DUMMY ANTENNA:

The 200 MMF dummy antenna must not be connected to the free end of the 25 ft. antenna during alignment. The 200 MMF. dummy antenna must be connected to the antenna junction lug on the chassis. It is not necessary to have the 25 ft. antenna connected to the receiver during alignment; if it is connected, it should be rolled up into a small hank.

I.F. TRANS. ALIGNMENT:

	Generator Connections	Generator Frequency	Dummy Antenna	Instructions
1.	Remove receiver chassis from cabinet as detailed on page 6.			
2.	To signal grid of 6BH5 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.
3.	To signal grid of 6BE6 valve (pin No.7).	455 Kc/s.	0.01MF mica capacitor in series with generator.	Leave grid wire attached to valve socket. Turn perm. tuner so that iron cores are fully out of windings on coil formers. Peak 1st IF. trans. pri. and sec. for max. output.
4.				Repeat operations No. 2 & 3.

B/CAST BAND ALIGNMENT:

1.	Refit chassis to front section of cabinet.			
2.	Refit control knobs and tuning pointer knob.			
3.	DIAL POINTER SETTING			Turn tuning pointer-knob anticlockwise until perm. tuner iron cores are out of windings on coil formers and the unit is hard against the stop. Loosen two grub screws in perm. tuner roller. Set centre of line on dial pointer to align with centre of end of travel spot on dial reading near 1700 Kc/s. Securely tighten the two grub screws.
4.	To antenna junction lug on chassis	1000 Kc/s.	200 MMF mica capacitor in series with generator.	Turn tuning-knob and perm. tuner until centre of line on dial pointer aligns with centre of spot on dial reading at 1000 Kc/s. Peak oscl. coil trimmer condenser then peak antenna trans. trim. cond. for max.output. Repeak oscl. coil trim cond.
5.	Tuning range after alignment 535 - 1640 Kc/s.			
6.	Check logging at each end of the band then refit rear section of cabinet.			

NOTE 1: Both iron cores are pre-set at the factory to an exact dimension of 2.275" between the extreme end of the former protruding through the

ANTENNA TRANS:

Start of winding - furthest from mounting end - Antenna
Finish of winding - nearest to mounting end - Signal grid.

OSCL. COIL:

Start of winding-furthest from mounting end - Junction of circuit Nos. 9 and 14.
Finish of winding - nearest to mounting end - Oscl. grid.

POWER TRANS. (PT962)

PRI.

Red lead-common. (leads
Green lead-200V. (changed
Black lead-230 & 240V. (to lugs

HT. SEC.

Blue lead-start. (leads
Yellow lead-centre tap. (changed
Blue lead-finish. (to lugs

LT. SEC. (two windings in parallel)
Start and finish in winding wire.

POWER TRANS. (PT983)

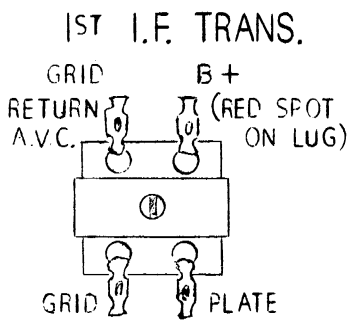
PRI.

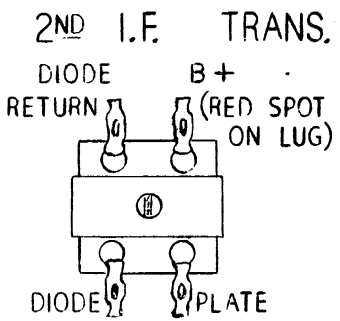
Red lead-common (leads
Green lead-230V. (changed
Black lead-250V. (to lugs

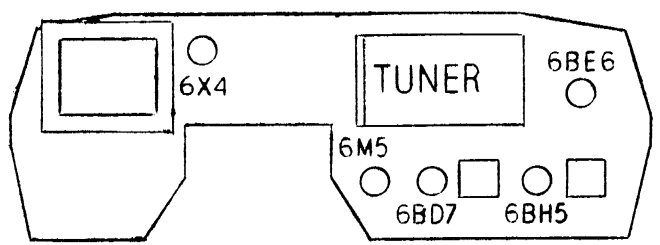
HT. SEC.

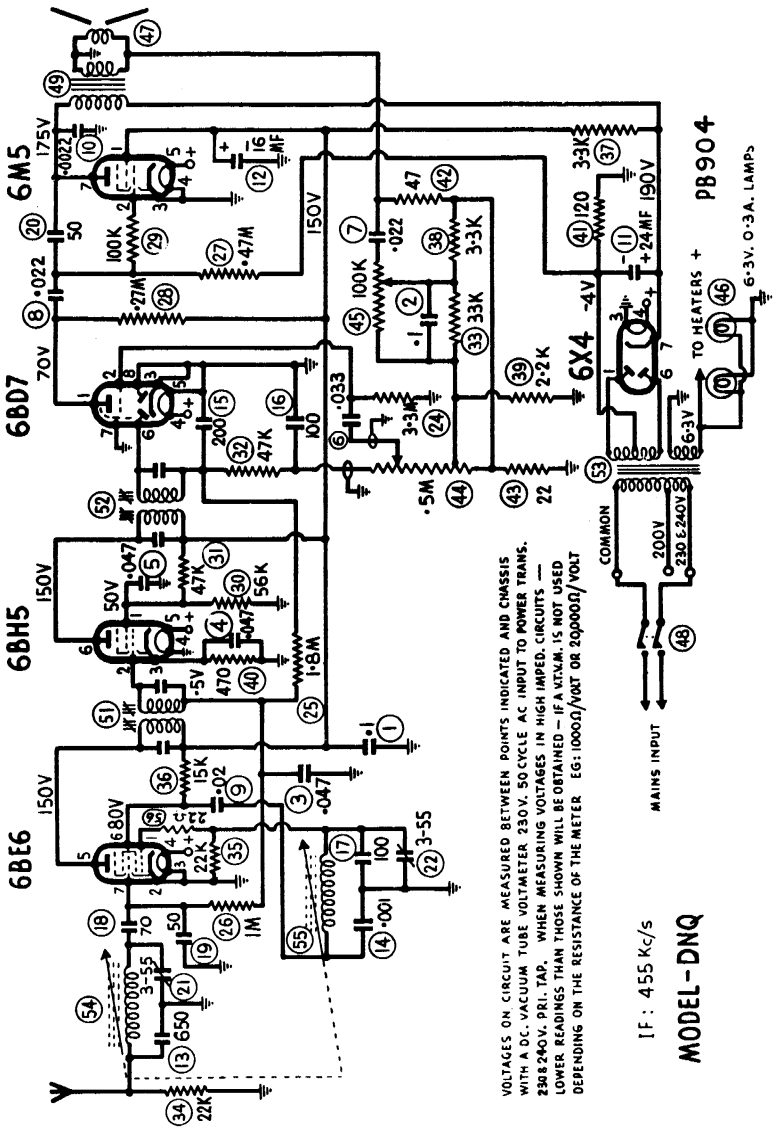
Yellow lead-start. (leads
Blue lead-centre tap. (changed
Yellow lead-finish. (to lugs

LT. SEC. (two windings in parallel)
Start and finish in winding wire.









RADIO CORPORATION PTY. LTD.

DIVISION OF ELECTRONIC INDUSTRIES LTD.
120-130 GRANT STREET, SOUTH MELBOURNE, S.C.4.

A35a

TECHNICAL BULLETIN

MANTEL MODEL—DNQ

5 VALVE SUPERHETERODYNE BROADCAST RECEIVER

FOR OPERATION FROM:-

200-240 Volt 50 Cycle Supply Mains (Power Transformer PT962)
Power Trans. Primary Mains Tap-red-common. (leads
" " " " " -green-200V mains. (changed
" " " " " -black-230 & 240V. mains (to lugs

230-250 Volt 40 & 50 Cycle Supply Mains (Power Transformer PT983)
Power Trans. Primary Mains Tap-red-common (leads
" " " " " -green-230V mains (changed
" " " " " -black-250V mains (to lugs

POWER CONSUMPTION:- 40 Watts-approx.

TUNING RANGE:- 535-1640 Kc/s. : 560.7-182.9 Metres.

THIS BULLETIN CONTAINS:

ALIGNMENT PROCEDURE

EQUIPMENT

Signal Generator:
Output Meter:
Mica Capacitor: 0.01MF (for I.F.T. alignment).
Dummy Antenna: 200 MMF. Mica Capacitor
Alignment Tool Type M195

ALIGNMENT CONDITIONS

Load Impedance: 7,000 ohms.
Output Level: 50 Milliwatts
Vol.Control : Max. Vol. Fully Clockwise
Intermed. Freq.:455 Kc/s.
Input Voltage: 230 Volts 50 Cycle A.C. Input to trans. 230V. pri. tap
Tone Control: Treble position