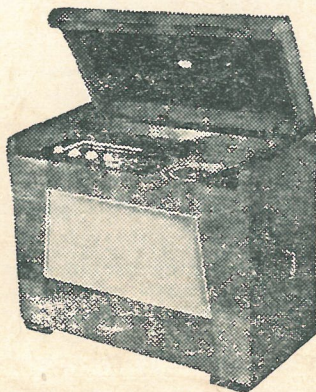


HIS MASTER'S VOICE



SERVICE SHEET

ISSUED BY SERVICE DIVISION, HIS MASTER'S VOICE (N.Z.) LTD., G.P.O. BOX 295, WELLINGTON.



HAMPTON 517 D/RG

also "Berkeley" ← see coil list

517 D/RG

CHASSIS—Seven valve, dual wave, superheterodyne with the following tube complement:

Type : KTW 63 R. F. Amplifier
 „ : X 61M Mixer
 „ : KTW 63 I.F. Amplifier
 „ : DH 63 2nd Detector—audio amplifier
 „ : KT 63 Pentode output
 „ : Y 61 "Magic Eye"
 „ : 5 V 4 Rectifier

VALVE VOLTAGE TABLE — Taken with volume control off. No applied signals. Voltmeter 1000 ohm per voltage. Negative to chassis.

		Plate	Screen	Cathode
KTW 63	RF	200	70	—
X 61 M	Mixer	200	70	1.2
KTW 63	IF	200	70	—
DH 63	2nd Dect.	55	—	—
KT 63	Output	230	245	15
5 V 4	Rectifier	—	—	300

RECORD CHANGER—"Plessey" 3-speed automatic changer. Capable of playing standard or microgroove records.

SPEAKER—"Rola" type 12 M.

INSTALLATION—For shipment the receiver mounting brackets are screwed securely to the cabinet cross batons, similarly the record-changer mounting screws are screwed up tightly to the mounting board. To put the radiogram into operation the receiver shipping screws must be removed according to the instructions printed on the dial mask, and the record-changer mounting screws slackened off exactly according to the Plessey installation instructions.

GENERAL SPECIFICATIONS—

Power supply: 230 volt 50 cycle only. Power consumption of receiver: 70 watts

Frequency Ranges—Broadcast : 540-1600 Kc/s. „ „ changer: 40 watts

—Shortwave : 5.8-19Ms.

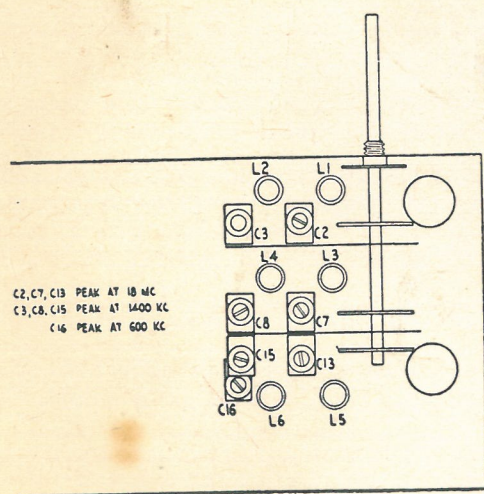
I.F. frequency —455 Kc/s.

CONTROLS—Tone control, and On/Off switch. Tapped compensated volume control. Spinner tuning control. Wave-change switch with third position for gramophone operation.

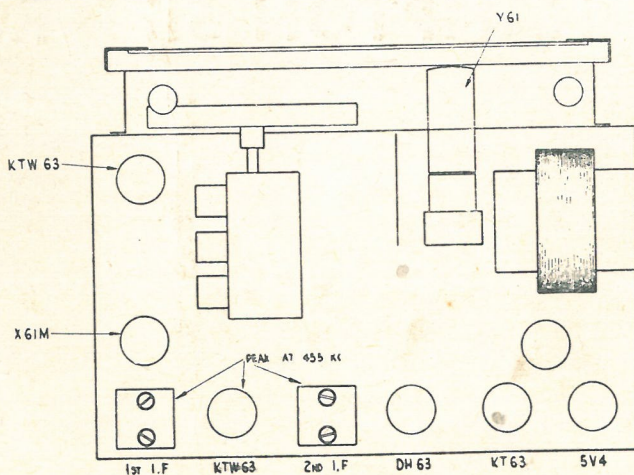
ALIGNMENT—INTERMEDIATE FREQUENCY — Short the receiver oscillator. This can be done by means of shorting strap connected between the rear section gang stator and earth. Inject a 455Kc modulated signal between the grid of the X61M and earth, using a blocking condenser between the live lead of the signal generator and the mixer grid. Do not take off the X61M grid lead. Connect an output meter across the speaker voice coil and adjust the I.F. trimmer condensers until no increase in output can be obtained. Remove the oscillator short.

RADIO FREQUENCY—BROADCAST BAND — Check the pointer for correct position on dial cord at maximum capacity of gang. Connect the signal generator to the receiver aerial and earth leads through a standard dummy antenna. Set the tuning signal generator to 600 Kc, and adjust C16 for maximum output, rocking the receiver slightly either side of the 600 Kc dial mark. Tune generator and receiver to 1400 Kc and adjust C15, C8, and C3, for maximum output. Repeat this procedure at 600 Kc and 1400 Kc until no increase in output can be obtained.

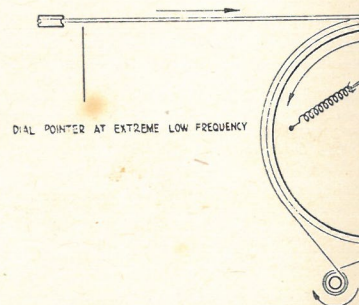
RADIO FREQUENCY—SHORTWAVE BAND — Adjust condensers C13, C7, and C2, for maximum output at 18 Mc. During alignment, both at IF and RF frequencies, the volume control should be full on, and the signal input reduced to a value no more than sufficient for indication of resonance on the output meter.



R.F. TRIMMER LOCATION



VALVE & I.F. TRIMMER LOCATIONS



DIAL STRINGING
 5 FT 6 IN. NYLON DIAL CORD

Switch Wafers shown with contact groups separated according to function.

Wafers shown in position 1, extreme counter-clockwise viewed from clicker end of shaft.

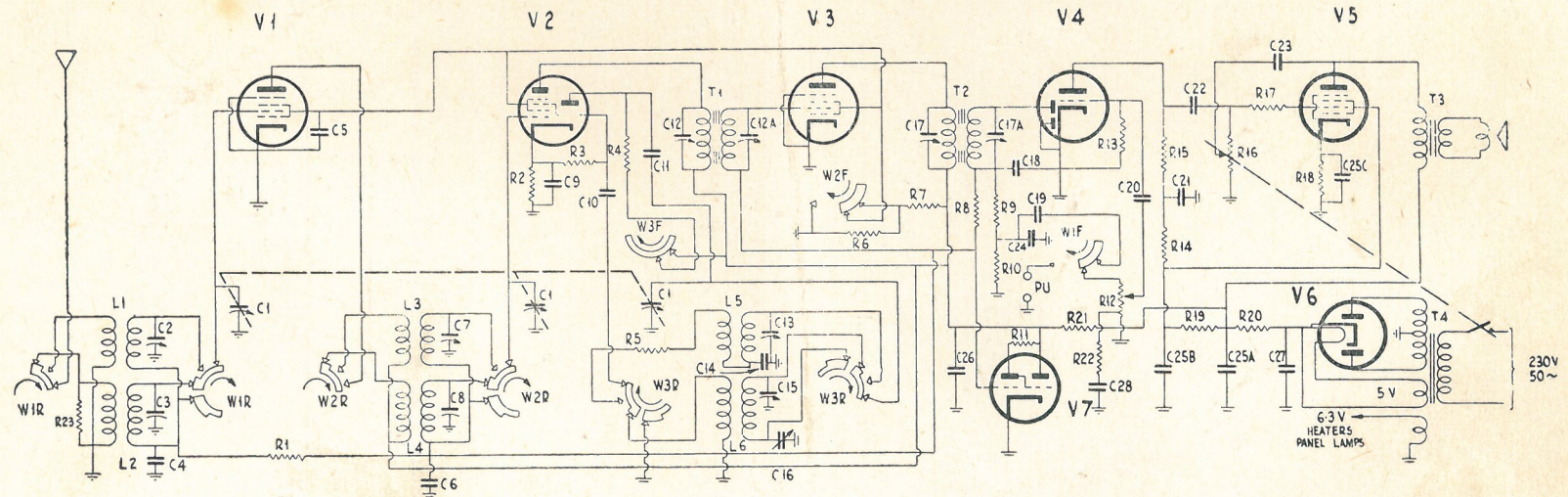
Position 1 : B.C.

Position 2 : S.W.

Position 3 : Gram.

W1F : Front Contacts of wafer next to clicker.

W1R : Rear Contacts of the same wafer continued in the same way to W3R.



CONDENSERS

C1	Polar 3 Gang
C2, C3, C7, C8, C13, C15	3-35 mmf Ceramic Base Trimmers
C4, C6, C9	.05 mf 350 V
C5	.1 mf 500 V
C10, C18	100 mf Mica
C11	50 mmf Silver Mica
C12, C17	140 mmf Dual Trimmer Base or 130 mmf Dual Base with 50 mmf across each section
C14	Fixed Padder .004 mf
C16	Variable padder TP10
C19	.05 mf 500 V
C20	.01 mf 500 V
C21, C26	.1 mf 500 V
C22	.01 mf 750 V
C23	.00025 mf Mica
C24	100 mmf Mica
C25	40-40-20 350 V Electro
C27	16 mf 525 V Electro
C28	.01 mf 350 V

RESISTORS

R1, R3	100K	$\frac{1}{4}$ Watt
R2	150 Ohm	$\frac{1}{2}$ W
R4, R14	27K	$\frac{1}{2}$ W
R5	47 Ohm	$\frac{1}{4}$ W
R6	15K	1 W
R7	10K	2 W
R8	2 Meg	$\frac{1}{2}$ W
R9	50K	$\frac{1}{4}$ W
R10	250K	$\frac{1}{4}$ W
R12	1 Meg	Volume Control Tapped
R13	5 Meg	$\frac{1}{4}$ W
R15	270K	$\frac{1}{3}$ W
R16	500K	Tone Control with Switch
R17	50K	$\frac{1}{4}$ W
R18	450 Ohm	1 W
R19, R20	750 Ohm	5 W w.w.
R21	1500 Ohm	5 W w.w.
R22	47K	$\frac{1}{4}$ W
R23	10K	$\frac{1}{4}$ W
R11	1 Meg.	$\frac{1}{4}$ W

R.F. INDUCTANCES

L1	Co 1235	S.W. Aerial Coil
L2	Co 1232	B.C. Aerial Coil
L3	Co 1236	S.W. R.F. Coil
L4	Co 1233	B.C. R.F. Coil
L5	Co 1237	S.W. Oscillator Coil
L6	Co 1234	B.C. Oscillator Coil
T1	TR 28	First I.F. Transformer
T2	TR 29	Second I.F. Transformer

TRANSFORMERS

Speaker Transformer	7000 Ohm-Voice Coil
Power Transformer	270-0-270 V 80 M/A
5 V Rectifier	