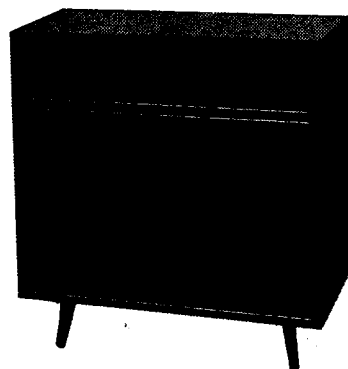


PHILIPS RADIOPLAYER

MODEL 201 SPECIFICATIONS

(Subject to alteration without notice)

Power Supply	.....	200/250V, 40-50 c/s
Tuning Range	.....	530-1620 Kc/s
Intermediate Frequency	.....	455 Kc/s
Cabinet	.....	Radiogram
Record Changer	.....	Philips type AG1014
Pick-up Head	.....	Philips type AG3010



VALVE EQUIPMENT AND VOLTAGE ANALYSIS

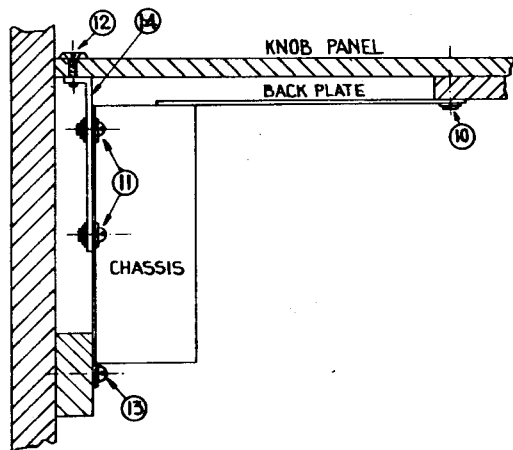
Valve Function	Valve No.	Valve Type	Plate Volts	Screen Volts	Osc. P. Volts	Cathode Volts
Frequency Converter I.F. Amplifier, A.V.C. and Demodulator	V1	6AN7	237	46	72	
	V2	6N8	237	46		
Audio Amplifier Phase Splitter	V3a	12AX7	65			31
	V3b		115			
Power Amplifier	V4	6M5	275	237		7.9
Power Amplifier	V5	6M5	275	237		7.9
Rectifier	V6	6V4	253/253V. A.C.		Unfiltered B+ 283V.= Filtered B+ 237V.=	
Dial Lamps (2)	V11, 12	8045D	6.3V, 0.32A tubular screw			
Heater Volts, 6.35V. A.C.; Voltage across R27, 2.2V. D.C.						

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

TO REMOVE CHASSIS FROM CABINET.

Remove receiver power plug, back panel and the four push fitted functional control knobs. Withdraw the loudspeaker and pick-up plugs from rear of receiver chassis (note respective location) together with mains lead socket connection.

Unscrew the aerial and earth terminal strip and disconnect the internal aerial.



To withdraw chassis initially remove the two 5/32" Whit. brass countersunk screws (12) threaded into each mounting bracket (14) through receiver knob panel adjacent to the tuning and volume control knobs. Removal of the two wood screws and washers (10) supporting dial back plate and the two metal thread

screws and washers (13) securing chassis rear flange will now enable the chassis complete with dial scale, etc., to be withdrawn. This latter procedure can be simplified and the requirement for chassis support largely eliminated if receiver is first placed face downwards on a suitable protective surface. Note that separation of mounting brackets (14) from chassis end flanges is not required for chassis withdrawal.

The replacement of the chassis is a reversal of the above procedure.

MAINS VOLTAGE ADJUSTMENT

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

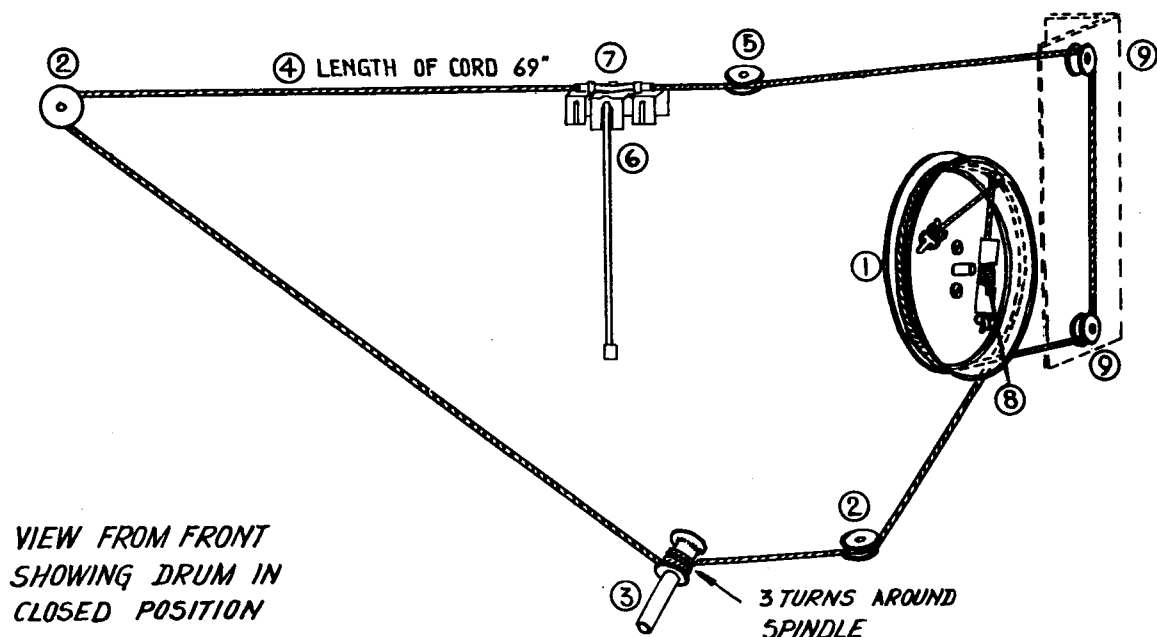
DIAL CALIBRATION.

Ensure that the line of pointer is square relative to scale. The pointer should lie inside the two parallel marks approximately adjacent station 7ZL on the R.H. scale border when set midway between similar markings on the opposite side.

An equal calibration error over entire dial scale range can be corrected by simply sliding the cursor on drive cord in the appropriate direction. Calibration is correct when a gang closed setting (tuning knob fully clockwise) corresponds with a pointer position over the stop mark on L.H. border line.

MISCELLANEOUS COMPONENTS

Drawing Reference No.	Description	Type or Code No.	Drawing Reference No.	Description	Type or Code No.
6	Assembly, cursor	CR.480.664	—	Knob, x4	CR.523.753
—	Assembly, lampholder, x2	C/F 733-5-4	—	Name "Philips"	CR.531.428
3	Assembly, tuning spindle	CR.371.335	—	Plug, power, chassis	CZ.365.115
—	Badge	CR.531.408	—	Plug, 2 pin polarised, x2	C/F 691-5-1
9	Bracket assy., cord support	CR.262.465	5	Pulley, dial (large)	CS.359.618
14	Bracket, chassis mtg., x2	CS.232.566.1	2	Pulley, dial (small), x2	CS.359.617
—	Channel rubber (scale mtg.)	CS.424.194	—	Scale, dial	CS.412.414.1
—	Clamp, dial, x2	CS.232.580	—	Socket, 2 pin polarised, x2	C/F 733-16-1
—	Clip, scale border trim retaining	CS.430.950	—	Socket, power, chassis	CZ.365.116
—	Clip, spring (I.F.T. mtg.), x2	A3.652.58	7	Spring, cursor	CS.212.016
—	Clip, spring (knob), x4	CS.281.832	8	Spring, dial cord	CS.210.043
4	Cord, dial drive 69" of cord required		—	Stay, cabinet lid EFFCO C41,	CR.285.809
1	Drum, dial	CS.360.006	—	Strip, A & E terminal	C/F 679-2-5
—	Ferrule, cabinet leg, x4	CS.420.216	—	Switch (A1), gram/radio	OAK 37011, CZ.200.250



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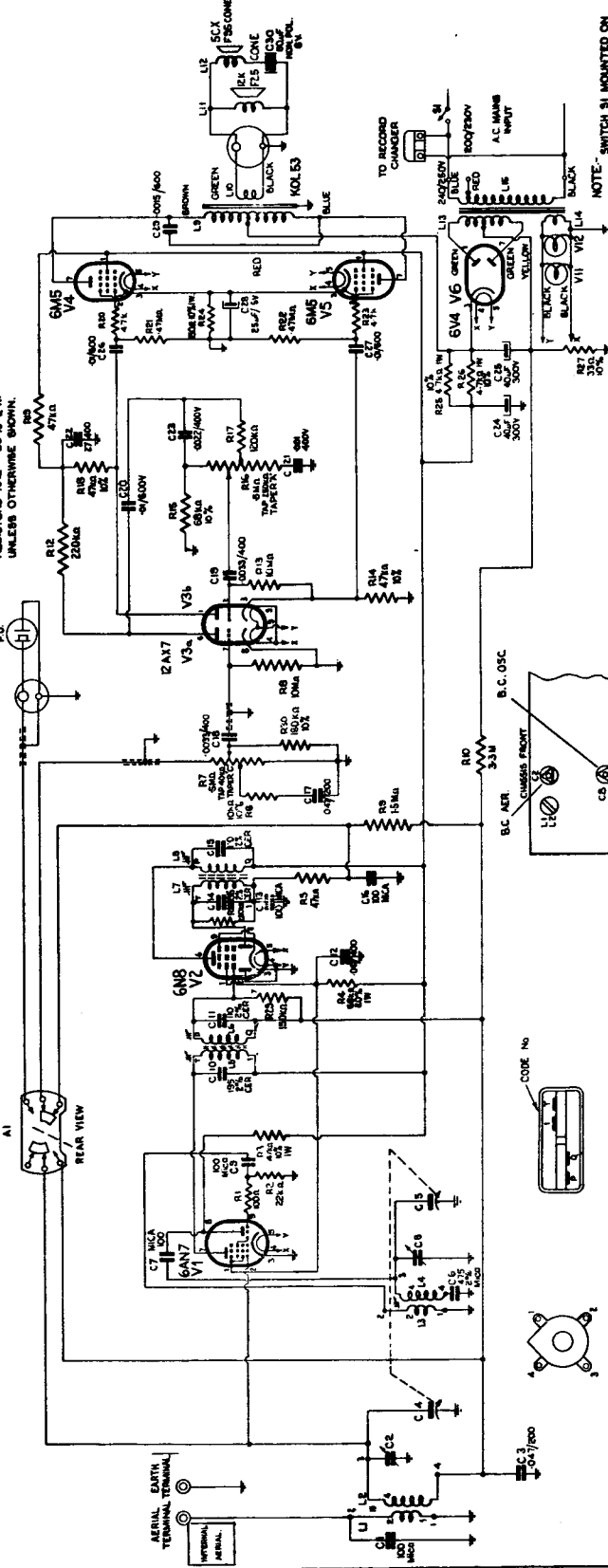
PHILIPS ELECTRICAL INDUSTRIES PTY. LIMITED

SYDNEY - MELBOURNE - BRISBANE - ADELAIDE - PERTH - HOBART

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NOTE:-
 CONDENSER VALUES:
 WHOLE NUMBERS = PF
 DECIMALS = UF
 SECOND FIGURE = D.C.M.V.
 TOLERANCE = 50% UNLESS OTHERWISE SHOWN
 UNLESS OTHERWISE SHOWN.

SWITCH A1
 DRAWN IN POSITION BROADCAST
 REBROADCAST
 GROUND



VOLTAGE ANALYSIS

VALVE No.	PLATE VOLTS	SCREENING GRID VOLTS	CONTROL GRID VOLTS	LM/A1 5+	5+	2B3
V1	237	4.6	7.2			237
V2	237	4.6				
V3	85					
V4	115					
V5	275	2.37				
V6	275	2.37				
V5	253/253A/C					

ACROSS R17 2.2
 FIL. VOLTS 8.28
 MEASURED 200 VOLT
 7-9
 PRODUCES 8V.
 8000

I.F. TRANSFORMER BASE VIEW OF LUGS
 PRIMARY AND SECONDARY WINDINGS ARE NOT SYMMETRICAL. CORRECT CONNECTION AS SHOWN IS ESSENTIAL.

AERIAL & OSCILLATOR COIL LUG PANEL VIEW OF LUGS

RECORD CHANGER

TRIMMING LAYOUT TOP VIEW OF CHASSIS

RECORD CHANGER

RECORD CHANGER

RECORD CHANGER

RECORD CHANGER

RECORD CHANGER

NOTE:- SWITCH S1 MOUNTED ON VOLUME CONTROL (A17).

All voltages measured from chassis

PARTS LIST

CAPACITORS

No.	Description	Code No.
C1, 7, 9, 13, 16	100pF mica	
C2	30pF air trimmer	CZ.113.700
C3, 17	0.047 μ F 200V paper	
C4, 5	2 gang tuning condenser	CZ.107.755
C6	475pF \pm 2% mica	CZ.066.119
C8	60pF air trimmer	49.005.58
C10, 11	Part of 1st I.F. transformer	
C12	0.047 μ F 400V paper	
C14, 15	Part of 2nd I.F. transformer	
C18, 19	0.0033 μ F 400V paper	
C20	0.01 μ F 600V paper	
C21	0.001 μ F 400V paper	
C22	0.27 μ F 400V paper	
C23	0.0022 μ F 400V paper	
C24, 25	40 μ F 350VP electrolytic	
C26, 27	0.01 μ F 600V paper	
C28	25 μ F 25VW electrolytic	
C29	0.0015 μ F 600V paper	
C30	50 μ F 6VW N.P. electrolytic	CZ.099.870
C31	0.0047 μ F 600V paper	

All tolerances are \pm 20% unless otherwise specified.

ALIGNMENT

Check dial calibration and if necessary adjust cursor position as described in the foregoing.
 For I.F.T. and R.F. trimmer locations refer to circuit diagram inset drawing.
 Set volume control to maximum and tone control to a central position.

RESISTORS

No.	Description	Code No.
R1	100 ohms $\frac{1}{2}$ W W/W	
R2	22,000 ohms $\frac{1}{2}$ W carbon	
R3	47,000 ohms \pm 10% 1W carbon	
R4	68,000 ohms 1W carbon	
R5, 19	47,000 ohms $\frac{1}{2}$ W carbon	
R6	10,000 ohms \pm 10% $\frac{1}{2}$ W carbon	
R7	0.5 megohm potentiometer taper "C" tapped at 40,000 ohms with S.P.S.T. switch	CZ.032.025
R8	10 megohm $\frac{1}{2}$ W carbon	
R9	1.5 megohm $\frac{1}{2}$ W carbon	
R10	3.3 megohm $\frac{1}{2}$ W carbon	
R12	220,000 ohms $\frac{1}{2}$ W carbon	
R13	10 megohm $\frac{1}{2}$ W carbon	
R14, 18	47,000 ohms \pm 10% $\frac{1}{2}$ W carbon	
R15	68,000 ohms \pm 10% $\frac{1}{2}$ W carbon	
R16	0.5 megohm potentiometer taper "A" tapped at 0.25 megohm	CZ.029.151
R17	120,000 ohms \pm 10% $\frac{1}{2}$ W carbon	
R20, 23	4,700 ohms $\frac{1}{2}$ W carbon	
R21, 22	0.47 megohm $\frac{1}{2}$ W carbon	
R24	150 ohms \pm 10% 1W W/W	CZ.001.621
R25, 26	4,700 ohms \pm 10% 1W carbon	
R27	33 ohm \pm 10% $\frac{1}{2}$ W carbon	CZ.000.317
R28	220,000 ohms $\frac{1}{2}$ W carbon	
R29	150,000 ohms $\frac{1}{2}$ W carbon	
R30	180,000 \pm 10% $\frac{1}{2}$ W carbon	

All tolerances are \pm 20% unless otherwise specified.

I.F. Alignment.

Screw out iron core of 2nd I.F.T. primary.
 Apply modulated 455 Kc/s signal via a 100 pF capacitor to control grid (pin 2) of V1 and peak I.F.T. cores in the following sequence:—
 Secondary 2nd I.F.T.
 Secondary 1st I.F.T.
 Primary 1st I.F.T.
 Primary 2nd I.F.T.
 Do not repeat any adjustments.

COILS

No.	Ohms	Description	Type or Code No.
L1	19.6-26.4	B/C aerial coil	CZ.323.026
L2	1.5-2.0		
L3	1.2-1.7	B/C oscillator coil	CZ.330.613
L4	<0.5		
L5	4.7-5.2	1st I.F. transformer	A3.126.84
L6	8.0-9.0		
L7	4.7-5.2	2nd I.F. transformer	CZ.320.444
L8	8.3-9.2		
L9	150/158	Output transformer	Rola type KOL53
L10	<0.5		CZ.345.043
L11	—	Loudspeaker	Rola type 12K, F25
L12	—	Loudspeaker	Rola type 5CK, F95
L13	315-425	Power transformer	CZ.344.089
L14	<0.5		
L15	26-36		

IMPORTANT! When 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.

R.F. Alignment.

Use a Standard R.M.A. dummy aerial and apply a modulated R.F. signal to aerial terminal.
 Alignment frequencies are: 1,420 Kc/s, 3XY (peak oscillator (C8) and aerial (C2) trimmers), and 600 Kc/s, 7ZL (peak L3, 4 oscillator slug while rocking gang).
 Do not attempt to adjust the iron core of the aerial coil.