



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.



MODEL 600

MANUFACTURER'S SPECIFICATIONS

GENERAL

Channel	: 40
Frequency range	: 26.965 MHz to 27.405 MHz.
Frequency tolerance	: 0.005%
Operation temperature range	: -30°C to + 50°C
Microphone	: Dynamic with Push-to-Talk button
Input voltage	: 13.8V DC
Current drain	: Transmit : AM full mod. 1.5A Receive : 1.2A Max. audio output 0.3A stand-by (no signal)
Size	: 8 1/2" L x 6-7/8" ± x 2 1/4" H.
Weight	: 5 1/2 pounds.
Antenna	: 50 ohms, unbalanced.
Semiconductor	: 20 Transistors, 26 Diodes.
Integrated Circuit	: 4
Meter	: Illuminated indicates receiving signal strength wave relative power output and Standing Ratio.

RECEIVER

Sensitivity	: 1uV for 10dB S + N/N
Selectivity	: 6dB at 4KHz, 40dB at 40KHz.
Image rejection	: 30 dB
IF frequency	: 1st IF : 10.695 MHz 2nd IF : 455Khz
Squelch	: Adjustable
Audio output power	: 2.5 watts into 8 ohms.
Frequency response	: 300 — 3,000Hz
Built in speaker	: 8 ohms
External speaker	: 8 ohms.

TRANSMITTER

Power	: 4 Watts Max.
Frequency response	: 300 to 3,000Hz
Modulation	: Less than 100%

LAKE MODEL 600

Courtesy of the Manufacturer

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

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9CE1045

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.
 Connect Microphone.

Suggested Alignment Tools:

GC ELECTRONICS:

PLL1 thru PLL6, TX1, PT25, RX1, RX2.....9440
 RX3 thru RX7.....5000, 5009, 8276, 8728, 9089
 LC202, LC203, LC204.....9440

SYNTHESIZER ALIGNMENT

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of frequency counter to TP4 (Q2 emitter).	Ch. 19	PT25	Adjust for 10.240MHz.
Input of oscilloscope to TP5 (PLL2 secondary).	Ch. 19	PLL2	Adjust for maximum RF (60mV p-p typical). (See Figure 1.)
Input of DC meter to TP2 (IC1 Pin 7).	Ch. 1	PLL1	Adjust for 3.50 volts. Check for approximately 2.00 volts on channel 40.
Input of frequency counter to TP1 (IC1 Pin 2).	Ch. 1		Check for 3.300MHz. Check all channels. (See Truth Chart for correct frequencies.)
Input of oscilloscope to TP3. (High side of PLL4).	Ch. 19	PLL3, PLL4	Adjust for maximum RF (100mV p-p typical). (See Figure 2.)
Input of frequency counter to TP3. (High side of PLL4).	Ch. 1		Check for 37.660MHz. Check all channels. (See Truth Chart for correct frequencies.)
Input of frequency counter to TP7 (IC3 Pin 9).	Ch. 1 XMT		Check for 26.965MHz. If necessary readjust PT25 for correct frequency. Check all channels. (See page 4 for channel frequencies.)

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. Preset controls as follows, unless otherwise noted: Squelch MINIMUM, RF Gain Maximum, NB/ANL ANL.

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator to TP6 (Q10 emitter). 455kHz, 1000Hz @ 30% modulation.	Ch. 19	RX7, RX6, RX5	Adjust for maximum audio output.
Output of signal generator to antenna input. 27.185MHz, 1000Hz @ 30% modulation.	Ch. 19	RX4, RX3, RX2, RX1	Adjust for maximum audio output. Readjust RX5, RX6, and RX7 for maximum.

RECEIVER ADJUSTMENTS

Connect an AC VTVM or AF wattmeter across speaker voice coil.
Adjust volume control to obtain a suitable indication.
Preset controls as follows, unless otherwise noted. Squelch MINIMUM, RF Gain Maximum,
NB/ANL ANL.

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator to antenna input. 27.185MHz, 1000Hz @ 30% modulation. Output 1000uV.	Ch. 19 Squelch Maximum	VR1	SQUELCH RANGE Adjust so squelch just breaks.
Output of signal generator to antenna input. 27.185MHz, 1000Hz @ 30% modulation. Output 100uV.	Ch. 19	VR3	SIGNAL METER Adjust for 9 on SIGNAL scale of meter.

TRANSMITTER ALIGNMENT

Connect a 50-ohm, 25-2att 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
Input of RF wattmeter to antenna input. Inject a 1000Hz, 20mV audio signal at mic input.	Ch. 19 XMT	PLL5, PLL6, TX1, LC202, LC203	Adjust for maximum RF output and envelope distortion.
Input of RF wattmeter to antenna input.	Ch. 19 XMT	LC204	Adjust for 4.0 watts RF output maximum.

TRANSMITTER ADJUSTMENTS

Connect a 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
Input of oscilloscope or modulation meter to antenna input. Inject a 1000Hz, 20mV audio signal at mic input.	Ch. 19 XMT	VR2	AMC Adjust for 100% modulation maximum. (See Figure 3.)
Input of RF wattmeter to antenna input.	Ch. 19 XMT	VR4	RF METER At 4.0 watts RF output adjust so needle rests at leading edge of red area on RF scale of meter.

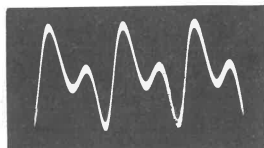


FIGURE 1

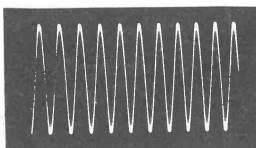


FIGURE 2

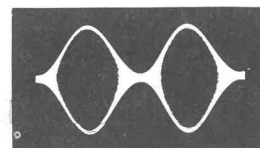
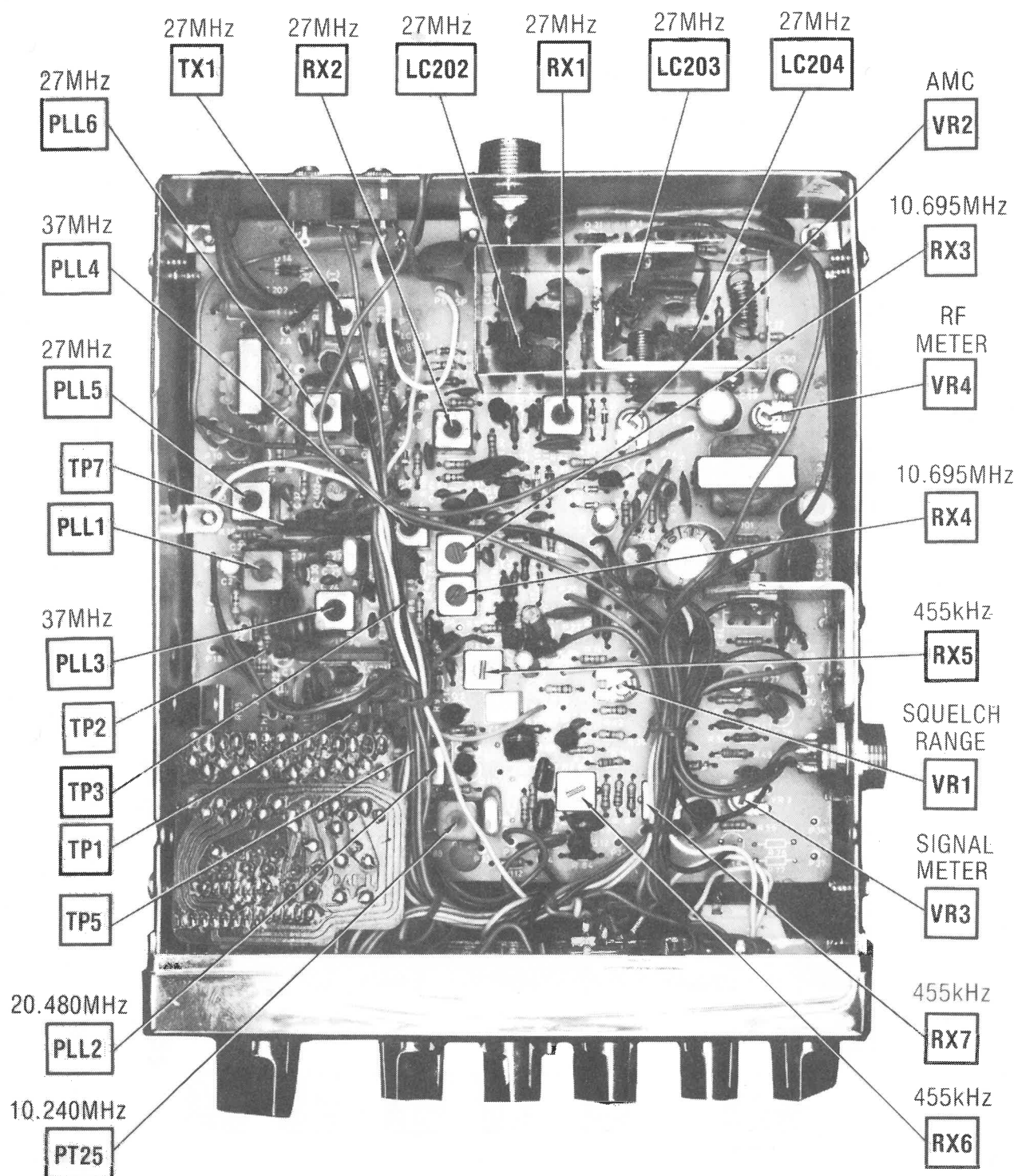


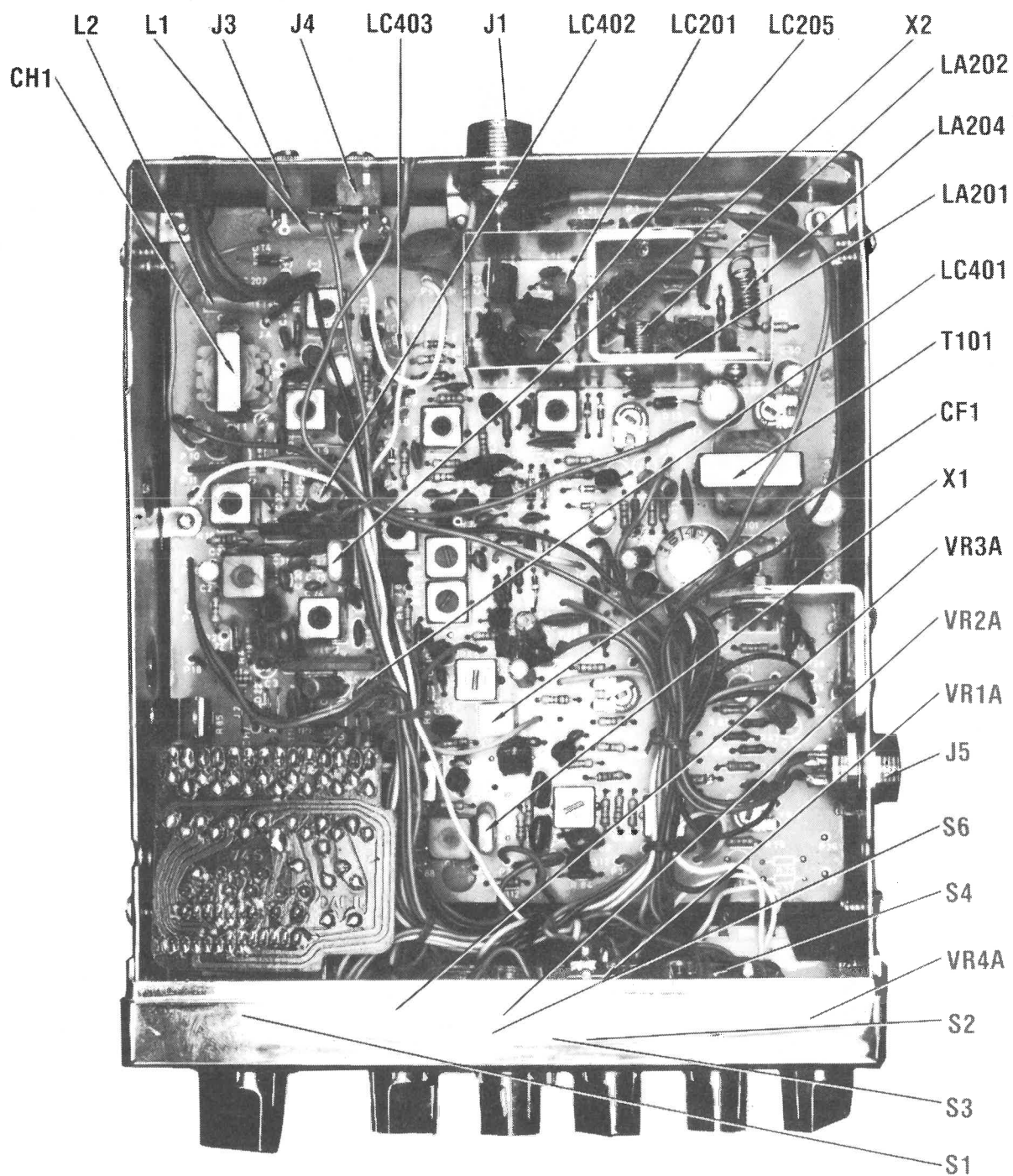
FIGURE 3

TRUTH CHART

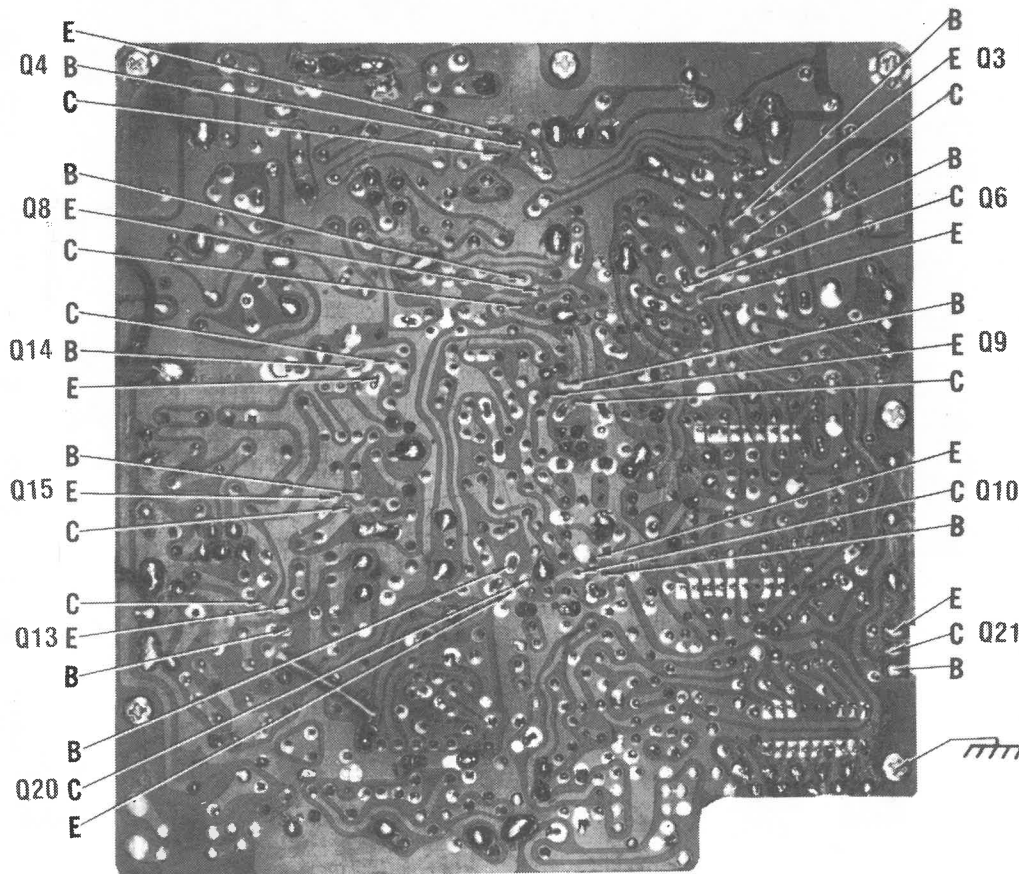
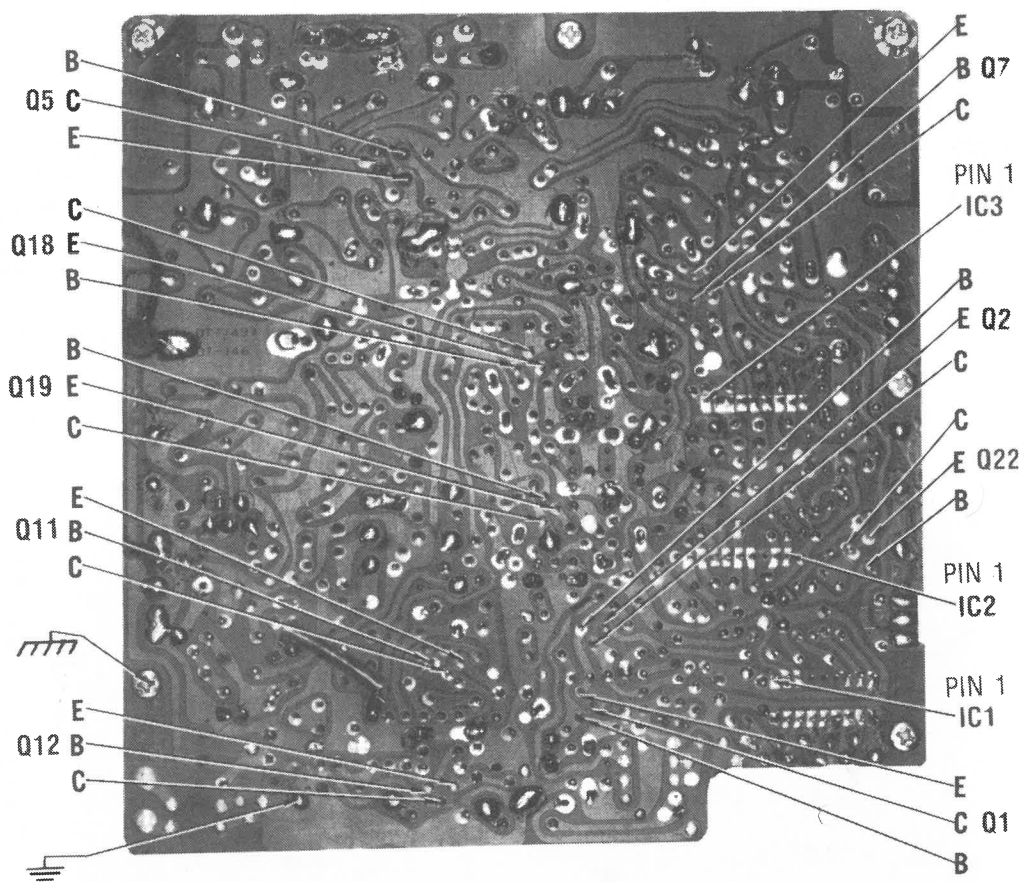
CHANNEL	1 = 6.03 Volts 0 = 0 Volts CHANNEL INPUT CODES								DIVIDER INPUT IN MHz AT TP1	REC and XMT SYNTH IN MHz AT TP3	
	IC1 PINS										
	11	12	13	14	15	16	17				
1	1	0	0	1	0	1	0		3.300	37.660	
2	1	0	0	1	0	0	1		3.290	37.670	
3	1	0	0	1	0	0	0		3.280	37.680	
4	1	0	0	0	1	1	0		3.260	37.700	
5	1	0	0	0	1	0	1		3.250	37.710	
6	1	0	0	0	1	0	0		3.240	37.720	
7	1	0	0	0	0	1	1		3.230	37.730	
8	1	0	0	0	0	0	1		3.210	37.750	
9	1	0	0	0	0	0	0		3.200	37.760	
10	0	1	1	1	1	1	1		3.190	37.770	
11	0	1	1	1	1	1	0		3.180	37.780	
12	0	1	1	1	1	0	0		3.160	37.800	
13	0	1	1	1	0	1	1		3.150	37.810	
14	0	1	1	1	0	1	0		3.140	37.820	
15	0	1	1	1	0	0	1		3.130	37.830	
16	0	1	1	0	1	1	1		3.110	37.850	
17	0	1	1	0	1	1	0		3.100	37.860	
18	0	1	1	0	1	0	1		3.090	37.870	
19	0	1	1	0	1	0	0		3.080	37.880	
20	0	1	1	0	0	1	0		3.060	37.900	
21	0	1	1	0	0	0	1		3.050	37.910	
22	0	1	1	0	0	0	0		3.040	37.920	
23	0	1	0	1	1	0	1		3.010	37.950	
24	0	1	0	1	1	1	1		3.030	37.930	
25	0	1	0	1	1	1	0		3.020	37.940	
26	0	1	0	1	1	0	0		3.000	37.960	
27	0	1	0	1	0	1	1		2.990	37.970	
28	0	1	0	1	0	1	0		2.980	37.980	
29	0	1	0	1	0	0	1		2.970	37.990	
30	0	1	0	1	0	0	0		2.960	38.000	
31	0	1	0	0	1	1	1		2.950	38.010	
32	0	1	0	0	1	1	0		2.940	38.020	
33	0	1	0	0	1	0	1		2.930	38.030	
34	0	1	0	0	1	0	0		2.920	38.040	
35	0	1	0	0	0	1	1		2.910	38.050	
36	0	1	0	0	0	1	0		2.900	38.060	
37	0	1	0	0	0	0	1		2.890	38.070	
38	0	1	0	0	0	0	0		2.880	38.080	
39	0	0	1	1	1	1	1		2.870	38.090	
40	0	0	1	1	1	1	0		2.860	38.100	



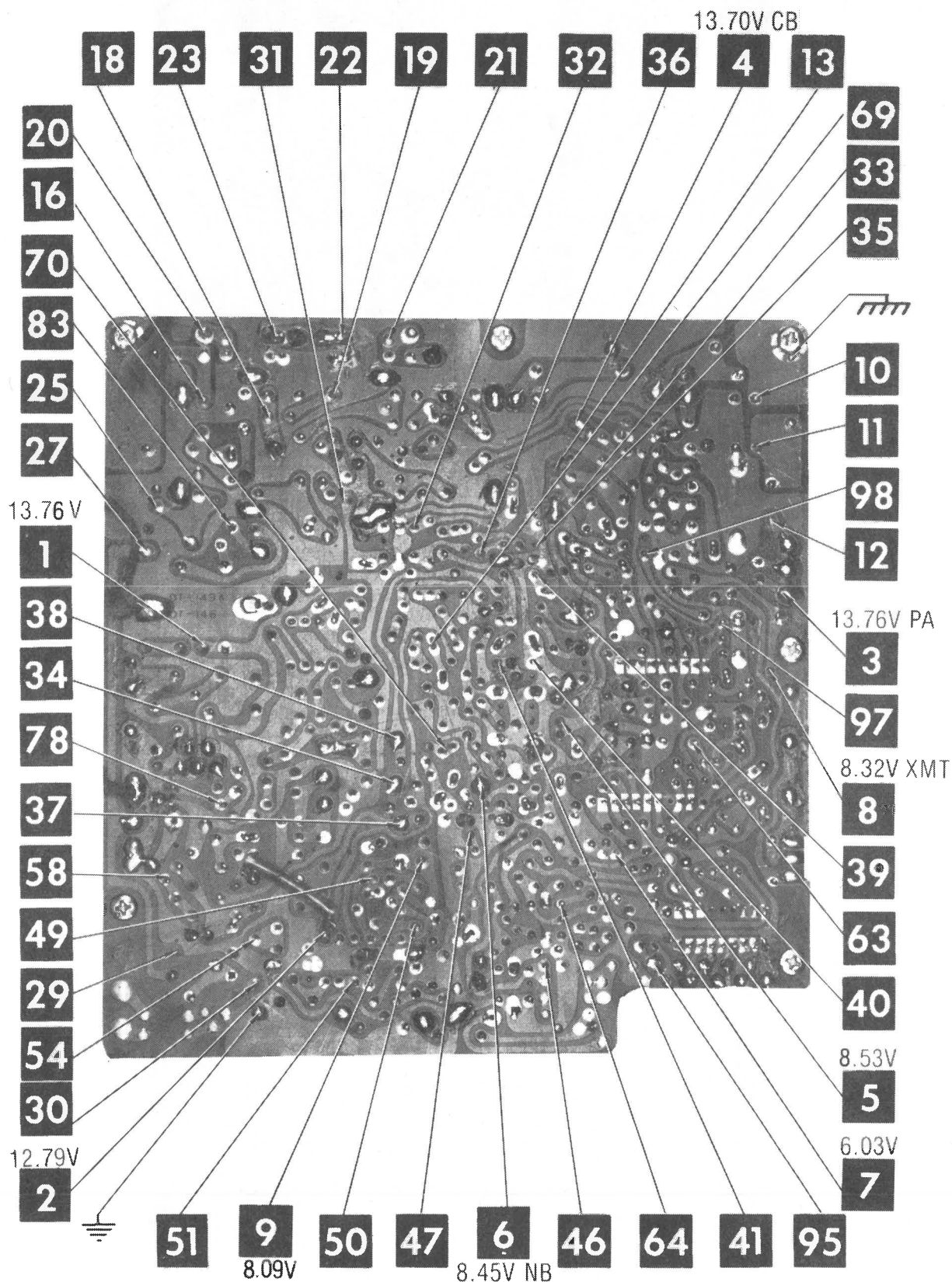
CHASSIS - BOTTOM



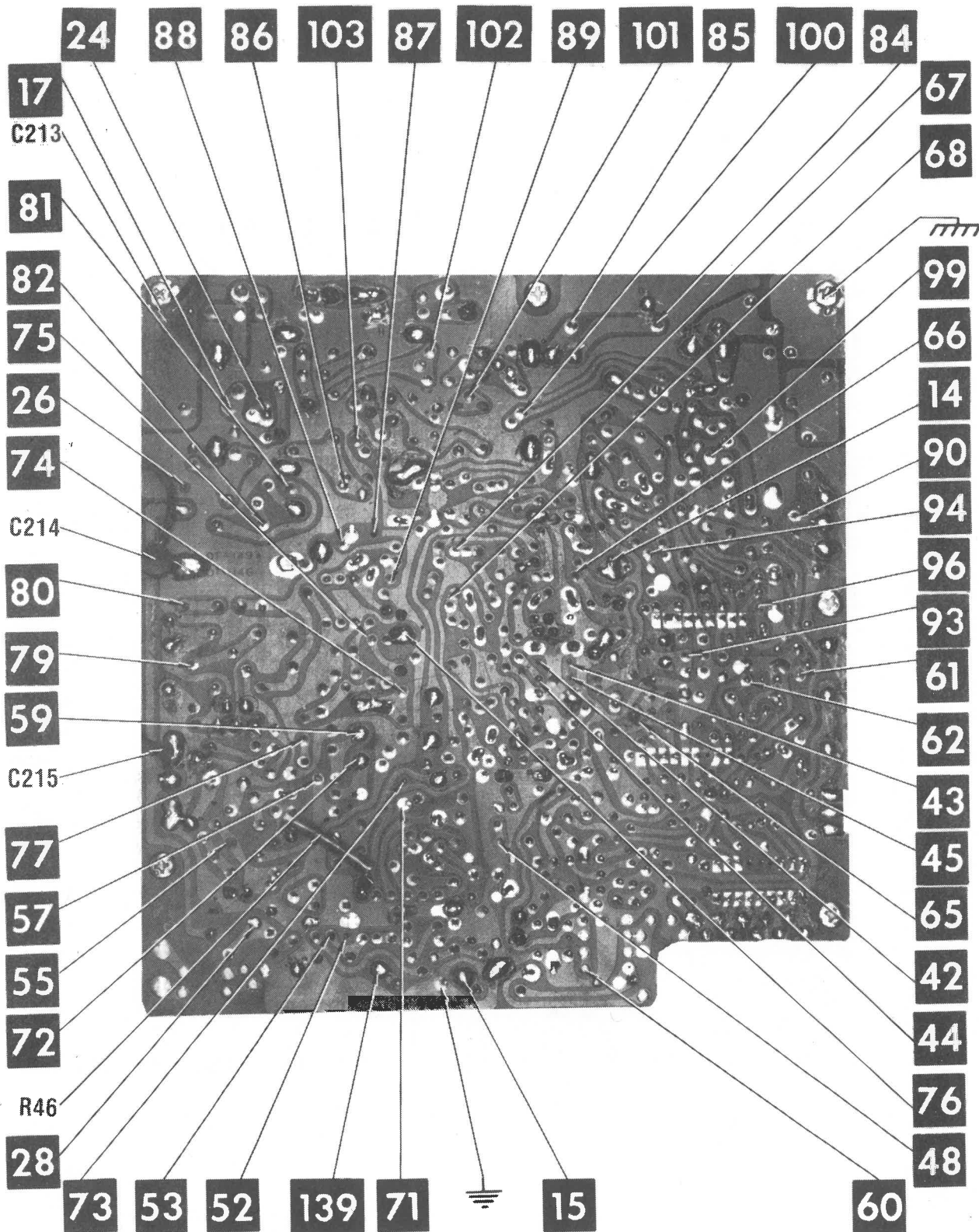
CHASSIS - BOTTOM



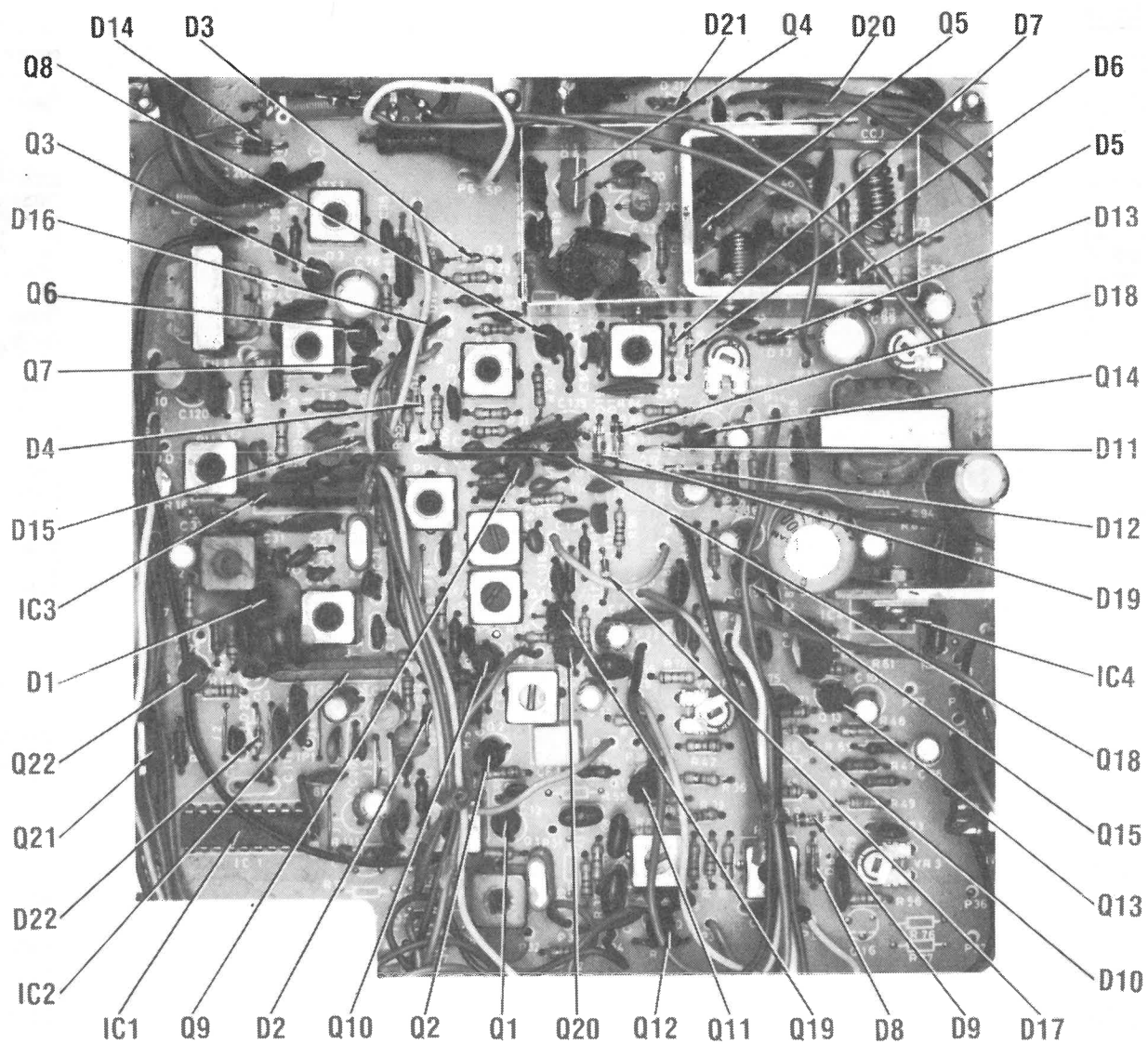
MAIN BOARD



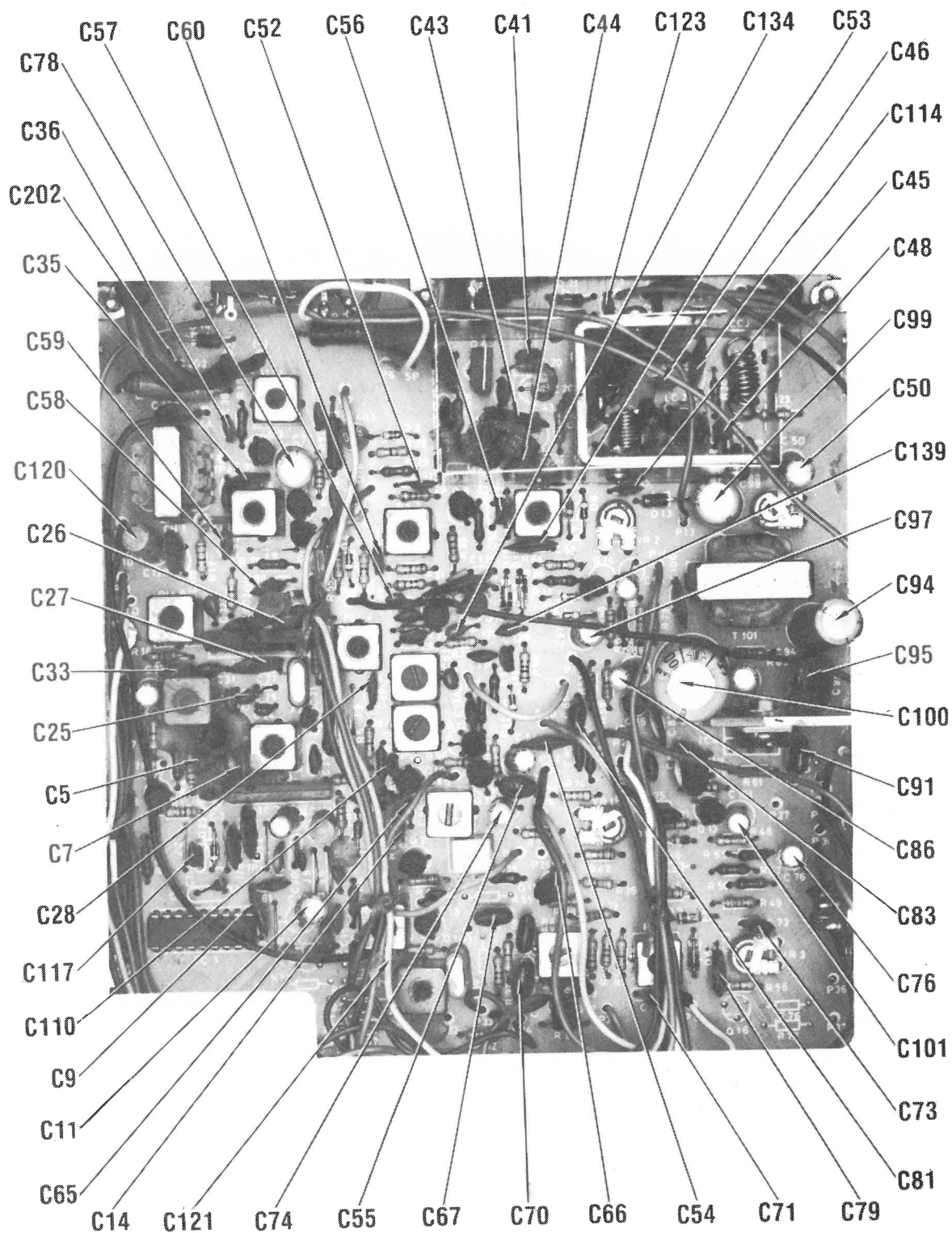
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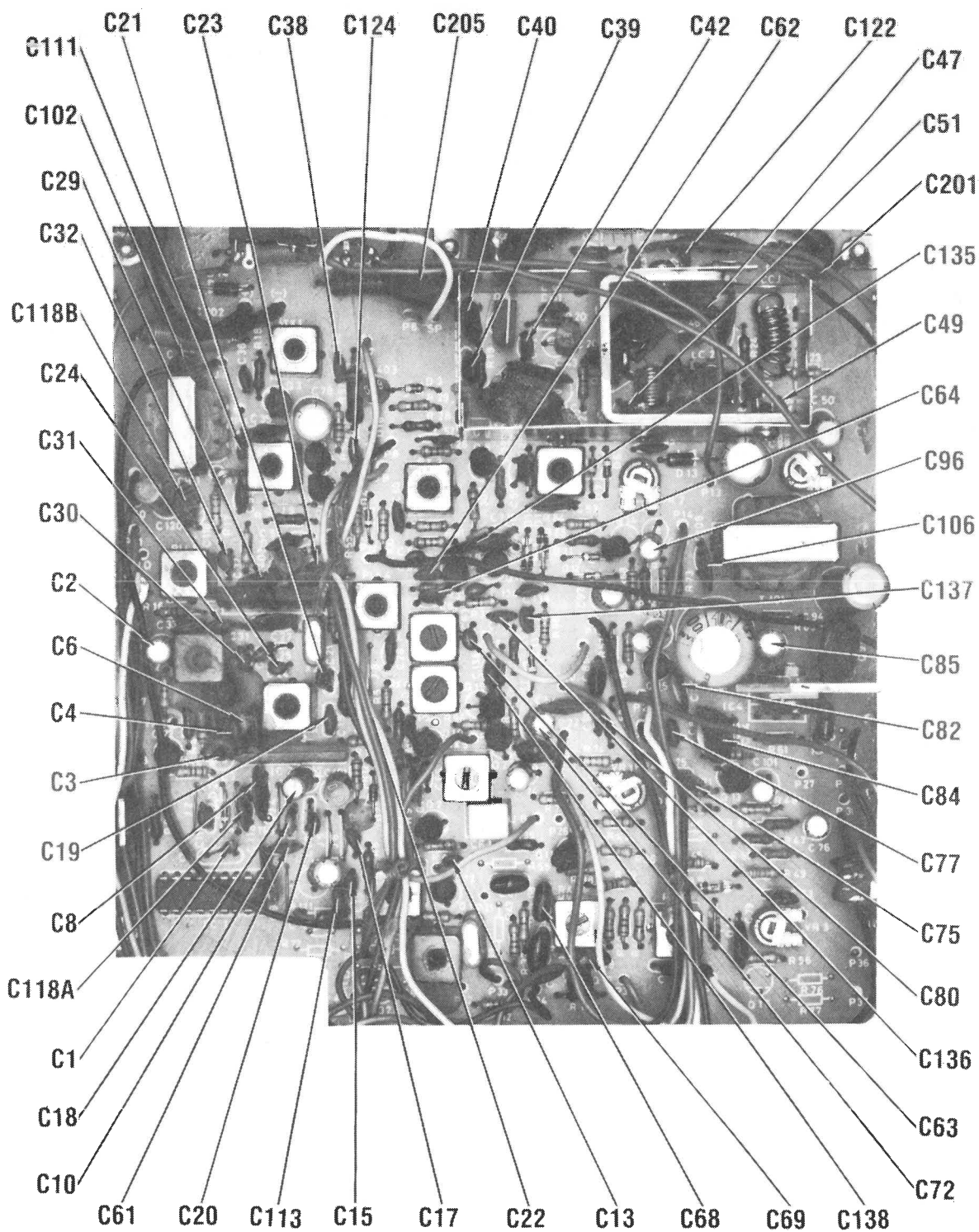
MAIN BOARD



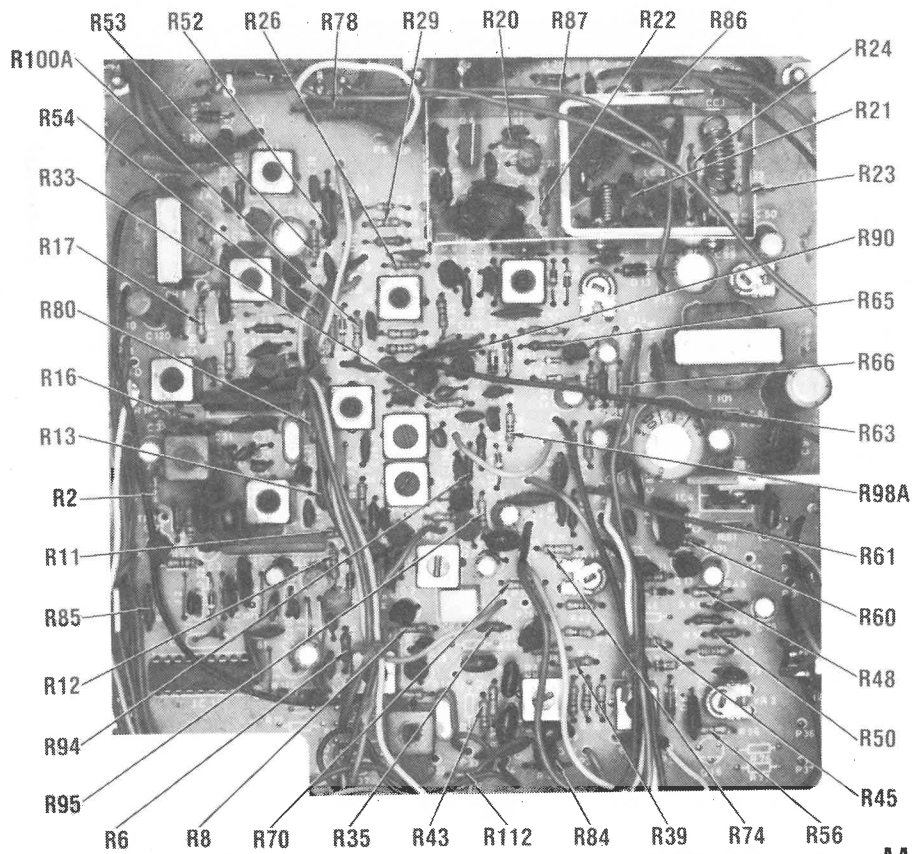
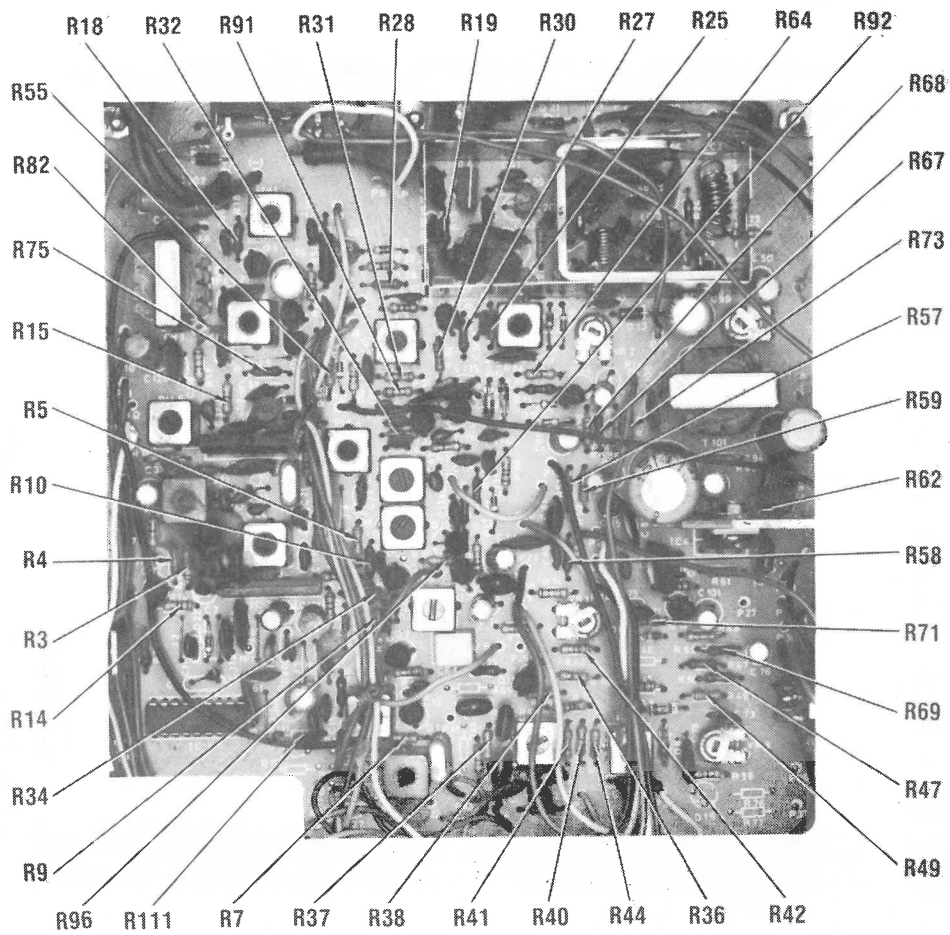
MAIN BOARD



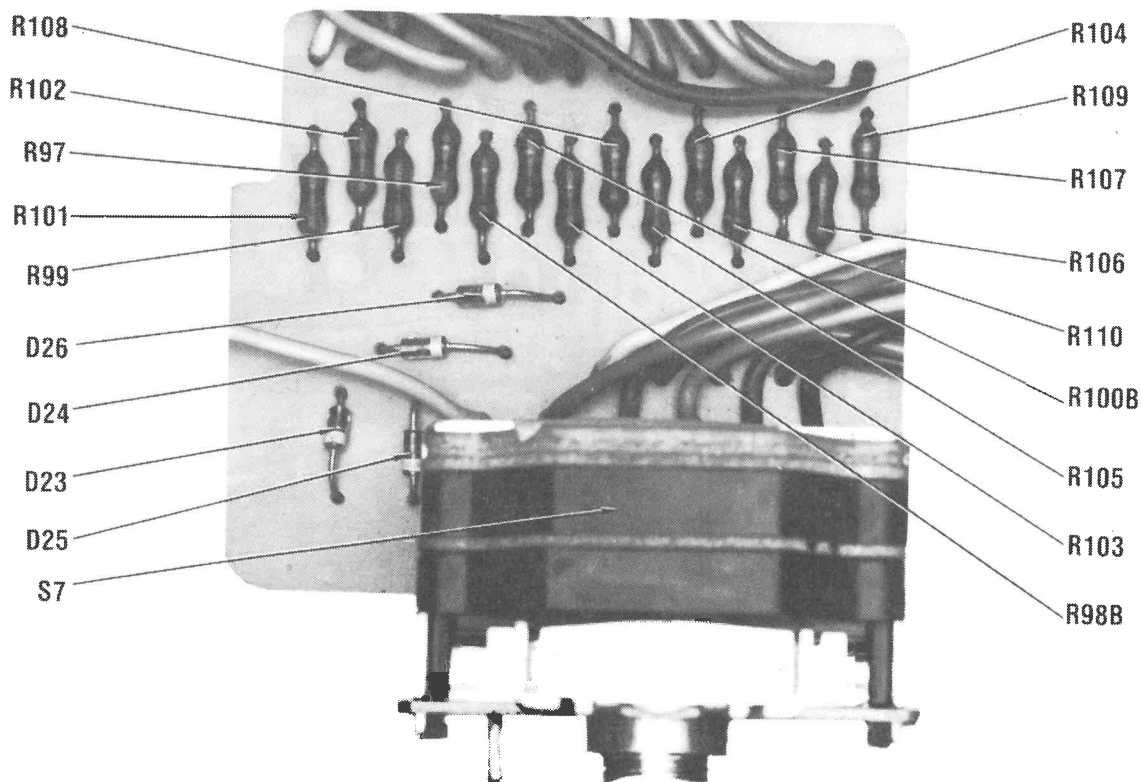
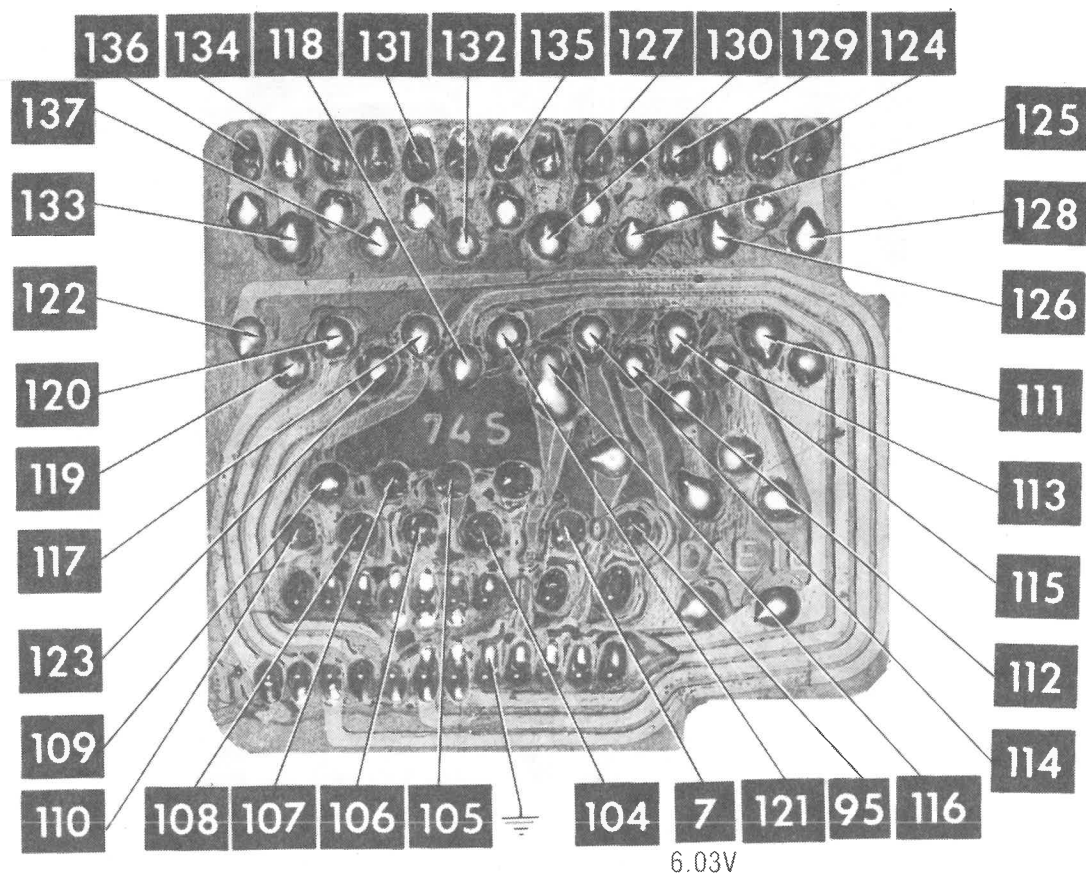
MAIN BOARD



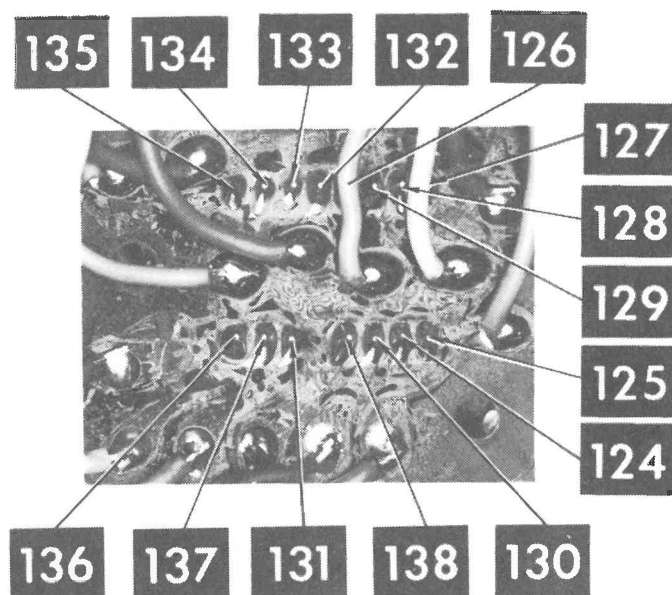
MAIN BOARD



MAIN BOARD

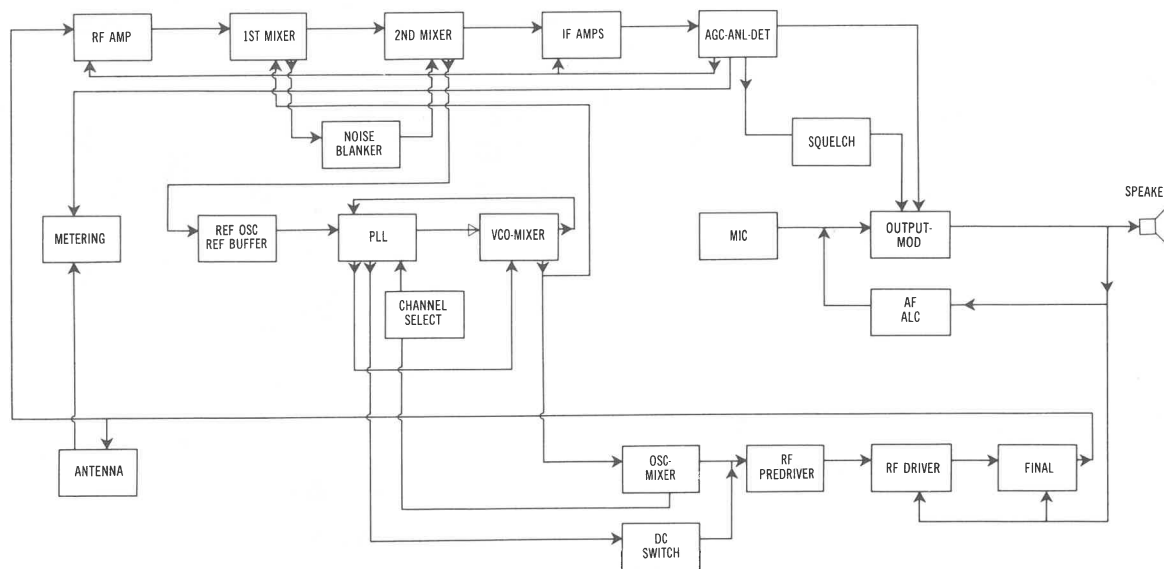


CHANNEL SELECTOR BOARD

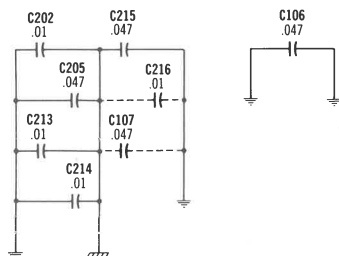
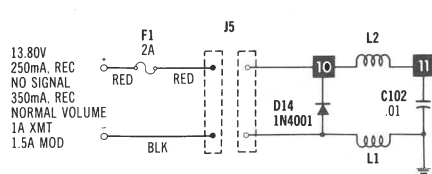


LED BOARD

LAKE MODEL 600



BLOCK DIAGRAM



TERMINAL GUIDE



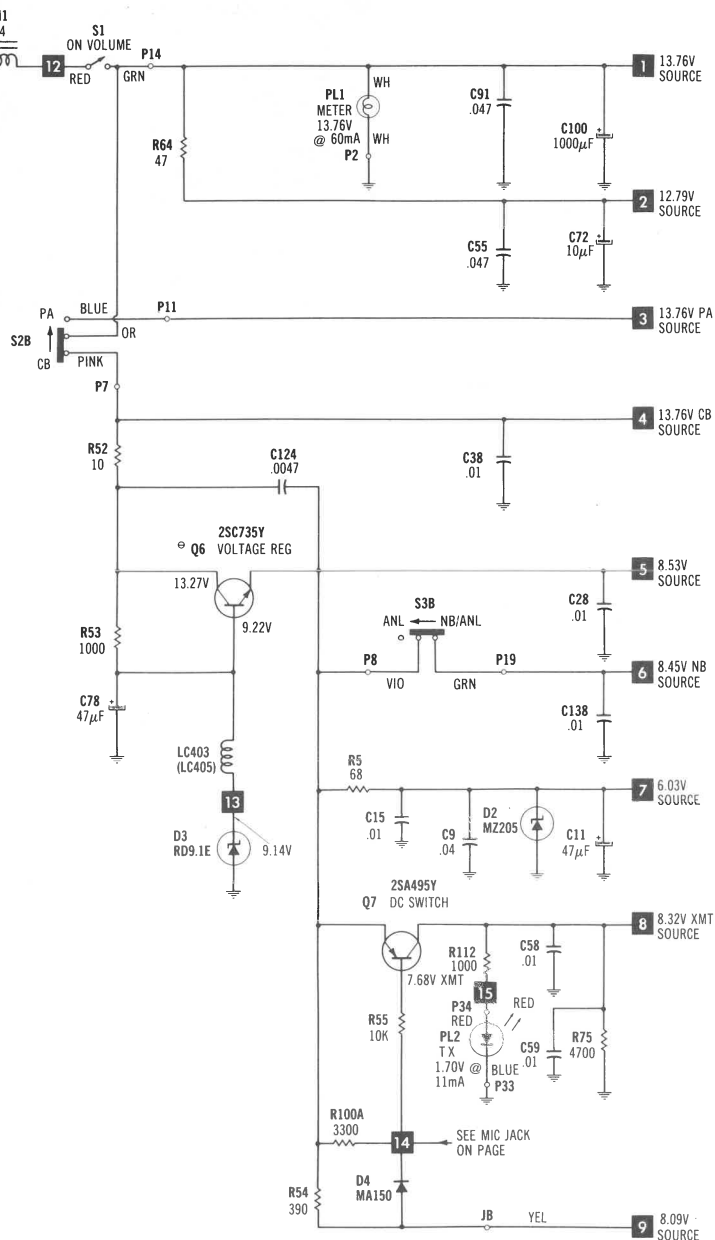
- X— Circuitry not used in some versions.
 - Circuitry used in some versions.
 - ⊗ Nominal value ▽ Common tie point
 - ⊥ Ground
 - ⏏ Chassis
 - ⊙ See parts list
- Waveforms and Voltages taken in Channel 19 with switching in receive unless noted.
 Item numbers in rectangles appear in the alignment/adjustment instructions.
 Supply voltage maintained as shown at input.
 Voltages measured with digital meter, no signal.
 Controls adjusted for normal operation.
 Terminal identification may not be found on unit.
 Resistors are 1/2W or less, 5% unless noted.
 Value in () used in some versions.
 Arrow head(s) at coils and transformers indicates accessibility of tuning slug(s).

A PHOTOFAC STANDARD NOTATION SCHEMATIC

WITH **CIRCUITRACE**

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POWER SUPPLY SCHEMATIC



MAIN SCHEMATIC

PARTS LIST AND DESCRIPTION (CONTINUED)

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

WIRING DATA

Cable (Speaker)(Unshielded).....	Use BELDEN No. 8782 (AWG24)(4 colors)
Shielding Strap.....	Use BELDEN No. 8660 (3/16" width)
Hook-up Wire (General Use).....	Use BELDEN No. 8524 (AWG22)(13 colors)
Hook-up Wire (Shielded).....	Use BELDEN No. 8401 (Braided Shield)(1 conductor)(AWG25)
	Use BELDEN No. 8421 (Spiral Shield)(1 conductor)(AWG25)
	Use BELDEN No. 8737 (Spiral Shield)(2 conductor)(AWG22)
Microphone Cable (Coiled).....	Use BELDEN No. 8491 (4 conductor-2 shielded)(6 ft.)(AWG23)

SEMICONDUCTORS (Select replacement transistor for best results)

ITEM No.	TYPE No.	MFR. PART No.	REPLACEMENT DATA							
			GENERAL ELECTRIC PART No.	MALLORY PART No.	RAYTHEON PART No.	RCA PART No.	SYLVANIA PART No.	THORDARSON PART No.	WORKMAN PART No.	ZENITH PART No.
D1	SC-20	603000002	GE-90		REN 614		ECG614	TM614	WEP200	103-219
D2	MZ205	601100002		ZM5.1B		SK3776/5010	ECG5010	TM5010	WEP1411	103-279-10
D3	MA1062	601100001	GE-300	ZM6.2B	REN 177	SK3779/5013	ECG5013	TM5013	WEP1414	103-279-18
	RD9.1E			ZM9.1B		SK3784/5018	ECG5018	TM5018	WEP1419	
D4	MA1091	601100001	GE-300	ZM9.1B	REN 177	SK3784/5018	ECG5018	TM5018	WEP1419	103-279-18
D5	MA150	6000000150	GE-300	PTC214	REN 109	SK3175/177	ECG177	TM177	WEP1062	103-131
D6	MA150	600000060	GE-300	PTC206	REN 109	SK3088	ECG109	TM109/**	WEP134	103-Z9001
D7	MA150	6000000150	GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062	103-131
D8	MA150	600000060	GE-300	PTC206	REN 109	SK3088	ECG109	TM109/**	WEP134	103-Z9001
D9	MA150	600000060	GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062	103-131
D10	MA150	6000000150	GE-300	PTC206	REN 109	SK3088	ECG109	TM109/**	WEP134	103-Z9001
D11	MA150	6000000150	GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062	103-131
D12	MA150	6000000150	GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062	103-131
D13	V06C	602000002	GE-504A	PTC201	REN 116	SK3311	ECG116	TM116	WEP156	212-76-02
D14	1N4001	602000002	GE-504A	PTC201	REN 116	SK3311	ECG116	TM116	WEP156	212-76-02
	10D1		GE-504A	PTC201	REN 116	SK3311	ECG116	TM116	WEP156	212-76-02
D15	MA150	6000000150	GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062	103-131
D16	MA150	6000000150	GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062	103-131
D17	MA150	6000000150	GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062	103-131
D18	MA150	600000060	GE-300	PTC206	REN 109	SK3088	ECG109	TM109/**	WEP134	103-Z9001
D19	MA150	600000060	GE-300	PTC206	REN 109	SK3088	ECG109	TM109/**	WEP134	103-Z9001
D20	MA150	600000060	GE-300	PTC206	REN 109	SK3088	ECG109	TM109/**	WEP134	103-Z9001
D21	MA150	600000060	GE-300	PTC206	REN 109	SK3088	ECG109	TM109/**	WEP134	103-Z9001
D22	MA150	6000000150	GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062	103-131
D23	1S953	6000000150	GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062	103-131
D24	MA150	6000000150	GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062	103-131
	1S953		GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062	103-131
D25	MA150	6000000150	GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062	103-131
D26	1S953	6000000150	GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062	103-131
IC1	MA150	6000000150	GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062	103-131
IC1	MC145106P	640000001								
IC2	MM55126N	640000002			REN 1192	SK3445/1192	ECG1192	TM1192	WEP2120	
IC2	AN103-0	640000002			REN 1192	SK3445/1192	ECG1192	TM1192	WEP2120	
IC3	TA7310P	640000002			REN 1192	SK3445/1192	ECG1192	TM1192	WEP2120	
IC3	AN103-0	640000002			REN 1192	SK3445/1192	ECG1192	TM1192	WEP2120	
IC4	LM383T	640000003				SK3852/1232	ECG1232	TM1232	WEP2150	
Q1	LM383	632037218	GE-61*	PTC121*	REN 123A*	SK3245/199	ECG123*	TM123A*/**	WEP372	121-Z9000A*
Q2	2SC372Y	632037218	GE-61*	PTC121*	REN 123A*	SK3245/199	ECG123*	TM123A*/**	WEP372	121-Z9000A*
Q3	2SC829	632037218	GE-20*	PTC139*	REN 229*	SK3122	ECG229*	TM229*/**	WEP829	121-Z9000A*
Q4	2SC372Y	632037218	GE-61*	PTC121*	REN 123A*	SK3245/199	ECG123A*	TM123A*/**	WEP372	121-Z9000A*
Q4	NCB1V14	632000001	GE-270	PTC180	REN 295	SK3253/295	ECG295	TM295	WEP913	121-880
Q5	2SC1957	632000002	GE-270	PTC180	REN 295	SK3253/295	ECG295	TM295	WEP913	121-880
Q5	NCB1J35	632000002	GE-215	PTC186	REN 235	SK3239/236	ECG235	TM235/**	WEP785	121-Z9039
Q6	2SC1306	632073518	GE-215	PTC186	REN 235	SK3239/236	ECG235	TM235/**	WEP785	121-Z9039
Q7	2SC735Y	632073518	GE-210	PTC123*	REN 289	SK3122	ECG289	TM289/**	WEP735A	121-Z9014
Q7	2SC1318	632049518	GE-221*	PTC103*	REN 159*	SK3114/290	ECG159*	TM159*/**	WEP495	121-Z9003
Q8	2SA495Y	632039418	GE-61*	PTC121*	REN 229*	SK3124/289	ECG229*	TM229*	WEP394	121-Z9021
Q8	2SC394Y	632039418	GE-20*	PTC139*	REN 229*	SK3122	ECG229*	TM229*/**	WEP829	121-Z9000A*
Q9	2SC829	632039418	GE-61*	PTC121*	REN 229*	SK3124/289	ECG229*	TM229*	WEP394	121-Z9021
Q9	2SC394Y	632039418	GE-20*	PTC139*	REN 229*	SK3122	ECG229*	TM229*/**	WEP829	121-Z9000A*
Q10	2SC372Y	632037218	GE-61*	PTC121*	REN 123A*	SK3245/199	ECG123A*	TM123A*/**	WEP372	121-Z9000A*
Q11	2SC829	632037218	GE-20*	PTC139*	REN 229*	SK3122	ECG229*	TM229*/**	WEP829	121-Z9000A*
Q11	2SC372Y	632037218	GE-61*	PTC121*	REN 123A*	SK3245/199	ECG123A*	TM123A*/**	WEP372	121-Z9000A*
Q12	2SC372Y	632037218	GE-61*	PTC121*	REN 123A*	SK3245/199	ECG123A*	TM123A*/**	WEP372	121-Z9000A*
Q13	2SC945	632037218	GE-212	PTC121*	REN 199	SK3124/289	ECG199	TM199/**	WEP1945	121-972
Q14	2SA564S	632049514	GE-65	PTC103*	REN 234	SK3247/234	ECG234	TM234	WEP564	121-879
Q14	2SA495Y	632049514	GE-221*	PTC103*	REN 159*	SK3114/290	ECG159*	TM159*/**	WEP495	121-Z9003
Q15	2SC372Y	632037218	GE-61*	PTC121*	REN 123A*	SK3245/199	ECG123A*	TM123A*/**	WEP372	121-Z9000A*
Q18	2SC372Y	632037218	GE-61*	PTC121*	REN 123A*	SK3245/199	ECG123A*	TM123A*/**	WEP372	121-Z9000A*
Q19	2SA495Y	632049518	GE-221*	PTC103*	REN 159*	SK3114/290	ECG159*	TM159*/**	WEP495	121-Z9003
Q20	2SA564	632027218	GE-65	PTC103*	REN 234	SK3247/234	ECG234	TM234	WEP564	121-879
Q21	2SC372Y	632027218	GE-61*	PTC121*	REN 123A*	SK3245/199	ECG123A*	TM123A*/**	WEP372	121-Z9000A*
Q21	2SC1173-0	630000003	GE-215	PTC110	REN 236	SK3197/235	ECG236	TM236/**	WEP745	121-Z9040
Q22	2SC1173	630000003	GE-215	PTC110	REN 236	SK3197/235	ECG236	TM236/**	WEP745	121-Z9040
Q22	2SC372Y	632037218	GE-61*	PTC121*	REN 123A*	SK3245/199	ECG123A*	TM123A*/**	WEP372	121-Z9000A*
Q22	2SC900	632037218	GE-62	PTC139*	REN 199	SK3250/315	ECG199	TM199/**	WEP66	121-972

* Lead configuration may vary from original.
/** Also available as exact type replacement.

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 50V	820,011,228	PC10-25	TDC104M050EL	QDT1-2	SD50-R109
C2	10 16V	820,051,470		VTT10B25	QV1-41	EV-1222
C3	.22 50V	820,011,339	PC50-16	TDC224M050EL	QDT1-10	SD50-R229
C11	47 10V	820,041,100		VTT47D16	QV1-73	EV-1226
C18	1 50V	820,011,109	PC1-50	VTT1A50	QV1-11	EV-1615
C50	33 6.3	820,041,470	PC30-25	VTT33D25	QV1-63	EV-1325
C72	10 16V	820,051,470	PC10-25	VTT10B25	QV1-41	EV-1222
C74	3.3 50V	820,031,470	PC5-50	VTT3R3A50	QV1-25	EV-1618.1
C76	1 50V	820,011,109	PC1-50	VTT1A50	QV1-11	EV-1615
C78	47 16V	820,041,330	PC50-16	VTT47D16	QV1-73	EV-1226
C85	47 10V	820,041,100	PC50-16	VTT47D16	QV1-73	EV-1226
C86	1 50V	820,011,109	PC1-50	VTT1A50	QV1-11	EV-1615
C94	220 16V	820,041,221	PC250-25	VTT220H16	QV1-117	EV-1240
C96	3.3 50V	820,031,470	PC5-50	VTT3R3A50	QV1-25	EV-1618.1
C97	47 10V	820,041,100	PC50-16	VTT47D16	QV1-73	EV-1226
C99	47 25V	820,041,221	PC50-25	VTT47E25	QV1-77	EV-1426.1
C100	1000 16V	820,041,102	PC1000-16	VTT1000L16	QV1-183	EV-1261
C101	1 50V	820,011,109	PC1-50	VTT1A50	QV1-11	EV-1615
C120	33 16V	820,041,330	PC30-25	VTT33D25	QV1-63	EV-1325

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
C4	68	730,024,220		NP068	CN0468		10TCC-Q68
C5	.01				MAG5011		
C6	22 N220						
C7	330			GP330	GP333		10TCR-Q22
C8	150 N150 10%						10TS-T33
C9	.04				GP140		10TCP-T15
C10	47 N220 5%						56A-S40
C13	.001						10TCR-Q47
C14	68			GP1000	GP210	QC2-81	56A-D10
C15	.01			NP068	CN0468		10TCC-Q68
C17	47			CN0447			
C19	.001		NP047	GP210	QC2-81	10TCC-Q47	
C20	.001 10% 50V		DPMS6D1	EWF1A210	QF1-1	56A-D10	
C21	.001 10% 50V		DPMS6D1	EWF1A210	QF1-1	1PB-D10	
C22	2		NP02P2	CN0522		10TCC-V22	
C23	7		NP06P8	CN0568		10TCC-V68	
C24	33		NP033	CN0433		10TCC-Q33	
C25	4		NP04P7	CN0547		10TCC-V47	
C26	330		GP330	GP333		10TS-T33	
C27	390		GP330	GP390		10TS-T39	
C28	.01			MAG5011			
C29	68 NPO 10%		NP068	CN0468		10TCC-Q68	
C30	56			CN0456		10TCC-Q56	
C31	.01			MAG5011			
C32	2		NP02P2	CN0522		10TCC-V22	
C33	.01			MAG5011			
C35	68 NPO 10%		NP068	CN0468	QC2-81	10TCC-Q68	
C36	.001		GP1000	GP210		56A-D10	
C38	.01			MAG5011			
C39	.01			MAG5011			
C40	330		GP330	GP333		10TS-T33	
C41	.01			MAG5011			
C42	120			CN0312		10TCC-T12	
C43	220 NPO 10%					10TCC-T22	
C44	120					10TCC-T12	
C45	.01			CN0312			
C46	120			MAG5011		10TCC-T12	
C47	270		GP270	GP327		10TS-T27	
C48	2		NP02P2	CN0522		10TCC-V22	
C49	.0047		GP4700	GP247		56A-D47	
C51	27			CN0427		10TCC-Q27	
C52	.01			MAG5011			
C53	.047			MAG2515		HY-735	
C54	.047			MAG2515		HY-735	
C55	.047 10% 50V		DPMS2547	EWF1A147	QF1-171	1PB-S47	
C56	.01			MAG5011			
C57	10		NP010	CN0410		10TCC-Q10	
C58	.01			MAG5011			
C59	.01			MAG5011			
C60	.01			MAG5011			
C62	.01			MAG5011			
C63	2		NP02P2	CN0522		10TCC-V22	
C64	.01			MAG5011			
C65	18			CN0418		10TCC-Q18	
C66	2		NP02P2	CN0522		10TCC-V22	
C67	.047 10% 50V		DPMS2547	EWF1A147	QF1-171	1PB-S47	
C68	.047 10% 50V		DPMS2547	EWF1A147	QF1-171	1PB-S47	
C69	.047 10% 50V		DPMS2547	EWF1A147	QF1-171	1PB-S47	
C70	.047 10% 50V		DPMS2547	EWF1A147	QF1-171	1PB-S47	
C71	.047 10% 50V		DPMS2547	EWF1A147	QF1-171	1PB-S47	
C73	.0068 10% 50V		WMF1D68	EWF1A268	QF1-73	1PB-D68	
C75	.0047 10% 50V			M192P4729R8		192P4729R8	
C77	100		NP0100	CN0310		10TCC-T10	
C79	.022 10% 50V			M192P2239R8		192P2239R8	
C80	.0022			GP222		10TS-D22	
C81	.022 10% 50V			M192P2239R8		192P2239R8	
C82	220 N220 5%	730,025,221				10TCR-T22	
C83	.01			MAG5011			
C84	220 N220 5%	730,025,221					
C91	.047 10% 50V		DPMS2547	EWF1A147	QF1-171	10TCR-T22	
						1PB-S47	

PARTS LIST AND DESCRIPTION (CONTINUED)
(When ordering parts, state Model, Part Number, and Description.)

CAPACITORS (cont)

ITEM No.	RATING	MFG. PART No.	REPLACEMENT DATA			
			CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
						Q-LINE GENERAL LINE
C95	.2 10% 50V			DPMS2P2	PVC602	2PS-P20
C102	.01				MAG5011	
C106	.047				MAG2515	HY-735
C107	.047				MAG2515	HY-735
C110	18 NPO 10%			NP082	CN0418	10TCC-Q18
C111	82 10%				CN0482	10TCC-Q82
C113	.01				MAG5011	
C114	390			GP390	GP339	10TS-T39
C117	.0047 10% 50V			WMF1D47	EWFLA247	1PB-D47
C118A	.022					HY-725
C118B	.022					HY-725
C121	22			NP022	CN0422	10TCC-Q22
C122	.01				MAG5011	
C123	.01				MAG5011	
C124	.01				MAG5011	
C134	5			NP04P7	CN0547	10TCC-V47
C135	200 NPO					10TCC-T20
C136	.0047			GP4700	GP247	5GA-D47
C137	.001			GP1000	GP210	5GA-D10
C138	.01				MAG5011	
C202	.01				MAG5011	
C205	.047				MAG2515	HY-735
C213	.01				MAG5011	
C214	.01				MAG5011	
C215	.047				MAG2515	HY-735
C216	.01				MAG5011	

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

ITEM No.	FUNCTION	RESIST-ANCE	REPLACEMENT DATA			
			MFG. PART No.	CENTRALAB PART No.	MALLORY PART No.	TRW PART No.
VR1	Squelch Range	10K	960,000,010			U260R103B
VR2	AMC	5000	960,000,011			U260R502B
VR3	Signal Meter	20K	960,000,012			U260R253B
VR4	RF Meter	20K	960,000,012			U260R253B
VR1A	Volume/Power Switch	50K	960,000,013			
VR2A	Squelch	10K	960,000,014			
VR3A	RF Gain	20K	960,000,003			
VR4A	SWR CAL	10K	960,000,014			

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L1	RF Choke	501,000,001	LD-018		(1) Number on unit.
L2	RF Choke	501,000,001	LD-018		
LA201	RF Choke	501,000,001	LD-018		
LA202	RF Choke	501,000,010			
LA204	Pi Filter	501,000,010			
LC201	RF Choke (2.2uH)	501,000,005			
LC202	RF Driver (27MHz)	500,000,003	LC-017	CB303	
LC203	Final (27MHz)	500,000,006	LC-022		
LC204	Antenna (27MHz)	500,000,001			
LC205	RF Choke (68uH)	501,000,012			
LC401	RF Choke (68uH)	501,000,012			
LC402	RF Choke (.9uH)	501,000,013			
LC403	RF Choke (68uH)	501,000,012			
PLL1	VCO	537,000,015			
PLL2	Frequency Doubler	537,000,016			
PLL3	PLL Mixer (37MHz)	537,000,017			
PLL4	XMT Osc (37MHz)	537,000,018			
PLL5	XMT Mixer (27MHz)	537,000,019			
PLL6	XMT Mixer (27MHz)	537,000,020	PLL6 (1)		
PT25	Ref Osc (10.240MHz)	537,000,028			
RX1	Rec Antenna (27MHz)	537,000,022			
RX2	Rec RF (27MHz)	537,000,023	RX2 (1)		
RX3	Rec Mixer (10.695MHz)	537,000,024			
RX4	Rec Mixer (10.695MHz)	537,000,024			
RX5	IF (455kHz)	537,000,025			
RX6	IF (455kHz)	537,000,026			
RX7	IF (455kHz)	537,000,027			
TX1	Predriver (27MHz)	537,000,021	TX1 (1)		

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA			NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (O CURRENT 1000~)	MFG. PART No.	THORDARSON PART No.	TRIAD PART No.	
CH1	1.5A	.14	.82mH	502,000,001			

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.	MFG. PART No.	THORDARSON PART No.	TRIAD PART No.	
T101	29	1 2 8 5	532,000,003			

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFG. PART No.	QUAM PART No.	
SP1	3" PM 8 Ohms	403,000,002	30A05Z8R	

FUSE DEVICES

ITEM No.	DESCRIPTION	REPLACEMENT DATA					
		PART No.		BUSS PART No.		LITTELFUSE PART No.	
		DEVICE	HOLDER	DEVICE	HOLDER	DEVICE	WORKMAN PART No.
F1	3A 250V Quick Acting	421,000,004	429,000,001	AGC3	HRK	312003	150145
							F63-2

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
CF1	Filter	413,000,001	455kHz (Ceramic)
J1	Jack	424,000,001	Antenna
J6	Jack	424,000,006	Mic
LED1	LED	610,000,003	Channel Display
MIC	Microphone	404,000,001	
M1	Meter	411,000,001	RF/SWR CAL
P6	Plug	424,000,005	Mic
PL1	Lamp	426,000,002	Meter (13.76V @ 60mA)
PL2	LED	610,000,002	TX (Transmit) IND
S2	Switch	420,000,002	PA/CB
S7	Switch	420,000,008	Channel Select
X1	Crystal	413,000,018	10.240MHz
X2	Crystal	413,000,014	10.695MHz
	P.C. Board	415,000,014	Main
	P.C. Board	415,000,015	Switch
	P.C. Board	415,000,016	LED

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

ITEM	PART No.	ITEM	PART No.
Bracket, Mounting	301,000,003	Panel, Front	377,000,003
Cabinet, Top	374,000,003	Knob, Channel Select	383,000,005
Cabinet, Bottom	374,000,004		

LAKE MODEL 600