

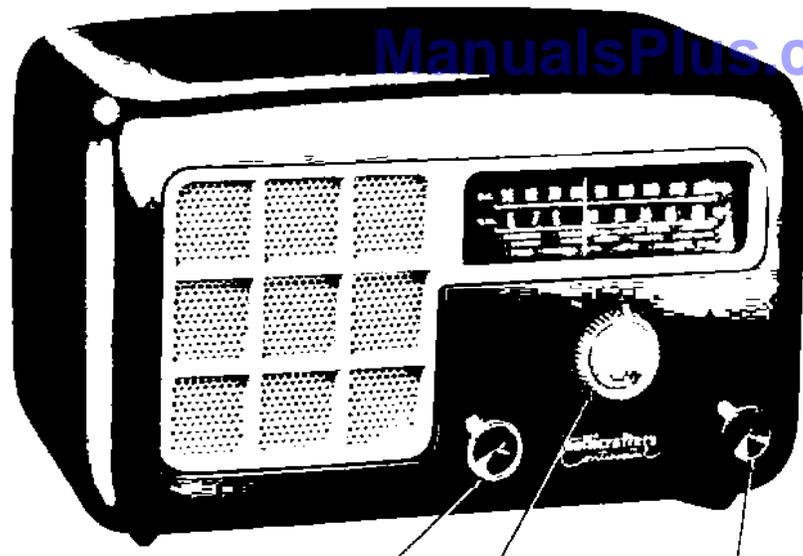


the hallicrafters Canada, Limited
TORONTO ONTARIO

GENERAL DESCRIPTION

Your Hallicrafters Continental provides reception of both the standard broadcast band and the 6 to 16 megacycle shortwave range. It is a 5 tube superheterodyne radio and is designed to operate from 105 to 125 volt direct current (DC) or 50/60 cycle alternating current (AC).

Fine performance of both standard and shortwave broadcasts can be obtained with the 15 foot antenna wire included with your receiver. It is merely necessary to uncoil this wire, connect one end of it to terminal A1 on the back of the net and then run it about the room in any convenient manner. To complete the antenna installation, the jumper should be connected between terminals A2 and G on the back of the set.



HALLICRAFTERS CONTINENTAL
Models 5R30A, 5R31A, 5R32A, 5R33A and 5R34A
92X1589-A

For your convenience, the principal shortwave stations of the world have been clearly marked on the dial. Since shortwave reception conditions vary with the season of the year and even with the time of day, shortwave programs may not be heard with the same regularity as standard broadcasts. It is important, therefore, that you refer to the table below as it provides an easy means of selecting the shortwave band most suitable to the time of day.

To get the maximum enjoyment from your Hallicrafters radio, carefully follow the instructions contained in this book.

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
15-16 MC	Early Mornings and Summer Evenings	Over 1500 Miles

INSTALLATION INSTRUCTIONS

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

LOCATION - Do not locate the receiver close to sources of heat such as radiators and heating vents. Allow for proper ventilation of the receiver by placing it at least two or three inches away from the wall.

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.

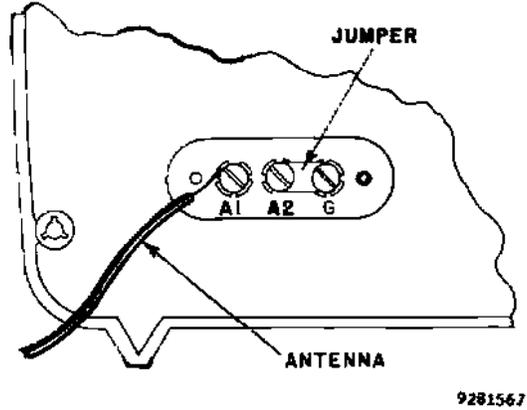


Fig. 1. Rear View of Receiver Showing Antenna and Ground Connections

OPERATING INSTRUCTIONS

TUNING DIAL

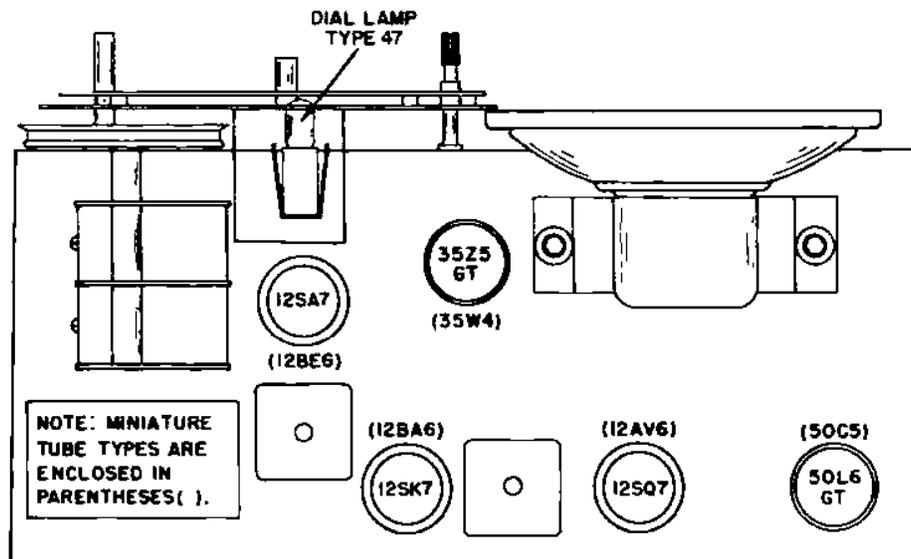
1. The standard broadcast band is calibrated in kilocycles with a zero deleted for convenience. To convert the dial reading to the station frequency in kilocycles, add one zero.
2. The shortwave band is calibrated directly in megacycles.

STANDARD BROADCAST AND SHORTWAVE RECEPTION

1. Plug the power cord into a convenient electrical outlet which provides 105 to 125 volts DC or 50/50 cycles AC. If in doubt about your power supply, call your power company before plugging in the receiver. The wrong power source may cause damage in the receiver.
2. Turn the right hand knob clockwise for standard broadcast reception or counterclockwise for shortwave reception.
3. The large center knob turns the receiver on and off and also controls volume. Turn this knob clockwise to turn the receiver on. Allow about a minute for the receiver to warm up.

NOTE: If the receiver does not operate after the one minute warm up when connected to a DC source, the power plug should be reversed in the wall outlet to obtain proper polarity.

4. Tune in the desired station by rotating the left hand knob until the dial pointer indicates the station frequency.
5. After the station has been accurately tuned in, adjust the center knob for the desired volume.
6. To turn the receiver off, turn the center knob counterclockwise until a click is heard.



95C1590-A

Fig. 2. Top View of Chassis Showing Location of Tubes and Dial Lamp

SERVICE OR OPERATING QUESTIONS - For further information regarding operation or servicing of your receiver, contact your dealer. Make no service shipments to the factory as the Hallicrafters Co. will not accept the responsibility for unauthorized shipments. Factory type service is available, however, at any **HALLICRAFTERS AUTHORIZED SERVICE CENTER** which displays the sign shown at the right. For the location of the one nearest you, consult your dealer or telephone directory.

The Hallicrafters Co. reserves the privilege of making revisions in current production of equipment and assumes no obligation to incorporate these revisions in earlier models.



94X1901-R

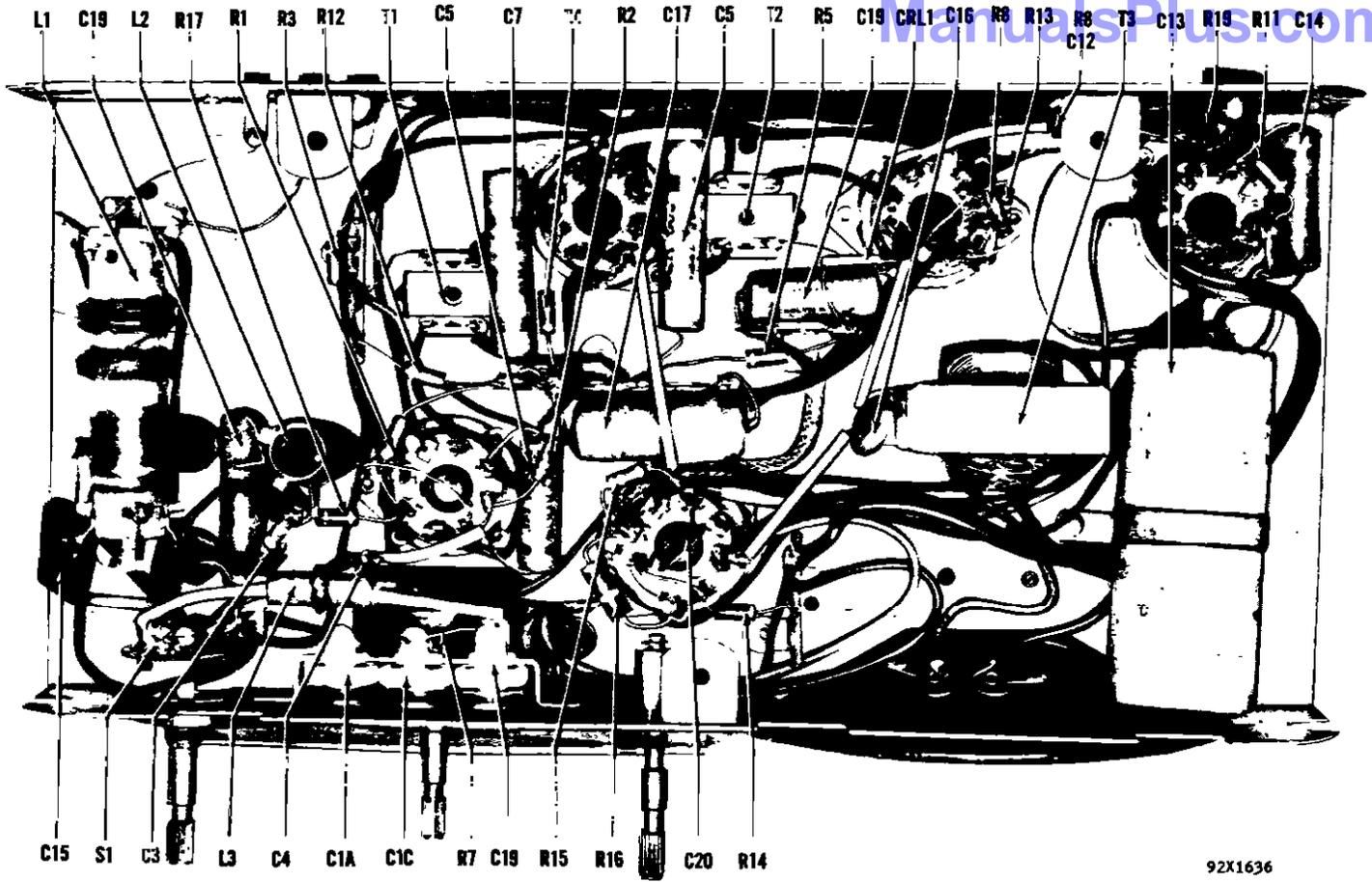


Fig. 7. Bottom View of Chassis Showing Component Location (Chassis Using Octal Tubes)

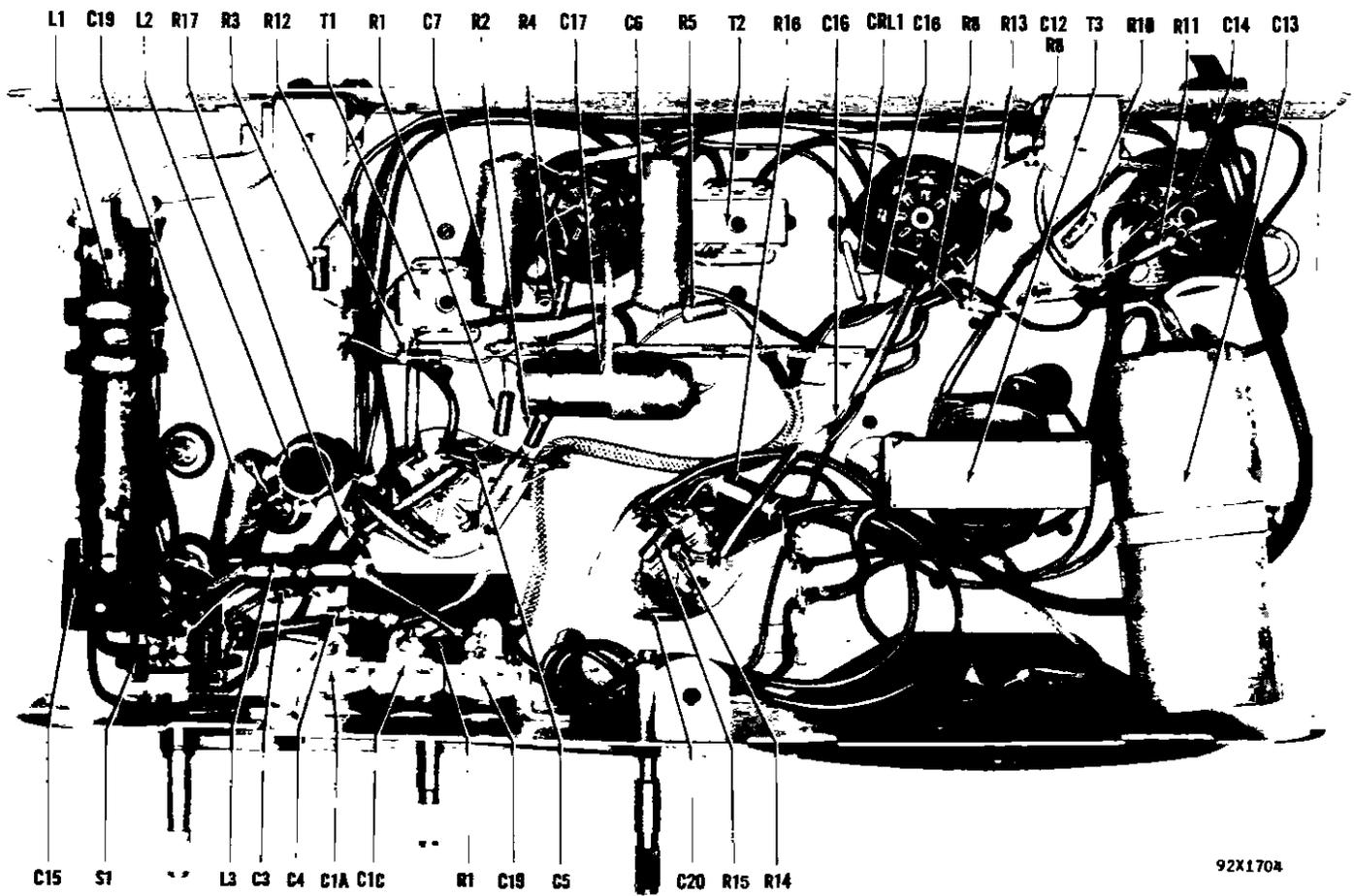
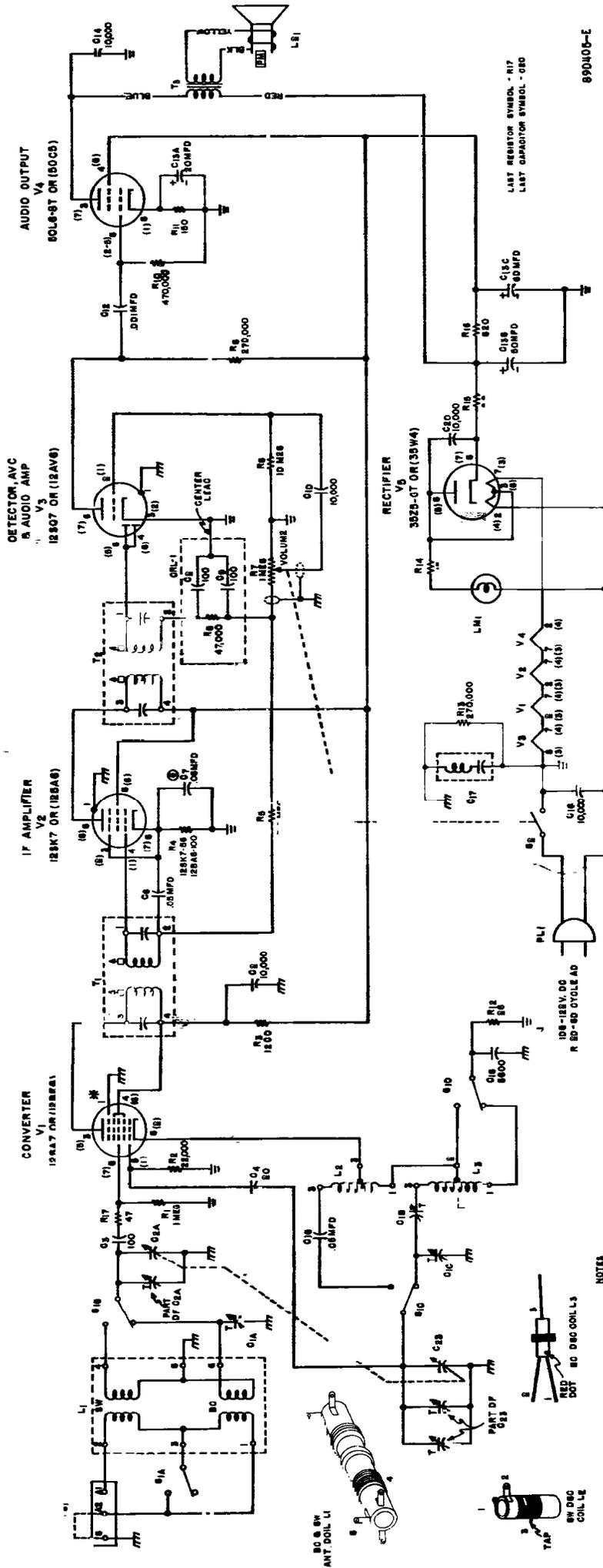


Fig. 8. Bottom View of Chassis Showing Component Location (Chassis Using Miniature Tubes)

SERVICE PARTS LIST

Schematic Symbol	Description	Hallicrafters Part Number	Schematic Symbol	Description	Hallicrafters Part Number
CAPACITORS					
C-1A,B & C	Trimmer assembly, 3 section	44C408	V-1	12BE6: converter	90X12BE6
C-2A & B	Tuning capacitor, 2 section	48C282	V-2	12BA6: IF amplifier	90X12BA6
C-3	100 mmf. 500 V., ceramic	47X20UJ101K	V-3	12AV6: detector and audio amplifier	90X12AV6
C-4	50 mmf. 500 V., ceramic	47X20UJ500K	V-4	50C5: audio output	90X50C5
C-5,10,14,16,20	10,000 mmf. 450 V., ceramic disc	47A217	V-5	35W4: rectifier	90X35W4
C-6,7,19	.05 mfd. 200 V., tubular paper	46AU503J			
C-8,9	100 mmf. (part of diode filter network CRL-1)	-----			
C-12	.001 mfd. 600 V., tubular paper	46AZ102J			
C-13A,B & C	20 mfd. 25 V., 90-60 mfd. 150 V.; electrolytic	45B197			
C-15	5600 mmf. 500 V., mica	47X30A562			
C-17	Resonant capacitor	46A150			
RESISTORS					
R-1	1 megohm 1/2 watt, carbon	23X20X105M			
R-2	22,000 ohms 1/2 watt, carbon	23X20X223M			
R-3	1200 ohms 1/2 watt, carbon	23X20X122M			
R-4	56 ohms 1/2 watt, carbon (used with 12SK7)	23X20X560K			
	100 ohms 1/2 watt, carbon (used with 12BA6)	23X20X101K			
R-5	2.2 megohms 1/2 watt, carbon	23X20X225M			
R-6	47,000 ohms (part of diode filter network CRL-1)		CRL-1	Diode filter network (includes R-6, C-8 and C-9)	49A016
	VOLUME control, 1 megohm; includes OFF-ON switch S-2	25B965		Escutcheon, Model 5R30A	7D349
R-8	10 megohms 1/2 watt, carbon	23X20X106M		Escutcheon, Models 5R31A, 5R32A, 5R33A and 5R34A	7A352
R-9,13	270,000 ohms 1/2 watt, carbon	23X20X274M		Grommet, rubber	16A125
R-10	470,000 ohms 1/2 watt, carbon	23X20X474M		Knob, VOLUME; Model 5R30A	15B477
R-11	150 ohms 1/2 watt, carbon	23X20X151K		Knob, VOLUME; Models 5R31A, 5R32A, 5R33A and 5R34A	15A480
R-12	56 ohms 1/2 watt, carbon	23X20X560K		Knob, TUNING and SW-BC: Model 5R30A	15B478
R-14	15 ohms 1/2 watt, carbon	23X20X150M		Model 5R31A	15B481
R-15	22 ohms 1/2 watt, carbon	23X20X220M		Model 5R32A	15B482
R-16	820 ohms 1 watt, carbon	23X30X821M		Model 5R33A	15B483
R-17	47 ohms 1/2 watt, carbon	23X20X470K		Model 5R34A	15B484
COILS AND TRANSFORMERS					
L-1	Coil, antenna; BC and SW	51B1494	PL-1	Line cord and plug	87A078
L-2	Coil, oscillator; SW	51B1493	LM-1	Lamp, dial; Mazda #47	39A004
L-3	Coil, oscillator; BC	51B1495		Lock, line cord; male	76A397-1
T-1	Transformer, IF; input	50B524		Lock, line cord; female	76A397-2
T-2	Transformer, IF; output	50B525		Pointer, dial	82A211
T-3	Transformer, audio output	55C187		Shaft, tuning	74B511
SWITCHES					
S-1A,B,C & D	Switch, rotary; SW-BC	60B472		Socket, tube; miniature (with center shield)	6B402
S-2	Switch, OFF-ON; part of VOLUME control R-7	-----		Socket, tube; miniature (without center shield)	8B314
TUBE COMPLEMENT (OCTAL)					
V-1	12SA7: converter	90X12SA7	LS-1	Speaker, 5 inch PM (refer to part number stamped on speaker)	85C127 or 85C103
V-2	12SK7: IF amplifier	90X12SK7		Terminal strip, antenna	88A032
V-3	12SQ7: detector and audio amplifier	90X12SQ7			
V-4	50L6GT: audio output	90X50L6GT			
V-5	35Z5GT: rectifier	90X35Z5GT			
TUBE COMPLEMENT (MINIATURE)					
MISCELLANEOUS					
				Cabinet:	
				Model 5R30A	116E003
				Model 5R31A	116E004
				Model 5R32A	116E005
				Model 5R33A	116E006
				Model 5R34A	116E007
				Cabinet back	8C1657
				Clip, mtg.; for antenna coil L-1	76A879
				Clip, mtg.; for IF transformers T-1 and T-2	76A385
				Clip, mtg.; for oscillator coil L-2	76A868
				Dial cord (specify length)	38A001
				Dial glass	22C349
				Dial light assembly; does not include dial lamp	86A011
				Diode filter network (includes R-6, C-8 and C-9)	49A016
				Escutcheon, Model 5R30A	7D349
				Escutcheon, Models 5R31A, 5R32A, 5R33A and 5R34A	7A352
				Grommet, rubber	16A125
				Knob, VOLUME; Model 5R30A	15B477
				Knob, VOLUME; Models 5R31A, 5R32A, 5R33A and 5R34A	15A480
				Knob, TUNING and SW-BC: Model 5R30A	15B478
				Model 5R31A	15B481
				Model 5R32A	15B482
				Model 5R33A	15B483
				Model 5R34A	15B484
				Line cord and plug	87A078
				Lamp, dial; Mazda #47	39A004
				Lock, line cord; male	76A397-1
				Lock, line cord; female	76A397-2
				Pointer, dial	82A211
				Shaft, tuning	74B511
				Socket, tube; miniature (with center shield)	6B402
				Socket, tube; miniature (without center shield)	8B314
				Socket, tube; octal	6A250
				Spring, dial cord	75A012
				Speaker, 5 inch PM (refer to part number stamped on speaker)	85C127 or 85C103
				Terminal strip, antenna	88A032



MODELS 5R30A, 5R31A, 5R32A, 5R33A and 5R34A

Property of NIPS
RUN 3

VALUES AND TOLERANCES SHOWN ARE NOMINAL AND VARIATIONS MAY BE FOUND. IT IS RECOMMENDED THAT THE VALUE OF ANY REPLACEMENT CORRESPOND TO THE NOMINAL VALUE OF THE PART BEING REPLACED.

- NOTES
1. RESISTANCE INDICATED IN OHMS AND CAPACITANCE IN MMF UNLESS OTHERWISE SPECIFIED.
 2. ALL VOLTAGES ARE MEASURED IN THE MIDDLE OF THE RANGE OF THE TUNING CAPACITOR FULLY MESHED.
 3. LINE VOLTAGE - 117 VOLTS AC
 4. SPECIFIED ALL VOLTAGES SHOWN AS AC WILL BE DC WHEN OPERATING FROM A DC SOURCE.
 5. DC VOLTAGES WERE MEASURED WITH A VACUUM TUBE VOLTMETER (VTVM).

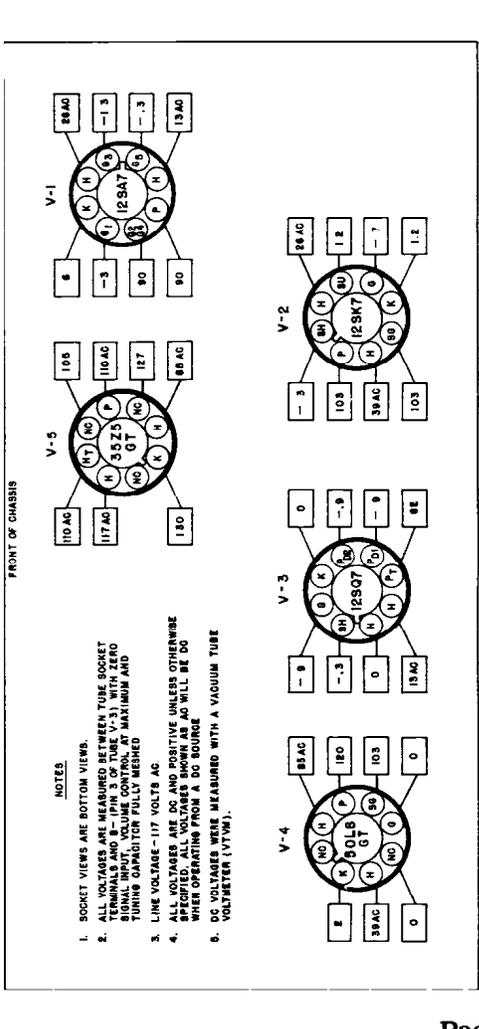
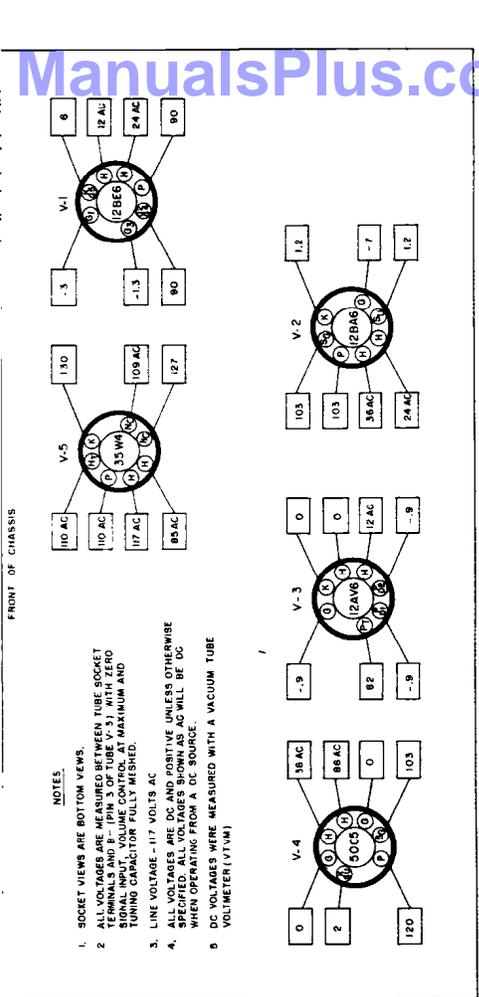


Fig. 9. Schematic Diagram

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

Fig. 11. Tube Socket Voltage Chart for Chassis Using Miniature Tubes