



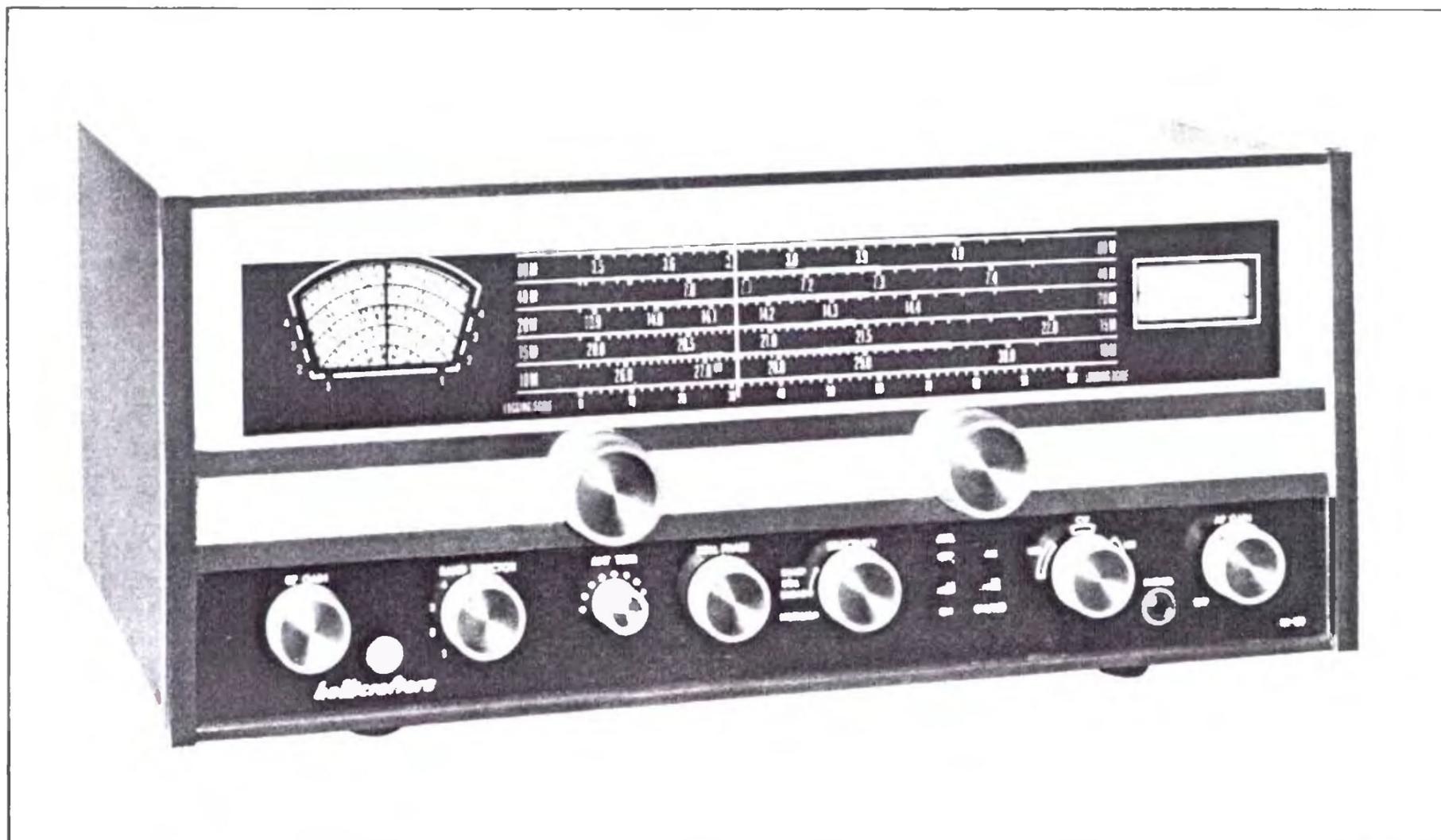
OPERATING AND SERVICE INSTRUCTIONS

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**COMMUNICATIONS**

**RECEIVER**

**MODEL SX-130**



156-006082

Figure 1. Hallicrafters' Model SX-130 Receiver.

## SECTION I GENERAL DESCRIPTION

The Hallicrafters' Model SX-130 Communications Receiver is a four band superheterodyne receiver tuning from 535 to 1610 kilocycles (KC) and 1.725 to 31.5 megacycles (MC) with calibrated electrical bandsread provided on the 80, 40, 20, 15, 10 meter and citizens band. The frequency range covers foreign and domestic short-wave broadcasts, amateurs, aircraft, and marine plus standard AM broadcasts. The receiver provides for the reception of code (CW), voice (AM), and single-sideband (SSB) signals over its entire tuning range, the upper or lower sideband being readily selectable by means of a front panel control. This feature greatly simplifies tuning of single-sideband signals.

Other features of the Model SX-130 include:

- Product detector for CW and SSB.
- Slide rule bandsread dial.
- Separate bandsread tuning condenser.
- Crystal filter.
- Antenna trimmer for maximum signal transfer.
- "S" meter to indicate the accuracy of tuning and the relative strength of received signals.
- Front panel controlled automatic noise limiter reduces interference from electrical equipment, ignition noise, etc.
- Calibrated BFO for USB-LSB-CW.
- Crystal phasing control for precise bandwidth adjustment.
- Manual RF gain control prevents overloading by strong signals.
- Precision tuning mechanism insures close calibration and accurate resettability.
- Balanced or unbalanced antenna inputs.
- New, handsomely styled cabinet.

## SECTION II TECHNICAL SPECIFICATIONS

### Frequency Coverage

Band 1 .....	535 KC to 1610 KC
Band 2 .....	1.725 MC to 4.7 MC
Band 3 .....	4.5 MC to 13.0 MC
Band 4 .....	11.9 MC to 31.5 MC

Intermediate Frequency..... 1650 KC

Reception Modes..... AM, CW and SSB

Selectivity..... Variable in three steps; normal, crystal broad and crystal sharp

Power Source..... 105 to 125 volts, 50/60 cycles

Power Consumption..... 48 watts

Audio Power Output..... 2 watts

Audio Output Impedance..... 3.2 ohms; rear mounted screw terminals

Headphone Impedance..... 50 to 2000 ohms; panel jack accepts standard 1/4 inch phone plug

Antenna Input Impedance..... 50 to 600, balanced or unbalanced

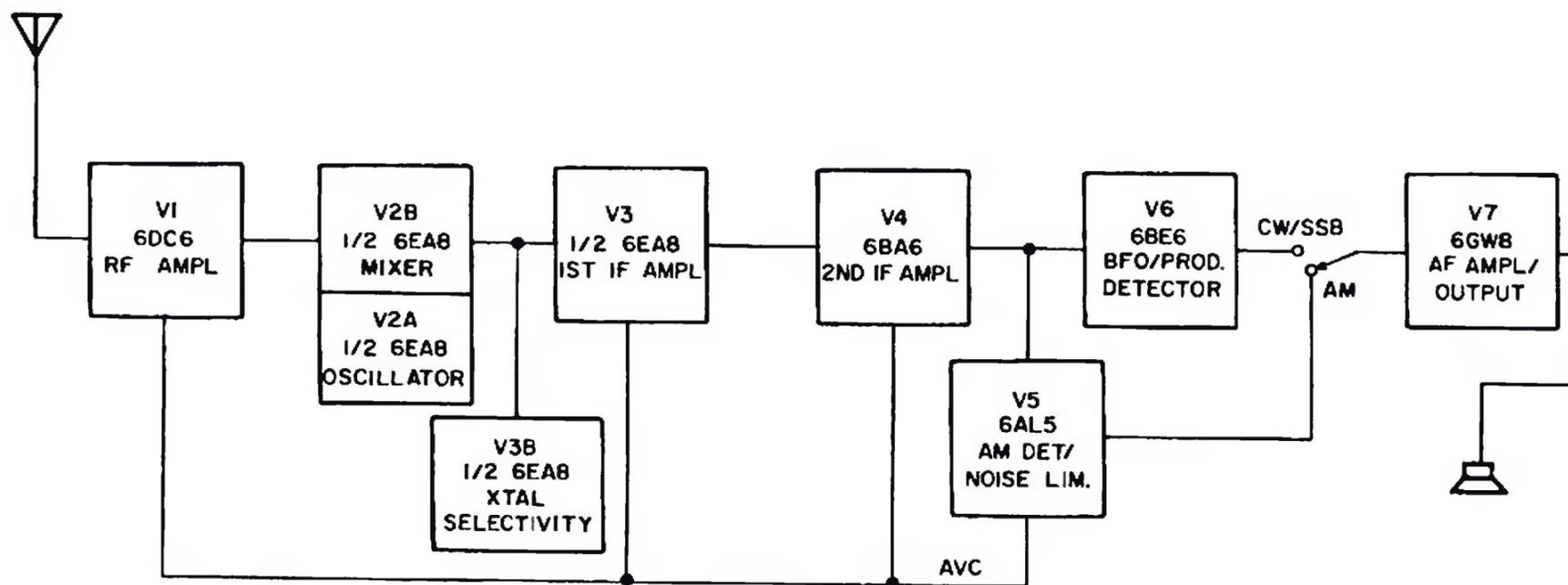
Number of Tubes..... Seven, plus one diode

Receive/Standby..... Rear mounted screw terminals; short to receive, open for standby

Dimensions..... 8 inches high, 18-7/8 inches wide, 9-3/4 inches deep

Net Weight..... 22 pounds

Shipping Weight..... 25 pounds



156-006126

Figure 2. Block Diagram of Receiver.

## SECTION III INSTALLATION

### 3-1. UNPACKING.

Carefully remove this equipment from its carton and packing material and examine it for any possible damage which may have occurred in transit. Should any sign of damage be apparent, file a claim immediately with the carrier stating the extent of damage. Carefully check all shipping labels and tags before removing or replacing them.

### 3-2. LOCATION.

The receiver may be placed in any location that will permit free air circulation around the cabinet. Avoid excessively warm locations such as those near radiators and heating vents. Also, avoid direct blasts of air from circulating fans, etc.

### 3-3. ANTENNAS.

The Model SX-130 uses an input circuit designed for a 52 to 600 ohm input. Any of the popular dipole, beam antennas or single wire antennas will give good results. It should be remembered, however, that these antennas will give optimum results over a limited frequency range. Generally speaking, the same rules that apply to transmitting antennas will hold true for receiving antennas. If an unbalanced or a single

wire antenna is used, connect one end to the terminal marked A1. The jumper link should be connected between A2 and G (see figure 3). For further information on this subject, refer to the "Radio Amateur's Handbook" or the "ARRL Antenna Book", both published by the American Radio Relay League.

### 3-4. GROUNDS.

All station equipment should be bonded together with heavy copper wire or braid and connected to a cold water pipe or earth ground. An external chassis ground terminal is provided on the SX-130 rear chassis apron for this purpose.

### 3-5. POWER SOURCE.

The SX-130 is designed to operate from a 105/125 volt, 50/60 cycle AC power source. Power consumption is 48 watts.

#### NOTE

If in doubt about your power source, contact your local power company prior to inserting the power cord into any power outlet. Plugging the power cord into the wrong source can cause extensive damage to the unit.

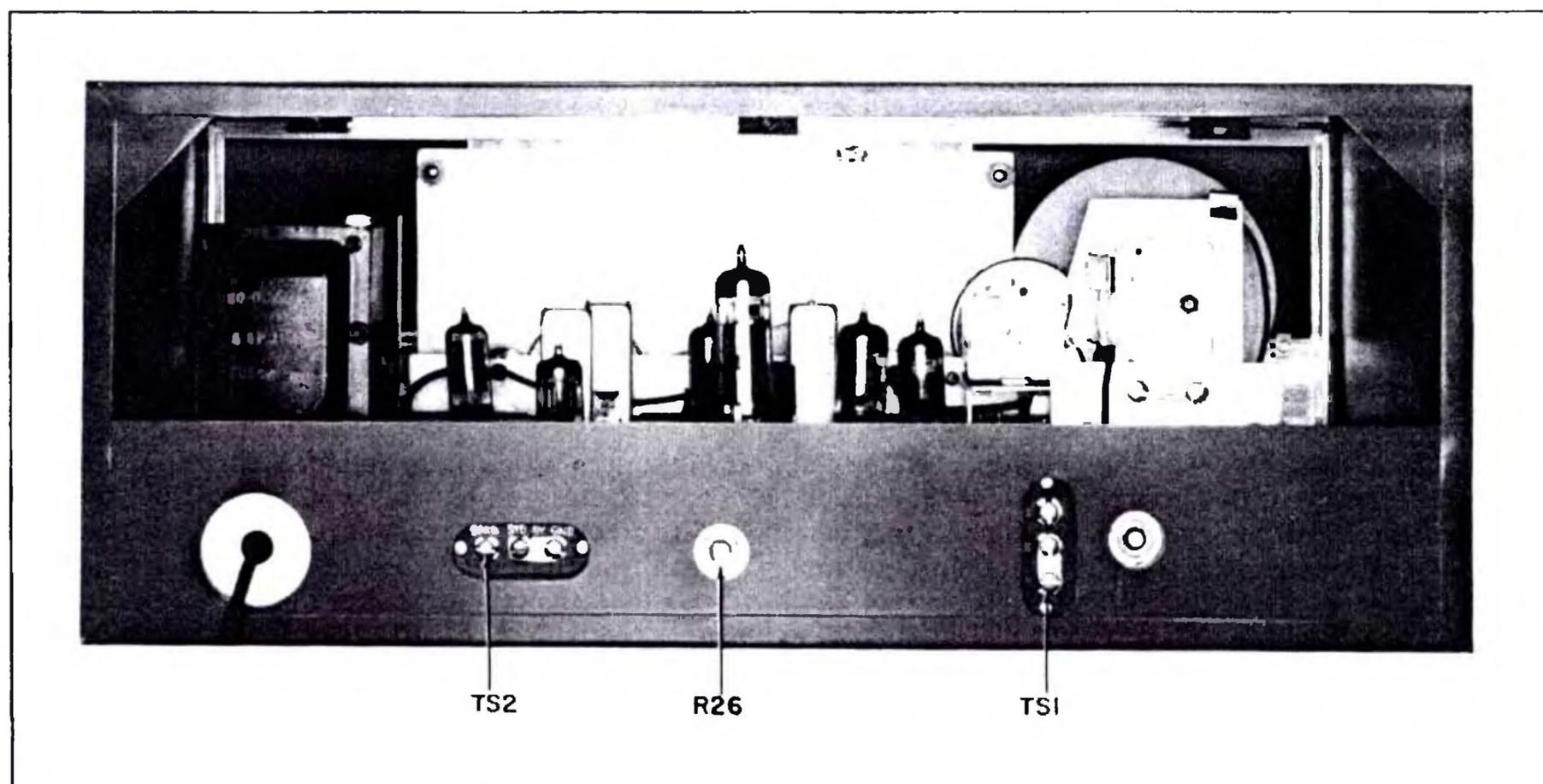


Figure 3. Rear View of Receiver.

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#### 4.2. BAND SELECTOR SWITCH.

The BAND SELECTOR switch is a four position rotary switch, which is used to place the proper set of coils into the circuit to cover the desired frequency range. The range of frequencies covered for each setting of the switch is shown in the following chart.

<u>SWITCH POSITION</u>	<u>FREQUENCY</u>
1	535 KC — 1610 KC
2	1.725 MC — 4.7 MC
3	4.5 MC — 13 MC
4	11.9 MC — 31.5 MC

#### 4.3. ANT TRIM CONTROL.

The ANT TRIM control is a variable capacitor connected across the secondary of the antenna coil in use. The capacitor adjustment compensates for the loading effects of various types of antennas. This control should always be peaked for maximum signal increase after the desired signal has been tuned in.

#### 4.4. XTAL PHASE CONTROL.

This control is to be used with the SELECTIVITY switch for maximum rejection of unwanted signals. Adjust for best reception, when using BROAD or SHARP XTAL selectivity positions.

#### 4.5. SELECTIVITY CONTROL.

This is a three position switch for selecting the intermediate frequency bandwidth required for different reception modes.

Recommended settings are:

NORMAL	Full fidelity AM
BROAD XTAL	SSB, or AM under adverse conditions
SHARP XTAL	CW

#### 4.6. ANL ON/OFF SWITCH.

The ANL switch is normally kept in the OFF position and used when necessary to eliminate impulse noise in AM reception. The switch does not function when receiving CW or SSB.

#### 4.7. AM-CW/SSB SWITCH.

In the AM position the switch connects the AM detector to the AF amplifier and disables the BFO. In the CW/SSB position the switch connects the product detector to the AF amplifier and energizes the BFO.

#### 4.8. USB-CW-LSB CONTROL.

This control establishes the frequency necessary for proper recovery of upper sideband, CW (code), or lower sideband signals. After the desired signal has been tuned in, this control may be used for fine tuning to establish the desired voice or code pitch. The control is not used for AM reception.

For single sideband reception, this control will usually be set as follows:

80 and 40 meters	— LSB
20, 15 and 10 meters	— USB

#### 4.9. AF GAIN-ON/OFF CONTROL.

The AF GAIN control turns power on and off, also, adjusts the audio output level in the speaker or headphones. Clockwise rotation increases the signal voltage applied to the grid of the AF amplifier, thus increasing the audio output.

#### 4.10. TUNING AND BANDSPREAD CONTROLS.

These controls are used in conjunction with one another to tune the desired signal frequency. Wide tuning is performed with the TUNING control and fine tuning may be done with the BANDSPREAD control.

##### MAIN TUNING DIAL.

The main tuning, or left hand dial, is operated by the TUNING control. The dial has four calibrated scales covering the following ranges:

BAND 1 . . . . .	535 to 1610 KC
BAND 2 . . . . .	1.725 to 4.7 MC
BAND 3 . . . . .	4.5 to 13.0 MC
BAND 4 . . . . .	11.9 to 31.5 MC

Also, a 0 to 100 scale is provided for accurately logging and relocating stations of special interest.

##### IMPORTANT

The main dial calibration will be correct only when the bandspread pointer is set at the extreme right (100 on the bandspread logging scale).

##### BANDSPREAD DIAL.

The bandspread, or right hand dial, is operated by the BANDSPREAD control. This dial



#### 5-4. USE OF THE "S" METER.

The "S" meter provides a visual means of determining whether or not the receiver is properly tuned, as well as an indication of the relative signal strength. The "S" meter circuit consists of a DC milliammeter connected in series

with the cathode lead of the first IF amplifier tube, the grid of which is controlled by AVC voltage. Since the cathode current of this tube varies with the strength of the incoming signal, the meter will indicate relative signal strength. The "S" meter is calibrated in "S" units from 1 to 9 and in decibels above S-9.

## SECTION VI SERVICE DATA

#### 6-1. CHASSIS REMOVAL.

To remove the chassis and panel assembly from the cabinet, first remove three screws from inside the cabinet, at the top of the front panel. These screws can be reached through the rear cabinet opening. Then remove five screws from the bottom of the cabinet. After these screws have been removed, slide the chassis forward and out of cabinet.

#### 6-2. TUBE AND DIAL LAMP REPLACEMENT.

Tubes may be replaced from the rear of the cabinet without removing the chassis. When replacing dial lamps, it is recommended that the chassis be removed from the cabinet. (Refer to paragraph 6-1.)

#### 6-3. DIAL RESTRINGING.

To restring the TUNING or BANDSPREAD dials, first remove the chassis from the cabinet (refer to paragraph 6-1). For stringing details, see figure 5.

#### 6-4. SERVICE AND OPERATING QUESTIONS.

For further information regarding operation or servicing of this equipment, contact the dealer from whom the unit was purchased. The Halli-crafters Company maintains an extensive system of Authorized Service Centers where any required service will be performed promptly and efficiently at no charge if the equipment is delivered to the service center within 90 days from date of purchase by the original buyer and the defect falls within

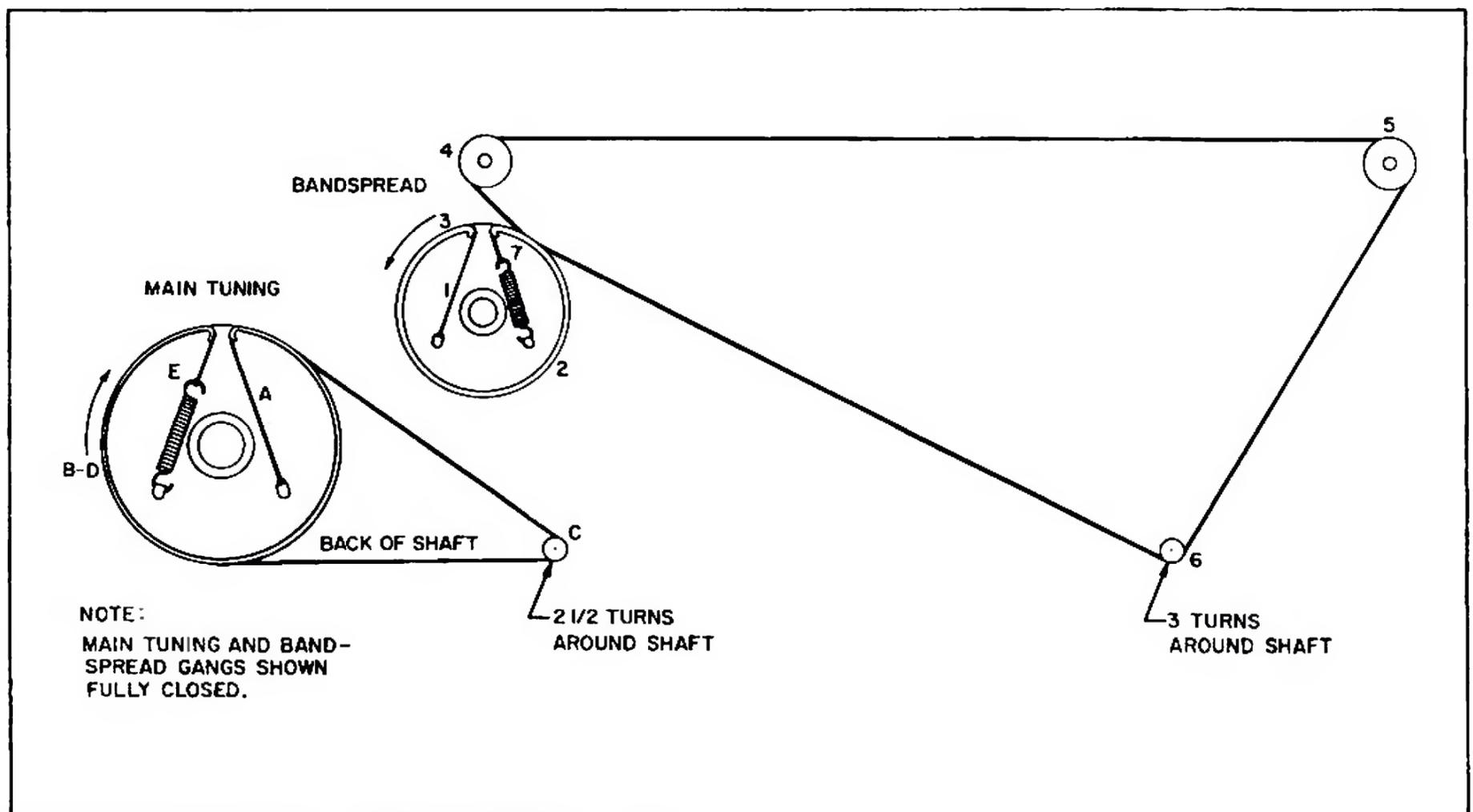


Figure 5. Dial Cord Restringing Diagram.

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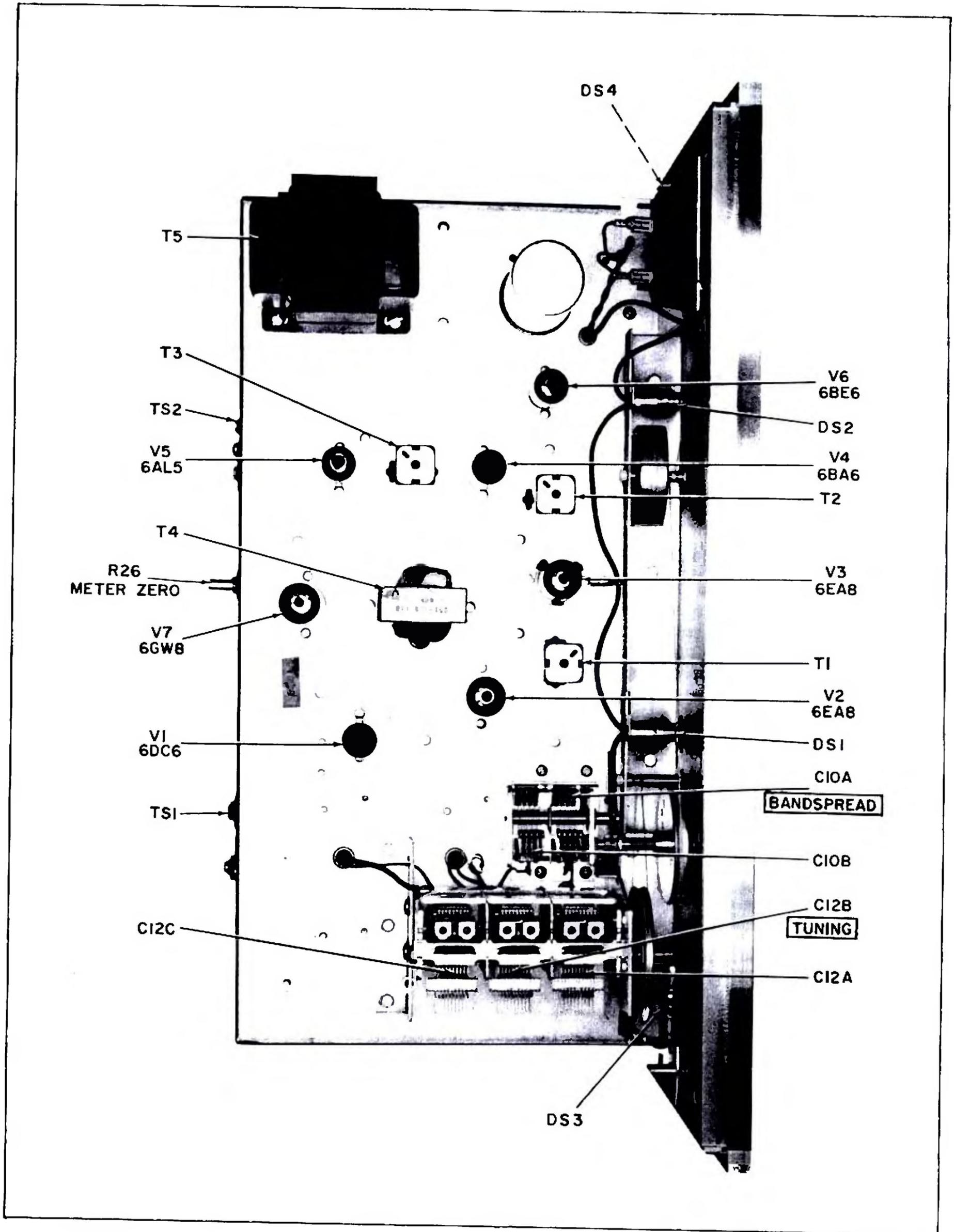


Figure 6. Top View of Receiver.

156-006124

the terms of the warranty. It is necessary to present the Bill of Sale in order to establish warranty status. After the expiration of the warranty, repairs will be made for a nominal charge. All Hallicrafters Authorized Service Centers display the sign shown at right. For the location of the one nearest you, consult your dealer or your local telephone directory.

Make no service shipments to the factory unless instructed to do so by letter, as The Hallicrafters Company will not accept responsibility for unauthorized shipments.

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



## SECTION VII ALIGNMENT

This receiver has been carefully aligned at the factory by specially trained personnel using precision equipment. Alignment of the receiver should not be attempted until all other possible causes of faulty operation have been investigated. Alignment should not be required unless the receiver has been tampered with or component parts have been replaced in the RF or IF stages. Alignment should be performed only by persons familiar with communications receivers and experienced in their alignment.

### 7-1. EQUIPMENT REQUIRED.

1. Signal Generator covering 455 KC to 30 MC.
2. Vacuum Tube Voltmeter (VTVM).
3. Audio output power meter, set to 3-4 ohms.

### 7-2. INITIAL CONTROL SETTINGS.

BAND SELECTOR . . . As indicated in chart  
RF and AF GAIN . . . . . Maximum

XTAL PHASE . . . . . Center of range  
ANL . . . . . OFF  
FUNCTION . . . . . AM  
BANDSPREAD . . . . . Fully clockwise  
Other controls to be set as indicated by the alignment chart.

### 7-3. ALIGNMENT PROCEDURE.

The adjustments mentioned in the alignment chart may be located by referring to figures 6 and 7. Before proceeding with alignment perform the following:

1. Remove chassis from cabinet. (Refer to paragraph 6-1.)
2. The local oscillator is 1650 KC higher than the incoming signal on all bands.
3. Connect output meter to SPKR-GND terminals. Use just enough generator output to maintain a 500 milliwatt reading on the output meter.

### IF ALIGNMENT

STEP	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RECEIVER CONTROL SETTINGS	ADJUST	REMARKS
1	Connect high side to pin 2 of V2 and low side to chassis.	1650 KC (approx.) unmodulated	BAND SELECTOR-1 SELECTIVITY - XTAL BROAD	Signal generator	Use enough gen. input to give a slight indication on the "S" meter. Adjust frequency of gen. for maximum deflection of "S" meter. The IF should be aligned to this crystal frequency.

IF ALIGNMENT (CONT.)

STEP	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RECEIVER CONTROL SETTINGS	ADJUST	REMARKS
2	Same as step 1.	Crystal frequency. Modulate generator 30% with 400 cycles.	BAND SELECTOR-1 SELECTIVITY - NORMAL	T1, T2 & T3	Adjust top and bottom cores for maximum audio output.
3	Same as step 1.	Same as step 2 unmodulated.	BAND SELECTOR-1 SELECTIVITY - NORMAL FUNCTION-CW/SSB	L14	Remove knob from CW-USB-LSB control and adjust L14 shaft for zero beat. Replace knob with white indicator dot in center of CW line on panel.

RF, MIXER AND OSCILLATOR ALIGNMENT

All controls set as in initial control settings. Generator modulated 30% with 400 CPS.

STEP	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RECEIVER CONTROL SETTINGS	ADJUST	REMARKS
1	Connect high side to A1, low side to GND. (A2 & GND tied together.)	1400 KC	BAND SELECTOR-1 TUNING - 1400 KC	C3 (Osc. trimmer) C23 (Mix. trimmer) C13 (ANT TRIM)	Adjust for maximum output.
2	Same as step 1.	600 KC	BAND SELECTOR-1 TUNING - 600 KC	L4 (Osc. coil) L12 (Mix. coil) C13 (ANT TRIM)	Adjust for maximum output.
3	Same as step 1.	4.0 MC	BAND SELECTOR-2 TUNING - 4.0 MC	C2 (Osc. trimmer) C22 (Mix. trimmer) C13 (ANT TRIM)	Adjust for maximum output.
4	Same as step 1.	1.8 MC	BAND SELECTOR-2 TUNING - 1.8 MC	L3 (Osc. coil) L13 (ANT TRIM)	Adjust for maximum output.
5	Same as step 1.	11 MC	BAND SELECTOR-3 TUNING - 11 MC	C1 (Osc. trimmer) C21 (Mix. trimmer) C13 (ANT TRIM)	Adjust for maximum output.
6	Same as step 1.	5.0 MC	BAND SELECTOR-3 TUNING - 5 MC	L2 (Osc. coil) L10 (Mix. coil) C13 (ANT TRIM)	Adjust for maximum output.
7	Same as step 1.	28 MC	BAND SELECTOR-4 TUNING - 28 MC	C6 (Osc. trimmer) C20 (Mix. trimmer) C13 (ANT TRIM)	Adjust for maximum output.
8	Same as step 1.	14 MC	BAND SELECTOR-4 TUNING - 14 MC	L1 (Osc. coil) L7 (Mix. coil) C13 (ANT TRIM)	Adjust for maximum output.

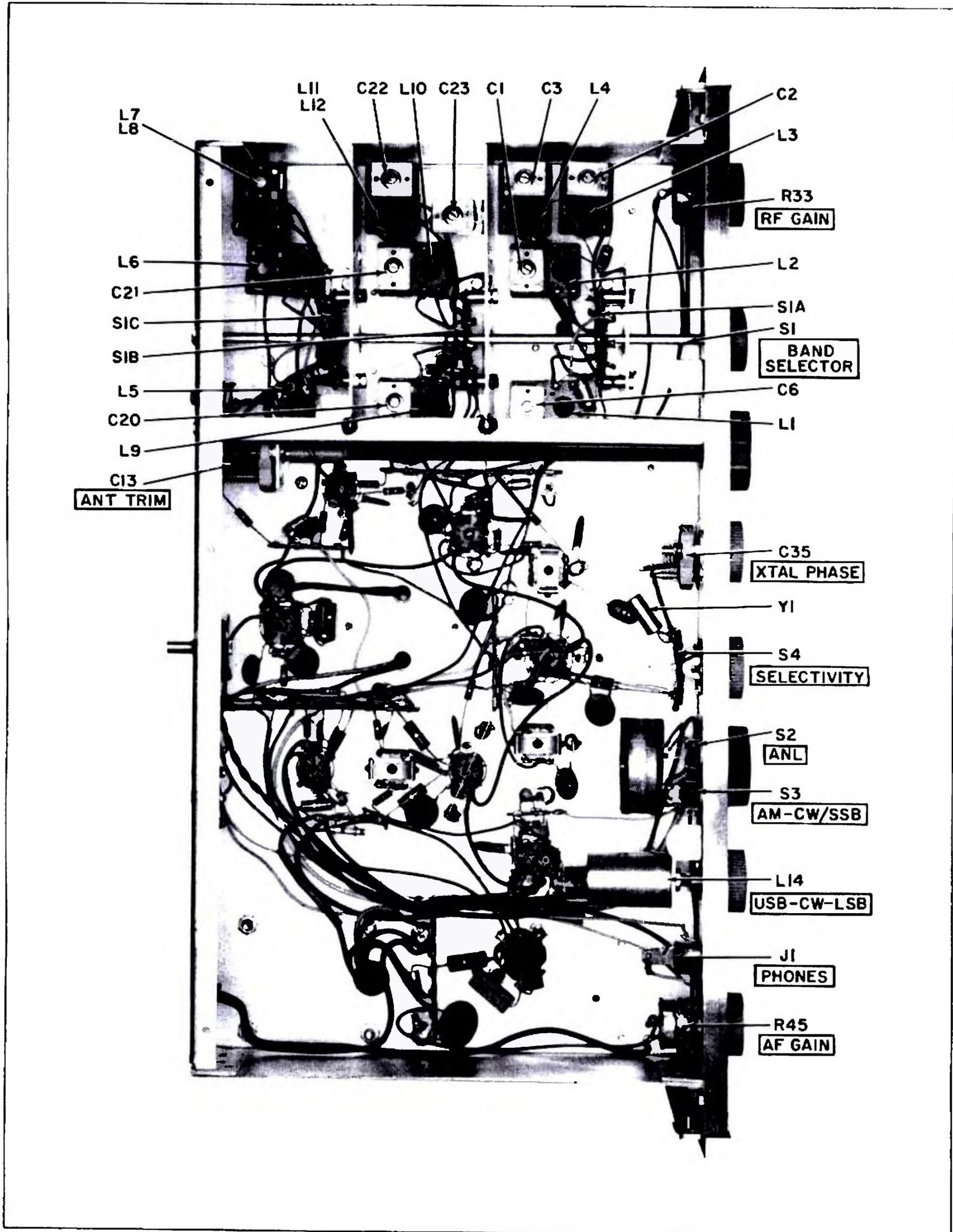


Figure 7. Bottom View of Receiver

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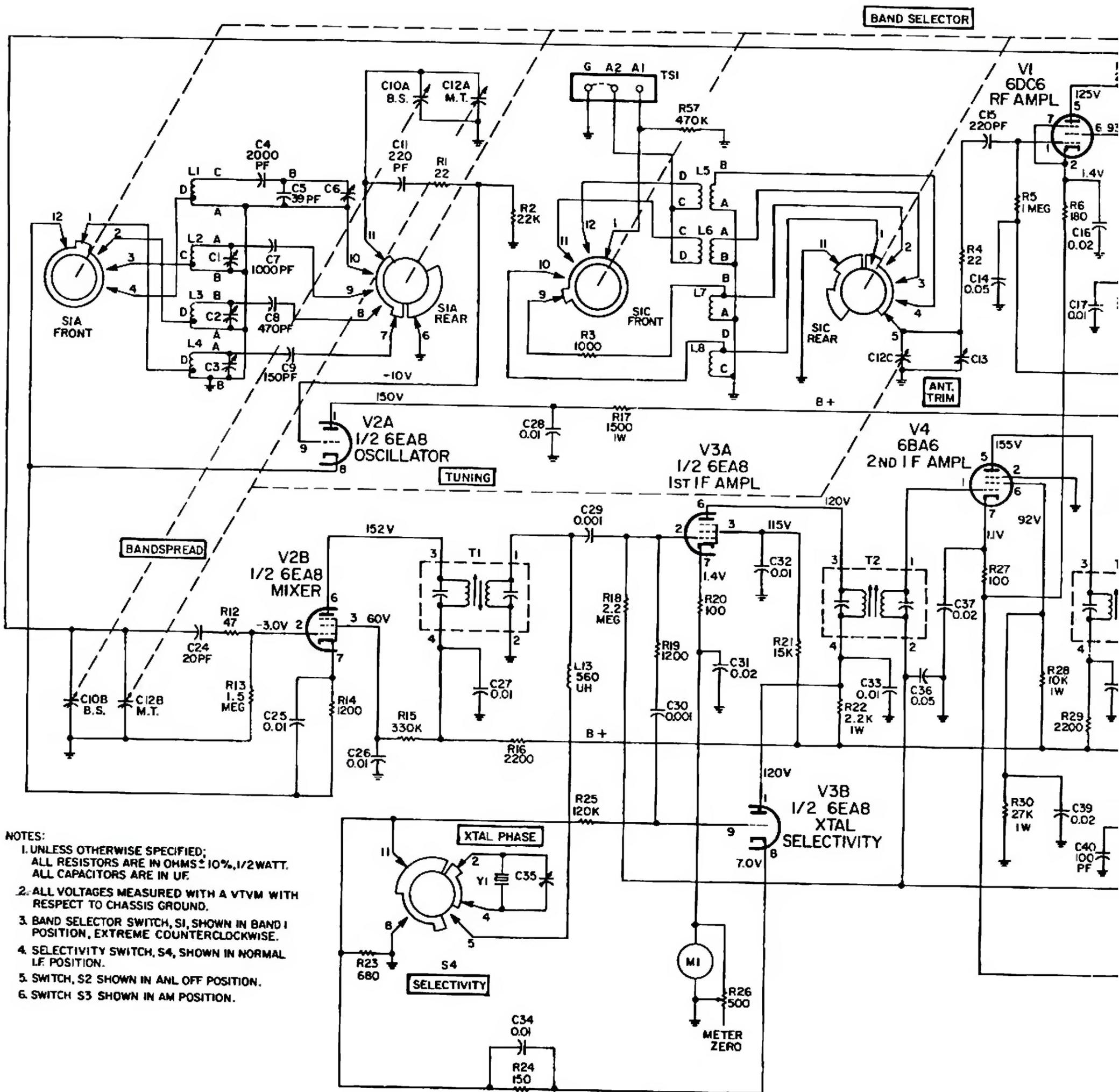
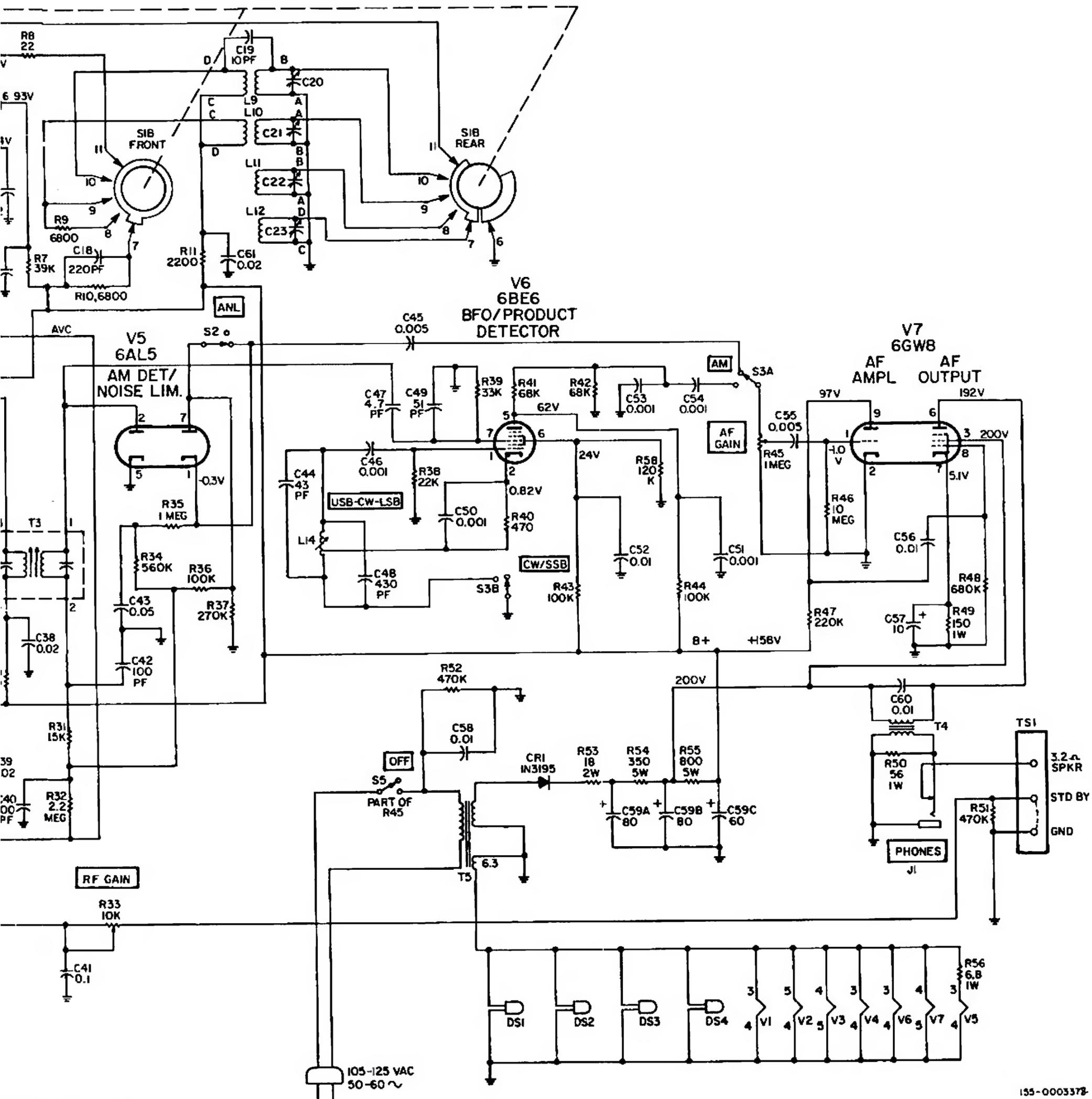


Figure 8. Schematic Diagram



c Diagram of Model SX-130.

## SERVICE REPAIR PARTS LIST

Schematic Symbol	Description	Hallicrafters Part Number	Schematic Symbol	Description	Hallicrafters Part Number	Schema Symbc
CAPACITORS			RESISTORS (CONT)			
C1,2,3,20	Variable, Trimmer 4 PF to 80 PF	C44-100395	R3	1000 ohms	451-252102	L14
C4	2000 PF, 2.5%, 500 V, Plastic	505-201202	R5,35	1 megohm	451-252105	
C5	39 PF, 2%, 500 V, Dura-Mica	493-110390-333	R6	180 ohms	451-252181	T1,2,3
C6	Variable, Trimmer, 1.5 PF to 15 PF	047-200147	R7	39K ohms	451-252393	T4
C7	1000 PF, 2.5%, 500 V, Plastic	505-201102	R9,10	6800 ohms	451-252682	T5
C8	470 PF, 2.5%, 500 V, Plastic	505-201471	R11,16,29	2200 ohms	451-252222	
C9	150 PF, 2.5%, 500 V, Plastic	505-201151	R12	47 ohms	451-252470	
C10A & B	Variable, BANDSPREAD	048-000608	R13	1.5 megohms	451-252155	
C11,15,18	220 PF, 10%, 500 V, Plastic	505-203221	R14,19	1200 ohms	451-252122	V1
C12A, B & C	Variable, TUNING	048-000607	R15	330K ohms	451-252334	V2,3
C13	Variable, 4.6 PF to 52.5 PF, ANT TRIM	048-000546	R17	1500 ohms, 1 watt	451-352152	V4
C14,36,43	0.05 $\mu$ F, +80%, -20%, 50 V, Ceramic Disc	047-001144	R18,32	2.2 megohms	451-252225	V5
C16,31,37,38,39,61	0.02 $\mu$ F, +80%, -20%, 500 V, Ceramic Disc	047-100242	R20,27	100 ohms	451-252101	V6
C17,25,26,27,28,32,33,34,52,56,60	0.01 $\mu$ F, +80%, -20%, 500 V, Ceramic Disc	047-100224	R21,31	15K ohms	451-252153	V7
C19	10 PF, 10%, 500 V, Fixed Composition	047-200403-011	R22	2.2K ohms, 1 watt	451-352222	CR1
C21	Variable, Trimmer, 3 PF to 30 PF	044-100396	R23	680 ohms	451-252681	
C22	Variable, Trimmer, 2 PF to 30 PF	044-100148	R24	150 ohms	451-252151	
C23	Variable, Trimmer, 2 PF to 20 PF	044-100191	R25,58	120 K ohms	451-252124	
C24	20 PF, 10%, 500 V Plastic	505-203200	R26	Variable, 500 ohms, 2 watts, Meter Zero	025-002121	
C29,30,46,50,51,53,54	0.001 $\mu$ F, 20%, 500 V, Ceramic Disc	047-001671	R28	10 K ohms, 1 watt	451-352103	S1
C35	Variable, 3.1 PF to 20.6 PF, XTAL PHASE	048-000612	R30	27 K ohms, 1 watt	451-352273	S2
C40,42	100 PF, 20%, 1000 V, Ceramic Disc	047-001799	R33	Variable, 10 K ohms, 20%, 1 watt RF GAIN	025-002534	S3
C41	0.1 $\mu$ F, +80%, -20%, 100 V, Ceramic Disc	047-001428	R34	560 K ohms	451-252564	S4
C44	43 PF, 5%, N750, Ceramic Tubular	491-005430-095	R36,43,44	100 K ohms	451-252104	
C45,55	0.005 $\mu$ F, GMV, 1000V, Ceramic Disc	047-100485	R37	270 K ohms	451-252274	
C47	4.7 PF, 10%, 500 V, Fixed Composition	047-200403-006	R39	33 K ohms	451-252333	
C48	430 PF, 2%, 500 V, Dura-Mica	493-110431-334	R40	470 ohms	451-252471	
C49	51 PF, 10%, NPO, Ceramic Tubular	491-026510-022	R41,42	68 K ohms	451-252683	
C57	10 F, 25 V, Electrolytic	045-000934	R45	Variable, 1 megohm, 30%, AF GAIN, ON/OFF	025-002533	
C58	0.01 $\mu$ F, 1400 V, Ceramic Disc	047-100752	R46	10 megohms	451-252106	Y1
C59A, B & C	60 $\mu$ F, 300 V; 2 x 80 $\mu$ F, 300 V, Electrolytic	045-001330	R47	220 K ohms	451-252224	
R1,4,8	22 ohms	451-252220	R48	680 K ohms	451-252684	
R2,38	22K ohms	451-252223	R49	150 ohms, 1 watt	451-352151	
			R50	56 ohms, 1 watt	451-352560	
			R51,52,57	470 K ohms	451-252474	
			R53	18 ohms, 2 watts	451-652180	J1
			R54	350 ohms, 5 watts, wire wound	445-012351	
			R55	800 ohms, 5 watts, wire wound	445-012801	
			R56	6.8 ohms, 1 watt	451-352068	
			*All resistors are carbon type 10%, 1/2 watt, unless otherwise specified			
			COILS AND TRANSFORMERS			
			L1	Coil, RF, Oscillator, Band 4	050-002478	M1
			L2	Coil, RF, Oscillator, Band 3	050-002136	DS1,2
			L3	Coil, RF, Oscillator, Band 2	050-002135	DS3,4
			L4	Coil, RF, Oscillator, Band 1	050-002134	
			L5	Coil, Antenna, Band 4	050-002141	
			L6	Coil, Antenna, Band 3	050-002140	
			L7,8	Coil, Antenna, Bands 1 and 2	050-002139	
			L9	Coil, RF, Mixer, Band 4	051-201905	
			L10	Coil, RF, Mixer, Band 3	051-201906	
			L11,12	Coil, RF, Mixer, Bands 1 and 2	050-002138	
			L13	Choke, RF, 560 $\mu$ H	050-002155	TS1 TS2

# SERVICE REPAIR PARTS LIST

Schematic Symbol	Description	Hallicrafters Part Number
RESISTORS (CONT)		
R3	1000 ohms	451-252102
R5,35	1 megohm	451-252105
R6	180 ohms	451-252181
R7	39K ohms	451-252393
R9,10	6800 ohms	451-252682
R11,16,29	2200 ohms	451-252222
R12	47 ohms	451-252470
R13	1.5 megohms	451-252155
R14,19	1200 ohms	451-252122
R15	330K ohms	451-252334
R17	1500 ohms, 1 watt	451-352152
R18,32	2.2 megohms	451-252225
R20,27	100 ohms	451-252101
R21,31	15K ohms	451-252153
R22	2.2K ohms, 1 watt	451-352222
R23	680 ohms	451-252681
R24	150 ohms	451-252151
R25,58	120 K ohms	451-252124
R26	Variable, 500 ohms, 2 watts, Meter Zero	025-002121
R28	10 K ohms, 1 watt	451-352103
R30	27 K ohms, 1 watt	451-352273
R33	Variable, 10K ohms, 20%, 1 watt RF GAIN	025-002534
R34	560 K ohms	451-252564
R36,43,44	100 K ohms	451-252104
R37	270 K ohms	451-252274
R39	33 K ohms	451-252333
R40	470 ohms	451-252471
R41,42	68 K ohms	451-252683
R45	Variable, 1 megohm, 30%, AF GAIN, ON/OFF	025-002533
R46	10 megohms	451-252106
R47	220 K ohms	451-252224
R48	660 K ohms	451-252684
R49	150 ohms, 1 watt	451-352151
R50	56 ohms, 1 watt	451-352560
R51,52,57	470 K ohms	451-252474
R53	18 ohms, 2 watts	451-652180
R54	350 ohms, 5 watts, wire wound	445-012351
R55	800 ohms, 5 watts, wire wound	445-012801
R56	6.8 ohms, 1 watt	451-352068

\*All resistors are carbon type 10%, 1/2 watt,  
unless otherwise specified

## COILS AND TRANSFORMERS

1	Coil, RF, Oscillator, Band 4	050-002478
2	Coil, RF, Oscillator, Band 3	050-002136
3	Coil, RF, Oscillator, Band 2	050-002135
4	Coil, RF, Oscillator, Band 1	050-002134
5	Coil, Antenna, Band 4	050-002141
6	Coil, Antenna, Band 3	050-002140
7,8	Coil, Antenna, Bands 1 and 2	050-002139
9	Coil, RF, Mixer, Band 4	051-201905
10	Coil, RF, Mixer, Band 3	051-201906
11,12	Coil, RF, Mixer, Bands 1 and 2	050-002138
13	Choke, RF, 560 $\mu$ H	050-002155

Schematic Symbol	Description	Hallicrafters Part Number
COILS AND TRANSFORMERS (CONT)		
L14	Coil, BFO, 1650 KC, USB-CW-LSB	050-002087
T1,2,3	Transformer, IF, 1650 KC	050-000751
T4	Transformer, Output	050-002099
T5	Transformer, Power	050-002025-001

## ELECTRON TUBES AND DIODES

V1	Tube, Type 6DC6	090-901338
V2,3	Tube, Type 6EA8	090-901350
V4	Tube, Type 6BA6	090-901112
V5	Tube, Type 6AL5	090-001163
V6	Tube, Type 6BE6	090-901124
V7	Tube, Type 6GW8	090-001502
CR1	Diode, Silicon, Type 1N3195	019-002770

## SWITCHES

S1	Rotary, BAND SELECTOR	060-200389
S2	Slide, SPDT, ANL	060-002560
S3	Slide, DPDT, AM-CW/SSB	060-002561
S4	Rotary, SELECTIVITY	060-002804

## MISCELLANEOUS

	Cabinet	066-004514
	Core, Adjustable (L14)	077-003176
	Core, Coil Tuning (L1, 2,3,4,9 & 10)	077-100068
Y1	Crystal, Quartz, 1650 KC	019-003651
	Dial, Cord (Tuning & Bandspread)	038-100049
	Dial Scale, Tuning	083-001068
	Flywheel	071-000212-002
	Foot, Rubber (4)	016-001469
J1	Jack, PHONES	036-000350
	Knob, ANT TRIM	015-001844
	Knob, BAND SELECTOR	015-001897-002
	Knob, RF GAIN, XTAL PHASE, SELECTIVITY, USB-CW-LSB, AF GAIN	015-001897-001
	Knob, TUNING & BANDSPREAD	015-001751-002
	Line Cord	087-100078
	Lock, Line Cord	076-004546-004
M1	Meter	082-000587
DS1,2	Pilot Lamp, Type No. 44	039-100003
DS3,4	Pilot Lamp, Type No. 47	039-100004
	Pointer, Bandspread	082-000669
	Shield, Coil (L14)	069-100142
	Shield, Tube (V3)	069-100667
	Shield, Tube (V5)	069-100232
	Socket, Pilot Lamp	086-000710
	Socket, Tube, 7-pin (V1,4,5, & 6)	006-000946
	Socket, Tube, 9-pin (V2, 3 & 7)	006-000947
	Spring, Dial Cord (2)	075-000893
TS1	Terminal Strip (Antenna)	088-100032
TS2	Terminal Strip (Output)	088-002554