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PHOTOFACT[®]

TRADE NAME : Heath Models GW-11A, GWW-11A,
GW-11D, GWW-11D

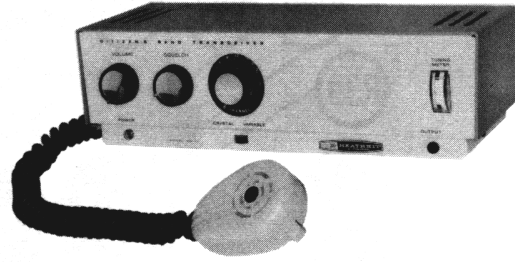
SUPPLIER : Heath Co., A Subsidiary of Daystrom, Inc.
Benton Harbor, Michigan

TYPE SET : 8 Tube Transceiver

POWER SUPPLY : 110-120 Volts AC (or)
6 (or) 12 Volt Storage Battery

RATING : 45 Watts, .44A @ 117VAC (Receive)
60 Watts, .58A @ 117VAC (Transmit)
3.0A @ 12.6VDC (Receive)
3.7A @ 12.6VDC (Transmit)

TUNING RANGE: TRANSMITTER: Any 3 of CB Channels 1 thru 23
RECEIVER: Any one Crystal Controlled channel
or continuously variable.



ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT	
Suggested Alignment Tools: A1 thru A4, A6 thru All... GENERAL CEMENT #8282, 8606, 9295..... WALSCO #2526, 2545, 2544 A5..... GENERAL CEMENT #5004, 5009, 8195..... WALSCO #8989, 9291	

RECEIVER ALIGNMENT

	SIGNAL GENERATOR	CHANNEL	ADJUST	REMARKS
1.	High side to antenna terminal, common to ground. Tune to 455KC (Unmod.)		A1, A2, A3, A4	Connect DC probe VTVM to pin 6 of V4, common to ground. Adjust for maximum deflection.
2.	High side to antenna terminal, common to ground. Tune to channel frequency.	23 (27.255MC)	A5	Crystal-Variable switch in variable position. Adjust for maximum deflection.
3.	"	1 (26.965MC)	A6	Check for receiver tracking at this point. If sharp rise in VTVM indication is found as receiver is tuned to channel 1, no adjustment of A6 is needed. When adjustment of A6 is necessary, return to step 2 and check high channel tracking.
4.	"	12	A7	Adjust for maximum output.
5.	Not Used.		A8	Crystal-Variable switch in crystal position. Connect DC probe of VTVM to pin 9 of V1, common to ground. Rock A8 to each side of peak noting rate of dropoff. Set A8 just below peak on side of gradual dropoff.

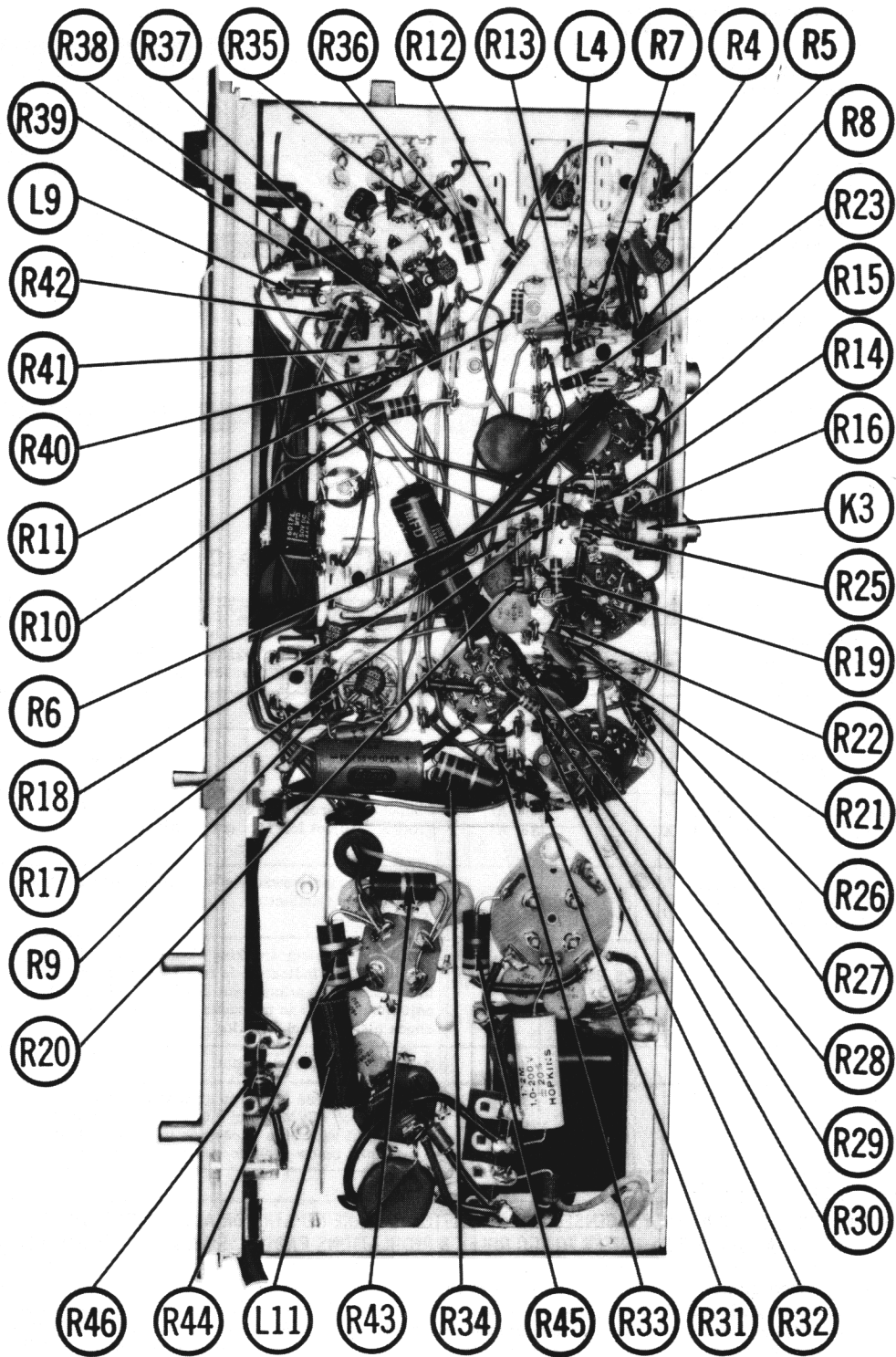
TRANSMITTER ALIGNMENT

ONLY THOSE PERSONS PROPERLY LICENSED ARE PERMITTED TO MAKE REPAIRS OR ADJUSTMENTS WHICH MAY RESULT IN ILLEGAL OPERATION. (REFER TO FCC RULES & REGULATIONS PART 19, SUBPART D, SECTION 19.71)

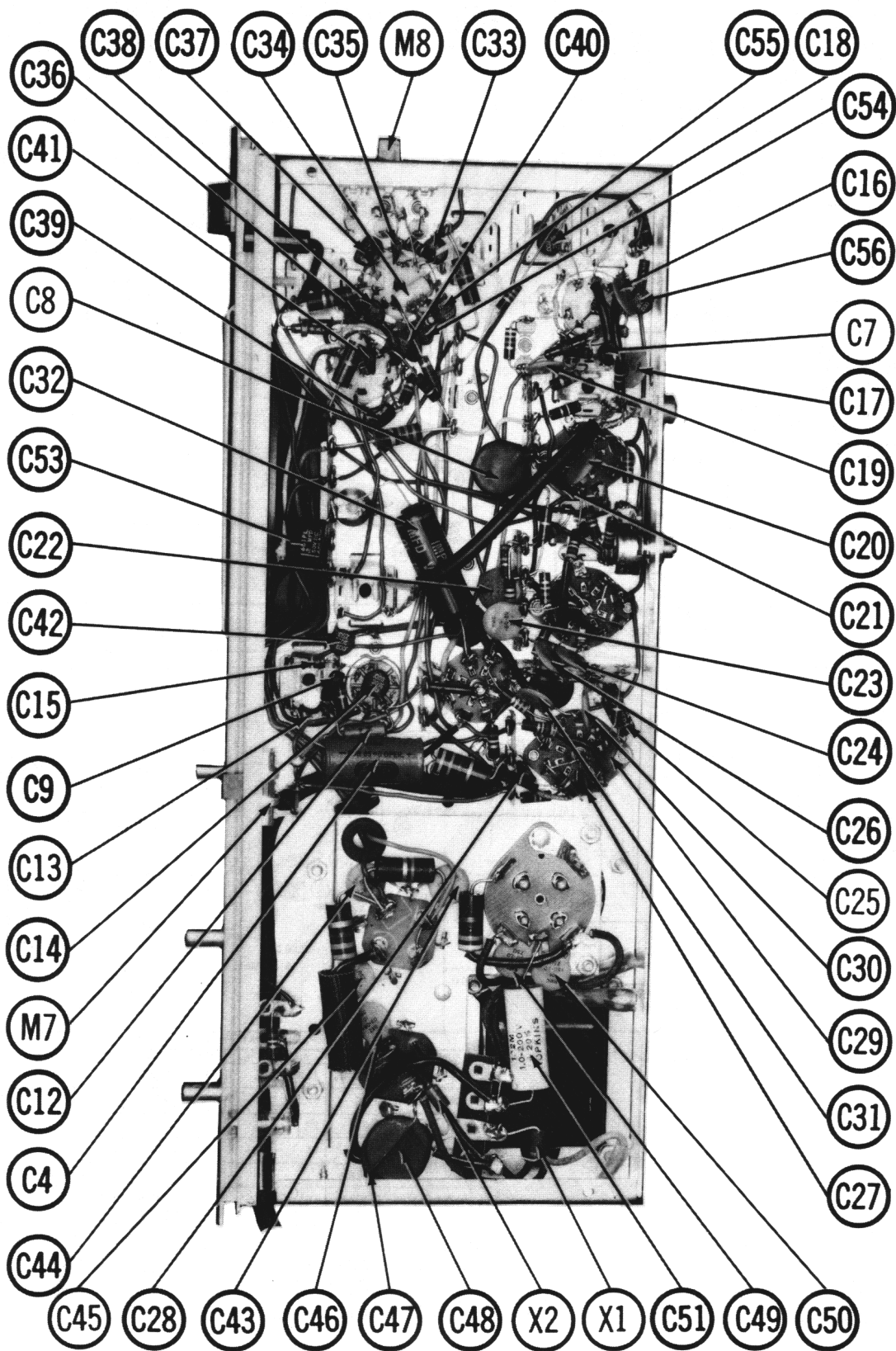
	SPECIAL INSTRUCTIONS	INDICATOR	ADJUST	REMARKS
1.	Place crystal selector switch on or near the centermost channel as covered by the unit.	Connect dummy load and RF watt-meter to antenna terminal. Tuning meter on front panel may be used as output indicator if RF Watt-meter is not available.	A9	Key Transmitter. Rock A9 to each side of peak noting rate of dropoff; Set A9 just below peak on side of gradual dropoff.
2.	"	"	A10, All	Adjust for maximum output.

HEATH MODELS GW-11A/-11D, GWW-11A/-11D

HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana

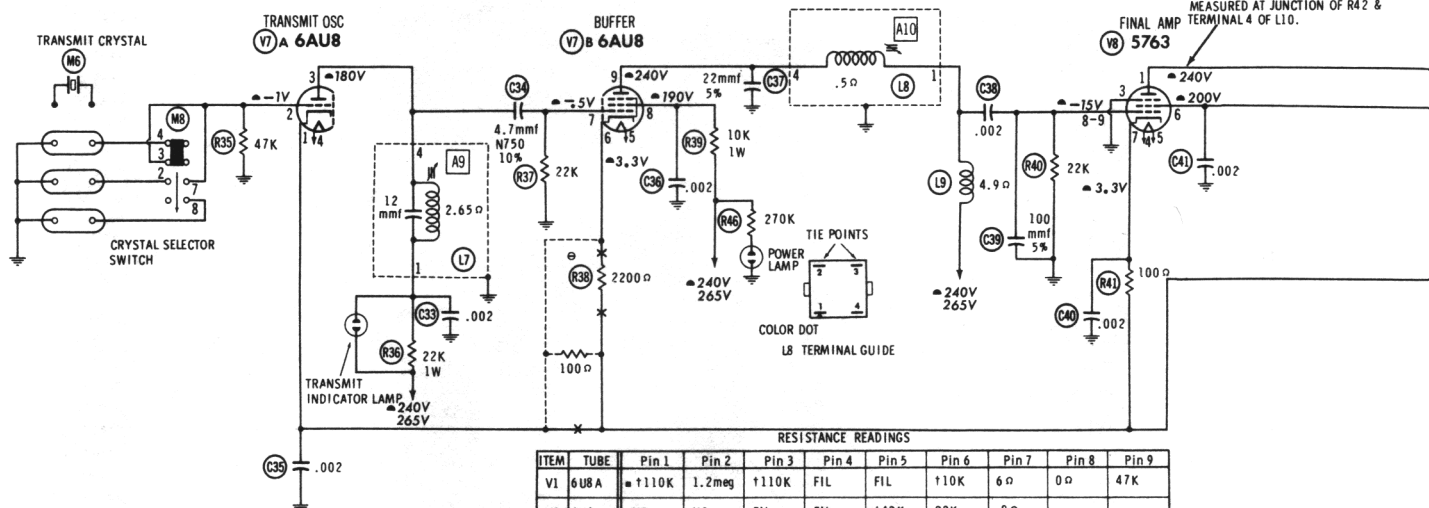
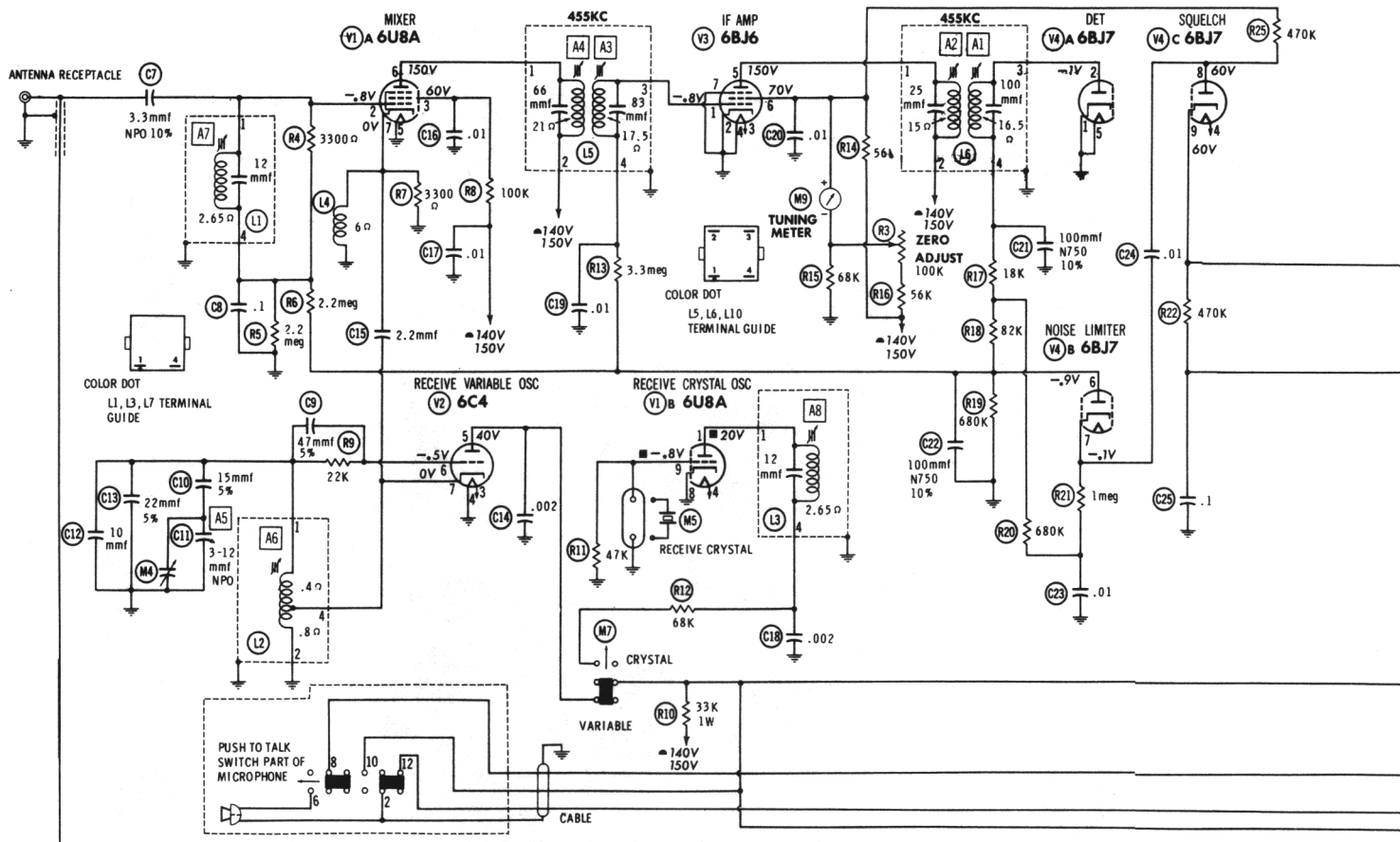


CHASSIS BOTTOM VIEW — RESISTOR & INDUCTOR IDENT. (DC POWER)



HEATH MODELS GW-11A/-11D, GWW-11A/-11D

CHASSIS BOTTOM VIEW — CAPACITOR & MISC. IDENT. (DC POWER)

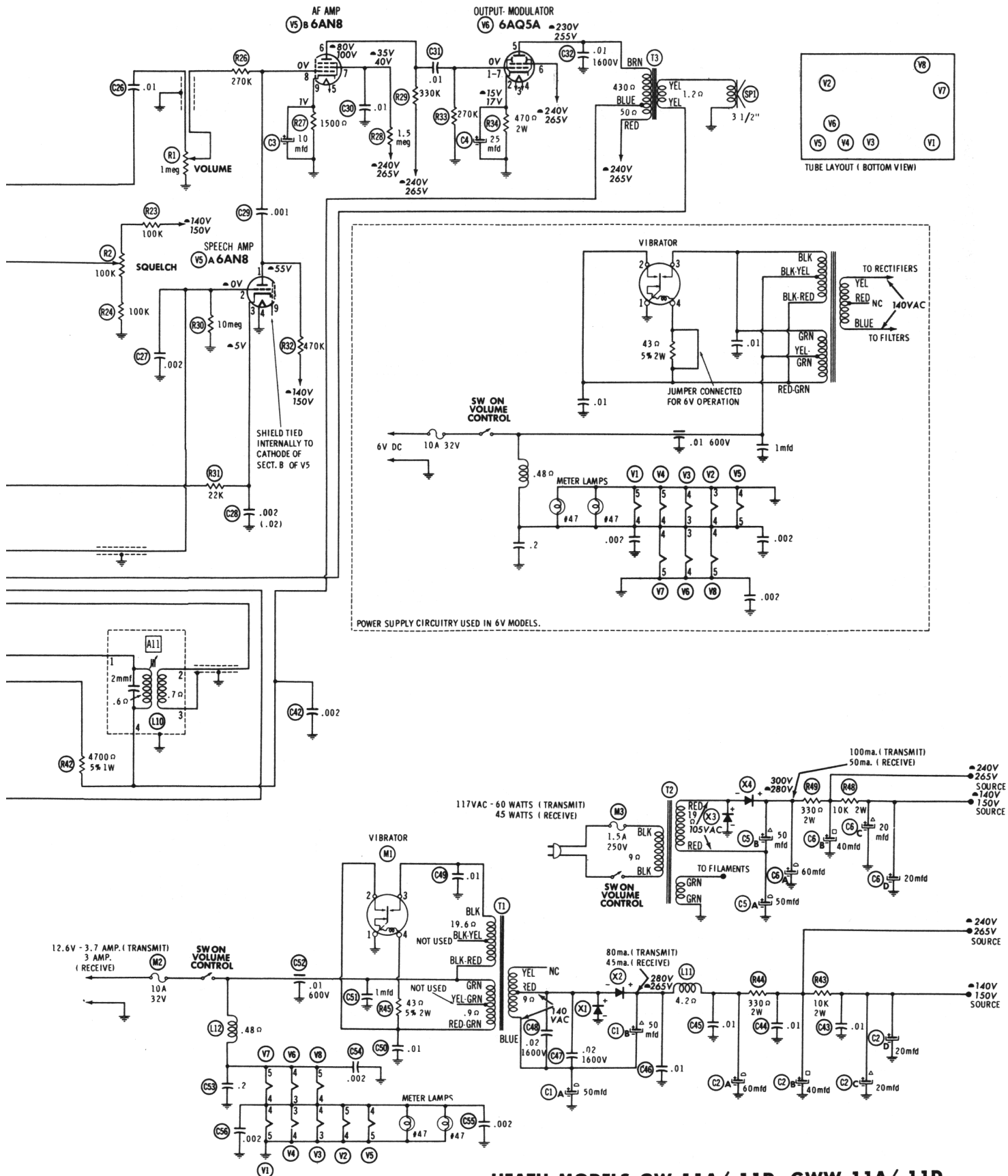


RESISTANCE READINGS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	6U8A	+110K	1.2meg	+110K	FIL	FIL	+10K	6Ω	0Ω	47K
V2	6C4	NC	NC	FIL	FIL	+43K	22K	.8Ω		
V3	6B6	4meg	0Ω	FIL	FIL	+10K	+60K	0Ω		
V4	6B7	0Ω	750K	NC	FIL	FIL	680K	2.5meg	+535K	600K
V5	6A8	+480K	10meg	+22K	FIL	FIL	+330K	+1.5meg	500K	1500Ω
V6	6A8A	270K	470Ω	FIL	FIL	+810Ω	+330Ω	270K		
V7	6A8	-0Ω	47K	+22K	FIL	FIL	+2200Ω	22K	+10K	+350Ω
V8	5763	+380Ω	NC	0Ω	FIL	FIL	+5000Ω	+100Ω	22K	22K

- ⊙ See parts list for alternate value or application.
- 1. Voltage measurements taken with vacuum tube voltmeter.
- 2. All controls set for normal operation, no signal applied.
- 3. Measured values are from socket pin or terminal to common ground.
- 4. All terminals viewed from bottom unless otherwise designated.
- 5. Numbers assigned to terminals may not be found on the unit.
- 6. Supply voltage maintained at rated value for voltage readings.

ALL READINGS TAKEN IN "RECEIVE" POSITION UNLESS OTHERWISE DESIGNATED.
 = TAKEN IN "TRANSMIT" POSITION.
 = VARIABLE - CRYSTAL SWITCH IN "CRYSTAL" POSITION.
 NC NO CONNECTION
 † MEASURED FROM OUTPUT OF X2 OR X4.



HEATH MODELS GW-11A/-11D, GWW-11A/-11D

PARTS LIST AND DESCRIPTION

TUBES

ITEM No.	AMPEREX		GENERAL ELECTRIC		RCA		RAYTHEON		SYLVANIA	
	USE	TYPE	ITEM No.	TYPE	ITEM No.	USE	ITEM No.	TYPE	ITEM No.	TYPE
V1	Mixer-Receive Crystal Osc.	6UB8	V5	Speech Amp.-AF Amp.					6AUB	
V2	Receive Variable Osc.	6C4	V6	Output-Modulator					6AQ5A	
V3	IF Amp.	6B36	V7	Transmitter Osc.-Buffer					6AU8	
V4	Det.-Noise Limiter-Squeech	6BJ7	V8	Final Amp.					57B3	

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	CURRENT RATING (Measured)	RECTIFIERS		DIODES	NOTES
		ORIGINAL Part or Type No.	RCA PART No.		
X1	.080A	IN3194	F4		
X2	.080A	IN3194	F4		
X3	.100A	IN3194	F4		
X4	.100A	IN3194	F4		

ELECTROLYTIC CAPACITORS

ITEM No.	RATING CAP. VOLT.	REPLACEMENT DATA						
		HEATH PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.	
C1A	50	25-58	AFH2-33	B0260	XC2-33	FP240	TMD-2655	TVL-2576
C2A	50	25-93	AFH3-45-25			FP444.95		
C3	10	25-54	PTT39	NLW10-15	MTI-5	TT12X10		TE-1114
C4	25	25-44	PRSI260	BBR25-25	QTI-11	TC-26		TV.A-1205
C5A	50	25-58	AFH2-33	B0260	XC2-33			TMD-2655
C6A	50	25-93	AFH3-45-25					

FIXED CAPACITORS (cont)

ITEM No.	RATING	REMARKS	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENDO PART No.	MALLORY PART No.	SPRAGUE PART No.
C12	10		ADM-15-100	TC Z-10	C10Q1C	CM-15-100J	MCE-215	10TCC-Q10
C13	22 .5%		ADM-15-200	TC Z-22	C10Q22C	CM-15-220J		10TCC-Q22
C14	.002		BPD-002	DD-202	BYA10D2	CCD-202	GP-220	10TCC-D20
C15	2.2		BPD-002	TC Z-2R2	C10V22C	CCO-2R2	CNO-522	10TCC-V22
C16	.01		BPD-01	DD-103	BYA10S1	CCD-103	GP-110	10TSS-S10
C17	.01		BPD-01	DD-103	BYA10S1	CCD-103	GP-110	10TSS-D20
C18	.002		BPD-002	DD-202	BYA10D2	CCD-202	GP-220	10TSS-D20
C19	.01		BPD-01	DD-103	BYA10S1	CCD-103	GP-110	10TSS-S10
C20	.01		BPD-01	DD-103	BYA10S1	CCD-103	GP-110	10TSS-S10
C21	100	10% N750	N750-DI 100	TCN-100	C10T1U	CC TN-101	CNT-310	10TCC-T10
C22	100	10% N750	N750-DI 100	TCN-100	C10T1U	CC TN-101	CNT-310	10TCC-T10
C23	.01		BPD-01	DD-103	BYA10S1	CCD-103	GP-110	10TSS-S10
C24	.01		BPD-01	DD-103	BYA10S1	CCD-103	GP-110	10TSS-S10
C25	1.200V		P288N-1	DF-104	CUB2PI	2DP-2-104	GEM-201	2PS-P10
C26	.01		BPD-01	DD-103	BYA10S1	CCD-103	GP-110	10TSS-S10
C27	.002		BPD-002	DD-202	BYA10D2	CCD-202	GP-220	10TSS-D20
C28	.002		BPD-002	DD-202	BYA10D2	CCD-202	GP-220	10TSS-D20
C29	.001		BPD-001	DD-102	BYA10D1	CCD-102	GP-210	10TSS-D10
C30	.01		BPD-01	DD-103	BYA10S1	CCD-103	GP-110	10TSS-S10
C31	.01		BPD-01	DD-103	BYA10S1	CCD-103	GP-110	10TSS-S10
C32	.01 1600V		P1684CM-01	DD16-103	CUB16S1	16CP-4-103	2HV-110	30GA-S10
C33	.002		BPD-002	DD-202	BYA10D2	CCD-202	GP-220	10TSS-D20
C34	4.7 10% N750		BPD-002	TCN-5	C10V5U	CC TN-050	CNT-547	10TCC-U-V50
C35	.002		BPD-002	DD-202	BYA10D2	CCD-202	GP-220	10TSS-D20
C36	.002		BPD-002	DD-202	BYA10D2	CCD-202	GP-220	10TSS-D20
C37	22 .5%		ADM-15-220	TC Z-22	C10Q22C	CM-15-220J	CNO-422	10TCC-Q22
C38	.002		BPD-002	DD-202	BYA10D2	CCD-202	GP-220	10TSS-D20
C39	100 5%		ADM-15-101	TC Z-100	C10T1U	CM-15-101J	CNO-310	10TCC-T10
C40	.002		BPD-002	DD-202	BYA10D2	CCD-202	GP-220	10TSS-D20
C41	.002		BPD-002	DD-202	BYA10D2	CCD-202	GP-220	10TSS-D20
C42	.002		BPD-002	DD-202	BYA10D2	CCD-202	GP-220	10TSS-D20
C43	.01		BPD-01	DD-103	BYA10S1	CCD-103	GP-110	10TSS-S10
C44	.01		BPD-01	DD-103	BYA10S1	CCD-103	GP-110	10TSS-S10
C45	.01		BPD-01	DD-103	BYA10S1	CCD-103	GP-110	10TSS-S10
C46	.02 1600V	#21-38	BPD-01	DD-103	BYA10S1	16CP-5-203	GP-110	10TSS-S10
C47	.02 1600V	#21-38	BPD-01	DD-103	BYA10S1	16CP-5-203	GP-110	10TSS-S10
C48	.01		BPD-01	DD-103	BYA10S1	CCD-103	GP-110	10TSS-S10
C49	.01		BPD-01	DD-103	BYA10S1	CCD-103	GP-110	10TSS-S10
C50	.01		BPD-01	DD-103	BYA10S1	CCD-103	GP-110	10TSS-S10
C51	1mfd 200V	#23-81	P288N-1		CUB2W1		GEM-21	2TM-M1
C52	.01 600V		BPD-002	DD-202	CUB6P2	2CP-5-204	GEM-402	2PS-P20
C53	.2 50V		BPD-002	DD-202	BYA10D2	CCD-202	GP-220	10TSS-D20
C54	.002		BPD-002	DD-202	BYA10D2	CCD-202	GP-220	10TSS-D20
C55	.002		BPD-002	DD-202	BYA10D2	CCD-202	GP-220	10TSS-D20
C56	.002		BPD-002	DD-202	BYA10D2	CCD-202	GP-220	10TSS-D20

Heath Part Number.

CONTROLS

All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	USE	RESISTANCE	HEATH PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume, Switch	1m Ω	19-53	B-70-S or (F2-1meg, KR-1, SU204)	A47-1meg-Z, SWE-12, FS-3	Q13-137, 76-1 f (BU2, CF26, SSI, GC)*	U-53, US-26, or (UA16A, US-41, SF1000)
R2	Squeech	100K	10-108	B-40 or (F1-100K, SU204)	A47-100K-S, FS-3	Q11-128, or (BU2, CF13, SSI, DC)*	U-41, or (UA15L, SF1000)
R3	Zero Adj. (Meter)	100K	10-121	JL-104			MCL15L

† Indicate Metal Housing Switch.
* "SNAPTROL"

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENDO PART No.	MALLORY PART No.	SPRAGUE PART No.
C7	3.3 NPO 10%		NPO-DI 3.3	TC Z-3R3	C10V33C	CC TO-3R3	CNO-533	10TCC-V33
C8	3.1 50V		TID-1	CK-104	CUB2PI	IDP-2-104	GEM-201	2PS-P10
C9	47 5%		ADM-15-470	TC Z-47	C10Q47C	CM-15-470J	CNO-447	10TCC-Q47
C10	15 .5%		ADM-15-150	TC Z-15	C10Q15C	CM-15-150J	CNO-415	10TCC-Q15
C11	3-12 NPO	#31-13		822-BZ				

PARTS LIST AND DESCRIPTION (CONTINUED)

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		HEATH PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	
L1	Antenna	40-312				
L2	Oscillator	40-313				
L3	Oscillator Plate (Receive)	40-312				
L4	RF Choke (Mixer)	45-27		72F275AP		30uh
L5	Cathode	52-38				
L6	Output IF	52-39				
L7	Oscillator Plate (Transmitter)	40-312				
L8	RF Choke (Driver Plate)	40-431				130uh
L9	RF Choke	45-27				30uh
L10	Final RF	40-432				90uh
L11	RF Choke	45-7				235MEH
L12	Hash Filter	45-20		6177		

TRANSFORMER (POWER)

ITEM No.	RATING	REPLACEMENT DATA				NOTES
		HEATH PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	
T1	PRI. 12.6VDC SEC. 1 140V @ SEC. 2 ① 1.4A ② 1.4A ③ 1.1A*	55-8				* Transmit

TRANSFORMER (POWER)

ITEM No.	RATING	REPLACEMENT DATA				NOTES
		HEATH PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	
T2	PRI. 117VAC SEC. 1 105V ③ SEC. 2 6.3V ③ ④ 44A ⑤ .05A (.58A)*	54-124				* Transmit

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE	REPLACEMENT DATA				NOTES
		HEATH PART No.	MERIT PART No.	Stancor PART No.	Thordarson PART No.	
T3	5800Ω Tap ③ 4900Ω	51-65				

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		HEATH PART No.	GUAM PART No.	
SP1	3½" PM	401-21	3A07	

VIBRATOR

ITEM No.	TYPE	INPUT VOLTS	FREQUENCY	REPLACEMENT DATA			NOTES
				HEATH PART No.	CORNELL-DUBILIER PART No.	MALLOY PART No.	
M1	Interruptor	6		68-5		1610	

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA				
			HEATH PART No.	LITTELFUSE PART No.	FUSE HOLDER	FUSE HOLDER	
M2	3AG	10A 32V 1½A	423-30	311010 (3AG 10A 32V)	423-6	155020	AGC10
M3	3AG	1½A 250V	421-1	31201.5 (3AG 1½A 250V)	422-1	357001	AGC 1½ 4405

MISCELLANEOUS

ITEM No.	PART NAME	HEATH PART No.	NOTES
M4	Tuning Cap.	26-66	1 Gang (5.9mmf)
M5	Crystal		Receive (Part numbers are consecutive from 404-44 for channel 1 to 404-66 for channel 23)
M6	Crystal		Transmit (Part numbers are consecutive from 404-14 for channel 1 to 404-36 for channel 23)
M7	Switch	60-4	Rec. Crystal-Variable (DPST Slide Type)
M8	Switch	60-10	Transmit Crystal Selector (3-Position Slide Type)
M9	Meter	407-82	Signal
	Microphone	480-29	

CABINETS & CABINET PARTS

(When Ordering Cabinets & Cabinet Parts, Specify Model, Chassis & Color)

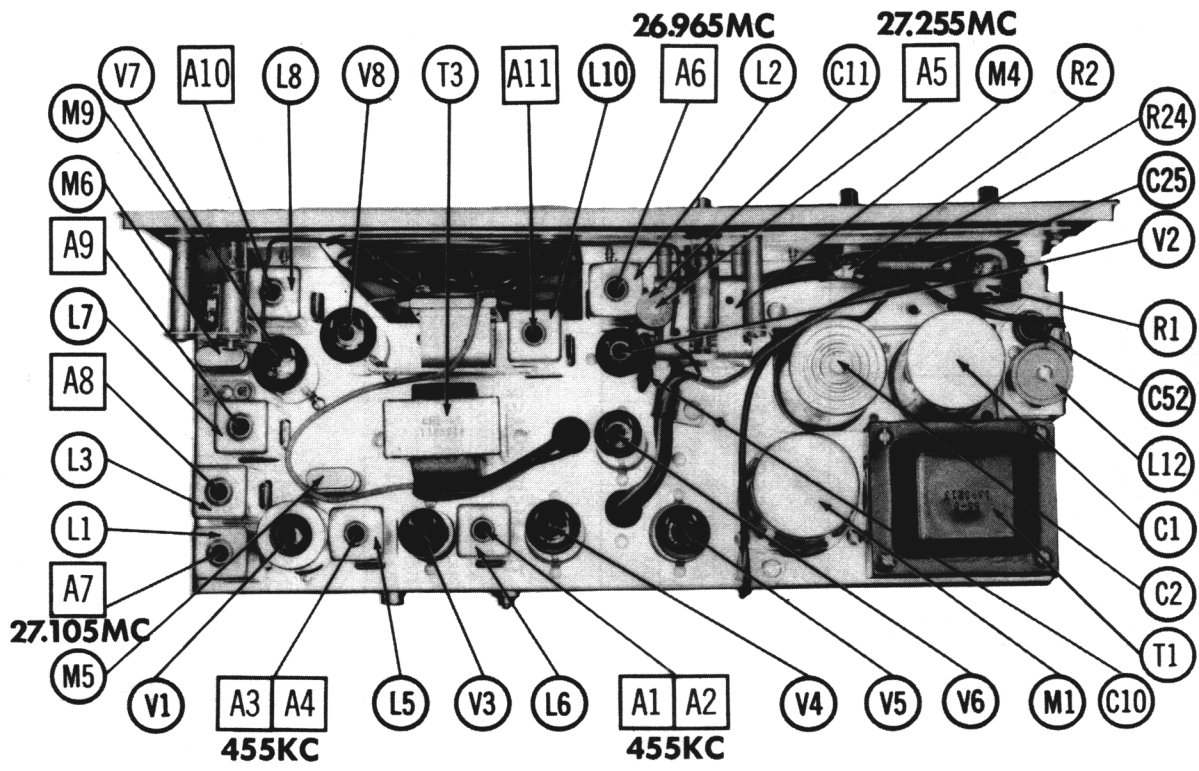
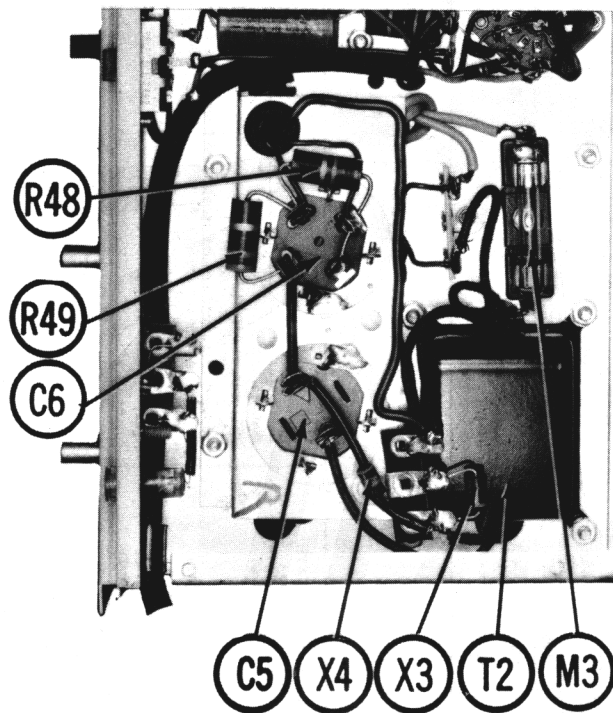
NAME	PART NO.	DESCRIPTION
Dial Pointer Knob	100-M270	
	462-78	Squeatch, Volume, Tuning
Cabinet	90-M131F	

WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors
Power Cord	Use BELDEN No. 8524 (Stranded) Available in 12 Colors
Power Cord (Interlock Type)	Use BELDEN No. 17106 (Plastic) or 17126 (Rubber) - 6 Ft. Use BELDEN No. 17109 (Plastic) or 17139 (Rubber) - 9 Ft. Use BELDEN No. 8874 (Rubber) or 8895 (Plastic)

HEATH MODELS GW-11A/-11D '11D GW-11A/-11D

CHASSIS
BOTTOM
VIEW
(AC POWER)



CHASSIS - TOP VIEW