

PHILIPS RADIOPLAYER MODEL 1852.

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

SPECIFICATIONS (Subject to Alteration Without Notice.)

Voltage Rating (Power Supply) 220 to 260 volts A.C.

Tuning Range 1,550 to 540 Kc/s.
8 to 22 Mc/s.

Intermediate Frequency 472.5 Kc/s.

Ned. Ver. v. Historie v/d

VALVE EQUIPMENT

Frequency Converter

I.F. Amplifier

Demodulator, A.V.C.
and Audio Amplifier

Power Amplifier

Rectifier

Dial Lamp

EK2G Octode

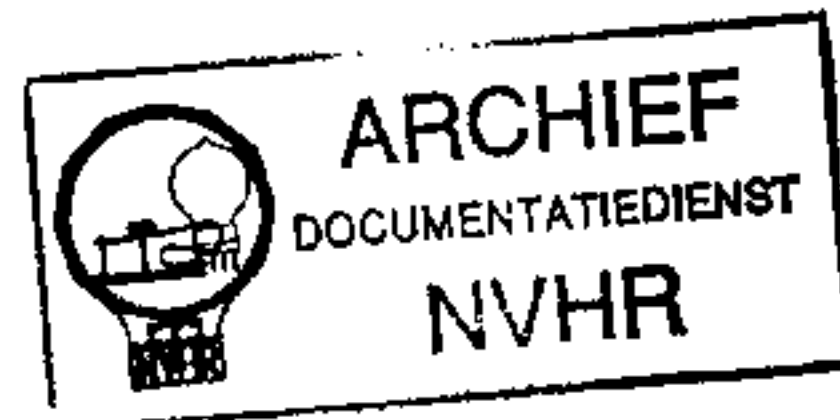
6U7G R.F. Penthode

6B6G Duo-diode Triode

EL3G Power Penthode

5Y3G Full-wave

Special type 8091D 6.3 volt 0.64 A.



VOLTAGE ADJUSTMENT.

The receiver may be adapted for A.C. mains of 220, 240 or 260 volts by means of taps located on the power transformer.

Special receivers for 110 volt operation can be supplied on request. It is important that the Radioplayer should be operated with the red lead of the power flex connected to the tap which most nearly corresponds to the mains voltage where the installation is made.

REMOVING THE CHASSIS.

The mechanical arrangement of the dial is such that portion of the unit is mounted on the cabinet proper. This is connected to the chassis by flexible cables. In removing the chassis from the cabinet it is not necessary to detach the dial glass proper and associated mechanism.

The following procedure is recommended:

- (1) Remove power plug from mains socket.
- (2) Remove knobs at front of cabinet (recessed grub screws).
- (3) Disconnect loudspeaker cord connectors (at the same time note colour scheme to facilitate re-connection).
- (4) Remove chassis mounting bolts.
- (5) Swing chassis around so that the front of the dial drive drum (shown as "10" in drawing) is accessible. During this operation care should be taken that the flexible cable sheath ("2" in drawing) 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. When 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 connected and power applied 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.

DIAL CALIBRATION.

If the pointer does not indicate the correct position for tuning 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 ("15") in relation to the pointer clamp and slider ("4"). After adjustment tighten the clamping screws securely.

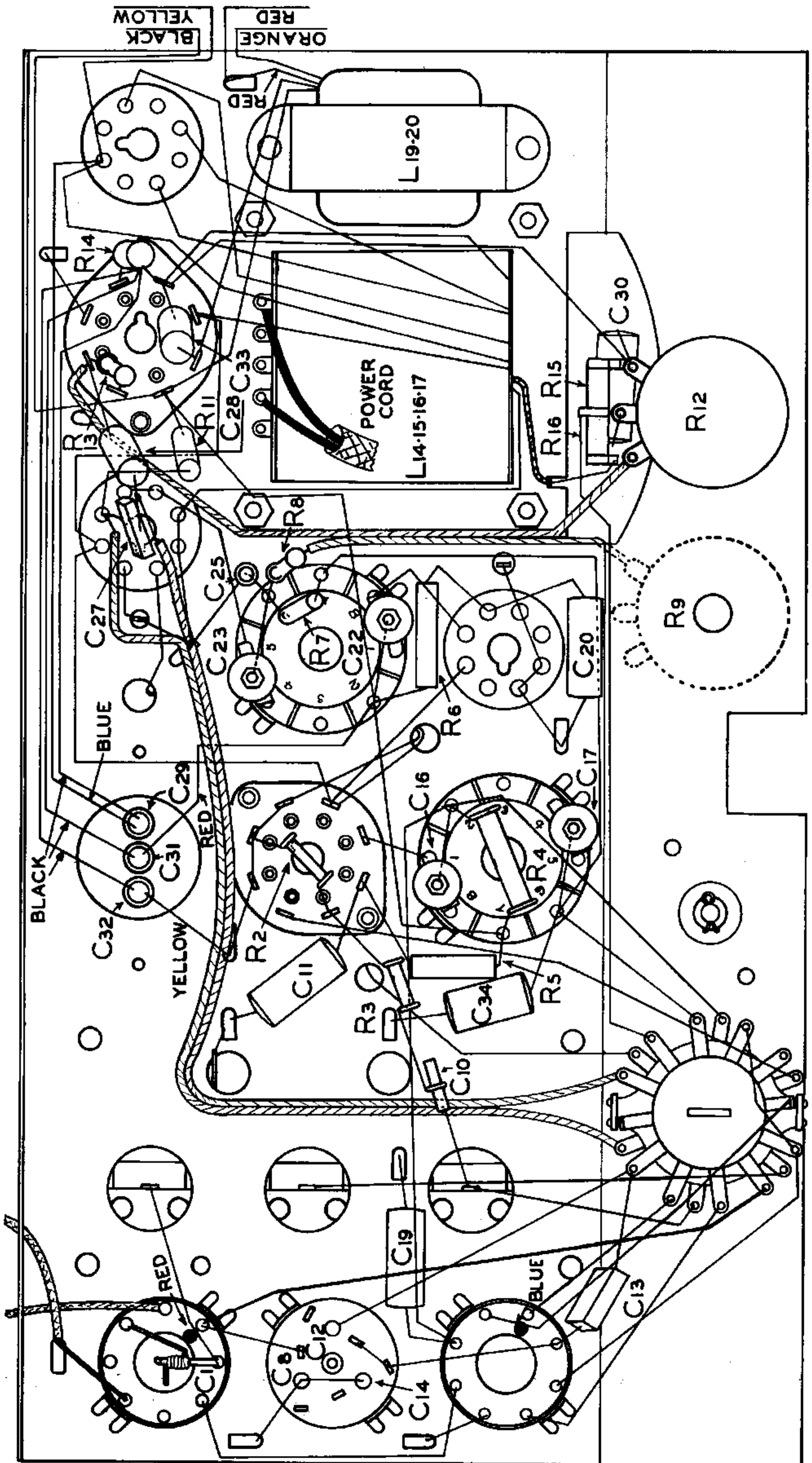
DIAL POINTER.

The sharpness of the light image projected by the glass pointer on to the scale depends on the distance that the glass rod is spaced away from the scale. Adjustable brackets (shown as "6" in the drawing) are provided so that the position of the slide bars (1) can be adjusted and accordingly vary the focus of the pointer. The lower end of the pointer is kept close to the dial scale by a counter-weight and, therefore, it is the upper slide rod that will be mainly varied to change the focus of the pointer. Under normal circumstances where the dial scale has not been removed or tampered with in any way, focussing of the pointer will be unnecessary; in fact, even if the entire dial scale mechanism is taken out of the cabinet, there is no need to alter the original adjustment of the brackets "6" and the focussing should be satisfactory when the parts are restored.

SERVICE DATA.

COMPONENT LOCATION DIAGRAM.

C	14.1.8.12.13.19.	10.	34.11.32.	31.	16.2917.	20.22.23.27.25.	28.	33.	30.	C
R	3 5 2 4	6	7 9	8	13.16.12.11.5	14				R



SERVICE DATA.

COMPONENT PARTS

CONDENSERS (PRICES QUOTED ARE STRICTLY NETT, AND ARE SUBJECT TO ALTERATION WITHOUT NOTICE.)

No.	Value	Code No.	Price.	No.	Value	Code No.	Price.
C1	8 μ F	52/521	3d.	C18	Part of Coil 42/315		
C2	Tuning Gang	53/213	9/6	C19	.01 μ F	52/311	4d.
C3				C20	.01 μ F	52/311	4d.
C4				C21	Part of Coil 42/419		
C5				C22	2.5-30 μ F	54/313	8d.
C6				C23	2.5-30 μ F	54/313	8d.
C7				C24	Part of Coil 42/419		
C8				2.5-30 μ F	54/313	8d.	C25
C9	100 μ F	52/811	6d.	C26	.01 μ F	52/311	4d.
C10	100 μ F	52/811	6d.	C27	.001 μ F	52/218	8d.
C11	.01 μ F	52/311	4d.	C28	.01 μ F	52/311	4d.
C12	2.5-30 μ F	54/313	8d.	C29	16 μ F	52/422	8/8
C13	420 μ F	52/236	7d.	C31	8 μ F		
C14	2.5-30 μ F	54/313	8d.	C32	25 μ F		
C15	Part of Coil 42/315			C30	.006 μ F	52/323	8d.
C16	2.5-30 μ F	54/313	8d.	C33	.004 μ F	52/324	7d.
C17	2.5-30 μ F	54/313	8d.	C34	.01 μ F	52/332	4d.

NOTE: C34, which does not appear in circuit, is connected between the moving arm of Switch "5" and chassis.

RESISTORS

No.	Value.	Code No.	Price.	No.	Value.	Code No.	Price.
R1	1 megohm	62/214	4d.	R9	0.5 megohm pot.	63/214	3/3
R2	50,000 ohm	62/212	4d.	R10	0.5 megohm	62/216	4d.
R3	25 ohm	62/223	6d.	R11	0.25 megohm	62/415	5d.
R4	10,000 ohm	62/422	5d.	R12	0.5 megohm pot.	63/416	3/3
R5	150,000 ohm	62/414	5d.	R13	50,000 ohm	62/212	7d.
R6	60,000 ohm	62/413	5d.	R14	150 ohm	64/213	5d.
R7	1 megohm	62/214	4d.	R15	100 ohm	64/221	6d.
R8	50,000 ohm	62/212	4d.	R16	125 ohm		

COILS

No.	Value.	Code No.	Price.	No.	Value.	Code No.	Price.		
L1	30 ohms	42/712	4/3	L12	7.5 ohms	42/419	7/9		
L2	—			L13	7.5 ohms				
L3	4.0 ohms			42/216	5/-	L14	—	44/212	13/-
L4	—					L15	—		
L5	3.5 ohms	L16	—						
L6	2.5 ohms	L17	—						
L7	—	L19	600 ohms			44/312	6/-		
L8	—	L20	0.5 ohms						
L9	—								
L10	7.5 ohms	42/315	7/9						
L11	7.5 ohms								

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**.

VOLTAGE ANALYSIS

Valve Type	Plate Voltage	Screen Voltage	Bias Voltage	Heater Voltage (A.C.)
EK2G	200 (osc. p. 200v.)	55	-2	6.3
6U7G	245	100	-2	6.3
6B6G	100	-	-1.5	6.3
EL3G	220	245	-5.5	6.3
5Y3G	300 volts A.C. per plate.			5.0

NOTE:

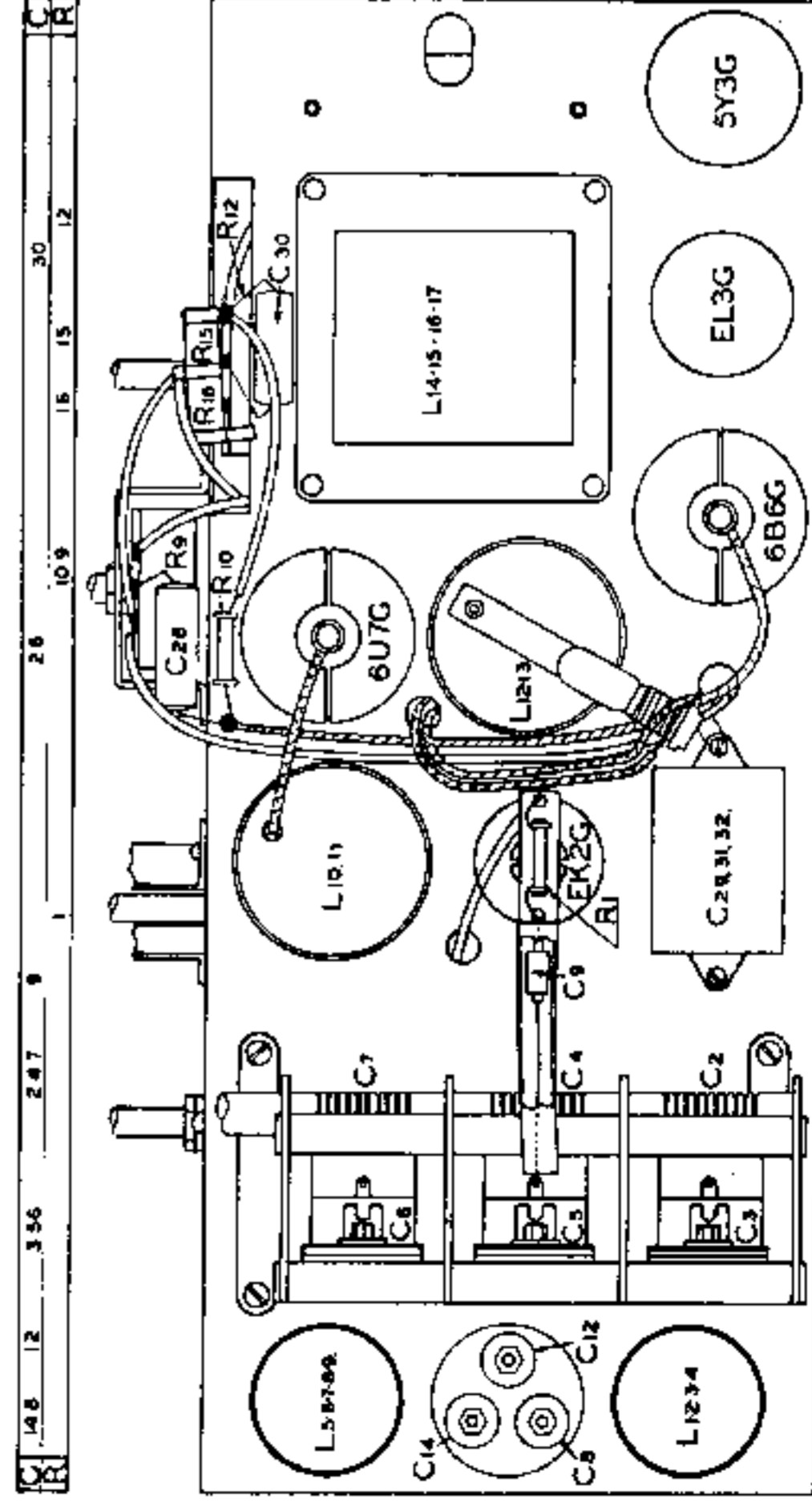
The abovementioned voltage values, with the exception of bias voltages, are measured between the socket points indicated and chassis, with the receiver in the no signal condition and with the volume control at zero. Bias voltages are to be measured at the source of the voltage, as incorrect readings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

LOUD SPEAKER CONNECTIONS.

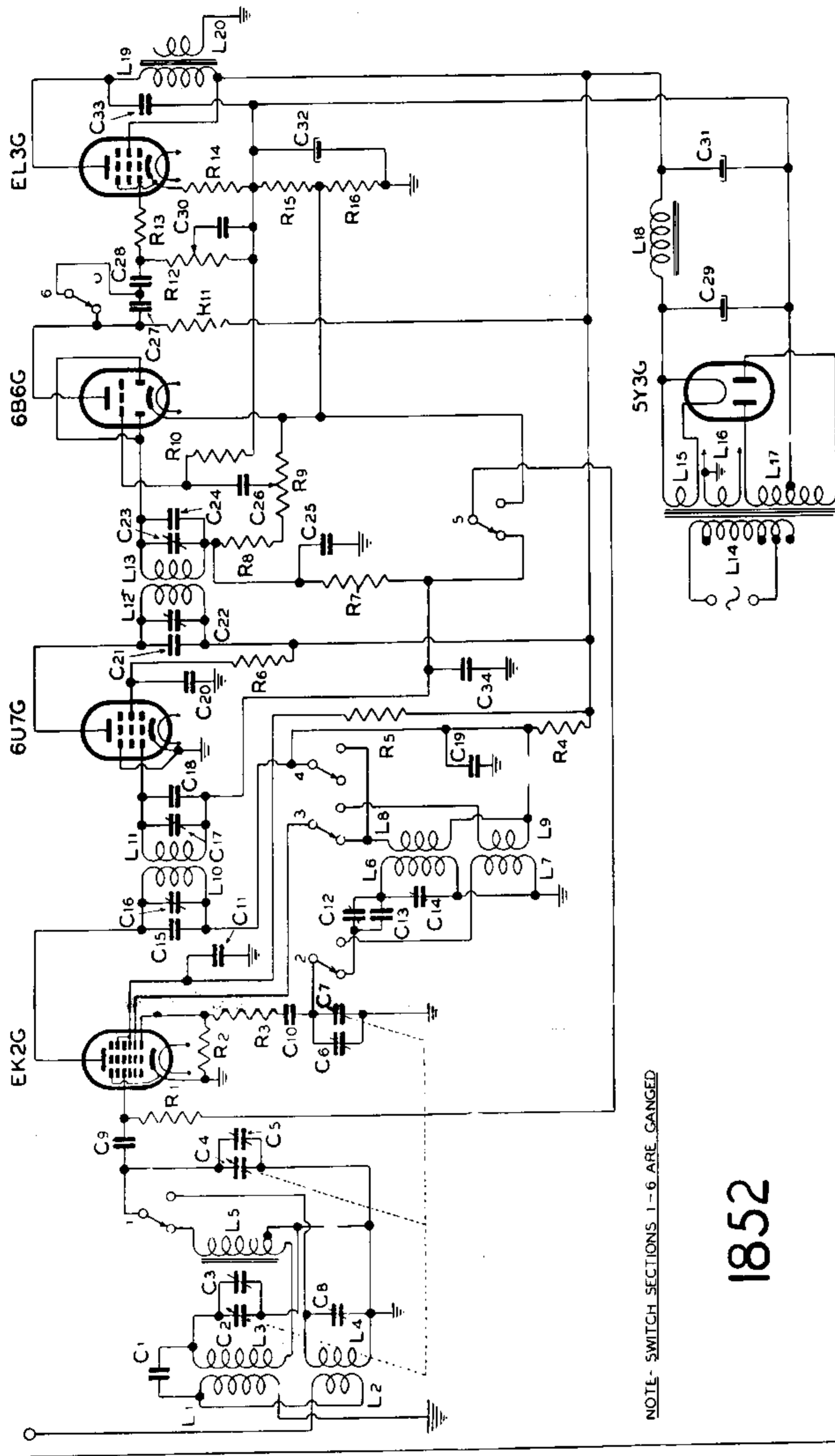
The speaker leads (voice coil and field) in this model are joined by connectors.

If after disconnecting and re-connecting the speaker and chassis for any purpose, it is found that the hum level in the speaker is high, this will most likely be due to reversal of the voice coil (red and orange) leads. The remedy is to change over the red and orange leads at the connectors.

CHASSIS LAYOUT DIAGRAM.



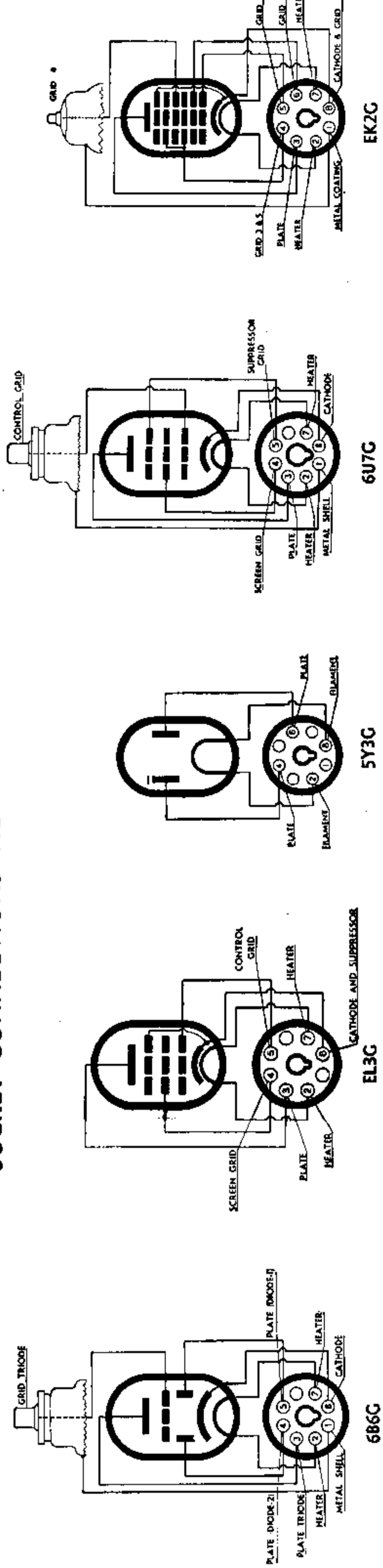
L	1.2	3.4	5	4.95	6.10	7	15.16	12	13.14	15.17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
C	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
R	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28



NOTE - SWITCH SECTIONS 1-6 ARE GANGED

1852

SOCKET CONNECTIONS VIEWED FROM BOTTOM OF BASE.



SERVICE DATA.

COMPONENTS NOT SHOWN ON CIRCUIT DIAGRAM

(SEE DIAL DIAGRAM)

No. on Diagram.	Description.	Code No.	Price	No. on Diagram.	Description.	Code No.	Price.
1	Dial slide rod	24/252	1/6		No. 18 Cabinet	33/619	£4/12/6
2	Dial wire assembly comp.	26/318	3/-		Control knob	32/229	7d.
3	Glass pointer rod	33/522	6d.		Loudspeaker unit (less transformer)	45/313	15/6
4	Pointer clamp and slider	24/519	2/6		Tone control extension spindle	24/241	9d.
5	Slide counter weight	24/475	3d.		Amphenol type octal socket	34/521	6d.
6	Dial adjusting brackets	23/444	6d.		Wafer type octal socket	34/546	4d.
7	Dial mounting bracket	23/441	6d.		Trimmer mounting disc	33/416	5d.
8	Dial drive cord	35/313	5d.		Panel lamp holder	24/644	6d.
9	Cord tension spring	25/211	2d.		Goat type valve shield	24/615	5d.
10	Dial drum (Philite)	32/226	2/8		Valve shield earthing clip	24/616	2d.
11	Cable support gang bracket	23/443	1/6		Wave change clicker plate	72/212	2/3
12	Wire clamp	24/222	2d.		Wave change switch section	73/411	2/-
13	Tension spring cap	24/323	2d.		Volume control mounting brkt.	23/442	9d.
14	Wire tension spring	25/218	3d.		Rubber chassis mounting grommet	32/311	2d.
15	Wire tension guide	24/454	7d.		Brass bush for above grommet	24/218	2d.
	Tuning control spindle	24/242	9d.		Connector for speaker cable	34/555	6d.
	Tuning control mtg. bracket	24/442	6d.				
	Dial glass (printed)	33/523	5/6				
	Baffle silk	35/218	4/6				

