



INTERMEDIATE FREQUENCY CIRCUIT

- Turn range switch to Range 1. Rotate the tuning control to approximately 600 K.C. Connect the 088 Signal Generator output lead through a .1 mfd. condenser to the grid of the 6A8G tube.
- Set Signal Generator indicator for 470 K.C. adjust attenuator for approximately 1/4 scale reading on output meter. Then adjust compensators (26)a 2nd I.F. Sec., (26) 2nd I.F. Pri., (14)a 1st I.F. Sec., (14) 1st I.F. Pri., for maximum reading on output meter.

RADIO FREQUENCY CIRCUIT

Range 2.—5.7 to 18 M.C.

- Remove the signal generator output lead and series condenser from the 6A8G tube and connect them to the ANT. TERMINAL No. 1, on aerial input panel (rear of chassis) and the generator ground lead to GND. TERMINAL No. 3, rear of chassis. Connect TERMINAL No. 2 to GROUND TERMINAL No. 3 with connector link provided on the panel.
- Set range switch in position No. 2 (S.W.). Turn signal generator and receiver dials to 18 M.C. and adjust compensator (7) Osc. for maximum output.
- The adjustment of the antenna compensator on the high frequency range causes a slight detuning of the oscillator circuit. In order to overcome this detuning effect,

connect a variable condenser of approximately 350 mfd., having a good vernier drive, across the oscillator section of the tuning condenser. Leaving the signal generator and receiver dials at 18 M.C., tune the added condenser so that the second harmonic of the receiver oscillator will beat against the signal from the signal generator. The antenna compensator (3)a should then be adjusted to give maximum output.

- Now remove the external condenser from the tuning condenser of receiver and turn compensator (7) osc. to the maximum capacity position (clockwise), then without moving signal generator or receiver tuning condenser, turn compensator (7) (counter-clockwise) until a second peak is reached on the output meter. The first peak is caused by tuning to the image frequency signal and must be neglected. Compensator (7) is adjusted on the second peak to give maximum output.

RANGE 1: 530 to 1720 K.C.

Turn range switch to Range No. 1. Turn the Receiver dial to 1600 K.C. Then adjust compensators (8) and (3) for maximum reading on output meter. The 088 Signal Generator dial is set at 800 K.C. and the second harmonic of this frequency (1600 K.C.) is used in making the above adjustment.

- The low frequency end of the band is now tuned by turning Signal Generator and Receiver dials to 600 K.C. and adjusting compensator (8)a—see note (a) below—for maximum output.
 - When compensator (8)a osc. series is being adjusted, the Tuning Condenser must be rolled for maximum output. This is accomplished as follows: First tune compensator (8)a for maximum output. Then vary the Tuning Condenser for maximum output at 600 K.C. Now retune Compensator (8)a and again vary the tuning condenser back and forth at 600 K.C., for maximum output. This operation of first tuning the Compensator, then the Tuning Condenser is continued until maximum output is obtained at the 600 K.C. frequency.
- Set the Signal Generator and Receiver Dials for 1600 K.C. and re-adjust Compensator (8) for maximum output. Then turn the dials to 1500 K.C. and re-adjust compensator (3) for maximum reading on output meter.

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