



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.



PEARCE-SIMPSON MODEL TIGER MARK -2

MODEL Tiger Mark-2

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

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7CY496

ALIGNMENT INSTRUCTIONS

CAUTION: Use isolation transformer or observe polarity when connecting test equipment. Maintain line voltage at 120V AC. Allow a 15-minute warm-up period. Adjustments made with 13.8-volt DC input.

Connect low sides of test equipment to ground unless specified otherwise.

Connect 50-ohm dummy load or antenna before keying transmitter.

Suggested Alignment Tools:

GC ELECTRONICS

L112, T106, T107, T108, T109 5009

L106, L109, L110 9304

L103, L104, T101, T102, T103, T104, T105, T111 9440

CT101 5000

SYNTHESIZER ALIGNMENT

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of frequency counter to TP1.	Ch. 13		Check for 10.2392MHz ± 0.4 kHz.
Input of frequency counter to TP2.	Ch. 1 Delta Tune-Center	CT101	Adjust for 37.659200MHz.
Input of VTVM to TP8.	Ch. 1	T101	Adjust for 1.5V $\pm .01$ volt.
Input of RF VTVM to TP3.	Ch. 13	T111	Adjust for maximum.
Input of frequency counter to TP4.	Ch. 13, Xmit		Check for 10.6942MHz ± 0.4 kHz.

RECEIVER ALIGNMENT

Connect an AC VTVM or AF wattmeter across speaker voice coil. Adjust volume control to obtain a suitable indication. Set generator output low enough to prevent AGC limiting.

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to TP5. 455kHz, 1000Hz @ 30% modulation.	Ch. 13	T109, T108, T107	Adjust for maximum output.
Output of signal generator thru .01uF to TP3. 10.694200MHz, 1000Hz @ 30% modulation.	Ch. 13	T106, L112	Adjust for maximum output.
Output of signal generator thru .01uF to antenna jack. 27.115MHz, 1000Hz @ 30% modulation.	Ch. 13 Delta Tune-Center RF Gain-Maximum	T105, T104	Adjust for maximum output. Repeat above steps, if necessary.

RECEIVER ADJUSTMENTS

Connect an AC VTVM or AF wattmeter across speaker voice coil.
Adjust volume control to obtain a suitable indication.

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to antenna jack. 27.115MHz, 1000Hz @ 30% modulation. Output 500uV.	Ch. 13 Delta Tune-Center RF Gain-Maximum	RV101	SQUELCH RANGE Set squelch control VR2 fully clockwise. Adjust RV101 so that squelch just breaks.
Output of signal generator thru .01uF to antenna jack. 27.115MHz, 1000Hz @ 30% modulation.	Ch. 13	RV103	S METER Adjust for 9 on S scale of meter.

TRANSMITTER ALIGNMENT

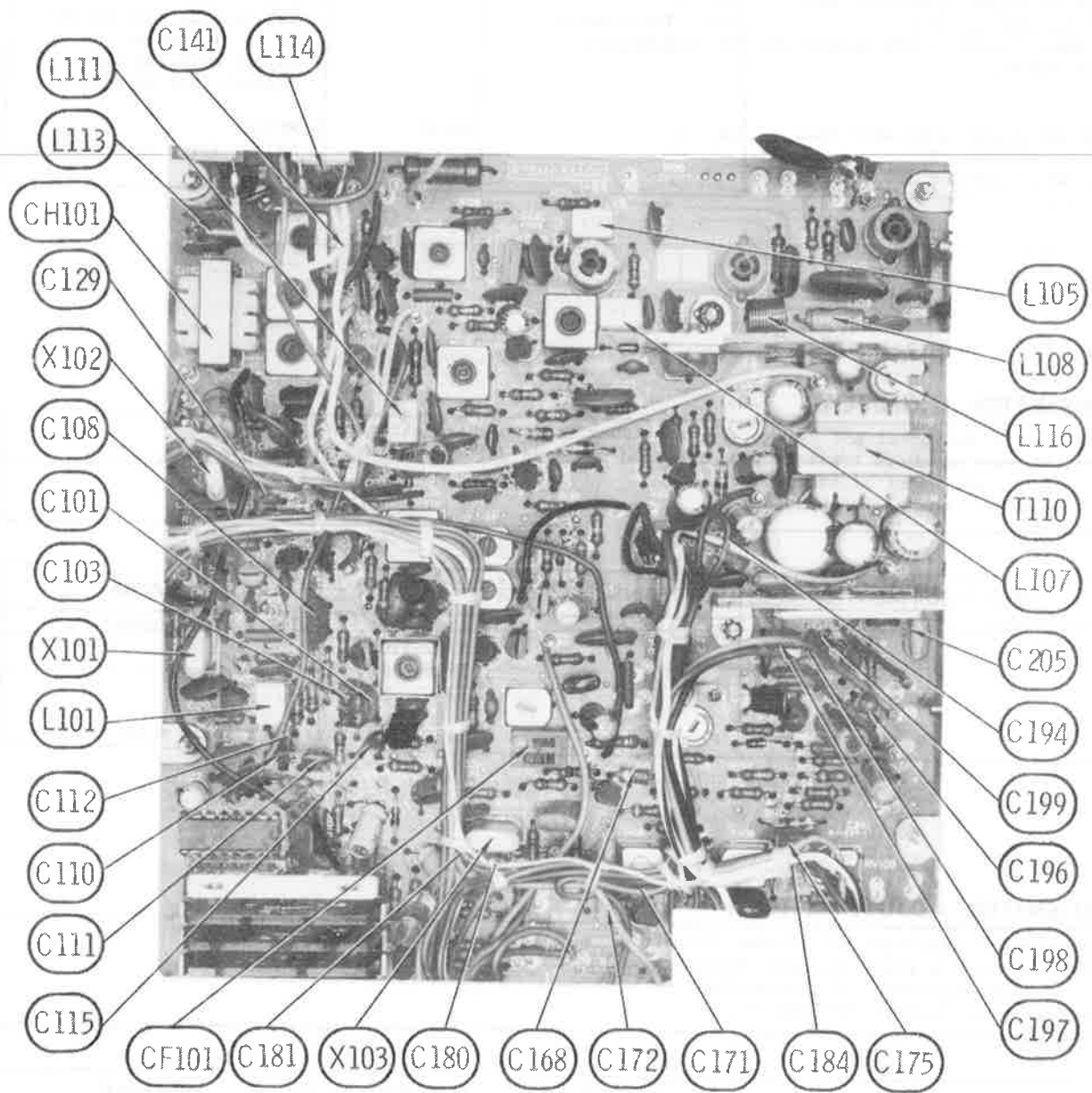
Connect an RF wattmeter and 50-ohm, 25-watt dummy load to antenna connector.
NOTE: Be sure to check transmit frequency and power on all active channels after alignment of transmitter.
See page 4 for channel frequencies.

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
	Ch. 13	L103,L104, T102,T103, L106,L109, L110	Adjust for maximum.
	Ch. 13	L110,L109	Adjust for 4 watts maximum.

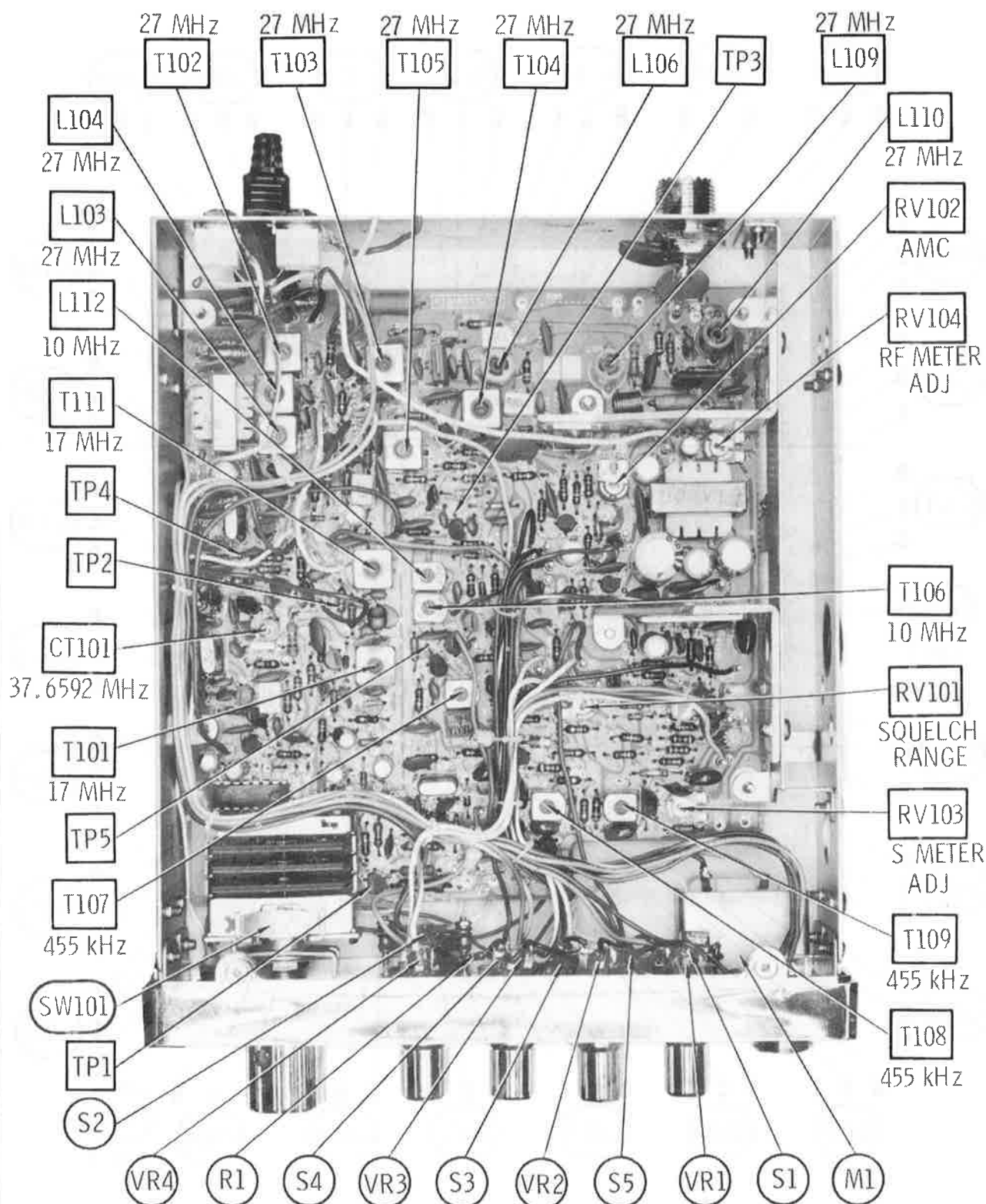
TRANSMITTER ADJUSTMENTS

Connect an RF wattmeter and 50-ohm, 25-watt dummy load to antenna connector.
NOTE: Be sure to check transmit frequency and power on all active channels after adjustment of transmitter.
See page 4 for channel frequencies.

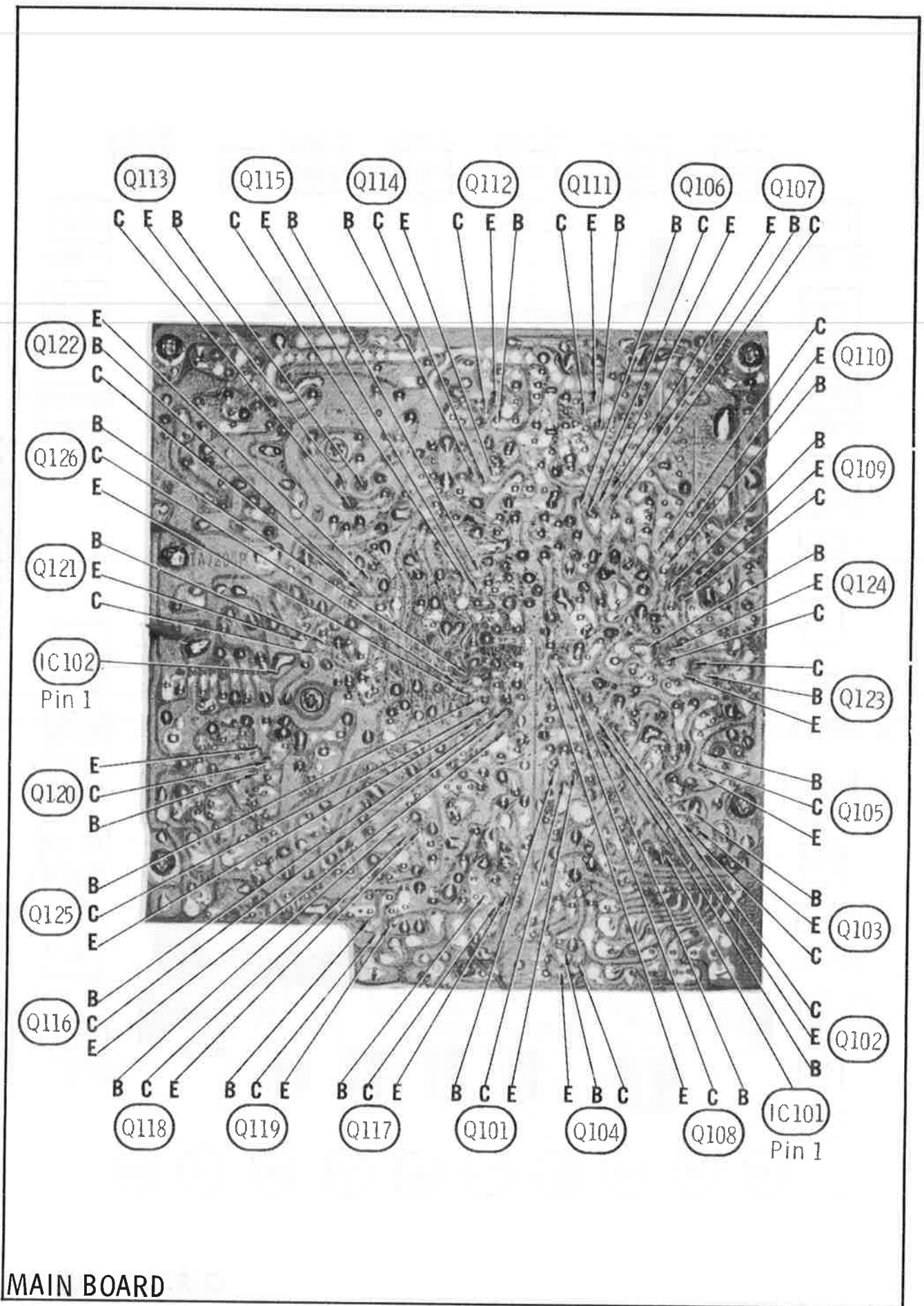
TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Modulation meter to antenna jack. Inject a 1000Hz signal at mic input.	Ch. 13	RV102	AMC Disconnect C209 to disable AMC. Adjust signal for over-modulation. Restore AMC operation. Adjust RV102 for 100% modulation maximum.
	Ch. 13	RV104	RF PANEL METER Adjust RV104 so that RF panel meter agrees with RF wattmeter.



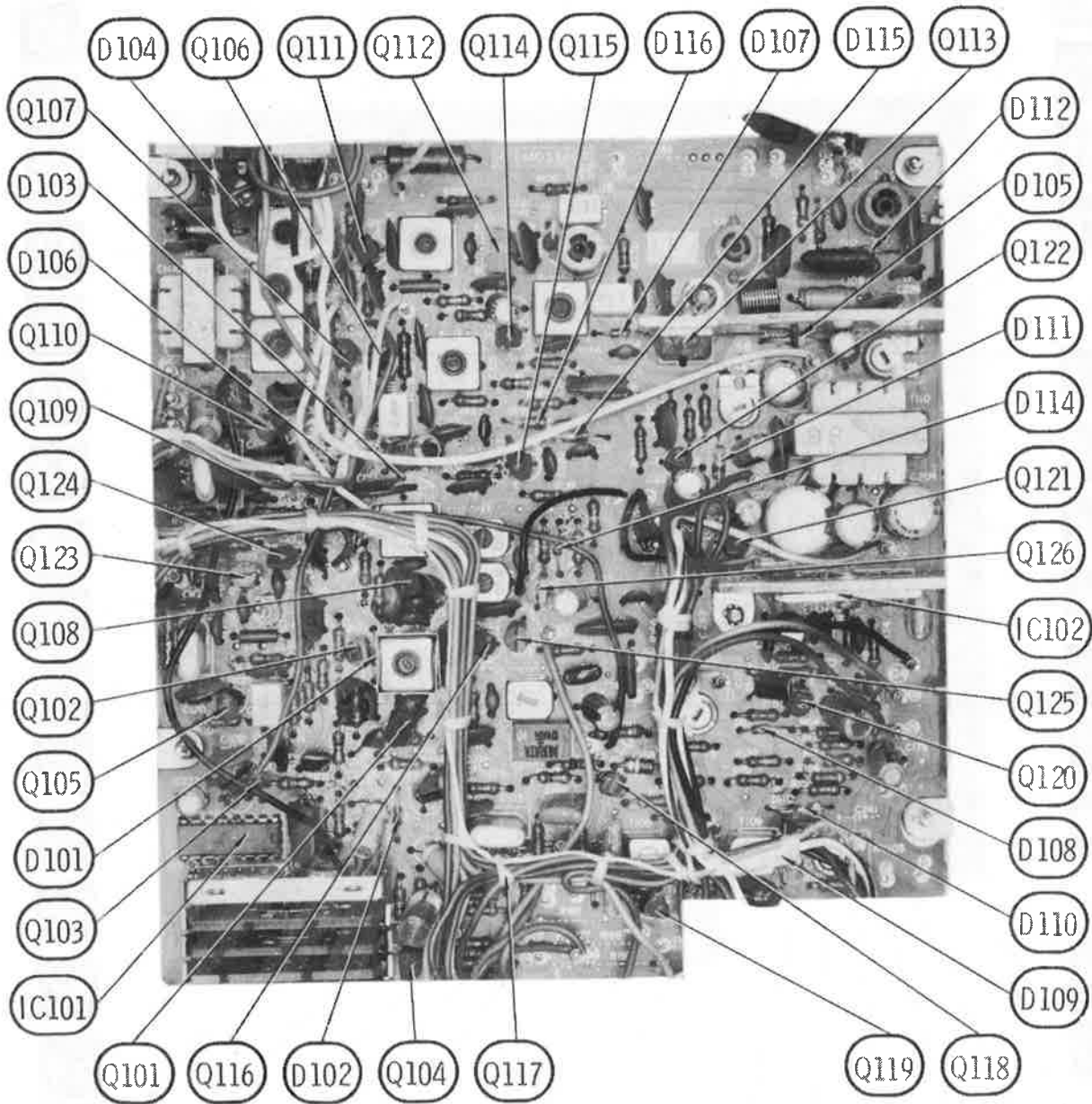
MAIN BOARD



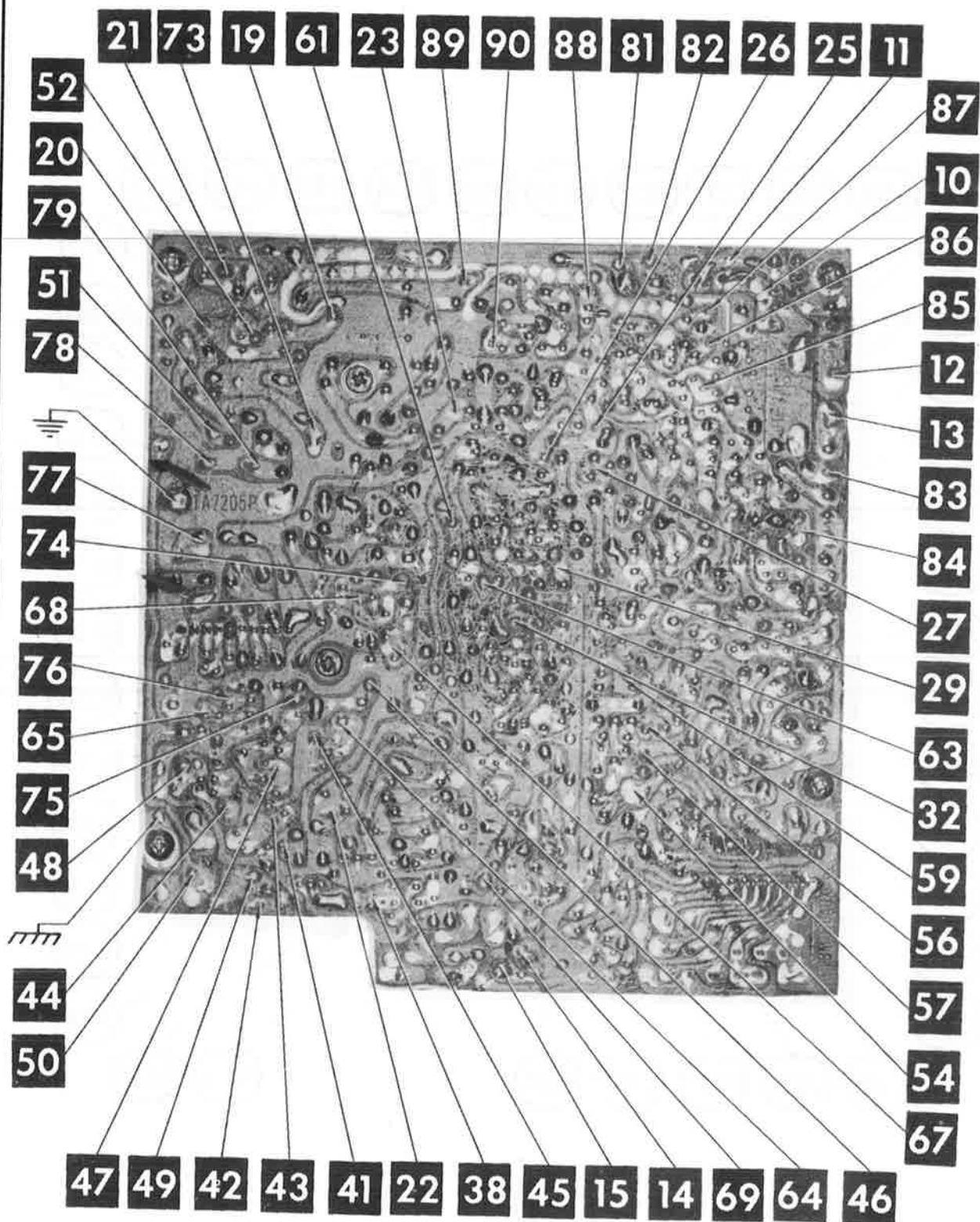
CHASSIS-BOTTOM



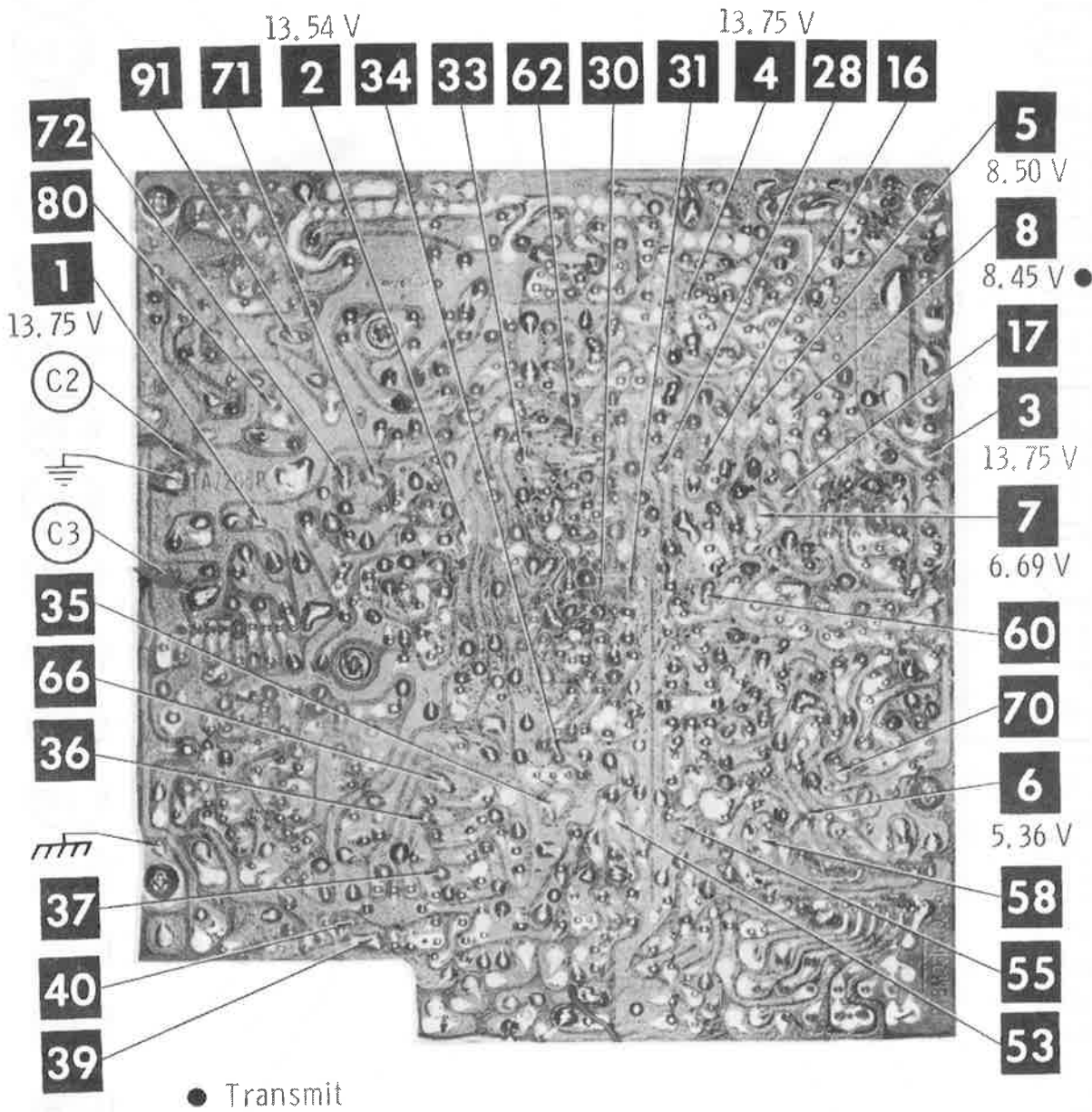
MAIN BOARD



MAIN BOARD

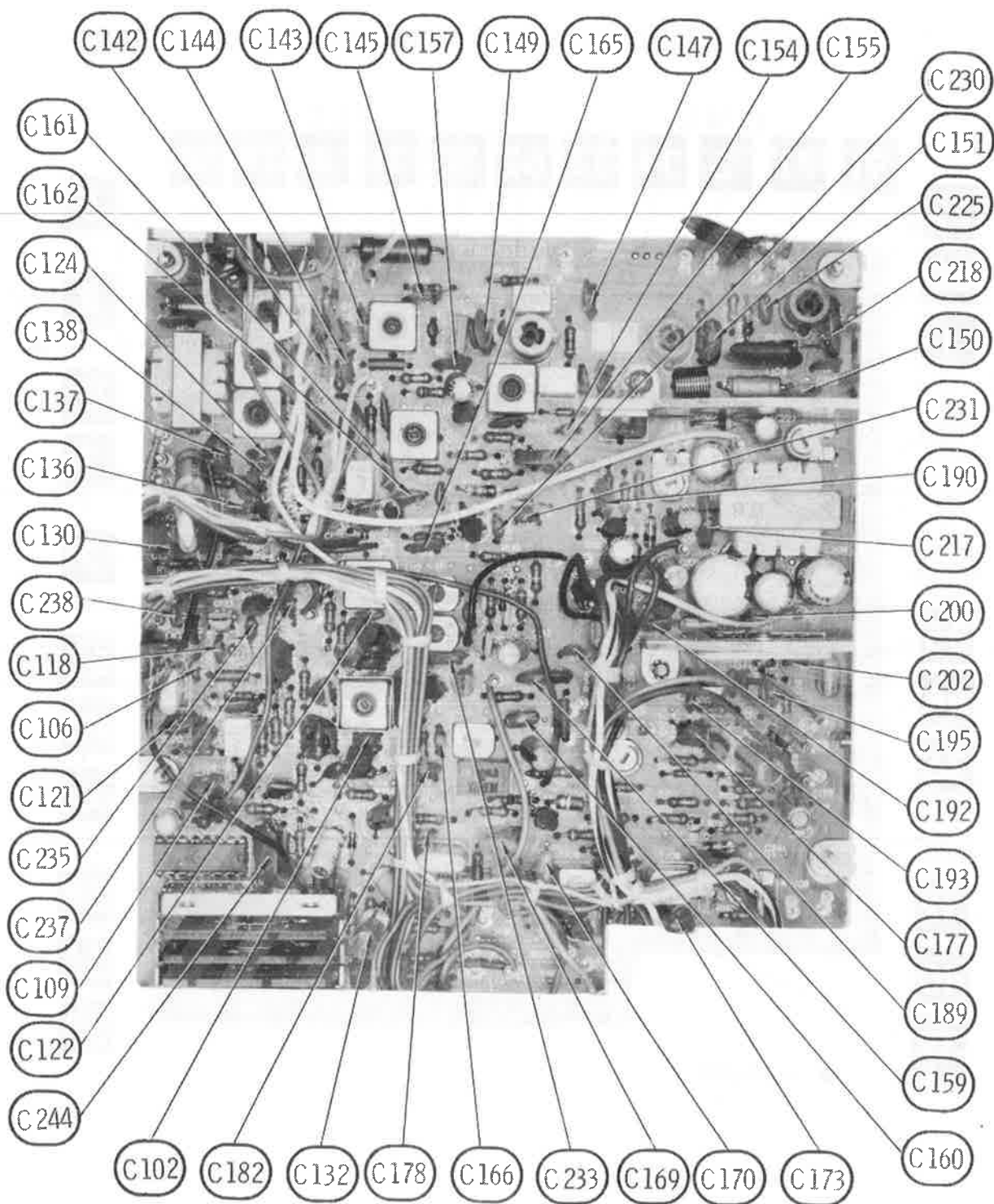


MAIN BOARD

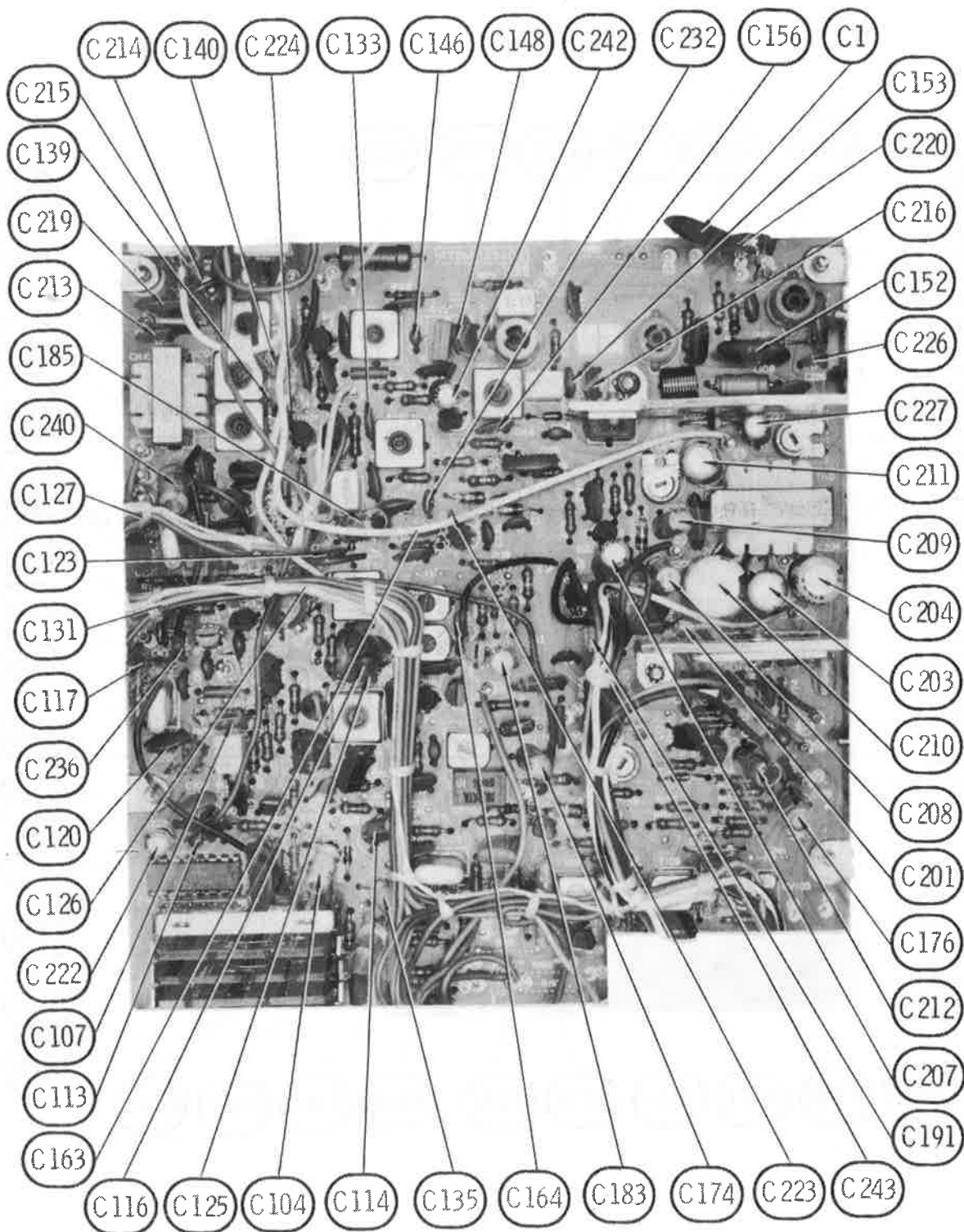


PEARCE-SIMPSON MODEL TIGER MARK -2

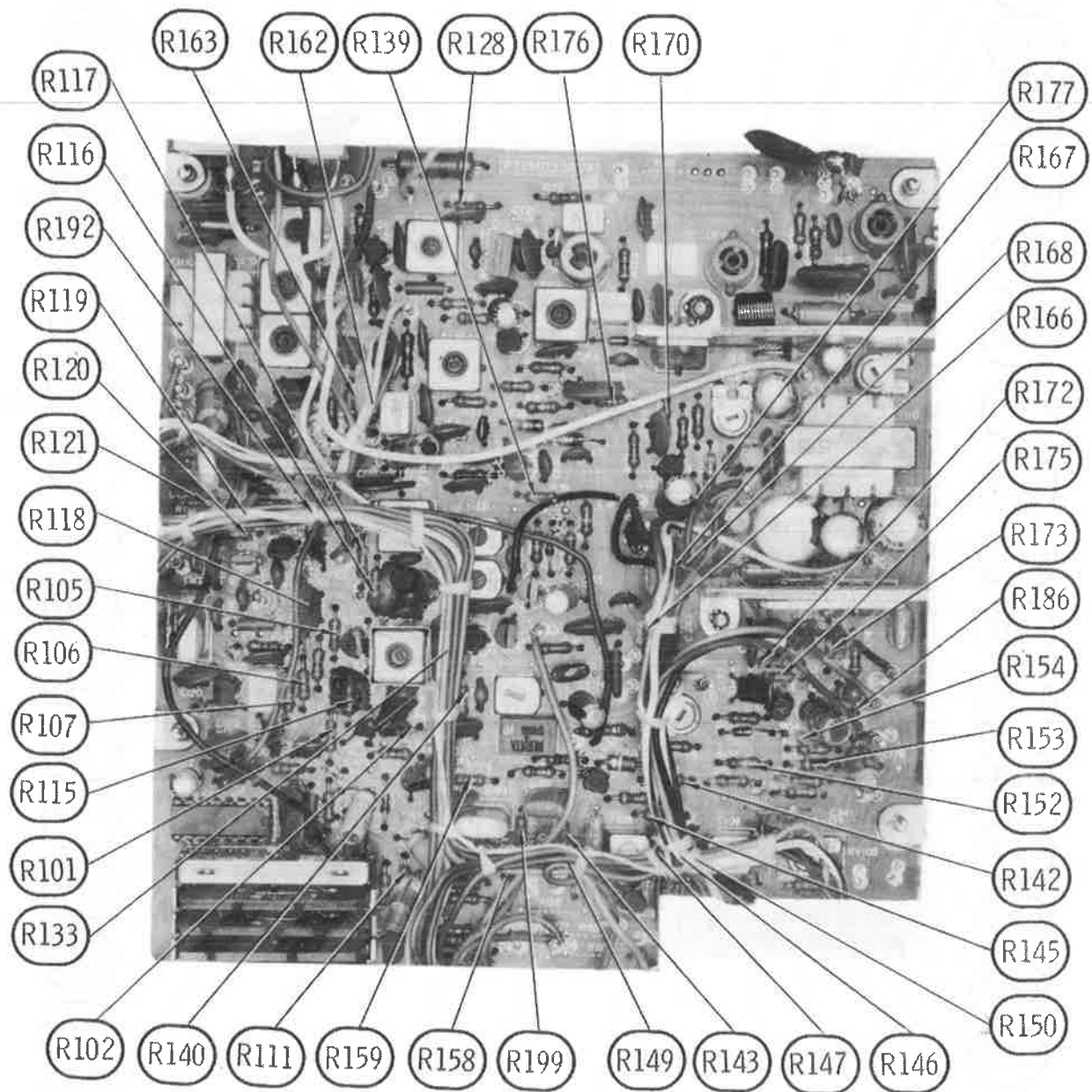
MAIN BOARD



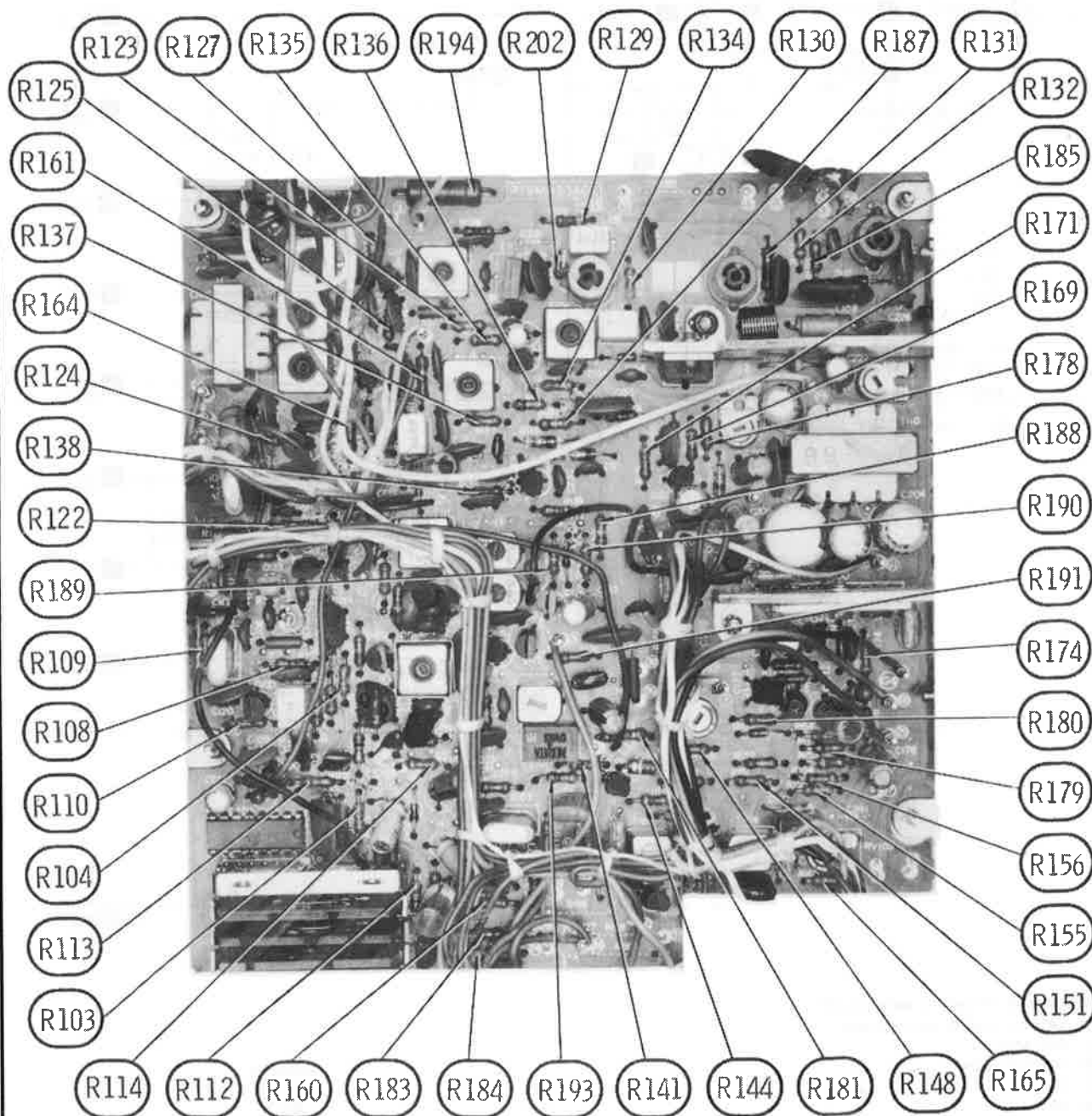
MAIN BOARD



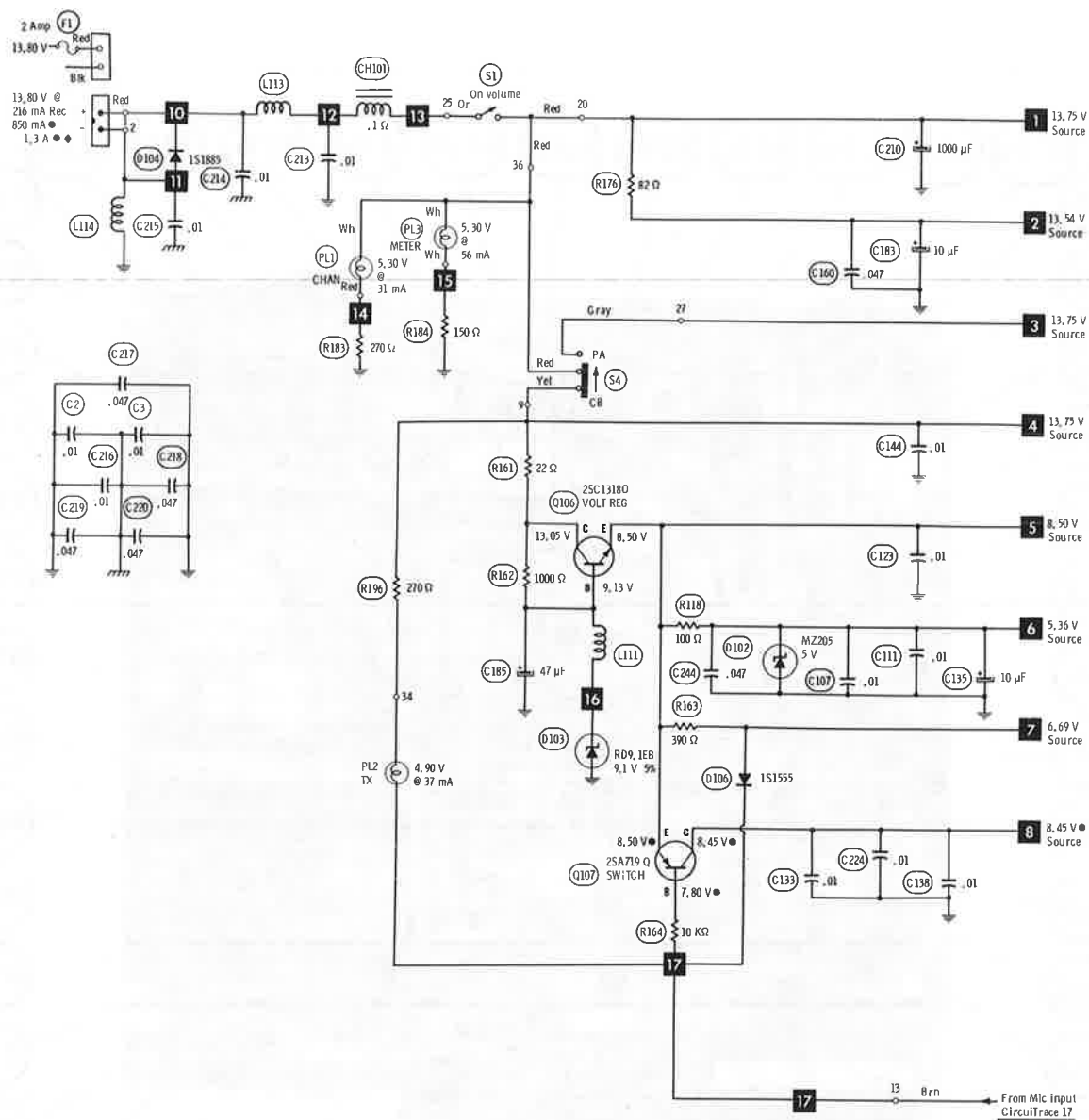
MAIN BOARD



MAIN BOARD



MAIN BOARD



—*— Circuitry not used in some versions

--- Circuitry used in some versions

⊙ See parts list

* Nominal value

⊕ Ground

⏏ Chassis

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 PHOTOFAC STANDARD NOTATION SCHEMATIC

WITH **CIRCUITRACE**

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Terminal Guide



Q106, Q107

PARTS LIST AND DESCRIPTION

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

SEMICONDUCTORS (Select replacement transistor for best results)

ITEM No.	TYPE No.	MFR. PART No.	REPLACEMENT DATA							
			GENERAL ELECTRIC PART No.	IR WORKMAN PART No.	MALLORY PART No.	MOTOROLA PART No.	RAYTHEON PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.
D101	ITT410	5001-196	GE-90	D201	PTC311	HEPR2503	RE 195	SK3126	RT-262	
D102	BB142 (1)		GE-90	D201	PTC311	HEPR2503	RE 195	SK3126	RT-262	
D103	MZ205	5001-197	GE1C-5.1	Z1203	ZM5.1A	HEPZ0406	RE 105	SK3056	RT-235	ECG135
D104	RD9.1E	2102-032	GE2D-9.1		ZB9.1B		RE 114		RT-240	ECG139
D105	1S1855	2102-014	GE-504A	5A4D	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
D106	V06C	5001-089	GE-509	5A8D	PTC203	HEPR0055	RE 51	SK3032	RT-210	ECG125
D107	1S1555	5001-156	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D108	1S1555	5001-156	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D109	1N60	5001-080	1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D110	1N60	5001-080	1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D111	1N60	5001-080	1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D112	1N60	5001-080	1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D114	1S1555	5001-156	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D115	1N60	5001-080	1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D116	1N60	5001-080	1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D201	1S1555	5001-156	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
IC101	PLL02A	5002-030							TVMC-81	ECG1155
IC102	TA7205P	5002-031	GE1C-179	WEP949	PTC780				RT-308 *	ECG123A *
Q101	2SC7100	5001-002	GE-211 *	(1R)2SC710	PTC115	HEPS0016 *	RE 13 *	SK3018 *	RT-308 *	ECG123A *
Q102	2SC7100	5001-002	GE-211 *	(1R)2SC710	PTC115	HEPS0016 *	RE 13 *	SK3018 *	RT-308 *	ECG123A *
Q103	2SC829B		GE-20 *	(1R)2SC829B	PTC121 *	HEPS0015 *	RE 9 *	SK3122	RT-308	ECG229 *
Q104	2SC829B	5001-037 (1)	GE-20 *	(1R)2SC829B	PTC121 *	HEPS0015 *	RE 9 *	SK3122	RT-308	ECG229 *
Q105	2SC7100	5001-002 (1)	GE-211 *	(1R)2SC710	PTC115	HEPS0016 *	RE 13 *	SK3018 *	RT-308 *	ECG123A *
Q106	2SC7100	5001-002 (1)	GE-211 *	(1R)2SC710	PTC115	HEPS0016 *	RE 13 *	SK3018 *	RT-308 *	ECG123A *
Q107	2SC1318Q	5001-539	GE-211 *	(1R)2SC710	PTC115	HEPS0016 *	RE 13 *	SK3018 *	RT-308 *	ECG123A *
Q108	2SC7190	5001-540	GE-211 *	(1R)2SC710	PTC115	HEPS0016 *	RE 13 *	SK3018 *	RT-308 *	ECG123A *
Q109	2SC1359B	5001-541	GE-211 *	(1R)2SC710	PTC115	HEPS0016 *	RE 13 *	SK3018 *	RT-308 *	ECG123A *
Q110	2SC7100	5001-002 (1)	GE-211 *	(1R)2SC710	PTC115	HEPS0016 *	RE 13 *	SK3018 *	RT-308 *	ECG123A *
Q111	2SC7100	5001-002 (1)	GE-211 *	(1R)2SC710	PTC115	HEPS0016 *	RE 13 *	SK3018 *	RT-308 *	ECG123A *
Q112	2SC1687C	(10)	GE-20 *	TR-24 *	PTC121 *	HEPS0015 *	RE 13 *	SK3018 *	RT-107A *	ECG123A *
Q113	2SC1687	5001-542 (1)	GE-20 *	TR-24 *	PTC121 *	HEPS0015 *	RE 13 *	SK3018 *	RT-107A *	ECG123A *
Q114	2SC1760-3	5001-517 (11)	GE-276		PTC180				RT-310	ECG306
Q115	2SC1306I	(10)(12)	GE-215	WEP1306	PTC186		RE 203	SK3197	RT-146	ECG235
Q116	2SC1306	5001-050 (1)	GE-215	WEP1306	PTC186		RE 203	SK3197	RT-146	ECG235
Q117	2SC1047B	5001-543	GE-60 *	(1R)2SC829B	PTC132 *	HEPS0016 *	RE 28 *	SK3018 *	RT-107	ECG161 *
Q118	2SC1359B	5001-544	GE-212	(1R)2SC380AC	PTC121 *	HEPS0014 *	RE 192	SK3038 *	RT-308	ECG199
Q119	2SC829C	5001-037	GE-20 *	(1R)2SC829B	PTC121 *	HEPS0015 *	RE 9 *	SK3122	RT-308	ECG229 *
Q120	2SC7100	5001-002 (1)	GE-211 *	(1R)2SC710	PTC115	HEPS0016 *	RE 13 *	SK3018 *	RT-308 *	ECG123A *
Q121	2SC829C	5001-037	GE-20 *	(1R)2SC829B	PTC121 *	HEPS0015 *	RE 9 *	SK3122	RT-308	ECG229 *
Q122	2SC372Y	5001-020	GE-61 *	(1R)2SC372	PTC121 *	HEPS0015 *	RE 13 *	SK3122	RT-308	ECG229 *
Q123	2SC829P,Q	5001-545	GE-61 *	(1R)2SC828A	PTC121 *	HEPS0015 *	RE 192	SK3122	RT-308	ECG199
Q124	2SC828P,Q	5001-545	GE-61 *	(1R)2SC644	PTC132 *	HEPS0015 *	RE 13 *	SK3018 *	RT-308	ECG123A *
Q125	2SC839	(10)	GE-61 *	(1R)2SC644	PTC132 *	HEPS0015 *	RE 13 *	SK3018 *	RT-308	ECG123A *
Q126	2SC839F	5001-014 (1)	GE-61 *	(1R)2SC644	PTC132 *	HEPS0015 *	RE 13 *	SK3018 *	RT-308	ECG123A *
	2SC839	(10)	GE-61 *	(1R)2SC644	PTC132 *	HEPS0015 *	RE 13 *	SK3018 *	RT-308	ECG123A *
	2SC839F	5001-014 (1)	GE-61 *	(1R)2SC644	PTC132 *	HEPS0015 *	RE 13 *	SK3018 *	RT-308	ECG123A *
	2SC900U	5001-511	GE-62	(1R)2SC644	PTC139 *	HEPS0015 *	RE 192	SK3124	RT-302	ECG199
	2SC900U	5001-511	GE-62	(1R)2SC644	PTC139 *	HEPS0015 *	RE 192	SK3124	RT-302	ECG199

* Lead configuration may vary from original.

(1) Used in some versions.

(10) Number on unit.

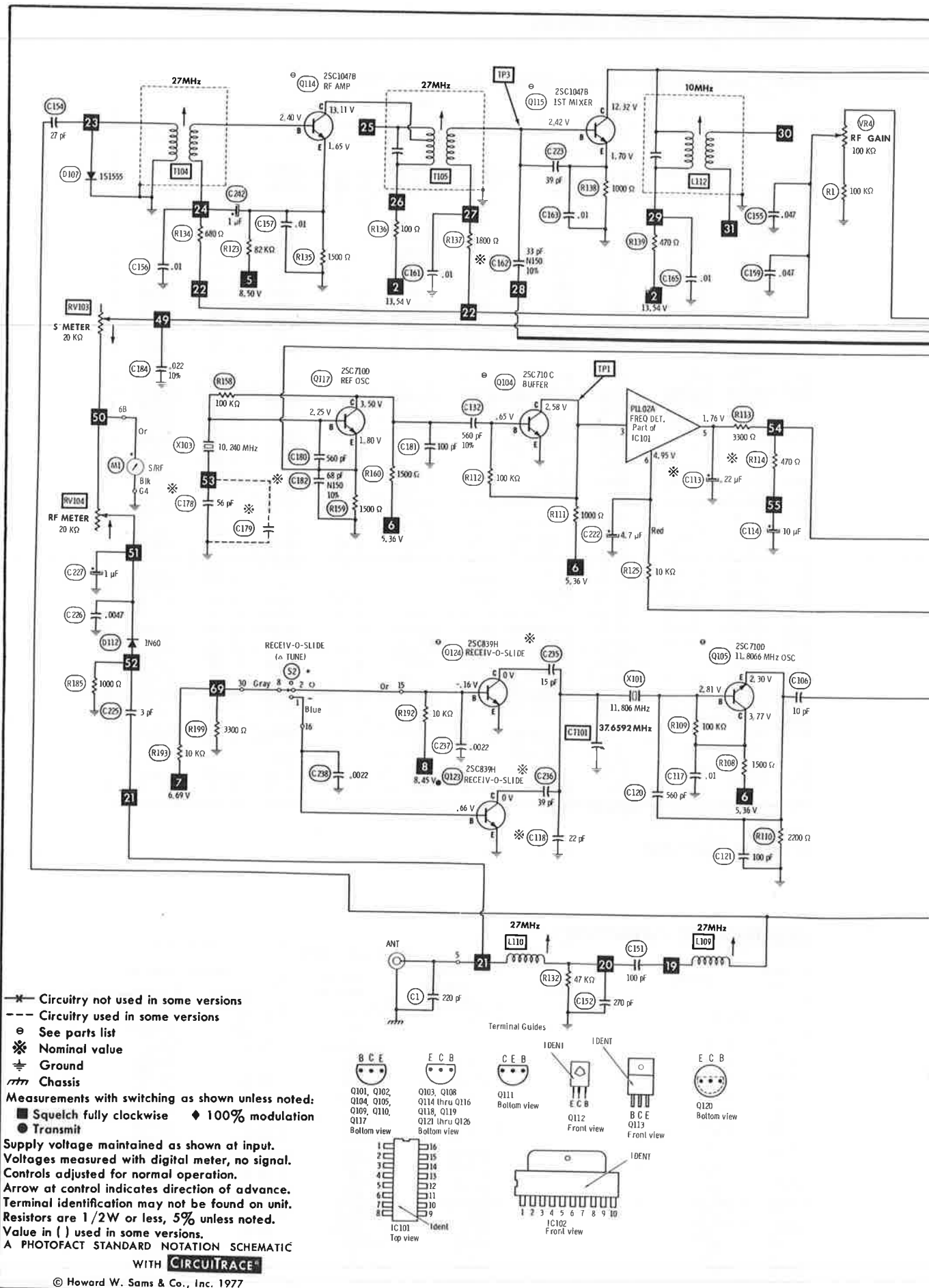
(11) Rating, 950 MW @ 500 MA

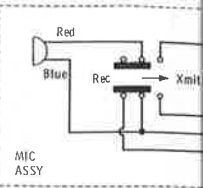
(12) Rating, 12 WATT @ 3 AMP

PEARCE-SIMPSON MODEL TIGER MARK -2

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA				
		MFR. PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
					Q-LINE	GENERAL LINE
C104	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C113	.22 50V			TDC224M050EL	QDT1-10	SD50-R229
C114	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C115	.1 50V			TDC104M050EL	QDT1-2	SD50-R109
C135	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C174	3.3 25V		PC5-50	VTT3R3A50	QV1-23	EV-1318
C176	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C183	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C185	47 10V		PC50-16	VTT47D16	QV1-73	EV-1226
C196	3.9 10V			TDC335M015FL	QDT1-41	SD15-3R39
C197	33 6.3V		PC30-25	VTT33B10	QV1-61	EV-1125
C203	47 16V		PC50-16	VTT47D16	QV1-73	EV-1226
C204	220 16V		PC250-25	VTT220H16	QV1-117	EV-1240
C207	33 6.3V		PC30-25	VTT33B10	QV1-61	EV-1125
C208	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C209	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C210	1000 16V		PC1000-16	VTT1000L16	QV1-183	EV-1260
C211	47 25V		PC50-25	VTT47E25	QV1-75	EV-1326
C212	33 6.3V		PC30-25	VTT33B10	QV1-61	EV-1125
C222	4.7 25V		PC5-50	VTT4R7B50	QV1-27	EV-1319
C227	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C240	33 16V		PC30-25	VTT33D25	QV1-63	EV-1325
C242	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615







PARTS LIST AND DESCRIPTION (CONTINUED)

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

CAPACITORS

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA					
			CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.		
						Q-LINE	GENERAL LINE	
C1	220		DC-103	CD15FD221J03	SX322	QW1-35	MWA-221	
C2	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C3	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C101	18 NPO				CN0418		10TCC-Q18	
C102	22		DTZ-22	NP022	CN0422		10TCC-Q22	
C103	1 NPO				CN0510		10TCC-V10	
C106	10		DTZ-10	NP010	CN0410		10TCC-Q10	
C107	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C108	330		DD-331	GP330	GP333		10TS-T33	
C109	330		DD-331	GP330	GP333		10TS-T33	
C110	.001			DPMS6D1	EWFA1A210	QF1-1	1PB-D10	
C111	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10	
C112	39				CN0439		10TCC-Q39	
C116	15		DTZ-15	NP015	CN0415		10TCC-Q15	
C117	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10	
C118	22 N150				*		10TCP-Q22	
C120	560		DD-561		GP356		10TS-T56	
C121	100		DD-101	GP100	GP310		10TS-T10	
C122	15		DTZ-15	NP015	CN0415		10TCC-Q15	
C123	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C124	100			CD15FD101J03	SX310	QW1-27	MWA-101	
C125	33		DTZ-33	NP033	CN0433		10TCC-Q33	
C126	12 N150				*		10TCP-Q12	
C127	56 N150				*		10TCP-Q56	
C129	560		DD-101		GP310		10TS-T10	
C130	82 N150				*		10TCP-Q82	
C131	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C132	560			CD19FD561J03	SX356		MWC-561	
C133	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C136	220		DD-221	GP322	GP322		10TS-T22	
C137	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C138	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C139	2		DTZ-2R2	NP02P2	CN0522		10TCC-V22	
C140	2		DTZ-2R2	NP02P2	CN0522		10TCC-V22	
C141	68		DD-680	GP68	GP468		10TS-Q68	
C142	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C143	100 N150				*		10TCP-T10	
C144	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C145	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C146	470		DD-471	GP470	GP347		10TS-T47	
C147	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C148	120		DTZ-120		CN0312		10TCC-T12	
C149	220		DD-221		GP322		10TS-T22	
C150	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C151	100			CD15FD101J03	SX310	QW1-27	MWA-101	
C152	270			CD15FD271J03	SX327	QW1-37	MWB-271	
C153	82		DD-820		GP482		10TS-Q82	
C154	27				CN0427		10TCC-Q27	
C155	.047		UK16-503		MAG1615		HY-635	
C156	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C157	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C159	.047		UK16-503		MAG1615		HY-635	
C160	.047		UK16-503		MAG1615		HY-635	
C161	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C162	33 N150				*		10TCP-Q33	
C163	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C164	2		DTZ-2R2	NP02P2	CN0522		10TCC-V22	
C165	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C166	10		DTZ-10	NP010	CN0410		10TCC-Q10	
C168	2.2		DTZ-2R2	NP02P2	CN0522		10TCC-V22	
C169	.047			DPMS2S47	EWFA1A147	QF1-171	1PB-S47	
C170	.047			DPMS2S47	EWFA1A147	QF1-171	1PB-S47	
C171	.047			DPMS2S47	EWFA1A147	QF1-171	1PB-S47	
C172	.047			DPMS2S47	EWFA1A147	QF1-171	1PB-S47	
C173	.047			DPMS2S47	EWFA1A147	QF1-171	1PB-S47	
C175	.0047			WMF1D47	EWFA1A247	QF1-57	1PB-D47	
C177	.0022			DPMS6D22	EWFA1A222		6PS-D22	
C178	56 N150				*		10TCP-Q33	
C180	560		DD-561		GP356		10TS-T56	
C181	100		DD-101	GP100	GP310		10TS-T10	
C182	68 N150				*		10TCP-Q68	
C184	.022			DPMS2S22	EWFA1A122	QF1-127	1PB-S22	
C189	.0022		DD-222		GP222	QC2-97	56A-D22	
C190	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C191	.022			DPMS2S22	EWFA1A122	QF1-127	1PB-S22	
C192	220		DD-221		GP322		10TS-T22	
C193	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10	
C194	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C195	.0022		DD-222		GP222	QC2-97	56A-D22	
C198	68		DD-680	GP68	GP468		10TS-Q68	
C199	68		DD-680	GP68	GP468		10TS-Q68	
C200	100		DD-101	GP100	GP310		10TS-T10	
C201	.068			WMF1S68	EWFA1A168	QF1-195	1PB-S68	
C202	100		DD-101	GP100	GP310		10TS-T10	
C205	.068			WMF1S68	EWFA1A168	QF1-195	1PB-S68	
C213	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C214	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C215	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C216	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C217	.047		UK16-503		MAG1615		HY-635	
C218	.047		UK16-503		MAG1615		HY-635	
C219	.047		UK16-503		MAG1615		HY-635	
C220	.047		UK16-503		MAG1615		HY-635	
C223	39				CN0439		10TCC-Q39	
C224	.01		DC-103	MGP01	TA110	QC2-141	TG-S10	
C225	3		DTZ-3R3	NP03P3	CN0533		10TCC-V33	
C226	.0047		DD-472	GP4700	GP247		56A-D47	
C230	7		DTZ-6R8	NP06P8	CN0568		10TCC-V68	
C231	100		DD-101	GP100	GP310		10TS-T10	

PARTS LIST AND DESCRIPTION (CONTINUED)

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

CAPACITORS (cont)

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA					
			CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.		
						Q-LINE	GENERAL LINE	
C232	.0033		DD-331	WMF1D33	GP330		QF1-43	1PB-D33
C233	330							10TS-T33
C235	15 N150							10TCP-Q15
C236	39 N150							10TCP-Q39
C237	.0022			DPMS6D22			QF1-195	6PS-D22
C238	.0022			DPMS6D22				6PS-D22
C241	.068		DD-101	WMF1S68	GP100			1PB-S68
C243	100		UK16-503					10TS-T10
C244	.047							HY-635
CT101	20							

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

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

ITEM No.	FUNCTION	RESIST-ANCE	REPLACEMENT DATA				
			MFR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	MALLORY PART No.	TRW PART No.
RV101	Squelch Range	10K	5008-120	T-10K (4)	C-103 (4)	MTC14L1 (4)	X201R103B (4)
RV102	AMC	2000	5008-121				
RV103	S Meter	20K	5008-122				
RV104	RF Meter	20K	5008-122				
VR1	Volume/Switch	50K	5008-117				
VR2	Squelch	10K	5008-088				
VR3	Tone	50K	5008-118				
VR4	RF Gain	100K	5008-119				

(4) Modify terminals to fit PC board.

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L101	RF Choke (22uH)	5006-426			
L103	Xmit Mixer (27MHz)	5006-427			
L104	Harmonic Suppressor (27MHz)	5006-428			
L105	RF Choke (2.2uH)	5006-419			
L106	Xmit Driver (27MHz)	5006-420			
L107	RF Choke (68uH)	5006-421			
L108	RF Choke	5006-422			
L109	Final (27MHz)	5006-423			
L110	Pi Filter (27MHz)	5006-424			
L111	RF Choke (68uH)	5006-421			
L112	IF (10MHz)	5006-414			
L113	RF Choke	5006-040			
L114	RF Choke	5006-040			
L116	RF Choke	5006-425			
T101	VCO Osc (17MHz)	5006-409			
T102	Xmit Mixer (27MHz)	5006-410			
T103	Xmit Buffer (27MHz)	5006-411			
T104	Rec Ant (27MHz)	5006-412			
T105	Rec RF (27MHz)	5006-413			
T106	IF (10MHz)	5006-414			
T107	IF (455kHz)	5006-415			
T108	IF (455kHz)	5006-416			
T109	IF (455kHz)	5006-417			
T111	VCO Buffer (17MHz)	5006-418			

FILTER CHOKE

ITEM No.	RATINGS		REPLACEMENT DATA			NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (O CURRENT 1000~)	MFR. PART No.	THORDARSON PART No.	
CH101	1.45A	.11	.48mH	1202-174	ELA-16 (1)	(1) Number on unit.

PARTS LIST AND

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

TRANSFORMER

ITEM No.	IMPEDANCE		
	PRI.	SEC.	
T110	2	8	2 13

SPEAKER

ITEM No.	TYPE
SP1	3" PH, 8 Ohms

FUSE DEVICES

ITEM No.	DESCRIPTION
F1	2 Amp

MICROPHONE

ITEM No.	MFR. PART No.	PA
MIC	1601-032	18

CRYSTALS

ITEM No.	CRYSTAL FREQUENCY IN MHz	MFR. PART No.
X101	11.806	5003-17
X102	10.695	5003-18

MISCELLANEOUS

ITEM No.	PART NAME
CF101	Filter
M1	Meter
S1	Switch
S2	Switch
S3	Switch
S4	Switch
SW101	Printed Circuit B

CABINETS & CAB

ITEM
Cabinet, Top
Cabinet, Bottom
Panel, Front
Knob, Control

WIRING DATA

General-use Hook-up Wire
Shielded Antenna Lead
Coiled Microphone Cable
Bonding Strap

PARTS LIST AND DESCRIPTION (CONTINUED)

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

CAPACITORS (cont)

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA				
			CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
						Q-LINE	GENERAL LINE
C232 C233 C235 C236 C237 C238 C241 C243 C244 CT101	.0033 330 15 N150 39 N150 .0022 .0022 .068 100 .047 20		DD-331	WMF1033 GP330 DPMS6D22 DPMS6D22 WMF1568 GP100	EWFA233 GP333 * * ENF6222 ENF6222 EWFA168 GP310 MAG1615	QF1-43 QF1-195	1PB-D33 10TS-T33 10TCP-Q15 10TCP-Q39 6PS-D22 6PS-D22 1PB-S68 10TS-T10 HY-635

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

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

ITEM No.	FUNCTION	RESIST-ANCE	REPLACEMENT DATA				
			MFR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	MALLORY PART No.	TRW PART No.
RV101 RV102 RV103 RV104 VR1 VR2 VR3 VR4	Squelch Range AMC S Meter RF Meter Volume/Switch Squelch Tone RF Gain	10K 2000 20K 20K 50K 10K 50K 100K	5008-120 5008-121 5008-122 5008-122 5008-117 5008-088 5008-118 5008-119	T-10K (4)	C-103 (4)	MTCL4L1 (4)	X201R103B (4)

(4) Modify terminals to fit PC board.

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L101 L103 L104 L105 L106 L107 L108 L109 L110 L111 L112 L113 L114 L116 T101 T102 T103 T104 T105 T106 T107 T108 T109 T111	RF Choke (22uH) Xmit Mixer (27MHz) Harmonic Suppressor (27MHz) RF Choke (2.2uH) Xmit Driver (27MHz) RF Choke (68uH) RF Choke Final (27MHz) Pi Filter (27MHz) RF Choke (68uH) IF (10MHz) RF Choke RF Choke RF Choke VCO Osc (17MHz) Xmit Mixer (27MHz) Xmit Buffer (27MHz) Rec Ant (27MHz) Rec RF (27MHz) IF (10MHz) IF (455kHz) IF (455kHz) IF (455kHz) VCO Buffer (17MHz)	5006-426 5006-427 5006-428 5006-419 5006-420 5006-421 5006-422 5006-423 5006-424 5006-421 5006-414 5006-040 5006-040 5006-425 5006-409 5006-410 5006-411 5006-412 5006-413 5006-414 5006-415 5006-416 5006-417 5006-418			

FILTER CHOKE

ITEM No.	RATINGS		REPLACEMENT DATA			NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MFR. PART No.	THORDARSON PART No.	TRIAD PART No.
CH101	1.45A	.11	.48mH	1202-174 ELA-16 (1)		

PARTS LIST AND DESCRIPTION (CONTINUED)

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

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA			NOTES
	PRI.	SEC.	MFR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T110	2	1 8 2 13	5007-64 ETA-66 (1)	TR723		(1) Number on unit.

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFR. PART No.	QUAM PART No.	
SP1	3" PM, 8 Ohms	5015-023	3A0528R	

FUSE DEVICES

ITEM No.	DESCRIPTION	REPLACEMENT DATA					
		PART No.		BUSS PART No.		LITTELFUSE PART No.	
		DEVICE	HOLDER	DEVICE	HOLDER	DEVICE	HOLDER
F1	2 Amp		5015-026	AGC2	HDJ	312002	150145

MICROPHONE

ITEM No.	REPLACEMENT DATA				CONNECTION DATA						
	MFR. PART No.	GC PART No.	NOISE CANCEL	GC POWER	GC CONNECTOR	GC Red	GC Shield	GC Yellow	GC Blue	GC White	GC Black
MIC	1601-032	18-032	18-034	18-010	18-092	1	2	4	3	NC	2

CRYSTALS

ITEM No.	CRYSTAL FREQUENCY IN MHz	MFR. PART No.	CTS KNIGHTS PART No.	CHANNEL	ITEM No.	CRYSTAL FREQUENCY IN MHz	MFR. PART No.	CTS KNIGHTS PART No.	CHANNEL
X101 X102	11.806 10.695	5003-179 5003-180	CB100M11806 CC130M10695	Osc Xmit Osc	X103	10.240	5003-181	CA120M10240	Ref Osc

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
CF101 M1 S1 S2 S3 S4 S5 SW101	Filter Meter Switch Switch Switch Switch Switch Switch Printed Circuit Board	0516-003 5014-031 5009-054 5009-085 5009-085 5009-085 5009-086	455kHz S/RF Power (On Volume Control) Receiv-O-Slide ANL PA/CB NB Channel Selector Main (PTBMO33A0X)

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

ITEM	PART No.	ITEM	PART No.
Cabinet, Top Cabinet, Bottom Panel, Front Knob, Control	5020-139 5020-140 5020-138 5022-059	Knob, Channel Selector Assembly Mounting Bracket Mic Holder	5022-101 5025-029 5026-042

WIRING DATA

General-use Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 13 Colors 8524 (Stranded) Available in 13 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 8491 4-Conductor (2 shielded, 2 unshielded) Neoprene
Bonding Strap	Use BELDEN No. 8661 (3/8 inch)