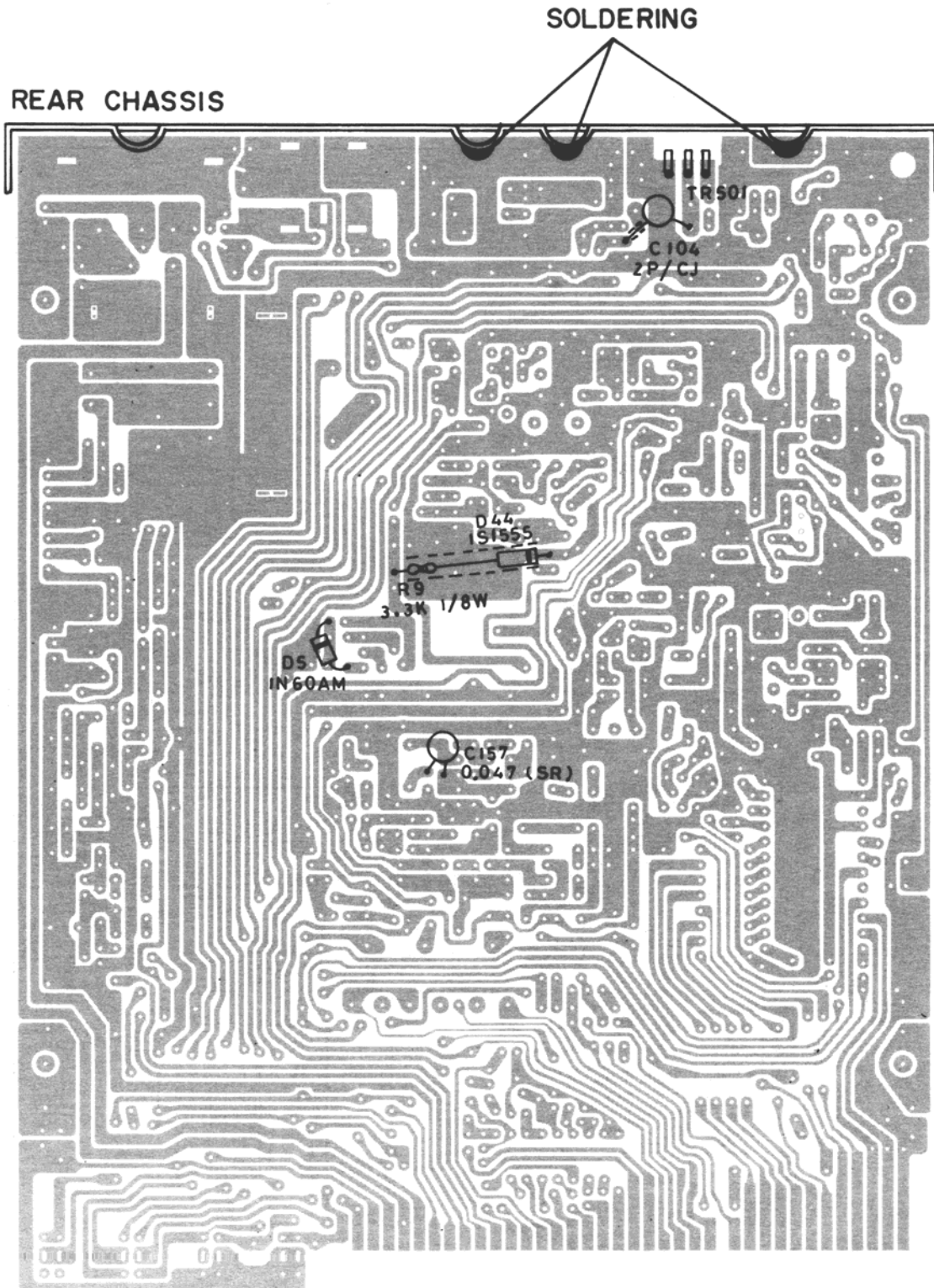
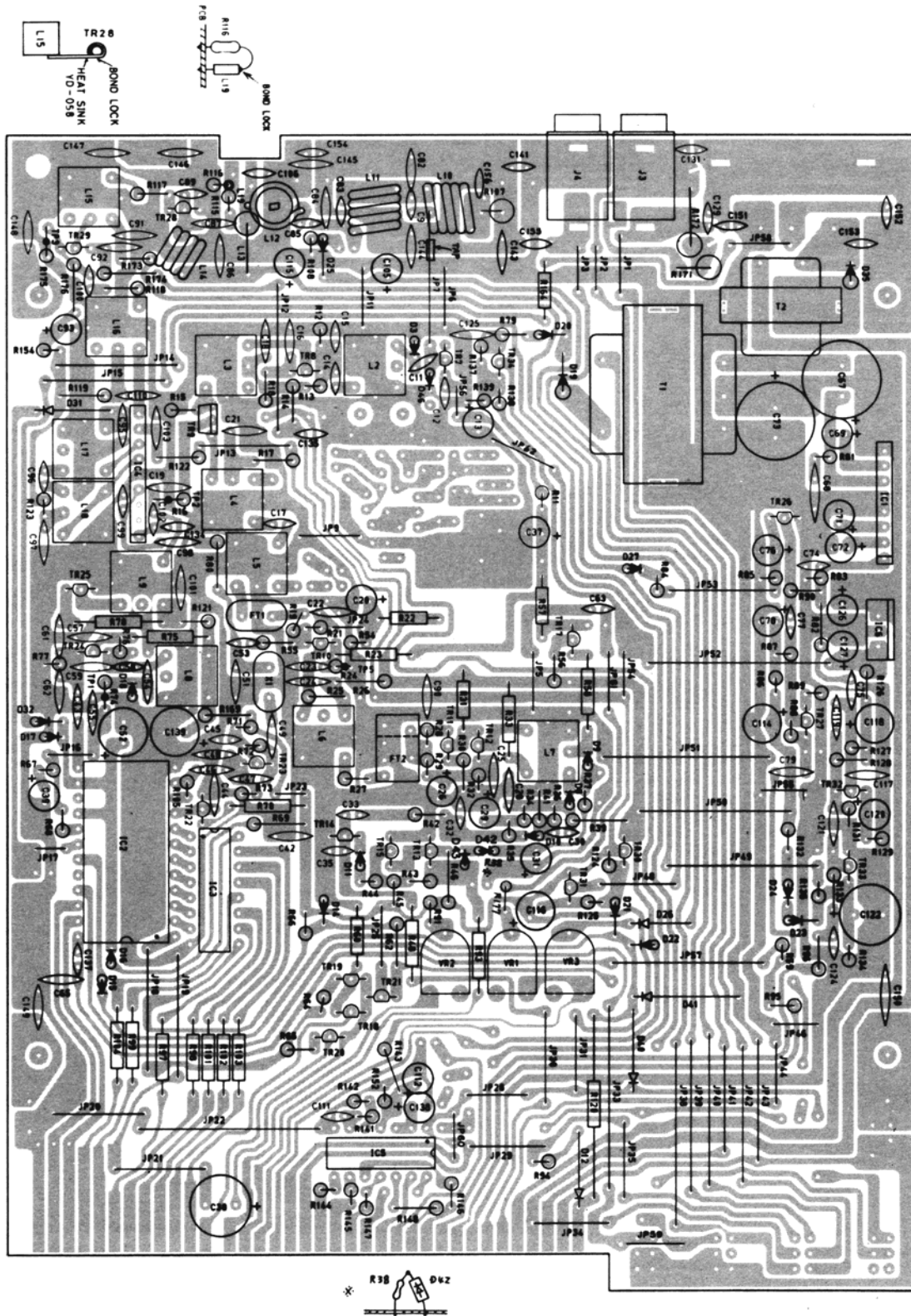


ADDITIONAL PARTS ON THE BOTTOM

MAIN P.C. BOARD

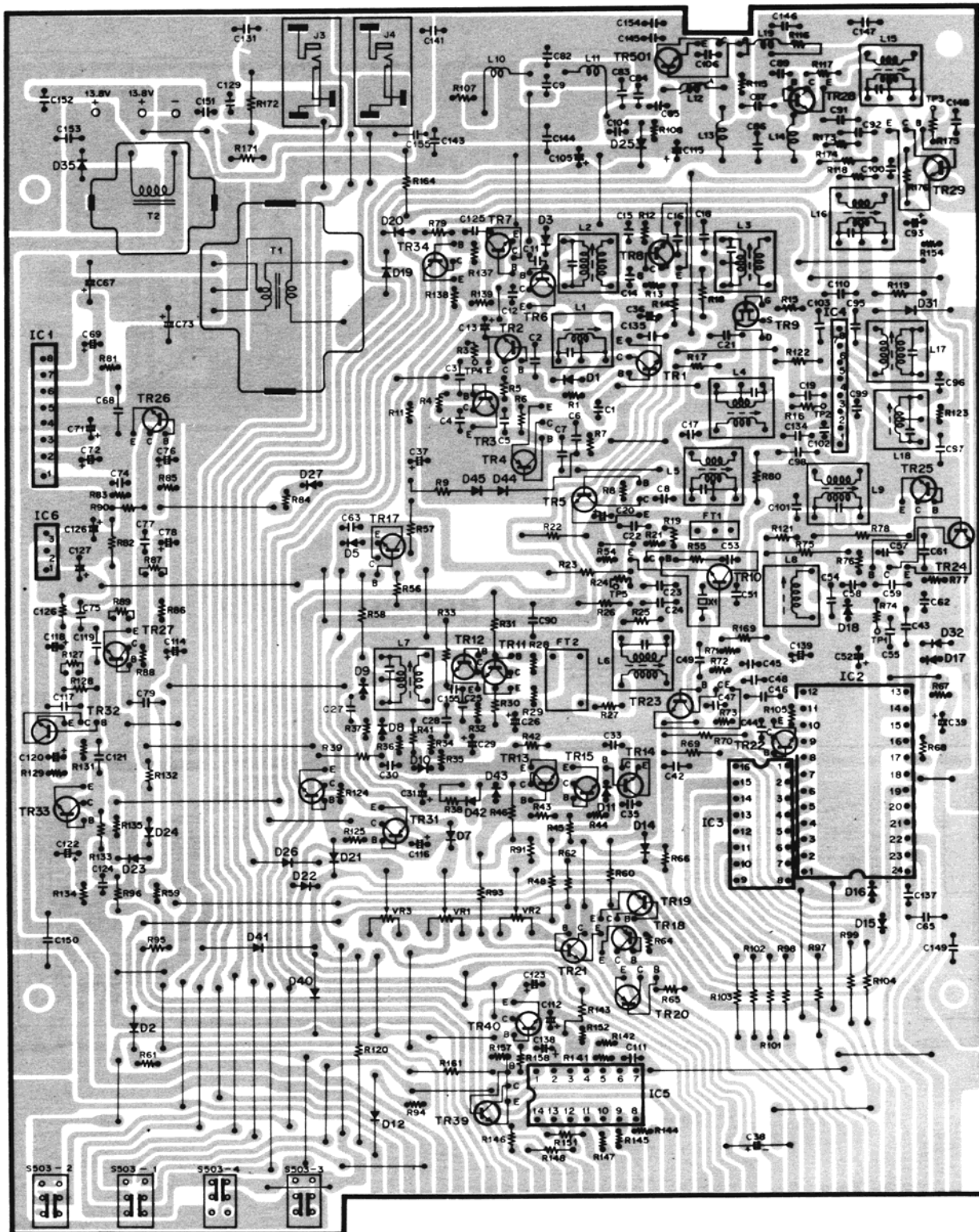


MAIN P.C. BOARD (TOP VIEW)



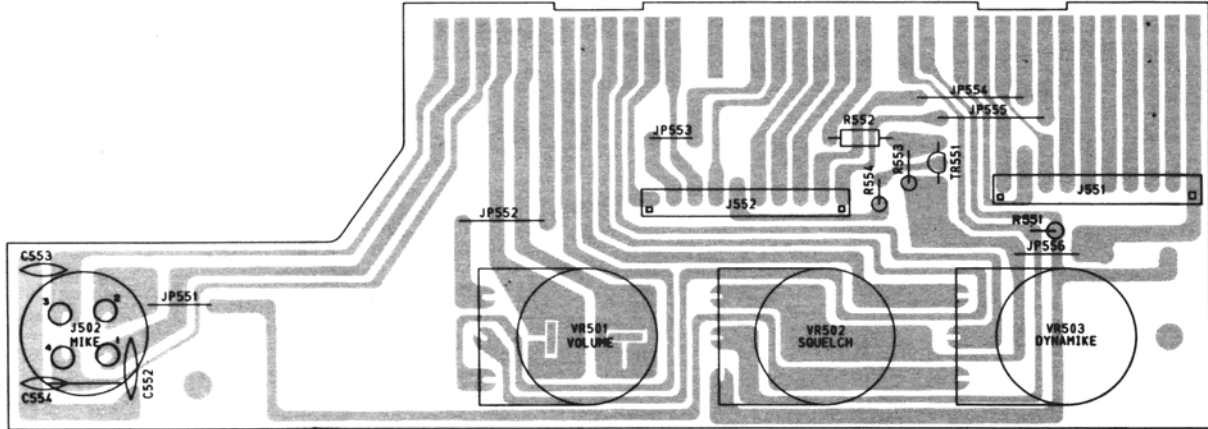
8001 PA-218AA

MAIN P.C. BOARD (BOTTOM VIEW)



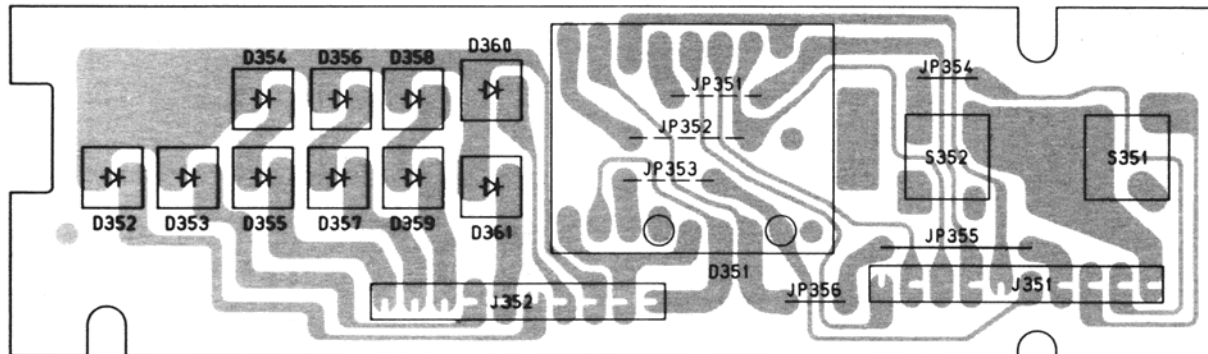
FRONT P.C. BOARD

(TOP VIEW)



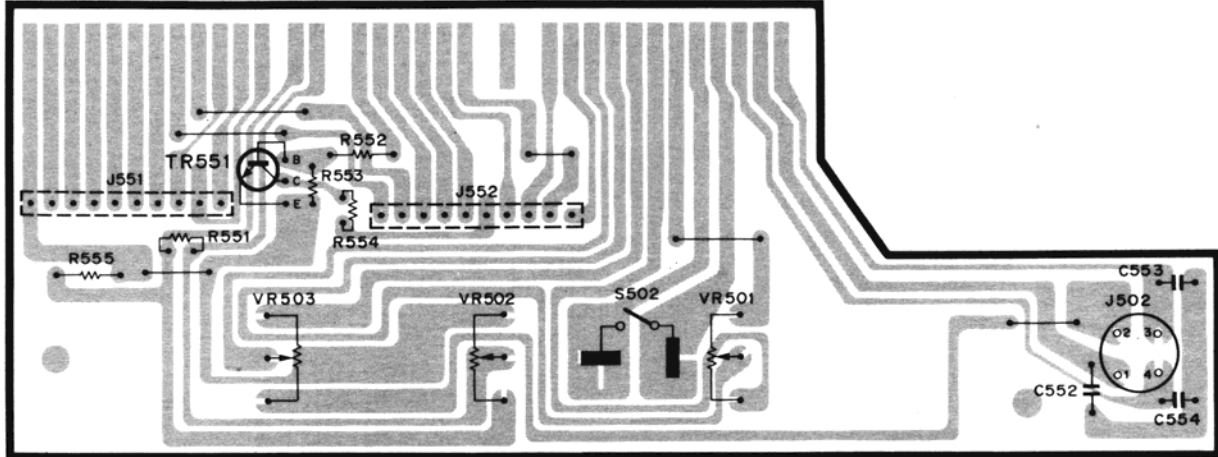
LED P.C. BOARD

(TOP VIEW)



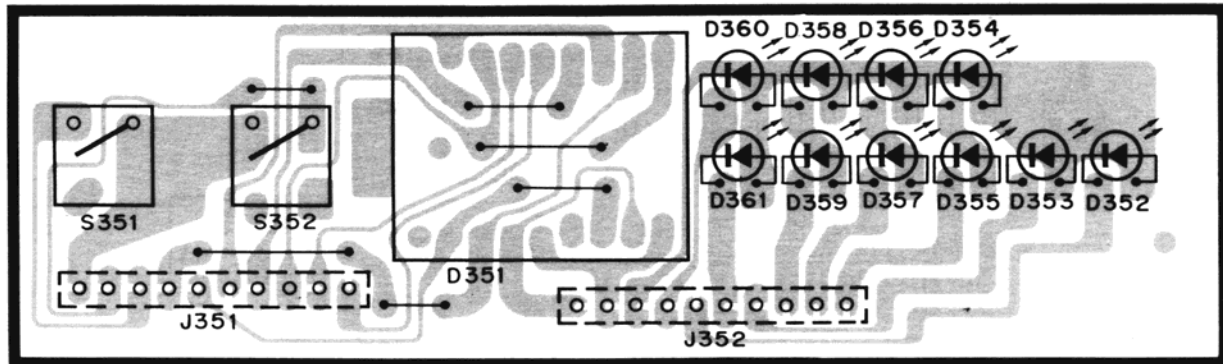
FRONT P.C. BOARD

(BOTTOM VIEW)



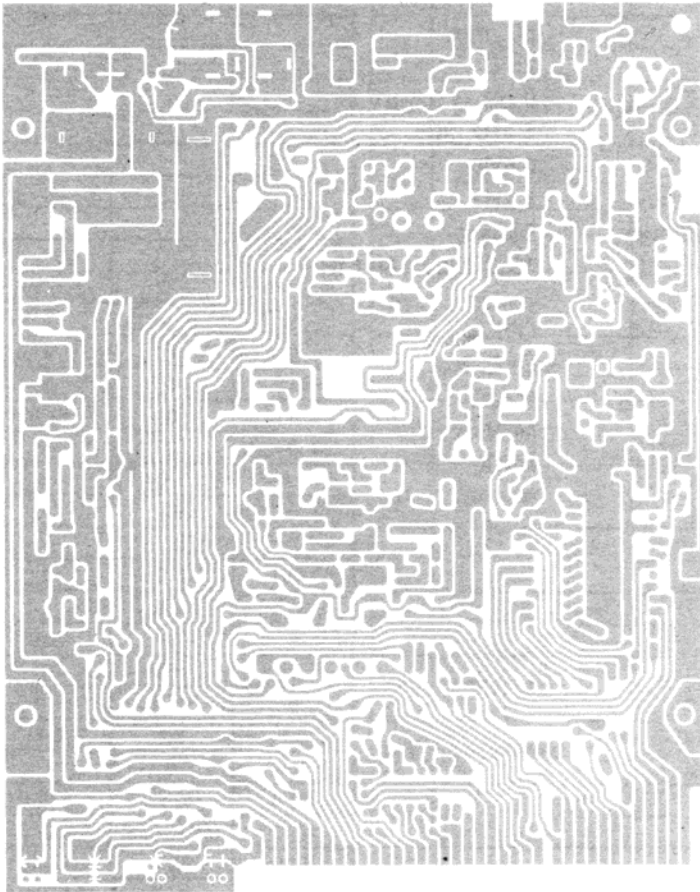
LED P.C. BOARD

(BOTTOM VIEW)

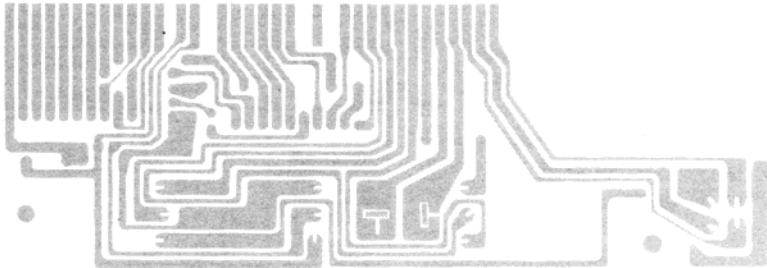


COPPER PATTERN LAYOUT

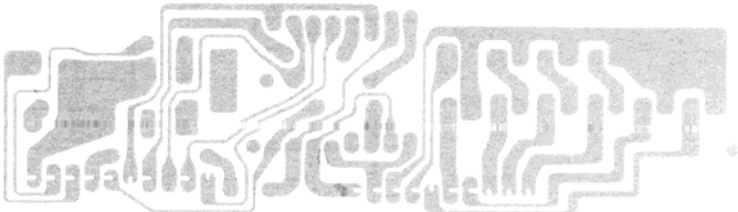
MAIN P.C. BOARD



FRONT P.C. BOARD



LED P.C. BOARD



VOLTAGE CHART

MEASUREMENT CONDITION

Power Supply Voltage:	13.8 V, DC
Antenna Impedance:	50 ohm
Temperature:	25°C
SSG Output level:	0 dB = 0.5 μ V
SSG Modulation:	1 kHz, 30%
Standard Audio level	0.5W
Standard Output frequency	1 kHz
Audio Frequency Impedance:	8 ohm
Channel:	19 CH (27.185 MHz)
PA:	OFF
CH9:	OFF
VOLUME:	MAX.
SQUELCH:	MIN.
DYNAMIKE:	MAX.

IC VOLTAGE CHART

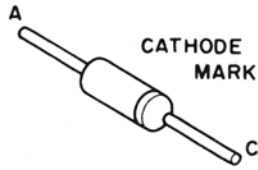
	IC1	IC2	IC3	IC4	IC5	IC6
Pin No.	μPC1242H	SM5123A	LB1710	TA7310PU	LB1417	HA17808W
1	0	3	2.9	2.3	8	13.5
	0	2.9	2.9	2.3	8	13.5
2	2	0.13	2.9	2.1	2.8	0
	2	0.13	2.9	2	2.8	0
3	1.2	0.13	0.13	1.2	2.8	8.2
	1.2	0.13	0.13	1.2	2.8	8.2
4	0	2.9	0.13	1.9	0	
	0	2.9	0.13	2.4	0.2	
5	0	0.13	2.9	0	0	
	0	0.13	2.9	0	0.55	
6	7	0.13	0.13	1.3	0.1	
	6.6	0.13	0.13	8	3.2	
7	12.5	2.9	0.13	1.9	0	
	12	2.9	0.13	2	0	
8	13	2.9	0	4.2	5	
	12	2.9	0	4.5	0.36	
9		0	5.6	1.3	5	
		0	5.6	6.5	0.78	
10		3	0.7		5	
		3	0.7		1.1	
11		3	0.7		5	
		2.9	0.7		0.68	
12		0	1.8		5	
		0	1.8		0.68	
13		1	0.7		5	
		1	0.7		0.45	
14		5.5	0.7		5	
		5.5	0.7		0.25	
15		0	1.8			
		0	1.8			
16		5.5	1.8			
		5.5	1.8			
17		2.3				
		3.8				
18		5.5				
		5.5				
19		4.5				
		0.7				
20		4.5				
		4.5				
21		4.5				
		4.5				
22		4.5				
		4.5				
23		4.5				
		4.5				
24		0				
		0				

Upper : RX mode
Lower : TX mode

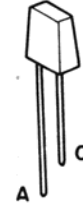
SEMI-CONDUCTOR LEAD IDENTIFICATION

Diodes A: ANODE
C: CATHODE

IN60AM
IN60P
IS2076A
IN4003
IS1555
ISV73-EB
HZ6A3

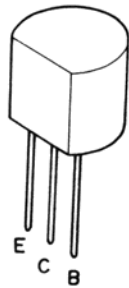


RT-242 PRS
RT-242 YS

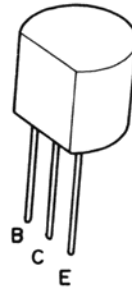


Transistors B: BASE
C: COLLECTOR
E: EMITTER

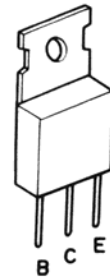
2SA733A-P
2SC941TM-O
2SC945A-Q
2SC1674-L
2SC1675-L
2SC3242A-E



2SB525-C
2SC2086-D



2SC2166-C

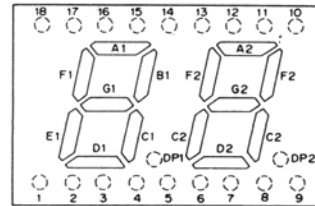


FET D: DRAIN
S: SOURCE
G: GATE

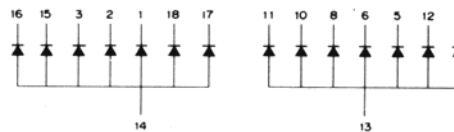
2SK192A-BL



LL-2253YG



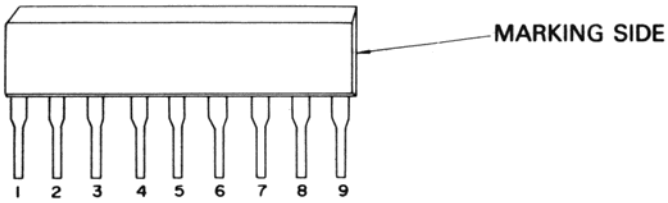
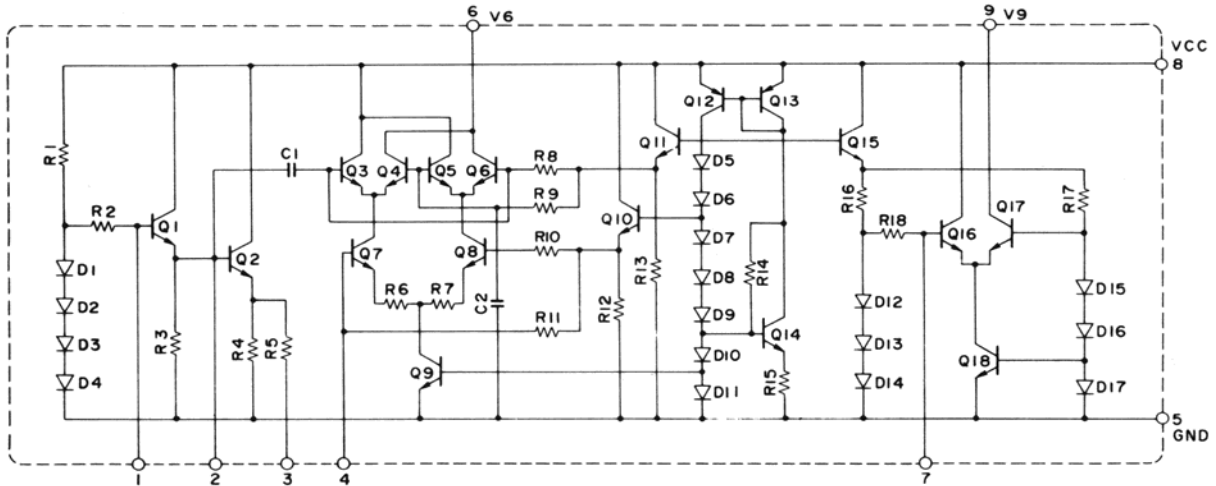
COMMON ANODE



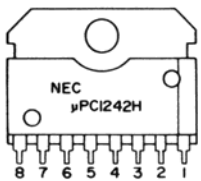
Pin no.	Function	Pin no.	Function
1	E1 Cathode	10	B2 Cathode
2	D1 Cathode	11	A2 Cathode
3	C1 Cathode	12	F2 Cathode
4	NC Cathode	13	DIGIT 2 Anode
5	E2 Cathode	14	DIGIT 1 Anode
6	D2 Cathode	15	B1 Cathode
7	G2 Cathode	16	A1 Cathode
8	C2 Cathode	17	G1 Cathode
9	NC Cathode	18	F1 Cathode

IC INTERNAL DIAGRAMS

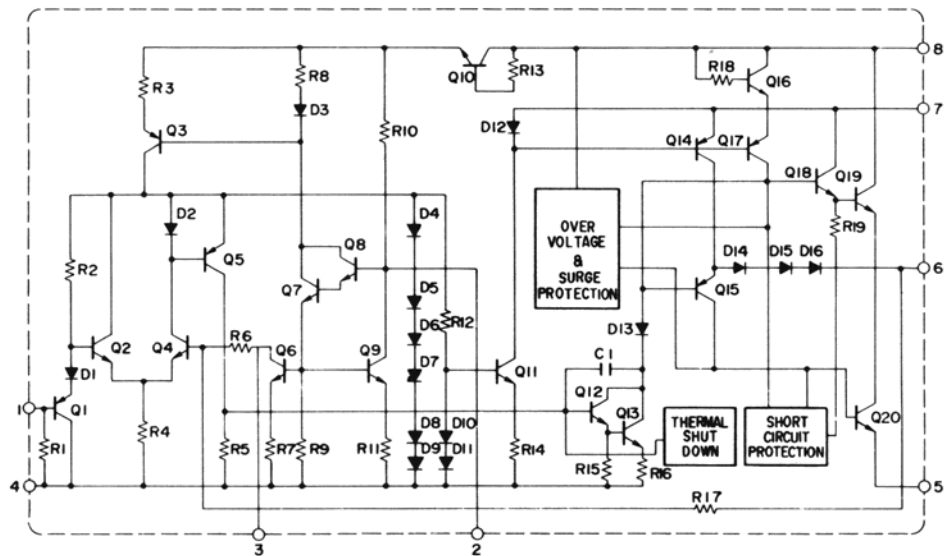
TA7310P-U



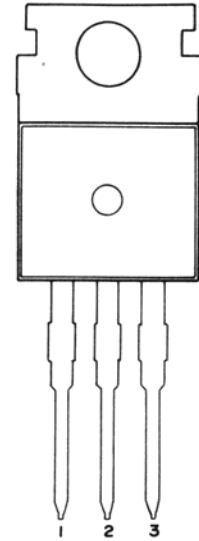
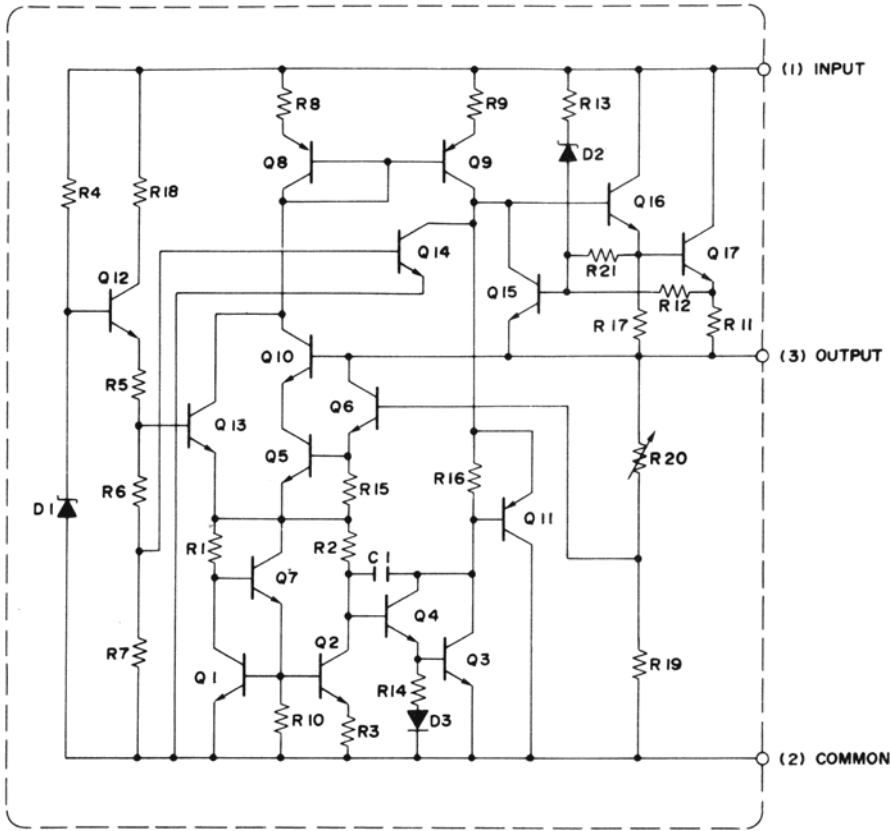
μ PC1242H



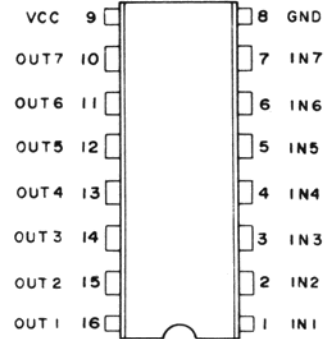
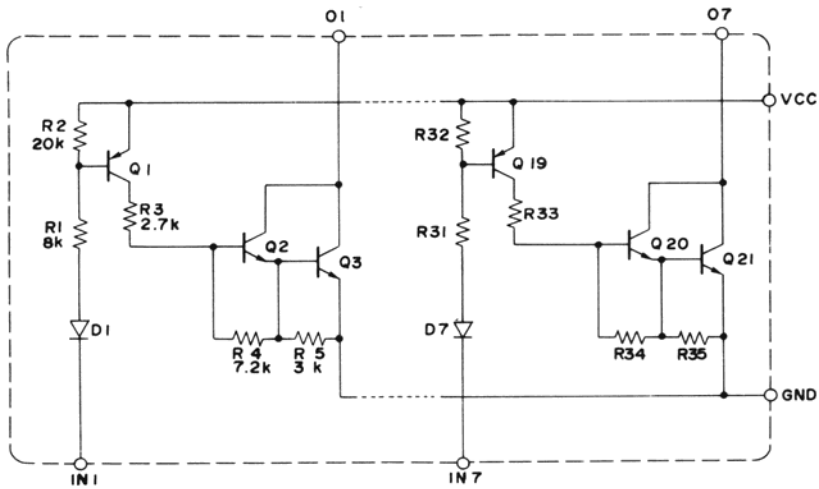
NO	μ PC1242H
1	INPUT
2	RIPPLE FILTER
3	N. F. B.
4	GND
5	GND
6	OUTPUT
7	BOOTSTRAP
8	V+



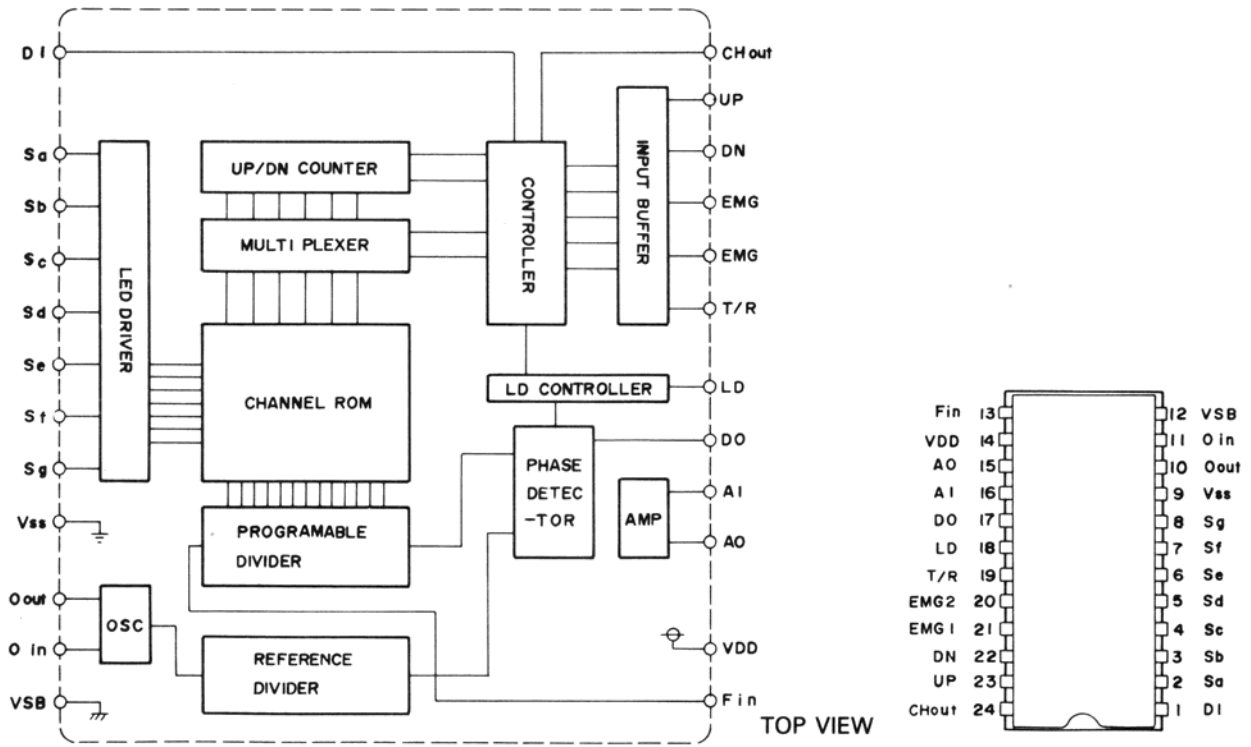
HA17808W



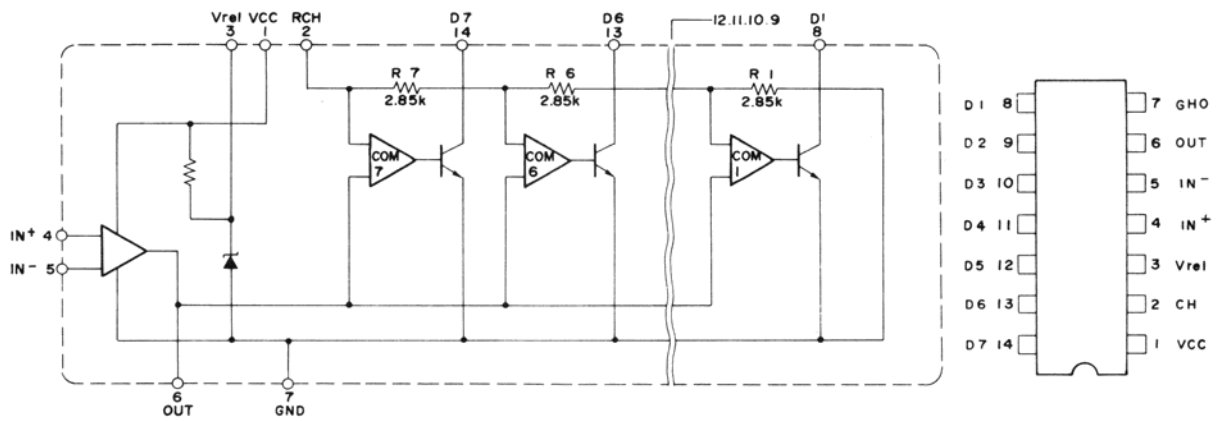
LB1710



SM5123A



LB1417



PARTS LIST 21 PLUS

PARTS LIST 21 PLUS

SYMBOL	DESCRIPTION	PART NO.	SYMBOL	DESCRIPTION	PART NO.
D005, 007, 009	DIODE 1N60 AM	150 014 9 001	L009	COIL LA-166 TKXC-18501N	066 025 9 005
D008	DIODE 1S2076A	151 101 9 001	L007	COIL LA-204 RMC-41997N	046 024 9 003
D019, 035	DIODE 1N4003	151 083 9 001	L015	COIL LA-208 TKXC-24341AC	060 029 9 004
D003, 010-012, 015, 016, 020-027 031, 040-043	DIODE 1S1555	151 028 9 007	L003, 017	COIL LA-260 TKXC-25114N	060 030 9 014
D018	DIODE 1SV73-EB	151 137 9 001	L005	COIL LA-277 TKAC-25365N	046 025 9 004
D014, 017	DIODE: ZENER HZ6A-3	152 156 9 001	L018	COIL LA-373 TKXC-28319Y	047 004 9 002
D351	DIODE: LED (LL-2253)	158 070 9 001	L012	COIL LC-074	044 040 9 002
D358-360	DIODE: LED (GL-9HD4)	158 071 9 001	L013	COIL LD-168	047 046 9 001
D356, 357	DIODE: LED (GL-9HY4)	158 071 9 002	L019	COIL LD-087	044 048 9 003
D352-355, 361	DIODE: LED (GL-9NG4)	158 071 9 003	L010, 011	COIL LE-096 8-1/2T	047 044 9 001
TR019, 031, 034	XSTOR DB-003 2SA733-P	177 020 9 001	L014	COIL LE-151 C-7931 D4.0 6-1/2T	041 128 9 001
TR018, 020	XSTOR DB-106 2SB525-C	177 045 9 001	MC951	MICROPHONE MK-341	561 008 9 001
TR012, 029	XSTOR DB-301 2SC941TM-O	176 089 9 004	B351	PC BOARD:LED PA-225AA	302 947 9 001
TR013-015, 017, 022, 027, 030, 032, 033, 026, 551	XSTOR DB-224 2SC945A-Q	176 062 9 001	X001	CRYSTAL QZ-074 10.240	132 027 9 001
TR008	XSTOR DB-295 2SC1674-L	176 081 9 002	R172	RES: METAL OXIDE 15 2 W J	011 002 5 150
TR006, 007, 010, 011, 023, 024, 025	XSTOR DB-259 2SC1675-L	176 065 9 001	R171	RES: METAL OXIDE 2.7 2 W J	011 002 5 279
TR028	XSTOR DB-228 2SC2086-D	176 108 9 002	VR002, 001	RES: SEMI-FIXED RT-182 TT24R 100KB	008 465 9 003
TR501	XSTOR DB-331 2SC2166-C	176 108 9 001	VR003	RES: SEMI-FIXED RT-182 TT24R 200KB	008 465 9 005
TR021	XSTOR DB-383 2SC3242A-E	176 191 9 001	VR503	RES: VARIABLE RV-614 1KA	008 843 9 004
TR009	FIELD EFFECT XSTOR DC-019 2SK192A-BL	182 076 9 001	VR502	RES: VARIABLE RV-615 50KB	008 843 9 005
IC004	INTEGRATED CIRCUIT TA7310-P-U	307 328 9 001	VR501	RES: VARIABLE RV-616 50KA	008 843 9 006
IC001	INTEGRATED CIRCUIT UPC1242H	307 415 9 001	SP501	SPEAKER SP-053	580 073 9 001
IC006	INTEGRATED CIRCUIT HA17808W	307 415 9 002	S503	SWITCH:PUSH SW-537	088 149 9 001
IC003	INTEGRATED CIRCUIT (LB1710)	307 415 9 003	S351, 352	SWITCH:TACT SW-539	084 155 9 001
IC002	INTEGRATED CIRCUIT (SM5123A)	307 415 9 004	T002	XFMR:AF CHOKE TF-083	042 021 9 001
IC005	INTEGRATED CIRCUIT (LB1417)	307 415 9 005	T001	XFMR:OUTPUT TF-177	061 050 9 001
FT002	FILTER: CERAMIC FL-009 C FU-455H2	140 009 9 001	WA951	DC CORD WZ-383	426 107 9 001
FT001	FILTER: CRYSTAL (FL-055 10M-7A1)	143 011 9 001		PANEL:FRONT ABS, BLACK	380 539 9 001
F951, 952	FUSE FS-014 2A	191 251 3 002		CONTROL PLATE ABS, CR THUMBSCREW, ACCY ABS INST CLR BLACK	380 541 9 001 634 204 9 001
J003, 004	JACK JK-089 HSJ0615	773 086 9 001		BUTTON:PUSH (PA)	384 075 9 003
J551, 552	JACK JK-221 10P	777 050 9 002		ABS, CR, SILK PRINT	
J501	JACK: ANT JK-230 M-BR-23D	777 050 9 004		BUTTON:PUSH (CH9)	384 075 9 006
J502	JACK JK-325 4S-L-D107	777 050 9 005		ABS, CR, SILK PRINT	384 075 9 007
J351	JACK JK-328 5551-10	777 050 9 007		BUTTON:PUSH (UP)	384 075 9 008
J352	JACK JK-328 5551-18	777 051 9 002		ABS, CR, SILK PRINT	
J505	JACK JK-329	777 050 9 009		BUTTON:PUSH ABS, CR	384 077 9 001
L002	COIL LA-029 TKXN-22160BU	060 023 9 001		BUTTON:PUSH ABS, CR	384 077 9 002
L016	COIL LA-088 TKXC-24124N	066 019 9 002		KNOB ABS, CR	751 313 9 001
L004	COIL LA-120 TKAC-24073F	046 037 9 001		MOUNTING BRKT SPCC, 1.6T, BLACK	250 197 9 001
L006	COIL LA-163 ROC-42066N	060 022 9 001		COVER:BOTTOM VINYLTOP, SB-K08, 1.0T, BLACK	252 055 9 001
L008	COIL LA-165 VTKXNA-XT231ZO-TW	044 046 9 001		COVER:TOP VINYLTOP, SB-K08, 1.0T, BLACK	253 135 9 001

MECHANICAL PARTS LIST

REF. NO.	DESCRIPTION	DYNASCAN PART NO.
1	Panel, Front ABS, Black	380-539-9-001
2	Control Plate ABS,CR	380-541-9-001
3	Window AS,Gray Smoke	
4	Support ABS, Black	
5	LED Housing ABS, White	
6	Screw, Mounting ABS INST CLR,Black	634-204-9-001
7	Button, Push (PA) ABS, CR, Silk Print	384-075-9-003
8	Button, Push (CH9) ABS, CR, Silk Print	384-075-9-006
9	Button, Push (DOWN) ABS, CR, Silk Print	384-075-9-007
10	Button, Push (UP) ABS, CR, Silk Print	384-075-9-008
11	Button, Push ABS, CR	384-077-9-001
12	Button, Push ABS, CR	384-077-9-002
13	Knob ABS, CR	751-313-9-001
14	Spacer Push Button ABS, Black	
15	Mounting Bracket SPCC, 1.6T, Black	250-197-9-001
16	Cover, Bottom Vinytop, SB-K08, 1.0T, Black	252-055-9-001
17	Cover, Top Vinytop, SB-K08, 1.0T, Black	253-135-9-001
18	Chassis SPCC, 1.0T, ZMC	
19	Holder, IC (B)	SECC,1T Non Oil
20	Holder, IC (A)	ALP,2T Non Oil
21	Holder, Switch	SECC, 1.0T
22	Hanger, Microphone SPCC, 1.0T, NI	
23	Shield Plate	ALP, 0.1T
24	Shield Plate	ALP, 0.1T
25	ID Plate, FCC	ALP, 0.5T
26	Display Plate Mylar 0.35T	
27	Washer, Rubber, Neoprene, Black, 7*15*2.0T	
28	Wool-coated Paper, Wool Tack, Wool Paper, 10*150*0.3T	
29	Insulation Plate	Mylar 0.1T
30	Screw, Flat HD +	M3×5 NI
31	Screw, Bind HD +	M3×8 BNI
32	Screw, Bind HD +	M3×8 NI
33	Screw, Bind HD +	M3×12 NI
34	Screw, Tapping Round HD +	D3.5×8 NI
35	Screw, Tapping Round HD +	D5×10 NI
36	Screw, Taptight Bind HD +	M3×6 BNI
37	Screw, Taptight Bind HD +	M3×6 NI
38	Hex Nut	M3.0 NI
39	Nut Flange	M3 NI
40	Washer, Lock	D3.5 NI
41	Washer, Star	D5 NI
42	Screw, P Tight Bind HD +	D×8 NI
43	Spring Plate, Knob	D6
44	Rivet, AL, ID Plate	D3.2×3.2
45	Spacer, Connector PVC 0.5T	
46	Washer SPT 0.35T	
47	Spacer, Wool Track, 0.3T, Black	