	Mains Rectifier.

### Waveband Ranges

M.W. 185-580 metres.  
L.W. 1175-2000 metres.

### Mains Supply Voltages

200-220 and 220-250 volts, A.C. or D.C.

### Consumption

60 watts.

### Loudspeaker

4 in. dia, high Z (800Ω).

### Output

1 watt.

### Cabinet Dimensions

12½ in. width. 7¼ in. height. 6¾ in. depth.

## CAUTION

- (i) Live chassis—check polarity.
- (ii) The L.S. may be replaced only with a high impedance type (800Ω).
- (iii) The speech coil is at H.T. potential.

## CHASSIS

### Removal

Pull off the volume and w/change knobs, place the receiver face down on a protected surface and remove the backplate. Remove the two rear chassis screws, and the three screws securing the chassis to the front of the cabinet. Unsolder the loudspeaker leads and withdraw the chassis.

### Assembly

Turn gang to maximum and set tuner drive coupling to a 9 o'clock position viewed from the rear of the cabinet. Carefully engage the pin on the gang with the slot in the tuner drive, before replacing the chassis fixing screws.

## TRIMMING INSTRUCTIONS

### General notes

- (i) Output is observed on an A.C. Voltmeter (10v range) connected to the speech coil via a 47kpf capacitor. V/C in maximum position.
- (ii) When trimming R.F. circuits, couple the generator to the receiver via a turn of insulated wire placed near on the ferrite rod aerial.

Section	W/Band & Pointer	Frequency	Injection point	Adjust for max. output
I.F.	M.W. Gang at min.	470kc/s	G1V1 via 47kpf	L8-7-6-5
Osc. and R.F.	M.W. Gang at max.	510kc/s	G1V1 via 47kpf	L4
	M.W. 580kc/s	580kc/s	Loose coupling Trimming Note (ii)	L1
	M.W. 1570kc/s	1570kc/s	As above	C7
	L.W. 190kc/s	190kc/s	As above	L2
Then repeat trimming of L1 and C7				

Note.—Switch to M.W. and recheck trimming.

OFFICIAL SERVICE AGENT :—

## AMALGAMATED ELECTRIC SERVICES LTD.

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SURREY

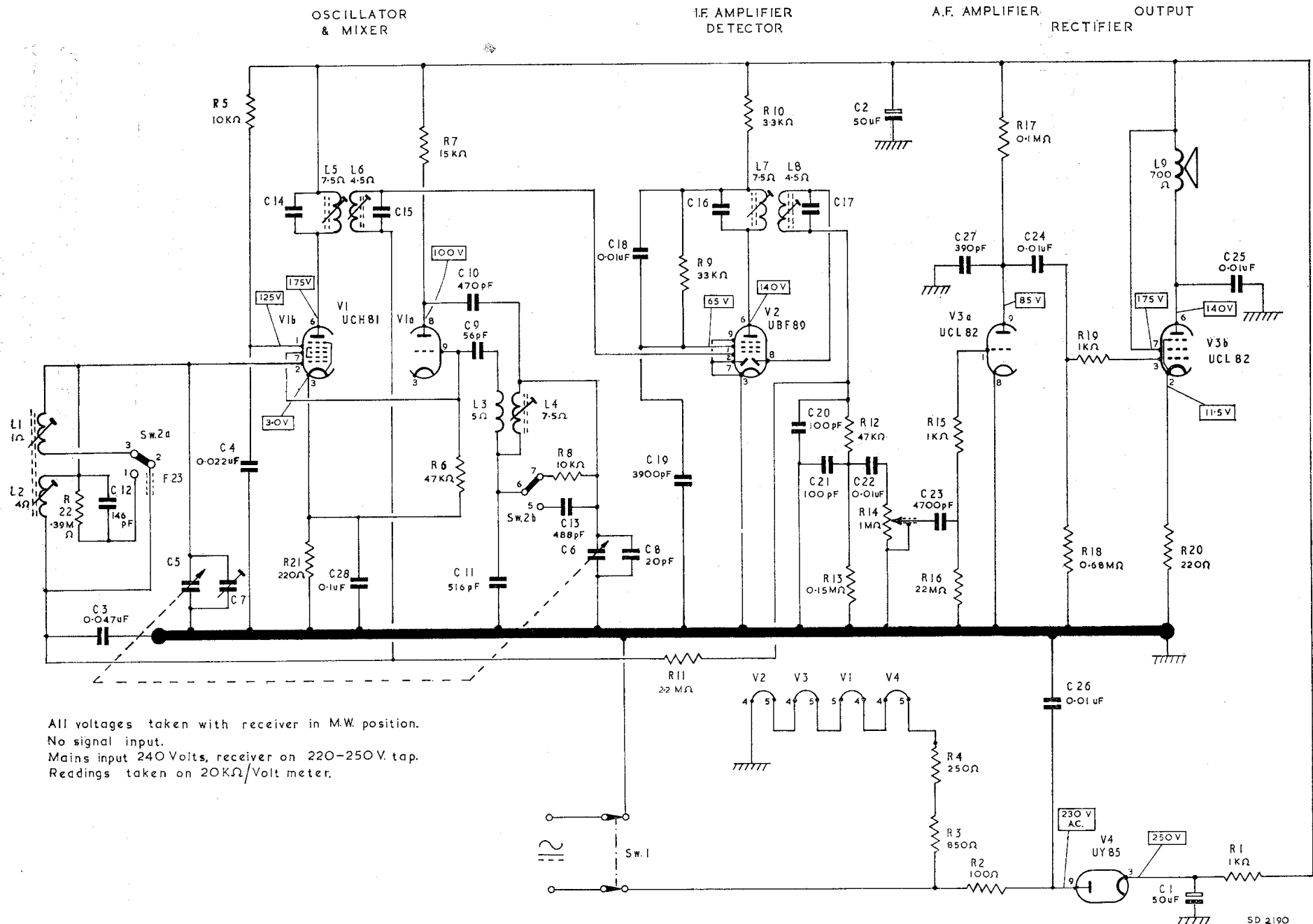
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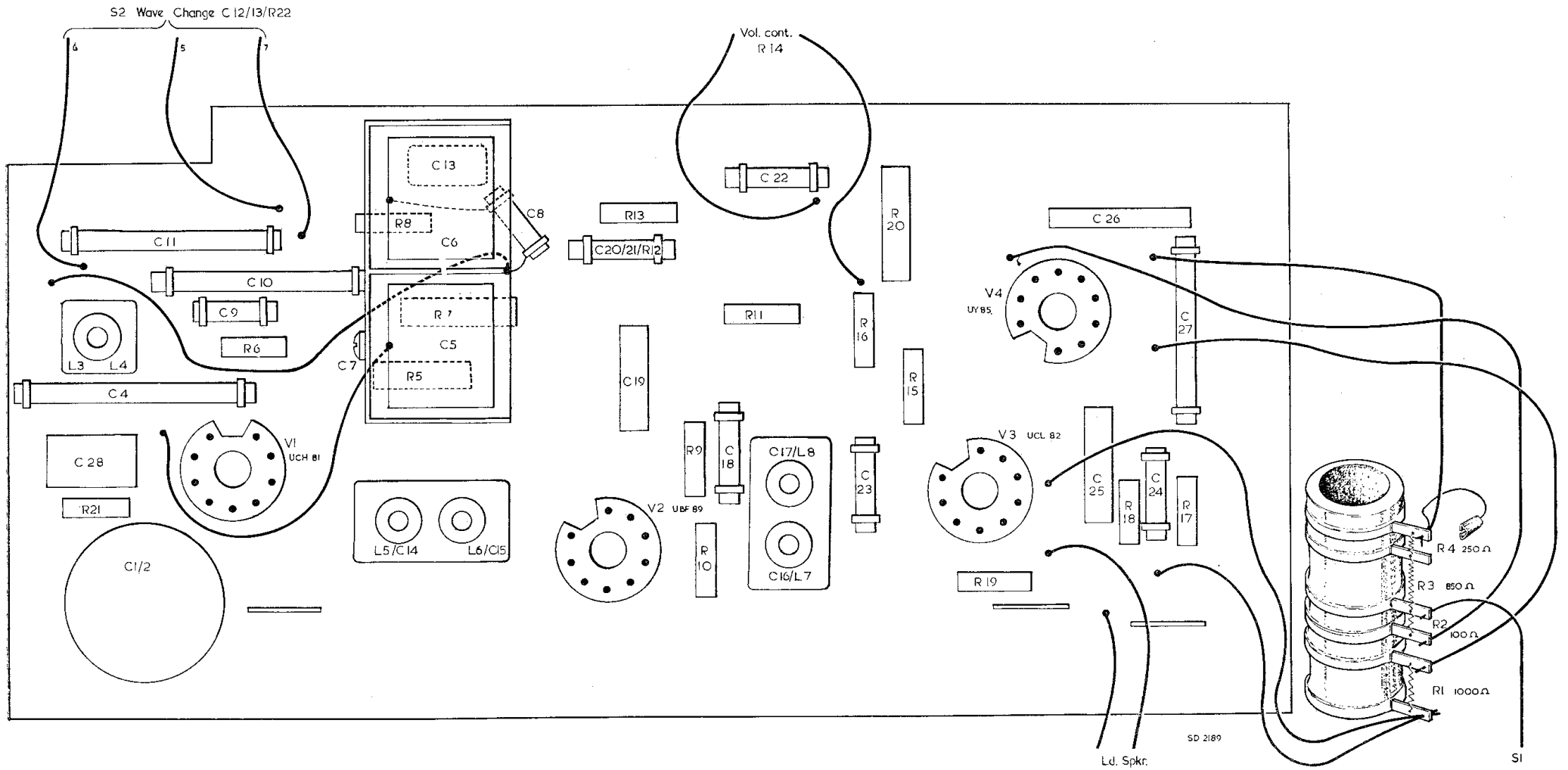
AES 366

L	1, 2.	5, 6.	3, 4.	7, 8.	9.	L			
C	3, 12.	5, 7, 4, 14.	28, 15.	10, 9, 11.	13, 6, 8, 18, 19, 16.	20, 17, 21, 22, 2, 23, 27, 24, 26.	1, 25.	C	
R	22.	5, 21.	7, 6.	8.	11, 9.	10.	13, 12, 14, 4, 3, 15, 16, 2, 17, 18, 19.	20, 1.	R

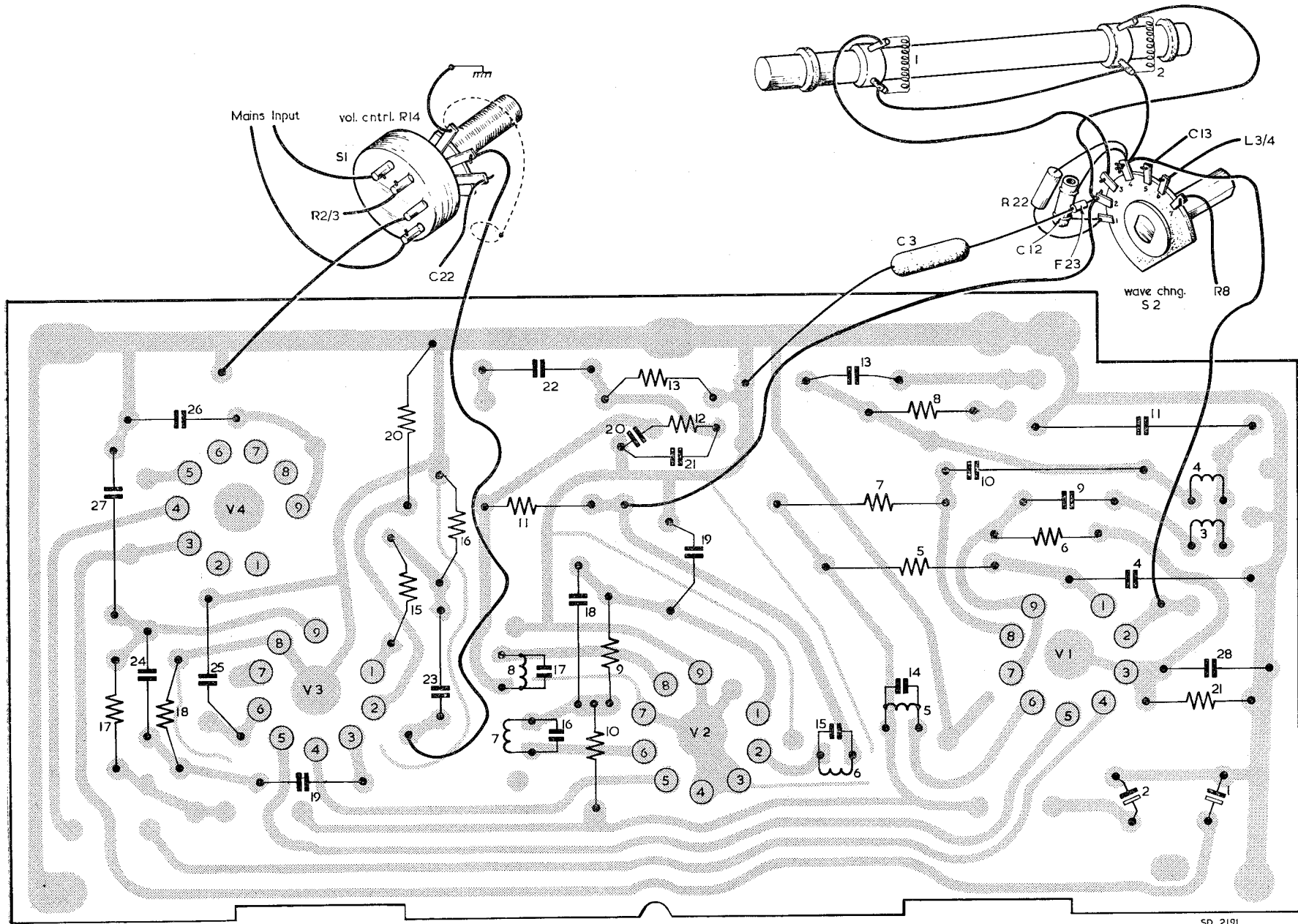


All voltages taken with receiver in M.W. position.  
 No signal input.  
 Mains input 240 Volts, receiver on 220-250V. tap.  
 Readings taken on 20KΩ/Volt meter.

<b>L</b>	3. 4.	5. 6.	8. 7.
<b>C</b>	28. 1/2. 4. 11. 12,13. 9. 10.	7. 14. 15. 7.	20. 19. 18. 22. 16. 17. 23. 25. 26. 24. 27.
<b>R</b>	21.	22. 6. 8. 5. 7.	9. 10. 11. 16. 20. 15. 19. 18. 17. 1/4.



L						7, 8.					6.	5.			1.	2.	4.
C	27.	24.	26.	25.	19.		23.	22, 17.	20.	21, 19.	15.	13.	3.	10.	12, 9.	4, 11.	28.
R	17.	18.				20, 15, 14.	16.	11.	10, 9.	13.	12.	7.	5.	8.	22.	6.	21.



## SPARE PARTS LIST

### CABINET ASSEMBLY

Cabinet assembly	...	...	...	...	...	HY.074.83
Grille assembly	...	...	...	...	...	MK.835.38
Backing plate	...	...	...	...	...	MK.367.03
Fixing clips (6)	for above	...	...	...	...	MK.999.10
Ornamental ring on grille	...	...	...	...	...	MK.451.44
Cosmor trade name	...	...	...	...	...	MK.708.93
Fixing clips for speaker (4)	...	...	...	...	...	MK.926.63
Station scale	...	...	...	...	...	MK.708.11

### CONTROL KNOBS

On/off and volume	...	...	...	...	...	MK.858.93
Wavechange	...	...	...	...	...	MK.858.90
Clips for above (2)	...	...	...	...	...	MK.451.57
Tuning	...	...	...	...	...	MK.858.89
Coupling piece	...	...	...	...	...	MK.986.48
Felt washer	or above	...	...	...	...	MK.450.51
Fixing clip	...	...	...	...	...	MK.962.21
Backplate	...	...	...	...	...	MK.367.49
Fixing clips (5)	...	...	...	...	...	MK.751.72
Special screws (5)	...	...	...	...	...	MK.946.88
Printed panel with components	...	...	...	...	...	MK.985.09

### MISCELLANEOUS

Fixing clip for rear of chassis (2)	...	...	...	...	...	MK.955.91
Screw for above (2)	...	...	...	...	...	MK.946.88
Fixing screw for front of chassis (3)	...	...	...	...	...	B.071.TF/8N x 3/8
Grommet (3)	...	...	...	...	...	08.008 x 75
Distance piece (3)	for above	...	...	...	...	B.001.AE/5.1 x 7 x 5
Washer (3)	...	...	...	...	...	B.050.ED/4
Mounting grommet for gang (3)	...	...	...	...	...	08.008.73
Distance piece for above (3)	...	...	...	...	...	B.001.AC/4.1 x 6 x 4
Threaded rod for R1-4	...	...	...	...	...	MK.645.83
Large washer	...	...	...	...	...	MK.450.26
Lockwasher	...	...	...	...	...	B.053.BD/3
Nut (3)	fixing materials	...	...	...	...	B.020.EE/3
Asbestos washer	for above	...	...	...	...	MK.448.61
Spring washer (2)	...	...	...	...	...	B.051.AH/3
Washer (2)	...	...	...	...	...	MK.449.53

Tapping clip for R1-4	...	...	...	...	...	MK.751.46
Heat screen for R1-4	...	...	...	...	...	MK.081.12
Insulating plugs for chassis (4)	...	...	...	...	...	MK.726.07
Valve screen	...	...	...	...	...	MK.252.34
Nut for controls (2)	...	...	...	...	...	MK.927.05
Cable clamp (2)	...	...	...	...	...	A3.469.42
Sleeving	...	...	...	...	...	K.558.LB/size
Insulating spindle for controls (2)	...	...	...	...	...	MK.004.48
Screw (2)	...	...	...	...	...	B.054.ED/3 x 8
Lockwasher (2)	...	...	...	...	...	B.053.AD.3
Coupling piece for gang	...	...	...	...	...	MK.986.77
Grub screw for above	...	...	...	...	...	B.061.ED/3 x 6
Aerial support bracket	...	...	...	...	...	MK.033.83
Switch—waveband	...	...	...	...	...	MK.999.09
Tag strip—general	...	...	...	...	...	MK.964.52
Mains lead	...	...	...	...	...	R.909.KA/803
Valve position label	...	...	...	...	...	PG.012.00
Licence plate	...	...	...	...	...	MK.707.29
Type label	...	...	...	...	...	MK.706.61
Fixing screw for gang (3)	...	...	...	...	...	B.808.AD/4N x 3/8
Valveholder V	...	...	...	...	...	MK.225.89
Contact for valve screen	...	...	...	...	...	MK.939.12
Ceramic tube for P20	...	...	...	...	...	MK.117.62
Rod for Aerial	...	...	...	...	...	56.681.22/4B

### VALVES

V1	...	...	...	...	...	UCH81
V2	...	...	...	...	...	UBF89
V3	...	...	...	...	...	UCL82
V4	...	...	...	...	...	UY85

### TRANSFORMERS AND COILS

L1/2	Rod aerial assembly	...	...	...	...	MK.820.40
L1	M.W. aerial, coil only	...	...	...	...	MK.568.71
L2	L.W. aerial, coil only	...	...	...	...	MK.568.72
L3/4	Oscillator coil M.W.+L.W.	...	...	...	...	MK.569.25
L5/6	1st I.F. coil	...	...	...	...	MK.568.68
L7/8	2nd I.F. coil	...	...	...	...	MK.568.68
L11	Loudspeaker	...	...	...	...	ND.2350.AX

### CAPACITORS

	Value	Permitted Tolerance %	
C1/2	Elco ... 50+50uF	...	AC.8307/50+50
C3	Polyester ... 47,000pF	10	C.296.AC/A47K
C4	Ceramic ... 22,000pF	-20+50	C.301.GB/H22K
C5	Gang ...	...	MK.999.08
C7	Ceramic ... 20pF	5	C.304.GH/B20E
C9	Ceramic ... 56pF	5	C.304.AH/B56E
C10	Ceramic ... 470pF	5	C.304.AH/B470E
C11	Ceramic ... 516pF	1	C.304.GH/D516E
C12	Ceramic ... 146pF	1	C.304.AH/D146E
C13	Mica ... 488pF	2	MK.190.93
C14	...	...	In L5-6
C15	...	...	In L7-8
C17	...	...	...
C18	Ceramic ... 10,000pF	-20+50	C.301.GB/H10K
C19	Ceramic ... 3,900pF	20	MK.198.98
C20	Diode filter ... 100pF	...	E.553.ZZ/03
C21	Diode filter ... 100pF	...	...
R12	Ceramic ... 10,000pF	...	C.301.GB/H10K
C23	Ceramic ... 4,700pF	-20+50	C.322.BA/H4K7
C24	Ceramic ... 10,000pF	-20+50	C.301.GB/H10K
C25	Ceramic ... 10,000pF	-25+50	MK.206.10
C26	Ceramic ... 10,000pF	-25+50	MK.206.10
C27	Ceramic ... 390pF	10	C.304.AH/A390E
C28	Polyester ... 0.1uF	10	C.296.AC/A100K

### RESISTORS

	Value	Watts	Permitted Tolerance %
R1	1,000Ω	8.5	...
R2	100Ω	4.5	...
R3	850Ω	11.0	...
R4	250Ω	3.0	...
R5	10,000Ω	1	10
R6	47,000Ω	1	10
R7	15,000Ω	1	10
R8	10,000Ω	1	10
R9	33,000Ω	1	10
R10	3,300Ω	1	10
R11	2.2MΩ	1	10
R12	Diode filter ... 47,000Ω	...	...
C21	...	...	...
R13	0.15MΩ	1	10
R14	1MΩ	1	10
R15	1,000Ω	1	10
R16	22MΩ	1	10
R17	0.1MΩ	1	10
R18	0.68MΩ	1	10
R19	1,000Ω	1	10
R20	220Ω	1	10
R21	220Ω	1	10
R22	0.39MΩ	1	10
R23	Ferroxcube bead	...	...