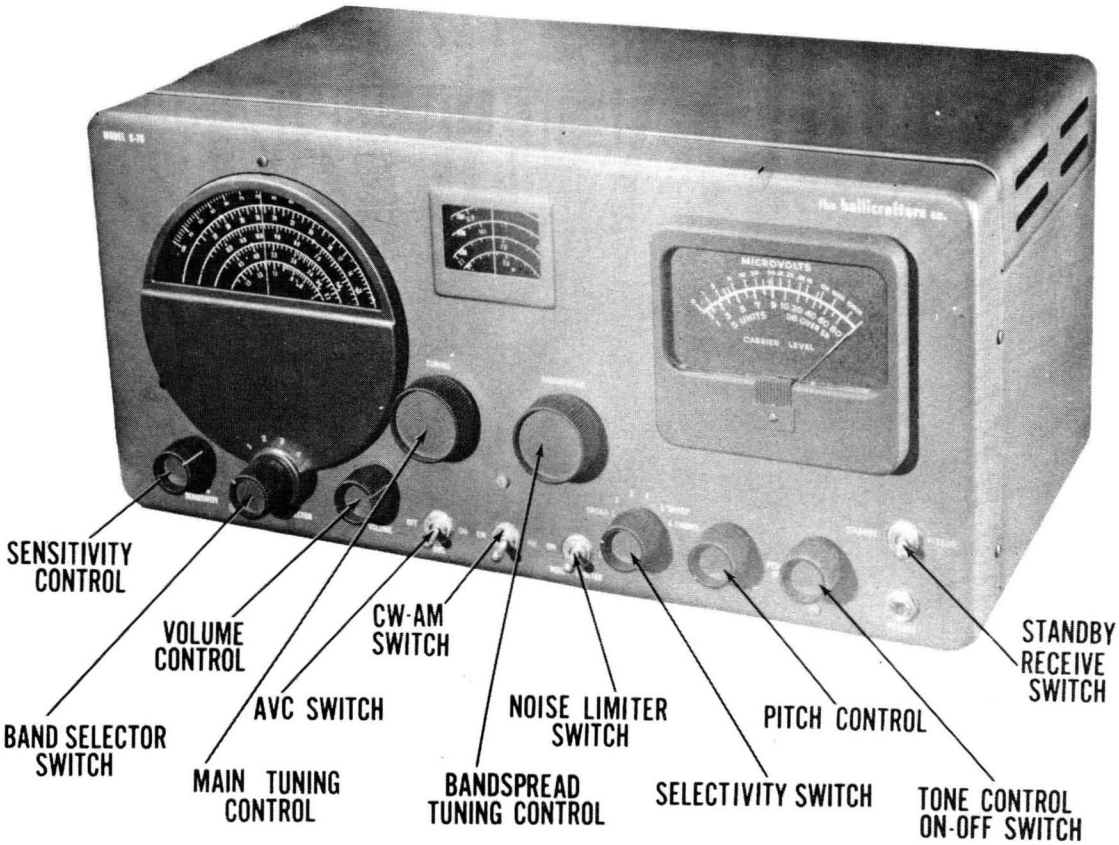
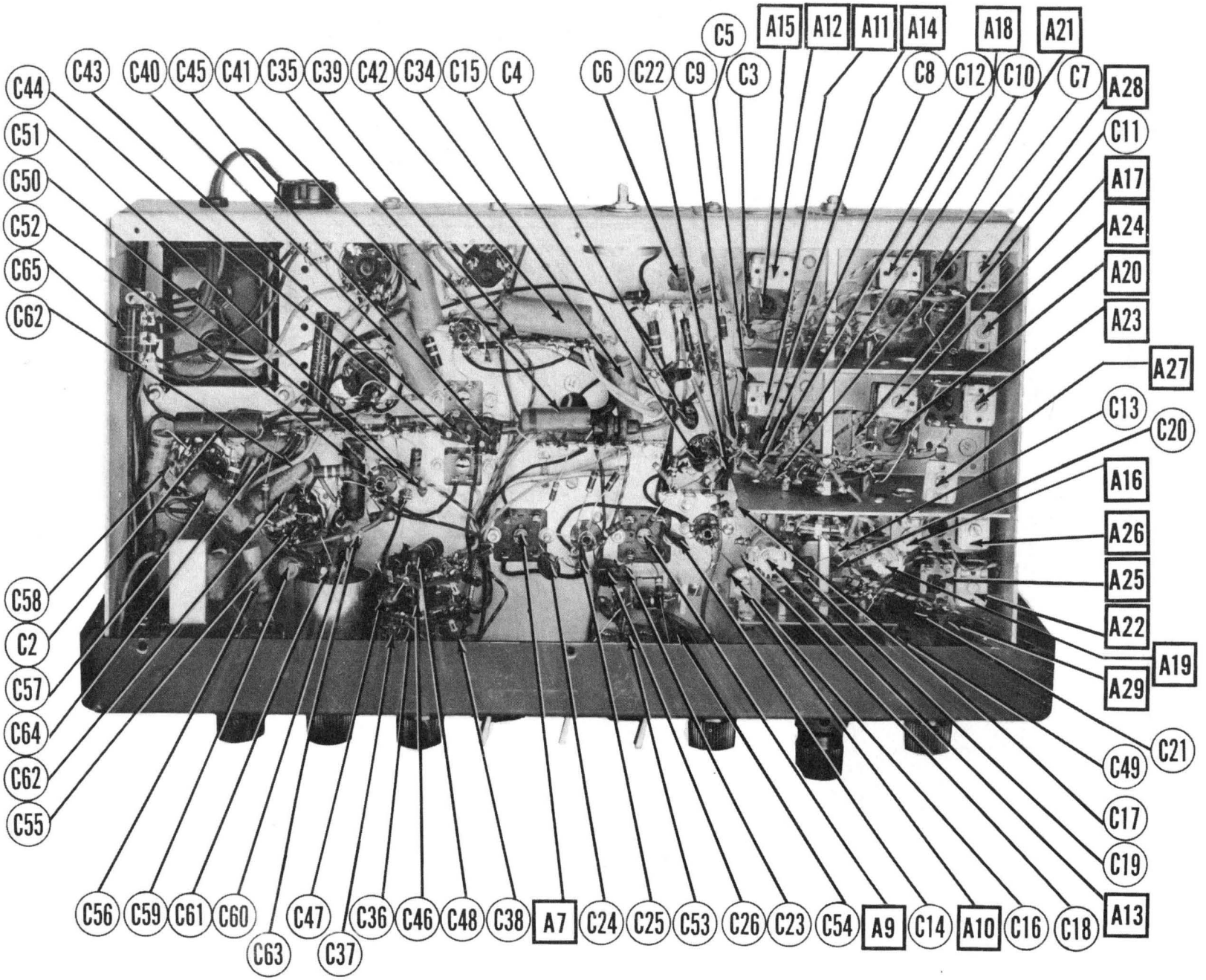
HALLICRAFTERS
MODELS S-76, S-76U



HALLICRAFTERS
MODELS S-76, S-76U

TRADE NAME	Hallicrafters, Models S-76, S-76U
MANUFACTURER	The Hallicrafters Co., 5th. and Kostner Avenues, Chicago, Illinois
TYPE SET	AC Operated Multi-Band Superheterodyne Communications Type Receiver
TUBES (ELEVEN)	Types 6CB6 RF Amp., 6AU6 1650KC Mixer, 6C4 Oscillator, 6BA6 1650KC IF Amp., 6BE6 50KC Converter, 6BA6 50KC IF Amp., 6AL5 DET-AVC-Noise Limiter, 6SC7 AF Amp.-BF0, 6K6GT Power Output, VR-150/0D3 Voltage Regulator, 5Y3GT Rectifier
POWER SUPPLY	105-125 Volts AC (Model S-76), 105 or 250 Volts AC (Model S-76U)
RATING	.71 Amp. at 117 Volts AC
TUNING RANGE	Band 1 538-1580KC, Band 2 1720KC-4.9MC, Band 3 4.6-13MC, Band 4 12-34MC

HOWARD W. SAMS & CO., INC. • Indianapolis 5, Indiana


C5
A15
A12
A11
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A18
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C43
C40
C45
C41
C35
C39
C42
C34
C15
C4
C6
C22
C9
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C12
C10
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A28
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R40
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R56
T2
M9
R54
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R60
L21
R33
R43
R42
M6
R36
R35
R34
R41
M10
M8
R26
M7
R22
R52
R21
R23
R2
R19
R32
R18

PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA: Hallicrafters PART No.	REPLACEMENT DATA: STANDARD REPLACEMENT	RMA BASE TYPE	INSTALLATION NOTES
V1	RF Amplifier	90X6CB6	6CB6	6CK	
V2	1650KC Mixer	90X6AU6	6AU6	7BK	
V3	Oscillator	90X6C4	6C4	6BG	
V4	1650KC IF Amp.	90X6BA6	6BA6	7BK	
V5	50KC Converter	90X6BE6	6BE6	7CH	
V6	50KC IF Amplifier	90X6BA6	6BA6	7BK	
V7	Detector-AVC-Noise Limiter	90X6AL5	6AL5	6BT	
V8	AF Amplifier-BFO	90X6SC7	6SC7	8S	
V9	Power Output	90X6K6GT	6K6GT	7S	
V10	Voltage Regulator	VR150/0D3	VR150/0D3	4AJ	
V11	Rectifier	90X5Y3GT	5Y3GT	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: Hallicrafters PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
C1A	60	450	45B113			UPT62245		TVL-3790	▲ Filter
B	20	450						TVA-1705	■ Filter
C	20	450							▲ Filter
C2	10	25	45A121	PRS25/10		BR102A		TVA-1204	Output Cathode
C3	220		47B20221K5	SI220	D6-221	5R5T25	GP2K-221	5GA-T22	RF Coupling
C4	5000		47A168	BPD-005	DD-502	1D5D5	811-005	5HK-D5	RF Amp. Screen
C5	5000		47A168	BPD-005	DD-502	1D5D5	811-005	5HK-D5	RF Amp. Cathode
C6	5000		47A168	BPD-005	DD-502	1D5D5	811-005	5HK-D5	AVC Filter
C7	2.2		47A160-4		TCZ-2.2		NP0K-2R2		Fixed Trimmer
C8	220		47B20221K5	SI220	D6-221	5R5T25	GP2K-221	5GA-T22	RF Bypass
C9	5000		47A168	BPD-005	DD-502	1D5D5	811-005	5HK-D5	RF Bypass
C10	25		47X20UK250K				N750K-250	5TCU-Q25	RF Coupling
C11	2.2		47A160-4		TCZ-2.2		NP0K-2R2		RF Coupling
C12	100		47X20UJ101K	SI100N750	TCN-100		N750L-101	5TCU-T1	RF Coupling
C13	2.2		47A160-4		TCZ-2.2		NP0K-2R2		Osc. Coupling
C14	5000		47A168	BPD-005	DD-502	1D5D5	811-005	5HK-D5	1650KC Mixer Plate
C15	5000		47A168	BPD-005	DD-502	1D5D5	811-005	5HK-D5	1650 KC Mixer Screen
C16	100		47X20UJ101K	SI100N750	TCN-100		N750L-101	5TCU-T1	Osc. Feedback
C17	100		47X20UJ101K	SI100N750	TCN-100		N750L-101	5TCU-T1	Osc. Grid Cap.
C18	25		47X20UK250K				N750K-250	5TCU-Q25	Fixed Trimmer
C19	2400	500	47X30D242J	1464-0025		1R5D25			Fixed Padder
C20	1000	500	47X25D102J	1464-001		1R5D1		MS-21	Fixed Padder
C21	470	500	47X20B471K	1469-0005	TCN-470	5R5T5	N750L-471	MS-35	Fixed Padder
C22	5000		47A168	BPD-005	DD-502	1D5D5	811-005	5HK-D5	1650KC Mixer Cathode
C23	5000		47A168	BPD-005	DD-502	1D5D5	811-005	5HK-D5	AVC Filter
C24	5000		47A168	BPD-005	DD-502	1D5D5	811-005	5HK-D5	1650KC IF Amp. Dec.
C25	5000		47A168	BPD-005	DD-502	1D5D5	811-005	5HK-D5	1650 KC IF Amp. Screen
C26	5000		47A168	BPD-005	DD-502	1D5D5	811-005	5HK-D5	1650 KC IF Amp. Cathode
C27	.05	200	46AU503J	P288-05	DF-503	PTE4S5		2TM-S5	Osc. Anode Dec.
C28	100		47X20UJ101K	SI100N750	TCN-100		N750L-101	5TCU-T1	Osc. Grid Cap.
C29	.05	200	46AU503J	P288-05	DF-503	PTE4S5		2TM-S5	Conv. Cathode
C30	100		47X20UJ101K	SI100N750	TCN-100		N750L-101	5TCU-T1	Fixed Trimmer
C31	2.2		47A160-4		TCZ-2.2		NP0K-2R2		IF Coupling
C32	390	500	47X20D391J	1469-0004	TCN-390	5R5T4	N750L-391	MS-34	Fixed Trimmer
C33	390	500	47X20D391J	1469-0004	TCN-390	5R5T4	N750L-391	MS-34	Fixed Trimmer
C34	.05	200	46AU503J	P288-05	DF-503	PTE4S5		2TM-S5	50KC Conv. Dec.
C35	.02	600	46A4203J	P688-02	DF-203	PTE6S2		6TM-S2	RF Bypass
C36	.0047	600	46A181	P688-0047	D6-472		GP2-333-472	6TM-D47	Fixed Padder
C37	.01	600	46A179	P688-01	D6-103	PTE6S1	GP2-333-103	6TM-S1	Fixed Padder
C38	.022	600	46A180	P688-022				6TM-S22	Fixed Padder
C39	470	500	47X20B471K	1469-0005	TCN-470	5R5T5	N750L-471	MS-35	IF Coupling
C40	.05	600	46AY503J	P688-05	DF-503	PTE6S5		6TM-S5	50KC IF Amp. Dec.
C41	.05	600	46AY503J	P688-05	DF-503	PTE6S5		6TM-S5	50KC IF Amp. Screen
C42	.25	200	46AT254J	P488-25		GT2P25		2TM-P25	50KC IF Amp. Cathode
C43	2.2		47A160-4		TCZ-2.2		NP0K-2R2		IF Coupling
C44	390	500	47K20D391J	1469-0004	TCN-390	5R5T4	N750L-391	MS-34	Fixed Trimmer
C45	390	500	47X20D391J	1469-0004	TCN-390	5R5T4	N750L-391	MS-34	Fixed Trimmer
C46	.0047	600	46A181	P688-0047	D6-472		GP2-333-472	6TM-D47	Fixed Padder
C47	.01	600	46A179	P688-01	D6-103	PTE6S1	GP2-333-103	6TM-S1	Fixed Padder

PARTS LIST AND DESCRIPTIONS (Continued)

RESISTORS

ITEM No.	RATING: RESISTANCE	RATING: WATTS	REPLACEMENT DATA: Hallicrafters PART No.	IRC PART No.	IDENTIFICATION CODES
R28	15Ω	½	23X20X150K		Parasitic Supppessor
R29	22KΩ	½	23X20X223K	BTS-22K	50KC Osc. Grid
R30	10KΩ	1	23X30X103K	BTA-10K	50KC Osc. Anode
R31	150Ω	½	23X20X151K	BTS-150	50KC Conv. Cathode
R32	3300Ω	½	23X20X332K	BTS-3300	50KC Conv. Plate Decoupling
R33	470Ω	½	23X20X471K	BTS-470	Bias Network
R34	180Ω	½	23X20X181K		Parasitic Suppressor
R35	220Ω	½	23X20X221K		Parasitic Suppressor
R36	390Ω	½	23X20X391K		Parasitic Suppressor
R37	1Meg	½	23X20X105K	BTS-1Meg	50KC IF Amp. Grid
R38	100Ω	½	23X20X101K	BTS-100	50KC IF Amp. Cathode
R39	39KΩ	1	23X30X393K	BTA-39K	50KC IF Amp. Screen
R40	3300Ω	½	23X20X332K	BTS-3300	50KC IF Amp. Decoupling
R41	180Ω	½	23X20X181K		Parasitic Suppressor
R42	220Ω	½	23X20X221K		Parasitic Suppressor
R43	390Ω	½	23X20X391K		Parasitic Suppressor
R44	6.8Ω	1	23X30X068K		Diode Filament
R45	1.5Meg	½	23X20X155K	BTS-1.5Meg	Noise Limiter Diode Load
R46	1Meg	½	23X20X105K	BTS-1Meg	Voltage Divider
R47	1Meg	½	23X20X105K	BTS-1Meg	Voltage Divider
R48	82KΩ	½	23X20X823K	BTS-82K	Det. Diode Load
R49	330KΩ	½	23X20X334K	BTS-330K	Det. Diode Load
R50	47KΩ	½	23X20X473K	BTS-47K	AVC Network
R51	3.3Meg	½	23X20X335K	BTS-3.3Meg	AVC Network
R52	100Ω	½	23X20X101K	BTS-100	AVC Network
R53	470KΩ	½	23X20X474K	BTS-470K	Phono Input Shunt
R54	120KΩ	½	23X20X124K	BTS-120K	BFO Grid-See Note 2
R55	39KΩ	½	23X20X393K	BTS-39K	BFO Plate-See Note 3
R56	15Meg	½	23X20X156K	BTS-15Meg	AF Amp. Grid
R57	220KΩ	½	23X20X224K	BTS-220K	AF Amp. Plate
R58	470KΩ	½	23X20X474K	BTS-470K	Output Grid
R59	390Ω	1	23X30X391K	BTA-390	Output Cathode
R60	560Ω	1	23X30X561K	BTA-560	Output XFMR Shunt
R61	390KΩ	½	23X20X394K	BTS-390K	Bias Network-See Note 4
R62	3000Ω	10	24BG302E	1 3/4A-3000	Voltage Regulator Load
R63	10KΩ	½	23X20X103K	BTS-10K	Filter

Note 1 Some models use 2.2Meg resistor in this application.
Note 2 Some models use 100KΩ resistor in this application.
Note 3 Some models use 47KΩ resistor in this application.
Note 4 Some models use 350KΩ resistor in this application.

TRANSFORMER (POWER)

ITEM No.	RATING: PRI.	RATING: SEC. 1	RATING: SEC. 2	RATING: SEC. 3	REPLACEMENT DATA: Hallicrafters PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.
T1	117VAC @ .71A	540VCT .105ADC	5VAC @ 2A	6.3VAC @ 3.5A	52C221 52C222 ①		P-3052 ④	PH-120 ③

① Used in model S-76U.
② Add series resistor to reduce plate voltage.
④ Drill new mounting holes.

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING: IMPEDANCE PRI.	RATING: IMPEDANCE SEC.	RATING: DC RES. PRI.	RATING: DC RES. SEC.	REPLACEMENT DATA: Hallicrafters PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	INSTALLATION NOTES
T2	7KΩ	500Ω Tap 3.2Ω	370Ω	52Ω Tap .4Ω	55B120	A-3878	A2900	RO-13	

PARTS LIST AND DESCRIPTIONS (Continued)

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 Hallicrafters PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
C48	.022	600	46A180	P688-022				6TM-S22	Fixed Padder
C49	.25	200	46AT254J	P488-25		GT2P25		2TM-P25	RF Bypass
C50	220		47B2022lK5	SI220	D6-221	5R5T25	GP2K-221	5GA-T22	Diode RF Filter
C51	220		47B2022lK5	SI220	D6-221	5R5T25	GP2K-221	5GA-T22	Diode RF Filter
C52	.02	600	46AY203J	P688-02	DF-203	PTE6S2		6TM-S2	Audio Coupling
C53	.02	600	46AY203J	P688-02	DF-203	PTE6S2		6TM-S2	Audio Coupling
C54	.02	600	46AY203J	P688-02	DF-203	PTE6S2		6TM-S2	Audio Coupling
C55	220		47B2022lK5	SI220	D6-221	5R5T25	GP2K-221	5GA-T22	RF Bypass
C56	.005	600	46AY502J	P688-005	D6-502	PTE6D5	GP2-333-502	6TM-D5	Tone Comp.
C57	.02	600	46AY203J	P688-02	DF-203	PTE6S2		6TM-S2	Audio Coupling
C58	.01	600	46X35X103J	P688-01	D6-103	PTE6S1	GP2-333-103	6TM-S1	Output Plate
C59	.02	600	46AY203J	P688-02	DF-203	PTE6S2		6TM-S2	BFO Feedback
C60	470	500	47X20B471K	1469-0005		5R5T5		MS-35	BFO Grid Cap.
C61	560	500	47X20D561J						Fixed Trimmer
C62	.02	600	46AY203J	P688-02	DF-203	PTE6S2		6TM-S2	RF Bypass
C63	47		47X20UK470K	SI47	D6-470	5R5Q5	GPlK-470	5GA-Q47	BFO Coupling
C64	.05	200	46AU503J	P288-05	DF-503	PTE4S5		2TM-S5	Noise Limiter Filter
C65	.01	600	46X35X103J	P688-01	D6-103	PTE6S1	GP2-333-103	6TM-S1	Line Filter

CONTROLS

ITEM No.	RATING RESISTANCE	RATING WATTS	REPLACEMENT DATA Hallicrafters PART No.	IRC PART No.	CLAROSTAT PART No.	CENTRALAB PART No.	INSTALLATION NOTES
R1A	10KΩ	½	25B590	Q13-116	AM-81-Z	B-15	Sensitivity Control
B	Shaft		Not Req.	Not Req.	RS-2	Not Req.	Attach to R1A Per Instructions.
R2A	500KΩ	½	25B534	Q13-133	AM-60-Z	B-60	Volume Control
B	Shaft		Not Req.	Not Req.	RS-2	Not Req.	Attach to R2A Per Instructions.
R3A	500KΩ	½	25B605	Q13-133	AG-60-Z	B-60-S	Tone Control
B	Shaft		Not Req.	Not Req.	RS-2	Not Req.	Attach to R3A Per Instructions.
C	Switch		Not Req.	76-1	SWB	Not Req.	Attach to R3A Per Instructions.
R4	500Ω	4			RTV-25		"S" Meter Adjustment-Wire Wound

RESISTORS

ITEM No.	RATING RESISTANCE	RATING WATTS	REPLACEMENT DATA Hallicrafters PART No.	IRC PART No.	IDENTIFICATION CODES
R5	22Ω	½	23X20X220K		Parasitic Suppressor
R6	15Ω	½	23X20X150K		Parasitic Suppressor
R7	1Meg	½	23X20X105K	BTS-1Meg	RF Amp. Grid
R8	180Ω	¼	23X20X181K	BTS-180	RF Amp. Cathode
R9	39KΩ	1	23X30X393K	BTA-39K	RF Amp. Screen
R10	1000Ω	½	23X20X102K	BTS-1000	RF Choke Shunt
R11	3300Ω	½	23X20X332K	BTS-3300	RF Amp. Plate
R12	3300Ω	½	23X20X332K	BTS-3300	RF Amp. Plate
R13	6800Ω	1	23X30X682K	BTA-6800	RF Amp. Plate
R14	3300Ω	½	23X20X332K	BTS-3300	RF Amp. Plate Decoupling
R15	15Ω	½	23X20X150K		Parasitic Suppressor
R16	1.5Meg	½	23X20X155K	BTS-1.5Meg	1650KC Mixer Grid-See Note 1
R17	2200Ω	½	23X20X222K	BTS-2200	1650 KC Mixer Cathode
R18	330KΩ	½	23X20X334K	BTS-330K	1650 KC Mixer Screen
R19	3300Ω	½	23X20X332K	BTS-3300	1650 KC Mixer Plate Decoupling
R20	22KΩ	½	23X20X223K	BTS-22K	Osc. Grid
R21	10KΩ	1	23X30X103K	BTA-10K	Osc. Plate
R22	15Ω	½	23X20X150K		Parasitic Suppressor
R23	120KΩ	½	23X20X124K	BTS-120K	AVC Network-See Note 2
R24	100Ω	½	22X20X101K	BTS-100	1650KC IF Amp. Cathode
R25	8200Ω	½	23X20X822K	BTS-8200	1650 KC IF Amp. Screen
R26	3300Ω	½	23X20X332K	BTS-3300	1650 KC IF Amp. Plate Decoupling
R27	270Ω	½	23X20X271K	BTS-270	"S" Meter Shunt

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FOLDER 9

PARTS LIST AND DESCRIPTIONS (Continued)

FILTER CHOKE

ITEM No.	RATINGS TOTAL DIRECT CURRENT	RATINGS D. C. RESISTANCE	RATINGS INDUCTANCE (0 CURRENT 1000 ~)	REPLACEMENT DATA Hallicrafters PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	INSTALLATION NOTES
L1	.105A	330Ω	9 Henries	56B107		C-2995 ②	R-23110②	② One new mounting hole.

COILS (RF-IF)

ITEM No.	USE	DC RES. PRI.	DC RES. SEC.	REPLACEMENT DATA Hallicrafters PART No.	MEISSNER PART No.	NOTES
L2	Ant. Coil	.2Ω	0Ω	51B1325		Band 4
L3	Ant. Coil	.3Ω	.1Ω	51B1324		Band 3
L4	Ant. Coil	.4Ω	1.5Ω	51B1323		Band 2
L5	Ant. Coil	28Ω	5.8Ω	51B1322		Band 1
L6	RF Choke	.3Ω		53A215		
L7	RF Coil	1.3Ω	0Ω	51B1327		Band 4
L8	RF Coil	9Ω	.1Ω	51B1326		Band 3
L9A	RF Coil	1.5Ω		51B1319		Band 2 L9A and 9B wound on same
L9B	RF Coil	6.5Ω				Band 1 Form
L10	Osc. Coil	2Ω	.1Ω	51B1321		Band 4
L11	Osc. Coil	.5Ω	.1Ω	51B1320		Band 3
L12	Osc. Coil	.5Ω	.9Ω	51B1329		Band 2
L13	Osc. Coil	.7Ω	2Ω	51B1328		Band 1
L14	1st IF	.8Ω	.8Ω	50B488		1650KC
L15	2nd IF	.8Ω	.8Ω	50B488		1650KC
L16	Osc. Coil	.4Ω		50B490		1600KC (Tap 2Ω)
L17	1st IF Pri.	32Ω		50B489		50KC (Tap 14Ω)
L18	1st IF Sec.	32Ω		50B489		50KC (Tap 14Ω)
L19	2nd IF Pri.	32Ω		50B489		50KC (Tap 14Ω)
L20	2nd IF Sec.	32Ω		50B489		50KC (Tap 14Ω)
L21	BFO Osc. Coil	100Ω		54B045		(Tap 69Ω)
L22	RF Choke	9Ω		53A107		

DIAL LIGHTS

ITEM No.	BASE TYPE	VOLTS	AMPS.	BEAD COLOR	REPLACEMENT DATA Hallicrafters PART No.		NOTES
M1	Bayonet	6-8	.25	Blue	39A003		Type number 44.
M2	Bayonet	6-8	.25	Blue	39A003		Type number 44.
M3	Bayonet	7.5	.2	White			Type number 51.
M4	Bayonet	7.5	.2	White			Type number 51.

MISCELLANEOUS

ITEM No.	PART NAME	HALLICRAFTERS PART No.	NOTES
M5A	Switch	62B053	Band, Ant. Section
B	Switch	62B053	Band, RF Section
C	Switch	62B054	Band, Osc. Grid Section
D	Switch	62B055	Band, Osc. Plate Section
M6	Switch	60B399	Selectivity
M7	Switch	60A138	AVC
M8	Switch	60A138	AM-CW
M9	Switch	60A192	Receiver-Standby
M10	Switch	60A138	Limiter
M11	Meter	82C183	Carrier Level
M12	3 Gang Var. Cap.	48C244	(12-420MMF) Each Section
M13	3 Gang Var. Cap.	48C243	Bandspread
	Cabinet	66D652	
	Dial Scale	83B387	Main
	Dial Scale	83B388	Bandspread

VOLTAGE READINGS

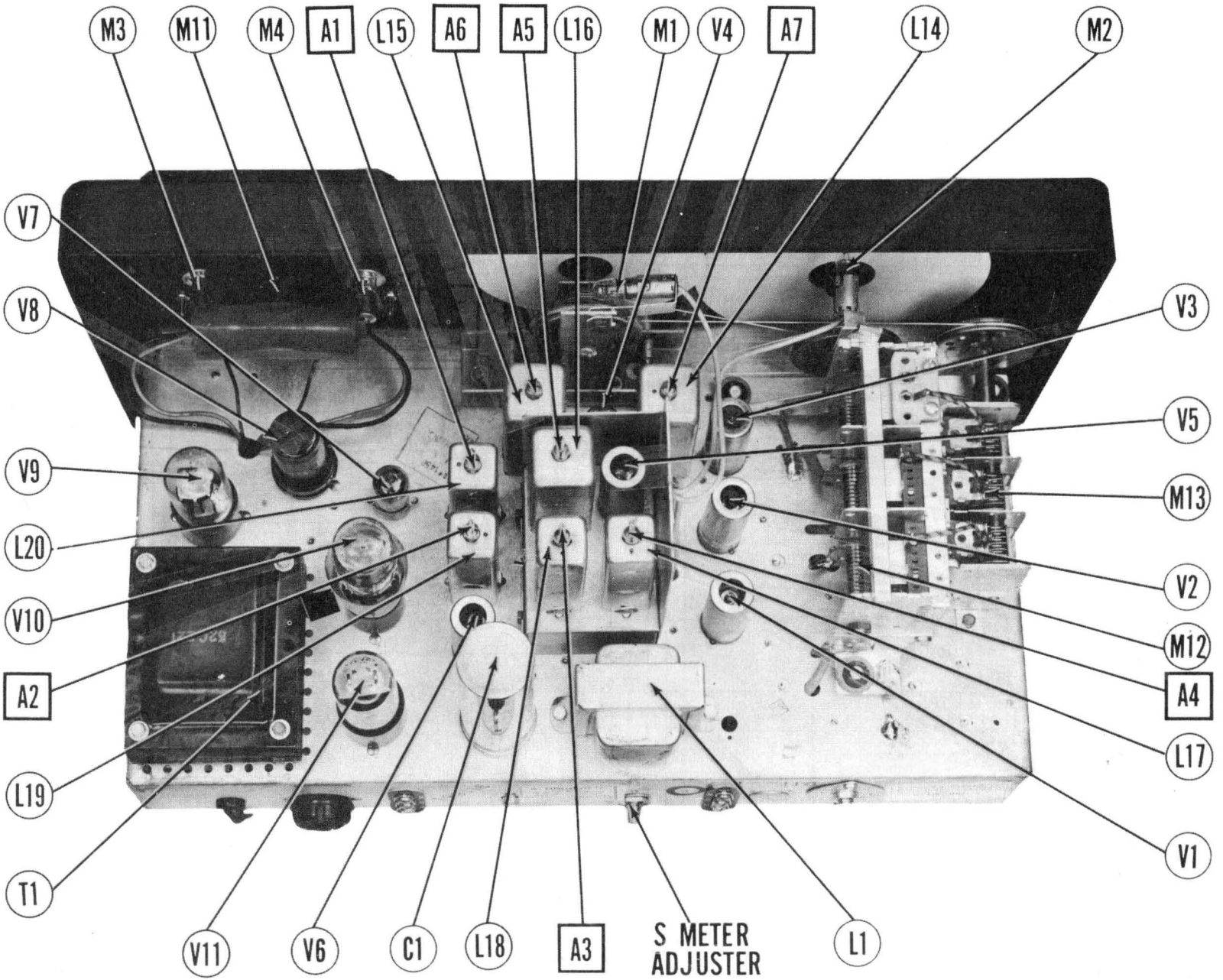
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
V 1	6CB6	0V	26VDC	0V	6.3VAC	260VDC	255VDC	26VDC	
V 2	6AU6	-3.8VDC	0V	0V	6.3VAC	255VDC	70VDC	4.6VDC	
V 3	6C4	85VDC	0V	0V	6.3VAC	85VDC	§-11VDC	0V	
V 4	6BA6	0V	26VDC	0V	6.3VAC	260VDC	135VDC	26VDC	
V 5	6BE6	§-1.8VDC	1.4VDC	0V	6.3VAC	260VDC	85VDC	0V	
V 6	6BA6	0V	26VDC	0V	6.3VAC	250VDC	220VDC	26VDC	
V 7	6AL5	0V	-.1VDC	0V	4.3VAC	0V	0V	-.1VDC	
V 8	6SC7	0V	▲115VDC	-.5VDC ▲-6.1VDC	-.3VDC	95VDC	0V	0V	6.3VAC
V 9	6K6GT	0V	0V	265VDC	260VDC	0V	280VDC	6.3VAC	16VDC
V 10	VR-150/0D3	0V	0V	140VDC	260VDC	140VDC	0V	140VDC	0V
V 11	5Y3GT	260VDC	280VDC	0V	280VAC	0V	280VAC	0V	280VDC

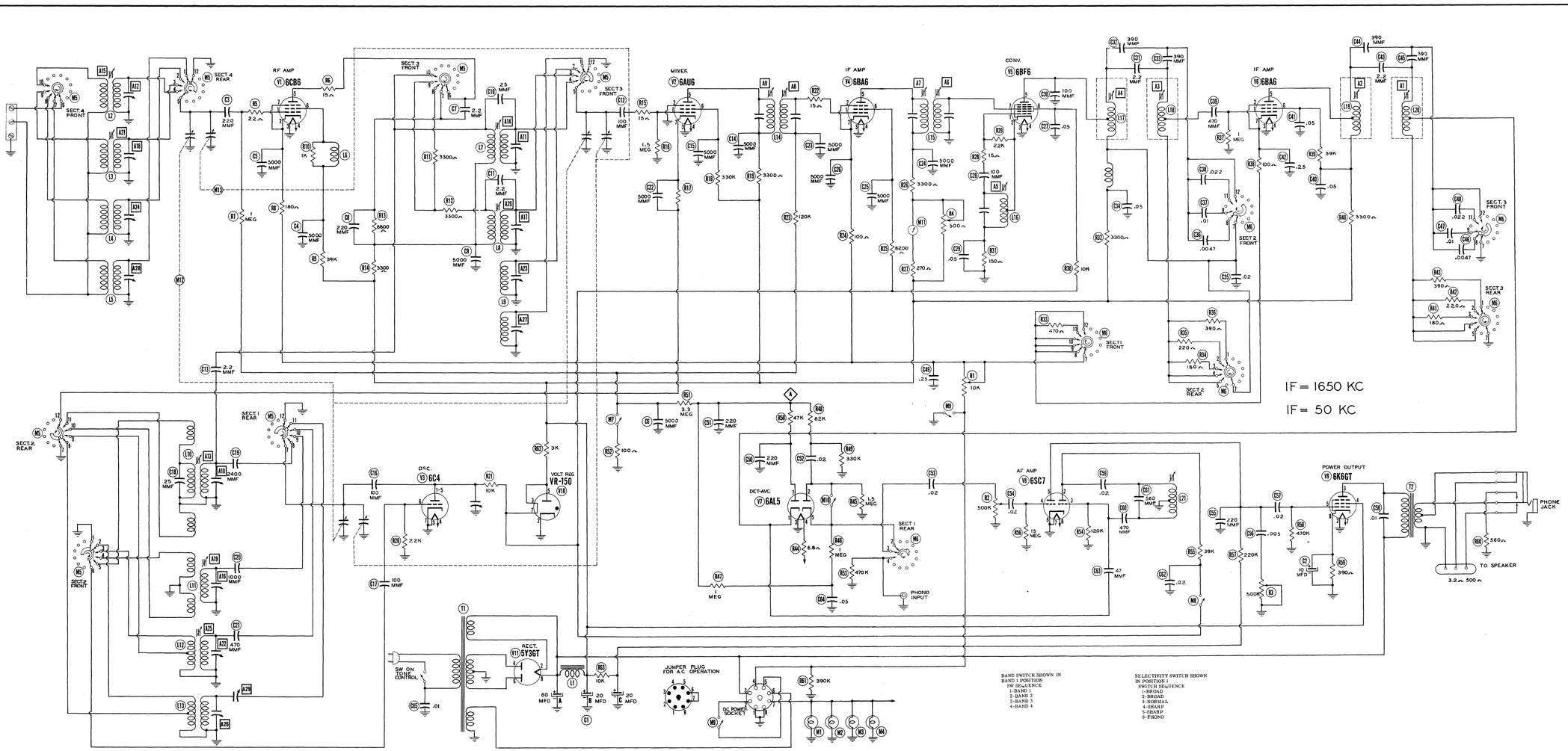
RESISTANCE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
V 1	6CB6	4.7Meg	10KΩ	0Ω	.1Ω	†10KΩ	†39K Ω	10KΩ	
V 2	6AU6	1.5Meg	0Ω	0Ω	.1Ω	†3.6KΩ	†330KΩ	2.2KΩ	
V 3	6C4	†13KΩ	Inf.	0Ω	.1Ω	†13KΩ	22KΩ	0Ω	
V 4	6BA6	3.8Meg	10KΩ	0Ω	.1Ω	†3.6KΩ	†11KΩ	10KΩ	
V 5	6BE6	22KΩ	150Ω	0Ω	.1Ω	†3.6KΩ	†13KΩ	.8Ω	
V 6	6BA6	1Meg	10KΩ	0Ω	.1Ω	†3.6KΩ	†42KΩ	10KΩ	
V 7	6AL5	390Ω	1.5Meg	0Ω	2.5Ω	2.4Meg	Inf.	450KΩ	
V 8	6SC7	0Ω	†▲42KΩ	120KΩ	15Meg	†230KΩ	0Ω	0Ω	.1Ω
V 9	6K6GT	Inf.	0Ω	†370Ω	†330Ω	470KΩ	†0Ω	.1Ω	390Ω
V 10	VR-150/0D3	Inf.	0Ω	†3.3KΩ	†330Ω	†3.3KΩ	Inf.	†3.3KΩ	Inf.
V 11	5Y3GT	†330Ω	40KΩ	Inf.	70Ω	Inf.	78Ω	Inf.	40KΩ

▲ CW AND AM SWITCH IN CW POSITION.
§ TAKEN WITH VACUUM TUBE VOLTMETER.
ALL MEASUREMENTS TAKEN IN BC BAND #1.
▲ CW AND AM SWITCH IN CW POSITION.
† MEASURED FROM PIN 8 OF V11.
SELECTIVITY SWITCH IN BROAD 1.
AVC SWITCH IN ON POSITION.
NOISE LIMITER SWITCH IN ON 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.

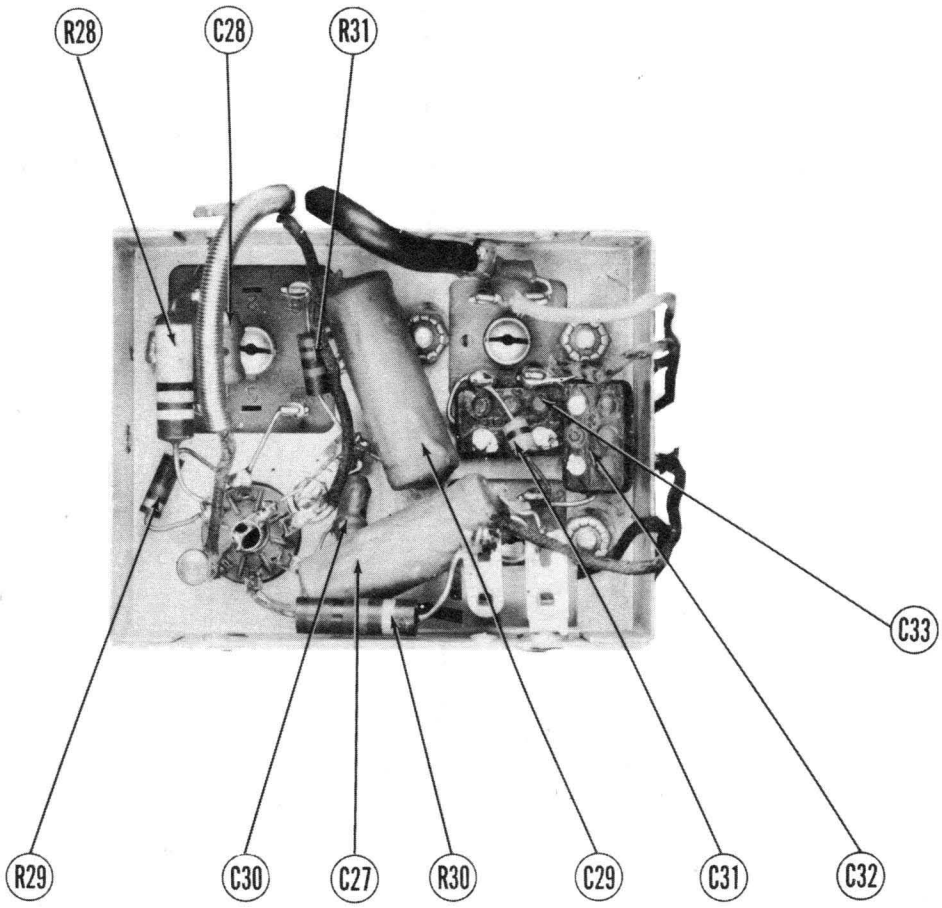

M3
M11
M4
A1
L15
A6
A5
L16
M1
V4
A7
L14
M2
V7
V8
V3
V5
V9
M13
L20
V2
V10
M12
A2
A4
L17
L19
V1
T1
V11
V6
C1
L18
A3
S METER
ADJUSTER
L1

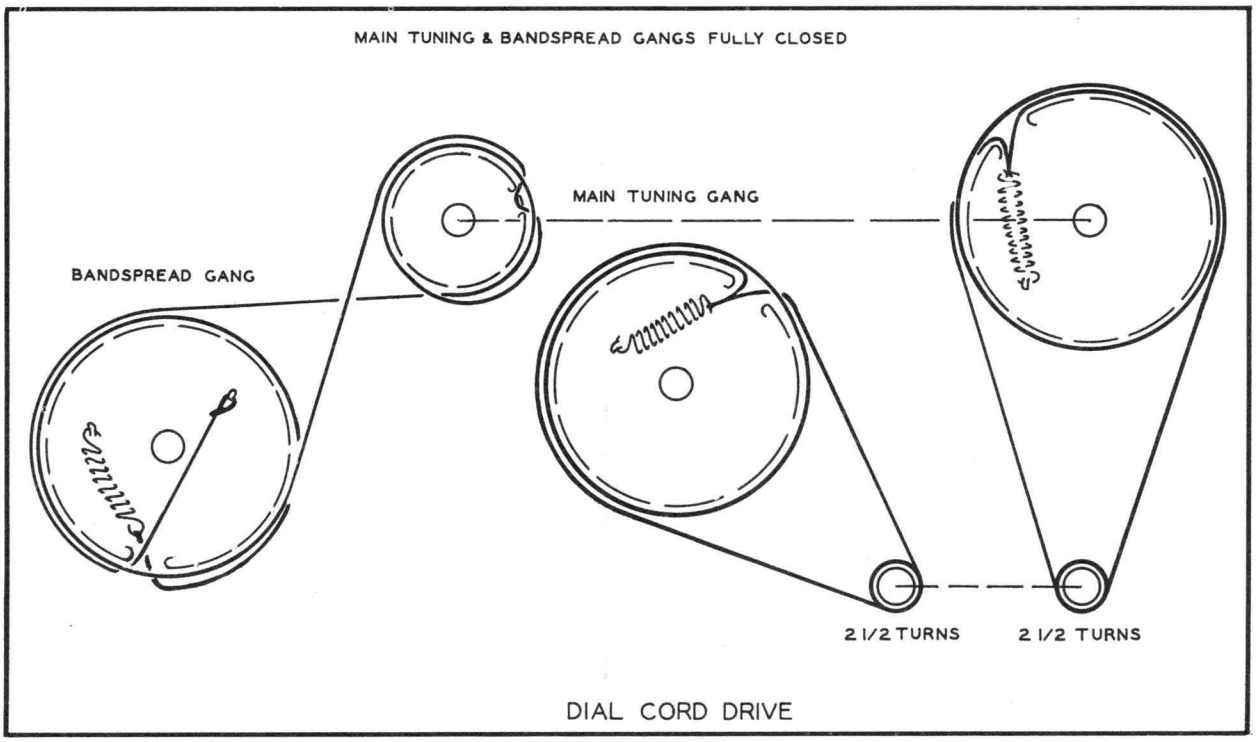


ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

To set dial turn tuning gang fully closed and set the zero on the logging scale under the dial index line.
Turn the noise limiter and AVC switches to "off", send-receive switch to "receive", CW/AM switch to AM, and the band selector to "band 2".
Turn both main tuning and bandspread capacitors to half meshed.
During alignment of the 50KC IFs, (step 1), remove the first oscillator tabe, (V3). from its socket to prevent signal interference
Connect a 3.2 or 500Ω speaker.

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
1.	.01MFD	High side to terminal 1 on L15. Low side to chassis.	50KC (unmod.)	2	Tuning gang half meshed.	Use VTVM DC Probe to Point A . Common to chassis.	A1, A2, A3, A4	Adjust in the order given for maximum deflection. Then repeat the adjustments in the same order.
2.	"	High side to stator on center section of main tuning gang. Low side to chassis.	1650KC	"	"	"	A5, A6, A7, A8, A9	Replace V3. Adjust A5 for maximum deflection. Then retune signal gen. for maximum deflection. Adjust A6, A7, A8, and A9 for maximum deflection, at the new frequency. Rotate the selectivity switch from step 5 to step 1. The reading on the VTVM should decrease progressively, if not repeat step.1.
3.	"	High side to terminal 1 on L15. Low side to chassis.	50KC (unmod.)	"	"	Use speaker as indicator		Turn CW/AM switch to "CW". Remove pitch control knob. Turn pitch control shaft for zero beat indication on speaker. Replace knob with indicator line straight up. Turn switch back to "AM".
	Turn the BAND SPREAD, VOLUME, TONE, and SENSITIVITY controls fully clockwise. Turn the SELECTIVITY switch to 3. Leave all other controls as set.							
4.	330Ω carbon resistor	High side thru 330Ω to antenna terminal "A1", (connect link) Low side to chassis.	30MC (400∿ Mod.)	4	30MC	DC Probe to Point A . Common to chassis.	A10, A11 A12	Adjust for maximum deflection.
5.	"	"	14MC	"	14MC	"	A13, A14 A15	Adjust for maximum deflection. Repeat steps 4 and 5 until no further improvement can be made.
6.	"	"	11.5MC	3	11.5MC	"	A16, A17 A18	Adjust for maximum deflection.
7.	"	"	5.1MC	"	5.1MC	"	A19, A20 A21	Adjust for maximum deflection. Repeat steps 6 and 7 until no further improvementscan be made.
8.	"	"	4.6MC	2	4.6MC	"	A22, A23 A24	Adjust for maximum deflection.
9.	"	"	1.925MC	"	1.925MC	"	A25	Adjust for maximum deflection. Repeat steps 8 and 9 until no further improvement can be made.
10.	"	"	1400KC	1	1400KC	"	A26, A27, A28	Adjust for maximum deflection.
11.	"	"	600KC	"	600KC	" "	A29	Adjust for maximum deflection. Repeat steps 10 and 11 until no further improvement can be made.





DIAL CORD DRIVE