

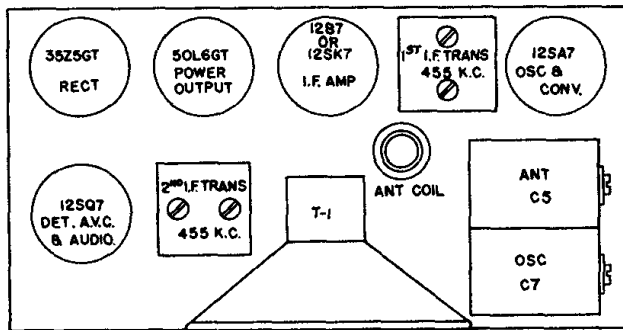
GENERAL ELECTRIC

ALIGNMENT PROCEDURE

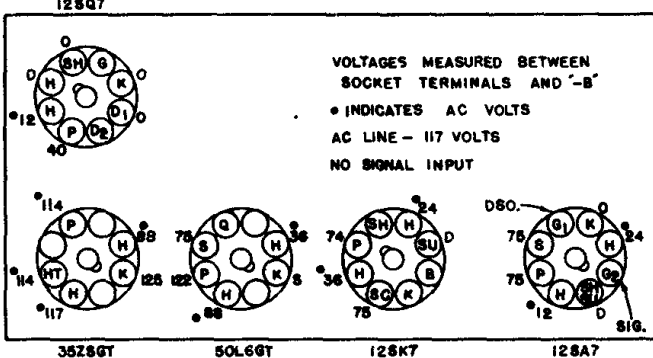
Alignment Frequencies

I.F. 455 KC
R.F. 1500 KC
The location of all trimmers is shown in Fig. 1.

MODELS L500, L510, L550, L560



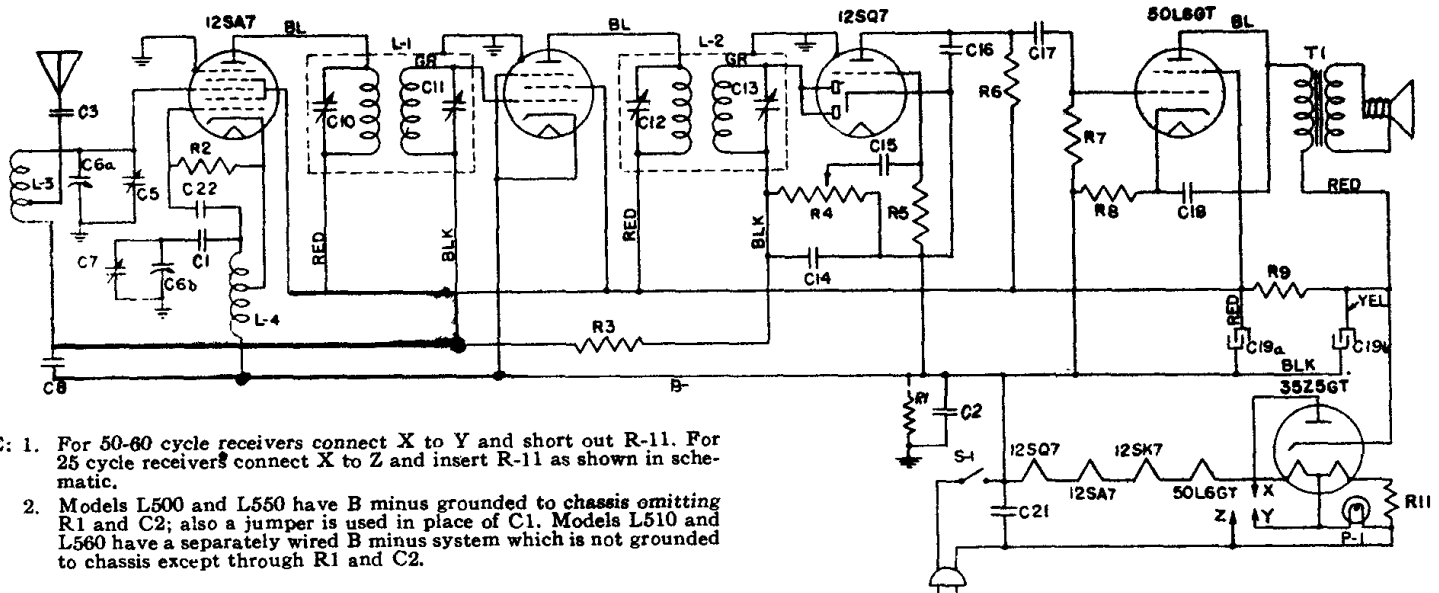
FRONT OF CHASSIS



BOTTOM VIEW OF CHASSIS

C1	CAPACITOR—.05 mfd., 200 V. paper.....
C2	CAPACITOR—.20 mfd., 400 V. paper.....
C3	CAPACITOR—470 mmf., mica.....
C6a, 6b	CONDENSER—Tuning condenser.....
C8	CAPACITOR—.05 mfd., 200 V. paper.....
C14	CAPACITOR—330 mmf., mica.....
C15	CAPACITOR—.005 mfd., 600 V. paper.....
C16	CAPACITOR—330 mmf., mica.....
C17	CAPACITOR—.01 mfd., 600 V. paper.....
C18	CAPACITOR—.02 mfd., 600 V. paper.....
C19a	CAPACITOR—20 mfd., 150 V. electrolytic.....
C19b	CAPACITOR—30 mfd., 150 V. electrolytic.....
C21	CAPACITOR—.05 mfd., 600 V. paper.....
C22	CAPACITOR—100 mmf., mica.....
R1	RESISTOR—330,000 ohms, 1/2 W. carbon.....
R2	RESISTOR—22,000 ohms, 1/2 W. carbon.....
R3	RESISTOR—2.2 megohms, 1/2 W. carbon.....
R4	VOL. CONTROL—0.5 megohm control.....
R5	RESISTOR—4.7 megohms, 1/2 W. carbon.....
R6	RESISTOR—270,000 ohms, 1/2 W. carbon.....
R7	RESISTOR—470,000 ohms, 1/2 W. carbon.....
R8	RESISTOR—150 ohms, 1/2 W. carbon.....
R9	RESISTOR—2,700 ohms, 1 W. carbon.....
R11	RESISTOR—13 ohms, 1/2 W. carbon.....

(12B7)



NOTE: 1. For 50-60 cycle receivers connect X to Y and short out R-11. For 25 cycle receivers connect X to Z and insert R-11 as shown in schematic.

2. Models L500 and L550 have B minus grounded to chassis omitting R1 and C2; also a jumper is used in place of C1. Models L510 and L560 have a separately wired B minus system which is not grounded to chassis except through R1 and C2.

I.F. Alignment

Connect an output meter across the voice coil. Turn the volume control to maximum. Set test oscillator to 455 KC and keep the oscillator output as low as a readable meter reading will permit.

Apply signal to the converter grid through a .05 mfd. capacitor and align progressively the trimmers in the 2nd and 1st I.F. transformer cans.

R.F. Alignment

Close the gang condenser by rotating the tuning control. Slide the pointer along the cord until it lines up with the first dial marking on the left. Now rotate the tuning control until the pointer is over the 1500 KC dial mark. Apply a 1500 KC signal to the receiver antenna post through a standard I.R.E. dummy antenna. Align the oscillator trimmer (C-7) to bring in the signal and peak the signal by adjusting the antenna trimmer (C-5). (See Fig. 1 for trimmer locations.)

Precaution

If the signal generator is AC operated, use an isolating transformer between the power supply and the radio receiver power input. The use of an isolating capacitor is not recommended as AC current through the capacitor will introduce hum modulation and/or create the possibility of a burned-out signal generator attenuator.

Special Service Information

The following information will be very useful in servicing receivers if a vacuum tube voltmeter or similar voltage measuring instrument is available.

(1) Stage Gains*

Antenna Post to Converter Grid.... 4.0 at 1000 KC
I.F. on Converter Grid to I.F. on I.F.

Amplifier Grid..... 50 at 455 KC

I.F. Amplifier Grid to Diode Plate... 45 at 455 KC

(2) 0.20-volt, 400-cycle signal across the volume control will give 1/2-watt speaker output.* (Volume control turned to maximum.)

(3) Average DC voltage developed across oscillator grid leak..... 6 volts

* Variations of $\pm 20\%$ permissible. All readings obtained with enough signal input to give 1/2-watt speaker output.