



HIS MASTER'S VOICE

Service Sheet

ISSUED BY SERVICE DIVISION, HIS MASTER'S VOICE (N.Z.) LTD., G.P.O. BOX 296, WELLINGTON.

DORSET - CHESTER

Model 535CRG

A five-valve superheterodyne radio-gramophone with loctal valves. Available in two console cabinets of distinctive oak and veneer construction respectively.

CONTROLS: Tuning, Volume, Tone—On/Off, Gram.-Radio.

VALVE COMPLIMENT: Mixer, 7S7; I.F., 7B7; Diode and First Audio, 7C6; Output, 7C5; Rectifier, 7Y4.

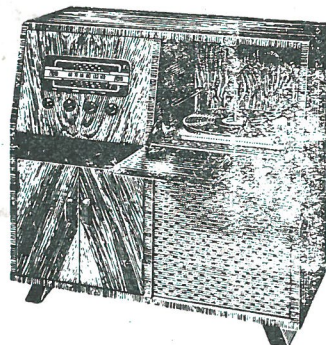
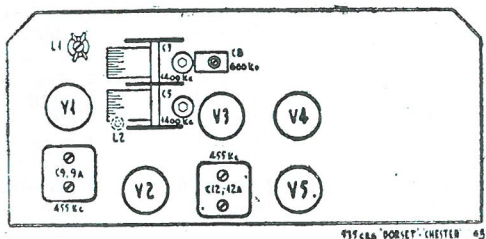
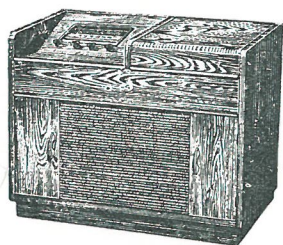
VALVE SOCKET VOLTAGES: Taken with—
Negative lead connected to chassis. Voltmeter 1000 ohms per volt. Volume control Off. No applied signal.
Switch in radio position.

	Plate	Screen	Cathode
7S7 Mixer	215	80	1.4
7B7 I.F.	215	80	2
7C6 Det. Audio	80	—	—
7C5 Output	190	220	11
7Y4 Rectifier	290	—	—

FREQUENCY RANGE: Broadcast 535 kc—1700 kc.

POWER SUPPLY: 230 volts A.C.—50 cycles. Consumption: Receiver, 45 watts; Turntable, 25 watts.

CABINET DIMENSIONS: Dorset—Height 28 in ; Length 35½ in ; Depth 14½ in
Chester—Height, 32in.; Length 32¼in.; Depth 16in.



ALIGNMENT INSTRUCTIONS

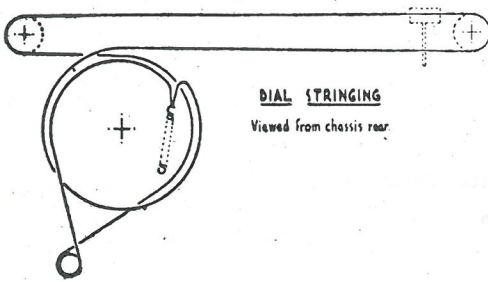
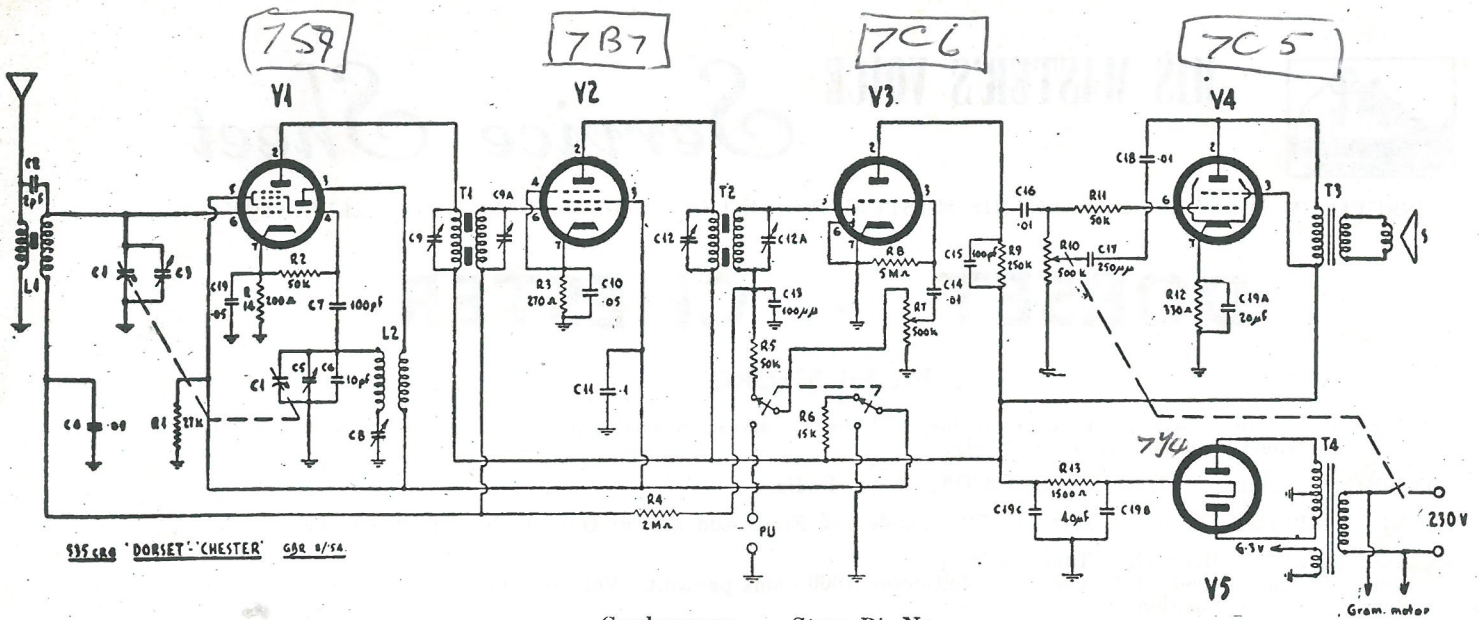
Turn gang plates full in and set pointer to index at left-hand end of scale. Set output meter range selector to 50 milliwatts and connect across speaker voice coil. Turn receiver volume full on, then as successive adjustments of the trimmers increase the receiver output, reduce signal generator output to give approximately half scale deflection on the output meter. For I.F. alignment use a .1 mfd. condenser on the generator cable; for R.F. use a standard dummy antenna.

Connect Signal Gen. to	Set Sig. Gen. to	Radio Dial Setting	Adjust	Adjust for
1. C1 (front gang stator)	455 kc	1500 kc	C9, C9A, C12, C12A	Max. output
2. Aerial lead	600 kc	600 kc	C8, L1*	Max. output
3. Aerial lead	1400 kc	1400 kc	C5, C3	Max. output
*4. Aerial lead	1000 kc	1000 kc (Rock gang)	L2	Max. output

Repeat operations 2 and 3 until no further increase in receiver sensitivity can be obtained.

The screwed cores of L1 and L2 should not be touched unless it is absolutely certain that the receiver is badly out of alignment, also it is only when this condition obtains that operation 4 should be carried out at all.

535 CRG



Condensers:

C1
C2
C3, 5
C4, 10, 20
C6
C7, 13, 15
C8
C9, 9A
C11
C12, 12A
C14
C16, 18
C17
C19
C21

Resistors:

R1
R2, 5, 11, 15
R3
R4
R6
R7
R8
R9
R10
R12
R13
R14

Valves:

V1
V2
V3
V4
V5
L1
L2
T1
T2
T3
T4
S

Store Pt. No.

1500-H1
1500-P1
1500-F5
1500-A7
1500-H
1500-Q
1500-O9
1500-I4
1500-J1
1500-I4
1500-B5
1500-B4
1500-J
1500-N4
1500-C8

1300-L1
1300-G2
1300-X
1300-J1
1300-E6
PO 216
1300-J9
1300-K4
PO 1110
1300-A5
1300-C5
1300-Q

1400-R2
1400-Q9
1400-R1
1400-R
1400-R3
CO 747
CO 748
TR 28
TR 29

SP 595
TR 746
SP 595

DR 93
PO 231
SC 745
LA 1182
SW 1023

Polar 2-gang C1042
2 pf. ceramicon (coil)
Trimmer 3-30 pf. Philips
.05 mfd. 350v.
10 pf. ceramicon
.0001 mfd. mica
Padder TP 11 d
I.F. Trimmer base 160-160
.1 mfd. 350v.
I.F. Trimmer base 160-160
.01 mfd. 350v.
.01 mfd. 500v.
.00025 mfd. mica
40-40-20 mfd. 350v. electro.
.1 mfd. 500v.

25K 1 watt
50K 1/2 watt
280 ohm 1/2 watt
2 meg. 1/2 watt
15K 2 watt
1/2 meg. pot. less switch
5 meg. 1/2 watt
250K 1/2 watt
1/2 meg. pot. with switch
330 ohm 1 watt
1500 ohm 5 watt WW
200 ohm 1 watt

7S7-Mixer
7B7-I.F.
7C6-Det. Audio
7C5-Output
7V4-Rectifier
Aerial Coil
Osc. Coil
1st I.F. Xformer
2nd I.F. Xformer
5000 ohm Output Xformer
+ H.M.V. Elliptical Spkr.
Power Transformer
Speaker-H.M.V. Elliptical
+ O.T.
Dial drum
Dial pointer
Dial Scale
Panel lamp
R/G switch

535C RG