

PHILIPS RADIOPLAYER MODEL 3442

A.C. OPERATED FOR BROADCAST AND SHORT-WAVE RECEPTION.

SPECIFICATIONS. (Subject to Alteration without Notice.)

Voltage Rating (Power Supply) 220-260 volts A.C.
40-60 cycles.
(Also special 110 volt Models)

Tuning Range 1600 to 550 Kc/s.
6 to 18 Mc/s.

Intermediate Frequency 472.5 Kc/s.

VALVE EQUIPMENT.

Frequency Converter	ECH4G	Octode (V1).
I.F. Amplifier, A.V.C., and Demodulator	EBF2G	Duo-diode Penthode (V2).
Power Amplifier	EL3NG	Power Penthode (V3).
Rectifier	5Y3G	Full Wave (V4).
Dial Lamp		6.3 volt 0.32 amp. Panel Lamp (V11).

VOLTAGE ADJUSTMENT.

The receiver may be adapted for A.C. mains of 220, 240 or 260 volts by means of taps located on the power transformer. It is important that the receiver should be operated with the red lead of the power flex connected to the tap which most nearly corresponds to the mains voltage where the installation is made.

REMOVING THE CHASSIS.

- (1) Disconnect power plug and remove back of cabinet.
- (2) Withdraw speaker plug from chassis.
- (3) Remove knobs at front of cabinet.
- (4) Remove dial mechanism by withdrawing the four screws securing the dial brackets at either end of dial. If the dial glass is loose when the mechanism is released, the glass should be laid aside carefully to avoid damage or risk of breakage. The remaining mechanism is now laid with care on top of the chassis with due attention to the fact that the flexible cable should not be kinked.
- (5) Unscrew the four chassis mounting bolts.
- (6) Slide chassis and dial mechanism complete, out of the cabinet.
- (7) A reversal of the withdrawal procedure will suffice to restore the chassis to the cabinet.

DIAL CALIBRATION.

If the pointer does not indicate the correct position for a given station, the position of the pointer in relation to the gang condenser can be adjusted by loosening the clamping screw on the pointer slider, and moving the slider in relation to the slotted wire tension guide. After adjustment, tighten the clamping screw securely.

VOLTAGE ANALYSIS.

Valve Type	Plate Voltage	Osc. Plate Voltage	Screen Voltage	Bias Voltage	Heater Voltage (A.C.)
ECH4G	220	75	95	2.5	6.3
EBF2G	220	—	60	0	6.3
EL3NG	200	—	220	5.5	6.3
5Y3G	300 A.C. per plate				5.0

NOTE:

The abovementioned voltage values, with the exception of bias voltages, are measured between the socket points indicated and chassis with the receiver in the no signal condition and with the volume control at zero. Bias voltages are to be measured at the source of the voltage, as incorrect readings will otherwise be obtained. Voltages are measured with a 1,000 ohm per volt voltmeter and may vary as much as 10% from the figures quoted.

SERVICE DATA.

COMPONENTS NOT SHOWN ON CIRCUIT DIAGRAM.

No. on Dial Drawing	Description	Code No.	Price	No. on Dial Drawing	Description	Code No.	Price
	Back, cabinet	34/148	5/6		Grommett, rubber, power cord	32/313	2d.
	Badge, Philips, Emblem	24/447	1/-		Knob, control	32/229	7d.
	Bands, rubber, dial, glass	33/316	3d.		Lamp, dial illuminating	92/213	6d.
7	Bracket, dial, mounting	23/441	6d.		Plate, clicker	72/238	2/-
11	Bracket, gang, cable support- ing	23/443A	1/6	3	Pointer, glass	33/524	6d.
	Bracket, lamp, holder	93/314	3d.		Ring, locking, Amphenol socket	24/666	1d.
6	Bracket, slide rod, adjusting ...	23/444	6d.	1	Rod, slider supporting	24/252	1/6
	Bracket, tuning spindle, sup- porting	24/442	6d.		Silk, baffle	35/232	4/6
	Bush, chassis, mounting	24/299	2d.		Socket, 7 pin, Amphenol	34/542	6d.
	Cabinet	34/113	£5		Socket, octal, Amphenol	34/521	6d.
13	Cap, tension spring	24/323	2d.		Socket, lamp holder, bakelite	34/901	5d.
	Card, knob	33/223	2/-		Spindle tuning control	24/242	9d.
4	Clamp and Slider, pointer transport	24/519	2/6	9	Spring, cord tension	25/211	2d.
	Clips, grid	24/629	1d.	14	Spring, tension dial wire	25/218	3d.
8	Cord, dial drive	35/313	5d.		Strip, trimmer mounting	33/416	5d.
	Cord, power supply	26/250	1/6		Switch assembly, wave change	74/231	8/6
5	Counterweight, dial pointer ...	24/475	3d.		Switch section, wave change	73/222	2/-
10	Drum, dial drive	34/593	1/8		Switch, tone control	93/243	2/9
	Escutcheon, moulded	32/256	2/11	2, A, 12			
	Glass, dial, printed	35/412	6/3	13, 14,			
	Grommett, rubber chassis mounting	32/311	2d.	15	Wire assembly, dial drive	26/323	3/-

PRICES QUOTED ARE STRICTLY NETT AND SUBJECT TO CHANGE WITHOUT NOTICE.



COMPONENT LOCATION DIAGRAM.

L	13. 14. 15. 16	11 12	9 10	5. 6. 7. 8. 1. 2. 3. 4.	L
C	29	28	14. 7. 18.	6.	6
			16.	2. 11. 3. 12.	C
R	27	35	19. 17. 15.	33.	5
			9.	10. 4. 34.	R
V	4	3	6 4 7. 2. 8. 3 10 9.	5	5
			2.		R
			1.		V.

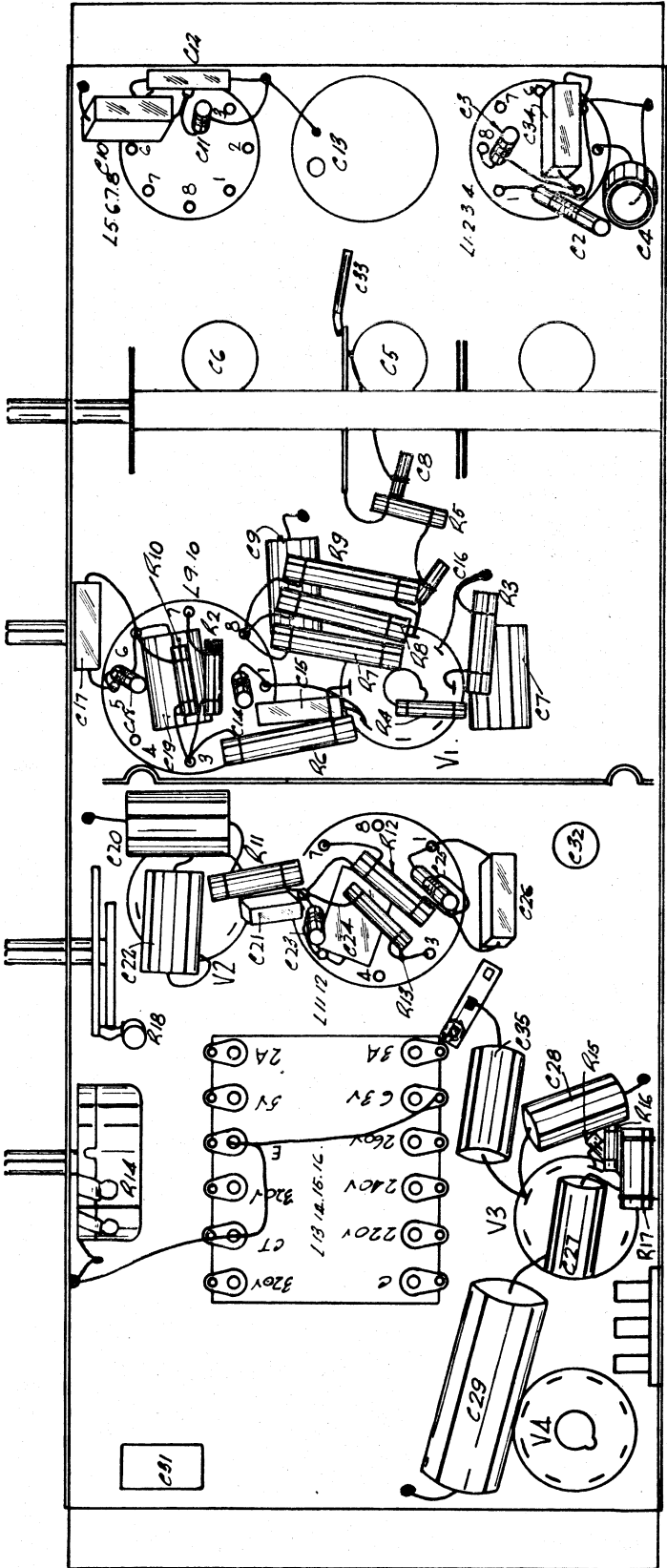


Diagram 1.

SERVICE DATA.

COMPONENT PARTS.

CONDENSERS (PRICES QUOTED ARE STRICTLY NETT AND ARE SUBJECT TO CHANGE WITHOUT NOTICE.)

No.	Value	Code No.	Price	No.	Value	Code No.	Price
C2	15 mmfd	53/101	3d.	C19	.05 mfd	52/315	11d.
C3	30 mmfd	52/536	3d.	C20	.05 mfd	52/315	11d.
C4	.05 mfd	52/315	11d.	C21	.0001 mfd	52/212	7d.
C5/6	Tuning Gang	53/326	9/11	C22	.01 mfd	52/332	7d.
C7	.1 mfd	52/339	9d.	C23	30 mmfd	52/536	3d.
C8	100 mmfd	52/811	6d.	C24	80 mmfd	52/239	6d.
C9	.01 mfd	52/332	7d.	C25	80 mmfd	52/239	6d.
C10	200 mmfd \pm 5%	52/263	7d.	C26	30 mmfd	52/536	3d.
C11	125 mmfd	52/535	6d.	C27	.004 mfd	52/331	8d.
C12	.003 mfd. \pm 10%	52/269	11d.	C28	.004 mfd	52/331	8d.
C13	2.5 to 30 mmfd	54/313	8d.	C29	25 mfd	52/416	1/3
C14	30 mmfd	52/536	3d.	C31	16 mfd Electro.	52/432	3/9
C15	80 mmfd	52/239	6d.	C32	16 mfd Electro.	52/432	3/9
C16	100 mmfd	52/811	6d.	C33	2.25 mmfd	52/532	3d.
C17	80 mmfd	52/239	6d.	C34	80 mmfd	52/239	6d.
C18	30 mmfd	52/536	3d.	C35	.02 mfd	52/313	6d.

RESISTORS.

No.	Value	Code No.	Price	No.	Value	Code No.	Price
R2	150,000 ohm	62/233	4d.	R11	1 megohm	62/317	5d.
R3	150 ohm	62/318	5d.	R12	100,000 ohm	62/313	5d.
R4	50,000 ohm	62/212	4d.	R13	50,000 ohm	62/212	4d.
R5	100 ohm	62/242	4d.	R14	500,000 ohm		
R6	10 megohm	62/434	6d.		Vol. Control	63/428	3/3
R7	50,000 ohm	62/417	6d.	R15	50,000 ohm	62/212	4d.
R8	50,000 ohm	62/417	6d.	R16	1 megohm	62/214	4d.
R9	30,000 ohm	62/425	6d.	R17	150 ohm	64/213	5d.
R10	2 megohm	62/222	4d.	R18	10,000 ohm	62/323	5d.

COILS.

No.	Description	Code No.	Price	No.	Description	Code No.	Price
L1/4	Aerial Coil	42/735	4/3	L13/16	Power Trans.	44/247	13/-
L5/8	Oscillator Coil	42/246	4/3	L17/20	Speaker + Output Transformer	45/367	23/6
L9/10	First I.F.	42/319	7/3	L17/18	Speaker Output Transformer	44/339	7/6
L11/12	Second I.F.	42/423	7/3				

IMPORTANT: In ordering spare parts quote **CODE NUMBER ONLY**. If claiming free replacement under **GUARANTEE**, return defective parts **PROMPTLY** and quote **TYPE** and **SERIAL NUMBER** of **RADIOPLAYER**.

DIAL PARTS DIAGRAM.

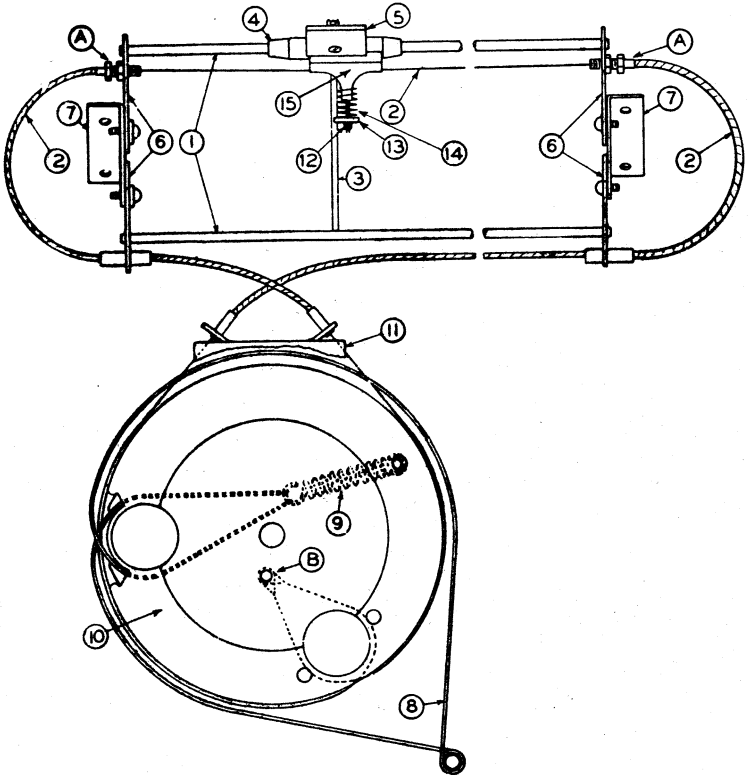


Diagram 2.

CHASSIS LAYOUT DIAGRAM.

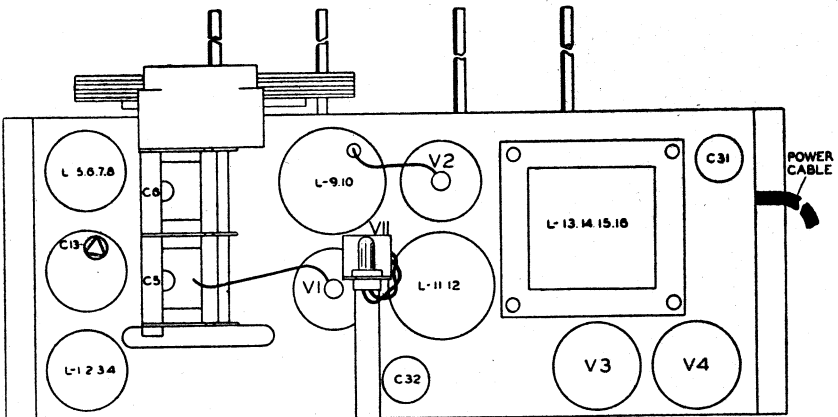
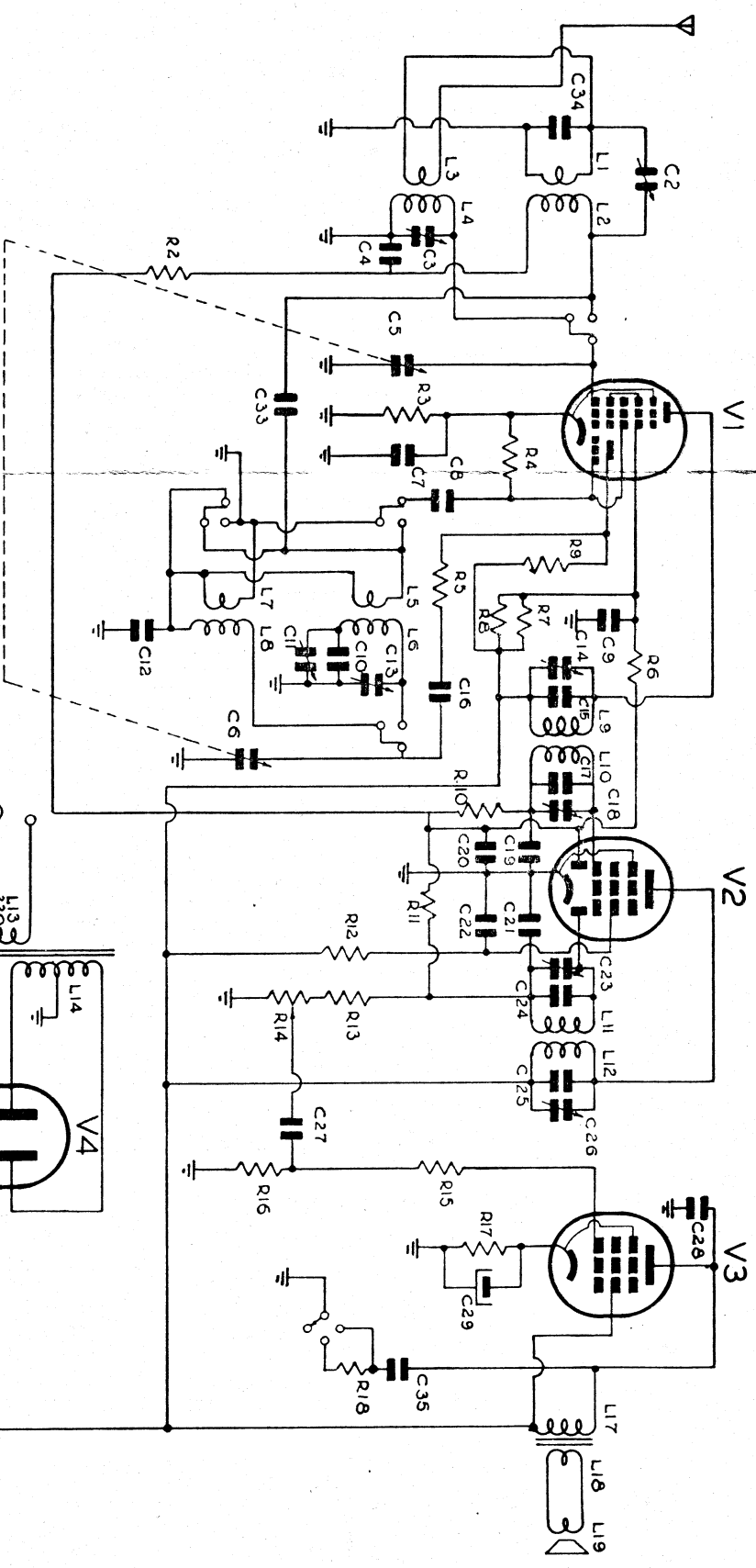


Diagram 3.

L	1234	4	5	33	7	8	5	6	7	8	9	10	13	14	15	16	11	12	26	28	35	17	18	19	
C	34	2	3	2	3	4	1	9	5	7	8	6	10	12	13	14	17	20	22	24	25	27	31	29	32
R																									
V																									



WAVE-CHANGE SWITCH POSITIONS

