



RADIO CORPORATION PTY. LTD.

DIVISION OF ELECTRONIC INDUSTRIES LTD.
124-130 GRANT STREET, SOUTH MELBOURNE, S.C.A.

TECHNICAL BULLETIN

Bulletin: DML-2
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MODEL -- DML PORTABLE GRAMO-RADIO UNIT

MODIFICATIONS FOR STEREOPHONIC

Modifications have been made so that Model 'DML' may be used with an additional amplifier/speaker unit for Stereophonic reproduction.

- (A) The four speed, single record player unit part No. M468 has been changed to a four speed, single record player part No. M505 which has a stereo cartridge in the head of the pick-up arm.
- (B) The stereo cartridge left channel lead is wired to the receiver audio amplifier (junction of circuit No. 26 and 38.)
- (C) Circuit No. 26, a 1.2 megohm resistor is changed to a 560K ohm 10% ~~M~~W carbon resistor part No. R5642 to eliminate acoustic feedback (boom) when some records are being played.
- (D) The right channel lead from the stereo cartridge is wired to a socket located central on the rear of the plastic cabinet.

The end of the input lead (lead approx. 18 ft.) from the additional amplifier/speaker unit is inserted into the right channel outlet socket at the rear of the cabinet.

The ON/OFF supply mains switch, tone control and volume control on Model 'DML' function only on the Model 'DML'.

MODEL — DML RADIO PLAYER

A33a.

FOR OPERATION FROM:

- 200-240 Volt 40 or 50 Cycle AC. Mains (Power Transformer 73C1)
- " " " " Primary Tap - red - common
- " " " " " - green - 200 Volt mains
- " " " " " - black - 230 & 240 Volt mains

NOTE: 1 When the receiver is to be operated from a 250 Volt 40 or 50 cycle AC, supply main the transformer primary connections are as for the 240 volt supply mains but a 180 Ohm 10 Watt resistor Part No. R166 is to be mounted beneath the chassis and wired in the power trans. common lead (red).

NOTE: 2 The record player four speed drive pulley for 40 cycle mains operation is Part No. 846/524.

POWER CONSUMPTION:

- Radio Operation: 40 Watts - approx.
- Gramo Operation: 60 Watts - approx.

TUNING RANGE:

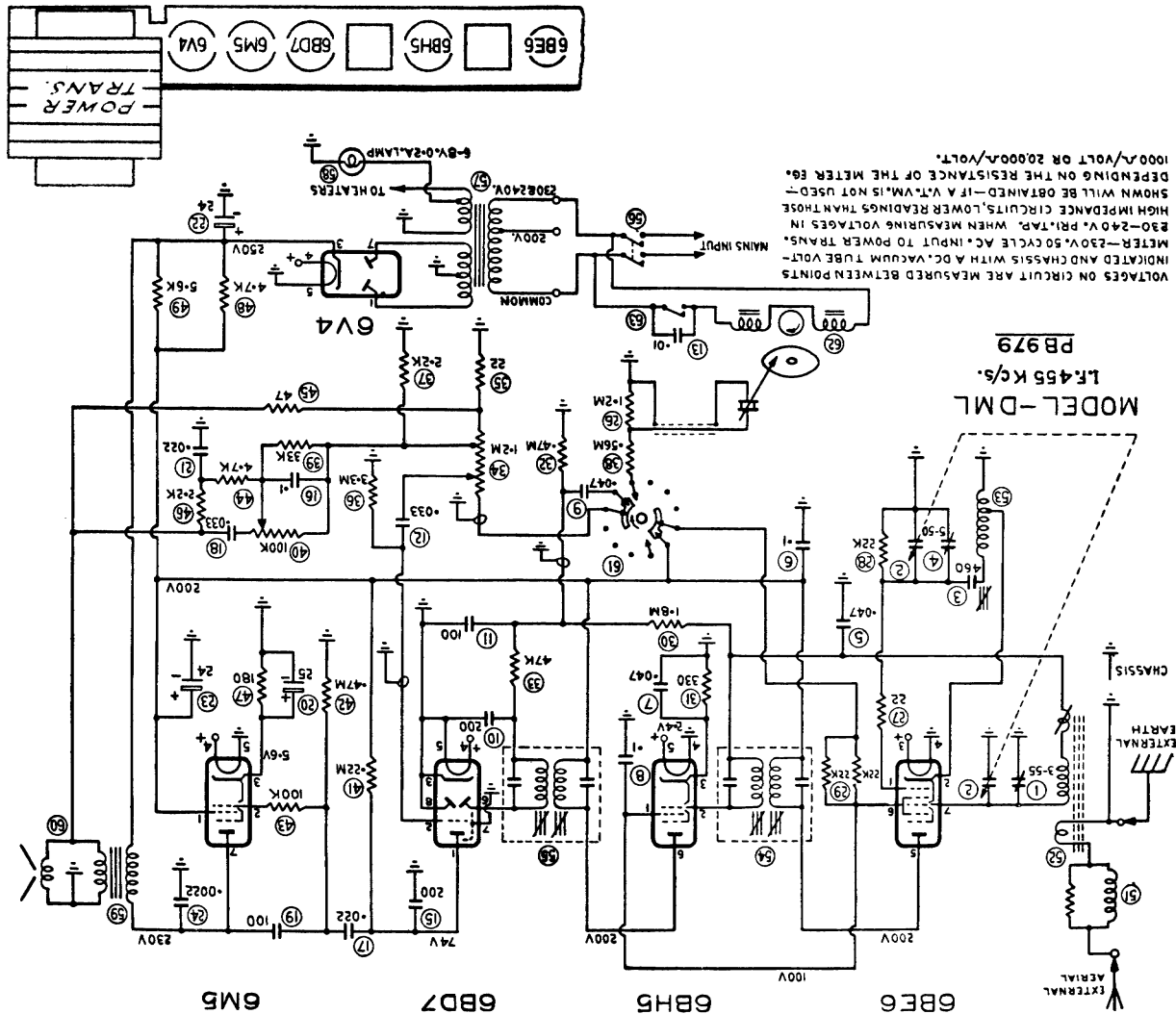
- 535 - 1610 Kilocycles
- 560.7 - 186.3 Metres.

ALIGNMENT PROCEDURE:

EQUIPMENT:

- Signal Generator: modulated 400CPS.
- Output Meter : 7000 Ohms
- Mica Capacitor : 0.01 MF Mica capacitor, for IF. trans alignment.
- Dummy Antenna : 200 μ MF Mica capacitor
- Alignment Tool : Straight type trim. adjustment.
- Alignment Tool : Flexible type 48/712 for b/cast osc. coil core and IPT. core adjustment

- ALIGNMENT CONDITIONS:
- Load Impedance: 7000 Ohms
 - Output Level : 50 Milliwatts
 - Vol. Control : Max. vol. (fully clockwise)
 - Tone Control : treble position (fully clockwise)
 - Intermediate Frequency Input : 455 Kc/s
 - Voltage: 230 Volts 50 cycle AC. input to 230-240V. pri. tap.
 - Radio position



A33b.

IF TRANSFORMER ALIGNMENT.

It is not necessary to remove the chassis from the cabinet to adjust the iron cores in the IF transformers.

Make sure the pick-up arm is anchored to its rest pillar.

Place the cabinet on a table with the base of the cabinet uppermost.

Remove the four screws from the base of the cabinet, then lift base section of cabinet upward on the hinges.

Operation	Generator Frequency	Dummy Antenna	Instructions
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1.	To signal grid of 6BH5 valve (pin No.2.)	455 Kc/s	0.01MF Mica capacitor in series with generator	Turn grammo-radio switch to radio position. Leave grid wire attached to valve socket Peak 2nd IF. trans. pri. and sec. iron cores for max. output.
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2.	To signal grid of 6BE6 converter valve (pin No.7.)	455 Kc/s	0.01MF Mica capacitor in series with generator	Turn tuning drum until tuning condenser plates are fully out of mesh. Leave grid wire attached to valve socket. Peak 1st. IF. trans. pri. and sec. iron cores for max. output.
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DIAL DRUM SETTING:

Fully mesh the condenser gang plates. Set the centre of the end of travel spot near 535 Kc/s on dial reading to align with the indicator line across dial reading aperture. The dial reading drum is adjusted by loosening the screw in the bush of the drum.

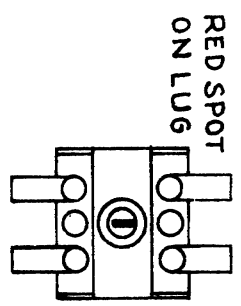
BROADCAST ALIGNMENT.

1.	To AVC connection of rod aerial	600 Kc/s	200 MUF capacitor in series with generator	Turn tuning drum until alignment spot at 600 Kc/s on dial reading aligns with indicator line of aperture. Leave cond. gang set in this position, peak osc. coil ind. trim (iron core) and sec. trimmer coil on ferrite rod aerial for max. output. Do not rock the cond. gang to and fro through the signal or more the dial drum off the 600 Kc/s dial mark until after the ind. trim. and rod aerial trim. coil have been peaked for max. output.
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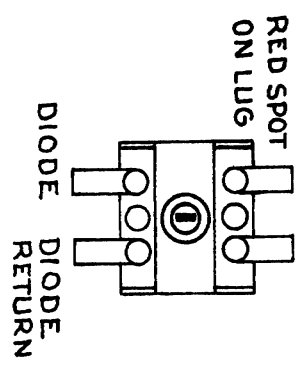
Turn tuning drum until alignment spot at 600 Kc/s on dial reading aligns with indicator line of aperture. Leave cond. gang set in this position, peak osc. coil ind. trim (iron core) and sec. trimmer coil on ferrite rod aerial for max. output. Do not rock the cond. gang to and fro through the signal or more the dial drum off the 600 Kc/s dial mark until after the ind. trim. and rod aerial trim. coil have been peaked for max. output.

Operation No.	Generator Connection	Generator Frequency	Dummy Antenna	Instructions
2.	To AVC. connection of rod aerial	1400 Kc/s	200 MUF capacitor in series with generator	Turn tuning drum until alignment spot at 1400 Kc/s on dial reading aligns with indicator line of aperture. Adjust osc. coil trim. cond. and rod. aerial trim. cond. for max. output. Repeat operations 1 and 2
3.				
4.				Tuning range after alignment 535 - 1610 Kc/s.
5.				Close base section of cabinet and secure with the four screws.

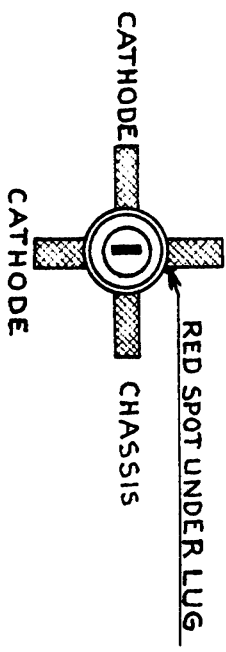
1ST. I.F. TRANS.



2ND. I.F. TRANS.



OSCILLATOR COIL



LUG VIEW OF COIL

