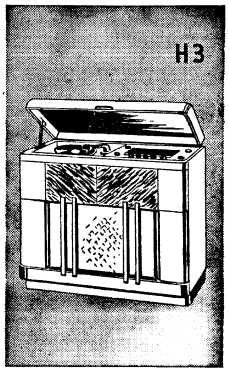
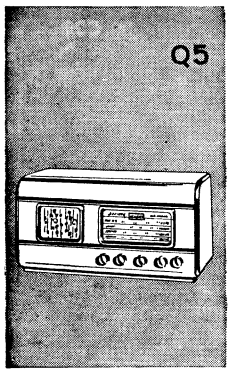


Hotpoint
BAND-MASTER
Radio Receivers

Models
Q55DE
H35DG
H35DGX
H35DGY



SERVICE DATA & TECHNICAL INFORMATION

Two Band
Five Valves

AUSTRALIAN GENERAL ELECTRIC PROPRIETARY LIMITED

A.C. Operated
Superheterodynes

ELECTRICAL SPECIFICATIONS.

FREQUENCY RANGES: Medium Wave ..... 1600-540 Kc/s (187.5-555M)
Short Wave ..... 18-6 Mc/s (16-50M)

INTERMEDIATE FREQUENCY ..... 455 Kc/s

POWER SUPPLY RATING ..... 200-260 volts 50-60 C.P.S.
(Models are produced with other voltage and frequency ratings)

POWER CONSUMPTION ..... 60 watts

DIAL LAMPS ..... 6.3 volts, 0.25 amp. M.E.S.

VALVE COMPLEMENT:

(1)	6J8GA	Converter
(2)	6SK7GT	I.F. Amplifier
(3)	6SQ7GT	Det., A.V.C., and A.F. Amplifier
(4)	6V6GT/G	Output
(5)	6X5GT	Rectifier

LOUDSPEAKER:

Model Q55DE:
7 inch—Code No. AY38
Transformer—XA2
V.C. Impedance—3 ohms at 400 C.P.S.
Permanent Magnet

Models H35DG and H35DGY:
12 inch—Code Nos. AU32, AU42, AU44 or AU45
Transformer—TX2 on AU32
TU2 on AU42
TU202 on AU44 and AU45
V.C. Impedance—2.2 ohms at 400 C.P.S.
Permanent Magnet

Model H35DGX:
12 inch—Code Nos. AU44 or AU45
Transformer—TU202
V.C. Impedance—2.2 ohms at 400 C.P.S.
Permanent Magnet

UNDISTORTED POWER OUTPUT ..... 3 watts

MECHANICAL SPECIFICATIONS.

	Height	Width	Depth
Cabinet Dimensions (ins.):			
Q55DE	10½	20¼	8⅞
H35DG, H35DGX, H35DGY	31	36	16⅞
Chassis Base Dimensions (ins.):			
H35DG, H35DGX, H35DGY	2½	11	5½

Carton Dimensions:			
Q55DE	12	21¼	10½
H35DG, H35DGX, H35DGY	Crated		

Weight (nett lbs.):
Q55DE ..... 26 lbs.
H35DG, H35DGX, H35DGY ..... 121 lbs.
Cabinet Finish ..... Walnut Veneer

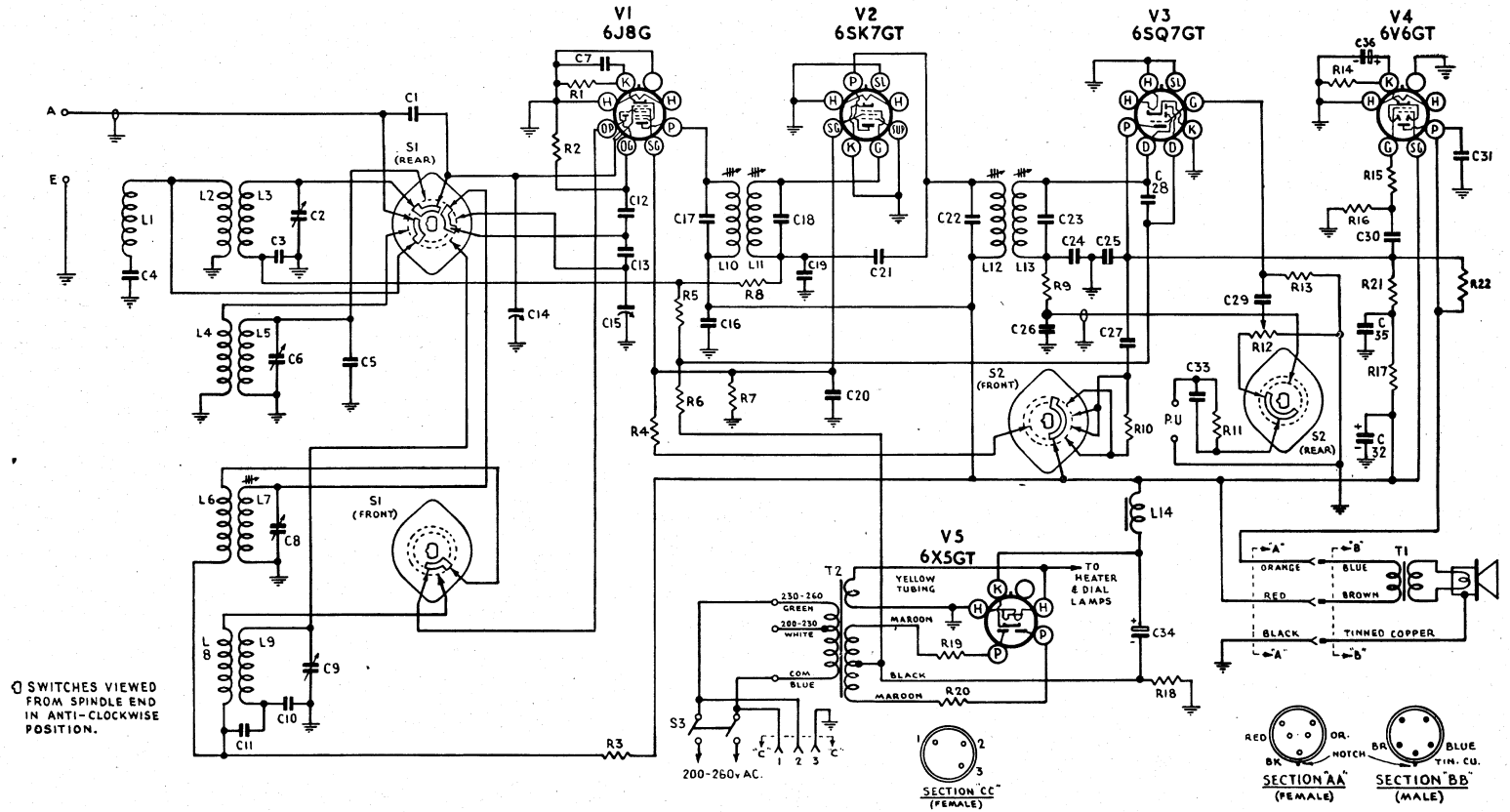
GENERAL DESCRIPTION.

The model Q55DE is a 5 valve, two band, A.C. operated table model superheterodyne, and features of design include Tropic-proof construction, automatic volume control, magnetite cores in I.F. transformers and boadcast oscillator coil, air-dielectric trimming capacitors, straight-line edge-lighted dial with metropolitan stations printed in ⅛" high characters.

Models H35DG, H35DGX and H35DGY are Radio-Phonograph combinations and have similar features.

Model H35DG and H35DGY incorporate the OAK Automatic Record Changers.

Model H35DGX incorporates the Garrard RC70 Automatic Record Changers, features of these being: The Permapoint needle plays 2,000 records—plays up to ten 10" or 12" (not mixed) records without attention. The synchronous motor and simple construction with minimum number of working parts ensure trouble-free service.



CIRCUIT CODE — HOTPOINT H35DG, H35DGY.

Code No.	Description	Part No.
	INDUCTORS	
L1	I.F. Filter (including C4)	9382
L2, L3	Aerial Coil, 540-1600 Kc/s	15454
L4, L5	Aerial Coil, 6-18 Mc/s	15456
L6, L7	Oscillator Coil, 540-1600 Kc/s	9206A
L8, L9	Oscillator Coil, 6-18 Mc/s	15458
L10, L11	1st I.F. Transformer	22700
L12, L13	2nd I.F. Transformer	22703
L14	Filter Choke	TU17
	RESISTORS	
R1	200 ohms, ½ watt	
R2	32,000 ohms, ½ watt	
R3	25,000 ohms, 1 watt	
R4	25,000 ohms, 2 watt	
R5	1.6 megohms, ½ watt	
R6	2.5 megohms, ½ watt	
R7	20,000 ohms, 1 watt	
R8	0.1 megohm, ½ watt	
R9	50,000 ohms, ½ watt	
R10	50,000 ohms, ½ watt	
R11	1.6 megohm, ½ watt	
R12	0.5 megohm, Volume Control	6490
R13	10 megohms, 1 watt	
R14	325 ohms, 1 watt	
R15	50,000 ohms, ½ watt	
R16	0.5 megohm, ½ watt	
R17	50,000 ohms, 1 watt	
R18	50 ohms, 3 watt	
R19	100 ohms, ½ watt	
R20	100 ohms, ½ watt	
R21	0.25 megohm, 1 watt	
R22	1 megohm, 1 watt	
	CAPACITORS	
C1	4 uuF Mica	
C2	3-25 uuF Air Trimmer	19659
C3	.05 uF paper, 200 v. working	
C4	50 uuF Silvered Mica	
C5	9 uuF Mica	
C6	3-25 uuF Air Trimmer	19659
C7	0.1 uF 200 v. working	
C8	3-25 uuF Air Trimmer	19659
C9	3-25 uuF Air Trimmer	19659
C10	4000 uuF Mica Padder, ± 2½%	
C11	.05 uF Paper, 400 v. working	
C12	70 uuF Mica	
C13	470 uuF Mica Padder, ± 2½%	
C14	12-430 uuF Tuning	18201
C15	12-430 uuF Tuning	18201
C16	.1 uF Paper, 400 v. working	
C17	70 uuF Mica	
C18	70 uuF Mica	
C19	.05 uF Paper, 400 v. working	
C21	9 uuF Mica	
C22	70 uuF Mica	
C23	70 uuF Mica	
C24	100 uuF Mica	
C25	200 uuF Mica	
C26	100 uuF Mica	
C27	.005 uF Paper, 600 v. working	
C28	50 uuF Mica	
C29	.01 uF Paper, 600 v. working	
C30	.01 uF Paper, 600 v. working	
C31	.005 uF Paper, 600 v. working	
C32	16 uF 525 P.V. Electrolytic	
C33	500 uuF Mica	
C34	8 uF 525 P.V. Electrolytic	
C35	.1 uF Paper, 400 v. working	
C36	25 uF 40 P.V. Electrolytic	
	TRANSFORMER	
T1	Loudspeaker Transformer	TX2, TU2, TU202
T2	Power Transformer, 50-60 C.P.S.	17859A
T2	Power Transformer, 40 C.P.S.	17861A
	LOUDSPEAKER	
	12 inch Permanent Magnet	AU32, AU42, AU44, AU45

ALIGNMENT PROCEDURE.

Manufacturer's Setting of Adjustments.

The receiver is tested by the manufacturer with precision instruments, and all adjusting screws are sealed. Realignment should be necessary only when components in tuned circuits are repaired or replaced or when it is found that the seals over the adjusting screws have been broken.

It is especially important that the adjustments should not be altered unless in association with the correct testing instruments listed below.

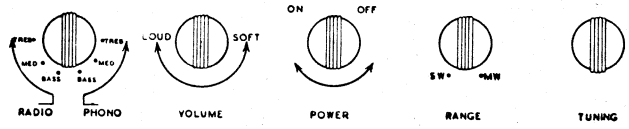
Under no circumstances should the plates of the ganged tuning capacitor be bent, as the unit is accurately aligned during manufacture and cannot be readjusted unless by skilled operators using specialised equipment.

For all alignment operations, connect the "low" side of the signal generator to the receiver chassis, and keep the generator output as low as possible to avoid A.V.C. action. Also, keep the volume control in the maximum clockwise position.

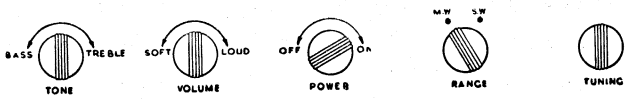
Testing Instruments.

(1) A.W.A. Junior Signal Generator, type 2R3911, or
(2) A.W.A. Modulated Oscillator, type J6726.
If the modulated oscillator is used, connect a 0.25 megohm non-inductive resistor across the output terminals, and, for short wave alignment, an additional 400 ohms non-inductive resistor in series with the "high" output lead of the instrument.
(3) A.W.A. Output Meter, type 2M8832.

CONTROLS H35DG, H35DGX, H35DGY.



CONTROLS Q55DE.



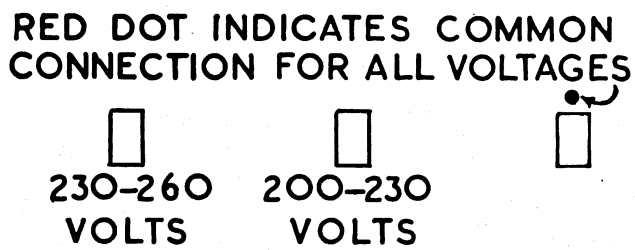
ALIGNMENT TABLE — MODELS Q55DE, H35DG, H35DGX, H35DGY.

Order	Connect "high" side of Generator to:	Tune Generator to:	Tune Receiver Dial to:	Adjust for maximum peak output
1	6J8GA*	455 Kc/s	540 Kc/s	L13 Core
2	6J8GA*	455 Kc/s	540 Kc/s	L12 Core
3	6J8GA*	455 Kc/s	540 Kc/s	L11 Core
4	6J8GA*	455 Kc/s	540 Kc/s	L10 Core
	Repeat the above adjustments until the maximum output is obtained.			
5	Aerial Terminal	600 Kc/s	600 Kc/s	L.F. Osc. Core Adj. (L7)†
6	Aerial Terminal	1500 Kc/s	1500 Kc/s	H.F. Osc. Adj.‡
7	Aerial Terminal	1500 Kc/s	1500 Kc/s	H.F. Aer. Adj. (C2)
	Repeat adjustments 5, 6 and 7.			
8	Aerial Terminal	16 Mc/s	16 Mc/s	H.F. Osc. Adj.§
9	Aerial Terminal	16 Mc/s	16 Mc/s	H.F. Aer. Adj.¶

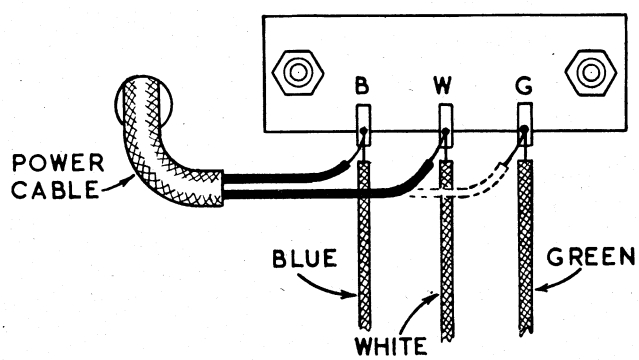
*With grid clip connected. An 0.001 uF capacitor should be connected in series with the "high" side of the test instrument.
†Rock the tuning control back and forth through the signal.
‡C7 in model Q55DE, C8 in models H35DG, H35DGX and H35DGY.
§C8 in model Q55DE, C9 in models H35DG, H35DGX and H35DGY. Use minimum capacity peak if two can be obtained. Check to determine that the trimmer has been adjusted to correct peak by tuning the receiver to approximately 15.09 Mc/s, where a weaker signal should be received.
¶C5 in model Q55DE, C6 in models H35DG, H35DGX and H35DGY. Use maximum capacity peak if two can be obtained.

CONNECTION TO POWER SUPPLY.

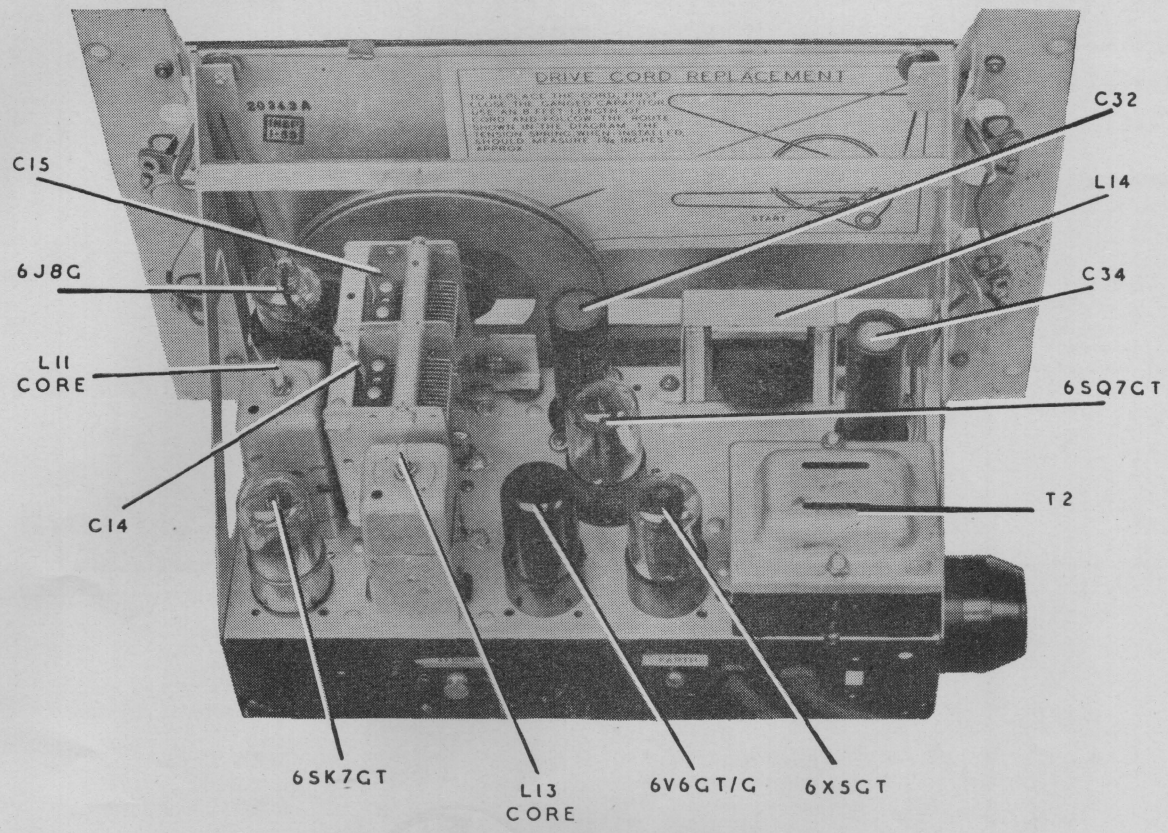
The receiver should not be connected to any circuit supplying other than alternating current from 200-260 volts and at the frequency stated on the label within the cabinet. The power supply connections are shown in the accompanying diagrams.



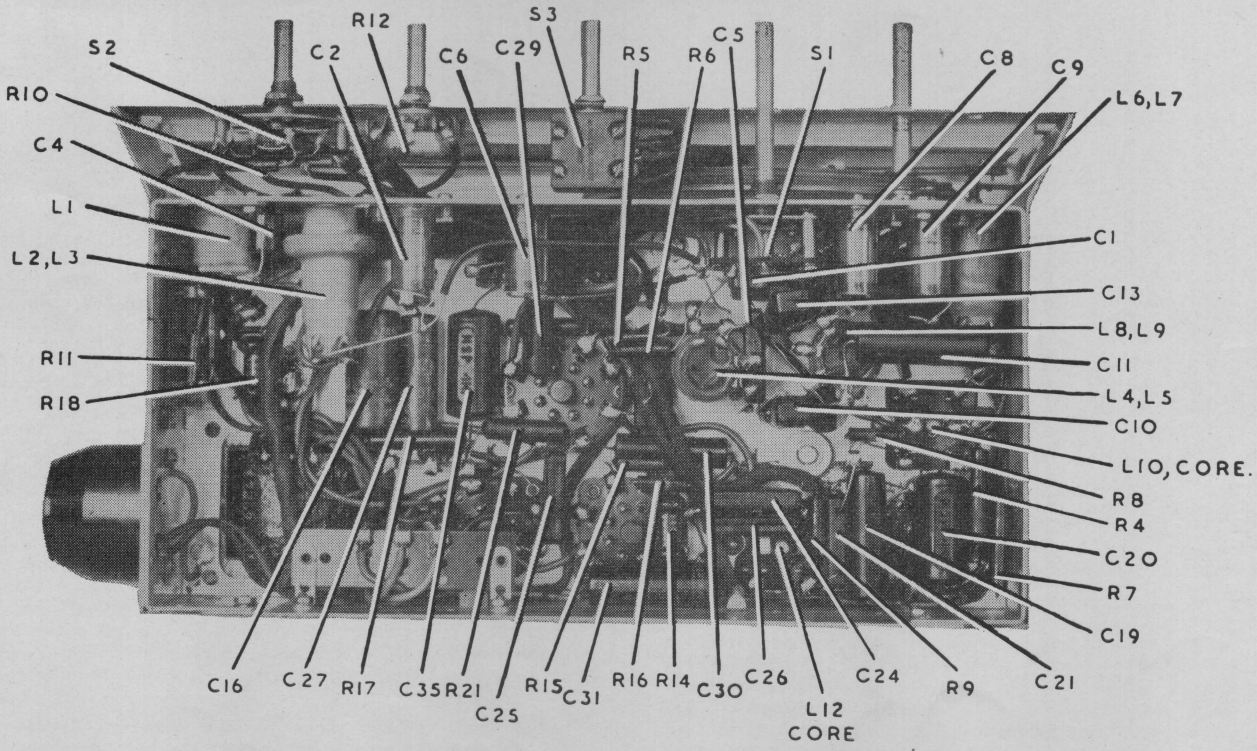
Model Q55DE.



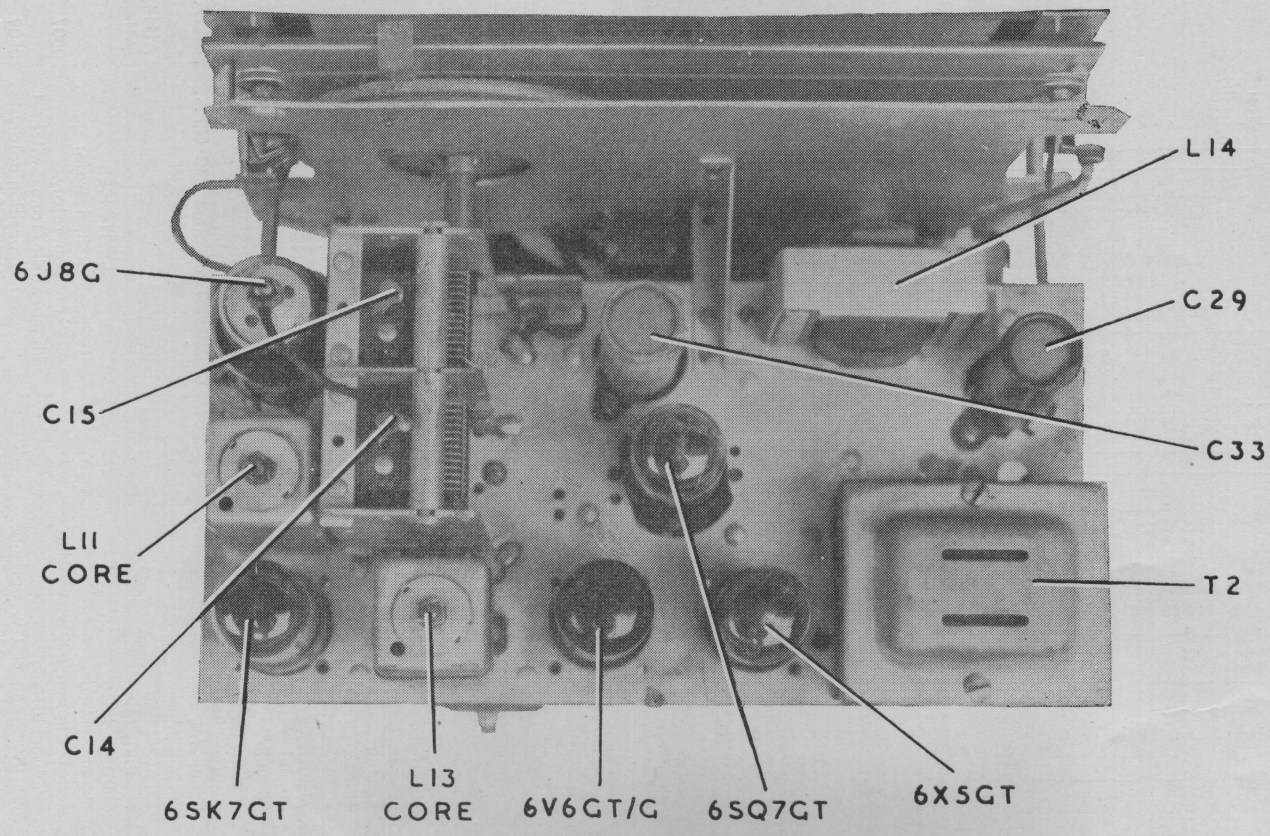
Models H35DG, H35DGX, H35DGY.



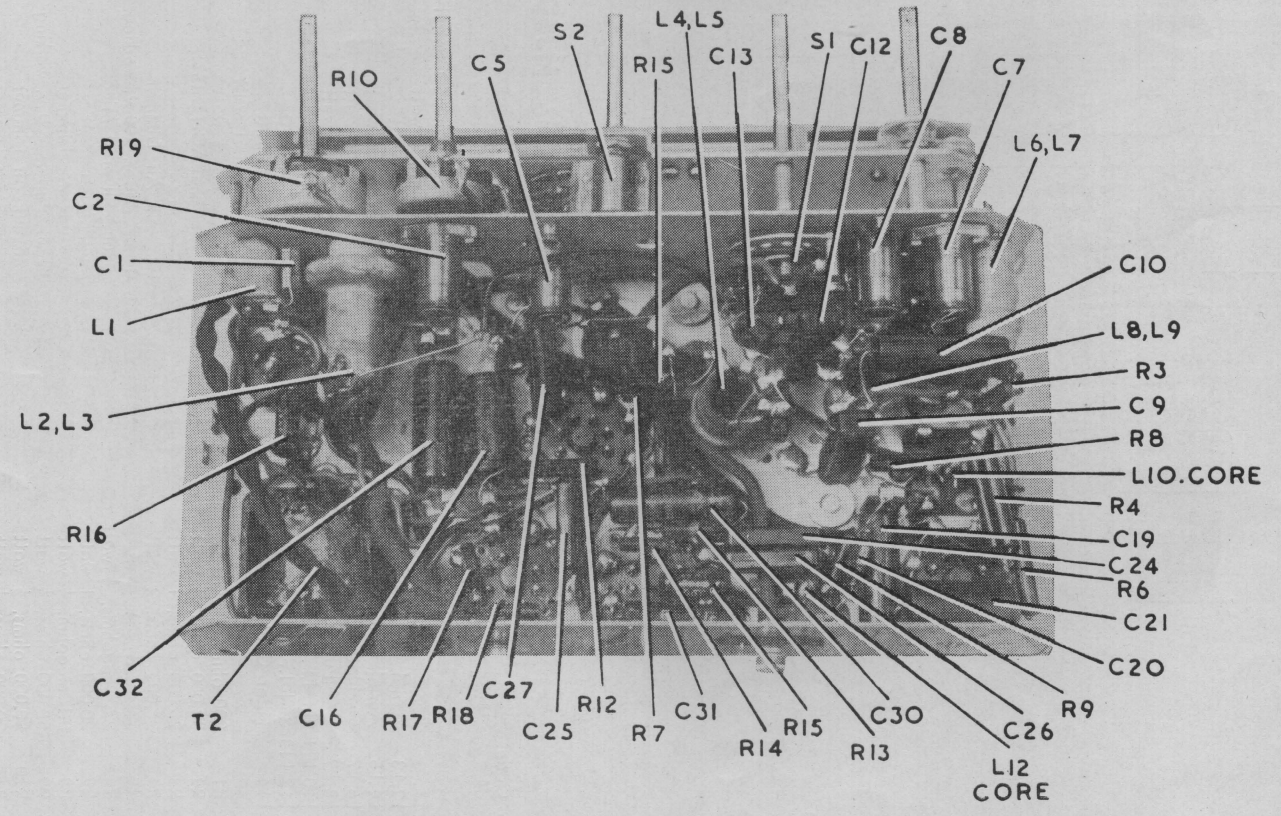
CHASSIS [Top View] — Models H35DG, H35DGY



CHASSIS [Underneath View] — Models H35DG, H35DGY



CHASSIS [Top View] — Model Q55DE



CHASSIS [Underneath View] — Model Q55DE

CHASSIS REMOVAL.

Model Q55DE

First remove the control knobs—each is held by a set-screw.

The chassis is held in the cabinet by two screws. Remove these and withdraw the chassis from the cabinet.

Models H35DG, H35DGX and H35DGY:

First remove the control knobs, which are each held by a set-screw.

Disconnect the phono motor, pick-up and loudspeaker cables.

The chassis is held in the cabinet by four winged nuts—two at each end of the dial frame assembly. Removal of these enables the chassis to be withdrawn from the cabinet.

DIAL POINTER ADJUSTMENT.

The dial pointer is held in position on the drive cord by two rubber-lined clips. To alter the position of the pointer, loosen the two holding clips slightly and move the pointer in the required direction. It is important to reclamp the clips after any adjustment of the dial pointer.

DRIVE CORD REPLACEMENT.

Follow the diagram which is affixed to the back of the dial frame assembly. This shows the route of the cord and the method of attachment.

MECHANICAL REPLACEMENT PARTS.

Item	Part No.
Model Q55DE:	
Cabinet	Q5
Cable, aerial	15452
Cable, power	209
Cable, speaker	19188
Cable, volume control	20416
Chassis, end: Left hand	20124
Right hand	22417
Clip, grid	7459
Dial Frame Assembly	20514
Dial Pointer Assembly	20522
Dial Scale	20614 or 23314
Dial Strap	20520
Dial Support Assembly	20518
Drum, drive	20130
Knob	4589
Socket, valve	4704
Socket, valve cushion	20142
Spindle Assembly, drive	20505
Strip, tag: 1 way	7628
2 way	8863
Terminal, aerial	17717

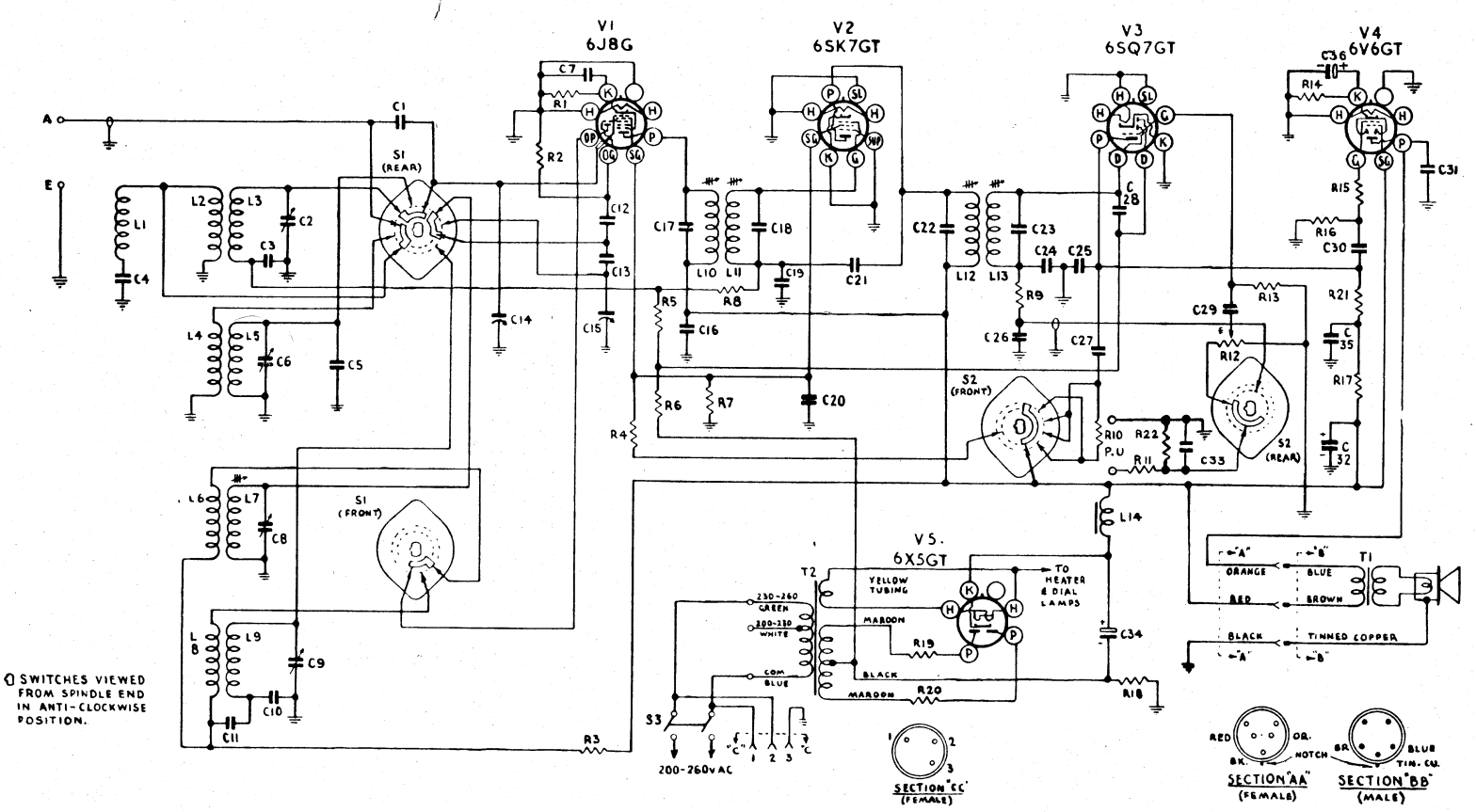
Item	Part No.
Models H35DG, H35DGX, H35DGY	
Cabinet	H3
Cable, aerial	15452
Cable, pick-up	20742
Cable, power	20743
Cable, phono-motor	21911
Cable, speaker	19188
Cable, volume control	20416
Chassis, end: Left hand	20316
Right hand	22556
Clip, grid	7459
Dial Frame Assembly	20343B
Dial Pointer Assembly	20331
Dial Scale	20184 or 23312
Drum, drive	22542
Knob	4589
Socket, valve	4704
Socket, valve cushion	20142
Strip, tag: 1 way	7628
2 way	8863
3 way	8821
Terminal, spring	5458

Winding	D.C. Resistance in ohms
Aerial Coil (M.W.):	
Primary (L2)	30
Secondary (L3)	4
Aerial Coil (S.W.):	
Primary (L4)	4
Secondary (L5)	*
Oscillator Coil (M.W.):	
Primary (L6)	2
Secondary (L7)	6
Oscillator Coil (S.W.):	
Primary (L8)	*
Secondary (L9)	*
I.F. Transformer Windings	10
I.F Filter (L1)	17.5†
Power Transformer (T2):	
Primary	50
Secondary	400
Loudspeaker Input Transformer (T1):	
XA2 Primary	450
XA2 Secondary	*
TU2 Primary	490
TU2 Secondary	*
TX2 Primary	430
TX2 Secondary	*
TU202 Primary	400
TU202 Secondary	*

The above readings were taken on a standard chassis, but substitution of materials during manufacture may cause variations, and it should not be assumed that a component is faulty if a slightly different reading is obtained.

*Less than 1 ohm.

†In some receivers this reading may be as high as 60 ohms.



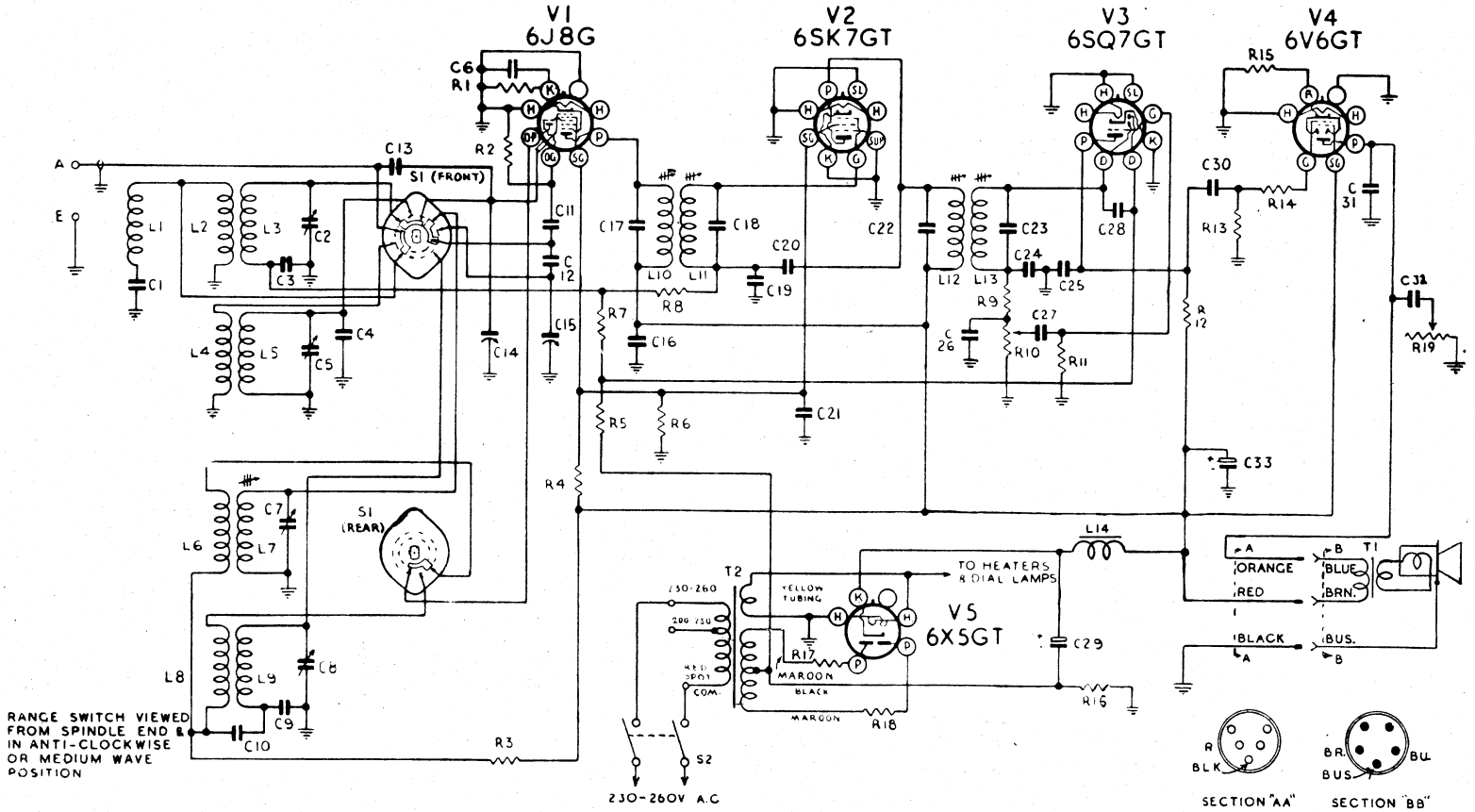
CIRCUIT CODE — HOTPOINT MODEL H35DGX.

Code No.	Description	Part No.
	INDUCTORS	
L1	I.F. Filter (including C4)	9382
L2, L3	Aerial Coil, 540-1600 Kc/s	15454
L4, L5	Aerial Coil, 6-18 Mc/s	15456
L6, L7	Oscillator Coil, 540-1600 Kc/s	9206A
L8, L9	Oscillator Coil, 6-18 Mc/s	15458
L10, L11	1st I.F. Transformer	22700
L12, L13	2nd I.F. Transformer	22703
L14	Filter Choke	TU17
	RESISTORS	
R1	200 ohms, ½ watt	
R2	32,000 ohms, ½ watt	
R3	25,000 ohms, 1 watt	
R4	25,000 ohms, 2 watt	
R5	1.6 megohms, ½ watt	
R6	2.5 megohms, ½ watt	
R7	20,000 ohms, 1 watt	
R8	0.1 megohm, ½ watt	
R9	50,000 ohms, ½ watt	
R10	50,000 ohms, ½ watt	
R11	20,000 ohms, ½ watt	
R12	0.5 megohm, Volume Control	6490
R13	10 megohms, 1 watt	
R14	325 ohms, 1 watt	
R15	50,000 ohms, ½ watt	
R16	0.5 megohm, ½ watt	
R17	50,000 ohms, 1 watt	
R18	50 ohms, 3 watt	
R19	100 ohms, ½ watt	
R20	100 ohms, ½ watt	
R21	0.25 megohm, 1 watt	
R22	50,000 ohms, ½ watt	
	CAPACITORS	
C1	4 uuF Mica	
C2	3-25 uuF Air Trimmer	19659
C3	.005 uF Paper, 200 v. working	
C4	50 uuF Silvered Mica	
C5	9 uuF Mica	
C6	3-25 uuF Air Trimmer	19659
C7	0.1 uF Paper, 200 v. working	
C8	3-25 uuF Air Trimmer	19659
C9	3-25 uuF Air Trimmer	19659
C10	4000 uuF Mica Padder, ± 2½%	
C11	.05 uF Paper, 400 v. working	
C12	70 uuF Mica	
C13	470 uuF Mica Padder, ± 2½%	
C14	12-430 uuF Tuning	18201
C15	12-430 uuF Tuning	18201
C16	.1 uF Paper, 400 v. working	
C17	70 uuF Mica	
C18	70 uuF Mica	
C19	.05 uF Paper, 400 v. working	
C20	.1 uF Paper, 400 v. working	
C21	9 uuF Mica	
C22	70 uuF Mica	
C23	70 uuF Mica	
C24	100 uuF Mica	
C25	200 uuF Mica	
C26	100 uuF Mica	
C27	.005 uF Paper, 600 v. working	
C28	50 uuF Mica	
C29	.01 uF Paper, 600 v. working	
C30	.01 uF Paper, 600 v. working	
C31	.005 uF Paper, 600 v. working	
C32	16 uF 525 P.V. Electrolytic	
C33	0.01 uF Paper, 600 v. working	
C34	8 uF 525 P.V. Electrolytic	
C35	.1 uF Paper, 400 v. working	
C36	25 uF 40 P.V. Electrolytic	
	TRANSFORMERS	
T1	Loudspeaker Transformer	TU202
T2	Power Transformer, 50-60 C.P.S.	17859A
T2	Power Transformer, 40 C.P.S.	17861A
	LOUDSPEAKER	
	12 inch Permanent Magnet	AU44, AU45
	SWITCHES	
S1	Range Switch, 1 wafer 2 position rotary	20507
S2	Phono/Radio/Tone Switch, 1 wafer 6 position rotary	20509
S3	Power Switch D.P.S.T.	

SOCKET VOLTAGES — MODELS Q55DE, H35DG, H35DGX, H35DGY.

Valve	Cathode to Chassis Volts	Screen Grid to Chassis Volts	Anode to Chassis Volts	Anode Current mA	Heater Volts
6J8GA Converter: M.W.	1.5	70	240	1.0	6.3
S.W.	2.0	70	240	1.3	6.3
Oscillator: M.W.	—	—	115	5.0	—
S.W.	—	—	115	5.0	—
6SK7GT I.F. Amplifier	0	70	240	5.0	6.3
6SQ7GT 2nd Det., A.V.C. and A.F. Amp.	0	--	90*	0.6	6.3
6V6GT/G Output	13	240	225	40	6.3
6X5GT Rectifier	300	—	280 (A.C.)	—	6.3

Volts across back-bias resistor Model Q55DE R16—3.0, Models H35DG, H35DGX, H35DGY R18—3.0.
Total H.T. current—60mA.
Measured at 240 volts A.C. supply. No signal input. Volume Control maximum clockwise. Voltmeter 1000 ohms per volt; measurements taken on highest scale giving accurate readable deflection.
*This reading may vary depending on the resistance of the voltmeter used.



CIRCUIT CODE — MODEL Q55DE.

Code No.	Description	Part No.
	INDUCTORS	
L1	I.F. Filter (including C1)	9382
L2, L3	Aerial Coil, 540-1600 Kc/s	15454
L4, L5	Aerial Coil, 6-18 Mc/s	15456
L6, L7	Oscillator Coil, 540-1600 Kc/s	9206A
L8, L9	Oscillator Coil, 6-18 Mc/s	15458
L10, L11	1st I.F. Transformer	22700
L12, L13	2nd I.F. Transformer	22703
L14	Filter Choke	TU17
	RESISTORS	
R1	200 ohms, ½ watt	
R2	32,000 ohms, ½ watt	
R3	25,000 ohms, 1 watt	
R4	25,000 ohms, 2 watt	
R5	2.5 megohms, ½ watt	
R6	20,000 ohms, 1 watt	
R7	1.6 megohm, ½ watt	
R8	0.1 megohm, ½ watt	
R9	50,000 ohms, ½ watt	
R10	0.5 megohm, Volume Control	6490
R11	10 megohms, 1 watt	
R12	0.25 megohm, 1 watt	
R13	0.5 megohm, ½ watt	
R14	50,000 ohms, ½ watt	
R15	325 ohms, 3 watt	
R16	50 ohms, 3 watt	
R17	100 ohms, ½ watt	
R18	100 ohms, ½ watt	
R19	0.1 megohm, Tone Control	4284
	CAPACITORS	
C1	50 uuF Silver Mica	
C2	3-25 uuF Air Trimmer	19659
C3	.05 uF Paper, 200 v. working	
C4	9 uuF Mica	
C5	3-25 uuF Air Trimmer	19659
C6	0.1 uF Paper, 200 v. working	
C7	3-25 uuF Air Trimmer	19659
C8	3-25 uuF Air Trimmer	19659
C9	4000 uuF padder ± 2½%	
C10	.05 uF Paper, 400 v. working	
C11	70 uuF Mica	
C12	470 uuF padder ± 2½%	
C13	4 uuF Mica	
C14	12-430 uuF Tuning	18201
C15	12-430 uuF Tuning	18201
C16	.1 uF Paper, 400 v. working	
C17	70 uuF Mica	
C18	70 uuF Mica	
C19	0.05 uF Paper, 600 v. working	
C20	9 uuF Mica	
C21	.1 uF Paper, 400 v. working	
C22	70 uuF Mica	
C23	70 uuF Mica	
C24	100 uuF Mica	
C25	200 uuF Mica	
C26	100 uuF Mica	
C27	.01 uF Paper, 600 v. working	
C28	50 uuF Mica	
C29	8 uF 525 P.V. Electrolytic	
C30	.02 uF Paper, 600 v. working	
C31	.01 uF Paper, 600 v. working	
C32	.035 uF Paper, 600 v. working	
C33	16 uF 525 P.V. Electrolytic	
	TRANSFORMERS	
T1	Loudspeaker Transformer	XA2
T2	Power Transformer, 50-60 C.P.S.	17859B
T2	Power Transformer, 40 C.P.S.	17861B
	LOUDSPEAKER	
	7 inch Permanent Magnet	AY38
	SWITCHES	
S1	Range Single Wafer, 4 pole 2 pos.	20507
S2	Power D.P.S.T. Rotary	