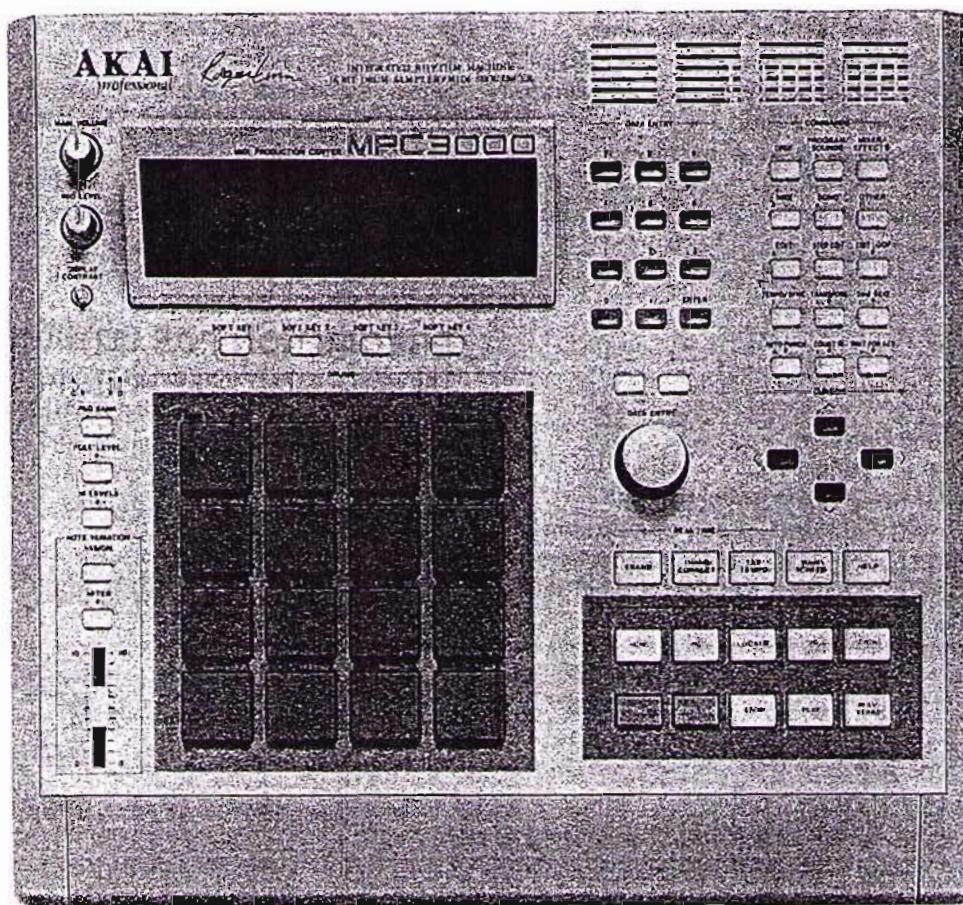


Mac3000

AKAI SERVICE MANUAL



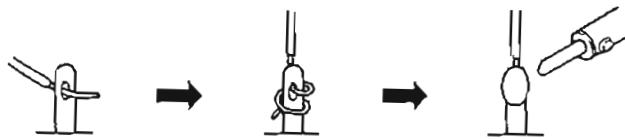
MIDI PRODUCTION CENTER

MODEL **MPC3000**

★ SAFETY INSTRUCTIONS

PRECAUTIONS DURING SERVICING

1. Parts identified by the Δ (*) symbol are critical for safety. Replace them only with the parts number specified.
2. In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation. These must also be replaced only with the specified replacements.
Examples: RF converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
3. Use specified internal wiring. Note especially:
 - 1) Wires covered with PVC tubing
 - 2) Double insulated wires
 - 3) High voltage leads
4. Use specified insulating materials for hazardous live parts.
Note especially:
 - 1) Insulation Tape
 - 2) PVC tubing
 - 3) Spacers (insulating barriers)
 - 4) Insulation sheets for transistors
 - 5) Plastic screws for fixing micro switches
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap the ends of the wires securely around the terminals before soldering.



6. Make sure that wires do not contact heat producing parts (heat sinks, oxide metal film resistors, fusible resistors, etc.).
7. Check that replaced wires do not contact sharp edged or pointed parts.
8. Also check areas surrounding repaired locations.
9. Make sure that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

SAFETY CHECK AFTER SERVICING

After servicing, make measurements of leakage-current or resistance in order to determine that exposed parts are acceptably insulated from the supply circuit.

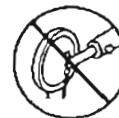
The leakage-current measurement should be done between accessible metal parts (such as chassis, ground terminal, microphone jacks, signal input/output connectors, etc.) and the earth ground through a resistor of 1500 ohms paralleled with a 0.15 μ F capacitor, under the unit's normal working conditions. The leakage-current should be less than 0.5 mA rms AC.

The resistance measurement should be done between accessible exposed metal parts and power cord plug prongs with the power switch (if included) "ON". The resistance should be more than 2.2 M ohms.

PRECAUTION FOR LITHIUM BATTERY

The lithium battery may explode when heated excessively.
[OBSERVE THE FOLLOWING WHEN REPLACING]

- Replace with the same make and type only.
- Use soldering iron in "recommended way" only.
- Place battery in correct polarity.
- Do not short the terminals.
- Do not charge battery.
- Do not dispose of battery in fire.



(DANGER)



[RECOMMENDED WAY]

★ INFORMATIONS

SYMBOLS FOR PRIMARY DESTINATION

Unit destinations are indicated with letters as shown below.

Symbols	Principal Destinations
A	U.S.A
B	U.K
C	Canada
E	Europe (except U.K)
J	Japan
S	Australia
V	Germany
U	Universal Area
Y*	Custom version

★ SPECIFICATIONS

Sound generator	Digital sampling input S/PDIF
Sampling rate 44.1kHz (frequency response: 20 Hz - 20 kHz)	Stereo output level 6 dBm/600 ohms
Sampling capacity 2 MB standard (21.9 seconds mono or 10.9 seconds stereo), expandable to 16 MB (188.3 seconds mono or 94.1 seconds stereo)	Level of 8 individual outputs 6 dBm/600 ohms
Data format 16-bit linear	Sync/Trigger input
Dynamic filtering 12 dB/Octave dynamic resonant lowpass filter per voice	level 0.5 Vp-p level (with input control at maximum)
Maximum sounds in memory 128	Sync output level 2.5 Vp-p/600 ohms
Number of sound programs 24	MIDI inputs 2 (mergeable)
Sound assignments per program ... 64	MIDI outputs 4 (independent)
Simultaneous voices..... 32	SCSI port 1 (25-pin D-sub connector)
 Sequencer	Headphone output 1
Maximum notes 75,000	Foot switch inputs 2 (independently assignable)
Resolution 96 parts per 1/4-note (ppq)	 General
Sequences 99	Display 320 character (240 x 64 dot graphic) LCD
Tracks per sequence 99	Disk drive 3.5 inch HD (1.44 MB formatted)
MIDI output channels 64 (16 channels x 4 output ports)	CPU V53/16 MHz
Song mode 20 songs, 250 steps per song	Dimensions 440 (W) x 121 (H) x 405 (D) mm
Drum pads 16 (velocity and pressure sensitive)	Weight 9 kg
Drum pad banks..... 4	Power requirements..... AC 100 V, 50/60 Hz for Japan AC 120 V, 60 Hz for U.S.A. and Canada AC 220 - 240 V, 50 Hz for Europe
Sync modes MIDI Time Code, MIDI clock, FSK 24, 1/4-note clicks and SMPTE (optional). SMPTE frame rates supported are 24, 25, 29.97 drop and 30.	Power consumption 27 W for Japan 40 W for other countries
 Rear Panel Inputs/Outputs	 Accessories
Record input sensitivity (both L and R)	Standard accessories
HI gain -58 dBs/45 k ohms	3.5 inch disk x 4 (Disk #1 to #4 : Drum sound data)
MID gain -38 dBs/45 k ohms	AC cord x 1
LO gain -18 dBs/45 k ohms	Operator's manual.... x 1
	 Optional accessory
	EXM3008(Memory Expansion Board)
	IB-CRT (Interface Board for external VGA monitoring)
	I-0055 (SMPTE timecode reading IC)

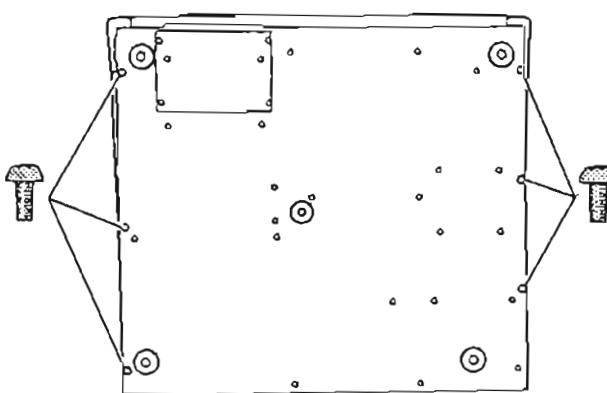
0dBs = 0.775 V_{RMS}

* For improvement purposes, specifications and design are subject to change without notice.

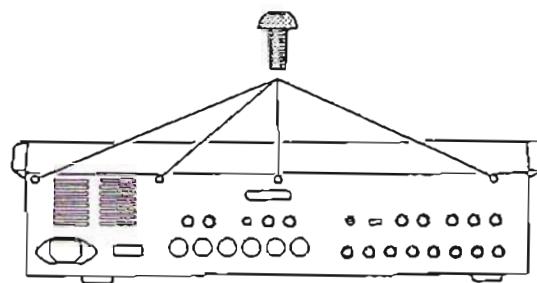
I. DISASSEMBLY

In case of trouble, etc., necessitating dismantling, please dismantle in the order shown in the illustrations.
Reassemble in the reverse order.

1. Remove the six screws on the bottom



2. Remove the four screws on the REAR PANEL then carefully lift up the front part of the TOP PANEL for removal.



II. PRINCIPAL PARTS LOCATION

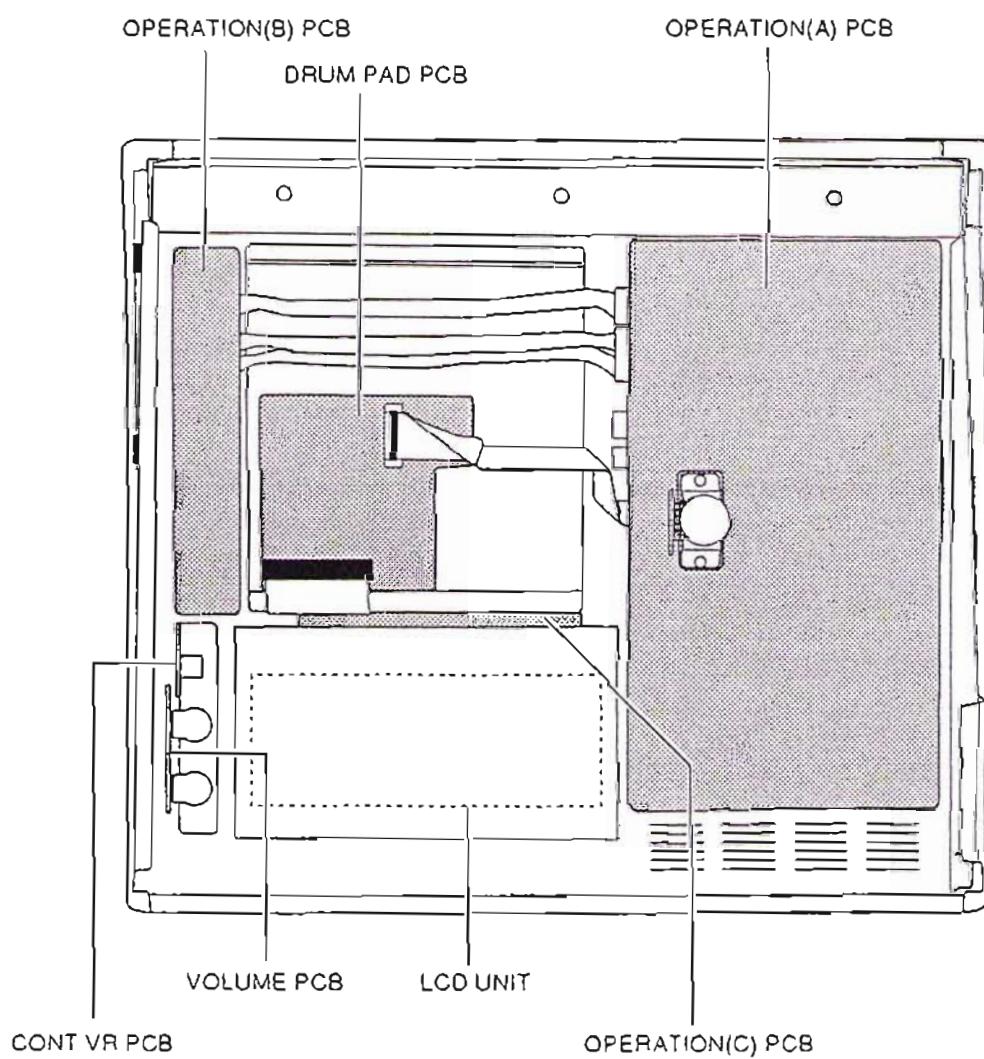


Fig. 2-1 Reverse side of the TOP PANEL BLOCK

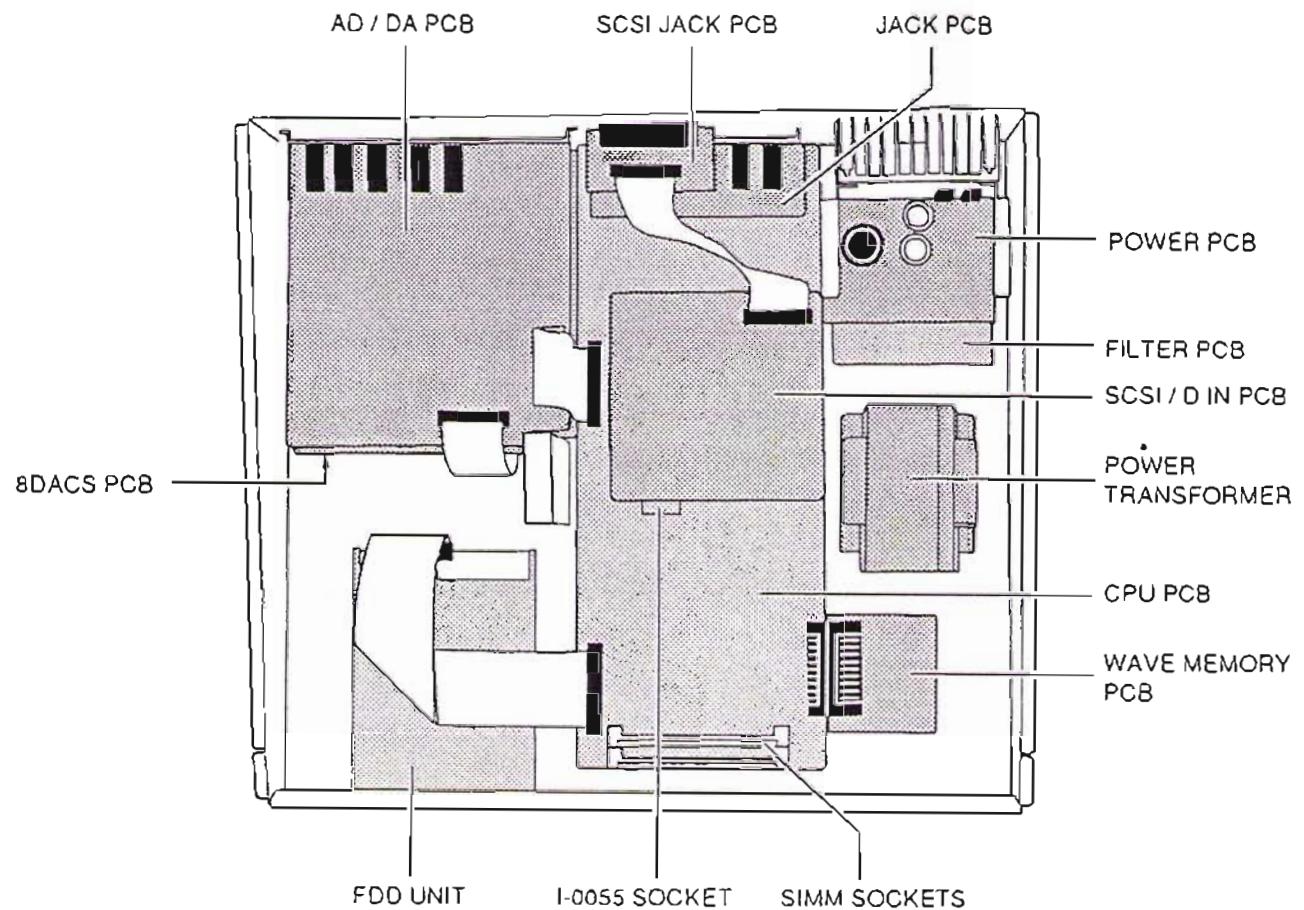


Fig. 2-2 Top view of the chassis

III. PARTS LIST

ATTENTION

1. When placing an order for parts, be sure to list the Part No., Model No. and the description of each part. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.
2. Please make sure that Part No. is correct when ordering. If not, a part different from the one you ordered may be delivered.
3. Since the parts shown in Parts List or Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.

HOW TO USE THIS PARTS LIST

1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
4. How to read the Parts List.

a) Mechanism Block

2. HEAD BASE BLOCK

Ref. No.	Part. No.	Description
1	BH-T2023A320A	HEAD BASE BLOCK
2	HP-H2206A010A	HEAD R/P PR4-8FU C
3	ZS-477876	PAN20x03STL CMT
4	ZS-536488	B1D20x08STL CMT
5	ZG-402895	SP CS ANGLE ADJUST

SP (Service Parts) Classification

This number corresponds with the individual parts index number in the figure.

b) PC Board

2. MAIN PC BOARD

Ref. No.	Part. No.	Description
IC1	EI-324536	IC HD14049BP
IC2	EI-336801	IC M88841-564M
C1A	EC-338399	C MMV V 223M 250AC [U,E,B,S]
C1B	EC-350949	C MMV V 223M 250DC [J]
C1C	EC-338397	C MMV V 223M 125AC [C,A]
X1	EI-318384	OSC X'TAL NC-18C

Symbols for primary destination

[A] : AAL (U.S.A) [S] : SAA (Australia)
[B] : BEAB (England) [U] : U/T (Universal Area)
[C] : CSA (Canada)
[E] : CEE (Europe) [V] : VDE (Germany)
[J] : JPN (Japan) [Y] : Custom

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

The available PC Board Blocks are listed separately.

5. When Part No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts List by its Reference No. listed at right of Part No.

WARNING

△ (*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

AVERTISSEMENT

△ (*) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

1. RECOMMENDED SPARE PARTS

We suggest you to stock the following Recommended Spare Part items listed below since they can cover most of the routine service.

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	BA-379695J1	PC PAD SENSOR	56	EI-3216C6	IC LM393N
2	BB-428036J	FLOPPY DISK FD-235HF-3300	57	EI-413120J	IC L7A1045 L602B DSP-A
3	* BT-378272	TRANS POW L4003 C.A [C,A]	58	EI-414848J	IC MB8116400-70PZ-G
4	* BT-378271	TRANS POW L4003 J [J]	59	EI-412247J	IC MB814400-80L PSZ-G
5	* BT-419200J	TRANS POW L4012 E,V,S [E,V,B,S]	60	EI-372103	IC MB89254
6	ED-417916J	D LED SLN-210VT RED T26	61	EI-425710J	IC MB89255B-P.G
7	* ED-330319	D SILICON DBA10B 100V1.0A	62	EI-388602J	IC MB89352A-P.G
8	* ED-383752J	D SILICON DBF40C 200V4.0A	63	EI-375185	IC MS1953BL
9	ED-389834J	D SILICON DS135E-FB2 F12 100/1	64	EI-412283J	IC MS1955BL
10	ED-344280	D SILICON H GMA-01-FY2 F05	65	EI-353227	IC MS216L
11	ED-391103J	D ZENER H HZS1282	66	EI-348785	IC MS220L
12	ED-388358J	D ZENER H HZSSC2	67	EI-362587J1	IC MS238AL
13	* EF-355226	FUSE BET T 250V 1.00A [B]	68	EI-377191	IC NJM5532D-D
14	* EF-359225	FUSE BET T 250V 3.15A [B]	69	EI-336995	IC NJM780SA
15	* EF-358974	FUSE BET T 250V 630MA [B]	70	* EI-397407J	IC NJM7812FA
16	* EF-376821	FUSE ICP-N15 50V 0.6A	71	EI-413206J	IC NJM7905FA
17	* EF-373142	FUSE ICP-N25 50V 1.0A	72	* EI-410281J	IC NJM7912FA
18	* EF-623103	FUSE SET T 250V 1.00A [E,V,S]	73	EI-419256J	IC PALCE 22V10H-25PC L3022C
19	EF-691007	FUSE SET T 250V 3.15A [E,V,S]	74	EI-412279J1	IC PCM69AP-4
20	* EF-601942	FUSE SET T 250V 630MA [E,V,S]	75	EI-410389J	IC PO30RV1
21	* EF-309387	FUSE TSC A 250V 1.00A [J]	76	* EI-353281	IC SI3052V
22	* EF-306952	FUSE TSC A 250V 4.00A [J]	77	EI-419235J	IC SM5841HP
23	* EF-309388	FUSE TSC A 250V 800MA [J]	78	EI-360038J1	IC TC74HC02AP
24	* EF-310229	FUSE TSC 125V 1.00A [C,A]	79	EI-419228J	IC TC74HC4072AP
25	* EF-306957	FUSE TSC 125V 4.00A [C,A]	80	EI-419227J	IC TE7774
26	* EF-309391	FUSE TSC 125V 800MA [C,A]	81	EI-377101	IC UPC7805HF
27	EH-359185	COMP R RKC1/8B8 103J	82	EI-365829	IC UPC812C-AK
28	EI-422329J	IC AK5328-VP	83	EI-413119J	IC UPD70236GID-16
29	EI-419226J	IC AM27C020-150DC	84	EI-413121J	IC UPD72089GF-38A
30	EI-397343J	IC AM27C256-150DC	85	EI-405572J	IC UPD78C10AGO-36
31	EI-386287J	IC HD74AC00P	86	EI-379997J	IC YM36238
32	EI-389050J	IC HD74AC32P	87	EI-425214J	IC 18CV8PC-15 M8P1
33	EI-386300J	IC HD74AC86P	88	EI-419232J	IC 18CV8PC-15 M8P7
34	EI-388711J	IC HD74HC00P	89	EI-419230J	IC 18CV8PC-15 M8P8
35	EI-387934J	IC HD74HC04P	90	EI-419161J	IC 18CV8PC-25 L3022A
36	EI-386303J	IC HD74HC08P	91	EI-419162J	IC 18CV8PC-25 L3022B
37	EI-386289J	IC HD74HC138P	92	EI-419165J	IC 18CV8PC-25 L3022D
38	EI-402126J	IC HD74HC155P	93	EI-419184J	IC 18CV8PC-25 LS110A
39	EI-419180J	IC HD74HC166P	94	EI-419185J	IC 18CV8PC-25 L6028C
40	EI-396510J	IC HD74HC173P	95	EI-419229J	IC 18CV8PC-25 M8P3
41	EI-387936J	IC HD74HC175P	96	* EI-354123	OSC QE CSA120MTZ 12.000000MHZ
42	EI-388712J	IC HD74HC245P	97	EI-396541J	OSC X'TAL HC-49/U 32.000000MHZ
43	EI-393697J	IC HD74HC259P	98	EI-419166J	OSC X'TAL TD308C 10MHZ
44	EI-388709J	IC HD74HC32P	99	EI-384779J	OSC X'TAL TD308C 33.8688MHZ
45	EI-393698J	IC HD74HC365P	100	* EI-358632J1	SOCKET INLET SOT-16 3P
46	EI-388567J	IC HD74HC573P	101	EL-728382J	EL BACK LIGHT
47	EI-413124J	IC HD74HC590P	102	EM-382317J	IND LCD EDM-MPJ2COW
48	EI-393702J	IC HD74HC595P	103	EQ-348929	RELAY SIG G5A-237P 2TR 12V
49	EI-416497J	IC HM658512LP-85	104	* ER-200972	R FUSE H S10 ERD2FC 1/4W 30R0G
50	EI-378277	IC I-0055	105	* ER-318647	R FUSE H S10 ERD2FC 1/4W 4R7J
51	EI-379605	IC LA6339	106	ES-414627J	SW ROTARY EC24B50D0
52	EI-405201J	IC LC3517BL-15	107	* ES-364478	SW SEESAW SDOTA1 T8.5 01-1
53	EI-416488J	IC LC3517BSL-15	108	ES-412281J	SW SLIDE SGSU12 2-03S
54	EI-378276	IC LC7981	109	ES-410552J	SW TACT SKHV8E T05
55	EI-397666J	IC LM2940CT-5.0	110	ET-379341	DETECTOR PC910X
			111	ET-419234J	TR FET 2SK669 T05
			112	EV-419242J	VR ROTA.RK09K1110 H6.5L25 B103
			113	EV-419243J	VR ROTARY RK16312A0L25A103X2
			114	EV-419241J	VR SPL RK09T1112 SW L15 B502
			115	* EZ-403706J	BATTERY LITHIUM CR2032E
			116	SE-376331	PAO

2. P.C. BOARD BLOCK

Ref. No. Part No. Description

1	BA-L4012A020A	PC CPU BLK MPC3000
2	BA-L4012A030A	PC(4) AD/DA BLK MPC3000
3-A	BA-L4012A040A	PC(4) DRUM PAD BLK MPC3000(J)
3-B	BA-L4012A040B	PC(4) DRUM PAD BLK MPC3000(E)
4	BA-L4012A050A	PC(4) OPERATION BLK MPC3000
5	BA-L4012A090A	PC(4) JACK BLK MPC3000
6	BA-L6028A050A	PC 2M-MEMORY BLK S3000

PC (#) AD/DA BLK CONSISTS OF FOLLOWING P.C. BOARDS.

- AD/DA P.C. BOARD
- 8DACS P.C. BOARD

PC (#) DRUM PAD BLK CONSISTS OF FOLLOWING P.C. BOARDS.

- DRUM PAD P.C. BOARD
- POWER P.C. BOARD
- FILTER P.C. BOARD
- VOLUME P.C. BOARD

PC (#) OPERATION BLK CONSISTS OF FOLLOWING P.C. BOARDS.

- OPERATION (A) P.C. BOARD
- OPERATION (B) P.C. BOARD
- OPERATION (C) P.C. BOARD
- SCSI JACK P.C. BOARD
- CONT VR P.C. BOARD

PC (#) JACK BLK CONSISTS OF FOLLOWING P.C. BOARDS.

- JACK P.C. BOARD
- SCSI/D IN P.C. BOARD

3. CPU P.C. BOARD

Ref. No. Part No. Description

D1	ED-344280	D SILICON H GMA-01-FY2 F05
D2	ED-344280	D SILICON H GMA-01-FY2 F05
D3	ED-344280	D SILICON H GMA-01-FY2 F05
D4	ED-344280	D SILICON H GMA-01-FY2 F05
FL1	EH-410420J	FILTER EMI DSS306-93B101MT05
FL2	EH-410420J	FILTER EMI DSS306-93B101MT05
FL3	EH-410420J	FILTER EMI DSS306-93B101MT05
FL4	EH-410420J	FILTER EMI DSS306-93B101MT05
FL5	EH-410420J	FILTER EMI DSS306-93B101MT05
FL6	EH-410420J	FILTER EMI DSS306-93B101MT05
FL7	EH-410420J	FILTER EMI DSS306-93B101MT05
FL8	EH-410420J	FILTER EMI DSS306-93B101MT05
FL9	EH-410420J	FILTER EMI DSS306-93B101MT05
FL10	EH-410420J	FILTER EMI DSS306-93B101MT05
FL11	EH-410420J	FILTER EMI DSS306-93B101MT05
FL12	EH-410420J	FILTER EMI DSS306-93B101MT05
FL13	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL14	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL15	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL16	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL17	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL18	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL19	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL20	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL21	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL22	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL23	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL24	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL25	EH-413150J	FILTER EMI BL03RN2-R62T4 T05

Ref. No.	Part No.	Description
FL26	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL27	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL28	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL29	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL30	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL31	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL32	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL33	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL34	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL35	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL36	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL37	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL38	EH-410420J	FILTER EMI DSS306-93B101MT05
FL39	EH-410420J	FILTER EMI DSS306-93B101MT05
FL40	EH-410420J	FILTER EMI DSS306-93B101MT05
IB1	EH-359185	COMP R RKC1/8BB 103J
IC1	EI-413121J	IC UPD72069GF-38A
IC2	EI-393698J	IC HD74HC365P
IC3	EI-378276	IC LC7981
IC4	EI-416488J	IC LC3517BSL-15
IC5	EI-388709J	IC H074HC32P
IC6	EI-413119J	IC UPD70236GD-16
IC7	EI-375185	IC MS1953BL
IC8	EI-388712J	IC HD74HC245P
IC9	EI-386289J	IC H074HC138P
IC10	EI-402126J	IC HD74HC155P
IC11	EI-388711J	IC H074HC00P
IC12	EI-360038J	IC TC74HC02AP
IC13	EI-419228J	IC AM27C020-150DC
IC14	EI-419226J	IC AM27C020-150DC
IC15	EI-416497J	IC HM658512LP-85
IC16	EI-416497J	IC HM658512LP-85
IC17	EI-416488J	IC LC3517BSL-15
IC18	EI-389050J	IC H074AC32P
IC19	EI-386287J	IC H074AC00P
IC20	EI-419227J	IC TE7774
IC21	EI-419228J	IC TC74HC4072AP
IC22	EI-386303J	IC HD74HC08P
IC23	EI-372103	IC MB89254
IC24	EI-396510J	IC HD74HC173P
IC25	EI-419229J	IC 18CV8PC-25 M8P3
IC27	EI-390698J	IC HD74HC365P
IC28	EI-413120J	IC L7A1045 L6028 DSP-A
IC29	EI-419230J	IC 18CV8PC-15 M8P8
IC30	EI-425713J	IC MB89255B-P-G
IC31	EI-419232J	IC 18CV8PC-15 M8P7
IC32	EI-393702J	IC HD74HC595P
IC33	EI-393702J	IC HD74HC595P
IC34	EI-386287J	IC HD74AC00P
IC35	EI-386300J	IC HD74AC86P
J1	EJ-405316J	DIN J M1756 3P
J2	EJ-405316J	DIN J M1756 3P
J3	EJ-405316J	DIN J M1756 3P
J4	EJ-405316J	DIN J M1756 3P
J5	EJ-405316J	DIN J M1756 3P
J6	EJ-405316J	DIN J M1756 3P
J7	EJ-419240J	SOCKET FCN-23SJ068-G/0 68P
L1	EO-394178J	COIL FIX 2 SBT-0240 400N
L2	EO-394178J	COIL FIX 2 SBT-0240 400N
L3	EO-362435	COIL FIX 1 LAL03NA R22M
L4	EO-394178J	COIL FIX 2 SBT-0240 400N
L5	EO-394178J	COIL FIX 2 SBT-0240 400N
P7	EJ-425508J	PLUG FAN-20SG-1 20P
P10	EJ-419247J	PLUG 128A-050P2C-S14A 50P
PH1	ET-379341	DETECTOR PC910X
PH2	ET-379341	DETECTOR PC910X
R8	* ER-200972	R FUSE H S10 ERO2FC 1/4W 33R0G
TR1	ET-419234J	TR FET 2SK669 T05
W201	EW-425614J	WIREASSY L4012-1 W201 34P
W202	EW-425615J	WIREASSY L4012-1 W202 34P
X1	EI-396541J	OSC X'TAL HC-49/U 32.000000MHZ
X2	EI-384779J	OSC X'TAL TD308C 33.8688MHZ
I	* EZ-403706J	BATTERY LITHIUM CR2032E

4. AD/DA P.C. BOARD

Ref. No.	Part No.	Description
D101	ED-389834J	D SILICON DS135E-FB2 F12 100/1
D102	ED-388358J	D ZENER H HZSSC2
D103	EO-388358J	D ZENER H HZSSC2
D104	ED-388358J	D ZENER H HZSSC2
D105	ED-391103J	D ZENER H HZS12B2
D106	ED-391103J	D ZENER H HZS12B2
F101	* EJ-376821	FUSE ICP-N15 50V 0.6A
FL101	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL102	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL103	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL104	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL105	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL106	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL107	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL108	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL109	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL110	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL111	EH-410420J	FILTER EMI DSS306-938101MT05
FL112	EH-410420J	FILTER EMI DSS306-938101MT05
FL113	EH-410420J	FILTER EMI DSS306-938101MT05
IC101	EJ-348785	IC M5220L
IC102	EJ-348785	IC M5220L
IC103	EJ-362587J1	IC M5238AL
IC104	EJ-362587J1	IC M5238AL
IC105	EJ-365829	IC UPC812C-AK
IC106	EJ-422329J	IC AK5328-VP
IC107	EJ-412283J	IC M51955BL
IC108	EJ-419235J	IC SM5841HP
IC109	EJ-412279J1	IC PCM69AP-4
IC110	EJ-377191	IC NJM5532D-0
IC111	EJ-348785	IC M5220L
IC112	EJ-348785	IC M5220L
IC113	EJ-348785	IC M5220L
IC114	EJ-353227	IC M5216L
IC115	EJ-377101	IC UPC7805HF
IC116	EJ-413206J	IC NJM7905FA
IC117	EJ-397666J	IC LM2940CT-5.0
J101	EJ-303548J	PIN J YKB11-0252B YELLOW 1P
J102	EJ-353031	PHONE J 3P HLJ0520-010
J103	EJ-353031	PHONE J 3P HLJ0520-010
J104	EJ-354105	PHONE J 2P HLJ0520-110 6.3
J105	EJ-354105	PHONE J 2P HLJ0520-110 6.3
J106	EJ-353031	PHONE J 3P HLJ0520-010
L101	EO-394178J	COIL FIX 2 SBT-0240 400N
L102	EO-394178J	COIL FIX 2 SBT-0240 400N
P101	EJ-425511J	PLUG FAN-34SG-1 34P
P102	EJ-425509J	PLUG FAN-26SG-1 26P
R143	ER-322787	R C8H S10 FS RDS 1/4W 101J
R179	ER-322591	R C8H S10 FS RDS 1/4W 101J
R180	ER-322591	R C8H S10 FS RDS 1/4W 101J
R191	ER-321619	R OMFI H S15 FS 1W 101J
R192	ER-321619	R OMFI H S15 FS 1W 101J
RL101	EO-348929	RELAY SIG GSA-237P 2TR 12V
SW101	ES-412281J	SW SLIDE SSSU12-2-03S

5. 8DACS P.C. BOARD

Ref. No.	Part No.	Description
D301	ED-388358J	D ZENER H HZSSC2
D302	ED-388358J	D ZENER H HZSSC2
FL301	EH-410420J	FILTER EMI DSS306-938101MT05
FL302	EH-410420J	FILTER EMI DSS306-938101MT05
FL303	EH-410420J	FILTER EMI DSS306-938101MT05
FL304	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL305	EH-410420J	FILTER EMI DSS306-938101MT05
FL306	EH-410420J	FILTER EMI DSS306-938101MT05
FL307	EH-410420J	FILTER EMI DSS306-938101MT05
FL308	EH-410420J	FILTER EMI DSS306-938101MT05
IC301	EJ-419235J	IC SM5841HP
IC302	EJ-419235J	IC SM5841HP
IC303	EJ-419235J	IC SM5841HP
IC304	EJ-419235J	IC SM5841HP

Ref. No.	Part No.	Description
IC305	EJ-412279J1	IC PCM69AP-4
IC306	EJ-412279J1	IC PCM69AP-4
IC307	EJ-412279J1	IC PCM69AP-4
IC308	EJ-377191	IC NJM5532D-0
IC309	EJ-377191	IC NJM5532D-0
IC310	EJ-377191	IC NJM5532D-0
IC311	EJ-377191	IC NJM5532D-0
IC312	EJ-377191	IC NJM5532D-0
IC313	EJ-348785	IC M5220L
IC314	EJ-348785	IC M5220L
IC315	EJ-348785	IC M5220L
IC316	EJ-348785	IC M5220L
IC317	EJ-348785	IC M5220L
IC318	EJ-348785	IC M5220L
IC319	EJ-348785	IC M5220L
IC320	EJ-348785	IC M5220L
IC321	EJ-397666J	IC LM2940CT-5.0
IC322	EJ-397666J	IC LM2940CT-5.0
J301	EJ-354105	PHONE J 2P HLJ0520-110 6.3
J302	EJ-354105	PHONE J 2P HLJ0520-110 6.3
J303	EJ-354105	PHONE J 2P HLJ0520-110 6.3
J304	EJ-354105	PHONE J 2P HLJ0520-110 6.3
J305	EJ-354105	PHONE J 2P HLJ0520-110 6.3
J306	EJ-354105	PHONE J 2P HLJ0520-110 6.3
J307	EJ-354105	PHONE J 2P HLJ0520-110 6.3
J308	EJ-354105	PHONE J 2P HLJ0520-110 6.3
R429	ER-322591	R C8H S10 FS RDS 1/4W 101J
R430	ER-322591	R C8H S10 FS RDS 1/4W 101J
R431	ER-322591	R C8H S10 FS RDS 1/4W 101J
R432	ER-322591	R C8H S10 FS RDS 1/4W 101J
R433	ER-322591	R C8H S10 FS RDS 1/4W 101J
R434	ER-322591	R C8H S10 FS RDS 1/4W 101J
R435	ER-322591	R C8H S10 FS RDS 1/4W 101J
R436	ER-322591	R C8H S10 FS RDS 1/4W 101J
W301	EW-425616J	WIREASSY L4012-1 W301 26P

6. DRUM PAD P.C. BOARD

Ref. No.	Part No.	Description
D701	ED-344280	D SILICON H GMA-01-FY2 F05
D702	ED-344280	D SILICON H GMA-01-FY2 F05
D703	ED-344280	D SILICON H GMA-01-FY2 F05
D704	ED-344280	D SILICON H GMA-01-FY2 F05
D705	ED-344280	D SILICON H GMA-01-FY2 F05
D706	ED-344280	D SILICON H GMA-01-FY2 F05
D707	ED-344280	D SILICON H GMA-01-FY2 F05
D708	ED-344280	D SILICON H GMA-01-FY2 F05
D709	ED-344280	D SILICON H GMA-01-FY2 F05
D710	ED-344280	D SILICON H GMA-01-FY2 F05
D711	ED-344280	D SILICON H GMA-01-FY2 F05
D712	ED-344280	D SILICON H GMA-01-FY2 F05
D713	ED-344280	D SILICON H GMA-01-FY2 F05
D714	ED-344280	D SILICON H GMA-01-FY2 F05
D715	ED-344280	D SILICON H GMA-01-FY2 F05
D716	ED-344280	D SILICON H GMA-01-FY2 F05
D717	ED-344280	D SILICON H GMA-01-FY2 F05
D718	ED-344280	D SILICON H GMA-01-FY2 F05
D719	ED-344280	D SILICON H GMA-01-FY2 F05
D720	ED-344280	D SILICON H GMA-01-FY2 F05
D721	ED-344280	D SILICON H GMA-01-FY2 F05
D722	ED-344280	D SILICON H GMA-01-FY2 F05
D723	ED-344280	D SILICON H GMA-01-FY2 F05
D724	ED-344280	D SILICON H GMA-01-FY2 F05
IC701	EJ-387934J	IC HD74HC04P
IC702	EJ-379605	IC LA6339
IC703	EJ-362587J1	IC M5238AL
IC704	EJ-362587J1	IC M5238AL
P701	EJ-425508J	PLUG FAN-20SG-1 20P
P702	EJ-379603	PLUG 20FR-ST

7. POWER P.C. BOARD

Ref. No.	Part No.	Description
C802	EC-379611	C EC V S10 SME 123M 10.0DC
C803	EC-324662	C EC V CUT AS1 222M 25.0DC
C804	EC-324662	C EC V CUT AS1 222M 25.0DC
C807	EC-379535	C TT V F05 DN 106M 16.0DC
D801	* ED-383752J	D SILICON OBF40C 200V/4.0A
D802	* ED-330319	D SILICON DBA10B 100V/1.0A
D803	* ED-389834J	D SILICON DS135E-FB2 F12 100/1
D804	* ED-388358J	D ZENER H HZSSC2
IC801	* EI-353281	IC SI3052V
IC802	* EI-397407J	IC NJM7812FA
IC803	* EI-410281J	IC NJM7912FA
F2-A	* EF-308952	FUSE TSC A 250V 4.00A [J]
F2-B	* EF-306957	FUSE TSC 125V 4.00A [C.A]
F2-C	* EF-691007	FUSE SET T 250V 3.15A [E.V.S]
F2-D	* EF-359225	FUSE BETT 250V 3.15A [B]
F3-A	* EF-309388	FUSE TSC A 250V 800MA [J]
F3-B	* EF-309391	FUSE TSC 125V 800MA [C.A]
F3-C	* EF-601942	FUSE SET T 250V 630MA [E.V.S]
F3-D	* EF-358974	FUSE BETT 250V 630MA [B]
F4-A	* EF-309388	FUSE TSC A 250V 800MA [J]
F4-B	* EF-309391	FUSE TSC 125V 800MA [C.A]
F4-C	* EF-601942	FUSE SET T 250V 630MA [E.V.S]
F4-D	* EF-358974	FUSE BETT 250V 630MA [B]

8. FILTER P.C. BOARD

Ref. No.	Part No.	Description
C851	* EC-425606J	C MMY V CUT MMRC 683M 27SAC
C852	* EC-410346J	C CE V DE1110E102M 400AC
C853	* EC-410346J	C CE V DE1110E102M 400AC
C854	* EC-410346J	C CE V DE1110E102M 400AC
C855	* EC-410346J	C CE V DE1110E102M 400AC
C856	* EC-338411	C CE V DE7150 FZ 103P 400AC
FL851	* EO-389172J	COIL LF LF-4N 502
R851	* ER-318647	R FUSE H S10 ERO2FC 1/4W 4R7J
T851	BT-390145J	TRANS PULSE NI05-05-5
F1-A	* EF-309387	FUSE TSC A 250V 1.00A [J]
F1-B	* EF-310229	FUSE TSC 125V 1.00A [C.A]
F1-C	* EF-623103	FUSE SET T 250V 1.00A [E.V.S]
F1-D	* EF-355226	FUSE BETT 250V 1.00A [B]

9. VOLUME P.C. BOARD

Ref. No.	Part No.	Description
VR701	EV-419243J	VR ROTARY RK16312A0L25A103X2
VR702	EV-419243J	VR ROTARY RK16312A0L25A103X2

10. OPERATION (A) P.C. BOARD

Ref. No.	Part No.	Description
D601	ED-417916J	D LED SLN-210VT RED T26
D602	ED-417916J	D LED SLN-210VT RED T26
D603	ED-417916J	D LED SLN-210VT RED T26
D604	ED-417916J	D LED SLN-210VT RED T26
D605	ED-417916J	D LED SLN-210VT RED T26
D606	ED-417916J	D LED SLN-210VT RED T26
D607	ED-417916J	D LED SLN-210VT RED T26
D608	ED-417916J	D LED SLN-210VT RED T26
D609	ED-417916J	D LED SLN-210VT RED T26
D610	ED-389834J	D SILICON DS135E-FB2 F12 100/1
D611	ED-344280	D SILICON H GMA-01-FY2 F05
D612	ED-344280	D SILICON H GMA-01-FY2 F05
D613	ED-344280	D SILICON H GMA-01-FY2 F05
D614	ED-344280	D SILICON H GMA-01-FY2 F05
D615	ED-344280	D SILICON H GMA-01-FY2 F05
D616	ED-344280	D SILICON H GMA-01-FY2 F05
D617	ED-344280	D SILICON H GMA-01-FY2 F05
D618	ED-344280	D SILICON H GMA-01-FY2 F05
D619	ED-388358J	D ZENER H HZSSC2
JE601	EH-349374	COMP R RKC1/BB8 472J
IC601	EI-405572J	IC UPD78C10AGO-36
IC602	EI-397343J	IC AM27C256-1S0DC
IC603	EI-388567J	IC HD74HC573P
IC604	EI-386289J	IC HD74HC138P
IC605	EI-393697J	IC HD74HC259P
IC606	EI-393697J	IC HD74HC259P
IC607	EI-338695	IC NJM78L05A
SW601	ES-410552J	SW TACT SKHVBE T05
SW602	ES-410552J	SW TACT SKHVBE T05
SW603	ES-410552J	SW TACT SKHVBE T05
SW604	ES-410552J	SW TACT SKHVBE T05
SW605	ES-410552J	SW TACT SKHVBE T05
SW606	ES-410552J	SW TACT SKHVBE T05
SW607	ES-410552J	SW TACT SKHVBE T05
SW608	ES-410552J	SW TACT SKHVBE T05
SW609	ES-410552J	SW TACT SKHVBE T05
SW610	ES-410552J	SW TACT SKHVBE T05
SW611	ES-410552J	SW TACT SKHVBE T05
SW612	ES-410552J	SW TACT SKHVBE T05
SW613	ES-410552J	SW TACT SKHVBE T05
SW614	ES-410552J	SW TACT SKHVBE T05
SW615	ES-410552J	SW TACT SKHVBE T05
SW616	ES-410552J	SW TACT SKHVBE T05
SW617	ES-410552J	SW TACT SKHVBE T05
SW618	ES-410552J	SW TACT SKHVBE T05
SW619	ES-410552J	SW TACT SKHVBE T05
SW620	ES-410552J	SW TACT SKHVBE T05
SW621	ES-410552J	SW TACT SKHVBE T05
SW622	ES-410552J	SW TACT SKHVBE T05
SW623	ES-410552J	SW TACT SKHVBE T05
SW624	ES-410552J	SW TACT SKHVBE T05
SW625	ES-410552J	SW TACT SKHVBE T05
SW626	ES-410552J	SW TACT SKHVBE T05
SW627	ES-410552J	SW TACT SKHVBE T05
SW628	ES-410552J	SW TACT SKHVBE T05
SW629	ES-410552J	SW TACT SKHVBE T05
SW630	ES-410552J	SW TACT SKHVBE T05
SW631	ES-410552J	SW TACT SKHVBE T05
SW632	ES-410552J	SW TACT SKHVBE T05
SW633	ES-410552J	SW TACT SKHVBE T05
SW634	ES-410552J	SW TACT SKHVBE T05
SW635	ES-410552J	SW TACT SKHVBE T05
SW636	ES-410552J	SW TACT SKHVBE T05
SW637	ES-410552J	SW TACT SKHVBE T05
SW638	ES-410552J	SW TACT SKHVBE T05
SW639	ES-410552J	SW TACT SKHVBE TGS
SW640	ES-410552J	SW TACT SKHVBE T05
SW641	ES-410552J	SW TACT SKHVBE T05
SW642	ES-410552J	SW TACT SKHVBE T05
SW643	ES-410552J	SW TACT SKHVBE T05
SW644	ES-410552J	SW TACT SKHVBE T05
SW645	ES-410552J	SW TACT SKHVBE T05
SW646	ES-410552J	SW TACT SKHVBE T05
SW647	ES-410552J	SW TACT SKHVBE T05
SW648	ES-410552J	SW TACT SKHVBE T05



Ref. No.	Part No.	Description
W601	EW-425618J	WIRE ASSY L4012-1 W601 20P
W602	EW-425619J	WIRE ASSY L4012-1 W602 20P
X601	EI-354123	OSC CE CSA120MTZ 12.00000MHZ

11. OPERATION (B) P.C. BOARD

Ref. No.	Part No.	Description
D661	ED-417916J	D LED SLN-210VT RED T26
D662	ED-417916J	D LED SLN-210VT RED T26
D663	ED-417916J	D LED SLN-210VT RED T26
D664	ED-417916J	D LED SLN-210VT RED T26
D665	ED-417916J	D LED SLN-210VT RED T26
D666	ED-417916J	D LED SLN-210VT RED T26
D667	ED-417916J	D LED SLN-210VT RED T26
SW661	ES-410552J	SW TACT SKHVBE T05
SW662	ES-410552J	SW TACT SKHVBE T05
SW663	ES-410552J	SW TACT SKHVBE T05
SW664	ES-410552J	SW TACT SKHVBE T05
SW665	ES-410552J	SW TACT SKHVBE T05
VR661	EV-365876	VR SLIDE VJ4513-2PVNB5 103

12. OPERATION (C) P.C. BOARD

Ref. No.	Part No.	Description
SW651	ES-410552J	SW TACT SKHVBE T05
SW652	ES-410552J	SW TACT SKHVBE T05
SW653	ES-410552J	SW TACT SKHVBE T05
SW654	ES-410552J	SW TACT SKHVBE T05

13. SCSI JACK P.C. BOARD

Ref. No.	Part No.	Description
FL551	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL552	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL553	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL554	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL555	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL556	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL557	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL558	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL559	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL560	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL561	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL562	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL563	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL564	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL565	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL566	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL567	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
FL568	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
J551	EJ-428182J	SOCKET OBLIC-J25SAF-2L9 25P
WS03	EW-425617J	WIRE ASSY L4012-1 W503 26P

14. CONT VR P.C. BOARD

Ref. No.	Part No.	Description
VR703	EV-419241J	VR SPL RAK0971112 SW L15 B502

15. JACK P.C. BOARD

Ref. No.	Part No.	Description
D501	ED-344280	D SILICON H GMA-01-FY2 F05
D502	ED-344280	D SILICON H GMA-01-FY2 F05
FL501	EH-410420J	FILTER EMI DSS306-93B101MT05
FL502	EH-410420J	FILTER EMI DSS306-93B101MT05
FL503	EH-410420J	FILTER EMI DSS306-93B101MT05
FL504	EH-410420J	FILTER EMI DSS306-93B101MT05
FL505	EH-410420J	FILTER EMI DSS306-93B101MT05
IC501	EJ-362587J1	IC M5238AL
IC502	EJ-362587J1	IC M5238AL
IC503	EJ-321606	IC LM393N
JS01	EJ-354105	PHONE J 2P HLJ0520-110 6 3
JS02	EJ-354105	PHONE J 2P HLJ0520-110 6 3
JS03	EJ-353031	PHONE J 3P HLJ0520-010
JS04	EJ-354105	PHONE J 2P HLJ0520-110 6 3
VR501	EV-419242J	VR ROTA.RAK09K1110 H6.5L25 B103

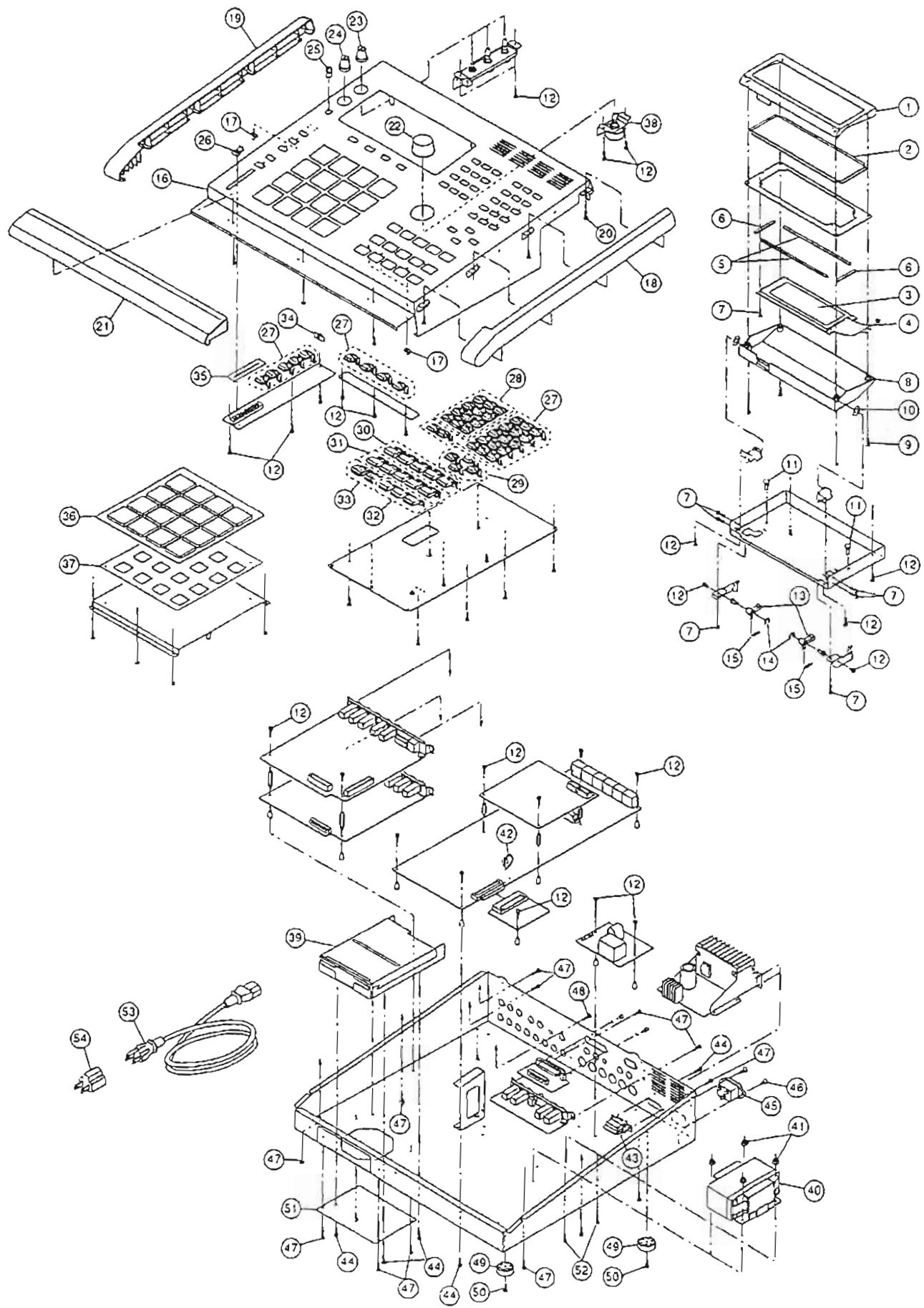
16. SCSI/D IN P.C. BOARD

Ref. No.	Part No.	Description
D901	ED-389834J	D SILICON DS135E-F82 F12 100/1
F901	* EF-373142	FUSE ICP-N25 50V 1.0A
FL901	EH-413150J	FILTER EMI BL03RN2-R62T4 T05
IB901	EH-408860J	COMP R RKC1/8B9 111J
IB902	EH-408860J	COMP R RKC1/8B9 111J
IC901	EJ-388602J	IC M889352A-P.G
IC902	EJ-410389J	IC P030RV1
IC903	EJ-425713J	IC M889255B-P.G
IC904	EJ-387936J	IC HD74HC175P
IC905	EJ-379997J	IC YM3623B
IC906	EJ-425214J	IC 18CV8PC-15 MSP1
IC907	EJ-393702J	IC HD74HC395P
IC908	EJ-393702J	IC HD74HC95P
IC909	EJ-387934J	IC HD74HC04P
P901	EJ-419246J	SOCKET 128A-050S2A-S14A 50P
P902	EJ-425509J	PLUG FAN-26SG-1 26P

17. WAVE MEMORY P.C. BOARD (2M-MEMORY)

Ref. No.	Part No.	Description
IC1	EJ-412247J	IC M8814400-80L PSZ-G
IC2	EJ-412247J	IC M8814400-80L PSZ-G
IC3	EJ-412247J	IC M8814400-80L PSZ-G
IC4	EJ-412247J	IC M8814400-80L PSZ-G
IC5	EJ-419185J	IC 18CV8PC-25 L6028C
P301	EJ-413161J	PLUG FCN-235P68-G/0 68P

FINAL ASSEMBLY BLOCK



18. FINAL ASSEMBLY BLOCK

Ref. No.	Part No.	Description
1	SP-419812J	PANEL LCD(A)3 MPC3000
2	SE-419757J	WINDOW LCD
3	EM-382317J	IND LCD EDM-MPJ2COW
4	EL-728382J	EL BACK LIGHT
5	SZ-401475J1	SEAL DUST A
6	SZ-401476J1	SEAL DUST B
7	ZS-320906	ST BR30X06STL CMT
8	SP-419959J	PANEL LCD(B)2
9	ZS-417407	PAN30X10STL BNI
10	ZW-259738	PW41X070X025PSL
11	ZW-318343	RV NYL40X050
12	ZS-379405	BID30X06STL CMT
13	ML-380175J	ARM LOCK
14	ZW-270101	RING E 300SUP CMT
15	ZG-380174J	SP PULL ARM LOCK
16	SP-419767J1	PANEL TOP
17	SE-419756J	LENS LED
18	SP-419765J	PANEL SIDE(R)
19	SP-419766J	PANEL SIDE(L)
20	ZS-332009	PT BR30X06STL CMT
21	SZ-419759J	CUSHION PAD PART
22	SK-411156J	KNOB CONTROL
23	SK-411144J	KNOB VOL PART(1)
24	SK-411147J	KNOB VOL PART(2)
25	SK-413636J	KNOB VOL GR
26	SK-364219B	KNOB SLIDE(B)
27	SB-419762J	BUTTON PUSH(A)
28	SB-419763J	BUTTON PUSH(B)
29	SB-419764J	BUTTON PUSH(C)
30	SK-419827J	KNOB OPERATE(E)
31	SK-378253A	KNOB OPERATE(A)
32	SK-378253B	KNOB OPERATE(B)
33	SK-378253D	KNOB OPERATE(D)
34	SE-419749J	MASK LED
35	SE-423110J	MASK SLIDE
36	SE-376331	PAD
37	BA-379695J1	PC PAD SENSOR
38	ES-414627J	SW ROTARY EC24B50D0
39	BB-428036J	FLOPPY DISK FD-235HF-3300
40-A	* BT-378271	TRANS POW L4003 J [J]
40-B	* BT-378272	TRANS POW L4003 C,A {C,A}
40-C	* BT-419200J	TRANS POW L4012 E,V,B,S [E,V,B,S]
41	ZW-609434	N FRANGE 30STL CMT
42	* EZ-403706J	BATTERY LITHIUM CR2032E
43	* ES-364478	SW SEESAW SDOTA1 T8.5 01-1
44	ZS-355511	BID30X06STL BNI
45	* EJ-358632J1	SOCKET INLET SOT-16 3P
46	ZS-336612	ST CTS30X08STL BNI
47	ZS-345272	ST BR30X06STL BNI
48	ZS-350934	PT BR30X08STL BNI
49	ZS-379405	BID30X06STL CMT
50	SA-332850	FOOT ROUND SHAPED
51	ZS-360715	ST PAN30X08STL CMT C080
52	SE-419761J	COVER FDD
53	ZS-396044	BID30X08STL BNI
54-A	* EW-380905J	AC CORD 250S KP300 KS16A H B J [J]
54-B	* EW-368420J1	AC CORD200SKP30KS16 BAC {C,A}
54-C	* EW-403993J	AC CORD200SKP4819DKS31A 8 E {E,V}
54-D	* EW-419170J	AC CORD200S KP610 KS31A B [B]
54-E	* EW-368418J1	AC CORD200SKP51KS31 B S [S]
55	* EJ-405424J	PLUG ADAPTOR KPA-25 [J]

NOTE :

Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

19. EXM3008 (OPTIONAL P.C. BOARD)

Ref. No.	Part No.	Description
IC1	EJ-414848J	IC MB8116400-70PZ-G
IC2	EJ-414848J	IC MB8116400-70PZ-G
IC3	EJ-414848J	IC MB8116400-70PZ-G
IC4	EJ-414848J	IC MB8116400-70PZ-G
IC5	EJ-419184J	IC 18CV8PC-25 LS110A
P101	EJ-413161J	PLUG FCN-23SP68-G/0 68P

20. IB-CRT (A) (OPTIONAL P.C. BOARD)

Ref. No.	Part No.	Description
IC1	EJ-413124J	IC HD74HC590P
IC2	EJ-413124J	IC HD74HC590P
IC3	EJ-405201J	IC LC3517BL-1S
IC4	EJ-393702J	IC HD74HC595P *
IC5	EJ-419160J	IC HD74HC166P
IC6	EJ-419161J	IC 18CV8PC-25 L3022A
IC7	EJ-419162J	IC 18CV8PC-25 L3022B
IC8	EJ-419256J	IC PALCE 22V10H-25PC L3022C
IC9	EJ-419165J	IC 18CV8PC-25 L3022D
X1	EJ-419168J	OSC XTAL TD308C 10MHZ

21. IB-CRT (B) (OPTIONAL P.C. BOARD)

Ref. No.	Part No.	Description
W1	EJ-419167J	SOCKET KHEY-15S-1A3A 15P

22. I-0055 (OPTIONAL IC)

Ref. No.	Part No.	Description
1	EJ-378277	IC I-0055

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BAL4012A030A	2-2	ED389834J	7-D803	EH410420J	15-FL503	EI348785	5-IC318
BAL4012A040A	2-3-A	ED389834J	10-D610	EH410420J	15-FL504	EI348785	5-IC319
BAL4012A040B	2-3-B	ED389834J	16-D901	EH410420J	15-FL505	EI348785	5-IC320
BAL4012A050A	2-4	ED391103J	4-D105	EH413150J	3-FL13	EI353227	4-IC114
BAL4012A090A	2-5	ED391103J	4-D106	EH413150J	3-FL14	EI353281	7-IC801
BAL6028A050A	2-6	ED417916J	10-D601	EH413150J	3-FL15	EI354123	10-X601
BA379695J1	18-37	ED417916J	10-D602	EH413150J	3-FL16	EI360038J1	3-IC12
BB428036J	18-39	ED417916J	10-D603	EH413150J	3-FL17	EI362587J1	4-IC103
BT378271	18-40-A	ED417916J	10-D604	EH413150J	3-FL18	EI362587J1	4-IC104
BT378272	18-40-B	ED417916J	10-D605	EH413150J	3-FL19	EI362587J1	6-IC703
BT390145J	8-T851	ED417916J	10-D606	EH413150J	3-FL20	EI362587J1	6-IC704
BT419200J	18-40-C	ED417916J	10-D607	EH413150J	3-FL21	EI362587J1	15-IC501
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ABBREVIATIONS FOR THE SERVICE MANUAL

ABBREVIATION	EXPLANATION	ABBREVIATION	EXPLANATION
AMP (Amp)	AMPlifier	MINI	MINimum
BBD	Bucket Brigade Diode	MIX	MIXer
BCD	Binary Code Decimal	MOD	MOdulation
B.DOWN	Brake DOWN	M.WHEEL	Modulation WHEEL
B.UP	Back UP	OSC	OSCillator
CE	Chip Enable	PLD	Programmable Logic Device
CH	CHannel	RAM	Random Access Memory
COMP	COMParator	RD	ReaD
CONT	CONTrol	REG	REGulator
CV	Control Voltage	RESO	RESOnance
D/A	Digital to Analogue	RL	ReLay
DMA	Direct Memory Access	ROM	Read Only Memory
DSP	Digital Signal Processor	SCSI	Small Computer System Interface
EG	Envelope Generator	S/H	Sample and Hold
EXT	EXTernal	SMPTE	Society of Motion Picture & Television Engineers
FREQ	FREQuency	SW	SWitch
HPF	High Pass Filter	THRU	THRoUgh
INH	INHibit	TRANS	TRANSpose
INT	INTerrupt	U	Upper
INV	INVerter	VA	Voltage Analog
L	Lower	VCA	Voltage Controlled Amplifier
LFO	Low Frequency Oscillator	VCF	Voltage Controlled Filter
MAX	MAXimum	VR	Variable Resistor
MEMO	MEMOry	VREF	REFerence Voltage
MIDI	Musical Instrument Digital Interface	WR	WRite

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