

# PHILCO

# MODEL 1204

GENERAL DESCRIPTION:

A sensitive five tube superheterodyne radio gramophone combination with four tuning bands covering the following ranges -

Broadcast	-	550	1600	KC/s
Short wave 1	-	3	10	MC/s
Short wave 2	-	9.3	12	MC/s
Short wave 3	-	12	22.5	MC/s

The circuit is a five tube superheterodyne of efficient design with semi band spread on shortwave, a high gain I.F. channel, and inverse feedback applied to the output stage. A separate position of the wave change switch is provided for gramophone operation.

TUBES:

- 7Q7 - Converter
- 7B7 - I.F. Stage
- 7C6 - Diode-triode detector amplifier
- 6K6GT - Output
- 7Y4 - Rectifier

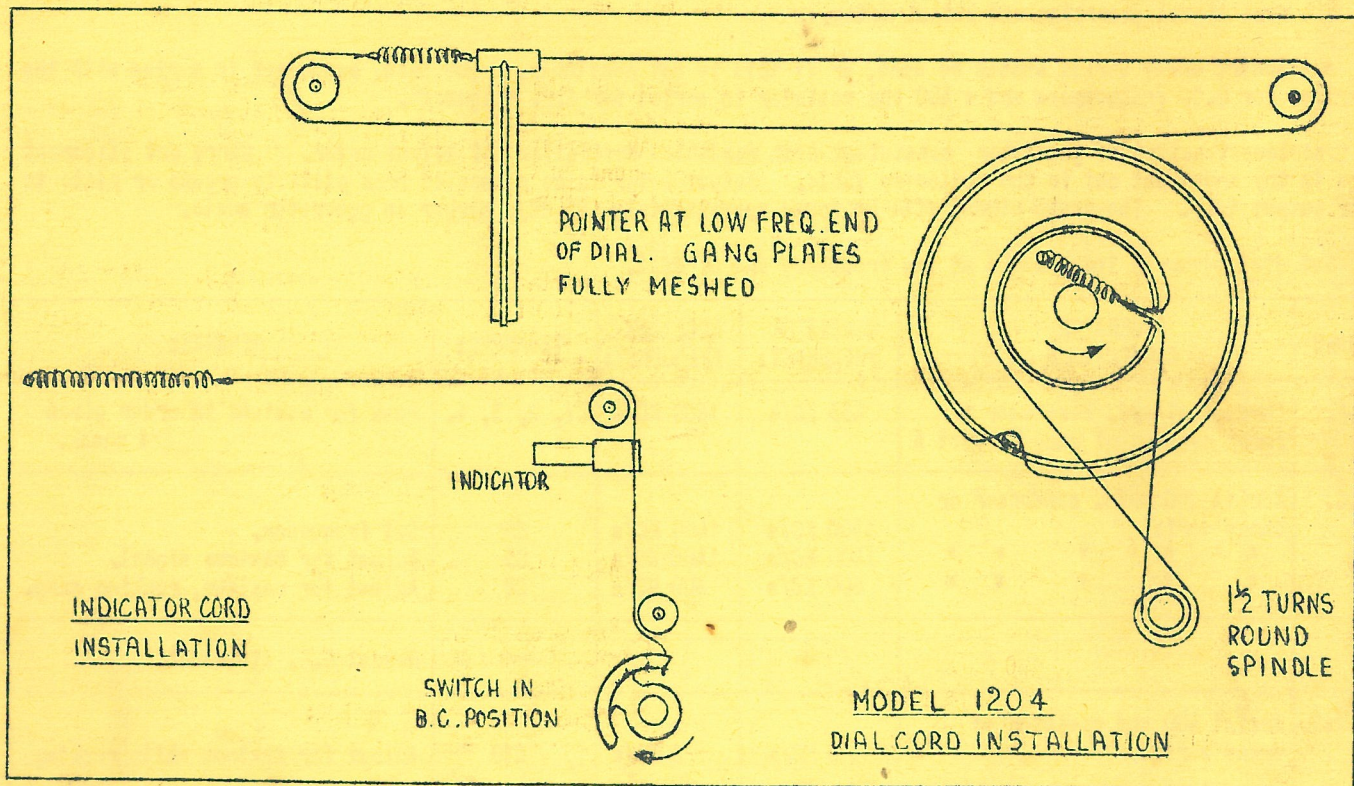
Power Supply 230V A.C. 50 cycles.

Power Consumption 70 watts.

SPEAKER: E.M.

GRAM UNIT: Collare induction with magnetic pickup.

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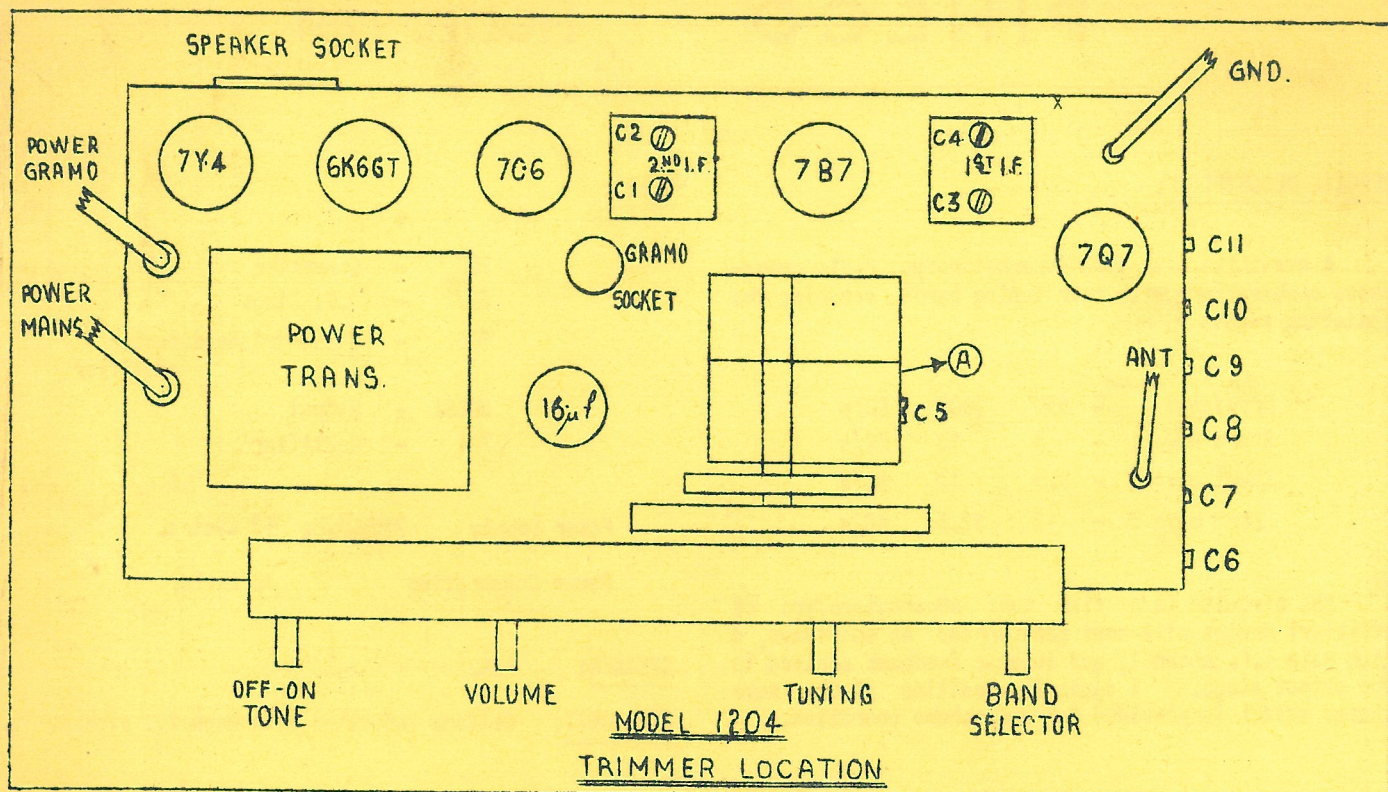


PLATES FULLY MESHED. THESE VOLTAGES ARE FOR 230V.AC. OPERATION

DOMINION RADIO & ELECTRICAL CORP. LTD. AUCK. N.Z.

UNSHADED ROTOR AT REAR

DRAWN	14-1-49
CHECKED	14-2-49
APPROVED	No. 1943



ALIGNMENT PROCEDURE

EQUIPMENT REQUIRED:

All wave signal generator and output meter.

A standard dummy aerial should be used, or if this is not available, a 200 mmfd. condenser in series with the generator for B.C. frequencies and a 400 ohm resistor in series for S.W. alignment.

Use lowest output of generator consistent with readable deflection of output meter. Carry out alignment steps in the order set out in the following table. Output meter to be connected from plate to ground or plate to B+ of output tube. The image signal will be found approximately .91 MC/s higher on generator scale.

Set dial pointer to index marks at low frequency end of dial.

BAND	GENERATOR CONNECTION:	GENERATOR FREQUENCY:	RECEIVER FREQUENCY:	TRIMMERS:	REMARKS:
I.F.	Through .1 mfd. condenser to front section of gang - Point A	455 KC/s	1600 KC/s	C1, 2, 3, 4.	Peak for maximum in order given and check.
B.C.	Aerial 200 mmfd. condenser or dummy aerial	1400 KC/s	1400 KC/s	C9	Set frequency.
	" " " " "	1400 KC/s	1400 KC/s	C5	Adjust for maximum signal.
	" " " " "	600 KC/s	600 KC/s	C8	Adjust for maximum, rocking gang.
					Repeat B.C. alignment.
S.W.1.	Aerial 400 ohm resistor or dummy aerial	8 MC/s	8 MC/s	C10	Adjust for maximum while rocking gang.
S.W.2.	" " " "	12 MC/s	12 MC/s	C7	Set frequency.
	" " " "	11 MC/s	11 MC/s	C6	Adjust for maximum signal.
S.W.3.	" " " "	20 MC/s	20 MC/s	C11	Adjust for maximum while rocking gang.



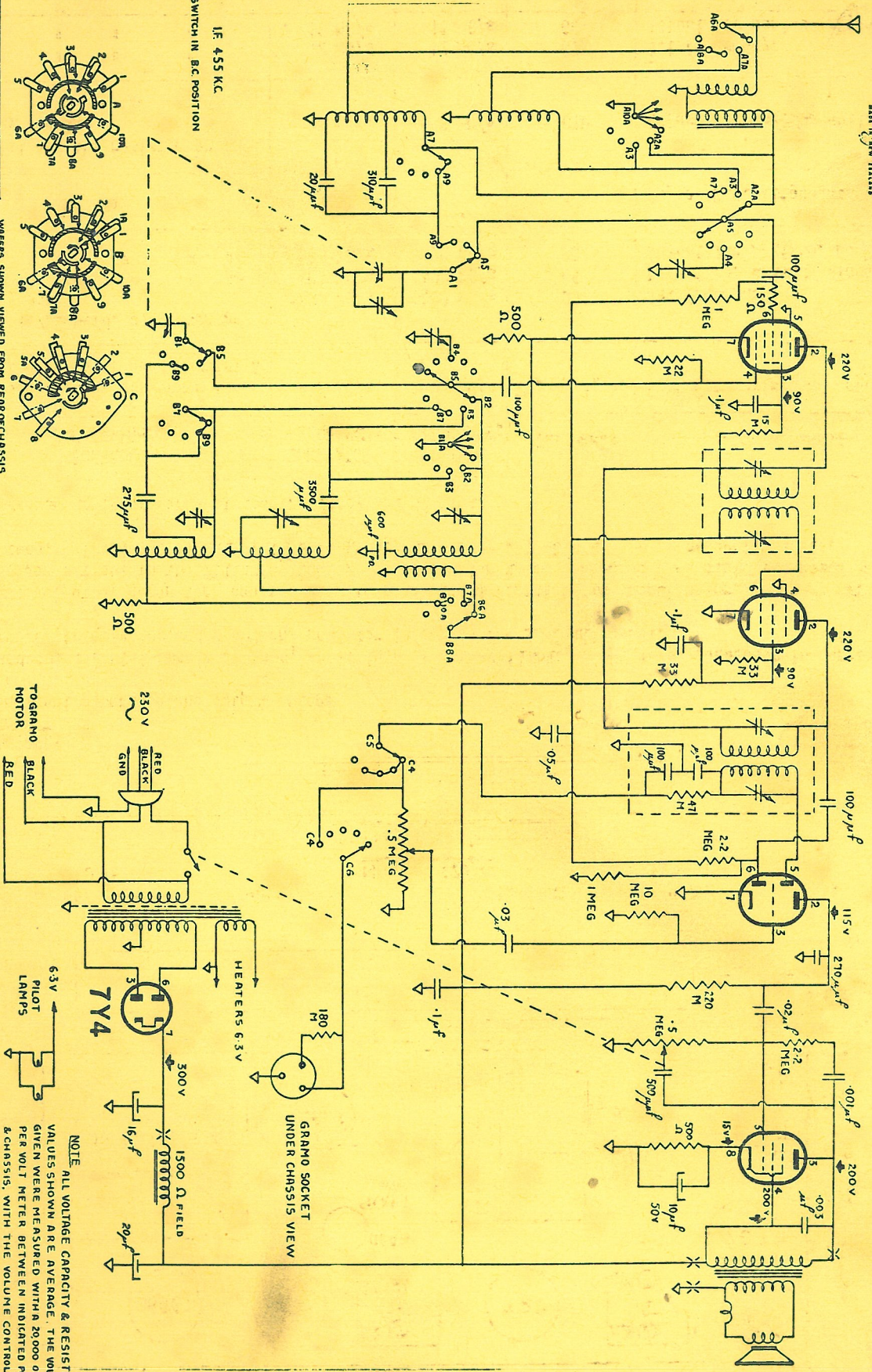
**PHILCO**  
MADE IN U.S.A.

**7Q7**

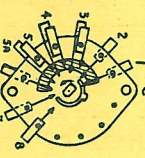
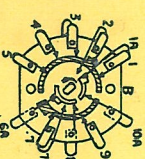
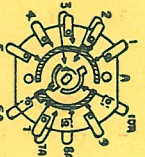
**7B7**

**7C6**

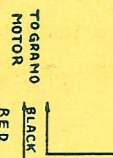
**6K6GT**



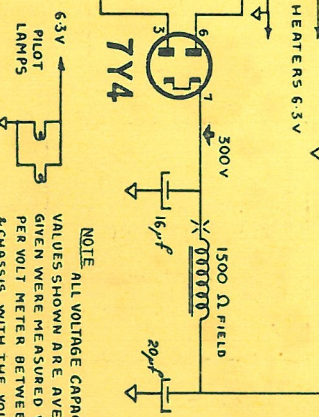
IF 455 KC.  
SWITCH IN B.C POSITION



WAFERS SHOWN VIEWED FROM REAR OF CHASSIS  
SHADED ROTOR AT FRONT  
UNSHADED ROTOR AT REAR



GRANO SOCKET  
UNDER CHASSIS VIEW



NOTE: ALL VOLTAGE CAPACITY & RESISTANCE VALUES SHOWN ARE AVERAGE. THE VOLTAGES GIVEN WERE MEASURED WITH A 20,000 OHMS PER VOLT METER BETWEEN INDICATED POINTS & CHASSIS, WITH THE VOLUME CONTROL AT MINIMUM & THE TUNING CONDENSER PLATES FULLY MESHERD. THESE VOLTAGES ARE FOR 230VAC OPERATION.

**DOMINION RADIO & ELECTRICAL CORP LTD AUCK. N.Z.**

Drawn	BP	14-1-39
Checked	H. J. H.	
Approved		No 1943

**N.Z. PHILCO 1204**