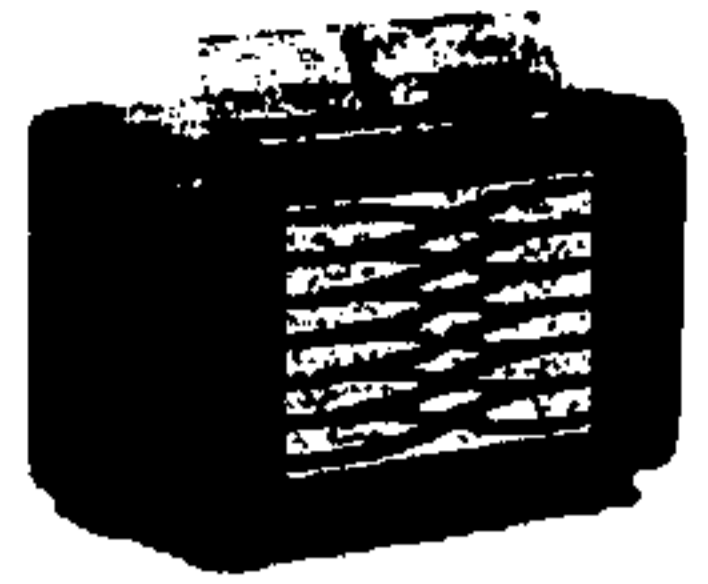


# PHILIPS RADIOPLAYER

## MODEL 117

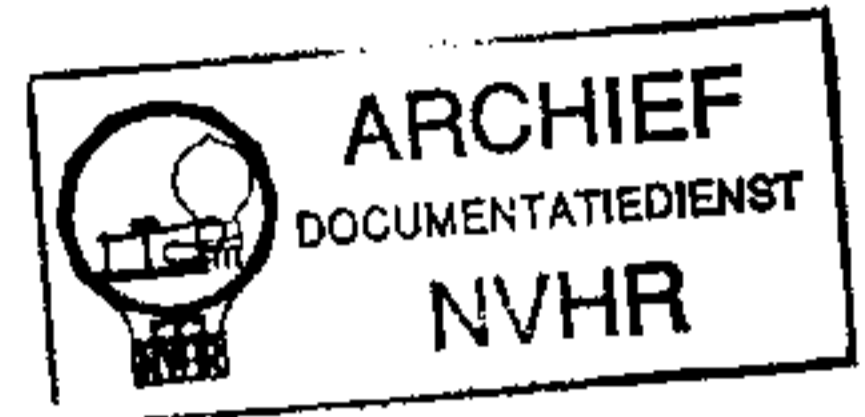


### SPECIFICATIONS

(Subject to alteration without notice.)

Ned. Ver. v. Historie v/d

Tuning Ranges .....	535-1,620 Kc/s 5.85-18.4 Mc/s
Intermediate Frequency .....	455 Kc/s
Cabinet .....	De-luxe bakelite table
Battery Equipment .....	2 x 45V, heavy duty, plug-in type, dry batteries; 1 x 1.5V plug-in type, dry battery
Battery Consumption .....	"A", 0.3A "B", 14 MAS



### VALVE EQUIPMENT AND VOLTAGE ANALYSIS

Valve Function	Valve No.	Valve Type	Plate Volts	Screen Volts	Bias Volts
Frequency Converter	V1	IR5	41	41	0
1st I.F. Amplifier	V2	IT4	47	47	0
2nd I.F. Amplifier	V3	IT4	84	47	0
Demodulator, A.V.C. and 1st Audio	V4	IS5	17	5	0
Power Amplifier	V5	3S4	83	57	-6

NOTE: These voltages are measured with a "1,000 ohms per volt" meter and may vary  $\pm 10\%$  from the figures quoted. They are measured from the socket points quoted to chassis; V5 bias is measured across back bias resistor R17. The receiver should be in a "no signal" condition.

#### REMOVAL OF CHASSIS FROM CABINET.

The incorporation of a removable chassis bottom cover or "service window" permits much service work being carried out on this Radioplayer without the need to remove the chassis from the cabinet. If it is necessary that the chassis be removed, proceed as follows:—

Remove the plugs from the batteries, or if the Radioplayer is vibrator unit operated, remove the battery clips from the battery terminals. Remove the cabinet back, the bottom cover, the control knobs, the speaker plug from its socket and release the dial cursor and slider from the dial cord. Removal of the four chassis mounting bolts permits the chassis to be withdrawn from the cabinet.

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

#### ALIGNMENT.

Removal of the chassis bottom cover permits access to all alignment trimming adjustments.

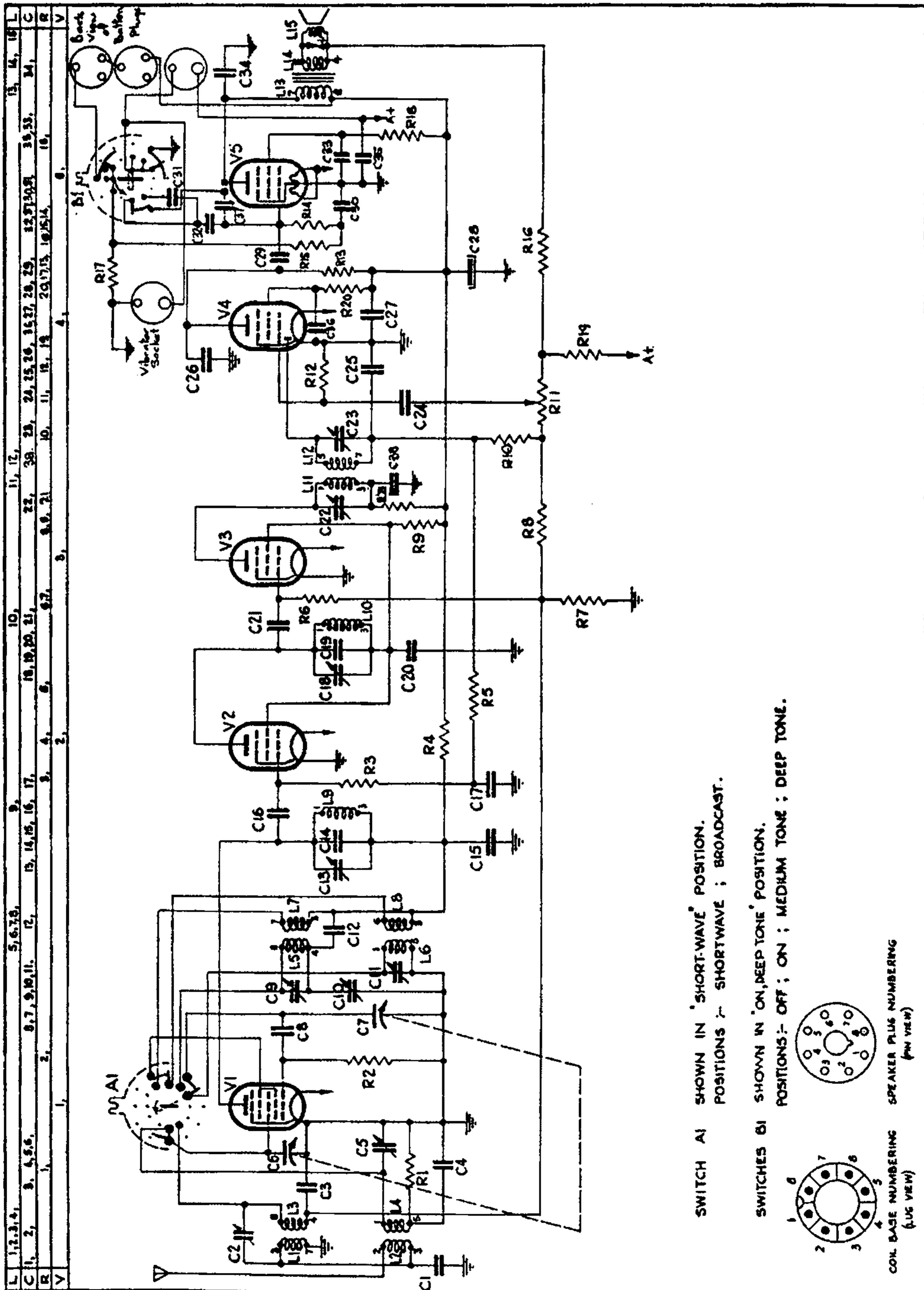
The receiver oscillator on the short wave band operates at a frequency below that of the incoming signal.

#### VIBRATOR UNIT OPERATION.

Model 117 may be operated from a 6 volt accumulator by means of vibrator unit Model 118.

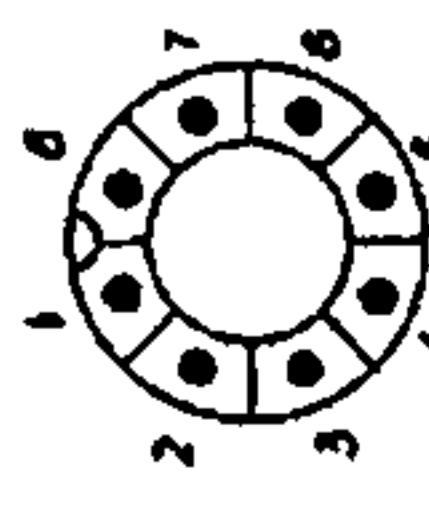
Provision is made on the receiver chassis for fitting the vibrator unit. The receiver battery leads should be plugged into the vibrator unit sockets, the surplus cable being neatly stowed in the cabinet. It is also necessary to fit the two-pin plug from the vibrator unit to the socket provided on the receiver chassis.

A separate service sheet covers the Model 118 unit.

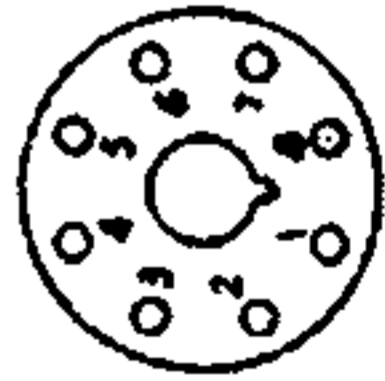


SWITCH A1 SHOWN IN 'SHORT-WAVE' POSITION.  
POSITIONS :- SHORTWAVE ; BROADCAST.

SWITCHES B1 SHOWN IN 'ON,DEEP TONE' POSITION.  
POSITIONS:- OFF ; ON ; MEDIUM TONE ; DEEP TONE.



COIL BASE NUMBERING  
(PIN VIEW)



SPEAKER PLUG NUMBERING  
(PIN VIEW)

# PARTS LISTS

## CAPACITORS

No.	Description	Code No.
C1	200 pF mica	
C2	30 pF glass trimmer	CZ.117.600
C3-17-20- 27-30- 33-36- 38	0.1 mF 200V paper	
C4	0.0045 mF mica	
C5-9	30 pF air trimmer	CZ.113.700
C6-7	2 gang tuning	2H
C8	47 pF ceramic	CZ.096.604
C10-13-18- 22-23	125 pF ceramic trimmer	CZ.118.200
C11	15 pF glass trimmer	CZ.117.400
C12	565 pF mica	
C14-19	150 pF mica	
C15	0.002 mF mica	
C16-21-25- 26-31	100 pF ceramic	CZ.096.602
C24	0.01 mF 600V paper	
C28	24 mF 350V electrolytic	
C29	0.002 mF 600V paper	
C32	290 pF mica	
C34	0.006 mF 200V paper	
C35	0.5 mF 200V paper	
C37	33 pF ceramic	CZ.096.605

## RESISTORS

No.	Description	Code No.
R1-10	50,000 ohms 1/2W carbon	
R2	30,000 ohms 1/2W carbon	
R3-6-7- 14	1 megohm 1/2W carbon	
R4	15,000 ohms 1/2W carbon	
R5-8-12	2 megohms 1/2W carbon	
R9	10,000 ohms 1/2W carbon	
R11	0.5 megohm potentiometer	
R13	0.5 megohm 1W carbon	
R15	0.5 megohm 1/2W carbon	
R16	50 ohms 1/2W carbon	
R17	500 ohms 1W carbon	
R18	20,000 ohms 1W carbon	
R19	25 ohms 1/2W carbon	
R20	5 megohms 1W carbon	
R21	5,000 ohms 1W carbon	

## COILS

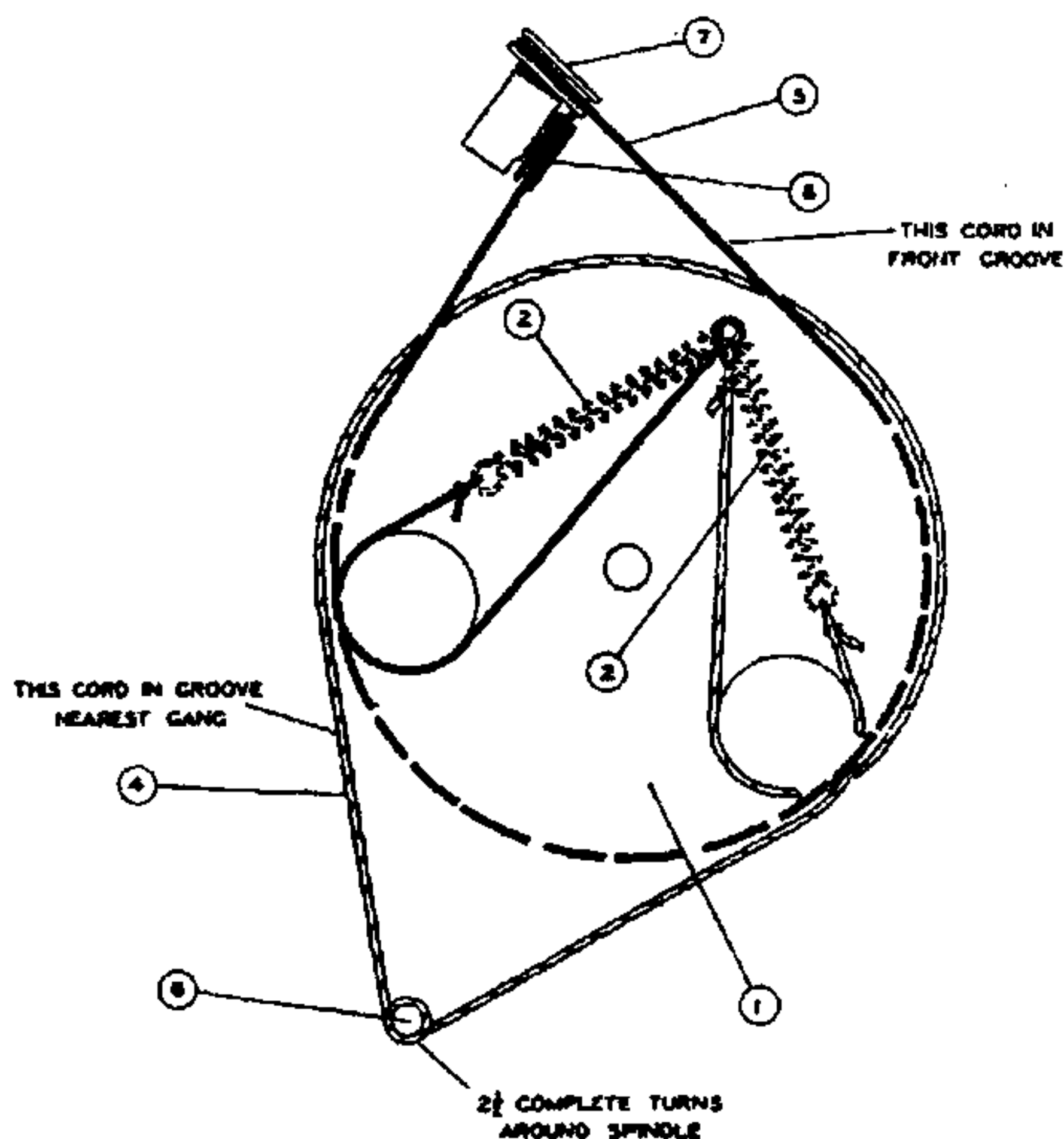
No.	Ohms	Description	Code No.
L1	21.5	Aerial Coil	CZ.320.010
L2	1.2		
L3	3.5		
L4	<0.5		
L5	4.2	Oscillator Coil	CZ.321.007
L6	<0.5		
L7	1.8		
L8	0.8		
L9	7.0	1st I.F. Choke	CZ.320.411
L10	7.0	2nd I.F. Choke	CZ.320.411
L11	5.0	3rd I.F. Transformer	CZ.320.413
L12	5.0		
L13	130	Speaker and Transformer 8,000 ohms	CZ.161.208
L14	<0.5		
L15	3.6		

## SERVICE DATA

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

## COMPONENTS NOT SHOWN ON CIRCUIT DIAGRAM

No. on Dial Parts Diagram	Description	Code No.	No. on Dial Parts Diagram	Description	Code No.
—	Arm, side (T/C—on/off switch)	CS.218.010	—	Clip, dial glass mounting	CS.227.000
—	Arm, side (W/C switch)	CS.218.006	—	Cloth, speaker baffle	CE.081.14
—	Assembly, baffle	CR.005.219	—	Contact, cab. back shield to chassis	CS.106.204
—	Assembly, cabinet back	CR.572.019	5	Cord, dial	CS.361.817
—	Assembly, chassis cover	CR.572.017	4	Cord, drum	CS.361.818
—	Assembly, cursor	CR.480.618	—	Glass, dial printed	CS.412.247
1	Assembly, dial drum	CR.382.808	—	Grommet, battery lead	CS.422.414
—	Assembly, dial glass, mtg. brkt.	CR.265.200	—	Grommet, chassis mounting	CS.422.421
—	Assembly, T/C—on/off switch (complete)	CZ.200.409	—	Key, T/C clicker	CS.365.804
—	Assembly, W/C switch (complete)	CZ.200.025	—	Key, W/C clicker	CS.365.803
—	Assembly terminal	CZ.376.200	—	Knob, tuning	CR.523.647
—	Assembly T/C clicker	CR.450.024	—	Knob, vol. control and switches	CR.523.646
—	Assembly W/C clicker	CR.450.020	—	Nut tee (chassis mtg.)	CH.603.014
—	Badge, Philips	CR.531.406	—	Plate, anchoring (bottom cover)	CS.257.905
—	Bank, T/C—on/off switch	CZ.200.405	—	Plug, 2-pin polarised	CR.102.200
—	Bank, W/C switch	CZ.200.024	—	Plug, 3-pin	CZ.365.204
—	Brace, end (T/C—on/off and W/C switch)	CS.219.000	7	Pulley, wooden (large)	CS.360.202
—	Bracket, cab. back top mtg.	CS.244.602	8	Pulley, wooden (small)	CS.360.201
—	Bracket, gantry (top)	CR.295.000	—	Ring "C" (tuning spindle)	CS.281.802
—	Bracket, gantry (side)	CS.250.002	—	Rod, dial slide	CS.382.209
—	Bracket, slide rod mtg.	CS.244.601	—	Socket, 2-pin polarised	CR.102.401
—	Bracket, tuning spindle	CS.224.607	—	Socket, miniature valve	CZ.369.301
—	Bracket, V/C mounting	CS.230.602	—	Socket, octal wafer	CZ.369.507
—	Buffer, cabinet mounting	CS.423.000	6	Spindle, tuning	CS.351.222
—	Cabinet	CS.460.479	2	Spring, dial drum	CS.210.010
—	Clamp, baffle mounting	GS.235.826	—	Spring, slide rod	CS.255.001
—	Clamp, speaker mounting	CS.234.813	—	Spring, tuning spindle	CS.212.001
			—	Spring, T/C on/off and W/C clicker key	CS.211.802
			—	Washer, felt (cabinet mtg.)	CS.424.018

DIAL CORD  
LAYOUT