



"BRIGHTON"
MODEL 546 B.C.

HIS MASTER'S VOICE (N.Z.) LTD. LTD.
WELLINGTON

BROADCAST RECEIVER MODEL 546 B.C. SERVICE DATA SHEET

TYPE SET—A.C. Superheterodyne.

TUBES (six)—6BA6 R.F. Amp., ECH 42 Converter, 6BA6 I.F. Amp., 6AV6 Det.-A.F., 6AQ5 Power Output, 6X4 Rectifier.

POWER SUPPLY—230 v. A.C. Rating 55 watts.

TUNING RANGE—Broadcast, 535-1530 k.c.

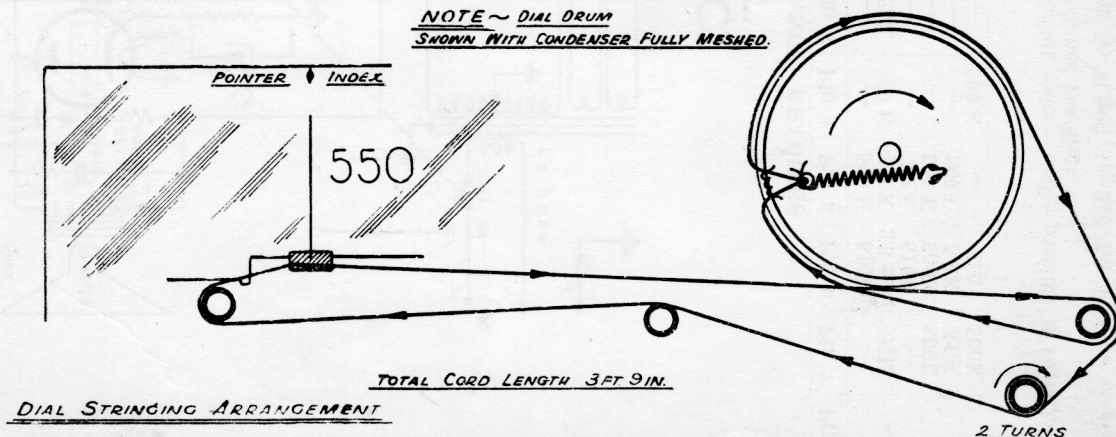
ALIGNMENT INSTRUCTIONS

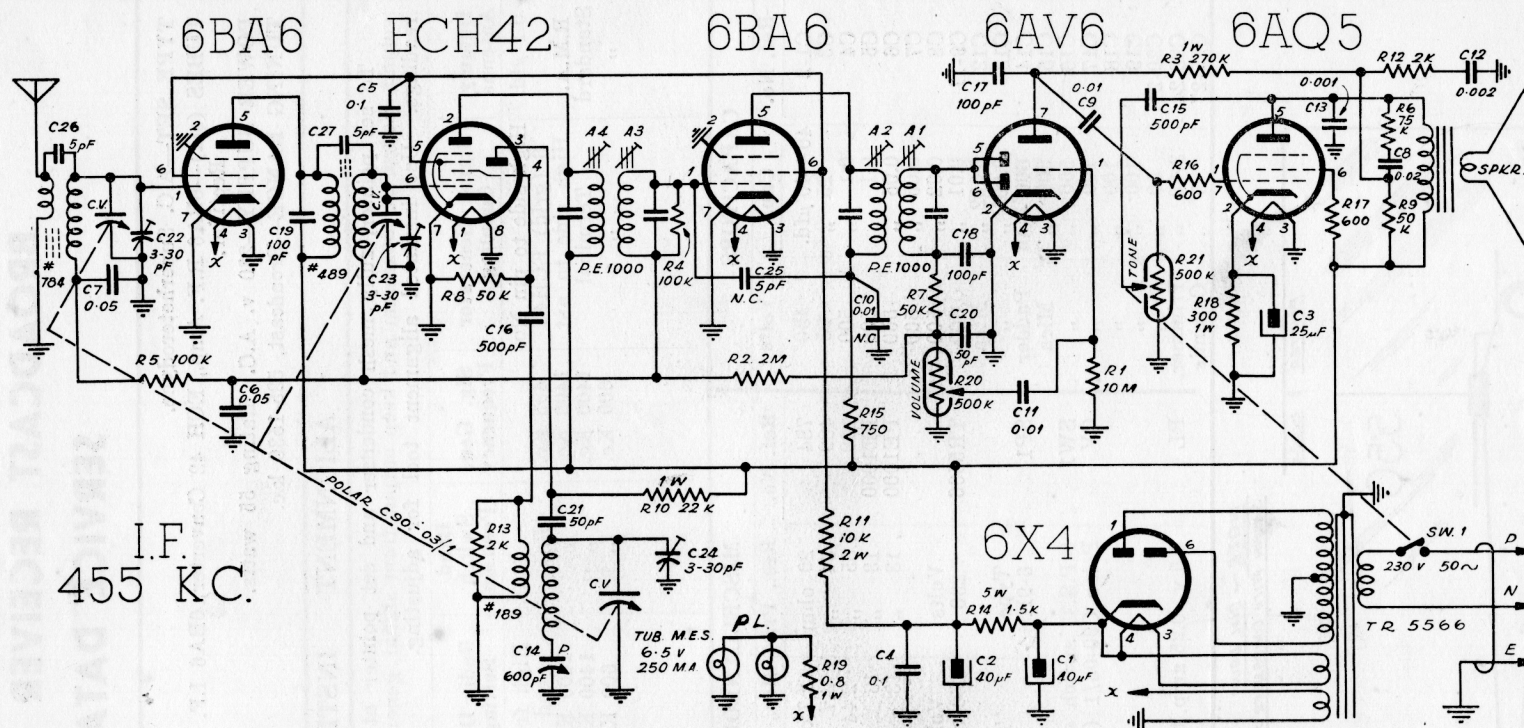
To set pointer, fully mesh condenser and set pointer at last reference mark at left end of dial. Set volume control at maximum and keep output from signal generator no higher than necessary to obtain output readings. Use insulated alignment tool for adjusting.

Dummy Antenna	Signal Generator Coupling	Sig. Gen. Frequency	Band Switch Position	Radio Dial Setting	Output Meter	Adjust	Remarks
0.1 μ fd.	High side to pin No. 6 (grid) ECH42	455 Kc.	B.C.	High freq. end	Across voice coil	A1, A2, A3, A4.	Adjust for maximum output
R.M.A.	High side to ant. Terminal	1400 Kc.	"	1400 Kc.	"	C24	" "
Standard	"	1400 Kc.	"	1400 Kc.	"	C22 & C23	" "
"	"	600 Kc.	"	600 Kc.	"	C14	Rock variable and adjust for max. output. Recheck C24 at 1400 Kc. If C24 is changed recheck C22 and C23.

CAPACITORS			MISCELLANEOUS				RESISTORS		
Ref. No.	Cap.	Volts	Ref. No.	Res., Pri.	Res., Sec.		Ref. No.	Res.	Watts
C1-2	40 + 40 μ fd.	450	784	20 ohm	2.7 ohm	Ant.	R 1	10 meg.	$\frac{1}{2}$
C3	25 "	25	489	64 "	2.7 "	R.F.	R 2	2 "	"
C4	0.1 "	500	189	0.85 "	2.44 "	Osc.	R 3	270K ohm	1
C5	0.1 "	500	PE1000	13 "	13 "	IF	R 4	100K "	$\frac{1}{2}$
C6	0.05 "	500	PE1000	13 "	13 "	IF	R 5	100K "	"
C7	0.05 "	500					R 6	75K "	"
C8	0.02 "	500					R 7	50K "	"
C9-11	0.01 "	500	TR5566	Volts 230	Volts 350 aside	Volts 2 x 6.3	R 8	50K "	"
C12	0.002 "	Mica					R 9	50K "	"
C13	0.001 "	"		Type	Transformer		R 10	22K "	1
C14	600 μ fd	Padder	SP1	6-9H	5000 ohm		R 11	10K "	2
C15	500 "	Mica					R12-13	2K "	$\frac{1}{2}$
C16	500 "	"	SW1	S.P.S.T. switch attached to R20			R14	1.5K "	5
C17	100 "	"	CV	Polar C90-03/1 (swing 351 μ fd.)			R15	750 "	$\frac{1}{2}$
C18	100 "	"					R16-17	600 "	"
C19	100 "	"					R18	300 "	1
C20-21	50 "	"					R19	0.8 "	"
C22-24	3-30 "	Trimmer	PL	6.5 v., 0.25 amp. tub. M.E.S. lamp			R20	500K "	Pot
C25-27	5 "	Ceramic					R21	500K "	"

NOTE ~ DIAL DRUM
SHOWN WITH CONDENSER FULLY MESHED.





SCHEMATIC DIAGRAM MODEL 546 B.C.

VOLTAGE READINGS

Use	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
R.F.	6BA6	0	—	—	5.7	225	75	—	—
Conv.	ECH42	5.7	215	80	—5	75	—	—5	—
I.F.	6BA6	0	—	—	5.7	215	75	—	—
Det.A.F.	6AV6	0	—	—	5.7	0	0	80	—
Output	6AQ5	0	11	—	5.7	200	225	0	—
Rect.	6X4	300 ac	—	5.8	330	—	300 ac	330	—

RESISTANCE READINGS

Use	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
R.F.	6BA6	2.6 meg	—	—	—	500 K	510K	—	—
Conv.	ECH42	—	500K	522K	50 K	510K	2.5 meg	50K	—
I.F.	6BA6	2.5 meg	—	—	—	5.7K	510K	—	—
Det.A.F.	6AV6	10	—	—	—	500 K	500K	800K	—
Output	6AQ5	5.6K	300	—	—	500K	5.6K	5.6K	—
Rect.	6X4	480	—	—	500 K	—	480	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 tolerances 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.