PHILCO MODEL 888

SPECIFICATIONS

GENERAL DESCRIPTION:

This model is a powerful 11 tube super Het. particularly suitable for stable long distance reception, and excellent reproduction on local stations. The permeability tuned bandspread system makes shortwave station selection very simple and wide band coverage is obtained over all the main shortwave bands.

Because of the large number of tuned circuits involved, special care should be taken to follow the alignment data given in this bulletin.

TUNING RANGES:

Broadcast	.....	540 to 1700	KC/s
Shortwave 1	.....	1.5 " 2.6	MC/s
2	.....	2.3 " 7.3	MC/s
3	.....	7.2 " 22	MC/s

Band Spread

31M	.....	9.4 to 9.9	MC/s
25M	.....	11.4 " 12	MC/s
19M	.....	14.8 " 15.6	MC/s
16M	.....	17.4 " 18.2	MC/s
13M	.....	21.2 " 21.8	MC/s

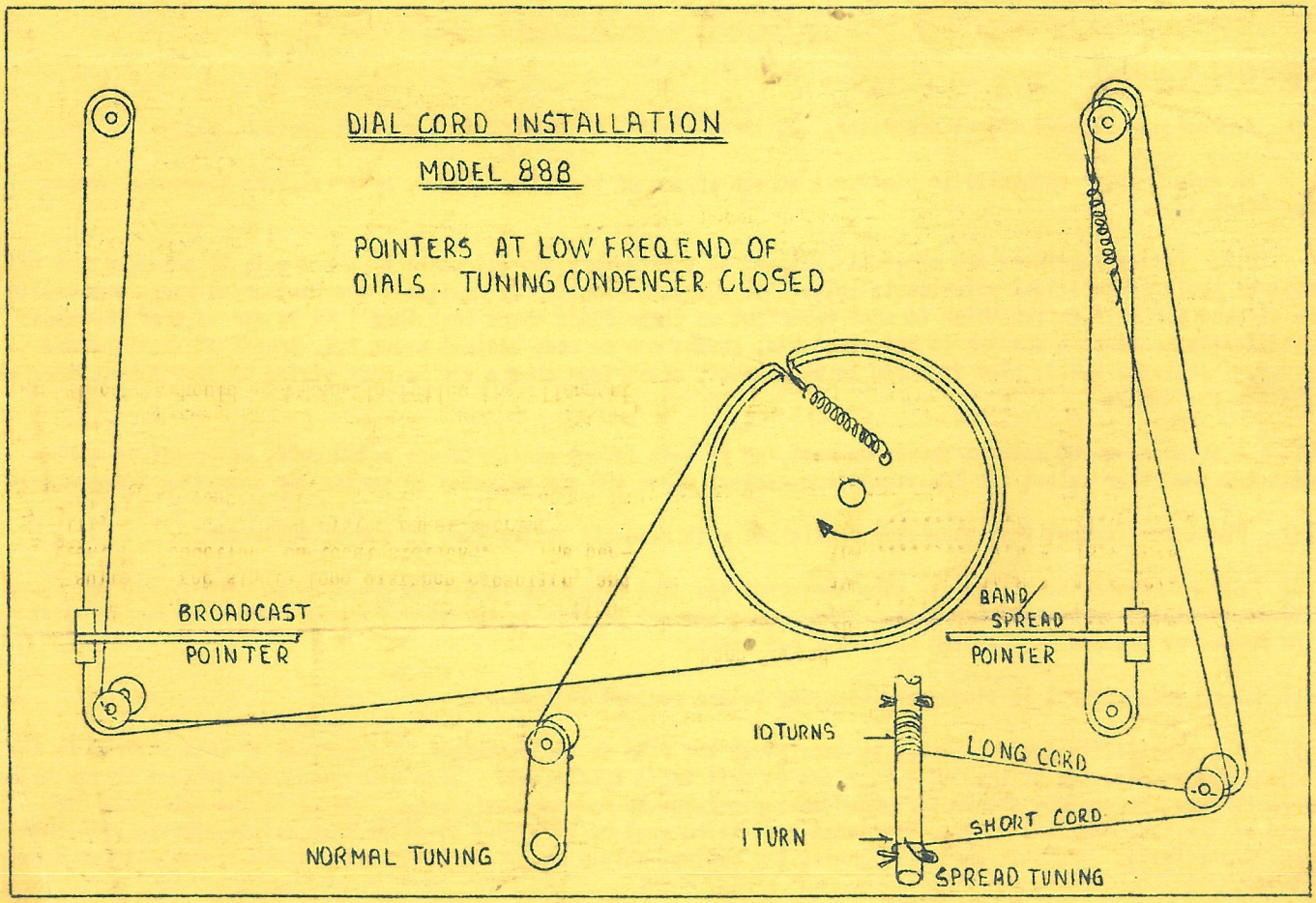
Intermediate Frequency 455 KC/s

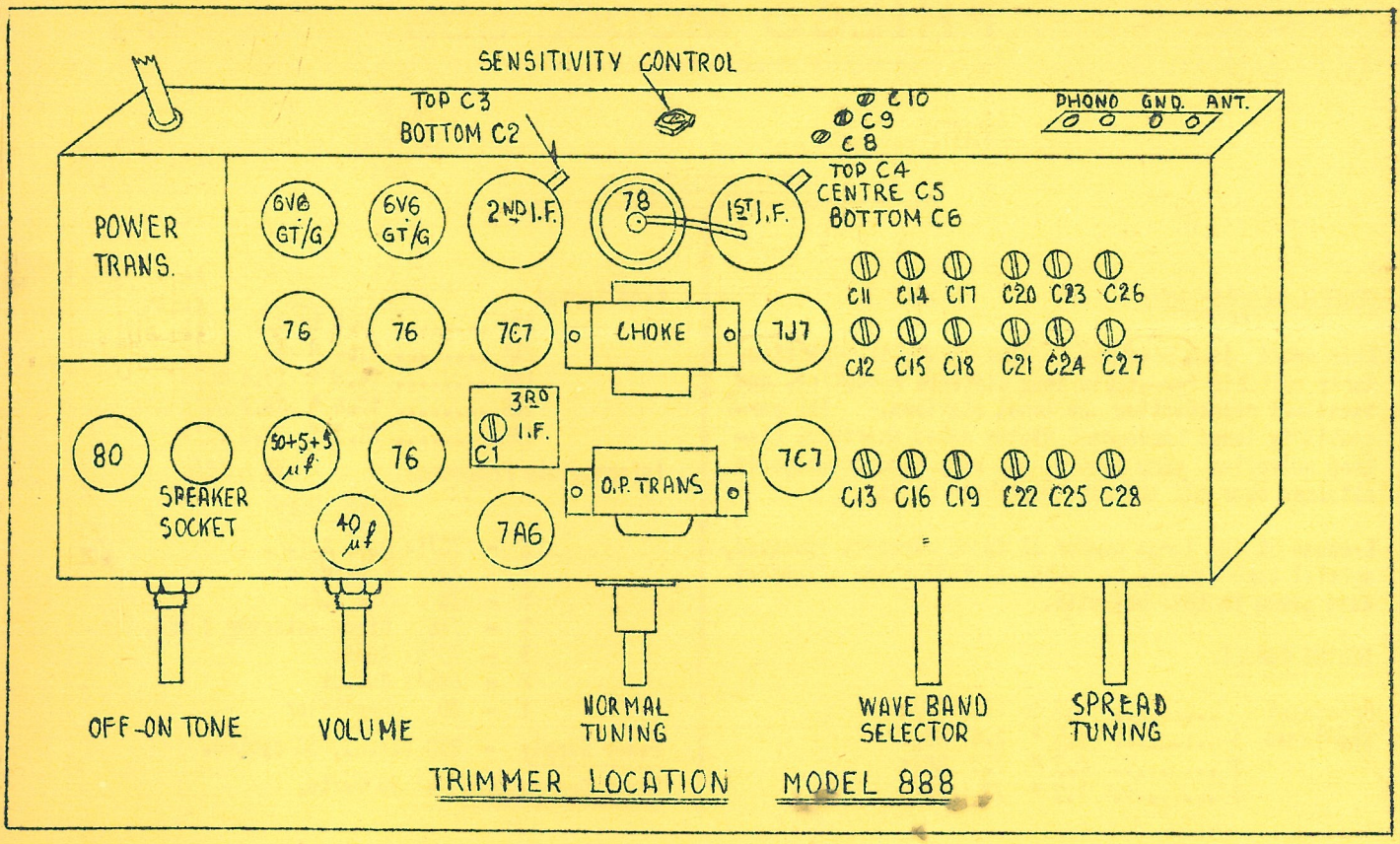
TUBES USED

2	-	7C7's R.F. & I.F.
1	-	7J7 Converter
1	-	78 1st I.F.
1	-	7A6 Diode detector & AVC.
3	-	76's Audio
2	-	6V6's Output
1	-	80 Rectifier

Power Supply - 230 V.A.C., 50 cycles.

Power Consumption - 90 Watts.





TRIMMER LOCATION MODEL 888

ALIGNMENT PROCEDURE

EQUIPMENT REQUIRED:

A precision allwave signal generator, and if available, a 1000/100 KC/s crystal spotter.

An output meter connected to plate and screen of one of the output tubes, or a V.T.V.M. connected across the diode load.

N.B. Philco receivers are carefully aligned in the factory and alignment of a new set, if necessary at all, will be confined to slight adjustments only. If a crystal spotter is available the Bandspread bands can easily be checked for calibration which is most important on these bands where less than 1 MC is spread over the whole dial length. Where a spotter is not available, checks can be made against known S.W. Broadcast stations and W.W.V. When the S.W.3. band is known to be correct, comparison checks can be made giving an approximate idea of station positions.

(1) A standard dummy antenna should be used, or if this is not available use a 200 Mmfd. condenser in series with the generator output for Broadcast frequencies, and a 400 ohm resistor in series for Shortwave frequencies.

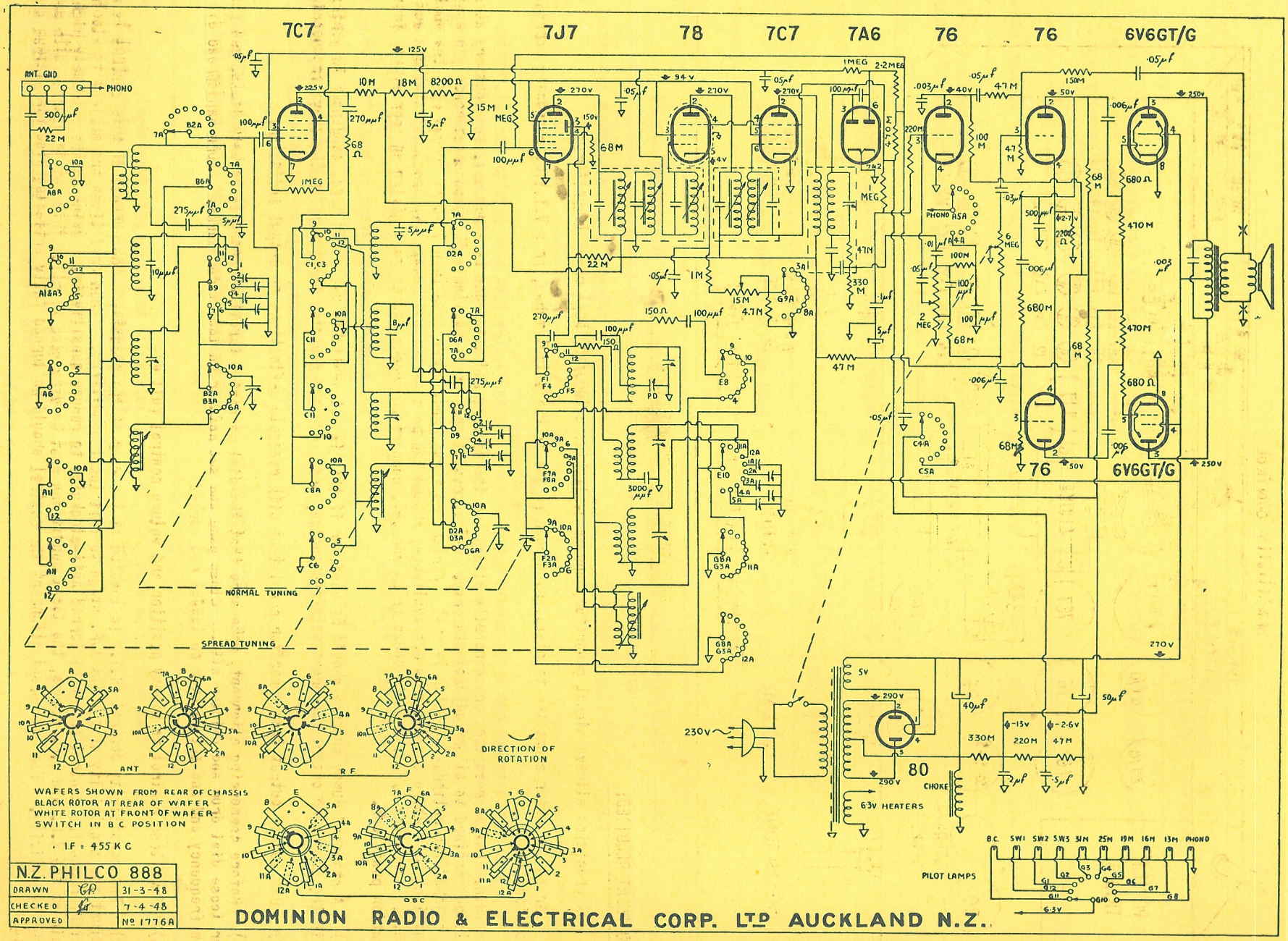
(2) Use lowest output from generator consistent with readable deflections on output indicator.

(3) Before commencing alignment, make sure that the dial mechanism functions properly on both dials, and check for loose dial drum and pointer slip. Close gang and set pointer on lowest red marks. Turn Bandspread dial to low frequency end and set pointer on lowest red marks.

(4) Turn tone control to midway position and volume control full on.

(5) The sensitivity control (R.1.) is located at the rear of the chassis. The purpose of this control is to adjust the sensitivity of the 1st I.F. stage to suit local conditions. When conditions are subject to electrical interference the control should be turned anti-clockwise to reduce sensitivity. Owing to the extremely high gain of the R.F. and I.F. stages, the local conditions must be very good to allow this set to operate with maximum sensitivity. For all normal alignment the control should be turned fully anti-clockwise for minimum sensitivity.

(6) Normally the oscillator peak is on the high side of the signal frequency except for the 13M and 16M Bandspread bands and S.W.1. band.



N.Z. PHILCO 888		
DRAWN	CP	31-3-48
CHECKED	[illegible]	7-4-48
APPROVED		No 1776A

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

Operation	Switch Position	Generator Frequency	Receiver Frequency	Adjust Trimmers	Instructions
1	B.C.	455 KC/s	1600 KC/s		Screw C5 in fully clockwise and set R1 bias control for minimum sensitivity. Connect signal generator to centre section of gang through a .05 mfd. condenser.
2	B.C.	455 KC/s	1600 KC/s	1.2.3.4.6.5.	Align once only in order given for maximum output.
3					Transfer generator output to ant. terminal for all subsequent operations, and use appropriate dummy antenna for B.C. & S.W.
4	S.W.3.	21 MC/s	21 MC/s	C11	Adjust C11 for calibration. (Check image).
5	S.W.3.	17.8 MC/s	17.8 MC/s	C12, C13.	Adjust for maximum and repeat 4.
6	S.W.2.	6 MC/s	6 MC/s	C8	Roll gang adjust for maximum output.
7	B.C.			C10	Set to ½ turn from tight.
8	B.C.	1400 KC/s	1400 KC/s	C9	Roll gang, adjust for maximum output.
9	B.C.	600 KC/s	600 KC/s	C10	Roll gang, adjust for maximum output and repeat step 8.

BAND SPREAD

The iron core settings and coils should not be altered unless repairs have been made to the B.S. coils. Recheck setting in the following manner with the tuning control at extreme low frequency end of dial, set osc. core (Blue end), flush with rear of osc. coil form. The Ant. and R.F. cores should now extend 1/16" beyond coil.

10	13M	21.5 MC/s	21.5 MC/s	C26,27,28.	Adjust C26 to first peak from tight, C27, C28 for maximum output, image on generator 20.6 MC/s.
11	16M	17.8 MC/s	17.8 MC/s	C23,24,25.	Adjust C23 to first peak from tight, C24, C25 for maximum output, image on generator 16.9 MC/s.
12	19M	15.2 MC/s	15.2 MC/s	C20,21,22	Adjust C20 to second peak from tight, C21, C22 for maximum output. Image on generator 16.1 MC/s.
13	25M	11.7 MC/s	11.7 MC/s	C17,18,19	Adjust C17 to second peak from tight, C18, C19 for maximum output. Image on generator 12.6 MC/s.
14	31M	9.7 MC/s	9.7 MC/s	C14,15,16	Adjust C14 to second peak from tight, C15, C16 for maximum output. Image on generator 10.6 MC/s.