

ALIGNING PROCEDURE:

The bottom cover must be on the chassis.

1. Intermediate Frequency Alignment.

Turn the range switch to the left to the broadcast position and see that the volume control and tone control are both full on to the right. Turn the gang condenser to the high frequency end, with the plates all out of mesh. Connect an output meter to the voice coil terminals of the speaker; an A.C. voltmeter with one volt full scale is very satisfactory for this purpose.

Apply a 456 KC signal from a test oscillator to the grid cap of the 6A8G tube and adjust the trimmers on I.F. transformers L6 and L5 in that order for maximum deflection on the output meter. Use as weak a signal as possible to give a readable deflection and do not turn down the volume control.

If the I.F. transformers were much out of adjustment repeat this last operation.

2. WAVE TRAP ADJUSTMENT

Remove the test oscillator lead from the 6A8G grid cap and connect it to the blue antenna wire of the chassis through a standard dummy antenna, or alternatively a 200 MMFD mica condenser. The ground lead of the oscillator should be grounded to the chassis as before. The range switch and gang condenser should be left as they were set for #1 above.

With a strong 456 KC signal input adjust the slotted screw of the wave trap coil at the end of the rear of the chassis with a small screw-driver, for minimum output. A very strong input signal is necessary for the final adjustment. On some sets there will be a lock nut on this screw instead of a tension spring in which case the nut should be tightened again after the adjustment is made.

3. BROADCAST BAND ALIGNMENT

First make sure that the dial pointer coincides exactly with the last scale calibration mark when the condenser is turned in to full mesh at the 530 KC end.

Then turn the pointer to 1400 KC and with a 1400 KC signal on the antenna adjust C6 and C4 in that order for maximum output on the meter. Make sure that the input signal is exactly 1400 KC by checking against a master oscillator or a broadcasting station, or else the dial scale will not calibrate properly.

These remarks also apply to the other frequencies used in aligning the set.

Then apply a 600 KC signal to the antenna and while rocking the gang slowly about the 600 KC position adjust the series pad C9 for maximum output.

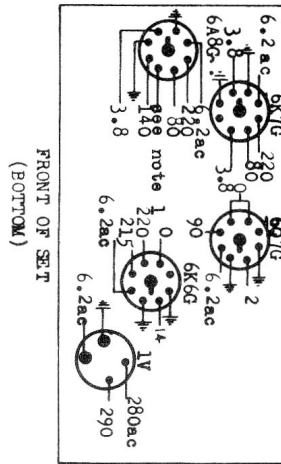
If C9 was very much out of adjustment repeat the 1400 KC alignment.

4. SHORT WAVE ALIGNMENT

Turn the range switch to the right to the short wave position and leave the volume control still on full.

Change the dummy antenna to a 400 ohm carbon resistor and apply a 15000 KC signal to the set from the oscillator: Turn the pointer to 15 M.C. and adjust C7 and C3 in that order for maximum output. Rock the gang back and forth slightly while adjusting C3.

The usual precaution must be observed in adjusting C7. Two peaks will be found and the proper one is that with the condenser screwed furthest out to the left.



MODEL - 428
I.F. = 456Kc.
1938-39

NOTE: RANGE SWITCH SHOWN IN SHORT WAVE POSITION

