

HALLICRAFTERS  
MODEL SX-62

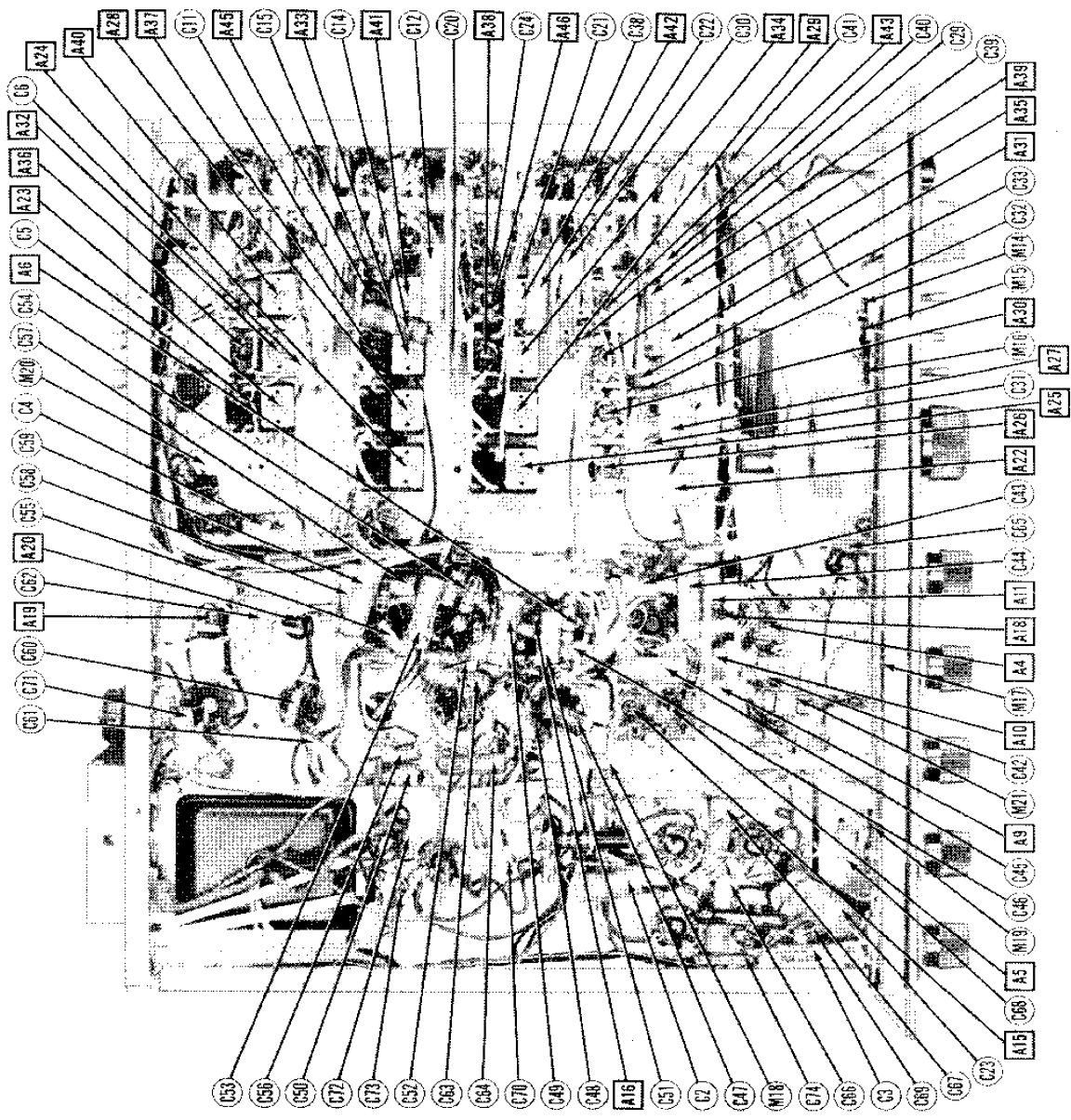
HALLICRAFTERS MODEL SX-62

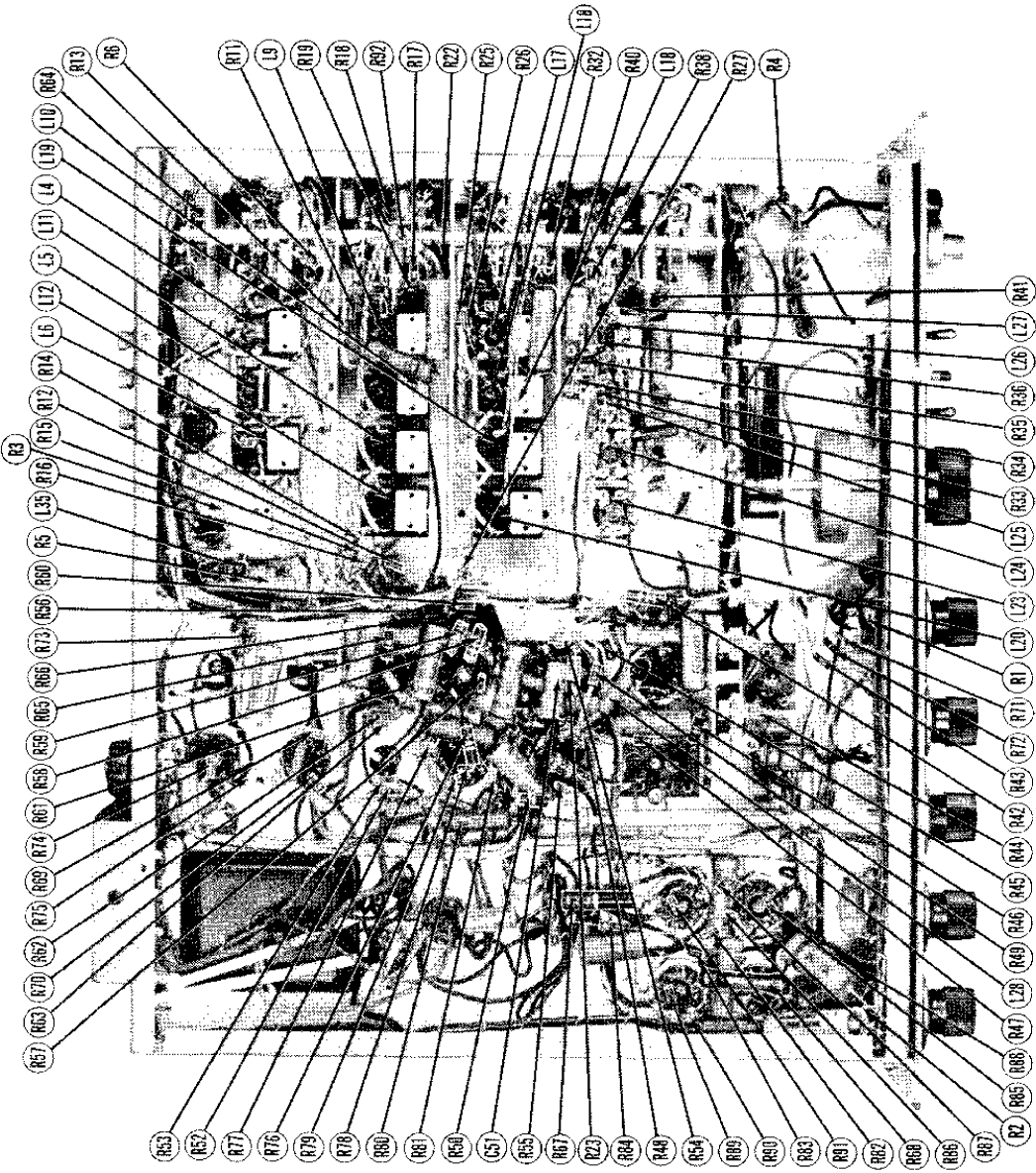
TRADE NAME	Hallcrafters, Model SX-62	
MANUFACTURER	The Hallcrafters Co., 8th & Kostner Avenues, Chicago 24, Illinois	
TYPE SET	AC Operated Multi-Band AM-FM Superheterodyne Receiver	
TUBES(SIXTEEN)	Types 6C4 XTAL Calib. Osc., 6AG5 1st RF Amp., 6AC6 2nd RF Amp., 7F8 Converter, 6SK7 1st IF Amp., 6XG7 2nd IF Amp., 7H7 3rd IF Amp., 7H7 4th FM IF Amp.-AM DET-AVC, 6H6 Discriminator, 7A4 CW Beat Osc., 6H6 Noise Limiter, 6SL7GT AF-Phase Inv. (2) 6V6GT Power Output, CDS/VR-150 Voltage Regulator, 5U4G Rectifier	
POWER SUPPLY	105-125 volts AC	RATING .98 Amp., @ 117 Volts AC
TUNING RANGE	Band #1 550-1620KC, Band#2 1.62-1.9MC, Band#3 4.9-15MC, Band#4 15-32MC, Band#5 27-56MC AM-FM, Band#6 54-109MC AM-FM.	

HOWARD W. SAMS & CO., INC. • Indianapolis Indiana

"The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed."  
"Reproduction or use, without express permission, of editorial or pictorial con-

tent, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. Copyright 1949 by Howard W. Sams & Co., Inc., Indianapolis Indiana, U. S. of America. Copyright under International Copyright Union. All rights reserved under Inter-American Copyright Union (1910) by Howard W. Sams & Co., Inc." Printed in U. S. of America





**HALICRAFTERS**  
**MODEL SX-62**  
**PAGE 3**

# PARTS LIST AND DESCRIPTIONS (Continued)

## RESISTORS

ITEM No.	RATING	REPLACEMENT DATA		IDENTIFICATION CODES
		HALLICRAFTERS PART No.	ARC PART No.	
R27	1000K	R270A1223	RTS-1200	Br.-Red-Blk. 2nd IF Decoupling
R28	1.5K	R280A1509	RTS-1500	Red.-Blk-Grn. 1st IF Coil Shunt
R29	2.2 Meg.	R290A1522K	RTS-2.2 Meg.	Red.-Blk-Grn. Converter Grid
R30	1000K	R300A1000	RTS-1000	Yl.-Yl.-Blk. Parasitic Suppressor
R31	47K	R310A1021	RTS-47K	Red.-Blk-Red 2nd IF Decoupling
R32	2000K	R320A1522M	RTS-2000	Grn.-Blue-Blk. Osc. Coil Shunt
R33	1000K	R330A1522K	RTS-1000	Yl.-Yl.-Red Osc. Grid
R34	1000K	R340A1522K	RTS-1000	Yl.-Yl.-Red Osc. Grid
R35	1000K	R350A1522K	RTS-1000	Yl.-Yl.-Red Osc. Grid
R36	500K	R360A1522K	RTS-500K	Yl.-Yl.-Red Osc. Grid
R37	15K	R370A1509	RTS-15K	Gr.-Grn.-Blk. Osc. Grid
R38	15K	R380A1509	RTS-15K	Gr.-Grn.-Blk. Osc. Grid
R39	10K	R390A1509	RTS-10K	Gr.-Grn.-Blk. Osc. Grid
R40	5000K	R400A1509	RTS-5000K	Gr.-Grn.-Blk. Osc. Grid
R41	470K	R410A1509	RTS-470K	Gr.-Grn.-Blk. Osc. Grid
R42	500K	R420A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R43	1000K	R430A1509	RTS-1000	Gr.-Grn.-Blk. Osc. Grid
R44	500K	R440A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R45	1000K	R450A1509	RTS-1000	Gr.-Grn.-Blk. Osc. Grid
R46	1.2 Meg.	R460A1509	RTS-1.2 Meg.	Gr.-Grn.-Blk. Osc. Grid
R47	1000K	R470A1509	RTS-1000	Gr.-Grn.-Blk. Osc. Grid
R48	500K	R480A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R49	500K	R490A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R50	500K	R500A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R51	200K	R510A1509	RTS-200K	Gr.-Grn.-Blk. Osc. Grid
R52	1 Meg.	R520A1509	RTS-1 Meg.	Gr.-Grn.-Blk. Osc. Grid
R53	500K	R530A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R54	500K	R540A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R55	500K	R550A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R56	500K	R560A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R57	500K	R570A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R58	500K	R580A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R59	500K	R590A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R60	500K	R600A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R61	500K	R610A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R62	500K	R620A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R63	500K	R630A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R64	500K	R640A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R65	500K	R650A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R66	500K	R660A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R67	500K	R670A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R68	500K	R680A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R69	500K	R690A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R70	500K	R700A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R71	1.5 Meg.	R710A1509	RTS-1.5 Meg.	Gr.-Grn.-Blk. Osc. Grid
R72	1200K	R720A1509	RTS-1200K	Gr.-Grn.-Blk. Osc. Grid
R73	1200K	R730A1509	RTS-1200K	Gr.-Grn.-Blk. Osc. Grid
R74	1000K	R740A1509	RTS-1000K	Gr.-Grn.-Blk. Osc. Grid
R75	500K	R750A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R76	500K	R760A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R77	500K	R770A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R78	500K	R780A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R79	500K	R790A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R80	500K	R800A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R81	500K	R810A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R82	500K	R820A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R83	500K	R830A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R84	500K	R840A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R85	500K	R850A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R86	500K	R860A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R87	500K	R870A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R88	500K	R880A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R89	500K	R890A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R90	500K	R900A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R91	500K	R910A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid
R92	500K	R920A1509	RTS-500K	Gr.-Grn.-Blk. Osc. Grid

Note: Some more's use two 47K resistors in parallel.  
Note 1. Not used in all models.

# PARTS LIST AND DESCRIPTIONS

## TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA		NOTES
		HALLICRAFTERS PART No.	STANDARD REPLACEMENT	
V1	6X4	6CA	609	
V2	6X4	6AG5	7BD	
V3	6X4	6AG5	7BD	
V4	6X4	6AG5	7BD	
V5	6X4	6AG5	7BD	
V6	6X4	6AG5	7BD	
V7	6X4	6AG5	7BD	
V8	6X4	6AG5	7BD	
V9	6X4	6AG5	7BD	
V10	6X4	6AG5	7BD	
V11	6X4	6AG5	7BD	
V12	6X4	6AG5	7BD	
V13	6X4	6AG5	7BD	
V14	6X4	6AG5	7BD	
V15	6X4	6AG5	7BD	
V16	6X4	6AG5	7BD	
V17	6X4	6AG5	7BD	
V18	6X4	6AG5	7BD	

## CAPACITORS

Capacity values given in the rating column are in mfd. for Electrolytic and Paper Capacitors, and in mfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING	REPLACEMENT DATA		IDENTIFICATION AND INSTALLATION NOTES
		HALLICRAFTERS PART No.	STANDARD REPLACEMENT	
C1A	30	4840413	4840413	
C1B	20	4840413	4840413	
C2	10	4840413	4840413	
C3	10	4840413	4840413	
C4	10	4840413	4840413	
C5	10	4840413	4840413	
C6	10	4840413	4840413	
C7	10	4840413	4840413	
C8	10	4840413	4840413	
C9	10	4840413	4840413	
C10	10	4840413	4840413	
C11	10	4840413	4840413	
C12	10	4840413	4840413	
C13	10	4840413	4840413	
C14	10	4840413	4840413	
C15	10	4840413	4840413	
C16	10	4840413	4840413	
C17	10	4840413	4840413	
C18	10	4840413	4840413	
C19	10	4840413	4840413	
C20	10	4840413	4840413	
C21	10	4840413	4840413	
C22	10	4840413	4840413	
C23	10	4840413	4840413	
C24	10	4840413	4840413	
C25	10	4840413	4840413	
C26	10	4840413	4840413	
C27	10	4840413	4840413	
C28	10	4840413	4840413	
C29	10	4840413	4840413	
C30	10	4840413	4840413	
C31	10	4840413	4840413	
C32	10	4840413	4840413	
C33	10	4840413	4840413	
C34	10	4840413	4840413	
C35	10	4840413	4840413	
C36	10	4840413	4840413	
C37	10	4840413	4840413	
C38	10	4840413	4840413	
C39	10	4840413	4840413	
C40	10	4840413	4840413	
C41	10	4840413	4840413	
C42	10	4840413	4840413	
C43	10	4840413	4840413	

Note: Some more's use two 47K resistors in parallel.  
Note 1. Not used in all models.



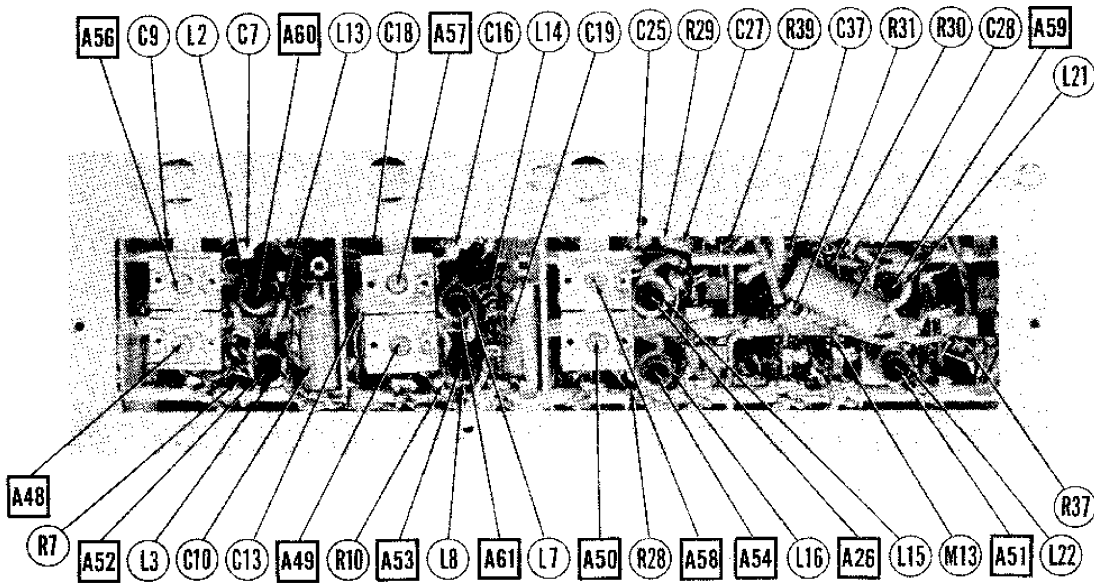
# PARTS LIST AND DESCRIPTIONS (Continued)

## DIAL LIGHTS

ITEM No.	BASE TYPE	VOLTS	AMPS	BEAD COLOR	REPLACEMENT DATA		NOTES
					HALOIN SYSTEMS PART No.	PART No.	
M1	Bayonet	6-8V	C. 35A	Blue			Type #44
M2							

## MISCELLANEOUS

ITEM No.	PART NAME	HALOIN PART No.	NOTES
M3	SWITCH	823329	Selector
M4	"	60A139	Standby
M5	"	60A138	YAL, Dial
M6	"	60A136	YAL, Dial
M7	"	60A135	YAL, Dial
M8	"	60A134	YAL, Dial
M9	"	60A133	YAL, Dial
M10	"	60A132	YAL, Dial
M11	"	60A131	YAL, Dial
M12	"	60A130	YAL, Dial
M13	"	60A129	YAL, Dial
M14	"	60A128	YAL, Dial
M15	"	60A127	YAL, Dial
M16	"	60A126	YAL, Dial
M17	"	60A125	YAL, Dial
M18	"	60A124	YAL, Dial
M19	"	60A123	YAL, Dial
M20	"	60A122	YAL, Dial
M21	"	60A121	YAL, Dial
M22	"	60A120	YAL, Dial
M23	"	60A119	YAL, Dial
M24	"	60A118	YAL, Dial
M25	"	60A117	YAL, Dial
M26	"	60A116	YAL, Dial
M27	"	60A115	YAL, Dial
M28	"	60A114	YAL, Dial
M29	"	60A113	YAL, Dial
M30	"	60A112	YAL, Dial
M31	"	60A111	YAL, Dial
M32	"	60A110	YAL, Dial
M33	"	60A109	YAL, Dial
M34	"	60A108	YAL, Dial
M35	"	60A107	YAL, Dial
M36	"	60A106	YAL, Dial
M37	"	60A105	YAL, Dial
M38	"	60A104	YAL, Dial
M39	"	60A103	YAL, Dial
M40	"	60A102	YAL, Dial
M41	"	60A101	YAL, Dial
M42	"	60A100	YAL, Dial
M43	"	60A99	YAL, Dial
M44	"	60A98	YAL, Dial
M45	"	60A97	YAL, Dial
M46	"	60A96	YAL, Dial
M47	"	60A95	YAL, Dial
M48	"	60A94	YAL, Dial
M49	"	60A93	YAL, Dial
M50	"	60A92	YAL, Dial
M51	"	60A91	YAL, Dial
M52	"	60A90	YAL, Dial
M53	"	60A89	YAL, Dial
M54	"	60A88	YAL, Dial
M55	"	60A87	YAL, Dial
M56	"	60A86	YAL, Dial
M57	"	60A85	YAL, Dial
M58	"	60A84	YAL, Dial
M59	"	60A83	YAL, Dial
M60	"	60A82	YAL, Dial
M61	"	60A81	YAL, Dial
M62	"	60A80	YAL, Dial
M63	"	60A79	YAL, Dial
M64	"	60A78	YAL, Dial
M65	"	60A77	YAL, Dial
M66	"	60A76	YAL, Dial
M67	"	60A75	YAL, Dial
M68	"	60A74	YAL, Dial
M69	"	60A73	YAL, Dial
M70	"	60A72	YAL, Dial
M71	"	60A71	YAL, Dial
M72	"	60A70	YAL, Dial
M73	"	60A69	YAL, Dial
M74	"	60A68	YAL, Dial
M75	"	60A67	YAL, Dial
M76	"	60A66	YAL, Dial
M77	"	60A65	YAL, Dial
M78	"	60A64	YAL, Dial
M79	"	60A63	YAL, Dial
M80	"	60A62	YAL, Dial
M81	"	60A61	YAL, Dial
M82	"	60A60	YAL, Dial
M83	"	60A59	YAL, Dial
M84	"	60A58	YAL, Dial
M85	"	60A57	YAL, Dial
M86	"	60A56	YAL, Dial
M87	"	60A55	YAL, Dial
M88	"	60A54	YAL, Dial
M89	"	60A53	YAL, Dial
M90	"	60A52	YAL, Dial
M91	"	60A51	YAL, Dial
M92	"	60A50	YAL, Dial
M93	"	60A49	YAL, Dial
M94	"	60A48	YAL, Dial
M95	"	60A47	YAL, Dial
M96	"	60A46	YAL, Dial
M97	"	60A45	YAL, Dial
M98	"	60A44	YAL, Dial
M99	"	60A43	YAL, Dial
M100	"	60A42	YAL, Dial
M101	"	60A41	YAL, Dial
M102	"	60A40	YAL, Dial
M103	"	60A39	YAL, Dial
M104	"	60A38	YAL, Dial
M105	"	60A37	YAL, Dial
M106	"	60A36	YAL, Dial
M107	"	60A35	YAL, Dial
M108	"	60A34	YAL, Dial
M109	"	60A33	YAL, Dial
M110	"	60A32	YAL, Dial
M111	"	60A31	YAL, Dial
M112	"	60A30	YAL, Dial
M113	"	60A29	YAL, Dial
M114	"	60A28	YAL, Dial
M115	"	60A27	YAL, Dial
M116	"	60A26	YAL, Dial
M117	"	60A25	YAL, Dial
M118	"	60A24	YAL, Dial
M119	"	60A23	YAL, Dial
M120	"	60A22	YAL, Dial
M121	"	60A21	YAL, Dial
M122	"	60A20	YAL, Dial
M123	"	60A19	YAL, Dial
M124	"	60A18	YAL, Dial
M125	"	60A17	YAL, Dial
M126	"	60A16	YAL, Dial
M127	"	60A15	YAL, Dial
M128	"	60A14	YAL, Dial
M129	"	60A13	YAL, Dial
M130	"	60A12	YAL, Dial
M131	"	60A11	YAL, Dial
M132	"	60A10	YAL, Dial
M133	"	60A9	YAL, Dial
M134	"	60A8	YAL, Dial
M135	"	60A7	YAL, Dial
M136	"	60A6	YAL, Dial
M137	"	60A5	YAL, Dial
M138	"	60A4	YAL, Dial
M139	"	60A3	YAL, Dial
M140	"	60A2	YAL, Dial
M141	"	60A1	YAL, Dial



# ALIGNMENT INSTRUCTIONS

## IF ALIGNMENT

Pre-set the front panel controls as follows:							
Receive/standby		Receive					
Calib. Xtal		Off					
Noise Limiter		Off					
Volume		Near Maximum					
Reception		AM					
Selectivity		Normal/Sharp					
Sensitivity		Near Maximum					
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1. .1MFD	High side to Pin 1 (Grid) 7F8 (V4), Low side to chassis	455KC	Band 1	1000KC	Across voice coil	A1, A2, A3, A4, A5, A6	Adjust for maximum output.
2. Set reception switch at "CW" and adjust A7 for 1000, note.							
3. Set selectivity control to crystal/broad. Turn A4 slowly in one direction across the resonant setting obtained above and "rock" the signal generator observing the dip in the output meter reading. The correct setting of A4 is in center of the observed dip. Set the signal generator at the weaker of the two peaks obtained on either side of zero beat and adjust A8 (crystal phasing trimmer) for the null.							
4. Set selectivity control to crystal/sharp and A9 near minimum capacity. Slowly increase its capacity while "rocking" the signal generator and adjust for maximum output. It may be necessary to reduce the signal generator input and the receiver sensitivity to prevent overloading. After peaking A9, turn it in until a 2 db. drop in output occurs.							
5. Tune signal generator to the exact crystal frequency and note output meter reading. Set selectivity control to crystal/broad position and note the drop in output reading. Switch to crystal/medium position and with A10 pre-set near minimum capacity, slowly increase its capacity, while "rocking" the signal generator, until output meter reads half way between output readings obtained in the sharp crystal and broad crystal positions.							
6. Set reception switch to "AM" and the selectivity control to crystal/sharp and set signal generator to the exact crystal frequency. Switch to normal/sharp position and reset A1, A2, A3, A5, A6, and A11 for maximum output.							
7. Set reception switch to "CW" and adjust A7 for zero beat.							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
8. .1MFD	High side to Pin 1 (Grid) 7F8 (V4), Low side to chassis.	10.7MC (AM) (400% MOD)	Band 3	Mid Scale	Across voice coil	A12, A13, A14, A15, A16	Adjust for maximum output.
9. .1MFD	"	"	"	"	"	A17, A18	Adjust for maximum output. Do not readjust A12 thru A16.
10. Remove 400% modulation and set reception control to "CW". Adjust A19 for zero beat.							
11. Add 400% modulation, turn reception control to "FM" and adjust A20 for maximum output.							
12. Adjust A21 for the null or minimum indication on the output meter. Slowly tune signal generator thru 13.7MC and note the two maximum readings on the output meter. If the peaks are equal, the discriminator transformer is properly aligned. If not, it may be necessary to readjust A20 until reasonable balance is obtained.							

Connect signal generator high side thru RCA dummy to A-1 on antenna terminal strip and place a jumper across the "A-2" and "GND" terminals. Use only enough signal from generator to give a 500 milliwatt output reading for best results.  
The RCA dummy antenna consists of a 200MF capacitor in series with a 200H. RF choke which is shunted by a 400M $\Omega$  capacitor in series with a 400 $\Omega$  carbon resistor.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
13. RCA Dummy	High side to "A1" on Ant. terminal strip. Low side to chassis.	1500KC	Band 1	1500KC	Across voice coil	A22, A23, A24, A25, A26	Adjust for maximum output.
14. RCA Dummy	"	600KC	"	600KC	"	A27	" " " "
15. RCA Dummy	"	4.5MC	Band 2	4.5MC	"	A27, A28, A29	" " " "
16. RCA Dummy	"	2.0MC	"	2.0MC	"	A30	" " " "
17. RCA Dummy	"	14.0MC	Band 3	14.0MC	"	A31, A32, A33, A34	" " " "
18. RCA Dummy	"	7.0MC	"	7.0MC	"	A35, A36, A37, A38	" " " "
19. RCA Dummy	"	28.0MC	Band 4	28.0MC	"	A39, A40, A41, A42	" " " "
20. RCA Dummy	"	18.0MC	"	18.0MC	"	A43, A44, A45, A46	" " " "
21. 300 $\Omega$ carbon res.	High side thru 300 $\Omega$ to "A1". Low side to chassis.	50.0MC	Band 5	50.0MC	"	A47, A48, A49, A50	" " " "
22. 300 $\Omega$ carbon res.	"	30.0MC	"	30.0MC	"	A51, A52, A53, A54	" " " "
23. 300 $\Omega$ carbon res.	"	105KC	Band 6	105KC	"	A55, A56, A57, A58	" " " "
24. 300 $\Omega$ carbon res.	"	60MC	"	60MC	"	A59, A60, A61, A62	" " " "

VOLTAGE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
1	6C4	83VDC	0V	0V	6.3VAC	83VDC	-4.4VDC	0V	
2	6AG5	0V	1.8VDC	0V	6.3VAC	83.5VDC	105VDC	1.8VDC	
3	6AG5	-1.1VDC	1.8VDC	0V	6.3VAC	84.0VDC	125VDC	1.6VDC	
4	7F2	-2VDC	0V	83VDC	1VDC	0V	125VDC	6.3VAC	-2.4VDC
5	6SK7	0V	6.3VAC	0V	0V	8.2VDC	160VDC	0V	240VDC
6	6SQ7	0V	6.3VAC	2.8VDC	0V	2.8VDC	140VDC	0V	240VDC
7	7H7	0V	82.5VDC	80.0VDC	0V	0V	0V	7.6VDC	6.3VAC
8	7H7	0V	50VDC	50VDC	0V	0V	-5VDC	0V	6.3VAC
9	8B8	0V	0V	-5.7VDC	1.8VDC	-1.8VDC	0V	6.3VAC	0V
10	7A4	0V	1.8VDC	0V	0V	0V	16.5VDC	24VDC	6.3VAC
11	6HS	0V	0V	-1.1VDC	-1.1VDC	0V	-2VDC	4.3VAC	0V
12	6SL7G1	0V	65VDC	8VDC	0V	86VDC	8VDC	6.3VAC	0V
13	6V6GT	0V	0V	270VDC	240VDC	0V	0V	6.3VAC	14.5VDC
14	6V6GT	0V	0V	270VDC	240VDC	0V	0V	6.3VAC	14.5VDC
15	UD3/VR-133	1.8VDC	0V	1.55VDC	0V	1.55VDC	0V	1.8VDC	0V
16	6U4G	0V	220VDC	0V	270VAC	0V	270VAC	250VDC	800VDC

‡ TAKEN WITH VACUUM TUBE VOLTMETER.

RESISTANCE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
1	6C4	*500KΩ	0Ω	0Ω	.2Ω	*	500KΩ	4.7 Meg.	0Ω
2	6AG5	2. Meg.	Inf.	0Ω	.2Ω	*3.1KΩ	*3.5KΩ	170Ω	
3	6AG5	1.3Meg.	Inf.	0Ω	.2Ω	*1.2KΩ	*47KΩ	170Ω	
4	7F2	2.2 Meg.	0Ω	*70KΩ	1000Ω	0Ω	*90Ω	.2Ω	10KΩ
5	6SK7	0Ω	.2Ω	0Ω	1.2 Meg.	270Ω	*80Ω	0Ω	*1.5KΩ
6	6SQ7	0Ω	.2Ω	330Ω	2.5 Meg.	530Ω	60KΩ	0Ω	*1.1KΩ
7	7H7	0Ω	*11KΩ	*50KΩ	0Ω	0Ω	2.2 Meg.	1.8KΩ	.2Ω
8	7H7	0Ω	*58 KΩ	*52KΩ	0Ω	0Ω	240KΩ	0Ω	.2Ω
9	8B8	0Ω	0Ω	150KΩ	200KΩ	180KΩ	Inf.	.2Ω	0Ω
10	7A4	0Ω	*100KΩ	10Ω	Inf.	Inf.	65Ω	63Ω	.2Ω
11	6H6	0Ω	0Ω	2.2Meg.	1.7 Meg.	Inf.	150Ω	2.8Ω	Inf.
12	6SL7G1	1 Meg.	*220KΩ	1.3KΩ	8.2KΩ	220KΩ	1.2KΩ	.2Ω	0Ω
13	6V6GT	0Ω	0Ω	*200Ω	*230Ω	220KΩ	10KΩ	.2Ω	230Ω
14	6V6GT	0Ω	0Ω	*200Ω	*230Ω	220KΩ	58Ω	.2Ω	230Ω
15	UD3/VR-133	2.2KΩ	0Ω	*2.2KΩ	220KΩ	*2.2KΩ	Inf.	*2.2KΩ	Inf.
16	6U4G	Inf.	50KΩ	Inf.	0Ω	Inf.	58Ω	45KΩ	50KΩ

‡ VOLTAGE AND RESISTANCE READINGS TAKEN IN 1A POSITION.

\* Measured from pin 5 of V16 (6U4G)

† Taken in band 2 position.

- DC Voltage measurements are at 20,000 ohms per volt; AC Voltages measured at 1,000 ohms.
- Socket connections are shown as bottom views.
- Measured values are from socket pin to common negative.
- Line voltage maintained at 117 volts for voltage readings.
- Nominal tolerance on component values makes possible a variation of 15% in voltage and resistance readings.
- Volume control at maximum, no signal applied for voltage measurements.





VOLTAGE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
1	6C4	23VDC	0V	0V	6.3VAC	25VDC	-14VDC	0V	
2	6AG5	0V	1.6VDC	0V	6.3VAC	25VDC	16VDC	1.6VDC	
3	6AG5	-1.1VDC	1.6VDC	0V	6.3VAC	24VDC	15VDC	1.6VDC	
4	7F8	-2VDC	0V	85VDC	1VDC	0V	125VDC	6.3VAC	-2.4VDC
5	6SK7	0V	6.3VAC	0V	0V	8.0VDC	100VDC	0V	240VDC
6	6SQ7	0V	6.3VAC	2.8VDC	0V	2.8VDC	140VDC	0V	240VDC
7	7H7	0V	225VDC	200VDC	0V	0V	0V	7.6VDC	6.3VAC
8	7H7	0V	50VDC	50VDC	0V	0V	-5VDC	0V	6.3VAC
9	6E8	0V	0V	-5.7VDC	1.8VDC	-1.8VDC	0V	6.3VAC	0V
10	7A4	0V	160VDC	0V	0V	0V	16.5VDC	24VDC	6.3VAC
11	6E8	0V	0V	-1.1VDC	-1.1VDC	0V	-2VDC	4.3VAC	0V
12	6SL7GT	0V	25VDC	25VDC	0V	85VDC	8VDC	6.3VAC	0V
13	6V6GT	0V	0V	270VDC	240VDC	0V	0V	6.3VAC	14.5VDC
14	6V6GT	0V	0V	270VDC	240VDC	0V	0V	6.3VAC	14.5VDC
15	6DB/VR	1.5VDC	0V	1.5VDC	0V	1.5VDC	0V	1.5VDC	0V
16	6V6GT	0V	200VDC	0V	270VDC	0V	270VDC	250VDC	240VDC

† TAKEN WITH VACUUM TUBE VOLTMETER.

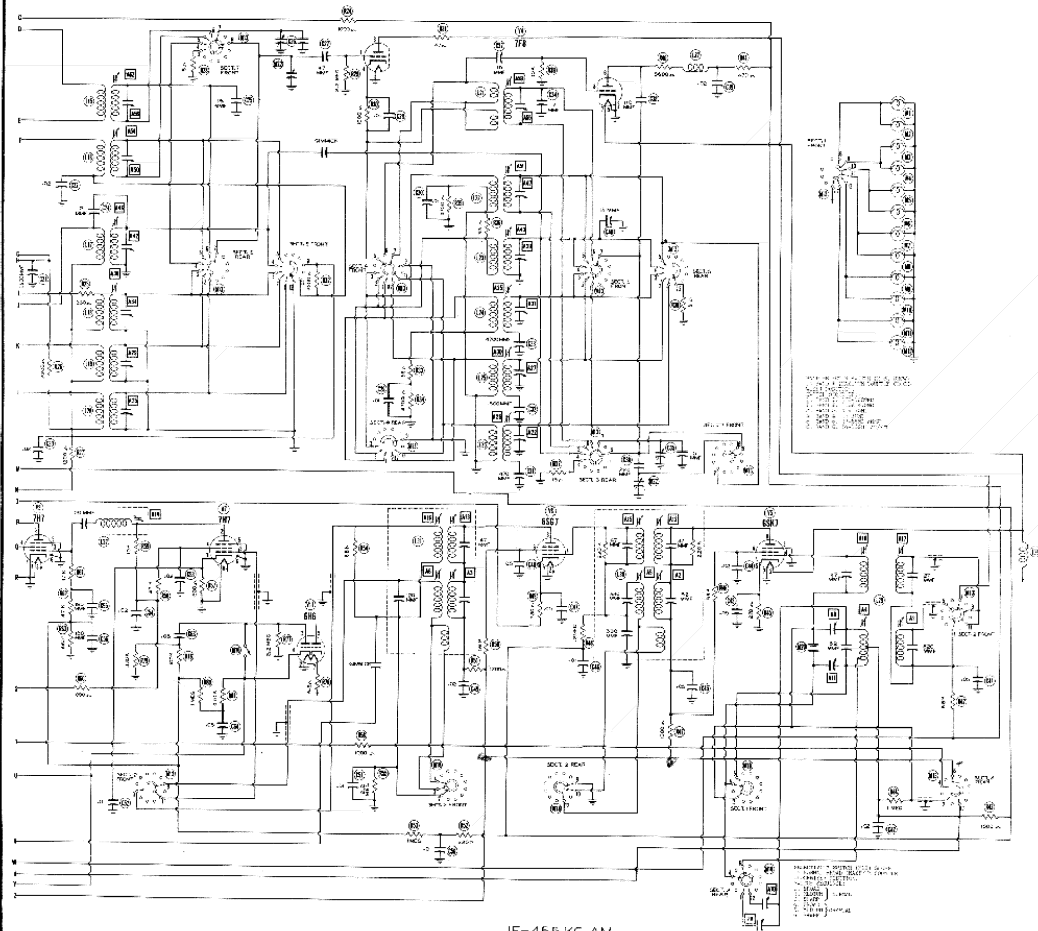
RESISTANCE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
1	6C4	*500KΩ	0Ω	0Ω	.2Ω	500KΩ	4.7 Meg	0Ω	
2	6AG5	2. Meg	Inf.	0Ω	.2Ω	*3.1KΩ	*3.1KΩ	170Ω	
3	6AG5	1.0 Meg	Inf.	0Ω	.2Ω	*1.2KΩ	*47KΩ	170Ω	
4	7F8	2.2 Meg	0Ω	*75KΩ	100Ω	0Ω	*90Ω	.2Ω	10KΩ
5	6SK7	0Ω	.2Ω	0Ω	*2.2 Meg	270Ω	*20Ω	0Ω	*1.5KΩ
6	6SQ7	0Ω	.2Ω	330Ω	2.5 Meg	530Ω	60KΩ	0Ω	*1.5KΩ
7	7H7	0Ω	*11KΩ	*50KΩ	0Ω	0Ω	2.2 Meg	1.8KΩ	.2Ω
8	7H7	0Ω	*50 KΩ	*62KΩ	0Ω	0Ω	240KΩ	0Ω	.2Ω
9	6E8	0Ω	0Ω	180KΩ	200KΩ	180KΩ	Inf.	.2Ω	0Ω
10	7A4	0Ω	*100KΩ	10Ω	Inf.	Inf.	60KΩ	60Ω	.2Ω
11	6E8	0Ω	0Ω	2.2Meg	1.7 Meg	Inf.	150Ω	2.8Ω	Inf.
12	6SL7GT	1. Meg	*220KΩ	1.3KΩ	8.2KΩ	220KΩ	1.2KΩ	.2Ω	0Ω
13	6V6GT	0Ω	0Ω	*230Ω	*230Ω	220KΩ	10KΩ	.2Ω	200Ω
14	6V6GT	0Ω	0Ω	*230Ω	*230Ω	220KΩ	5Ω	.2Ω	200Ω
15	6DB/VR	2.2KΩ	0Ω	*2.2KΩ	220KΩ	*2.2KΩ	Inf.	*2.2KΩ	Inf.
16	6V6GT	Inf.	50KΩ	Inf.	6Ω	Inf.	5Ω	45KΩ	60KΩ

† VOLTAGE AND RESISTANCE READINGS TAKEN IN FM POSITION.

\* Measured from pin 8 of V16 (6L6G)  
 † Taken in band 2 position.

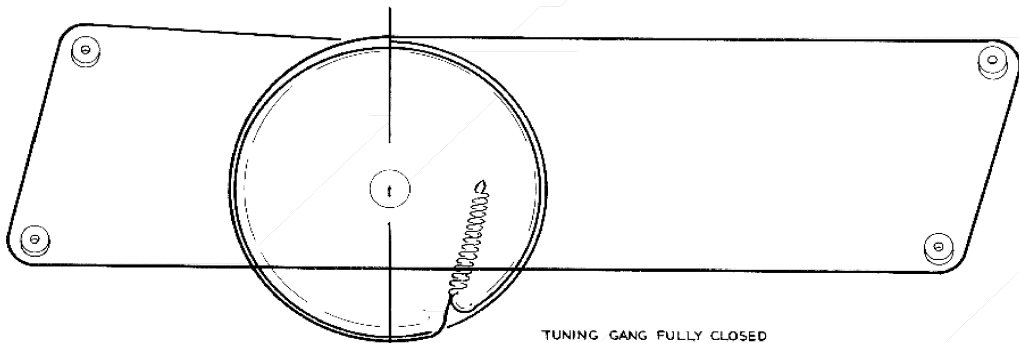
- DC Voltage measurements are at 20,000 ohms per volt; AC Voltages measured at 1,000 ohms.
- Socket connections are shown as bottom views.
- Measured values are from socket pin to common negative.
- Line voltage maintained at 117 volts for voltage readings.
- Nominal tolerance on component values makes possible a variation of ±15% in voltage and resistance readings.
- Volume control at maximum, no signal applied for voltage measurements.



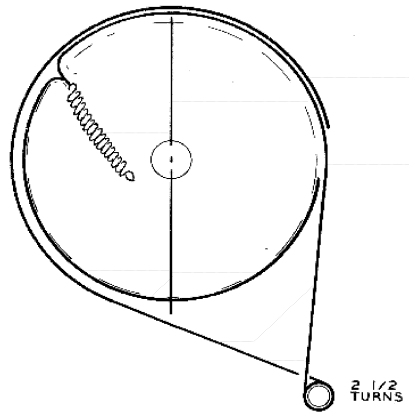
IF=455 KC AM  
 IF=0.7 MC FM

A PHOTOGRAPH OF THE ORIGINAL SCHEMATIC  
 DRAWING BY G. S. GILBERT, JR., IN 1947

499-12



TUNING GANG FULLY CLOSED



2 1/2  
TURNS  
DIAL CORD DRIVE

# **K4XL's BAMA**

**This manual is provided FREE OF CHARGE from the “BoatAnchor Manual Archive” as a service to the Boatanchor community.**

**It was uploaded by someone who wanted to help you repair and maintain your equipment.**

**If you paid anyone other than BAMA for this manual, you paid someone who is making a profit from the free labor of others without asking their permission.**

**You may pass on copies of this manual to anyone who needs it. But do it without charge.**

**Thousands of files are available without charge from BAMA. Visit us at <http://bama.sbc.edu>**