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OPERATING and SERVICE
INSTRUCTIONS
SX-62
the hallicrafters co.

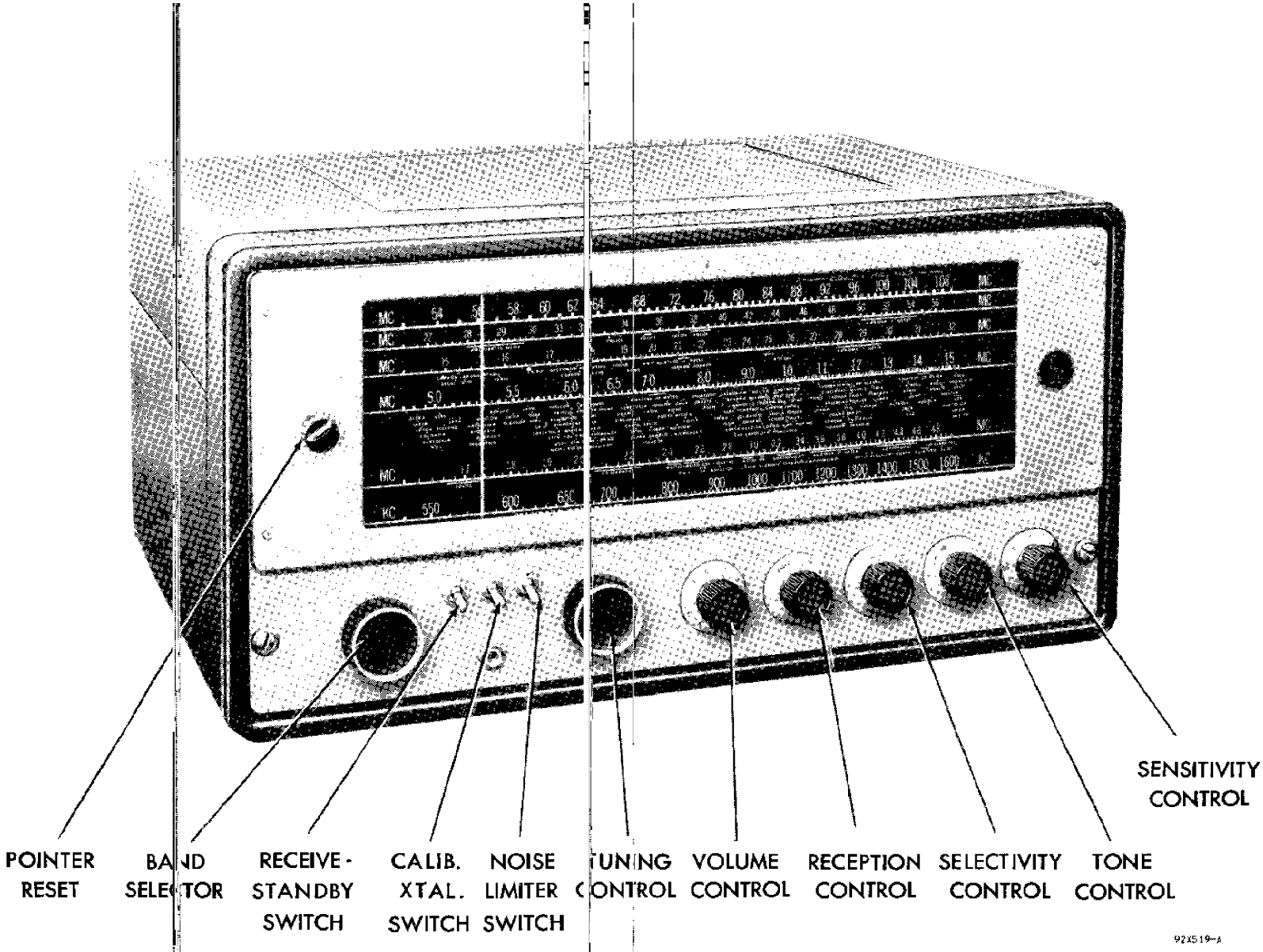
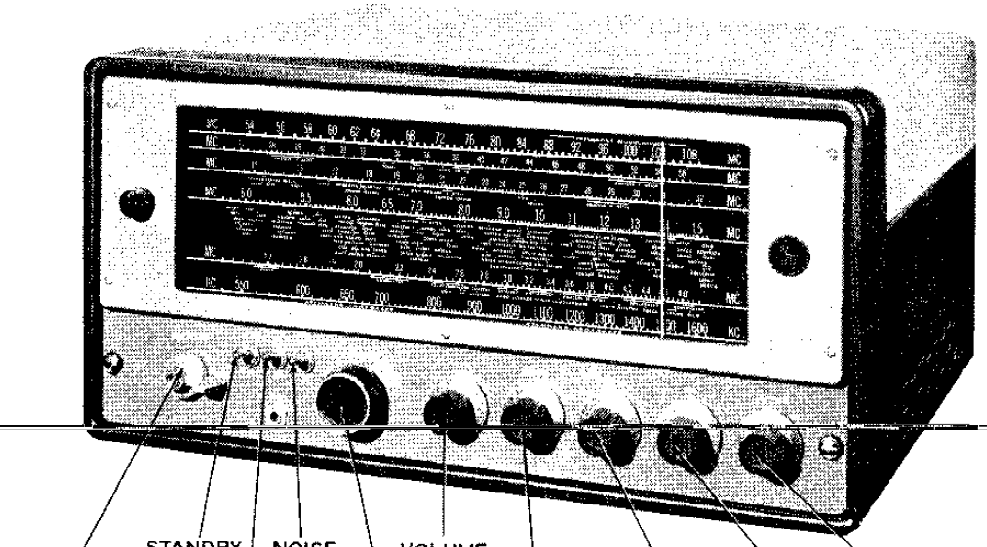


Fig. 1. Radio Receiver Model SX-62/62U

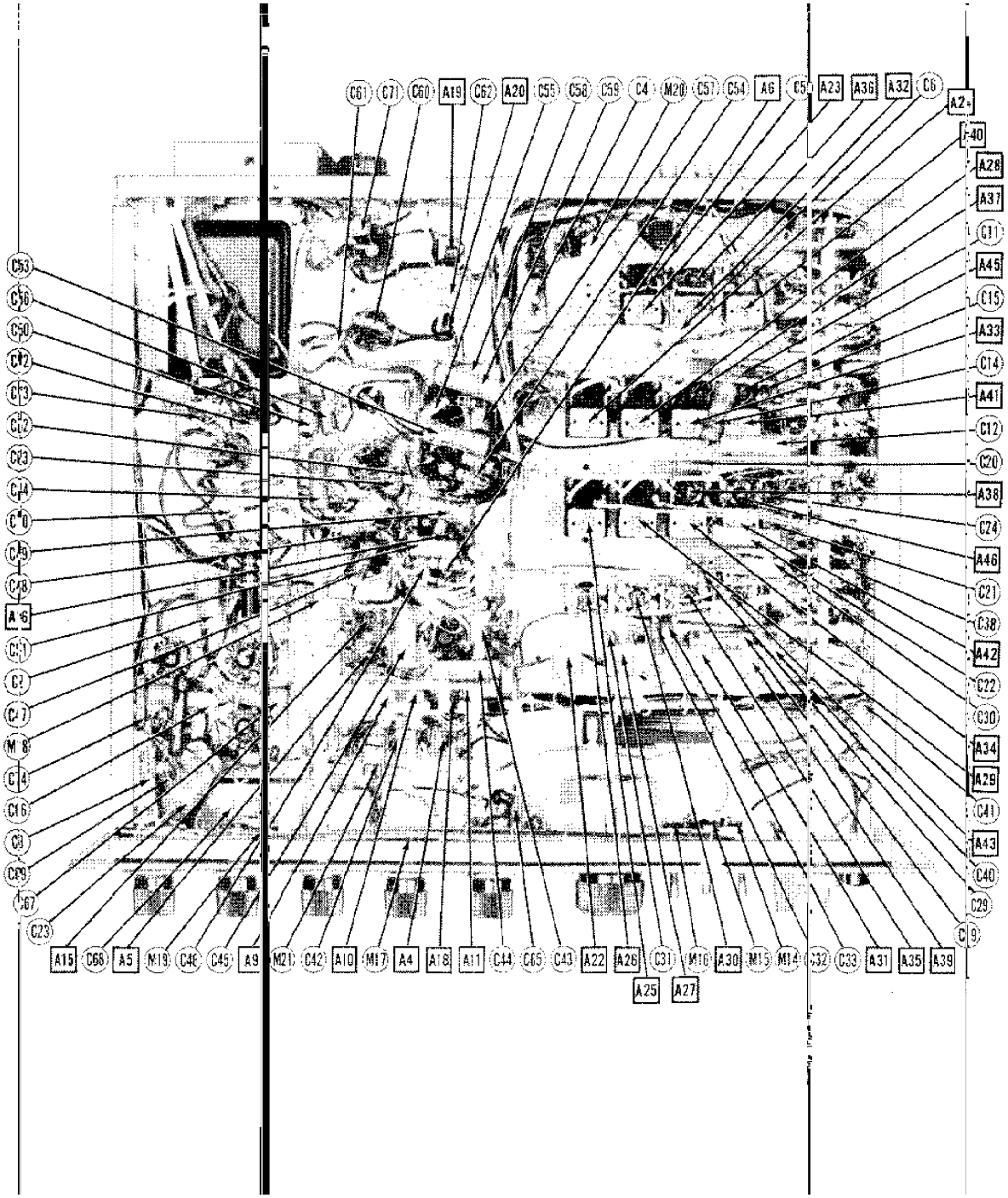


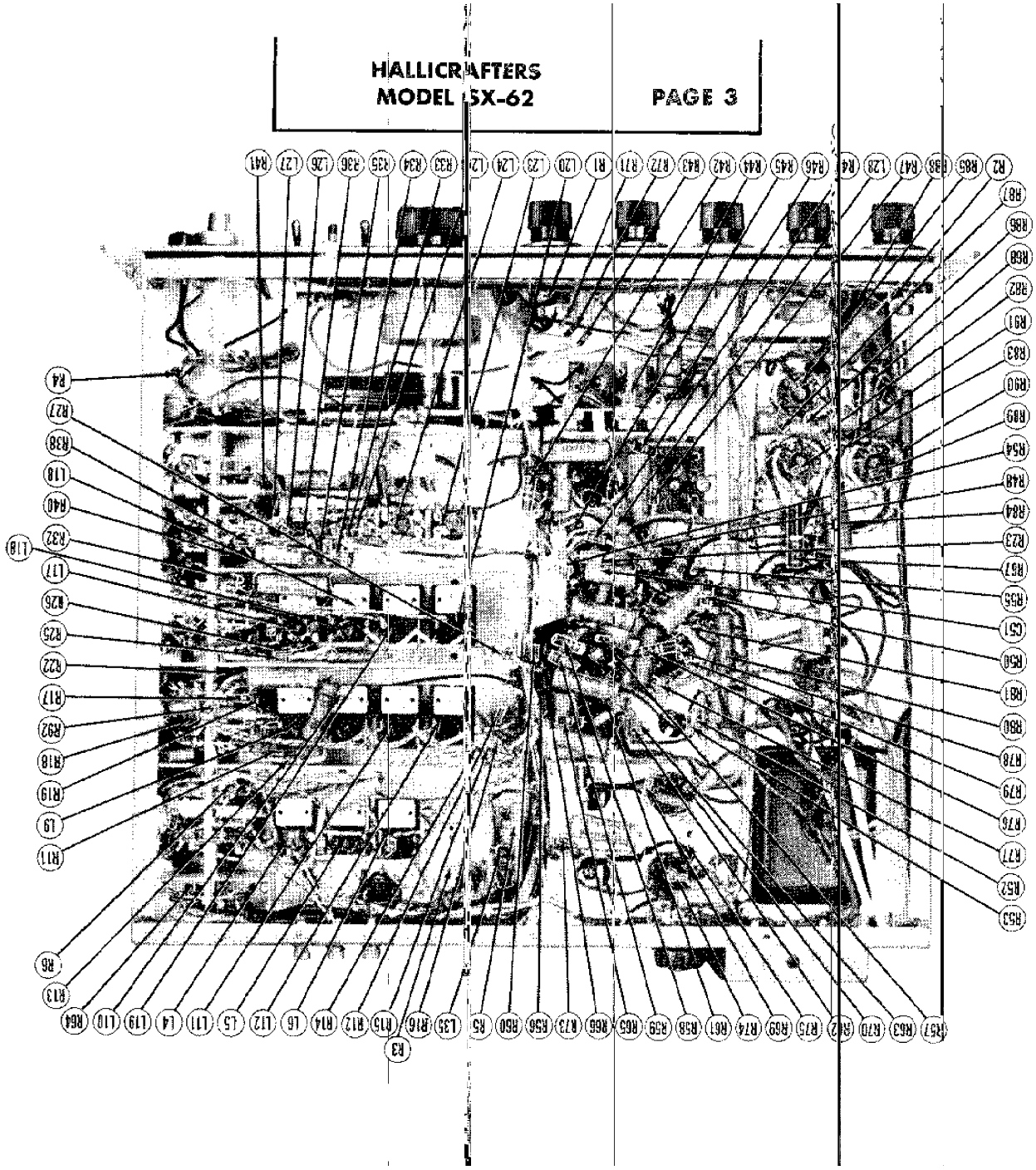
HALLICRAFTERS MODEL SX-62

TRADE NAME	Hallicrafters, Model SX-62
MANUFACTURER	The Hallicrafters Co., 5th & Kostner Avenues, Chicago 24, Illinois
TYPE SET	AC Operated Multi-Band AM-FM Superheterodyne Receiver
TUBES(SIXTEEN)	Types 6C4 XTAL Calib. Osc., 6AC5 1st RF Amp., 6AC5 2nd RF Amp., 7F8 Converter, 6SK7 1st IF Amp., 6SG7 2nd IF Amp., 7F7 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, OD3/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 1.62-4.9MC, Band#3 4.9-15MC, Band#4 15-42MC, Band#5 27-56MC AM-FM, Band#6 54-109MC AM-FM.

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

DATE 5/49 499-12 SET #61 FOLDER 12


C61 C71 C60 A19 C62 A20 C55 C58 C59 C4 M20 C57 C54 A6 C5 A23 A36 A32 C6 A2
A40 A28 A37 C31 A45 C15 A33 C14 A41 C12 C20 A38 C24 A46 C21 C38 A42 C22 C30 A34 A29 C41 A43 C40 C29 C9
C53 C56 C50 C72 C73 C52 C23 C74 C70 C75 C78 A16 C71 C2 C77 M8 C74 C16 C3 C79 C67 C23
A15 C68 A5 M19 C48 C45 A9 M21 C42 A10 M17 A4 A18 A11 C44 C65 C43 A22 A26 C31 M10 A30 M15 M14 C32 C33 A31 A35 A39
A25 A27


R41 L27 L26 R36 R35 R34 R33 L24 L23 L22 R1 L20 R71 R72 R43 R42 R44 R45 R46 R4 L28 R47 R38 R85 R2
R87
R86
R88
R82
R91
R83
R90
R89
R54
R48
R84
R23
R57
R55
C51
R50
R81
R86
R78
R79
R76
R77
R52
R53
R4
R27
R38
L18
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R15
R16
R3
L13
R5
R60
R56
R73
R66
R65
R39
R58
R61
R74
R69
R75
R42
R70
R63
R57

PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA: HALLICRAFTERS PART No.	REPLACEMENT DATA: STANDARD REPLACEMENT	RMA BASE TYPE	NOTES
V1	XTAL Calib.Osc.	6C4	6C4	6J9	
V2	1st RF Amp.	6AG5	6AG5	7BD	
V3	2nd RF Amp.	6AG5	6AG5	7BD	
V4	Converter	7V8	7V8	8SW	
V5	1st IF Amp.	6SK7	6SK7	8SK	
V6	2nd IF Amp.	6SK7	6SK7	8SK	
V7	3rd IF Amp.	7V7	7V7	8V	
V8	4th IF Amp. AM-DET-AVC	7V7	7V7	8V	
V9	Discriminator	6H6	6H6	7Q	
V10	CW Beat Osc.	7A4	7A4	5AC	
V11	Noise Limiter	6H6	6H6	7Q	
V12	AF-Phase Inv.	6SL7GT	6SL7GT	6BD	
V13	Power Output	6V6GT	6V6GT	7AC	
V14	Power Output	6V6GT	6V6GT	7AC	
V15	Voltage Regulator	0D3/VR-150	0D3/VR-150	4AJ	
V16	Rectifier	5U4G	5U4G	5T	

CAPACITORS

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

ITEM No.	RATING CAP.	RATING VOLT	REPLACEMENT DATA: HALL. PART No.	CRAFT. PART No.	AEROVOX PART No.	CORNELL-DUBILIER No.	ERIE PART No.	SOLAR PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
C1A	30	450	45A04	1§	AF444J4A	UP 4450		DY-313	TA-330	▲ Filter
B	20	450								■ ▲ Filter
C	20	25								Output Cath. Bypass
C2	10	25	45A1	1	FR525/10	BR 32A		M-10-25	TA-10	AF Cath. Bypass
C3	100	25	45A1	6	FR525/100	BR 251		M-100-25	UHC-100	Cathode Bypass
C4	.01	600	46AZ	103	P838-01	GT 31	GP2-335-01	ST-6-01	68P33	XTAL Cal. Plate Bypass
C5	2		47A1	0-4			NP0K-3			RF Coupling
C6	.05	200	49A0	1	P838-05	GT 35		ST-4-05	68P16	AVC Filter
C7	5		CC20	UK050D	1409-000005	SR V5	NP0K-5	MO5.5-55	MS-55	Fixed Trimmer
C8	7		CC20	UK070K						" "
C9	.05	200	49A0	1	P838-05	GT 35		ST-4-05	68P16	1st RF Cath. Bypass
C10	.01	600	46AZ	103	P838-01	GT 31	GP2-335-01	ST-6-01	68P33	1st RF Screen Bypass
C11	.02	600	46AY	203	P858-02	GT 32		ST-6-02	68P34	1st RF Plate Decoup.
C12	.02	600	46AY	203	P838-02	GT 32		ST-6-02	68P34	" " " "
C13	5600	500	CM35	A562M	1407-006	1D 06	GP2M-005	MW.5-26	1FM-26	" " " "
C14	.05	200	49A0	503	P838-05	GT 35		ST-4-05	68P16	AVC Filter
C15	8		47A1	80-4						RF Coupling
C16	15		CC20	UK150K					MS-415	Fixed Trimmer
C17	7		CC20	UK070K						" "
C18	.05	200	46AY	503	P838-05	GT 35		ST-4-05	68P16	2nd IF Cath. Bypass
C19	.01	600	46AZ	103	P858-01	GT 31	GP2-335-01	ST-6-01	68P33	2nd IF Screen Bypass
C20	.02	600	46AY	203	P838-02	GT 32		ST-6-02	68P34	2nd IF Plate Decoup.
C21	5600	500	CM35	A562M	1407-006	1D 06	GP2M-005	MW.5-26	1FM-26	" " " "
C22	.02	600	46AY	203	P838-02	GT 32		ST-6-02	68P34	" " " "
C23	.25	200	46AT	254	P838-25	GT 325		ST-2-25	68P24	Cathode Bypass
C24	2		47A1	20-4			NP0K-3			RF Coupling
C25	15		CC20	UK150K					MS-415	Fixed Trimmer
C26	7		CC20	UK070K						" "
C27	47	500	CM20	A470K	1408-00005	5W 505	GP1K-50	MO.5-45	1FM-45	RF Coupling
C28	.01	600	46AY	103	P838-01	GT 31	GP2-335-01	ST-6-01	68P33	Mixer Cath. Bypass
C29	.01	600	46AZ	103	P838-01	GT 31	GP2-335-01	ST-6-01	68P33	" " " "
C30	.01	600	46AZ	103	P838-01	GT 31	GP2-335-01	ST-6-01	68P33	" " " "
C31	470	500	CM20	A471K						Fixed Padder
C32	1500	500	CM20	C152G	1464-0015	1F 5015			CM5.5-215	" "
C33	4700	500	CM35	A472G						" "
C34	7		CC20	UK070K						Fixed Trimmer
C35	6		CC20	UK060D	1469-000005	5W 5V5	NP0K-5	MO8.5-55	MS-55	" "
C36	220	500	CM20	E221G						Fixed Padder
C37	110		CC25	UK111J	1468-0001	6W 3T1	GP1K-100	MO.5-31	1FM-31	Osc. Grid Comp.
C38	110		CC25	UK111J	1468-0001	6W 3T1	GP1K-100	MO.5-31	1FM-31	Osc. Feedback
C39	.02	600	46AY	203J	P838-02	GP 32		ST-6-02	68P34	Osc. Plate Decoupling
C40	15		CC20	UK150K					MS-415	Fixed Trimmer Note
C41	.05	600	46AY	503J	P838-05	GP 35		ST-6-05	TM-15	Mixer Plate Decoup.
C42	.02	600	46AY	203J	P838-02	GP 32		ST-6-02	TM-12	AVC Filter
C43	.05	200	46AY	503J	P838-05	GP 35		ST-4-05	TM-15	1st IF Cat. Bypass

PARTS LIST AND DESCRIPTIONS (Continued)

RESISTORS

ITEM No.	RATING RESISTANCE	RATING WATTS	REPLACEMENT DATA: HALLICRAFTER PART No.	REPLACEMENT DATA: IRC PART No.	IDENTIFICATION CODES
R27	1200Ω	½	RC20AE122K	BTS-1200	Br.-Red-Red 2nd RF Decoupling
R28	15Ω	½	RC20AE150M		Br.-Grn.-Blk. RF Coil Shunt
R29	2.2 Meg.	½	RC20AE225M	BTS-2.2 Meg.	Red-Red-Grn. Converter Grid
R30	1000Ω	½	RC20AE102M	BTS-1000	Br.-Blk.-Red Converter Cathode
R31	47Ω	½	RC20AE470M		Yl.-Vi.-Blk. Parasitic Suppressor
R32	2200Ω	½	RC20AE222M	BTS-2200	Red-Red-Red 2nd RF Decoupling
R33	56Ω	½	RC20AE560K		Grn.-Blue-Blk. Osc. Coil Shunt
R34	4700Ω	½	RC20AE472K	BTS-4700	Yl.-Vi.-Red Osc. Grid
R35	4700Ω	½	RC20AB472K	BTS-4700	Yl.-Vi.-Red " "
R36	33Ω	½	RC20AE330M		Or.-Or.-Blk. Osc. Coil Shunt
R37	15Ω	½	RC20AE150M		Br.-Grn.-Blk. " " "
R38	15Ω	½	RC20AE150M		Br.-Grn.-Blk. " " "
R39	10KΩ	½	RC20AE103K	BTS-10K	Br.-Blk.-Or. Osc. Grid
R40	56000Ω	½	RC30AE563K	BTA-5600	Grn.-Blue-Red Osc. Plate
R41	470Ω	½	RC20AE471M	BTS-470	Yl.-Vi.-Br. Osc. Plate Decoupling
R42	68KΩ	½	RC30AE683K	BTA-68K	Blue-Gray-Or. Mixer Decoupling
R43	1000Ω	½	RC20AE102M	BTS-1000	Br.-Blk.-Red AVC Network
R44	1 Meg.	½	RC20AE105M	BTS-1 Meg.	Br.-Blk.-Grn. " "
R45	270Ω	½	RC20AE271K		Red-Vi.-Br. 1st IF Cathode
R46	56KΩ	½	RC20AE563	BTA-56K	Grn.-Blue-Or. 1st IF Screen Decoupling
R47	1000Ω	½	RC20AE102M	BTS-1000	Br.-Blk.-Red 1st IF Decoupling
R48	1.2 Meg.	½	RC20AE125K	BTS-1.2 Meg.	Br.-Red-Grn. AVC Network
R49	330Ω	½	RC20AE331K		Or.-Or.-Br. 2nd IF Cathode
R50	56KΩ	½	RC20AE563	BTA-56K	Grn.-Blue-Or. 2nd IF Screen Decoupling
R51	1200Ω	½	RC20AE122K	BTS-1200	Br.-Red-Red 2nd IF Plate Decoupling
R52	220KΩ	½	RC20AE224K	BTS-220K	Red-Red-Yl. AVC Network
R53	1 Meg.	½	RC20AE105M	BTS-1 Meg.	Br.-Blk.-Grn. " "
R54	68KΩ	½	RC30AE683K	BTA-68K	Blue-Gray-Or. 3rd IF Coil Shunt
R55	2.2 Meg.	½	RC30AE225M	BTA-2.2 Meg.	Red-Red-Grn. 3rd IF Grid
R56	1000Ω	½	RC20AE102M	BTS-1000	Br.-Blk.-Red Limiter Decoupling
R57	1800Ω	½	RC20AE182K	BTS-1800	Br.-Gray-Red 3rd IF Cathode
R58	47KΩ	½	RC30AE473K	BTA-47K	Yl.-Vi.-Or. 3rd IF Screen Decoupling
R59	10KΩ	½	RC30AE103K	BTA-10K	Br.-Blk.-Or. 3rd IF Plate
R60	1000Ω	½	RC20AE102M	BTS-1000	Br.-Blk.-Red 3rd IF Decoupling
R61	47KΩ	½	RC20AE473K	BTS-47K	Yl.-Vi.-Or. Limiter Grid
R62	47KΩ	½	RC20AE473K	BTS-47K	Yl.-Vi.-Or. " "
R63	220KΩ	½	RC20AE224K	BTS-220K	Red-Red-Yl. " "
R64	100Ω	½	RC20AE101K		Br.-Blk.-Br. 3rd IF Cathode
R65	56KΩ	½	RC30AE563	BTA-56K	Grn.-Blue-Or. Limiter Decoupling
R66	330Ω	½	RC20AE331K		Or.-Or.-Br. Limiter Plate Decoupling
R67	220Ω	2	RC40AE221K	BW-2-220	Red-Red-Br. Output Cathode
R68	2000Ω	10	2W-2000	AB-2000	Filter
R69	47KΩ	½	RC20AE473K	BTS-47K	Yl.-Vi.-Or. Bias. Coil Shunt
R70	150KΩ	½	RC20AE154K	BTS-150K	Br.-Grn.-Yl. De-emphasis
R71	1.5 Meg.	½	RC20AE155K	BTS-1.5 Meg.	Br.-Grn.-Grn. AF Load
R72	120Ω	½	RC20AE121K	BW-½-120	Br.-Red-Br. AVC Shunt
R73	1200Ω	½	RC20AE122K	BTS-1200	Br.-Red-Red Beat Osc. Plate Decoupling
R74	5100Ω	½	RC20AE512J		Grn.-Br.-Red Beat Osc. Cathode 5%
R75	47KΩ	½	RC20AE473K	BTS-47K	Yl.-Vi.-Or. Beat Osc. Grid
R76	6.8Ω	½	RC30AE068K	BW-1-6.8	Blue-Gray-Gold Noise Limiter Filament
R77	2.2 Meg.	½	RC20AE225M	BTS-2.2 Meg.	Red-Red-Grn. Noise Limiter Load
R78	100KΩ	½	RC20AE104M	BTS-100K	Br.-Blk.-Yl. Voltage Divider
R79	330KΩ	½	RC20AE334K	BTS-330K	Or.-Or.-Yl. " "
R80	1 Meg.	½	RC30AE105M	BTS-1 Meg.	Br.-Blk.-Grn. Voltage Divider
R81	470KΩ	½	RC30AE474K	BTS-470K	Yl.-Vi.-Yl. Noise Limiter Load
R82	1200Ω	½	RC20AE122K	BTS-1200	Br.-Red-Red AF Cathode
R83	56Ω	½	RC20AE560K	BW-½-56	Grn.-Blue-Blk. Feedback Network
R84	10KΩ	½	RC20AE103K	BTS-10K	Br.-Blk.-Or. " "
R85	1200Ω	½	RC20AE122K	BTS-1200	Br.-Red-Red Phase Inverter Cathode
R86	220KΩ	½	RC20AE224K	BTS-220K	Red-Red-Yl. AF Plate
R87	220KΩ	½	RC20AE224K	BTS-220K	Red-Red-Yl. Phase Inverter Plate
R88	1000Ω	2	RC40AE102K	BW-2-1000	Br.-Blk.-Red Feedback Network
R89	6200Ω	½	RC20AE622K	BTS-6200	Gray-Red-Red Phase Inverter Grid
R90	220KΩ	½	RC20AE224K	BTS-220K	Red-Red-Yl. Output Grid
R91	220KΩ	½	RC20AE224K	BTS-220K	Red-Red-Yl. " "
R92	1000Ω	½	RC20AE102M	BTS-1000	Br.-Blk.-Red RF Coil Shunt See Note 1

Note. Some models use two 47Ω resistors in parallel.
Note 1. Not used in all models.

PARTS LIST AND DESCRIPTIONS (Continued)

ITEM No.	RATING CAP.	RATING VOLT	HALLICRAFT. PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SOLAR PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
C44	.02	600	46AY203J	P686-02	CT682		ST-6-02	TM-12	1st IF Screen Bypass
C45	.05	600	43AZ503J	P686-05	CT685		ST-6-05	TM-15	1st IF Plate Decoup.
C46	.01	600	46AZ103J	P686-01	CT681	GP2-335-01	ST-6-01	TM-11	AVC Filter
C47	.05	600	46AY503J	P686-05	CT685		ST-4-05	TM-15	2nd IF Cath. Bypass
C48	.05	600	46AY503J	P686-05	CT685		ST-6-05	TM-15	2nd IF Screen Bypass
C49	.02	600	46AY203J	P686-02	CT682		ST-6-02	TM-12	2nd IF Plate Decoup.
C50	.01	600	46AZ103J	P686-01	CT681	GP2-335-01	ST-6-01	TM-11	AVC Filter
C51	.01	600	43AZ103J	P686-01	CT681	GP2-335-01	ST-6-01	TM-11	3rd IF Grid Filter
C52	.01	600	43AZ103J	P686-01	CT681	GP2-335-01	ST-6-01	TM-11	3rd IF Cath. Bypass
C53	.02	600	46AY302J	P686-02	CT682		ST-6-02	TM-12	3rd IF Screen Bypass
C54	.02	600	46AY203J	P686-02	CT682		ST-6-02	TM-12	3rd IF Plate Decoup.
C55	180	600	CM20A181K	1469-0002	5W572	GP2K-200	MO.5-32	1FM-32	Diode Filter
C56	180	600	CM20A181K	1469-0002	5W572	GP2K-200	MO.5-32	1FM-32	" "
C57	.02	600	46AY203J	P686-02	CT682		ST-6-02	TM-12	4th IF Screen Bypass
C58	.01	600	43AZ103J	P686-01	CT681	GP2-335-01	ST-6-01	TM-11	4th IF Plate Decoup.
C59	.02	600	46AY203J	P686-02	CT682		ST-6-02	TM-12	Decoupling
C60	47	600	CM20A470K	1469-00005	5W545	GP1K-60	MO.5-45	1FM-45	RF Bypass
C61	560	500	CM25A561K	1468-0005	1W576	GP2K-500	MO.5-36	MS-36	De-emphasis
C62	.05	600	46AY503J	P686-06	CT685		ST-6-06	TM-15	2W Beat Osc. Plate Dec.
C63	.05	600	46AY503J	P686-05	CT685		ST-4-05	TM-15	Audio Coupling
C64	.05	600	46AY503J	P686-06	CT685		ST-4-05	TM-15	Tone Comp.
C65	.01	600	43AZ103J	P686-01	CT681	GP2-335-01	ST-6-01	TM-11	Audio Coupling
C66	.02	600	46AY203J	P686-02	CT682		ST-6-02	TM-12	" "
C67	.02	600	46AY203J	P686-02	CT682		ST-6-02	TM-12	" "
C68	.05	600	46AY503J	P686-06	CT685		ST-6-05	TM-15	Tone Comp.
C69	.05	600	46AY503J	P686-05	CT685		ST-6-05	TM-15	" "
C70	.01	600	43AZ103J	P686-01	CT681	GP2-335-01	ST-6-01	TM-11	RF Bypass
C71	.01	600	43AZ103J	P686-01	CT681	GP2-335-01	ST-6-01	TM-11	Switch Bypass
C72	.01	600	46BR103J	P686-01	CT681		ST-6-01	TM-11	Line Filter
C73	.01	600	46BR103J	P686-01	CT681		ST-6-01	TM-11	Line Filter
C74	680	500	CM25A681K	1468-00075	1W577	GP2K-750	MO.5-37	1FM-37	Output Grid Bypass

§ Two 10MFD sections connected in parallel.
Note: Not used in all models.

CONTROLS

ITEM No.	RATING RESISTANCE	RATING WATTS	REPLACEMENT DATA PART No.	IRC PART No.	CLAROSTAT PART No.	INSTALLATION NOTES
R1A	1 Meg.	½	25A549	U13-137	M-63-Z	Volume control
B	Shaft		Not Req.	A	Not Req.	Attach to R1A Per Instructions
C	Switch		Not Req.	41	SW-A	Attach to R1A Per Instructions
R2	10KΩ	½	25A548		M-27-S	Sensitivity control

RESISTORS

ITEM No.	RATING RESISTANCE	RATING WATTS	REPLACEMENT DATA HALLICRAFTERS PART No.	REPLACEMENT DATA IRC PART No.	IDENTIFICATION CODES
R3	4.7 Meg.	½	RC20AE475K	BTS-4.7 Meg.	Yl.-Vi.-Grn. Crystal Oscillator Grid
R4	470KΩ	½	RC20AE474M	BTS-470K	Yl.-Vi.-Yl. Crystal Oscillator Voltage Dropping
R5	27KΩ	2	RC40AE273K	HT-2-27K	Red-Vi.-Or. Crystal Oscillator Plate Decoup.
R6	100KΩ	½	RC20AE104M	BTS-100K	Br.-Blk.-Yl. Ant. Coil Shunt
R7	15Ω	½	RC20AE150M		Br.-Grn.-Blk. " " "
R8	12Ω	½	RC20AE120K		Br.-Red-Blk. Parasitic Suppressor
R9	150Ω	½	RC20AE151K		Br.-Grn.-Br. 1st RF Cathode
R10	15Ω	½	RC20AE150M		Br.-Grn.-Blk. RF Coil Shunt
R11	2200Ω	1	RC20AL222M	BTS-2200	Red-Red-Red 1st RF Decoupling
R12	1200Ω	½	RC20AE122K	BTS-1200	Br.-Red-Red 1st RF Decoupling
R13	330Ω	½	RC20AE331M		Or.-Or.-Br. Parasitic Suppressor
R14	2.2 Meg.	½	RC20AE225K	BTS-2.2 Meg.	Red-Red-Grn. AVC Network
R15	5.6 Meg.	½	RC20AE565K	BTS-5.6 Meg.	Grn.-Blue-Grn. " "
R16	470KΩ	½	RC20AE474M	BTS-470K	Yl.-Vi.-Yl. " "
R17	100KΩ	½	RC20AE104M	BTS-100K	Br.-Blk.-Yl. RF Coil Shunt
R18	15Ω	½	RC20AE150M		Br.-Grn.-Blk. " " "
R19	2200Ω	½	RC20AE222M	BTS-2200	Red-Red-Red 1st RF Decoupling
R20	150Ω	½	RC20AE151K		Br.-Grn.-Br. 2nd RF Cathode
R21	15Ω	½	RC20AE150M		Br.-Grn.-Blk. Parasitic Suppressor See Not
R22	47KΩ	1	RC30AE473K	BTA-47K	Yl.-Vi.-Or. 2nd RF Decoupling
R23	100KΩ	1	RC30AE104K	BTA-100K	Br.-Blk.-Yl. Voltage Divider
R24	1000Ω	½	RC20AE102M	BTS-1000	Br.-Blk.-Red 1st RF Plate Decoupling
R25	330Ω	½	RC20AE331M		Or.-Or.-Br. Parasitic Suppressor
R26	2200Ω	½	RC20AE222M	BTS-2200	Red-Red-Red 2nd RF Decoupling

PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (POWER)

ITEM No.	RATING PRI.	RATING SEC. 1	RATING SEC. 2	RATING SEC. 3	REPLACEMENT DATA HALLICRAFTERS PART No.	REPLACEMENT DATA STANCOR PART No.	REPLACEMENT DATA CHICAGO PART No.	REPLACEMENT DATA MERIT PART No.
T1A	117VAC @ .98A	660VAC CT @ .145A	5VAC 3A	6.3VAC 4.7A	5P0141	P-6314 *	PH-200 *	
B	115/230 VAC @ 25/60 Cycles				5P0131			

* Add series resistor to reduce plate voltage.

TRANSFORMER (OUTPUT)

ITEM No.	RATING IMPEDANCE PRI.	RATING IMPEDANCE SEC.	RATING DC RES. PRI.	RATING DC RES. SEC.	REPLACEMENT DATA HALLICRAFTERS PART No.	REPLACEMENT DATA STANCOR PART No.	REPLACEMENT DATA CHICAGO PART No.	REPLACEMENT DATA MERIT PART No.	INSTALLATION NOTES
T2	6000Ω CT	600Ω TAP @ 500Ω	480Ω CT	270Ω TAP @ 27Ω	55B077				

FILTER CHOKE

ITEM No.	RATINGS TOTAL DIRECT CURRENT	RATINGS D.C. RESISTANCE	RATINGS INDUCTANCE (D CURRENT 1000 MA)	REPLACEMENT DATA HALLICRAFTERS PART No.	REPLACEMENT DATA STANCOR PART No.	REPLACEMENT DATA CHICAGO PART No.	REPLACEMENT DATA MERIT PART No.	INSTALLATION NOTES
L1	.080A	290Ω	17H	56C067	C-1709	R-8120#	C-2990#	# Drill one new mounting hole.

R F COILS

ITEM No.	USE	DC RES. PRI.	DC RES. SEC.	REPLACEMENT DATA HALLICRAFTERS PART No.	REPLACEMENT DATA MEISSNER PART No.	
L2	Ant. Coil	0Ω	0Ω	51B829		Band 6
L3	Ant. Coil	0Ω	0Ω	51B828		Band 5
L4	Ant. Coil	0Ω	0Ω	51B990		Band 4
L5	Ant. Coil	0Ω	0Ω	51B826		Band 3
L6	Ant. Coil	32Ω	.2Ω	51B823		Band 1
L7	1st RF Coil	0Ω	0Ω	51B835		Band 6
L8	1st RF Coil	0Ω	0Ω	51B832		Band 5
L9	1st RF Coil	1.5Ω	0Ω	51B989		Band 4
L10	1st RF Coil	.1Ω	0Ω	51B987		Band 3
L11	Ant. Coil	0Ω	0Ω	51B825		Band 2
L12	1st RF Coil	.2Ω	.1Ω	51B824		Band 1
L13	RF Screen Chk.	0Ω		37A117		Wound on 330Ω res.
L14	RF Screen Chk.	0Ω		37A117		Wound on 330Ω res.
L15	2nd RF Coil	0Ω	0Ω	51B833		Band 6
L16	2nd RF Coil	0Ω	0Ω	51B844		Band 5
L17	2nd RF Coil	.1Ω	0Ω	51B989		Band 4
L18	2nd RF Coil	.3Ω	.1Ω	51B988		Band 3
L19	1st RF Coil	.1Ω	0Ω	51B986		Band 2
L20	2nd RF Coil	.1Ω	0Ω	51B985		Band 1
L21	Osc. Coil	0Ω	0Ω	51B839		Band 6
L22	Osc. Coil	0Ω	0Ω	51B838		Band 5
L23	Osc. Coil	0Ω	0Ω	51B991		Band 4
L24	Osc. Coil	.2Ω	0Ω	51B836		Band 3
L25	Osc. Coil	0Ω	.8Ω	51B835		Band 2
L26	Osc. Coil	0Ω	1.8Ω	51B834		Band 1
L27	RF Plate Chk.	2Ω		53B008		
L28	Fil. Choke	.2Ω		53A009		
L29A	FM 1st IF	.8Ω	.8Ω	50C198		
B	AM 1st IF	1Ω	1Ω			
L30A	FM 2nd IF	1Ω ‡	1Ω	50C190		‡ Include AM Pri. winding
B	AM 2nd IF					Tertiary winding .5Ω
L31A	FM 3rd IF		.8Ω	50C373		
B	AM 3rd IF	* 10Ω	9Ω			* Includes FM Pri. winding
L32	IF Coupling			53B104		
L33	FM Disc. XFMR	.2Ω	.2Ω	50C191		
L34	RFO Coil	0Ω		54C032		
L35	RF Plate	25Ω		53A139		

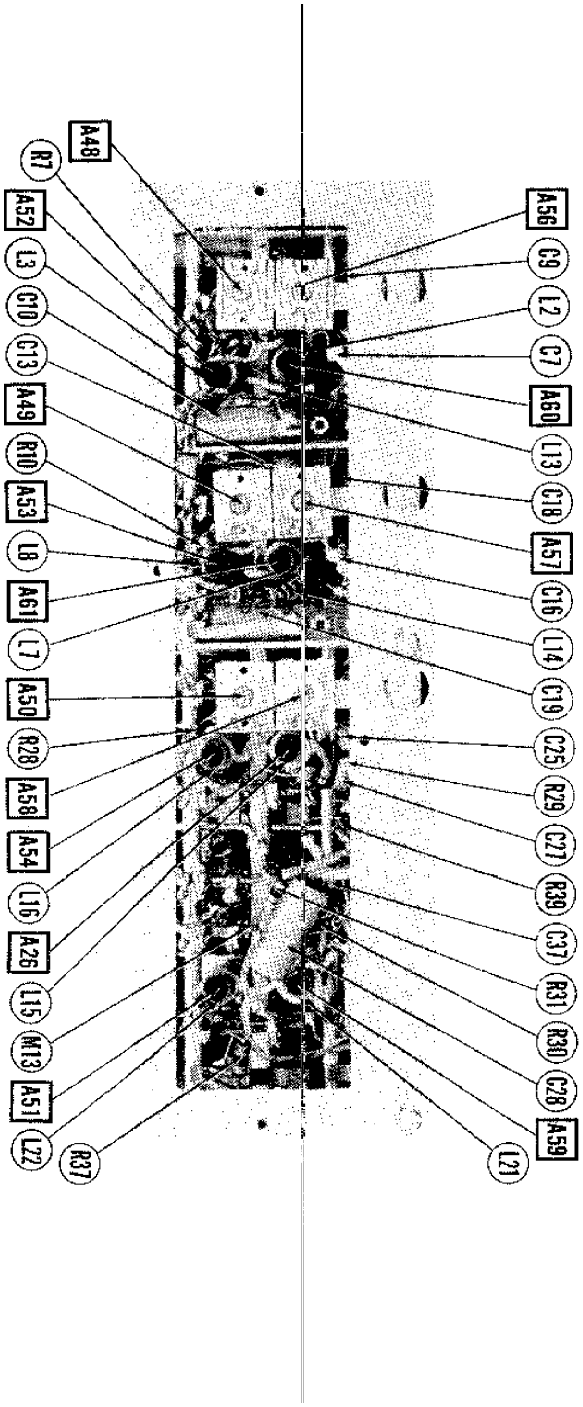
PARTS LIST AND DESCRIPTIONS (Continued)

DIAL LIGHTS

ITEM No.	BASE TYPE	VOLTS	AMPS.	BEAD COLOR	REPLACEMENT DATA HALLI-CRAFTERS PART No.		NOTES
M1 to M12	Bayonet	6-8V	0.25A	Blue			Type #44

MISCELLANEOUS

ITEM No.	PART NAME	HALLICRAFTERS PART No.	NOTES
M13	Switch	60S329	Selector
M14	"	60A153	Standby
M15	"	60A138	XTAL Calib.
M16	"	60A138	Noise Limiter
M17	"	60C330	Reception
M18	"	60A634	Selectivity
M19	"	60C246	Tone
M20	Crystal	19A128	455KC
M21	"	19A1811	500KC
M22	Tuning Gang	46U804	
	Trimmer	44A078	A8, A17, A35
	"	44B164	A9, A10, A11
	"	44A076	A22
	"	44A047	A27, A31
	"	44A347	A39
	Dual Trimmers	44B165	(A48, A56), (A49, A57), (A50, A58)
	Dial Scale	22R21	
	Dial Pointer	07R825	
	Knob	15A088-2	Band Selector
	"	15A045	Reception
	"	15A063	Selectivity
	"	15A062	Tone
	"	15A064	Sensitivity
	"	15A047	Tuning
	"	15A074-1	Pointer Reset
	"	15A027	Volume



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.							
	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.							
8.	.1MFD	High side to Pin 1 (Grid) 7F8 (V4). Low side to chassis.	10.7MC (AM) (400\ MOD)	Band 6	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 "AM" and adjust A20 for maximum output.							
12	Adjust A21 for the null or minimum indication on the output meter. Slowly tune signal generator thru 10.7MC 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 RMA 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 RMA dummy antenna consists of a 200MMF capacitor in series with a 200Ω RF choke which is shunted by a 400MMF capacitor in series with a 400Ω carbon resistor.

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
13.	RMA Dummy	High side to "A1" on Ant. terminal strip. Low side to chassis.	1500KC	Band 1	1500KC	Across voice coil	A22, A23, A24, A25	Adjust for maximum output.
14.	RMA Dummy	"	600KC	"	600KC	"	A26	" " " "
15.	RMA Dummy	"	4.5MC	Band 2	4.5MC	"	A27, A28, A29	" " " "
16.	RMA Dummy	"	2.0MC	"	2.0MC	"	A30	" " " "
17.	RMA Dummy	"	14.0MC	Band 3	14.0MC	"	A31, A32, A33, A34	" " " "
18.	RMA Dummy	"	7.0MC	"	7.0MC	"	A35, A36, A37, A38	" " " "
19.	RMA Dummy	"	28.0MC	Band 4	28.0MC	"	A39, A40, A41, A42	" " " "
20.	RMA Dummy	"	18.0MC	"	18.0MC	"	A43, A44, A45, A46	" " " "
21.	300Ω carbon res.	High side thru 300Ω to "A1". Low side to chassis.	50.0MC	Band 5	50.0MC	"	A47, A48, A49, A50	" " " "
22.	300Ω carbon res.	"	30.0MC	"	30.0MC	"	A51, A52, A53, A54	" " " "
23.	300Ω carbon res.	"	105MC	Band 6	105MC	"	A55, A56, A57, A58	" " " "
24.	300Ω 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	23VDC	0V	0V	6.3VAC	23VDC	-.4VDC	0V	
2	6AQ8	0V	1.6VDC	0V	6.3VAC	235VDC	105VDC	1.6VDC	
3	6AG5	-.1VDC	1.6VDC	0V	6.3VAC	240VDC	170VDC	1.6VDC	
4	7F8	-2VDC	0V	83VDC	1VDC	0V	195VDC	6.3VAC	-2.4VDC
5	6SK7	0V	6.3VAC	0V	0V	6.2VDC	100VDC	0V	240VDC
6	6CQ7	0V	6.3VAC	2.8VDC	0V	2.8VDC	140VDC	0V	240VDC
7	7H8	0V	82VDC	200VDC	0V	0V	0V	7.6VAC	6.3VAC
8	7K7	0V	50VDC	50VDC	0V	0V	-.5VDC	0V	6.3VAC
9	6BA6	0V	0V	-5.7VDC	1.8VDC	-.8VDC	0V	6.3VAC	0V
10	7A4	0V	150VDC	0V	0V	0V	16.5VDC	28VDC	6.3VAC
11	6H8	0V	0V	-.1VDC	-.1VDC	0V	-.2VDC	4.3VAC	0V
12	6BL7GT	0V	65VDC	.2VDC	0V	98VDC	.9VDC	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	CD6/VR-150	15.5VDC	0V	155VDC	0V	155VDC	0V	16.4VDC	0V
16	5U4G	0V	290VDC	0V	270VAC	0V	270VAC	290VDC	290VDC

§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	6AQ8	2 Meg.	Inf.	0Ω	.2Ω	*3.5KΩ	*3.5KΩ	170Ω	
3	6AG5	1.3Meg.	Inf.	0Ω	.2Ω	*1.2KΩ	*47KΩ	170Ω	
4	7F8	2.2 Meg.	0Ω	*20KΩ	100Ω	0Ω	*9KΩ	.2Ω	10KΩ
5	6SK7	0Ω	.2Ω	0Ω	2.2 Meg.	270Ω	*60KΩ	0Ω	*1.5KΩ
6	6CQ7	0Ω	.2Ω	33Ω	2.5 Meg.	55Ω	60KΩ	0Ω	*1.5KΩ
7	7H8	0Ω	*11KΩ	*50KΩ	0Ω	0Ω	2.2 Meg.	1.8KΩ	.2Ω
‡ 8	7H7	0Ω	*58 KΩ	*68KΩ	0Ω	0Ω	240KΩ	0Ω	.2Ω
‡ 9	6BA6	0Ω	0Ω	150KΩ	270KΩ	120KΩ	Inf.	.2Ω	0Ω
† 10	7A4	0V	*100KΩ	10Ω	Inf.	Inf.	0KΩ	0KΩ	.2Ω
‡ 11	6H6	0Ω	0Ω	2.2Meg.	1.2 Meg.	Inf.	150KΩ	2.2Ω	Inf.
12	6BL7GT	1 Meg.	*220KΩ	1.5KΩ	8.2KΩ	*220KΩ	1.2KΩ	.2Ω	0Ω
13	6V6GT	0Ω	0Ω	*220Ω	*280Ω	220KΩ	10KΩ	.2Ω	220Ω
14	6V6GT	0Ω	0Ω	*220Ω	*280Ω	220KΩ	56Ω	.2Ω	220Ω
15	CD6/VR-150	*2.2KΩ	0Ω	*2.2KΩ	220KΩ	*2.2KΩ	Inf.	*2.2KΩ	Inf.
16	5U4G	Inf.	60KΩ	Inf.	60Ω	Inf.	5Ω	45KΩ	60KΩ

‡ VOLTAGE AND RESISTANCE READINGS TAKEN IN FM POSITION.
* Measured from pin 5 of V16 (5U4G)
† Taken in band 2 position.

1. DC Voltage measurements are at 20,000 ohms per volt; AC Voltages measured at 1,000 ohms.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common negative.
4. Line voltage maintained at 117 volts for voltage readings.
5. Nominal tolerance on component values makes possible a variation of ±15% in voltage and resistance readings.
6. 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	85VDC	-.4VDC	0V	
2	6AQ8	0V	1.6VDC	0V	6.3VAC	235VDC	105VDC	1.6VDC	
3	6AQ5	-.1VDC	1.6VDC	0V	6.3VAC	240VDC	170VDC	1.6VDC	
4	7F8	-2VDC	0V	85VDC	1VDC	0V	195VDC	6.3VAC	-2.4VDC
5	6SK7	0V	6.3VAC	0V	0V	6.2VDC	100VDC	0V	240VDC
6	6CG7	0V	6.3VAC	2.8VDC	0V	2.8VDC	140VDC	0V	240VDC
7	7H8	0V	82VDC	200VDC	0V	0V	0V	7.6VAC	6.3VAC
8	7H7	0V	50VDC	50VDC	0V	0V	-.5VDC	0V	6.3VAC
9	6BH6	0V	0V	-5.7VDC	1.8VDC	-.8VDC	0V	6.3VAC	0V
10	7A4	0V	150VDC	0V	0V	0V	16.5VDC	28VDC	6.3VAC
11	6H8	0V	0V	-.1VDC	-.1VDC	0V	-.2VDC	6.3VAC	0V
12	6BL7GT	0V	85VDC	.2VDC	0V	86VDC	.9VDC	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	CD6/VR-150	15.5VDC	0V	155VDC	0V	155VDC	0V	16.4VDC	0V
16	5U4G	0V	290VDC	0V	270VAC	0V	270VAC	290VDC	290VDC

§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	6AQ8	2 Meg.	Inf.	0Ω	.2Ω	*3.5KΩ	*3.5KΩ	170Ω	
3	6AQ5	1.3Meg.	Inf.	0Ω	.2Ω	*1.2KΩ	*47KΩ	170Ω	
4	7F8	2.2 Meg.	0Ω	*70KΩ	100Ω	0Ω	*95Ω	.2Ω	10KΩ
5	6SK7	0Ω	.2Ω	0Ω	2.2 Meg.	270Ω	*60KΩ	0Ω	*1.5KΩ
6	6CG7	0Ω	.2Ω	33Ω	2.5 Meg.	550Ω	60KΩ	0Ω	*1.5KΩ
7	7H8	0Ω	*11KΩ	*50KΩ	0Ω	0Ω	2.2 Meg.	1.8KΩ	.2Ω
‡ 8	7H7	0Ω	*50 KΩ	*68KΩ	0Ω	0Ω	240KΩ	0Ω	.2Ω
‡ 9	6BH6	0Ω	0Ω	150KΩ	270KΩ	120KΩ	Inf.	.2Ω	0Ω
† 10	7A4	0V	*100KΩ	10Ω	Inf.	Inf.	95KΩ	0KΩ	.2Ω
‡ 11	6H6	0Ω	0Ω	2.2Meg.	1.2 Meg.	Inf.	150KΩ	2.2Ω	Inf.
12	6BL7GT	1 Meg.	*220KΩ	1.5KΩ	8.2KΩ	*220KΩ	1.2KΩ	.2Ω	0Ω
13	6V6GT	0Ω	0Ω	*220Ω	*280Ω	220KΩ	10KΩ	.2Ω	220Ω
14	6V6GT	0Ω	0Ω	*220Ω	*280Ω	220KΩ	56Ω	.2Ω	220Ω
15	CD6/VR-150	*2.2KΩ	0Ω	*2.2KΩ	220KΩ	*2.2KΩ	Inf.	*2.2KΩ	Inf.
16	5U4G	Inf.	60KΩ	Inf.	60K	Inf.	56Ω	45KΩ	60KΩ

‡ VOLTAGE AND RESISTANCE READINGS TAKEN IN FM POSITION.
* Measured from pin 5 of V16 (5U4G)
† Taken in band 2 position.

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