



HIS MASTER'S VOICE

Service Sheet

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BRADFORD

Model 545 RG

A five-valve superheterodyne radio-gramophone using loctal valves. Table model cabinet in polished veneers.

CONTROLS: Tuning, Volume, Tone—On/Off, Gram.-Radio.

VALVE COMPLIMENT: Mixer, 7S7; I.F., 7B7; Diode and First Audio, 7C6; Output, 7C5; Rectifier, 7Y4.

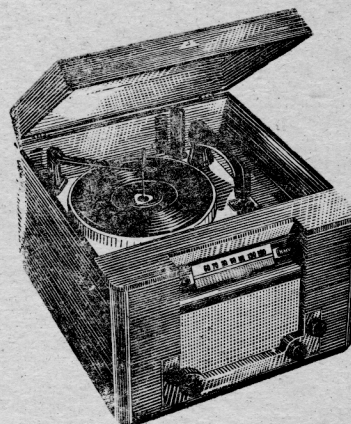
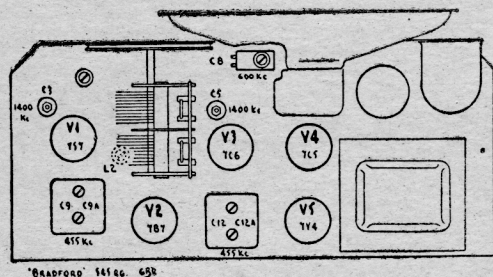
VALVE SOCKET VOLTAGES: Taken with—
Negative lead connected to chassis. Voltmeter 1000 ohms per volt. No applied signal. Volume control off. Switch in radio position.

	Plate	Screen	Cathode
7S7 Mixer	225	80	1.4
7B7 I.F.	225	80	2
7C6 Diode and 1st Audio	85	—	—
7C5 Output	210	230	11.5
7Y4 Rectifier	310	—	—

FREQUENCY RANGE: Broadcast, 535—1700 kc.

POWER SUPPLY: 230 volt A.C.—50 cycles. Consumption: Receiver, 50 watts; Turntable, 25 watts.

CABINET DIMENSIONS: —Height 13in ; Length 17in ; Depth 16½ in



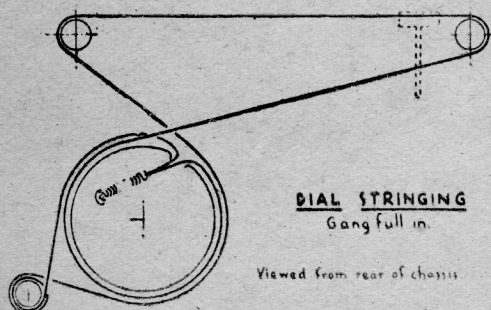
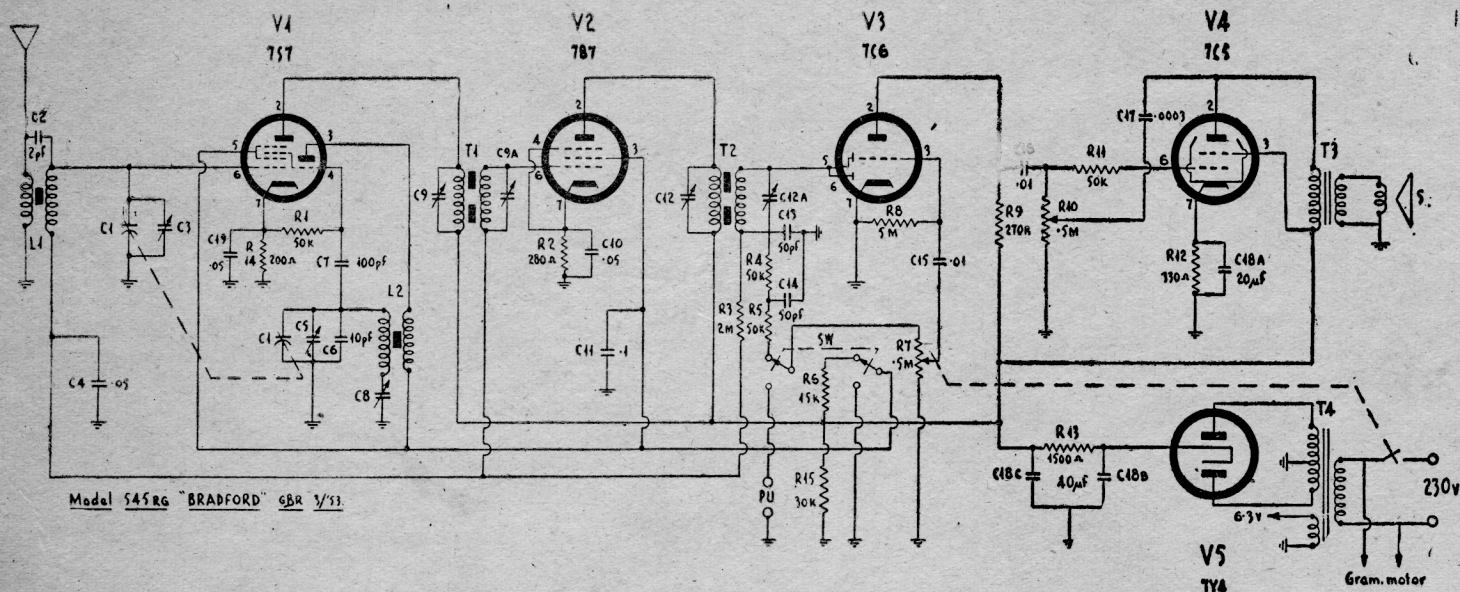
ALIGNMENT INSTRUCTIONS

Turn gang plates full in and set pointer to index at left-hand end of scale. Set output meter range selector to 50 milliwatts and connect across speaker voice coil. Turn receiver volume full on, then, as successive adjustments of the trimmers increase receiver output, reduce signal generator output to give approximately half scale deflection on the output meter. For I.F. alignment use a .1 mfd. condenser on the generator cable; for R.F. use a standard dummy antenna.

Connect Signal Gen. to	Set Sig. Gen. to	Radio Dial Setting	Adjust	Adjust for
1. C1 (front gang stator)	455 kc	1500 kc	C9, C9A, C12, C12A	Max. output
2. Aerial lead	600 kc	600 kc	C8, L1*	Max. output
3. Aerial lead	1400 kc	1400 kc	C5, C3	Max. output
*4. Aerial lead	1000 kc	1000 kc (Rock gang)	L2	Max. output

Repeat operations 2 and 3 until no further increase in receiver sensitivity can be obtained.

The screwed cores of L1 and L2 should not be touched unless it is absolutely certain that the receiver is badly out of alignment, also it is only when this condition obtains that operation 4 should be carried out at all.



Condensers:

C1	1500—H1
C2	1500—P1
C3, 5	1500—F5
C4, 10, 19	1500—A7
C6	1500—H
C7	1500—Q
C8	1500—O9
C9, 12	1500—I3
C11	1500—J1
C13, 14	1500—E
C15	1500—B5
C16	1500—B4
C17	1500—N
C18	1500—N4

Resistors:

R1, 4, 5, 11	1300—F8
R2	1300—X
R3	1300—J1
R6	1300—E6
R7	PO 1110
R8	1300—J9
R9	1300—H7
R10	PO 219
R12	1300—A5
R13	1300—K8
R14	1300—Q
R15	1300—N6

Valves:

V1	1400—R2
V2	1400—Q9
V3	1400—R1
V4	1400—R
V5	1400—R3
L1	CO 747
L2	CO 748
T1	TR 28
T2	TR 29
T3	TR 1125
T4	TR 1318
S	SP 1325
	DR 922
	PO 231
	SC 1329
	LA 1182
	SW 171

Store Pt. No.

Polar 2-gang C1042
2 pf. ceramicon
Philips trimmer 3-30 pf.
.05 350WV (paper)
10 pf. ceramicon
.0001 mica
Padder TP 11D
IF Base 130-130
.1 350WV (paper)
50 pf. mica
.01 350WV (paper)
.01 500WV (paper)
.0003 mica
40-40-20 Electro.

47K ½ watt
280 ohm ½ watt
2 meg. ½ watt
15K 2 watt
½ meg. pot. with switch
5 meg. ½ watt
270K ½ watt
½ meg. pot. less switch
330 ohm 1 watt
1500 ohm 10 watt WW
200 ohm 1 watt
30K 1 watt

7S7—Mixer
7B7—I.F.
7C6—Det. Audio
7C5—Output
7Y4—Rectifier
BC Aerial Coil
BC Osc. Coil
1st I.F. Xfmr.
2nd I.F. Xfmr.
Output Xfmr.
Power Xfmr. (Horiz.)
Speaker, 5-7H Rola
Dial drum
Dial pointer
Dial scale
Panel lamp
R/G switch