

MODEL

L64ME

Hotpoint BAND-MASTER

SERVICE DATA & TECHNICAL INFORMATION

**FOUR VALVE
BROADCAST**

**AUSTRALIAN
GENERAL ELECTRIC
PROPRIETARY LIMITED**

**A.C. OPERATED
SUPERHETERODYNE**

ELECTRICAL SPECIFICATIONS.

Frequency Range	540-1600 Kc/s. (555-187.5 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	35 watts

LOUDSPEAKER (Permanent Magnet):
5 inch—Code number AC53.
Transformer—XA2.

V.C. Impedance—3 ohms at 400 C.P.S.
Undistorted Power Output—1.5 watts.

VALVE COMPLEMENT:

- (1) 6BE6, Converter.
- (2) 6AR7GT, I.F. Amp., Det., A.V.C.
- (3) N78, Output.*
- (4) 5Y3GT Rectifier.

*Some receivers have been fitted with a KT61 output valve which is identical in performance with the N78. KT61 socket connections are shown in Fig. 4.

MECHANICAL SPECIFICATIONS.

	Height	Width	Depth
Cabinet Dimensions (ins.)	7 $\frac{3}{4}$	12 $\frac{3}{8}$	7 $\frac{1}{4}$
Carton Dimensions (ins.)	10	16	10
Weight (nett lbs.)	12 lbs.		
Cabinet Colours	Walnut, Ivory, Burgundy.		

GENERAL DESCRIPTION.

The Hotpoint L64ME is a compact mantel receiver housed in an attractively designed two-piece plastic cabinet. The back is so designed to enable the receiver to be carried with ease.

Features of design include—Tropic-proof construction, automatic volume control, magnetite cores in I.F. transformers and oscillator coil, automatic tone compensation, straight-line edge lighted plastic dial scale.

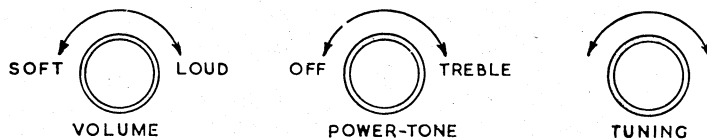


FIG. 1.

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 replaced or repaired, 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.
- (3) A.W.A. Output Meter, type 2M8832.

CIRCUIT CODE L64-ME.

Code No.	Description	Part No.	Code No.	Description	Part No.	Code No.	Description	Part No.
INDUCTORS								
L1	I.F. Filter (including C1)	9382	C1	50 uuF Silvered Mica		C18	0.025 uF Paper 400 v. Working	
L2, L3	Aerial Coil 540-1600 Kc/s.	7647A	C2	4 uuF Mica		C19	0.1 uF Paper 400 v. Working	
L4	Oscillator Coil 540-1600 Kc/s.	15949	C3	2-20 uuF Trimmer (on Gang)	18671	C20	24 uuF 350 P.V. Electrolytic	
L5, L6, L7, L8	1st I.F. Transformer ... 2nd I.F. Transformer ...	22709 22703	C4	12-430 uuF Tuning		C21	0.01 uF Paper 600 v. Working	
			C5	0.05 uF Paper 200 v. Working		C22	0.05 uF Paper 400 v. Working	
			C6	470 uuF Padder $\pm 2\frac{1}{2}\%$		C23	9 uuF Mica	
RESISTOR								
R1	20,000 ohms $\frac{1}{2}$ watt		C7	2-20 uuF Trimmer (on Gang)			TRANSFORMERS	
R2	0.5 megohm $\frac{1}{2}$ watt		C8	12-430 uuF Tuning	18671	T1	Loudspeaker Trans-	XA2
R3	1.0 megohm $\frac{1}{2}$ watt		C9	70 uuF Silvered Mica		T2	Power Transformer 50-60 C.P.S.	17871C
R4	2.5 megohm $\frac{1}{2}$ watt		C10	70 uuF Silvered Mica			Power Transformer 40 C.P.S.	17873C
R5	10,000 ohms 1 watt		C11	0.05 uF Paper 200 v. Working				
R6	0.5 megohm Volume Control (Tapped at 100,000 ohms)	26890	C12	0.1 uF Paper 400 v. Working				
R7	10,000 ohms $\frac{1}{2}$ watt		C13	70 uuF Silvered Mica			LOUDSPEAKER	
R8	75 ohms $\frac{1}{2}$ watt		C14	70 uuF Silvered Mica			5 inch Permanent Mag-net	AC53
R9	0.5 megohm $\frac{1}{2}$ watt		C15	500 uuF Mica				
R10	2,000 ohms 1 watt		C16	0.025 uF Paper 400 v. Working			SWITCH	
R11	50,000 ohms $\frac{1}{2}$ watt		C17	24 uuF 350 P.V. Electrolytic		S1	Power Switch (on R12)	
R12	0.1 megohm Tone Control (including S1)	26441						

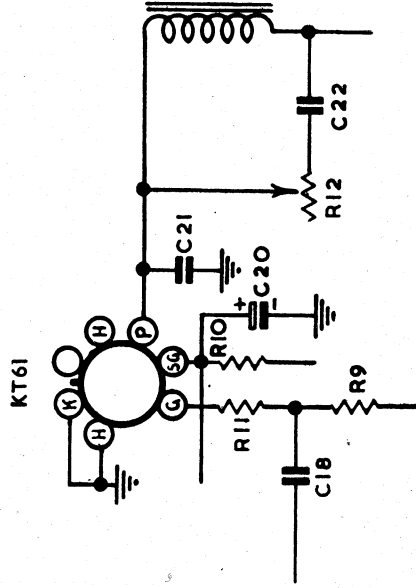
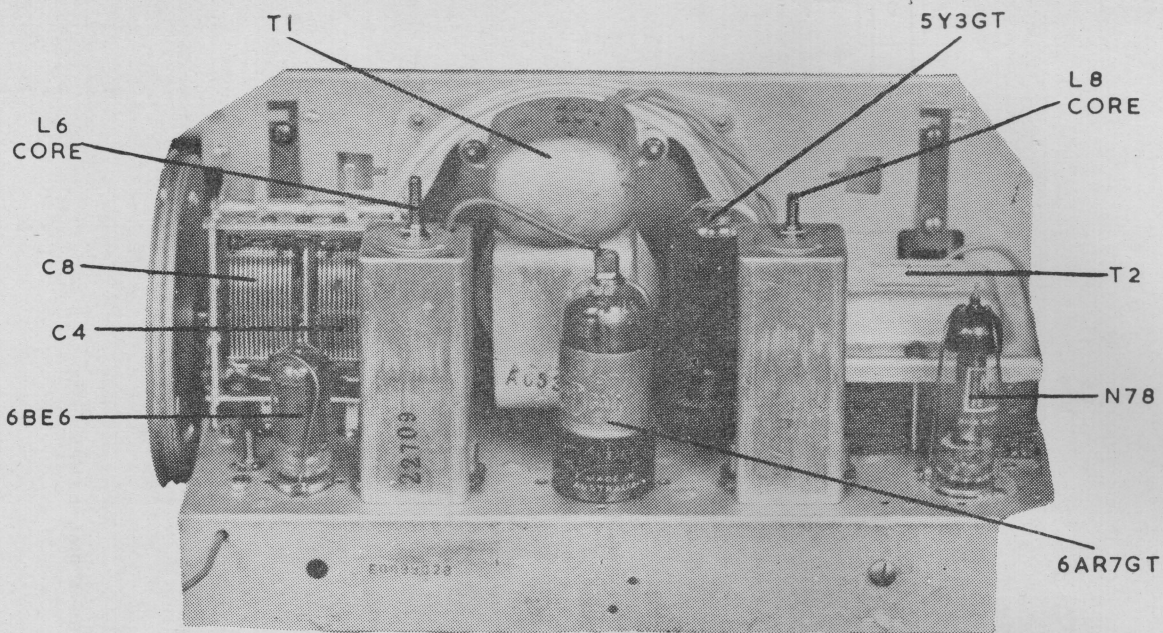
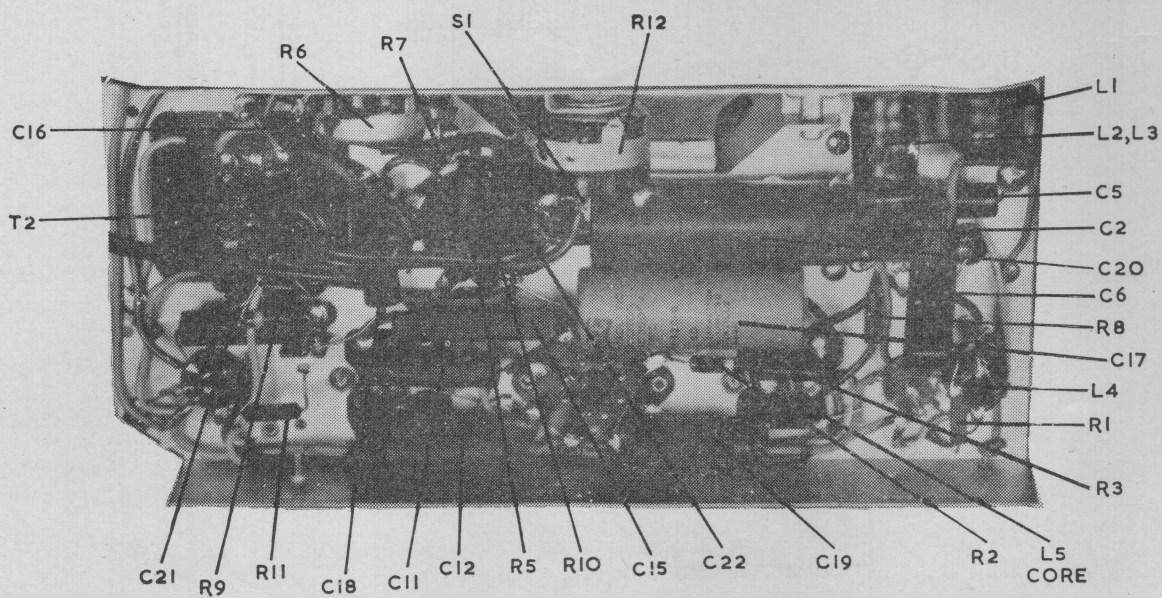


FIG. 4.

Code Values are unchanged.



CHASSIS TOP VIEW MODEL L64ME



CHASSIS UNDERNEATH VIEW MODEL L64ME

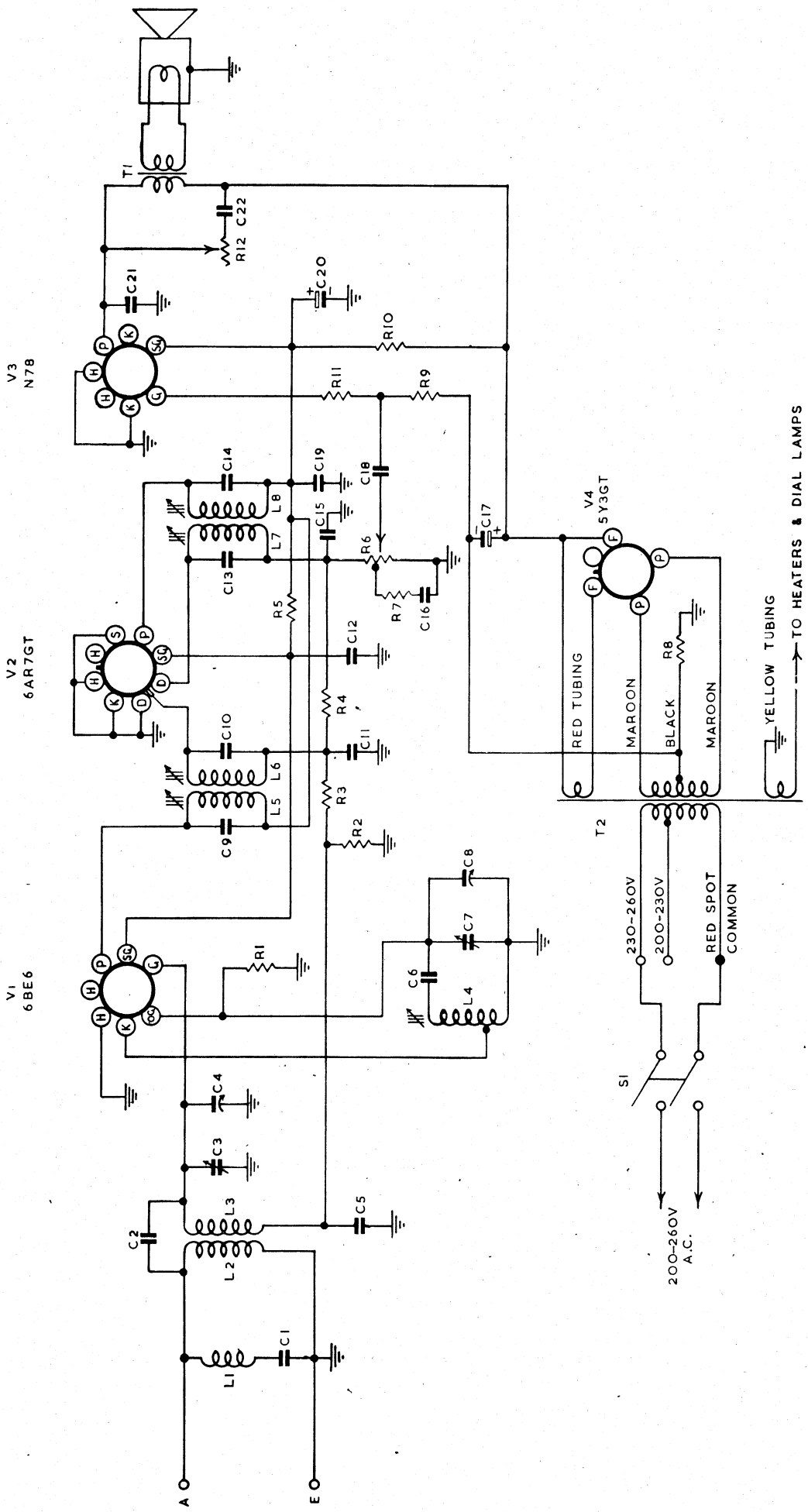


FIG. 5.

YELLOW TUBING → TO HEATERS & DIAL LAMPS

ALIGNMENT TABLE.

Alignment Order	Connect "high" side of Generator to:	Tune Generator to:	Tune Receiver to:	Adjust for Maximum Peak Output
1	Aerial Section of Gang (Rear portion)	455 Kc/s.	540 Kc/s.	L8 Core
2	Aerial Section of Gang (Rear portion)	455 Kc/s.	540 Kc/s.	L7 Core
3	Aerial Section of Gang (Rear portion)	455 Kc/s.	540 Kc/s.	L6 Core
4	Aerial Section of Gang (Rear portion)	455 Kc/s.	540 Kc/s.	L5 Core
Repeat the above adjustments until the maximum output is obtained.				
5	Aerial Lead	600 Kc/s.	600 Kc/s.	L.F. Osc. Core Adj. (L4) *
6	Aerial Lead	1500 Kc/s	1500 Kc/s.	H.F. Osc. Adj. (C7)
7	Aerial Lead	1500 Kc/s	1500 Kc/s.	H.F. Aer. Adj. (C3)
Repeat adjustments 5, 6 and 7.				

*Rock the tuning control back and forth through the signal.

Chassis Removal.

- (1) Remove the control knobs by pulling them straight off their spindles.
- (2) Remove two recessed nuts from the top of the cabinet back, two screws from underneath the cabinet back and withdraw it.
- (3) The chassis is held to the cabinet front by two screws situated under it. Removal of these enables the chassis to be withdrawn from the cabinet.

When replacing the chassis, make sure that the dial lamps locate correctly in their respective light cowls.

DRIVE CORD REPLACEMENT

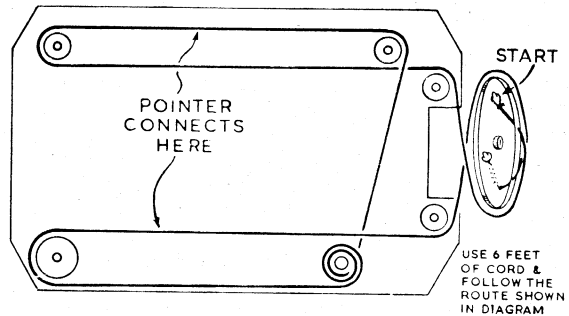


FIG. 2.

Tuning Drive Cord Replacement.

The accompanying diagram shows the route of the cord and the method of attachment. The fret assembly must be removed before the drive cord can be fitted.

RED DOT INDICATES COMMON CONNECTION FOR ALL VOLTAGES

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 diagram.

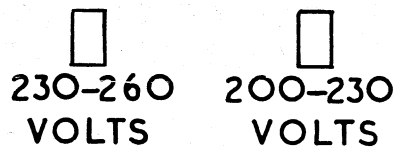


FIG. 3.

MECHANICAL REPLACEMENT PARTS.

Item	Part No.	Item	Part No.
Cabinet, front	26501	Knob	26516
Cabinet, back	26502	Light shield (walnut and bur-	
Cable power	15940	gundy cabinets only)	26527
Cib, grid	7459	Light shield (ivory cabinet only)	27043
Dial, pointer	26884	Socket, valve octal	4704
Dial, scale, Northern	25964	Socket, valve miniature.....	19965
Dial, scale, Southern	25962	Spindle, drive	26520
Drum, drive	25261	Strip, tag 1 way	7628.
Fret, assembly	26889		

D.C. RESISTANCE OF WINDINGS.

Winding	D.C. Resistance in ohms
Aerial Coil:	
Primary (L2)	30
Secondary (L3)	4
Oscillator Coil (L4)	5
I.F. Filter (L1)	17.5*
I.F. Transformer Windings.....	10
Power Transformer (T2):	
Primary	60
Secondary	350
Loudspeaker Input Transformer (T1):	
Primary	525 or 430
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.

SOCKET VOLTAGES.

VALVES	Screen Grid to Chassis Volts	Anode to Chassis Volts	Anode Current mA.	Heater Volts
6BE6 Converter	85	200	1.5	6.3
6AR7GT I.F. Amp., Det., A.V.C.	85	200	7.5	6.3
N78 Output	160	190	23	6.3
5Y3GT Rectifier	—	190 A.C.	—	5.0

Volts across back-bias resistor R8—3.0 v.

Total H.T. Current—43 mA.

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.