RADIO CORPORATION PTY. LTD.

DIVISION OF ELECTRONIC INDUSTRIES LTD.
126-130 GRANT STREET, SOUTH MELBOURNE, S.C.4.

TECHNICAL BULLETIN

MODEL DLN.

GRAMO-RADIO COMBINATION

An Automatic 4 Speed Record Changer (78, 45, 33-1/3, 16-2/3, r.p.m.)and a 6 valve Superheterodyne Broadcast Band Receiver.

FOR OPERATION FROM

200-240 Volt 50 Cycle AC. Mains (Power Transformer T119)
Power trans Primary Tap-red-common.
" " " " -green-200 Volt mains.
" " " " -black-230 & 240 Volt mains.

200-250 Volt 40 & 50 Cycle AC. Mains (Power Transformer T120)
Power trans. Primary Tap-red-common.
" " " " -green-200 Volt mains.
" " " " -black-230 & 240 Volt mains.
" " " " -white-250 Volt mains.

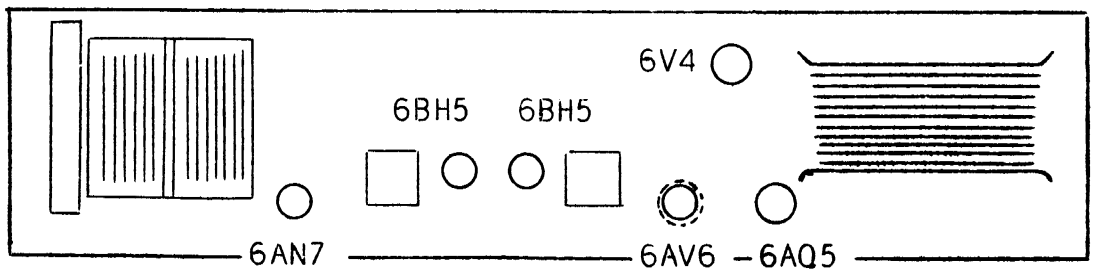
POWER CONSUMPTION.

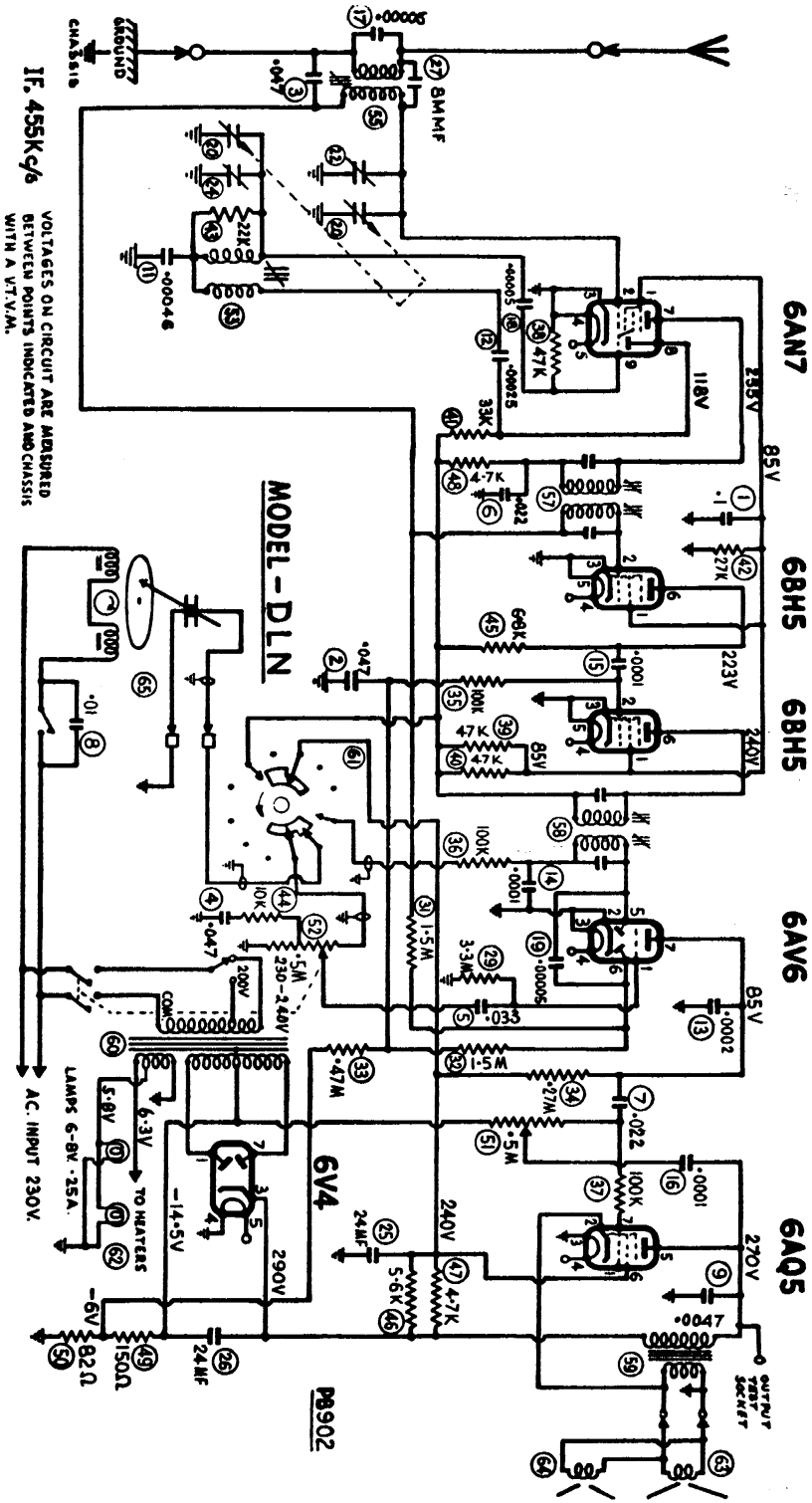
Radio Operation:- 55 Watts-approx.
Gramo Operation:- 75 Watts-approx.

TUNING RANGE

Broadcast Band: 535-1610 Kc/s. - 560.7-186.3 Metres.

THIS BULLETIN CONTAINS





ALIGNMENT PROCEDURE

EQUIPMENT

Signal Generator:		Load Impedance:	5,000 Ohms.
Output Meter:		Output Level:	50 Milliwatts.
Mica Capacitor:	0.01MF. (for IF. Trans. alignment)	Vol. Control:	Max. Vol. fully clockwise.
Dummy Antenna:	200MMF. Mica Capacitor	Intermed. Freq.:	455 Kc/s.
		Input Voltage:	230 Volts 50 Cycle AC. input to trans.
Alignment Tools:	Type M195 and PM581	Tone Control	230-240 volt pri.tap. Treble position.

ALIGNMENT CONDITIONS

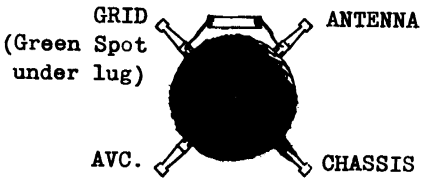
IF. TRANS. ALIGNMENT

Operation No.	Generator Connection	Generator Frequency	Dummy Antenna	Instructions
1.	Remove receiver chassis from cabinet as detailed on page 6.			
2.	Connect speaker leads to speaker sockets.			
3.	To control grid of 6BH5 2nd IF. valve (pin No.2)	455 Kc/s.	0.01MF Mica capacitor in series with generator	Leave grid wire attached to valve socket. Peak 2nd IF. trans. pri. and sec. for max. output.
4.	To control grid of 6AN7 valve (pin No.2)	455 Kc/s.	0.01MF. Mica capacitor in series with generator	Turn cond. gang plates fully out of mesh. Leave grid wire attached to valve socket. Peak 1st IF. trans. pri. and sec. for max. output.
5.				Repeat operations No.3 and 4.

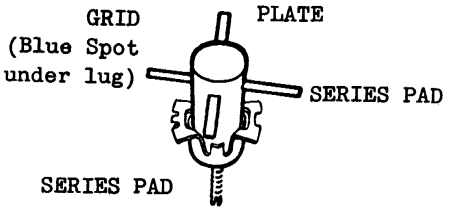
B/CAST ALIGNMENT

Operation No.	Generator Connection	Generator Frequency	Dummy Antenna	Instructions
1.	Fully mesh the cond. gang plates. Set the centre of the dial pointer to align with the centre of the end of travel mark on the dial reading near 540 Kc/s.			
2.	To antenna lead	600 Kc/s.	200MMF.Mica capacitor in series with generator	Turn cond. gang and dial pointer until centre of dial pointer aligns with centre of 600 Kc/s. spot on dial reading. Leave the gang and pointer set in this position and peak the oscl. coil ind. trim (iron core) for max. output.
3.	To antenna lead from receiver	1400 Kc/s.	200MMF. Mica capacitor in series with generator	Turn cond. gang and dial pointer until centre of dial pointer aligns with centre of 1400 Kc/s. spot on dial reading.Adjust oscl. coil trim cond. for logging and peak ant. trans. trim.cond. for max. output.
4.	To antenna lead from receiver	600 Kc/s.	200 MMF. Mica capacitor in series with generator	Turn cond. gang and dial pointer until centre of pointer aligns with centre of 600 Kc/s. spot on dial reading. Leave the gang and pointer set in this position. Re-peak oscl. coil ind. trim (iron core) and peak the ant. trans. ind. trim. (iron core) for max. output. Do not rock the cond. gang or dial pointer to and fro through the signal while adjusting or move them until after the inductance trimmer (iron core) of both of these transformers has been peaked for max. output.
5.	To antenna lead from receiver	1400 Kc/s.	200MMF. Mica capacitor in series with generator	Turn cond. gang and dial pointer until centre of dial pointer aligns with centre of 1400 Kc/s. spot on dial reading. Adjust oscl. coil trim condenser for logging and re-peak antenna trans. trim. condenser for max. output.

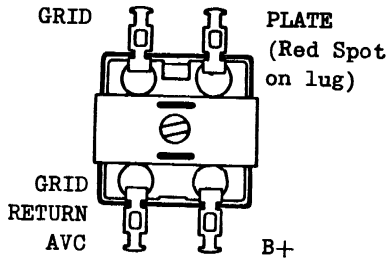
ANTENNA TRANS. B/CAST



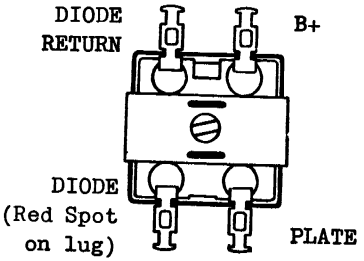
OSCL. COIL B/CAST



1st IF. TRANS.

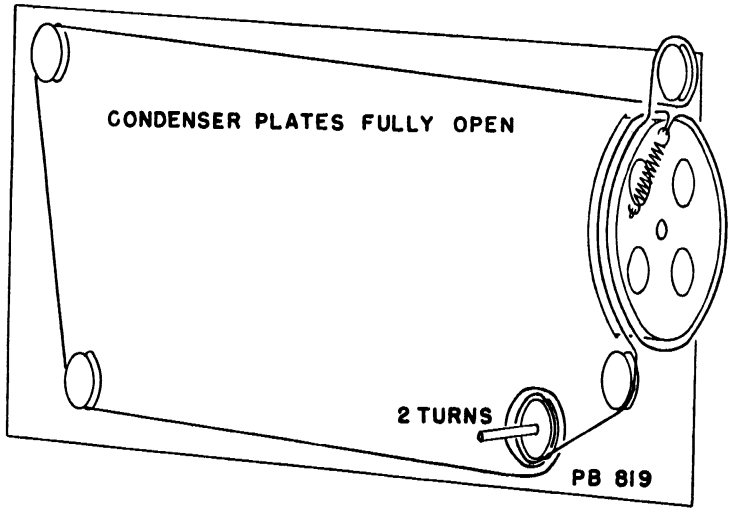


2nd IF. TRANS.



CORDING OF DIAL DRiVE

Length of cord required is 5 ft. 6 ins., which includes about 8 ins. to spare for tying to tension spring. Cord Part No. 34/754. Tension Spring Part No. 21/698.



CIRCUIT COMPONENT CHANGE TO ELIMINATE INSTABILITY

A. Circuit No. 9 a .0022 MF 600V. condenser has been changed to a .0047 MF paper condenser. 600V DCW. Part No. G4723

B. Circuit No. 50 a 68 ohm resistor has been changed to an 82 Ohm carbon resistor tol. ±10% 1 watt Part No. PR884.

C. The parts list on page 3 and 4 details the new parts. The changes are included in the circuit diagram in this bulletin.