



PHILCO



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Model 269

TYPE CIRCUIT: Four valve superheterodyne for Medium and Long wave-bands, with highly selective iron dust-core coils, full A.V.C. and Pentode Output (3 watts).

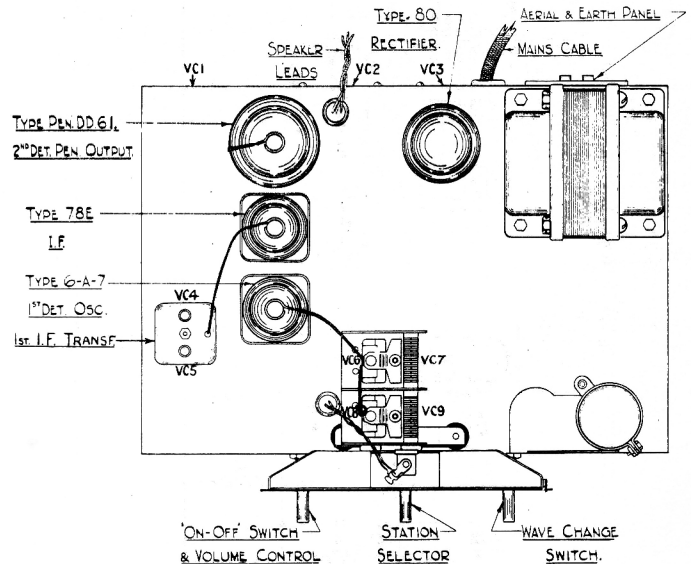
POWER SUPPLY: Alternating current mains of 200-260 volts, 40-100 cycles, when the correct transformer tapping is employed. Two tappings are provided: green covering 200-230 volts and white/black covering 231-260 volts respectively.

WAVE-BANDS: COVERAGE: Two (a) Medium, 500-1500 Kc. (600-200 metres); (b) Long, 150-300 Kc. (2000-1000 metres).

TUNING DRIVE: Geared 5-1 ratio for smooth and accurate tuning.

INTERMEDIATE FREQUENCY: 451 Kc.

POWER CONSUMPTION: 40 watts.



TOP CHASSIS DIAGRAM

TABLE 1. VOLTAGES.

A.C. Line 245 volt
50 cycles.

Valve socket readings to chassis taken with an 025 or 099 Philco Set Tester on the 300 and 10 volt ranges. Volume control at minimum, wave-change switch in M.W. position, and no aerial connected.

POSITION	VALVE	ANODE	SCREEN	CONTROL GRID	CATHODE
1st Detector and Oscillator S.3.	6A7	Pin 3. 250 volts Pin 5. 200 volts*	Pin 4 100 volts		Pin 7 6.5 volts
I.F. Amplifier S.2.	78E	Pin 3. 250 volts	Pin 4 100 volts		Pin 6 6.5 volts
2nd Det. A.V.C. and Pentode Output S.1.	PEN.DD. 61	Pin 6. 245 volts	Pin 4 250 volts	Pin 5 Pin 7 -0.1 volts†	Pin 3 5.5 volts
Full-Wave Rectifier S.4.	80	Pin 3. 350v. A.C. Pin 4. 350v. A.C.			

* Oscillator Anode volts. † Diodes volts.

Total D.C. 360 volts measured between EC1/2 and Chassis.

TABLE 2. RESISTANCES OF COILS.

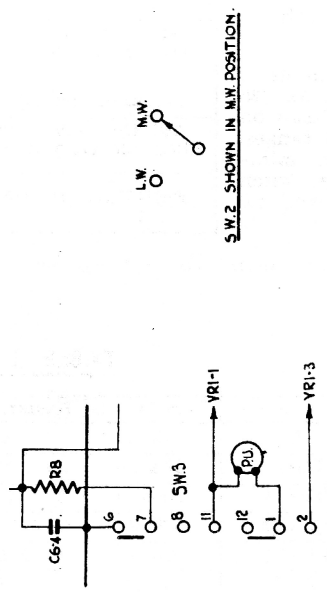
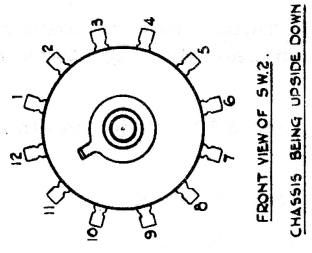
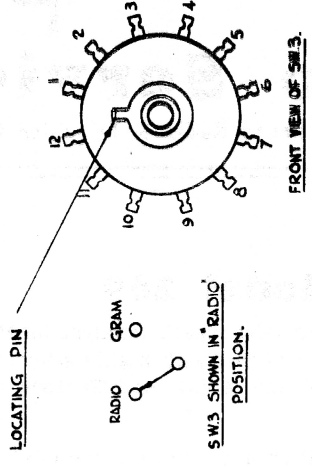
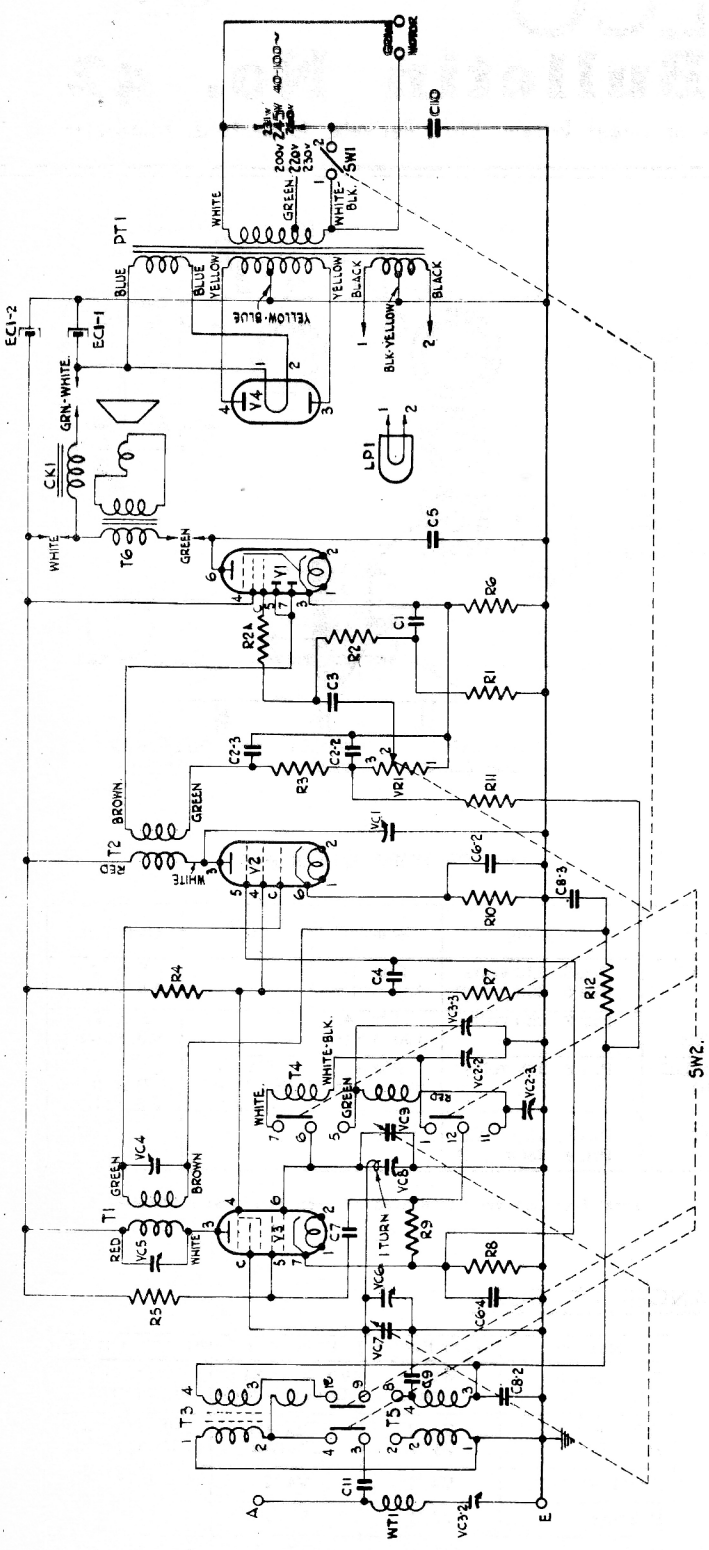
REF. NO.	TEST PROD 1	TEST PROD 2	RESIST. (OHMS)
WT1 ...	A	VC3/2	20
T3 Prim. ...	TB4/1	Chassis	SW2 M.W. 25
T5 Prim. ...	TB4/1	Chassis	SW2 L.W. 120
T3 Sec. ...	V3 Cap	C8/2	SW2 M.W. 2.5
T5 Sec. ...	V3 Cap	C8/2	SW2 L.W. 40
T1 Prim. ...	V3/3	TB2/2	8
T1 Sec. ...	V2 Cap	C8/3	12
T4 ...	V3/6	TB3/1	SW2 M.W. 2.5 SW2 L.W. 17
T2 Prim. ...	V2/3	TB2/2	30
T2 Sec. ...	V1/5	C2/3	80

REF. NO.	TEST PROD 1	TEST PROD 2	RESIST. (OHMS)
P.T.1 Prim. ...	White	Wh/Blk 245v.	35 approx.
P.T.1 Prim. ...	White	Green 220v.	30 approx.
H.T. Sec. ...	V4/3	Chassis	240 approx.
H.T. Sec. ...	V4/4	Chassis	240 approx.
Rectifier L.T.	V4/1	V4/2	0.1*
Heaters ...	V3/1	V3/2	0.2*
CK1 ...	EC1/1	EC1/2	2000 approx.
T6 Prim. ...	V1/6	EC1/1	230 approx.
T6 Sec. ...	Outp't Trfmr.	Outp't Trfmr.	0.2†
Speech Coil ...	Lead 1	Lead 2	2†

* Resistance of L.T. windings taken with all valves removed.

† Resistance of T6 secondary alone and speech coil alone (taken when disconnected).

NOTE: Reference numbers for valves should be read in conjunction with the socket numbers, e.g., V1.—S1.



NOTE: REVISED WIRING OF R8 & ADDITION OF SW3 & GRAM MOTOR CONNECTIONS ON MODEL 269 RADIO-GRAM ONLY.

MODEL 269 CIRCUIT DIAGRAM.

TABLE 3. PARTS AND PRICE LIST.

REF. NO.	DESCRIPTION.	PART NO.	LIST PRICE	
			s	d
T.1	1st I.F. Transformer Assembly	320-1047	5	6
VC.4		equiv.		
VC.5		32-1705		
T.2		32-2130		
T.3		32-2064		
T.4	Oscillator Coil	32-2094	4	6
T.5	L.W. Aerial Transformer	32-2065	5	3
T.6	Output Transformer, Speech Coil and Cone (Speaker Complete)	360-1020	21	3
CK.1				
WT.1	I.F. Trap Coil	38-6851	1	0
VC.1	Single Padder 5-50 mmfd.	310-6011	1	0
VC.2	Double Padder 240+500 mmfd.	31-6099	2	3
VC.3	Double Padder 50+125 mmfd.	31-6098	2	0
VC.6	Two-gang Condenser and Trimmers	31-1617	11	3
VC.7				
VC.8				
VC.9				
EC.1				
C.1	Tubular Condenser 0.1 mfd.	30-4122	6	
C.2	Moulded Condenser 110+110 mmfd.	8035 D.U.	1	0
C.3	Tubular Condenser .01 mfd.	30-4124	6	
C.4	Tubular Condenser .05 mfd.	30-4020	7	
C.5	Tubular Condenser .003 mfd.	30-4042	7	
C.6	Moulded Condenser .09+.09 mfd.	4989 D.G.	1	3
C.7	Mica Condenser 800 mmfd.	300-1005	8	
C.8	Moulded Condenser .05+.05 mfd.	3615 D.G.	1	2
C.9	Mica Condenser 50 mmfd.	300-1015	7	
C.10	Moulded Condenser .015 mfd.	3793 S.G.	8	
C.11	Mica Condenser 250 mmfd.	300-1014	6	
R.1	1/2 watt Carbon Resistor, 490,000 ohms.	6097	9	
R.2	1/4 watt Carbon Resistor, 490,000 ohms.	6097	9	
R2A	1/4 watt Carbon Resistor, 100,000 ohms.	33-1047	9	
R.3	1/4 watt Carbon Resistor, 51,000 ohms.	6098	9	
R.4	1 watt Carbon Resistor, 25,000 ohms.	3656	9	
R.5	1/4 watt Carbon Resistor, 10,000 ohms.	33-1000	9	
R.6	Wire-wound Resistor, 140 ohms.	330-3003	9	
R.7	1 watt Carbon Resistor 51,000 ohms.	4237	9	
R.8	1/2 watt Carbon Resistor 700 ohms.	330-1008	9	
R.9	1/4 watt Carbon Resistor, 51,000 ohms.	6098	9	
R.10	1/4 watt Carbon Resistor, 800 ohms. (+5%)	330-1009	9	
R.11	1/4 watt Carbon Resistor, 2 Megohms	33-1025	9	
R.12	1/4 watt Carbon Resistor 2 Megohms.	33-1025	9	
VR.1	Volume Control 330,000 ohms.	330-5004	3	6
SW.1	On-Off Switch			
SW.2	Wave-Change Switch	42-1164	2	2
P.T.1	Mains Transformer, 200-260v. 40-100 cycles	320-7007	17	0
S.1	7-Prong Socket, English type	270-6007	5	
S.2	6-Prong Socket	27-6036	5	
S.3	7-Prong Socket	27-6037	5	
S.4	4-Prong Socket	27-6034	4	
	Erinoid Screw for WT1	270-7022	5	
	Valve Shield	28-2726	2	
	Dial Scale	27-5033	1	3
	Dial Scale Shield	27-5034	10	
	Pointer and Hub Assembly	380-5125	9	
	Pilot Bulb	6608	1	4
	Grid Clip	28-2214	5	doz.
	Rubber Bush	4126	1	
	Rubber Buffers	5189	1	
V.1	Type Pen. D.D. 61 Double Diode Pentode Valve	340-2000	21	0
V.2	Type 78E, Variable-mu. H.F. Pentode Valve	8315E	13	0
V.3	Type 6A7 Variable-mu. Heptode Valve	34-2002E	16	0
V.4	Type 80 Full Wave Rectifier Valve	3149	8	0
	Mains Lead and Plug	LO-1009	1	7
	3-Way Speaker Cable	LO-1004	10	
	Large Tuning Knob and Spring	270-4041	9	
	"Volume" Knob and Spring	270-4037	5	
	"Wave-change" Knob and Spring	270-4038	5	
	Knob Spring	280-5262	2	doz.
	Red Wander Plug	380-5087	2	
	Black Wander Plug	380-5015	1	6 doz.
	Dial Screen		6	
	Reflector Assembly		1	2

Model 269 – Radiogram

Model 269 Radiogram is a 4-valve superheterodyne employing the same circuit as the Model 269 Baby Grand, but with the following refinements:—

GRAMOPHONE: The operation of the gramophone is controlled by a separate switch located on the motor board, which makes change over from radio to gram. without the possibility of radio break-through.

CONTROLS: The radio controls and tuning dial are brought out to the front of the cabinet. The volume control is effective on both radio and gramophone reproduction.

REMOVAL OF CHASSIS: This is easily effected by removing the four screws securing the chassis to the base-board and slacking off the radiogram switch fixing nut.

TOP CHASSIS DIAGRAM: This is the same as for Model 269 Baby Grand except for two flex leads which are brought out by the pilot lamp leads for connection to the change-over switch (Sw.3), and the motor cable.

CIRCUIT DIAGRAM: The changes are as shown on the diagram.

UNDER CHASSIS DIAGRAM: The changes are as shown in dotted lines on the diagram. Tables 1 and 2 and Alignment Procedure are the same as for Model 269 Baby Grand.

PARTS AND PRICE LIST.

Add

REF. No.	DESCRIPTION.	PART No.	LIST PRICE		
			£	s.	d.
SW.3	Radiogram Switch	42-1164	2	2	
	Type AC7 Motor, Turntable and 8,000 ohms Pick-up Assembly	350-2008	3	12	6
	Switch Cables	LO-1017	1	9	
		LO-1028	1	3	
	Motor Cable	LO-1029	1	3	
	Radiogram Switch Knob and Spring	270-4036			5