CHAPTER VI.

SERVICING.

1. GENERAL.

Since all connections to the receiver B29 are made on the front panel, the receiver may be wired up and operated when the chassis is removed from the cabinet, but instability may sometimes occur in these circumstances.

The best position in which to operate the receiver when it is withdrawn from the cabinet for servicing is lying on its left side with the bottom of the chassis towards the operator, so that the majority of the components and connections are readily accessible.

NOTE:- No attempt should be made to alter the ganging of the receiver unless a false bottom is fitted to the chassis, holes being drilled in it to allow access to the ganging trimmer controls.

Figure 2 is a servicing diagram of the receiver and gives the point-to-point wiring of the model, while Figs.5 and 6 show the location of the major components. The identity numbers used in Fig.2 are marked on the majority of the components in the receiver.

2. REPLACEMENT OF VALVES.

When Receiver B29 is bench mounted, the valves may be replaced by opening the lid in the top of the receiver, which is secured by two captive screws. When the receiver is rack-mounted, however, the top lid cannot be opened and valve replacements must be effected by removing the chassis from the cabinet.

A list of the valves used with their commercial and American equivalents is given below:-

Position in Set.	Service Type.	Commercial Type.	American Type.
1st R/F Amplifier.	VR100	KTW62	6K7G
2nd R/F Amplifier.	VR100	KTW62	6K7G
Detector/Oscillator.	VR99	X66	6K8G
1st A/F Amplifier.	NR68	DH63	6Q7G
2nd A/F Amplifier.	6J5G (Patt.W1528A)	L63	6J5G
Rectifier Valve.	VU71A	-	5U4G

3. POINT-TO-POINT RESISTANCES.

The following figures give the point-to-point resistance measurements of the receiver under the following conditions:-

(i) All valves and lamps removed from the receiver.

(ii) The supply change-over link board (111) set to "Battery".

(iii) The H/F gain control (41) set to maximum (fully clockwise).

(iv) The operating switch (87) set to "Osc. On - Filter In".

(v) The band change switch (10) set to range 4.

The resistances given below are approximate, but in no case should the resistance measured depart widely from that specified. All resistances are given in ohms except where otherwise stated.

TERMINAL BOARD.

Test between	Supply Switch. ON.	Supply Switch. OFF.
L.T. + and L.T.-	Infinity	Infinity
H.T. + and L.T.-	41,200	Infinity
Earth terminal and chassis.	0	0
L.S. Terminals.	Infinity	Infinity
Phone Jack.	24	24

VALVE SOCKETS.

Valve.	Test between Socket No.	and	H.T.+	L.T.+	Earth.
1	2		Infinity	0	Infinity
	3		5,000	Infinity	46,200
	4		40,300	"	40,300
	5		1,041,200	"	1 megohm
	7		41,200	"	0
	8		42,400	"	1,200
	Top Cap		41,200	"	3
2	2		Infinity	0	Infinity
	3		5,000	Infinity	46,200
	4		40,300	"	40,300
	5		1,041,200	"	1 megohm
	7		41,200	"	0
	8		42,400	"	1,200
	Top Cap		41,200	"	3
3	2		Infinity	0	Infinity
	3		100,000	Infinity	141,200
	4		100,000	"	141,200
	5		1,041,200	"	1 megohm
	6		30,000	"	71,200
	7		41,200	"	0
	8		41,200	"	0
	Top Cap		2,041,200	"	2 megohms
4	2		Infinity	0	Infinity
	3		100,000	Infinity	141,200
	4		Infinity	"	Infinity
	5		"	"	"
	7		41,200	"	0
	8		42,400	"	1,200
	Top Cap		45,200	"	4,000
5	2		Infinity	0	Infinity
	3		1,800	Infinity	43,000
	5		41,720	"	520
	7		41,200	"	0
	8		43,200	"	2,000

The mains section should be tested as follows, with the supply change-over link board (111) set to "Mains".

Test between.	Resistance.
Valve 6, pins 2 and 8.	0.13 ohms.
" pins 6 and 4.	330 ohms.
" pins 2 and fuse (112).	1,200 ohms.
Valve 5, pins 2 and 7	0.115ohms.
"50 cycle supply" terminals with supply switch (113) ON.	22 ohms.

4. VOLTAGES AND CURRENTS.

The following figures give the values of voltage and current to be found at various points of the receiver under the following conditions:-

(i) All valves and lamps in place in receiver.

(ii) The supply change-over link board set to "Mains".

(iii) The supply switch (113) set to "ON" and an A.C. supply of appropriate voltage connected to the "50 cycle supply" terminals.

(iv) The band change switch (10) set to Range 4.

(v) The operating switch (87) set to "Osc. on - Filter in".

The currents and voltages should not differ widely from those given below:-

VOLTAGES.

Test between.	Voltage.
Valve 6, pin 4 and earth.	214 V. A.C.
" pin 6 and earth.	214 V. A.C.
" pin 2 and earth.	234 V. A.C.
" pins 2 and 8.	5 V. A.C.
Valve 5, pin 2 and earth.	6.5 V. A.C.
Fuse (on link board) and earth.	218 V. A.C.

CURRENTS.

Test points.	Current.
Remove fuse and connect meter in lieu.	19 mA. with Osc. off. 22 mA. with Osc. on.

For the following measurements the resistances must be disconnected on the H.T. side and the meter connected between the resistance and the H.T. line.

R12 (Valve 1)	2.0 mA.
R14 (Valve 2)	2.5 mA.
R17 (Valve 3)	1.5 mA. with Osc.off. 0.5 mA. with Osc.on.
R18 (Valve 4)	1.0 mA.
R19 (Valve 5)	4.2 mA.

5. GANGING.

The operation of ganging the R/F circuits of the receiver must be attempted only after a false bottom pierced with holes for adjusting the various trimmers. has been fitted

to the chassis. The inductance trimmers are operated by the screws found in the centres of the screening cans, while the capacity trimmers are the normal preset condensers mounted on the cans.

In the following, the "top" of the range means the higher frequency end of the range, while the "bottom" is the lower frequency end.

The procedure for ganging the R/F circuits of the receiver is as follows:-

(i) Make the Supplies switch and set the operating switch to "Osc. on - Filter in". Allow the receiver to warm up for 15 minutes.

(ii) Connect the output of a G35 Oscillator to the top cap (grid) of V3 through a large condenser.

(iii) Set the band change switch to range 4 and the tuning control to 240 kc/s.

(iv) Connect an A.C. voltmeter or avometer across the 5,000-ohm output terminals of the receiver to give an indication of the output. In all the following tests the input to the receiver must be adjusted by ranging the output of Oscillator G35 to ensure that there is no overloading in the receiver. The crash filter must be switched "Out".

(v) Note the setting of the Oscillator G35 which gives maximum output from the receiver and adjust the inductance trimmer of the Range 4 "Oscillator" circuit so that this coincides with the calibrated frequency, i.e. 240 kc/s.

(vi) Set the tuning control at 560 kc/s and adjust the capacity trimmer of the tuned circuit for correct calibration.

(vii) Set the band change switch to range 3 and adjust "Oscillator" inductance trimmer at the bottom of this range and the capacity trimmer at the top of the range as shown in Fig.8, i.e. at 90 and 220 kc/s respectively.

(viii) Adjust trimmers of ranges 1 and 2 similarly.

(ix) Connect the output from the G35 to the grid (top cap) of V2 and adjust the trimmers of the "mixer" tuned circuits as described. Repeat the operations until a stable condition is obtained, always adjusting the inductance trimmer at the bottom and the capacity trimmer at the top of each range.

(x) Connect the G35 to the grid (top cap) of V1 and gang the second R/F circuits as before.

(xi) Connect the output from the G35 to the aerial terminal using a dummy aerial of 100 mmfd. capacity and adjust the first R/F circuits as before. For this operation the input switch should be put to the "Std. By" position.

(xii) Check that the aerial tuning condenser covers the range on all bands by setting the input switch to "Tune". If necessary the inductance of the aerial inductances may be adjusted by the trimmers.

(xiii) Check the adjustment of all the tuned circuits when the first R/F and aerial trimmers have been adjusted.

In ganging, the R/F gain control should be kept somewhere between half and three-quarters of the way to maximum.

6. A/F RESPONSE.

The procedure for adjusting the A/F filter is as follows:-

(i) Connect the output of an A/F oscillator through a 0.1 mfd. condenser to the grid of V3. Connect an output meter to the 5,000-ohm output terminals of the receiver.

(ii) Set the oscillator to approximately 1,000 c.p.s. and operating switch of the receiver to "Osc. off - Filter in".

(iii) Connect a 100,000-ohm resistance across the trimmer of the first section of the filter (C.33) and adjust the trimmer of the second section (C.34) for maximum output from the receiver.

(iv) Remove the resistance from C.33 and connect it across C.34. Now adjust C.33 for maximum output from the receiver.

(v) Remove the resistance from C.34 and the operation is completed.

NOTE:- If for any reason the adjustment of the A/F filter is disturbed it will probably be necessary to re-gang the oscillator circuits to obtain a beat note corresponding to the pass frequency of the filter.

Figure 7 shows the response curves of the receiver with and without the filter in circuit.

7. SPARES.

The following spares are supplied with Receiver B29 on first fitting:-

1 Plug, single, 3-point, with lead, Pattern 7151.
2 Receivers, telephone, equalised type, Pattern W.621.
1 Box of spares for Receiver B29, comprising:-

1	resistance,	1,250-ohms,	Erie R.M.A.	No.9.	
1	"	2,000-ohms,	" "	"	
1	"	5,000-ohms,	" "	"	Patt. W.3347.
1	"	50,000-ohms,	" "	No.8.	
1	"	500,000-ohms,	" "	No.9.	
1	"	1 megohm,	" "	"	Patt. W.3352.
1	"	2 megohms,	" "	"	
1	condenser,	100 mmfd.	Dubilier Type 635,	Patt.W2985.	
1	"	3½-30 mmfd.	Polar Type S.607.		

1 condenser, 1 mfd. 2 tag Muirhead Type 134N.
1 " 0.1 mfd. 1-tag Dubilier.
1 " 0.0001 mfd. Dubilier Type 690W.
2 condensers, 8+8+8 mfd. T.C.C. electrolytic, Patt.W.298.
2 fuses, Belling-Lee, Type 1055/250 mA.
2 grid clips for top caps of valves.
1 potentiometer, 100,000-ohms, Painton Type CV5.
6 lamps, 6.5-volt, 0.3-amp, Ever Ready No.2116.
4 valves, VR100 (V1 and V2).
2 valves, VR99 (V3).
2 valves, NR68 (V4).
2 valves, 6J5G (V5).
2 valves, VU71A (V6).

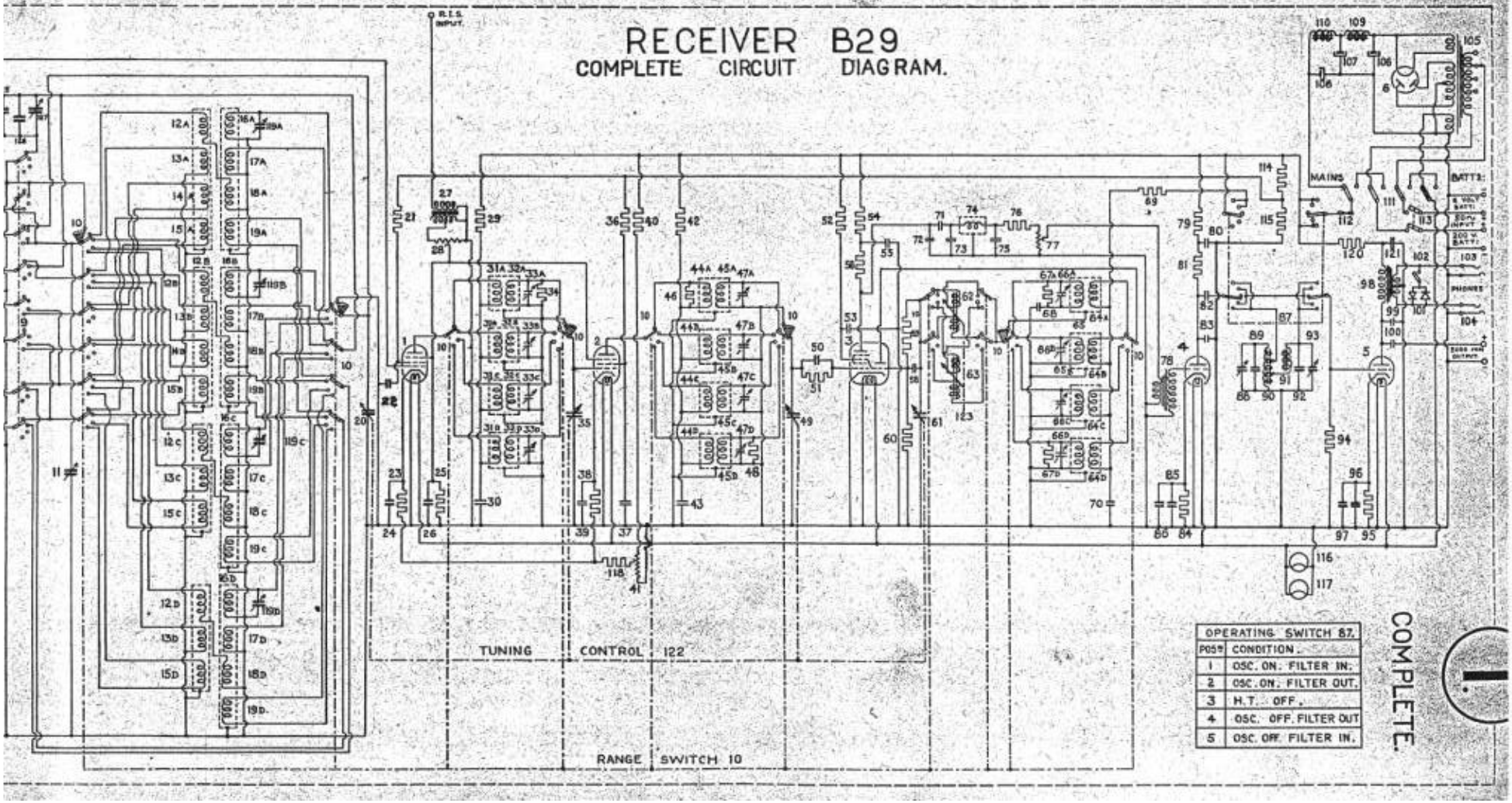
LIST OF IDENTITY NUMBERS.

1.	First R/F Amplifier Valve, VR100.		V1
2.	Second R/F Amplifier Valve, VR100.		V2
3.	Detector/Oscillator Valve, VR99.		V3
4.	First A/F Amplifier Valve, NR68.		V4
5.	Second A/F Amplifier Valve, 6J5G.		V5
6.	Rectifier Valve, VU71A.		V6
7.	Gas-gap Arrestor, Pattern 8431.		SG1
8.	Input Jack, P.O. Gauge "A", Pattern 676.		J1
9.	Input Switch, Oak 2-section.		S4
10.	Range Switch, Oak 12-section.		S6
11.	Aerial Tuning Condenser, Polar.		C6
12.	Aerial Tuning Inductance,	"A" Range I,	L1
13.	Aerial Coupling Inductance,	"B" Range II,	L2
14.	High Impedance Loop Aerial Coupling Inductance,	"C" Range III,	L3
15.	Low Impedance Feeder Coupling Inductance,	"D" Range IV,	L4
16.	First R/F Tuning Inductance,	"A" Range I,	L5
17.	"Stand-by" Aerial Coupling Inductance,	"B" Range II,	L6
18.	Tuned Circuit Coupling Inductance,	"C" Range III,	L7
19.	"Stand-by" Feeder Coupling Inductance,	"D" Range IV,	L8
20.	Input Main Tuning Condenser, ganged with 35, 49 and 61.		C1
21.	First R/F Valve Screen Decoupling Resistance, 5,000-ohms.		R11
22.	First R/F Valve Screen Decoupling Condenser, 0.1-mfd.		C47
23.	First R/F Valve Cathode Decoupling Resistance, 1,250-ohms.		R1
24.	First R/F Valve Cathode Decoupling Condenser, 0.1 mfd.		C40
25.	R/F Valves Suppressor Grid Leak Resistance, 1-megohm.		R30
26.	R/F Valves Suppressor Grid Bypass Condenser, 0.02 mfd.		C62
27.	R.I.S. Transformer.		T4
28.	R.I.S. "Suppressor Control" Potentiometer, 0.1-megohm.		P3
29.	First R/F Valve Anode Decoupling Resistance, 5,000-ohms.		R12
30.	First R/F Valve Anode Decoupling Condenser, 0.1-mfd.		C48
31.	First R/F Anode Coupling Coil,	"A" Range I,	L9
32.	Second, R/F Tuned Circuit Inductance,	"B" Range II,	L10
		"C" Range III,	L11
		"D" Range IV,	L12
33.	Second R/F Trimming Condenser, 3½/30-mmfd.	"A" Range I,	C9
		"B" Range II,	C14
		"C" Range III,	C19
		"D" Range IV,	C24
34.	Second R/F Tuned Circuit Damping Resistance, 2-megohms.		R23
35.	Second R/F Tuning Condenser, ganged with 20, 49 and 61.		C2
36.	Second R/F Screen Decoupling Resistance, 5,000-ohms.		R13
37.	Second R/F Screen Decoupling Condenser, 0.1-mfd.		C49
38.	Second R/F Cathode Decoupling Resistance, 1,250-ohms.		R2
39.	Second R/F Cathode Decoupling Condenser, 0.1-mfd.		C41
40.	R/F Valves Bias Potentiometer Resistance, 60,000-ohms.		R22
41.	R/F Valves Bias Potentiometer 10,000-ohms.		P2
42.	Second R/F Anode Decoupling Resistance, 5,000-ohms.		R14
43.	Second R/F Anode Decoupling Condenser, 0.1-mfd.		C50
44.	Second R/F Anode Coupling Coil,	"A" Range I,	L13
45.	Detector Tuned Circuit Inductance,	"B" Range II,	L14
		"C" Range III,	L15
		"D" Range IV,	L16
46.	Damping Resistance, 500,000-ohms.		R24
47.	Detector Trimming Condenser, 3½/30-mmfd.	"A" Range I.	C10

48.	Damping Resistance, 250,000-ohms.	R25
49.	Detector Tuning Condenser, ganged with 20, 35 and 61.	C3
50.	Detector Grid Condenser, 100 mmfd.	C56
51.	Detector Grid Leak Resistance, 2-megohms.	R6
52.	Detector Screen Grid Decoupling Resistance, 100,000-ohms.	R15
53.	Detector Screen Grid Decoupling Condenser, 1 mfd.	C51
54.	Detector Anode Decoupling Resistance, 50,000-ohms.	R17
56.	Detector Anode Decoupling Condenser, 1 mfd.	C53
57.	Detector Anode Load Resistance, 50,000-ohms.	R8
58.	Oscillator Grid Condenser, 2 mmfd.	C36
59.	Oscillator Grid Leak Resistance, 2 megohms.	R7
60.	Oscillator Grid Leak Resistance, 2 megohms.	R32
61.	Oscillator Tuning Condenser, ganged with 20, 35 and 49.	C4
62.	Oscillator Vernier Tuning Inductance (Ranges 1& 2).	L21
63.	Oscillator Vernier Tuning Inductance (Ranges 3 & 4).	L22
64.	Oscillator Anode Coupling Coil.) "A" Range 1	L17
	) "B" Range 2	L18
	) "C" Range 3	L19
65.	Oscillator Tuned Circuit) "D" Range 4	L20
	Inductance.	
66.	Oscillator Trimming Condenser, 3½/30 mmfd. "A" Range 1,	C11
	Oscillator Trimming Condenser, varies, "B" Range 2,	C16
	Oscillator Trimming Condenser, varies, "C" Range 3,	C21
	Oscillator Trimming Condenser, varies, "D" Range 4,	C26
67.	Oscillator Damping Resistance, 1-megohm, "A" Range 1,	R26
	Oscillator Damping Resistance, ½-megohm, "D" Range 4,	R28
68.	Oscillator Padding Condenser, 6,500 mmfd.	C60
69.	Oscillator Anode Decoupling Resistance, 30,000-ohms.	R16
70.	Oscillator Anode Decoupling Condenser, 0.1 mfd.	C52
71.	Detector Coupling Condenser, 0.01 mfd.	C27
72.	Detector R/F Bypass Condenser, 0.002 mfd.	C57
73.	Detector R/F Filter Condenser, 0.001 mfd.	C58
74.	Detector R/F Filter Choke.	L23
75.	Detector R/F Filter Condenser, 0.0015 mfd.	C59
76.	Detector R/F Filter Resistance, 500,000-ohms.	R29
77.	A/F Volume Control Potentiometer, preset, 250,000-ohms.	P1
78.	Inter-valve transformer.	T3
79.	First A/F Anode Decoupling Resistance, 50,000-ohms.	R18
80.	First A/F Anode Decoupling Condenser, 1 mfd.	C54
81.	First A/F Anode Load Resistance, 50,000-ohms.	R9
82.	First A/F Coupling Condenser, 0.1 mfd.	C29
83.	First A/F Anode Bypass Condenser, 0.001 mfd.	C28
84.	First A/F Cathode Bias Resistance, 1,250-ohms.	R4
85.	First A/F Cathode Bypass Condenser, 1 mfd.	C43
86.	First A/F Cathode Bypass Condenser, 1 mfd.	C44
87.	Operating Switch, Oak, 2-section.	S2
88.	A/F Filter Trimming Condenser, 1450/2000mmfd.	C33
89.	A/F Filter Tuning Condenser, 3,100 mmfd.	C32
90.	A/F Filter Inductance.	CH3
91.	A/F Filter Tuning Condenser, 3,100 mmfd.	C35
93.	A/F Filter Trimming Condenser, 1450/2000mmfd.	C34
94.	Second A/F Grid Leak Resistance, 1-megohm.	R10
95.	Second A/F Cathode Bias Resistance, 2,000-ohms.	R5
96.	Second A/F Cathode Bypass Condenser, 1 mfd.	C45
97.	Second A/F Cathode Bypass Condenser, 1 mfd.	C46
98.	Output Transformer.	T1
99.	Second A/F Anode Bypass Condenser, 0.01 mfd.	C30
100.	Output Coupling Condenser, 1 mfd.	C31
101.	Crash Filter Rectifier, Westinghouse H1.	W1 & W2
102.	Crash Filter Switch, Bulgin 5-amp, single-pole.	S5
103.	Telephone Jack, P.O. Gauge "A", Pattern 676.	J2
104.	Telephone Jack, P.O. Gauge "A", Pattern 676.	J3
105.	Mains Transformer, Pattern 1968A.	T2
106.	Smoothing Condenser, Electrolytic, 8 mfd.)	C37
107.	Smoothing Condenser, Electrolytic, 8 mfd.) One	[illegible]

109.	Smoothing Choke, 15/20-henry, 50 mA.	CH1
110.	Smoothing Choke, 15/20-henry, 50 mA.	CH2
111.	Mains-Battery Supply C.O., Link Board or Switch.	LK1 or S7
112.	H.T. Fuse, 60 mA.	F1
113.	Supply "ON/OFF" switch, Arrow 10-amp, D.P.	S1
114.	Screen Grid Potentiometer Resistance, 50,000-ohms.	R21
115.	Screen Grid Potentiometer Resistance, 50,000-ohms.	R20
116.	Scale Lamp, 6.5 V., 0.3-amp.	L1
117.	Scale Lamp, 6.5 V., 0.3-amp.	L2
118.	R/F Valves Bias Series Resistance, 250-ohms.	R31
119.	Input Trimming Condenser, 3½/30 mmfd., "A" Range I,	C8
	"B" Range II,	C13
	"C" Range III,	C18
	"D" Range IV,	C23
120.	Second A/F Anode Decoupling Resistance, 1,000-ohms.	R19
121.	Second A/F Anode Decoupling Condenser, 1 mfd.	C55
122.	Main Tuning Control.	
123.	Heterodyne Vernier Control.	
124.	"Stand-by" Tuned circuit Condenser, 100 mmfd.	C5
125.	"Stand-by" Tuned Circuit Condenser, 30 mmfd.	C63
126.	"Stand-by" Tuned Circuit Condenser, 30 mmfd.	C64
127.	"Stand-by" Tuned Circuit Trimmer, 3-30 mmfd.	C65

RECEIVER B29
COMPLETE CIRCUIT DIAGRAM.



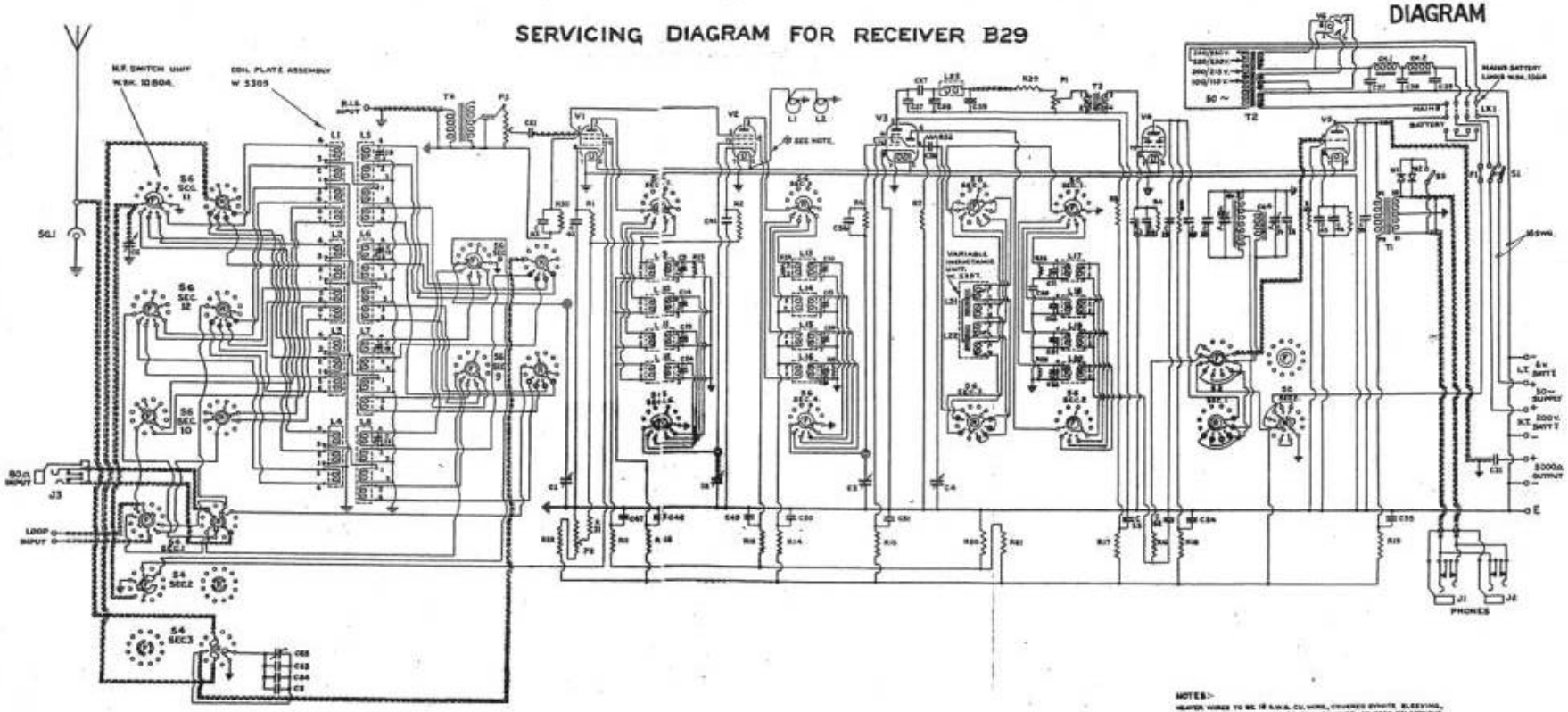
OPERATING SWITCH 87.	
POS'N	CONDITION.
1	OSC. ON. FILTER IN.
2	OSC. ON. FILTER OUT.
3	H.T. OFF.
4	OSC. OFF. FILTER OUT
5	OSC. OFF. FILTER IN.

COMPLETE.

2

SERVICING DIAGRAM

SERVICING DIAGRAM FOR RECEIVER B29



RESISTANCES			
R1	1500Ω. 5W. W.W.	R26	500-500Ω. 5W. W.W.
R2	1500Ω. 5W. W.W.	R27	250-500Ω. " "
		R28	250-500Ω. " W.W.
R4	1500Ω. 5W. W.W.		
R5	2000Ω. " "	R29	500-1000Ω. " W.W.
R6	2.5Ω. " "	R30	500-1000Ω. " "
R7	2.5Ω. 5W. W.W.	R31	2Ω. " "
R8	50-100Ω. 5W. W.W.	R32	250Ω. " "
R9	50-100Ω. 5W. W.W.	R33	2.5Ω. 5W. W.W.
R10	1-2Ω. 5W. W.W.		
R11	2000Ω. " "		
R12	" " "		
R13	" " "		
R14	2000Ω. " "		
R15	50-100Ω. " W.W.		
R16	50-100Ω. " W.W.		
R17	50-100Ω. " W.W.		
R18	20-100Ω. " W.W.		
R19	1000Ω. " W.W.		
R20	20-100Ω. " W.W.		
R21	20-100Ω. " W.W.		
R22	20-100Ω. " W.W.		
R23	2Ω. " W.W.		

CONDENSERS			
C1	4 GANG POLAR N.S. 3540. 2H.2.	C36	25/30 pF POLAR TWIN TRIM.
C2		C37	" " "
C3		C38	25/30 pF POLAR TWIN TRIM.
C4		C39	.01 μF MOUNTING (3H.)
C5	100 pF DUBILIER 2H.	C40	.001 μF DUBILIER 250 W.
C6	1 GANG POLAR TWIN TRIM.	C41	.01 μF MOUNTING (3H.)
C7		C42	.01 μF DUBILIER 250 W.
C8	25/30 pF POLAR TWIN TRIM.	C43	.01 μF MOUNTING (3H.)
C9		C44	1 μF MOUNTING (3H.)
C10	" " "	C45	" " "
C11	25/30 pF POLAR TWIN TRIM.	C46	2000 μμF DUBILIER 5KV.
C12		C47	1400/2000 μμF PLANET TRIM.
C13	25/30 pF POLAR TWIN TRIM.	C48	3100 μμF DUBILIER 5KV.
C14	" " "	C49	25 pF ERIE CERAMICON 1500
C15		C50	8-8-8 μF TWIN & DRY ELECTROLYTIC T.C.C. NO. E. 4781
C16	25/30 pF POLAR TWIN TRIM.	C51	.01 μF DUBILIER 250 W.
C17		C52	.01 μF DUBILIER 250 W.
C18	25/30 pF POLAR TWIN TRIM.	C53	
C19	" " "	C54	
C20	25/30 pF POLAR TWIN TRIM.	C55	1 μF MOUNTING (3H.)
C21		C56	" " "
C22	25/30 pF POLAR TWIN TRIM.	C57	1 μF MOUNTING (3H.)

INDUCTANCES
L1
L2
L3
L4
L5
L6
L7
L8
L9
L10
L11
L12
L13
L14
L15
L16
L17
L18
L19
L20
L21
L22
L23
L24
L25
L26

SWITCHES
S1
S2
S3
S4
S5
S6

LINK

CHOKES

TRANSFORMERS
T1
T2
T3
T4

POTENTIOMETERS
P1
P2
P3

RECTIFIERS
M1
M2

JACKS
J1
J2
J3

VALVES
V1
V2
V3
V4
V5
V6

FUSE
F1

LAMPS
L1
L2

SPARK GAP SYSTEM
SG1

NOTES:-

HEATER WIRES TO BE 18 S.W.G. CU. WIRE, COVERED SYNOTE SLEEVING, OTHER CONNECTIONS TO BE 16-24 S.W.G. CU. WIRE, COVERED TELCOTHENE. EXPOSED LEADS TO BE 16-24 S.W.G. COPPER WIRE TELCOTHENE COVERED. ⊕ DENOTES EXTERNAL.

SUPPLIES LEADS FOR J1 & J2 (PHONES) LOUD SPEAKER & H.S. TO BE EXPOSED TELEPHONE WIRE.

RESISTOR VALUES TO BE MARKED ON COMPONENTS SO AS TO BE EASILY IDENTIFIED WHEN SET IN WIRES.

ALL SCREENING TO BE EARTHED.

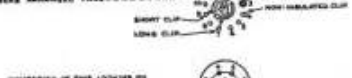
LEAD MARKED ⊕ TO BE 24 S.W.G. EUREKA WIRE 18" LONG COVERED SYNOTE SLEEVING.

SW4 SWITCHES ARE SHOWN VIEWED FROM FRONT AS EXTREME COUNTER-CLOCK POSITION.

F DENOTES FRONT OF SECTION.

R = REAR = "

CONTACT NUMBERS ARRANGED THUS



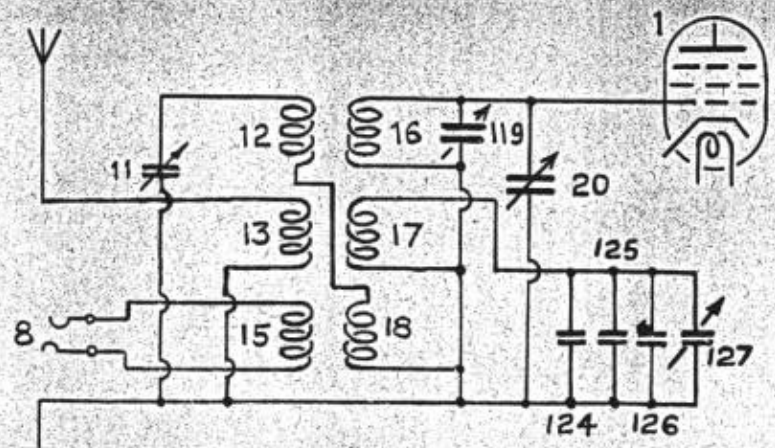
CONNECTION OF FUSE HOLDER ON UNDERNEATH SIDE OF VALVE HOLDER

RECEIVER B29.

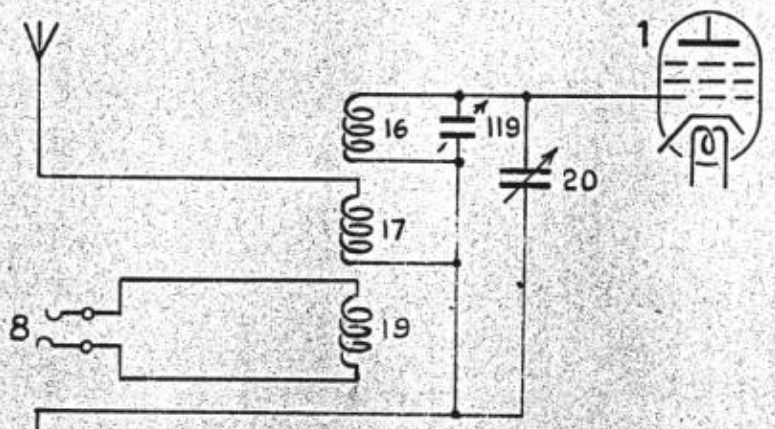
INPUT CIRCUITS, SIMPLIFIED DIAGRAMS.

3

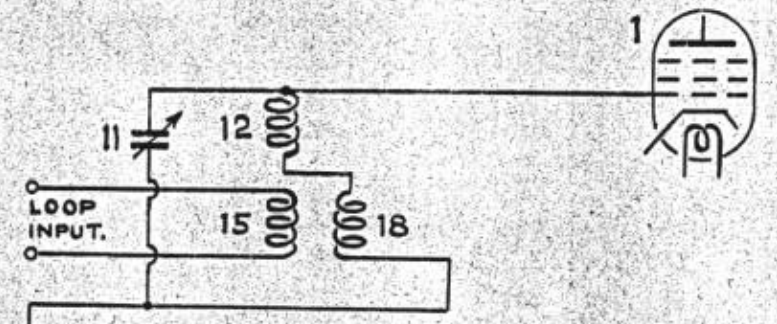
INPUT



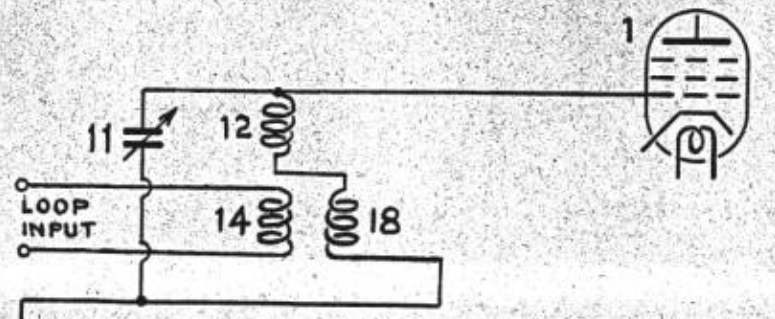
a. INPUT SWITCH IN "TUNE" POSITION.



b. INPUT SWITCH IN "STAND-BY" POSITION.



c. INPUT SWITCH IN "LOOP 1" POSITION.



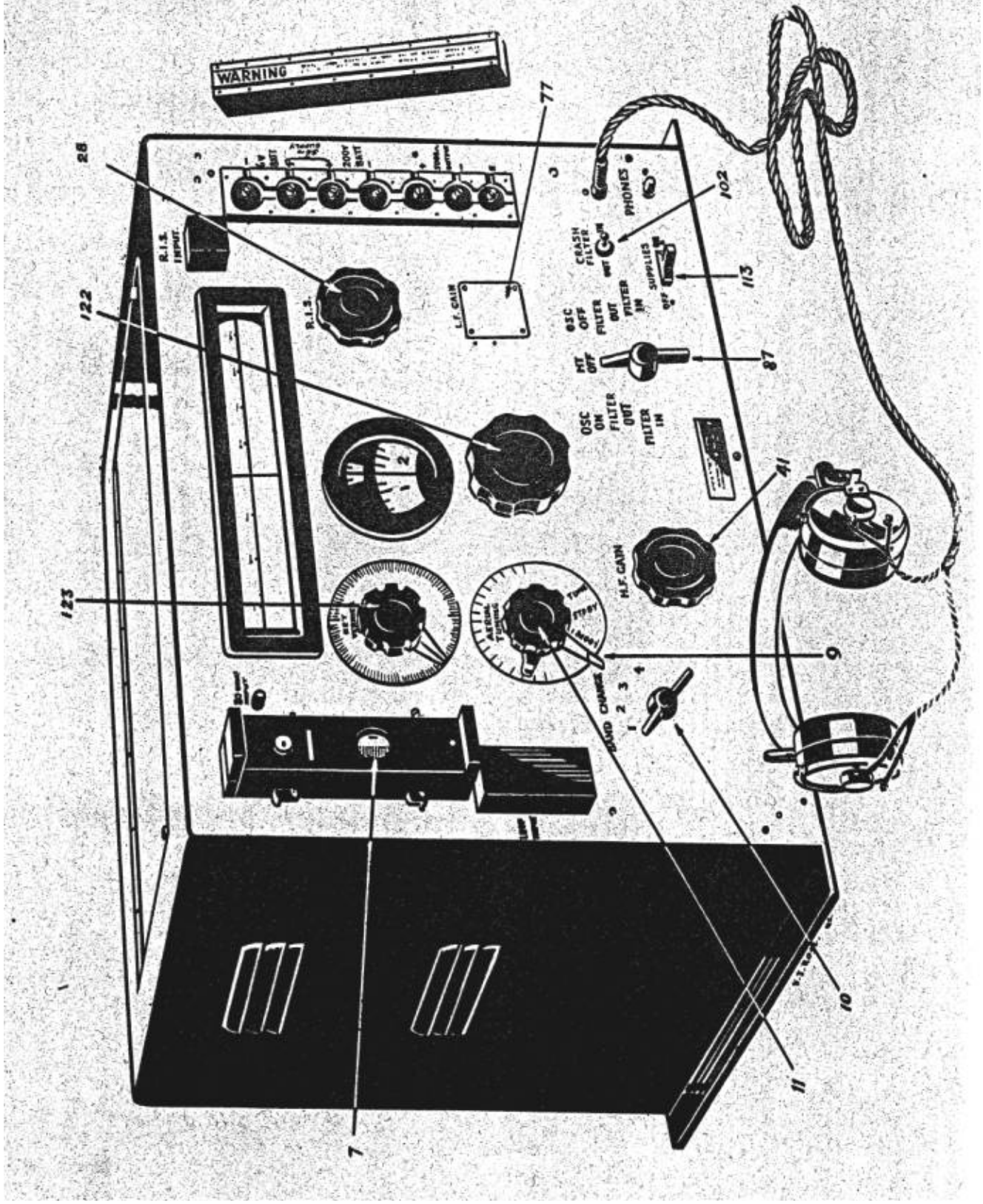
d. INPUT SWITCH IN "LOOP 2" POSITION.

RECEIVER B29.

FRONT VIEW.

4

FRONT.

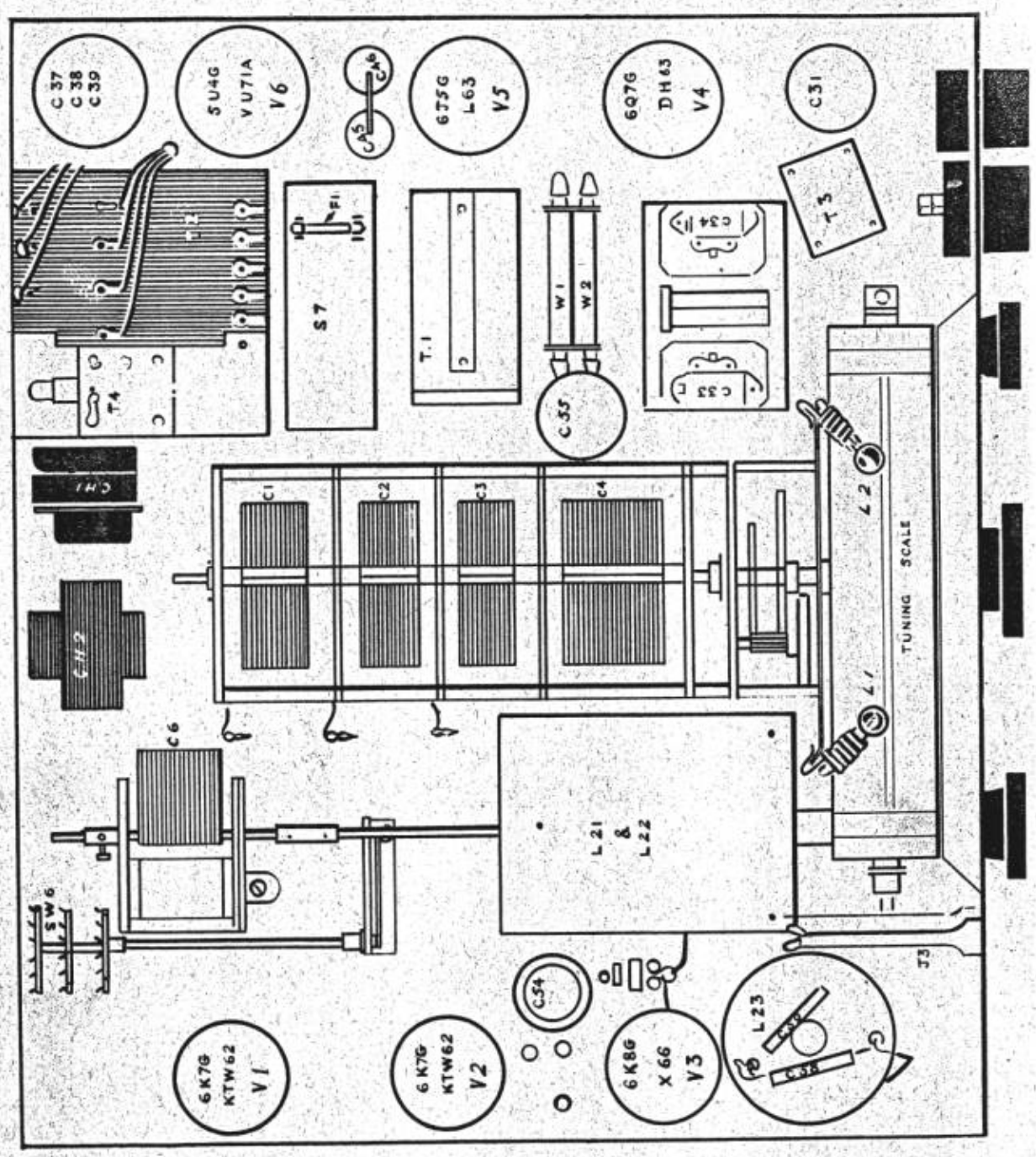


RECEIVER B 29.

5

TOP VIEW.

TOP.



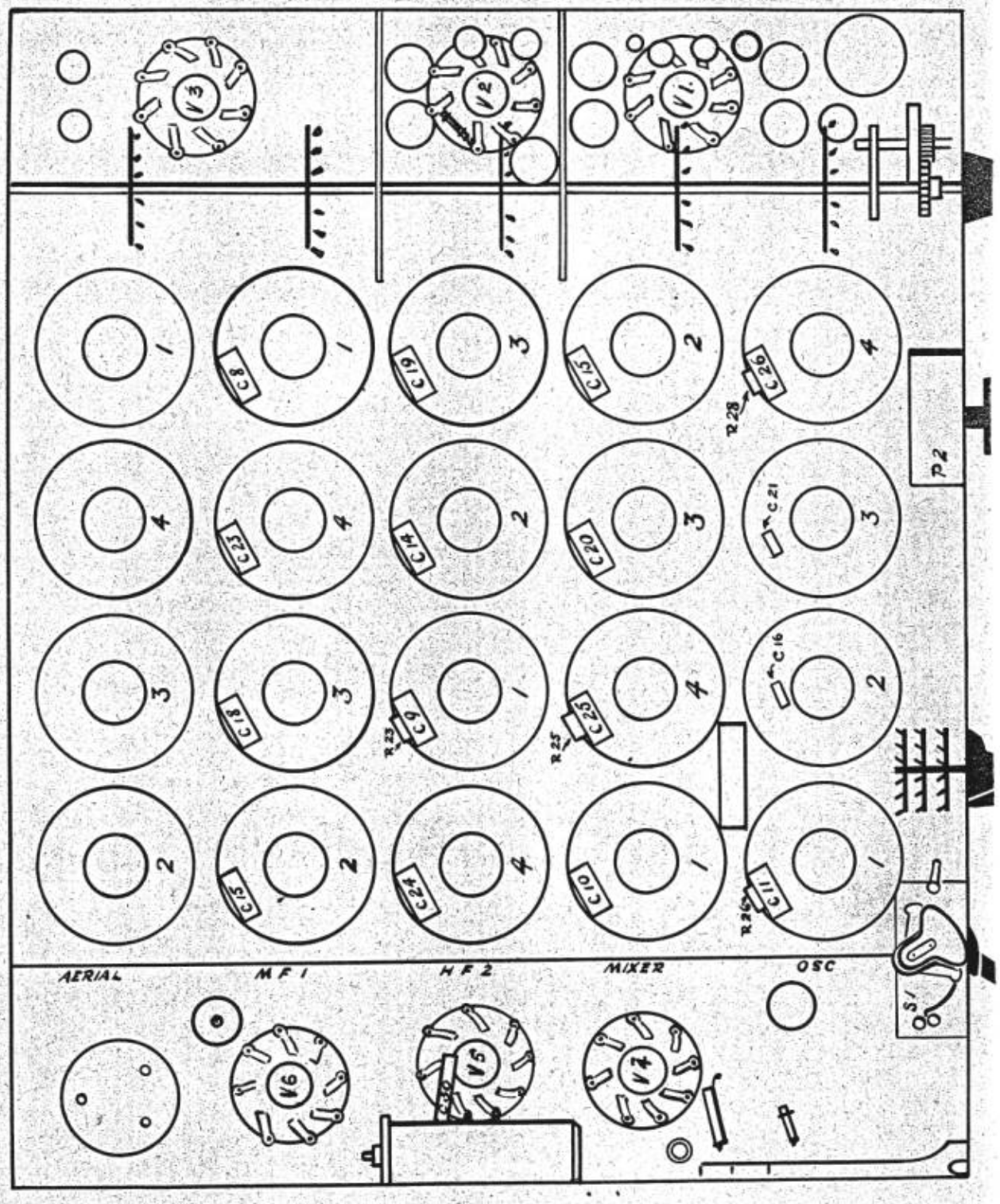
RECEIVER B29.

6

BOTTOM

BOTTOM VIEW.

Baseplate: 16 3/4 in + 13 in
add 3/8" to trimmer measurements on width
No correction needed for depth.



RECEIVER B 29.

A/F RESPONSE CURVES.

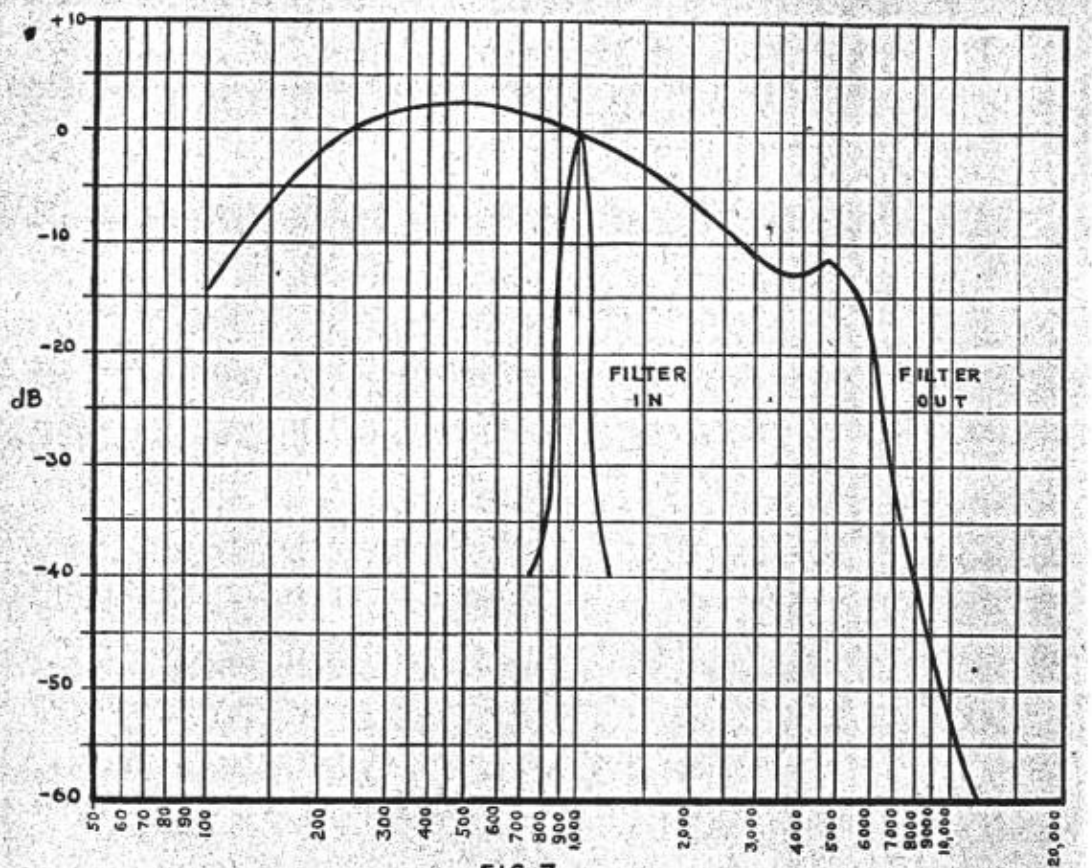
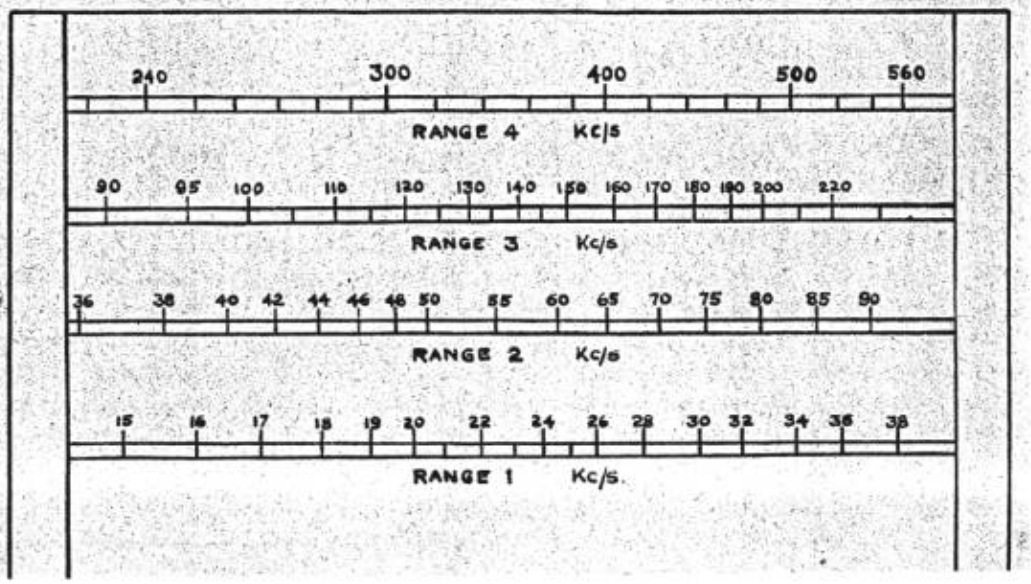


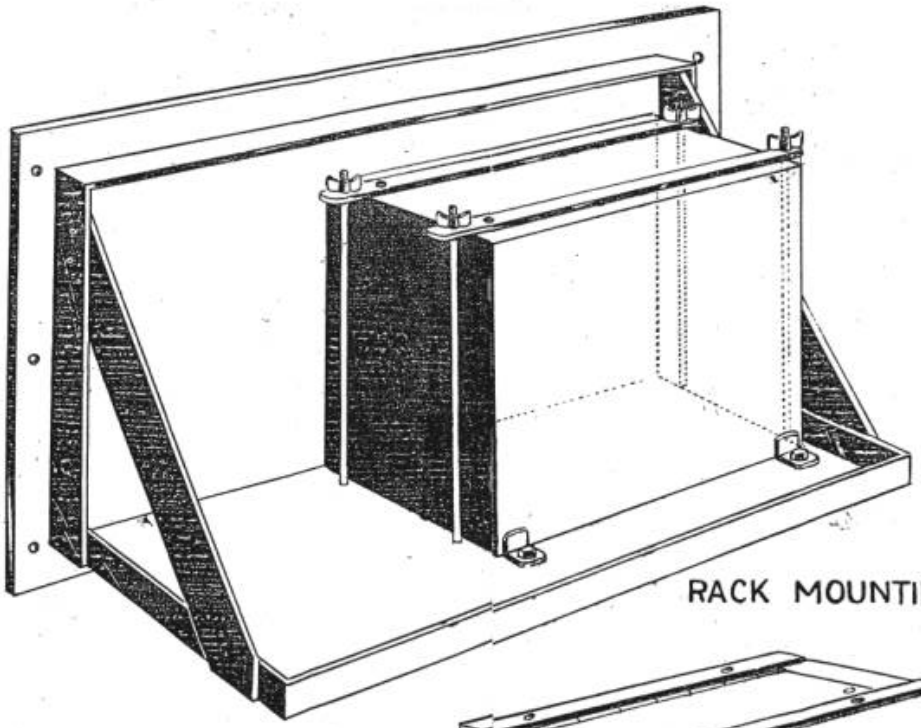
FIG 7.

TUNING SCALES.



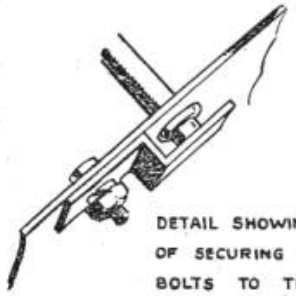
RECEIVER B29.

RACK AND BENCH MOUNTING.

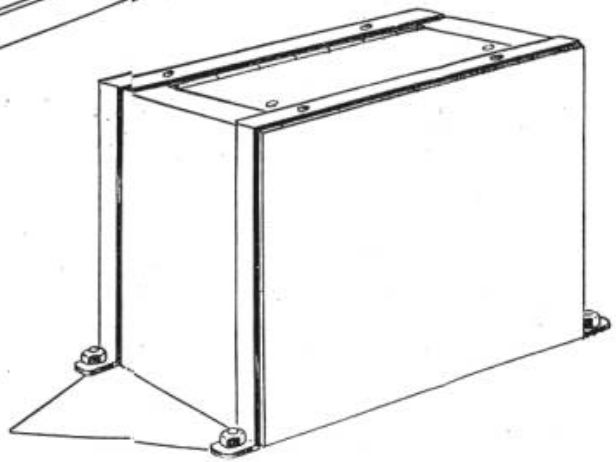


RACK MOUNTING.

MOUNTING FOR RECEIVER B29.
FOR W/T RACKS, PATT. W 3881.



DETAIL SHOWING METHOD OF SECURING RETAINING BOLTS TO TRAY.



STRAPS, SECURING
PATT. W. 3880.

A. P. 56152

FILTER UNIT DES. 12

CIRCUIT DIAGRAM

10