

**ASTOR**

**RADIO CORPORATION PTY. LTD.**  
DIVISION OF ELECTRONIC INDUSTRIES LTD.  
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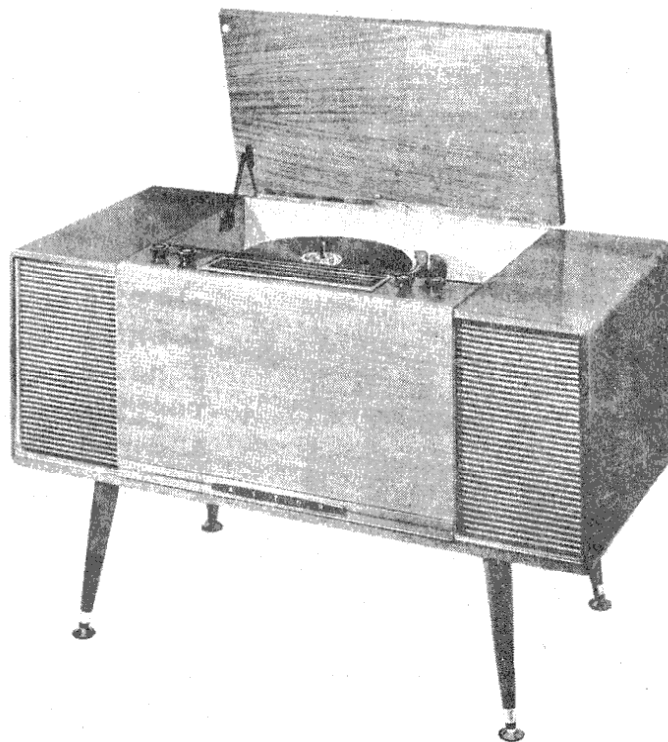
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**SERVICE DATA**

**ASTOR MODEL "G 3A"**

**STEREOGRAM**

**5 VALVE SUPERHETERODYNE BROADCAST BAND RECEIVER  
AND A 4 SPEED RECORD CHANGER**



<b>FUNCTION:</b>	Radio — Gramo Mono — Gramo Stereo
<b>TUNING RANGE:</b>	535 — 1640 Kilocycles
<b>INTERMEDIATE FREQUENCY:</b>	455 Kilocycles
<b>RECORD CHANGER:</b>	COLLARO "STUDIO" 4 Speed (16-2/3, 33-1/3, 45 and 78 RPM) Crystal — Ronette type STEREO — 105 6" diameter permag, each channel
<b>PICK-UP CARTRIDGE:</b>	15 Ohms
<b>SPEAKERS:</b>	2.25 Watts each channel
<b>SPEAKER VOICE COIL IMPEDANCE:</b>	200, 230 & 240, 250.
<b>POWER OUTPUT:</b>	50 Cycles
<b>MAINS INPUT VOLTAGE TAPS:</b>	Radio Operation — 55 Watts Gramo Operation — 90 Watts
<b>MAINS FREQUENCY:</b>	6AN7 Mixer—Oscillator
<b>POWER CONSUMPTION:</b>	6N8 I.F. Amplifier — Detector
<b>VALVE COMPLEMENT:</b>	6GW8 Audio Amplifier and Output (left channel)
	6GW8 Audio Amplifier and Output (right channel)
	6V4 H.T. Rectifier

SETTING THE DIAL POINTER

Turn tuning control until the tuning condenser gang is at the low frequency end of travel stop, condenser plates fully meshed. Set the centre of dial pointer to the centre of the end of travel spot, left hand end of dial reading.

BROADCAST ALIGNMENT

- A. To inject a signal into the receiver rod aerial, connect to the active terminal of the signal generator approximately two feet of aerial wire, then fashion the wire into a vertical position.
- B. Place vertical wire at a position in line with ferrite rod aerial and located at a position not less than 1 ft. from the inductance trimmer end of ferrite rod.
- C. Connect I.F. attenuator between pin 2 of 6N8 valve socket and chassis.

Oper. No.	Generator Connection	Generator Frequency	Instructions
1.	Refer para. A & B.	600 Kc/s	Turn tuning cond. gang and dial pointer to 600 Kc/s dial mark. Leave cond. gang and pointer set in this position, adjust osc. coil iron core and rod aerial inductance trimmer (metal ring) for max. output.
<b>NOTE:</b> Do not rock the cond. gang to and fro through signal until this operation is completed.			
2.	Refer para. A & B.	1400 Kc/s.	Turn cond. gang and dial pointer until centre of dial pointer is on centre of 1400 Kc/s mark on dial. Adjust osc. and aerial trimmer condensers for max. output.
3.	Repeat operations 1 and 2.		

Tuning range after alignment 535-1640 Kc/s.

AUDIO AMPLIFIER GAIN AND BALANCE TEST

Function Switch	-	Mono position.
Volume Control	-	maximum volume (fully clockwise)
Tone Control	-	maximum treble (fully clockwise)
Output Meter and Speaker connections	-	output meter across one channel output (speaker voice coil disconnected) and a speaker voice coil across the other channel output.
Audio Generator Frequency	-	1000 cps.

**Audio Generator Connection**

Before proceeding note colours of leads and connections, then disconnect amplifier input leads from pick-up sockets. Connect generator to one of the input leads to amplifier.

Audio Generator Output - 100 millivolts.

With equipment connected as above the output meter should read between .25 and .6 watts.

Leave input signal set at 100 mV; exchange output meter and speaker connections to opposite channels.

Check output meter reading which should be between .25 and .6 watts.

The difference in output between the two channels must not exceed 2DB or 150 milliwatts (approx.).

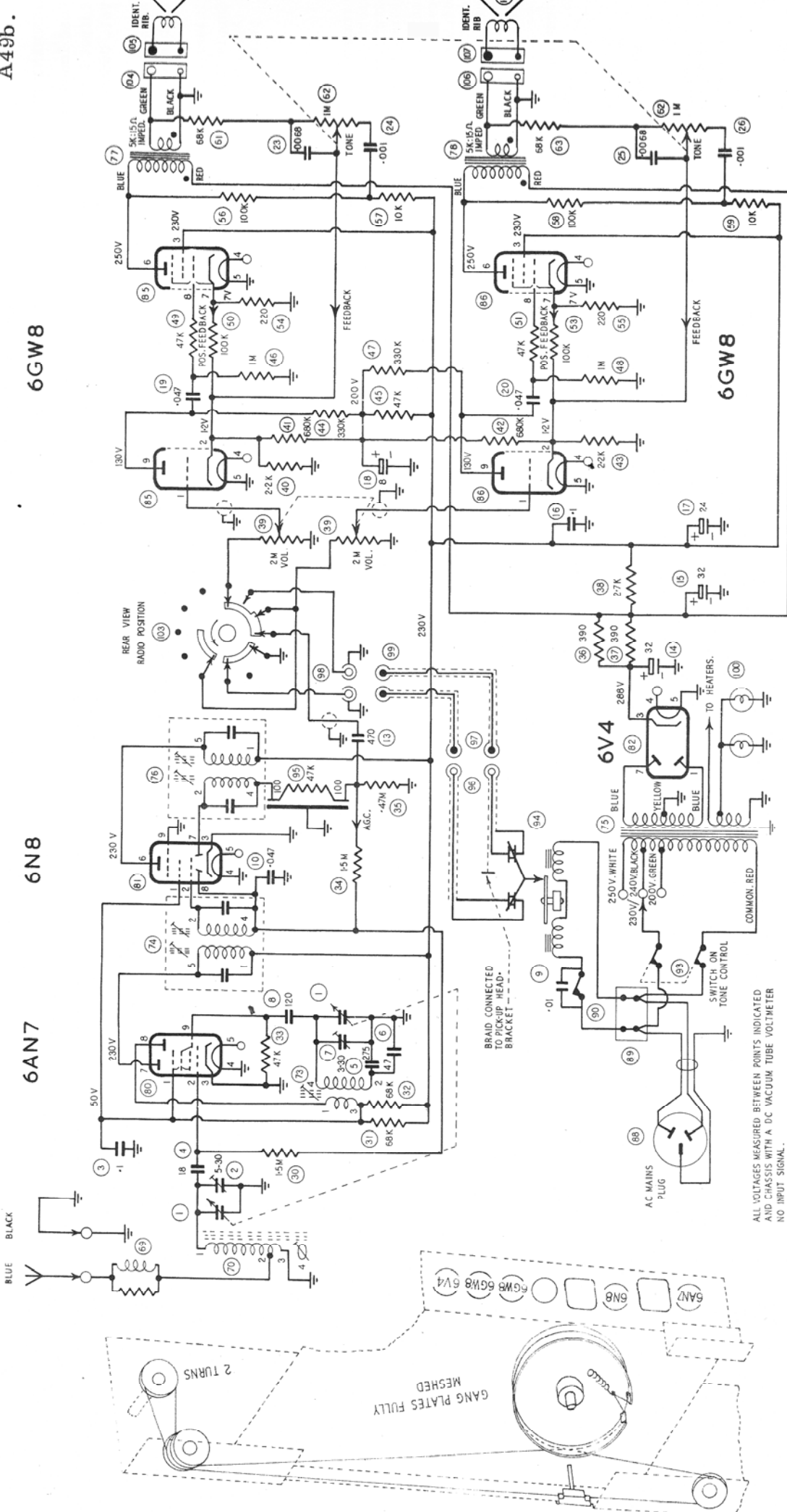
SPEAKER PHASING

It is essential that the speakers be phased correctly.

If a speaker has to be removed for service, note the lead connections to ensure correct phasing when reconnecting.

A method used for checking the phasing of the speakers is detailed in the following paragraphs.

1. Play a monophonic record.
2. To conduct the following test the listener should be located at a position four feet away in front of the centre of the cabinet.
3. If the phasing is correct the reproduced sound will appear to be radiated from a point near the centre of cabinet front.
4. With incorrect phasing the quality of reproduction will be poor, it will appear to be lacking in bass response and will appear to be radiated from both ends of the cabinet.
5. If the speakers are incorrectly phased, reverse the leads connected to the voice coil terminals of one speaker then repeat the test detailed above.



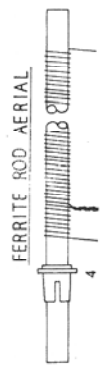
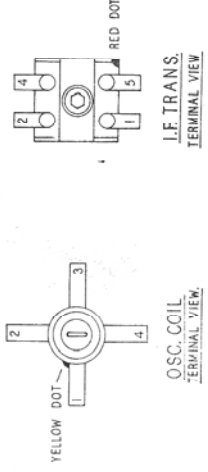
FUNCTION SWITCH POSITION:  
 1. RADIO.  
 2. MONO.  
 3. STEREO.

IF 455Kc/s.

**MODEL - G3A**  
 STEREOPHONIC.

PB1182

ALL VOLTAGES MEASURED BETWEEN POINTS INDICATED AND CHASSIS WITH A DC VACUUM TUBE VOLTMETER NO INPUT SIGNAL.  
 235V 50 CYCLE AC INPUT TO POWER TRANSFORMER  
 230/240V PRI. TAP.  
 NUMBERS ASSIGNED TO TERMINALS OF COILS AND TRANSFORMERS ARE TO FACILITATE CIRCUIT TRACING OR COMPONENT REPLACEMENT AND MAY NOT BE FOUND ON THE UNIT.



GANG PLATES FULLY MESHED

2 TURNS