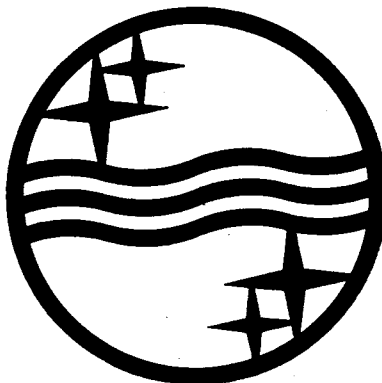


SERVICE DATA.

COMPONENTS NOT SHOWN ON CIRCUIT DIAGRAM.

No. on Dial Drawing.	Description.	Code No.	Price.	No. on Dial Drawing.	Description.	Code No.	Price.
14	Backing, dial, celluloid	34/218	2/-	—	Rubber bands, dial glass	33/316	3d.
—	Badge, Philips emblem	24/447	1/-	—	Shield, valve	24/663	7d.
—	Base, valve shield	24/665	3d.	—	Silk, baffle	35/232	4/6
13	Bracing strips, dial, celluloid	24/491	6d.	2	Slide rod, dial	24/243	1/6
6	Bracket, dial slider rod, adjustable	24/482	6d.	—	Socket, dial lamp with bracket	23/484	2/-
7, 8	Bracket, dial mounting	23/453	6d.	—	Socket, fuse lamp	24/652	6d.
16	Bracket, gang, cable support	23/443a	1/6	—	Socket, octal, amphenol	34/521	6d.
—	Bracket, tuning control spindle	24/442	6d.	—	Socket, octal, wafer	34/546	4d.
—	Cabinet, No. 28, with shelf	33/676	£7/5/-	—	Socket, 5 pin, amphenol	34/514	5d.
—	Cable, battery connection	26/236	4/9	—	Socket, 7 pin small, amphenol	34/542	6d.
—	Card, knob indicating	33/228	2/-	—	Spacers, brass, chassis mounting	24/299	2d.
—	Clicker plate, tone control	72/219	2/-	—	Speaker, complete with transformer	45/347	£2/5/-
11	Cord, dial drive	35/313	5d.	—	Spindle, tuning control	24/242	9d.
9	Drum, dial drive	34/593	2/8	—	Spindle, volume control	24/923a	6d.
—	Escutcheon, moulded	32/256	2/11	10	Spring, dial cord tension	25/211	2d.
15	Glass, dial, printed	33/570	6/3	—	Switch assembly, wave change	74/222	10/6
—	Grommet, rubber, chassis mounting	32/311	2d.	—	Switch section, tone control	73/219	2/3
—	Knob, tuning control	32/229	7d.	—	Terminals, pick-up, black	34/564	6d.
—	Locking ring, amphenol socket	24/666	1d.	—	Terminal, pick-up, red	34/596	6d.
1	Pointer assembly	24/523	2/6	3, 4, 5 } 12 & A }	Wire assembly, dial drive	26/323	3/-

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



RADIOPLAYER MODEL 2870

BATTERY OR BATTERY VIBRATOR OPERATED

SPECIFICATIONS.

(Subject to alteration without notice.)

Tuning Ranges: 1610 to 540 Kc/s.
8 to 22 Mc/s.
Intermediate Frequency: 472.5 Kc/s.

BATTERY EQUIPMENT:

For Battery Operation:

1-2 volt accumulator (100 amp. hrs. capacity).
3-45 volt triple capacity "B" batteries.

For Battery Vibrator Operation (with Type 330, 220 or 148 Vibrator Unit):

1-6 volt accumulator (100 amp. hrs. capacity).

BATTERY CONSUMPTION:

"B" Battery Operation:

"A" Battery: 0.65 amp. approx.
"B" Battery: 15 mA. approx.

Battery Vibrator Operation (with Type 330, 220 or 148 Vibrator):

"A" Battery: 1.2 amp. at 6 volts.

DIAL LAMP:

For "B" Battery Operation: 2.5 volt 0.3 amp.

For Battery Vibrator Operation: 6.3 volt 0.1 amp.

VALVE EQUIPMENT.

R.F. Amplifier	1D5G R.F. Penthode
Frequency Converter	KK2G Octode
I.F. Amplifier	1D5G R.F. Penthode
Demodulator and 1st Audio	1F7G D.D. Penthode
Phase Inverter	1F7G D.D. Penthode
P.P. Output	KL4G (2) Power Penthode

INSTRUCTIONS.

Full instructions for the installation of Model 2870 (battery operation) are contained in the instruction book supplied with each Radioplayer.

VIBRATOR OPERATION.

Model 2870 is intended for operation either with "B" batteries or alternatively with Philips Model 330, 220 or 148 Vibrator Unit.

If it is desired to use the 330, 220 or 148 vibrator unit in place of "B" batteries, reference should be made to the instructions accompanying the vibrator unit.

The switch on the 330 or 220 unit must be adjusted to position "C", and on the 148 unit to position "6713" to adapt the unit to a 2870 Receiver.

It is also necessary to change the dial panel lamp to a 6.3 volt 0.1 amp. type.

FUSE LAMP.

A fuse lamp is fitted in series with the "B" battery negative lead as a measure of protection against valve filament burn-outs.

The set will not operate if the lamp is fused or not properly screwed into the socket. The correct replacement fuse lamp is of the 2.5 volt 0.1 amp. type.

REMOVING THE CHASSIS:

1. Remove battery cable plug.
2. Unscrew knobs at front of cabinet.
3. Withdraw loudspeaker plug from chassis.
4. Remove dial glass and mechanism by withdrawing the four screws securing the dial bracket at either end of the dial. Care should be taken during this operation to see that when released, the dial glass is carefully laid aside to avoid risk of breakage. The remaining mechanism of the dial 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. Remove chassis mounting screws.
6. The chassis may now be withdrawn.
7. Replacing the chassis may be accomplished by a reversal of the abovementioned withdrawal procedure.

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 may be adjusted by loosening the clamping screw on the pointer slider and moving the slotted wire tension guide in relation to the pointer slider.

After adjustment, tighten the clamping screw securely.

SERVICE DATA.

COMPONENT PARTS.

CONDENSERS. (PRICES QUOTED SUBJECT TO CHANGE WITHOUT NOTICE.)

No. on Circuit Diagram.	Value.	Code No.	Price.	No. on Circuit Diagram.	Value.	Code No.	Price.
C1	8 uF	52/521	3d.	C27	40 uF	52/438	2/9
C2	2.5 to 30 uF	54/313	8d.	C28	.01 uF	52/311	4d.
C3	2.5 to 30 uF	54/313	8d.	C29	.05 uF	52/314	7d.
C4	.0045 uF	52/222	11d.	C30	2.5 to 30 uF	54/313	8d.
C5, C6, C7	Gang Condenser	53/217	10/3	C31	80 uF	52/622	7d.
C8	100 uF	52/811	6d.	C32	25 uF	52/416	1/3
C9	.01 uF	52/311	4d.	C33	80 uF	52/622	7d.
C10	30 uF	52/518	3d.	C34	2.5 to 30 uF	54/313	8d.
C11	4 uF	52/529	3d.	C35	100 uF	52/811	6d.
C12	2.5 to 30 uF	54/313	8d.	C36	25 uF	52/416	1/3
C13	2.5 to 30 uF	54/313	8d.	C37	.1 uF	52/316	6d.
C14	.0045 uF	52/222	11d.	C38	.01 uF	52/311	4d.
C15	.05 uF	52/314	7d.	C39	.1 uF	52/316	6d.
C16	100 uF	52/811	6d.	C40	.1 uF	52/316	6d.
C17	.01 uF	52/311	4d.	C41	.1 uF	52/316	6d.
C18	2.5 to 30 uF	54/313	8d.	C42	.03 uF	52/335	6d.
C19	2.5 to 30 uF	54/313	8d.	C43	25 uF	52/528	3d.
C20	340 uF	52/251	7d.	C44	25 uF	52/528	3d.
C21	2.5 to 30 uF	54/313	8d.	C45	.03 uF	52/335	6d.
C22	80 uF	52/622	7d.	C46	.001 uF	52/343	8d.
C23	80 uF	52/622	7d.	C47	.01 uF	52/311	4d.
C24	2.5 to 30 uF	54/313	8d.	C48	.002 uF	52/333	7d.
C25	.01 uF	52/311	4d.	C49	.02 uF	52/312	6d.
C26	.05 uF	52/314	7d.	C50	.006 uF	52/326	8d.
				C51	.25 uF	52/319	11d.

RESISTORS.

No. on Circuit Diagram.	Value.	Code No.	Price.	No. on Circuit Diagram.	Value.	Code No.	Price.
R1	1 megohm	62/214	4d.	R16	400 ohm tapped at 100 ohm	64/250	6d.
R2	0.25 megohm	62/232	4d.	R17	1 megohm	62/418	5d.
R3	100,000 ohm	62/215	4d.	R18	1 megohm	62/418	5d.
R4	1 megohm	62/214	4d.	R19	2 megohm	62/244	4d.
R5	50,000 ohm	62/212	4d.	R20	0.25 megohm	62/415	5d.
R6	25 ohm	62/223	6d.	R21	.15 megohm	62/233	4d.
R7	50,000 ohm	62/212	4d.	R22	5000 ohm	62/217	4d.
R8	1,000 ohm	62/234	4d.	R23	1 megohm	62/214	4d.
R9	50,000 ohm	62/212	4d.	R24	1 megohm	62/214	4d.
R10	2 megohm	62/222	4d.	R25	50,000 ohm	62/212	4d.
R11	50,000 ohm	62/212	4d.	R26	50,000 ohm	62/212	4d.
R12	.1 megohm	62/215	4d.	R27	10,000 ohm	62/213	4d.
R13	.5 megohm potentiometer	63/611	5/-	R28	1000 ohm	62/234	4d.
R14	70,000 ohm	62/245	4d.	R29	25,000 ohm	62/218	4d.
R15	50,000 ohm	62/212	4d.	R30	0.25 megohm	62/415	5d.

COILS.

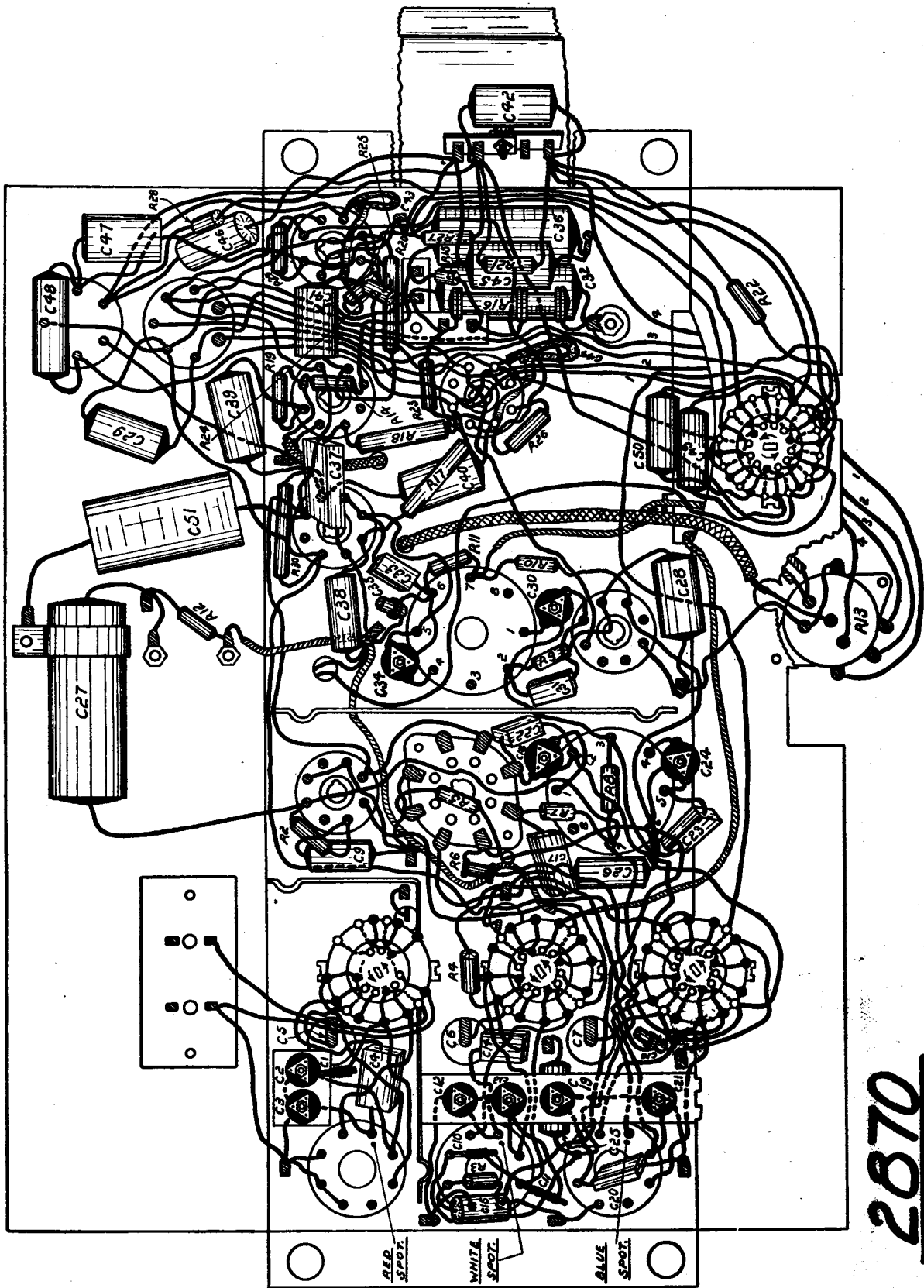
No. on Circuit Diagram.	Description.	Code No.	Price.	No. on Circuit Diagram.	Description.	Code No.	Price.
L1	30 ohms	42/723	4/3	L15	8 ohms	42/423	7/3
L2	3.5 ohms			L16	8 ohms		
L3	3.5 ohms			L11	1 ohm		
L4	_____			L12	2.5 ohms	42/232	4/3
L5	60 ohms			L13	_____		
L6	3.5 ohms	42/813	4/3	L14	_____		
L7	_____					L17	400 ohms
L8	_____			L18	_____		
L9	8 ohms	42/319	7/3	L19	1.8 ohms		
L10	8 ohms						

Speaker transformer only. 44/330 7/6

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**.

COMPONENT LOCATION DIAGRAM.

C.	15	25	32221M56	26.9	18.22	38.28	51	37.29.39	44	95.32.47.36	92	
C.	20	10	219846.7	17.23	24	27.31.34	363033	40.49.50		41.48.46	93	
R.	3			6	2.75.8	9	12.18.30.11	17.24.18.26.14.23	19	16.29.22.21.15.20.27	28	25



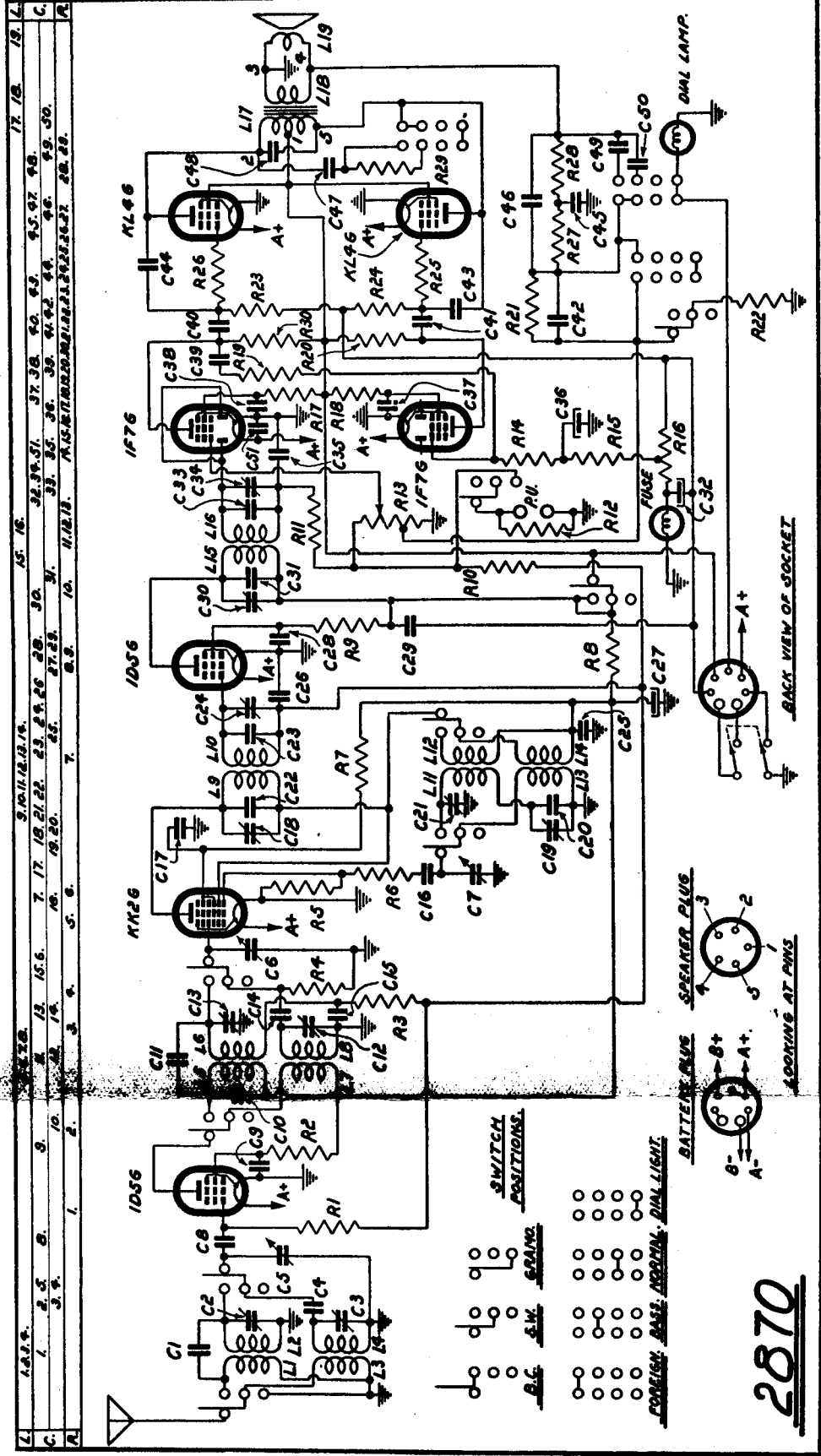
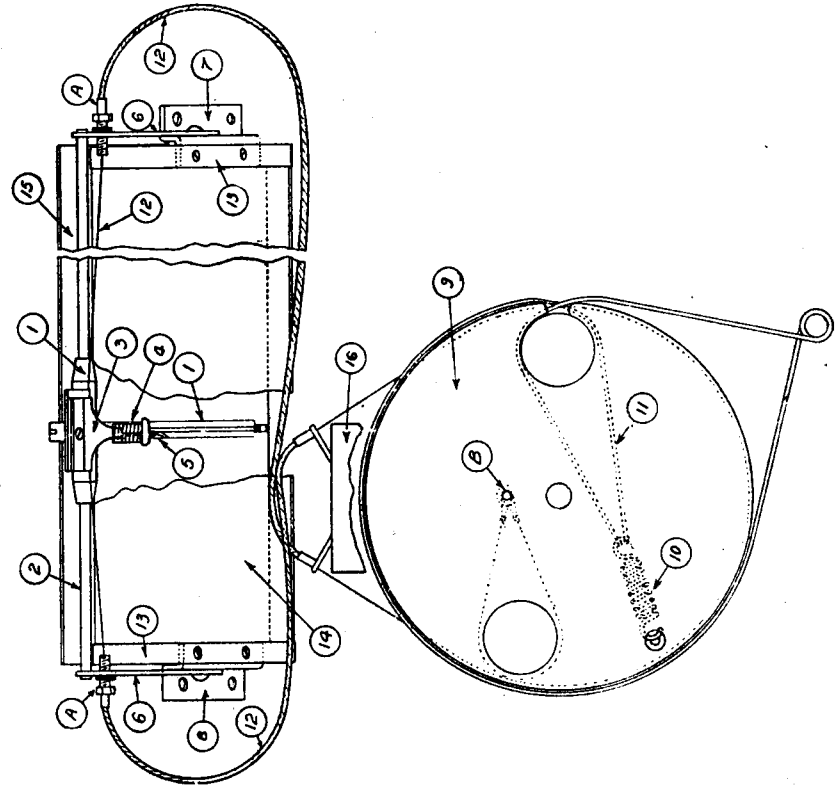
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VOLTAGE ANALYSIS.

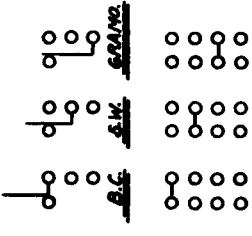
Valve Type.	Plate Voltage.	Screen Voltage.	Bias Voltage.	Osc. P. Voltage.	Filament Voltage.
ID5G (R.F.)	120	30	0	—	2
KK2G	120	50	0	120	2
ID5G (I.F.)	128	60	0	—	2
IF7G (DET.)	30	15	0	—	2
IF7G (DRIV.)	30	15	1.6	—	2
KL4G	126	128	7	—	2

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 per cent. from the figures quoted.

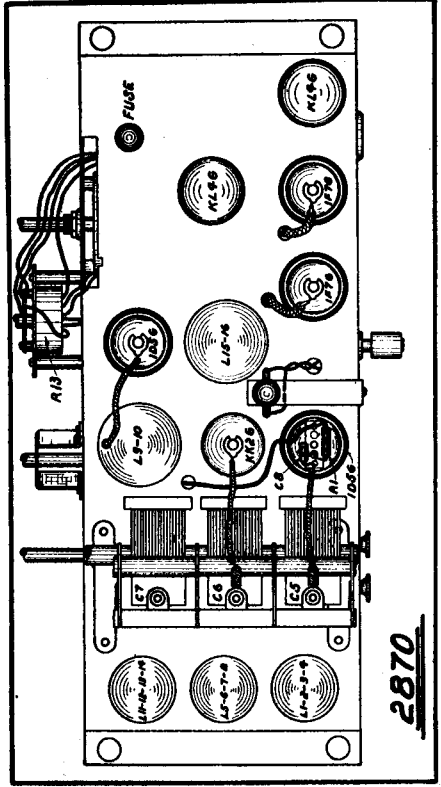


SWITCH POSITIONS.



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CHASSIS LAYOUT DIAGRAM.



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
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