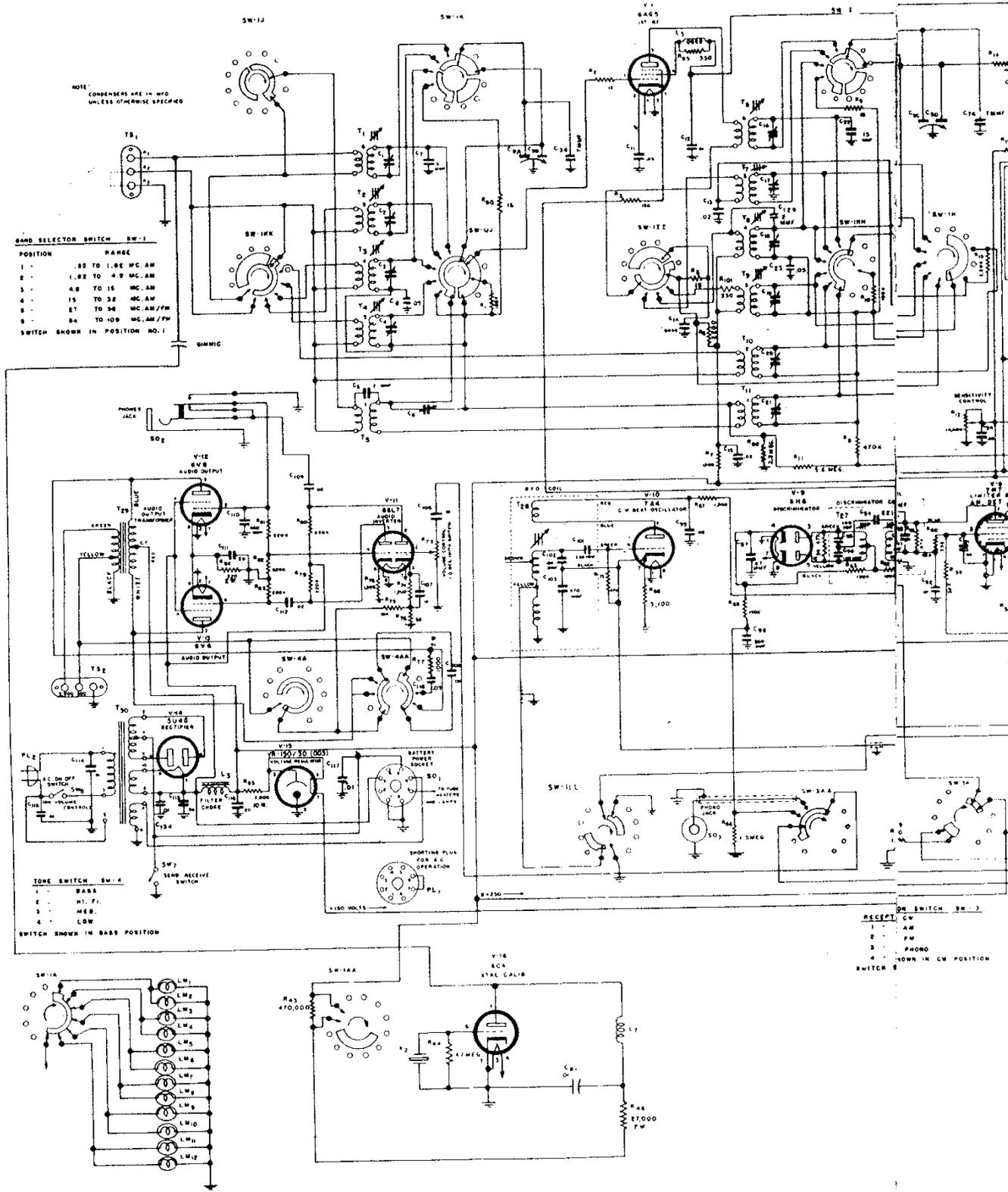
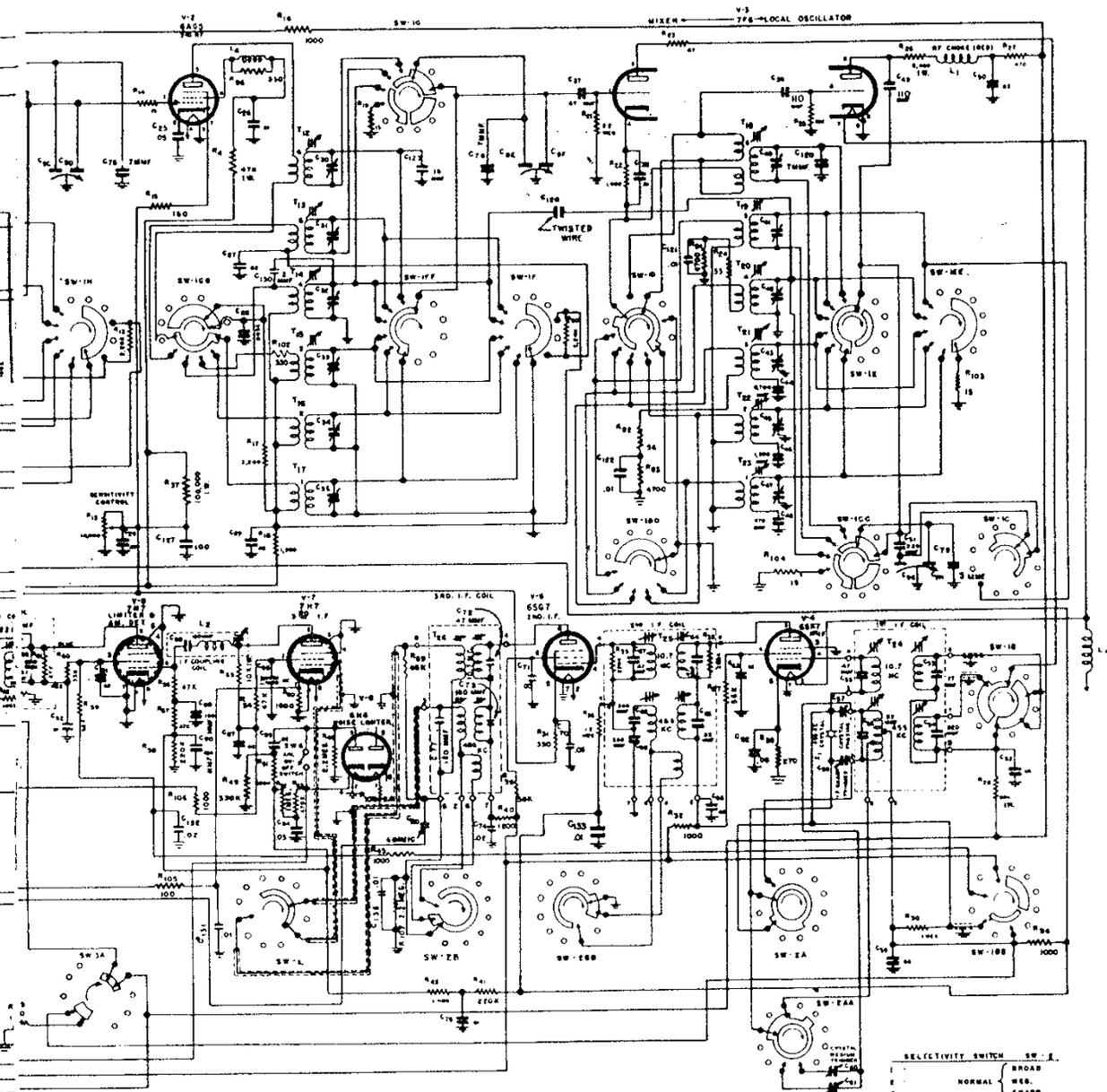


MODELS SX-62



20-8142



SW SWITCH SW-2
 AM
 PM
 PHONO
 DOWN IN CW POSITION

SELECTIVITY SWITCH SW-5
 1. BROAD
 2. MED.
 3. SHARP
 4. BROAD
 5. MED.
 6. SHARP
 SWITCH SHOWN IN NORMAL BROAD POSITION

NOTE-
 RESISTOR VALUES ARE IN OHMS.
 ALL RESISTORS ARE 1/2 WATT, UNLESS OTHERWISE SPECIFIED.
 CONDENSER VALUES ARE IN MFD. UNLESS OTHERWISE SPECIFIED

890282-0

LAST RESISTOR SYMBOL ASSIGNED -R108
 LAST CAPACITOR SYMBOL ASSIGNED -C135

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Connect high side of signal generator through an 0.1 mfd. capacitor to pin #1, of the 7F8 converter tube. With signal generator set at approximately 455 kc align slugs S-1,3,5,10,12 and 14 for maximum output.

Set RECEPTION control at CW and adjust slug S-8 for a 1,000 cycle note.

Set the SELECTIVITY control at CRYSTAL/BROAD. While slowly turning slug S-10 in one direction across the resonant setting obtained above, "rock" the signal generator tuning and observe the dip in the output meter reading as the adjustment passes through the response of the crystal filter. The correct setting of the slug S-10 is in the center of the observed dip. Set the signal generator at the weaker of the two responses obtained on either side of zero beat and adjust the crystal phasing trimmer C-57 for the null.

Set the SELECTIVITY control at CRYSTAL/SHARP and with trimmer C-61 set near minimum capacity, slowly increase its capacity while "rocking" the signal generator and adjust for maximum output. It may be necessary at this point to reduce the signal generator input and the receiver sensitivity to prevent overloading. After peaking the adjustment, turn the trimmer in until a drop in output of about 2 db. occurs. At this point the sharp crystal will have very good selectivity without sacrificing too much gain.

Tune the signal generator to exact crystal frequency and note output meter reading. Set the SELECTIVITY control at CRYSTAL/BROAD and note the drop in output, and output meter reading. Now switch to CRYSTAL/MEDIUM and with trimmer C-60 near minimum capacity, slowly increase its capacity, while "rocking" the signal generator, until the output meter indicates about midway between the output readings obtained in sharp crystal and broad crystal positions.

Set the SELECTIVITY control at CRYSTAL/SHARP and reset signal generator for the exact crystal frequency. Switch to NORMAL/SHARP and reset slugs S-1,3,5,12,14 and trimmer C-58 for maximum output.

Set the RECEPTION control at CW and adjust the BFO slug S-8 for zero beat.

IF AMP. ALIGNMENT (10.7 mc) - Set the mc controls as follows:

- BAND SELECTOR - - - - - 27/56 mc range
 - RECEIVE/STANDBY switch - RECEIVE
 - CALIB. XTAL switch - - - - OFF
 - NOISE LIMITER switch - - - OFF
 - VOLUME - - - - - Near maximum
 - RECEPTION control - - - - AM
 - SELECTIVITY control - - - - NORMAL/SHARP
 - SENSITIVITY control - - - - Near Maximum
- Set tuning dial pointer at approx. midscale.

Connect the high side of the signal generator through an 0.1 mfd. capacitor to pin #1 of the 7F8 converter tube. Set signal generator at 10.7 mc and adjust slugs S-4, 6, 9, 13 and 15 for maximum output. Now set slugs S-2 and S-11 for maximum output, but do not readjust slugs S-4,6,9,13 and 15.

Set RECEPTION control at CW and adjust slug S-17 for zero beat.

Set RECEPTION control at FM and adjust slug S-16 for maximum output. Now set Slug S-7 for the null or minimum output as indicated on the output meter. Check the discriminator by slowly tuning the signal generator through 10.7 mc and observe the two maximum audio level readings on the output meter. If the two peaks are equal the job is done; if not, it may be necessary to reset Slug S-16 until a reasonable balance is obtained.

RF AMP ALIGNMENT

After completing the alignment of the IF amplifier stages, the RF amplifier stages may be aligned according to the following alignment chart. Connect the high side of the signal generator to terminal A-1 through the dummy antenna specified and connect a jumper between antenna terminal A-2 and GND. Use just enough signal generator output to obtain a 500 milliwatt audio output level for best results.

ALIGNMENT CHART

Dummy Antenna	Signal Generator Frequency	Band Selector Range	Radio Dial Setting	Adjust	Remarks
RMA	1500 kc	550-1600 kc	1500 kc	C-47*, 6, 21, 35	Adjust for max. output
	600 kc		600 kc	S-36*	
RMA	4.5 mc	1.62-4.9 mc	4.5 mc	C-45*, 20, 34	Adjust for max. output
	2.0 mc		2.0 mc	S-35*	
RMA	14.0 mc	4.9-15 mc	14.0 mc	C-43*, 4, 19, 33	Adjust for max. output
	7.0 mc		7.0 mc	S-34*, 22, 26, 30	
RMA	28 mc	15-32 mc	28 mc	C-42*, 3, 18, 32	Adjust for max. output
	18 mc		18 mc	S-33*, 21, 25, 29	
300-ohm non-inductive resistor	50 mc	27-56 mc	50 mc	C-41*, 2, 17, 31	Adjust for max. output
	30 mc		30 mc	S-32*, 20, 24, 28	
300-ohm non-inductive resistor	105 mc	54-109 mc	105 mc	C-40*, 1, 16, 30	Adjust for max. output
	60 mc		60 mc	S-31*, 19, 23, 27	

* Note - Calibration adjustment

Note - The standard RMA dummy antenna mention in the alignment chart consists of a 200 mmf condenser in series with a 20 uh r-f choke which is shunted by a 400 mmf condenser in series with a 400 ohm carbon resistor.

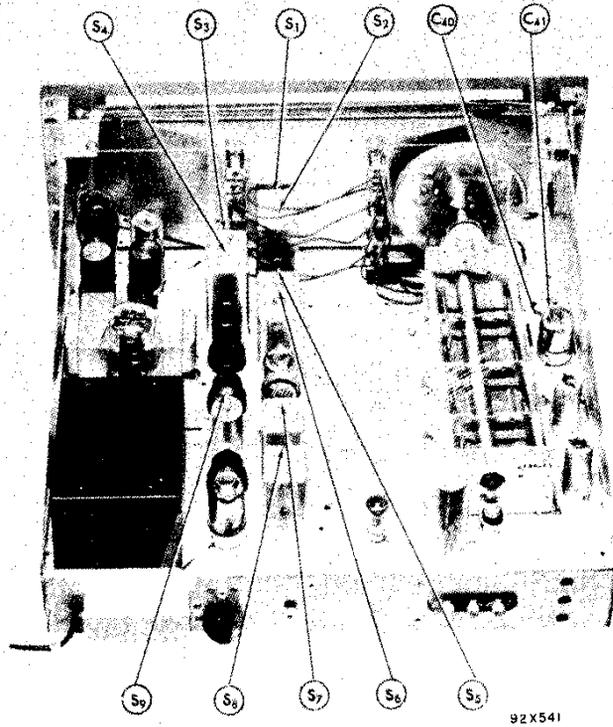


Fig. 2. Alignment adjustments, top view

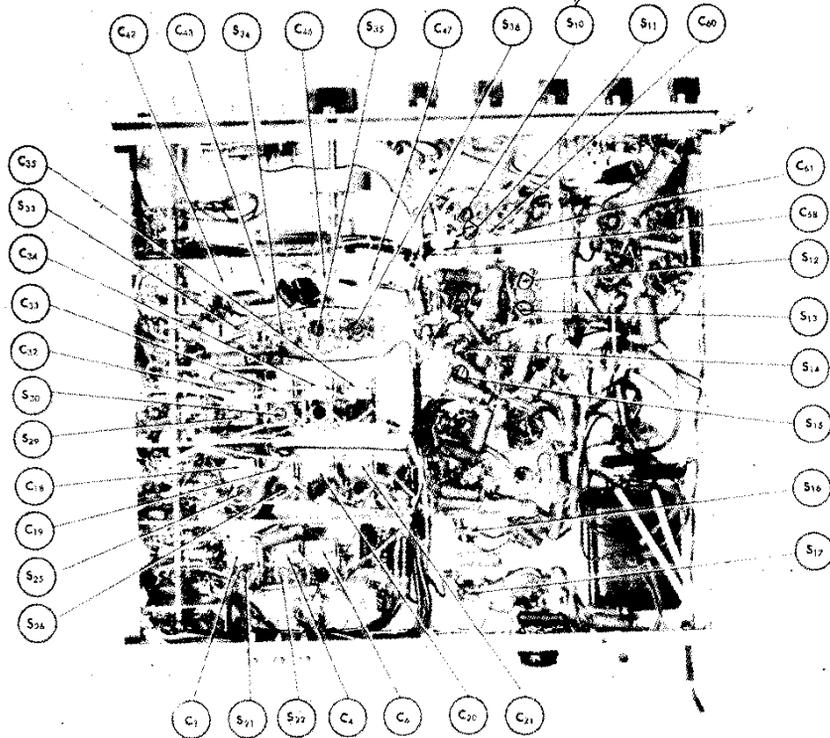
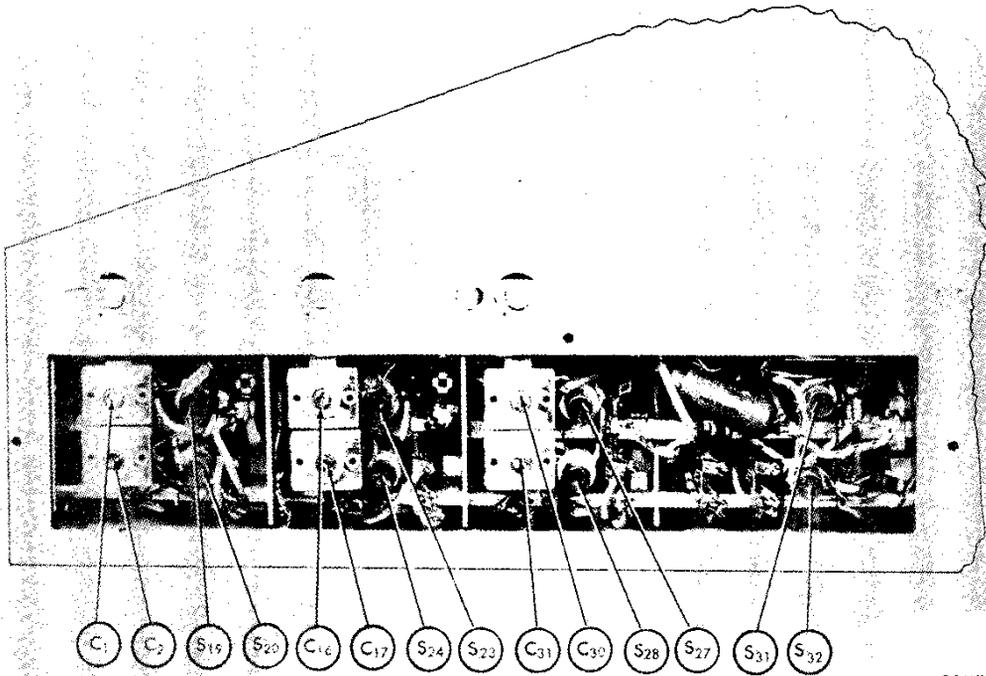


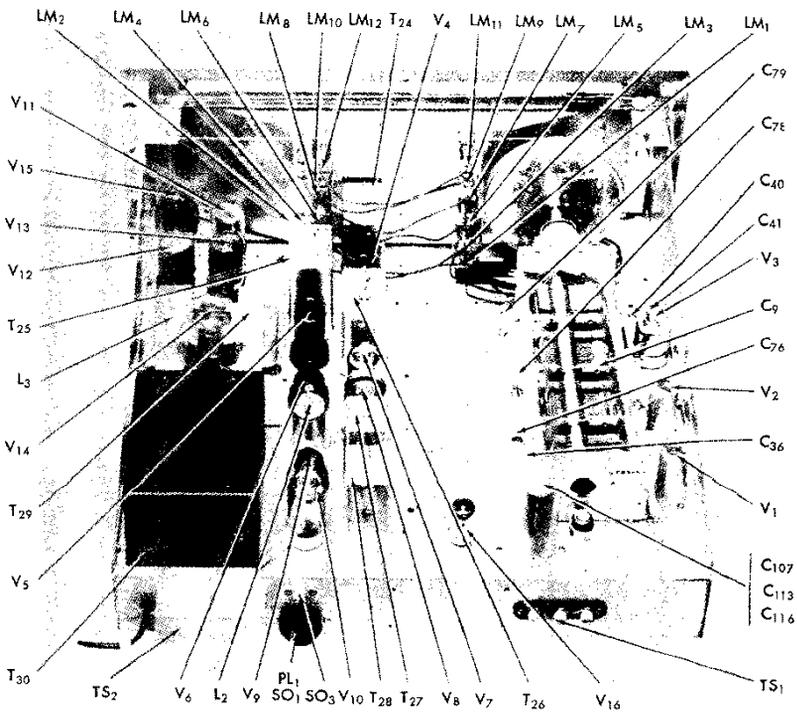
Fig. 3. Alignment adjustments, bottom view

MODELS SX-62



92X543

Fig. 4. Alignment adjustments, left side view



92X544

Fig. 5. Component locations, top view

MODELS SX-62

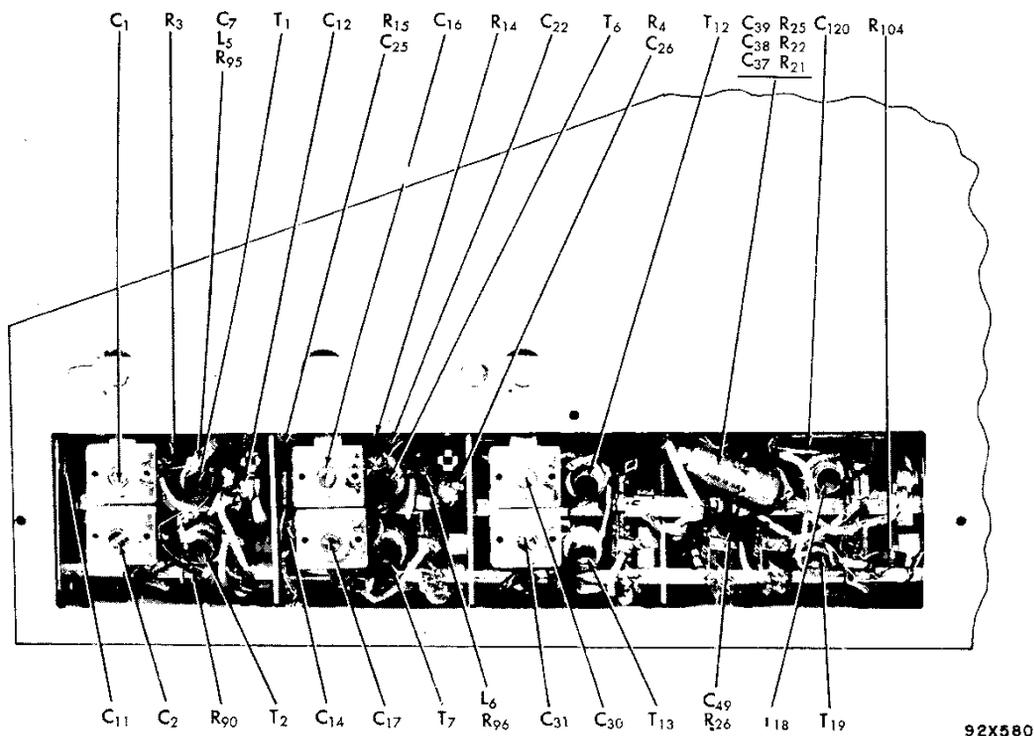


Fig. 7. Component locations, left side view.

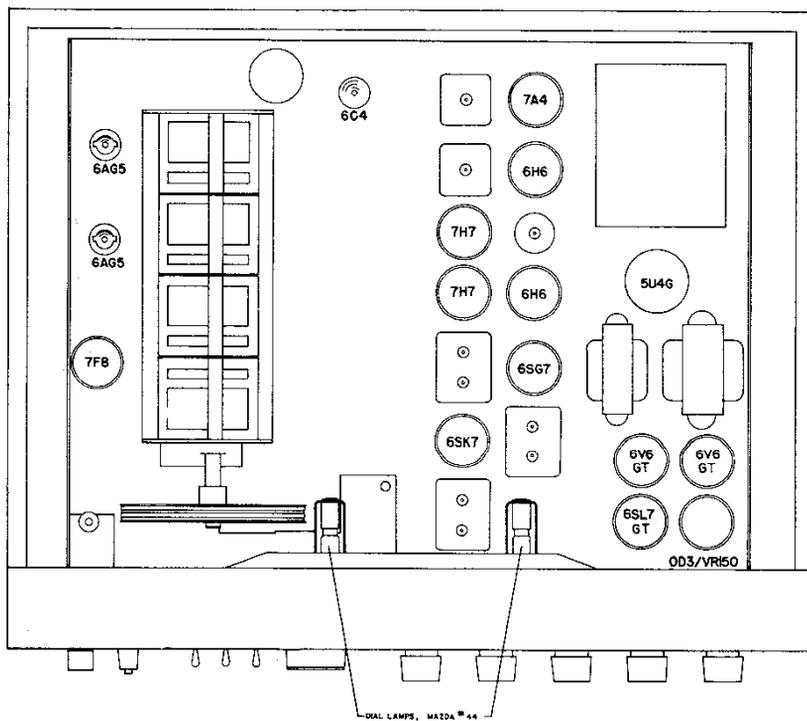


Fig. 8. Top view, location of tubes and dial lamps

MODELS SX-62

SERVICE PARTS LIST

Ref. No.	Description	Hallicrafters Part Number	Ref. No.	Description	Hallicrafters Part Number
CONDENSERS			RESISTORS (Cont.)		
C-1,2,16,17,30,31	Trimmers, adjustable; 2 section; antenna, RF amp. and mixer stages	44B165	R-16,22,32,45,86,106	1000 ohms $\frac{1}{2}$ watt, carbon	RC20AE102M
C-3,4,6,18,19,20,21,32,33,34,35	Part of transformers T-3,4, 5,8,9,10,11,14,15,16 & 17 respectively		R-21,48,107	2.2 megohms $\frac{1}{2}$ watt, carbon	RC20AE225M
C-5,129,130	2 mmf. 500 V., bakelite	47A160-4	R-23	47 ohms $\frac{1}{2}$ watt, carbon	RC20AE470M
C-7,79	5 mmf. 500 V., ceramic	CC20UK050D	R-24	33 ohms $\frac{1}{2}$ watt, carbon	RC20AE330M
C-8,11,25	.05 mfd. 200 V., tubular	49A091	R-25,75	10,000 ohms $\frac{1}{2}$ watt, carbon	RC20AE103K
C-9	Capacitor, main tuning	48C204	R-26	5600 ohms 1 watt, carbon	RC30AE562K
C-12,26,38,75,81,92,106,117,121,122,131,133,134,135	.01 mfd. 600 V., tubular	46A Z103J	R-27	470 ohms $\frac{1}{2}$ watt, carbon	RC20AE471M
C-13,15,27,29,50,59,63,74,86,87,91,109,112,132	.02 mfd. 600 V., tubular	46AY203J	R-28	68,000 ohms 1 watt, carbon	RC30AE683K
C-14,28	5600 mmf. 500 V., mica	CM35A562M	R-29	120 ohms $\frac{1}{2}$ watt, carbon	RC20AE121K
C-22,123	15 mmf. 500 V., ceramic	CC20UK150K	R-30,42,52	1 megohm $\frac{1}{2}$ watt, carbon	RC20AE105M
C-23,62,70,84,85	.05 mfd. 200 V., tubular	46AU503J	R-31,60	330 ohms $\frac{1}{2}$ watt, carbon	RC30AE331K
C-24	.25 mfd. 200 V., tubular	46AT254J	R-36	1.2 megohms $\frac{1}{2}$ watt, carbon	RC20AE125K
C-36,76,78,120	7 mmf. 500 V., ceramic	CC20UK070K	R-37	100,000 ohms 1 watt, carbon	RC30AE104K
C-37,97	47 mmf. 500 V., mica	CM20A470K	R-38	270 ohms $\frac{1}{2}$ watt, carbon	RC20AE271K
C-39,49	110 mmf. 500 V., ceramic	CC25UK111J	R-39,59,87	56,000 ohms $\frac{1}{2}$ watt, carbon	RC20AE563
C-40,41,57	Trimmer, adjustable, oscillator section, bands 5 & 6; and crystal phasing	44A078	R-41,58,79,80,81,83	220,000 ohms $\frac{1}{2}$ watt, carbon	RC20AE224K
C-42	Trimmer, adjustable, oscillator section, band 4	44A347	R-44	4.7 megohms $\frac{1}{2}$ watt, carbon	RC20AE475K
C-43,45	Trimmers, adjustable, oscillator section, bands 2 & 3	44A047	R-46	27,000 ohms 2 watt, carbon	RC40AE273K
C-44	4700 mmf. 2% 500 V., silver mica	CM35C472G	R-49	330,000 ohms $\frac{1}{2}$ watt, carbon	RC20AE334K
C-46	1500 mmf. 2% 500 V., silver mica	CM30C152G	R-50	1800 ohms $\frac{1}{2}$ watt, carbon	RC20AE182K
C-47	Trimmer, adjustable, oscillator section, band 1	44A076	R-55	10,000 ohms 1 watt, carbon	RC30AE103K
C-48	470 mmf. 2% 500 V., mica	CM20A471G	R-56,57,71,94	47,000 ohms $\frac{1}{2}$ watt, carbon	RC20AE473K
C-51	220 mmf. 2% 500 V., mica	CM25E221G	R-65	150,000 ohms $\frac{1}{2}$ watt, carbon	RC20AE154K
C-52,66,71,99,108,118	.05 mfd. 600 V., tubular	46AY503J	R-66	1 megohm $\frac{1}{2}$ watt, carbon	RC20AE155K
C-58,60,61	Trimmer, adjustable, crystal phasing	44B164	R-68	5100 ohms 5% $\frac{1}{2}$ watt, carbon	RC20AE512J
C-89,90	180 mmf. 500 V., mica	CM20A181K	R-73	Resistor, variable, VOLUME control	25A549
C-98	560 mmf. 500 V., mica	CM25A561K	R-76,92	56 ohms $\frac{1}{2}$ watt, carbon	RC20AE560K
C-107	10 mfd. 25 V., electrolytic	45A121	R-77	1000 ohms 2 watts, carbon	RC40AE102K
C-110	680 mmf. 500 V., mica	CM25A681K	R-82	3200 ohms $\frac{1}{2}$ watt, carbon	RC20AE822K
C-111,113,116	20 mfd. 25 V., 30-20 mfd. 450 V., electrolytic	45A041	R-84	220 ohms 2 watts, carbon	RC40AE221K
C-114,115	.01 mfd. 600 V., moulded paper	46BR103J	R-85	2000 ohms 10 watts, WW	24BG202D
C-127	100 mfd. 25 V., electrolytic	45A116	R-88	2.2 megohms $\frac{1}{2}$ watt, carbon	RC20AE225K
RESISTORS			R-89	68,000 ohms $\frac{1}{2}$ watt, carbon	RC20AE683K
R-1,10,51	100,000 ohms $\frac{1}{2}$ watt, carbon	RC20AE104M	R-91,93	4700 ohms $\frac{1}{2}$ watt, carbon	RC20AE472K
R-2	12 ohms $\frac{1}{2}$ watt, carbon	RC20AE120K	R-101,102	330 ohms $\frac{1}{2}$ watt, carbon	RC20AE331M
R-3,15	150 ohms $\frac{1}{2}$ watt, carbon	RC20AE151K	R-105	100 ohms $\frac{1}{2}$ watt, carbon	RC20AE101K
R-4,54	47,000 ohms 1 watt, carbon	RC30AE473K	R-106	6.8 ohms 1 watt, carbon	RC30AE068K
R-5,9,14,19,90,103,104	15 ohms $\frac{1}{2}$ watt, carbon	RC20AE150M	TRANSFORMERS AND COILS		
R-6,13,17,20	2200 ohms $\frac{1}{2}$ watt, carbon	RC20AE222M	T-1	Transformer, antenna stage, band 6	51B829
R-7,18,40,67,74,78	1200 ohms $\frac{1}{2}$ watt, carbon	RC20AE122K	T-2	Transformer, antenna stage, band 5	51B828
R-8,43,53	470,000 ohms $\frac{1}{2}$ watt, carbon	RC20AE474M	T-3	Transformer, antenna stage, band 4	51B990
R-11	5.6 megohms $\frac{1}{2}$ watt, carbon	RC20AE565K	T-4	Transformer, antenna stage, band 3	51B826
R-12	Resistor, variable, SENSITIVITY control	25A548	T-5	Transformer, antenna stage, band 1	51B823
			T-6,12	Transformer, RF and converter stages, band 6	51B833
			T-7	Transformer, RF stage, band 5	51B832
			T-8,14	Transformer, RF and converter stages, band 4	51B989
			T-9	Transformer, RF stage, band 3	51B987
			T-10	Transformer, antenna stage, band 2	51B825
			T-11	Transformer, RF stage, band 1	51B824
			T-13	Transformer, converter stage, band 5	51B844
			T-15	Transformer, converter stage, band 3	51B988
			T-16	Transformer, converter stage, band 2	51B986

Ref. No.	Description	Hallcrafters Part Number
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TRANSFORMERS AND COILS (Cont.)

T-17	Transformer, converter stage, band 1	51B985
T-18	Transformer, oscillator stage, band 6	51B839
T-19	Transformer, oscillator stage, band 5	51B838
T-20	Transformer, oscillator stage, band 4	51B991
T-21	Transformer, oscillator stage, band 3	51B836
T-22	Transformer, oscillator stage, band 2	51B835
T-23	Transformer, oscillator stage, band 1	51B834
T-24	Transformer, 1st IF amp stage	50C198
T-25	Transformer, 2nd IF amp stage	50C190
T-26	Transformer, 3rd IF amp stage	50C373
T-27	Transformer, FM detector	50C191
T-28	Transformer, BFO	54C032
T-29	Transformer, audio output	55B077
T-30	Transformer, power (115 V. 50/60 cycles)	52C141
*T-30	Transformer, power (115/230 V. 25/60 cycles)	52C131
L-1	RF choke (coded red)	53B008
L-2	IF coupling coil	53B104
L-3	Choke, filter	56B067
L-4	RF choke, filament	53A009
L-5,6	RF choke, screen (wound on R-95 & R-96)	37A117
L-7	Plate coil (Tube V-16)	53A139

Ref. No.	Description	Hallcrafters Part Number
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TUBES, RECTIFIERS AND LAMPS

V-1,2	Type 6AG5, antenna & RF amplifier	90X6AG5
V-3	Type 7F8, oscillator/converter	90X7F8
V-4	Type 6SK7, 1st IF amplifier	90X6SK7
V-5	Type 6SG7, 2nd IF amplifier	90X6SG7
V-6,9	Type 6H6, noise limiter & discriminator	90X6H6
V-7,8	Type 7H7, 3rd IF amplifier & AM detector	90X7H7
V-10	Type 7A4, BFO	90X7A4
V-11	Type 6SL7GT, phase inverter	90X6SL7GT
V-12,13	Type 6V6GT, AF power amplifier	90X6V6GT
V-14	Type 5U4G, rectifier	90X5U4G
V-15	Type OD3/VR150, voltage regulator	90XVR150
V-16	Type 6C4, calibration oscillator	90X6C4
LM-1,2,3,4,5,6,7,8,9,10,11,12	Lamp, 6-8 V., Mazda #44 (Blue bead)	39A003

MISCELLANEOUS

TS-1,2	Terminal strip, antenna or speaker	88A567
	Screw, knurled head, for above terminal strip	3A1371
X-1	Crystal, 455 KC	19A123
X-2	Crystal, calibration, 500 KC	19A1211
	Lock, line cord	76A299
	Pulley, condenser drive	28B068
	Flywheel, dial drive	71A187
	Shaft, general coverage dial	74A252
	Dial cord	38A019
	Escutcheon	7D078
	Window, general coverage dial	22C214
	Dial scale (calibrated)	22D215
	Clip, dial scale & window mtg.	76A043
	Shaft, index control	74A013
	Washer, "C" type, index control shaft	4A333
	Spring, dial drive & pointer index	75A013
	Dial pointer	67B835
	Knob, BAND SELECTOR control	15A088-2
	Knob, RECEPTION control	15A045
	Knob, SELECTIVITY control	15A063
	Knob, TONE control	15A062
	Knob, SENSITIVITY control	15A064
	Knob, TUNING control	15A047
	Knob, POINTER RESET	15A074-1
	Knob, VOLUME	15A097
	Mounting foot, rubber	16A029

SWITCHES

SW-1	Switch, BAND SELECTOR	60B329
SW-2	Switch, SELECTIVITY	60A234
SW-3	Switch, RECEPTION	60C330
SW-4	Switch, TONE	60C236
SW-5,6,7	Switch, toggle, SPST	60A138
SW-8	Switch, power (Part of volume control R-73)	

PLUGS AND SOCKETS

PL-1	Plug, octal (with jumpers)	35A003
PL-2	Plug and cord, power	87A078
SO-1	Socket, octal (BATTERY POWER and tube)	6A035
SO-2	Connector, PHONES	36B030
SO-3	Connector, PHONO	36A029
	Socket, miniature (6AG5 tube)	6A268
	Socket, miniature (6C4 tube)	6A292
	Socket, loktal (7H7 & 7A4 tube)	6A213
	Socket, loktal (7F8 tube)	6A223
	Socket, dial light	86B073

* Universal model only.