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PHOTOFACT® Folder



HEATH MODELS
GW-10A/D, GWW-10A/D



HEATH MODELS
GW-10A/D, GWW-10A/D

TRADE NAME	Heath Models GW-10A, GW-10D, GWW-10A, GWW-10D
MANUFACTURER	Heath Co., A Subsidiary of Daystrom, Inc., Benton Harbor, Michigan
TYPE SET	AC (or) Battery Operated 7 Tube Citizens Band Transmitter-Receiver
POWER SUPPLY	Models GW-10A, GWW-10A: 110-120 Volts AC, 60 Cycles GW-10D, GWW-10D: 6 (or) 12 Volt Storage Battery
RATING	Models GW-10A, GWW-10A: 38 Watts, .39 Amp. @117 Volts AC (Receive); 44 Watts, .44 Amp. @117 Volts AC (Transmit) GW-10D, GWW-10D: 3.2 Amp. @12.6 Volts DC (Receive); 3.8 Amp. @12.6 Volts DC (Transmit) or 6.4 Amp. @6.3 Volts DC (Receive); 7.6 Amp. @6.3 Volts DC (Transmit)
TUNING RANGE	TRANSMITTER: Any 3 of Citizens Band Channels 1 thru 23 RECEIVER: Crystal Controlled on any one of Citizens Band Channels 1 thru 23 or Manually Tuneable

NOTICE

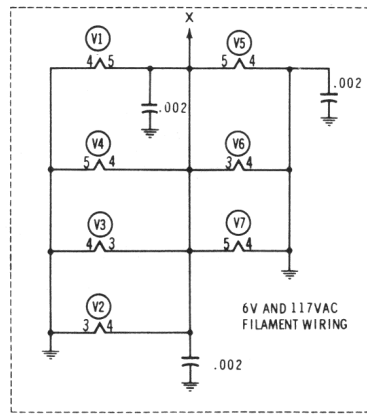
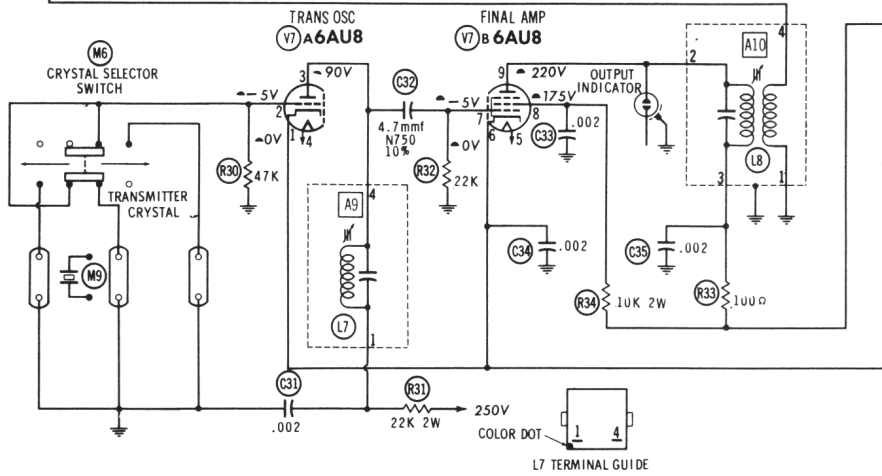
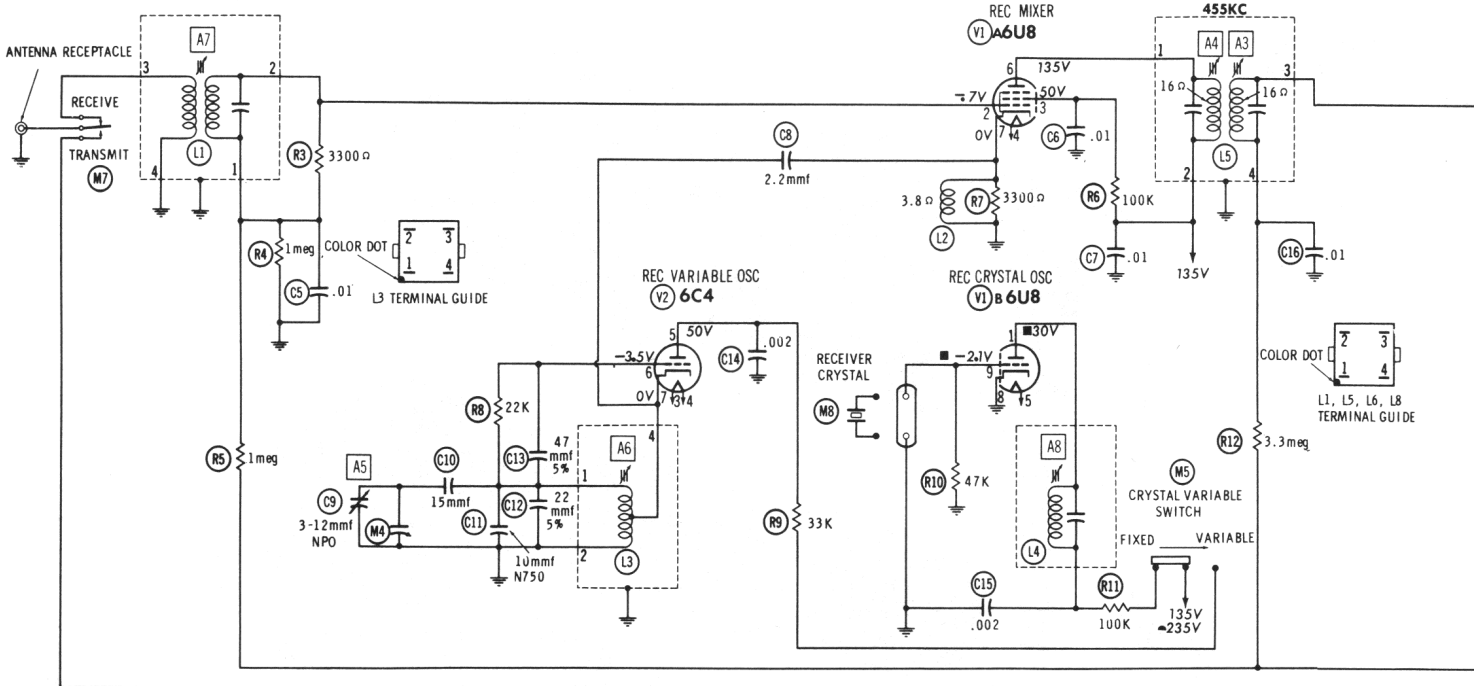
ONLY THOSE PERSONS PROPERLY LICENSED ARE PERMITTED TO MAKE ADJUSTMENTS OR REPAIRS WHICH MAY RESULT IN ILLEGAL OPERATION. (REFER TO FCC RULES & REGULATIONS PART 19, SUBPART D, SECTION 19.71).

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



The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of LZ140

the particular type of replacement part listed. Reproduction or use, without express permission, of editorial or pictorial content, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. © 1962 Howard W. Sams & Co., Inc., Indianapolis 6, Indiana. Printed in U.S. of America



RESISTANCE READINGS

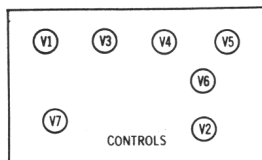
ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	6U8	±110K	700K	±110K	FIL	FIL	±10K	.1Ω	0Ω	47K
V2	6C4	NC	NC	FIL	FIL	±43K	22K	.1Ω		
V3	6BJ6	4meg	0Ω	FIL	FIL	±10K	±66K	0Ω		
V4	6BJ7	0Ω	650K	0Ω	FIL	FIL	630K	2.3meg	±540K	630K
V5	6AN8	±480K	10meg	0Ω	FIL	FIL	±330K	±1.5meg	270K	1500Ω
V6	6AQ5A	270K	470Ω	FIL	FIL	±810Ω	±330Ω	270K		
V7	6AU8	±0Ω	±47K	±22K	FIL	FIL	±0Ω	22K	±10K	±860Ω

ALL MEASUREMENTS MADE IN "RECEIVE", VARIABLE POSITION UNLESS OTHERWISE DESIGNATED.
 ▲ MEASURED IN "TRANSMIT" POSITION. † MEASURED FROM OUTPUT OF V1.
 ■ MEASURED IN "FIXED" POSITION. NC NO CONNECTION

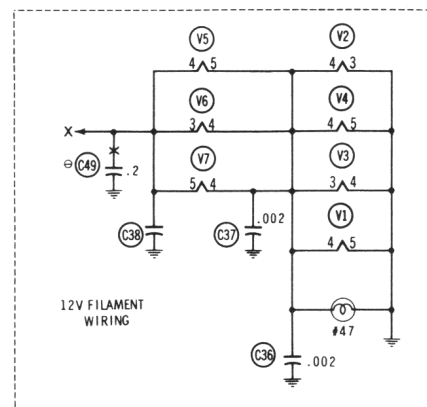
⊗ SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

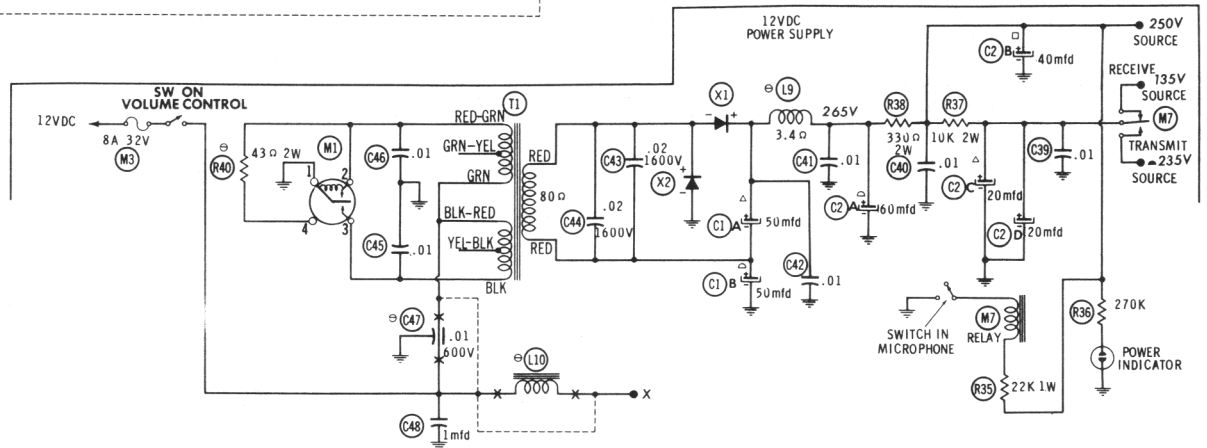
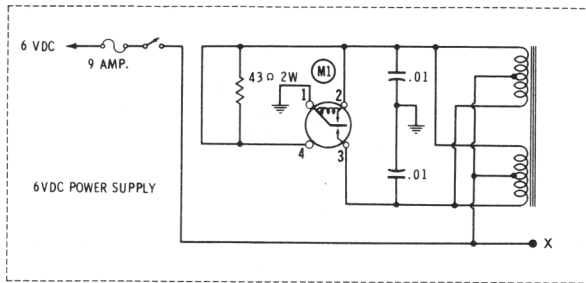
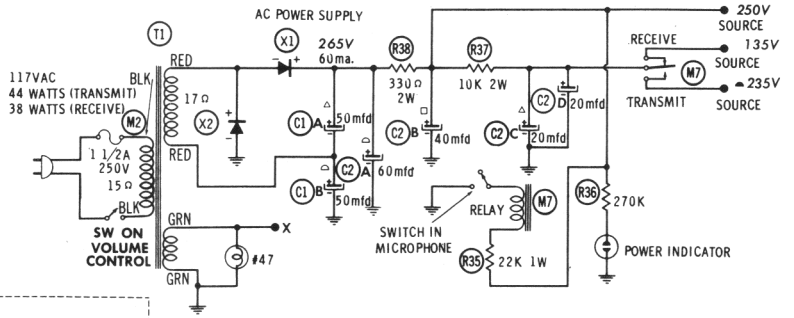
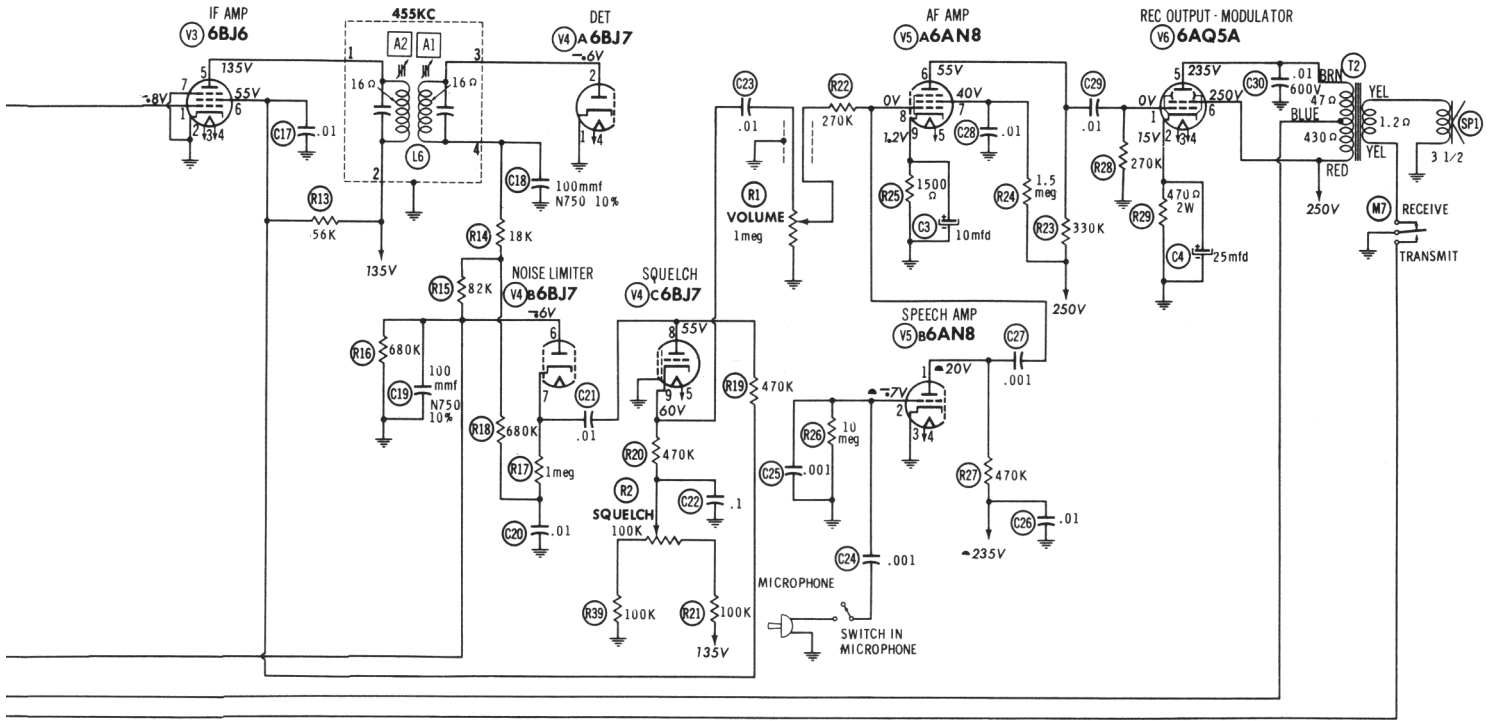
DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM

- DC voltage measurements taken with vacuum tube voltmeter; AC voltages measured with 1000 ohm per volt voltmeter.
- Socket connections are shown as bottom views.
- Measured values are from socket pin to common ground.
- Line voltage maintained at 117 volts for voltage readings.
- Nominal tolerance of component values makes possible a variation of ±15% in voltage and resistance readings.
- All controls at minimum, proper output load connected.

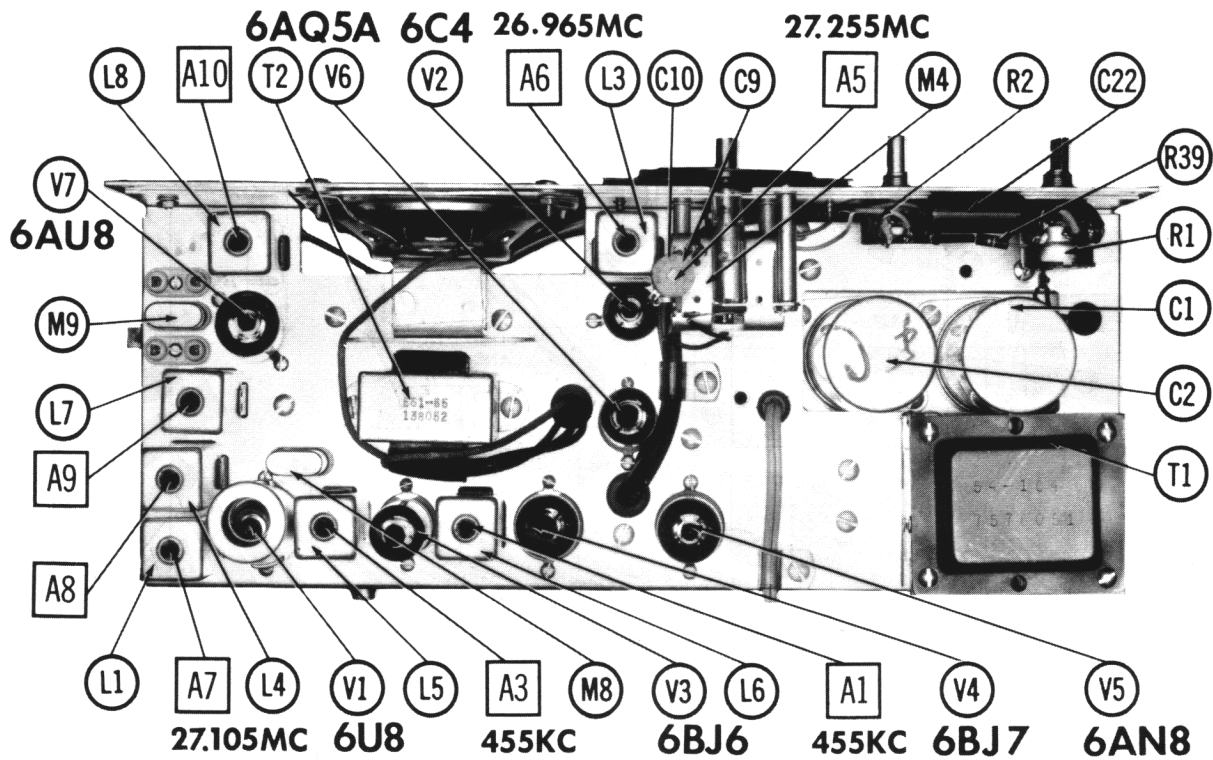


TUBE LAYOUT (BOTTOM VIEW)

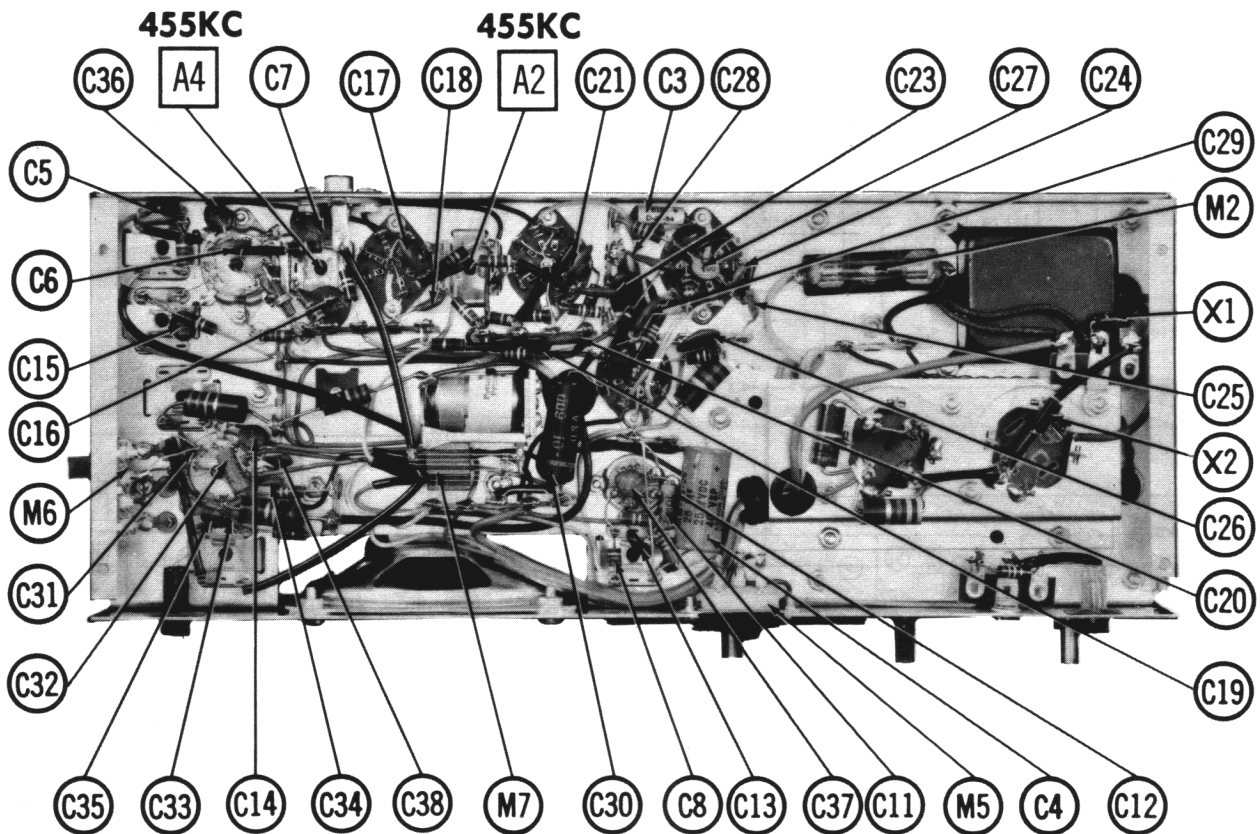




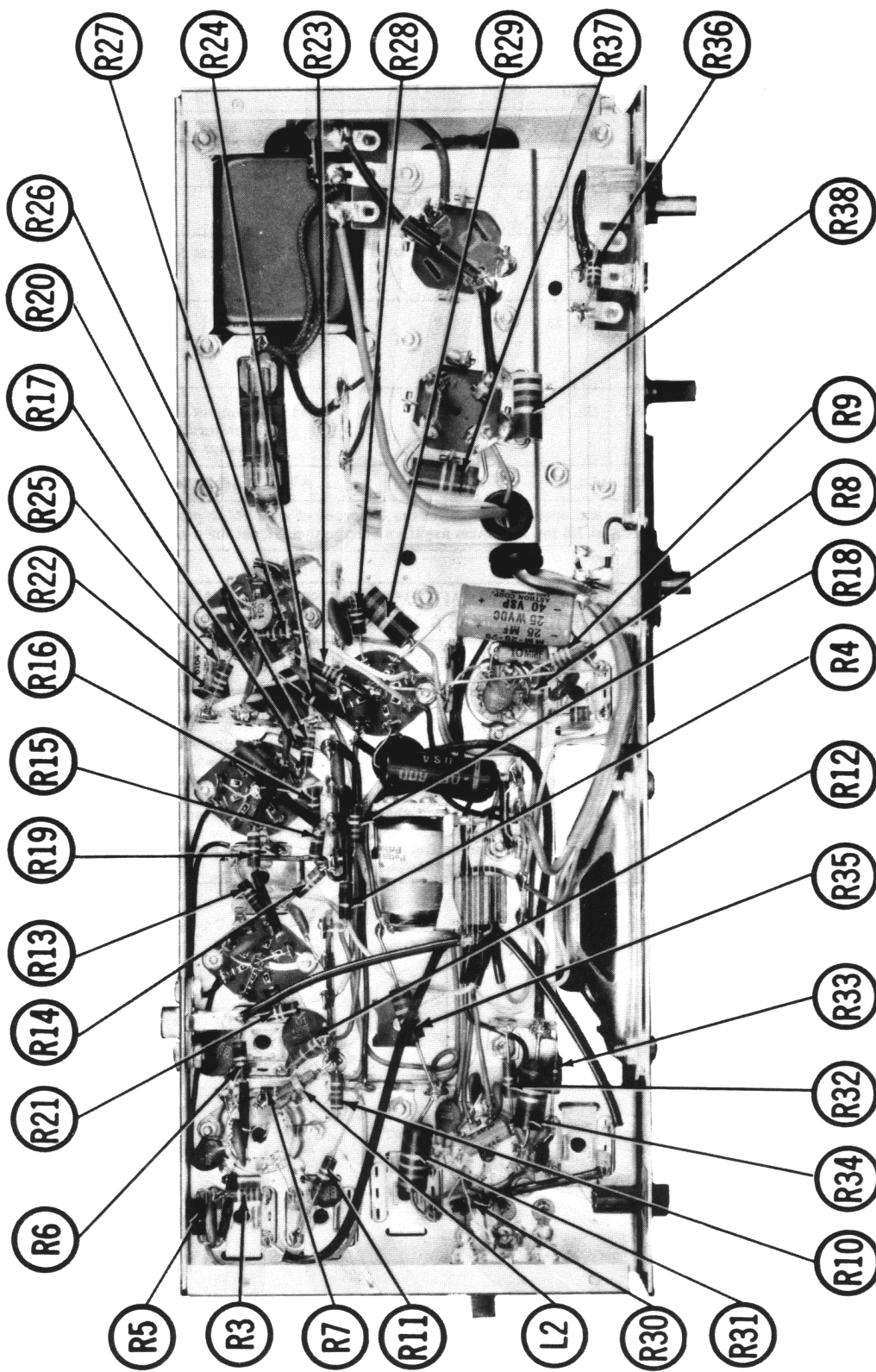
HEATH MODELS
 GW-10A/D, GWW-10A/D



CHASSIS - TOP VIEW



CHASSIS BOTTOM VIEW - ALIGNMENT, CAPACITOR & MISC. IDENT.



CHASSIS BOTTOM VIEW - RESISTOR & INDUCTOR IDENT.

PARTS LIST AND DESCRIPTIONS

TUBES

ITEM No.	USE	GENERAL ELECTRIC		RCA		RAYTHEON		Sylvania	
		TYPE				USE		TYPE	
V1	Rec. Mixer-Crystal Oscillator	6U8				Det.-Noise Limiter		6BJ7	
V2	Rec. Variable Oscillator	6C4				Squelch AF Amp.-Speech Amp.		6AN8	
V3	IF Amplifier	6BJ6				Rec. Output-Modulator Trans. Osc. -Final Amp.		6AQ5A 6AU8	

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	CURRENT RATING (Measured)	RECTIFIERS		DIODES		NOTES
		ORIGINAL Part or Type No.	SARKES TARZIAN PART No.	GENERAL ELECTRIC PART No.	RAYTHEON PART No.	
X1	.060A	57-27	IN1763	F6		
X2	.060A	57-27	IN1763	F6		

ELECTROLYTIC CAPACITORS

ITEM No.	RATING CAP.	VOLT.	HEATH PART No.	REPLACEMENT DATA				SPRAGUE PART No.
				AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	
C1A	.50	200	25-58	PRIS185	XC4-55			
C6	.50	200	25-93	PRIS185				
C7A	.60	450						
C	.40	350						
D	.20	250						
C3	10	10	25-54	PTT39	NLW10-15	MT1-5	MLV10-10	TE-1U4
C4	.25	25	25-44	PRSI260	BBR25-25	QTL-11	TD-25-25	TVA-1205

FIXED CAPACITORS (cont)

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.
C29	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C30	.01	600V	P688N-01	D6-103	CUP8S1	6DP-2-103	GEM-611	6HK-S10
C31	.002		BPD-002	DD-202	BYA10D2	CCD-202	B-220	5HK-D20
C32	4.7	N750 10%	N750-S1 5.0	TCN-5	C10V5U1	CCTN-050	CN7-547	10TCU-V50
C33	.002		BPD-002	DD-202	BYA10D2	CCD-202	B-220	5HK-D20
C34	.002		BPD-002	DD-202	BYA10D2	CCD-202	B-220	5HK-D20
C35	.002		BPD-002	DD-202	BYA10D2	CCD-202	B-220	5HK-D20
C36	.002		BPD-002	DD-202	BYA10D2	CCD-202	B-220	5HK-D20
C37	.002		BPD-002	DD-202	BYA10D2	CCD-202	B-220	5HK-D20
C38	.002		BPD-002	DD-202	BYA10D2	CCD-202	B-220	5HK-D20
C39	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C40	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C41	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C42	.01	1600V		DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C43	.02	1600V			CUB6S2	16DP-4-203	GEM-1612	MB-52
C44	.02	1600V			CUB6S2	16DP-4-203	GEM-1612	MB-52
C45	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C46	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C47	.01	600V			CUB2W1		GEM-21	47P6
C48	1mfd	200V			P288N-1,0		2TM-M1	
C49	.2	50V			P288N-2	IDP-3-204	GEM-402	4TM-P20

Heath Part Number.

Note 1. Not used in some DC operated versions.

FIXED 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	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C6	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C7	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C8	2.2	NPO	NFO-SI 2.2	TCZ-2R2	C10V22C	CCTO-2R2	CNO-522	10TCC-V22
C9	3-12	NPO	1469-000015	TCZ-15	22R5Q15	CM-19B-150J	CNO-415	MS-415
C10	15	5%	N750-S1 10	TCN-10	C10Q1U	CCTN-100	CNT-410	10TCU-Q10
C11	10	N750	1469-000022	TCZ-22	22R5Q22	CM-19B-220J	CNO-422	MS-422
C12	22	5%	1469-000047	TCZ-47	22R5Q47	CM-19B-470J	CNO-447	MS-447
C13	47	5%		DD-202	BYA10D2	CCD-202	B-220	5HK-D20
C14	.002		BPD-002	DD-202	BYA10D2	CCD-202	B-220	5HK-D20
C15	.002		BPD-002	DD-202	BYA10D2	CCD-202	B-220	5HK-D20
C16	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C17	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C18	100	N750 10%	N750-D1 100	D1N-100	C10T1U	CCTN-100	CNT-310	10TCU-T10
C19	100	N750 10%	N750-D1 100	D1N-100	C10T1U	CCTN-100	CNT-310	10TCU-T10
C20	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C21	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C22	.1	200V	P288N-1	DF-104	CUB2PL1	ZDP-3-104	GEM-201	2TM-P10
C23	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C24	.001		BPD-001	DD-103	BYA10S1	CCD-103	B-110	5HK-D10
C25	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C26	.001		BPD-001	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C27	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C28	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10

Note 1. DC operated models only.

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.
R1	Volume	1meg	19-53	B-70-8, or (AB-70, AK-11, KR-1)	A47-1meg-Z/ FS-3	Q13-137, 76-1, or (BU2, CF26, SSI, GC)*
R2	Power Off-On Squelch	100K	10-108	B-40, or (AB-40, AK-11)	A47-100K-Z/ FS-3	Q11-128, or (BU2, CF13, SSI, DC)*

* "SNAPTROL"

RESISTORS

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

ITEM No.	RATING	REMARKS	REPLACEMENT DATA		
			ITEM No.	RATING	REPLACEMENT DATA
R3	3300 Ω		R22	270K	
R4	1meg		R23	330K	
R5	1meg		R24	1.5meg	
R6	100K		R25	1500 Ω	
R7	3300 Ω		R26	10meg	
R8	22K		R27	470K	
R9	33K		R28	270K	
R10	47K		R29	470 Ω 2W	
R11	100K		R30	47K	
R12	3.3meg		R31	22K 2W	
R13	50K		R32	22K	
R14	18K		R33	100 Ω	
R15	82K		R34	10K 2W	
R16	680K		R35	22K 1W	
R17	1meg		R36	270K	
R18	680K		R37	10K 2W	
R19	470K		R38	300 Ω 2W	
R20	470K		R39	100K	
R21	100K		R40	430 Ω 2W	

PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		HEATH PART No.	Miller PART No.	Stancor PART No.	Workman PART No.	
L1	Ant. RF Choke (30uh)	40-310				① Not used in some versions,
L2	RF Choke (30uh)	45-27				
L3	Osc. Plate	40-313				
L4	Osc. Plate	40-312				
L5	1st IF	52-38	12-C1	RTC-8632	T807	
L6	2nd IF	52-39	12-C2	RTC-8633	T808	
L7	Osc. Plate	40-312				
L8	Final	40-311				
L9	RF Choke (90uh)	45-7				
L10	Hash Choke					

TRANSFORMER (POWER)

ITEM No.	RATING	REPLACEMENT DATA				NOTES
		HEATH PART No.	Meritt PART No.	Stancor PART No.	Thorndson PART No.	
T1	PRI. SEC. 1 SEC. 2 117V @ 100V @ 6.3V @ .44A .250A 3A	54-104				AC Operation
	PRI. SEC. 1 12.8VCT 100V @ ② 2.3A .250A (or) 6.3VCT 4.6A	55-5				DC Operation

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE	REPLACEMENT DATA				NOTES
		HEATH PART No.	Meritt PART No.	Stancor PART No.	Thorndson PART No.	
T2	PRI. SEC. 5000Ω 3-4Ω T300 ② 4900Ω	51-65				

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		HEATH PART No.	QUAM PART No.	
SP1	FIELD V. C. IMP. 3-4Ω PM 3-4Ω	401-21	3A07	

VIBRATOR

ITEM No.	TYPE	INPUT VOLTS	FREQUENCY	REPLACEMENT DATA			NOTES
				HEATH PART No.	CORNELL-DUBIER PART No.	MALLOY PART No.	
M1	Interrupter	6-12	115%	68-5	6301	61601	6301

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			HEATH PART No.	HEATH PART No.	LITTELFUSE PART No.	BUSS PART No.		
M2	3AG	1½A 250V	421-1 ①	422-1	31201.5 (3AG 1½A 250V)	357001	AGC 1½	4405
M3	SFE	8A 32V	421-4 ②	423-6	307008 (SFE 8A 32V)	156008	SFE 8	HDX

① AC Operation. ② DC Operation.

MISCELLANEOUS

ITEM No.	PART NAME	HEATH PART No.	NOTES
M4	Tuning Cap	26-66	1 Gang Crystal-Variable (DDPT Slide Type) Crystal Selector (8-Position Slide Type) Receive Transmit
M5	Switch	60-4	
M6	Switch	60-10	
M7	Relay	69-14	
M8	Crystal		
M9	Crystal		
	Microphone	480-14	

CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Dial Scale	205-M221F362	
Dial Pointer	100-M270	
Knob	462-78	
Front Panel	100-M271	
Cabinet	90-M131F	

WIRING DATA

General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid) Available in 12 Colors
8524 (Stranded) Available in 12 Colors
Power Cord Use BELDEN No. 1706 (Plastic) or 17128 (Rubber) - 6 Ft.
1709 (Plastic) or 17128 (Rubber) - 9 Ft.
Power Cord (Interlock Type) Use BELDEN No. 8874 (Rubber) or 8895 (Plastic)