

Hallicrafters, Inc.

Model: 5R50

Chassis:

Year: Pre 1955

Power:

Circuit:

IF:

Tubes:

Bands:

Resources

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MODELS 5R50, 5R51,
5R52, Runs 1, 2

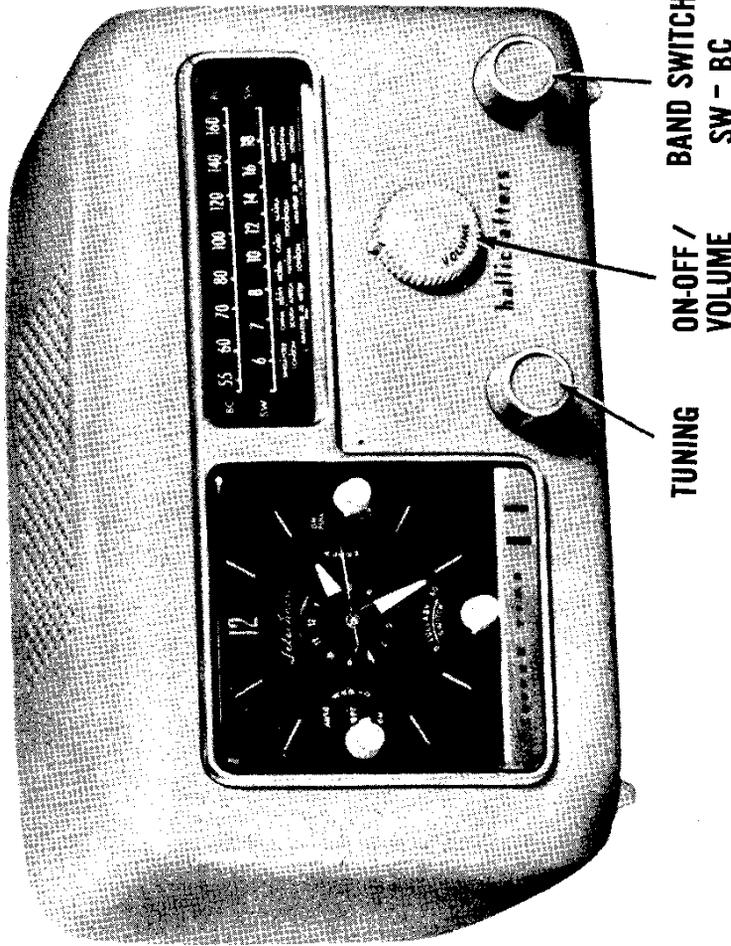


Fig. 1. Hallicrafters Clock Radio Models 5R50—Aqua Blue, 5R51—Minosa Yellow, 5R52—Shell Pink
For operating convenience the principal short wave stations of the world have been clearly marked on the dial. Since short wave receiving conditions vary with the time of day and the season of the year short wave programs may not be heard with the same regularity as standard broadcasts. It is important, therefore, that you refer to the table on page 3 as it provides a simple method of selecting the short wave band most suitable for any given time and season.

BEST SHORTWAVE RECEPTION TABLE

Band	Most Favorable Time	Most Favorable Distance
6-7 MC	Night - Winter	Day-400 Miles Night - Over 1500 Miles
9-10 MC	Day-Late Afternoon and Night-Winter	Over 500 Miles
11-12 MC	Evenings or Late Summer Afternoons	Day - Under 1500 Miles Night - Over 1500 Miles
15-18 MC	Early Mornings and Summer Evenings	Over 1500 Miles

MODELS 5R50, 5R51,
5R52, Runs 1, 2

INSTALLATION INSTRUCTIONS

UNPACKING - Observe all shipping labels and tags for instructions before removing or destroying them.

LOCATION - Your Hallicrafters Clock Radio should be placed in a convenient location away from radiators or other hot air sources. It should be positioned at least 2 inches from the wall to permit proper air circulation.

POWER SOURCE - The power plug should be inserted into a power outlet that will supply 105 to 125 volts 60 cycle AC ONLY. If in doubt about your power supply, call your power company before connecting the receiver. The wrong source of power may cause serious damage to both the radio receiver and the clock motor.

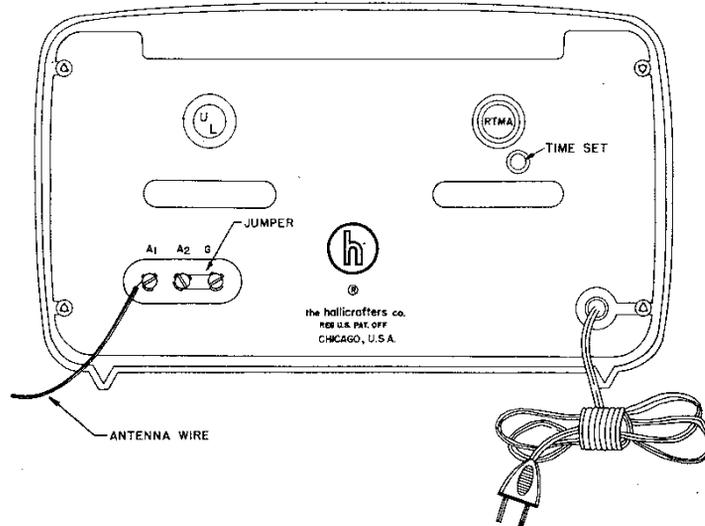


Fig. 2. Rear View Showing Antenna Connections and "Time Set" Knob

ANTENNA - The terminals marked A1, A2 and G on the back of the receiver are for antenna and ground connections. Satisfactory results can be obtained in most localities with the 15 foot antenna wire included with your receiver. This wire should be uncoiled for maximum signal pickup. An outside antenna 30 to 60 feet long may be necessary if the receiver is to be operated in a steel constructed building or in an area surrounded by numerous steel structures. The antenna used should be connected to terminal A1 on the antenna terminal strip. The jumper provided on this strip should be connected between terminals A2 and G. In some locations, reception may be improved by connecting a lead from terminal G to a cold water pipe or other good ground.

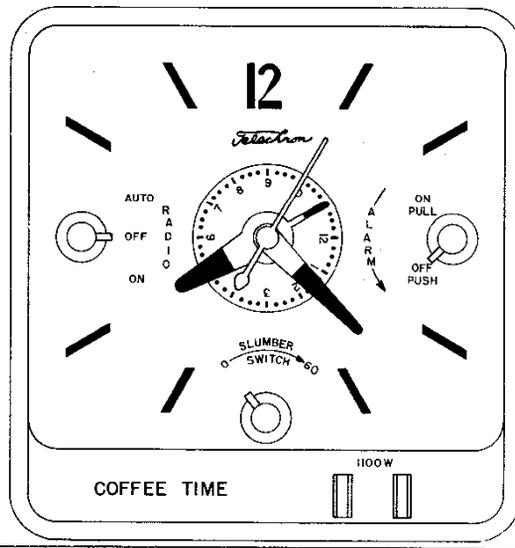
CLEANING - The cabinet, dial glass, and clock face should be cleaned with mild soap and water taking care to prevent excess moisture from entering the cabinet. Chemical cleaning solutions should not be used on your Hallicrafters Clock Radio.

OPERATING INSTRUCTIONS

CLOCK - Your clock will start automatically as soon as the power cord is plugged into the proper outlet. The correct time may be set by rotating the **TIME SET** knob that protrudes from the rear of the cabinet. The self starting feature will re-start the clock if there is a temporary interruption of the electric power.

ELECTRIC ALARM - The control regulating the electric alarm is located at the "three o'clock" position on the clock face. To set the alarm pull the knob to the "OUT" position and rotate the knob in the counterclockwise direction until the desired alarm time appears under the pointer near the center of the clock face. Leave the knob in the "OUT" position. When the alarm rings it may be turned off simply by pushing the control knob. If the alarm is not turned off after sounding for about forty five minutes it will turn off automatically.

Fig. 3. Clock Face Showing Controls and "Coffee Time" Outlet



IMPORTANT

The alarm will begin to sound approximately ten minutes later than the time indicated on the alarm set dial.

This period is to allow for a time difference between the turning on of the radio and "coffee time" appliance outlet and the sounding of the alarm. Refer to the instructions below.

RADIO AND "COFFEE TIME" APPLIANCE OUTLET— The RADIO switch, located at the "nine o'clock" position on the clock face, controls the mode of operation of the radio and the "coffee time" appliance outlet. When this switch is set to the "OFF" position neither radio nor outlet will operate. When set to the "ON" position the outlet will supply power and the radio may be operated by advancing the OFF-VOLUME control. When set to the "AUTOMATIC" position both radio and outlet will turn on automatically at the time to which the alarm has been set. If the alarm control has been left in the "OUT" position the alarm will begin to sound ten minutes later.

SLUMBER SWITCH— The SLUMBER switch, located at the "six o'clock" position on the clock face, may be used to turn the radio and/or the "coffee time" appliance outlet off automatically after operation for any desired period of time up to one hour. The SLUMBER switch will operate only when the RADIO switch is set to either the "OFF" or to the "AUTOMATIC" position. Operation of the SLUMBER switch is accomplished simply by advancing the knob until the pointer is at a position corresponding to the number of minutes that operation of the radio or outlet is desired. For example if you desire the radio to operate for one hour and then shut off advance the SLUMBER switch all of the way to the "60" position. If only 30 minutes operation is desired advance the SLUMBER switch only to the half way position, etc.

For your convenience in becoming acquainted with the use of the various controls the following table has been provided showing the proper control position for various types of operation.

TABLE 1, SHOWING OPERATING POSITIONS

MODE OF OPERATION	SET EACH CONTROL TO THE POSITION INDICATED AND FOLLOW THE SIMPLE INSTRUCTIONS				
	RADIO CONTROL	ALARM CONTROL	SLUMBER SWITCH	RADIO OFF-VOLUME CONTROL	"COFFEE TIME" OUTLET WILL BE:
To operate the radio manually	On	In	Off	On	On
To turn the radio on automatically at a desired time	Automatic	Set for desired time and push in	Off	On	Off, but will turn on with the radio
To sound the alarm only at a desired time	Off	Set for ten minutes earlier than the desired time and leave out.	Off	Off	Off
To automatically turn on the radio at a desired time and sound the alarm ten minutes later	Automatic	Set for desired time and leave out	Off	On	Off, but will turn on with the radio
To automatically turn on the "Coffee Time" outlet only at a desired time and sound the alarm ten minutes later	Automatic	Set for desired time and leave out	Off	Off	Off, but will turn on at the desired time
To automatically turn off the radio and "Coffee Time" outlet after operating for any desired length of time up to one hour	Off	In	Set for desired length of operating time	On	On, but will turn off with the radio
To automatically turn off the radio and "Coffee Time" outlet after operation for any desired period of time (up to one hour) and to turn them on again automatically at a later time (up to twelve hours) and to sound the alarm ten minutes later	Automatic	Set for the desired "TURN ON" time and leave out	Set for desired length of operating time before turning off	On	On, then off, then on, automatically

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RADIO OPERATION IMPORTANT

Before operating the radio be sure that the clock controls are set to an appropriate position. Refer to the above table. The radio will not operate if the RADIO switch on the clock face is set to the "OFF" position and may not operate if this switch is set to the "AUTOMATIC" position.

TUNING DIAL - The standard broadcast band is calibrated in kilocycles with the last zero deleted for convenience in reading the dial. To convert the dial reading to the station frequency in kilocycles simply add one zero.

The short wave band is calibrated directly in megacycles.

STANDARD BROADCAST AND SHORTWAVE RECEPTION - Turn the BAND SWITCH (right hand knob) clockwise for standard broadcast reception and counterclockwise for short wave reception.

The OFF-VOLUME control (large center knob) turns the receiver on and off and also controls the volume. Turn this knob in the clockwise direction to turn the receiver on and to increase volume. Allow about sixty seconds for the set to warm up.

Tune in the desired station with the TUNING control (left hand knob).

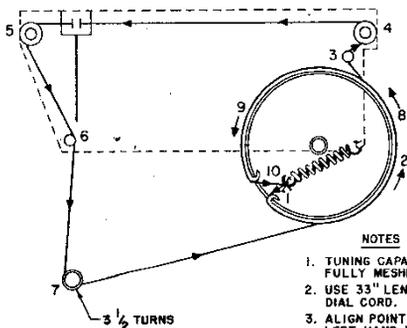
After the desired station has been tuned readjust the VOLUME control as desired.

The receiver may be turned off either by turning the OFF-VOLUME control to the extreme counterclockwise position (until a click is heard) or by setting the RADIO switch, located at the "nine o'clock" position on the clock face, to the "OFF" position.

SERVICE INSTRUCTIONS

SPECIFICATIONS

- Tubes 5 including 1 rectifier
- Speaker 5 inch PM
- Voice Coil Impedance 3.2 ohms
- Intermediate Frequency 455 KC
- Antenna Single wire or doublet
- Power Supply 105-125 volts
60 cycles AC only
- Frequency Coverage 540-1620 KC
and 6-18 MC



- NOTES
1. TUNING CAPACITOR FULLY MESHED.
 2. USE 33" LENGTH OF DIAL CORD.
 3. ALIGN POINTER WITH LEFT HAND INDEX MARKS ON DIAL.

Fig. 4. Dial Cord Stringing Diagram 92C1569-A

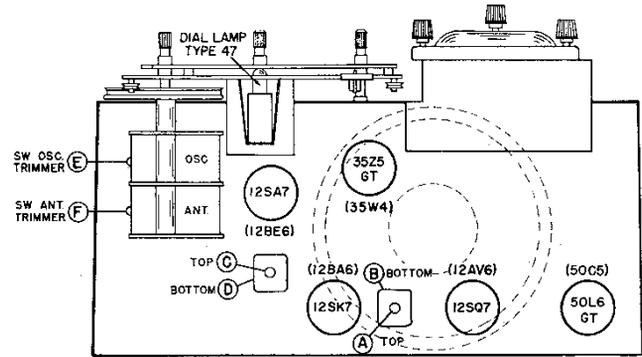


Fig. 5. Top View of Chassis Showing Location of Tubes and Alignment Adjustments

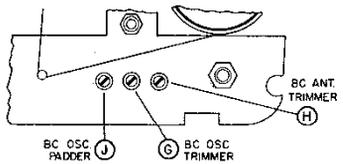
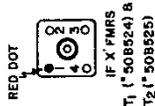
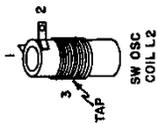
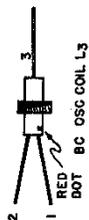
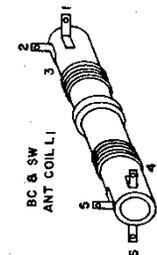


Fig. 6. Front View of Chassis Showing Location of Alignment Adjustments 92B1588-A

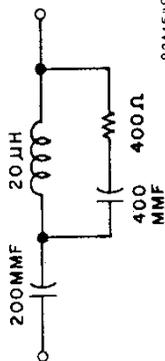
TUBE AND DIAL LAMP REPLACEMENT:- Refer to Fig. 5, for the location of the tubes and dial lamp used in the receiver. It will be necessary to remove the back cover from the cabinet to gain access to the tubes and dial lamp. To prevent damage to the tuning capacitor, set the TUNING control fully counterclockwise before making any replacement. When replacing tubes, check the tube type carefully and replace it with the correct type. The dial lamp and socket can be removed by compressing the side springs on the socket. Replacement of the dial lamp should be made with a 6-8 volt, Mazda #47 (brown bead) pilot lamp or equivalent.

MODELS 5R50, 5R51,
5R52, Runs 1, 2



ALIGNMENT PROCEDURE

- Connect output meter across speaker voice coil.
- Set volume control at maximum.
- Use a non-metallic alignment tool.
- Signal generator must have a modulated output and cover 455 KC, 600 KC, 1300 KC and 14 MC.
- Keep the generator output as low as possible to avoid AVC action.
- Refer to Figs. 5 and 6 for location of alignment adjustments.



92A1549

Fig. 7. RTMA Dummy Antenna

STEP	SIGNAL GENERATOR CONNECTIONS	SIGNAL GENERATOR FREQUENCY	BAND SWITCH SETTING	RECEIVER DIAL SETTING	ADJUST FOR MAXIMUM OUTPUT
1	High side to stator plates of rear section of tuning capacitor through a .01 mfd. capacitor. Low side to chassis.	455 KC	BROADCAST	1000 KC	A, B, C, D
2	High side to A1 on antenna terminal strip on rear of chassis through a standard RTMA dummy antenna (Fig. 7). Low side to chassis. Connect the jumper between A2 and G.	14 MC	SHORTWAVE	14 MC	E, F
3	Same as STEP 2.	1300 KC	BROADCAST	1300 KC	G, H
4	Same as STEP 2.	600 KC	BROADCAST	600 KC	J

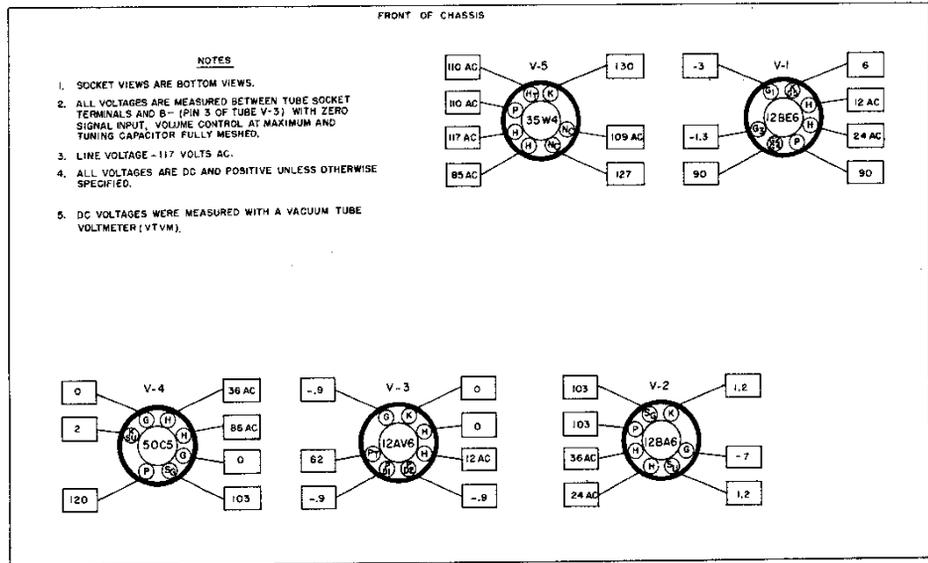


Fig. 9. Tube Socket Voltage Chart for Chassis Using Miniature Tubes

92C1703

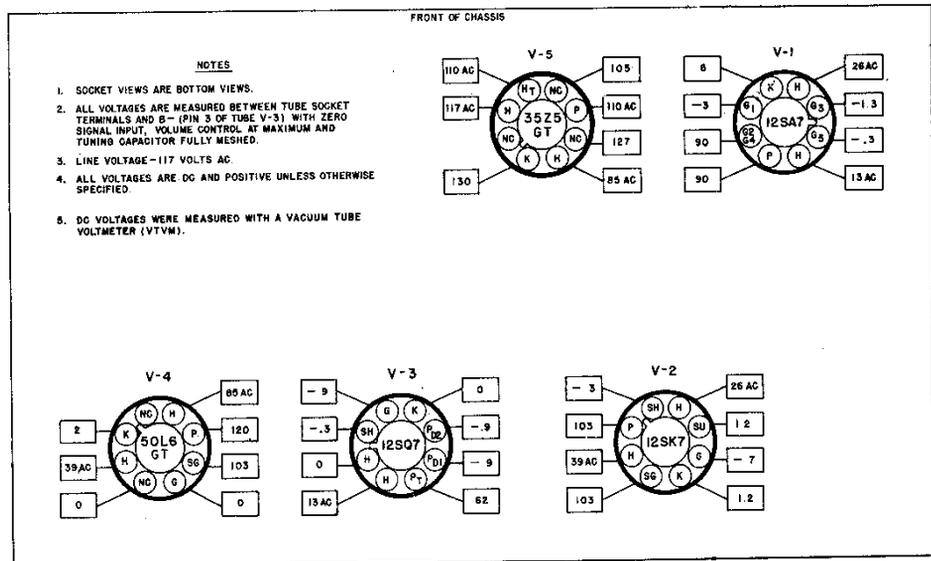


Fig. 10. Tube Socket Voltage Chart for Chassis Using Octal Tubes

92C1566

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L1 C19 L2 R3 R12 T1 R1 R2 R4 V2 C17 C6 R5 T2 R16 CRL1 C10 V3 R8 R9 R13 C12 R10 C14 V4

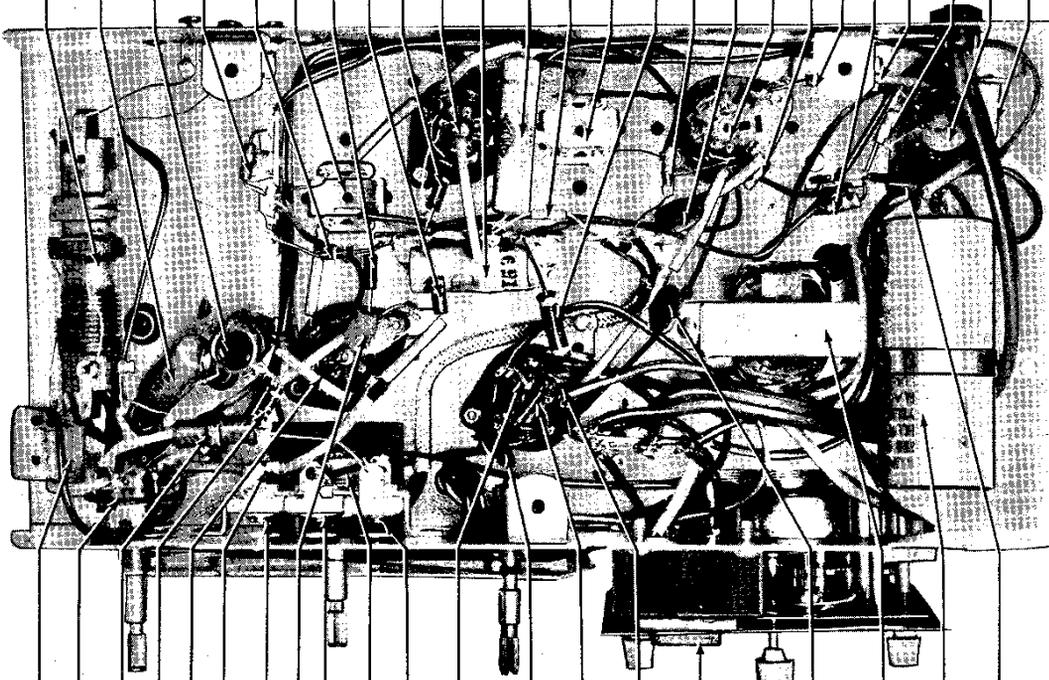


Fig. 11. Bottom View of Chassis Showing Component Location 92X1754

(Chassis Using Miniature Tubes)

L1 C19 L2 R17 R3 R1 R12 T1 C7 R2 R4 V2 C17 R16 C6 R5 T2 CRL1 C10 V3 R8 R9 R13 C16 R10 V4 R11

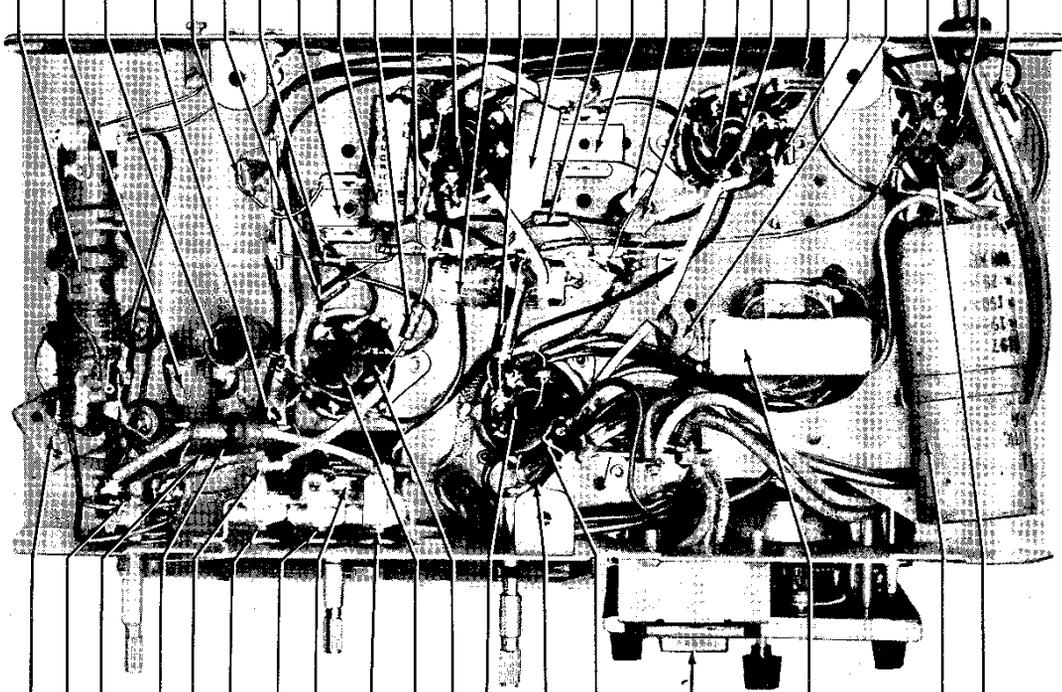


Fig. 12. Bottom View of Chassis Showing Component Location

(Chassis Using Octal Tubes)

