

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.



981-6204 (981-7461)

MANUFACTURER'S SPECIFICATIONS

Receiver

Sensitivity at 10 dB	
Signal-to-noise ratio	: 0.7 μ V
Image Rejection Ratio	
at fo-910 MHz	: 35 dB
1st I-F Rejection Ratio at	
10.695 MHz	: 40 dB
2nd I-F Rejection Ratio	
at 455 kHz	: 100 dB
Spurious Rejection Ratio	: -35 dB
Squelch Sensitivity at	
Maximum	: 300 μ V
Squelch Sensitivity at	
Threshold	: 0.7 μ V
A.G.C. (as measured to	
EIA Specs)	: 70 dB
I-F Response at 6 dB down	
band width	: $\pm$ 2.8 kHz
Adjacent Channel	
Selectivity (10 kHz)	: -40 dB
Frequency Stability	: 0.005%
Audio Output Power at	
maximum	: 4W
Audio Output Power at	
10% distortion	: 3W
Distortion at Input 1 mV	: 4.5%
Audio Fidelity at 400 Hz	: -15 dB
Audio Fidelity at 3000 Hz	: -15 dB
S-Meter Sensitivity for S-9	: 100 μ V
Current Drain at Full audio:	1.5A
Hum and Noise	: -45 dB

Transmitter

RF Output Power	
(at 13.8V DC)	: 4W, FCC max.
Modulation Capability	: 100% down
Frequency Stability	
(-30°C to +50°C)	: 0.005%
Spurious Ratio	: More than 60 dB down
Current Drain (at full modulation)	: 1.7A

Measurement Condition

Audio Output Power	: 0.5W
Audio Output Load	: 8 ohms
Modulation Frequency	: 1 kHz
Modulation	: 30%
Test Temperature	: 25°C
Power Supply	: 13.8V dc
Squelch Control	: Defeated
CB-PA Switch	: CB
Antenna Impedance	: 50 Ohms

Microphone

Cartridge Type	: Dynamic
Output Impedance	: 700 ohms
Output Level	: 0 dB = 0.4 milli-volt/microbar at 1 kHz
Frequency Range	: 300 Hz - 3.5 kHz

Courtesy of the Manufacturer

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

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JCPenney MODEL 981-6204

RECEIVER ADJUSTMENTS

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

TEST EQUIPMENT	TRANSCIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to antenna jack. 27.185MHz, 1000Hz @ 30% modulation. Output 1000uV.	Ch. 19 Squelch Maximum	RV1	SQUELCH RANGE Adjust so that squelch just breaks.
Output of signal generator thru .01uF to antenna jack. 27.185MHz, 1000Hz @ 30% modulation. Output 100uV.	Ch. 19 Squelch MINIMUM	RV3	SIGNAL METER Adjust for 9 on signal scale of meter.

TRANSMITTER ALIGNMENT

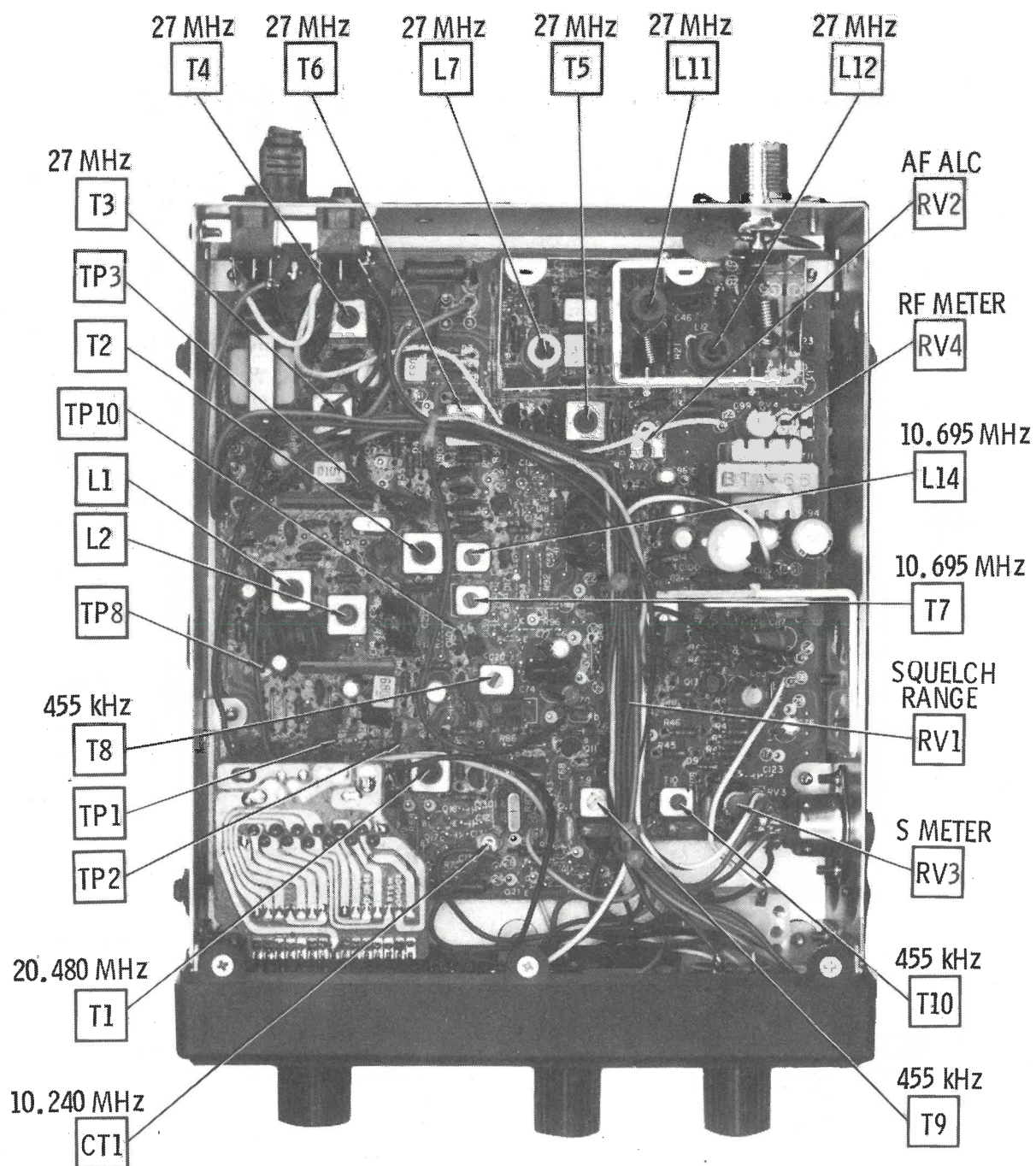
Connect an RF wattmeter and 50-ohm, 25-watt dummy load to antenna connector.
NOTE: Be sure to check transmit frequency and power on all active channels after alignment of transmitter.
See page 4 for channel frequencies.

TEST EQUIPMENT	TRANSCIVER	ADJUST	REMARKS
	Ch. 19	T3,T4,L7, L11,L12	Adjust for maximum RF output.
	Ch. 19	L7	Readjust clockwise for 4.4 watts output.
	Ch. 19	L12	Adjust counterclockwise for 3.8 watts output.

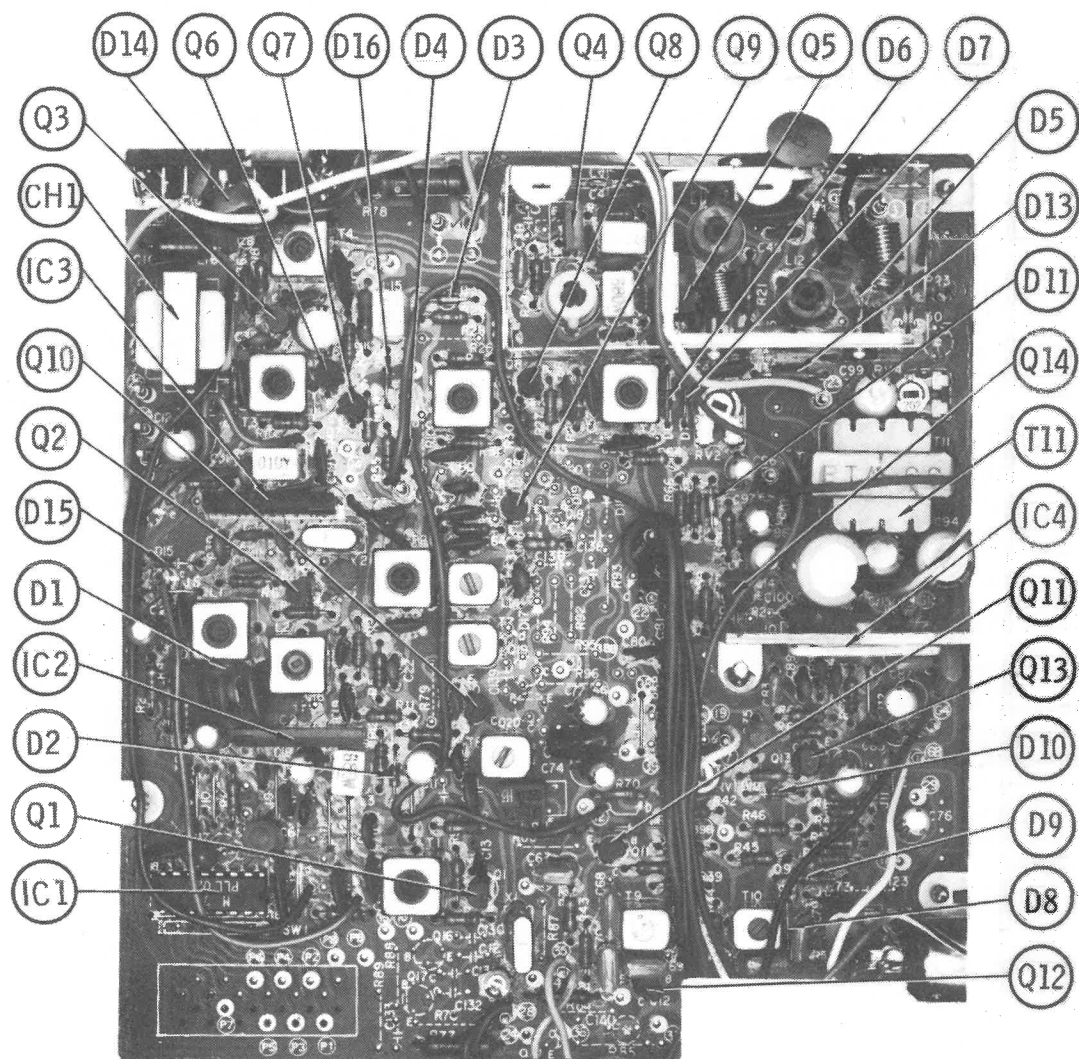
TRANSMITTER ADJUSTMENTS

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.

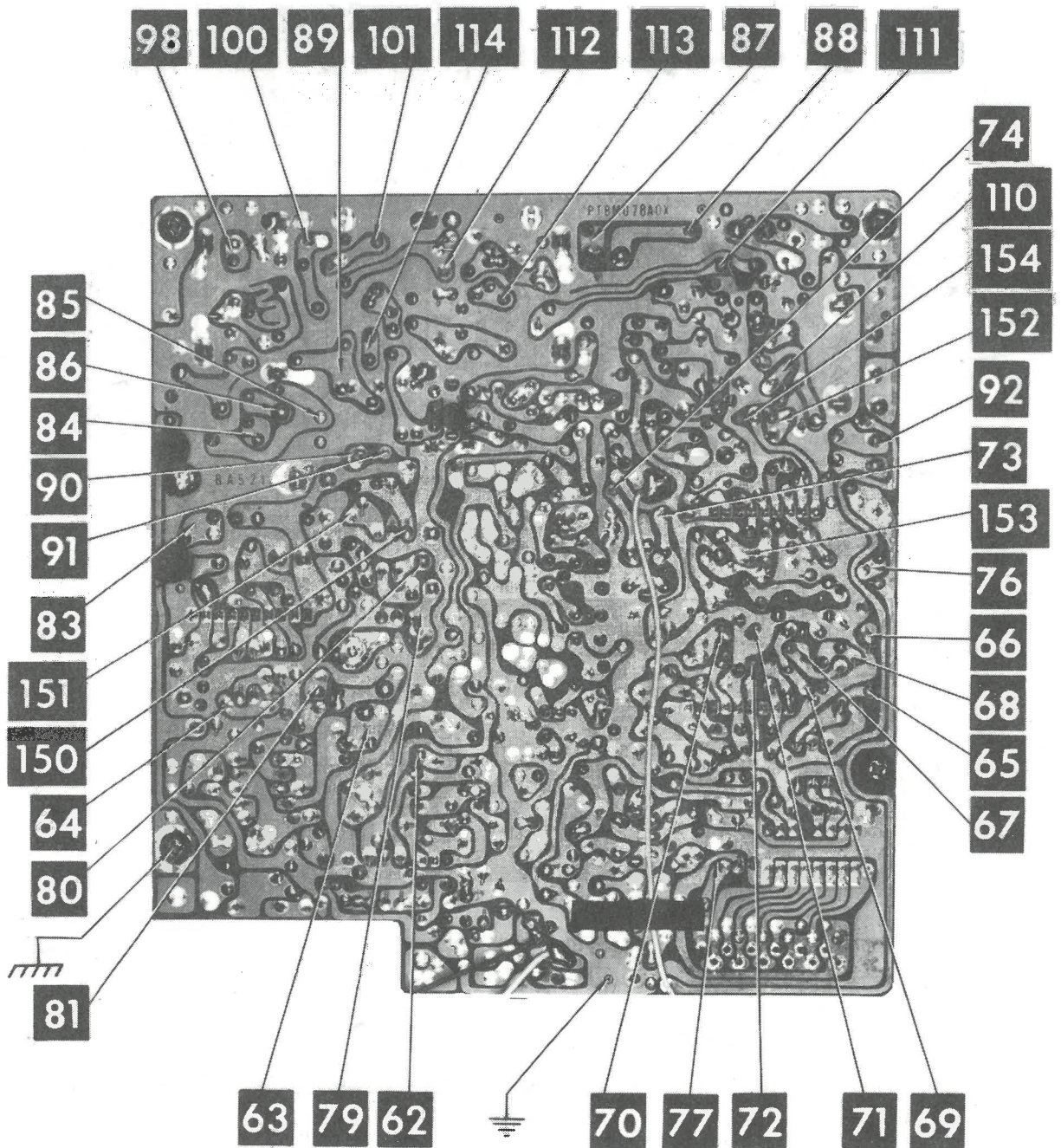
TEST EQUIPMENT	TRANSCIVER	ADJUST	REMARKS
Input of modulation meter to antenna jack. Inject a 20mV, 1000Hz signal at mic input.	Ch. 19	RV2	AF ALC Adjust for 90% modulation maximum.
Connect an RF wattmeter and 50-ohm, 25-watt dummy load to antenna connector.	Ch. 19	RV4	POWER METER Adjust so that RF panel meter agrees with RF wattmeter.



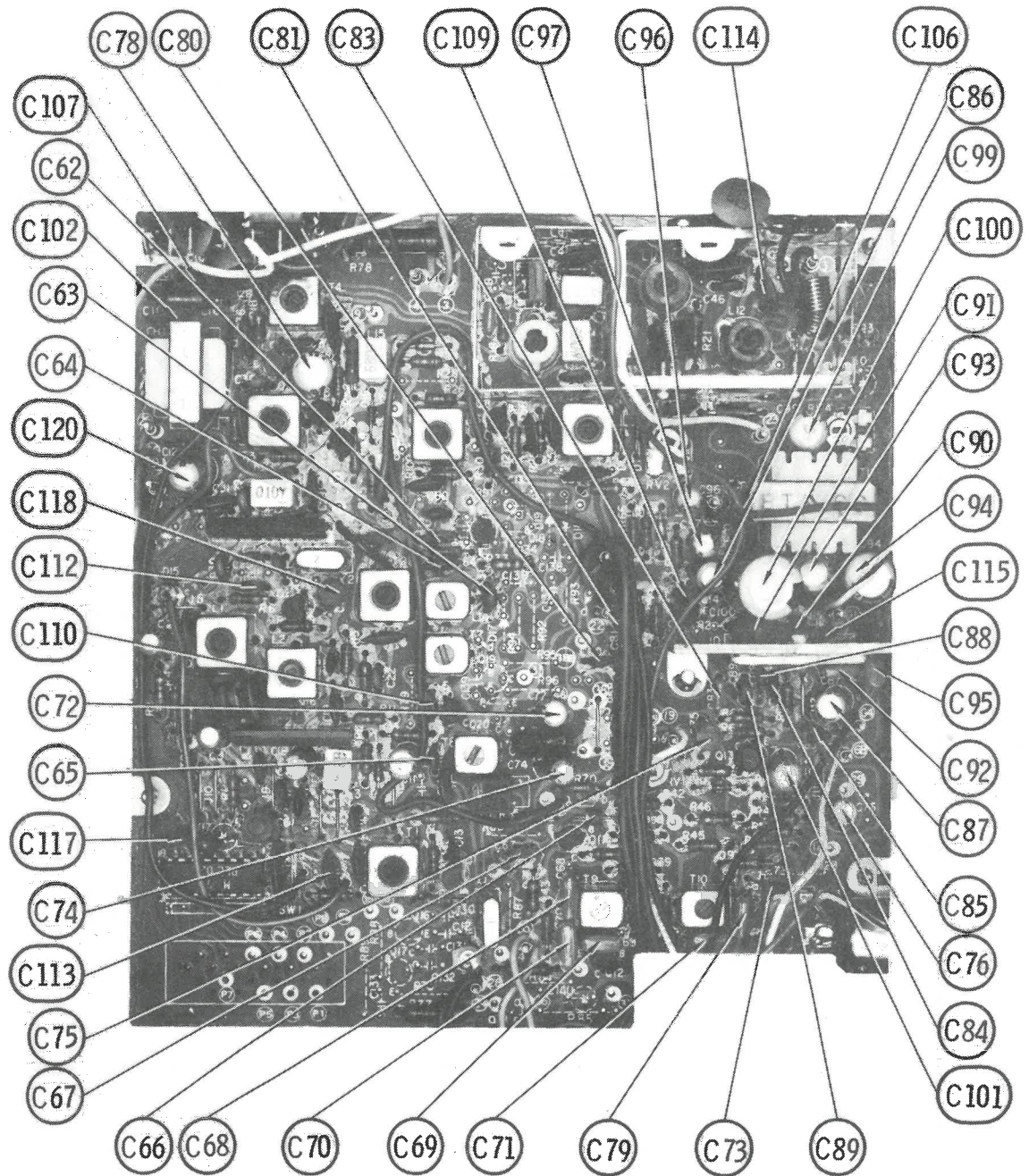
CHASSIS - BOTTOM



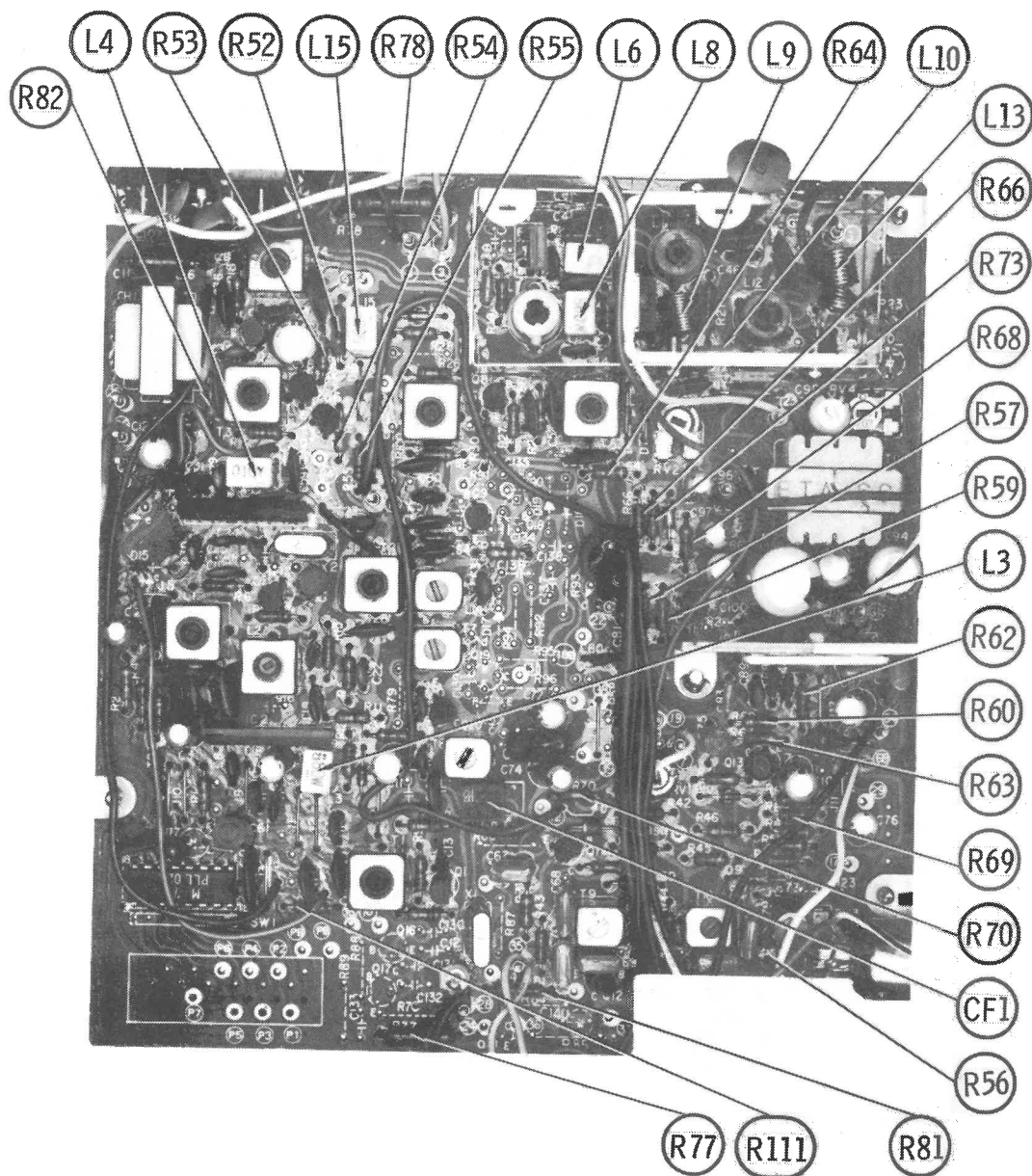
MAIN BOARD



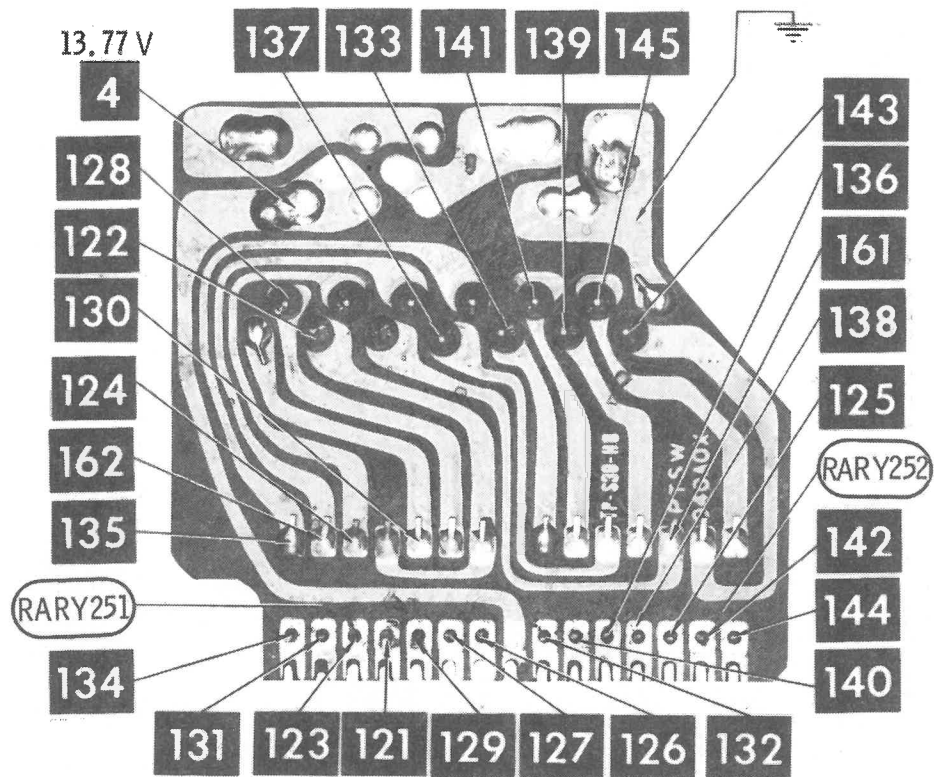
MAIN BOARD



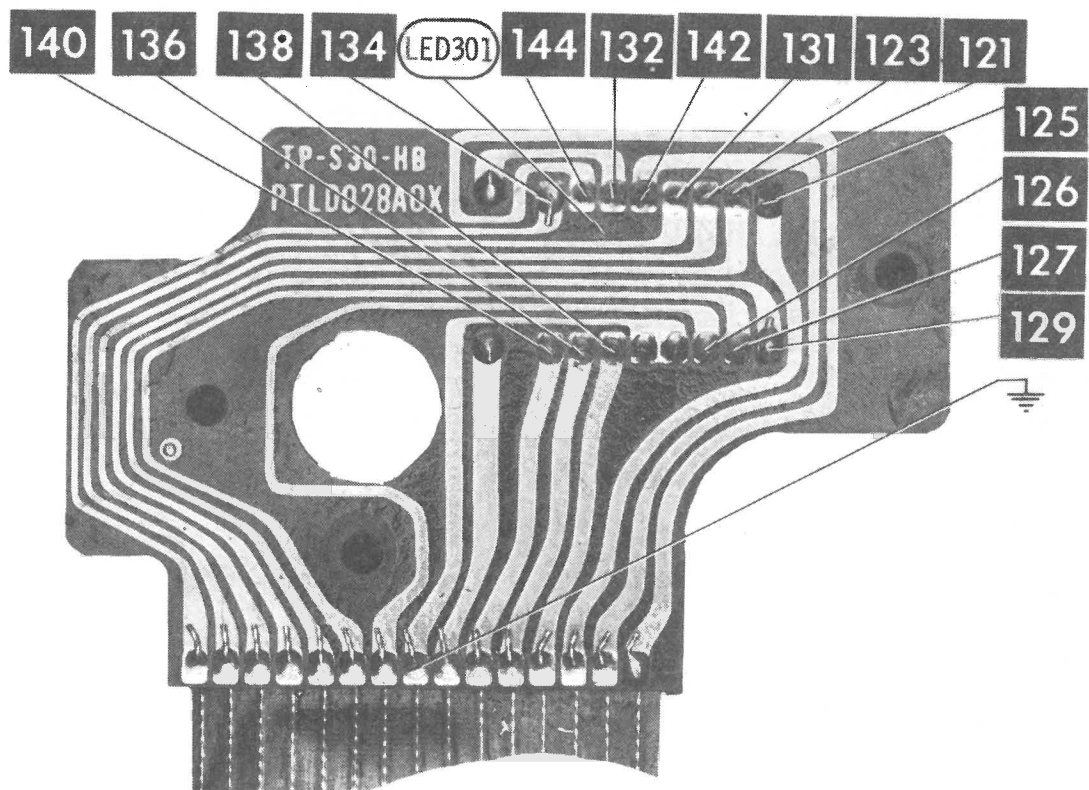
MAIN BOARD



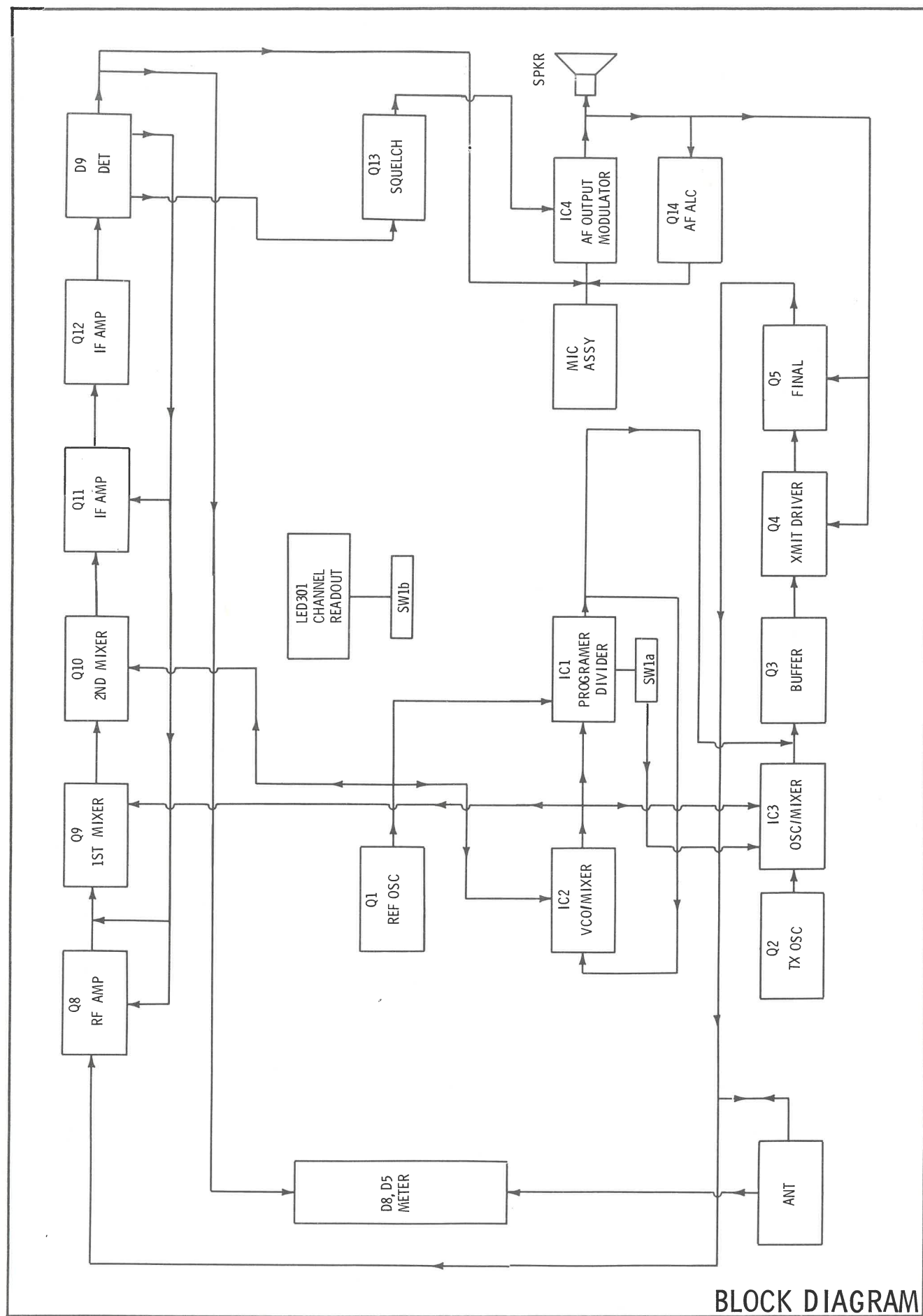
MAIN BOARD

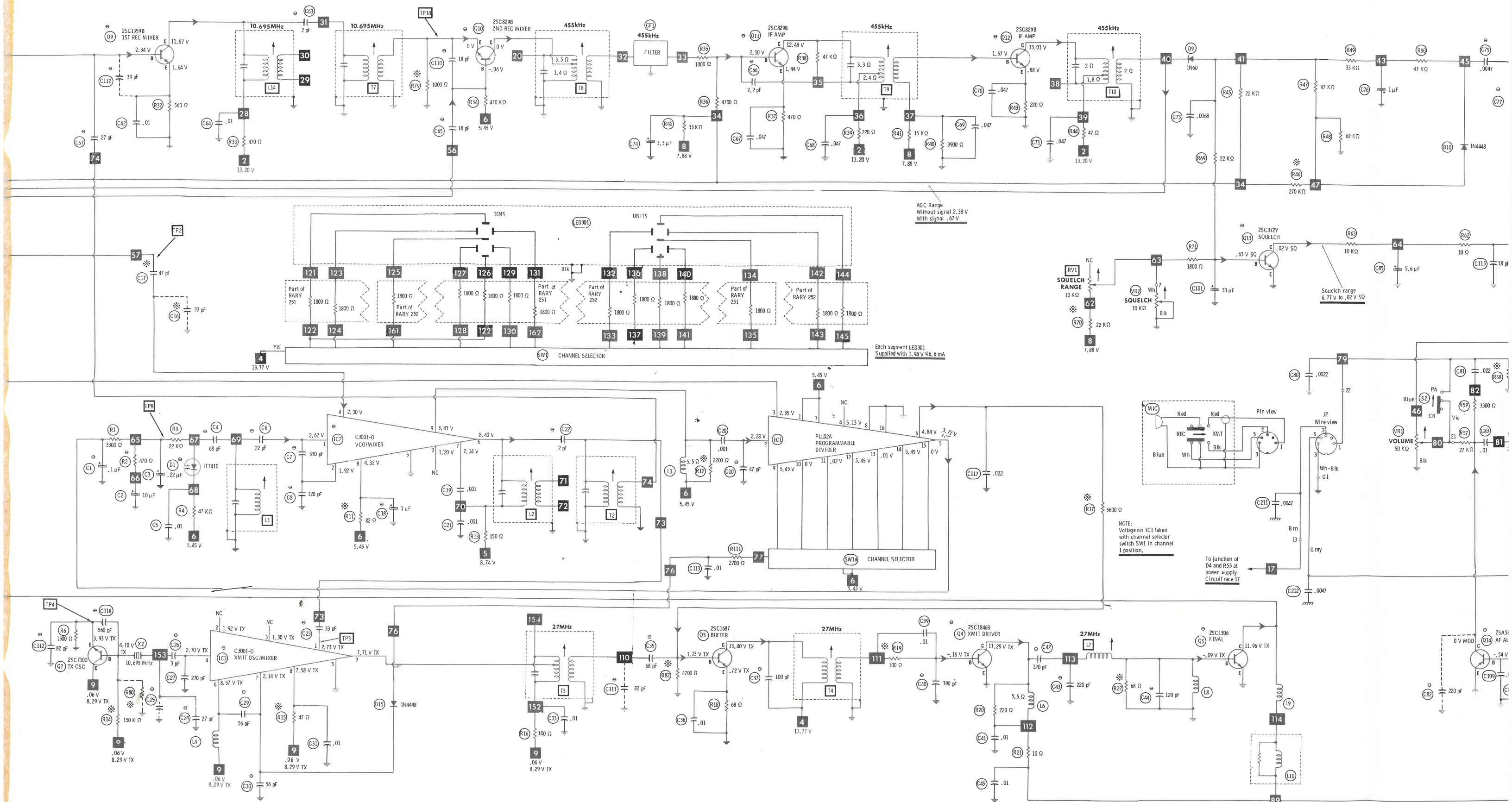


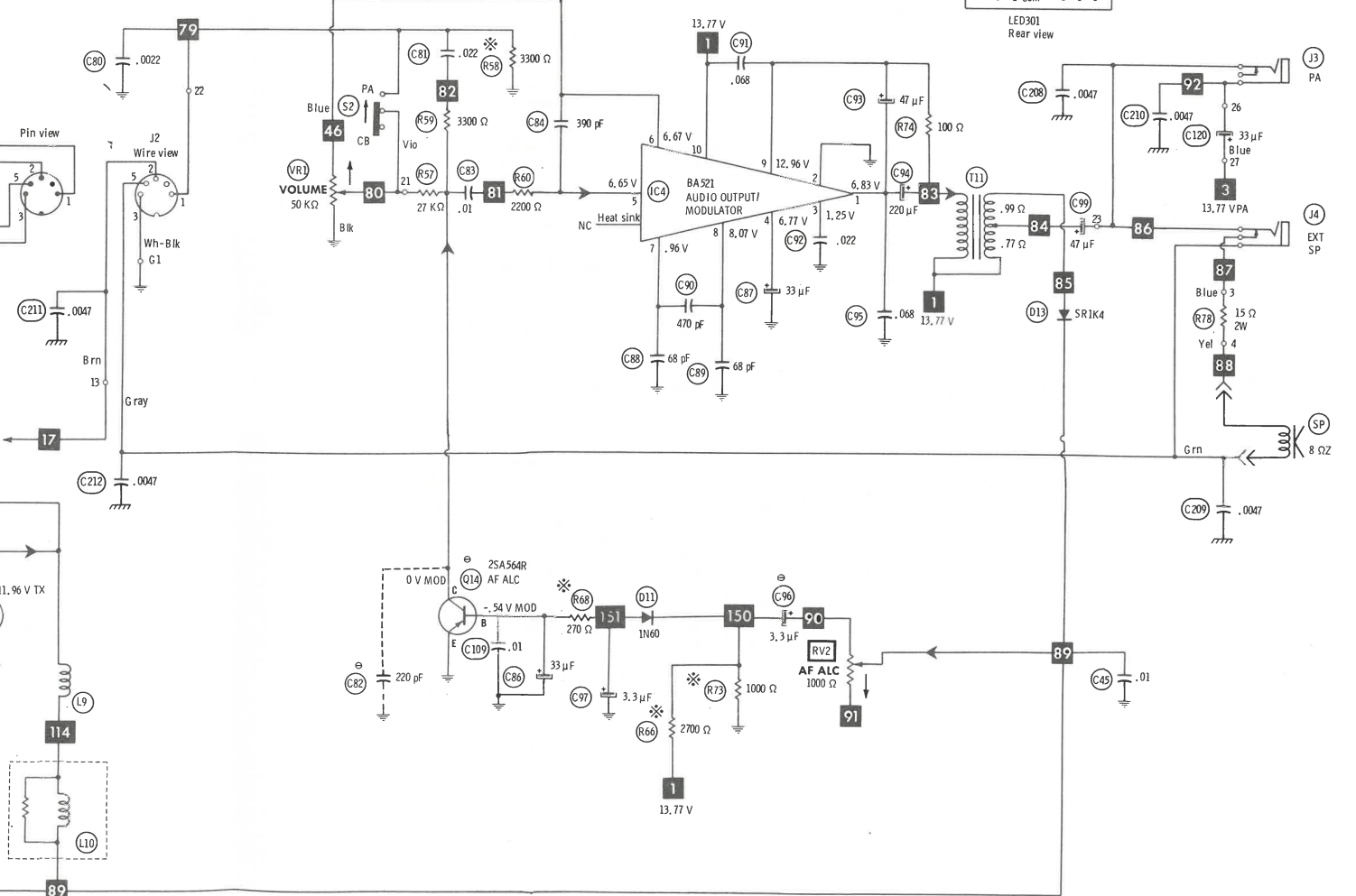
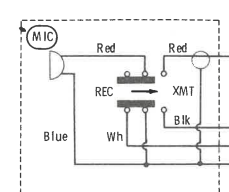
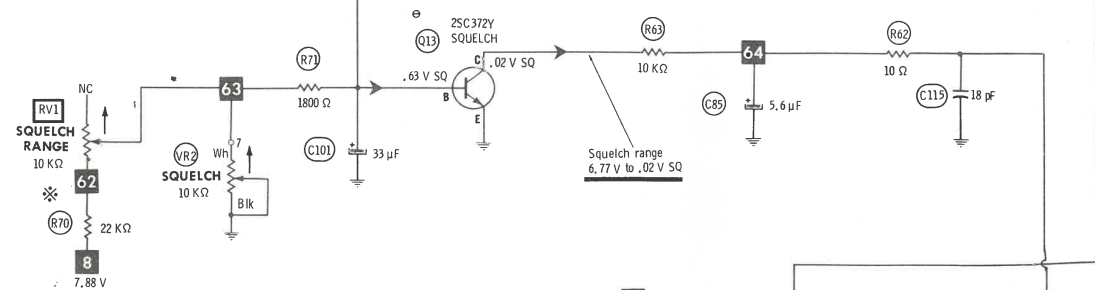
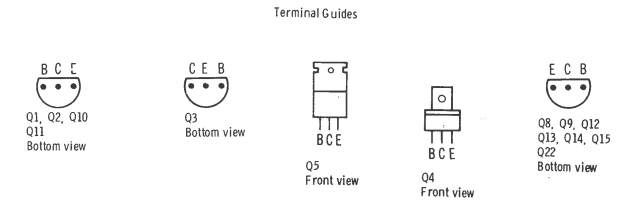
SWITCH BOARD



READOUT BOARD







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.	MALLORY PART No.	MOTOROLA PART No.	RAYTHEON PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.	THORDARSON PART No.	WORKMAN PART No.	ZENITH PART No.
D1	ITT410 BB122 MV201	QD-CTT410XQ			HEPR2502	REN 612			ECG612			ZEN-452
D2	MZ205	QD-ZMZ205XE	GEZD-5.0		HEPR2502	REN 612			ECG612			ZEN-452
D3	RD9.1E		GEZD-9.1	ZB9.1B	HEPR2502	REN 135			ECG135		WEP1103	
D4	MZ9.1B	QD-ZUZ9BXXP	GE-514	PTC214	HEPR0602	REN 139	SK3060	RT-240	ECG139A	1N4739A	WEP1109	103-272
	1N4448		GE-300	PTC214	HEPR0602	REN 139	SK3060	RT-240	ECG139A	1N4739A	WEP1109	103-272
	1S1555		GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	SN4448	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG177		WEP1062	
	1N60	QD-G1N60XXT	GE-514	PTC206	HEPR9135	REN 109	SK3088	RT-263	ECG109	1N4148	WEP925	
D5	1S188	QD-G1S188XZ	1N60	PTC207	HEPR9134A	REN 109	SK3087	RT-200	ECG109	1N34A	WEP134	ZEN-430
	1N4448		GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	ZEN-430
	SN4448	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG177		WEP1062	
	1N60		GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
D6	1S1555		GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG177		WEP1062	
	SN4448	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	1N60	QD-G1N60XXT	1N60	PTC206	HEPR9135	REN 109	SK3088	RT-263	ECG109	1N34A	WEP134	ZEN-430
D7	1S188	QD-G1S188XZ	1N34AS	PTC207	HEPR9135	REN 109	SK3087	RT-200	ECG109	1N60	WEP134	ZEN-430
	1N4448		GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	SN4448	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG177		WEP1062	
	1N60	QD-G1N60XXT	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
D8	1S188	QD-G1S188XZ	1N60	PTC206	HEPR9135	REN 109	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D9	1N4448	QD-G1N60XXT	1N34AS	PTC207	HEPR9135	REN 109	SK3087	RT-200	ECG109	1N34A	WEP134	ZEN-430
D10	1S1555	QD-SN4448XZ	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	SN4448	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG177		WEP1062	
	1N60	QD-G1N60XXT	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
D11	1S188	QD-G1S188XZ	1N60	PTC206	HEPR9135	REN 109	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D13	SRTK-4	QD-SSR1KX4P	GE-504A	PTC201	HEPR0052	REN 116	SK3030	RT-213	ECG116	1N4004	WEP156	212-76-02
D14	1S1885	QD-SS1885XT	GE-504A	PTC201	HEPR0052	REN 116	SK3030	RT-213	ECG116	1N4004	WEP156	212-76-02
D15	1N4448		GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	1S1555	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG177		WEP1062	
	SN4448	QD-SN4448XZ	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	1N4448		GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG177		WEP1062	
IC1	PLL02A	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
IC2	PLL02	QD-SN4448XZ	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG177		WEP1062	
	C3001-0	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	C3001	QD-SN4448XZ	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG177		WEP1062	
	TA7310P	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	MC3001	QD-SN4448XZ	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG177		WEP1062	
	C3001-0	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	C3001	QD-SN4448XZ	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG177		WEP1062	
	TA7310P	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	MC3001	QD-SN4448XZ	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG177		WEP1062	
IC4	BA521	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
Q1	2SC7100	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
Q2	2SC7100	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
Q3	2SC7100	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
Q4	2SC1687	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SC1846R	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SC1846	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SC1760	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SC2074	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
Q5	2SC1306	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SC2075	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SC1678	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SC1974	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
Q6	2SC1318Q	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SC1318	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
Q7	2SA719Q	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SA719	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SA720	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SA719P	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
Q8	2SC1047B	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SC1047	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SC710	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SC460	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
Q9	2SC1359B	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
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	2SC710	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
Q10	2SC829B	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SC829	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
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Q11	2SC829B	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SC829	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SC710	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
Q12	2SC829B	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SC829	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SC710	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
Q13	2SC372Y	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SC372	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SC828	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SC945	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
Q14	2SA564R	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SA564	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
	2SA733	QD-SN4448XZ	GE-300	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	

* Lead configuration may vary from original.

PARTS LIST AND DESCRIPTION (CONTINUED)

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

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA				
		MFR. PART No.	CORNELL- DUBILIER PART No.	MALLORY PART No.	SPRAGUE	PART No.
					Q-LINE	GENERAL LINE
C1	.1 10V			TDC104M050EL	QDT1-2	SD50-R109
C2	.1 16V	CE-ED100ZMN	PC10-25	VTT10B25	QV1-41	EV-1222
C3	.22 50V	CE-EGR22ZMN		TDC224M050EL	QDT1-10	SD50-R229
C11	.47 10V	CE-EC470ALE	PC50-16	VTT47D16	QV1-73	EV-1226
C18	1 50V	CE-EG010ALE	PC1-50	VTT1A50	QV1-11	EV-1615
C72	10 16V	CE-ED100ALN	PC10-25	VTT10B25	QV1-41	EV-1222
C74	3.3 25V	CE-EE3R3ALE	PC5-50	VTT3R3A50	QV1-23	EV-1318
C76	1 50V	CE-EG010ALE	PC1-50	VTT1A50	QV1-11	EV-1615
C78	47 16V	CE-ED470ALE	PC50-16	VTT47D16	QV1-73	EV-1226
C85	5.6 25V	CS-SE5R6MDN		TM565K025POX	QDT1-52	SD25-5R69
C86	33 10V		PC30-25	VTT33B10	QV1-61	EV-1125
C87	33 10V		PC30-25	VTT33B10	QV1-61	EV-1125
C93	47 16V	CE-ED470ALE	PC50-16	VTT47D16	QV1-73	EV-1226
C94	220 16V	CE-AD221ZLS	PC250-25	VTT220H16	QV1-117	EV-1240
C96	3.3 25V	CE-EE3R3ALE	PC5-50	VTT3R3A50	QV1-23	EV-1318
C97	3.3 25V	CE-EE3R3ALE	PC5-50	VTT3R3A50	QV1-23	EV-1318
C99	47 25V	CE-AE470ZLS	PC50-25	VTT47E25	QV1-75	EV-1326
C100	1000 16V	CE-ED102ALN	PC1000-16	VTT1000L16	QV1-183	EV-1260
C101	33 10V		PC30-25	VTT33B10	QV1-61	EV-1125
C120	33 16V	CE-ED330ALE	PC30-25	VTT33D25	QV1-63	EV-1325

PARTS LIST AND DESCRIPTION (CONTINUED)

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

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA				
		MFGR. PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
					Q-LINE	GENERAL LINE
C1	.1 10V			TDC104M050EL	QDT1-2	SD50-R109
C2	10 16V	CE-ED100ZMN	PC10-25	VTT10B25	QV1-41	EV-1222
C3	.22 50V	CE-EGR22ZMN		TDC224M050EL	QDT1-10	SD50-R229
C11	47 10V	CE-EC470ALE	PC50-16	VTT47D16	QV1-73	EV-1226
C18	1 50V	CE-EG010ALE	PC1-50	VTT1A50	QV1-11	EV-1615
C72	10 16V	CE-ED100ALN	PC10-25	VTT10B25	QV1-41	EV-1222
C74	3.3 25V	CE-EE3R3ALE	PC5-50	VTT3R3A50	QV1-23	EV-1318
C76	1 50V	CE-EG010ALE	PC1-50	VTT1A50	QV1-11	EV-1615
C78	47 16V	CE-ED470ALE	PC50-16	VTT47D16	QV1-73	EV-1226
C85	5.6 25V	CS-SE5R6MDN		TIM565K025P0X	QDT1-52	SD25-5R69
C86	33 10V		PC30-25	VTT33B10	QV1-61	EV-1125
C87	33 10V		PC30-25	VTT33B10	QV1-61	EV-1125
C93	47 16V	CE-ED470ALE	PC50-16	VTT47D16	QV1-73	EV-1226
C94	220 16V	CE-AD221ZLS	PC250-25	VTT220H16	QV1-117	EV-1240
C96	3.3 25V	CE-EE3R3ALE	PC5-50	VTT3R3A50	QV1-23	EV-1318
C97	3.3 25V	CE-EE3R3ALE	PC5-50	VTT3R3A50	QV1-23	EV-1318
C99	47 25V	CE-AE470ZLS	PC50-25	VTT47E25	QV1-75	EV-1326
C100	1000 16V	CE-ED102ALN	PC1000-16	VTT1000L16	QV1-183	EV-1260
C101	33 10V		PC30-25	VTT33B10	QV1-61	EV-1125
C120	33 16V	CE-ED330ALE	PC30-25	VTT33D25	QV1-63	EV-1325

CAPACITORS

ITEM No.	RATING	MFGR. PART No.	REPLACEMENT DATA				
			CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
						Q-LINE	GENERAL LINE
C4	68 N150 10% 50V				*		10TCP-Q68
C5	.01 50V		UK50-103		MAG5011		
C6	22 N150 50V				*		10TCP-Q22
C7	330 10% 50V		DD-331	GP330	GP333		10TS-T33
C8	120 10% 50V		DTZ-120		CN0312		10TCC-T12
	150 50V		DD-151		GP315		10TS-T15
C9	.047 50V		UK50-503		MAG5015		
C10	47 50V		DTZ-47	NP047	CN0447		10TCC-Q47
C12		(1)					
C13	.001 10% 50V			DPMS6D1	EWFI1A210	QFT2-1	1FT-D10
C14	68 N150 10% 50V				*		10TCP-Q68
C15	.01 50V	(1)	UK50-103		MAG5011		
C16					*		10TCP-Q47
C17	47 N150 10% 50V			DPMS6D1	EWFI1A210	QFT2-1	1FT-D10
C19	.001 10% 50V			DPMS6D1	EWFI1A210	QFT2-1	1FT-D10
C20	.001 10% 50V			DPMS6D1	EWFI1A210	QFT2-1	1FT-D10
C21	.001 10% 50V			NP02P2	CN0522		10TCC-V22
C22	2 50V		DTZ-2R2	NP033	CN0433		10TCC-Q33
C23	33 50V		DTZ-33		*		10TCP-Q27
C24	27 N150 50V						
C25		(1)					
C26	3 50V		DTZ-3R3	NP03P3	CN0533		10TCC-V33
C27	270 10% 50V		DD-271	GP270	GP327		10TS-T27
C28	.01 50V		UK50-103		MAG5011		
C29	56 50V		DD-560		GP456		10TS-Q56
C30	56 50V		DD-560		GP456		10TS-Q56
C31	.01 50V		UK50-103		MAG5011		
C33	.01 50V		UK50-103		MAG5011		
C35	68 50V		DD-680	GP68	GP468		10TS-Q68
C36	.01 50V		UK50-103		MAG5011		
C37	100 N150 10% 50V				*		10TCP-T10
C38	.047 50V		UK50-503		MAG5015		
C39	.01 10% 50V			WMF1S1	EWFI1A110	QFT2-91	1FT-S10
C40	390 50V		DD-391	GP390	GP339		10TS-T39
C41	.01 50V		UK50-103		MAG5011		
C42	120 10% 50V		DTZ-120		CN0312		10TCC-T12
C43	220 50V		DD-221		GP322		10TS-T22
C44	120 10% 50V		DTZ-120		CN0312		10TCC-T12
C45	.01 50V		UK50-103		MAG5011		
C46	120 10% 50V		DTZ-120		CN0312		10TCC-T12
C47	270 10% 500V		DD-271	GP270	GP327		10TS-T27
C49	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C51	27 50V				CN0427		10TCC-Q27
C52	.01 50V		UK50-103		MAG5011		
C53	.047 50V		UK50-503		MAG5015		
C54		(1)					
C55	.047 10% 50V			DPMS2S47	EWFI1A147	QFT2-171	1FT-S47
C56	.01 50V		UK50-103		MAG5011		
C57	27 50V				CN0427		10TCC-Q27
	47 50V				CN0447		10TCC-Q47
C58	.01 50V		DTZ-47	NP047	MAG5011		
C59	.01 50V		UK50-103		MAG5011		
C60	.01 50V		UK50-103		MAG5011		
C61	.001 125V						
C62	.01 50V		UK50-103		MAG5011		
C63	2 50V		DTZ-2R2	NP02P2	CN0522		10TCC-V22
C64	.01 50V		UK50-103		MAG5011		
C65	18 N150 50V				*		10TCP-Q18
C66	2.2 10% 500V		DTZ-2R2	NP02P2	CN0522		10TCC-V22
C67	.047 10% 50V			DPMS2S47	EWFI1A147	QFT2-171	1FT-S47
C68	.047 10% 50V			DPMS2S47	EWFI1A147	QFT2-171	1FT-S47
C69	.047 10% 50V			DPMS2S47	EWFI1A147	QFT2-171	1FT-S47
C70	.047 10% 50V			DPMS2S47	EWFI1A147	QFT2-171	1FT-S47
C71	.047 10% 50V			DPMS2S47	EWFI1A147	QFT2-171	1FT-S47
C73	.0068 10% 50V			WMF1D68	EWFI1A268	QFT2-73	1FT-D68
C75	.0047 125V			CD19FD472J03	SX247		MMC-472
C77		(1)					
C79	.022 10% 50V			DPMS2S22	EWFI1A122	QFT2-127	1FT-S22
C80	.0022 50V		DD-222		GP222	QC2-97	5GA-D22
C81	.022 50V		DC-253	MGP025	TA125		TG-S25

JC Penney MODEL 981-6204

PARTS LIST AND DESCRIPTION (CONTINUED)

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

CAPACITORS

ITEM No.	RATING	MFGR. PART No.	REPLACEMENT DATA				
			CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
						Q-LINE	GENERAL LINE
C82		(1)					
C83				WMF1S1	EWFI1A110	QFT2-91	1FT-S10
C84	.01 10% 50V		DD-391	GP390	GP339		10TS-T39
C88	68 50V		DD-680	GP68	GP468		10TS-Q68
C89	68 50V		DD-680	GP68	GP468		10TS-Q68
C90	470 50V		DD-471	GP470	GP347		10TS-T47
C91	.068 10% 50V			WMF1S68	EWFI1A168	QF1-195	1PB-S68
C92	.022 10% 50V			DPMS2S22	EWFI1A122	QFT2-127	1FT-S22
C95	.068 10% 50V			WMF1S68	EWFI1A168	QF1-195	1PB-S68
C102	.01 50V		UK50-103		MAG5011		
C106	.047 50V		UK50-503		MAG5015		
C107	.047 50V		UK50-503		MAG5015		
C108	.047 50V		UK50-503		MAG5015		
C109	.01 50V		UK50-103		MAG5011		
C110	18 50V				CN0418		10TCC-Q18
C111		(1)					
C112	82 10% 50V		DD-820		GP482		10TS-Q82
C113	.01 50V		UK50-103		MAG5011		
C114	390 10% 500V		DD-391	GP390	GP339		10TS-T39
C115	18 50V				CN0418		10TCC-Q18
C117	.022 50V		DC-253	MGP025	TA125		TG-S25
C118	560 125V			CD19FD561J03	SX356		MMC-561
C141		(1)					
C150	47 50V		DTZ-47	NP047	CN0447		10TCC-Q47
C201	150 10% 50V		DD-151		GP315		10TS-T15
C202	.01 50V		UK50-103		MAG5011		
C203	.01 50V		UK50-103		MAG5011		
C204	.01 50V		UK50-103		MAG5011		
C205	.047 50V		UK50-503		MAG5015		
C206	.01 50V		UK50-103		MAG5011		
C207	.01 50V		UK50-103		MAG5011		
C208	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C209	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C210	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C211	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C212	.0047 50V		DD-472	GP4700	GP247		5GA-D47
CT1	20 50V	CT-272200H01					

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.
(1) Replace with original value.

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

ITEM No.	FUNCTION	RESIST-ANCE	REPLACEMENT DATA			
			MFGR. PART No.	CENTRALAB PART No.	MALLORY PART No.	TRW PART No.
RV1	Squelch Range	10K	RP-GNB10301			U260R103B
RV2	AF ALC	2000	RP-GNB20201			U260R252B
RV3	S Meter	20K	RP-GNB20301			U260R253B
RV4	RF Meter	2000	RP-GNB20201			U260R252B
VR1	Volume/Power Switch	50K	RV-NB503A12			
VR2	Squelch	10K	RV-NA103B04			

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.
RA251	Resistor Network		(1)	RA252	Resistor Network		(1)

(1) Consists of seven 1.8K-ohm resistors.

PARTS LIST AND DESCRIPTION (CONTINUED)

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

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L1	VCO	TR-10DD003S		4602 70F226A1	
L2	VCO Mixer (37MHz)	TR-10MB003T			
L3	RF Peaking Coil (68uH)	LF-680KD01N			
L4	RF Peaking Coil (1uH)	LF-1R0KD01N			
L6	RF Peaking Coil (2.2uH)	LF-2R2KD01N			
L7	XMT Driver (27MHz)	TR-A5CZ001M			
L8	RF Peaking Coil (68uH)	LF-680KD01N			
L9	RF Choke (.55uH)	LA-1KE1011A			
L10	RF Choke (1.0uH)	LD-ADX3825M			
L11	Final (27MHz)	TR-A5CZ002M			
L12	Pi Filter (27MHz)	TR-A5CZ002M			
L13	Ant Matching (.4uH)	LA-1JG1010A			
L14	Rec Mixer (10.695MHz)	TR-07MB008N			
L15	RF Peaking Coil (68uH)	LF-680KD01N			
L16	RF Choke (.75uH)	LD-ADB4024B			
T1	Doubler (20.480MHz)	TR-10DB002S			
T2	VCO Mixer (37MHz)	TR-10MB005S			
T3	XMT Mixer (27MHz)	TR-10CB002M			
T4	XMT Buffer (27MHz)	TR-10CP005S			
T5	Rec Ant (27MHz)	TR-10MP003T			
T6	Rec RF (27MHz)	TR-10CA003T			
T7	Rec Mixer (10.695MHz)	TR-07MB008N			
T8	Rec Mixer (455kHz)	TR-07LA004N			
T9	Rec IF (455kHz)	TR-07LA005N			
T10	Rec IF (455kHz)	TR-07LA023N			

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA			NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
CH1	1.3A	.116	.48mH	LJ119H001Y ELA-16(1)	TR523		(1) Number on unit.

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA			NOTES
	PRI.	SEC.	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T11	32	1 8 2 128	TB-G25B001W ETA-66(1)			(1) Number on unit.

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP	3" PM, 8 Ohms	ZQ-A0770804 0770803(1)	30A05Z8R	(1) Number on unit.

PARTS LIST AND DESCRIPTION (CONTINUED)

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

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
	2A Quick Acting			AGC2	HDJ	312002	150145	FG2-2

MICROPHONE

ITEM No.	REPLACEMENT DATA				CONNECTION DATA						
	MFGR. PART No.	GC PART No.	GC NOISE CANCEL	GC POWER	GC CONNECTOR	GC Red	GC Shield	GC Yellow	GC Blue	GC White	GC Black
MIC	ZG-AAZ70116	18-032	18-034	18-010	18-105	1	3	2	5	NC	3

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
CF1	Filter	FB-R455A08M	455kHz
J1	Connector	YJ-C02S015Z	Antenna
J2	Jack	YJ-D05S008Z	Microphone
J3	Jack	YJ-T03S019Z	PA
J4	Jack	YJ-T03S019Z	External Speaker
J5	Jack	YJ-B02S007Z	DC Power
LED301	LED Display	QL-*SG2N72R	Channel Readout
M	Meter	ZM-J2030N06	S/Rf
PL1	Lamp		Meter
PL2	Lamp	ZP-A064101U	TX Indicator
S1	Switch		Power (Part of Volume Control)
S2	Switch	SS-020220ZL	PA/CB
SW1	Switch	SR-1940203W	Channel Selector
X1	Crystal	XA-S1B3001N	10.240MHz
X2	Crystal	XA-S1B3002N	10.695MHz
	Cord	AC-DC038GEA	DC Power
	Printed Circuit Board	AP-TSM040AA	Channel Switch
	Printed Circuit Board	AP-TL0028AA	LED
	Printed Circuit Board	AP-TBM078AA	Main

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

ITEM	PART No.	ITEM	PART No.
Chassis	MU-677SL016	Front Panel	MB-762SL014
Cover, Bottom	MU-773SX011	Escutcheon	AM-6204**01
Cover, Top	MU-773SX010	Knob, Channel	VN-286SB008
		Knob, Control	VN-276SB020

WIRING DATA

General-use Hook-up Wire (available in 5 colors)	BELDEN No. 8523	Coiled Microphone Cable	
Shielded Hook-up Wire (spiral wrapped)	BELDEN No. 8421	3-conductor (1 shielded)	23AWG BELDEN No. 9471 (5')
(braided)	BELDEN No. 8401		BELDEN No. 8497 (6')
Speaker Cable (available in 4 colors)	BELDEN No. 8782		BELDEN No. 9472 (7-1/2')
Bonding Strap	BELDEN No. 8672		28AWG BELDEN No. 9466 (6')
AC Power Cord	(6') BELDEN No. 17106		31AWG BELDEN No. 9468 (10')
	(9') BELDEN No. 17109	4-conductor (unshielded)	23AWG BELDEN No. 8415 (6')
		5-conductor (1 shielded)	28AWG BELDEN No. 9467 (6')
			BELDEN No. 9465 (7-1/2')

CHANNEL	CENTER FREQUENCY	LOWER FREQUENCY LIMIT	UPPER FREQUENCY LIMIT
1	26.965000	26.963651	to 26.966348
2	26.975000	26.973651	to 26.976348
3	26.985000	26.983650	to 26.986349
4	27.005000	27.003649	to 27.006350
5	27.015000	27.013649	to 27.016350
6	27.025000	27.023648	to 27.026351
7	27.035000	27.033648	to 27.036351
8	27.055000	27.053647	to 27.056352
9	27.065000	27.063646	to 27.066353
10	27.075000	27.073646	to 27.076353
11	27.085000	27.083645	to 27.086354
12	27.105000	27.103644	to 27.106355
13	27.115000	27.113644	to 27.116355
14	27.125000	27.123643	to 27.126356
15	27.135000	27.133643	to 27.136356
16	27.155000	27.153642	to 27.156357
17	27.165000	27.163641	to 27.166358
18	27.175000	27.173641	to 27.176358
19	27.185000	27.183640	to 27.186359
20	27.205000	27.203639	to 27.206360
21	27.215000	27.213639	to 27.216360
22	27.225000	27.223638	to 27.226361
23	27.255000	27.253637	to 27.256362
24	27.235000	27.233638	to 27.236361
25	27.245000	27.243637	to 27.246362
26	27.265000	27.263636	to 27.266363
27	27.275000	27.273636	to 27.276363
28	27.285000	27.283635	to 27.286364
29	27.295000	27.293635	to 27.296364
30	27.305000	27.303634	to 27.306365
31	27.315000	27.313634	to 27.316365
32	27.325000	27.323633	to 27.326366
33	27.335000	27.333633	to 27.336366
34	27.345000	27.343632	to 27.346367
35	27.355000	27.353632	to 27.356367
36	27.365000	27.363631	to 27.366368
37	27.375000	27.373631	to 27.376368
38	27.385000	27.383630	to 27.386369
39	27.395000	27.393630	to 27.396369
40	27.405000	27.403629	to 27.406370