# PHILCO MODEL 733

## SPECIFICATIONS

GENERAL DESCRIPTION:

Six tube A.C. Superheterodyne circuit with five tuning bands including two bandspread bands and covering the following frequencies:

Broadcast - 535 - 1600 K/cs.

Shortwave 1:- 2.5 - 7.5 M/cs.
" 2:- 7.5 - 22 M/cs.

Bandspread 1:- 9.4 - 12 M/cs.
" 2:- 15 - 18 M/cs.

The circuit consists of a 7B7 RF stage, a 7S7 triode-heptode frequency converter followed by a 7B7 permeability tuned I.F. stage and a 7C6 double diode second detector and high-mu audio amplifier. The power output stage consists of a 7C5 beam power amplifier giving ample undistorted output power for all requirements. A wide range of distortionless tone control is obtained by means of a negative feed-back network from the plate of the 7C5. Delay voltage for the A.V.C. line is obtained from the cathode of the output tube. All component values and voltages are marked on the circuit diagram.

Power Supply: 230 volt 50 cycle A.C.

Power Consumption: 50 watts.

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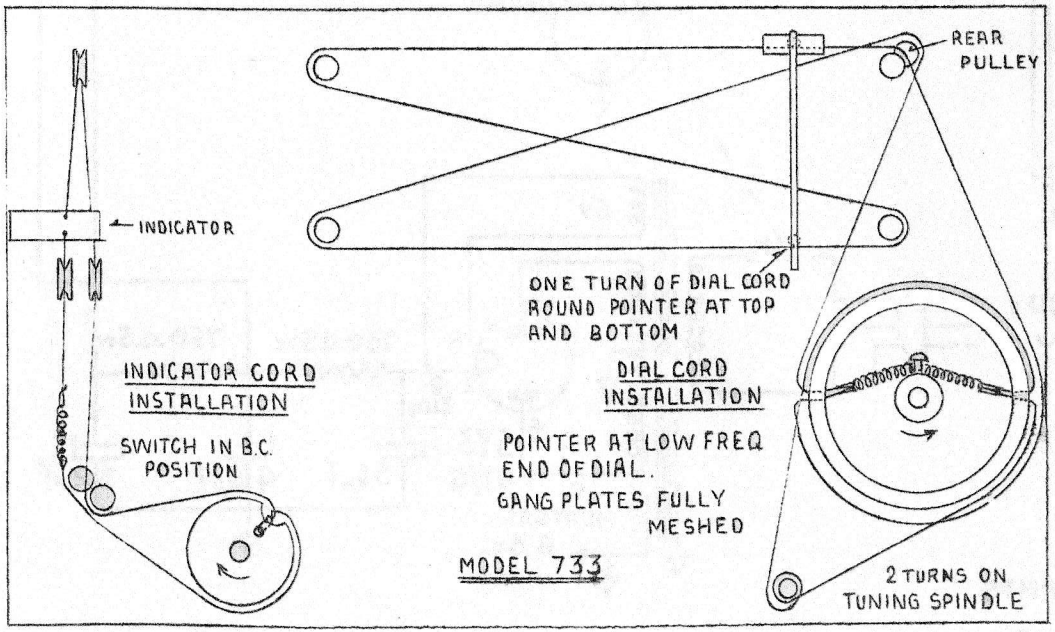
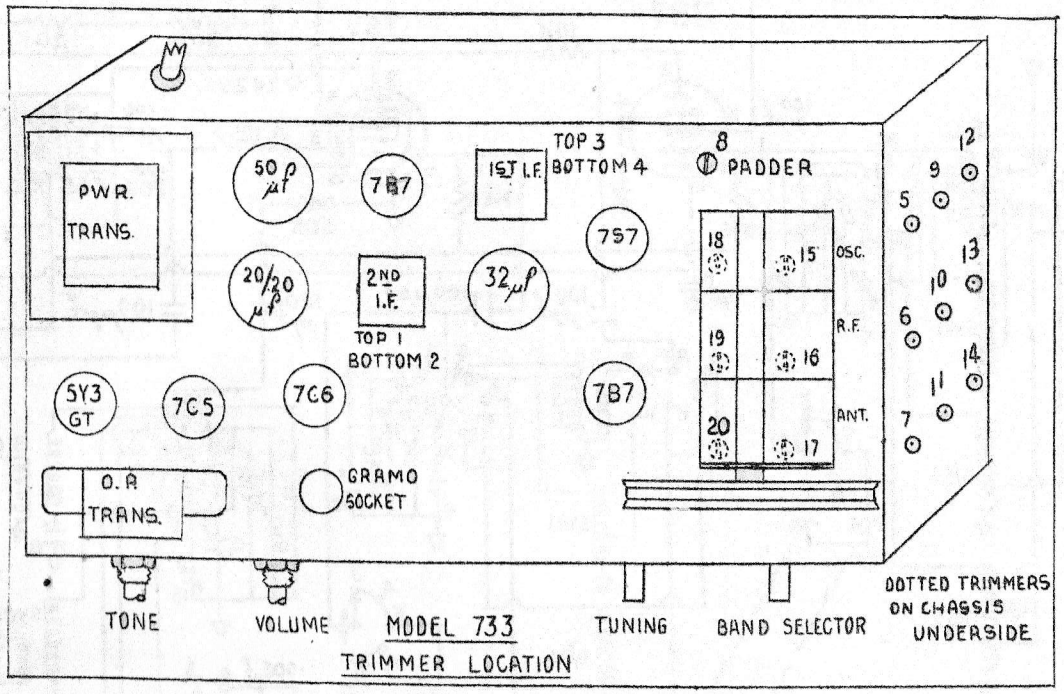



## ALIGNMENT PROCEDURE

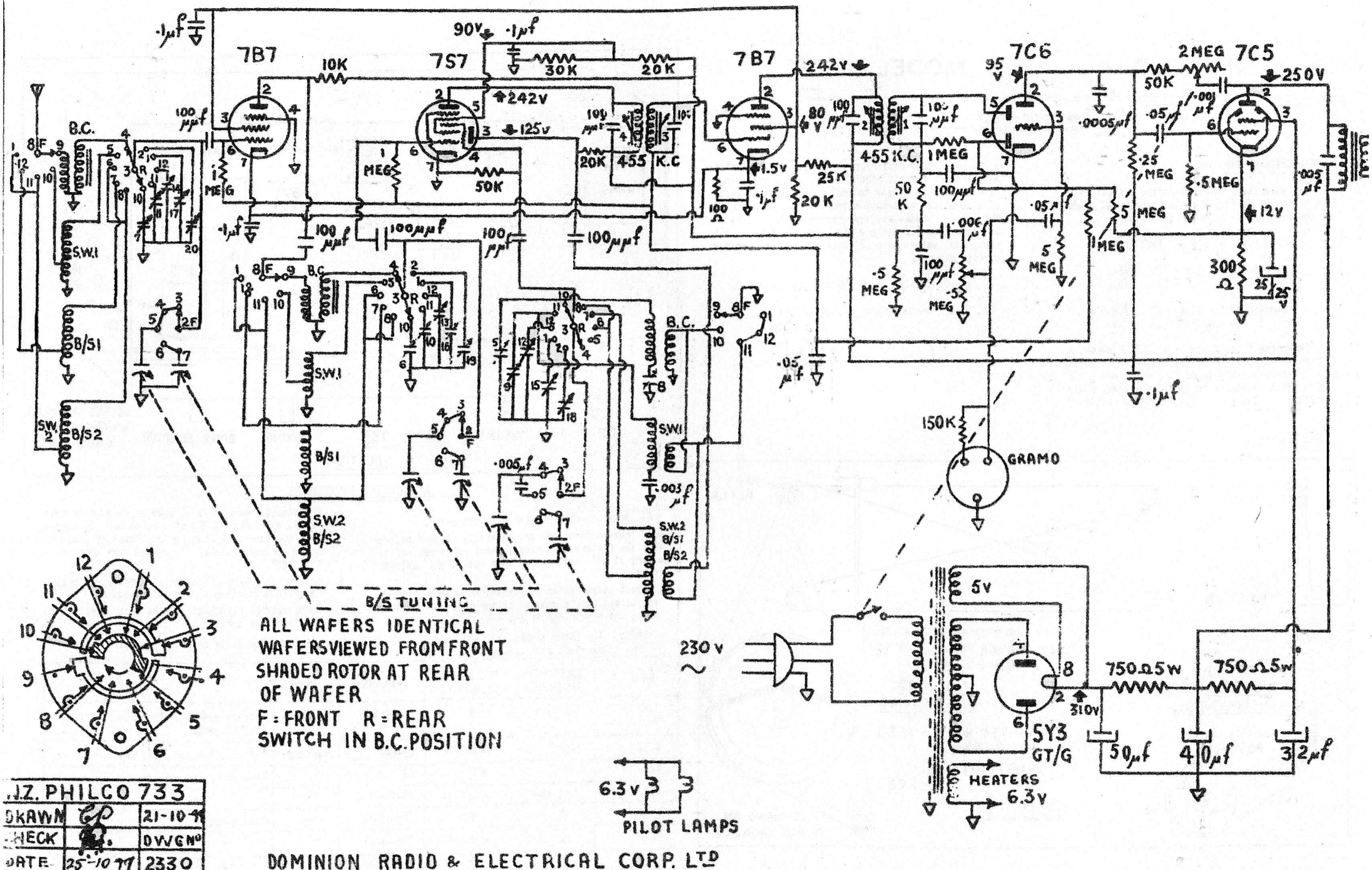
EQUIPMENT REQUIRED:
All wave signal generator - output meter.

(N.B. Philco receivers are carefully aligned before leaving the factory and re-alignment of a new set if necessary at all will be confined to slight adjustments only.

1. Connect output meter to convenient source of audio, say across the terminals of the output transformer using the high range of the meter.
2. A Standard dummy aerial should be used or if this is not available a 200 mfd condenser in series with the generator lead for broadcast frequencies and a 400 ohm resistor in series for short wave alignment.
3. Use lowest output of generator consistent with a readable deflection of the output meter.
4. Carry out the alignment in the order set out in the following table:

NOTE: The image signal will be found .91 m/cs higher on the generator scale or .91 m/cs lower on the receiver dial scale.

| BAND | GENERATOR FREQUENCY: | RECEIVER FREQUENCY: | TRIMMERS | DUMMY | REMARKS |
|---|---|---|---|---|---|
| I.F. | 455 K/cs | 1600 | 4-3-2-1 | .1 mfd | Connect generator to large centre section of gang. |
| B.C. | 1400 | 1400 | C5-6-7 | Standard | Repeat after adjusting C8. |
| B.C. | 600 | 600 | C8 | " | Roll gang. |
| S.W.1 | 6 M/cs | 6 M/cs | C9-10-11 | " | |
| S.W.2 | 18 " | 18 " | C12-13-14 | " | Roll gang. |
| B.S.1 | 12 " | 12 " | C15-16-17 | " | " " Check for image freq. |
| B.S.2 | 17 " | 17 " | C18-19-20 | " | " " |




| N.Z. PHILCO 733 | | |
|---|---|---|
| DRAWN | | 21-10-47 |
| CHECK | | DWG No |
| DATE | 25-10-47 | 2330 |

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