

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

WELLINGTON

"Mastertone" 5509

DESCRIPTION

AMPLIFIER:

Voltage amplifier and power output valves plus valve rectifier

RECORD-PLAYER:

Monarch automatic record changer

VALVES:

6AT6	-	Voltage amplifier
6AQ5	-	Power output
6X4	-	Rectifier

SPEAKER:

Rola 4X6F

POWER SUPPLY:

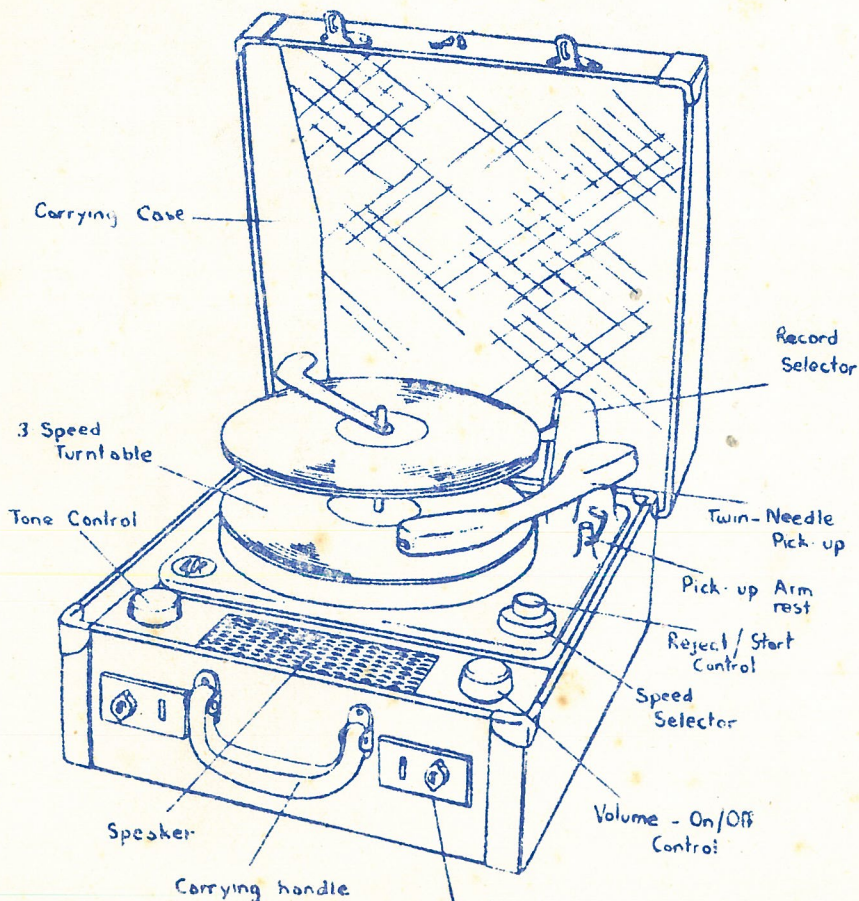
230v 50 cycles

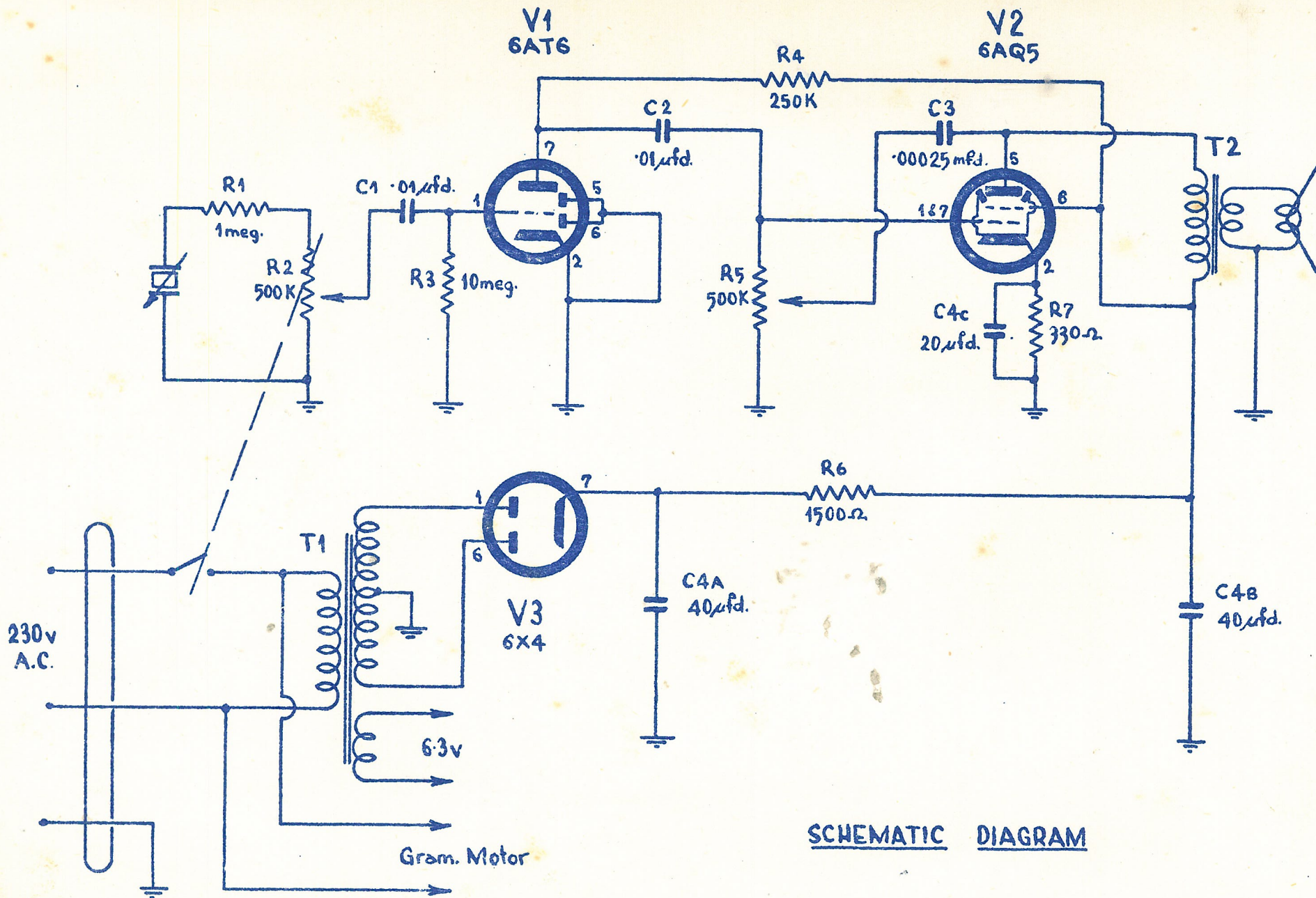
POWER CONSUMPTION:

Amplifier 27 watts
Record player 25 watts

CONTROLS:

Left-hand Knob - Tone
Right-hand Knob - Volume/on/off



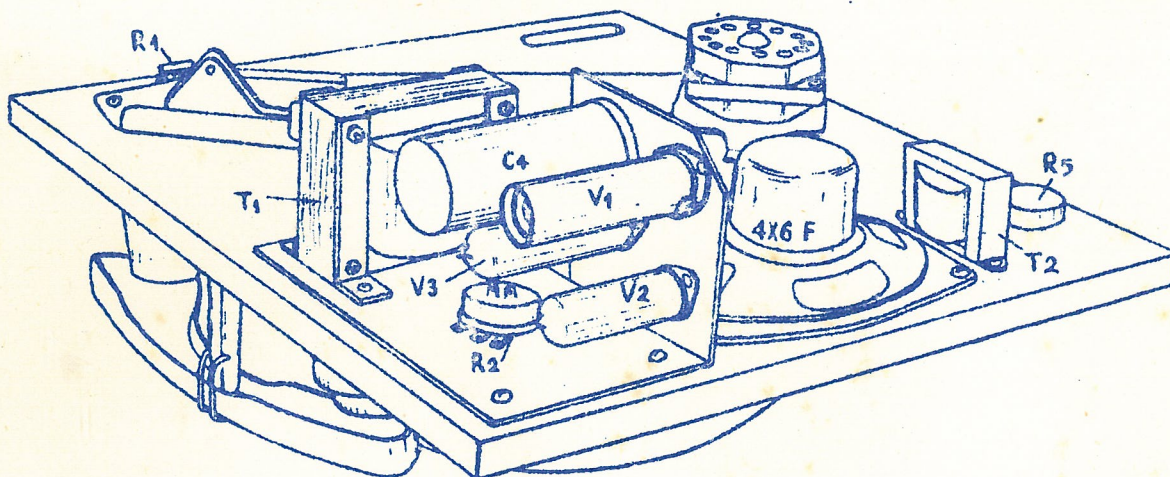


SCHEMATIC DIAGRAM

PARTS LIST.

<u>Item No</u>	<u>Part No:</u>	<u>Description</u>
C1-2	1500-B5	.01 350
C3	1500-J	.00025 Mica
C4	1500-N4	Electro 40-40-20 350wv
R1	1300-I8	1 Meg $\frac{1}{2}$ watt
R2	PO 252	$\frac{1}{2}$ Meg pot less switch
R3	1300-K1	10 Meg $\frac{1}{2}$ watt
R4	1300-K4	250k $\frac{1}{2}$ watt
R5	PO 284	$\frac{1}{2}$ Meg pot with switch
R6	1300-B7	1500 ohm 4w ww
R7	1300-A5	330 ohm 1 watt
V1	1400-Y6	6AT6
V2	1400-Z	6AQ5
V3	1400-Q7	6X4
T1	TR 1297	Power transformer
T2	TR 37	Output transformer EC487 5000 ohm
Speaker	SP 308	Speaker Rola 4-6F

COMPONENT LAYOUT



CIRCUIT ANALYSIS Voltage Readings

<u>Valve</u>	<u>No</u>	<u>Pin 1</u>	<u>Pin 2</u>	<u>Pin 3</u>	<u>Pin 4</u>	<u>Pin 5</u>	<u>Pin 6</u>	<u>Pin 7</u>
6AT6	1	0	0	0	6.3VAC	0	0	85v
6AQ5	2	0	11v	0	6.3VAC	210v	225v	0
6X4	3	105VAC	-	6.3VAC	0	-	105VAC	245v

RESISTANCE READINGS

<u>Valve</u>	<u>No</u>	<u>Pin 1</u>	<u>Pin 2</u>	<u>Pin 3</u>	<u>Pin 4</u>	<u>Pin 5</u>	<u>Pin 6</u>	<u>Pin 7</u>
6AT6	1	10m	0	0	.2ohm	0	0	500k
6AQ5	2	500k	330ohm	0	.2ohm	400k	400k	500k
6X4	3	220ohm	-	.2ohm	0	-	220ohm	400k

All voltage measurements are taken with 1000 ohms per volt meter between socket pins and chassis with volume and tone controls turned fully anticlockwise.

Resistance and voltage readings in H.T. circuit may vary according to condition of filter capacitors.