

MODEL R-198

Battery Operated

Service Data

If the receiver lacks sensitivity and the tubes and their voltages have checked O.K. (see voltage chart accompanying circuit diagram) proceed to check the alignment as follows.

Aligning Equipment—For proper alignment, an output meter and an accurately calibrated oscillator with a tuning range from 370 K.C. to 15 M.C. are required.

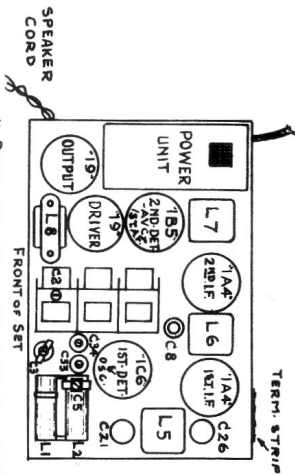
Alignment—The alignment operation can all be performed without removing the chassis from the cabinet.

- Connect an output meter across the voice coil terminals of the speaker.
- Connect a 370 K.C. oscillator between the grid cap of the 1-C-6 first detector and ground. Make sure that there is a condenser (approximately .02 MFD) in the oscillator leads so that the 1-C-6 grid is not shorted to the ground and the bias upset.
- With the volume control full on, align the I.F. stages beginning with the last and working forward, keeping the input signal low enough so that the lowest practical output reading is obtained. Particular care must be taken in aligning the I.F. because these circuits are very selective. This alignment should be carried out with the range switch in the "broadcast band" position and the gang condenser set about 1400 K.C.

- Transfer the oscillator leads to the antenna and ground and tune in to 1400 K.C. With the range switch in the "broadcast band" position set the dial on the receiver to 1400 K.C. and adjust C33, C5 and C2 in that order for maximum output. Keep the input from the oscillator as low as possible as before.
- Adjust the receiver and oscillator in tune at 550 K.C. and align C8 for maximum output, rocking the tuning condenser back and forth slightly while aligning.
- If an appreciable change in C8 was necessary operation (f) should be repeated.

- Turn the range switch to the short wave position and adjust the oscillator and tuning condenser in tune at 15 megacycles (20 meters). A fairly strong 20 meter signal will be received at two points on the dial; set the dial at the lowest wave length point.
- Adjust C34 and C3 in that order for maximum output.

NOTE:—A bakelite screw driver must be used for adjusting C34 and C33.

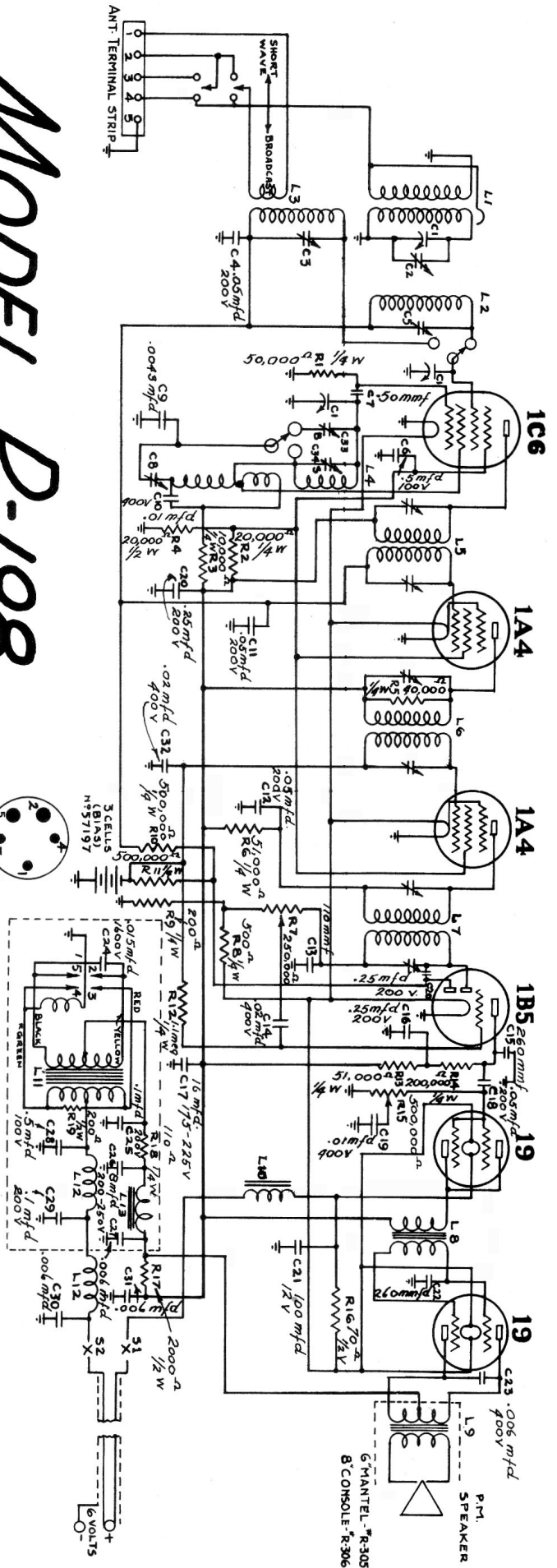


TUBE	CIRCUIT LOCATION	FILE	PLATE SCREEN BIAS
19	OUTPUT	1-92 155	0 -2*
19	DRIVER	1-92 125	-4*
1B5	2ND DET.	1-92 90	-3\$
1A4	I.F. 2ND.	1-92 120	50 -3#
1A4	I.F. 1ST.	1-92 130	50 -3#
1C6	1ST. DET. & OSC.	1-92 130 05c595	50 -3#

1936-37

I.F.

370K.C.



NOTE:—SETS WITH SERIAL NUMBERS FROM 620017062600 HAVE RED & BLACK LEADS INTERCHANGED, AND GREEN AND YELLOW INTERCHANGED.