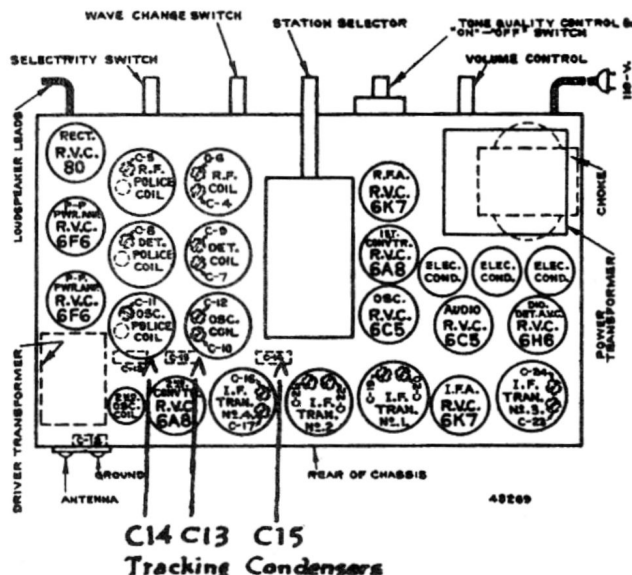


RESISTANCE OF COILS

Primary Power Transformer 60 cycle.....	3.14 Ohms
Secondary " " 25 "	5 " "
Secondary " " 60 "	186 " "
Secondary " " 25 "	400 " "
Primary I.F. Trans. No. 1 (48301).....	6.5 " "
Secondary " " " " "	9 " "
Primary " " " No. 2 (48302).....	8.5 " "
Secondary " " " " "	8.5 " "
Primary " " " No. 3 (48303).....	9.5 " "
Secondary " " " " "	5 " "

Primary I.F. Trans. No. 4 (48304).....	4.5 Ohms
Secondary " " " " "	4.5 " "
Primary Driver Trans. (48373).....	2,000 " "
Secondary " " " " "	8,500 " "
Primary Output " " " " "	700 " "
Overload Indicator coil.....	75 " "
Tuning Meter coil.....	350 " "
Filter Choke coil.....	200 " "
Speaker Field.....	500 " "
Voice Coil.....	2.5 " "



C14 C13 C15
Tracking Condensers

ALIGNMENT:

I.F. Trimmers:—Connect Test Oscillator to grid clip of 6A8 tube and chassis, leaving grid clip in place and using a .1 Mf. condenser in series with the lead from the test oscillator to the grid clip. Adjust to supply a frequency of 462.5 K.C.

With the Selectivity Switch in "High Selectivity" position, adjust, in order, C24, C23, C20 and C19. Recheck several times to make sure maximum output is obtained.

Turn Selectivity Switch to "Standard Selectivity" (Right) and align C22 and C21.

If a Cathode Ray Oscillograph is used, the double image method is considered best for the alignment of I.F. circuits. The folding back of the high and low frequency sides makes symmetrical adjustment easy and very accurate, and reduces the possibility of frequency error in aligning, since a small error is more obvious with two images on the screen.

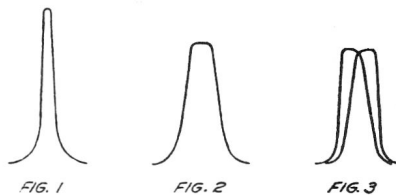


Fig. 1 shows the image obtained on the high selectivity and Fig. 2 on the standard selectivity position. Fig. 3 shows a double image which represents a circuit not symmetrically aligned to 462.5 K.C. but usually the closest approach to Fig. 2 that can be obtained with the use of an output meter.

Marconi Model 70 Alignment Instructions

Note: After aligning the I.F. Circuits, all subsequent trimming operations should be made with the Selectivity Switch in the "High Selectivity" position (Left).

S.W. I.F. Trimmers:—Supply a 1680 K.C. signal to the grid cap of the 6A8 second converter tube through a .05 Mf. condenser, leaving the grid clip in place. Turn W.C. switch to short wave and set gang at minimum. Adjust C18 for maximum output.

Note that the oscillator circuit, contrary to usual practice is tuned to a frequency lower than the signal, i.e., to 1217.5 K.C. Hence, if C18 is found to peak at two points, the correct setting is with the greater capacity (trimmer in).

Connect the test oscillator to the grid of the first converter tube, 6A8 through a condenser. Adjust C17 and C16 for maximum output. See that the input is reduced to keep the output below .5 watts.

Broadcast Band Trimmers:—With the gang condenser at minimum capacity, set the pointer between the letters "E" and "G" of the word "MEGA" on outer scale. Set the switch for broadcast band, connect test oscillator to A and G and supply a 1600 K.C. signal. With dial pointer indicating 1600 K.C., adjust C10, C7 and C4. If two peaks are noted on C10, the adjustment with the trimmer farthest out (lower capacity) is correct.

Supply a 580 K.C. signal and adjust C13 while rocking the dial back and forth at this frequency to obtain maximum output.

Police Band: (S.W. Band No. 1):—With the W.C. switch in the central position, supply a 6600 K.C. signal to A and G through a 400 Ohm non-inductive resistor. Rotate the dial to indicate 6.6 M.C. and adjust C11, C8 and C5.

Tune to 2.4 M.C. and supply a 2400 K.C. signal. Adjust C14 while rocking the dial slightly to obtain maximum output. Recheck C11 at 6600 K.C. as above.

Short-Wave Band (No. 2):—Connect the test oscillator as above and turn the W.C. switch to the extreme left. With the dial pointer indicating 20 M.C., tune in a signal of this frequency by adjusting, in order, C12, C9 and C6. Set the dial to approximately 8 M.C. and tune in a signal of this frequency by adjusting C15. Rock the dial to obtain the adjustment giving the greatest output. Recheck C12 at 20 M.C.

Note: On Broadcast, Police and Short Wave Bands if two settings of the oscillator trimmers are noted, the setting corresponding to the smaller capacity (trimmer out) is the correct one.

We recommend checking the correctness of alignment of R.F. Det. and Oscillator circuits by inserting a tuning wand into the tops of the coil shields. If the output decreases when either end of the wand is inserted, the circuit is correctly aligned.