

PCV-RX6 Series

SERVICE MANUAL

For American Area

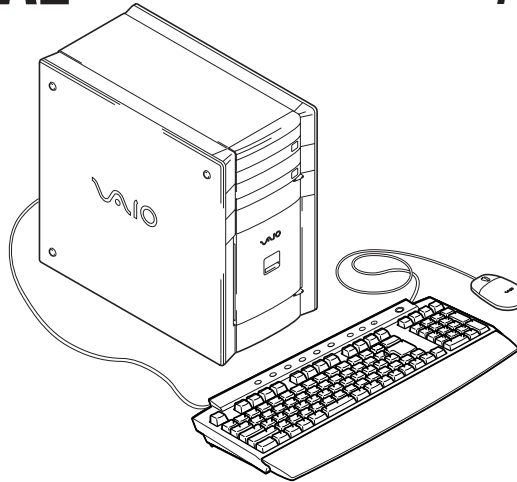
US Model

Canadian Model

Ver. 4-2002F

Revision History

Lineup: PCV-RX640 PCV-RX671
 PCV-RX650 PCV-RX672
 PCV-RX660 PCV-RX681
 PCV-RX670 PCV-RX682
 PCV-RX680G PCV-RX651
 PCV-RX690G PCV-RX641
 PCV-RX600E
 PCV-RX600N



MEMORY STICK



Specifications

Model-name	PCV-RX690G	PCV-RX680G	PCV-RX670	PCV-RX660	PCV-RX650	PCV-RX681	PCV-RX682
CPU	P4 2.2GHz	P4 2.0AGHz	P4 1.8GHz	P4 1.8GHz	P4 1.6GHz	P4 2.2GHz	P4 2.2GHz
M/B	(EE)	(AN)	(AN)	(AN)	(AN)	(AN)	(AN)
Memory	std/max	512MB/1024MB	512MB/1024MB	512MB/1024MB	512MB/1024MB	1024MB/1024MB	1024MB/1024MB
	Slot 1	512MB	512MB	512MB	256MB/512MB	512MB	512MB
	Slot 2	(256MB CTO)	None	None	256MB / None	512MB	512MB
HDD	Bay 1	120GB	120GB	80GB	80GB	120GB	120GB
	Bay 2	-	-	-	-	-	-
Opt.Device	Upper	DVD-RW	DVD-RW	DVD-RW	DVD-ROM	DVD-RW	DVD-RW
	Lower	DVD-ROM	CD-ROM	CD-ROM	CD-RW	CD-ROM	DVD-ROM
Expansion Card (Top)	Slot4 (AGP)	VGA Card	VGA Card	VGA Card	VGA Card	VGA Card	VGA Card
	Slot3 (PCI)	-	-	-	-	-	-
	Slot2 (PCI)	MPEG (ENX-17)	MPEG (ENX-17)	-	-	-	-
(Bottom) Slot1 (PCI)	Modem	Modem	Modem	Modem	Modem	Modem	Modem
MemoryStick	○	○	○	○	○	○	○
OS	Win XP Home	Win XP Home	Win XP Home	Win XP Home	Win XP Home	Win XP Home	Win XP Home

Model-name	PCV-RX671	PCV-RX672	PCV-RX640	PCV-RX600E	PCV-RX600N	PCV-RX651	PCV-RX641
CPU	P4 2.0AGHz	P4 2.0AGHz	Cel 1.3GHz	P4 1.6GHz / 1.8GHz / 2GHz / 2.2GHz(NW)	P4 1.6GHz / 1.8GHz / 2GHz / 2.2GHz(NW)	P4 1.7GHz	Cel 1.3GHz
M/B	(AN)	(AN)	(BI)	(EE)	(AN)	(AN)	(BI)
Memory	std/max	512MB/1024MB	256MB/512MB	1024MB max	1024MB max	256MB/1024MB	256MB/512MB
	Slot 1	512MB	512MB	256MB / 512MB	256MB / 512MB	256MB	256MB
	Slot 2	-	-	None / 256MB / 512MB	None / 256MB / 512MB	-	-
HDD	Bay 1	120GB	120GB	60GB	60GB / 80GB / 120GB	80GB	40GB
	Bay 2	-	-	-	None / 120GB	-	-
Opt.Device	Upper	DVD-RW	DVD-RW	DVD-ROM	DVD-RW / DVD-ROM	DVD-RW / DVD-ROM	DVD-ROM
	Lower	CD-ROM	DVD-ROM	CD-RW	DVD-ROM / CD-RW	DVD-ROM / CD-RW	CD-RW
Expansion Card (Top)	Slot4 (AGP)	VGA Card	VGA Card	VGA Card	VGA Card	VGA Card	VGA Card
	Slot3 (PCI)	-	-	-	-	-	-
	Slot2 (PCI)	-	-	-	None / MPEG (ENX-17)	None / MPEG (ENX-17)	-
(Bottom) Slot1 (PCI)	Modem	Modem	Modem	Modem	Modem	Modem	Modem
MemoryStick	○	○	×	○	○	○	×
OS	Win XP Home	Win XP Home	Win XP Home	Win XP Home	Win XP Home / Win XP Professional	Win XP Home	Win XP Home
				CTO Model	CTO Model		

PERSONAL COMPUTER VAIO

SONY®

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Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Service and Inspection Precautions

1. Obey precautionary markings and instructions

Labels and stamps on the cabinet, chassis, and components identify areas requiring special precautions. Be sure to observe these precautions, as well as all precautions listed in the operating manual and other associated documents.

2. Use designated parts only

The set's components possess important safety characteristics, such as noncombustibility and the ability to tolerate large voltages. Be sure that replacement parts possess the same safety characteristics as the originals. Also remember that the (Δ) mark, which appears in circuit diagrams and parts lists, denotes components that have particularly important safety functions; be extra sure to use only the designated components.

3. Always follow the original design when mounting parts and routing wires

The original layout includes various safety features, such as inclusion of insulating materials (tubes and tape) and the mounting of parts above the printer board. In addition, internal wiring has been routed and clamped so as to keep it away from hot or high-voltage parts. When mounting parts or routing wires, therefore, be sure to duplicate the original layout.

4. Inspect after completing service

After servicing, inspect to make sure that all screws, components, and wiring have been returned to their original condition. Also check the area around the repair location to ensure that repair work has caused no damage, and confirm safety.

5. When replacing chip components...

Never reuse components. Also remember that the negative side of tantalum capacitors is easily damaged by heat.

6. When handling flexible print boards...

- The temperature of the soldering-iron tip should be about 270°C.
- Do not apply the tip more than three times to the same pattern.
- Handle patterns with care; never apply force.

Caution: Remember that hard disk drives are easily damaged by vibration. Always handle with care.

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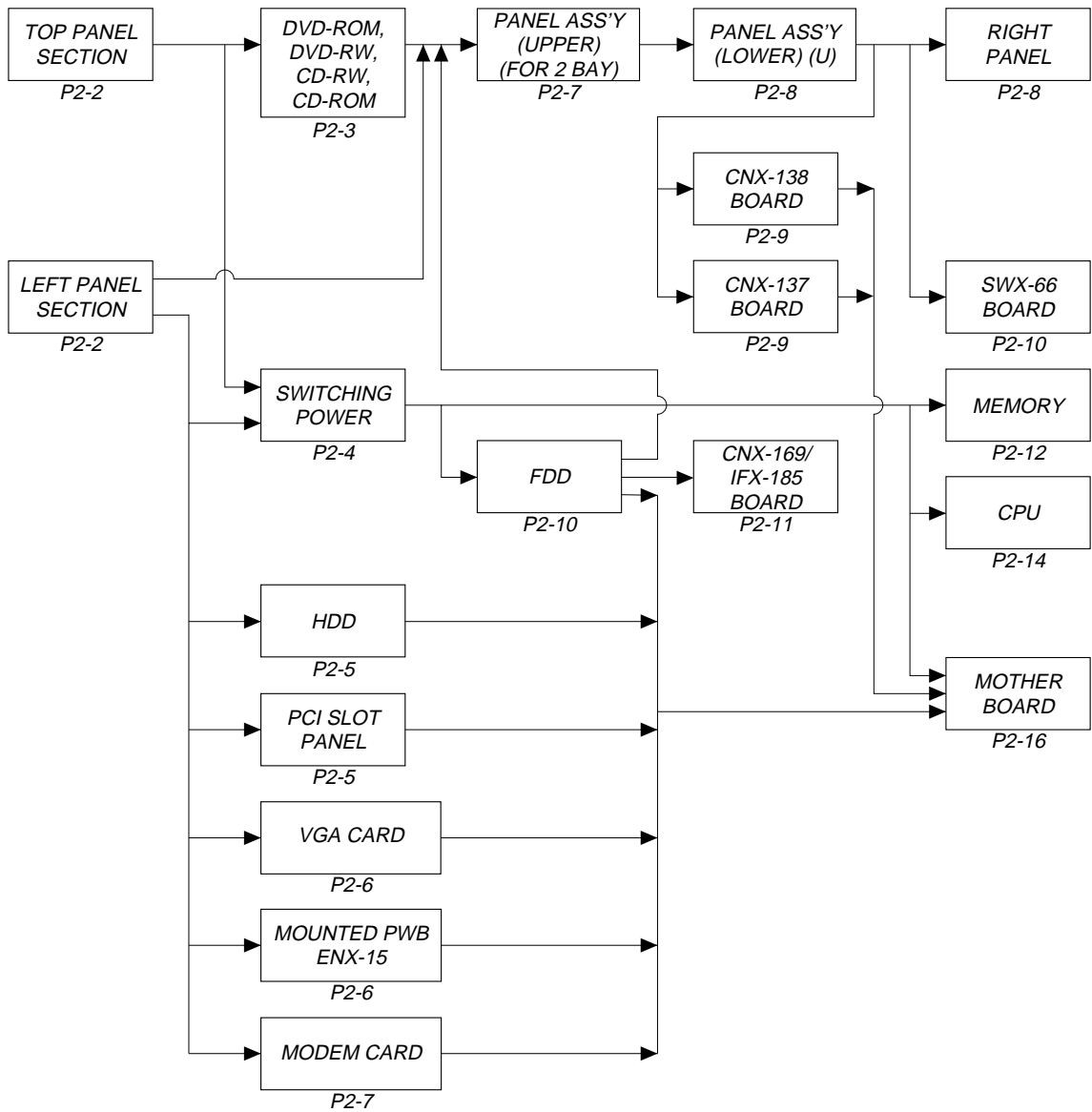
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History of the changes is shown as the "Revision History" at the end of this data.

SECTION 2 DISASSEMBLY

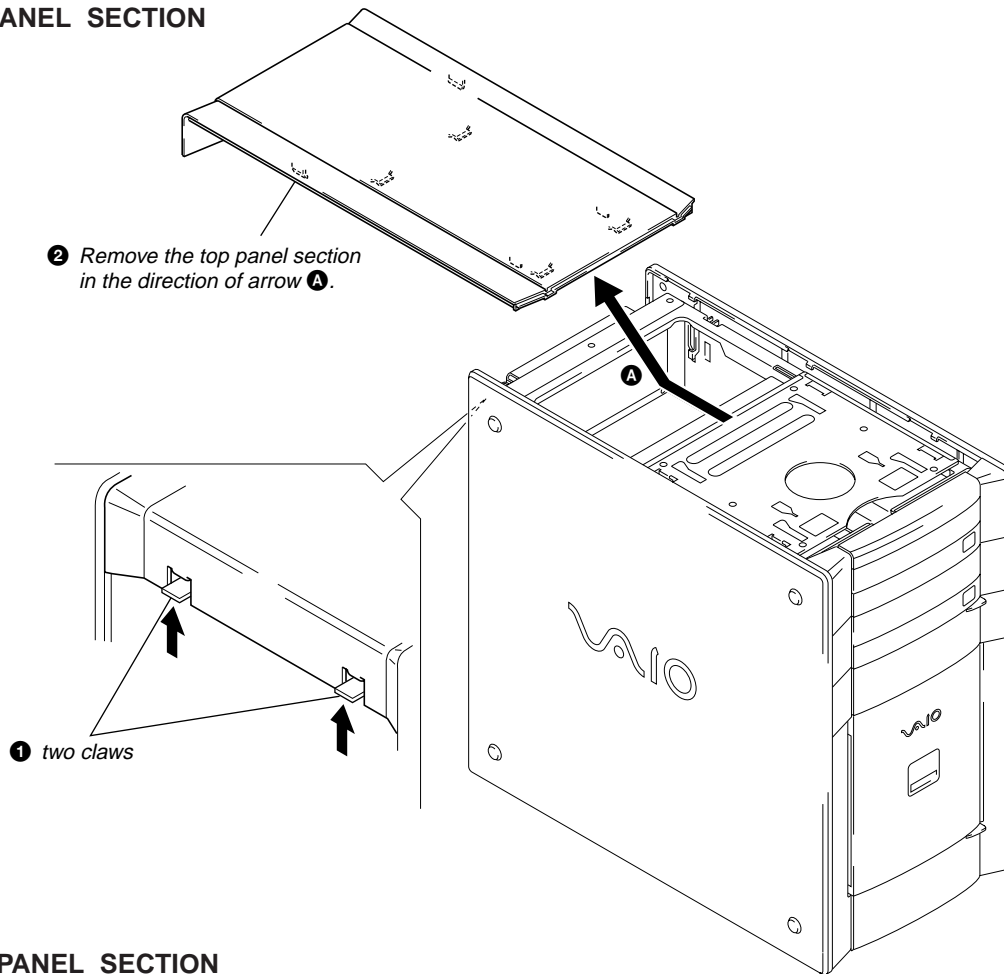
2-1. FLOW CHART



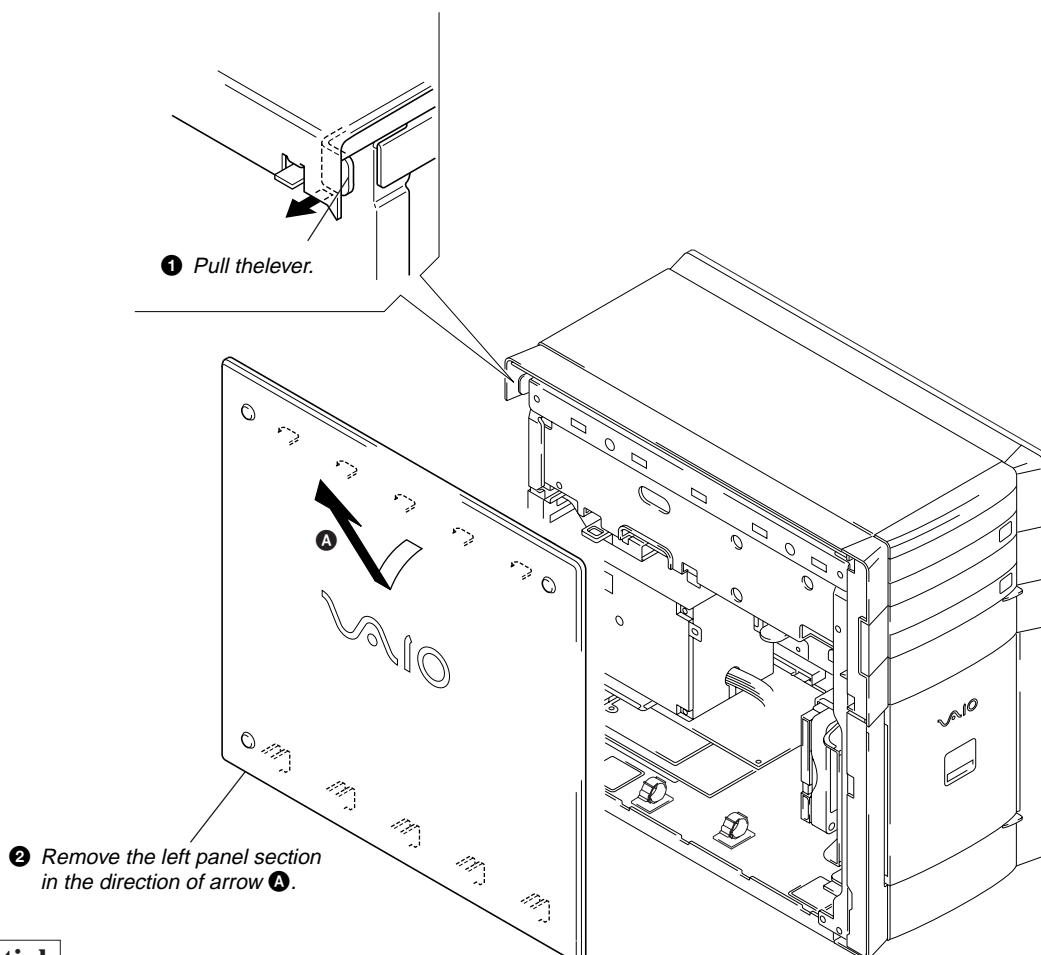
- P□-□ denotes the page concerned.
- HDD has a low resistance to vibration, requiring careful handling.

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2-2. TOP PANEL SECTION

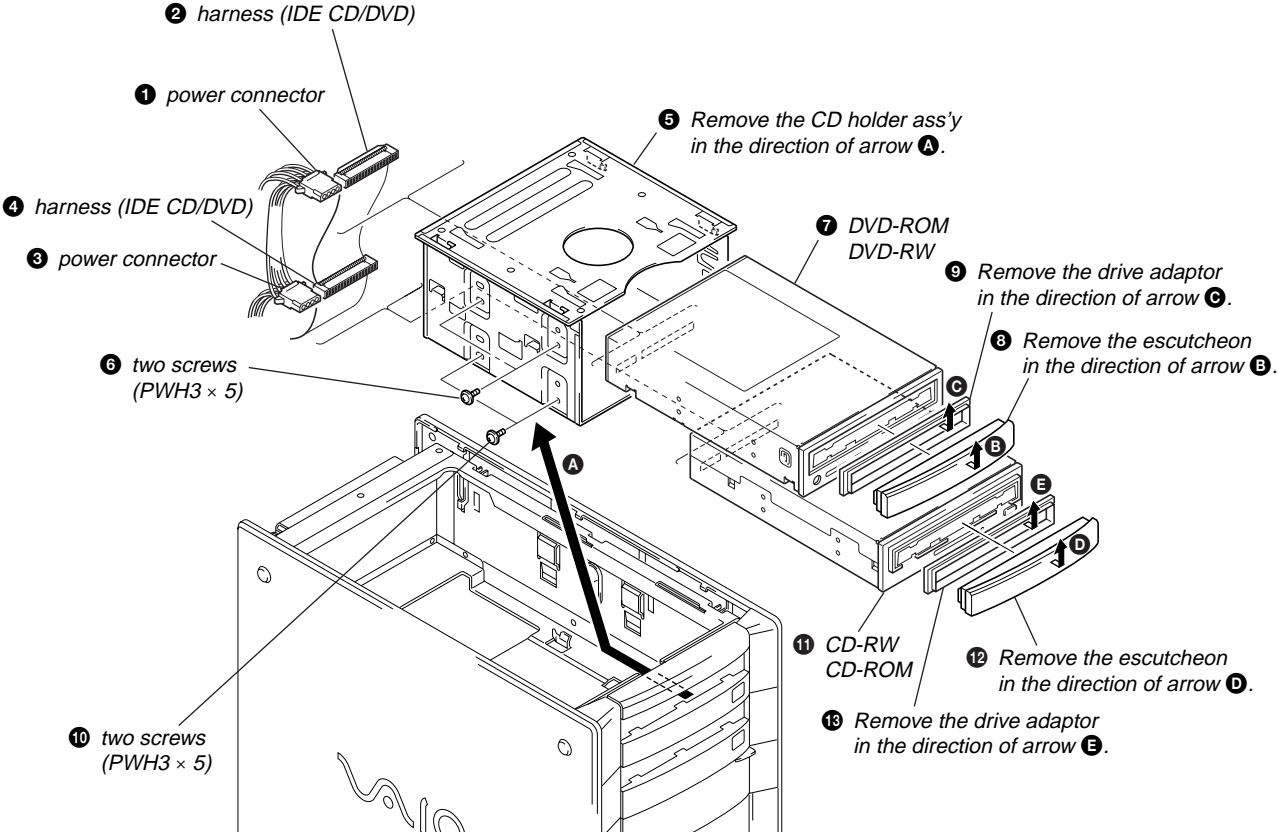


2-3. LEFT PANEL SECTION

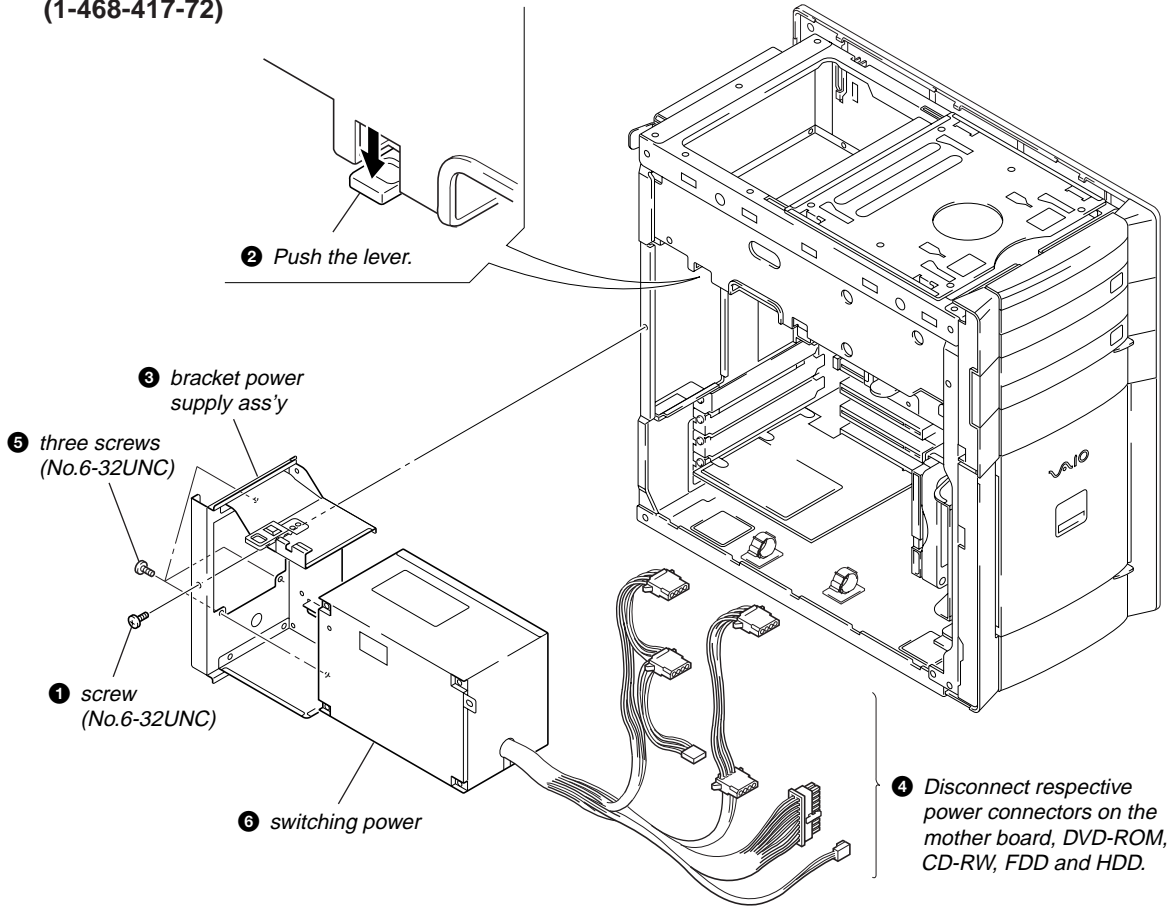


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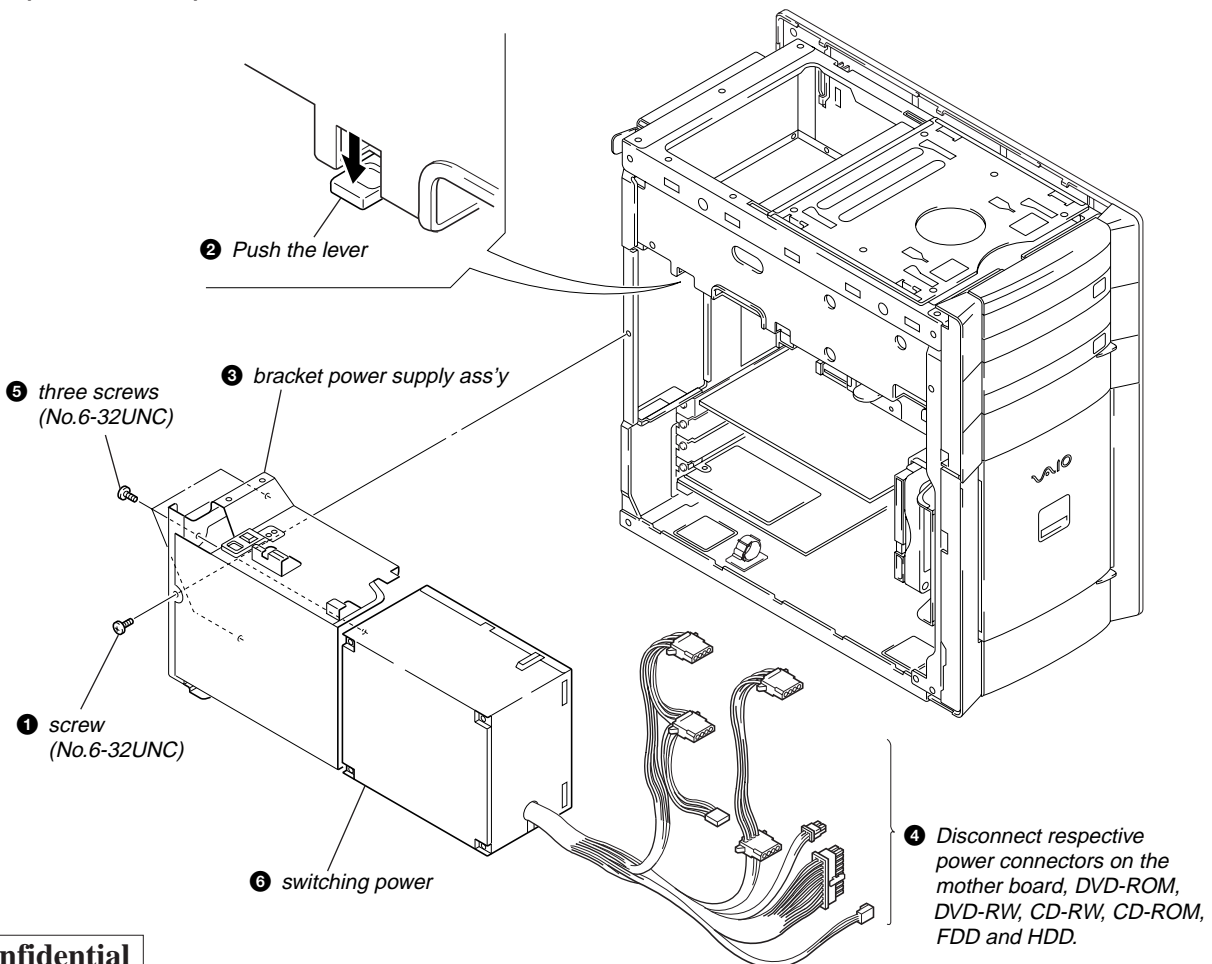
2-4. DVD-ROM, DVD-RW, CD-RW, CD-ROM



**2-5. SWITCHING POWER
(1-468-417-72)**

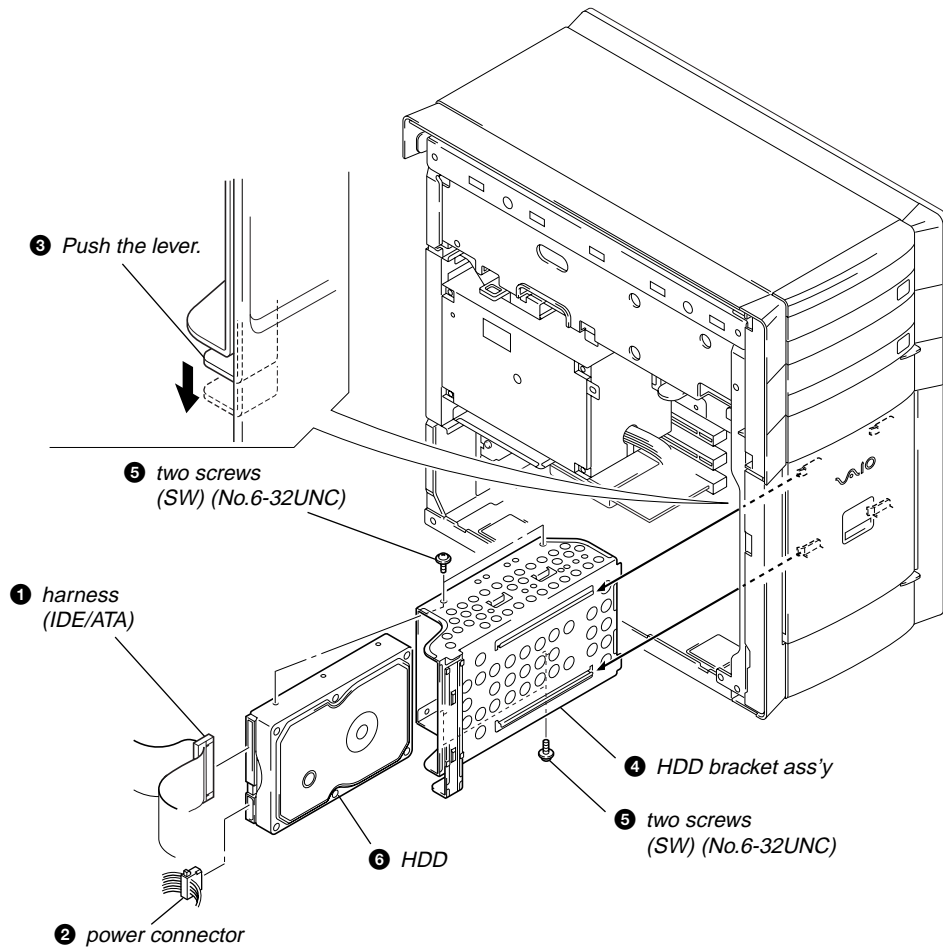


(1-468-601-14)

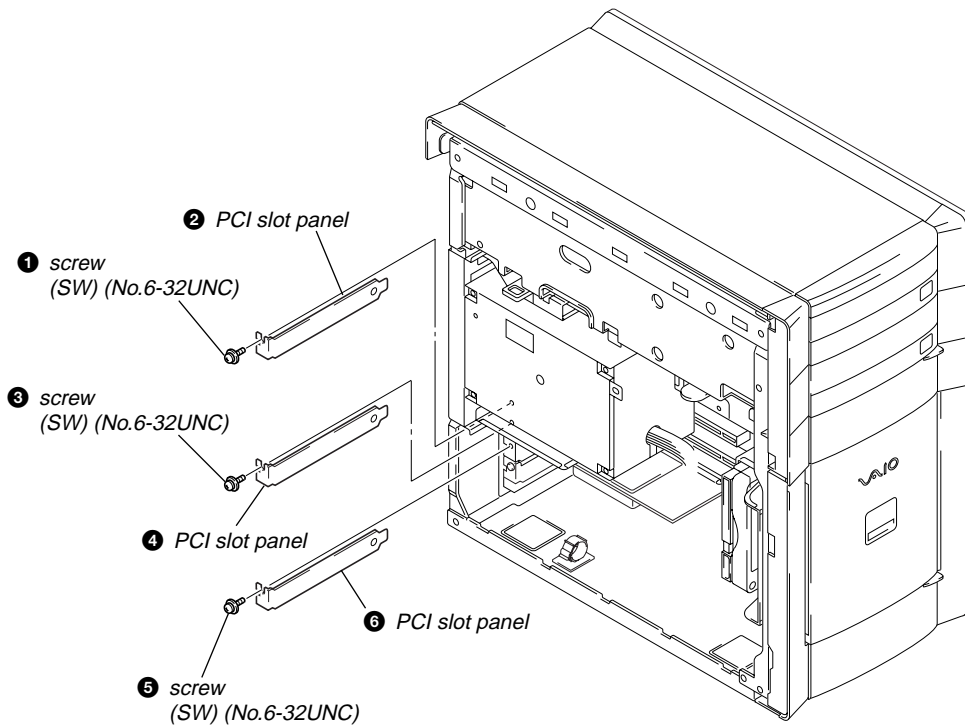


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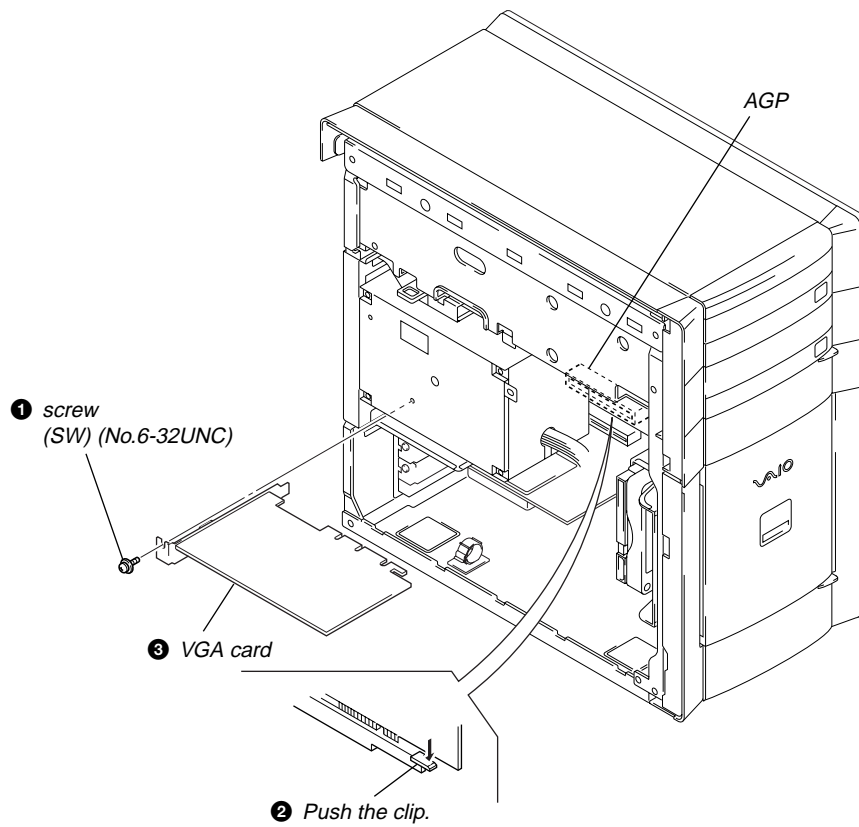
2-6. HDD



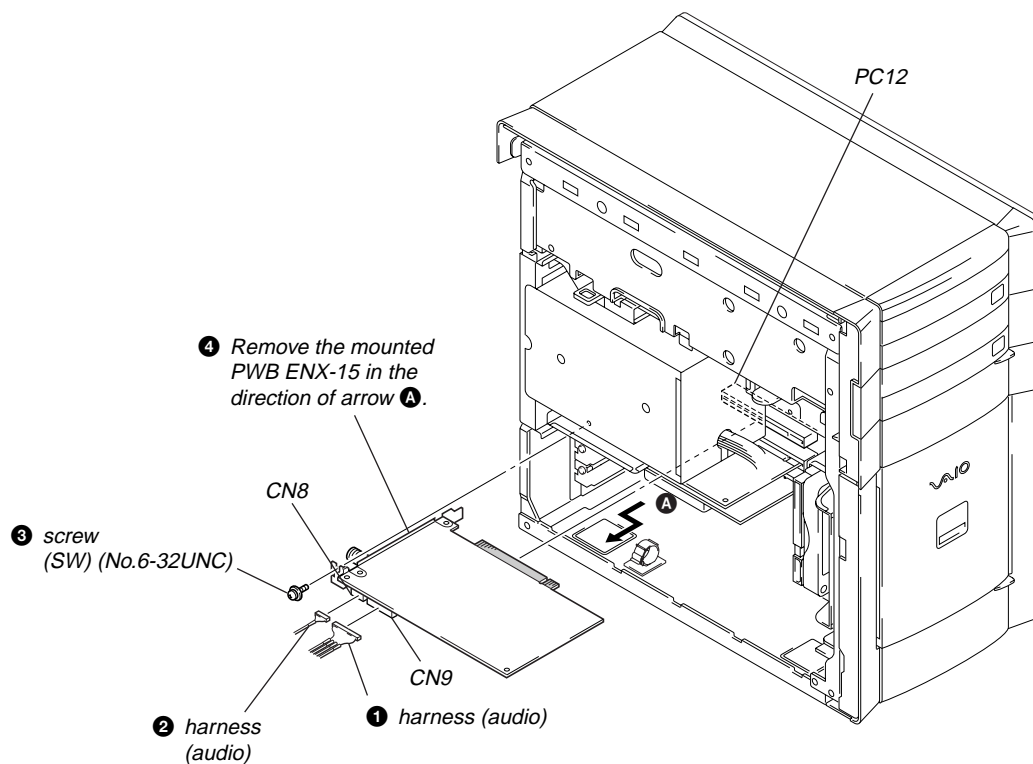
2-7. PCI SLOT PANEL



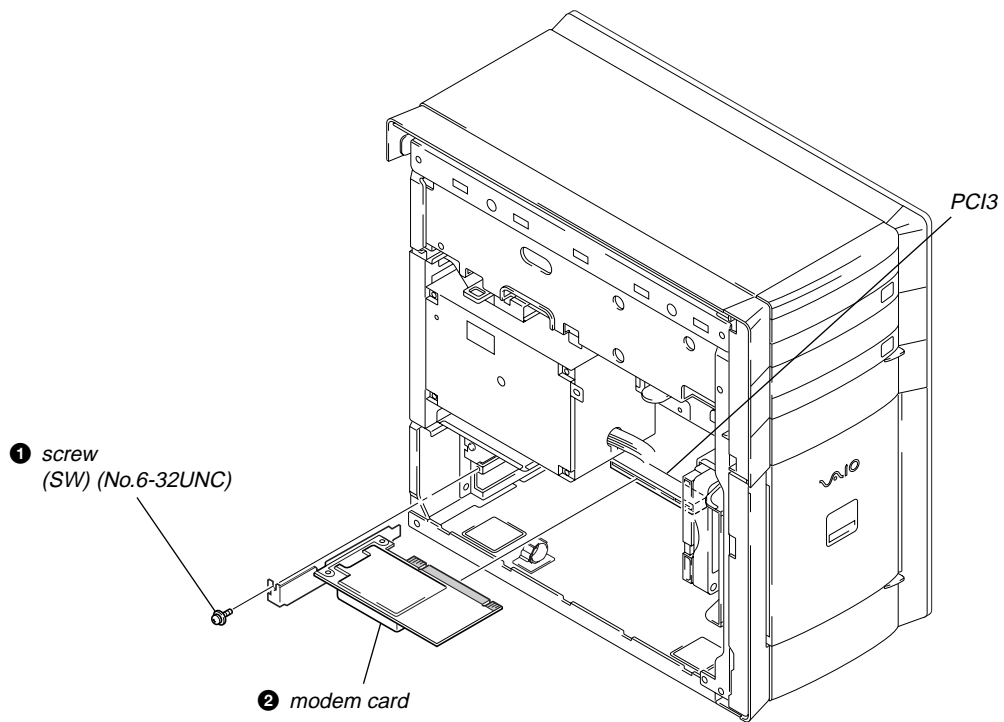
2-8. VGA CARD



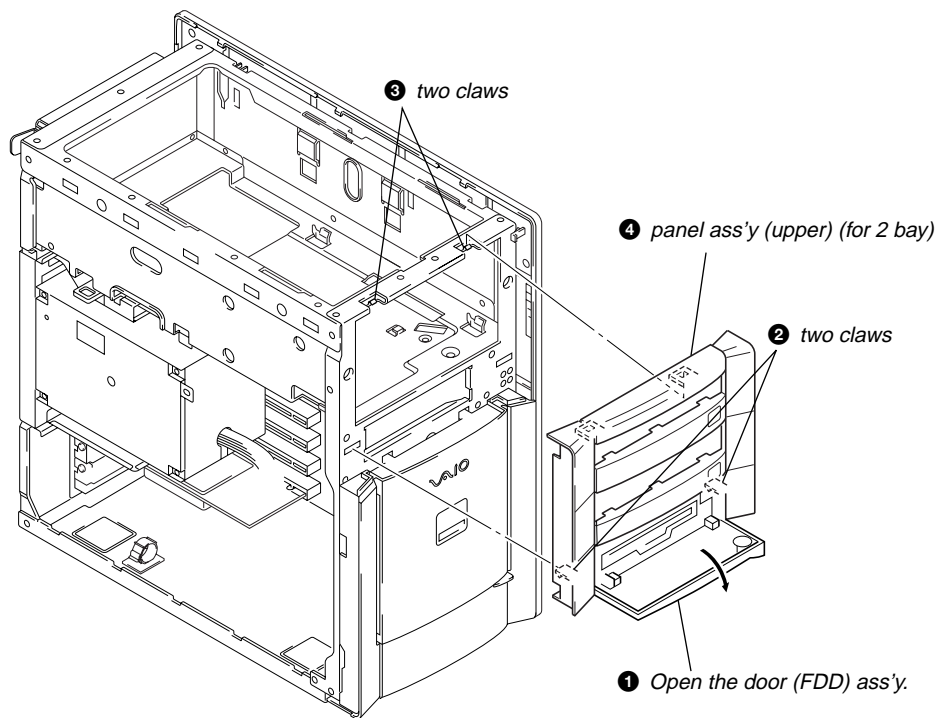
2-9. MOUNTED PWB ENX-15



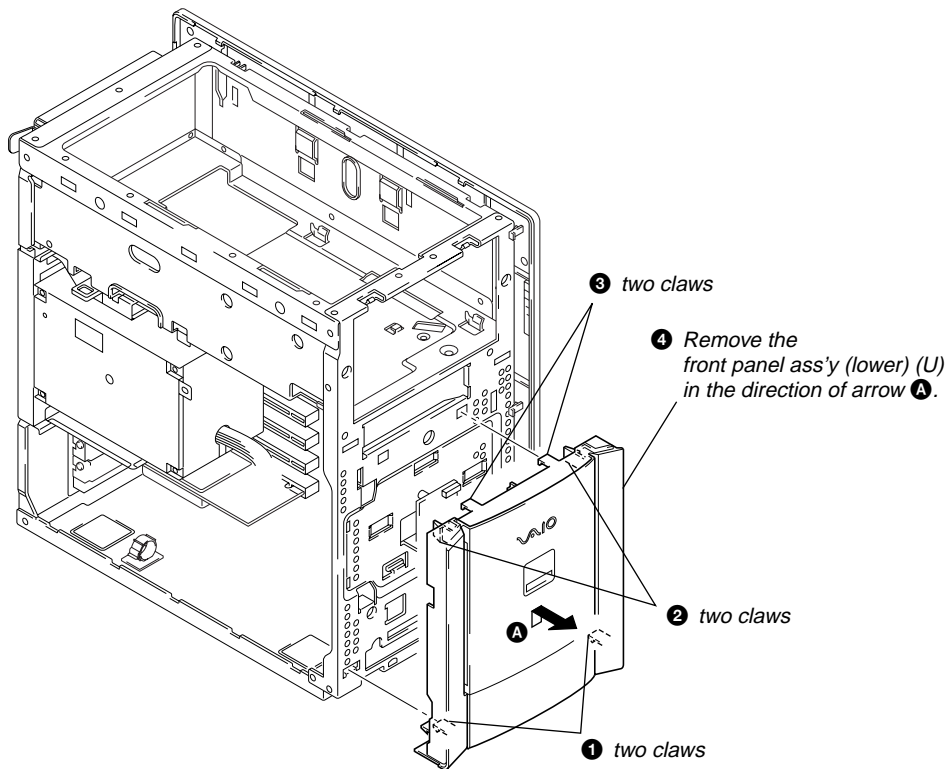
2-10. MODEM CARD



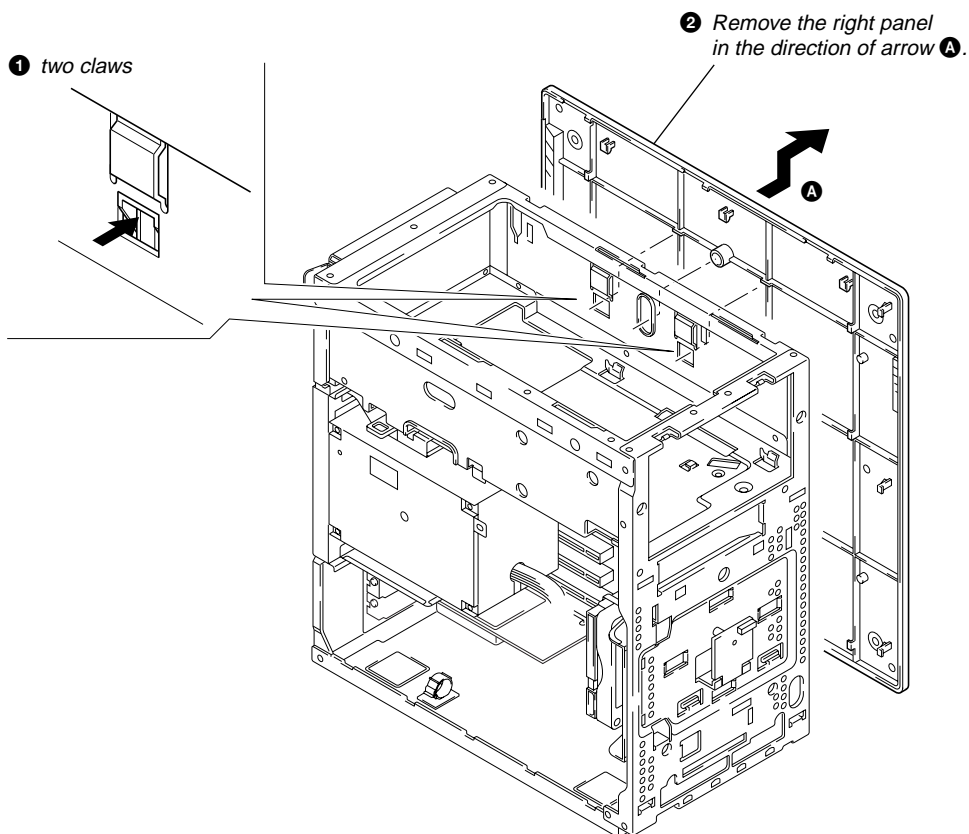
2-11. PANEL ASS'Y (UPPER) (FOR 2 BAY)



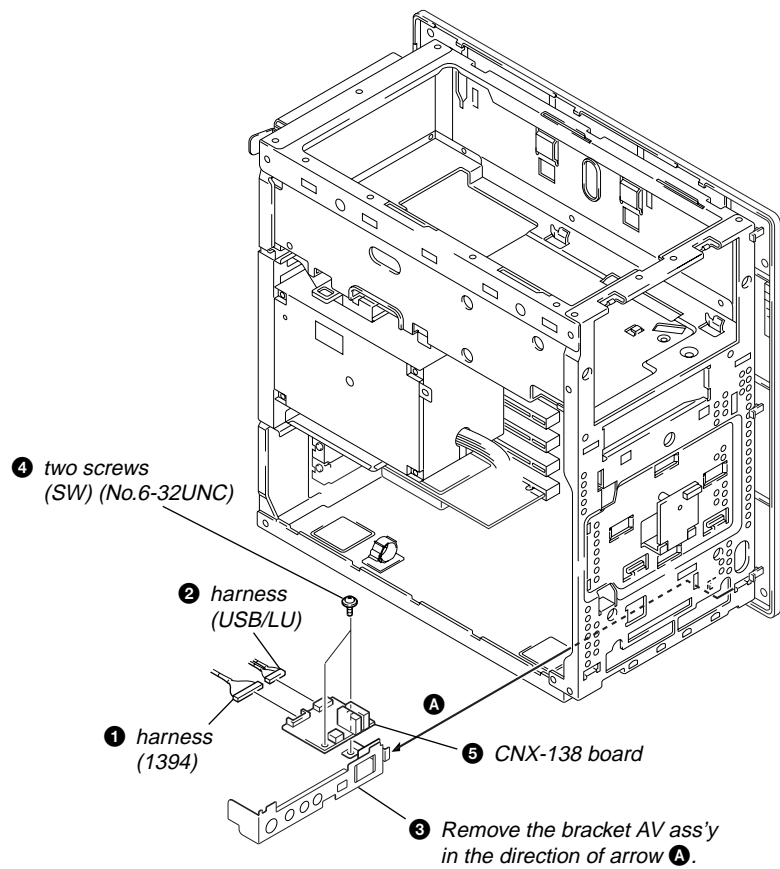
2-12. PANEL ASS'Y (LOWER) (U)



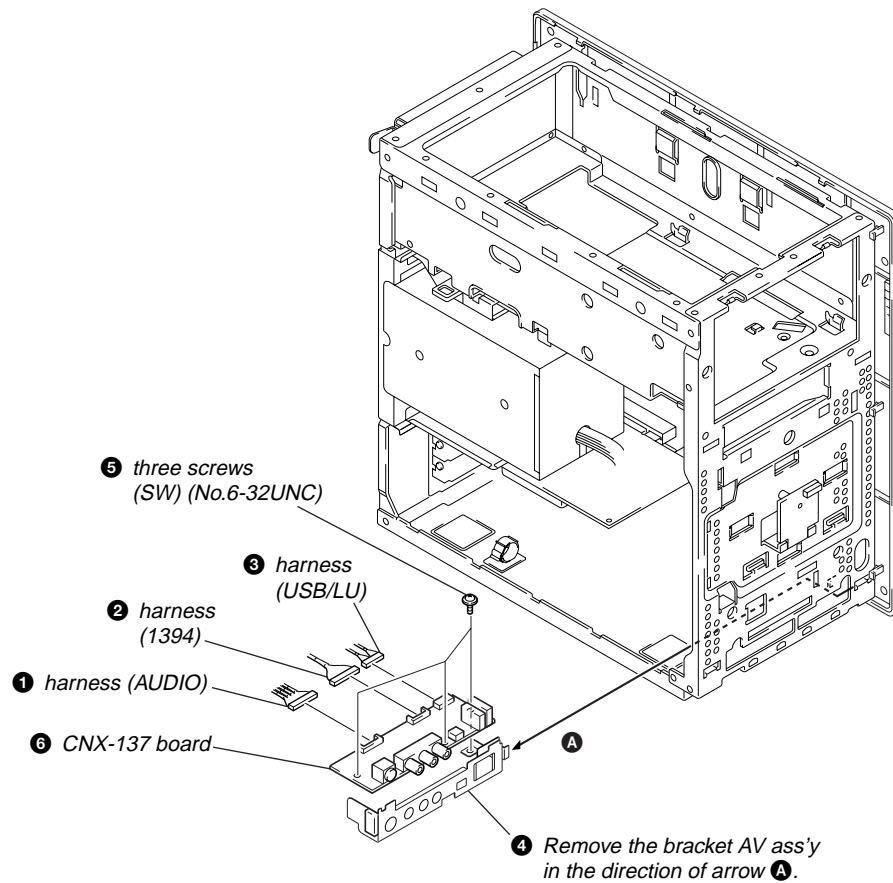
2-13. RIGHT PANEL



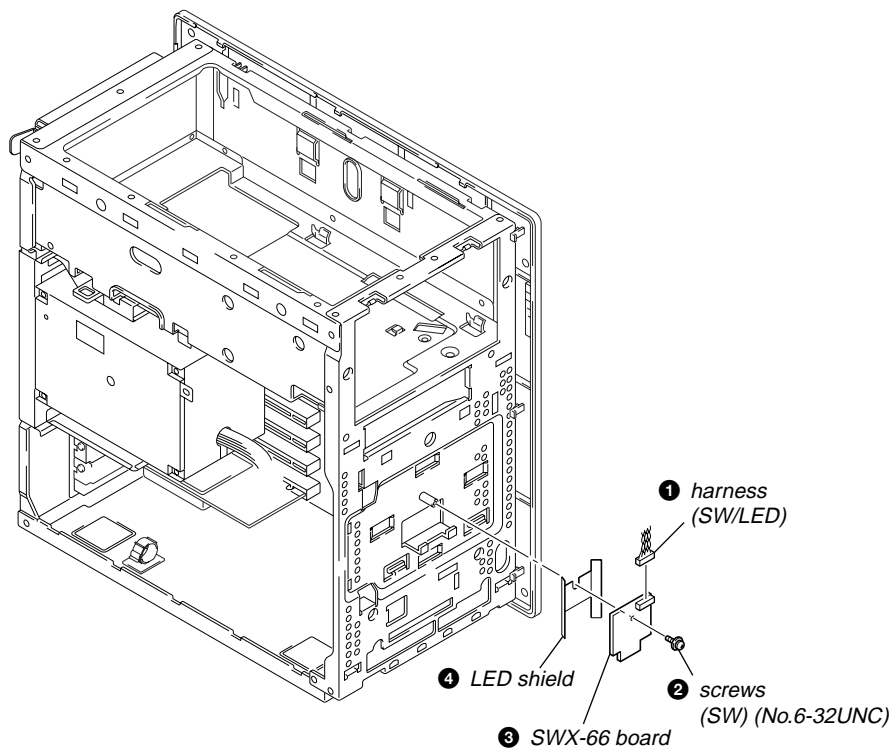
2-14. CNX-138 BOARD



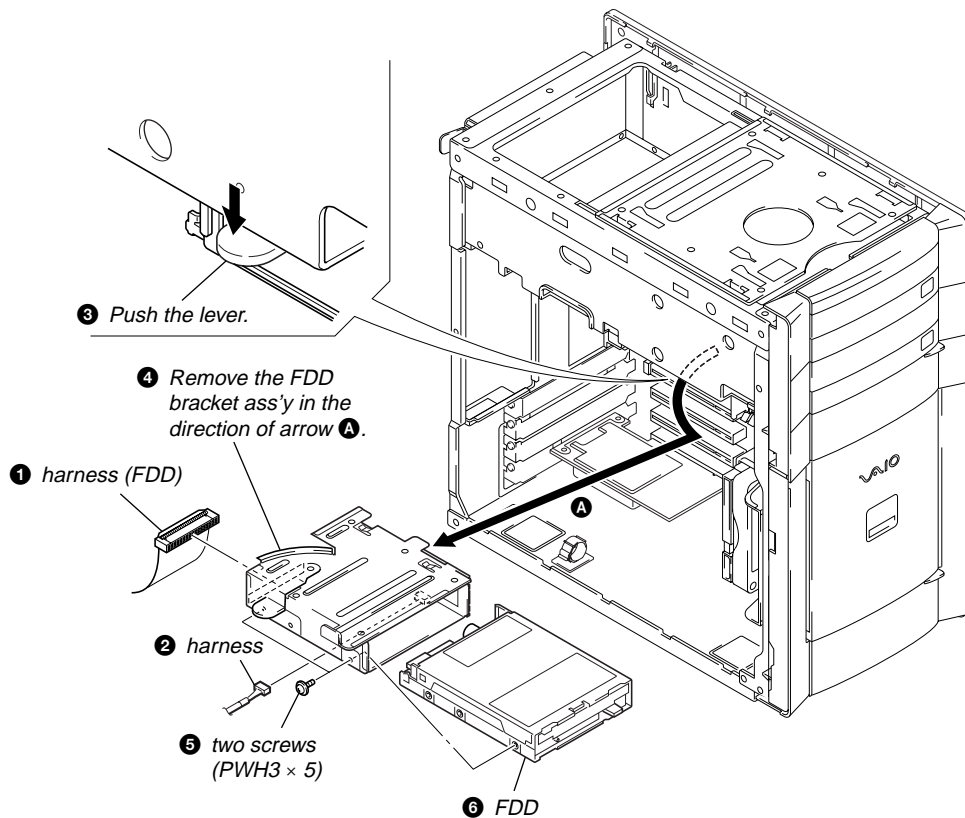
2-15. CNX-137 BOARD



2-16. SWX-66 BOARD

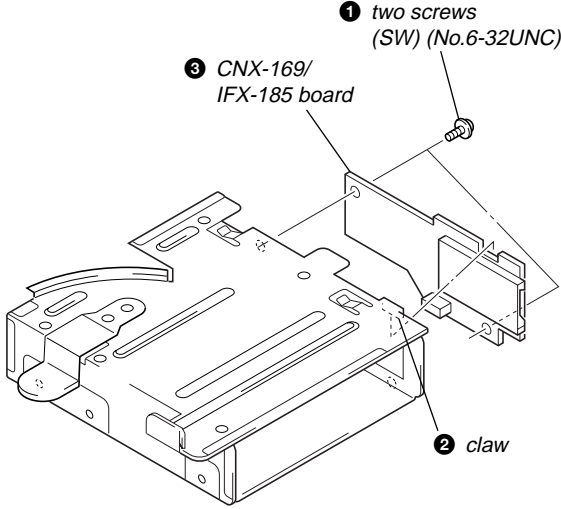


2-17. FDD

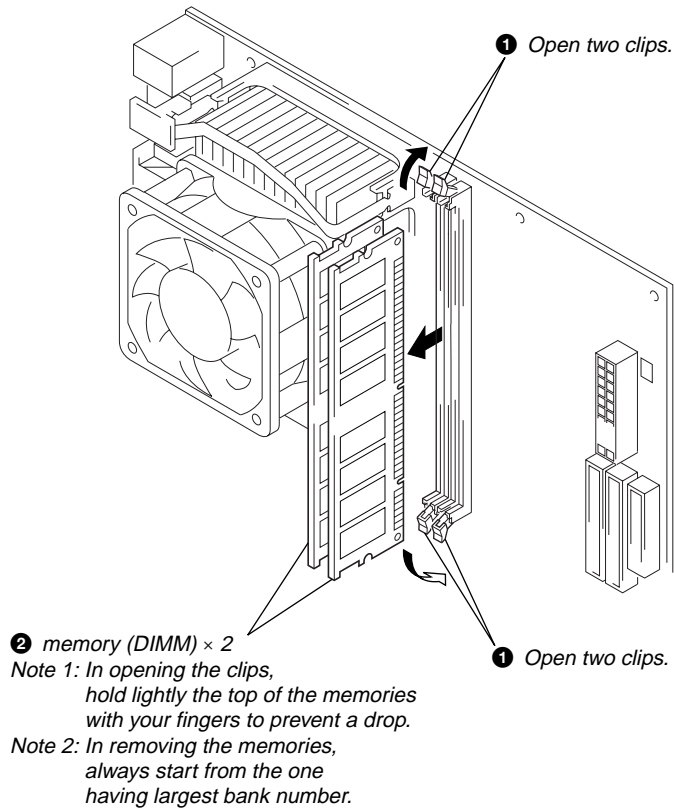


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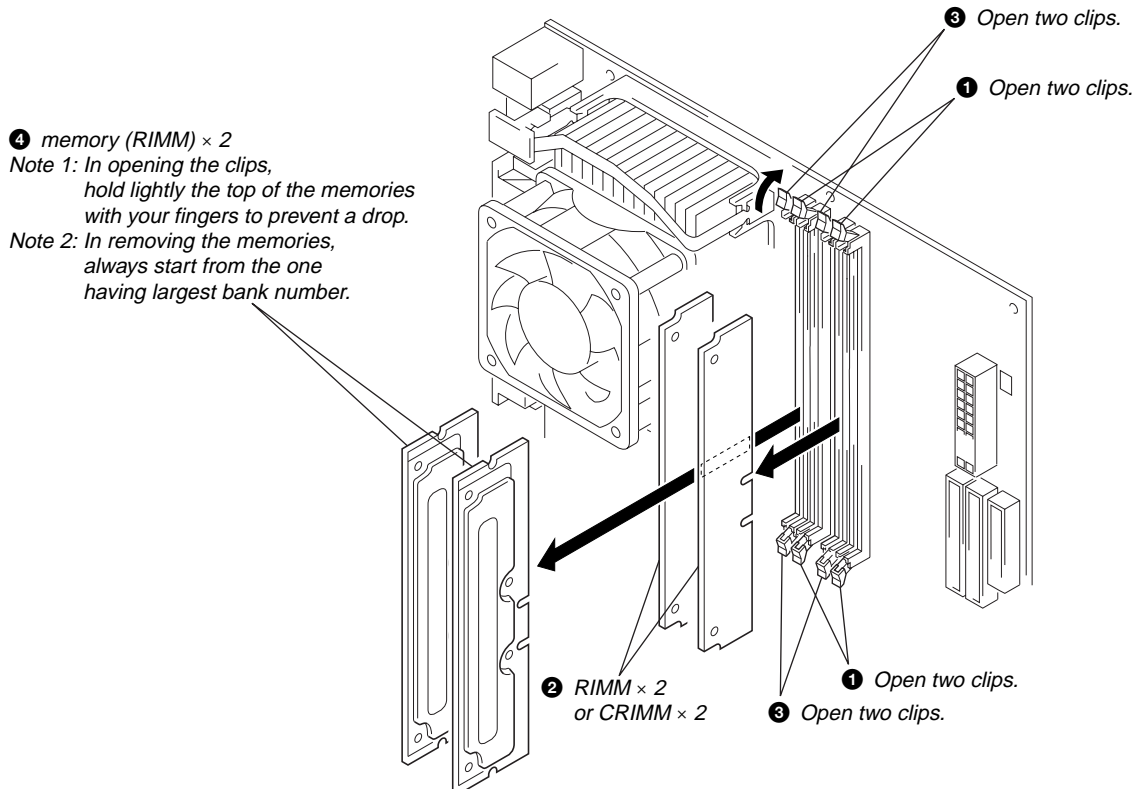
2-18. CNX-169/IFX-185 BOARD



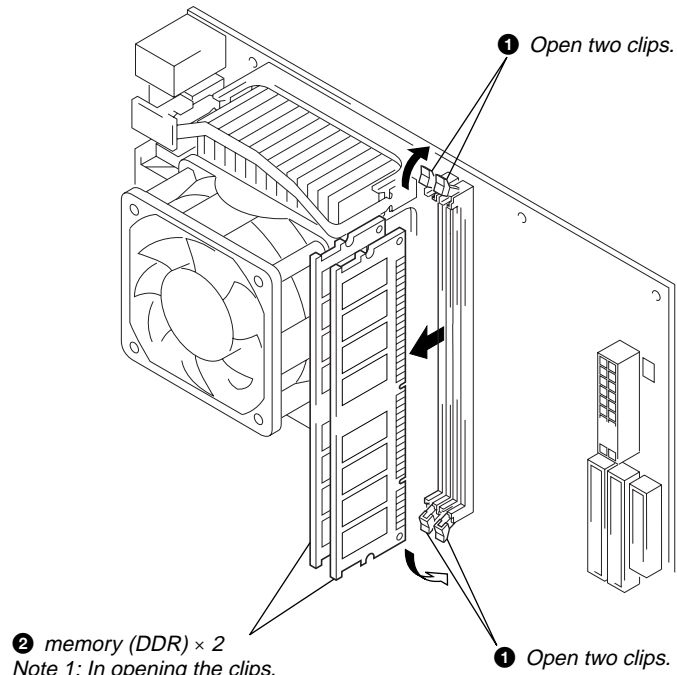
2-19. MEMORY (DIMM)



(RIMM, CRIMM)



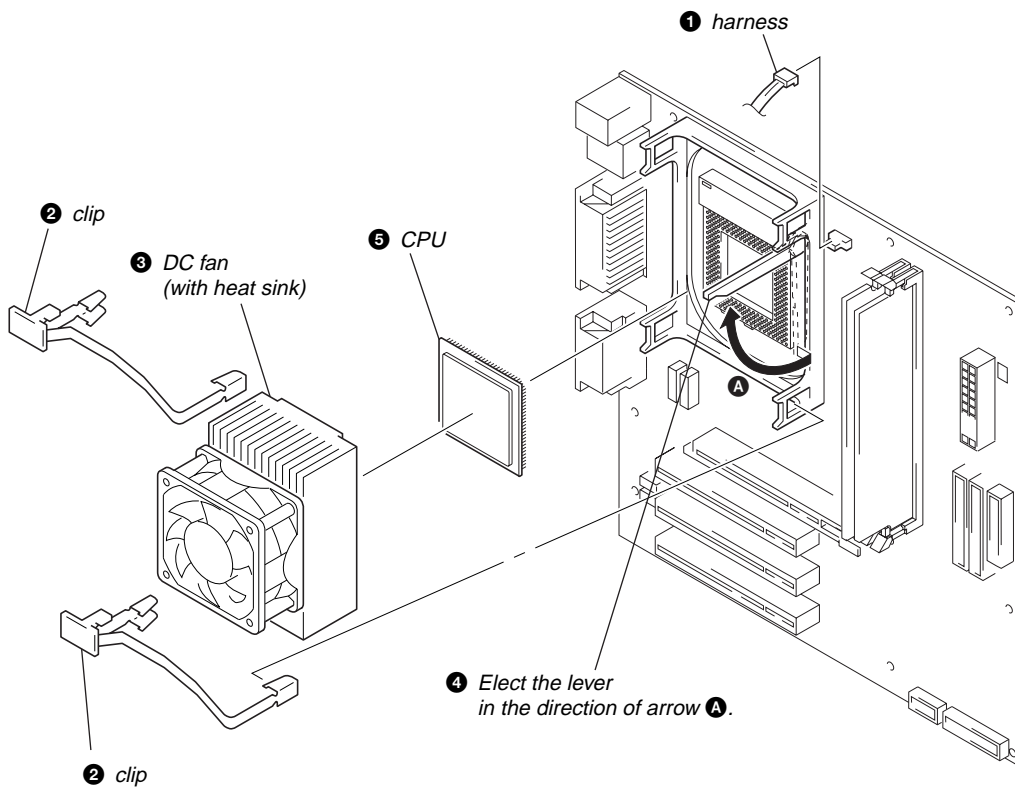
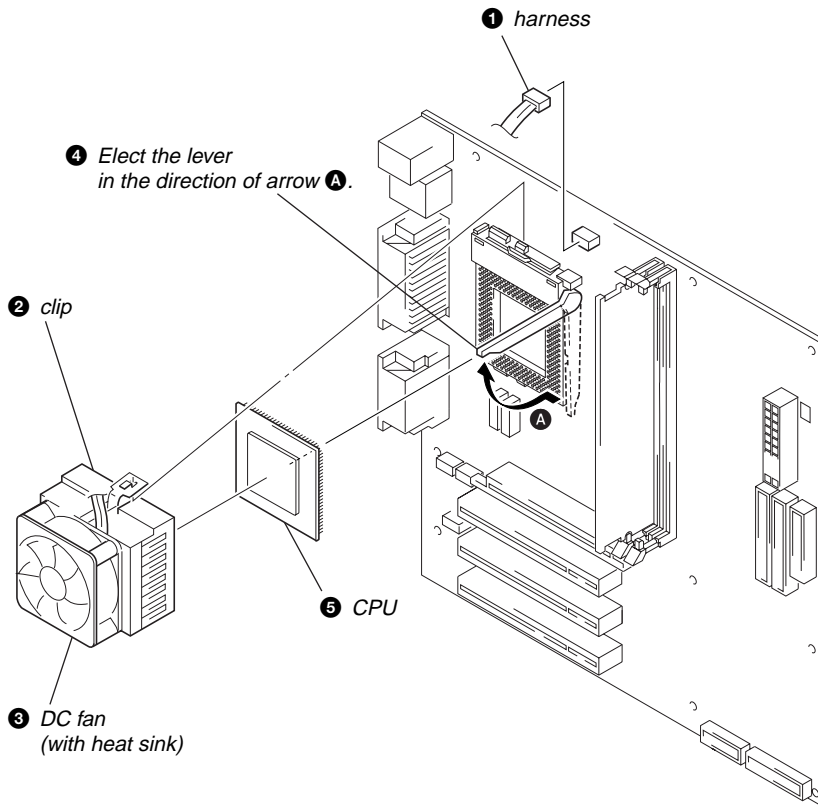
(DDR)



*Note 1: In opening the clips,
hold lightly the top of the memories
with your fingers to prevent a drop.*

*Note 2: In removing the memories,
always start from the one
having largest bank number.*

2-20. CPU



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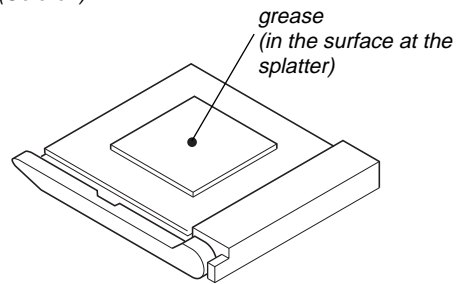
• CPU INSTALLATION

*Note : When heat sink is removed from CPU,
install new ones after thermal diffusion
grease is wiped off and silicon compound
is applied to the place shown in the figure.*

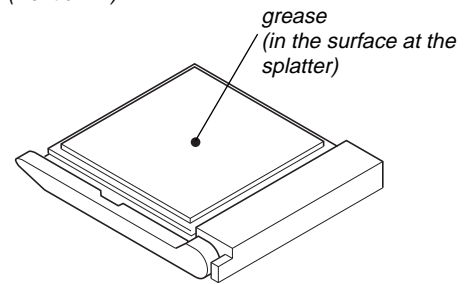
Thermal diffusion grease : silicon compound (G-765) 90G

*Amount to apply : 0.1 g (as the same size as the tip of a match) (Celeron)
0.5 g (as the same size as the tip of a match) (Pentium 4)*

(Celeron)

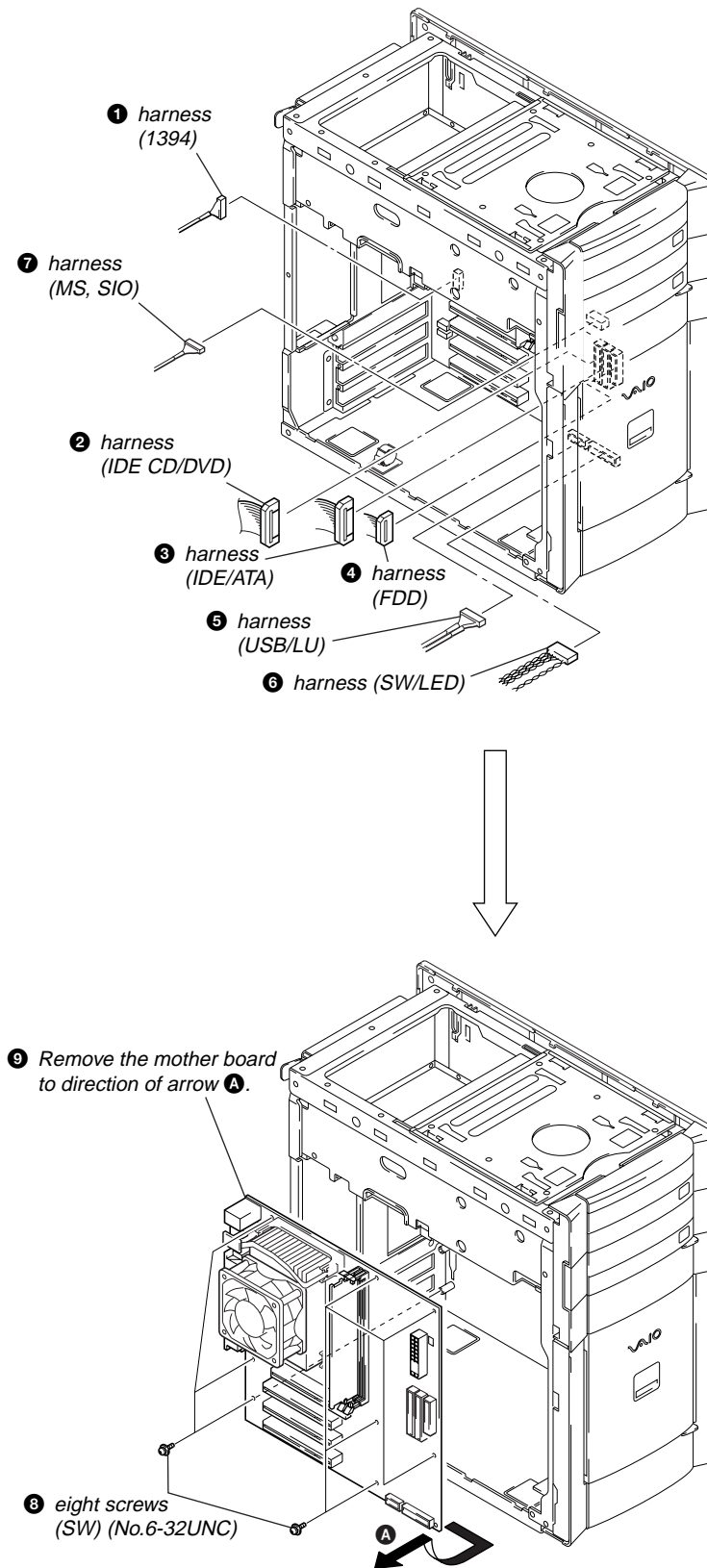


(Pentium 4)



** Take care not to apply the grease
to any other places because it has
high conductivity.*

2-21. MOTHER BOARD



SECTION 3 PROGRAM FOR SERVICE

3-1. General

The Diagnostic Programs for Service are available with the following three kinds.

1. PC-Doctor

This can test the Mother Board, CPU, Memory, FDD, HDD, and Optical drive.

2. intel815E-B Video Diag

This can test the VGA (intel815E-B Chipset built in).

3. nVIDIA Video Diag

There are two types of diagnostic programs, one for the memory Geforce2Ti (64M) and TNT2M64 (32M).

3-2. PC-Doctor Starting Method

As the Diag. disc is a bootable CD, set the CD in the Optical drive and turn the system power on.

The menu will be displayed, then select the menu.

1. PC-Doctor

After the system started, set a DOS formatted 1.44M floppy disk without the write protection in the FDD, and the CD-ROM Disc in the Optical drive, select the model to be tested following the menu. All tests are carried out automatically.

Do not remove the Diag. disc during the test.

3-2-1. Test Items

CPU/COPROCESSOR TEST

The CPU/Coprocessor are tested.

MEMORY TEST

The memory is tested.

The bus throughput of the extended memory cannot be tested, and therefore N/A is displayed as the test result, but this is not a fault.

SYSTEM BOARD TEST

The Mother Board is tested.

Also, the keyboard and mouse are tested, thus requiring the keyboard and mouse to be connected to the set in advance.

SERIAL PORT TEST

The COM port is tested.

PARALLEL PORT TEST

The printer port is tested.

VIDEO ADAPTER TEST

The video card is tested.

Only the DOS legacy mode is tested.

FIXED DISK TEST

HDD is tested.

DISKETTE TEST

FDD is tested.

As the read/write operation is performed to the floppy disk, set the DOS formatted 1.44M disk without the write protection before the PC-Doctor is started. Also, if the PC-Doctor is booted from the CD, the boot image of CD is treated as the floppy 0 (drive A), and accordingly the FDD is treated as the floppy 1 (drive B).

In this case, the floppy 0 cannot be tested and N/A is displayed as the test result, but this is not a fault.

MISCELLANEOUS TEST

Other devices are tested.

CD/DVD-ROM read check, CPU type check, and configuration check of PCI device, etc. are executed.

3-2-2. Test Result

After the test finished, "PASSED" or "FAILED" is displayed.

In case of "FAILED" display, press the F1 key to display the log and then, check the faulty item.

Certain items cannot be tested and N/A is displayed, but this is not a fault.

Example of log file

PC-DOCTOR 2.0 SYSTEM TEST LOG

=====

Inventory.....

CPU MHz is too low (700 vs 750)

Inventory FAILED

3-3. intel815E-B Video Diag Starting Method

As the Diag. disc is a bootable CD, set the CD in the Optical drive and turn the system power on.

The menu will be displayed, then select the following:

2. intel815E-BVideo Diag

After the system started, the file is automatically expanded on the RAM disk and the test starts.

3-3-1. Test Result

After the test finished, "PASS" or "FAIL" is displayed.

The contents of RAM disk are cleared when the power is turned off.

3-4. nVIDIA Geforce Video Diag Starting Method

As the Diag. disc is a bootable CD, set the CD in the Optical drive and turn the system power on.

The menu will be displayed, then select the menu.

After the system started, the file is automatically expanded on the RAM disk and the test starts.

3-4-1. Test Result

After the test finished, "PASS" or "FAIL" is displayed.

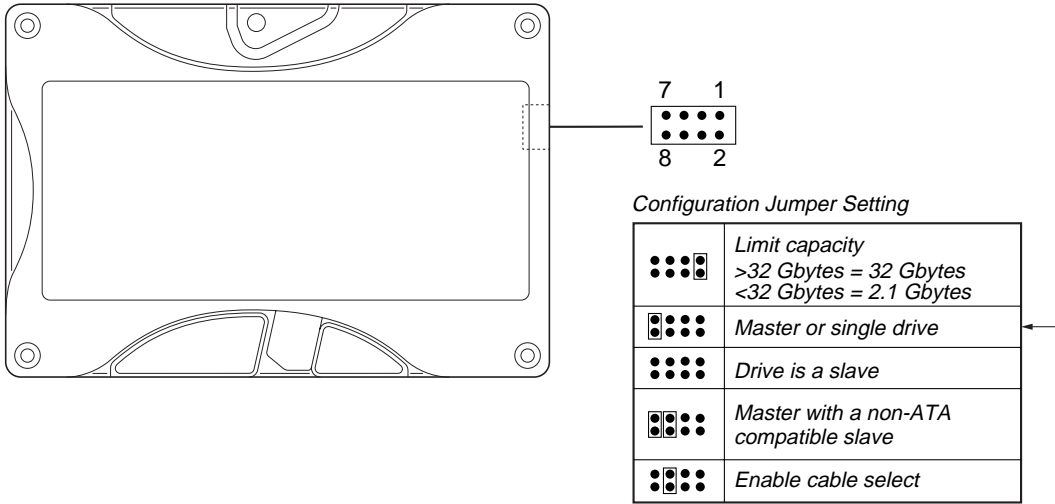
The contents of RAM disk are cleared when the power is turned off.

SECTION 4 SERVICE INFORMATION

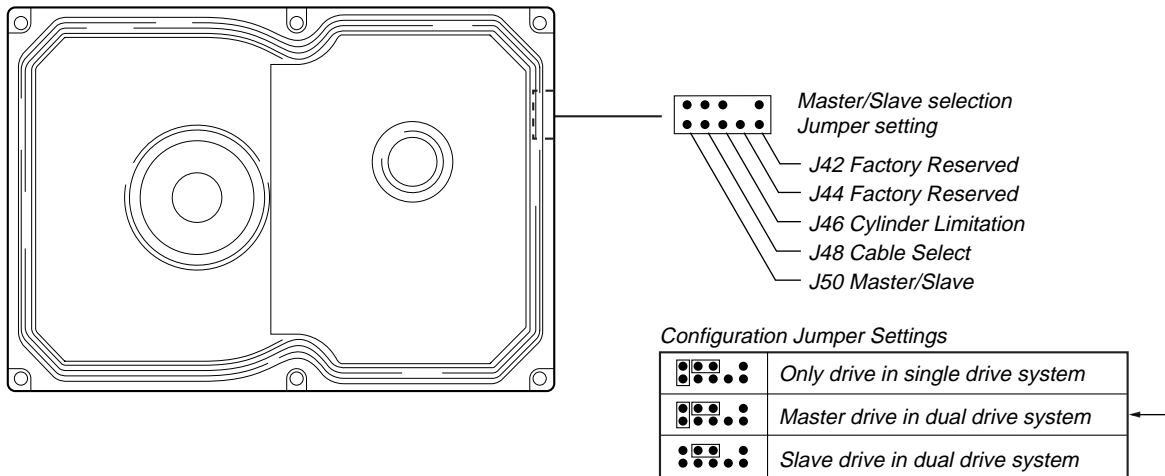
4-1. JUMPER SETTING ON HARD DISK DRIVE

The hard disk drive of service parts can be used without changing factory jumper setting, when it was replaced for service.

Part No.	Maker	Code	Capacity (formatted)	Memo
A-8110-897-A	Seagate	ST340810A	40 GB	
A-8025-545-A	Seagate	ST360020A	60 GB	
A-8058-425-A	Seagate	ST380020A	80 GB	



Part No.	Maker	Code	Capacity (formatted)	Memo
A-8059-699-A	Maxtor	4G120J6	120 GB	



SECTION 5 FRAME HARNESS

5-1. CONNECTOR LIST 1. MOTHER BOARD (BI)

1-1 Internal connector

Power supply

20pin ATX type connector.

Connector location on MB See the frame harness daigram

Pin assignments:

Pin	Signal Name
1	+3.3 V
2	+3.3 V
3	Ground
4	+5 V
5	Ground
6	+5 V
7	Ground
8	PWRGD (Power Good)
9	+5 VSB
10	+12 V
11	+3.3 V
12	-12 V
13	Ground
14	PS-ON# (power supply remote on/off control)
15	Ground
16	Ground
17	Ground
18	No Connection
19	+5 V
20	+5 V

PS FAN

Support FAN control of power supply.

Connector location on MB See the mechanical drawing sheet

Pin assignments:

Pin	Signal Name
1	Ground
2	FAN_CTRL (0V(S3) , 2V(S1), 12 V(S0))
3	FAN_SEN

The FAN_CTRL line is controlled by the BIOS and this line is voltage control line
Fan control circuit is same as Eeth MB and Anakin MB.

IDE Primary / Secondary

For 3.5" Hard Drive, 40 pin Header (2.54mm standard type)

Connector location on MB See the frame harness daigram

Host side detect Cable Ty pe Using GPIOs

FDD

Connector location on MB See the frame harness daigram

Pin assignments:

Pin	Signal Name	Pin	Signal Name
1	Ground	2	HDsel
3	Ground	4	N.C.
5	Ground	6	DRIVE_SELECT_#3
7	Ground	8	INDEX
9	Ground	10	DRIVE_SELECT_#0
11	Ground	12	DRIVE_SELECT_#1
13	Ground	14	DRIVE_SELECT_#2
15	Ground	16	N.C.
17	Ground	18	DIRECTION#
19	Ground	20	STEP#
21	Ground	22	WRITE_DATA#
23	Ground	24	WRITE_GATE#
25	Ground	26	TRACK_00#
27	Ground	28	WRITE_PROTECT#
29	N.C.	30	READ_DATA#
31	Ground	32	SIDE_1_SELECT#
33	N.C.	34	DSKCHG#

--NOTE--

'HDsel' signal is sent form drive. It indicate 2HD(when High) or 2DD(when Low) media.

'MODE_SELECT#' is control signal of disk rotation speed. When this signal is High,

Media rotates 300RPM (2MB). When Low, media rotates 360RPM(1.6MB).

168pin DIMM socket x2

2 slot DIMM connector, 3.3V Unbuffered SDRAM

Connector location on MB See the frame harness daigram

PGA370 socket

Coppermine-128k, Coppermine-256K , Tualatin-128K, Tualatin-256K supported

Connector location on MB See the frame harness daigram

PCI Slot x3

Single Edge Contact PCI slot.

Connector location on MB See the mechanical drawing sheet

-12V	B1	A1	TRST#	AD[17]	B32	A32	AD[16]
TCK	B2	A2	+12V	C/BE[2]#	B33	A33	+3.3V
Ground	B3	A3	TMS	Ground	B34	A34	FRAME#
TDO	B4	A4	TDI	IRDY#	B35	A35	Ground
+5V	B5	A5	+5V	+3.3V	B36	A36	TRDY#
+5V	B6	A6	INTA#	DEVSEL#	B37	A37	Ground
INTB#	B7	A7	INTC#	Ground	B38	A38	STOP#
INTD#	B8	A8	+5V	LOCK#	B39	A39	+3.3V
PRSNT1#	B9	A9	Reserved	PERR#	B40	A40	Reserved
Reserved	B10	A10	+5V	+3.3V	B41	A41	Reserved
PRSNT2#	B11	A11	*Reserved	SERR#	B42	A42	Ground
Ground	B12	A12	Ground	+3.3V	B43	A43	PAR
Ground	B13	A13	Ground	C/BE[1]#	B44	A44	AD[15]
Reserved	B14	A14	Reserved	AD[14]	B45	A45	+3.3V
Ground	B15	A15	RST#	Ground	B46	A46	AD[13]
CLK	B16	A16	+5V	AD[12]	B47	A47	AD[11]
Ground	B17	A17	GNT#	AD[10]	B48	A48	Ground
REQ#	B18	A18	Ground	Ground	B49	A49	AD[09]
+5V	B19	A19	Reserved	Key	B50	A50	Key
AD[31]	B20	A20	AD[30]	Key	B51	A51	Key
AD[29]	B21	A21	+3.3V	AD[08]	B52	A52	C/BE[0]#
Ground	B22	A22	AD[28]	AD[07]	B53	A53	+3.3V
AD[27]	B23	A23	AD[26]	+3.3V	B54	A54	AD[06]
AD[25]	B24	A24	Ground	AD[05]	B55	A55	AD[04]
+3.3V	B25	A25	AD[24]	AD[03]	B56	A56	Ground
C/BE[3]#	B26	A26	IDSEL	Ground	B57	A57	AD[02]
AD[23]	B27	A27	+3.3V	AD[01]	B58	A58	AD[00]
Ground	B28	A28	AD[22]	+5V	B59	A59	+5V
AD[21]	B29	A29	AD[20]	ACK64#	B60	A60	REQ64#
AD[19]	B30	A30	Ground	+5V	B61	A61	+5V
+3.3V	B31	A31	AD[18]	+5V	B62	A62	+5V

PCI #3 slot has special connection at A11 pin.

The serial IRQ signal connects to the A11 pin on the PCI #3.

AGP Slot

Single Edge Contact AGP slot. Universal AGP connector with AGP card lock system.

Connector location on MB See the frame harness daigram

CPU FAN

Supports CPU cooling fan of 500mA or less. Volt age = 12V

Connector location on MB See the frame harness daigram

Pin assignments:

Pin	Signal Name
1	Ground
2	FAN_CTRL (+12 V)
3	FAN_SEN

Fan control circuit is same as Eeth MB and Anakin MB.

Chassis FAN (Option)

Supports Chassis cooling fan of 500mA or less. Voltage = 12V

Connector lo cation on MB See the frame h arness diagram

Pin assignments:

Pin	Signal Name
1	Ground
2	FAN_CTRL (+12 V)
3	FAN_SEN

Fan control circuit is same as Eeth MB and Anakin MB.

Confidential

CD audio

4 pin standard 2mm single line header for CD Audio signal input

Connector location on MB See the frame harness daigram

Pin assignments:

Pin	Signal Name
1	Left Line In
2	Ground
3	Ground
4	Right Line In

AUX Audio (not installed*)

4 pin standard 2mm single line header for AUX Audio signal input

Connector location on MB See the frame harness daigram

Pin assignments:

Pin	Signal Name
1	Left Line In
2	Ground
3	Ground
4	Right Line In

Video Audio (not installed*)

4 pin standard 2mm single line header for Video Audio signal input

Connector location on MB See the frame harness daigram

Pin assignments:

Pin	Signal Name
1	Video_L
2	Ground
3	Ground
4	Video_R

SPDIF OUT (Option)

3 pin standard 2mm single line header for SPDIFoutput

Connector location on MB See the frame harness daigram

Pin assignments:

Pin	Signal Name
1	VCC
2	AU_DATA(GPIO[2])
3	Ground

IEEE1394 access header x2

8 pin standard 2.5 mm single line header for IEEE1394 Front connector.

Connector location on MB See the frame harness daigram

Pin assignments:

Pin	Signal Name
1	Shell Ground
2	Ground
3	TPA
4	TPA*
5	TPB
6	TPB*
7	Ground
8	VP (Power)

VP line need over current protector. Raychem SMD150/33-2 or equivalent is used for that.

USB Front access header

16 pin standard 2.5mm Dual line Box header for Front USB connector.

Connector location on MB See the frame harness daigram

Pin assignments:

Pin	Signal Name	Pin	Signal Name
1	USB VCC1	2	USB VCC3
3	P1-	4	P3-
5	P1+	6	P3+
7	GND	8	GND
9	KEY	10	GND
11	CP2-	12	P2-
13	CP2+	14	P2+
15	NC	16	USB VCC3

USBVCC2 and USBVCC3 line needs the over current protector. Raychem miniSMDC110-2 or equivalent is used for that.

I/O header

20 pin standard 2.5mm dual line header for LED/Switch unit

Connector location on MB See the frame harness daigram

Pin assignments:

Pin	Signal Name	Pin	Signal Name
1	PWR_BTN	11	MSG_LED+
2	PWR_BTN_G	12	MSG_LED-
3	IDELED-	13	KEYLOCK
4	IDELED+	14	KEYLOCK_G
5	KEY	15	SMI
6	PWR_LEDL+	16	SMI_G
7	PWR_LED-	17	+5V
8	PWR_LEDB+	18	HD_LED2-
9	RESET	19	Ground
10	RESET G (GND)	20	SPKR

Battery Holder & Battery

Holder location on MB See the frame harness daigram

Thermal measurement header

This header is used for thermal measurement at evaluation stage.

This connector does not need at production board.

This signal also routed to Super I/O for thermal monitoring.

3pin standard 2mm single line header for CPU thermal measurement

Connector location on MB See the frame harness daigram

Pin assignments:

Pin	Signal Name
1	THERMDP (CPU B14)
2	THERMDN (CPU B15)
3	Ground

1-2

External connector

Parallel

Connector location on MB Rear side, see the frame harness daigram

Pin assignments:

Pin	Signal Name	Pin	Signal Name
1	Strobe#	14	Auto Feed#
2	Data bit 0	15	Fault#
3	Data bit 1	16	INIT#
4	Data bit 2	17	SLCT IN#
5	Data bit 3	18	Ground
6	Data bit 4	19	Ground
7	Data bit 5	20	Ground
8	Data bit 6	21	Ground
9	Data bit 7	22	Ground
10	ACK#	23	Ground
11	Busy	24	Ground
12	Error	25	Ground
13	Select		

VGA

Connector location on MB Rear side, see the frame harness daigram

Pin assignments:

Pin	Signal Name
1	RED
2	GREEN
3	BLUE
4	NC
5	GND
6	GND
7	GND
8	GND
9	Reserved
10	GND
11	NC
12	DDCDAT
13	HSYNC
14	VSYNC
15	DDCCLK

* Connectors mentioned (not installed) are not used even they are mounted on MB.

IEEE1394 Rear connector

6 pin standard IEEE1394 Rear connector.

Connector location on MB See the frame harness daigram

Pin assignments:

Pin	Signal Name
1	VP (Power)
2	Ground
3	TPB*
4	TPB
5	TPA*
6	TPA

VP line need over current protector.

Raychem SMD150/33-2 or equivalent is used for that.

PS2 Keyboard /Mouse

Connector location on MB Rear side, see the frame harness daigram

Pin assignments:

Pin	Signal Name
1	Keyboard Data
2	Mouse Data
3	Ground
4	PS2VCC
5	Keyboard Clock
6	Mouse Clock
7	Mouse Data
8	N.C.
9	Ground
10	PS2VCC
11	N.C.
12	Mouse Clock

PS2VCC line needs the over current protector. Raychem miniSMDC110-2 or equivalent is used for that.

USB/LAN

Two USB connector for external USB devices. (Support the stacked connector)

One 10/100Base-T connector

Connector location on MB See the frame harness daigram

Pin assignments:

Pin	Signal Name
1	USBVCC1
2	USBP0#
3	USBP0
4	Ground
5	USBVCC2
6	USBP1#
7	USBP1
8	Ground
9	
10	
11	
12	
13	
14	
15	
16	

USBVCC1/USBVCC2 lines need the over current protector.

Raychem miniSMDC110-2 or equivalent is used for that.

COM/Line Out/Line In/Microphone Jack

Connector location on MB Rear side, see the frame harness daigram

COM1 pin assignments:

Pin	Signal Name
1	DCD
2	Serial In #
3	Serial Out #
4	DTR#
5	Ground
6	DSR
7	RTS
8	CTS
9	RI1#

COM1, COM2 RI# output connected to ICH input for Wakeup event

Line Out pin assignments:

Pin	Signal Name
Sleeve	Ground
Tip	Audio Left Out
Ring	Audio Right Out

Line In pin assignments:

Pin	Signal Name
Sleeve	Ground
Tip	Audio Left In
Ring	Audio Right In

Microphone In pin assignments:

Pin	Signal Name
Sleeve	Ground
Tip	Microphone mono In
Ring	Electret Bias Voltage

1-3 Jumper Header

CPU Clock select

Jumper Header manual configuration is used only for debug. Production should be auto-sense configuration. PCB should be able to support automatic and manual configuration by minimal mount options.

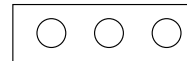
Select CPU's External frequency (BUS frequency) and BUS Frequency Multiplier and Memory Frequency. (Acceptable for BIOS setting instead of Jumper Header)

CMOS Clear/Reboot En

Clear the RTC data

Connector location on MB See the frame harness daigram

Jumper header



Combination of jumper caps:

	CMOSCLR	RBT_EN	
1-2	Normal	Reboot Disabled	
2-3	Clear	Normal	

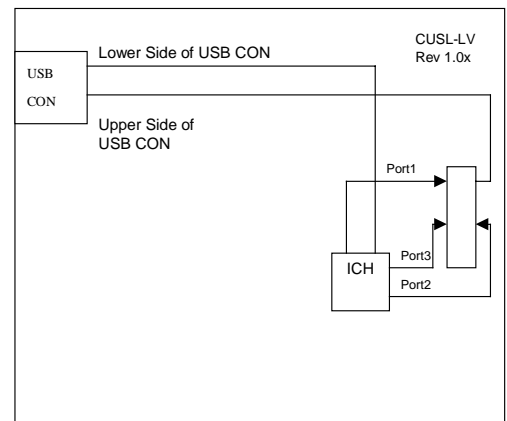
Reboot Enable:

If set to 1-2, disables reboot function

This header is for factory testing purpose only DO NOT CHANGE

1-4 USB Routing Layout

Same routing as Eeth MB and Adi MB.



Default setting of Port3 is disable by NP3 (High)

2. MOTHER BOARD (AN)

2-1 Internal connector

Power supply

20 pin ATX type connector.

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

4 pin ATX12V type connector.

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

PS FAN

Support FAN control of power supply.

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name
1	Ground
2	FAN_CTRL (0V(S3) , 2V(S1) , 12 V(S0))
3	FAN_SEN

The FAN_CTRL line is controlled by the BIOS and this line is voltage control line

IDE Primary / Secondary

For 3.5" Hard Drive, 40 pin Header (2.54mm standard type)

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Host side detect Cable Type Using GPIOs

FDD

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

168pin DIMM socket x 2

2 slot DIMM connector, 3.3V un-buffered SDRAM

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

mPGA478socket

Intel Pentium4 supported

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

PCI Slot x3

Single Edge Contact PCI slot

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

PCI #3 slot has special connection at A11 pin.

The serial IRQ signal connects to the A11 pin on the PCI #3.

AGP Slot

Single Edge Contact AGP slot. 1.5V AGP connector with retention mechanism

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

CPU FAN

Supports CPU cooling fan of 500mA or less. Voltage = 12V

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name
1	Ground
2	FAN_CTRL (+12 V)
3	FAN_SEN

Wake On LAN (not installed*)

Support Wake On LAN function

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name
1	+5Vsb
2	Ground
3	WOL signal

CD audio

4 pin standard 2mm single line header for CD Audio signal input

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name
1	Left Line In
2	Ground
3	Ground
4	Right Line In

AUX Audio

4 pin standard 2mm single line header for AUX Audio signal input

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name
1	Left Line In
2	Ground
3	Ground
4	Right Line In

Video Audio (not installed*)

4 pin standard 2mm single line header for AUX Audio signal input

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name
1	Left Line In
2	Ground
3	Ground
4	Right Line In

IEEE1394 access header x2

8 pin standard 2.5mm single line header for IEEE1394 Front connector.

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name
1	Shell Ground
2	Ground
3	TPA
4	TPA*
5	TPB
6	TPB*
7	Ground
8	VP (Power)

VP line need over current protector. Raychem SMD150/33-2 or equivalent is used for that.

USB Front access header

16 pin standard 2.5mm Dual line Box header for Front USB connector.

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name	Pin	Signal Name
1	USB VCC1	2	USB VCC3
3	P1-	4	P3-
5	P1+	6	P3+
7	GND	8	GND
9	KEY	10	GND
11	CP2-	12	P2-
13	CP2+	14	P2+
15	NC	16	USB VCC3

USBVCC2 and USBVCC3 line needs the over current protector. Raychem miniSMDC110-2 or equivalent is used for that.

* Connectors mentioned (not installed) are not used even they are mounted on MB.

I/O header

20 pin standard 2.5mm dual line header for LED/Switch unit

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name	Pin	Signal Name
1	PWR_BTN	11	MSG_LED+
2	PWR_BTN_G	12	MSG_LED-
3	IDELED-	13	KEYLOCK
4	IDELED+	14	KEYLOCK_G
5	KEY	15	SMI
6	PWR_LEDL+	16	SMI_G
7	PWR_LED-	17	+5V
8	PWR_LEDB+	18	HD_LED2-
9	RESET	19	Ground
10	RESET G (GND)	20	SPKR

Battery Holder

Holder location on MB	See the frame harness diagram
-----------------------	-------------------------------

CPU thermal measurement header

This header is used for CPU thermal measurement.

This signal also routed to Super I/O for thermal monitoring.

2pin standard 2mm single line header for CPU thermal measurement

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name
1	CPUTMPIN
2	GND

Memory Stick interface header

8pin standard 2mm dual line header for Memory Stick interface.

Pin assignments:

Pin	Signal Name
1	MS_LED
2	MSPIN2
3	SONYMSP
4	MSPIN4
5	MS_INS
6	GND
7	MSPIN7
8	GND

2-2 External connector

Parallel

Connector location on MB	Rear side, See the frame harness diagram
--------------------------	--

IEEE1394 Rear connector

6 pin standard IEEE1394 Rear connector.

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name
1	VP (Power)
2	Ground
3	TPB*
4	TPB
5	TPA*
6	TPA

VP line need over current protector.

Raychem SMD150/33-2 or equivalent is used for that.

PS2 Keyboard /Mouse

Connector location on MB	Rear side, See the frame harness diagram
--------------------------	--

PS2VCC line needs the over current protector. Raychem miniSMDC110-2 or equivalent is used for that.

USB/LAN

One USB connectors for external USB devices (Support the stacked connector)

One 10/100Base-T connector

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name	Pin	Signal Name
1	ACTLEDP	11	LANP8
2	ACTLEDN	12	LANP8
3	LILEDP	13	USBVCC1
4	LILEDN	14	USBP1-
5	TXPCON	15	UCBP1+
6	TXNCON	16	GND
7	RXPCON	17	NC
8	LANP5	18	NC
9	LANP5	19	NC
10	RXNCON	20	NC

USBVCC1 lines need the over current protector.

Raychem miniSMDC110-2 or equivalent is used for that.

COM1 Port/Line Out/Line In/Microphone Jack

Connector location on MB	Rear side, See the frame harness diagram
--------------------------	--

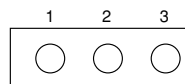
2-3 Jumper Header

CMOS Clear

Clear the RTC data

Connector location on MB	---
--------------------------	-----

Jumper header



Combination of jumper caps:

	CMOSCLR
1-2	Clear
2-3	Normal

3. MOTHER BOARD (EE)

3-1 Internal connector

Power supply

20 pin ATX type connector.

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

4 pin ATX12V type connector.

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

PS FAN

Support FAN control of power supply.

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name
1	Ground
2	FAN_CTRL (0V(S3) , 2V(S1), 12V(S0))
3	FAN_SEN

The FAN_CTRL line is controlled by the BIOS and this line is voltage control line

IDE Primary / Secondary

For 3.5" Hard Drive, 40 pin Header (2.54mm standard type)

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Host side detect Cable Type Using GPIOs

FDD

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

184pin RIMM socket x 4

4 slot RIMM connector, PC600/800 Rambus RIMM module

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

mPGA478 socket

Intel Pentium4 supported

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

PCI Slot x3

Single Edge Contact PCI slot

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

PCI #3 slot has special connection at A11 pin.

The serial IRQ signal connects to the A11 pin on the PCI #3.

AGP Slot

Single Edge Contact AGP slot. 1.5V AGP connector with retention mechanism

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

CPU FAN

Supports CPU cooling fan of 500mA or less. Voltage = 12V

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name
1	Ground
2	FAN_CTRL (+12 V)
3	FAN_SEN

Wake On LAN (not installed*)

Support Wake On LAN function

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name
1	+5Vsb
2	Ground
3	WOL signal

CD audio

4 pin standard 2mm single line header for CD Audio signal input

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name
1	Left Line In
2	Ground
3	Ground
4	Right Line In

AUX Audio

4 pin standard 2mm single line header for AUX Audio signal input

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name
1	Left Line In
2	Ground
3	Ground
4	Right Line In

IEEE1394 access header x2

8 pin standard 2.5mm single line header for IEEE1394 Front connector.

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name
1	Shell Ground
2	Ground
3	TPA
4	TPA*
5	TPB
6	TPB*
7	Ground
8	VP (Power)

VP line need over current protector. Raychem SMD150/33-2 or equivalent is used for that.

USB Front access header

16 pin standard 2.5mm Dual line Box header for Front USB connector.

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name	Pin	Signal Name
1	USB VCC1	2	USB VCC3
3	P1-	4	P3-
5	P1+	6	P3+
7	GND	8	GND
9	KEY	10	GND
11	CP2-	12	P2-
13	CP2+	14	P2+
15	NC	16	USB VCC3

USBVCC2 and USBVCC3 line needs the over current protector. Raychem miniSMDC110-2 or equivalent is used for that.

I/O header

20 pin standard 2.5mm dual line header for LED/Switch unit

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name	Pin	Signal Name
1	PWR_BTN	11	MSG_LED+
2	PWR_BTN_G	12	MSG_LED-
3	IDELED-	13	KEYLOCK
4	IDELED+	14	KEYLOCK_G
5	KEY	15	SMI
6	PWR_LED+	16	SMI_G
7	PWR_LED-	17	+5V
8	PWR_LEDB+	18	HD_LED2-
9	RESET	19	Ground
10	RESET G (GND)	20	SPKR

Battery Holder

Holder location on MB	See the frame harness diagram
-----------------------	-------------------------------

CPU thermal measurement header

This header is used for CPU thermal measurement.

This signal also routed to Super I/O for thermal monitoring.

2pin standard 2mm single line header for CPU thermal measurement

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name
1	CPUTMPIN
2	GND

3-2 External connector

Parallel

Connector location on MB	Rear side, see the frame harness diagram
--------------------------	--

IEEE1394 Rear connector

6 pin standard IEEE1394 Rear connector.

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name
1	VP (Power)
2	Ground
3	TPB*
4	TPB
5	TPA*
6	TPA

VP line need over current protector.

Raychem SMD150/33-2 or equivalent is used for that.

PS2 Keyboard /Mouse

Connector location on MB	Rear side, see the frame harness diagram
--------------------------	--

PS2VCC line needs the over current protector. Raychem miniSMDC110-2 or equivalent is used for that.

* Connectors mentioned (not installed) are not used even they are mounted on MB.

USB/LAN

One USB connectors for external USB devices (Support the stacked connector)

One 10/100Base-T connector

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

Pin assignments:

Pin	Signal Name	Pin	Signal Name
1	ACTLEDP	11	LANP8
2	ACTLEDN	12	LANP8
3	LILEDP	13	USBVCC1
4	LILEDN	14	USBP1-
5	TXPCON	15	UCBP1+
6	TXNCON	16	GND
7	RXPCON	17	NC
8	LANP5	18	NC
9	LANP5	19	NC
10	RXNCON	20	NC

USBVCC1 lines need the over current protector.

Raychem miniSMDC110-2 or equivalent is used for that.

COM1 Port/Line Out/Line In/Microphone Jack

Connector location on MB	Rear side, see the frame harness diagram
--------------------------	--

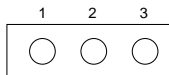
3-3 Jumper Header

CMOS Clear

Clear the RTC data

Connector location on MB	---
--------------------------	-----

Jumper header

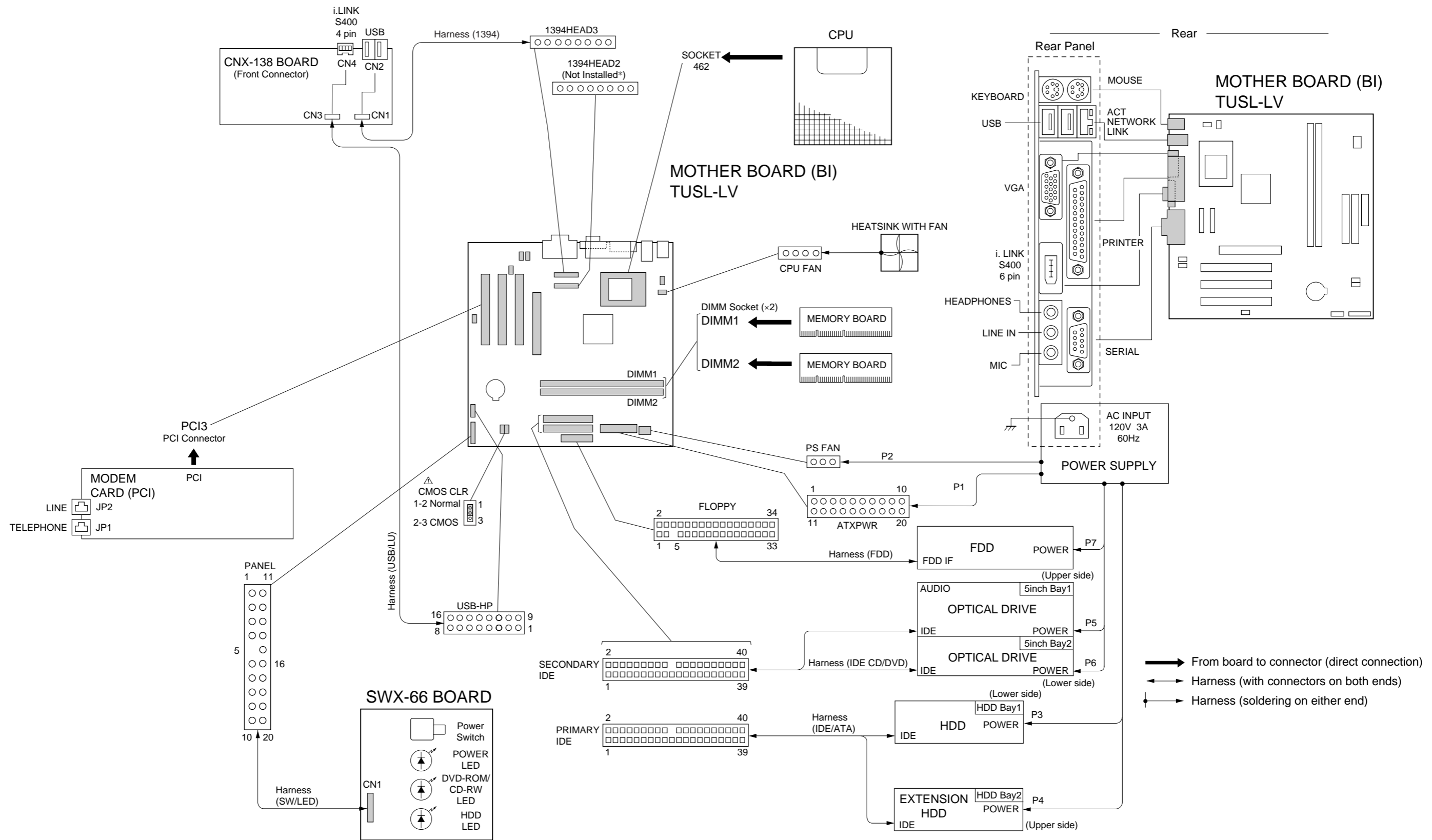


Combination of jumper caps:

	CMOSCLR
1-2	Clear
2-3	Normal

MEMO

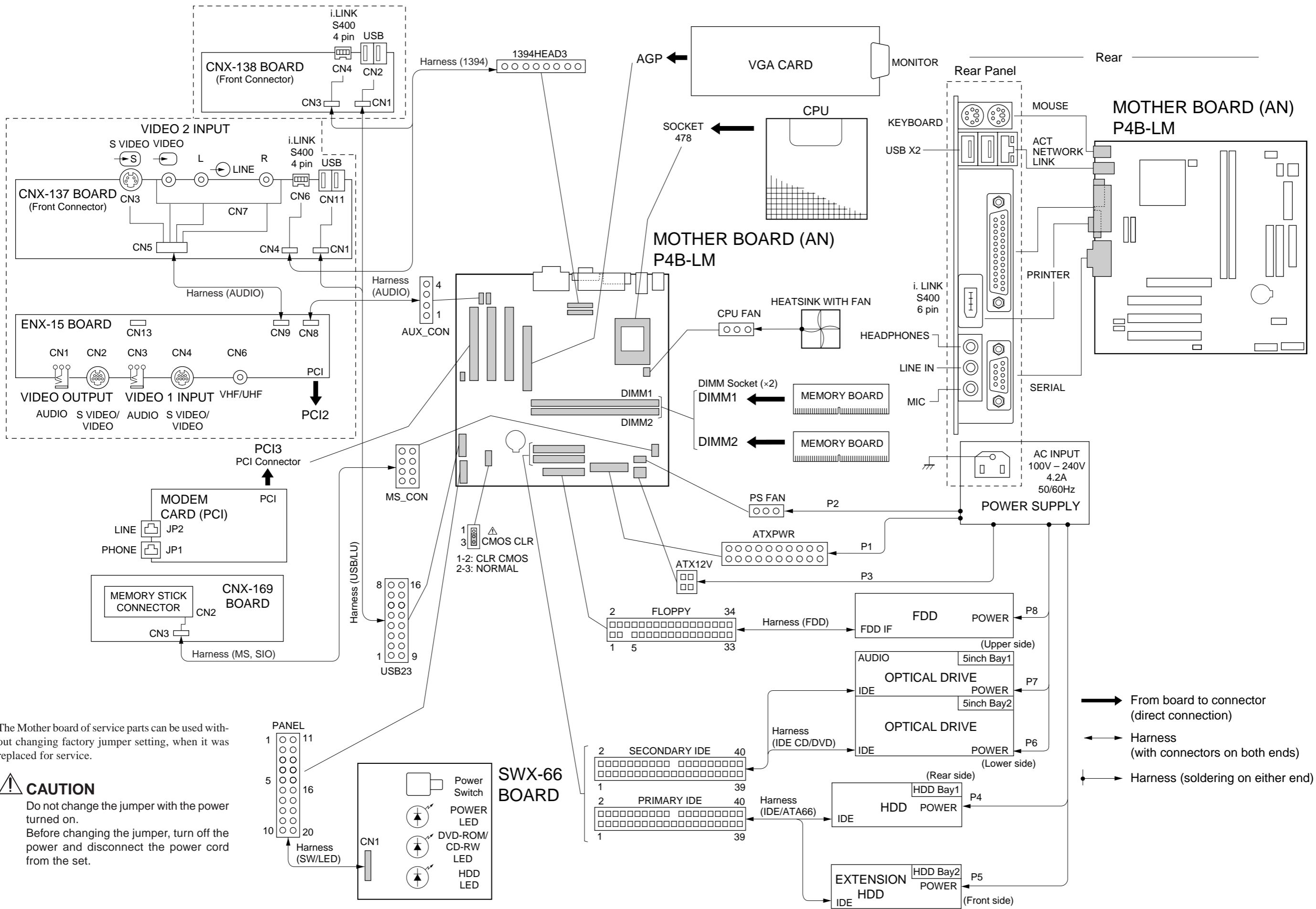
5-2. FRAME HARNESS DIAGRAM AND JUMPER SETTING OF MOTHER BOARD



The Mother board of service parts can be used without changing factory jumper setting, when it was replaced for service.

CAUTION

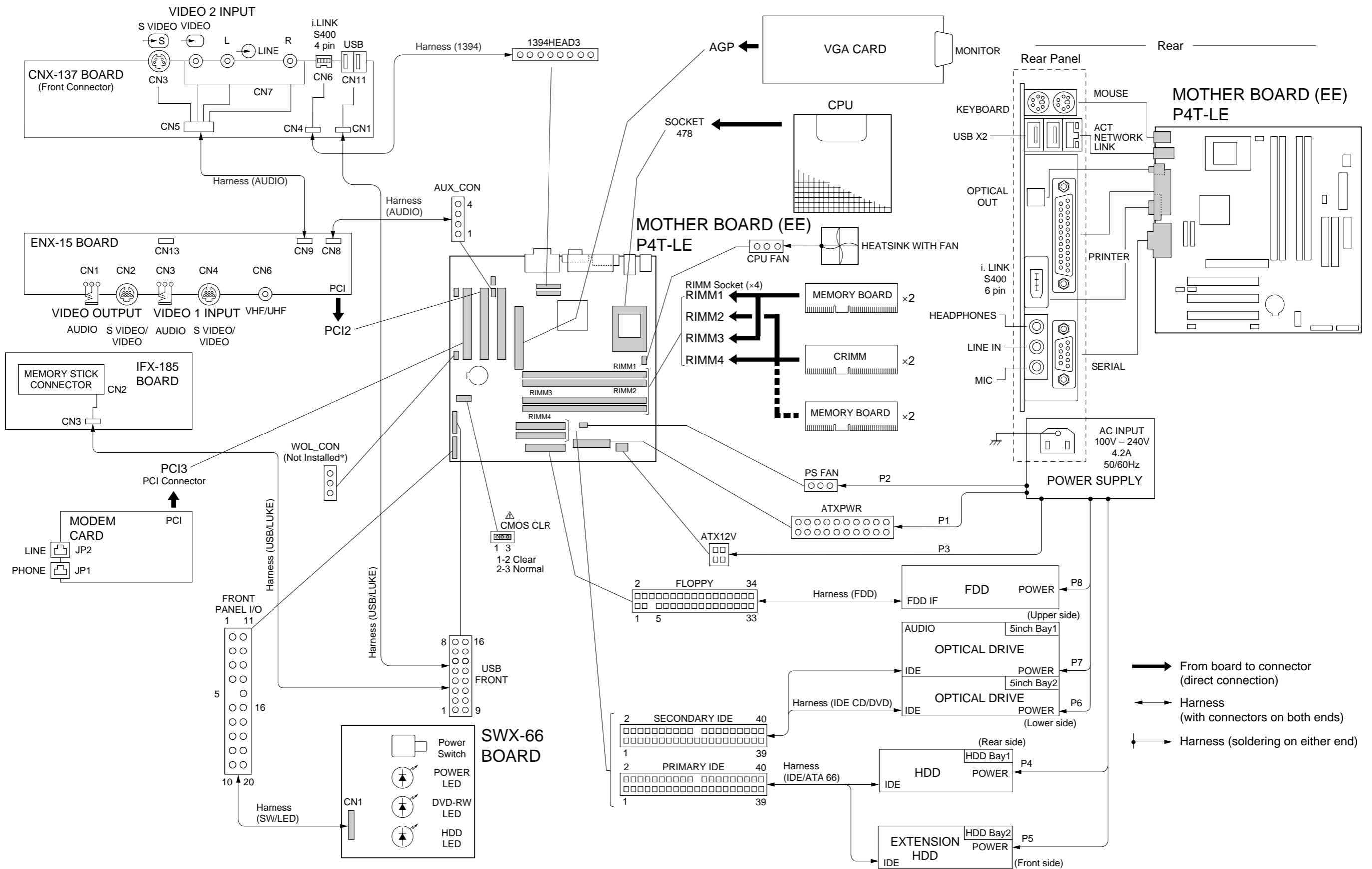
Do not change the jumper with the power turned on.
Before changing the jumper, turn off the power and disconnect the power cord from the set.



The Mother board of service parts can be used without changing factory jumper setting, when it was replaced for service.

CAUTION
Do not change the jumper with the power turned on.
Before changing the jumper, turn off the power and disconnect the power cord from the set.

Confidential



The Mother board of service parts can be used without changing factory jumper setting, when it was replaced for service.

CAUTION

Do not change the jumper with the power turned on. Before changing the jumper, turn off the power and disconnect the power cord from the set.

SECTION 6 REPAIR PARTS LIST

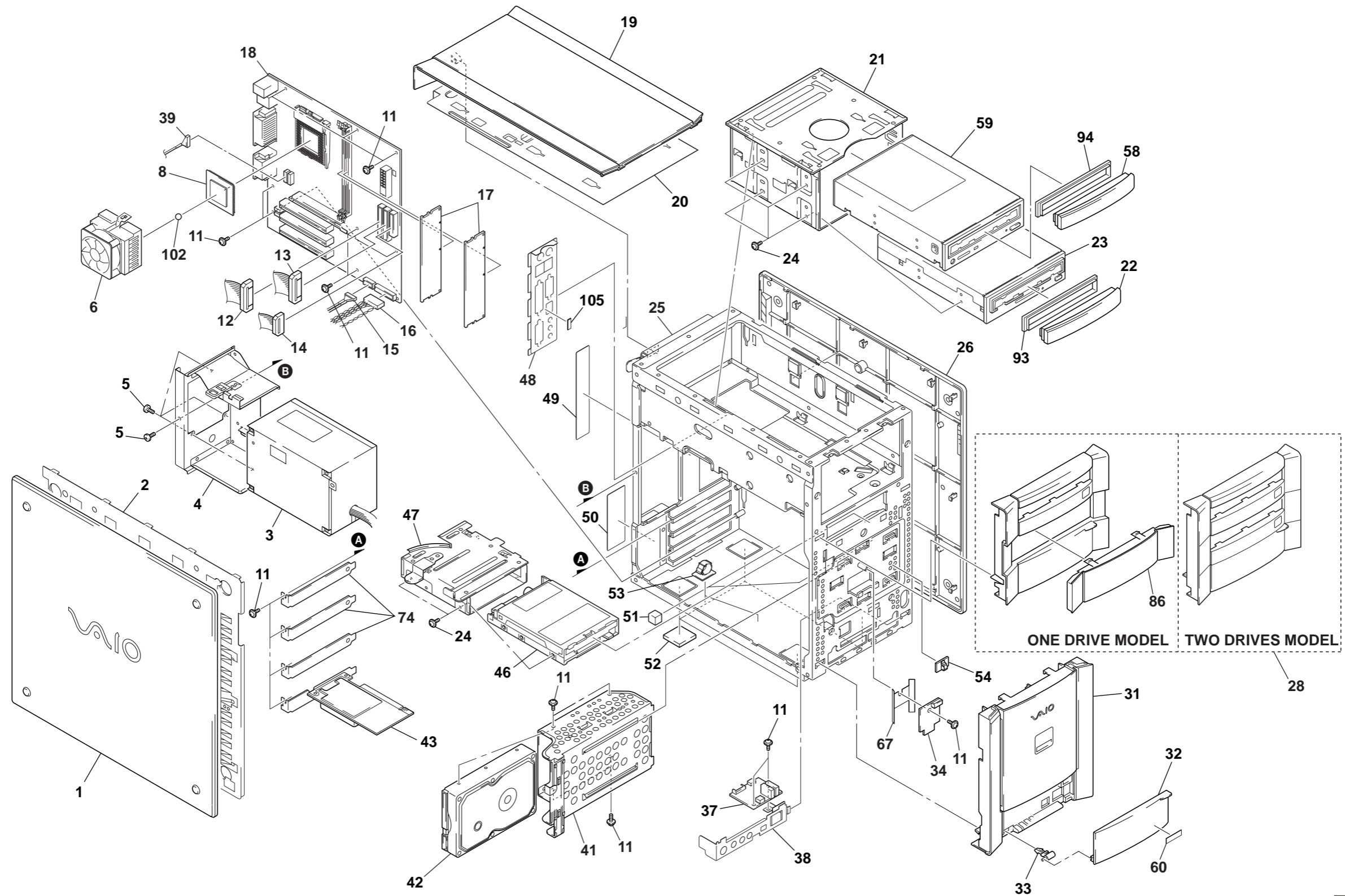
NOTE:

- The parts listed here are for service, and therefore they may be different from the parts shown in circuit diagrams or used in the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

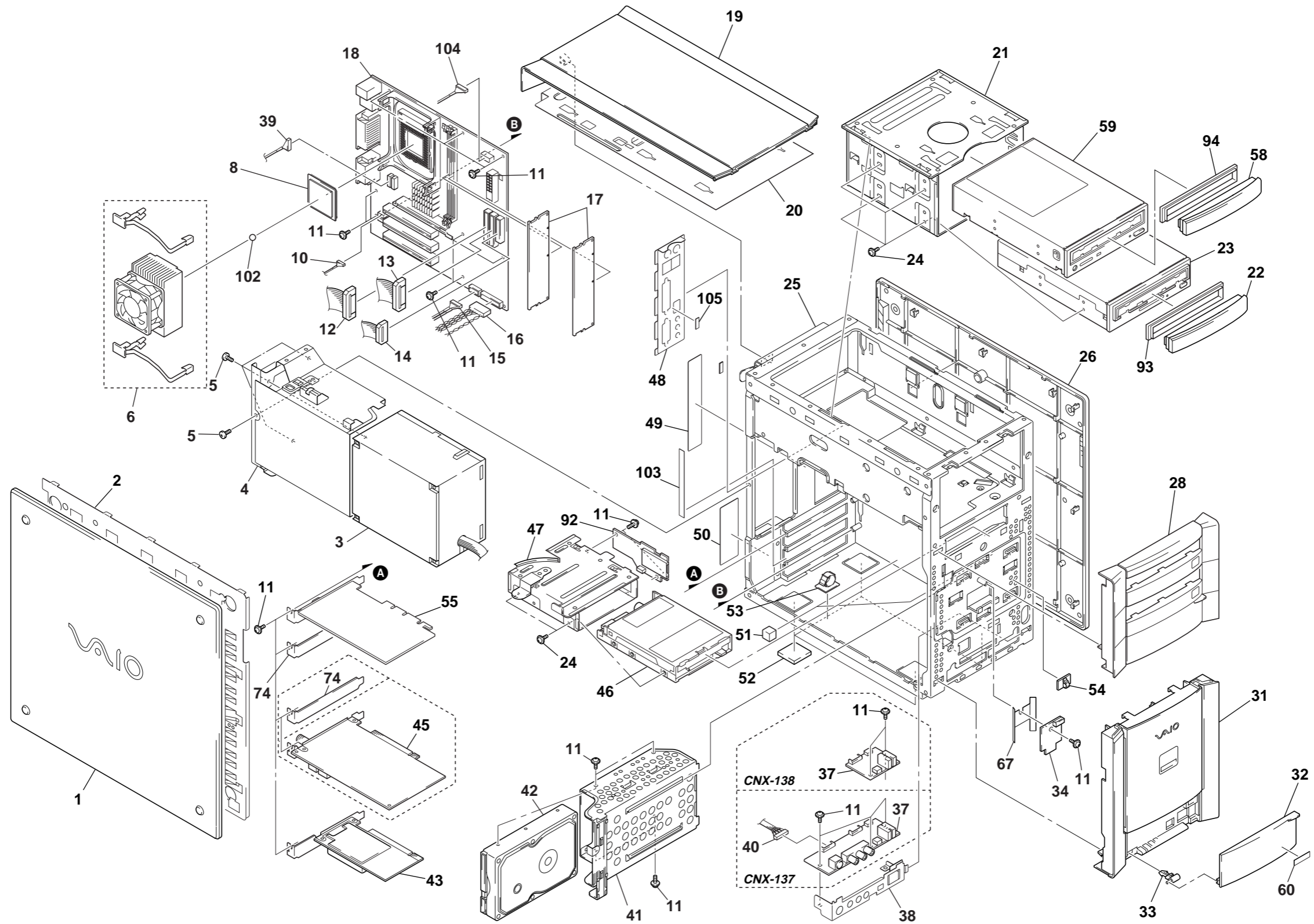
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

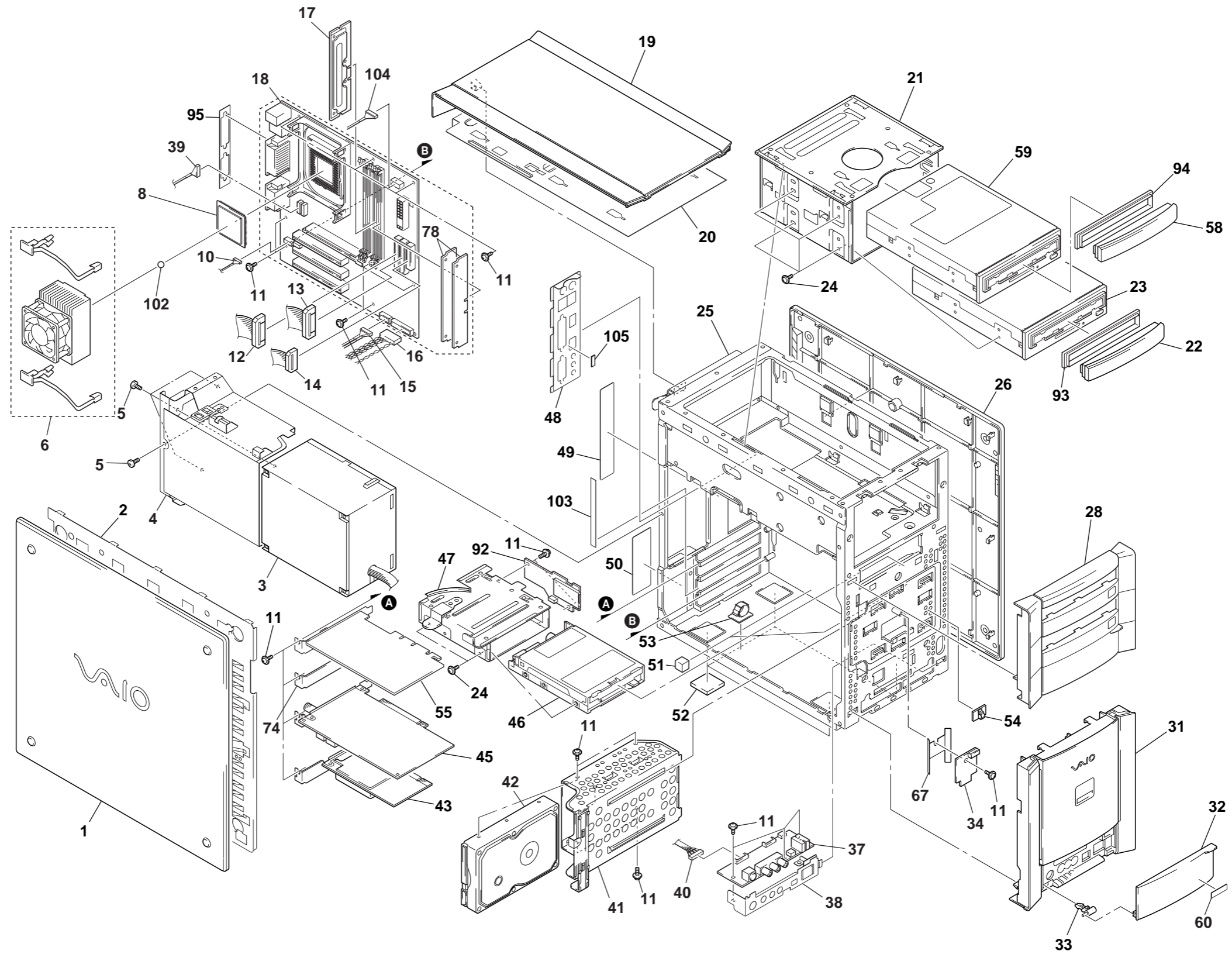
6-1. EXPLODED VIEWS AND PARTS LIST (MOTHER BOARD (BI) ASSY)



6-2. EXPLODED VIEWS AND PARTS LIST
(MOTHER BOARD (AN) ASSY)

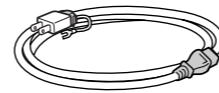


6-3. EXPLODED VIEWS AND PARTS LIST
(MOTHER BOARD (EE) ASSY)

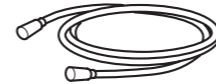


6-4. ACCESSORIES AND PARTS LIST

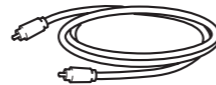
201
POWER CORD (1)



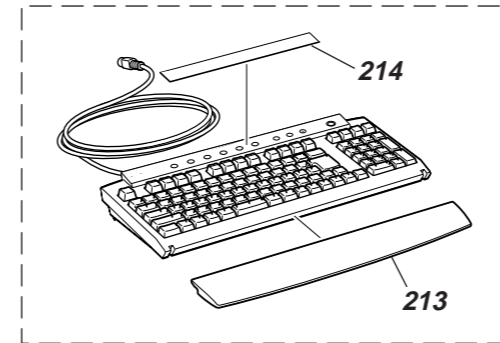
202
ANTENNA CABLE (1)



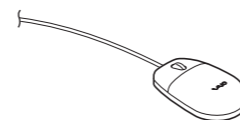
203
VIDEO CABLE (1)



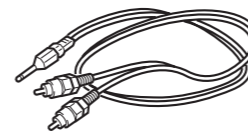
204
KEYBOARD (1)



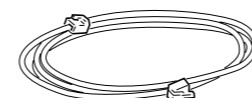
205
MOUSE (1)



206
AUDIO CABLE (1)



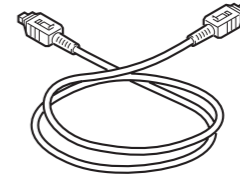
207
MODEM CABLE (1)



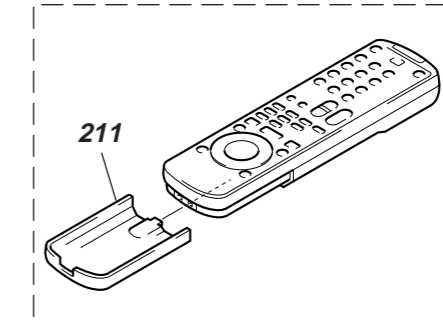
208
CONVERSION CONNECTOR
(VIDEO CONNECTING) (2)



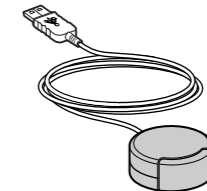
209
i. LINK CABLE (1)



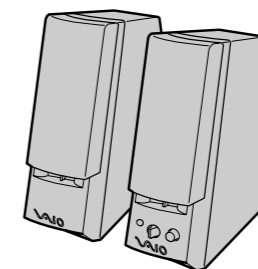
210
REMOTE COMMANDER (1)



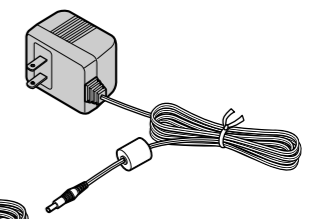
212
RAY-CATCHER UNIT (1)



215
SPEAKER UNIT (1)



216
AC ADAPTOR (1)



Ref.No.	Part No.	Description	RX690G	RX682	RX681	RX680G	RX672	RX671	RX670	RX660	RX651	RX650	RX641	RX640	RX600E	RX600N
1	4-648-912-02	PANEL, LEFT	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1	4-648-912-41	PANEL, LEFT	●	●	●	●	●	●	●	●	●	●	●	●	●	●
*	2	X-4624-140-1	LEFT CHASSIS ASSY	●	●	●	●	●	●	●	●	●	●	●	●	●
△	3	1-468-417-72	POWER, SWITCHING	●	●	●	●	●	●	●	●	●	●	●	●	●
△	3	1-468-601-14	POWER UNIT	●	●	●	●	●	●	●	●	●	●	●	●	●
*	4	X-4624-060-1	BRACKET PS (280W) ASSY	●	●	●	●	●	●	●	●	●	●	●	●	●
*	4	X-4624-061-1	BRACKET PS (150W) ASSY	●	●	●	●	●	●	●	●	●	●	●	●	●
5	4-635-795-01	SCREW (NO.6-32UNC)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
6	1-763-794-11	FAN, DC (WITH HEAT SINK)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
6	1-763-795-11	FAN, DC (WITH HEAT SINK)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
8	A-8058-777-A	CPU (P4/1.6G/5VH) ASSY (S)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
8	A-8058-779-A	CPU (P4/1.7G/5TK) ASSY (S)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
8	A-8058-856-A	CPU (P4/1.8G/5VJ) ASSY (S)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
8	A-8059-701-A	CPU (P4/2.2G/5YS) ASSY (S)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
8	A-8059-702-A	CPU (P4/2.0G/5YR) ASSY (S)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
8	A-8059-706-A	CPU (CEL/1.3G/5VR) ASSY (S)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
10	1-960-620-11	HARNESS (YUZU AUDIO)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
11	4-645-944-01	SCREW (SW) (NO.6-32UNC)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
12	1-959-912-31	HARNESS (IDE CD/DVD)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
13	1-960-364-51	HARNESS (IDE/ATA66)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
14	1-959-946-41	HARNESS (FDD)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
15	1-960-947-41	HARNESS (USB/LUKE)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
15	1-960-947-61	HARNESS (USB/LUKE)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
16	1-959-913-31	HARNESS (SW/LED)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
17	6-600-050-01	DIMM 256MB (IC V436532S04VATG-75)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
17	6-600-058-01	RIMM 128MB (IC MC-4R128FKE6D-845)	○	●	●	●	●	●	●	●	●	●	●	●	●	●
17	6-600-078-01	RIMM 256MB (IC MC-4R256FKE6D-845)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
17	6-600-081-01	DDR 256MB (IC HYMD132645A8-H)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
17	6-600-083-01	DDR 512MB (IC MT16VDDT6464AG-265B1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
18	A-8058-418-A	MOTHER BOARD(EE)ASSY(S)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
18	A-8058-431-A	MOTHER BOARD(BI)ASSY(S)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
18	A-8059-707-A	MOTHER BOARD(AN)ASSY(S)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
19	4-648-911-22	PANEL, TOP	●	●	●	●	●	●	●	●	●	●	●	●	●	●
19	4-648-911-41	PANEL, TOP	●	●	●	●	●	●	●	●	●	●	●	●	●	●
*	20	4-648-889-11	UPPER CHASSIS	●	●	●	●	●	●	●	●	●	●	●	●	●
*	21	X-4624-055-1	CD HOLDER ASSY	●	●	●	●	●	●	●	●	●	●	●	●	●
22	4-654-723-11	ESCUTCHEON (ASUS) (for CD-ROM)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
22	4-657-324-21	ESCUTCHEON (for CD-RW)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
22	4-657-324-71	ESCUTCHEON (for DVD-ROM)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
23	1-796-181-13	CD-ROM/ASR (40X)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
23	1-796-293-12	DVD-ROM/P-G7	●	●	●	●	●	●	●	●	●	●	●	●	●	●
23	A-8058-433-A	CD-RW DRIVE (175E-T3) ASSY (S)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
24	7-682-903-01	SCREW +PWH 3X5	●	●	●	●	●	●	●	●	●	●	●	●	●	●
*	25	X-4624-139-2	MAIN CHASSIS ASSY	●	●	●	●	●	●	●	●	●	●	●	●	●
26	4-648-910-02	PANEL, LIGHT	●	●	●	●	●	●	●	●	●	●	●	●	●	●
26	4-648-910-41	PANEL, LIGHT	●	●	●	●	●	●	●	●	●	●	●	●	●	●
28	A-8025-909-A	PANEL ASSY(UPPER)(FOR 2BAY)(U)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
28	A-8058-968-A	PANEL ASSY (UPPER) (2BAY) (MS)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
28	A-8025-101-B	PANEL ASSY (UPPER) (1BAY)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
31	A-8025-105-A	PANEL ASSY (LOWER) (U) (GP)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
31	A-8025-106-A	PANEL ASSY (LOWER) (U)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
31	A-8025-918-A	PANEL ASSY (LOWER) (U)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
32	X-4623-843-1	DOOR (AUDIO) ASSY (U) (GP)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
32	X-4623-844-1	DOOR (AUDIO) ASSY (U)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
32	X-4624-152-1	DOOR (AUDIO) ASSY (U)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
33	4-045-250-21	DAMPER	●	●	●	●	●	●	●	●	●	●	●	●	●	●
34	1-761-387-11	BOARD, SWX-66	●	●	●	●	●	●	●	●	●	●	●	●	●	●
37	1-681-234-11	BOARD, CNX-137	●	●	●	●	●	●	●	●	●	●	●	●	●	●
37	1-681-235-11	BOARD, CNX-138	●	●	●	●	●	●	●	●	●	●	●	●	●	●
*	38	X-4624-059-1	BRACKET AV ASSY	●	●	●	●	●	●	●	●	●	●	●	●	●
39	1-959-197-21	HARNESS (1394)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
40	1-959-225-41	HARNESS (AUDIO)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
*	41	X-4624-057-1	BRACKET ASSY, HDD	●	●	●	●	●	●	●	●	●	●	●	●	●

Ref.No.	Part No.	Description	RX690G	RX682	RX681	RX680G	RX672	RX671	RX670	RX660	RX651	RX650	RX641	RX640	RX600E	RX600N
42	A-8110-897-A	HDD (S-U6/40GB) ASSY (S)											●			
42	A-8025-545-A	HDD (S-U6/60GB) ASSY (S)												●		
42	A-8058-425-A	HDD (S-U6/80GB) ASSY (S)							●	●	●	●			●	●
42	A-8059-699-A	HDD (M-NP/120GB) ASSY (S)	●	●	●	●	●	●							●	●
43	1-761-444-11	CARD, MODEM													●	
43	1-761-487-13	CARD, MODEM (LOW PROFILE)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
45	A-8067-188-A	MOUNTED PWB ENX-15	●			●									●	●
46	A-8048-751-A	FDD (920-E/EK3) ASSY (S)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
*	47	X-4624-138-1	FDD BRACKET ASSY	●	●	●	●	●	●	●	●	●	●	●	●	●
*	48	X-4624-104-2	BRACKET ATX (WITH VGA) ASSY										●	●		
*	48	X-4624-107-2	BRACKET ATX (OPTICAL)(MS) ASSY	●											●	
*	48	X-4624-069-2	BRACKET ATX (W/O VGA) ASSY		●	●	●	●	●	●	●	●				●
*	49	4-657-558-01	I/O LABEL	●	●	●	●	●	●	●	●	●				●
*	49	4-657-559-01	I/O LABEL										●	●		
*	49	4-658-207-01	LABEL, I/O	●											●	
*	50	4-654-817-01	LABEL, SLOT				●						●	●		
*	50	4-658-009-01	LABEL, SLOT	●			●								●	●
*	50	4-658-010-01	LABEL, SLOT		●	●		●	●	●	●	●				
*	51	4-650-918-11	SPACER, MB	●	●	●	●	●	●	●	●	●	●	●	●	●
	52	4-643-547-01	FOOT	●	●	●	●	●	●	●	●	●	●	●	●	●
*	53	4-640-554-01	CABLE CLAMP	●	●	●	●	●	●	●	●	●	●	●	●	●
*	54	4-640-554-11	CABLE CLAMP	●	●	●	●	●	●	●	●	●	●	●	●	●
	55	1-761-483-21	CARD, VGA				●								●	●
	55	1-761-546-32	VGA CARD (GEFORCE2 TI)	●	●	●	●	●	●	●	●	●			●	●
	58	4-652-509-11	ESCUTCHEON (P-DVDRW) (for DVD-ROM)	●	●	●	●	●	●						●	●
	58	4-657-324-71	ESCUTCHEON (for DVD-ROM)							●	●	●		●	●	●
	58	4-657-324-21	ESCUTCHEON (for CD-RW)										●			
	59	1-796-293-12	DVD-ROM/P-G7							●	●	●		●	●	●
	59	1-796-388-11	DVD-RW/P-104R	●	●	●	●	●	●						●	●
	59	A-8058-433-A	CD-RW DRIVE (175E-T3) ASSY (S)										●			
*	60	4-661-010-01	LABEL, ID	●												
*	60	4-661-011-01	LABEL, ID				●									
*	60	4-661-012-01	LABEL, ID						●							
*	60	4-661-013-01	LABEL, ID							●						
*	60	4-661-014-01	LABEL, ID									●				
*	60	4-661-015-01	LABEL, ID										●			
*	60	4-662-861-01	LABEL, ID		●	●										
*	60	4-662-862-01	LABEL, ID		●											
*	60	4-662-863-01	LABEL, ID					●								
*	60	4-662-962-01	LABEL, ID												●	
*	60	4-662-963-01	LABEL, ID													●
*	60	4-662-965-01	LABEL, ID					●								
*	60	4-664-126-01	LABEL, ID								●					
*	60	4-666-087-01	LABEL, ID										●			
*	67	4-651-252-01	SHIELD, LED	●	●	●	●	●	●	●	●	●	●	●	●	●
*	74	4-650-779-11	PANEL, PCI SLOT	●	●	●	●	●	●	●	●	●	●	●	●	●
	78	1-761-410-11	CRIMM (YODA)	●											●	
	86	4-648-884-11	PANEL, BLANK										●			
	92	A-8067-057-A	IFX-185 MOUNTED PWB	●											●	
	92	A-8067-157-A	CNX-169 MOUNTED PWB		●	●	●	●	●	●	●	●				●
	93	4-657-321-21	ADAPTOR (SONY), DRIVE							●	●	●		●	●	●
	93	4-657-322-21	ADAPTOR (PIONEER), DRIVE	●	●			●						●	●	●
	94	4-657-322-21	ADAPTOR (PIONEER), DRIVE							●	●	●		●	●	●
	94	4-657-321-21	ADAPTOR (SONY), DRIVE										●			
	95	4-659-169-01	GASKET, CONNECTOR	●											●	
*	102	7-300-000-40	SILICON COMPOUND (G-765) 90G * Used on replacing CPU, heat sink. (Refer to page 2-14)	●	●	●	●	●	●	●	●	●	●	●	●	●
	103	4-659-636-01	GASKET (85)		●	●	●	●	●	●	●	●				●
	104	1-961-655-11	HARNESS (MS,SIO)		●	●	●	●	●	●	●	●				●
	105	4-662-655-01	GASKET (I.LINK)	●	●	●	●	●	●	●	●	●			●	●



○ : for CTO Option

ACCESSORIES & PACEKING MATEIRALS



Ref.No.	Part No.	Description	RX690G	RX682	RX681	RX680G	RX672	RX671	RX670	RX660	RX651	RX650	RX641	RX640	RX600E	RX600N
	4-662-040-11	USER GUIDE	●												●	
	4-662-043-11	GETTING STARTED GUIDE (RX)	●			●									●	●
△	201 1-777-786-11	CORD, AC	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	202 1-777-801-21	CORD, CONNECTION (F TYPE RF)	●			●									●	●
	203 1-777-802-21	CORD, CONNECTION (VIDEO)	●			●									●	●
	204 1-772-704-71	KEYBOARD (US)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	205 1-796-183-21	MOUSE (PS/2)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	206 1-765-263-21	CORD, CONNECTION (RK-G129)	●			●									●	●
	207 1-782-207-11	CABLE, MODEM	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	208 1-790-009-21	CABLE, CONNECTOR (WITH VIDEO)	●			●									●	●
	209 1-757-167-21	CORD, CONNECTION	●												●	
	210 1-476-795-11	REMOTE COMMANDER (US)	●			●									●	●
	211 9-885-003-36	LID, BATTERY	●			●									●	●
	212 1-418-887-31	RAY-CATCHER UNIT	●			●									●	●
	213 9-885-008-07	REST, PALM	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	214 9-885-000-89	PLATE (PLAIN), TOP	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	215 1-544-899-11	SPEAKER UNIT	●	●	●	●	●	●	●	●	●	●	●	●	●	●
△	216 1-476-386-21	ADAPTOR, AC	●	●	●	●	●	●	●	●	●	●	●	●	●	●

List of PCV-RX Series

Model	Service Manual Parts No.
PCV-RX260DS PCV-RX270DS PCV-RX280DS	9-928-379-11
PCV-RX360DS PCV-RX370DS PCV-RX380DS	9-928-395-11
PCV-RX450 PCV-RX460 PCV-RX470DS PCV-RX480DS PCV-RX490TV	9-874-306-12
PCV-RX462DS	9-874-316-11
PCV-RX463DS PCV-RX465DS	9-874-315-11
PCV-RX550 PCV-RX560 PCV-RX540 PCV-RX570 PCV-RX580 PCV-RX590G PCV-RX551 PCV-RX552 PCV-RX571 PCV-RX581 PCV-RX553 PCV-RX554 PCV-RX572	9-874-322-04
PCV-RX54M PCV-RX55M	9-874-331-01
PCV-RX640 PCV-RX641  PCV-RX650 PCV-RX651 PCV-RX660 PCV-RX670 PCV-RX671 PCV-RX672 PCV-RX681 PCV-RX682 PCV-RX680G PCV-RX690G PCV-RX600E PCV-RX600N	9-874-333-04 

 : Additional Model

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Revision History

Suffix	Ver.	Date	Contents	QM No.
-01	Ver. 1	2002.01.17	First Edition	—
-02	Ver. 2	2002.02.18	① (Model Lineup)	FIT-D2002_001
-03	Ver. 3	2002.03.08	② (Model Lineup)	FIT-D2002_003
-04	Ver. 4	2002.06.11	③ (Model Lineup)	FIT-D2002_024
<Remarks>				