

# PHILIPS RADIOPLAYER

## MODEL 2052 (with R.F. Stage)

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

**SPECIFICATIONS** (Subject to Alteration Without Notice.)

**VOLTAGE RATING** (Power Supply) 220-260 volts A.C.

**TUNING RANGE** 1550 to 540 Kc/s.  
8 to 22 Mc/s.

**INTERMEDIATE FREQUENCY** 472.5 Kc/s.

### VALVE EQUIPMENT.

**R.F. Amplifier**

**Frequency Converter**

**I.F. Amplifier & Demodulator**

**Power Amplifier**

**Rectifier**

**Tuning Indicator**

**Dial Lamp**

**6U7G R.F. Penthode**

**EK2G Octode**

**EBF2 Duo-diode Penthode**

**EL3G Power Penthode**

**5Y3G Full Wave**

**EM3**

**6.5 volt 0.64 amp. special type 8091D**  
(coloured).

### REMOVING THE CHASSIS.

Suggested removal procedure is as follows:

1. Remove the power plug.
2. Unscrew knobs at front of cabinet.
3. Withdraw loudspeaker plug at back of chassis.
4. Remove chassis mounting bolts.
5. Swing chassis around so that the front of dial drive drum (shown as "10" in drawing), is accessible. During this operation care should be taken that the flexible cable sheath is not kinked.
6. Slacken off brass sheath nipples ("A" in drawing), at either end of dial, so that tension on dial wire is relieved.
7. Lift off loops at end of dial drive wire from the drum at "B" and unwind wire from drum.
8. With the dial wire disconnected it will now be possible to clear the wire cable and sheath from the bracket ("11") and the chassis is free for removal, leaving the dial and associated mechanism in the cabinet.

### REPLACING THE CHASSIS.

This may be accomplished by a reversal of the above-mentioned removal process. Where the dial wire has been threaded into the drum in accordance with the illustration (care being taken that the disposition of the cables is exactly the same), the brass sheath nipples should be tightened so that there is a small amount of tension on the dial cable.

The chassis is next placed temporarily in position, the speaker plugged in and power supplied to the Radioplayer. Calibration is now checked by tuning the set (see separate paragraph on calibration), and if O.K. the chassis can be bolted down, the knobs fitted and the set is again ready for use.

### ALTERNATIVE METHOD.

If preferred, the following alternative method of chassis removal may be adopted:

1. Remove power 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 brackets 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. The chassis may now be withdrawn.
6. Replacing the chassis where the second method of withdrawal is followed, is simply a matter of reversing the 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 can 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.

### GRAMOPHONE PICK-UP OPERATION.

This may be accomplished by connecting a gramophone pick-up to the appropriate terminals at the rear of chassis and turning the wave-change switch to the "gramo" position.

One small point requires special attention; the pick-up leads proper should not be used as earth returns for the motor, pick-up or sheathing leads.

Earth return for any of these items must be made direct to the main chassis earth, or equivalent of same.

Earthing of either of the pick-up leads will result in defective operation.

### TUNING INDICATOR.

The tuning indicator support is secured to the dial bracket by a hexagon clamping screw located at the side of same. This screw should be released if adjustment or replacement of the tuning indicator becomes necessary.

**COMPONENTS NOT SHOWN ON CIRCUIT DIAGRAM.**

Diagram No.	Description.	Code No.	Price.	Diagram No.	Description.	Code No.	Price.
—	Wave change switch complete	74/213	10/6	2, A, 15,	Dial wire assembly complete	26/318	3/—
—	"P" type valve socket	34/516	4d.	14, 12, 13	Dial glass, printed	33/533	5/9
—	Trimmer support (5 unit)	33/421	8d.	—	Dial slider rod	24/252	1/6
—	Trimmer support (2 unit)	33/422	6d.	1	Dial adjusting bracket	23/444	6d.
—	Octal socket, wafer type	34/546	4d.	6	Glass pointer rod	33/524	6d.
—	Octal socket, amphenol type	34/521	6d.	3	Tuning control bracket	24/442	6d.
—	Small 7-pin socket	34/542	6d.	—	Tuning control spindle	24/242	9d.
—	Control knob	32/229	7d.	—	Baffle silk only	35/221	4/6
11	Cable securing bracket	23/443	1/6	—	Tuning indicator bracket (socket holder)	23/463	8d.
4	Pointer clamp and slider	24/519	2/6	—	Tuning indicator bracket (assembly mtg.)	23/469	9d.
7	Dial mounting brackets	23/441	6d.	—	Tuning indicator rear cover	23/519	7d.
10	Dial drum	32/226	2/8	—	Electrolytic mounting base	24/721	6d.
9	Dial spring	25/211	2d.	—	Valve shield and cap	24/663	7d.
8	Dial cord	35/313	5d.	—	Valve shield base	24/665	3d.
5	Pointer counter weight	24/475	3d.	—	Lamp bracket and sockets (also part of 2nd I.F.)	23/471	1/3
—	Power flex only	26/211	1/9				
—	Tone control switch	74/414	1/10				
—	Chassis mounting grommet	32/311	2.				
—	No. 20 cabinet	33/637	£6/15/—				

**VOLTAGE ANALYSIS.**

Valve Type	Plate Voltage	Screen Voltage	Bias Voltage	Heater Voltage (A.C.)
6U7G	210	80	1.5	6.3
EK2G	190 (Osc. p.=190v.)	45	2	6.3
EBF2	220	70	0	6.3
EL3C	195	220	5.5	6.3
5Y3C	300 volts A.C. per plate			5.0
EM3	—	—	—	6.3

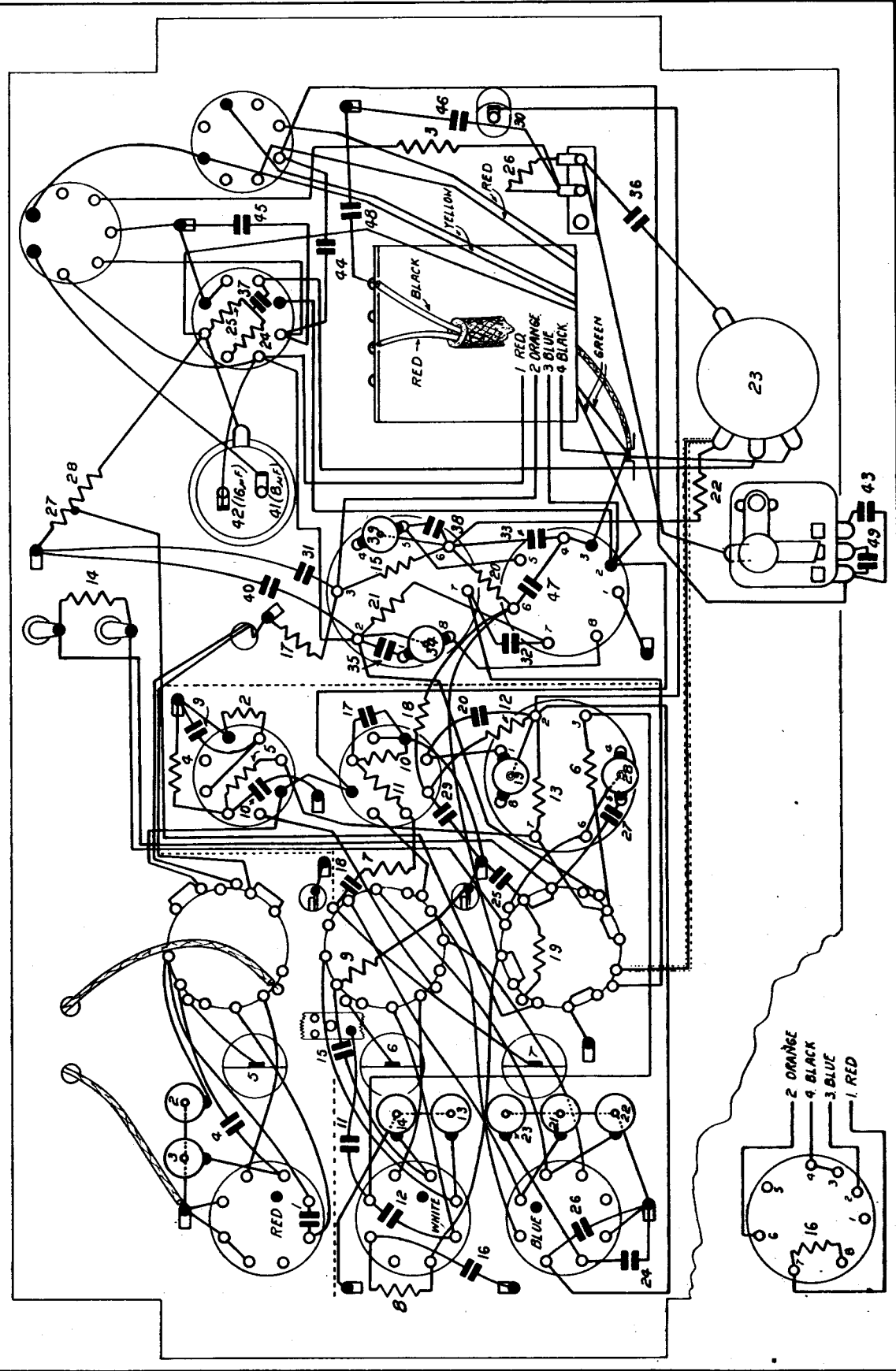
**NOTE:** The abovementioned voltage values, with the exception of bias voltages, are measured between the socket points indicated and chassis with the receiver in the no-signal condition and with the volume control at zero. Bias voltages are to be measured at the source of the voltage, as incorrect 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.



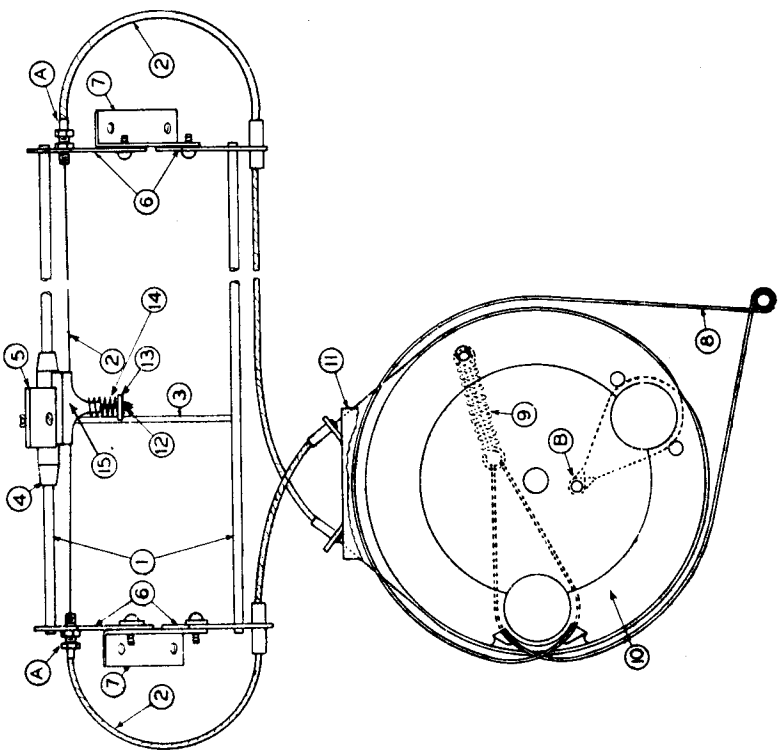
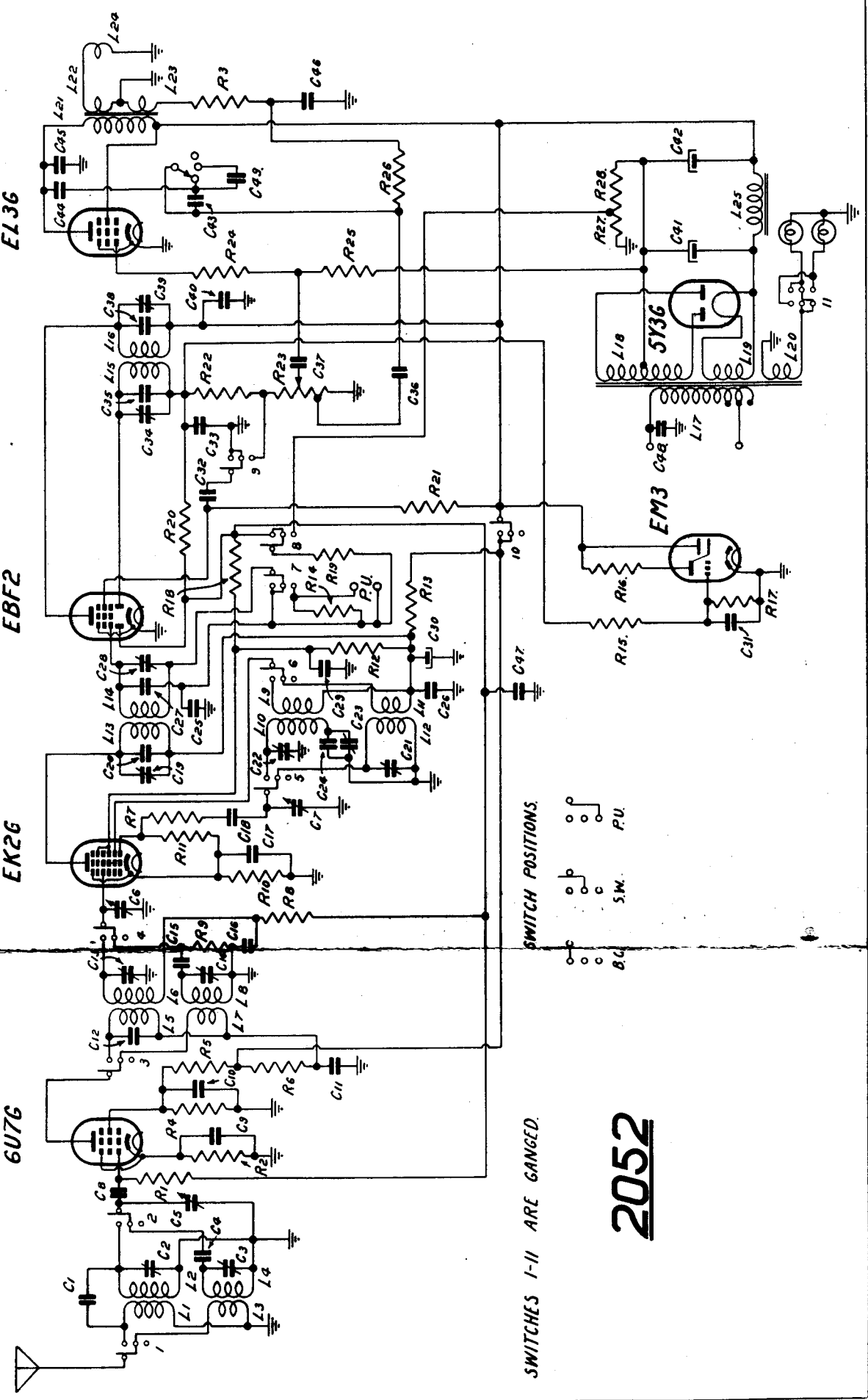


COMPONENT LOCATION DIAGRAM.

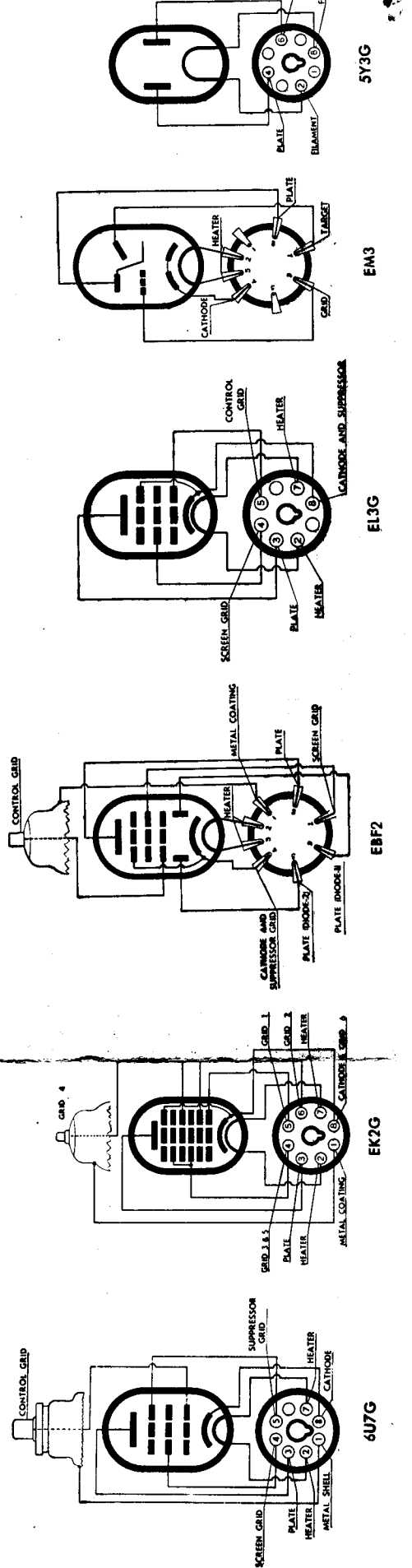
C.	1.	3, 2, 21, 11, 5, 7, 16	25.	27, 29, 19.	17, 9.	35.	47, 31, 49, 33, 39, 41, 43	37.	45.
C.	2, 16, 26, 12.	4, 22, 14, 2, 6.	18.	10, 28.	20.	32, 34, 40.	38, 42	44.	48, 36.
R.	8.	19.	9.	7.	13, 11, 6, 4, 10, 18, 12, 2.	17.	21, 14, 15, 20, 27, 22, 28.	23.	24, 25.
R.	14.							26.	3.



L	1.3	2.4	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
C	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	
R	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



DIAL PARTS DIAGRAM



CHASSIS LAYOUT DIAGRAM