

TECHNICAL BULLETIN



MODEL CLN.
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 FORM.

- 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 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.

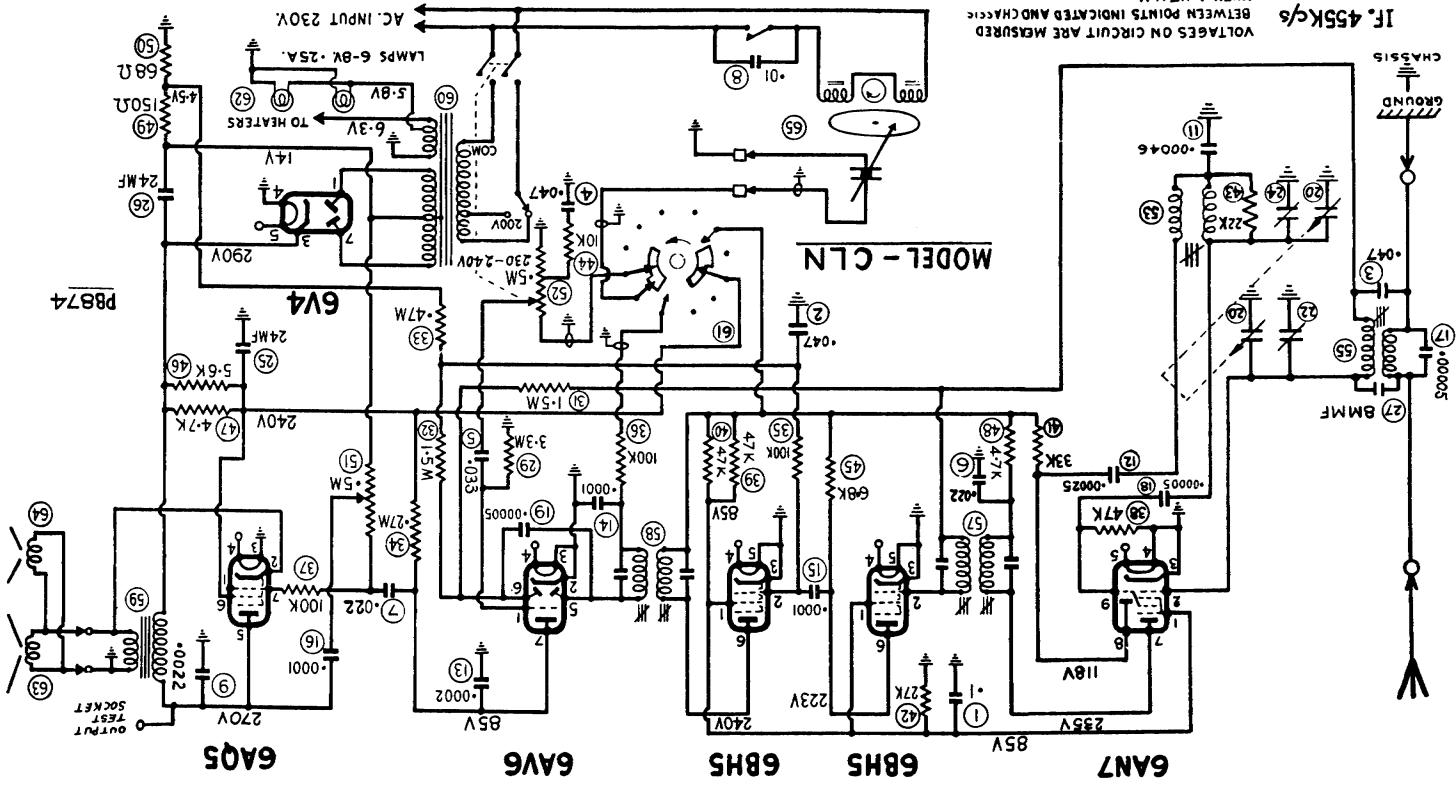
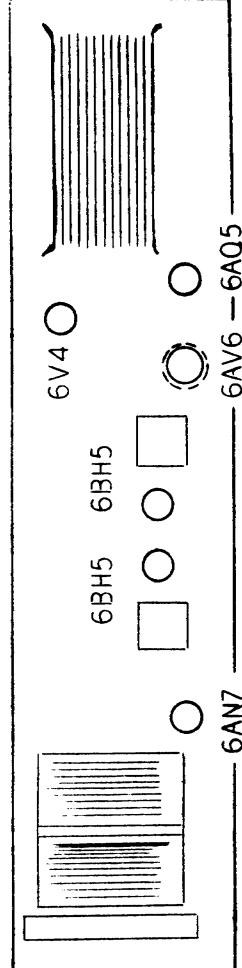
Radio Operation:- 55 7/8 watts-approx.
Gramo Operation:- 75 watts-approx.

TUNING RANGE

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

THIS BULLETIN CONTAINS

1. Alignment Instructions.
2. Circuit Diagram.
3. Component Parts List.
4. Connections for IF. and RF Transformers
5. Dial Drive Cordine Diagram
6. Valve Placement Diagram.
7. Instructions for Removing and Refitting Receiver Chassis and Record changer from Cabinet.
8. Instructions for Changing Mains Voltage Tap Position.
9. Chassis Serial Number.



ALIGNMENT PROCEDURE

EQUIPMENT

Signal Generator:

Mica Capacitor: 0.01MF. (for IF. Vol. Control trans. alignment)

Dummy Antenna: 230MF. Mica Capacitor

Alignment Tools: Type MI95 and PM581

ALIGNMENT CONDITIONS

Load Impedance: 5,000 Ohms.

Output Level: 50 Milliwatts. Max. Vol. fully clockwise.

Intermed. Freq.: 455 Kc/s.

Input Voltage: 230 Volts 50 Cycle AC. input to trans. 230-240 volt pri. tap.

Tone Control Treble position.

IF. TRANS. ALIGNMENT

Oper. Generator Connection Frequency Antenna

Generator Connection Frequency Antenna

Instructions

1. Remove receiver chassis from cabinet as detailed on page 6.

2. Connect speaker leads to speaker sockets.

3. To control grid 455 Kc/s. 0.01MF Mica capacitor in series with generator output.

4. To control grid 455 Kc/s. 0.01MF. Mica capacitor in mesh. Leave Grid wire attached to valve socket. Peak 2nd IF. trans. pri. and sec. for max.

5. To antenna 1400 Kc/s. 200MF. Mica capacitor in series with generator.

6. Repeat operations No. 3 and 4.

B/CAST ALIGNMENT

1. Fully mesh the cond. gang plates. Set the centre of the dial pointer to alien with the centre of the end of travel mark on the dial reading near 540 Kc/s.

2. To antenna lead 600 Kc/s. 200MF. 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 oscil. coil ind. trim (iron core) for max. output.

3. To antenna lead 1400 Kc/s. 200MF. 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 oscil. coil trim cond. for lagging and peak ant. trans. trim cond. for max. output.

Opera- tion No.	Generator Connection	Generator Frequency	Dummy Antenna	Instructions
4.	To antenna lead from receiver	600 Kc/s. 200 MF. 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. Re-peak oscil. 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. 200MF. 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 oscil. coil trim condenser for loffing and re-peak antenna trans. trim. condenser for max. output.
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ANTENNA TRANS. B/CAST

SERIES PAD

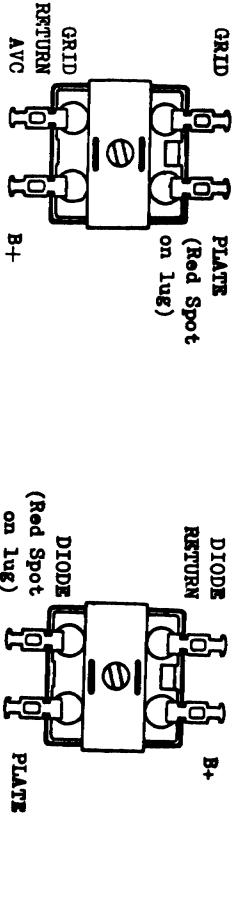
2nd IF. TRANS.



OSCIL. COIL B/CAST

SERIES PAD

1st IF. TRANS.



1st IF. TRANS.

SERIES PAD

2nd IF. TRANS.