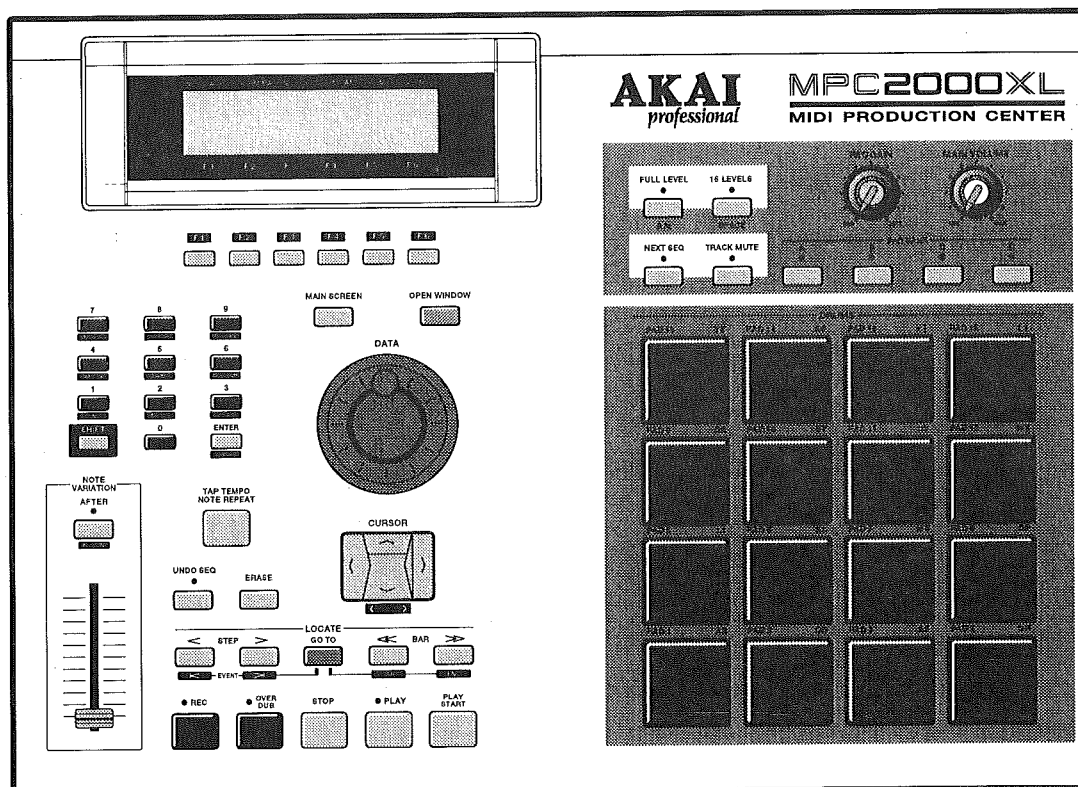


AKAI SERVICE MANUAL

MPC2000XL

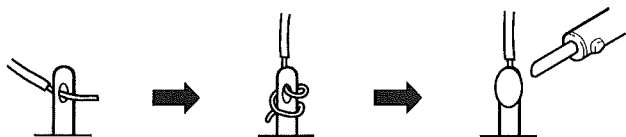


MIDI PRODUCTION CENTER
MODEL **MPC2000XL**

★ 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.

★ 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

General

Disk drive	3.5 inch Floppy disk (2HD/2DD)
Display	248 X 60 dot graphic LCD
Dimensions	405 (W) x 106 (H) x 331 (D) mm
Weight.....	5.5 kg
Power requirements	100 - 240 VAC, 50/60 Hz
Power consumption	23 W (13 W without option board)
Memory expansion slot	2 / 72 pin SIMM (70 ns)

Sound Generator

Sampling rate	44.1 kHz (frequency response: 20 Hz – 20 kHz)
Sampling capacity	2 MB standard (21.9 seconds mono or 10.9 seconds stereo)
Data format	16 bit linear
Dynamic filtering	12 dB/OCT dynamic resonant LPF per voice
Maximum sounds in memory	256
Number of sound programs	24
Sound assignments per program	64
Simultaneous voices	32

Sequencer

Maximum events	300,000 notes (maximum 50,000 notes per sequence)
Resolution	96 parts per 1/4-note (ppq)
Sequences	99
Tracks per sequence	64
MIDI output channels	32 (16 channels X 2 output ports)
Song mode	20 songs, 250 steps per song
Drum pads	16 (velocity and pressure sensitive)
Drum pad banks	4
Sync modes	MIDI clock and SMPTE (optional). SMPTE frame rates supported are 24,25,29.97 drop and 30

Rear Panel Inputs/Outputs

Record input (both L and R)	1/4-inch stereo phone X 2, balanced –40 dBu
Input impedance	39 kohms
Maximum input level	+10 dBu
Digital sampling input	RCA-pin X 1, SP DIF (optional)
Digital master output	RCA-pin X 1, SP DIF (optional)
Stereo output	1/4-inch phone X 2, unbalanced +11 dBu
output impedance	100 ohms
Maximum output level	+17 dBu
8 individual outputs (optional)	1/4-inch phone X 8, unbalanced +11 dBu
output impedance	100 ohms
Maximum output level	+17 dBu
Headphone output	1/4-inch stereo phone X 1, 200 mW/ 32ohms
MIDI inputs	5-pin DIN X 2
MIDI outputs	5-pin DIN X 2 (independent)
SCSI port	50-pin high-pitch SCSI connector X 1

Standard Accessories

AC power cord	1
CD-ROM disc	1 (sound Library disc)
Operator's manual	1

Optional Board

EB16 (multi-effect processor board)
FMX008M (8 Mb Flash ROM board)
IB-M208P (8 individual output and digital I/O board)
IC-M2TC (SMPTE IC chip)
S3SM16 (16 Mb SIMM board)

0 dBu = 0.775 Vrms

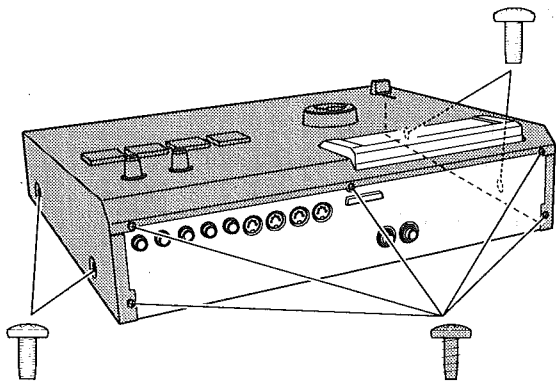
* For improvement purposes, specifications and design are subject to change without notice.

I. DISASSEMBLY

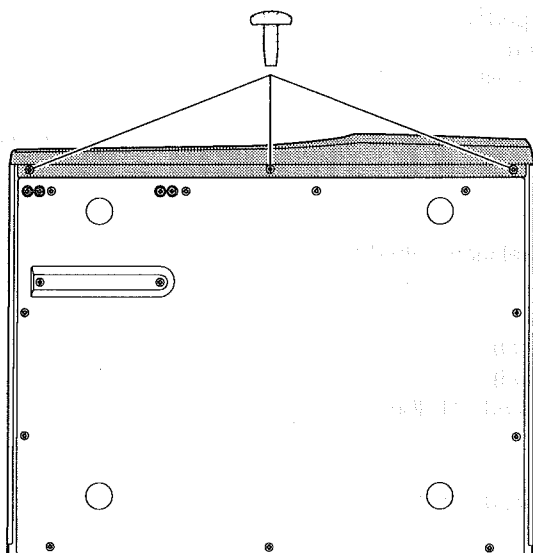
In case of trouble, etc., necessitating dismantling, please dismantle in the order shown in the illustrations.
Reassemble in the reverse order.

1. Removal of TOP PANEL

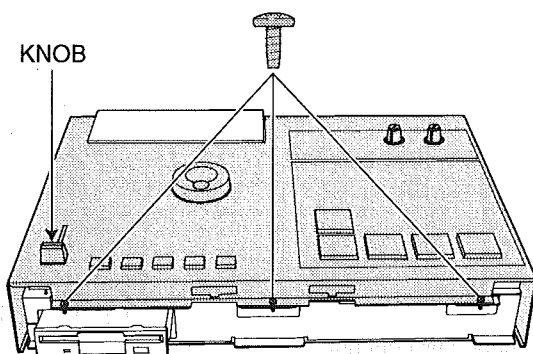
- (1) Remove the 4 screws on both the left and right sides and 5 screws on the back.



- (2) Remove the 3 screws on the bottom.
Remove the FRONT PANEL by pulling it in the forward direction.

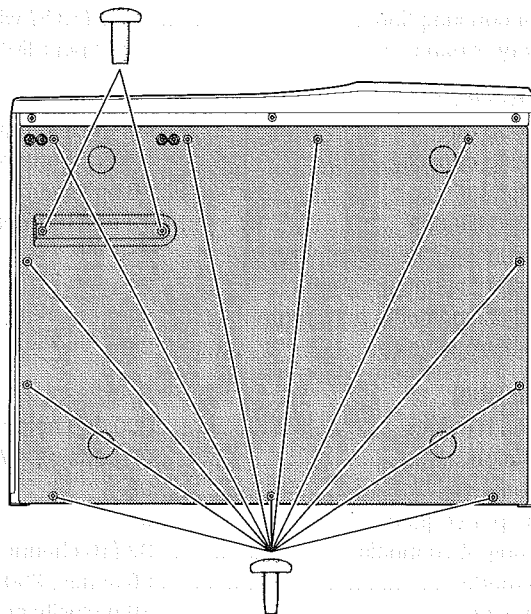


- (3) Remove the 3 screws which secure the UPPER PANEL.
Next, extract the MOTE VARIATION knob and remove the UPPER PANEL.



2. Removal of BOTTOM COVER

- (1) Remove 13 screws on the bottom.



II. PRINCIPAL PARTS LOCATION

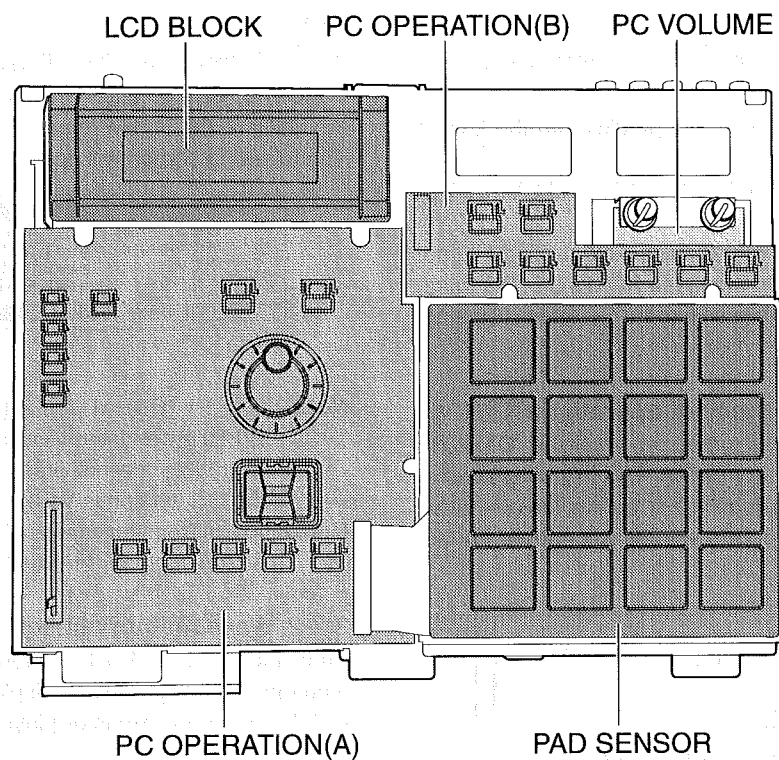


Fig. 2-1 Top view

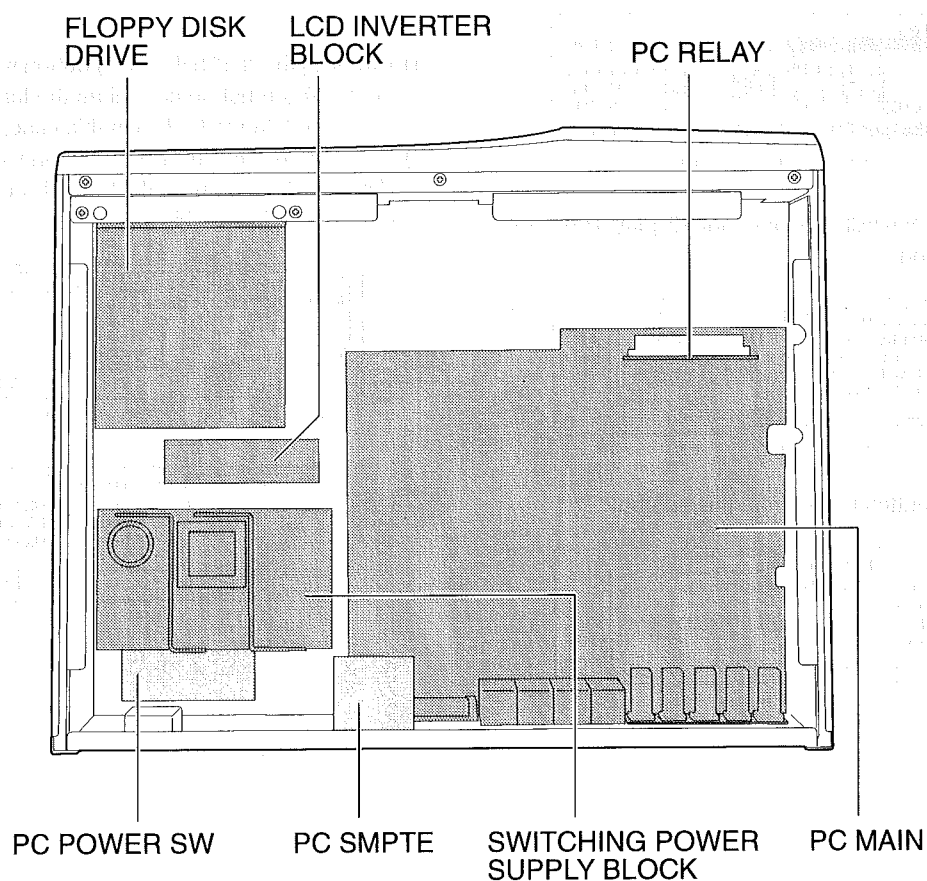


Fig. 2-2 Bottom view

III. SUPPLEMENTARY INFORMATION

3-1. SERVICE MODE

3-1-1. Booting up the operating system from the Floppy disk drive

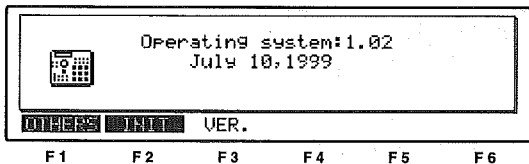
Insert the OS (operating system) floppy disk into the floppy disk drive.

While pressing and holding both of the REC and OVERDUB buttons, turn the power on.

The MPC2000XL will search for the OS disk and load it into the system instead of reading the Flash ROM's OS. Because of this, you can use a different version of the OS without erasing the flash ROM's OS.

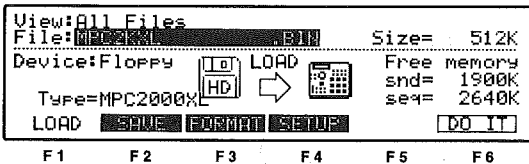
3-1-2. Version check of the boot operation ROM

30 seconds after the power is turned on, enter the "OTHER" mode and press the "F3" (ver.) button. The following screen will be displayed. While pressing the "F6" button, the operation ROM's version and boot program version will appear on the screen.

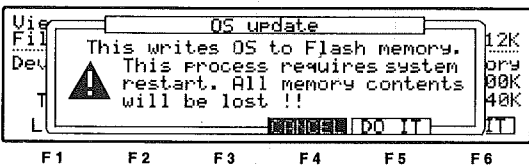


3-1-3. OS upload

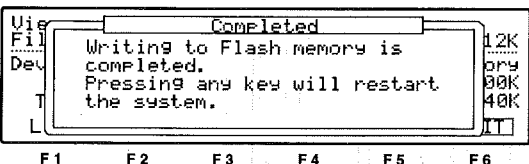
- 1) Insert the updated OS floppy disk and then move to the "LOAD" page. The filename MPC2KXL.BIN is displayed on the second line from the top. Press "F6" (DO IT).



- 2) The following screen will appear on the display. Press the "F5" (DO IT) button.



- 3) Press any other button to exit from this screen.

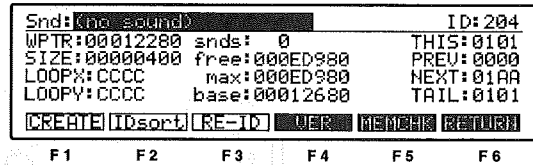


3-2. TEST MODE

3-2-1. Entering the TEST mode

Press the "SHIFT" and "F1" buttons at the same time while the unit is in the "TRIM" mode.

The following screen will appear on the display.



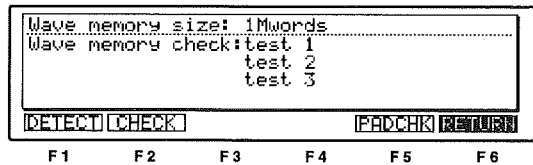
Note1: The F1 (CREATE), F2 (IDsort), F3 (RE-ID) and F4 (VER) are for factory use only. To avoid any occurrence of trouble, do not press these buttons (especially if the OS version is V1.0).

Note2: To exit from the various check modes, press any other button such as "MAIN SCREEN".

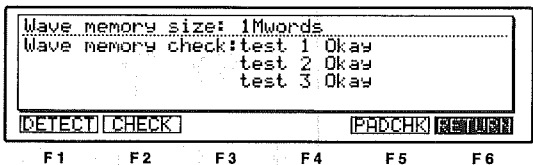
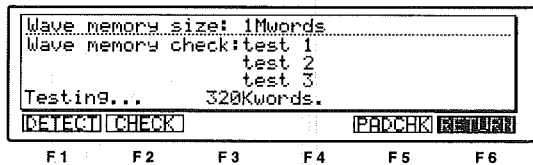
3-2-2. Wave memory check

Press the "F5" (MEMCHK) button in the test mode. The wave memory check page will be displayed.

Installed memory size is displayed on the screen.

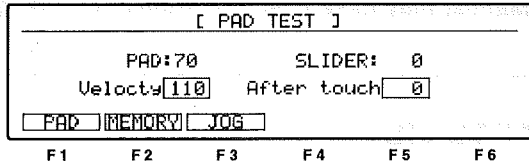


- 1) Pressing the "F1" (DETECT) button will detect the memory again. You must be careful as the loaded sound data and program data will be lost in this case.
- 2) Pressing the "F2" (CHECK) button will check the memory. You must be careful as the loaded sound data and program data will be lost in this case.



3-2-3. PAD check

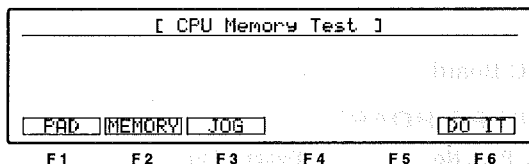
- 1) Press the "F5" (MEMCHK) button in the test mode. The wave memory check page will be displayed. Pressing the "F5 (PADCHK)" button will display the pad check page.
- 2) Press any of the 16 pad buttons. The pad number that you pressed will be shown in the display and the velocity and after touch conditions will be displayed momentarily.



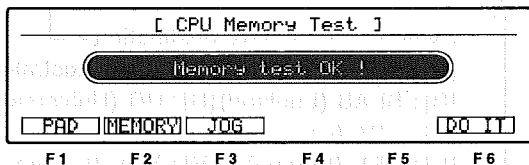
- 3) The SLIDER value will change from 0 to 127 when the SLIDER volume is moved from bottom to top.

3-2-4. CPU MEMORY check

- 1) Press the "F2" (MEMORY) button while the PAD check page is displayed (step 3-2-3).

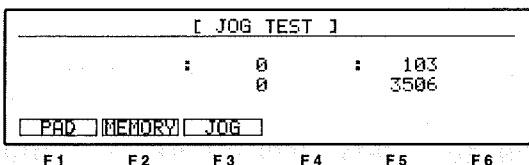


- 2) Press the "F6" (DO IT) button. The following screen will appear if the CPU memory is normal. You must be careful as the loaded data will be lost in this case.



3-2-5. JOG check

- 1) Press the "F3" (JOG) button while the PAD check page is displayed (step 3-2-3).
- 2) The real count value is displayed on the upper line and the accelerated count value is displayed on the lower line of the screen. If the "DATA" knob is turned slowly in the left or right direction, the lower line value is the same as the real count value. If the "DATA" knob is turned quickly, accelerated count value is displayed on the lower line.



- 3) To reset the count, press the "F3" button.

3-3. Boot block recovery

3-3-1. Operating system

The MPC2000XL is designed to operate with an operating system that is held in flash ROM. If this becomes corrupt, or an operating system upgrade is needed, the contents of the flash ROM must be reprogrammed.

3-3-2. OS recovery with boot EPROM

Note: Turn the unit's power off before starting.

- 1) Set the JP20 jumper to the 2-3 position on the PC MAIN.
- 2) Insert the updated EP-ROM into the IC20 socket.
- 3) Set the JP30 jumper to the 2-3 position.
- 4) Turn the power on.
- 5) Press the "F5" (BOOT) button on the "DISK SAVE" screen. The "JP20 Change P-ROM ⇄ F-ROM" message will appear on the display.
- 6) According to the instructions, set the JP20 jumper to the 1-2 position.
- 7) Press the "F6" (GO) button. The "FROM Boot write complete!!" message will appear on the display.
- 8) Turn the unit's power off.
- 9) Return the JP30 jumper to the 1-2 position.
- 10) Disconnect the EP-ROM from the IC20 socket.

IV. 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	PAN20↔03STL CMT
4	ZS-536488	BID20↔08STL 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 MB8841-564M
C1A	EC-338399	C MMY V 223M 250AC [U,E,B,S]
C1B	EC-350949	C MMY V 223M 250DC [J]
C1C	EC-338397	C MMY 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 MANUFACTURER'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

Ref. No.	Part No.	Description
1	BA-810408J	INVERTER 13585A-CFL-INV
2	BA-379695J1	PC PAD SENSOR
3	BB-811264J	FDD FD-235HF-8549H
4	△ EF-812351J	FUSE C.MINISMDC 6V 1.1A T12E
5	EL-810412J	IC AK5340-VS
6	EL-810887J	IC AV9173-01-CS8 FP T12E
7	EL-812341J	IC BA17805FP-E2 FPE2T16E
8	EL-811781J	IC E28F800B5-T70
9	EL-387934J	IC HD74HC04P
10	EL-401216J	IC HD74HC138FP
11	EL-386289J	IC HD74HC138P
12	EL-811068J	IC HD74HC157FP
13	EL-393697J	IC HD74HC259P
14	EL-401217J	IC HD74HC32FP
15	EL-810383J	IC HD74HC4060FP
16	EL-811086J	IC HD74HC541FP
17	EL-388567J	IC HD74HC573P
18	EL-428017J	IC HD74HC74FP
19	EL-812258J	IC KM416C1200CT-6 FPTY
20	EL-810047J	IC MB89352A-PFQ QFTY
21	EL-401213J	IC MB89371A-PF-G-BND QF
22	EL-810828J	IC MCCS142236DWR2 18B FPR2T24E
23	EL-812355J	IC M51957AFP-73A FP73AT12E
24	EL-810574J	IC M51957BFP FP73AT12E
25	EL-431255J	IC M5216FP-73A FP73AT12E
26	EL-385994J	IC M5220FP FPT1T12E
27	EL-362587J1	IC M5238AL
28	EL-403583J	IC NJM2904E FPTE1T12E
29	EL-812479J	IC NJM5532M FPT1T32P
30	EL-412279J1	IC PCM69AP-4
31	EL-811829J	IC TC190C080AF-002 L6028
32	EL-376758J1	IC TC74HC125AF
33	EL-812567J	IC TC74VHC04F EL FPELT16E
34	EL-430684J	IC UPD70236AGD-16-5BB
35	EL-396531J	IC UPD72068GF-3B9
36	EL-405572J	IC UPD78C10AAGQ-36
37	EL-812358J	IC XC9572-15-TQ100 L4014 CPU
38	EL-812359J	IC XC9572-15-TQ100 L4014 WRAM
39	EL-354123	OSC CE CSA120MTZ 12.000000MHZ
40	EL-812353J	OSC X'TAL C.SMD-49 11.2896MHZ
41	EL-430966J	OSC X'TAL C.SMD-49 32.0000MHZ
42	EJ-379603	(PLUG 20FR-ST)
43	EJ-353031	PHONE J 3P HLJ0520-010
44	EJ-810193J	PHONE J 3P HLJ0546-010 NUT/W
45	EJ-811063J	SOCKET 52706-7220 72P
46	EM-812326J	IND LCD GMV24160AFTW L=265
47	△ ER-324480	R CB H S10 FS RDS 1/4W 470J
48	△ ER-318647	R FUSE H S10 ERD2FC 1/4W 4R7J
49	△ ER-403339N	R FUSE V T05 ERD2FCV 1/4W10R0G
50	△ ER-430691N	R OMF H S12 FS RSS1 1W 101J
51	ES-812342J	ROTARY ENCODER EC12E24204 L17
52	△ ES-430685J1	SW PUSH SDDF3A 02-1
53	ES-411687N	SW TACT EVQ PAE 05R
54	ES-415015J	SW TACT SKQEAD
55	ET-430926J	DETECTOR PC400
56	EV-812348J	VR ROTARY RK14K124 L20 B103X2
57	EV-812349J	VR ROTARY RK14K124 L20 C503X2
58	EV-812350J	VR SLIDE RS45112 L15 B103X2 SP
59	SB-413601J1	BUTTON CURSOR
60	SB-810525J	BUTTON POWER
61	SB-430327J	BUTTON PUSH B(2) [RED]
62	SB-810359J	BUTTON PUSH B(3) [WHITE]
63	SB-810360J	BUTTON PUSH C-3 [WHITE]
64	SB-812379J	BUTTON PUSH C-4 [YELLOW]
65	SB-429685J	BUTTON PUSH(B) [WHITE]
66	SB-812317J	BUTTON PUSH(B)-3 [BLUE]
67	SK-812299J1	DIAL KNOB

2. PC BOARD BLK

Ref. No.	Part No.	Description
1	BA-L4014A020A	PC(#) MAIN BLK MPC2000XL
2	BA-L4014A030A	PC(#) OPERATION BLK MPC2000XL

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

- P.C. MAIN BLOCK
- P.C. RELAY BLOCK

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

- P.C. OPERATION (A) BLOCK
- P.C. OPERATION (B) BLOCK
- P.C. SMPTE BLOCK
- P.C. POWER SW BLOCK
- P.C. VOLUME BLOCK

3. PC MAIN BLK

Ref. No.	Part No.	Description
D45	ED-812367J	D SILICON C.DA114 T106T08E
D46	ED-812367J	D SILICON C.DA114 T106T08E
D80	ED-812354J	D ZENER C.RB081L-20 TE25T12E
D110	ED-812367J	D SILICON C.DA114 T106T08E
D120	ED-812367J	D SILICON C.DA114 T106T08E
D150	ED-812367J	D SILICON C.DA114 T106T08E
D151	ED-812367J	D SILICON C.DA114 T106T08E
D152	ED-812367J	D SILICON C.DA114 T106T08E
D153	ED-812367J	D SILICON C.DA114 T106T08E
D930	ED-812354J	D ZENER C.RB081L-20 TE25T12E
D931	ED-812338J	D ZENER C.UDZ4.7BTE-17 T08E
D940	ED-812354J	D ZENER C.RB081L-20 TE25T12E
D941	ED-812354J	D ZENER C.RB081L-20 TE25T12E
FS80	Δ EF-812351J	FUSE C.MINISMD 6V 1.1A T12E
IC1	EI-812355J	IC M51957AFP-73A FP73AT12E
IC10	EI-430684J	IC UPD70236AGD-16-5BB
IC30	EI-811781J	IC E28F800B5-T70
IC40	EI-812358J	IC XC9572-15-TQ100 L4014 CPU
IC45	EI-428017J	IC HD74HC74FP
IC50	EI-396531J	IC UPD72068GF-3B9
IC70	EI-812258J	IC KM416C1200CT-6 FPTY
IC71	EI-812258J	IC KM416C1200CT-6 FPTY
IC72	EI-401216J	IC HD74HC138FP
IC73	EI-401216J	IC HD74HC138FP
IC75	EI-401217J	IC HD74HC32FP
IC78	EI-401217J	IC HD74HC32FP
IC80	EI-810047J	IC MB89352A-PFQ QFTY
IC81	EI-810828J	IC MCCS142236DWR2 18B FPR2T24E
IC82	EI-811068J	IC HD74HC157FP
IC90	EI-403583J	IC NJM2904E FPE1T12E
IC95	EI-811086J	IC HD74HC541FP
IC100	EI-401213J	IC MB89371A-PF-G-BND QF
IC150	EI-430810J	IC ICS2008V
[OPTION]		
IC200	EI-811829J	IC TC190C080AF-002 L6028
IC220	EI-812359J	IC XC9572-15-TQ100 L4014 WRAM
IC250	EI-812258J	IC KM416C1200CT-6 FPTY
IC260	EI-810383J	IC HD74HC4060FP
IC270	EI-376758J1	IC TC74HC125AF
IC280	EI-812567J	IC TC74VHC04F EL FPELT16E
IC290	EI-810887J	IC AV9173-01-CS8 FP T12E
IC400	EI-812341J	IC BA17805FP-E2 FPE2T16E
IC420	EI-810412J	IC AK5340-VS
IC500	EI-385994J	IC M5220FP FPT1T12E
IC510	EI-812479J	IC NJM5532M FPT1T32P
IC600	EI-385994J	IC M5220FP FPT1T12E
IC610	EI-812479J	IC NJM5532M FPT1T32P
IC700	EI-812341J	IC BA17805FP-E2 FPE2T16E
IC720	EI-412279J1	IC PCM69AP-4
IC800	EI-385994J	IC M5220FP FPT1T12E
IC810	EI-385994J	IC M5220FP FPT1T12E
IC900	EI-385994J	IC M5220FP FPT1T12E
IC910	EI-385994J	IC M5220FP FPT1T12E
IC930	EI-810574J	IC M51957BFP FP73AT12E
IC940	EI-431255J	IC M5216FP-73A FP73AT12E
J80	EJ-812347J	SOCKET FCN-235D050-G/J 50P
J110	EJ-427801J	DIN J TCS5084-45-4151 5P
J120	EJ-427801J	DIN J TCS5084-45-4151 5P
J130	EJ-427801J	DIN J TCS5084-45-4151 5P
J140	EJ-427801J	DIN J TCS5084-45-4151 5P
J300	EJ-811063J	SOCKET 52706-7220 72P
J310	EJ-811063J	SOCKET 52706-7220 72P
J330	EJ-812340J	SOCKET 128A-044S2B-L14A 44P
J500	EJ-353031	PHONE J 3P HLJ0520-010
J600	EJ-353031	PHONE J 3P HLJ0520-010
J800	EJ-353031	PHONE J 3P HLJ0520-010
J900	EJ-353031	PHONE J 3P HLJ0520-010
J940	EJ-353031	PHONE J 3P HLJ0520-010
PH110	ET-430926J	DETECTOR PC400
PH120	ET-430926J	DETECTOR PC400
P50	EJ-429940J	PLUG 301-34GSB1 34P
P80	EJ-429943J	PLUG 301-50GSB1 50P
P82	EJ-429942J	PLUG 301-40GSB1 40P
P90	EJ-810418J	SOCKET SLD19S-1 19P
P320	EJ-810330J	PLUG 128A-060P3C-S14A 60P
P340	EJ-429940J	PLUG 301-34GSB1 34P

Ref. No.	Part No.	Description
R400	Δ ER-318647	R FUSE H S10 ERD2FC 1/4W 4R7J
R401	Δ ER-318647	R FUSE H S10 ERD2FC 1/4W 4R7J
R422	Δ ER-403339N	R FUSE V T05 ERD2FCV 1/4W10R0G
R811	Δ ER-324480	R CB H S10 FS RDS 1/4W 470J
R911	Δ ER-324480	R CB H S10 FS RDS 1/4W 470J
R948	Δ ER-430691N	R OMF H S12 FS RSS1 1W 101J
R949	Δ ER-430691N	R OMF H S12 FS RSS1 1W 101J
TR150	ET-429898C	TR C.DTA114EKA T146T08E
TR800	ET-810831J	TR.CHIP 2SC3326 A,B TE85LT08E
TR900	ET-810831J	TR.CHIP 2SC3326 A,B TE85LT08E
TR930	ET-430868C	TR C.DTC114EKA T146T08E
TR931	ET-428248J	TR C.2SA1037AK R,S T146T08E
TR932	ET-430868C	TR C.DTC114EKA T146T08E
TR940	ET-810831J	TR.CHIP 2SC3326 A,B TE85LT08E
TR941	ET-810831J	TR.CHIP 2SC3326 A,B TE85LT08E
TR942	ET-810831J	TR.CHIP 2SC3326 A,B TE85LT08E
TR943	ET-810831J	TR.CHIP 2SC3326 A,B TE85LT08E
X10	EI-430966J	OSC X'TAL C.SMD-49 32.0000MHZ
X260	EI-812353J	OSC X'TAL C.SMD-49 11.2896MHZ

4. PC RELAY BLK

Ref. No.	Part No.	Description
J320	EJ-432816J	SOCKET 128A-060S3B-L14N 60P
P330	EJ-810330J	PLUG 128A-060P3C-S14A 60P

5. PC OPERATION (A) BLK

Ref. No.	Part No.	Description
D220	ED-810393J	D LED GL-3KG8
D221	ED-388539J	D LED GL-3HD43
D222	ED-388539J	D LED GL-3HD43
D223	ED-810393J	D LED GL-3KG8
D224	ED-388539J	D LED GL-3HD43
D300	ED-344280	D SILICON H GMA-01-FY2 F05
D301	ED-344280	D SILICON H GMA-01-FY2 F05
D302	ED-344280	D SILICON H GMA-01-FY2 F05
D303	ED-344280	D SILICON H GMA-01-FY2 F05
D304	ED-344280	D SILICON H GMA-01-FY2 F05
D305	ED-344280	D SILICON H GMA-01-FY2 F05
D310	ED-344280	D SILICON H GMA-01-FY2 F05
D311	ED-344280	D SILICON H GMA-01-FY2 F05
D312	ED-344280	D SILICON H GMA-01-FY2 F05
D313	ED-344280	D SILICON H GMA-01-FY2 F05
D314	ED-344280	D SILICON H GMA-01-FY2 F05
D315	ED-344280	D SILICON H GMA-01-FY2 F05
D320	ED-344280	D SILICON H GMA-01-FY2 F05
D321	ED-344280	D SILICON H GMA-01-FY2 F05
D322	ED-344280	D SILICON H GMA-01-FY2 F05
D323	ED-344280	D SILICON H GMA-01-FY2 F05
D324	ED-344280	D SILICON H GMA-01-FY2 F05
D325	ED-344280	D SILICON H GMA-01-FY2 F05
D330	ED-344280	D SILICON H GMA-01-FY2 F05
D331	ED-344280	D SILICON H GMA-01-FY2 F05
D332	ED-344280	D SILICON H GMA-01-FY2 F05
D333	ED-344280	D SILICON H GMA-01-FY2 F05
D334	ED-344280	D SILICON H GMA-01-FY2 F05
D335	ED-344280	D SILICON H GMA-01-FY2 F05
D400	ED-344280	D SILICON H GMA-01-FY2 F05
D401	ED-344280	D SILICON H GMA-01-FY2 F05
D402	ED-344280	D SILICON H GMA-01-FY2 F05
D403	ED-344280	D SILICON H GMA-01-FY2 F05
D404	ED-344280	D SILICON H GMA-01-FY2 F05
D405	ED-344280	D SILICON H GMA-01-FY2 F05
D410	ED-344280	D SILICON H GMA-01-FY2 F05
D411	ED-344280	D SILICON H GMA-01-FY2 F05
D412	ED-344280	D SILICON H GMA-01-FY2 F05
D413	ED-344280	D SILICON H GMA-01-FY2 F05
D414	ED-344280	D SILICON H GMA-01-FY2 F05
D415	ED-344280	D SILICON H GMA-01-FY2 F05
D420	ED-344280	D SILICON H GMA-01-FY2 F05

Ref. No.	Part No.	Description
D421	ED-344280	D SILICON H GMA-01-FY2 F05
D422	ED-344280	D SILICON H GMA-01-FY2 F05
D423	ED-344280	D SILICON H GMA-01-FY2 F05
D424	ED-344280	D SILICON H GMA-01-FY2 F05
D425	ED-344280	D SILICON H GMA-01-FY2 F05
D430	ED-344280	D SILICON H GMA-01-FY2 F05
D431	ED-344280	D SILICON H GMA-01-FY2 F05
D432	ED-344280	D SILICON H GMA-01-FY2 F05
D433	ED-344280	D SILICON H GMA-01-FY2 F05
D434	ED-344280	D SILICON H GMA-01-FY2 F05
D435	ED-344280	D SILICON H GMA-01-FY2 F05
D436	ED-344280	D SILICON H GMA-01-FY2 F05
D440	ED-344280	D SILICON H GMA-01-FY2 F05
D441	ED-344280	D SILICON H GMA-01-FY2 F05
D442	ED-344280	D SILICON H GMA-01-FY2 F05
D443	ED-344280	D SILICON H GMA-01-FY2 F05
D444	ED-344280	D SILICON H GMA-01-FY2 F05
D445	ED-344280	D SILICON H GMA-01-FY2 F05
D446	ED-344280	D SILICON H GMA-01-FY2 F05
D450	ED-344280	D SILICON H GMA-01-FY2 F05
D451	ED-344280	D SILICON H GMA-01-FY2 F05
D452	ED-344280	D SILICON H GMA-01-FY2 F05
D453	ED-344280	D SILICON H GMA-01-FY2 F05
D454	ED-344280	D SILICON H GMA-01-FY2 F05
D455	ED-344280	D SILICON H GMA-01-FY2 F05
IC220	EI-393697J	IC HD74HC259P
IC230	EI-386289J	IC HD74HC138P
IC250	EI-405572J	IC UPD78C10AGQ-36
IC260	EI-388567J	IC HD74HC573P
IC270-A	EI-812828J	IC AM27C256 MPC2000XL V1.0-OP [PROGRAM]
IC270-B	EI-397343J	IC AM27C256-150DC [BLANK]
IC280	EI-387934J	IC HD74HC04P
IC300	EI-362587J1	IC M5238AL
IC320	EI-362587J1	IC M5238AL
P300	EJ-379603	PLUG 20FR-ST
SW240	ES-812342J	ROTARY ENCORDER EC12E24204 L17
SW400	ES-411687N	SW TACT EVQ PAE 05R
SW401	ES-411687N	SW TACT EVQ PAE 05R
SW402	ES-411687N	SW TACT EVQ PAE 05R
SW403	ES-411687N	SW TACT EVQ PAE 05R
SW404	ES-411687N	SW TACT EVQ PAE 05R
SW405	ES-415015J	SW TACT SKQEAD
SW410	ES-411687N	SW TACT EVQ PAE 05R
SW411	ES-411687N	SW TACT EVQ PAE 05R
SW412	ES-411687N	SW TACT EVQ PAE 05R
SW413	ES-411687N	SW TACT EVQ PAE 05R
SW414	ES-411687N	SW TACT EVQ PAE 05R
SW415	ES-411687N	SW TACT EVQ PAE 05R
SW420	ES-411687N	SW TACT EVQ PAE 05R
SW421	ES-411687N	SW TACT EVQ PAE 05R
SW422	ES-411687N	SW TACT EVQ PAE 05R
SW423	ES-411687N	SW TACT EVQ PAE 05R
SW424	ES-411687N	SW TACT EVQ PAE 05R
SW425	ES-411687N	SW TACT EVQ PAE 05R
SW430	ES-411687N	SW TACT EVQ PAE 05R
SW431	ES-411687N	SW TACT EVQ PAE 05R
SW432	ES-411687N	SW TACT EVQ PAE 05R
SW433	ES-415015J	SW TACT SKQEAD
SW434	ES-415015J	SW TACT SKQEAD
SW435	ES-411687N	SW TACT EVQ PAE 05R
SW436	ES-411687N	SW TACT EVQ PAE 05R
SW440	ES-411687N	SW TACT EVQ PAE 05R
SW441	ES-411687N	SW TACT EVQ PAE 05R
SW442	ES-411687N	SW TACT EVQ PAE 05R
SW443	ES-411687N	SW TACT EVQ PAE 05R
SW444	ES-415015J	SW TACT SKQEAD
SW445	ES-411687N	SW TACT EVQ PAE 05R
SW446	ES-415015J	SW TACT SKQEAD
SW450	ES-411687N	SW TACT EVQ PAE 05R
SW451	ES-411687N	SW TACT EVQ PAE 05R
SW452	ES-411687N	SW TACT EVQ PAE 05R
SW453	ES-411687N	SW TACT EVQ PAE 05R
SW454	ES-415015J	SW TACT SKQEAD
SW455	ES-411687N	SW TACT EVQ PAE 05R
VR350	EV-812350J	VR SLIDE RS45112 L15 B103X2 SP
X250	EI-354123	OSC CE CSA120MTZ 12.000000MHZ

6. PC OPERATION (B) BLK

Ref. No.	Part No.	Description
D500	ED-344280	D SILICON H GMA-01-FY2 F05
D501	ED-344280	D SILICON H GMA-01-FY2 F05
D502	ED-344280	D SILICON H GMA-01-FY2 F05
D503	ED-344280	D SILICON H GMA-01-FY2 F05
D510	ED-344280	D SILICON H GMA-01-FY2 F05
D511	ED-344280	D SILICON H GMA-01-FY2 F05
D512	ED-344280	D SILICON H GMA-01-FY2 F05
D513	ED-344280	D SILICON H GMA-01-FY2 F05
D530	ED-810393J	D LED GL-3KG8
D531	ED-810393J	D LED GL-3KG8
D532	ED-810393J	D LED GL-3KG8
D533	ED-810393J	D LED GL-3KG8
D534	ED-810393J	D LED GL-3KG8
D535	ED-810393J	D LED GL-3KG8
D536	ED-810393J	D LED GL-3KG8
D537	ED-810393J	D LED GL-3KG8
IC520	EI-393697J	IC HD74HC259P
SW500	ES-411687N	SW TACT EVQ PAE 05R
SW501	ES-411687N	SW TACT EVQ PAE 05R
SW502	ES-411687N	SW TACT EVQ PAE 05R
SW503	ES-411687N	SW TACT EVQ PAE 05R
SW510	ES-411687N	SW TACT EVQ PAE 05R
SW511	ES-411687N	SW TACT EVQ PAE 05R
SW512	ES-411687N	SW TACT EVQ PAE 05R
SW513	ES-411687N	SW TACT EVQ PAE 05R

7. PC SMPTE BLK

Ref. No.	Part No.	Description
J100	EJ-810193J	PHONE J 3P HLJ0546-010 NUT/W
J110	EJ-810193J	PHONE J 3P HLJ0546-010 NUT/W

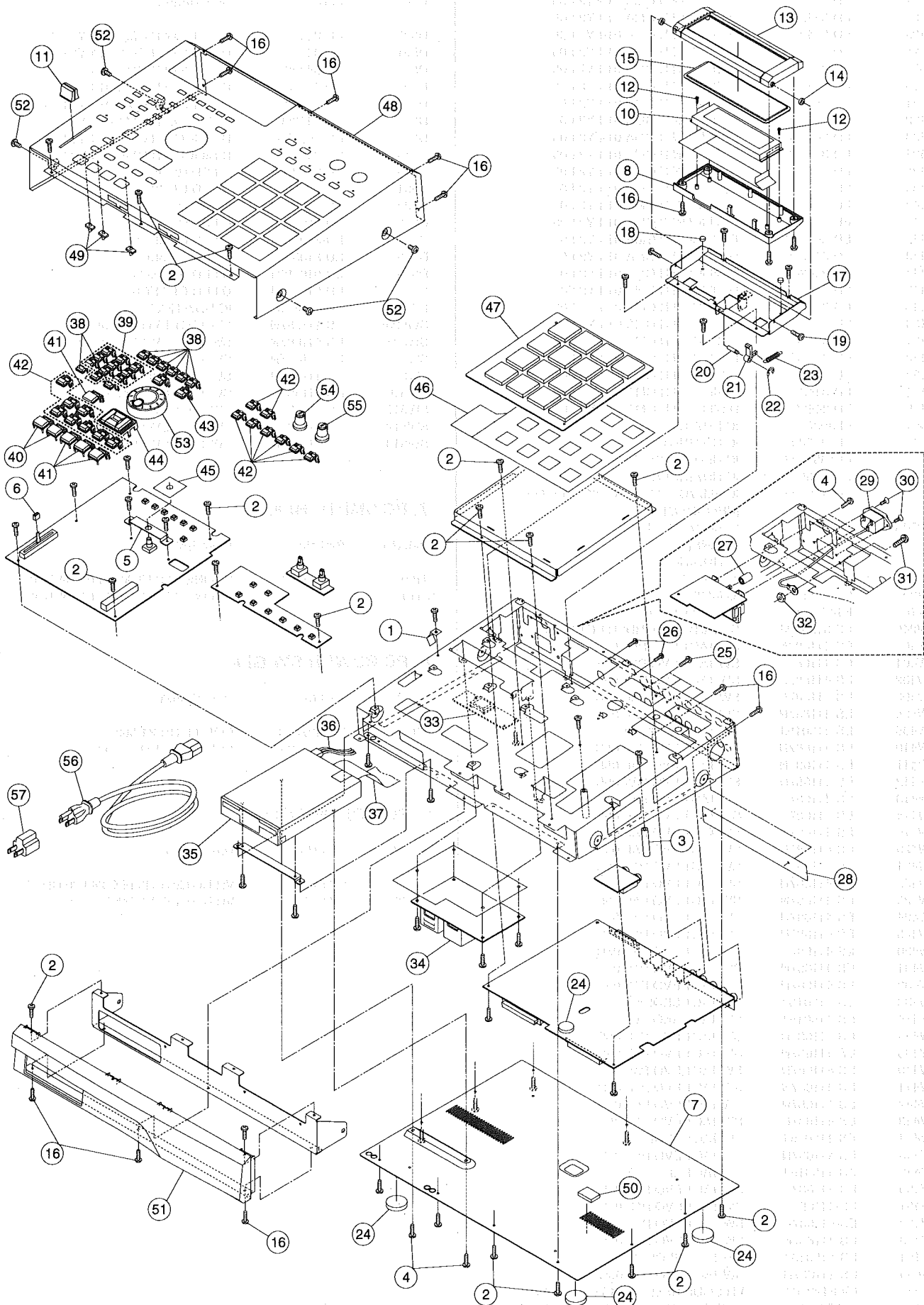
8. PC POWER SW BLK

Ref. No.	Part No.	Description
L10	EO-427223J	COIL LF HR-24-562
SW10	△ ES-430685J1	SW PUSH SDDF3A 02-1

9. PC VOLUME BLK

Ref. No.	Part No.	Description
VR500	EV-812349J	VR ROTARY RK14K124 L20 C503X2
VR800	EV-812348J	VR ROTARY RK14K124 L20 B103X2

FINAL ASSEMBLY BLOCK



10. FINAL ASSEMBLY BLOCK

Ref. No.	Part No.	Description
1	SZ-810334J	SHIELD POINT
2	ZS-376493	BT BID30X06STL CMT
3	MH-812289J	PROP F.SCREW 1 L=34.6
4	ZS-379405	BID30X06STL CMT
5	SZ-812614J1	HOLDER ENCODER
6	ZW-812300J	SPACER SLIDE
7	SP-812282J	BOTTOM COVER
8	SP-812297J1	PANEL LCD UNDER
10	EM-812326J	IND LCD GMV24160AFTW L=265
11	SK-810361J	KNOB SLIDE (B)
12	ZS-810640J	BT PAN17X05STL CMT PS3
13	SP-812312J	PANEL LCD UPPER
14	ZG-812287J	BUSH PANEL LCD
15	SE-812298J	WINDOW LCD
16	ZS-331182	BT BID30X08STL BNI
17	SC-812301J	COVER BLIND
18	SE-812290J	PANEL SPASER LCD
19	ZS-345272	ST BR30X06STL BNI
20	MH-812288J	PROP F.SCREW 3
21	ML-380175J	ARM LOCK
22	ZW-270101	RING E 300SUP CMT
23	ZG-812587J	SP PULL ARM LOCK
24	SA-812668J	FOOT B
25	ZS-812478J	PAN26X06STL BNI
26	ZS-812613J	PAN25X06STL NI3
27	SB-810525J	BUTTON POWER
28	SC-810351J1	COVER OPTION (A)
29	△ EJ-358632J2	SOCKET INLET SOT-16 3P
30	ZS-376875	BT CTS30X08STL BNI
31	ZS-322580	ST BID40X08STL BNI
32	ZW-413267	N FRANGE 40STL CMT
33	BA-810408J	INVERTER 13585A-CFL-INV
34	△ BP-811849J	SW REGULATOR SNP-9541-M
35	BB-811264J	FDD FD-235HF-8549H
36	EW-812363J	WIRE ASSY L4014 W51 4P-2P
37	EW-812366J	WIRE ASSY L4014 W50 34P
38	SB-429685J	BUTTON PUSH(B) [WHITE]
39	SB-812317J	BUTTON PUSH(B)-3 [BLUE]
40	SB-430327J	BUTTON PUSH B(2) [RED]
41	SB-810359J	BUTTON PUSH B(3) [WHITE]
42	SB-810360J	BUTTON PUSH C-3 [WHITE]
43	SB-812379J	BUTTON PUSH C-4 [YELLOW]
44	SB-413601J1	BUTTON CURSOR
45	SE-812403J	MASK DIAL
46	BA-379695J1	PC PAD SENSOR
47	SE-812815J	PAD CH
48	SP-812296J	PANEL TOP MPC2000 XL
49	SE-810353J	LENS LED
50	SE-812295J	SPASER EX
51	BD-810348J	PANEL FRONT
52	ZS-341959	ST BID40X06STL NI3
53	SK-812299J1	DIAL KNOB
54	SK-411149J	KNOB VOL PART(3) [RED]
55	SK-411151J	KNOB VOL PART(4) [WHITE]
56-A	△ EW-380905J	AC CORD 250S KP300 KS16A H B J [J]
56-B	△ EW-368420J1	AC CORD200SKP30KS16 B AC [A]
56-C	△ EW-410608J	AC CORD 250S KP4819D KS31A B E [E,V]
56-D	△ EW-419170J	AC CORD200S KP610 KS31A B [B]
57	△ EJ-405424J	PLUG ADAPTOR KPR-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.

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Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
BAL4014A020A	2-1	ED344280	6-D501	EI811068J	3-IC82	ES411687N	5-SW431
BAL4014A030A	2-2	ED344280	6-D502	EI811086J	3-IC95	ES411687N	5-SW432
BA379695J1	10-46	ED344280	6-D503	EI811781J	3-IC30	ES411687N	5-SW435
BA810408J	10-33	ED344280	6-D510	EI811829J	3-IC200	ES411687N	5-SW436
BB811264J	10-35	ED344280	6-D511	EI812258J	3-IC70	ES411687N	5-SW440
BD810348J	10-51	ED344280	6-D512	EI812258J	3-IC71	ES411687N	5-SW441
BP811849J	10-34	ED344280	6-D513	EI812258J	3-IC250	ES411687N	5-SW442
ED344280	5-D300	ED388539J	5-D221	EI812341J	3-IC400	ES411687N	5-SW443
ED344280	5-D301	ED388539J	5-D222	EI812341J	3-IC700	ES411687N	5-SW445
ED344280	5-D302	ED388539J	5-D224	EI812353J	3-X260	ES411687N	5-SW450
ED344280	5-D303	ED810393J	5-D220	EI812355J	3-IC1	ES411687N	5-SW451
ED344280	5-D304	ED810393J	5-D223	EI812358J	3-IC40	ES411687N	5-SW452
ED344280	5-D305	ED810393J	6-D530	EI812359J	3-IC220	ES411687N	5-SW453
ED344280	5-D310	ED810393J	6-D531	EI812479J	3-IC510	ES411687N	5-SW455
ED344280	5-D311	ED810393J	6-D532	EI812479J	3-IC610	ES411687N	6-SW500
ED344280	5-D312	ED810393J	6-D533	EI812567J	3-IC280	ES411687N	6-SW501
ED344280	5-D313	ED810393J	6-D534	EI812828J	5-IC270-A	ES411687N	6-SW502
ED344280	5-D314	ED810393J	6-D535	EJ353031	3-J500	ES411687N	6-SW503
ED344280	5-D315	ED810393J	6-D536	EJ353031	3-J600	ES411687N	6-SW510
ED344280	5-D320	ED810393J	6-D537	EJ353031	3-J800	ES411687N	6-SW511
ED344280	5-D321	ED812338J	3-D931	EJ353031	3-J900	ES411687N	6-SW512
ED344280	5-D322	ED812354J	3-D80	EJ353031	3-J940	ES411687N	6-SW513
ED344280	5-D323	ED812354J	3-D930	EJ358632J2	10-29	ES415015J	5-SW405
ED344280	5-D324	ED812354J	3-D940	EJ379603	5-P300	ES415015J	5-SW433
ED344280	5-D325	ED812354J	3-D941	EJ405424J	10-57	ES415015J	5-SW434
ED344280	5-D330	ED812367J	3-D45	EJ427801J	3-J110	ES415015J	5-SW444
ED344280	5-D331	ED812367J	3-D46	EJ427801J	3-J120	ES415015J	5-SW446
ED344280	5-D332	ED812367J	3-D110	EJ427801J	3-J130	ES415015J	5-SW454
ED344280	5-D333	ED812367J	3-D120	EJ427801J	3-J140	ES430685J1	8-SW10
ED344280	5-D334	ED812367J	3-D150	EJ429940J	3-P50	ES812342J	5-SW240
ED344280	5-D335	ED812367J	3-D151	EJ429940J	3-P340	ET428248J	3-TR931
ED344280	5-D400	ED812367J	3-D152	EJ429942J	3-P82	ET429898C	3-TR150
ED344280	5-D401	ED812367J	3-D153	EJ429943J	3-P80	ET430868C	3-TR930
ED344280	5-D402	EF812351J	3-F580	EJ432816J	4-J320	ET430868C	3-TR932
ED344280	5-D403	EI354123	5-X250	EJ810193J	7-J100	ET430926J	3-PH110
ED344280	5-D404	EI362587J1	5-IC300	EJ810193J	7-J110	ET430926J	3-PH120
ED344280	5-D405	EI362587J1	5-IC320	EJ810330J	3-P320	ET810831J	3-TR800
ED344280	5-D410	EI376758J1	3-IC270	EJ810330J	4-P330	ET810831J	3-TR900
ED344280	5-D411	EI385994J	3-IC500	EJ810418J	3-P90	ET810831J	3-TR940
ED344280	5-D412	EI385994J	3-IC600	EJ811063J	3-J300	ET810831J	3-TR941
ED344280	5-D413	EI385994J	3-IC800	EJ811063J	3-J310	ET810831J	3-TR942
ED344280	5-D414	EI385994J	3-IC810	EJ812340J	3-J330	ET810831J	3-TR943
ED344280	5-D415	EI385994J	3-IC900	EJ812347J	3-J80	EV812348J	9-VR800
ED344280	5-D420	EI385994J	3-IC910	EM812326J	10-10	EV812349J	9-VR500
ED344280	5-D421	EI386289J	5-IC230	EO427223J	8-L10	EV812350J	5-VR350
ED344280	5-D422	EI387934J	5-IC280	ER318647	3-R400	EW368420J1	10-56-B
ED344280	5-D423	EI388567J	5-IC260	ER318647	3-R401	EW380905J	10-56-A
ED344280	5-D424	EI393697J	5-IC220	ER324480	3-R811	EW410608J	10-56-C
ED344280	5-D425	EI393697J	6-IC520	ER324480	3-R911	EW419170J	10-56-D
ED344280	5-D430	EI396531J	3-IC50	ER403339N	3-R422	EW812363J	10-36
ED344280	5-D431	EI397343J	5-IC270-B	ER430691N	3-R948	EW812366J	10-37
ED344280	5-D432	EI401213J	3-IC100	ER430691N	3-R949	MH812288J	10-20
ED344280	5-D433	EI401216J	3-IC72	ES411687N	5-SW400	MH812289J	10-3
ED344280	5-D434	EI401216J	3-IC73	ES411687N	5-SW401	ML380175J	10-21
ED344280	5-D435	EI401217J	3-IC75	ES411687N	5-SW402	SA812668J	10-24
ED344280	5-D436	EI401217J	3-IC78	ES411687N	5-SW403	SB413601J1	10-44
ED344280	5-D440	EI403583J	3-IC90	ES411687N	5-SW404	SB429685J	10-38
ED344280	5-D441	EI405572J	5-IC250	ES411687N	5-SW410	SB430327J	10-40
ED344280	5-D442	EI412279J1	3-IC720	ES411687N	5-SW411	SB810359J	10-41
ED344280	5-D443	EI428017J	3-IC45	ES411687N	5-SW412	SB810360J	10-42
ED344280	5-D444	EI430684J	3-IC10	ES411687N	5-SW413	SB810525J	10-27
ED344280	5-D445	EI430810J	3-IC150	ES411687N	5-SW414	SB812317J	10-39
ED344280	5-D446	EI430966J	3-X10	ES411687N	5-SW415	SB812379J	10-43
ED344280	5-D450	EI431255J	3-IC940	ES411687N	5-SW420	SC810351J1	10-28
ED344280	5-D451	EI810047J	3-IC80	ES411687N	5-SW421	SC812301J	10-17
ED344280	5-D452	EI810383J	3-IC260	ES411687N	5-SW422	SE810353J	10-49
ED344280	5-D453	EI810412J	3-IC420	ES411687N	5-SW423	SE812290J	10-18
ED344280	5-D454	EI810574J	3-IC930	ES411687N	5-SW424	SE812295J	10-50
ED344280	5-D455	EI810828J	3-IC81	ES411687N	5-SW425	SE812298J	10-15
ED344280	6-D500	EI810887J	3-IC290	ES411687N	5-SW430	SE812403J	10-45

Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
SE812815J	10-47						
SK411149J	10-54						
SK411151J	10-55						
SK810361J	10-11						
SK812299J1	10-53						
SP812282J	10-7						
SP812296J	10-48						
SP812297J1	10-8						
SP812312J	10-13						
SZ810334J	10-1						
SZ812614J1	10-5						
ZG812287J	10-14						
ZG812587J	10-23						
ZS322580	10-31						
ZS331182	10-16						
ZS341959	10-52						
ZS345272	10-19						
ZS376493	10-2						
ZS376875	10-30						
ZS379405	10-4						
ZS810640J	10-12						
ZS812478J	10-25						
ZS812613J	10-26						
ZW270101	10-22						
ZW413267	10-32						
ZW812300J	10-6						

ABBREVIATIONS FOR THE SERVICE MANUAL

ABBREVIATION	EXPLANATION	ABBREVIATION	EXPLANATION
AMP (Amp)	AMPlifier	MINI	MINimum
BBD	Backet Brigade Diode	MIX	MIXer
BCD	Binary Code Decimal	MOD	MODulation / MODulator
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
DIR	DIRectory	ROM	Read Only Memory
DMA	Direct Memory Access	SCSI	Small Computer System Interface
DSP	Digital Signal Processor	S/H	Sample and Hold
EG	Envelope Generator	SIMM	Single Inline Memory Module
EXT	EXTErnal	SMPTE	Society of Motion Picture & Television Engineers
FREQ	FREQuency	SW	SWitch
HPF	High Pass Filter	THRU	THRoUgh
INH	INHibit	TRANS	TRANSpore
INT	INTerrupt	U	Upper
INV	INVerter	VA	Voltage Analog
L	Lower	VCA	Voltage Controlled Amplifier
LAN	Local Area Network	VCF	Voltage Controlled Filter
LFO	Low Frequency Oscillator	VR	Variable Resistor
MAX	MAXimum	VREF	REFerence Voltage
MEMO	MEMOry	WR	WRite
MIDI	Musical Instrument Digital Interface		

MPc2000XL

AKAI ELECTRIC CO., LTD. ELECTRONIC MUSICAL INSTRUMENT DIV.

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10. Final Assembly Block MPC2000XL-SE1

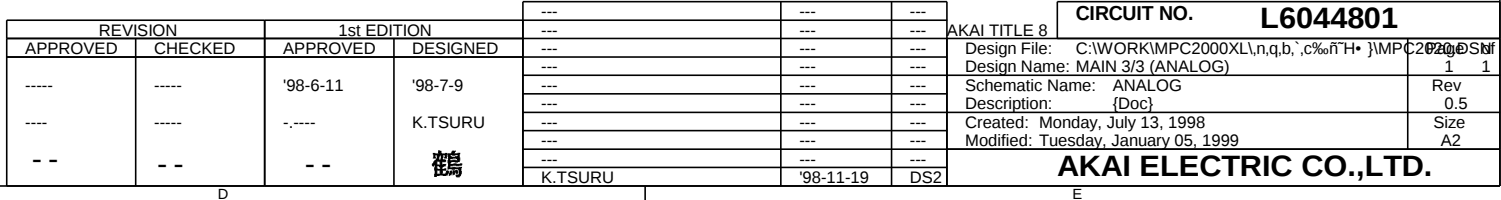
Ref No	Safety	Part No	Description	Note	FOB JPY
1		SZ 810334J	SHIELD POINT		30
2		ZS 376493	BT BID30X06STL CMT		5
3		MH 812289J	PROP F.SCREW 1 L=34.6		170
4		ZS 379405	BID30X06STL CMT		1
5		SZ 812614J1	HOLDER ENCODER		30
6		ZW 812300J	SPACER SLIDE		10
7		SP 812282J	BOTTOM COVER		800
8		SP 812297J1	PANEL LCD UNDER		60
10		EM 812326J	IND LCD GMV24160AFTW L=265		5,600
11		SK 430322J	KNOB SLIDE	[BLACK/BLUE]	20
12		ZS 810640J	BT PAN17X05STL CMT PS3		20
13		SP 812312J	PANEL LCD UPPER		100
14		ZG 812287J	BUSH PANEL LCD		20
15		SE 820330X	WINDOW LCD-SE1	[SILVER]	70
16		ZS 331182	BT BID30X08STL BNI		1
17		SC 812301J	COVER BLIND		80
18		SE 812290J	PANEL SPASER LCD		10
19		ZS 345272	ST BR30X06STL BNI		2
20		MH 812288J	PROP F.SCREW 3		140
21		ML 380175J	ARM LOCK		50
22		ZW 270101	RING E 300SUP CMT		1
23		ZG 812587J	SP PULL ARM LOCK		20
24		SA 812668J	FOOT B		20
25		ZS 812478J	PAN26X06STL BNI		10
26		ZS 812613J	PAN25X06STL NI3		10
27		SB 810525J	BUTTON POWER		30
28		SC 810351J1	COVER OPTION (A)		40
29	!	EJ 358632J2	SOCKET INLET SOT-16 3P		130
30		ZS 376875	BT CTS30X08STL BNI		14
31		ZS 322580	ST BID40X08STL BNI		2
32		ZW 413267	N FRANGE 40STL CMT		1
33		BA 810408J	INVERTER 13585A-CFL-INV		1,250
34	!	BP 811849J	SW REGULATOR SNP-9541-M		5,200
35		BB 811264J	FDD FD-235HF-8549H		6,100
36		EW 812363J	WIRE ASSY L4014 W51 4P-2P		80
37		EW 812366J	WIRE ASSY L4014 W50 34P		580
38		SB 820337X	BUTTON PUSH(B)-5	[BLACK]	20
39		SB 820336X	BUTTON PUSH(B)-4	[PURPLE]	30
40		SB 430327J	BUTTON PUSH B(2)	[RED]	30
41		SB 820334X	BUTTON PUSH B(4)	[BLACK]	150
42		SB 430328J	BUTTON PUSH C	[BLACK]	30
43		SB 812379J	BUTTON PUSH C-4	[YELLOW]	30
44		SB 811562J	BUTTON CURSOR(3)	[BLACK]	130
45		SE 812403J	MASK DIAL		40
46		BA 379695J1	PC PAD SENSOR		6,300
47		SE 820332X	PAD CH-SE1	[YELLOW]	1,500
48		SE 820328X	PANEL TOP MPC2000XL-SE1	[BLACK]	4,000
49		SE 810353J	LENS LED		20
50		SE 812295J	SPASER EX		50
51		BD 820329X	PANEL FRONT-SE1	[BLACK]	250
52		ZS 341959	ST BID40X06STL NI3		3
53		SK 820331X	DIAL KNOB-SE1	[BLACK]	50
54		SK 820338X	KNOB VOL PART(10)	[BLACK/PINK]	100
55		SK 820339X	KNOB VOL PART(11)	[BLACK/WHITE]	100
56-A	!	EW 380905J	AC CORD 250S KP300 KS16A H B J		690
56-B	!	EW 368420J1	AC CORD200SKP30KS16 B AC		750
56-C	!	EW 410608J	AC CORD 250S KP4819D KS31A B E		800
56-D	!	EW 419170J	AC CORD200S KP610 KS31A B		1,400
57	!	EJ 405424J	PLUG ADAPTOR KPR-25		400

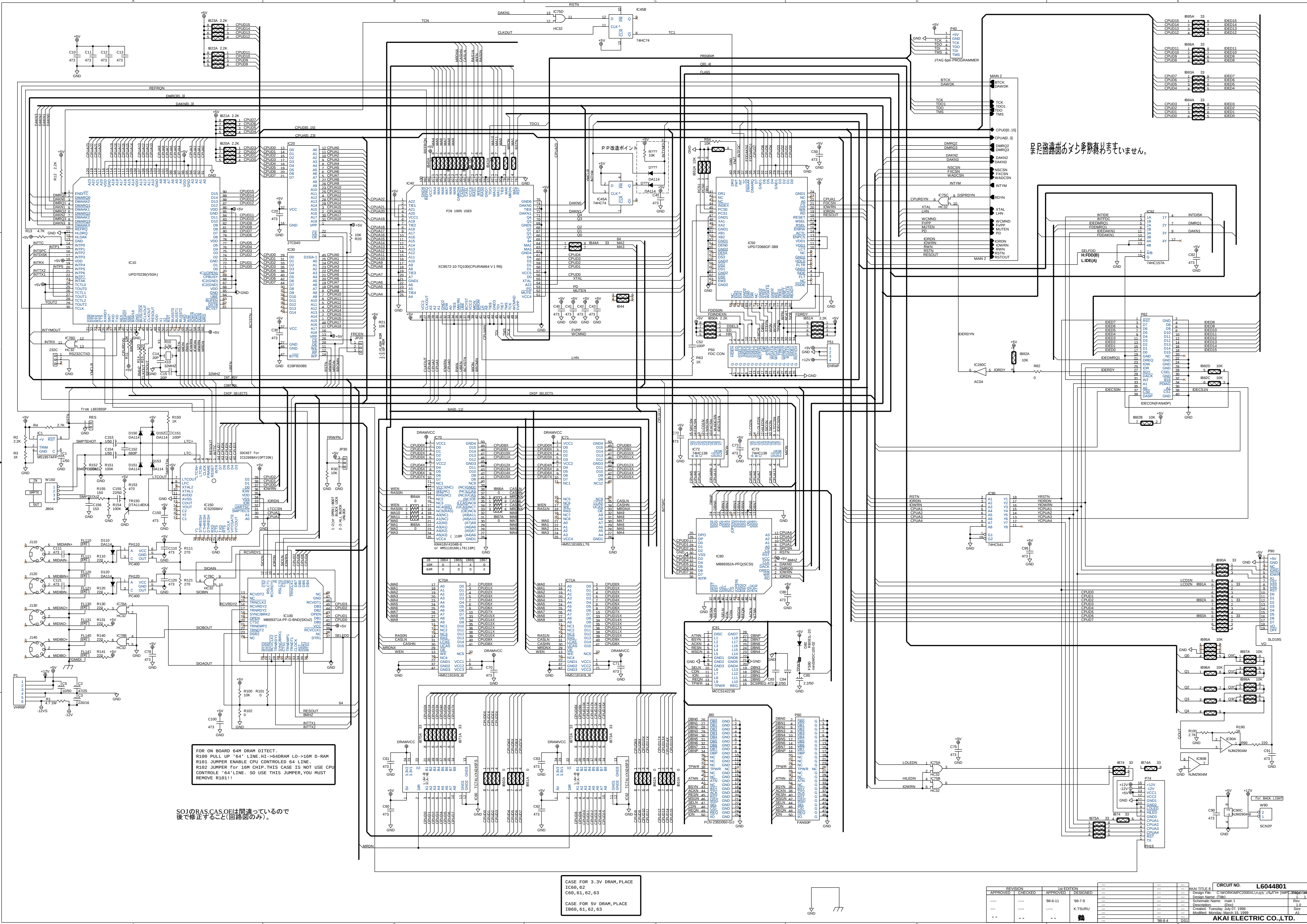
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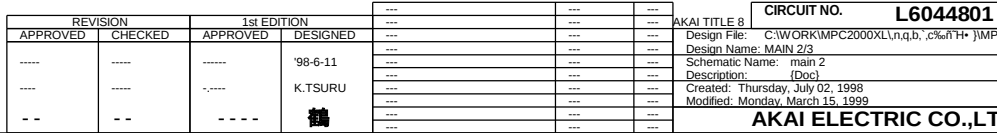
Ref No	Safety	Part No	Description	Note	FOB JPY
1		SZ 810334J	SHIELD POINT		30
2		ZS 376493	BT BID30X06STL CMT		5
3		MH 812289J	PROP F.SCREW 1 L=34.6		170
4		ZS 379405	BID30X06STL CMT		1
5		SZ 812614J1	HOLDER ENCODER		30
6		ZW 812300J	SPACER SLIDE		10
7		SP 812282J	BOTTOM COVER		800
8		SP 812297J1	PANEL LCD UNDER		60
10		EM 812326J	IND LCD GMV24160AFTW L=265		5,600
11		SK 430322J	KNOB SLIDE	[BLACK/BLUE]	20
12		ZS 810640J	BT PAN17X05STL CMT PS3		20
13		SP 812312J	PANEL LCD UPPER		100
14		ZG 812287J	BUSH PANEL LCD		20
15		SE 820330X	WINDOW LCD-SE1	[SILVER]	70
16		ZS 331182	BT BID30X08STL BNI		1
17		SC 812301J	COVER BLIND		80
18		SE 812290J	PANEL SPASER LCD		10
19		ZS 345272	ST BR30X06STL BNI		2
20		MH 812288J	PROP F.SCREW 3		140
21		ML 380175J	ARM LOCK		50
22		ZW 270101	RING E 300SUP CMT		1
23		ZG 812587J	SP PULL ARM LOCK		20
24		SA 812668J	FOOT B		20
25		ZS 812478J	PAN26X06STL BNI		10
26		ZS 812613J	PAN25X06STL NI3		10
27		SB 810525J	BUTTON POWER		30
28		SC 810351J1	COVER OPTION (A)		40
29	!	EJ 358632J2	SOCKET INLET SOT-16 3P		130
30		ZS 376875	BT CTS30X08STL BNI		14
31		ZS 322580	ST BID40X08STL BNI		2
32		ZW 413267	N FRANGE 40STL CMT		1
33		BA 810408J	INVERTER 13585A-CFL-INV		1,250
34	!	BP 811849J	SW REGULATOR SNP-9541-M		5,200
35		BB 811264J	FDD FD-235HF-8549H		6,100
36		EW 812363J	WIRE ASSY L4014 W51 4P-2P		80
37		EW 812366J	WIRE ASSY L4014 W50 34P		580
38		SB 820337X	BUTTON PUSH(B)-5	[BLACK]	20
39		SB 820336X	BUTTON PUSH(B)-4	[PURPLE]	30
40		SB 430327J	BUTTON PUSH B(2)	[RED]	30
41		SB 820334X	BUTTON PUSH B(4)	[BLACK]	150
42		SB 430328J	BUTTON PUSH C	[BLACK]	30
43		SB 812379J	BUTTON PUSH C-4	[YELLOW]	30
44		SB 811562J	BUTTON CURSOR(3)	[BLACK]	130
45		SE 812403J	MASK DIAL		40
46		BA 379695J1	PC PAD SENSOR		6,300
47		SE 820489X	PAD CH-SE2	[RED]	1,500
48		SE 820487X	PANEL TOP MPC2000XL-SE2	[ORANGE]	4,000
49		SE 810353J	LENS LED		20
50		SE 812295J	SPASER EX		50
51		BD 820488X	PANEL FRONT-SE2	[ORANGE]	250
52		ZS 341959	ST BID40X06STL NI3		3
53		SK 820331X	DIAL KNOB-SE1	[BLACK]	50
54		SK 820338X	KNOB VOL PART(10)	[BLACK/PINK]	100
55		SK 820339X	KNOB VOL PART(11)	[BLACK/WHITE]	100
56-A	!	EW 380905J	AC CORD 250S KP300 KS16A H B J		690
56-B	!	EW 368420J1	AC CORD200SKP30KS16 B AC		750
56-C	!	EW 410608J	AC CORD 250S KP4819D KS31A B E		800
56-D	!	EW 419170J	AC CORD200S KP610 KS31A B		1,400
57	!	EJ 405424J	PLUG ADAPTOR KPR-25		400
for ZIP DRIVE MODEL					
58	!	EW 820450X	WIRE ASSY L4020 W51 4P	4pin Power wire for ZIP	400
59		EW 820451X	WIRE ASSY L4020 W82 40P	40pin ATA wire for ZIP	600
60		ZS 417137	BID30X04STL CMT	Mounting screw for ZIP	1

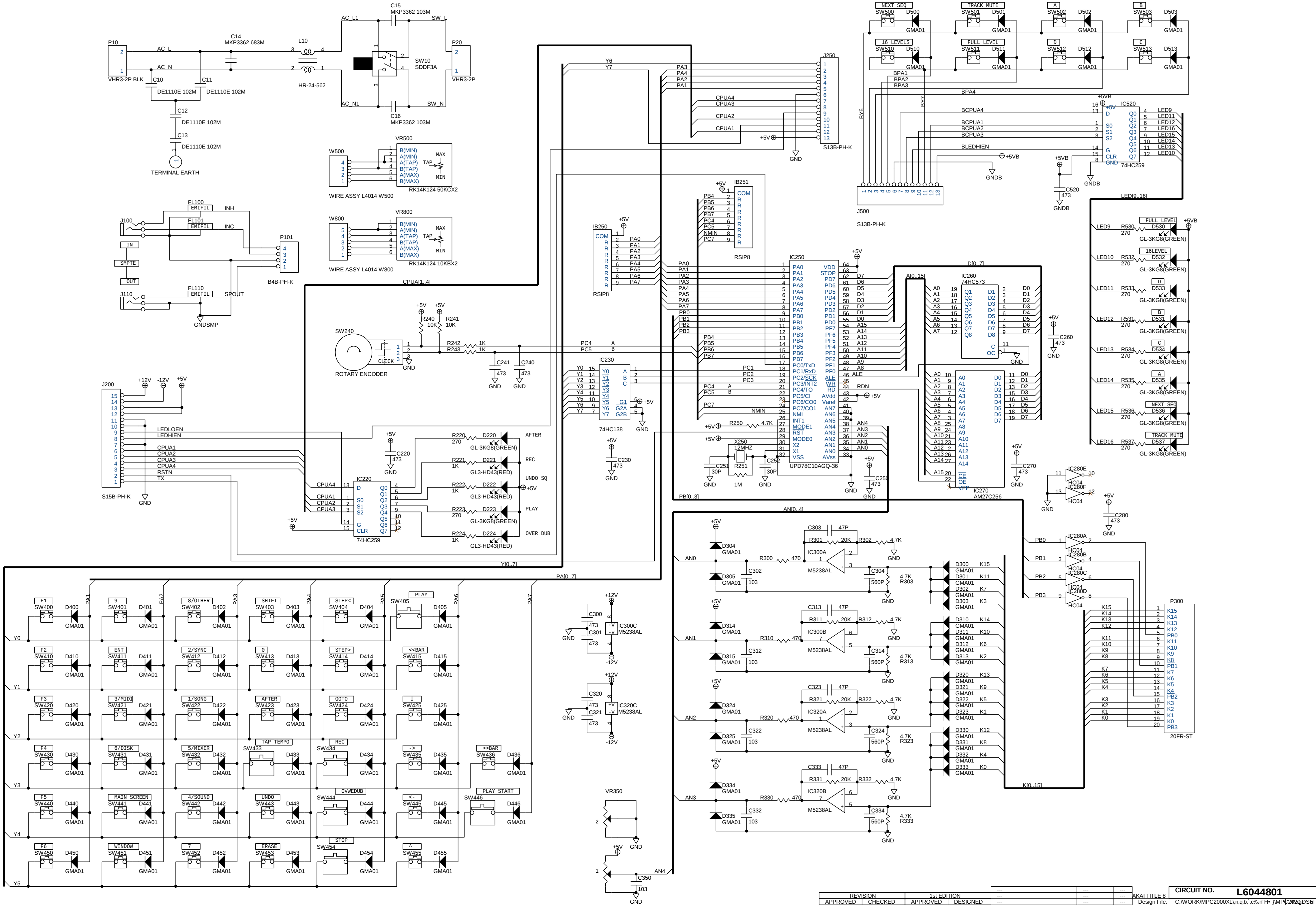
10. Final Assembly Block MPC2000XL-SE3

Ref No.		Part No.	Description	Note.	FOB JPY
1	SZ	810334J	SHIELD POINT		30
2	ZS	376493	BT BID30X06STL CMT		5
3	MH	812289J	PROP F.SCREW 1 L=34.6		170
4	ZS	379405	BID30X06STL CMT		1
5	SZ	812614J1	HOLDER ENCODER		30
6	ZW	812300J	SPACER SLIDE		10
7	SP	812282J1	BOTTOM COVER		800
8	SP	812297J1	PANEL LCD UNDER		60
10	EM	812326J	IND LCD GMV24160AFTW L=265		5,600
11	SK	430322J	KNOB SLIDE		20
12	ZS	810640J	BT PAN17X05STL CMT PS3		20
13	SP	812312J	PANEL LCD UPPER		100
14	ZG	812287J	BUSH PANEL LCD		20
15	SE	820586X	WINDOW LCD-SE3	[BLACK]	70
16	ZS	331182	BT BID30X08STL BNI		1
17	SC	812301J	COVER BLIND		80
18	SE	812290J	PANEL SPACER LCD		10
19	ZS	345272	ST BR30X06STL BNI		2
20	MH	812288J	PROP F.SCREW 3		140
21	ML	380175J	ARM LOCK		50
22	ZW	270101	RING E 300SUP CMT		1
23	ZG	812587J	SP PULL ARM LOCK		20
24	SA	812668J	FOOT B		20
25	ZS	812478J	PAN26X06STL BNI		10
26	ZS	812613J	PAN25X06STL NI3		10
27	SB	810525J	BUTTON POWER		30
28	SC	810351J1	COVER OPTION (A)		40
29	!	EJ 358632J2	SOCKET INLET SOT-16 3P		130
30	ZS	376875	BT CTS30X08STL BNI		14
31	ZS	322580	ST BID40X08STL BNI		2
32	ZW	413267	N FRANGE 40STL CMT		1
33	BA	810408J	INVERTER 13585A-CFL-INV		1,250
34	!	BP 811849J	SW REGULATOR SNP-9541-M		5,200
35	BB	811264J	FDD FD-235HF-8549H		6,100
36	EW	812363J	WIRE ASSY L4014 W51 4P-2P		80
37	EW	812366J	WIRE ASSY L4014 W50 34P		580
38	SB	820337X	BUTTON PUSH(B)-5	[BLACK]	20
39	SB	812317J	BUTTON PUSH(B)-3	[BLUE]	30
40	SB	430327J	BUTTON PUSH B(2)	[RED]	30
41	SB	820334X	BUTTON PUSH B(4)	[BLACK]	150
42	SB	430328J	BUTTON PUSH C	[BLACK]	30
43	SB	812379J	BUTTON PUSH C-4	[YELLOW]	30
44	SB	811562J	BUTTON CURSOR(3)	[BLACK]	130
45	SE	812403J	MASK DIAL		40
46	BA	379695J1	PC PAD SENSOR		6,300
47	SE	820582X	PAD CH-SE3	[BLACK]	1,500
48	SE	820580X	PANEL TOP MPC2000XL-SE3	[SILVER]	7,000
49	SE	810353J	LENS LED		20
50	SE	812295J	SPASER EX		50
51	BD	820581X	PANEL FRONT-SE3	[BLACK]	250
52	ZS	341959	ST BID40X06STL NI3		3
53	SK	820331X	DIAL KNOB-SE1		50
54	SK	820338X	KNOB VOL PART(10)		100
55	SK	820339X	KNOB VOL PART(11)		100
56-A	!	EW 380905J	AC CORD 250S KP300 KS16A H B J		690
56-B	!	EW 368420J1	AC CORD200SKP30KS16 B AC		750
56-C	!	EW 403993J	AC CORD200SKP4819DKS31A B E		970
56-D	!	EW 419170J	AC CORD200S KP610 KS31A B		1,400
57	!	EJ 405424J	PLUG ADAPTOR KPR-25		400
for ZIP DRIVE MODEL					
58	!	EW 820450X	WIRE ASSY L4020 W51 4P	4pin Power wire for Z	400
59		EW 820451X	WIRE ASSY L4020 W82 40P	40pin ATA wire for Z	600
60		ZS 417137	BID30X04STL CMT	Mounting screw for Z	1









*98-10-07 HC259(IC220,528)-CLR(15pin)CONNECT TO +5V(from GND)

*98-9-29 78C10(IC258) MODE(29P) RECONNECT TO +5V(from GND)

REVISION				1st EDITION				CIRCUIT NO. L6044801			
APPROVED	CHECKED	DESIGNED	DATE	APPROVED	CHECKED	DESIGNED	DATE	AKAI TITLE & Design File:	Design Name: (Title)	Rev	Size
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