



RADIO CORPORATION PTY. LTD. Bulletin: CNM-1.
 DIVISION OF ELECTRONIC INDUSTRIES LTD. File: Receivers AC.
 76-130 GRANT STREET, SOUTH MELBOURNE, S.C.A. 27/4/55.
TECHNICAL BULLETIN Page 1.

GRAMO-RADIO COMBINATION MODEL—"CNM"

An Automatic 3 Speed Record Changer (78, 45, 33 1/3 r.p.m.) and a 5 Valve Superheterodyne Broadcast Receiver.

FOR OPERATION FROM:—
 200-250 Volts 50 Cycle AC. Supply Mains.
 Power Trans. Primary Mains Taps: 200-220V. and 221-250V.

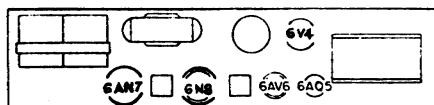
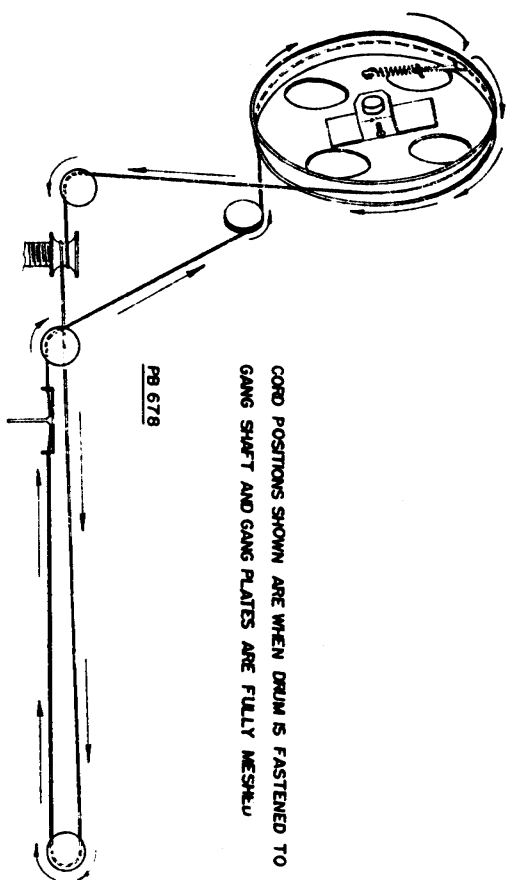
POWER CONSUMPTION:—
 Radio Operation:—55 Watts.—approx.
 Gramo Operation:—75 Watts.—approx.

TUNING RANGE:—
 535-1610 Kc/s. — 560.7-186.3 Metres.

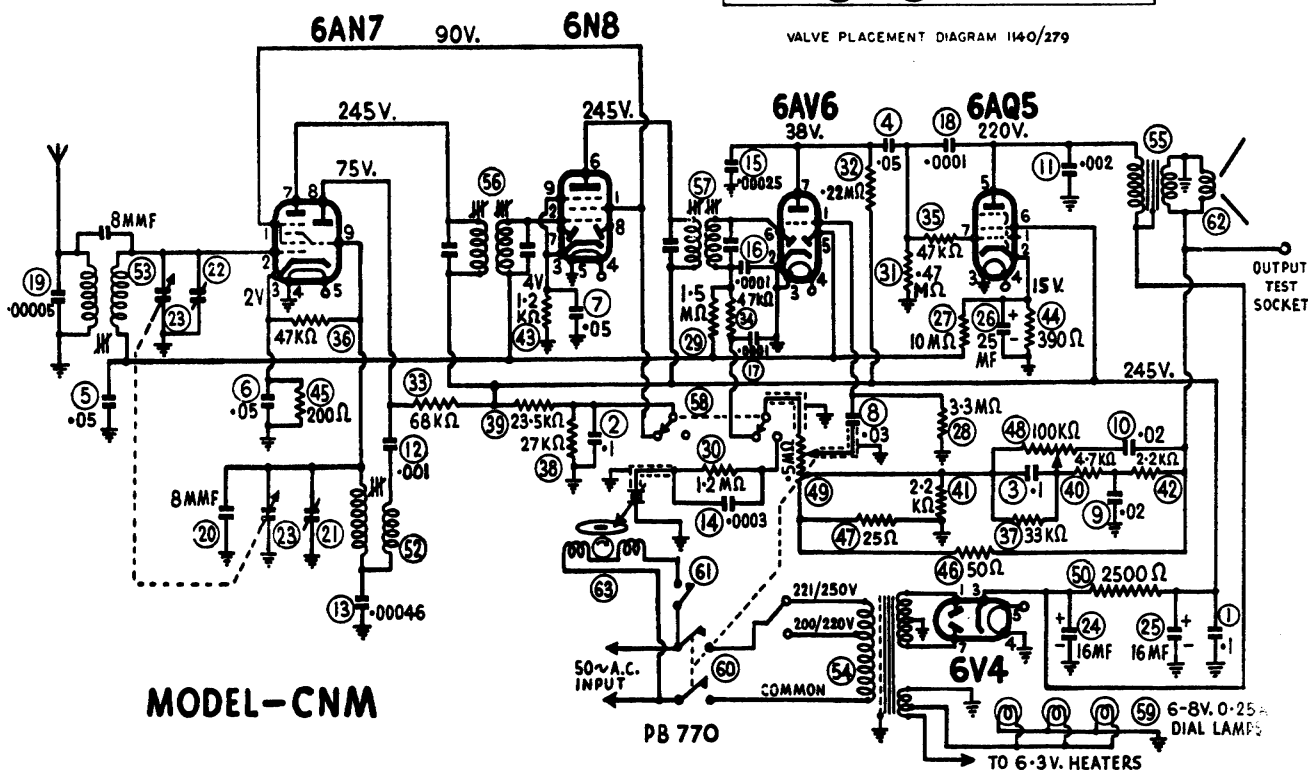
CORDING OF DIAL DRIVE

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

NOTE: 1 turn shown on drive shaft increased to 2 turns.



VALVE PLACEMENT DIAGRAM 1140/279



IF = 455 Kc/s. VOLTAGES MEASURED WITH A 1000 Ω/VOLT VOLTMETER 230V. 50 CYCLE INPUT TO 221-250 V. PRI. TAP

OPERATION INSTRUCTIONS

Equipment
 Signal Generator: 5,000 ohms.
 Output Meter: 50 Milliwatts.
 Mica Capacitor: 0.01MF. (for IF. trans. alignment)
 Dummy Antenna: 200MMF. Mica Capacitor

Alignment Procedure
 1. To control Grid of 6N8 I.F. valve (pin No. 2)
 2. To control Grid of 6AN7 valve (pin No. 2)
 3. Repeat operations No. 1 and 2.

Antenna Trans.
 Turn cond. gang plates fully out of mesh. Leave grid wire attached to valve socket. Peak list I.F. trans. pri. and sec. for max. output.

Antenna Trans.
 Turn cond. gang and dial pointer until centre of dial pointer aligns with centre of 600Kc/s. spot on dial reading. Leave the gang and pointer set in this position and peak the osc. coil inductance trim (iron core) for max. output.

Antenna Trans.
 Turn cond. gang and dial pointer until centre of dial pointer aligns with centre of 1400Kc/s. spot on dial reading. Adjust osc. coil trim condenser for logging and peak antenna trans. trim. condenser for max. output.

Antenna Trans.
 Turn cond. gang and dial pointer until centre of dial pointer aligns with centre of 600Kc/s. spot on dial reading. Leave the gang and pointer set in this position and then peak the antenna trans. ind. trim. (iron core) for max. output. Do not rock the 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.

Antenna Trans.
 Turn cond. gang and dial pointer until centre of dial pointer aligns with centre of 1400Kc/s. spot on dial reading. Adjust osc. coil trim condenser for logging and peak antenna trans. trim. condenser for max. output.

Antenna Trans.
 Turn cond. gang and dial pointer until centre of dial pointer aligns with centre of 600Kc/s. spot on dial reading. Leave the gang and pointer set in this position. Re-peak osc. coil ind. trim. (iron core) and then peak the antenna trans. ind. trim. (iron core) for max. output. Do not rock the 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.

Antenna Trans.
 Turn cond. gang and dial pointer until centre of dial pointer aligns with centre of 1400Kc/s. spot on dial reading. Adjust osc. coil trim condenser for logging and peak antenna trans. trim. condenser for max. output.

Antenna Trans.
 Turn cond. gang and dial pointer until centre of dial pointer aligns with centre of 600Kc/s. spot on dial reading. Leave the gang and pointer set in this position. Re-peak osc. coil ind. trim. (iron core) and then peak the antenna trans. ind. trim. (iron core) for max. output. Do not rock the 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.

Antenna Trans.
 Turn cond. gang and dial pointer until centre of dial pointer aligns with centre of 1400Kc/s. spot on dial reading. Adjust osc. coil trim condenser for logging and peak antenna trans. trim. condenser for max. output.

Antenna Trans.
 Turn cond. gang and dial pointer until centre of dial pointer aligns with centre of 600Kc/s. spot on dial reading. Leave the gang and pointer set in this position. Re-peak osc. coil ind. trim. (iron core) and then peak the antenna trans. ind. trim. (iron core) for max. output. Do not rock the 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.

Antenna Trans.
 Turn cond. gang and dial pointer until centre of dial pointer aligns with centre of 1400Kc/s. spot on dial reading. Adjust osc. coil trim condenser for logging and peak antenna trans. trim. condenser for max. output.

Antenna Trans.
 Turn cond. gang and dial pointer until centre of dial pointer aligns with centre of 600Kc/s. spot on dial reading. Leave the gang and pointer set in this position. Re-peak osc. coil ind. trim. (iron core) and then peak the antenna trans. ind. trim. (iron core) for max. output. Do not rock the 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.

Antenna Trans.
 Turn cond. gang and dial pointer until centre of dial pointer aligns with centre of 1400Kc/s. spot on dial reading. Adjust osc. coil trim condenser for logging and peak antenna trans. trim. condenser for max. output.

Antenna Trans.
 Turn cond. gang and dial pointer until centre of dial pointer aligns with centre of 600Kc/s. spot on dial reading. Leave the gang and pointer set in this position. Re-peak osc. coil ind. trim. (iron core) and then peak the antenna trans. ind. trim. (iron core) for max. output. Do not rock the 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.

Antenna Trans.
 Turn cond. gang and dial pointer until centre of dial pointer aligns with centre of 1400Kc/s. spot on dial reading. Adjust osc. coil trim condenser for logging and peak antenna trans. trim. condenser for max. output.

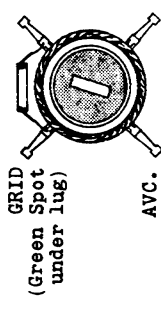
Tuning range after alignment: 535-1610 Kc/s.

ALIGNMENT PROCEDURE

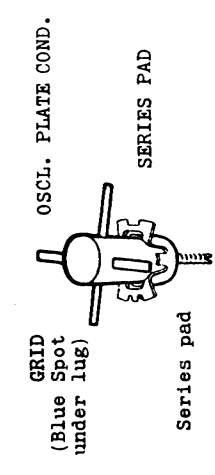
ALIGNMENT CONDITIONS

Load Impedance: 5,000 ohms.
 Output Level: 50 Milliwatts.
 Vol. Control: Max. Vol. fully clockwise.
 Intermed. Freq.: 455 Kc/s.
 Input Voltage: 230 Volts 50 Cycle AC. input to trans. 221-250 volt pri. tap
 Tone Control: Treble position.

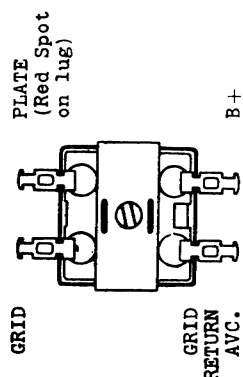
ANTENNA TRANS.



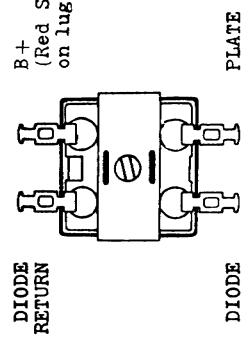
OSCL. COIL



1st IF. TRANS.



2nd IF. TRANS.



Tuning range after alignment: 535-1610 Kc/s.