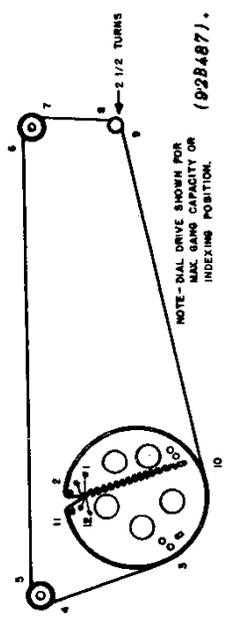


RESTRINGING DIAL CORD

To restring the general coverage dial cord, cut a 48-inch length of 30 lb. test dial cord and tie one end to the tension spring of the general coverage tuning capacitor drive pulley at position "1" on the diagram. Follow the sequence "1" through "12" and at position "12" stretch the tension spring and tie the cord securely.

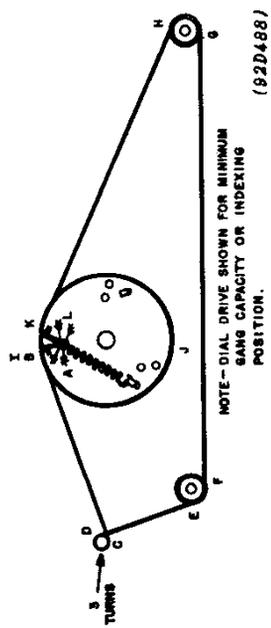
Set the general coverage tuning condenser at maximum capacity and attach and set the pointer in line with the left hand index marker.



Dial cable stringing procedure, general coverage dial.

To restring the band spread dial cord, cut a 36-inch length of 30 lb. test dial cord and follow the procedure as above, starting at position "A" ending at "L".

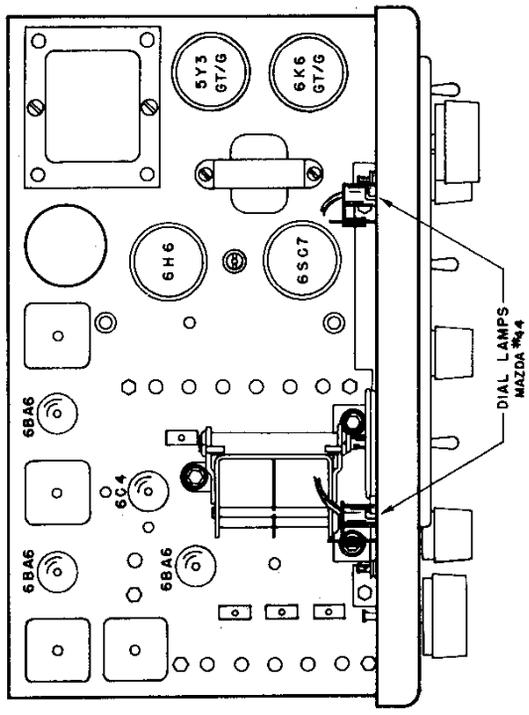
Set the bandspread condenser at minimum capacity and attach and set the pointer at "100" on the logging scale.



Dial cable stringing procedure, band spread dial.

REPLACING LAMPS

Refer to Fig. for the location of the two dial lamps used in the receiver. To gain access to defective lamps, reach in through cabinet cover and unclip the dial lamp sockets. The sockets may then be brought out into the open to change the defective lamp. Replace lamps with 8-8 V. Mazda #44, (Blue bead) lamps or equivalent.



Top view, location of tubes and dial lamps.

ALIGNMENT PROCEDURE

Set the following controls before alignment.

- STANBY/RECEIVE Set at RECEIVE
- CW/AM Set at AM (see step 2)
- SENSITIVITY Set at maximum
- NOISE LIMITER Set at OFF
- VOLUME Set at maximum
- TONE switch. Set at HIGH
- BANDSPREAD Set at 100
- SPEAKER/PHONES switch Set at SPEAKER

MODEL S-53

THE HALLICRAFTERS CO.

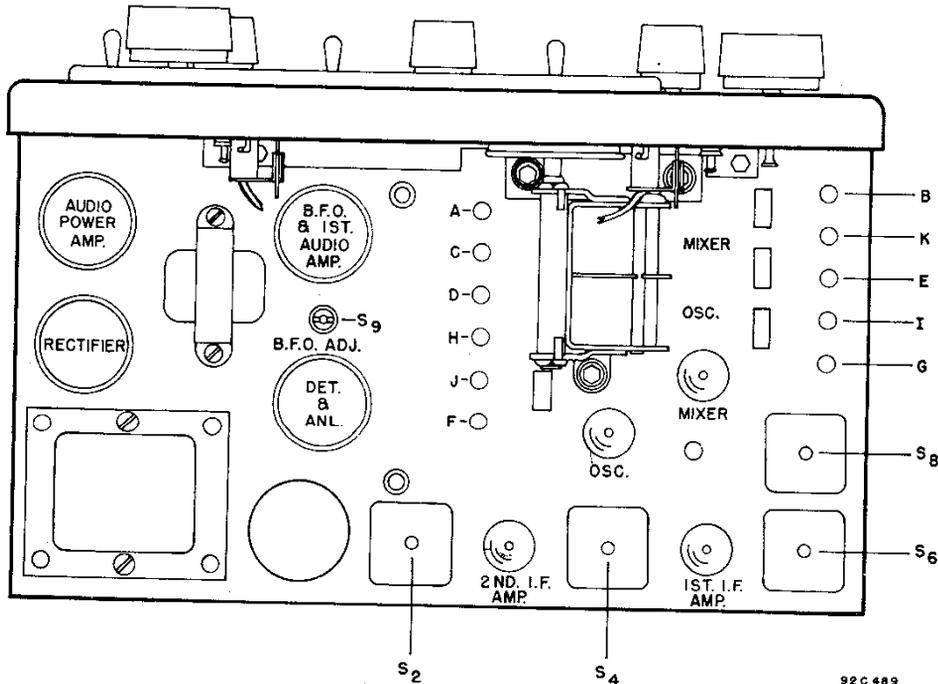
Remove the receiver chassis from the cabinet to make alignment adjustments. The chassis is held in the cabinet by three screws along both the bottom edge of the front panel and the rear of the cabinet, and two screws on either side of the front panel.

Before starting the alignment procedure, index the general coverage dial pointer on the low frequency end of the range and index the bandspread dial pointer at 100. The general coverage condenser should index at maximum capacity and the bandspread condenser should index at minimum capacity.

ALIGNMENT CHART

Step	Dummy Antenna	Signal Generator Coupling	Signal Generator Frequency	Band Selector Setting	Receiver Dial Setting	Adjust	Remarks
1	0.1 mfd. capacitor	High side to front stator section of tuning cap. Low side to chassis.	2.075 mc	A	Tuning cap. fully open	S1,S2,S3,S4,S5, S6,S7,S8	Adjust for maximum audio output at speaker voice coil. Use just enough signal generator output to obtain a 50 mw audio level.
2	See step 1.	See step 1.	2.075 mc	A	See step 1.	S9	With the CW/AM switch set at CW, adjust S-9 for zero beat.
3	300 ohm carbon resistor	High side to "A1" on antenna strip. Jumper connected between "A2" and "C"	1500 kc 600 kc	A	1500 kc 600 kc	*A,B *C	Adjust for maximum output as in step 1.
4	See step 3.	See step 3.	6 mc	B	6 mc	*D,E	Adjust for maximum output as in step 1.
5	See step 3.	See step 3.	15 mc	C	15 mc	*F,G	Adjust for maximum output as in step 1.
6	See step 3.	See step 3.	30 mc	D	30 mc	*H,I	Adjust for maximum output as in step 1.
7	See step 3.	See step 3.	52 mc	E	52 mc	*J,K	Adjust for maximum output as in step 1.

*Note - Calibration adjustments.

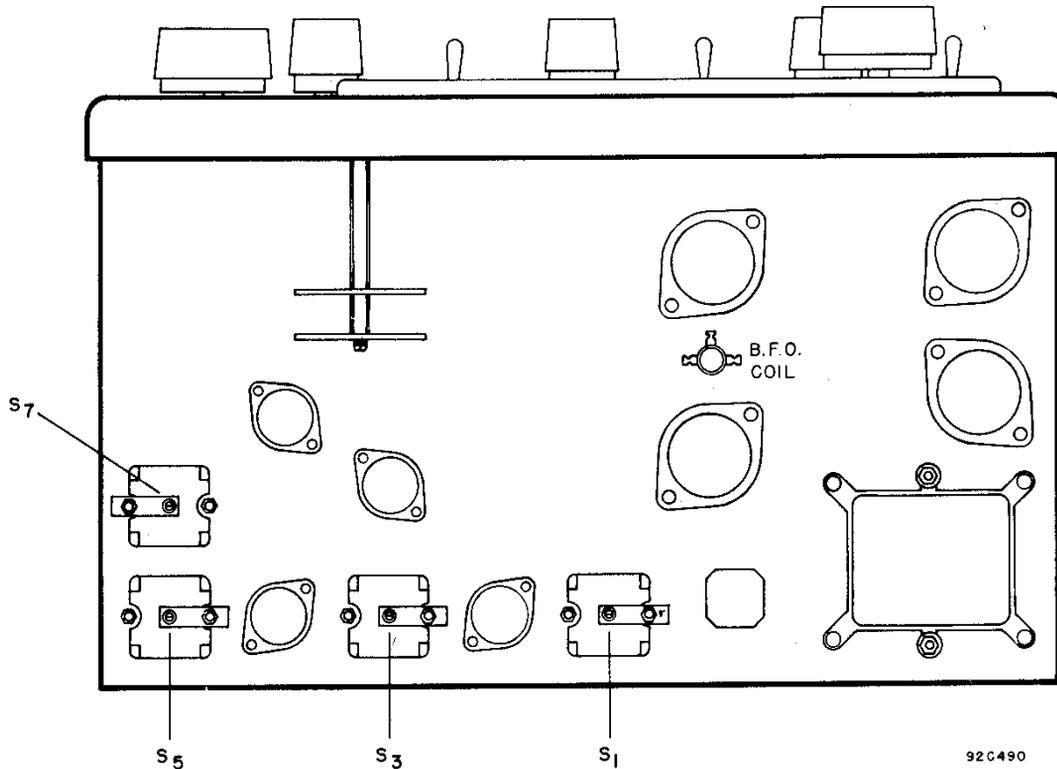


Alignment points, top view.

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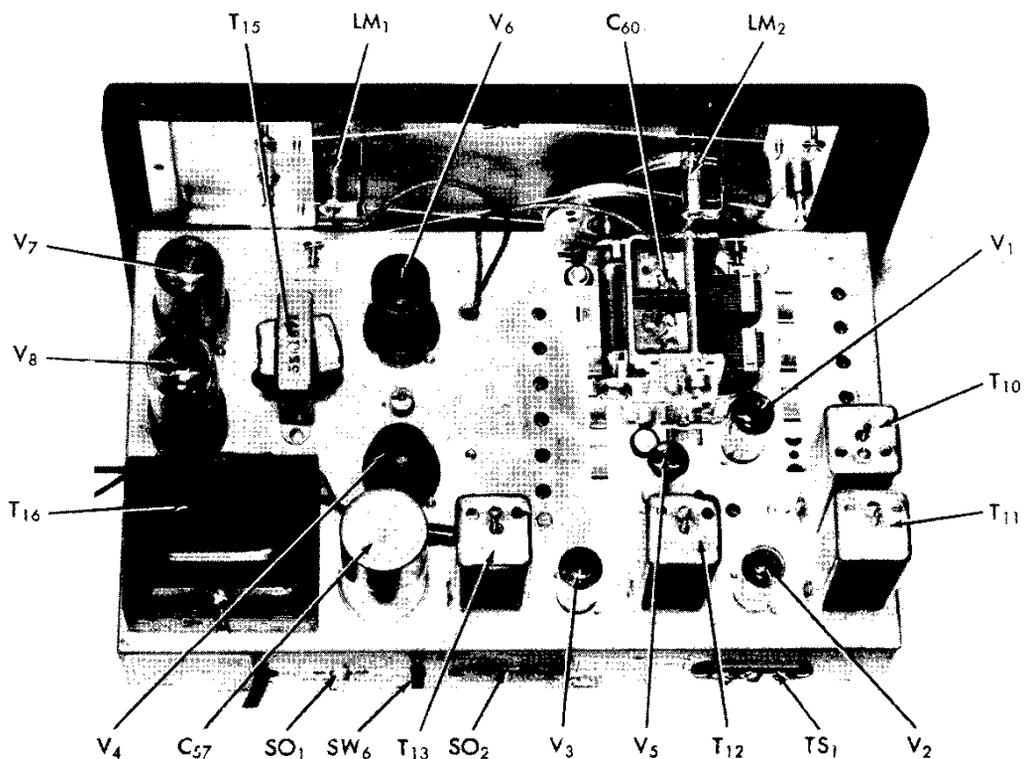
THE HALLICRAFTERS CO.

MODEL S-53

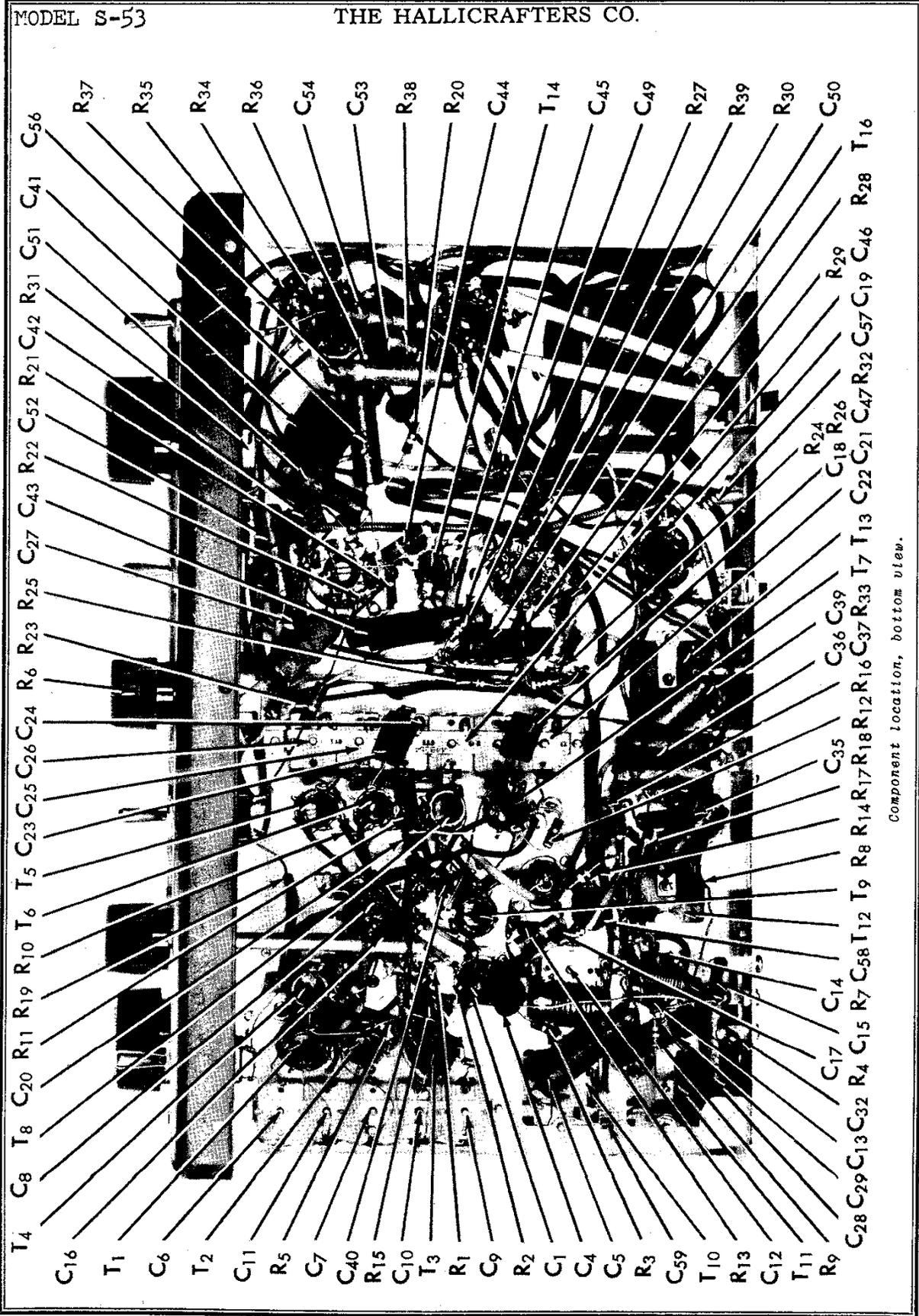


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Alignment points, bottom view.

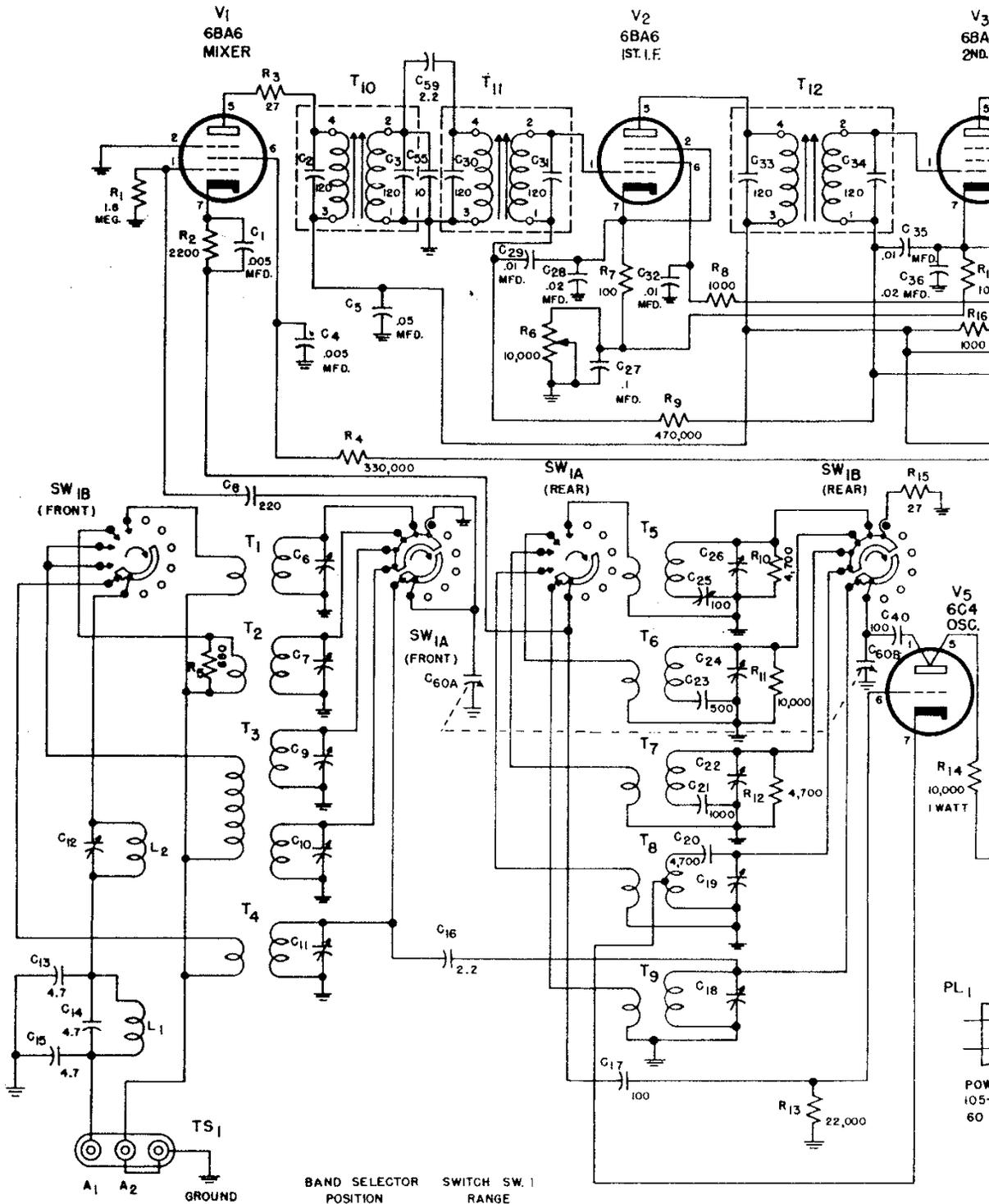


Component location, top view.



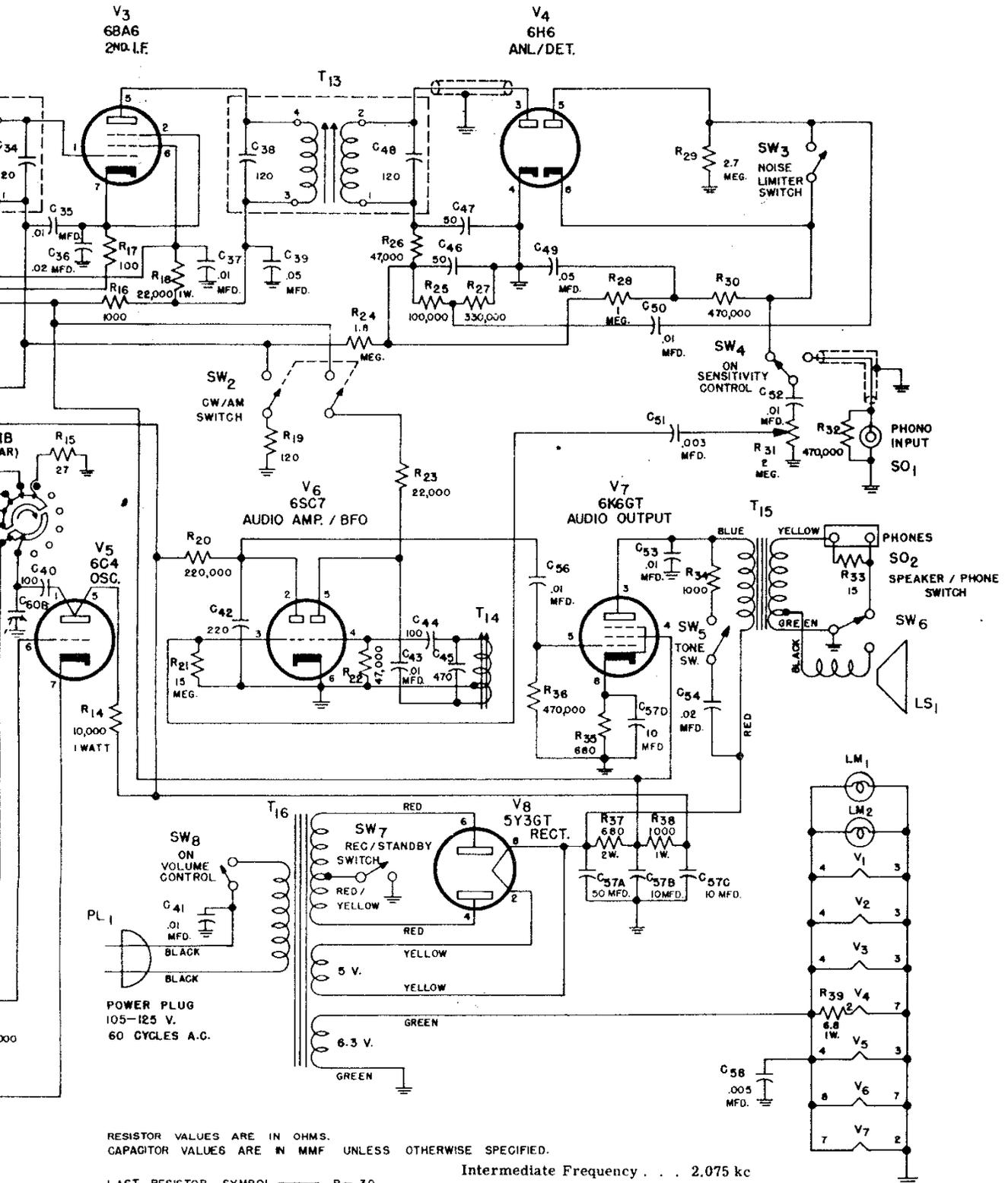
Component location, bottom view.

19-11,12



BAND SELECTOR POSITION	SWITCH SW. 1 RANGE	
A	540-1650 KC.	
B	2.5 - 6.6 MC.	
C	6 - 11 MC.	
D	13.5 - 32 MC.	
E	47 - 55 MC.	

NOTE: SWITCH SHOWN IN POSITION E.



SERVICE PARTS LIST

Ref. No.	Description	Hallcrafters Part Number	Ref. No.	Description	Hallcrafters Part Number
CONDENSERS			TRANSFORMERS AND COILS (Cont.)		
C-1,4,58	.005 mfd. 450 V., ceramic	47A168	T-6	Transformer, oscillator stage, band B	51B1032
C-5,39,49	.05 mfd. 400 V., tubular	46AW503J	T-7	Transformer, oscillator stage, band C	51B1033
C-6,7,9,10, 11	Trimmer assembly, 5 section antenna stage	44B355	T-8	Transformer, oscillator stage, band D	51B1034
C-8,42	220 mmf. 500 V., mica	CM20A221K	T-9	Transformer, oscillator stage, band E	51B1035
C-12	Trimmer adjustable, wave trap	44A356	T-10,11, 12,13	Transformer, IF amp. and detector stages	50B369
C-13,14,15	4.7 mmf. 500 V., bakelite	47A160-6	T-14	Transformer, BFO	54B038
C-16,59	2.2 mmf. 500 V., bakelite	47A160-4	T-15	Transformer, audio output	55B107
C-17,40,44	100 mmf. 500 V., ceramic	47A086	T-16	Transformer, power	52C164
C-18,19,22, 24,25,26	Trimmer assembly, 6 sections, oscillator stage	44B354	L-1	Coil, low pass filter	53A135
C-20	4700 mmf. 500 V., mica	CM35A472K	L-2	Coil, wave trap, antenna section	51B1036
C-21	1,000 mmf. 2% 500 V., silver mica	CM20C102G	SWITCHES		
C-23	500 mmf. 2% 500 V., silver mica	CM20C501G	SW-1	Band switch assembly	60B323
C-27	.1 mfd. 200 V., tubular	46A104J	SW-2	Switch, toggle, DPST, CW/AM control	60A285
C-28,36,54	.02 mfd. 600 V., tubular	46AY203J	SW-3,5,7	Switch, toggle, SPST, STANBY/REC., NOISE LIMITER & TONE control	60A138
C-29,32,35, 37,43,50, 52,53,56	.01 mfd. 600 V., tubular	46AZ103J	SW-4	Switch, part of SENSITIVITY control, R-6	
C-41	.01 mfd. 400 V., molded paper	46AB103J	SW-6	Switch, slide, SPDT, SPEAKER/PHONE control	60A243
C-45	470 mmf. 500 V., mica	CM20A471J	SW-8	Switch, part of VOLUME control R-31	
C-46,47	50 mmf. 500 V., ceramic	47A091	PLUGS AND SOCKETS		
C-51	.003 mfd. 600 V., tubular	46AZ302J	PL-1	Line cord and plug	87A078
C-55	10 mmf. 500 V., mica	CC20UK100K	SO-1	Receptacle, phono motor	36A029
C-57	50-10-10 mfd. 350-100-25V., electrolytic	45B122	SO-2	Receptacle, headphone jack	88A071
C-59	Tuning condenser, 2 section	48C198		Socket, octal (tube)	6A269
RESISTORS				Socket, miniature (tube)	6A297
R-1,24	1.8 megohms 1/2 watt, carbon	RC20AE185M		Socket, dial light	86B063
R-2	2200 ohms 1/2 watt, carbon	RC20AE222M	TUBES, RECTIFIERS AND LAMPS		
R-3,15	27 ohms 1/2 watt, carbon	RC20AE270M	V-1,2,3	6BA6, mixer, 1st & 2nd IF amplifier	90X6BA6
R-4,27	330,000 ohms 1/2 watt, carbon	RC20AE334K	V-4	6H6, detector & ANL	90X6H6
R-5,35	680 ohms 1/2 watt, carbon	RC20AE681K	V-5	6C4, oscillator	90X6C4
R-6	10,000 ohms, variable, SENSITIVITY control	25B603	V-6	6SC7, audio amplifier & BFO	90X6SC7
R-7,17	100 ohms 1/2 watt, carbon	RC20AE101K	V-7	6K6GT, power amplifier	90X6K6GT
R-8,16,34	1000 ohms 1/2 watt, carbon	RC20AE102M	V-8	5Y3GT, rectifier	90X5Y3GT
R-9,30,32, 36	470,000 ohms 1/2 watt, carbon	RC20AE474M	LM-1,2	Lamp, 6-8 V., 250 ma., Mazda #44	39A003
R-10,12	4700 ohms 1/2 watt, carbon	RC20AE472K	MISCELLANEOUS		
R-11	10,000 ohms 1/2 watt, carbon	RC20AE103K	TS-1	Terminal strip, antenna	88A032
R-13,23	22,000 ohms 1/2 watt, carbon	RC20AE223M		Lock, line cord	76A299
R-14	10,000 ohms 1 watt, carbon	RC30AE103K		Clip, coil mtg.	76A325
R-18	22,000 ohms 1 watt, carbon	RC30AE223M		Shaft, tuning drive	74A248.
R-19	120 ohms 1/2 watt, carbon	RC20AE121M		"C" washer (tuning drive shaft)	4A139
R-20	220,000 ohms 1/2 watt, carbon	RC20AE224K		Spring, dial cord	75A012
R-21	15 megohms 1/2 watt, carbon	RC20AE156K		Dial cord	38A019
R-22,26	47,000 ohms 1/2 watt, carbon	RC20AE473M		Plate, dial	63C333
R-25	100,000 ohms 1/2 watt, carbon	RC20AE104K		Pointer, general coverage dial	82A149
R-28	1 megohm 1/2 watt, carbon	RC20AE105M		Pointer, band spread dial	82A148
R-29	2.7 megohms 1/2 watt, carbon	RC20AE275M		Dial glass (calibrated)	22C204
R-31	2 megohms, variable, VOLUME control	25B602		Gasket, dial glass	12A042
R-33	15 ohms 1/2 watt, carbon	RC20AE150M		Clip, dial glass mtg.	76A390
R-37	680 ohms 2 watts, carbon	RC40AE681M		Pad, dial clip	16A126
R-38	1000 ohms 1 watt, carbon	RC30AE102M		Pad, felt (round disc)	14A166
R-39	6.8 ohms 1 watt, carbon	RC30AE068K		Pad, sponge rubber	16A047-1
TRANSFORMERS AND COILS				Mounting feet, rubber	16A007
T-1	Transformer, antenna stage, band A	51B1028		Speaker, P.M.	85C030
T-2	Transformer, antenna stage, band B	51B1027		Knob, BAND SELECTOR, SENSITIVITY, and VOLUME controls	15A049
T-3	Transformer, antenna stage, bands C & D	51B1026		Knob, BAND SPREAD and general coverage controls	15A047
T-4	Transformer, antenna stage, band E	51B1030			
T-5	Transformer, oscillator stage, band A	51B1031			