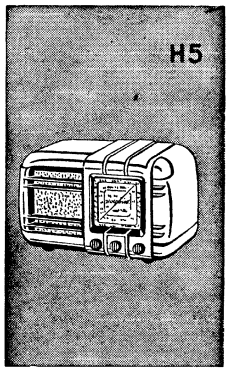


Hotpoint
BAND-MASTER

Models
H55MEZ
D/W **H55DEZ**

SERVICE DATA & TECHNICAL INFORMATION

FIVE VALVE,
TWO BAND, A.C. OPERATED
SUPERHETERODYNE

AUSTRALIAN GENERAL ELECTRIC
PROPRIETARY LIMITED

FIVE VALVE,
BROADCAST, A.C. OPERATED
SUPERHETERODYNE

ELECTRICAL SPECIFICATIONS.

Frequency Range:

Model H55MEZ ..... M.W. 540-1600 Kc/s (555-187.5 M)
Model H55DEZ ..... M.W. 540-1600 Kc/s (555-187.5 M)
S.W. 6-18 Mc/s (50-16 M)

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

Valve Complement:

Model H55MEZ.....
1. 6A8G Converter
2. 6AR7GT I.F. Amp., Det., A.V.C.
3. 6AU6 A.F. Amp.
4. 6V6GT Output
5. 6X5GT Rectifier

Model H55DEZ..... 6J8GA Converter
2. 6AR7GT I.F. Amp., Det., A.V.C.
3. 6AU6 A.F. Amp.
4. 6V6GT Output
5. 6X5GT Rectifier

Loudspeaker:
6½ inch—code number AE21
Transformer XA2
V.C. Impedance 3 ohms at 400 C.P.S.
Field 1000 ohms.

Undistorted Power Output ..... 3 watts

Controls: See accompanying diagrams. Model H55DEZ incorporates a Tone Control on the rear of the chassis.

MECHANICAL SPECIFICATIONS.

	Height	Width	Depth
Cabinet Dimensions (ins.)	7¾	12½	6¾
Chassis Base Dimensions (ins.)	2½	11	5½
Carton Dimensions (ins.)	10½	13¾	8¾

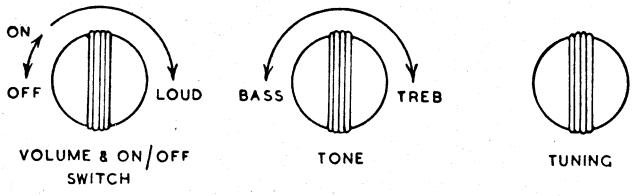
Weight (nett) ..... 16 lbs.
Cabinet Colours ..... Walnut, Ivory, Burgundy

GENERAL DESCRIPTION.

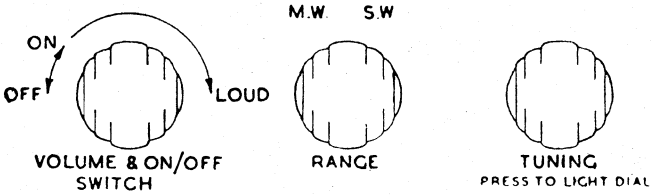
The models H55MEZ and H55DEZ are mantel models housed in moulded plastic cabinets which are produced in three colours: Ivory, Walnut and Burgundy.

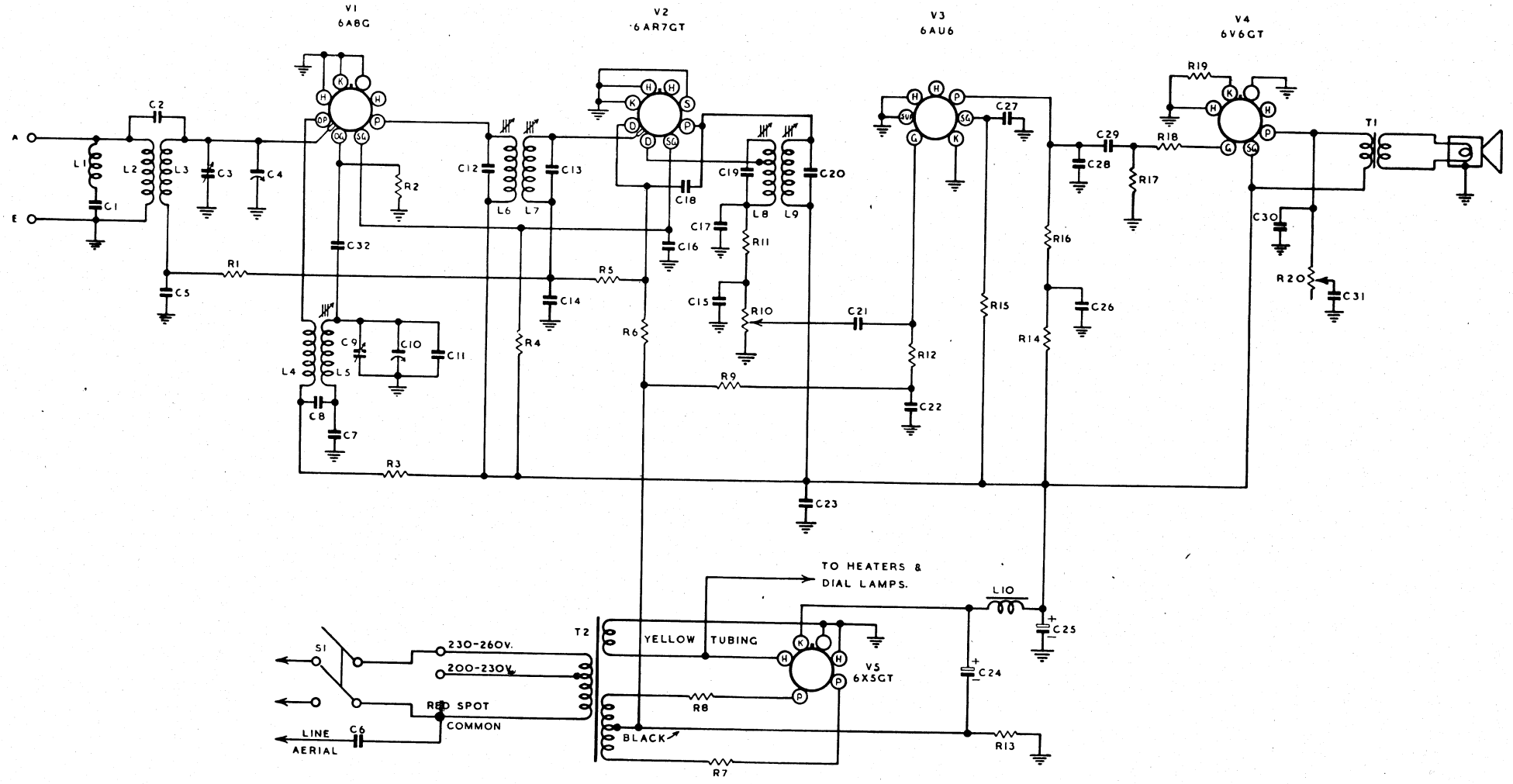
Features of design include: Tropic-proof construction, automatic volume control, magnetite cores in I.F. Transformers and broadcast oscillator coils, air-dielectric trimming capacitors, straight-line edge lit dial scale.

Controls: H55MEZ



Controls: H55DEZ




V1
6A8G
V2
6AR7GT
V3
6AU6
V4
6V6GT
A
E
L1
L2
L3
C1
C2
C3
C4
R1
R2
C5
C32
L4
L5
C8
C7
C9
C10
C11
R3
C12
C13
L6
L7
R4
C14
R5
R6
C18
C19
C20
L8
L9
C17
C16
R11
C15
R10
C21
R9
R12
C22
C23
C27
R15
R16
R14
C29
C28
R18
R17
R19
C30
R20
C31
T1
TO HEATERS &
DIAL LAMPS.
L10
C25
C24
R13
T2
S1
230-260V.
200-230V.
RED SPOT
COMMON
LINE
AERIAL
C6
YELLOW
TUBING
BLACK
V5
6X5GT
R8
R7

ALIGNMENT PROCEDURE.

Manufacturer's Setting of Adjustments.

The receiver is tested by the manufacturer with precision instruments and all adjusting screws are sealed. Re-alignment 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 re-adjusted 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.

ALIGNMENT TABLE. MODEL H55MEZ.

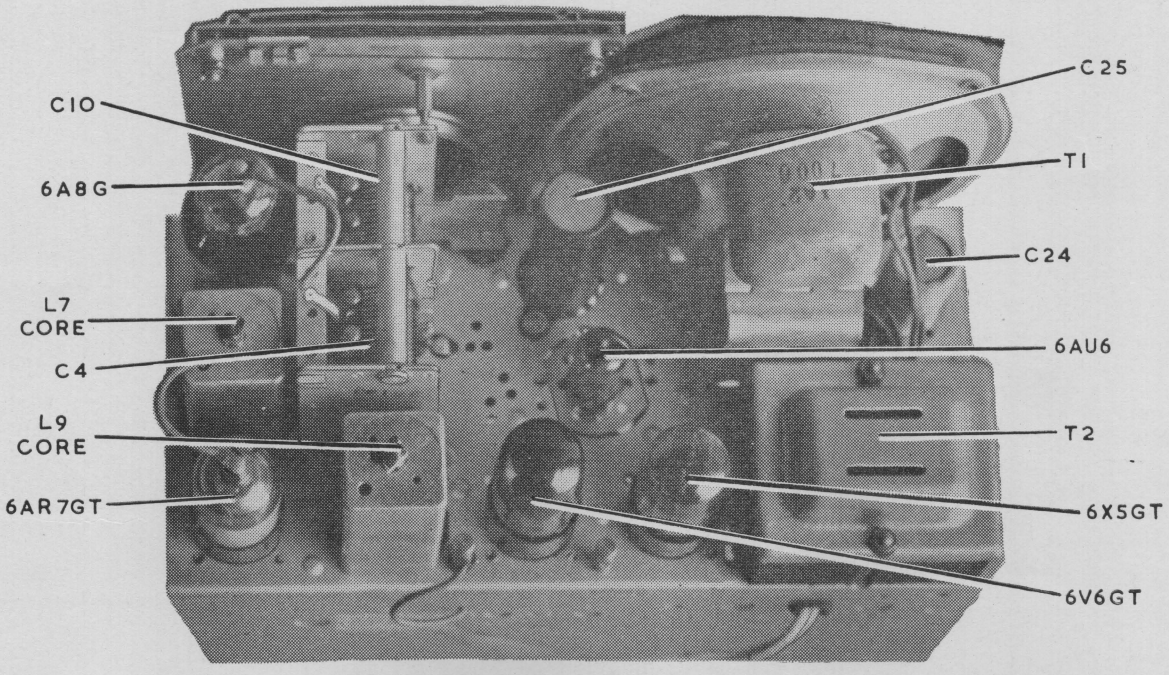
Order	Connect "high" side of Generator to:	Tune Generator to:	Tune Receiver Dial to:	Adjust for maximum peak output
1	6A8G*	455 Kc/s	540 Kc/s	L9 Core
2	6A8G*	455 Kc/s	540 Kc/s	L8 Core
3	6A8G*	455 Kc/s	540 Kc/s	L7 Core
4	6A8G*	455 Kc/s	540 Kc/s	L6 Core
	Repeat the above adjustments until the maximum output is obtained			
5	Aerial Terminal	600 Kc/s	600 Kc/s	L.F. Osc. Core Adj. (L5)†
6	Aerial Terminal	1500 Kc/s	1500 Kc/s	H.F. Osc. Adj. (C9)
7	Aerial Terminal	1500 Kc/s	1500 Kc/s	H.F. Aer. Adj. (C3)
	Repeat adjustments 5, 6 and 7.			

*With grid clip connected. A 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.

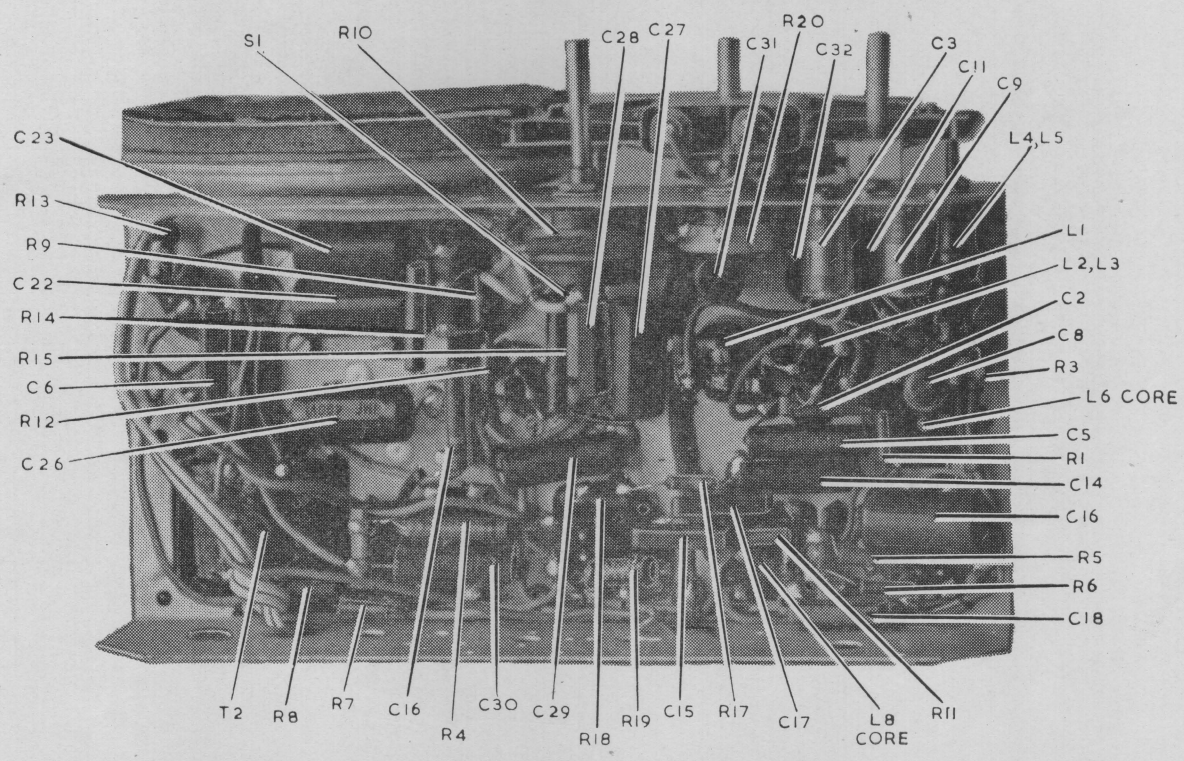
ALIGNMENT TABLE. MODEL H55DEZ.

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. (C12)
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. (C13)‡
9	Aerial Terminal	16 Mc/s	16 Mc/s	H.F. Aer. Adj. (C4)§

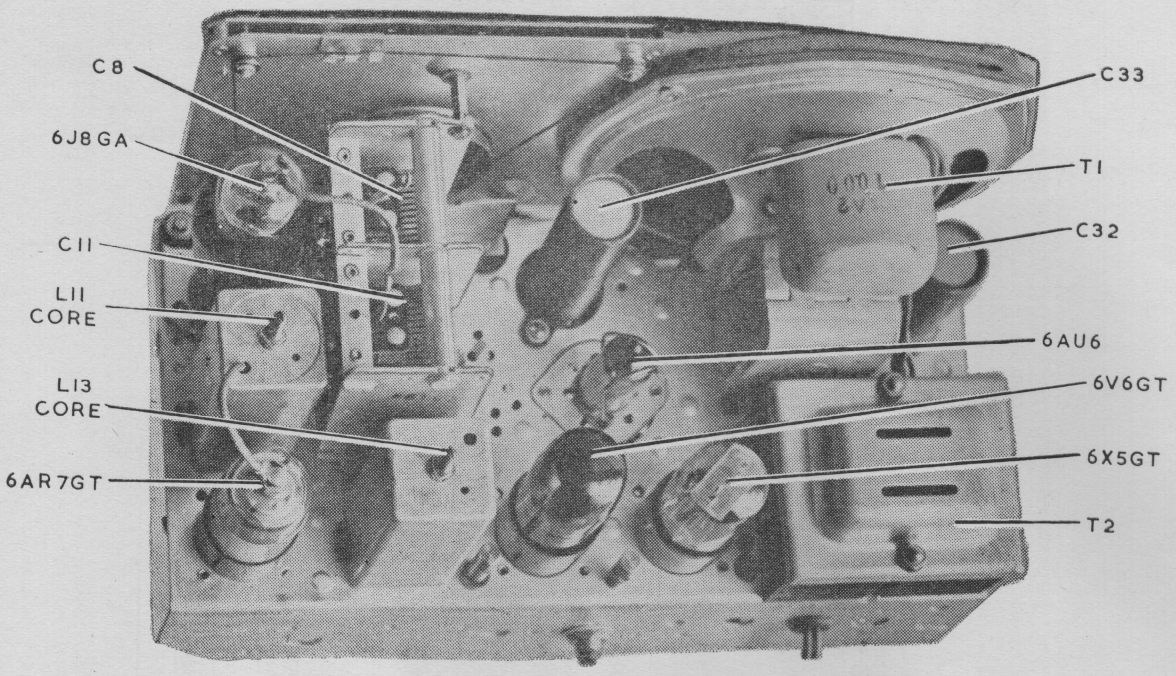
*With grid clip connected, a 0.001 uF capacitor should be connected in series with the "high" side of the test instrument.
†Rock the tuning control back and forth through the signal.
‡Use minimum capacity peak if two can be obtained. Check to determine that the trimmer has been adjusted to correct peak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



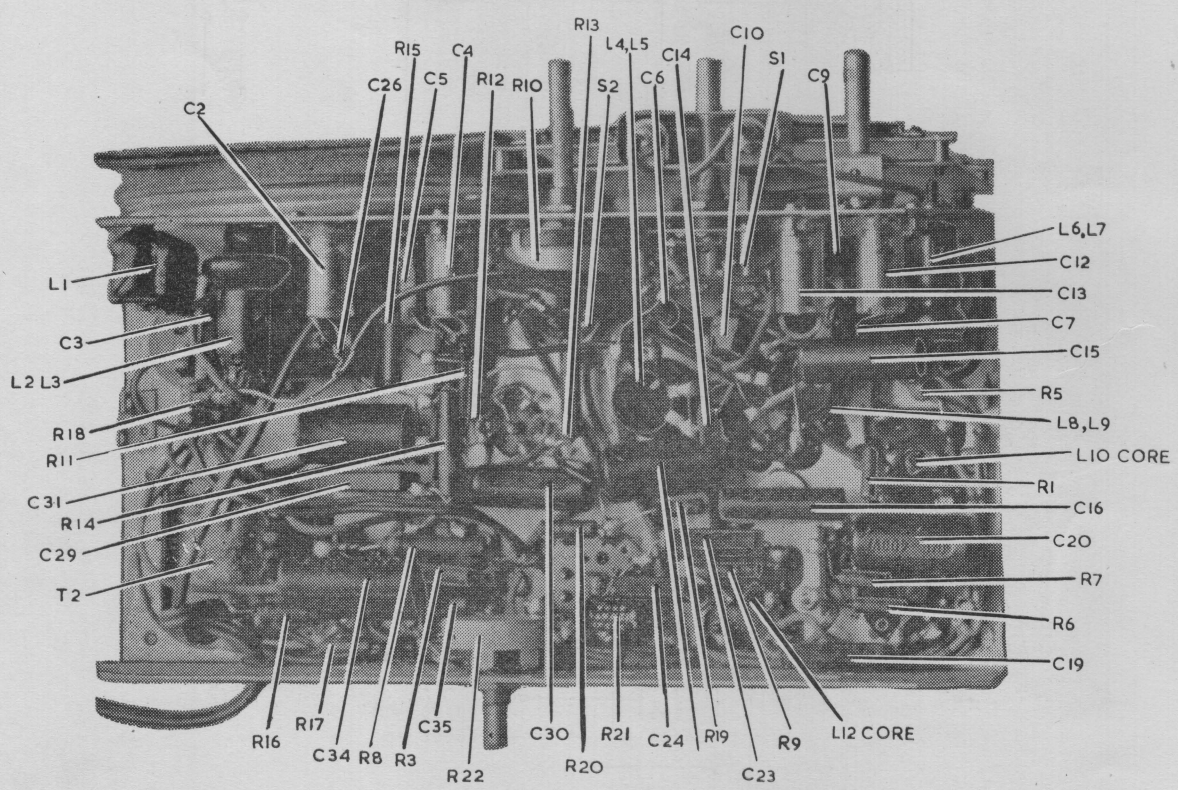
Chassis (top view). Model H55MEZ.



Chass (bottom view). Model H55MEZ.



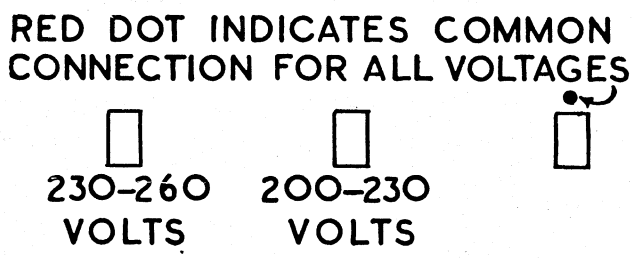
Chassis (top view). Model H55DEZ.



Chassis (bottom view). Model H55DEZ.

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 a label within the cabinet. The power supply connections are shown in the accompanying diagram.



Chassis Removal.

First remove the control knobs and felt washers—each knob is held by a set-screw. Then remove two screws from underneath the cabinet and withdraw the chassis.

Drive Cord Replacement.

1. Remove the dial backing from the front plate.

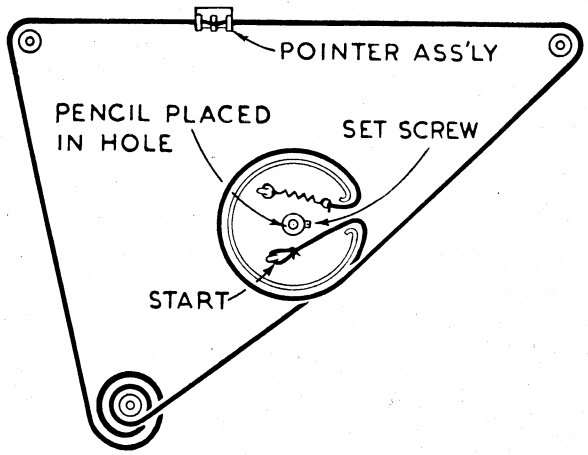
2. Loosen the set-screws holding the drive drum to the gang spindle.

3. Remove the front plate by unscrewing three screws from the front of the plate.

Before the drive cord can be replaced, it is necessary to fasten to the drive drum some object similar to the drive spindle. A pencil will be found quite satisfactory.

Now replace the drive cord as shown in the accompanying diagram.

To replace the front plate and drive drum, loosen the set-screws in the drum and, using the pencil as a guide, push the front plate and drive drum into position. Now re-tighten the set-screws and replace the front plate screws.



SOCKET VOLTAGES. MODEL H55MEZ.

	Valve	Cathode to Chassis Volts:	Screen Grid to Chassis Volts:	Anode to Chassis Volts	Anode Current mA.	Heater Volts
6A8G	Converter	0	90	230	4	6.3
	Oscillator	0	—	150	4	—
6AR7GT	I.F. Amp., Det., A.V.C.	0	90	230	5	6.3
6AU6	A.F. Amp.	0	90*	120*	0.7	6.3
6V6GT	Output	13	230	215	35	6.3
6X5GT	Rectifier	290	—	280A.C.	—	6.3

Volts across back-bias resistor R13—2.

Total H.T. Current—60mA.

*This reading may vary depending on the resistance of the voltmeter used.

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.

SOCKET VOLTAGES. MODEL H55DEZ.

	Valve	Cathode to Chassis Volts:	Screen Grid to Chassis Volts:	Anode to Chassis Volts:	Anode Current mA:	Heater Volts:
6J8GA	Converter, M.W.	0	80	230	1.3	6.3
	S.W.	2.5	80	230	1.1	—
	Oscillator, M.W.		—	105	5	—
	S.W.		—	105	5	—
6AR7GT	I.F. Amp., Det., A.V.C.	0	80	230	5	6.3
6AU6	A.F. Amp.	0	90*	120*	0.7	6.3
6V6GT	Output	13	230	215	35	6.3
6X5GT	Rectifier	290	—	280A.C.	—	6.3

Volts across back-bias resistor R18—2.

Total H.T. Current—60mA.

*This reading may vary depending on the resistance of the voltmeter used.

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.

D.C. RESISTANCE OF WINDINGS. MODEL H55MEZ.

Winding	D.C. Resistance in Ohms
Aerial Coil	
Primary (L2)	30
Secondary (L3)	4
Oscillator Coil	
Primary (L4)	2
Secondary (L5)	6.5
I.F. Transformer Windings	10
I.F. Filter (L1)	17.5*
Power Transformer (T2)	
Primary	50
Secondary	400
Loudspeaker Input Transformer (T1)	
Primary	450
Secondary	†

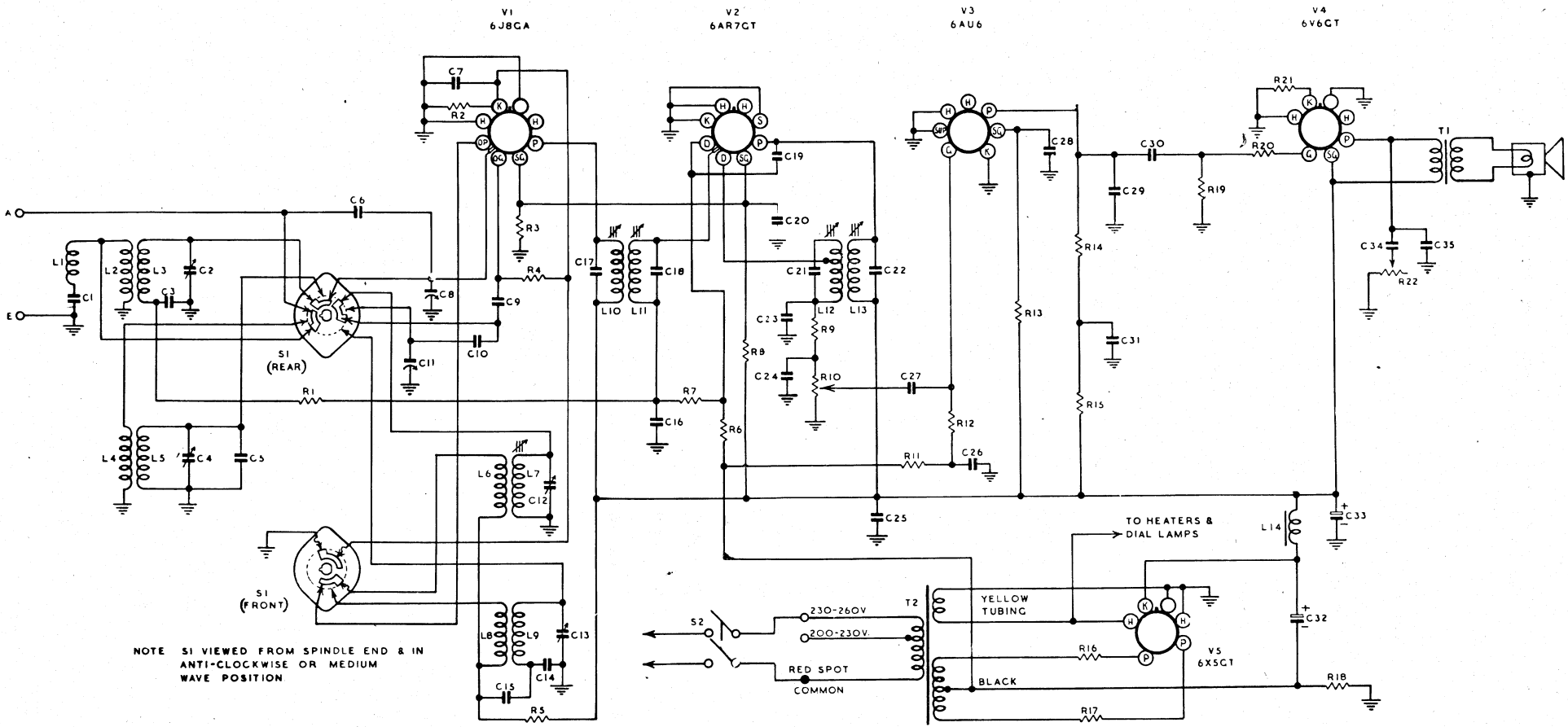
* In some receivers this reading may be as high as 60 ohms.
† Less than 1 ohm.

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.

MECHANICAL REPLACEMENT PARTS.

Items	Part No.
Cabinet	20090
Cable, Aerial	15452
Power	26053
Chassis, End, Left-hand	20124
Right-hand	22417
Clip, Grid	7459
Dial, Light Cowl	25554
Pointer	25572
Scale, Model H55MEZ	23375C
Model H55DEZ	23377C

Items	Part No.
Drive Drum	24233
Front Plate	25551
Knob	17603
Socket, Valve	4704
Valve	20142
Spindle Drive	25563
Strip, Tag, 1 way (H55MEZ only)	7628
2 way	8863
6 way	23996
Terminal Spring	5458


V1
6J8GA
V2
6AR7GT
V3
6AU6
V4
6V6GT
V5
6X5GT
A
E
L1
L2
L3
L4
L5
L6
L7
L8
L9
L10
L11
L12
L13
L14
C1
C2
C3
C4
C5
C6
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C35
R1
R2
R3
R4
R5
R6
R7
R8
R9
R10
R11
R12
R13
R14
R15
R16
R17
R18
R19
R20
R21
R22
S1
(REAR)
S1
(FRONT)
S2
T1
T2
230-260V
200-230V
RED SPOT
COMMON
YELLOW
TUBING
BLACK
TO HEATERS &
DIAL LAMPS
NOTE S1 VIEWED FROM SPINDLE END & IN
ANTI-CLOCKWISE OR MEDIUM
WAVE POSITION

MODEL H55DEZ—CIRCUIT CODE.

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	25195
L12, L13	2nd I.F. Transformer	25197
L14	Speaker Field 1000 ohms	
	RESISTORS.	
R1	0.1 megohm ½ watt	
R2	320 ohms ½ watt	
R3	20,000 ohms 1 watt	
R4	30,000 ohms ½ watt	
R5	25,000 ohms 1 watt	
R6	1.6 megohms ½ watt	
R7	1.0 megohm ½ watt	
R8	20,000 ohms 2 watts	
R9	50,000 ohms ½ watt	
R10	0.5 megohm Volume Control (includes S2)	23480
R11	0.5 megohm ½ watt	
R12	1.6 megohms ½ watt	
R13	0.5 megohm 1 watt	
R14	0.1 megohm 1 watt	
R15	50,000 ohms 1 watt	
R16	100 ohms ½ watt	
R17	100 ohms ½ watt	
R18	32 ohms 3 watts	
R19	0.5 megohm ½ watt	
R20	50,000 ohms ½ watt	
R21	325 ohms 3 watts	
R22	0.1 megohm Tone Control	25541
	CAPACITORS.	
C1	50 uuF silvered mica	
C2	2-20 uuF air trimmer	19659
C3	0.05 uF paper 200 V working	
C4	2-20 uuF air trimmer	19659
C5	9 uuF mica	
C6	4 uuF mica	
C7	0.1 uF paper 200 V working	
C8	12-430 uuF tuning	18202
C9	70 uuF mica	
C10	490 uuF padder ± 2½%	
C11	12-430 uuF tuning	18202
C12	2-20 uuF air trimmer	19659
C13	2-20 uuF air trimmer	19659
C14	4000 uuF padder ± 2½%	
C15	0.05 uF paper 400 V working	
C16	0.05 uF paper 200 V working	
C17	100 uuF silvered mica	
C18	100 uuF silvered mica	
C19	50 uuF mica	
C20	0.1 uF paper 400 V working	
C21	100 uuF silvered mica	
C22	100 uuF silvered mica	
C23	100 uuF mica	
C24	100 uuF mica	
C25	0.1 uF paper 400 V working	
C26	0.4 uF paper 200 V working	
C27	0.025 uF paper 400 V working	
C28	0.1 uF paper 400 V working	
C29	100 uuF mica	
C30	0.02 uF paper 600 V working	
C31	0.1 uF paper 400 V working	
C32	8 uF 525 P.V. Electrolytic	
C33	16 uF 525 P.V. Electrolytic	
C34	0.03 uF paper 600 V working	
C35	0.01 uF paper 600 V working	
	TRANSFORMERS.	
T1	Loudspeaker Transformer	XA2
T2	Power Transformer 50-60 C.P.S.	17859B
T2	Power Transformer 40 C.P.S.	17861B
	SWITCHES.	
S1	Range Switch	25559
S2	Power Switch (on R10)	
	LOUDSPEAKER.	
	6½ inch electro magnet	AE21

D.C. RESISTANCE OF WINDINGS MODEL H55DEZ.

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)	
Primary	450
Secondary	*

* Less than 1 ohm.

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

CIRCUIT CODE H55MEZ.

Code No.	Description	Part No.
	INDUCTORS	
L1	I.F. Filter (including C1)	9382
L2, L3	Aerial Coil 540-1600 Kc/s	15454
L4, L5	Oscillator Coil 540-1600 Kc/s	7638A
L6, L7	1st I.F. Transformer	25195
L8, L9	2nd I.F. Transformer	25197
L10	Speaker Field 1000 ohms	
	RESISTORS	
R1	0.1 megohm ½ watt	
R2	50,000 ohms, ½ watt	
R3	20,000 ohms 1 watt	
R4	25,000 ohms 2 watts	
R5	1 megohm ½ watt	
R6	1.6 megohms ½ watt	
R7	100 ohms ½ watt	
R8	100 ohms ½ watt	
R9	0.5 megohms ½ watt	
R10	0.5 megohm Volume Control (includes S1)	23480
R11	50,000 ohms ½ watt	
R12	1.6 megohms ½ watt	
R13	32 ohms 3 watt	
R14	50,000 ohms 1 watt	
R15	0.5 megohm 1 watt	
R16	0.1 megohm 1 watt	
R17	0.5 megohm ½ watt	
R18	50,000 ohms ½ watt	
R19	320 ohms 3 watt	
R20	0.1 megohm Tone Control	21917
	CAPACITORS	
C1	50 uuF Silvered Mica	
C2	4 uuF Mica	
C3	2-20 uuF Air Trimmer	19659
C4	12-430 uuF Tuning	18202
C5	0.05 uF Paper 200 v. Working	
C6	500 X uuF Mica (2000 v. Test)	
C7	440 uuF ± 2½% Padder	
C8	0.05 uF Paper 400 v. Working	
C9	2-20 uuF Air Trimmer	19659
C10	12-430 uuF Tuning	18202
C11	9 uuF Mica	
C12	100 uuF Silvered Mica	
C13	100 uuF Silvered Mica	
C14	0.05 uF Paper 200 v. Working	
C15	100 uuF Mica	
C16	0.1 uF Paper 400 v. Working	
C17	100 uuF Mica	
C18	50 uuF Mica	
C19	100 uuF Silvered Mica	
C20	100 uuF Silvered Mica	
C21	0.025 uF Paper 400 v. Working	
C22	0.4 uF Paper 200 v. Working	
C23	0.1 uF Paper 400 v. Working	
C24	8 uF 525 P.V. Electrolytic	
C25	16 uF 525 P.V. Electrolytic	
C26	0.1 uF Paper 400 v. Working	
C27	0.1 uF Paper 400 v. Working	
C28	100 uuF Mica	
C29	0.02 uF Paper 600 v. Working	
C30	0.01 uF Paper 600 v. Working	
C31	0.03 uF Paper 600 v. Working	
C32	70 uuF Mica	
	TRANSFORMERS	
T1	Loudspeaker Transformer	XA2
T2	Power Transformer 50-60 C.P.S.	17859B
T2	Power Transformer 40 C.P.S.	17861B
	SWITCH	
S1	Power Switch (on R10)	
	LOUDSPEAKER	
	6½ inch Electro Magnet	AE21