

Courier

# TECHNICAL INFORMATION MODEL RBH

## 7 VALVE BANDSPREAD A.C. 1951

DESIGNED AND MANUFACTURED

# RADIO (1936) LTD.

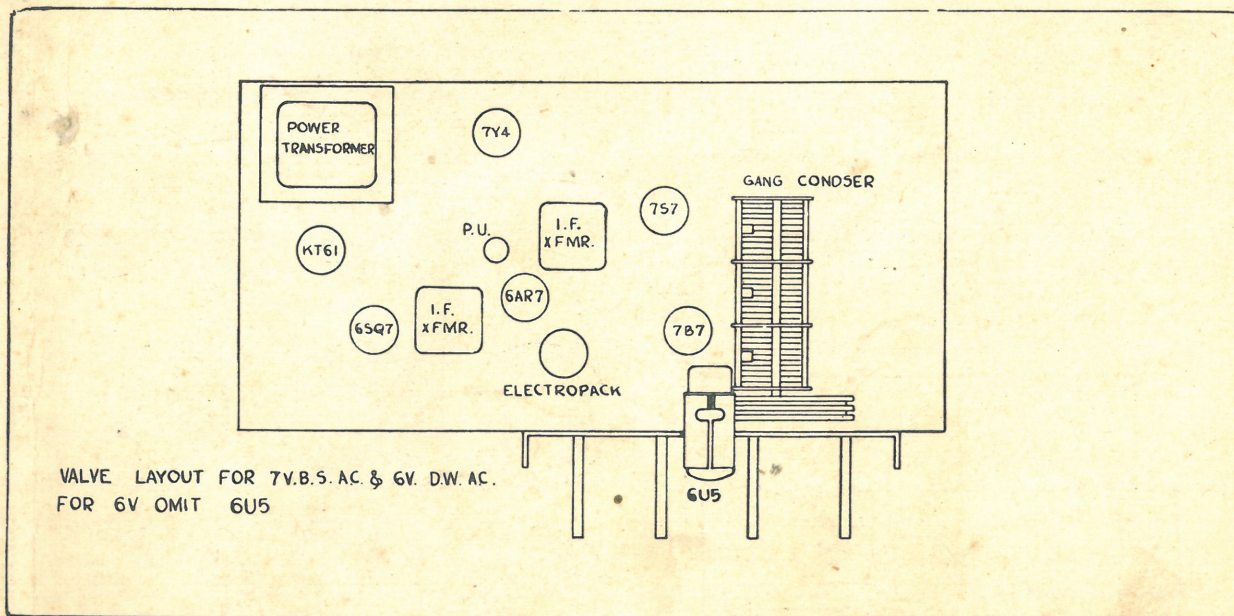
Power Supply	230v. 50CP/S	Rating	60 watts
Tuning Range	1600 K/CS - 550 K/CS	Speaker	Rola 8 H
21.5 MC/S - 17.8 MC/S - 15.2 MC/S - 11.8 MC/S		Power Output	3 watts
9.6 MC/S - 7.15 MC/S - 6.1 MC/S - 3.75 MC/S		I.F. Frequency	460 KC/S

### CIRCUIT DESCRIPTION :

A type 7B7 valve is employed as a radio frequency amplifier and is coupled to a type 7S7 frequency changer which is in turn coupled by means of a double tuned high gain I.F. Transformer to a type 6AR7GT which combines the function of intermediate frequency amplification, Detection and A.G.C. source. Voltage amplification is performed by a type 6SQ7GT and this valve is capacitively coupled to a type KT61G power amplifier. A type 6U7G is utilized as visual means of accurate tuning. The 230 AC mains source is converted to direct current by means of a 7Y4 valve, double wound power Xformer and filter system.

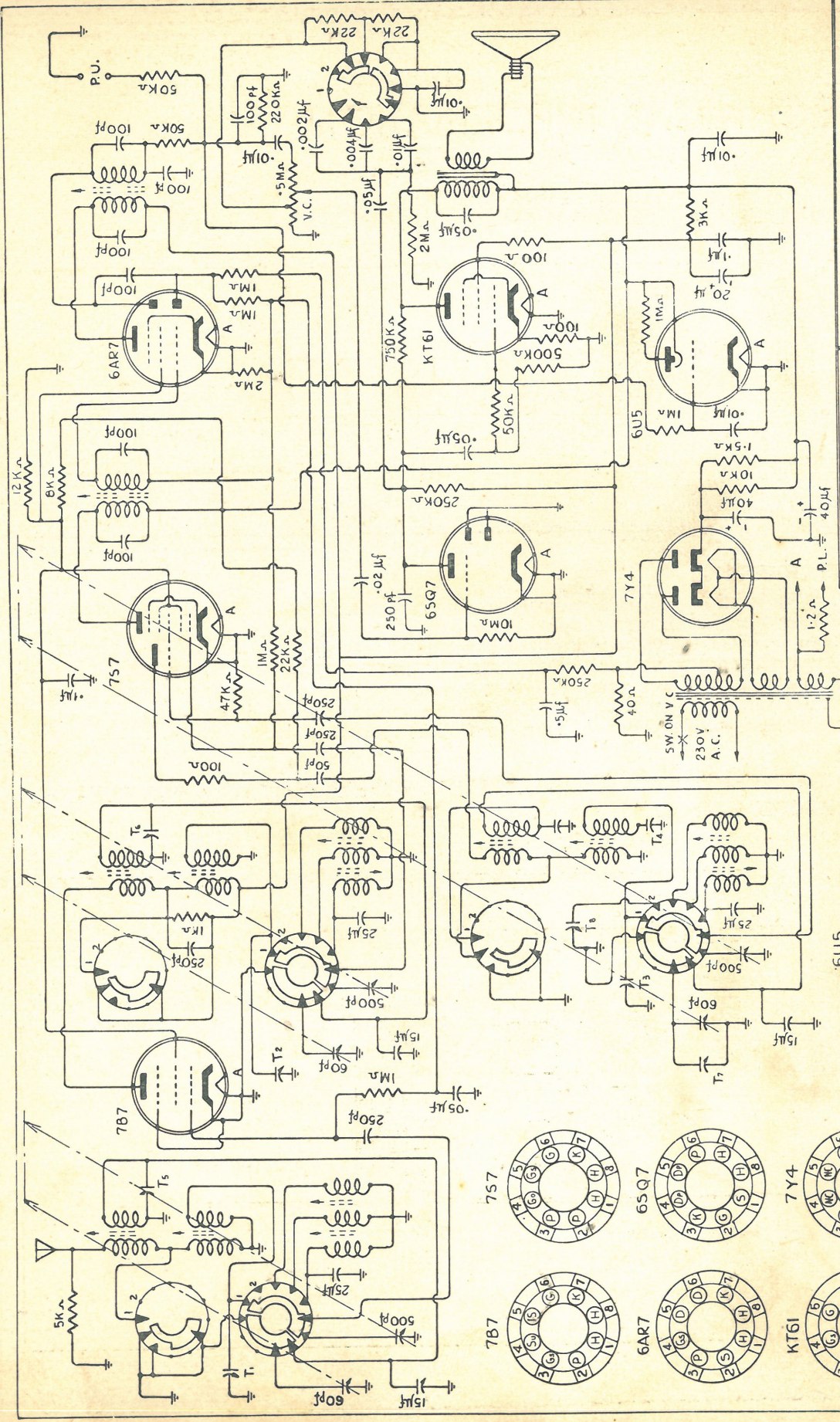
### ANTENNA :

A STANDARD INVERTED "L" TYPE ANTENNA WITH A FLAT OF APPROXIMATELY 30 FEET IS RECOMMENDED.



VALVE LAYOUT FOR 7V.B.S. AC. & 6V. D.W. AC.  
FOR 6V OMIT 6U5

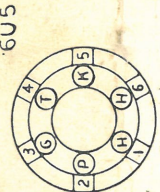
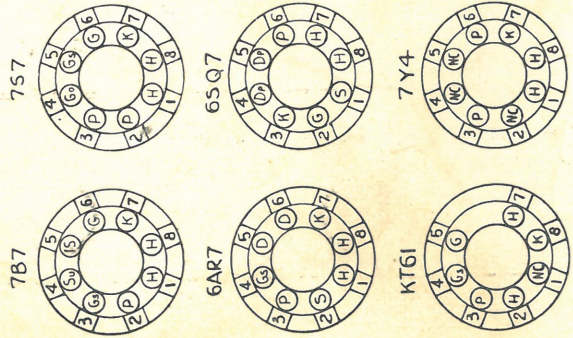
RBH



CIRCUIT DIAGRAM  
7V. ALLWAVE BANDSPREAD  
MODEL RBH

DRAWN : *Reframed 14 6-51*  
CHECKED : *R. J. Walker*  
APPROVED : *R. J. Walker*

SWITCH SHOWN IN BROADCAST  
POSITION ROTATE CLOCKWISE  
FOR SHORTWAVE



## VOLTAGES APPEARING BETWEEN VALVE PINS AND CHASSIS FRAME

VALVE PIN No.	1	2	3	4	5	6	7	8
7B7 R.F. Amp.	6.3AC	210DC	90DC	-	-	-1.4DC	-	-
7S7 Freq. Changer	6.3AC	210DC	125DC	-20DC	90DC	-1.4DC	-	-
6AR7 I.F. Amp.	-	-	180DC	90DC	-4DC	-1.8DC	-	6.3AC
6SQ7 Volt. Amp.	-	-9DC	-	-	-	90DC	6.3AC	-
KT61 Power Amp.	-	6.3AC	205DC	180DC	-	-	-	-3DC
7Y4 Rect.	300DC	-2.3DC	260AC	-	-	260AC	300DC	300DC
6U7g Indicator	-	-	-	-	-	-	-	-

NOTE.—DC Readings taken with vacuum tube voltmeter.

NOTE.—Receiver tuned off station.

### D.C. RESISTANCES

B.C. Ant. Coil Prim.	18 ohms	I.F. Primary	11.0ohms
B.C. Ant. „ SEC	3.5ohms	I.F. SEC	11.0ohms
B.C. Det. „ Prim.	10.5ohms	PX Prim.	32.0ohms
B.C. Det. „ SEC	3.5ohms	PX S E C	550.0ohms
B.C. OSC Coil Prim.	.9ohms	OX Prim.	530 ohms
B.C. OSC „ SEC	2.75ohms	OX S E C	1 ohm

### ALIGNMENT INFORMATION :

Adjust Vol. Control for Max. Gain.

Adjust Sig. Generator output to no higher than is necessary to obtain output meter reading.

DUMMY ANT.	Generator Coupled to	Generator Freq.	Receiver Dial Setting	ADJUST	Approx. Sens. for 50MV output.
.1 ufd.	Grid 6AR7	460KC/S	550KC/S	2nd I.F. Trimmer for Max.	1800 Micro Volts
.1 ufd.	„ 7S7	460KC/S	550KC/S	All I.F. Trimmers for Max.	20 Micro Volts
R.M.A. STANDARD	ANT.	1400KC/S	1400KC/S	OSC Trimmer for Max.	
„	„	„	„	ANT and DET Trimmers for Max.	Better than 1 Micro Volts
„	„	600KC/S	Through 600KC/S	Padder for Max.	Better than 1 Micro Volts

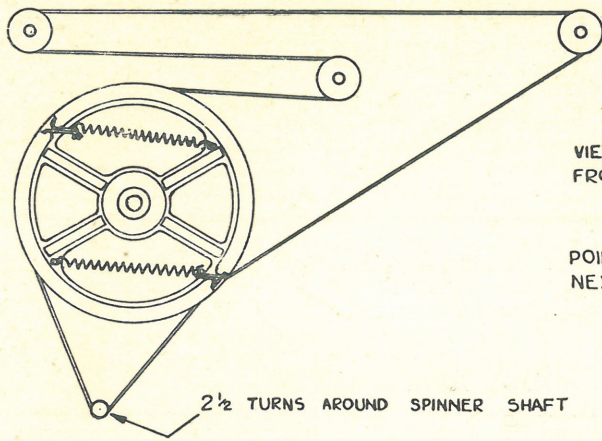
### CALIBRATION AND ALIGNMENT OF S.W. BANDS

#### CALIBRATION—

- Band 2—Set Sig. Generator and Receiver Dial Freq. 7.15MC/S and adjust T 8 for max. Set Sig. Generator and Receiver Dial Freq. to 38MC/S and adjust Core for max.
- Band 3—Set Sig. Generator and Receiver Dial Freq. to 11.8MC/S and adjust T 4 for max. Set Sig. Generator and Receiver Dial Freq. to 9.6MC/S and adjust Core for max.
- Band 4—Set Sig. Generator and Receiver Dial Freq. to 17.8MC/S and adjust Core for max.
- Band 5—Set Sig. Generator and Receiver Dial Freq. to 21.5MC/S and adjust Core for max.

#### ALIGNMENT—

- Band 2—Set Sig. Generator and Receiver Freq. to 7.15MC/S and adjust Ant. and Det. Trimmers T5 + T6 for max. Set Sig. Generator and Receiver Dial Freq. to 3.8MC/S and adjust Ant. and Det. Cores for max.
- Band 3—Set Sig. Generator and Receiver Dial Freq. to 11.8MC/S and adjust Ant. and Det. Cores for max.
- Band 4—Set Sig. Generator and Receiver Dial Freq. to 17.8MC/S and adjust Ant. and Det. Cores for max.
- Band 5—Set Sig. Generator and Receiver Dial Freq. to 21.5MC/S and adjust Ant. and Det. Cores for max.



VIEW OF DIAL STRINGING LOOKING  
FROM BACK OF SET

POINTER STRING ON SIDE OF DRUM  
NEXT TO DIAL BACKPLATE

2 1/2 TURNS AROUND SPINNER SHAFT

AMENDMENTS AND REMARKS:

RBH

MODEL RBH. — These amendments effective from Ser No. 137079 on.

EBL21 Type Tube replaces the KT61 Type Tube.—Requires change from Octal Wafer Socket to Loctal Socket. — Circuit values remain as Schematic.

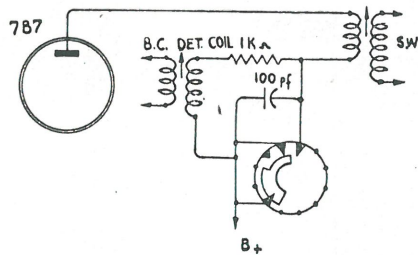
6AV6 Type Tube replaces the 6SQ7 Type Tube.—Requires change from Octal Wafer Socket to Loctal Socket. — Circuit values remain as Schematic.

Voltages will be the same, but Pin Numbers will vary with the Type Valve Socket used.

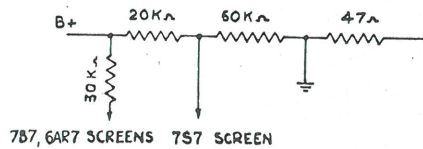


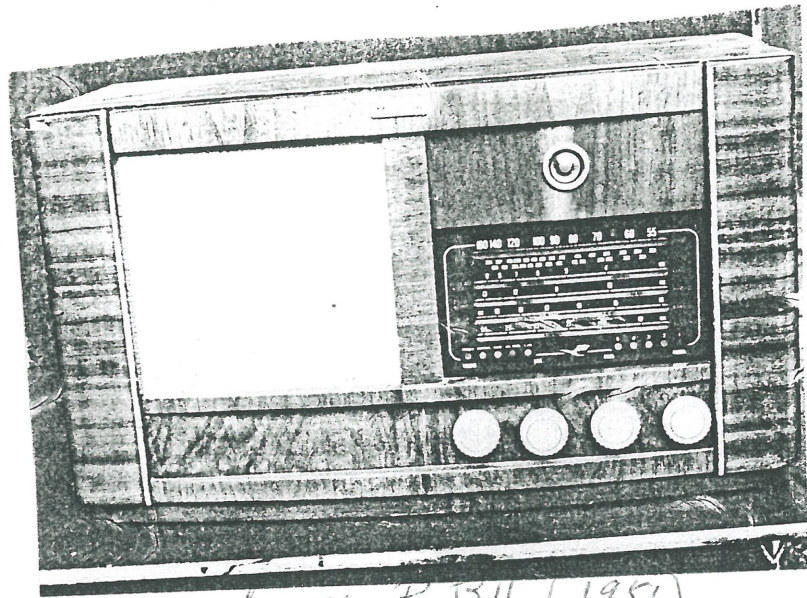
.05 mfd. 500V. Condenser across Speaker Primary changed to .02 mfd. 500V. Condenser.

B/C Det. Coil changed from Hi-Z. Prim. to Low-Z. Primary, with circuit alterations eliminating 250 Pfd. & 1K. resistor across Primary to circuit shown.



Cressall Candohm replaced by 1w. Series Feed Resistors for Screens and the 47 ohm. replaces the 40 ohm. portion of the Candohm as below.





Chrysler R134 (1951)