

SPECIFICATIONS

GENERAL DESCRIPTION:

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

Broadcast - 535 - 1600 K/cs.

Bandspread 9.4 - 15.8 M/cs.

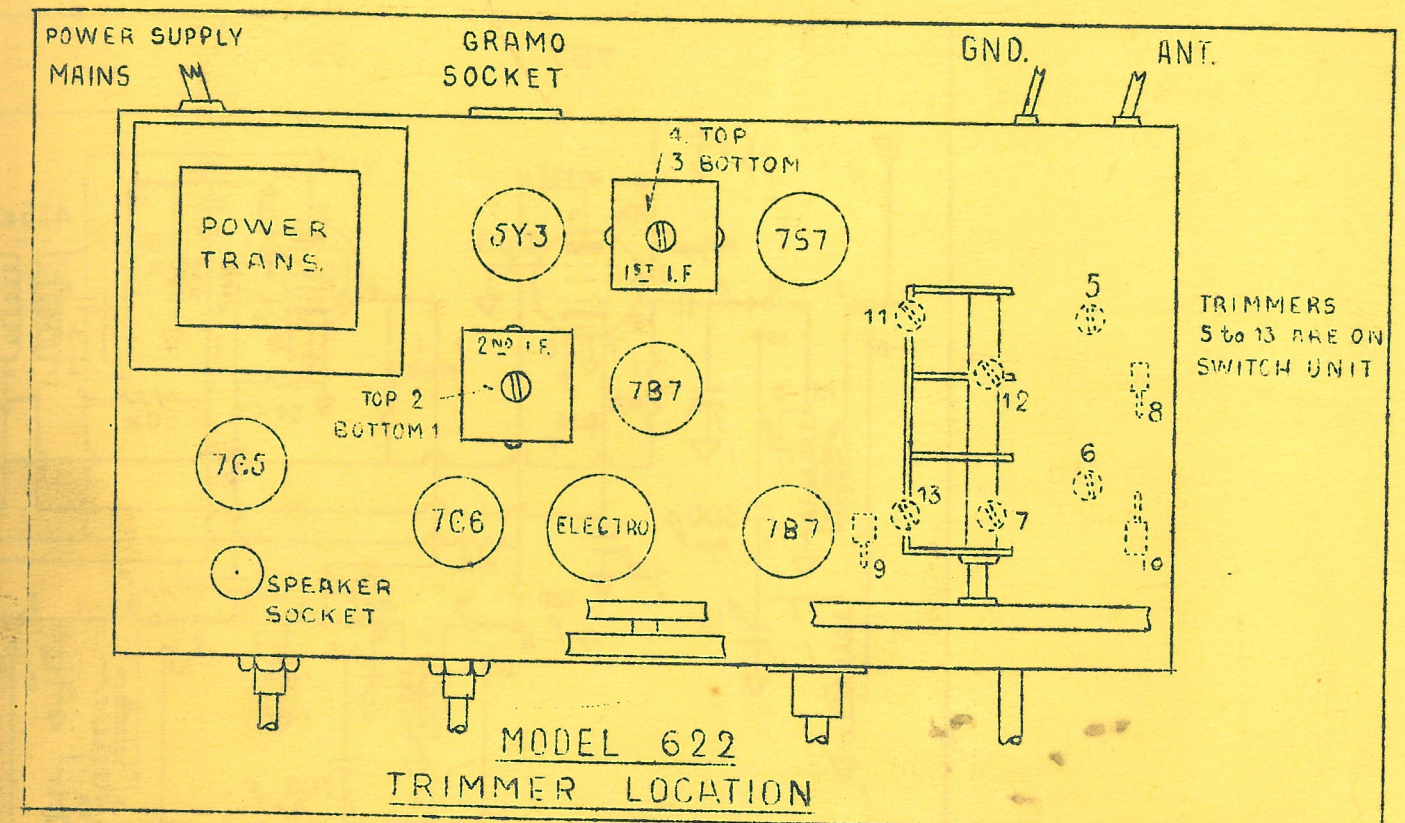
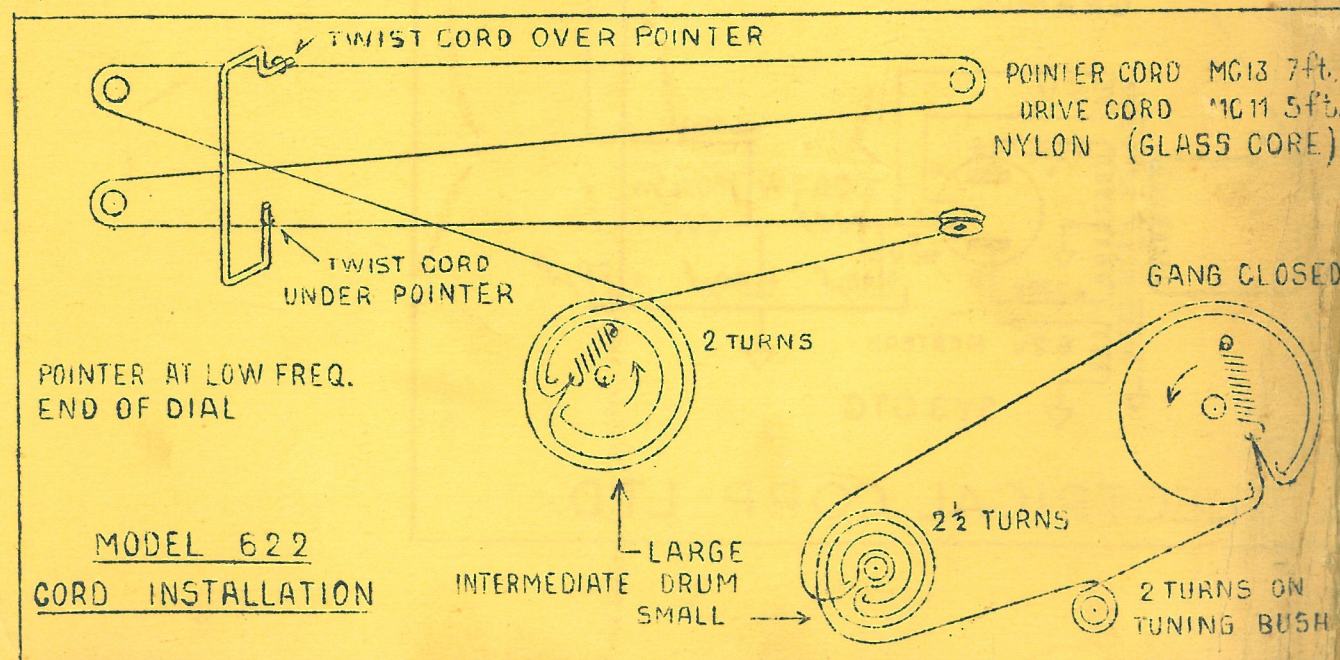
The circuit consists of a 7B7 RF stage, a 7S7 triode-heptode frequency converter followed by a 7B7 permeability tuned I.F. stage and a 7C6 double diode second detector and high- μ audio amplifier. The power output stage consists of

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:

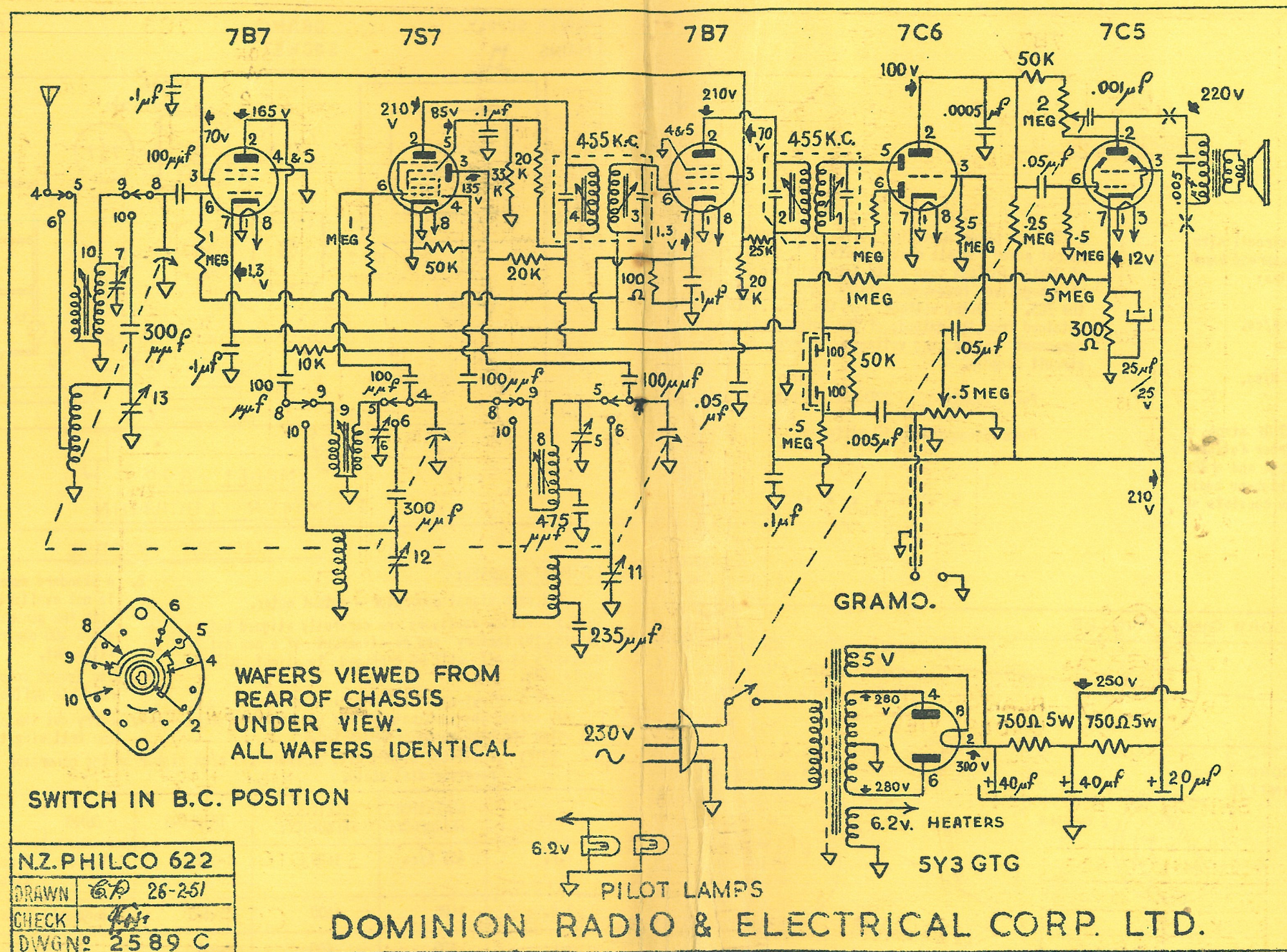
All wave signal generator - output meter.
(N.B.) Philco receivers are carefully aligned before leaving the factory and re-alignment of a new set if necessary at all will be confined to slight adjustments only.

1. Connect output meter to convenient source of audio, say across the terminals of the output transformer using the high range of the meter.

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.

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:

| BAND | GENERATOR FREQUENCY: | RECEIVER FREQUENCY: | TRIMMERS | DUMMY | REMARKS |
|------|----------------------|---------------------|----------|----------|--|
| I.F. | 455 K/cs | 1600 | 1-2-3-4 | .1 mfd | Connect generator to large centre section of gang. |
| B.C. | 1400 | 1400 | 5-6-7 | Standard | Repeat after adjusting 8-9-10. |
| B.C. | 600 | 600 | 8-9-10 | " | |
| S.W. | 12 M/cs | 12 M/cs | 11-12-13 | " | Roll gang. Check for image freq. |



DOMINION RADIO & ELECTRICAL CORP. LTD.

RADIO & ELECTRICAL ENGINEERS & MANUFACTURERS

*Broadway, Newmarket
Auckland, New Zealand*

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SERVICE BULLETIN

Due to shipping delays, it was found that the second run of Model 622 would require some production changes.

While these changes are not desirable, both from a manufacturing and retailing viewpoint, dealers can be assured that performance and appearance is not affected in any way except that, as it was necessary to use an assorted stock of volume controls, the effective control of volume, though quite adequate, will differ slightly. The resistance taper is not identical in all cases. It will be found that in some instances the volume control will be quicker-acting than in others. This is no detriment, but we feel that dealers should be advised so that they will know what to expect.

Another change is the replacement of the 7B7 I.F. amplifier tube with a Loktal type 7A7. As these tubes are direct plug-in replacements, it does not matter which is used.

The final and most noticeable change is that a different gang condenser is used and this has necessitated a dial calibration change. It will be necessary, therefore, for dealers requiring replacement dial scales to specify to which Model they refer.

To differentiate between the two runs and to simplify ordering of replacements, the second run will be designated Model 622A.

J. G. Henderson,
Service Manager.
DOMINION RADIO & ELECTRICAL CORP. LTD.