

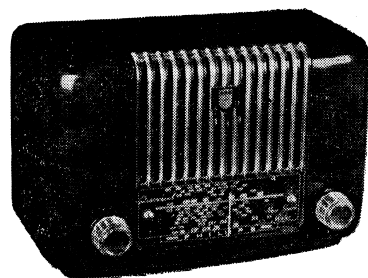
PHILIPS RADIOPLAYER

MODEL 138

SPECIFICATIONS

(Subject to alteration without notice)

Power Supply	200-250V, 40-60c/s
Tuning Range	530-1620kc/s
Intermediate Frequency	455kc/s
Cabinet	Bakelite mantel



VALVE EQUIPMENT AND VOLTAGE ANALYSIS

Valve Function	Valve No.	Valve Type	Plate Volts	Screen Volts	Osc. P. Volts
Frequency Converter	V1	6AN7	210	55	55
I.F. Amplifier, Demodulator and A.V.C.	V2	6N8	210	55	—
Power Amplifier	V3	6M5	208	210	—
Rectifier	V4	EZ82	V4 Cathode — L13 C.T., 230V.		
Dial Lamp	V11	6.3V. 0.32A. tubular screw			
Voltage across R13, -6.5V.					

NOTE: These voltages are measured with an "1,000 ohms per volt" meter and may vary $\pm 10\%$ from the figures quoted. They are measured from the socket points indicated to chassis or across the resistor listed. The receiver should be in a "no signal" condition.

TO REMOVE CHASSIS FROM CABINET.

Remove the power plug from the mains outlet socket. Remove the two control knobs (a firm pull is all that is necessary), and the combined back and bottom cover. Unsolder the speaker voice coil connections from the lug strip at the base of the speaker transformer. Release the dial cursor from the dial drive cord. Remove the two chassis retaining clamps at the rear of the chassis. The chassis may now be withdrawn from the cabinet.

The chassis may be replaced by a reversal of the above procedure.

TO REMOVE DIAL SCALE.

Remove the two dial scale securing screws. Care must be exercised in this operation not to damage the dial scale with tools. The most satisfactory tool to use is a 9/32" spintite blinded off so that its face does not touch the scale.

When the screws are removed, ease the top of the scale up from the cabinet a short distance to clear the top lugs and then lift it clear.

MAINS VOLTAGE ADJUSTMENT.

The power transformer is provided with two primary winding tappings—200/230 volts and 240/250 volts—for adjustment of the receiver to the supply voltage at the point of installation. The receiver is adjusted at the factory to the 240/250 volts tapping.

ALIGNMENT.

It is advisable to remove the chassis from the cabinet for alignment purposes. Three alignment points are provided on the front of the chassis: they represent cursor stop, 600 kc/s. and 1,420 kc/s. These marks, in conjunction with a simple pointer made up from workshop materials, facilitate alignment.

I.F. transformer adjustments are:—

2nd I.F.T.

Secondary — front screw.

Primary — rear screw.

1st I.F.T.

Secondary — screw nearer 6N8.

Primary — screw nearer 6AN7.

Before commencing R.F. alignment, fully close the tuning capacitor and set the makeshift pointer to the cursor stop mark stencilled on the chassis. Use a 100 pF capacitor as dummy aerial for R.F. alignment. Trimming adjustments are: oscillator trimmer (1,420 kc/s.) front of tuning capacitor, aerial trimmer (1,420 kc/s.) rear of tuning capacitor, padding (600 kc/s.) iron core in oscillator coil.

In the event of replacement of the oscillator coil it is advisable to make a preliminary peaking of the iron core at 600 kc/s. before commencing alignment.

No attempt should be made to adjust the aerial coil iron core.

DIAL CALIBRATION ADJUSTMENT.

If dial calibrations are incorrect by an equal amount over the length of the scale, the condition may be corrected by loosening the cursor to dial cord clamping screw, making the necessary adjustment and firmly re-tightening the screw.

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PARTS LIST

CAPACITORS

No.	Description	Code No.
C1	100 pF mica 10%	
C2, 3, 4, 5	2 gang tuning and trimmers	CZ.107.749
C6	330 pF mica 2%	CZ.066.124
C7, 8, 11, 12	Part of I.F. transformers	
C9	0.05 mF 400V paper	
C10, 14	0.05 mF 200V paper	
C13	250 pF mica	
C15	0.25 mF 200V paper	
C16	0.01 mF 600V paper	
C17, 18	24 mF 350V dual electrolytic	

All tolerances are 20% except where otherwise stated.

RESISTORS

No.	Description	Code No.
R1	25,000 ohms $\frac{1}{2}$ W carbon	
R2, 3	50,000 ohms 1W carbon 10%	
R4, 8	2 megohms $\frac{1}{2}$ W carbon	
R5, 9, 10	0.5 megohm $\frac{1}{2}$ W carbon	
R6, 11	50,000 ohms $\frac{1}{2}$ W carbon	
R7	0.5 megohm carbon potentiometer	CZ.030.503
R12	1,000 ohms 1W carbon	
R13	160 ohms 1W carbon 10%	

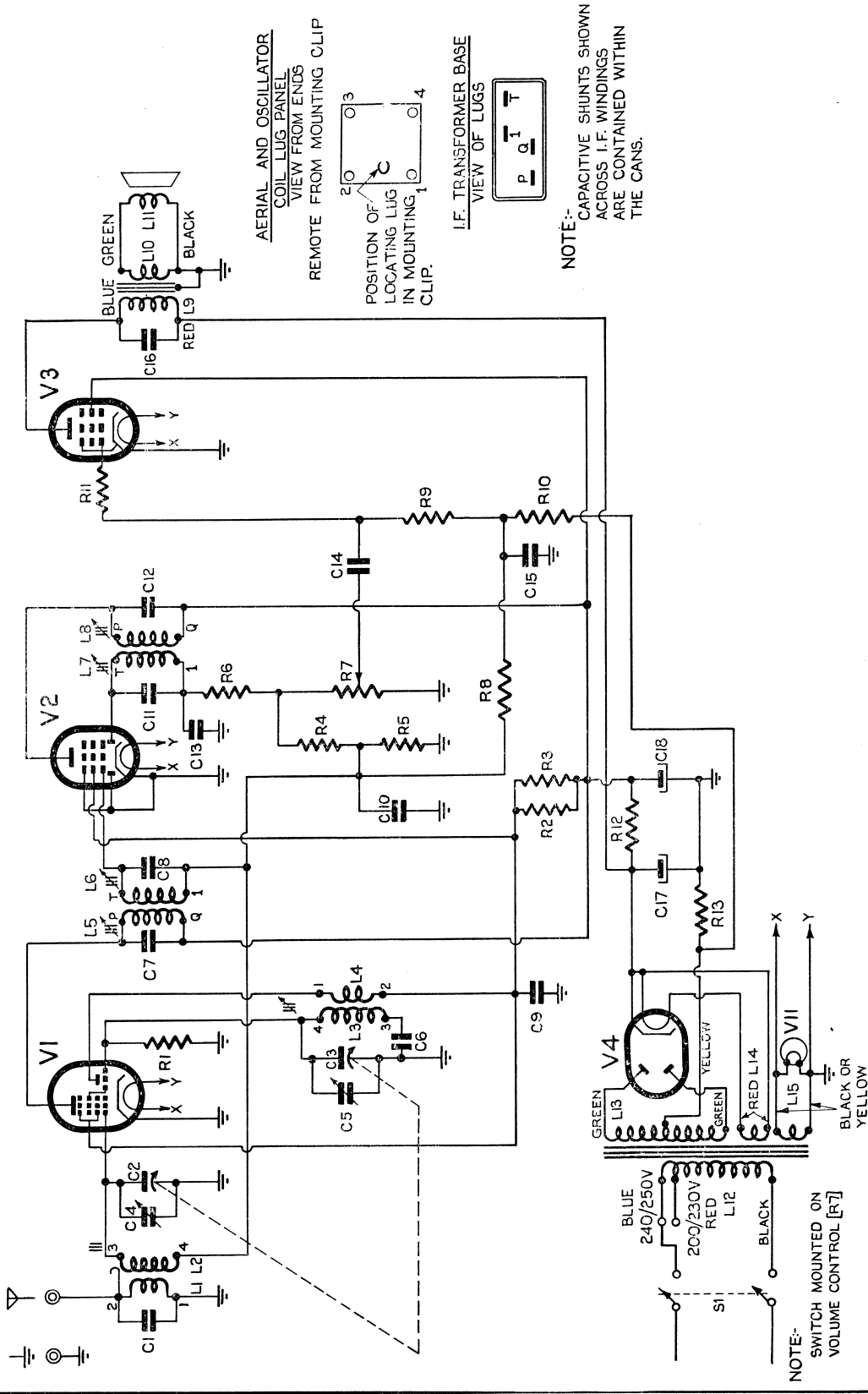
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COILS

No.	Ohms	Description	Code No.
L1	24.0-32.5	Aerial coil	CZ.323.019
L2	2.0-3.0		
L3	1.0-2.0	Oscillator coil	CZ.330.606
L4	3.5-5.0		
L5	11.5-15.5	1st I.F. transformer	A3.124.25
L6	11.5-15.5		
L7	11.5-15.5	2nd I.F. transformer	A3.124.25
L8	11.5-15.5		
L9	476-644	Speaker transformer	CZ.345.015
L10	<1.0		
L11	3.1-4.1	Speaker	49.239.58
L12	55-75	Power transformer	CZ.344.047
L13	630-850		
L14	<0.5		
L15	<0.5		

IMPORTANT! In ordering spare parts, quote CODE NUMBER of part and MODEL NUMBER of Receiver. In claiming free replacement under GUARANTEE, return defective part PROMPTLY and quote MODEL and SERIAL NUMBER of Receiver and DATE OF PURCHASE.

L	1	2	12, 13, 14, 15	3, 4, 5	6	7	8	9, 10, 11	L
C	1	4, 2, 5	3, 6, 9, 7	17, 8, 10, 18	13 11	12, 14, 15,	16		C
R	1	12, 2, 3, 4, 5, 6, 7, 8,	13	12, 2, 3, 4, 5, 6, 7, 8,	2	9, 10, 11			R
V		1, 4, 11,				3			V



MISCELLANEOUS COMPONENTS

No. on Dial Cord Layout Drawing	Description	Code No.	No. on Dial Cord Layout Drawing	Description	Code No.
—	Assembly, cursor	CR.480.648	4	Cord, dial	CS.361.835
—	Assembly, lampholder	CZ.367.920	1	Drum, dial	CS.359.807
—	Assembly, lug strip 2 lug	A1.351.92	—	Knob 2x	CR.523.709
—	Assembly, lug strip 2 lug	CZ.375.042	—	Plate, chassis retaining, 4x	CS.231.232
—	Assembly, lug strip 4 lug, 2x	A1.352.66	—	Plate, masking	CS.050.414
—	Assembly, lug strip 4 lug	CZ.375.021	5	Pulley dial	CS.359.602
—	Back, cabinet	CS.462.153	—	Ring, "C" (tuning spindle), 2x	CS.281.802
—	Badge, Philips	CS.436.416	6	Ring, dial cord	CS.281.807
—	Bracket, cabinet back mtg., 4x	CS.244.602	—	Rod, dial slide	CS.382.223
—	Bracket, lamp	CS.231.233	—	Scale, dial NSW/QLD	CS.412.353
—	Bracket, tuning spindle	CS.224.607	—	Scale, dial SA/WA	CS.412.360
—	Cabinet, black	CR.570.471	—	Scale, dial VIC/TAS	CS.412.359
—	Cabinet, blue	CR.570.470	—	Screw, dial scale mtg., 2x	CS.258.839
—	Cabinet, burgundy	CR.570.464	—	Socket, noval, 4x	CZ.369.702
—	Cabinet, fawn	CR.570.449	—	Speed fix (knobs), 2x	CH.777.371
—	Cabinet, green	CR.570.469	—	Speed fix (masking plate), 2x	CH.629.203
—	Cabinet, ivory	CR.570.463	—	Speed fix (speaker), 2x	CH.629.205
—	Cabinet, red	CR.570.468	—	Spindle, potentiometer	CS.351.335
—	Cabinet, walnut	CR.570.467	—	Spindle, pulley	CS.382.835
—	Cabinet, white	CR.570.472	3	Spindle, tuning	CS.351.337
—	Clip, spring (I.F.T. mtg.), 2x	A3.652.58	2	Spring, dial drum	CS.210.034
			—	Switch, on/off	28.650.25

DIAL CORD LAYOUT
VIEW FROM FRONT OF CHASSIS.

