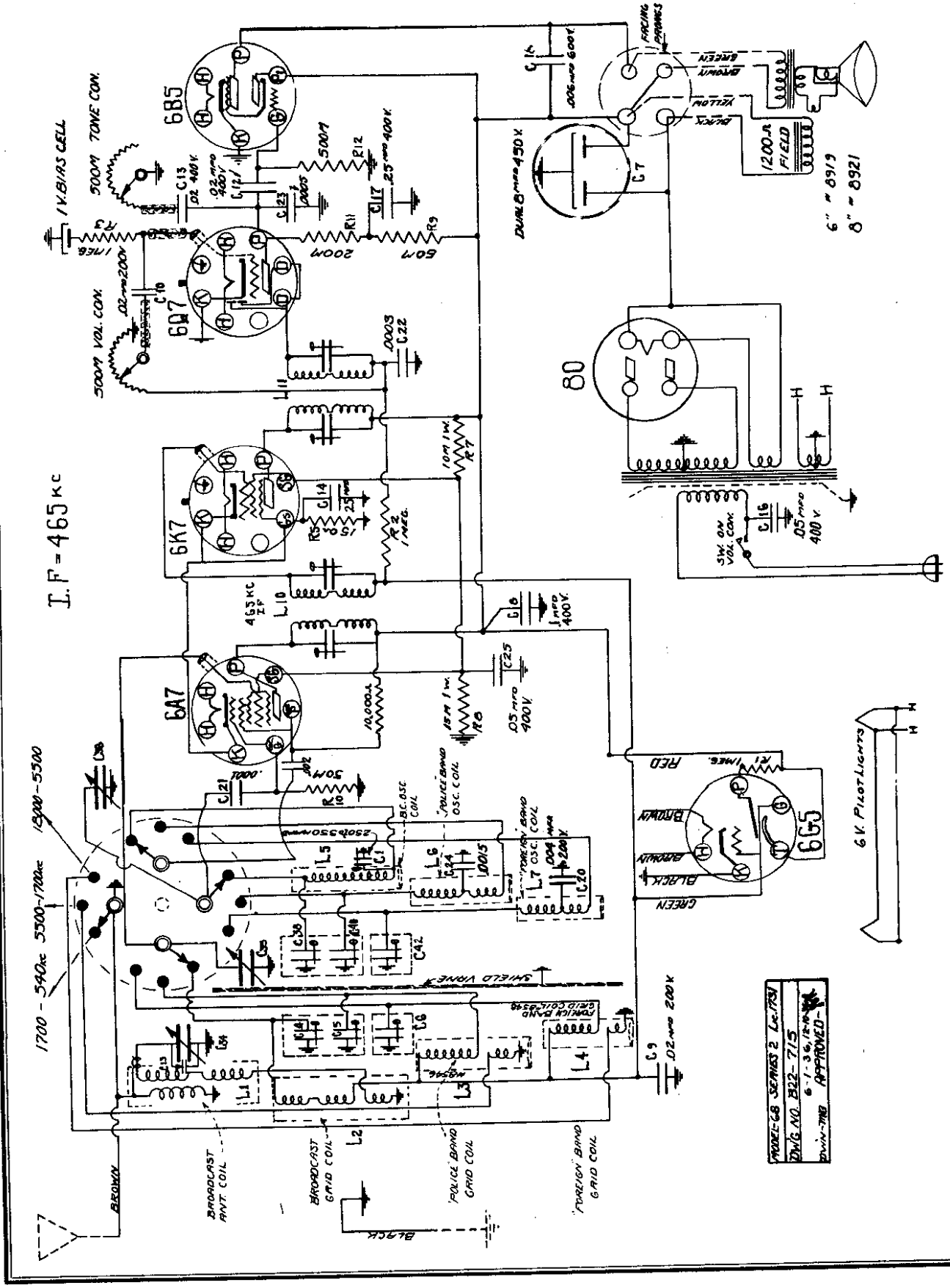
MODELS A9848, A9849
Chassis 68
Schematic

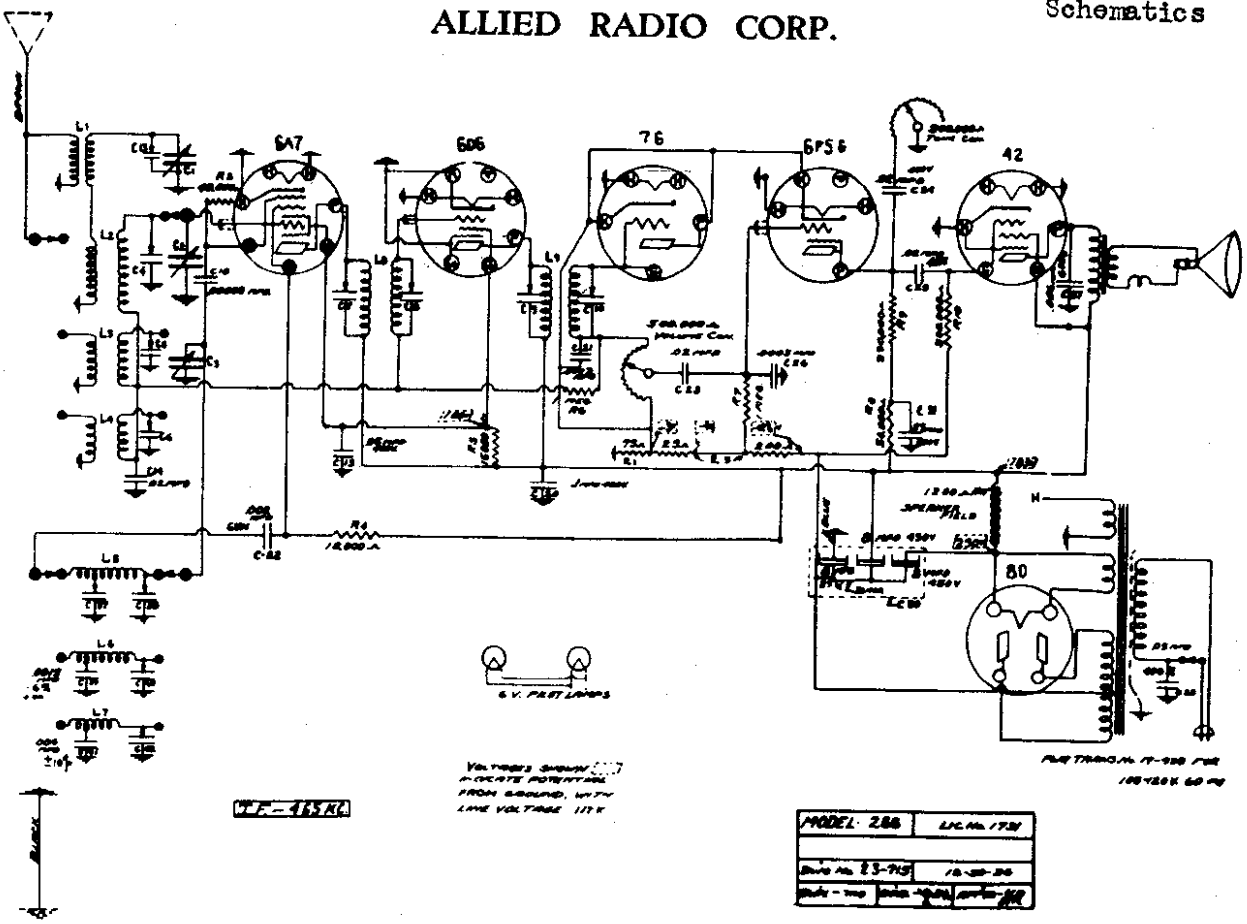
ALLIED RADIO CORP.

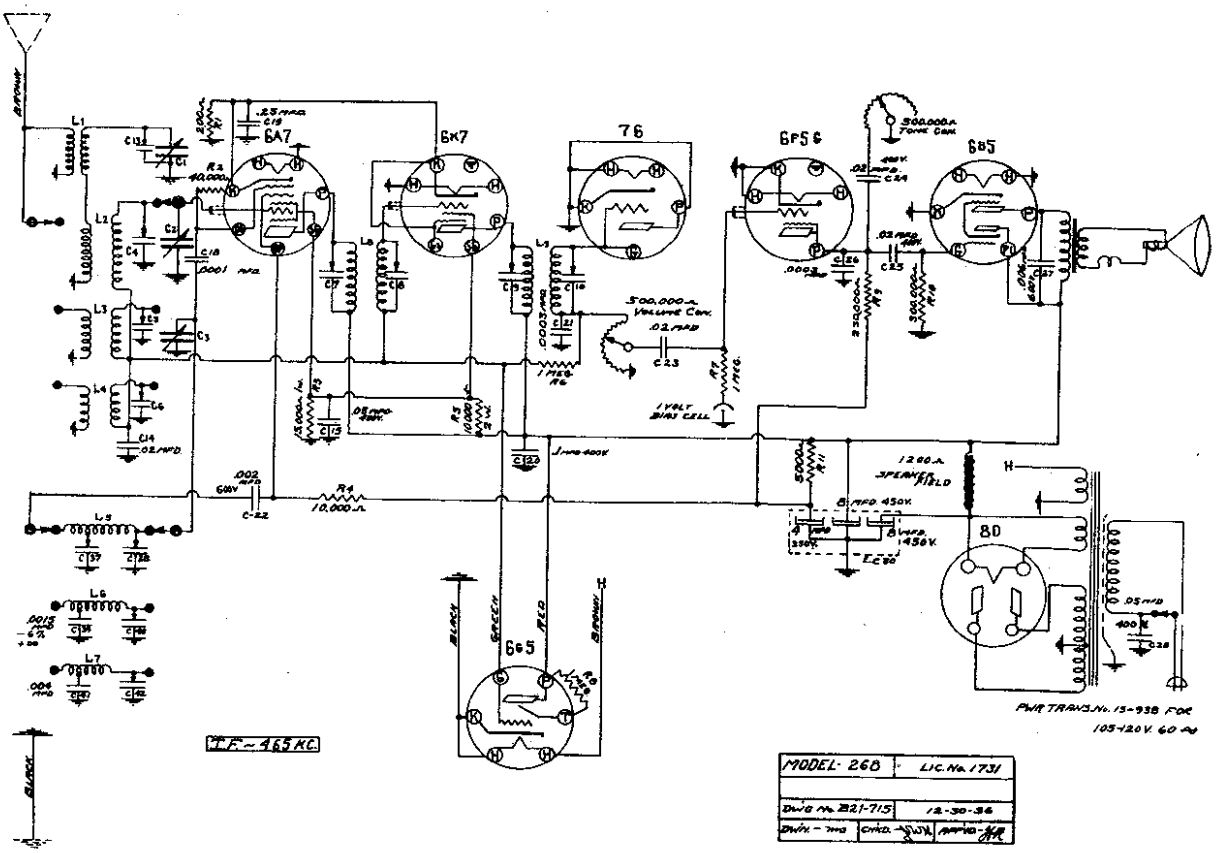


MODELS A9848, A9848

Chassis 266, 268
Schematics

ALLIED RADIO CORP.





Chassis 68,266,268
Trimmers
Chassis 68
Socket, Voltage

ALLIED RADIO CORP.

MODELS A9848, A9849

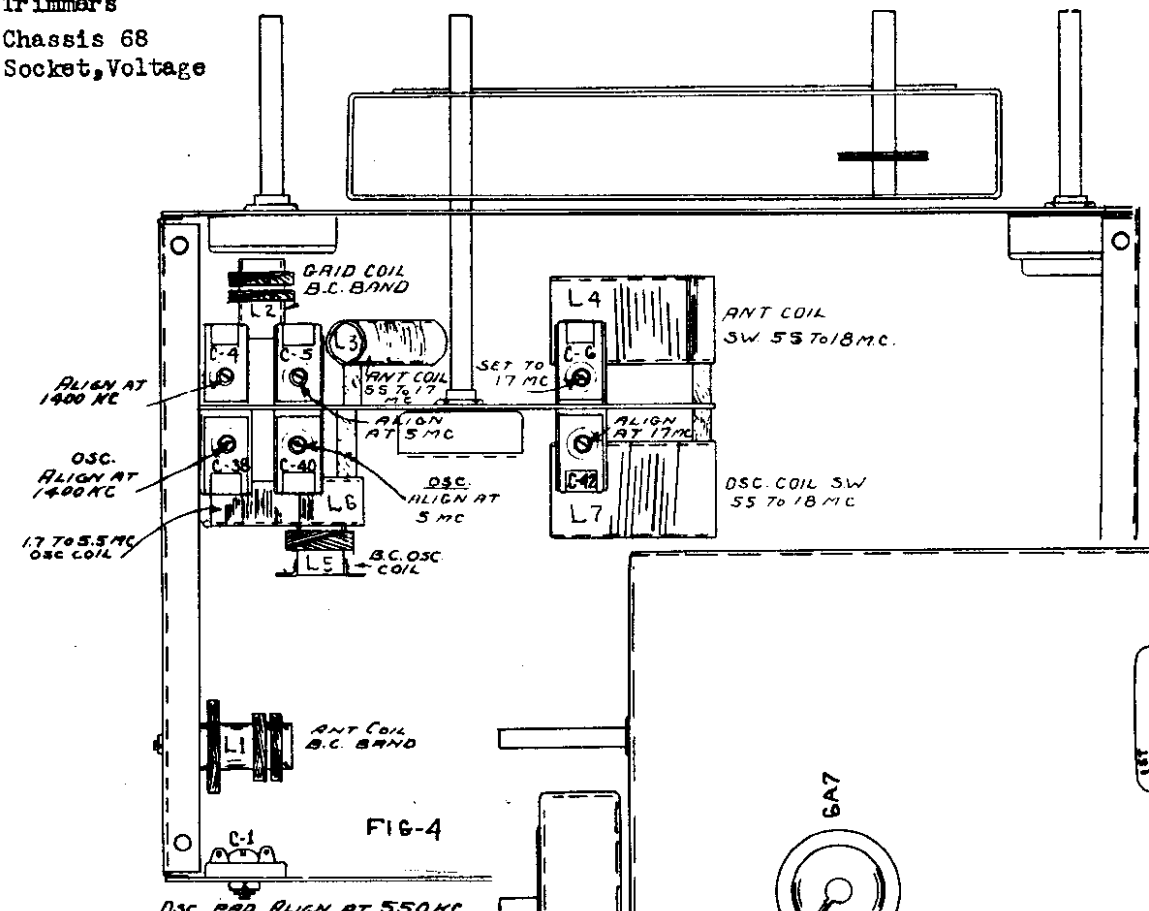


FIG-4

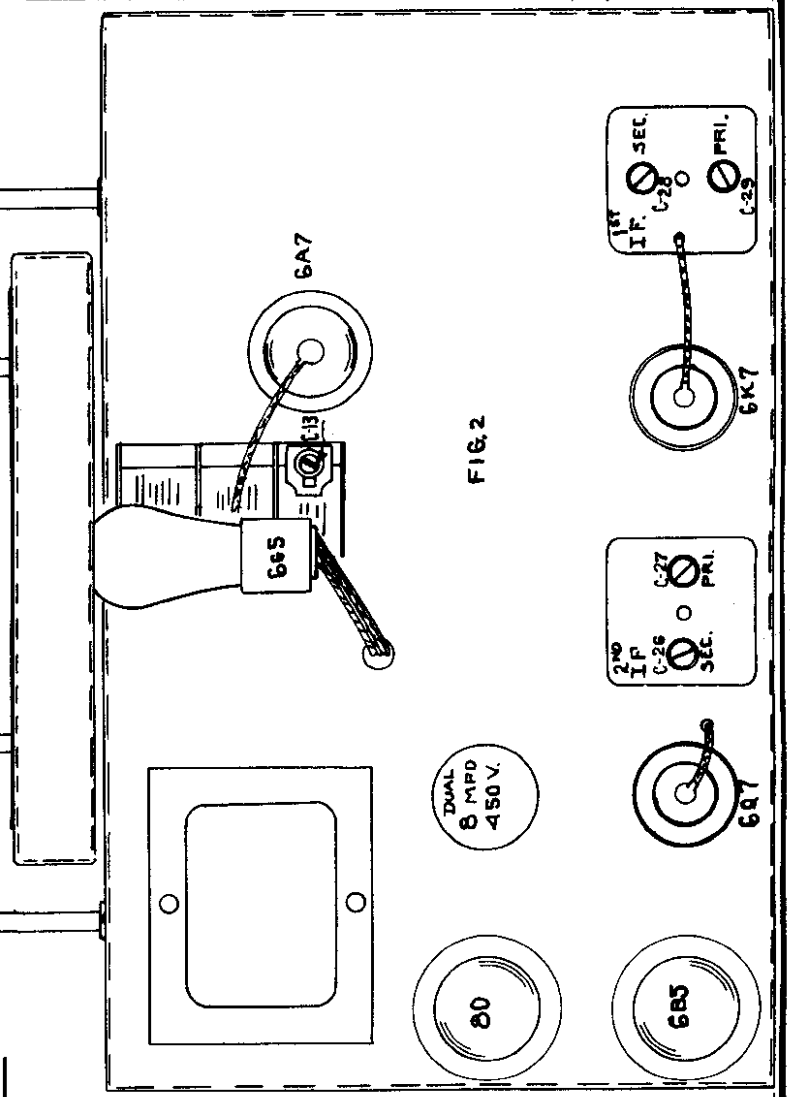


FIG.2

TUBE	PLATE	CATHODE	S.G.	OSC. PLATE
6A7	230	2½	98	180 V.
6K7	230	2½	98	-
6Q7	35	-	-	-
6B5	220	-	-	P.1 235
6G5	Target 235	-	-	-
80	H.V. OFF FILAMENT 320 VOLTS DROP ACROSS SPEAKER FIELD 85 VOLTS			

VOLTAGE READINGS TAKEN FROM GROUND
WITH LINE VOLTAGE AT 115 VOLTS
NO SIGNAL IN ANTENNA

MODELS A9848,A9849
Chassis 68,266,268

ALLIED RADIO CORP.

The following alignment instructions are given with the assumption that the Service Station has a signal generator capable of accurately covering the range of the receiver.

The only other apparatus necessary is a meter connected in the output stage to indicate resonance. This can be an 0 to 3 Volt AC meter connected across the voice coil of the speaker of preferably an output meter connected in the plate circuit of the power tube in series with an 8 Mfd. paper condenser.

I. THE I.F. STAGES

The intermediate frequency stages are aligned in the usual manner by feeding 465 K.C. into the grid of the mixer tube 6A7.

The two trimmers in each of the I.F. cans should be very carefully peaked to resonance as they are very critical and will greatly affect the performance of the set. These are trimmers Nos. C-26,27, 28, 29 on Figure 2.

Always use as low an output as possible from the signal generator when making the various adjustments.

The sensitivity of the I.F. system alone will be found to be between 15 and 20 Microvolts.

II. ALIGNMENT OF THE SHORT WAVE BAND 5.5 TO 18 M.C.

First check the position of the dial hand by rotating the variable condenser to full capacity. The hand then should be in line with the lines that divide the dial in half. If the hand is off position it can be lined up by loosening the center screw.

1. Turn band switch all the way to the right for the 5.5 to 18 M.C. Band (Yellow), and set dial hand to 17 M.C.
2. Refer to Figure 3 and with a 17 M.C. signal from the generator, peak oscillator, trimmer condenser C-42 to 17 M.C.
3. Adjust trimmer C-6 of the antenna circuit to 17 M.C. after the above mentioned oscillator trimmer has been set.

III. ALIGNMENT OF SHORT WAVE BAND 1.7 TO 5.5 M.C.

1. With the band switch in the middle position, (Blue) and the dial hand set to 5 M.C., peak trimmer C-40 of the oscillator circuit to 5 M.C.
2. Adjust Antenna stage trimmer C-5 to 5 M.C. after the above oscillator trimmer has been set.

NOTE: After adjusting the two high bands at 17 megacycles and 5 megacycles the test oscillator input to antenna should be increased and receiver dial advanced to .9 megacycle lower and note if test oscillator signal is heard.

In case there is no response, the oscillator trimmers have been pulled down too tightly. The trimmers should be released until this condition exists, then go back to original point of alignment - reduce antenna input voltage and correct the trimmer adjustment.

EXAMPLE: The receiver has been adjusted to 17 megacycles. Tune receiver to approximately 16.9 M.C.

Increase oscillator signal by "opening up" the attenuator. Move the dial back and forth at 16.9 M.C.

If no signal is heard, let oscillator trimmer off until it is heard at 16.9 M.C.

Reduce signal voltage from generator, go back to 17 M.C. and slightly correct this last trimmer adjustment.

The same thing applies to the 5 M.C. adjustment.

IV. THE ALIGNMENT OF THE BROADCAST BAND

1. Set Band Switch to the 550-1700 K.C. band, and the hand to 1400 K.C.
2. Peak oscillator trimmer C-38 to 1400 K.C., then the R.F. Trimmer C-4 and the antenna stage trimmer C-13 on the variable condenser to 1400 K.C.
3. Rotate dial hand to 550 K.C. and adjust padding condenser C-37 to 550 K.C.
4. Re-check dial at 1400 K.C. as mentioned in (1) and (2).
5. Points in the middle of the dial may be checked and if necessary the plates of the oscillator section of the variable condenser (back section) may be bent for alignment.

V. NOTES

1. Seal all trimmers after their final adjustment.
2. Be sure that the settings are being made to the true fundamental signal from the oscillator and not on a harmonic or image frequency.
3. The normal voltage readings at the sockets are given in a separate chart on the following pages.
4. It is advisable to check the position of the tuning eye tube to make certain that it is not pushed against the inside of the dial card. With the adjustment screw on the bracket, allow a small amount of clearance between the end of the tube and the dial to avoid any possibility of the heat from the tube affecting the dial card.