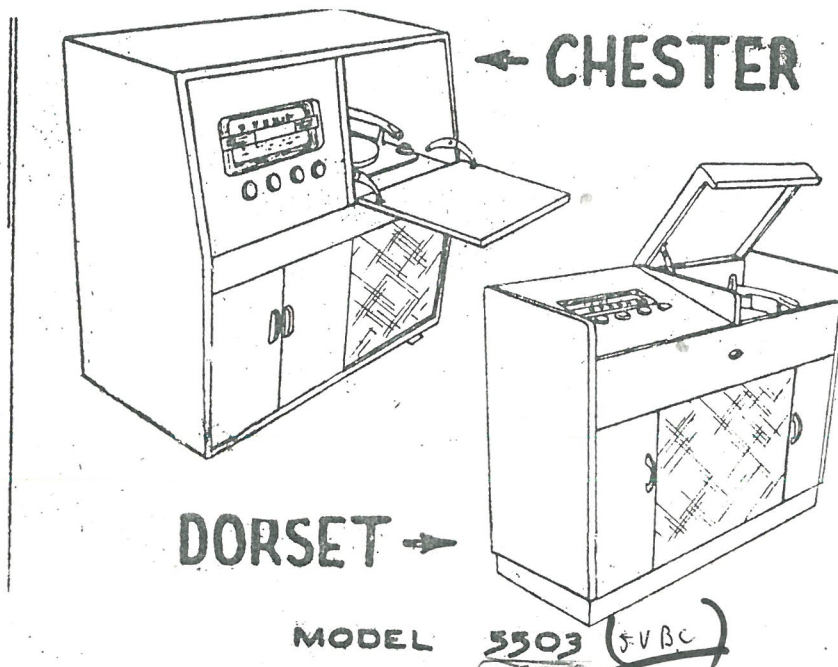


HIS MASTER'S VOICE (N.Z.) LTD.
WELLINGTON

"Dorset"/"Chester"
MODEL 5503 5-V B.C.

5-V 1953

<u>DESCRIPTION</u>	
<u>RADIO</u>	Five valve broadcast A.C. superheterodyne Radio gramophone.
<u>GRAM UNIT</u>	"Monarch" three speed automatic record changer.
<u>VALVES</u>	6 BE 6 - Converter 6 BA 6 - I.F. Amplifier 6 AT 6 - 2nd detector and Aud. Amplifier 6 AQ 5 - Output 6X4 - Rectifier
<u>SPEAKER</u>	Rola 6X9H Elliptical
<u>POWER SUPPLY</u>	230 volts 50 cycles
<u>POWER CONSUMPTION</u>	Receiver = 50 watts Record-changer = 25 watts
<u>FREQUENCY RANGE</u>	Broadcast = 535 Kc/s - 1,700 Kc/s I.F. = 455 Kc/s
<u>CABINETS</u>	Combined Console Radio and Gramophone with Record storage space.
<u>CONTROLS</u>	(from left) Tone on/off, Volume, Tune, Radio/Gram switch.
<u>INSTALLATION</u>	For shipment the record-changer, retaining bolts are screwed hard down. Once the set is unpacked, these bolts should be loosened off to allow the Record-changer to float. Do <u>not</u> completely remove the nuts.



5503

<u>Item No:</u>	<u>Part No:</u>	<u>Description:</u>
C1	1500-H1	2 Gang Polar C1042
C2	1500-C3	5 PF Ceramicon
C3-15	1500-A7	.05 350V
C4-5	1500-F5	3-30 PF Phillips Trimmer
C6	1500-O9	Padder TP 11D
C7	1500-J	250 PF Mica
C8-9	1500-C8	.1 500V
C10-11	1500-R	.0001 Silver Mica
C12-14	1500-B4	.01 500V
C13	1500-E	50 PF Mica
C16	1500-L	.0005 Mica (Simplex)
C17	1500-N4	40-40-20 Electro 250V
R1	1300-N7	22K $\frac{1}{2}$ W
R2	1300-O8	47 Ohm $\frac{1}{2}$ W
R3	1300-G7	100K $\frac{1}{2}$ W
R4	1300-G	100 Ohm $\frac{1}{2}$ W (Carbon)
R5	1500-E6	15K $\frac{1}{2}$ W
R6	1300-J1	2 Meg $\frac{1}{2}$ W
R7	1300-G2	50K $\frac{1}{2}$ W
R8	1300-G7	100K $\frac{1}{2}$ W
R10	P0 216	$\frac{1}{2}$ Meg Pot less switch
R11	1300-K1	10 Meg $\frac{1}{2}$ W
R12	1300-Q4	4.7K $\frac{1}{2}$ W
R13	1300-H7	270K $\frac{1}{2}$ W
R14-16	1300-F2	25K $\frac{1}{2}$ W
R15	P0 1145	$\frac{1}{2}$ Meg Pot with switch
R17	1300-A5	300 Ohm $\frac{1}{2}$ W
R18	1300-B3	500 Ohm $\frac{1}{2}$ W
R19	1300-K8	1500 Ohm $\frac{1}{2}$ W WW
	1300-I8	1 Meg $\frac{1}{2}$ W
V1	1400-N2	Valve 6 BE 6
V2	1400-W	Valve 6 BA 6
V3	1400-Y6	Valve 6 AT 6
V4	1400-Z	Valve 6 AQ 5
V5	1400-Q7	Valve 6X4
L1	CO 747	B.C. Aerial Coil
L2	CO 748	B.C. Osc Coil
T4	TR 1318	Power transformer
T1-T2	TR 1162	I.F. transformer AP1001/52
T3	TR 1125	Output transformer DCG 87
	SP 615	Speaker Rola H-6-9 6X9H
	SC 1366	Dial Scale
	DR 93	Dial Drum



The Hallmark of Quality

News Letter

H. M. V. (N. Z.) LTD.

G.P.O. BOX 296, WELLINGTON, N.Z.

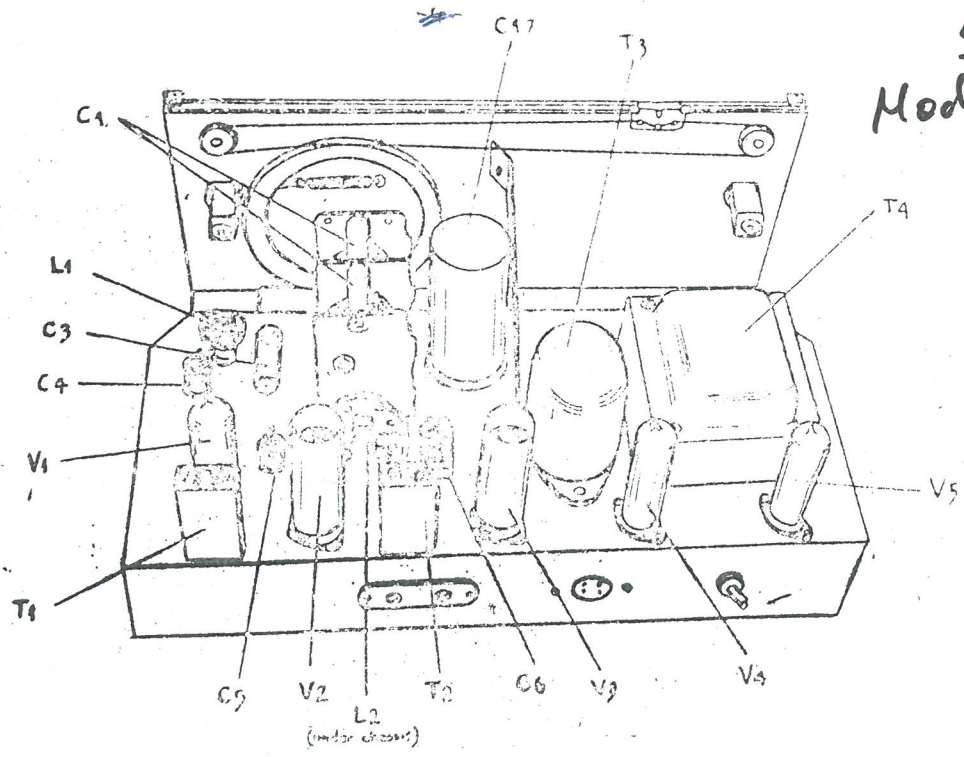
ATTENTION.
SERVICE DEPARTMENTS.

RADIOGRAMS.

model 5503

Cases have been reported where Chester and Dorset Radiograms have developed excessive hum, and investigation has shown that in such cases this is due to the use of a substandard rivet to anchor the earth lugs to the aluminium chassis.

We would suggest that if you experience trouble due to hum or instability in these particular models, that the various earth legs be bonded together to ensure a good electrical earth to all return points. As this matter has now been rectified, these remarks only apply to chassis bearing numbers 1089-1.



5-V BC
Model 5503
"Dorset"
+
"Chester"

5506 circuit
telegram cabinet

ALIGNMENT

I.F. ALIGNMENT

Set Radio-gram switch to "Radio" position. Tune the set to the extreme low frequency end of the band. Set output meter to 50 milliwatts and connect across the voice coil of the speaker, then turn the volume and tone controls fully clockwise. Connect signal generator to receiver via a .1 mfd condenser. Set signal generator to I.F. frequency, then proceed as shown in operation 1 of alignment chart.

R.F. ALIGNMENT

Set pointer to reference mark at left hand end of dial, then connect signal generator via a standard dummy antenna, and proceed as in operations 2 and 3 of alignment chart.

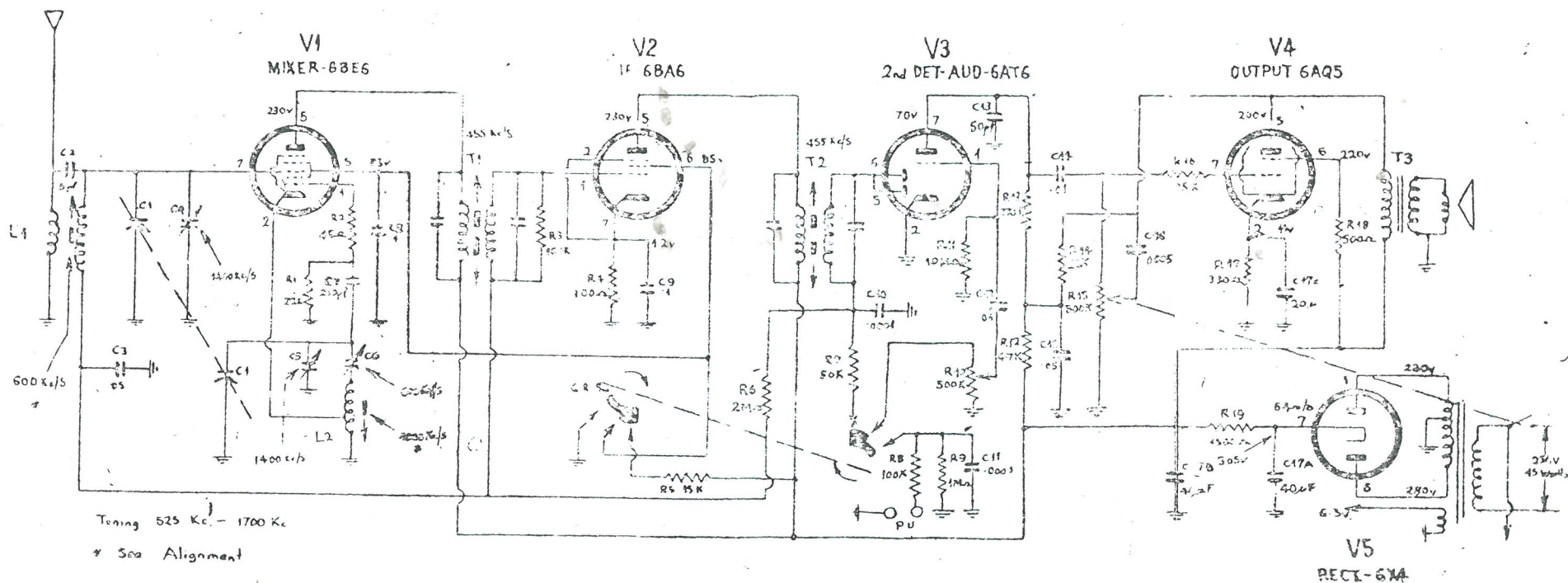
<u>Feed Sig.Gen to</u>	<u>Sig.Gen Setting</u>	<u>Radio Dial Setting</u>	<u>Adjust</u>	<u>Adjust for</u>
1.C1 front gang stator	455 Kc/s	535 Kc/s	T1, T2	Max output
2.Aerial Lead	600 Kc/s	600 Kc/s (Rock gang)	C6	Max output
3.Aerial Lead	1400 Kc/s	1400 Kc/s	C5 first, then C4	Max output

NOTE:- The slugs in the Aerial and Oscillator coils should only be

5V. BC-gram

has inbuilt 5x7" # 53937 5506 # 53937 telegram
spx (no plug)

5503

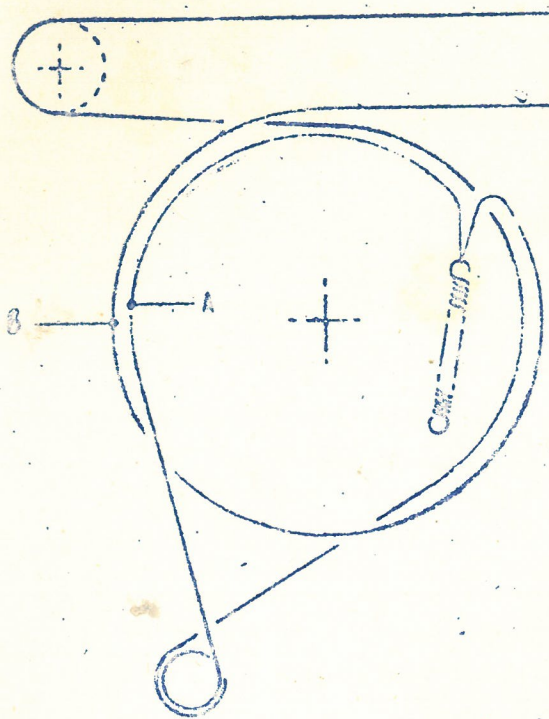


CIRCUIT DIAGRAM

S. VALVE B.C.
Model 5503

Dorset + Claster
cabinet styles

5506 tablegram
uses same chassis



Viewed from chassis rear

Gang full in.
Drum slot at 2 o'clock.
String 25 $\frac{1}{2}$ ".

End 'A' around near edge of drum to shaft. At same time end 'B' round drum approx. 300 deg. leaving shaft take "C" on panel side of 'B' and around rear edge of drum.
Loop over pulleys.

*5 Valve
B-cgm*

5503

*5402
5VBC
sh 82*

CIRCUIT ANALYSIS

Voltage Readings

Valve	No:	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7
6BE6	1	-2v	0v	0v	6.3AC	210	80	0
6BA6	2	0	.65	6.3AC	0	210	80	.65
6AT6	3	0	0	0	6.3AC	0	0	00
6AQ5	4	0	10	6.3AC	0	195	210	0
6X4	5	270AC	0	6.3AC	0	0	270AC	290

RESISTANCE READINGS

Valve	No:	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7
6BE6	1	22K	.1ohm	0	.2ohm	1m	1m	2.5m
6BA6	2	2.5m	100ohm	.2ohm	0	1m	1m	100ohm
6AT6	3	10m	0	0	.2ohm	550K	550K	1.5m
6AQ5	4	500K	330ohm	.2ohm	0	1m	1m	500K
6X4	5	430ohm	Inf	.2ohm	0	Inf	430ohm	1m

All voltage measurements are taken with 1,000 ohms per volt meter between socket pins and chassis with volume control at minimum, gram switch in "Radio" position, gang full in and no signal in.

Resistance and voltage readings in high tension circuits may vary according to condition of filter capacitors.

5503