

PHOTOFACT[®] with

CIRCUITRACE[®]

For Supplier Address See PHOTOFACT Index

NOTE

Repair or adjustment of transmitter circuits must be under supervision of a person with first-or second-class radiotelephone license.

(Refer to FCC Rules and Regulations Part 95, Subpart 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.

COBRA MODEL 85



MODEL 85

HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

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ALIGNMENT INSTRUCTIONS

Suggested Alignment Tools: GC ELECTRONICS
 T1, L3, L4 9440
 ALL Other Tunable Transformers and Coils 5000, 8290

RECEIVER

Connect an AC VTVM or AF Wattmeter across speaker voice coil.
 Adjustments made with 13.8-volt DC input.
 Adjust volume control to obtain suitable reading.

SIGNAL GENERATOR	GEN FREQ	CHANNEL	ADJUST	REMARKS
High side thru .01uF to collector of Q2, low side to ground.	455kHz, 1000Hz @ 30% modulation.	Any	T4,T5	Set signal output to maintain a .5V output across speaker voice coil. Adjust for maximum.
High side thru .01uF to antenna jack, low side to ground.	27.115MHz, 1000Hz @ 30% modulation, output 2uV.	13	L4,T1,T6, T7,T8	Adjust for maximum.

RECEIVER ADJUSTMENTS

Connect an AC VTVM or AF Wattmeter across speaker voice coil.
 These adjustments made with 13.8-volt DC input.
 Adjust volume control to obtain a suitable reading.

SIGNAL GENERATOR	GEN FREQ	CHANNEL	ADJUST	REMARKS
SQUELCH RANGE High side thru .01uF to antenna jack, low side to ground.	27.115MHz, 1000Hz @ 30% modulation, output 300uV.	13	R58	Set squelch control fully clockwise. Adjust so that squelch just breaks.
"S" METER High side thru .01uF to antenna jack, low side to ground.	27.115MHz, 1000Hz @ 30% modulation, output 100uV.	13	R18	Adjust for "S"9 reading on panel meter.

TRANSMITTER

Connect an RF Wattmeter or 50-ohm, 25-watt dummy load to antenna connector.
 Adjustments made with 13.8-volt DC input.

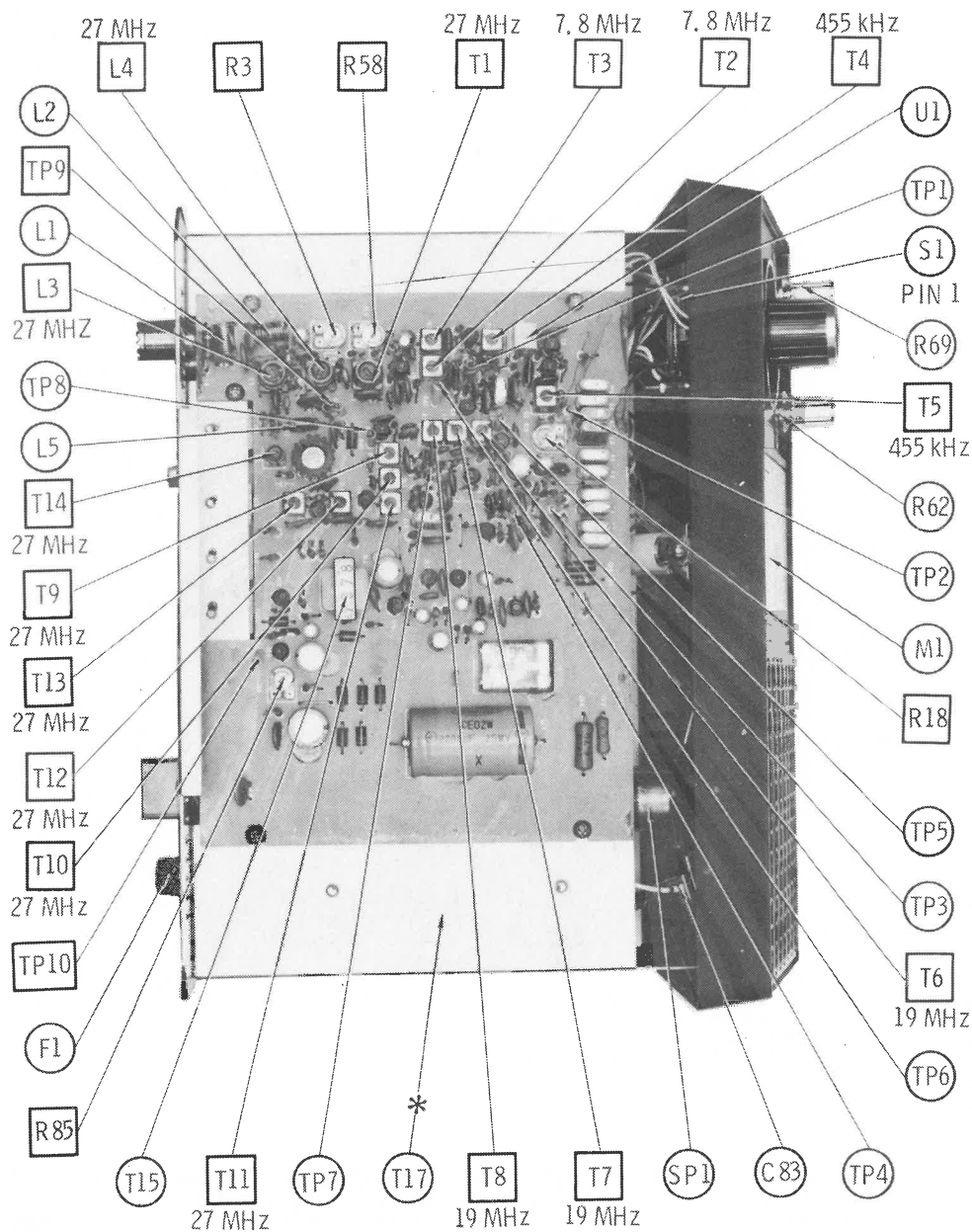
AM

INDICATOR	ADJUST	REMARKS
OSCILLATOR, MIXER, BUFFER, DRIVER, FINAL RF Wattmeter	T9,T10,T11, T12,T13,T14	Channel selector to CH 13. Key transmitter. Adjust for maximum.
FINAL INPUT POWER Remove jumper at TP9 and connect 0-1000 DC milliammeter.	L3	Adjust for 5 watts (calculated).
FREQUENCY CHECK Frequency Counter		Connect counter to antenna jack. Key transmitter. Check all channels for correct frequency.

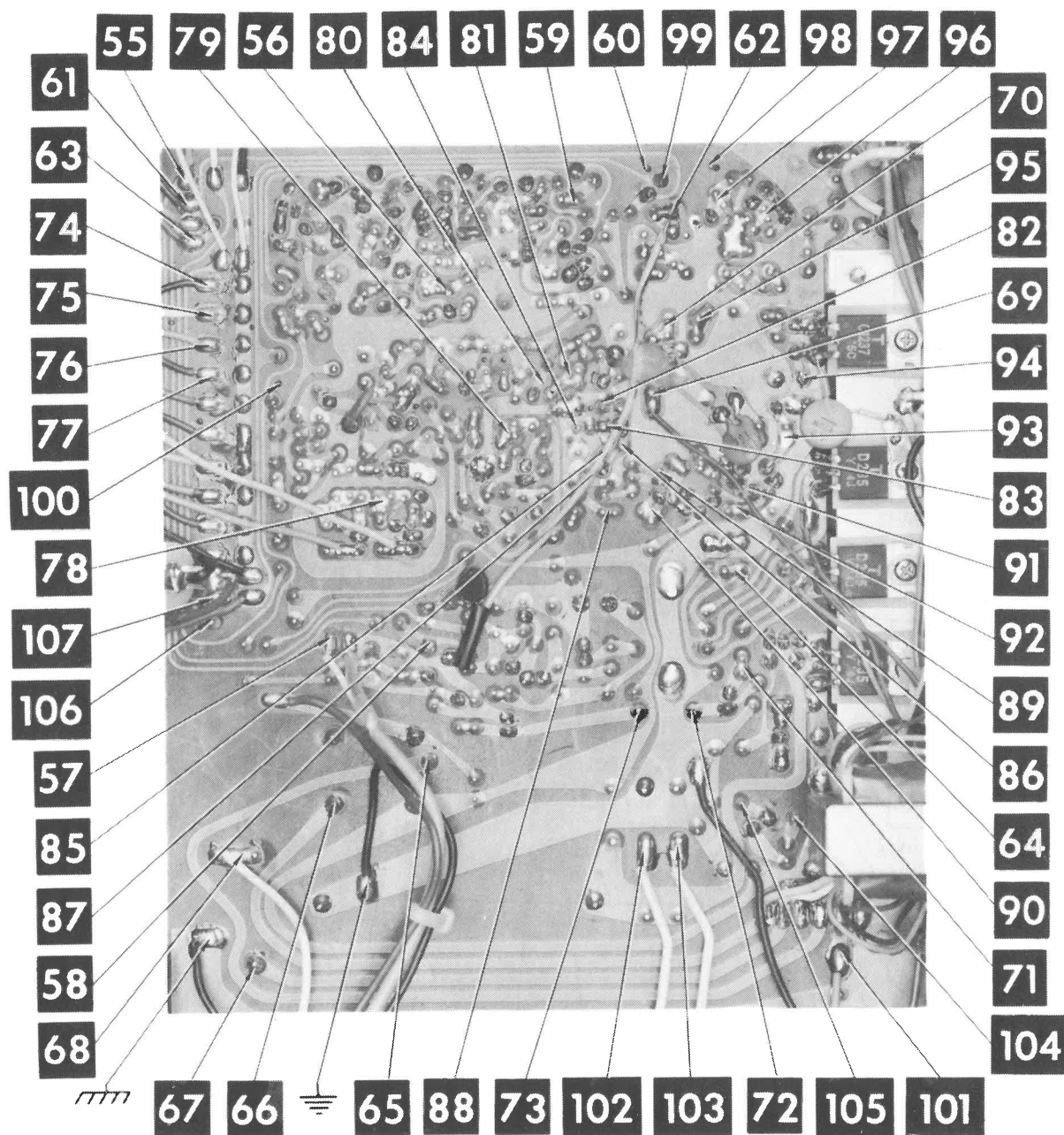
TRANSMITTER ADJUSTMENTS

Connect an RF Wattmeter or 50-ohm, 25-watt dummy load to antenna connector.
 Adjustments made with 117-volt AC input to power supply.

INDICATOR	ADJUST	REMARKS
VOLTAGE REGULATOR DC Voltmeter connected to TP10 and ground.	R85	Adjust R85 for 13.8V DC at TP10. Key transmitter. Voltage should not vary.
RF PANEL METER RF Wattmeter	R3	Key transmitter. Adjust so that panel RF meter agrees with RF wattmeter (mid-scale of red scale).

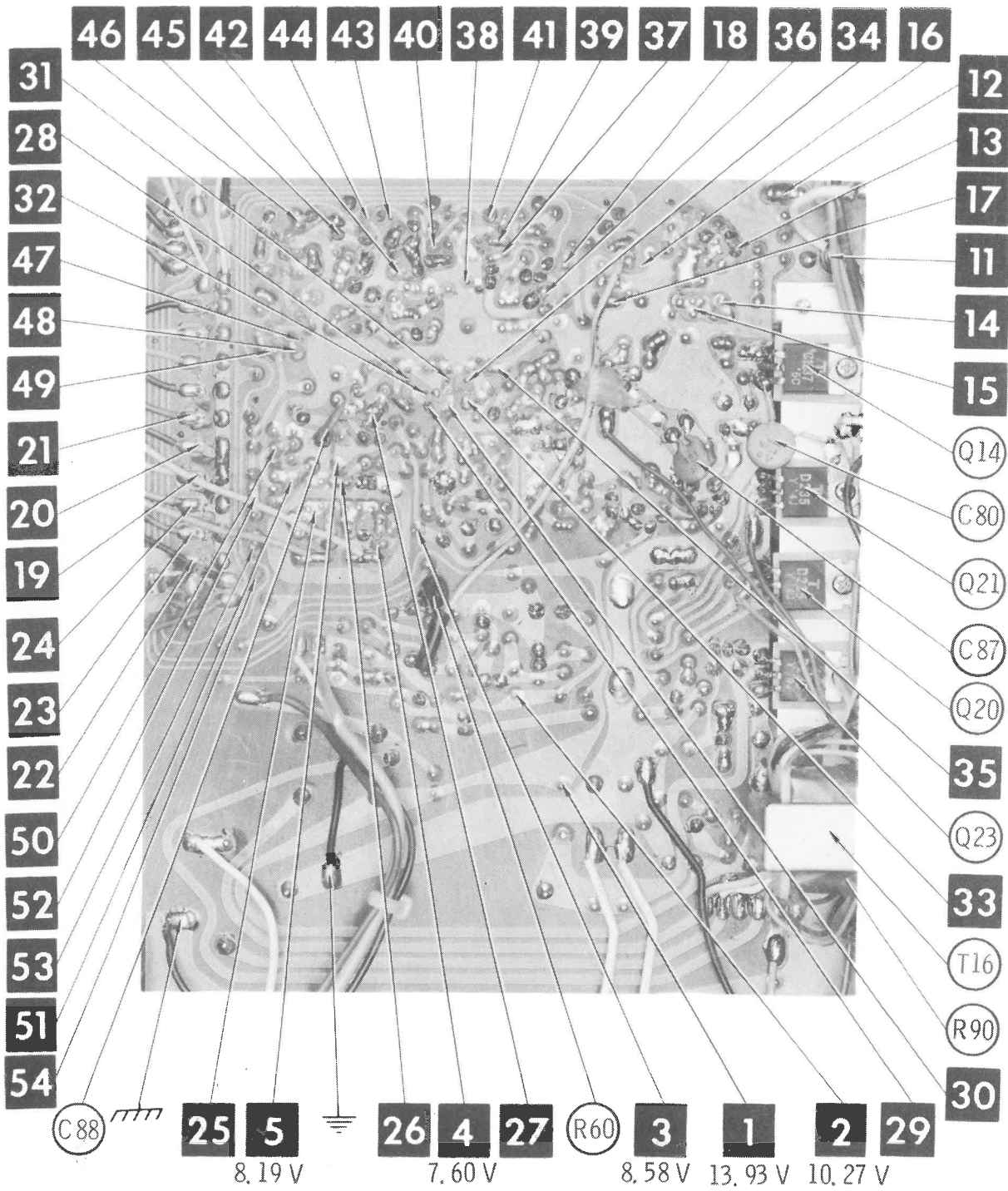


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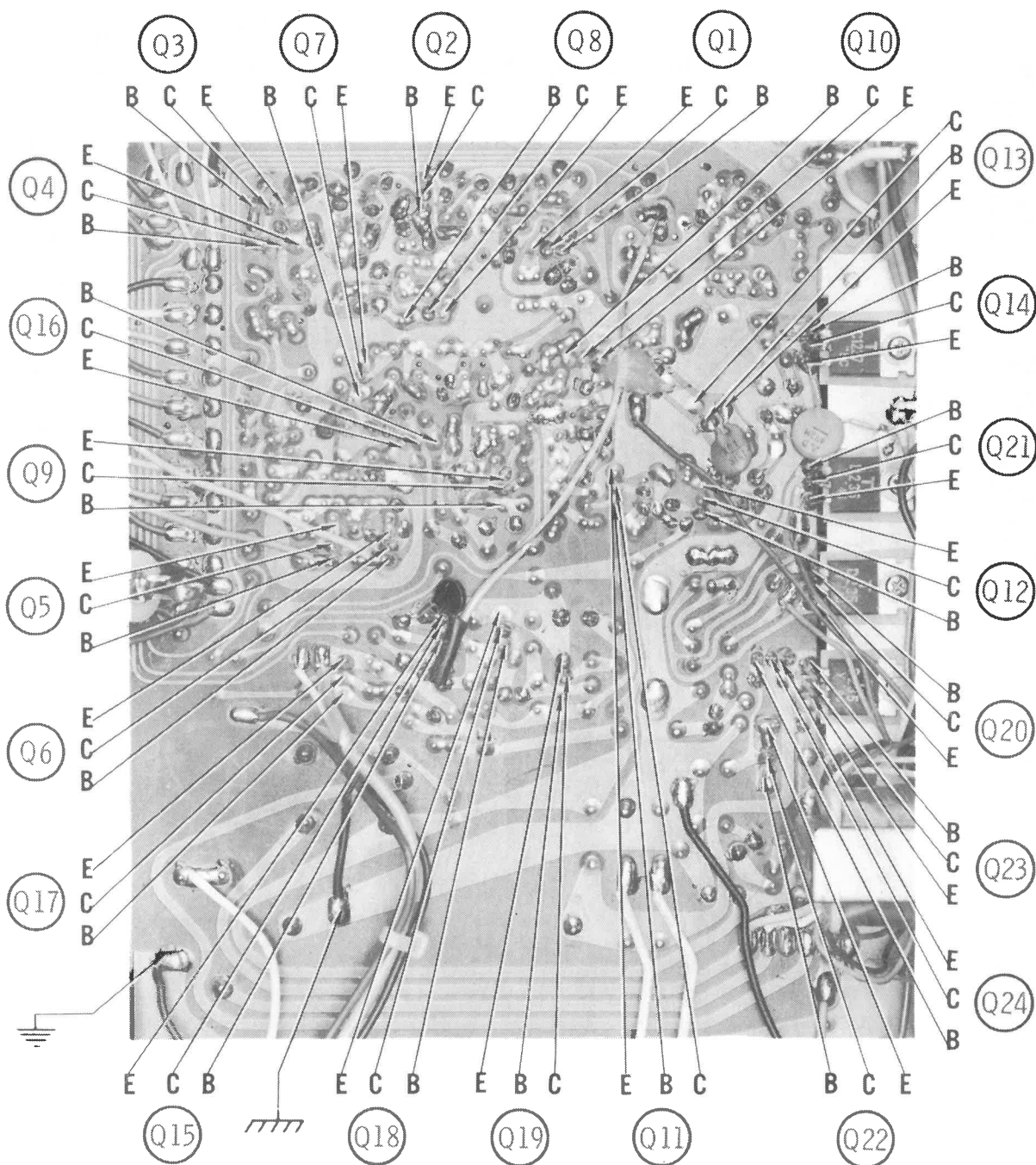


MAIN BOARD

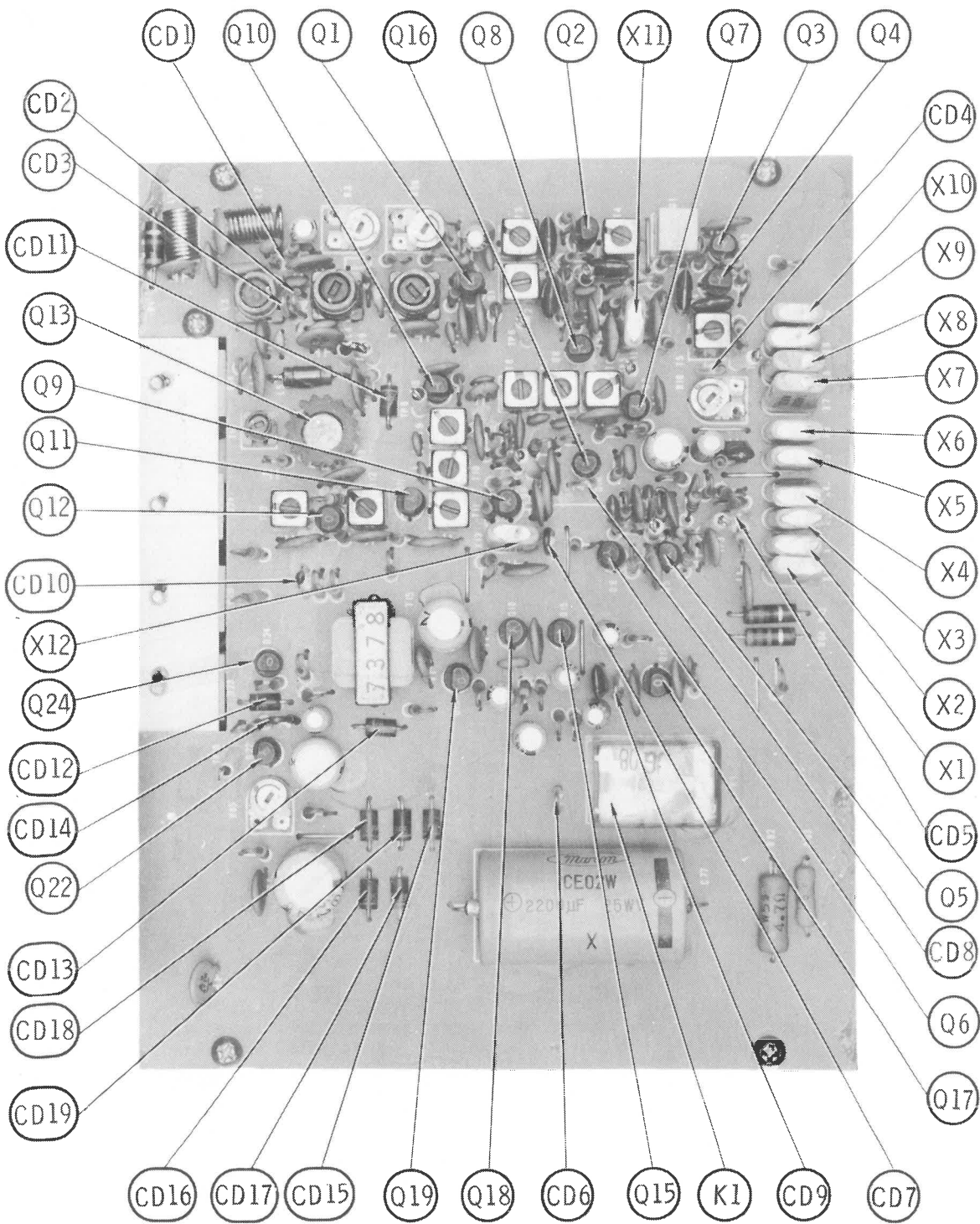
COBRA MODEL 85



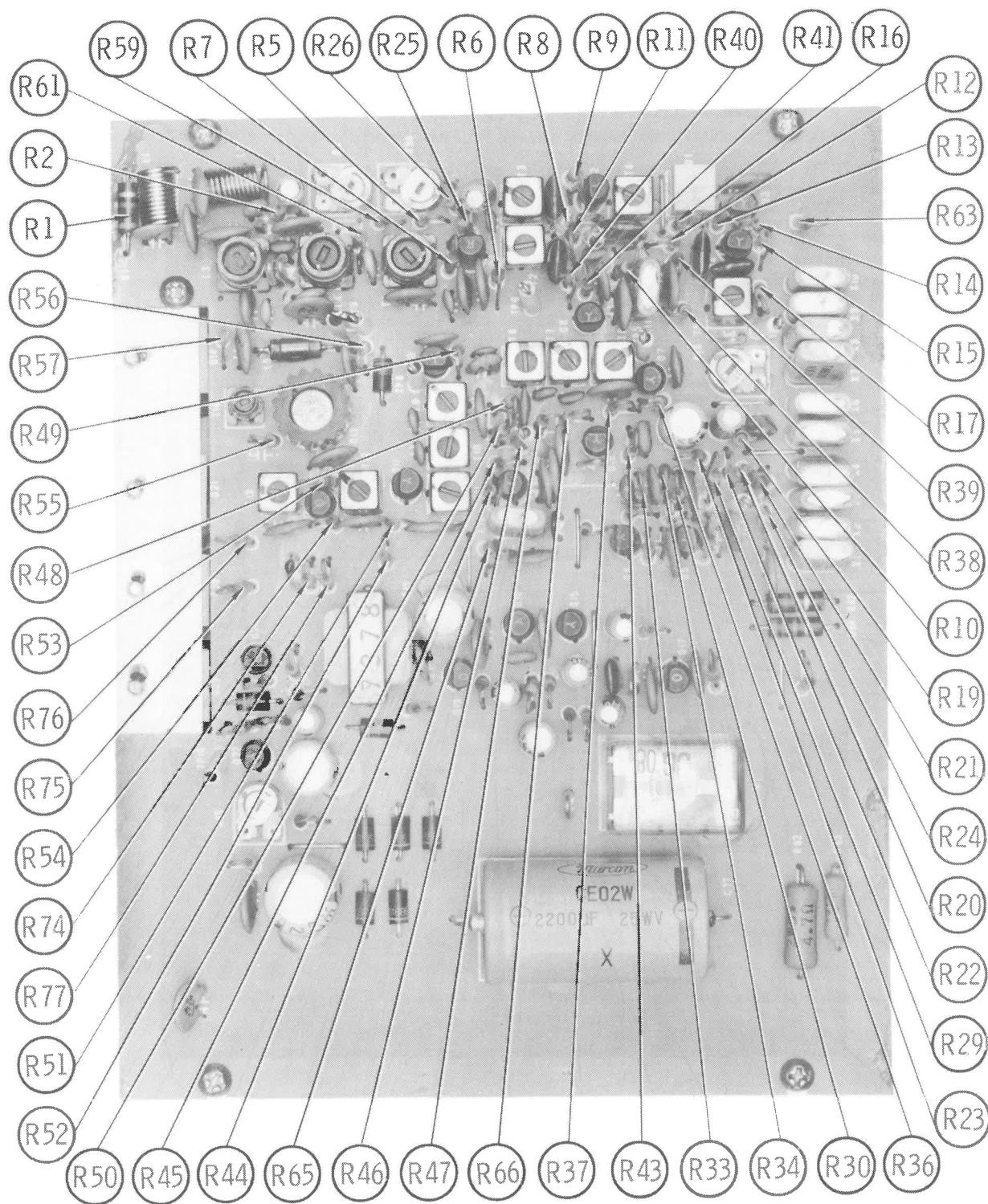
MAIN BOARD



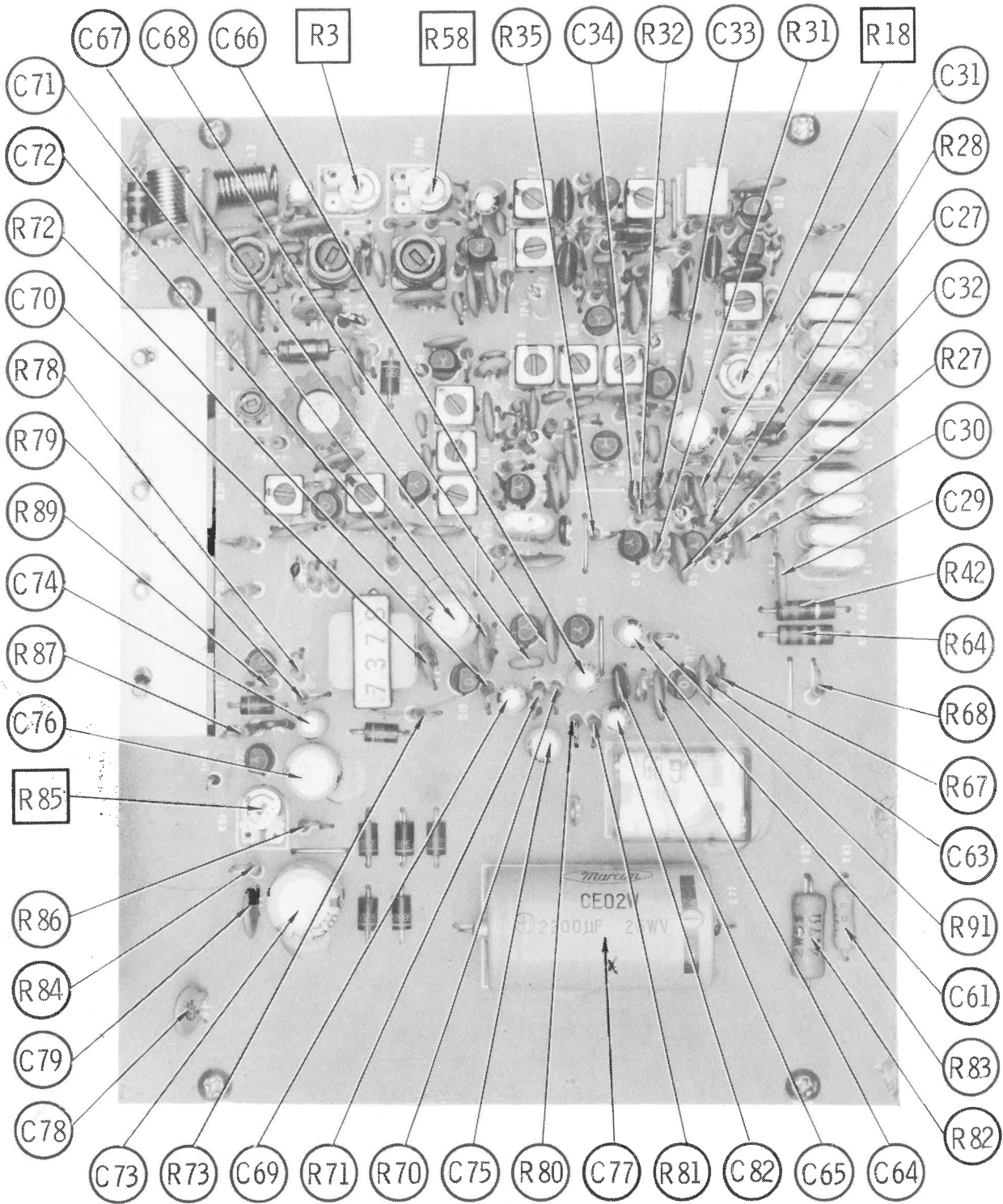
MAIN BOARD



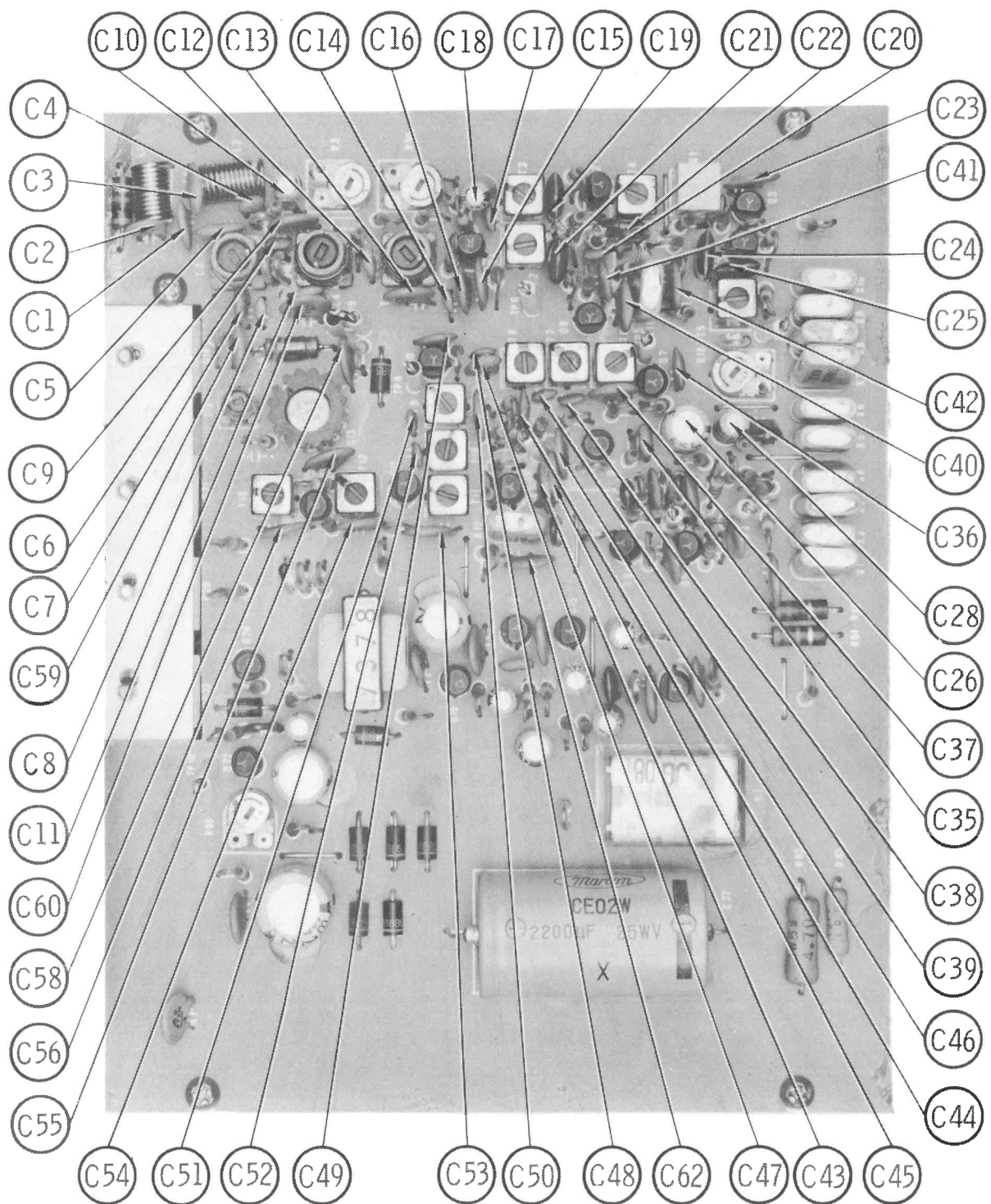
MAIN BOARD



MAIN BOARD



MAIN BOARD



MAIN BOARD

PARTS LIST AND DESCRIPTION

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

WIRING DATA

General-use Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors 8524 (Stranded) Available in 12 Colors
Power Cord, 2-Wire	Use BELDEN No. 17106 (Plastic) or 17126 (Rubber) -6 feet 17109 (Plastic) or 17129 (Rubber) -9 feet
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 8491 4-Conductor (2 shielded, 2 unshielded) Neoprene

SEMICONDUCTORS (Select replacement transistor for best results)

ITEM No.	TYPE No.	MFR. PART No.	REPLACEMENT DATA							
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	MOTOROLA PART No.	RAYTHEON PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.
CD1	1S1588	151-051-9-001	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
CD2	1S1588	151-051-9-001	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
CD3	1S1588	151-051-9-001	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
CD4	1S1588	151-051-9-001	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
CD5	1S1588	151-051-9-001	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
CD6	1S1588	151-051-9-001	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
CD7	02Z8.2A 8.2V Zener	152-042-9-001	GEZD-8.2	Z1208	ZB8.2	HEPZ0411	RE 112	SK3136	RT-257	ECG5072
CD8	1S1588	151-051-9-001	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
CD9	1S1588	151-051-9-001	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
CD10	S3016R M8513A-R(1)	151-030-9-006 151-034-9-001	GE-300 GE-300	D200 D200	PTC214 PTC214	HEPR0602 HEPR0602	RE 52 RE 52	SK3100 SK3100	RT-218 RT-218	ECG177 ECG177
CD11	1S1885	151-030-9-005	GE-504A	8D4	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
CD12	1S1885	151-030-9-005	GE-504A	8D4	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
CD13	1S1885	151-030-9-005	GE-504A	8D4	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
CD14	02Z6.8A 6.8V Zener	152-042-9-002	GEZD-6.8	Z1206	ZB6.8	HEPZ0409	RE 110	SK3058	RT-238	ECG5071
CD15	1S1885	151-030-9-005	GE-504A	8D4	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
CD16	1S1885	151-030-9-005	GE-504A	8D4	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
CD17	1S1885	151-030-9-005	GE-504A	8D4	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
CD18	1S1885	151-030-9-005	GE-504A	8D4	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
CD19	1S1885	151-030-9-005	GE-504A	8D4	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
CD20	1S2093(1)	181-003-9-001	GE-61	TR-70	PTC121	HEPS0016	RE 9	SK3018	RT-108	ECG6407
Q1	2SC784R	176-026-9-001	GE-20	(IR)2SC458"B"	PTC121	HEPS0015	RE 13	SK3018	RT-105	ECG123A
Q2	2SC372Y	176-042-9-003	GE-20	(IR)2SC458"B"	PTC121	HEPS0015	RE 13	SK3018	RT-105	ECG123A
Q3	2SC372Y	176-042-9-003	GE-20	(IR)2SC458"B"	PTC121	HEPS0015	RE 13	SK3018	RT-105	ECG123A
Q4	2SC372Y	176-042-9-003	GE-20	(IR)2SC458"B"	PTC121	HEPS0015	RE 13	SK3018	RT-105	ECG123A
Q5	2SC372Y	176-042-9-003	GE-20	(IR)2SC458"B"	PTC121	HEPS0015	RE 13	SK3018	RT-105	ECG123A
Q6	2SC372Y	176-042-9-003	GE-20	(IR)2SC458"B"	PTC121	HEPS0015	RE 13	SK3018	RT-105	ECG123A
Q7	2SC372Y	176-042-9-003	GE-20	(IR)2SC458"B"	PTC121	HEPS0015	RE 13	SK3018	RT-105	ECG123A
Q8	2SC372Y	176-042-9-003	GE-20	(IR)2SC458"B"	PTC121	HEPS0015	RE 13	SK3018	RT-105	ECG123A
Q9	2SC372Y	176-042-9-003	GE-20	(IR)2SC458"B"	PTC121	HEPS0015	RE 13	SK3018	RT-105	ECG123A
Q10	2SC372Y	176-042-9-003	GE-20	(IR)2SC458"B"	PTC121	HEPS0015	RE 13	SK3018	RT-105	ECG123A
Q11	2SC372Y	176-042-9-003	GE-20	(IR)2SC458"B"	PTC121	HEPS0015	RE 13	SK3018	RT-105	ECG123A
Q12	2SC735-0	176-031-9-001	GE-47	TR-24	PTC123	HEPS0014	RE 13	SK3124	RT-107A	ECG289
Q13	2SC482X	176-029-9-002	GE-45	TR-65	PTC158	HEPS3013	RE 79	SK3048	RT-107A	ECG195
Q14	2SC1237	172-029-9-001	GE-215	TR-92	PTC186		RE 21	SK3054	RT-154	ECG236
Q15	2SC372Y	176-042-9-003	GE-20	(IR)2SC458"B"	PTC121	HEPS0015	RE 13	SK3018	RT-105	ECG123A
Q16	2SC372Y	176-042-9-003	GE-20	(IR)2SC458"B"	PTC121	HEPS0015	RE 13	SK3018	RT-105	ECG123A
Q17	2SA562-0	177-006-9-002	GE-21	TR-54	PTC103	HEPS0019	RE 26	SK3114	RT-115	ECG290
Q18	2SC733Y	176-037-9-004	GE-20	(IR)2SC372	PTC139	HEPS0025	RE 13	SK3124	RT-102	ECG199
Q19	2SC735-0	176-031-9-001	GE-47	TR-24	PTC123	HEPS0014	RE 13	SK3124	RT-107A	ECG289
Q20	2SD235Y	172-010-9-001	GE-66	TR-76	PTC167		RE 21	SK3054	RT-154	ECG152
Q21	2SD235Y	172-010-9-001	GE-66	TR-76	PTC167		RE 21	SK3054	RT-154	ECG152
Q22	2SC372Y	176-029-9-001	GE-20	(IR)2SC458"B"	PTC121	HEPS0015	RE 13	SK3018	RT-105	ECG123A
Q23	2SD235Y	172-010-9-001	GE-66	TR-76	PTC167		RE 21	SK3054	RT-154	ECG152
Q24	2SC735-0	176-031-9-001	GE-47	TR-24	PTC123	HEPS0014	RE 13	SK3124	RT-107A	ECG289

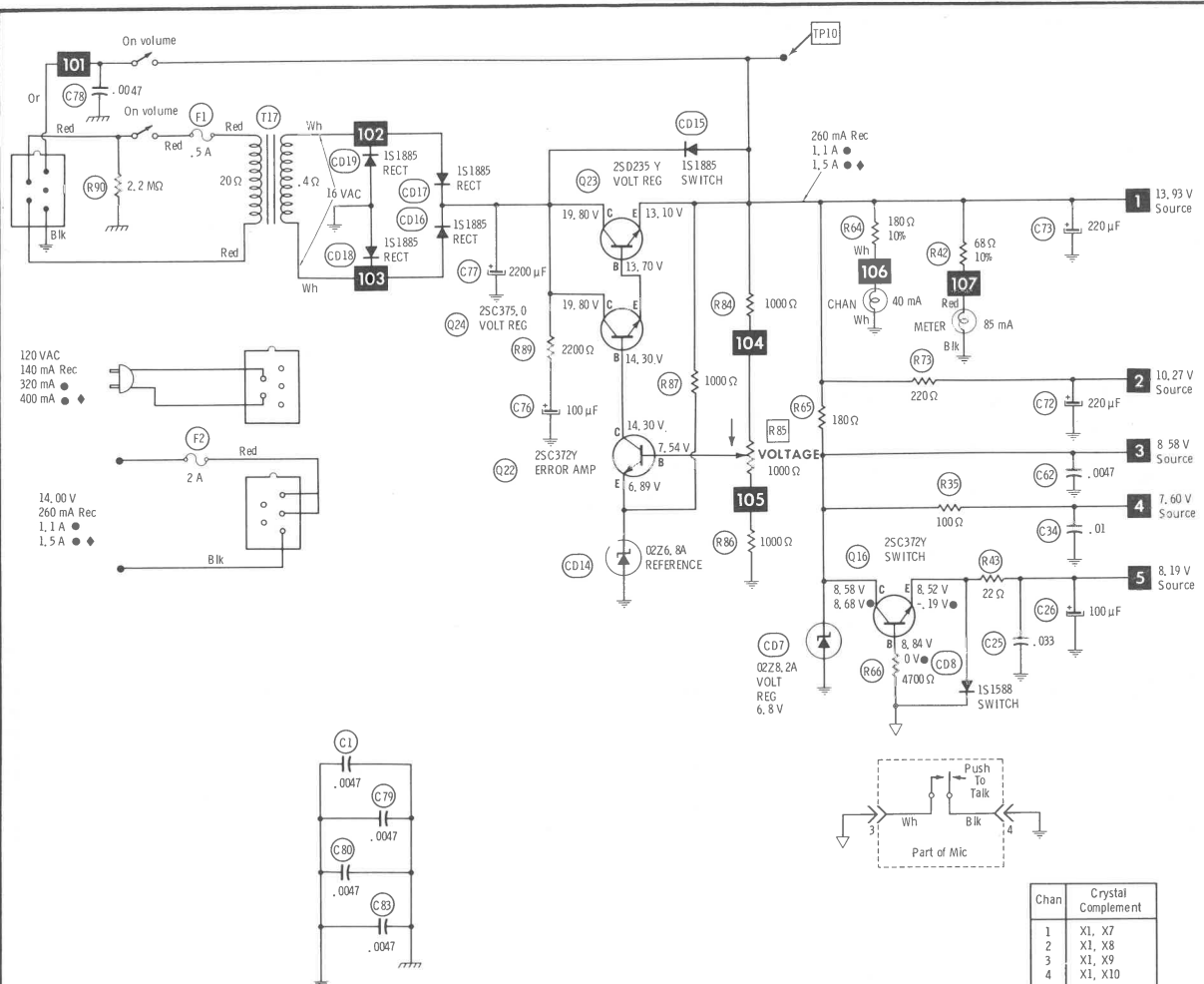
(1) Used in some versions.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA					
		MFR. PART No.	ARCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C10	1 50V	022-076-9-001	RME-A-J-001	EP50-1	PC1-50	MTV1CB50	EV-1615
C18	3.3 50V	022-076-9-002	RME-B-J-003	EP50-5	PC5-50	VTT3R3A50	EV-1618
C26	100 10V	022-076-9-010	RME-E-E-100	EP15-100	PC100-10	VTT100E10	EV-1130
C28	3.3 50V	022-076-9-002	RME-B-J-003	EP50-5	PC5-50	VTT3R3A50	EV-1618
C61	1 50V	022-076-9-001	RME-B-G-010	EP15-10	PC10-25	VTT10A25	EV-1222
C66	1 50V	022-076-9-001	RME-A-J-001	EP50-1	PC1-50	MTV1CB50	EV-1615
C69	1 50V	022-076-9-001	RME-A-J-001	EP50-1	PC1-50	MTV1CB50	EV-1615
C72	220 16V	022-077-9-004	RME-J-E-250	EP15-250	PC250-25	VTT220G16	EV-1240
C73	220 25V	022-076-9-011	RME-K-G-250	EP30-250	PC250-25	VTT220H25	EV-1340
C74	10 16V	022-076-9-003	RME-B-G-010	EP15-10	PC10-25	VTT10A25	EV-1222
C75	33 16V	022-076-9-005	ME-A-G-035	EP30-25	PC30-25	VTT33D25	EV-1325
C76	100 16V	022-091-9-001	RME-E-E-100	EP15-100	PC100-16	VTT100F16	EV-1230
C77	2200 25V	022-129-9-001	ME-G2000		WBR2000-25	TC2520A	TVA-1213.5
C82	3.3 50V	022-076-9-002	RME-B-J-003	EP50-5	PC5-50	VTT3R3A50	EV-1618

(CONTINUED ON PAGE 20)

COBRA MODEL 85



Chan	Crystal Complement
1	X1, X7
2	X1, X8
3	X1, X9
4	X1, X10
5	X2, X7
6	X2, X8
7	X2, X9
8	X2, X10
9	X3, X7
10	X3, X8
11	X3, X9
12	X3, X10
13	X4, X7
14	X4, X8
15	X4, X9
16	X4, X10
17	X5, X7
18	X5, X8
19	X5, X9
20	X5, X10
21	X6, X7
22	X6, X8
23	X6, X10

✕ Circuitry not used in some versions

--- Circuitry used in some versions

⊖ See parts list

✱ Nominal value

⊥ Ground

⏏ Chassis

▽ Common tie point

Measurements with switching as shown unless noted:

■ Squelch fully clockwise ◆ 100% modulation

● Transmit

Supply voltage maintained as shown at input.

Voltages measured with digital meter, no signal.

Controls adjusted for normal operation.

Arrow at control indicates direction of advance.

Terminal identification may not be found on unit.

Resistors are 1/2W or less, 5% unless noted.

Value in () used in some versions.

A PHOTOFACT STANDARD NOTATION SCHEMATIC
WITH CIRCUITTRACE™

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Terminal Guides



Q1 Thru Q12,
Q15 Thru Q19,
Q22, Q24



Q13



Q14, Q20,
Q21, Q23



PARTS LIST AND DESCRIPTION (CONTINUED)

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

CAPACITORS

ITEM No.	RATING	MFGR. PART No.	REPLACEMENT DATA				
			ARCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	.0047		CCD-472				10TS-D47
C2	100 10%		CCD-101	DD-101	GP100	GP310	10TS-T10
C3	220 10%		CCD-221	DD-221		GP322	10TS-T22
C4	5		CCTO-050				10TCC-V50
C5	180 10%		CCD-181	DD-181		GP318	10TS-T18
C6	10		CCTO-100	DTZ-10	NP010	CN0410	10TCC-Q10
C7	100 10%		CCD-101	DD-101	GP100	GP310	10TS-T10
C8	15 N220		*			*	10TCR-Q15
C9	.0047		CCD-472			*	10TS-D47
C11	22 N220		*			*	10TCR-Q22
C12	33 N220 10%		*			*	10TCR-Q33
C13	.0047		CCD-472				10TS-D47
C14	33		CCTO-330	DTZ-33	NP033	CN0433	10TCC-Q33
C15	.0047		CCD-472				10TS-D47
C16	.0047		CCD-472				10TS-D47
C17	1					CN0510	10TCC-V10
C19	.033		6DP-3-333		DPMS6S33	EWF6133	6PS-S33
C20	10		CCTO-100	DTZ-10	NP010	CN0410	10TCC-Q10
C21	.033		6DP-3-333		DPMS6S33	EWF6133	6PS-S33
C22	.033		6DP-3-333		DPMS6S33	EWF6133	6PS-S33
C23	.0047		CCD-472				10TS-D47
C24	.033		6DP-3-333		DPMS6S33	EWF6133	6PS-S33
C25	.033		6DP-3-333		DPMS6S33	EWF6133	6PS-S33
C27	.01		1MDF-1-103	CPJ-103	DPMS4S1	EWF1A110	1PB-S10
C29	.0047		CCD-472				10TS-D47
C30	150 10%		CCD-151	DD-151		CN0315	10TCC-T15
C31	100 10%		CCD-101	DD-101	GP100	GP310	10TS-T10
C32	220 10%		CCD-221	DD-221		GP322	10TS-T22
C33	100 10%		CCD-101	DD-101	GP100	GP310	10TS-T10
C34	.01		1MDF-1-103	CPJ-103	DPMS4S1	EWF1A110	1PB-S10
C35	470		CCD-471	DD-471		GP347	10TS-T47
C36	100 10%		CCD-101	DD-101	GP100	GP310	10TS-T10
C37	.0047		CCD-472				10TS-D47
C38	1					CN0510	10TCC-V10
C39	1					CN0510	10TCC-V10
C40	220 10%		CCD-221	DD-221			10TS-T22
C41	100 10%		CCD-101	DD-101	GP100	GP310	10TS-T10
C42	.0047		CCD-472				10TS-D47
C43	220 10%		CCD-221	DD-221		GP322	10TS-T22
C44	100 10%		CCD-101	DD-101	GP100	GP310	10TS-T10
C45	.0047		CCD-472				10TS-D47
C46	.0047		CCD-472				10TS-D47
C47	470		CCD-471	DD-471	GP470	GP347	10TS-T47
C48	47		CCTO-470	DTZ-47	NP047	CN0447	10TCC-Q47
C49	150 10%		CCD-151	DD-151		CN0315	10TCC-T15
C50	.0047		CCD-472				10TS-D47
C51	2		CCTO-2R2	DTZ-2R2	NP02P2	CN0522	10TCC-V22
C52	2		CCTO-2R2	DTZ-2R2	NP02P2	CN0522	10TCC-V22
C53	.0047		CCD-472				10TS-D47
C54	.0047		CCD-472				10TS-D47
C55	.0047		CCD-472				10TS-D47
C56	.0047		CCD-472				10TS-D47
C58	.0047		CCD-472				10TS-D47
C59	220 10%		CCD-221	DD-221		GP322	10TS-T22
C60	.0047		CCD-472				10TS-D47
C62	.0047		CCD-472				10TS-D47
C63	.0047		CCD-472				10TS-D47
C64	.0047		CCD-472				10TS-D47
C65	.022		CCD-203			GP120	5GA-S20
C67	.001		CCD-102	DD-102		GP210	10TS-D10
C68	.0047		CCD-472				10TS-D47
C70	.001		CCD-102	DD-102		GP210	10TS-D10
C71	.0047		CCD-472				10TS-D47
C78	.0047		CCD-472				10TS-D47
C79	.0047		CCD-472				10TS-D47
C80	.0047		CCD-472				10TS-D47
C83	.0047		CCD-472				10TS-D47
C86	.0047		CCD-472				10TS-D47
C87	100 10%		CCD-101	DD-101	GP100	GP310	10TS-T10

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

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.	MALLORY PART No.	TRW PART No.
R3	RF Power	100K	008-206-9-001				
R18	"S"	100K	008-206-9-001				
R58	Squelch Range	5000	008-232-9-002				
R62	Squelch	5000	008-158-9-005				
R69	Volume/Switch	50K	008-232-9-003				
R85	Voltage	1000	008-232-9-001				

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA		ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFGR. PART No.			WORKMAN PART No.	MFGR. PART No.
R60	2300 Co1d NTC		004-099-9-002				

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L1	Pi Filter	044-025-9-005			
L2	Pi Filter	044-025-9-005			
L3	Antenna (27MHz)	041-054-9-002			
L4	Antenna (27MHz)	044-034-9-001			
L5	Final Tank	041-070-9-001			
T1	Mixer Input (27MHz)	066-021-9-001			
T2	7.8MHz IF	066-019-9-001			
T3	7.8MHz IF	066-015-9-006			
T4	IF Input (455kHz)	060-020-9-001			
T5	IF Output (455kHz)	060-014-9-004			
T6	Synth Mixer (19MHz)	060-021-9-002			
T7	Harmonic Sup (19MHz)	066-015-9-008			
T8	Harmonic Sup (19MHz)	066-015-9-008			
T9	Xmit Mixer Out (27MHz)	066-021-9-003			
T10	Harmonic Sup (27MHz)	066-021-9-004			
T11	Harmonic Sup (27MHz)	066-021-9-004			
T12	Buffer Input (27MHz)	066-021-9-004			
T13	Xmit Driver Input (27MHz)	066-021-9-004			
T14	Driver Output (27MHz)	066-021-9-005			

TRANSFORMER (Driver)

ITEM No.	TURNS RATIO			REPLACEMENT DATA			NOTES
	PRI.	SEC. 1	SEC. 2	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T15	2	1		068-005-9-001			

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA			NOTES
	PRI.	SEC.	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T16	32	8	061-027-9-001			

TRANSFORMER (Power)

ITEM No.	RATING		REPLACEMENT DATA			NOTES
	PRI.	SEC. 1	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T17	120V AC @ 400mA AC	16V AC @ 2400mA AC	065-110-9-001			

PARTS LIST AND L

(When ordering parts, state

SPEAKER

ITEM No.	TYPE
SP	3" X 5" PM 8 ohms

FUSE DEVICES

ITEM No.	DESCRIPTION
F1	.5 Amp Quick Acting
F2	2 Amp Quick Acting

CRYSTALS

ITEM No.	CRYSTAL FREQUENCY IN MHz	MFGR. PART No.
X1	11.705	132-023-9-001
X2	11.755	132-023-9-002
X3	11.805	132-023-9-003
X4	11.855	132-023-9-004
X5	11.905	132-023-9-005
X6	11.955	132-023-9-006

MISCELLANEOUS

ITEM No.	PART NAME
U1	Ceramic Filter
M1	Meter
K1	Relay
S1	Switch

CABINETS & CABI

ITEM
Case
Knob, Channel Selector

ACCESSORIES

ITEM
Microphone
Power Cord
Power Cord

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.	MALLORY PART No.	TRW PART No.
R3 R18 R58 R62 R69 R85	RF Power "S" Squelch Range Squelch Volume/Switch Voltage	100K 100K 5000 5000 50K 1000	008-206-9-001 008-206-9-001 008-232-9-002 008-158-9-005 008-232-9-003 008-232-9-001				

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA		ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFGR. PART No.			WORKMAN PART No.	MFGR. PART No.
R60	2300 Cold NTC		004-099-9-002				

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L1 L2 L3 L4 L5 T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 T11 T12 T13 T14	Pi Filter Pi Filter Antenna (27MHz) Antenna (27MHz) Final Tank Mixer Input (27MHz) 7.8MHz IF 7.8MHz IF IF Input (455kHz) IF Output (455kHz) Synth Mixer (19MHz) Harmonic Sup (19MHz) Harmonic Sup (19MHz) Xmit Mixer Out (27MHz) Harmonic Sup (27MHz) Harmonic Sup (27MHz) Buffer Input (27MHz) Xmit Driver Input (27MHz) Driver Output (27MHz)	044-025-9-005 044-025-9-005 041-054-9-002 044-034-9-001 041-070-9-001 066-021-9-001 066-019-9-001 066-015-9-006 060-020-9-001 060-014-9-004 060-021-9-002 066-015-9-008 066-015-9-008 066-021-9-003 066-021-9-004 066-021-9-004 066-021-9-004 066-021-9-004 066-021-9-004			

TRANSFORMER (Driver)

ITEM No.	TURNS RATIO			REPLACEMENT DATA			NOTES
	PRI.	SEC. 1	SEC. 2	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T15	2	1		068-005-9-001			

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA			NOTES
	PRI.	SEC.	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T16	32	8	061-027-9-001			

TRANSFORMER (Power)

ITEM No.	RATING		REPLACEMENT DATA			NOTES
	PRI.	SEC. 1	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T17	120V AC @ 400mA AC	16V AC @ 2400mA AC	065-110-9-001			

PARTS LIST AND DESCRIPTION (CONTINUED)

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

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP	3" X 5" PM 8 ohms	580-017-9-001	35A05Z8	

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 F2	.5 Amp Quick Acting 2 Amp Quick Acting	191-251-3-102 191-251-3-002	742-028-9-001 742-022-9-001	AGC1/2 AGC2	HKP HDJ	312.500 312002	342001AL 150145	F61/2-2 F62-2

CRYSTALS

ITEM No.	CRYSTAL FREQUENCY IN MHz	MFGR. PART No.	CTS KNIGHTS PART No.	CHANNEL	ITEM No.	CRYSTAL FREQUENCY IN MHz	MFGR. PART No.	CTS KNIGHTS PART No.	CHANNEL
X1	11.705	132-023-9-001	A090W11.705	1,2,3,4	X7	7.460	132-023-9-007	B090W7.4600	1,5,9,13,17,21
X2	11.755	132-023-9-002	A090W11.755	5,6,7,8	X8	7.470	132-023-9-008	B050W7.4700	2,6,10,14,18,22
X3	11.805	132-023-9-003	A090W11.805	9,10,11,12	X9	7.480	132-023-9-009	B050W7.4800	3,7,11,15,19
X4	11.855	132-023-9-004	A090W11.855	13,14,15,16	X10	7.500	132-023-9-010	B050W7.5000	4,8,12,16,20,23
X5	11.905	132-023-9-005	A090W11.905	17,18,19,20	X11	7.345	132-023-9-011	C090W7.3450	REC L.O.
X6	11.955	132-023-9-006	A090W11.955	21,22,23	X12	7.800	132-023-9-012	C090W7.8000	XMIT L.O.

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
U1 M1 K1 S1	Ceramic Filter Meter Relay Switch	140-008-9-001 320-065-9-001 441-010-9-001 083-183-9-001	LF-B6 (455kHz) "S"/RF Channel Selector

CABINETS & CABINET PARTS (When ordering specify model, chassis & color)

ITEM	PART No.	ITEM	PART No.
Case Knob, Channel Selector	272-105-9-001 751-092-9-001	Knob, Volume/Squelch	751-122-9-001

ACCESSORIES

ITEM	MFGR. PART No.	REMARKS
Microphone Power Cord Power Cord	562-003-9-001 420-014-9-002 420-014-9-001	AC DC