

S.B. #5

Model 8

N.Z. Courtenay

DEALERS' SERVICE DATA

No. 5

MODEL 8
DUAL WAVE

D195

WITH IMPROVED VOLUME CONTROL CIRCUIT
AND INTER-STATION NOISE SUPPRESSION.

(ganged RF, IF
& audio)

FIRST EDITION, OCTOBER, 1935.
CIRCUIT D195.

TURNBULL & JONES LTD.

Head Office : Wellington.

AUCKLAND, HAMILTON, PALMERSTON NORTH, CHRISTCHURCH, DUNEDIN.

Model 8
11

ELECTRICAL SPECIFICATIONS.

Mains operated for	200-250 volts A.C. 50 cycles
Power consumption	65 watts
Undistorted output	3 watts
Valves used	1-80, 1-42, 1-6B7, 1-6A7, 2-6D6
Intermediate frequency	465 K.C.
Broadcast Band frequency	550-1500 K.C.
Short Wave Band coverage	5.5-15.5 M.C.
Line-up and test frequencies	465, 1400, 1000, 600 K.C., 15, 12, 9, 6 M.C.

GENERAL INSTRUCTIONS FOR LINING UP DUAL WAVE MODELS.

This method of line up presumes the possession of a standard signal generator covering all frequencies.

First, connect output from signal generator to grid of 6A7 mixer, and take care that $\frac{1}{2}$ M.F. condenser is between 6A7 grid and signal generator output, as otherwise bias would be short-circuited in this valve.

Set standard signal generator to 465 K.C. and align up I.F. transformers. These are aligned from top of chassis in the cans at back of chassis. Read microvolts absolute input as required to give standard 50 milliwatts output as shown on accompanying chart. Next, to line up the broadcast bands, set must be removed from cabinet. The broadcast and short wave trimmers are mounted underneath chassis both for convenience and efficiency in electrical lay-out and to avoid customers tampering with adjustments. The short wave trimmers are marked with RED SPOTS, AND SHOULD NOT BE TOUCHED EXCEPT IF ONE HAS STANDARD TEST OSCILLATOR OR CAN LISTEN TO SHORT WAVE STATIONS OF KNOWN FREQUENCY.

TO LINE UP BROADCAST BAND proceed as follows:—

(1) See that pointer is adjusted in a horizontal position when condensers are full in, that is, full capacity.

(2) Tune receiver dial to 1400 K.C. position. Adjust receiver oscillator and R.F. trimmers until 1400 K.C. signal from standard sig. gen. gives maximum output.

(3) Set receiver dial to 600 k.c. position. Adjust broadcast padder until 600 K.C.

signal from generator gives maximum output. Check sensitivity with chart.

Important: Make no further adjustment on oscillator trimmer or padder condensers.

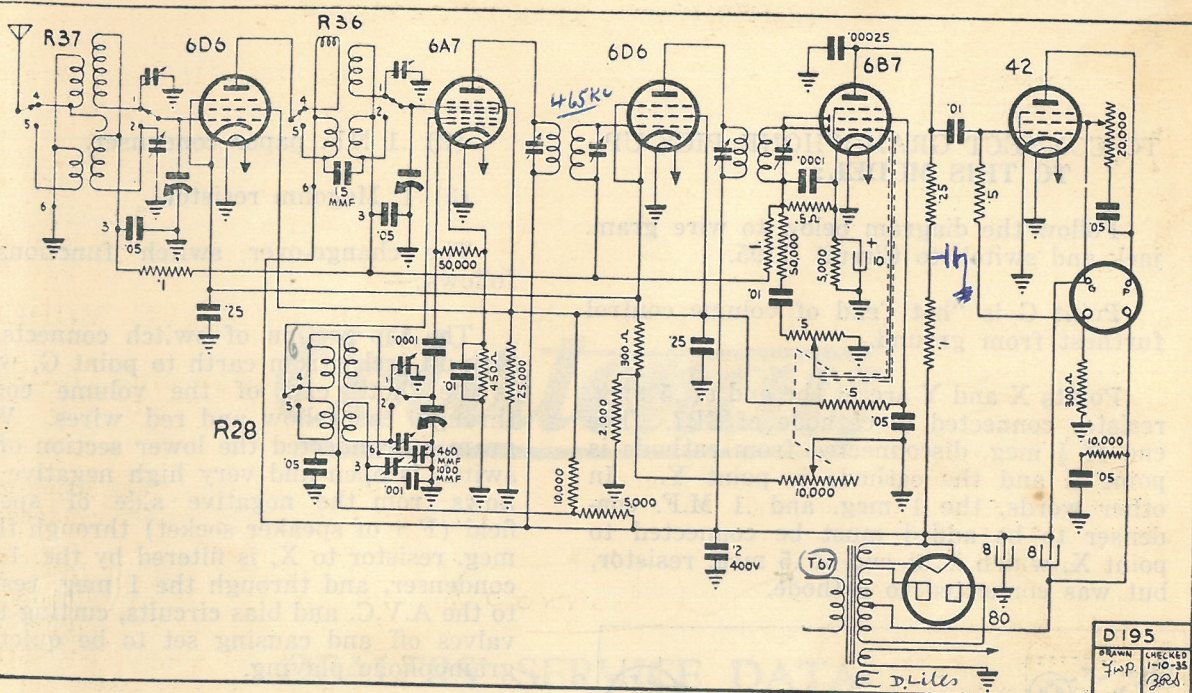
(4) Re-set receiver dial to 1400 K.C. position. Re-align R.F. trimmers only for maximum output of 1400 K.C. signal, and check sensitivity with chart. No further adjustment should be necessary for the broadcast band.

TO LINE UP SHORT WAVE BAND:

Switch to short wave band as shown by indicator on dial, but do not adjust pointer, as this would upset broadcast dial readings. Short wave trimmers are marked with red spots. Set dial pointer to bring in 12 M.C. signal. **The oscillator must be set at a higher frequency than the R.F. circuits.** To check this, tune to 11 070 M.C. and the weak image-repeat point should be heard. Note the condition that when the oscillator is set correctly at 465 K.C. (the I.F. frequency) higher than the R.F. signal received the image repeat will be 930 K.C. (i.e. 2 x I.F. frequency) lower than the received signal.

TO LINE UP SET WITHOUT STANDARD SIGNAL GENERATOR:

Line up of short wave band requires very delicate adjustment and had best be attempted only when calibrated oscillator is available. However, a clever serviceman can make a fairly acceptable line-up by using as a signal source stations whose frequencies are as near as possible to the suggested line-up frequencies mentioned above, and following the same procedure.



~~removed~~
in drug
bank has
Missing
decoupling
exp
6B7
plate

Note: ~~lost of min~~ loc on RFHF
self-brainers

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TO LINE UP BROADCAST BAND proceed as follows:—

(1) See that pointer is adjusted in a horizontal position when condensers are full in, that is, full capacity.

(2) Tune receiver dial to 1400 K.C. position. Adjust receiver oscillator and R.F. trimmers until 1400 K.C. signal from standard sig. gen. gives maximum output.

(3) Set receiver dial to 600 k.c. position. Adjust broadcast padder until 600 K.C.

signal from generator gives maximum output. Check sensitivity with chart.

Important: Make no further adjustment on oscillator trimmer or padder condensers.

(4) Re-set receiver dial to 1400 K.C. position. Re-align R.F. trimmers only for maximum output of 1400 K.C. signal, and check sensitivity with chart. No further adjustment should be necessary for the broadcast band.

TO LINE UP SHORT WAVE BAND:

Switch to short wave band as shown by indicator on dial, but do not adjust pointer, as this would upset broadcast dial readings. Short wave trimmers are marked with red spots. Set dial pointer to bring in 12 M.C. signal. **The oscillator must be set at a higher frequency than the R.F. circuits.** To check this, tune to 11 070 M.C. and the weak image-repeat point should be heard. Note the condition that when the oscillator is set correctly at 465 K.C. (the I.F. frequency) higher than the R.F. signal received the image repeat will be 930 K.C. (i.e. 2 x I.F. frequency) lower than the received signal.

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