



PHOTOFACT®

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

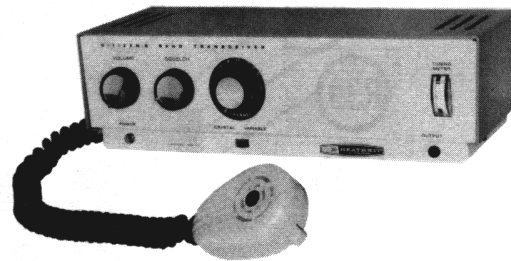
SUPPLIER : Heath Co., A Subsidiary of Daystrom, Inc.
Benton Harbor, Michigan

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 A11...	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.

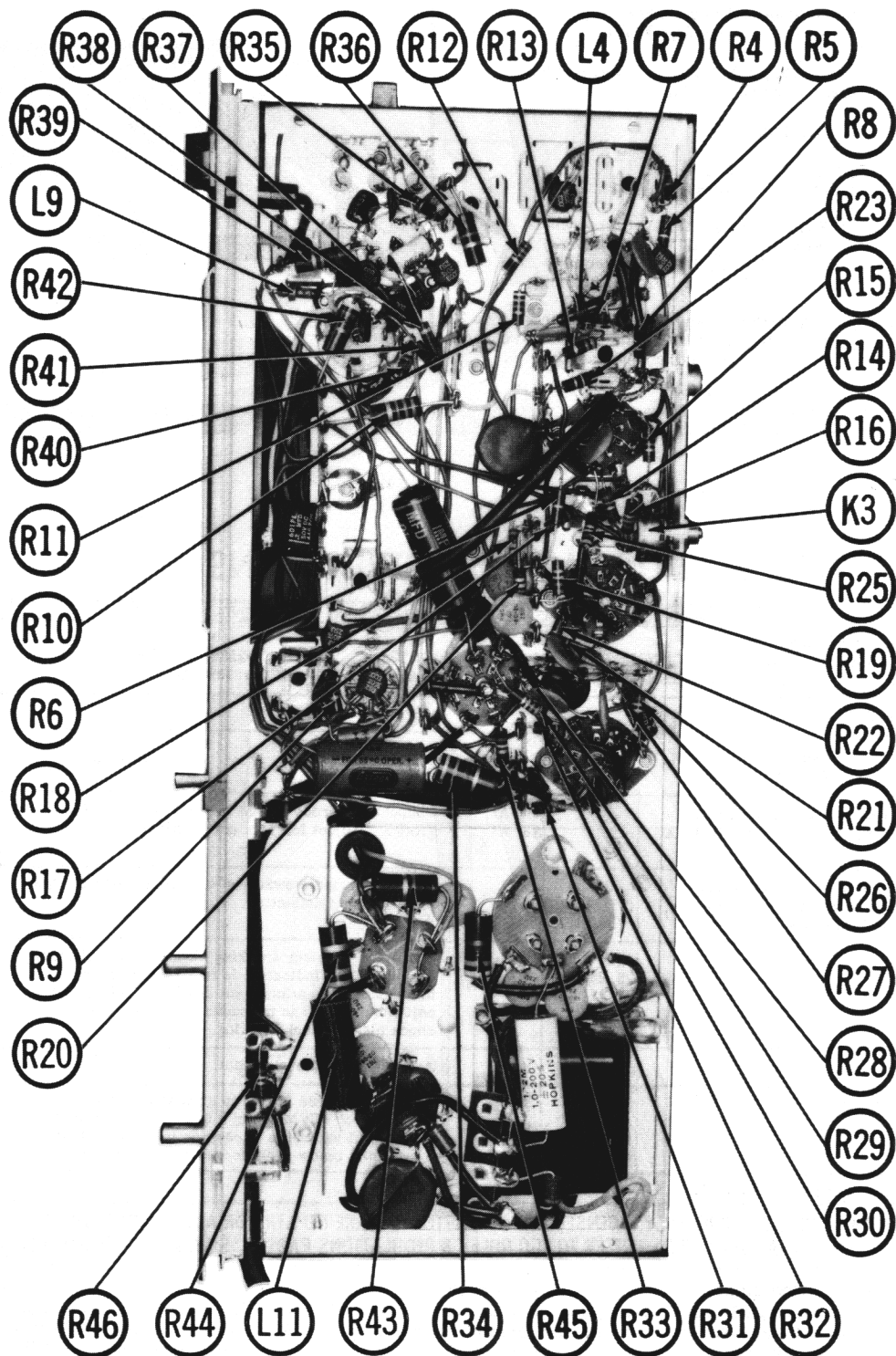
TRANSMITTER ALIGNMENT

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)

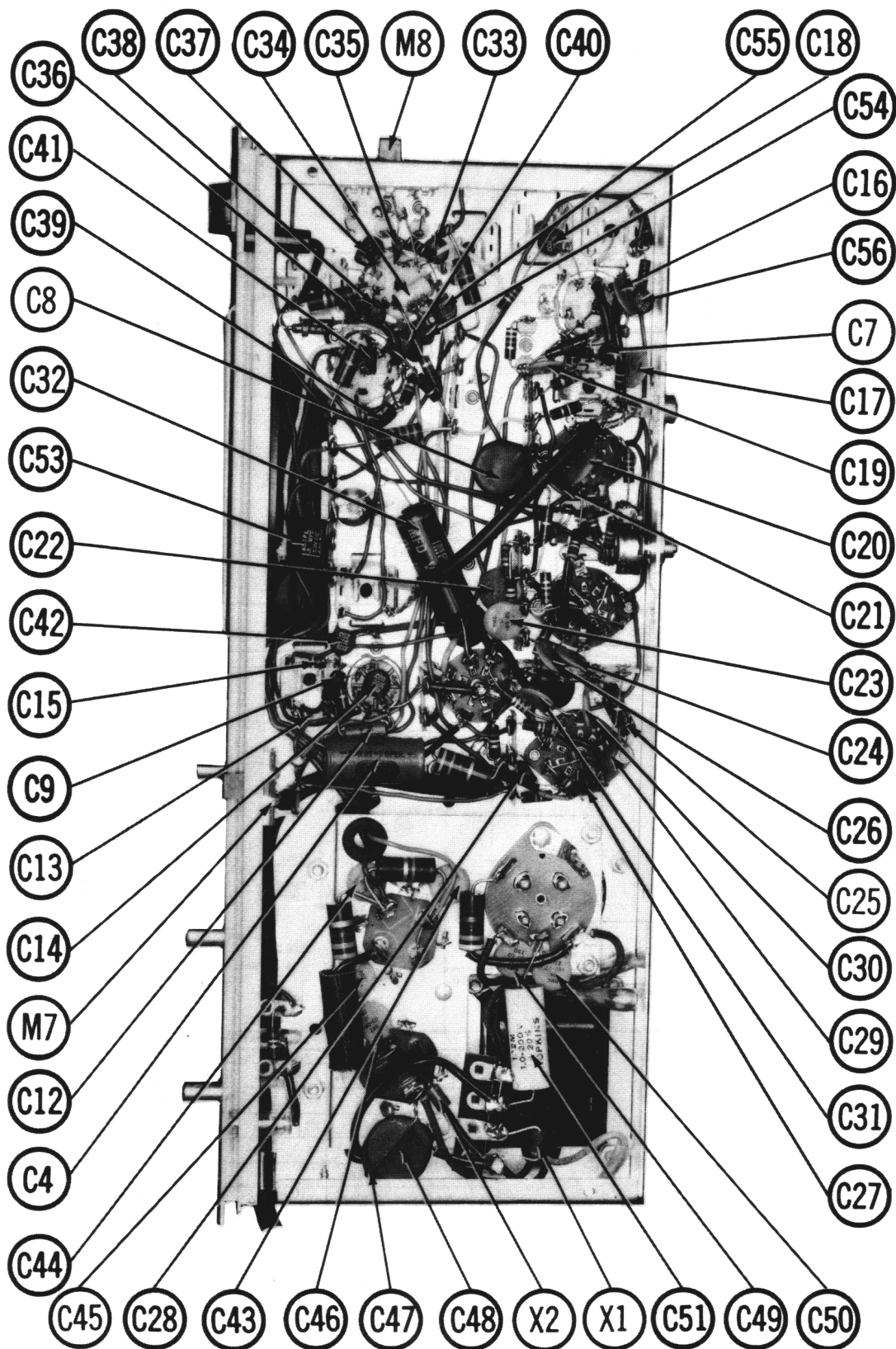
	SPECIAL INSTRUCTIONS	INDICATOR	ADJUST	REMARKS
1.	Place crystal selector switch on or near the centermost channel as covered by the unit.	Connect dummy load and RF watt-meter to antenna terminal. Tuning meter on front panel may be used as output indicator if RF Watt-meter is not available.	A9	Key Transmitter. Rock A9 to each side of peak noting rate of dropoff. Set A9 just below peak on side of gradual dropoff.
2.	"	"	A10, A11	Adjust for maximum output.

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

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

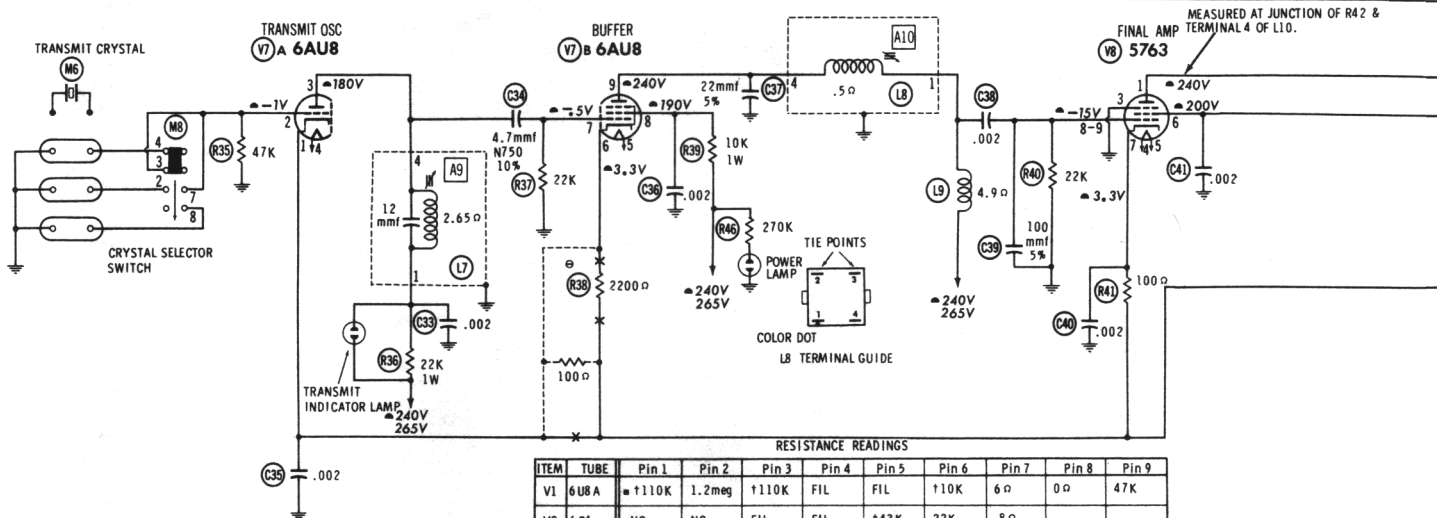
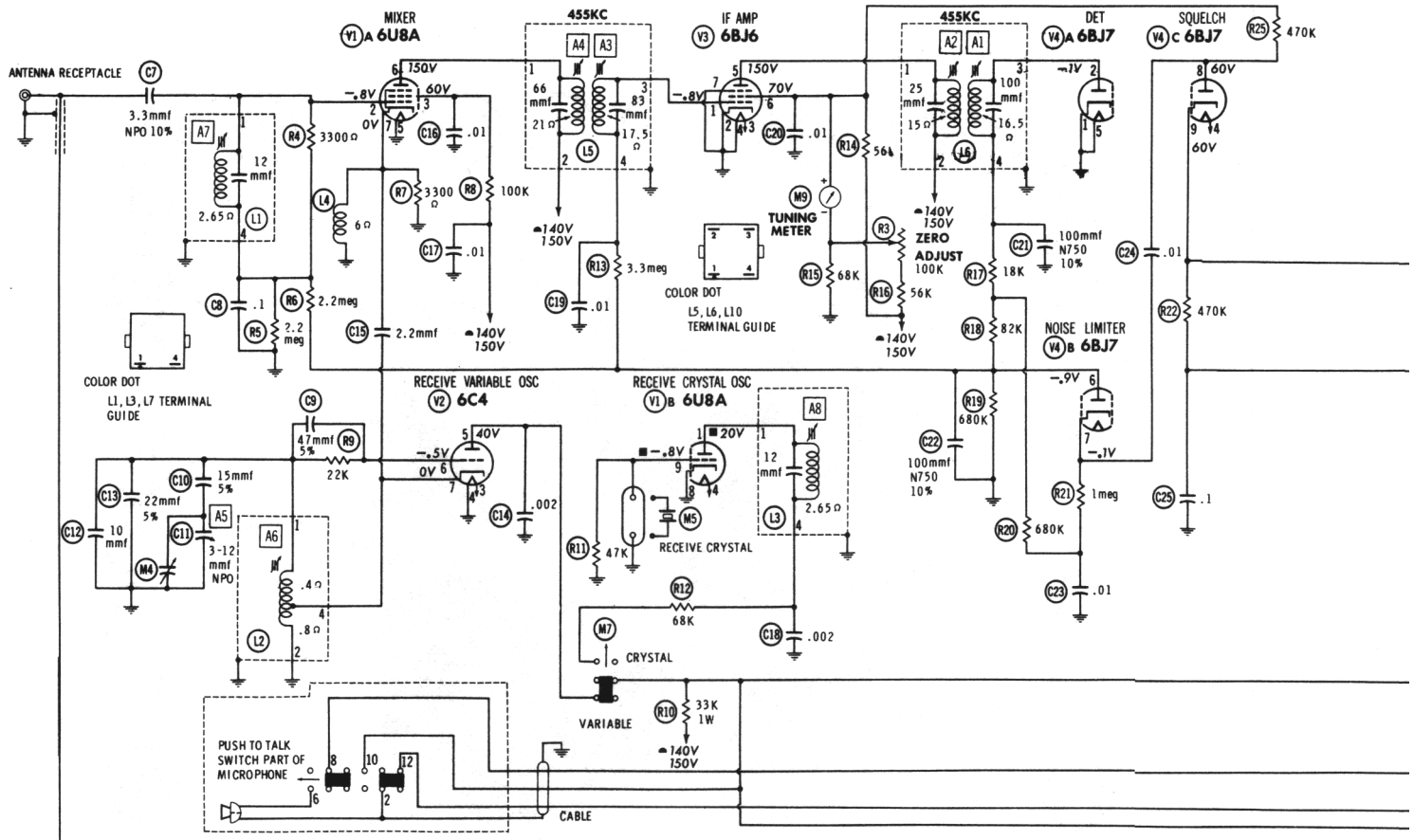


CHASSIS BOTTOM VIEW — RESISTOR & INDUCTOR IDENT. (DC POWER)



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
V1	6U8A	†110K	1.2meg	†110K	FIL	FIL	†10K	6Ω	0Ω
V2	6C4	NC	NC	FIL	FIL	†43K	22K	.8Ω	
V3	6BJ6	4meg	0Ω	FIL	FIL	†10K	†60K	0Ω	
V4	6BJ7	0Ω	750K	NC	FIL	FIL	680K	2.5meg	†535K
V5	6AN8	†480K	10meg	†22K	FIL	FIL	†330K	†1.5meg	500K
V6	6AQ5A	270K	470Ω	FIL	FIL	†810Ω	†330Ω	270K	
V7	6AU8	~0Ω	47K	†22K	FIL	FIL	~2200Ω	22K	†10K
V8	5763	†380Ω	NC	0Ω	FIL	FIL	†5000Ω	~100Ω	22K

ALL READINGS TAKEN IN "RECEIVE" POSITION UNLESS OTHERWISE DESIGNATED.

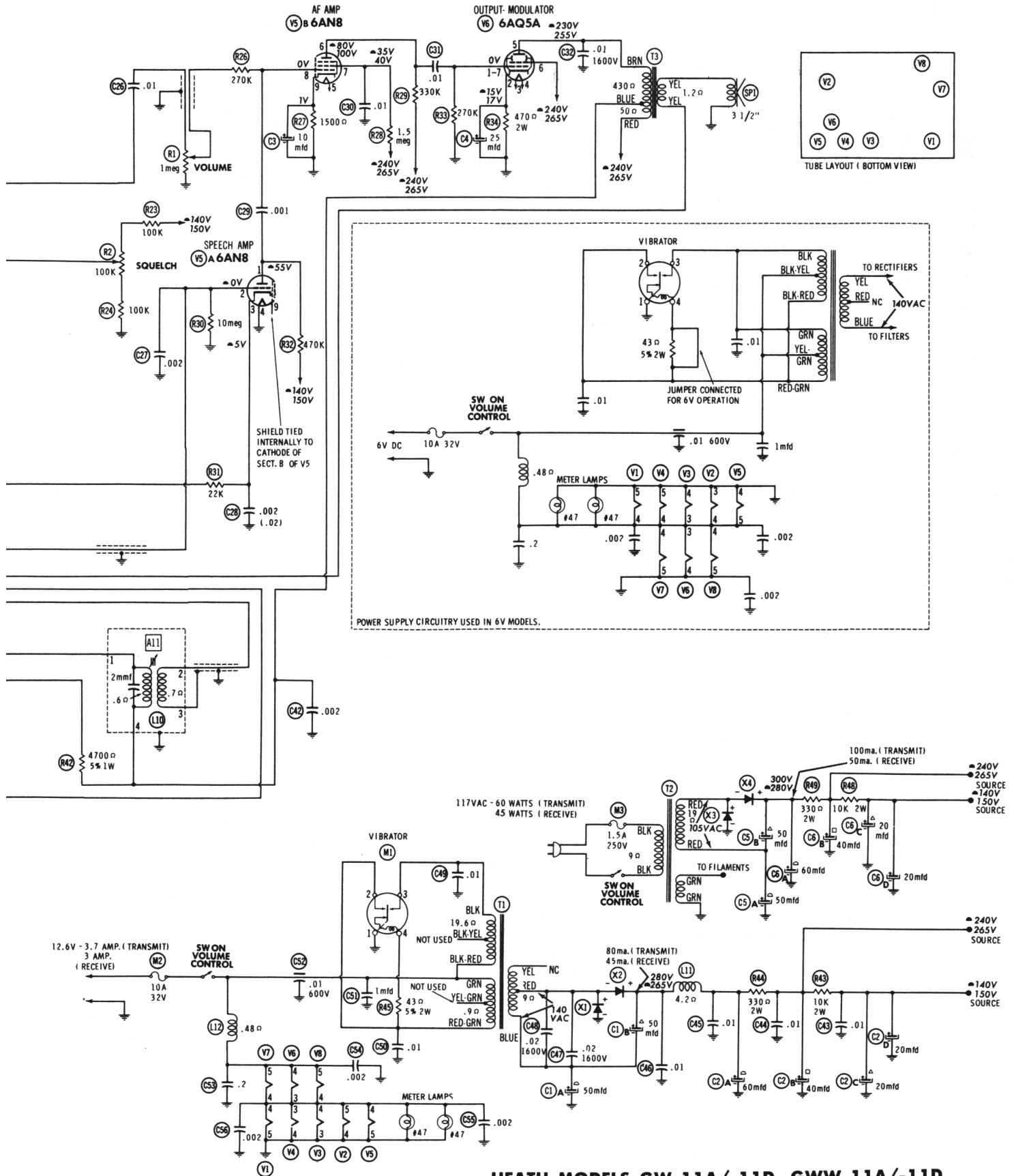
† TAKEN IN "TRANSMIT" POSITION.

~ VARIABLE - CRYSTAL SWITCH IN "CRYSTAL" POSITION.

NC NO CONNECTION

† MEASURED FROM OUTPUT OF X2 OR X4.

- ⊙ 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.



PARTS LIST AND DESCRIPTION

TUBES

◆	AMPEREX	◆	GENERAL ELECTRIC		◆	RCA	◆	RAYTHEON	◆	SYLVANIA	◆
ITEM No.	USE		TYPE			ITEM No.		USE		TYPE	
V1	Mixer-Receive Crystal Osc.		6U8A			V5		Speech Amp. -AF Amp.		6AU8	
V2	Receive Variable Osc.		6C4			V6		Output-Modulator		6AQ5A	
V3	IF Amp.		6B36			V7		Transmitter Osc. -Buffer		6AU8	
V4	Det. -Noise Limiter-Squelch		6BJ7			V8		Final Amp.		57B3	

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	CURRENT RATING (Measured)	ORIGINAL Part or Type No.	RECTIFIERS		NOTES
			SARKES TARZIAN Part No.	DIODES	
X1	.080A	57-27	F4	HV Rectifier	
X2	.080A	57-27	IN3194	HV Rectifier	
X3	.100A	57-27	IN3194	HV Rectifier	
X4	.100A	57-27	IN3194	HV Rectifier	

ELECTROLYTIC CAPACITORS

ITEM No.	RATING CAP.	VOLTS.	HEATH PART No.	AEROVOX PART No.	REPLACEMENT DATA			
					CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1A	50	200	25-58	AFH2-33	B0260	XC2-33	FP240	TVL-2576
C2A	50	200		AFH3-45-25				
C2B	60	450		PRSI570			FP444.95	
C3	10	10	25-93	PTT39	NLW10-15	MTL-5	TT12X10	TE-1114
C4	25	25	25-44	PRSI260	BBR25-25	QTL-11	TC-26	TVL-1205
C5A	50	200	25-58	AFH2-33	B0260	XC2-33		TVL-2576
C6A	50	200		AFH3-45-25				
C6B	60	450		PRSI570				
C7	10	10	25-93					
C8	25	25	25-44					
C9	50	200	25-58					
C10	50	200						
C11	50	200						

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA			
			AEROVOX PART No.	CORNELL-DUBILIER PART No.	ELMENDO PART No.	SPRAGUE PART No.
C7	3.3 NPO 10%		NPO-DI 3.3	CC TO-3R3	CC TO-3R3	10TCC-V33
C8	3.3 50V		TTD-1	CK-104	IDP-2-104	2PS-P10
C9	47 5%		ADM-15-470	TCZ-47	CM-15-470J	10TCC-Q47
C10	15 5%		ADM-15-150	TCZ-15	CM-15-150J	10TCC-Q15
C11	3-12 NPO	#31-13		822-BZ		

FIXED CAPACITORS (cont)

ITEM No.	RATING	REMARKS	REPLACEMENT DATA			
			AEROVOX PART No.	CORNELL-DUBILIER PART No.	ELMENDO PART No.	SPRAGUE PART No.
C12	10		ADM-15-100	TCZ-10	CM-15-100J	10TCC-Q10
C13	22 5%		ADM-15-200	TCZ-22	CM-15-220J	10TCC-Q22
C14	.002		BPD-002	DD-202	CCD-202	10TCC-D20
C15	2.2		BPD-01	DD-103	CCD-103	10TCC-V22
C16	.01		BPD-01	DD-103	CCD-103	10TCC-S10
C17	.002		BPD-01	DD-103	CCD-103	10TCC-S10
C18	.002		BPD-01	DD-103	CCD-103	10TCC-S10
C19	.01		BPD-01	DD-103	CCD-103	10TCC-S10
C20	.01		BPD-01	DD-103	CCD-103	10TCC-S10
C21	100 10% N750		N750-DI 100	TCN-100	CC TN-101	10TCC-U-T10
C22	100 10% N750		N750-DI 100	TCN-100	CC TN-101	10TCC-U-T10
C23	.01		BPD-01	DD-103	CCD-103	10TCC-S10
C24	.01		BPD-01	DD-103	CCD-103	10TCC-S10
C25	.1 200V		P288N-1	DD-103	CCD-103	2PS-P10
C26	.01		BPD-01	DD-103	CCD-103	10TCC-S10
C27	.002		BPD-002	DD-202	CCD-202	10TCC-D20
C28	.002		BPD-002	DD-202	CCD-202	10TCC-D20
C29	.001		BPD-001	DD-102	CCD-102	10TCC-D10
C30	.01		BPD-01	DD-103	CCD-103	10TCC-S10
C31	.01		BPD-01	DD-103	CCD-103	10TCC-S10
C32	.01 1600V		P1684CM-01	DD18-103	16CP-4-103	30GA-S10
C33	.002		BPD-002	DD-202	CCD-202	10TCC-D20
C34	4.7 10% N750		BPD-002	DD-202	CCD-202	10TCC-U-V50
C35	.002		BPD-002	DD-202	CCD-202	10TCC-D20
C36	.002		BPD-002	DD-202	CCD-202	10TCC-D20
C37	22 5%		ADM-15-220	TCZ-22	CM-15-220J	10TCC-Q22
C38	.002		BPD-002	DD-202	CCD-202	10TCC-D20
C39	100 5%		ADM-15-101	TCZ-100	CM-15-101J	10TCC-T10
C40	.002		BPD-002	DD-202	CCD-202	10TCC-D20
C41	.002		BPD-002	DD-202	CCD-202	10TCC-D20
C42	.002		BPD-002	DD-202	CCD-202	10TCC-D20
C43	.01		BPD-01	DD-103	CCD-103	10TCC-S10
C44	.01		BPD-01	DD-103	CCD-103	10TCC-S10
C45	.01		BPD-01	DD-103	CCD-103	10TCC-S10
C46	.02 1600V	#21-38	BPD-01	DD-103	16CP-5-203	10TCC-S10
C47	.02 1600V	#21-38	BPD-01	DD-103	16CP-5-203	10TCC-S10
C48	.01		BPD-01	DD-103	CCD-103	10TCC-S10
C49	.01		BPD-01	DD-103	CCD-103	10TCC-S10
C50	.01		BPD-01	DD-103	CCD-103	10TCC-S10
C51	1mfd 200V		P288N-1		GEM-21	2TM-M1
C52	.01 600V		BPD-002	DD-202	CCD-202	2PS-P20
C53	.2 50V		BPD-002	DD-202	CCD-202	10TCC-D20
C54	.002		BPD-002	DD-202	CCD-202	10TCC-D20
C55	.002		BPD-002	DD-202	CCD-202	10TCC-D20
C56	.002		BPD-002	DD-202	CCD-202	10TCC-D20

Heath Part Number.

CONTROLS

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

ITEM No.	USE	RESISTANCE	HEATH PART No.	REPLACEMENT DATA			
				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	U-53, US-26, or (UAI6A, US-41, SFI1000)
R2	Squelch	100K	10-108	B-40 or (F1-100K, SU204)	A47-100K-S, FS-3	Q11-128, or (BU2, GC)*	U-41, or (UAI5L, SFI1000)
R3	Zero Adj. (Meter)	100K	10-121	JL-104			MCL15L

† Indicate Metal Housing Switch.

* "SNAPTROL".

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.	WORKMAN 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	Input IF	52-39				
L7	Output IF Oscillator Plate (Transmitter)	40-312				
L8	RF Choke (Driver Plate)	40-431				130uh
L9	RF Choke	45-27				30uh
L10	Final RF	40-432		6177		90uh
L11	RF Choke	45-7				235MH
L12	Hash Filter	45-20				

TRANSFORMER (POWER)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
			HEATH PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	
	PRI.	SEC. 1 SEC. 2					
T1	12.6VDC ① 1.4A (2.1A)*	140V③ - .080A	55-8				* Transmit

TRANSFORMER (POWER)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
			HEATH PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	
	PRI.	SEC. 1 SEC. 2					
T2	117VAC ② 44A (.58A)*	105V③ 6.3V④ 3.6A	54-124				* Transmit

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA				NOTES
			HEATH PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	
	PRI.	SEC.					
T3	5800Ω Tap ③ 4900Ω	3-4Ω	51-65				

SPEAKER

ITEM No.	TYPE		REPLACEMENT DATA		NOTES
			HEATH PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.		
SPI	3½"	P.M.	3-4Ω	401-21	3A07

VIBRATOR

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

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA						
			HEATH PART No.		LITTELFUSE PART No.				BUSS PART No.
					FUSE	HOLDER	FUSE	HOLDER	
			FUSE	HOLDER					FUSE
M2	3AG	10A 32V 1½A	421-30	423-6	311010 (3AG 10A 32V)	155020	AGC10	HHJ-B	
M3	3AG	250V	421-1	422-1	31201.5 (3AG 1½A 250V)	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	
	Microphone	480-29	

CABINETS & CABINET PARTS

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

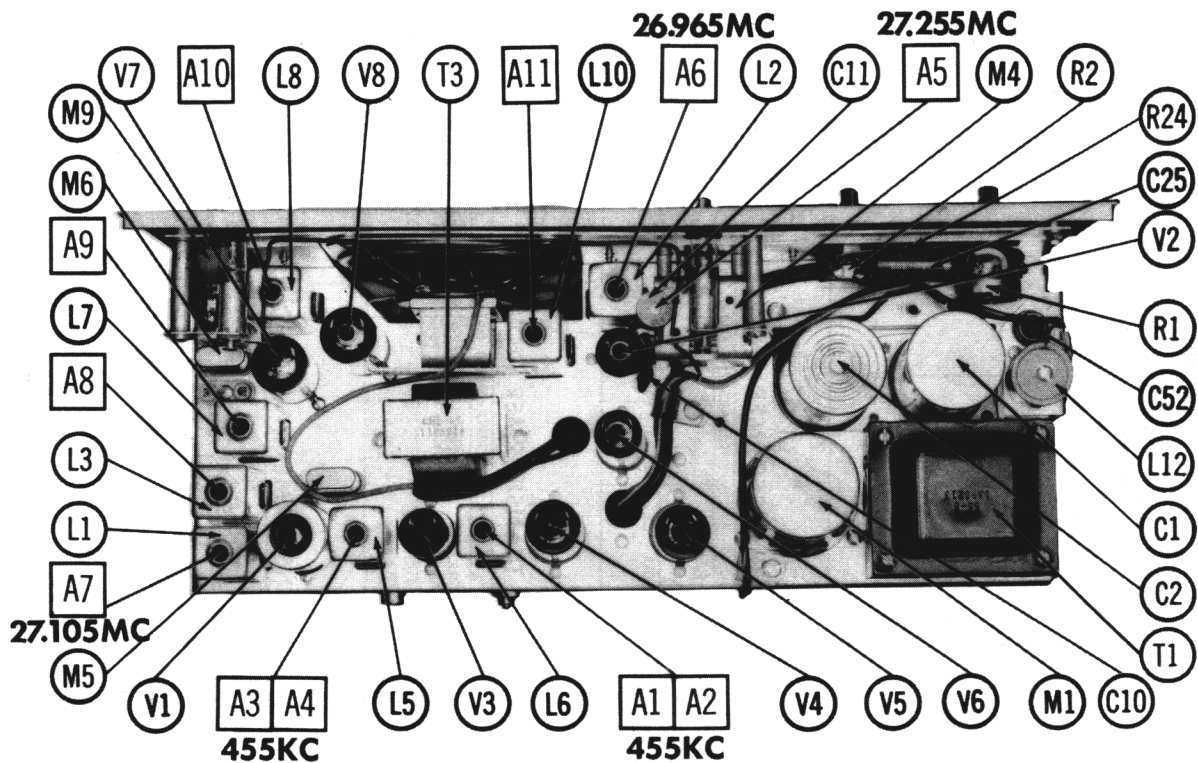
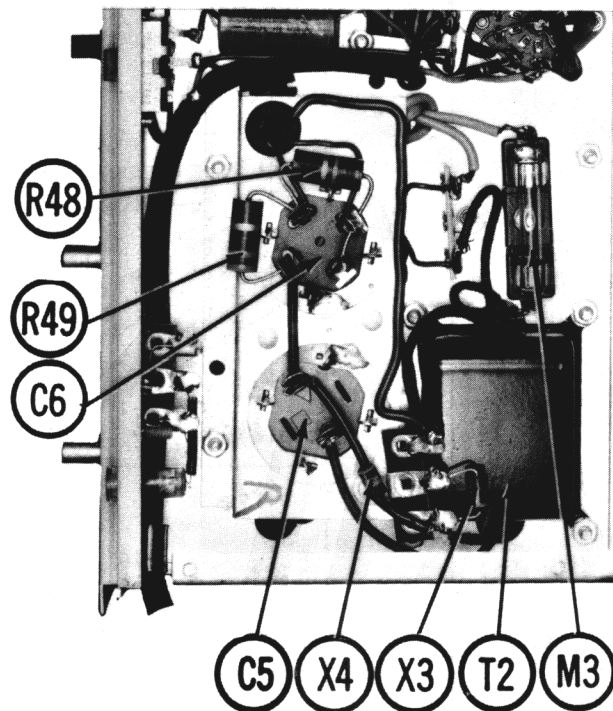
NAME	PART NO.	DESCRIPTION
Dial Pointer Knob	100-M270	
Cabinet	462-78 90-M131F	Squealch, Volume, Tuning

WIRING DATA

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

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

CHASSIS
BOTTOM
VIEW
(AC POWER)



CHASSIS – TOP VIEW