

SAMS PHOTOFACT[®] CB RADIO SERIES



CB-22
22
JUNE 1969

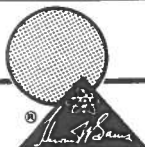


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HOWARD W. SAMS & CO., INC.

Indianapolis, Indiana



PHOTOFACT®

For Supplier Address See PHOTOFACT Index

NOTE

ONLY THOSE PERSONS PROPERLY LICENSED ARE PERMITTED TO MAKE REPAIRS OR ADJUSTMENTS WHICH MAY RESULT IN ILLEGAL OPERATION. (REFER TO FCC RULES AND REGULATIONS PART 95, SUBPARTS C & D.)

The frequency of the transmitter should be checked periodically with a secondary frequency standard to insure proper and legal operation.

Best results will be obtained when adjusting the final RF output circuit if the antenna normally used is connected and the chassis is as nearly in the cabinet as possible.

Connect either 50-ohm dummy load or the normally used antenna system.



ALLIED/KNIGHT MODELS A-2567/KN-2567 (17B6435X)

ALIGNMENT INSTRUCTIONS

Suggested Alignment Tools:

A1 thru A11, A13, A14, A15, A18... GENERAL CEMENT #8606, 8606L, 8869... WALSCO #2543, 2544, 2588
A12, A16, A17... GENERAL CEMENT #5004, 5009... WALSCO #2520

RECEIVER

Connect DC VTVM from point A to chassis. Set to indicate negative voltage. Set fine tuning to mid-range.

SIGNAL GENERATOR	CHANNEL	ADJUST	REMARKS
High side thru .01mfd to pin 7 (Grid) of V3 (Rec. Conv.), low side to chassis. Tune to 475KC (Unmod.).	Any	A1 thru A6	Adjust for maximum.
High side thru .01mfd to pin 9 (Grid) of V1B (Rec. Mixer), low side to chassis. Tune to 7.5MC (Unmod.).	Any	A7	Adjust for maximum.
High side to antenna receptacle, low side to chassis. Tune to 27.085MC (Unmod.).	11	A8 thru A11	Adjust for maximum.

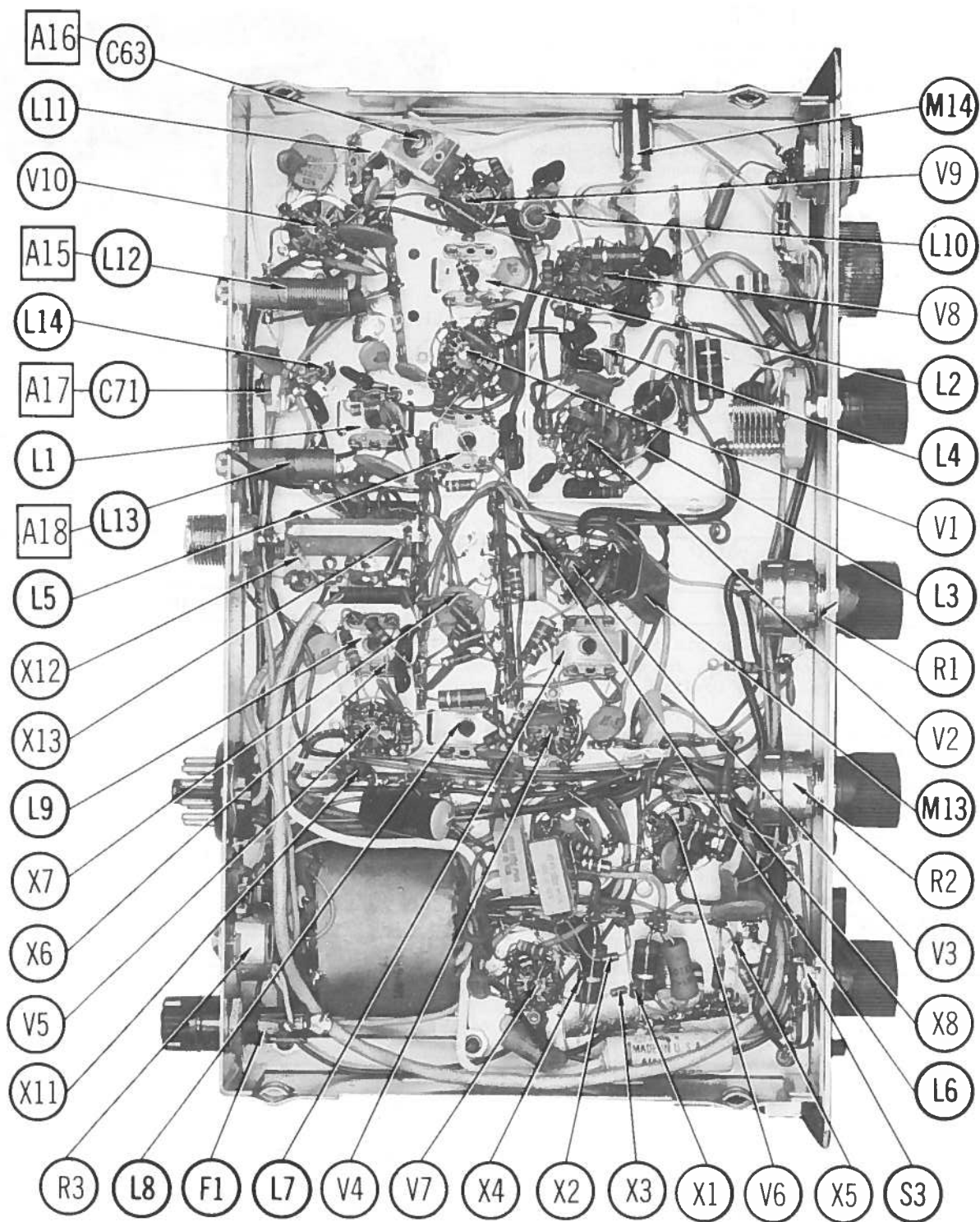
TRANSMITTER

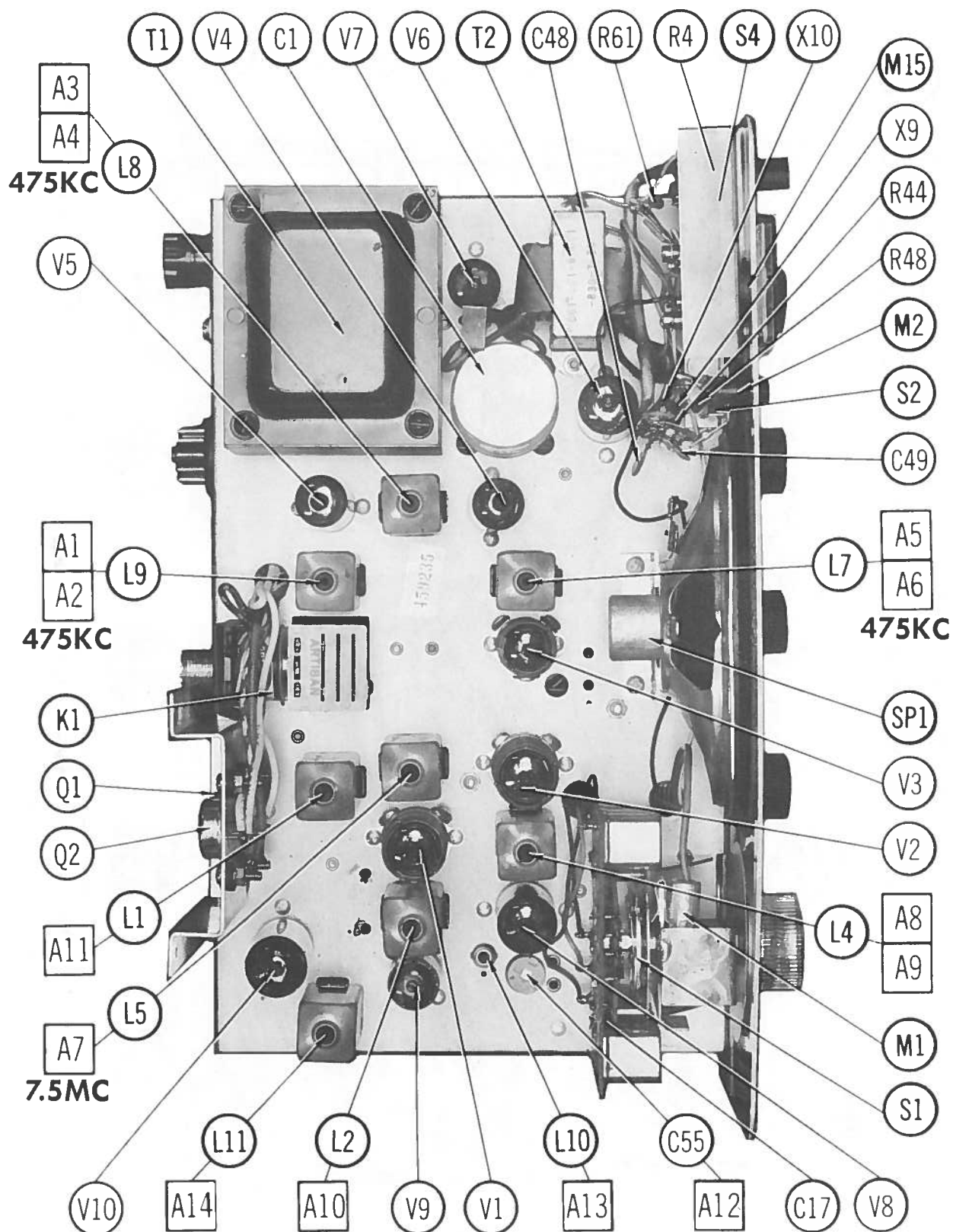
INDICATOR	ADJUST	REMARKS
Accurate frequency meter.	A12	Adjust for correct frequency.
Field Strength Meter	A13, A14	Adjust for maximum output. Check each channel for approximately the same output. Readjustment of A8 & A9 may be necessary.
"	A15, A16	Remove V8 (Trans. Osc.). Key Transmitter and adjust A15 through its range. If any deflection is noted on field strength meter while A15 is adjusted, adjust A16 until there is no deflection. Reinsert V8 and adjust A16 for maximum.
"	A17	Adjust for maximum. Repeat A16 adjustment if needed. Readjustment of A17 may be necessary after antenna system is attached.
Nearby TV receiver tuned to Channel 2.	A18	Key Transmitter and adjust for MINIMUM interference.

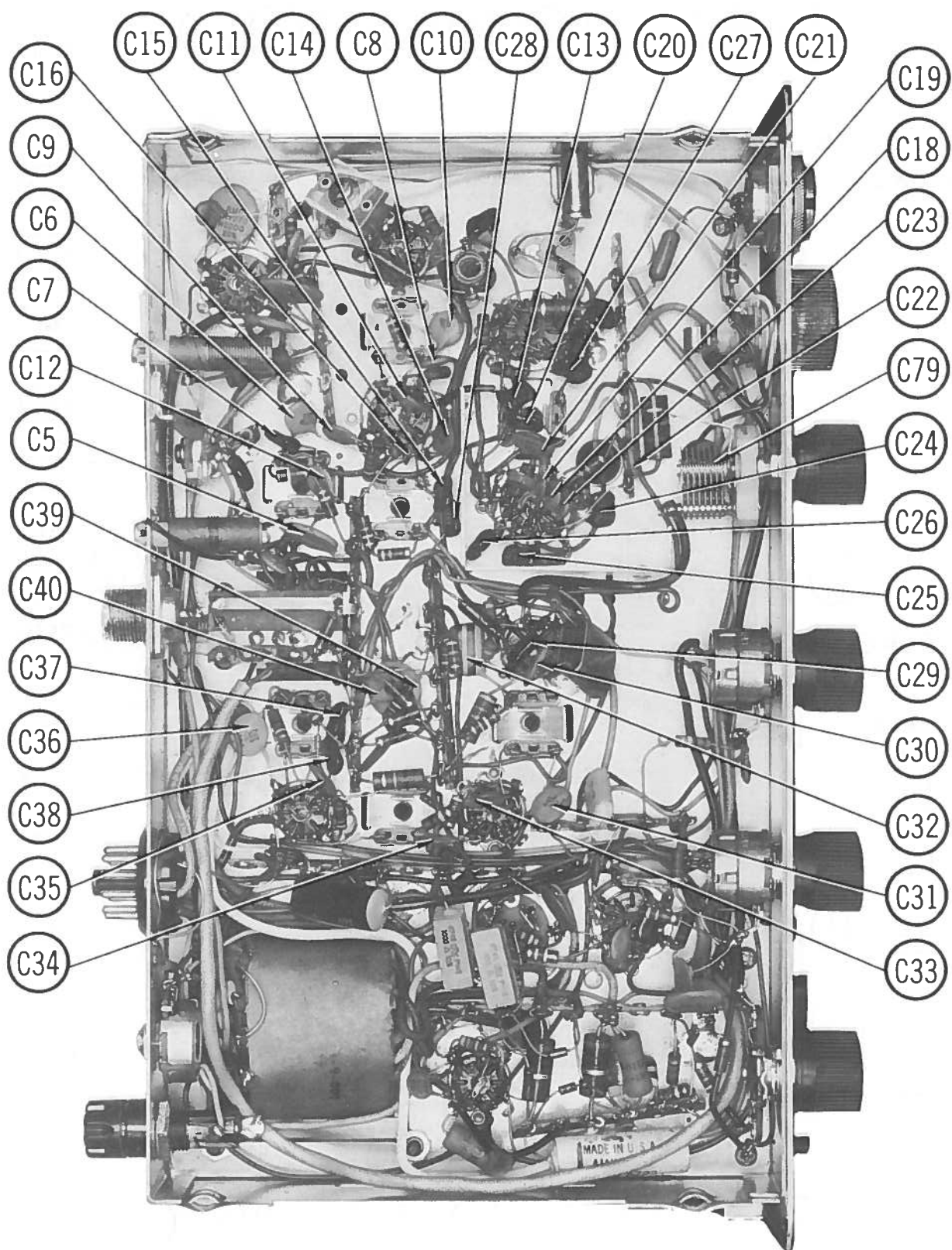
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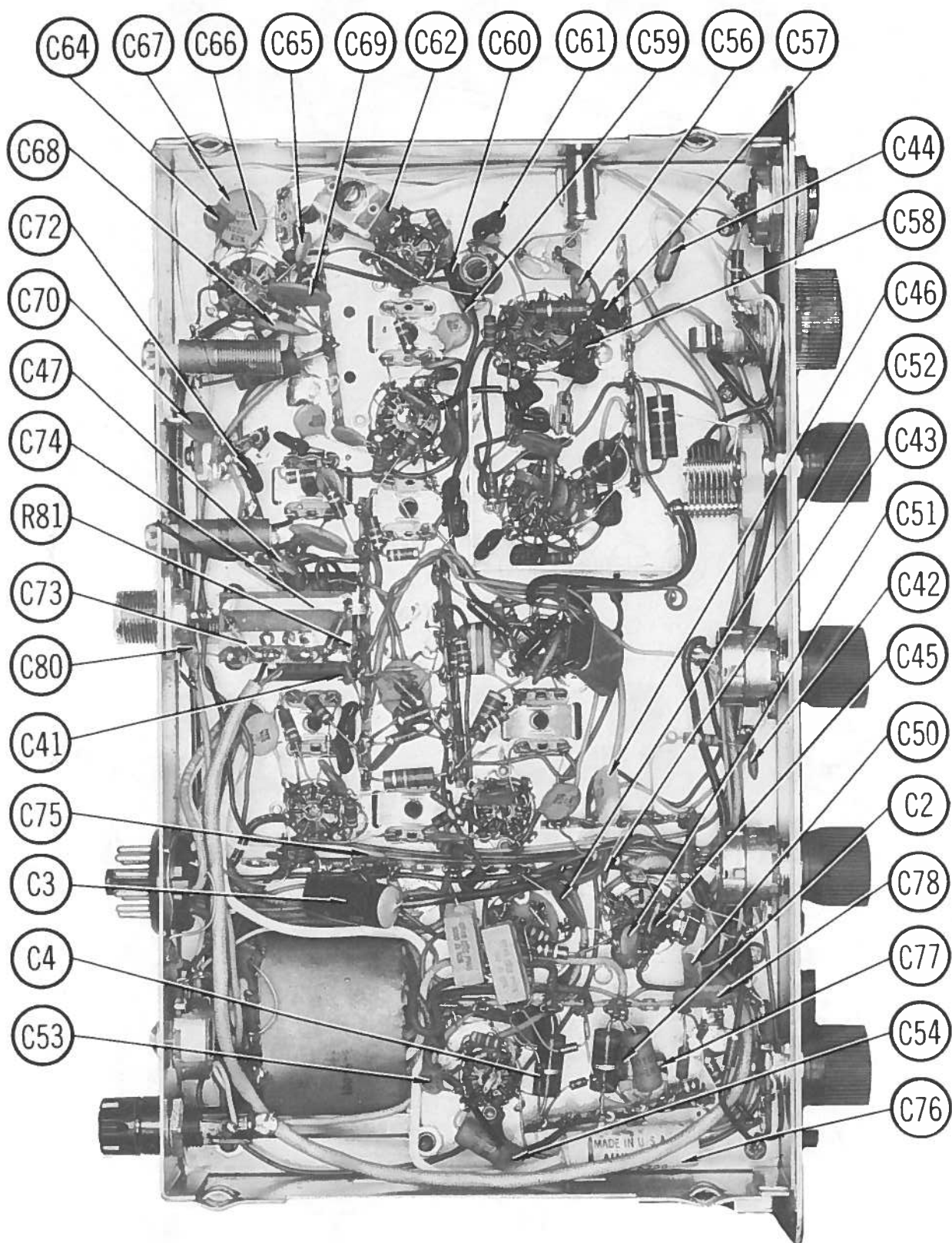
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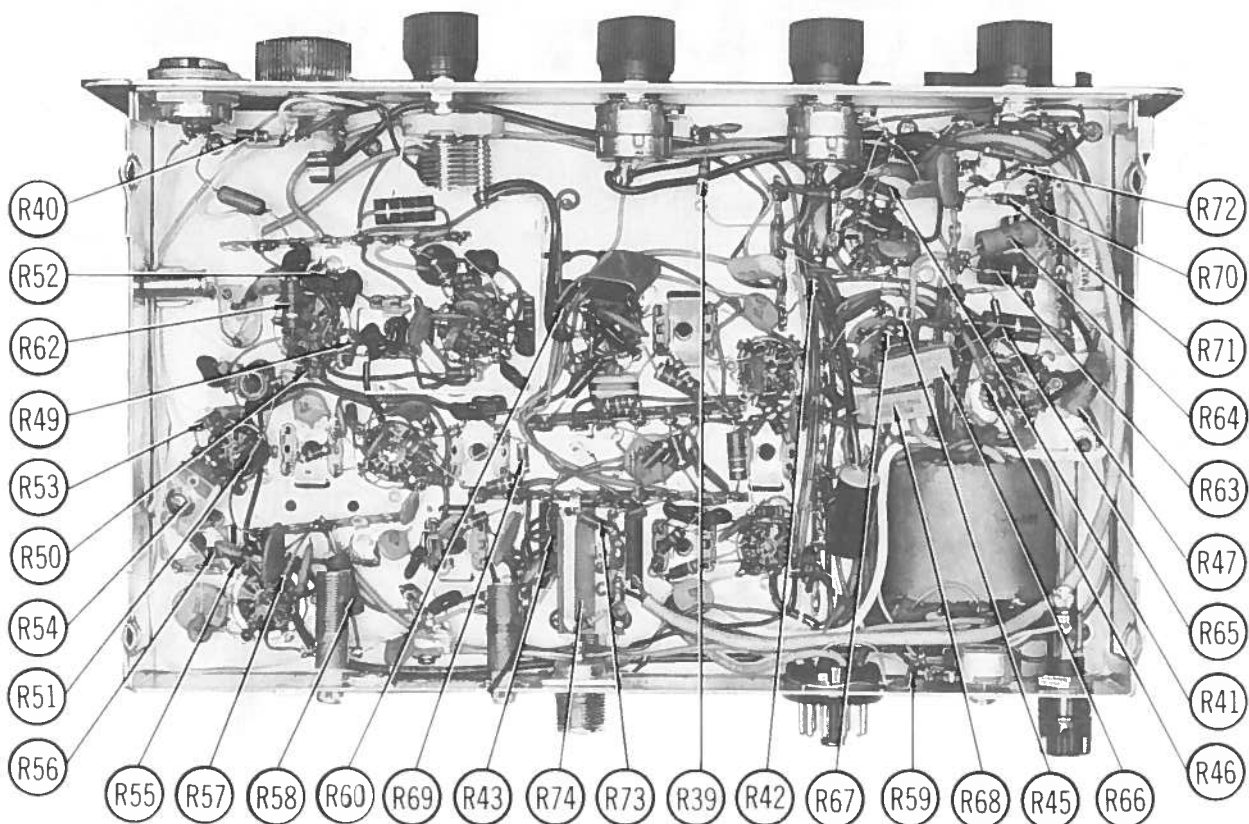
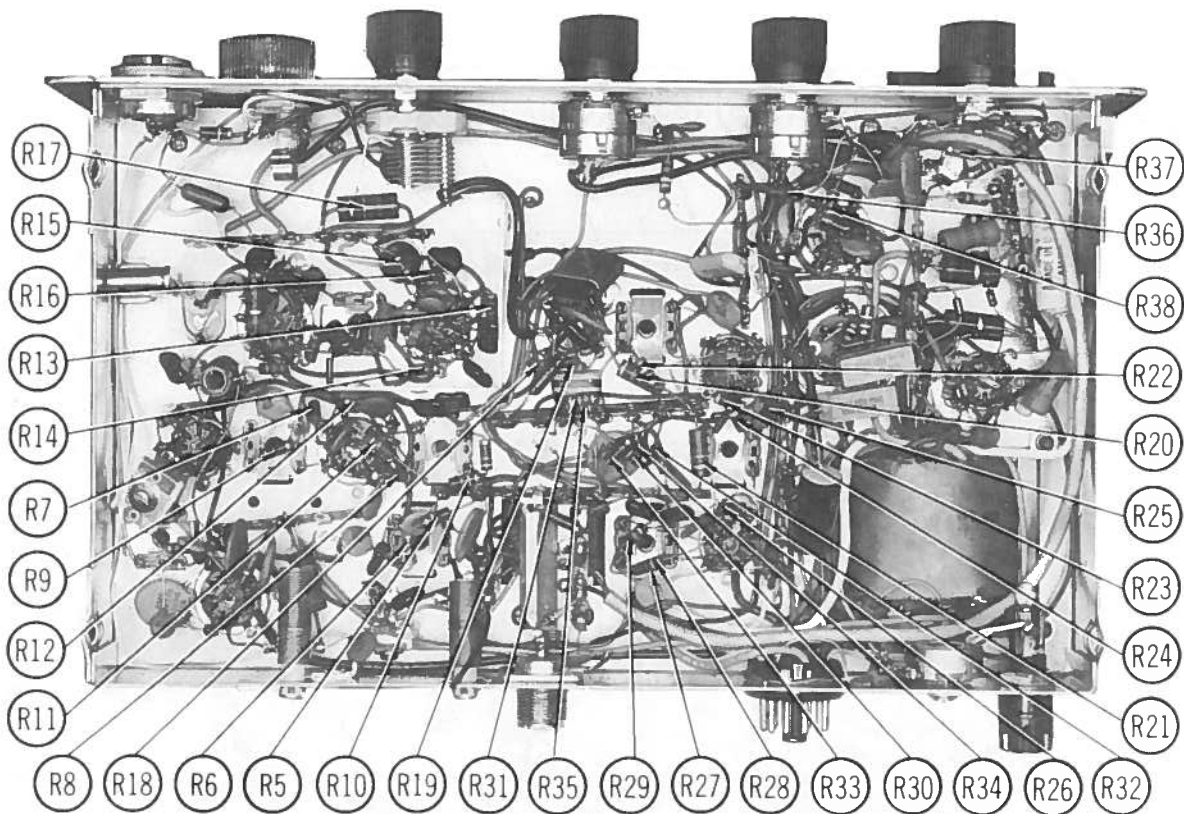
ALLIED/KNIGHT MODELS A-2567/KN-2567











PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

TUBES

AMPEREX			GENERAL ELECTRIC		RCA		SYLVANIA	
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V1	RF Amp.-Rec Mixer	6EAB	V6	AF Amp-1st & 2nd Speech Amp	12AX7			
V2	Synthesizer Osc.-Converter	6EAB	V7	Output -Modulator	12AQ5			
V3	2nd Rec Converter	12BE6	V8	Transmit Mixer - 7.5MC Osc.	6EAB			
V4	1st IF Amp	12BA6	V9	Buffer Amp	6BA6			
V5	2nd IF Amp	12BA6	V10	Final Amp	6BQ5			

TRANSISTORS

ITEM No.	TYPE No.	FUNCTION	REPLACEMENT DATA						
			MFR. PART No.	DELCO PART No.	GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MOTOROLA PART No.	RCA PART No.	SYLVANIA PART No.
Q1	GP1622 (SP1137)	Power Oscillator	(1)	DS-503	GE-3	TR-01	HEP232	SK3009	ECG 1D4
Q2	GP1622 (SP1137)	Power Oscillator	(1)	DS-503	GE-3	TR-01	HEP232	SK3009	ECG 104

(1) When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MFR. PART OR TYPE No.	REPLACEMENT RECTIFIERS & DIODES			REPLACEMENT RECTIFIERS	NOTES
		GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	SYLVANIA PART No.	RCA PART No.	
X1	1N4005	GE-504A	8D6 or 18DB8A (1)	ECG 116 or ECG 117	SK3017A or SK3032	(1) A single unit replacement for X1, X2, X3 & X4
X2	1N4005	GE-504A	8D6 or 18DB8A (1)	ECG 116 or ECG 117	SK3017A or SK3032	
X3	1N4005	GE-504A	8D6 or 18DB8A (1)	ECG 116 or ECG 117	SK3017A or SK3032	
X4	1N4005	GE-504A	8D6 or 18DB8A (1)	ECG 116 or ECG 117	SK3017A or SK3032	
X5	1N4005	GE-504A	8D6 or 5A6-0	ECG 116 or ECG 117	SK3017A or SK3032	
X6	1N662	1N34AS	1N34A	ECG 109		
X7	1N662	1N34AS	1N34A	ECG 109		
X8	ER301	GE-504A	804	ECG 116		
X9	SG3408					
X10	SG3408					
X11	ER301	GE-504A	8D4	ECG 116		
X12	1N64	1N60	1N60	ECG 109		
X13	1N64	1N60	1N60	ECG 109		

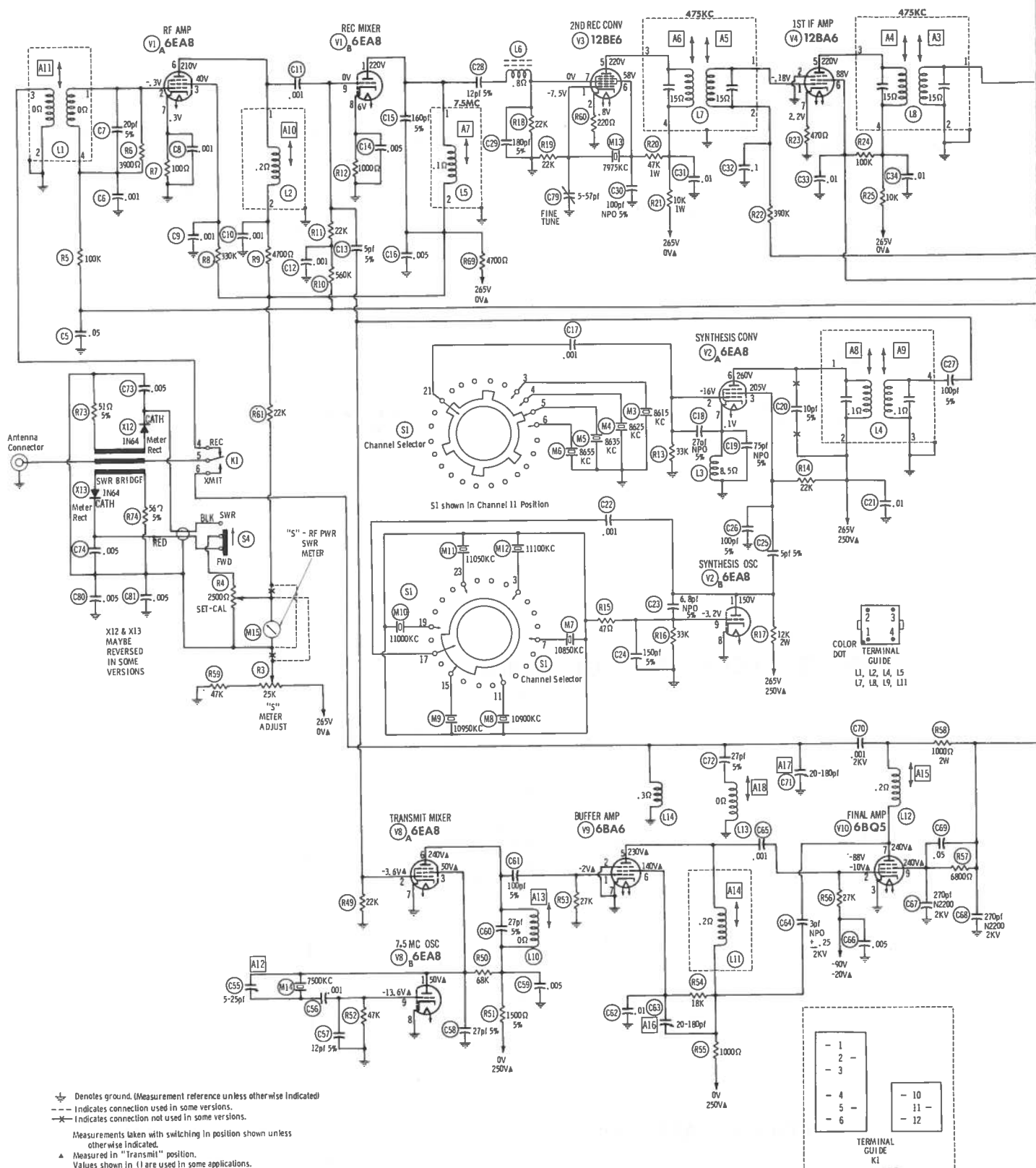
ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA						
		PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1A	30 450V	(021-021-9-001)	4-15-30 (1)	AFH3-38	CC0295A	XC3-29	FP396A	TVL-3840
B	30 450V							
C	20 450V							
C2	12.5 25V		CRE607A	EA30-10	NLW10-25	MT1-5	MTA10E50	TE-1204
C3	200 16V		PTT123	EA30-150	WBR300-35	QT1-28	MTA200F25	TL-1164
C4	12.5 25V		CRE607A	EA30-10	NLW10-25	MT1-5	MTA10E50	TE-1204

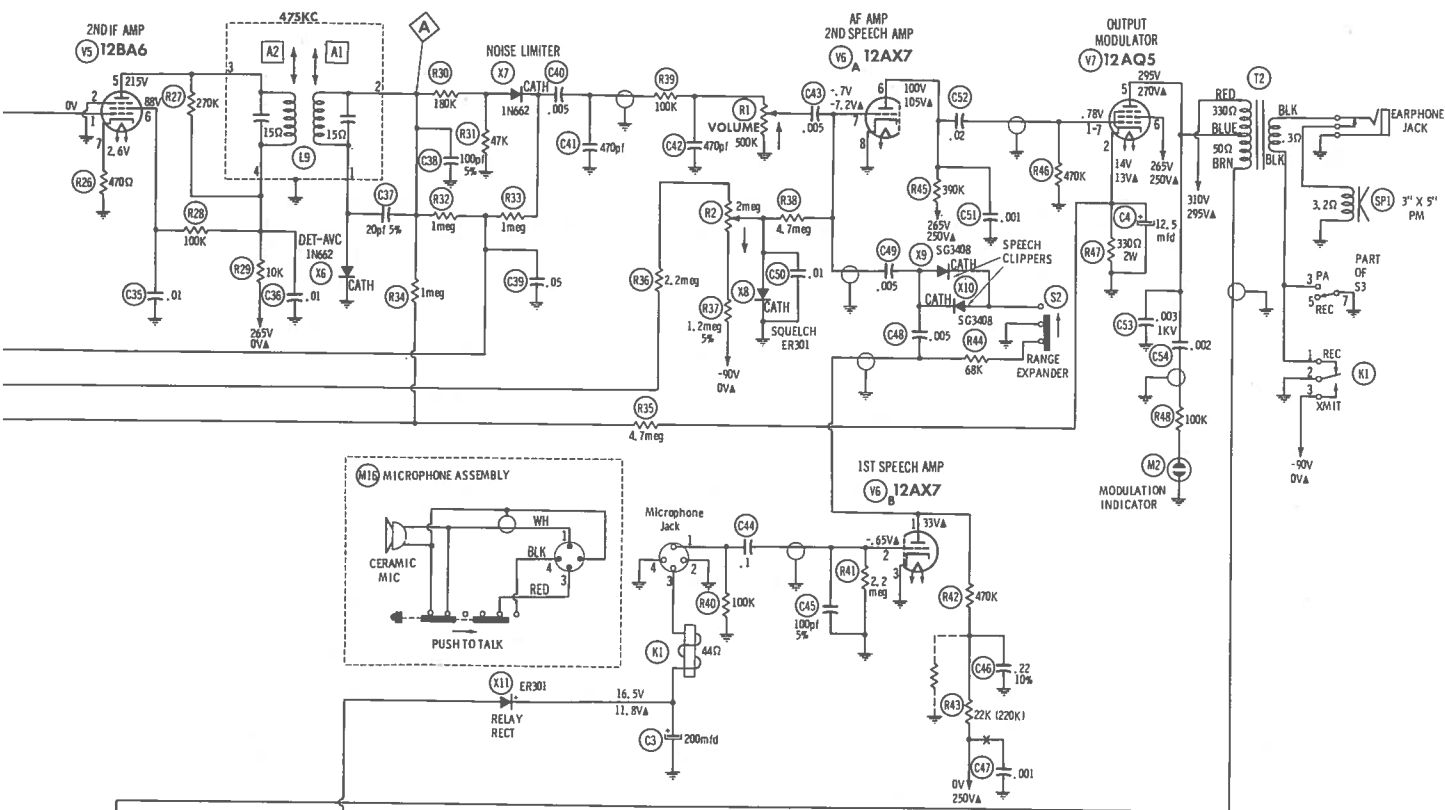
(1) 1- 20mfd @ 450V section not used.

(CONTINUED ON PAGE 28)

ALLIED/KNIGHT MODELS A-2567/KN-2567



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PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C5	.05 400V		GPD Z5V503P	DD-503		CCD-503	GP150	5GA-S50
C6	.001		GPO X5F102K	DD-102	J8S601YP102K	CCD-102	GP210	10TS-D10
C7	20 5%		ADM-15-200	CPR-20J	C015E200J500	OM-15-200J	SX420	MS-42
C8	.001		GPD X5F102K	DD-102	J8S601YP102K	CCD-102	GP210	10TS-D10
C9	.001		GPO X5F102K	DD-102	J8S601YP102K	CCD-102	GP210	10TS-D10
C10	.001		GPD X5F102K	DD-102	J8S601YP102K	CCD-102	GP210	10TS-D10
C11	.001		GPD X5F102K	DD-102	J8S601YP102K	CCD-102	GP210	10TS-D10
C12	.001		GPD X5F102K	DD-102	J8S601YP102K	CCD-102	GP210	10TS-D10
C13	5 5%		ADM-15-050					MS-55
C14	.005		GPD X5R502K	DD-502	J8T601YP502K	CCD-502	JF250	10TS-D50
C15	160 5%		ADM-15-161	CPR-160J	CD15F161J500	DM-15-161J	SX316	MS-316
C16	.005		GPD X5R502K	DD-502	J8T601YP502K	CCD-502	JF250	10TS-D50
C17	.001		GPD X5F102K	DD-102	J8S601YP102K	CCD-102	GP210	10TS-D10
C18	27 NPO 5%			TCZ-27			CN0427	10TCC-Q27
C19	75 NPO 5%			TCZ-75			CN0475	10TCC-Q75
C20	10 5%		ADM-15-100		CD15C100J500	OM-15-100S		
C21	.01		GPD X5S103K	DD-103	8YX601ZU103P	CCD-103	JF110	10TS-S10
C22	.001		GPD X5F102K	DD-102	J8S601YP102K	CCD-102	GP210	10TS-D10
C23	6.8 NPO 5%		NPO-D1 6.8	DTZ-6R8	CZ601CH6R8D		CN0568	10TCC-V68
C24	150 5%		ADM-15-151	CPR-150J	CD15F151J500	DM-15-151J	SX315	MS-315
C25	5 5%		ADM-15-050					MS-55
C26	100 5%		ADM-15-101	CPR-100J	CD15F101J500	OM-15-101J	SX310	MS-31
C27	100 5%		ADM-15-101	CPR-100J	CD15F101J500	OM-15-101J	SX310	MS-31
C28	12 5%		ADM-15-120		CD15C120J500	DM-15-120J		MS-412
C29	180 5%		ADM-15-181	CPR-180J	CD15F181J500	DM-15-181J	SX318	MS-318
C30	100 NPO 5%			DTZ-100			CN0310	10TCC-T10
C31	.01		GPD X5S103K	DD-103	8YX601ZU103P	CCD-103	JF110	10TS-S10
C32	.1		DBE4P1		OMF4P1	4DP-3-104	PVC401	4PS-P10
C33	.01		GPD X5S103K	DD-103	8YX601ZU103P	CCD-103	JF110	10TS-S10
C34	.01		GPD X5S103K	DD-103	8YX601ZU103P	CCD-103	JF110	10TS-S10
C35	.01		GPD X5S103K	DD-103	8YX601ZU103P	CCD-103	JF110	10TS-S10
C36	.01		GPD X5S103K	DD-103	8YX601ZU103P	CCD-103	JF110	10TS-S10
C37	20 5%		ADM-15-200	CPR-20J	CD15E200J500	DM-15-200J	SX420	MS-42
C38	100 5%		ADM-15-101	CPR-100J	CD15F101J500	DM-15-101J	SX310	MS-31
C39	.05 400V		GPD Z5V503P	DD-503		CCD-503	GP150	5GA-S50
C40	.005		GPD X5R502K	DD-502	J8T601YP502K	CCD-502	JF250	10TS-D50
C41	470		GPD X5F471K	DD-471	J8Z601YP471K	CCD-471	GP347	10TS-T47
C42	470		GPD X5F471K	DD-471	J8Z601YP471K	CCD-471	GP347	10TS-T47
C43	.005		GPD X5R502K	DD-502	J8T601YP502K	CCD-502	JF250	10TS-D50
C44	.1		OBE4P1		DMF4P1	4DP-3-104	PVC401	4PS-P10
C45	100 5%		ADM-15-101	CPR-100J	CD15F101J500	DM-15-101J	SX310	MS-31
C46	.22 400V 10%		DBE6P22		DMF4P22	4DP-5-224	PVC4022	4PS-P22
C47	.001		GPD X5F102K	DD-102	J8S601YP102K	CCD-102	GP210	10TS-D10
C48	.005		GPD X5R502K	DD-502	J8T601YP502K	CCD-502	JF250	10TS-D50
C49	.005		GPD X5R502K	DD-502	J8T601YP502K	CCD-502	JF250	10TS-D50
C50	.01		GPD X5S103K	DD-103	8YX601ZU103P	CCD-103	JF110	10TS-S10
C51	.001		GPO X5F102K	DD-102	J8S601YP102K	CCD-102	GP210	10TS-D10
C52	.02		GPO Z5U203P	DD-203	8YT601ZU203Z	CCD-203	GP120	10TS-S20
C53	.003 1KV		GPD X5R302K	DD-302	8YS601ZU302P	CCD-302	GP230	5GA-030
C54	.002		GPD X5F202K	DD-202	J8X601YP202K	CCD-202	GP220	10TS-D20
C55	5-25			825-AZ				
C56	.001		GPD X5F102K	DD-102	J8S601YP102K	CCD-102	GP210	10TS-D10
C57	12 5%		ADM-15-120		CD15C120J500	DM-15-120J		MS-412
C58	27 5%		ADM-15-270	CPR-27J	CD15E270J500	DM-15-270J	SX427	MS-427
C59	.005		GPD X5R502K	DD-502	J8T601YP502K	CCD-502	JF250	10TS-D50
C60	27 5%		ADM-15-270	CPR-27J	CD15E270J500	DM-15-270J	SX427	MS-427
C61	100 5%		ADM-15-101	CPR-100J	CD15F101J500	DM-15-101J	SX310	MS-31
C62	.01		GPD X5S103K	DD-103	8YX601ZU103P	CCD-103	JF110	10TS-S10
C63	20-180	#028-004-9-001						
C64	3 NPO $\pm .25$ -2KV							
C65	.001		GPD X5F102K	DD-102	J8S601YP102K	CCD-102	GP210	10TS-D10
C66	.005		GPD X5R502K	DD-502	J8T601YP502K	CCD-502	JF250	10TS-D50
C67	270 N2200 2KV							
C68	270 N2200 2KV							
C69	.05 400V		GPD Z5V503P	DD-503		CCD-503	GP150	5GA-S50
C70	.001 2KV		HV0-30-1000	DD30-102	HVV202XP102M	3CCD-102	B210	30GA-D10
C71	20-180	#028-004-9-001						
C72	27 5%		ADM-15-270	CPR-275	CD15E270J500	DM-15-270J	SX427	MS-427
C73	.005		GPD X5R502K	DD-502	J8T601YP502K	CCD-502	JF250	10TS-D50
C74	.005		GPD X5R502K	DD-502	J8T601YP502K	CCD-502	JF250	10TS-D50
C75	.001		GPD X5F102K	DD-102	J8S601YP102K	CCD-102	GP210	10TS-D10
C76	.1 400V		DBE4P1		OMF4P1	4DP-3-104	PVC401	4PS-P10
C77	.1		DBE4P1		DMF4P1	4DP-3-104	PVC401	4PS-P10
C78	.05 400V		GPO Z5V503P	DD-503		CCD-503	GP150	5GA-S50
C79	5-57	#029-008-9-001						
C80	.005		GPD X5R502K	DD-502	J8T601YP502K	CCD-502	JF250	10TS-D50
C81	.005		GPD X5R502K	DD-502	J8T601YP502K	CCD-502	JF250	10TS-D50

Allied Part Number.

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

CONTROLS (All wattages 1/2 watt, or less, unless listed)

ITEM No.	FUNCTION	RESIST-ANCE	REPLACEMENT DATA				
			MFGR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume & Power Switch	500K	008-001-9-015	F2-500K, SF012, KR-1	A47-500K-Z, FS-3, SWE-12 or [NP-500K-Z, UP-E-400, NWE-12]	Q13-133, 76-1 or [BU1, CF25, SS14, GC]*	UA55A, SF1000, US41 or [RU55A, SL38, SF1000, US41] or [U48, US26]
R2	Squelch & Standby Switch	500K	008-001-9-015	F2-500K, SF012, KR-1	A47-500K-Z, FS-3, SWE-12 or [NP-500K-Z, UP-E-400, NWE-12]	Q13-133, 76-1 or [BU1, CF25, SS14, GC]*	UA55A, SF1000, US41 or [RU55A, SL38, SF1000, US41] or [U48, US26]
R3	Set - Calibrate	2500	008-061-9-001				
R4	"S" Meter Adjust	25K	008-001-9-012	F1-25K, SNK010	A47-25K-S, FKS-1/2 or [NP-25K-S, UP-S-014]	B11-120, SK6 or [BU1, CF11, SS6]*	UA253L, SN281 or [RU253L, SL38, SN281] or SU29

* "SNAPTROL"

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	MFGR. PART No.
R66	100 5W	PW5-100	5W-SQ-100	

ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	MFGR. PART No.
R68	1000 5W	PW5-1000	5W-SQ-1000	

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			
		PART No.	MEISSNER PART No.	MILLER PART No.	WORKMAN PART No.
L1	Antenna Matching	(066-001-9-001)			
L2	RF Amp	(046-002-9-001)			
L3	RFC (100uh)	(041-001-9-009)	19-3100	72F104AP	T866
L4	Synthesizer Converter	(060-002-9-001)			
L5	Rec Mixer Plate	(046-002-9-002)			
L6	RFC (22uh)	(041-001-9-017)	19-6022		TA311
L7	Input IF	(060-001-9-001)			
L8	Interstage IF	(060-001-9-001)			
L9	Output IF	(060-001-9-001)		12C30	
L10	Xmtr Mixer Plate	(044-002-9-001)		12C30	
L11	Buffer Amp	(046-002-9-001)		12C31	
L12	Final Plate	(044-004-9-001)		42A156CB1	
L13	TVI Trap	(044-002-9-003)		42A336CB1	
L14	RFC (2.2uh)	(041-001-9-019)	19-2011	74F226AP	T857

TRANSFORMER (Power)

ITEM No.	RATING			REPLACEMENT DATA					NOTES
	PRI. 1	SEC. 1	SEC. 2	MFGR. PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	117VAC @ .73A*	245V AC @ .16A AC	12.6VAC 2.4A	(065-006-9-001)					* Transmit
	PRI. 2								
	12.6VDC 4.6A *								

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	MFGR. PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T2	7000 Tap @ 200	4	(061-001-9-001)					

ALLIED/KNIGHT MODELS A-2567 / KN-2567

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA			NOTES
		MFR. PART No.	JENSEN PART No.	QUAM PART No.	
SP1	3" x 5" PM 4 ohms	(580-001-9-001)	P3X5X3	35A05	

FUSE DEVICES

ITEM No.	DESCRIPTION	REPLACEMENT DATA						
		PART No.		BUSS PART No.		LITTELFUSE PART No.		WORKMAN PART No.
		DEVICE	HOLDER	DEVICE	HOLDER	DEVICE	HOLDER	DEVICE
F1	2 Amp 250V			AGC 2	HKP	312002	342014	
F2	14Amp			SFE 14	HH1-8	307014	155014	

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
K1	Relay	(441-002-9-001)	Receive - Transmit
M1	Lamp, Dial		GE-53X
M2	Lamp, Neon		Modulation Indicator (NE-1)
M3	Crystal		8615KC
M4	Crystal		8625KC
M5	Crystal		8635KC
M6	Crystal		8655KC
M7	Crystal		10,850KC
M8	Crystal		10,900KC
M9	Crystal		10,950KC
M10	Crystal		11,000KC
M11	Crystal		11,050KC
M12	Crystal		11,100KC
M13	Crystal		7975KC
M14	Crystal		7500KC
M15	Meter		"S" - RF Power - SWR
M16	Microphone Assembly		
S1	Switch		Channel Selector 24-Position Rotary
S2	Switch		SPOT Slide Dyna-Range
S3	Switch		Receive -PA 2-Position Rotary
S4	Switch		SPDT Slide FWD - SWR
	Printed Circuit Board	(302-008-9-002)	Crystal

WIRING DATA

General-use Hook-up Wire Use BELDEN No. 8530 (Solid) Available in 12 Colors
 8524 (Stranded) Available in 12 Colors
 Shielded Antenna Lead Use BELDEN No. 8214 Lowest Loss (RG-8/U Type)
 8237 Low Loss (RG-8/U)
 8240 (Solid) Miniature (RG-58/U)
 8259 (Stranded) Miniature (RG-58A/U)
 Coiled Microphone Cable Use BELDEN No. 8497 3 Conductor- 1 Shielded for Press-to-Talk (Neoprene)
 8496 3 Conductor- 1 Shielded for Press-to-Talk (Vinyl)
 Ignition Noise Suppression Use BELDEN No. 7300-Series Spark-Plug Sets
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