'BUFFALO' MODEL

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H.W. CLARKE (N.Z.) LTD.

Feb 1958

TECHNICAL INFORMATION

COVERING

PACEMAKER BROADCAST RECEIVER

MANUFACTURED BY COLLIER & BEALE Ltd.

TYPE SET—A.C. Superhetrodyne. Mantel set Plastic Cabinet

TUBES (Five)— 6BE6 Converter, 6BA6 I.F. Amp., 6AV6 Det.-A.F., 6AQ5 Power Output, 6X4 Rectifier.

POWER SUPPLY—230 v. A.C. Rating 25 watts.

TUNING RANGE—Broadcast 535-1540 K.C.

ALIGNMENT INSTRUCTIONS

To set pointer, fully mesh variable condenser and set pointer at last reference mark at left end of dial. Set volume control at maximum and keep output from signal generator no higher than necessary to obtain output reading. Use insulated alignment tool for adjusting.

Dummy Antenna	Signal Generator Coupling	Sig. Gen. Frequency	Band Switch Position	Radio Dial Setting	Output Meter	Adjust	Remarks
0.1 μfd.	High Side to pin No. 7 (grid) of 6BE6.	455 Kc.	———	High freq. end	Across voice coil	A1, A2, A3, A4.	Adjust for maximum output
R.M.A. Standard	High side to ant. terminal	1400 Kc.	———	1400 Kc.	"	C13	" "
		1400 Kc.	———	1400 Kc.	"	C14	" "

CAPACITORS

Ref. No.	Cap.	Volts
C1/A	50 μf	250
C1/B	50 "	250
C1/C	10 "	250
C2	1 "	350
C3	.05	350
C4	.02	350
C5	.01	Styroseal
C6	.01	Ceramic
C7	.005	Ceramic
C8	.005	Ceramic
C9	.001	Mica
C10	362 pf	Sil. Mica
C11	100 pf	Ceramic
C12	50 pf	Ceramic
C13	3.30 pf	Trimmer
C14	3.30 pf	Trimmer

MISCELLANEOUS

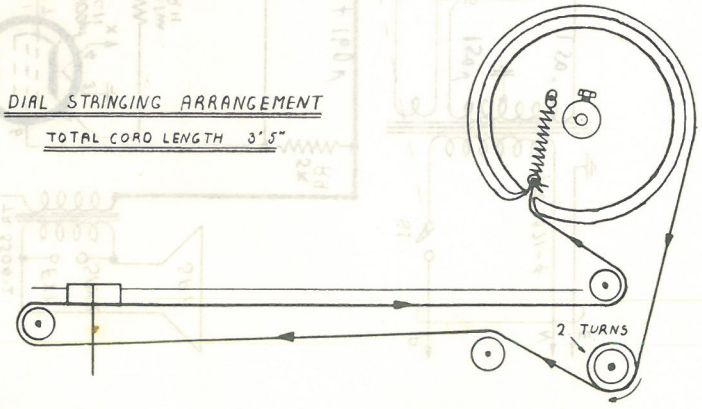
Ref. No.	Res., Pri.	Res., Sec.	
E80	14 ohm	14 ohm	
727		.35 ohm	
187	0.25 ohm	2.44 ohm	
	Volts	**Volts**	**Volts**
TR5571-2	230	175/175	6.3
	Type	**Transformer**	
SP1	5 PM		
S1	SPST attached to R4		
CV	Polar C90-02/1 (swing 351μμf.)		
P.L.	6.5 v. 0.3 amp. M.E.S. tub. lamp		
TR5504-2	5000 to 3.5		

RESISTORS

Ref. No.	Res.	Watts
R1	10 Meg.	½
R2	2 Meg.	½
R3	500K	Pot
R4	500K	Pot
R5	500K	½
R6	100K	½
R7	50K	½
R8	20K	½
R9	5K	½
R10	3K	1
R11	300 phm	1
R12	5 ohm	½
R13	150K	½

DIAL STRINGING ARRANGEMENT

TOTAL CORD LENGTH 3'5"

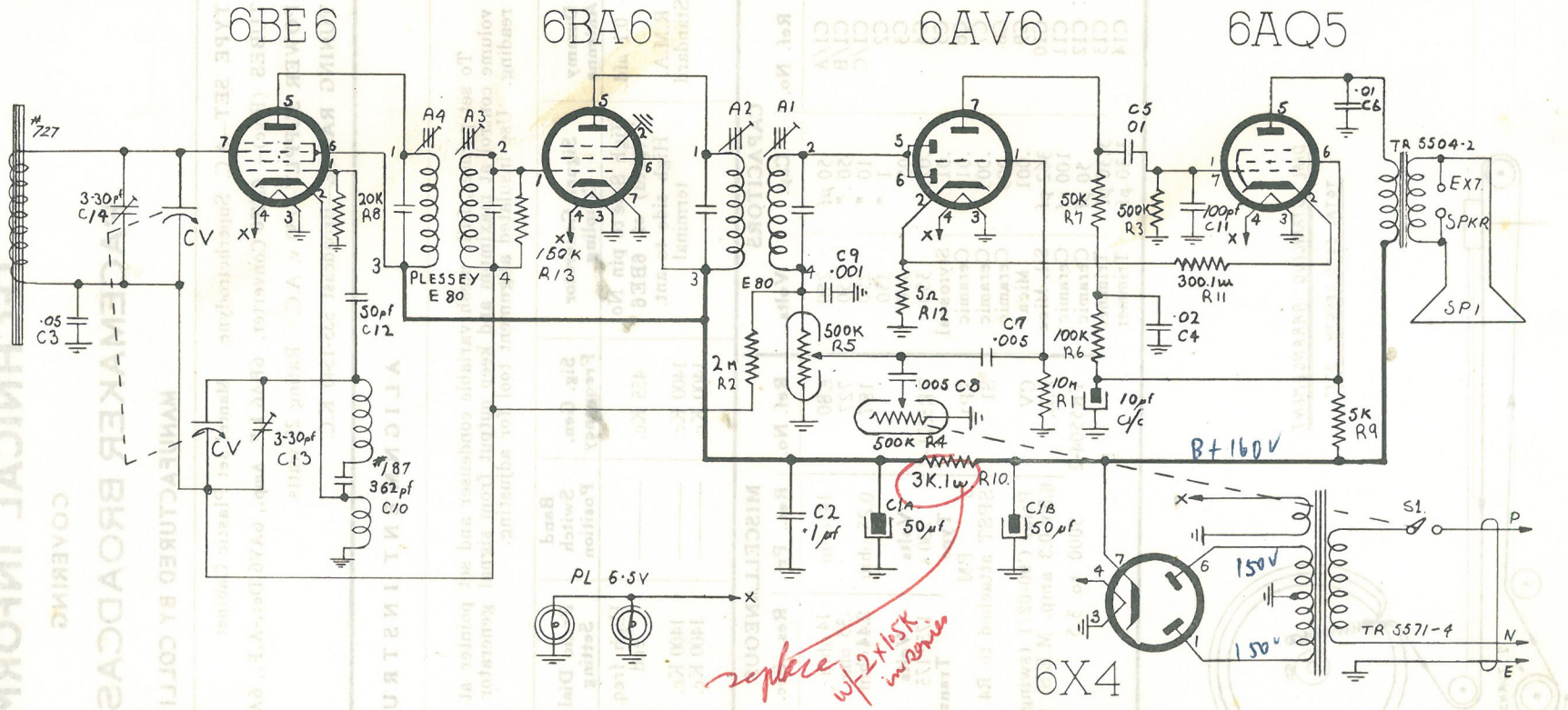


BASS COMPENSATION

Bass compensation has been achieved by the combination of values chosen for the plate-feed circuit R6.R7.C4 of the 6AV6 stage.

The change of reactance of C4. with frequency, modifies the effective plate-load impedance presented to the tube.

This results in a greater gain ~~as the frequency is reduced.~~ at the low audio frequencies



SCHEMATIC DIAGRAM MODEL **BUFFALO**

VOLTAGE READINGS

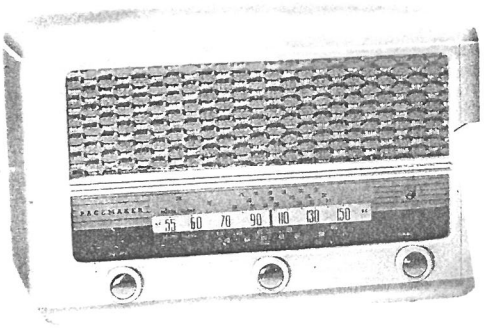
Use	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
Conv.	6BE6	—	—	—	6.3	90	90	—	—
I.F.	6BA6	—	—	—	6.3	90	90	—	—
Det-A.F.	6AV6	—	—	—	6.3	-	-	85	—
Output	6AQ5	—	6.3	—	6.3	150	150		—
Rect.	6X4	150	—		6.3	-	150	160	—

RESISTANCE READINGS

Use	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
Conv.	6BE6	20K	0.25	—	—	503K	503K	2.5 meg	—
I.F.	6BA6	2.5 meg.	—	—	—	503K	503K	—	
Det-A.F	6AV6	10 „	—	—	—	500K	500K	[illegible]	
Output	6AQ5	500K	305	—	—	500K	505K	500K	
Rect.	6X4	220	—	—	—	—	220	500K	

1. D.C. voltage measurements are at 20,000 ohms per volt—A.C. voltage measurements at 1,000 ohms per volt.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to chassis.
4. Nominal tolerance on component values make possible a variation of ± 10% in voltage and resistance readings.
5. Volume control at maximum, no signal applied for voltage measurements.
6. Resistance readings in B+ circuits may vary widely according to condition of filter capacitors.

BUFFALO Feb 1958



" Buffalo "