

PCG-C1VP/C1VPK

SERVICE MANUAL

*US Model
Canadian Model*



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Caution Markings for Lithium/Ion Battery - The following or similar texts shall be provided on battery pack of equipment or in both the operating and the service instructions.

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

CAUTION: The battery pack used in this device may present a fire or chemical burn hazard if mistreated. Do not disassemble, heat above 100°C (212°F) or incinerate.

Dispose of used battery promptly.
Keep away from children.

CAUTION: Changing the back up battery.

- Overcharging, short circuiting, reverse charging, multilation or incineration of the cells must bi avoided to prevent one or more of the following occurrences; release of toxic materials, release of hydrogen and/or oxygen gas, rise in surface temperature.
- If a cell has leaked or vented, it should be replaced immediately while avoiding to touch it without any protection.



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...

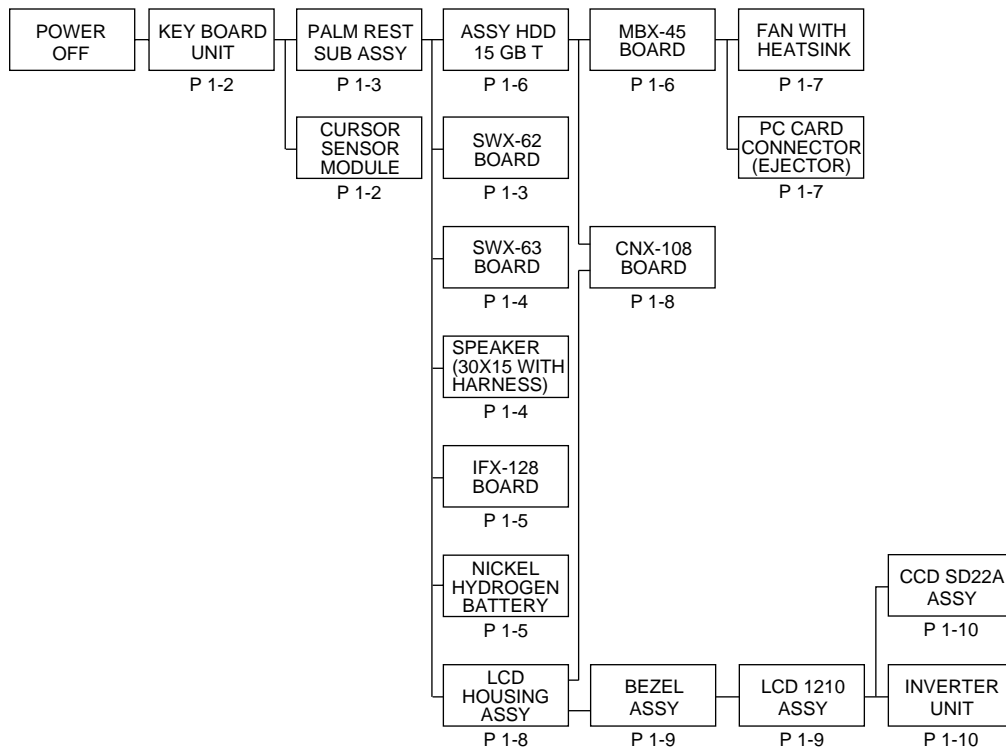
- The temperature of the soldering-iron tip should be about 270C.
- Do not apply the tip more than three times to the same pattern.
- Handle patterns with care; never apply force.

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

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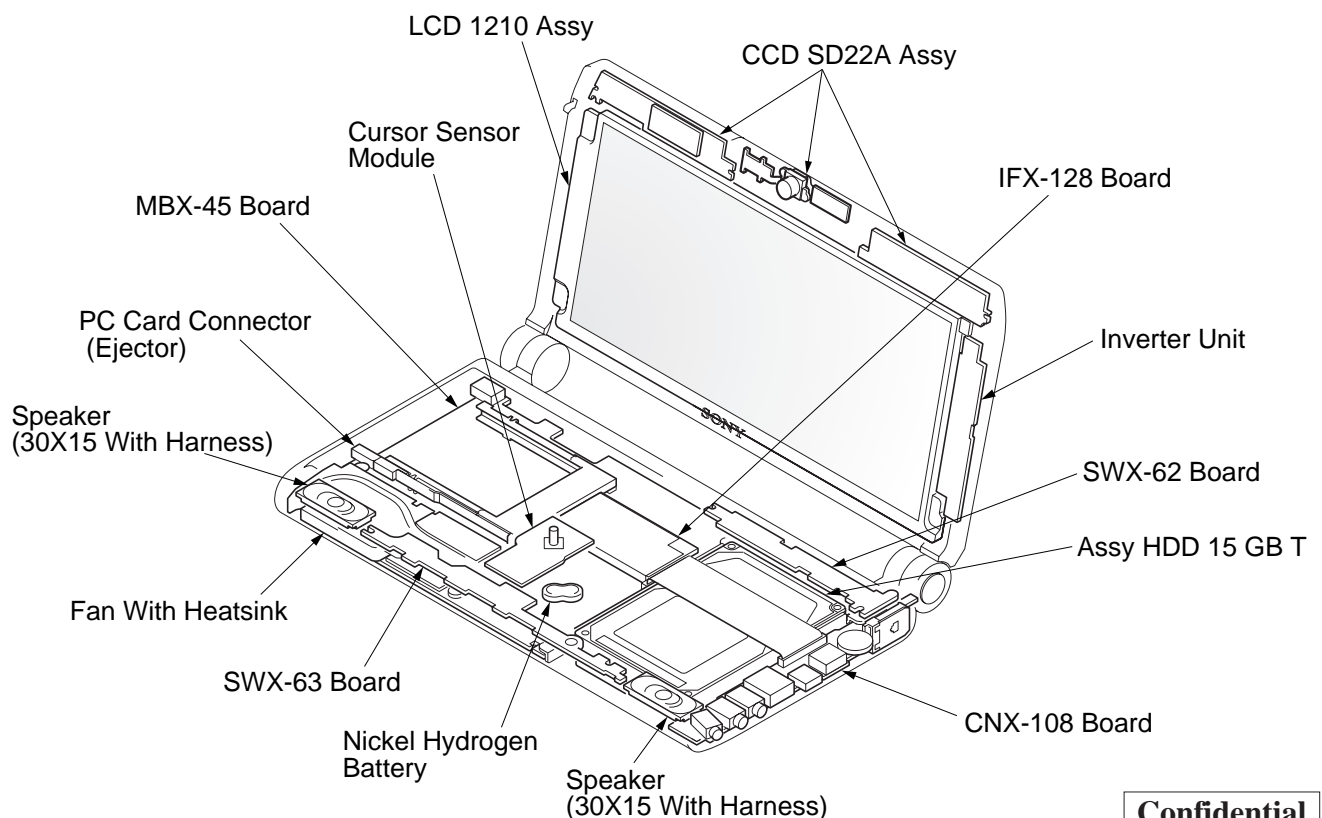
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 • Abbreviations		
	UC : US model / Canadian model	

1-1. Flowchart



- P XX means pages that appears in this manual.
- Remember that hard disk drives are easily damaged by vibration. Always handle with care.

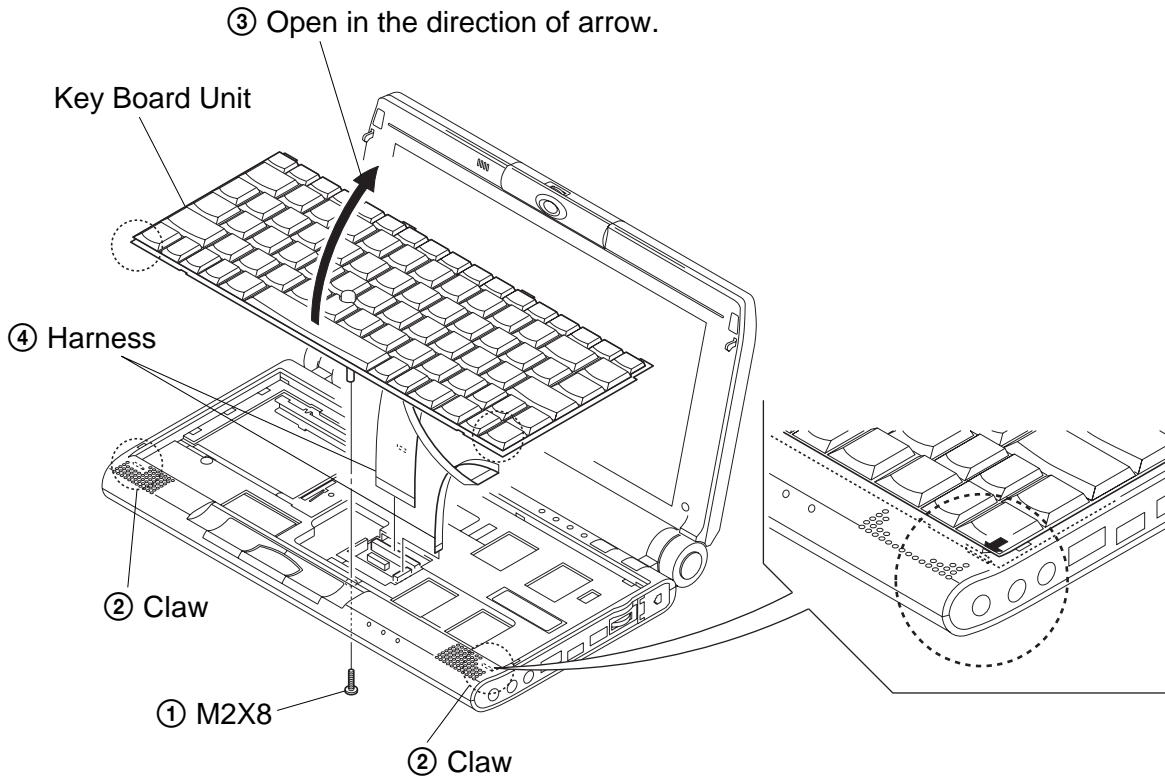
1-2. Main Electrical Parts Location Diagram



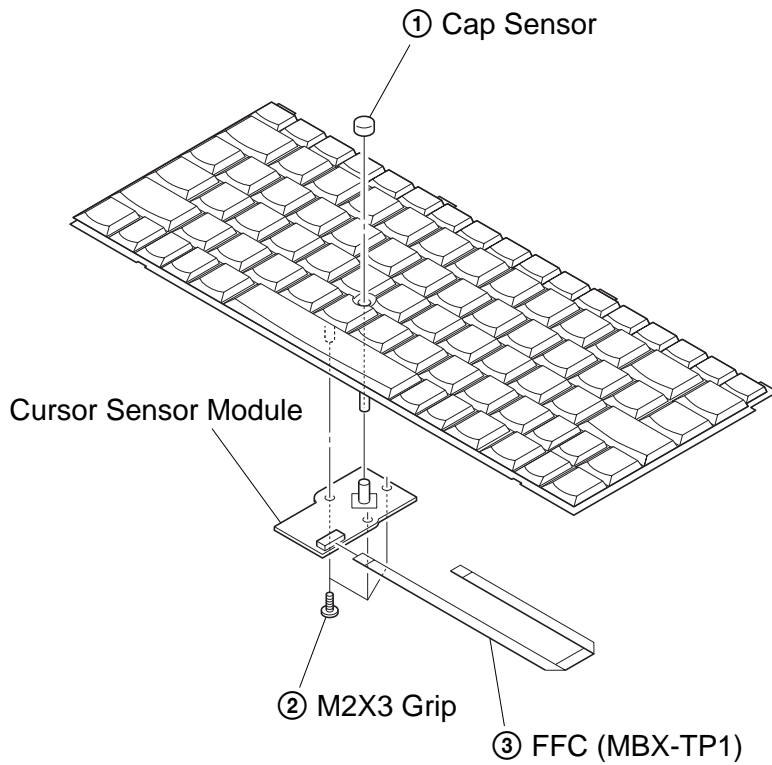
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1-3. Removal

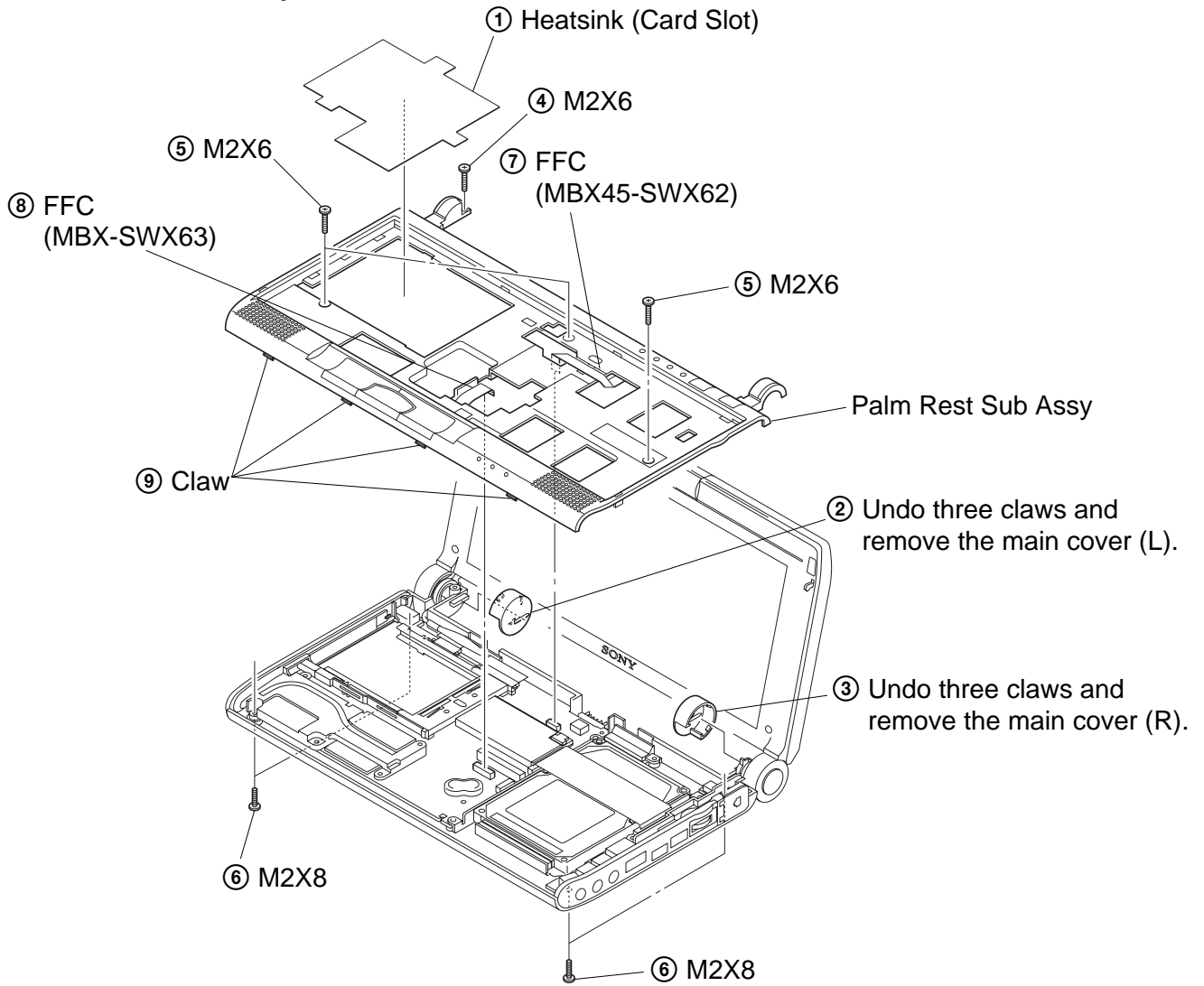
1. Key Board Unit



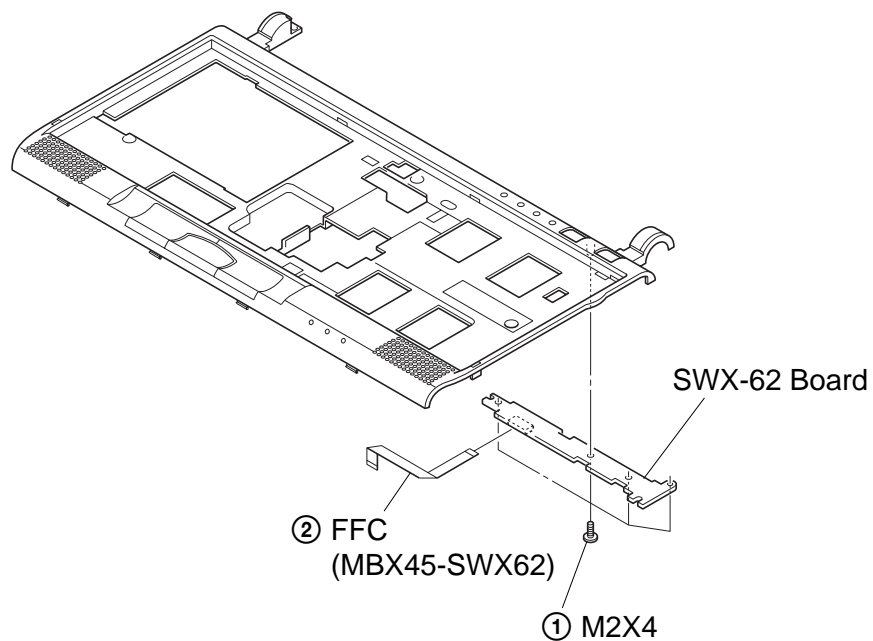
2. Cursor Sensor Module



3. Palm Rest Sub Assy

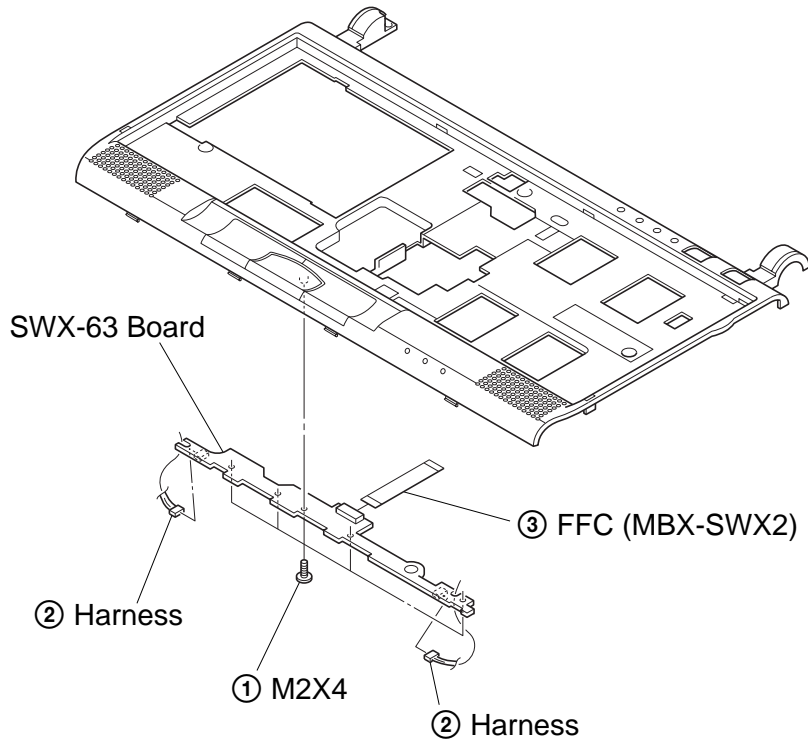


4. SWX-62 Board

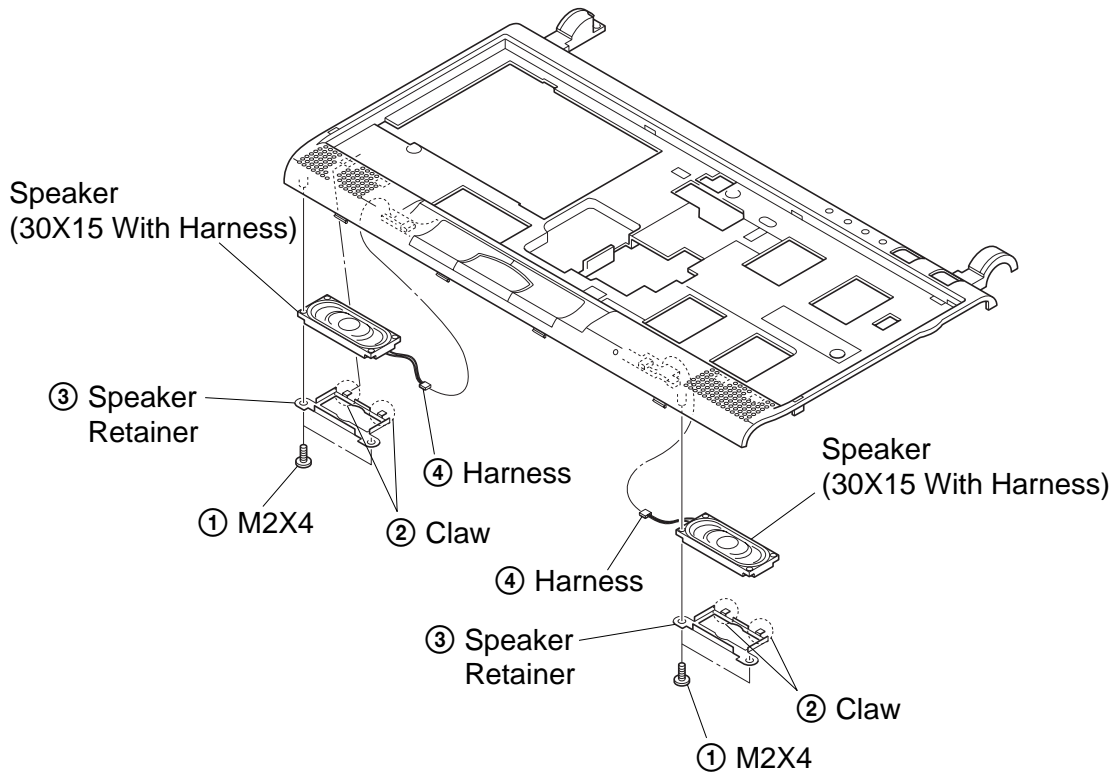


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5. SWX-63 Board

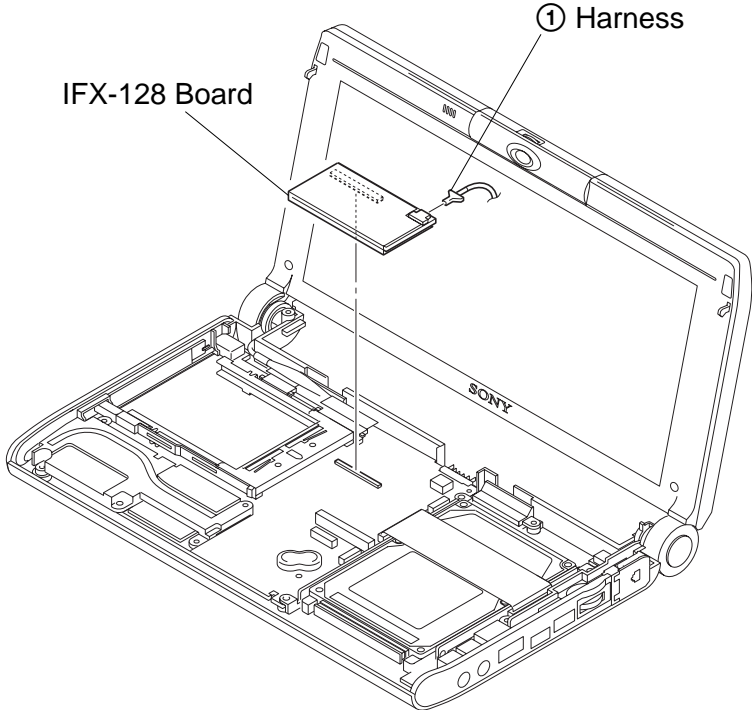


6. Speaker (30X15 With Harness)

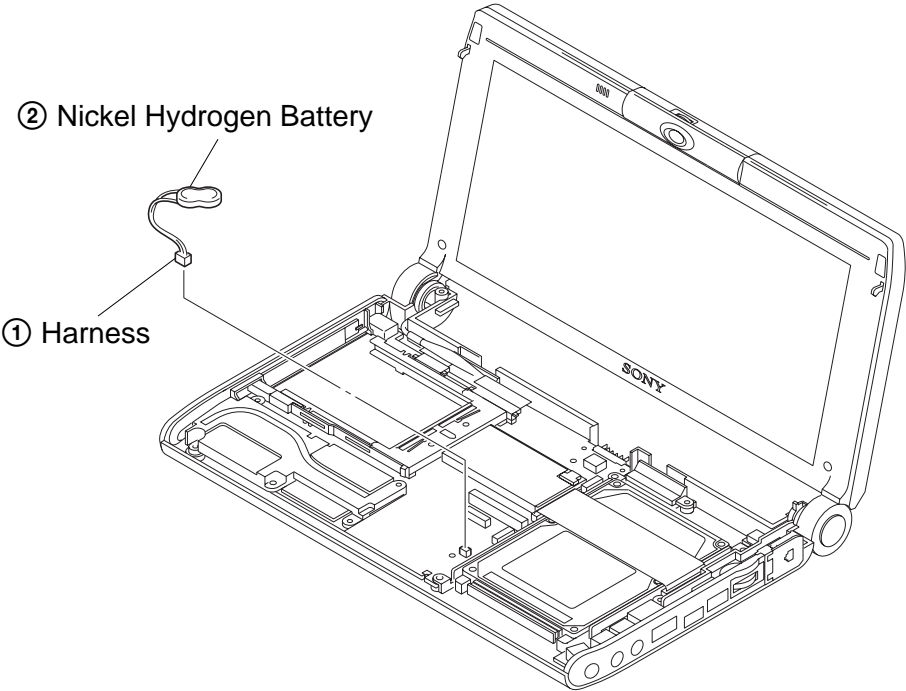


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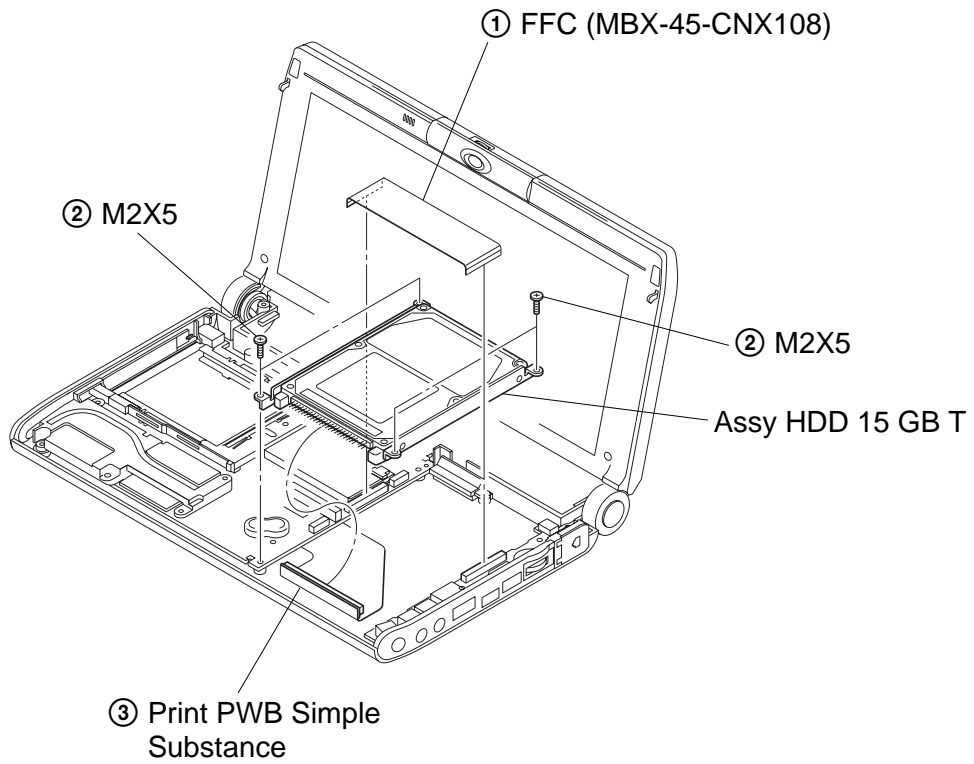
7. IFX-128 Board



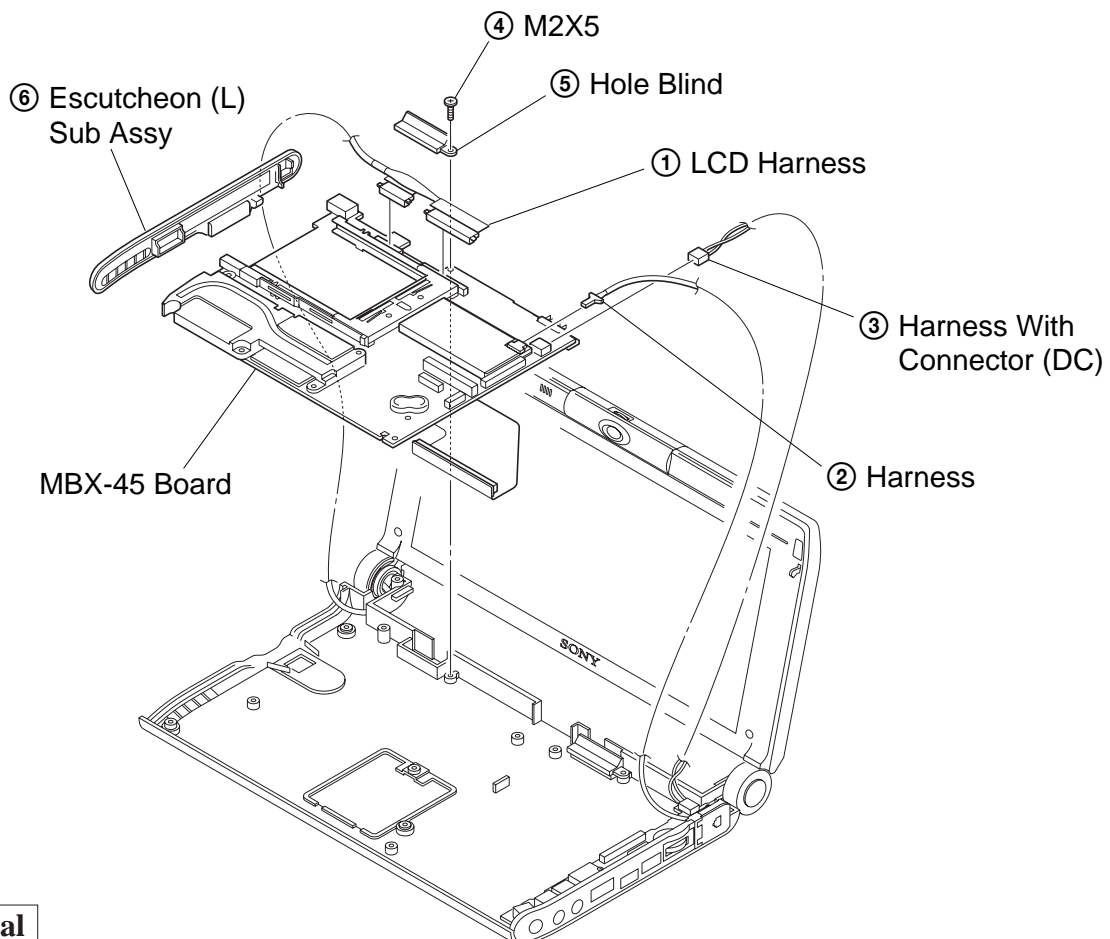
8. Nickel Hydrogen Battery



9. Assy HDD 15 GB T

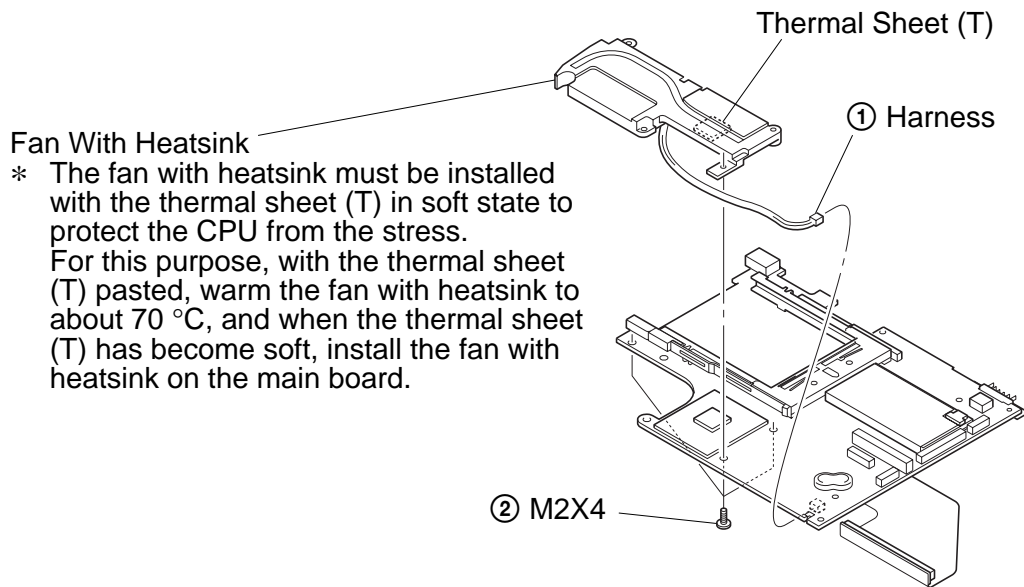


10. MBX-45 Board

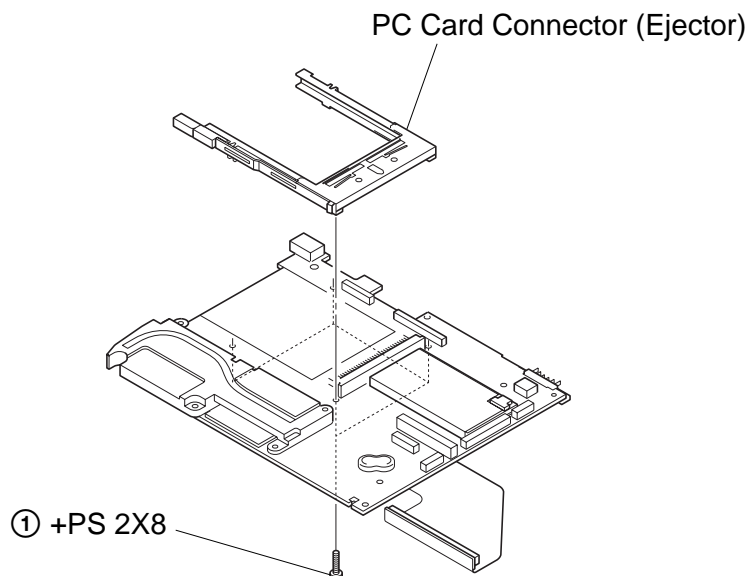


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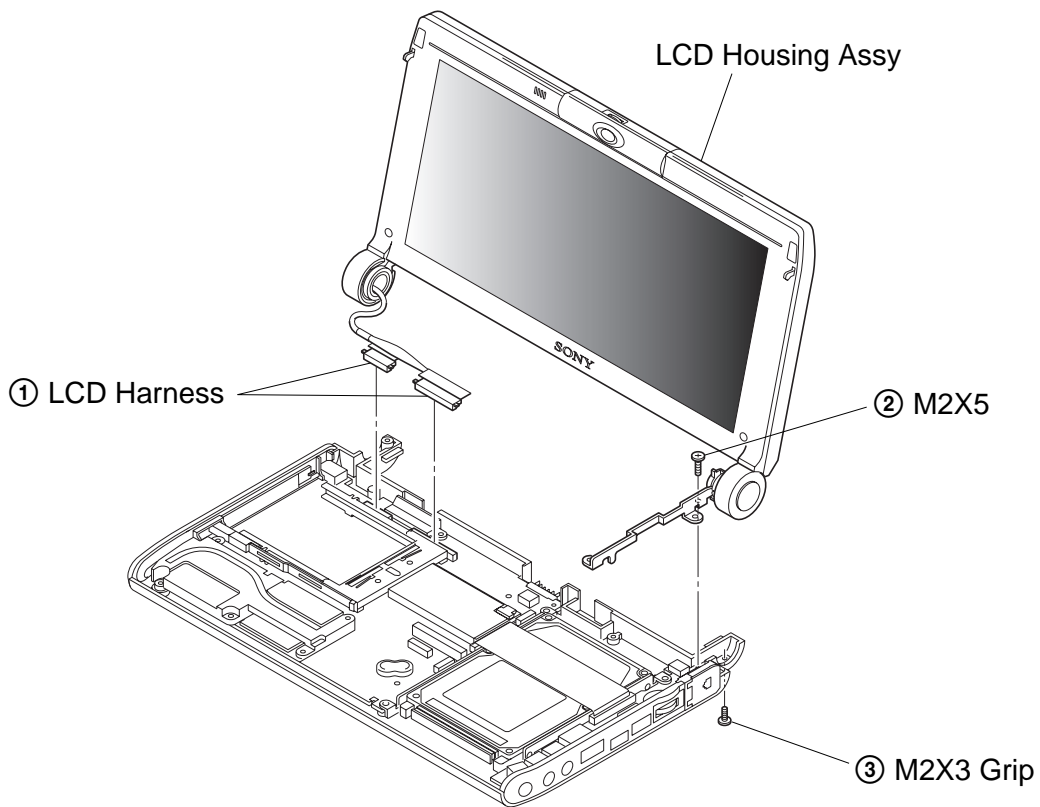
11. Fan With Heatsink



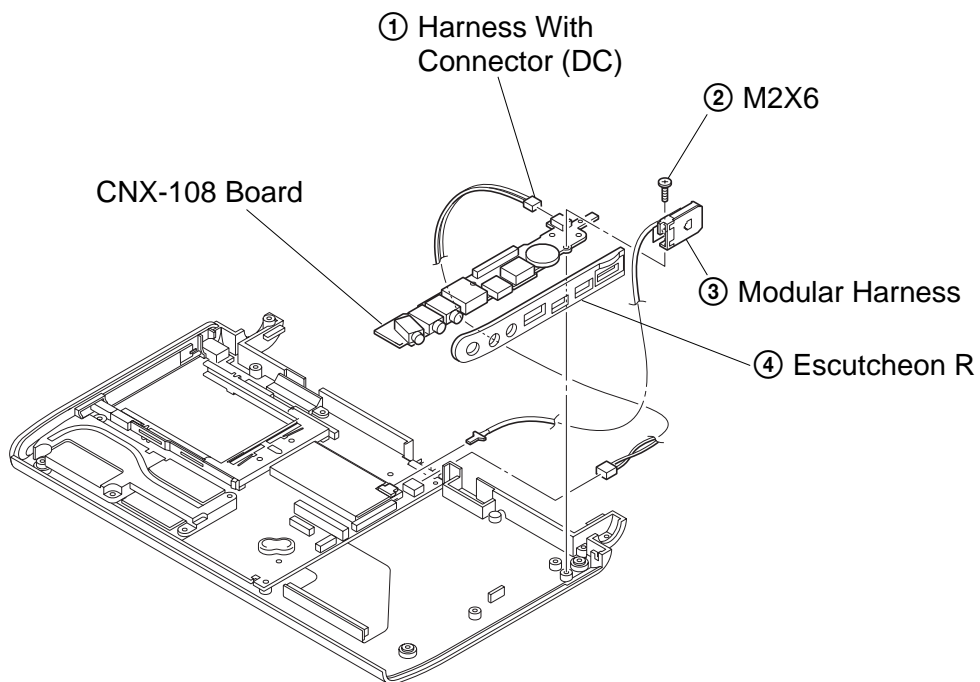
12. PC Card Connector (Ejector)



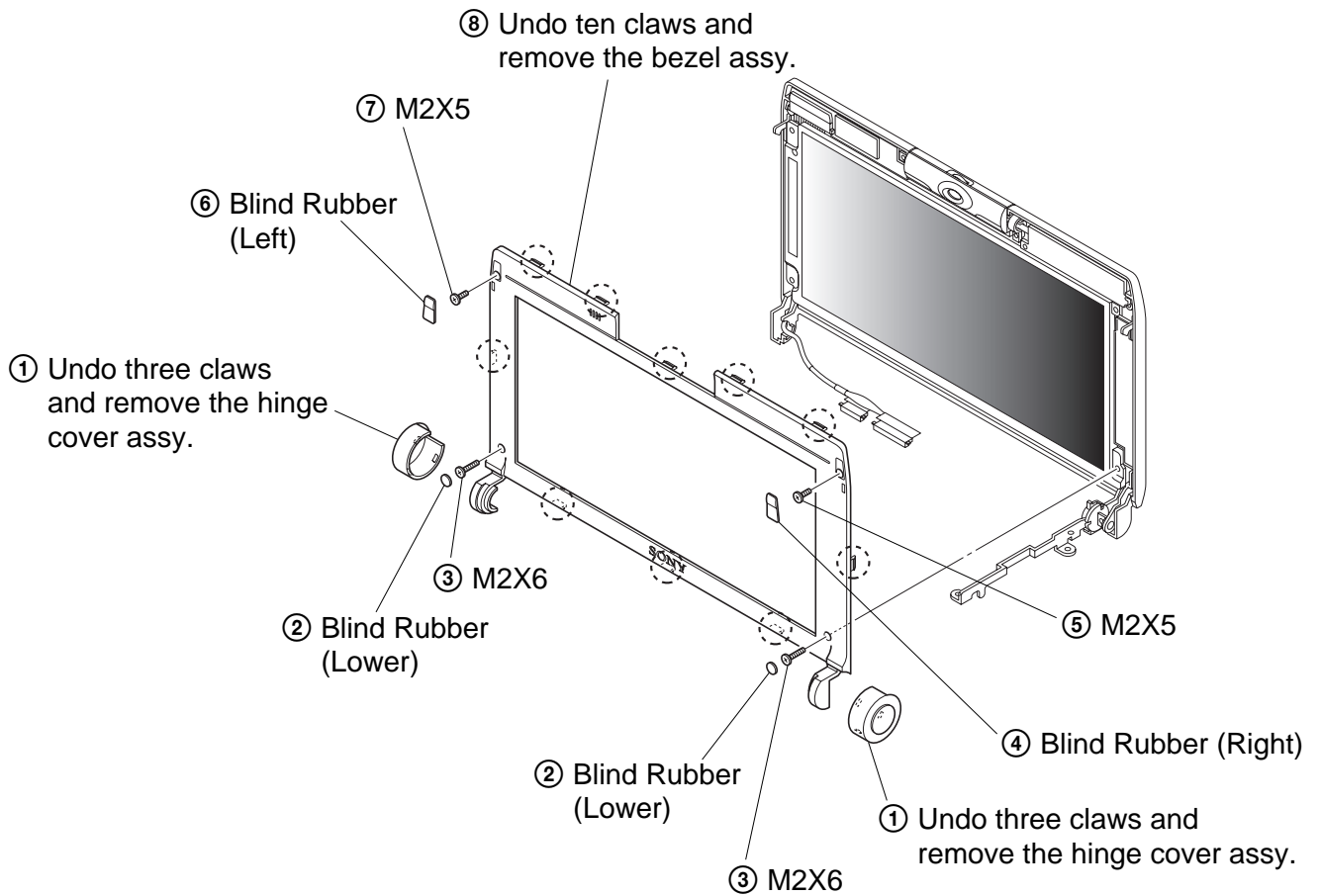
13. LCD Housing Assy



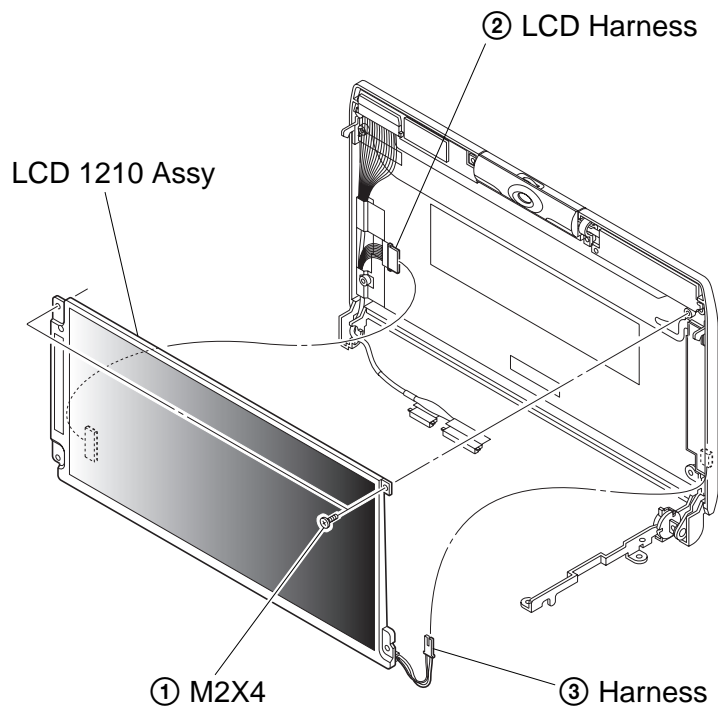
14. CNX-108 Board



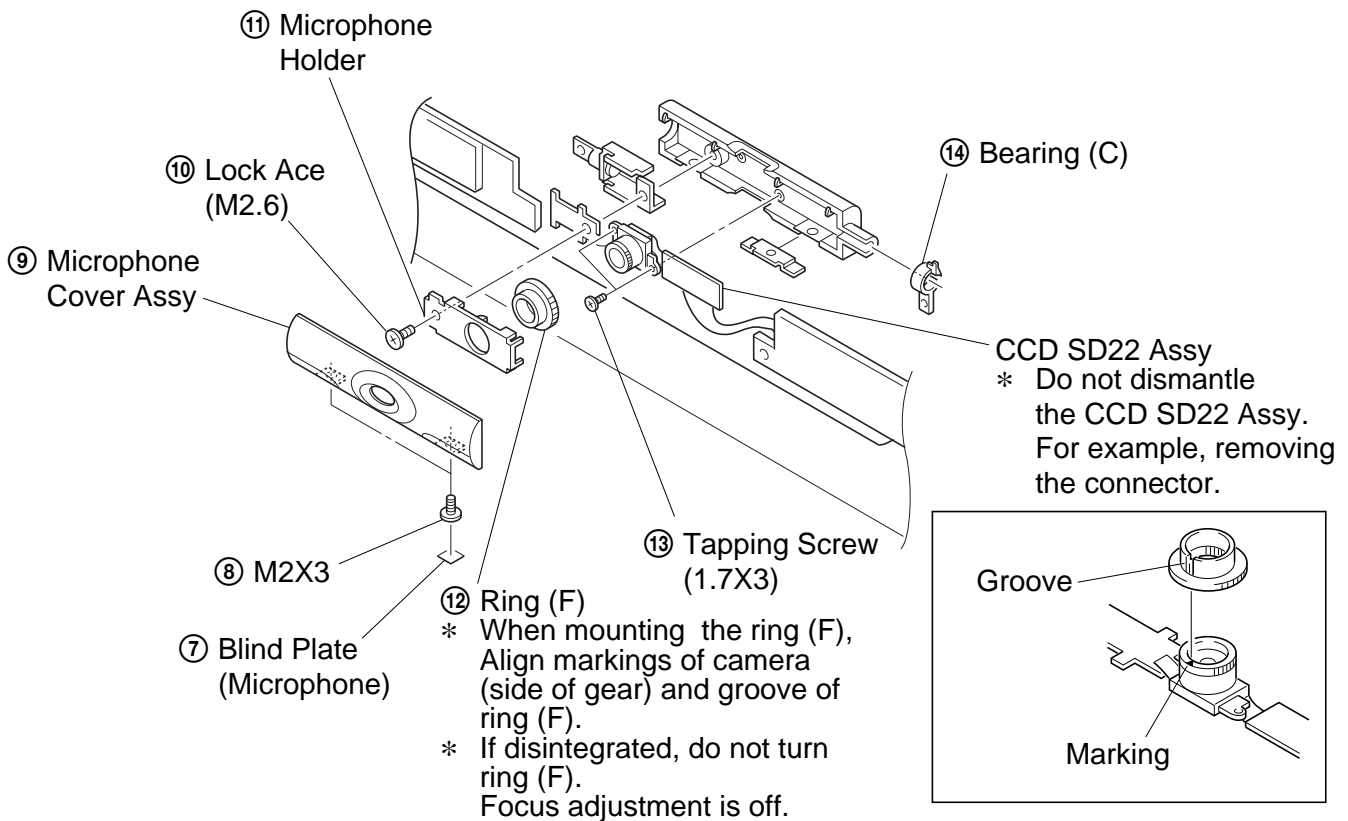
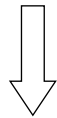
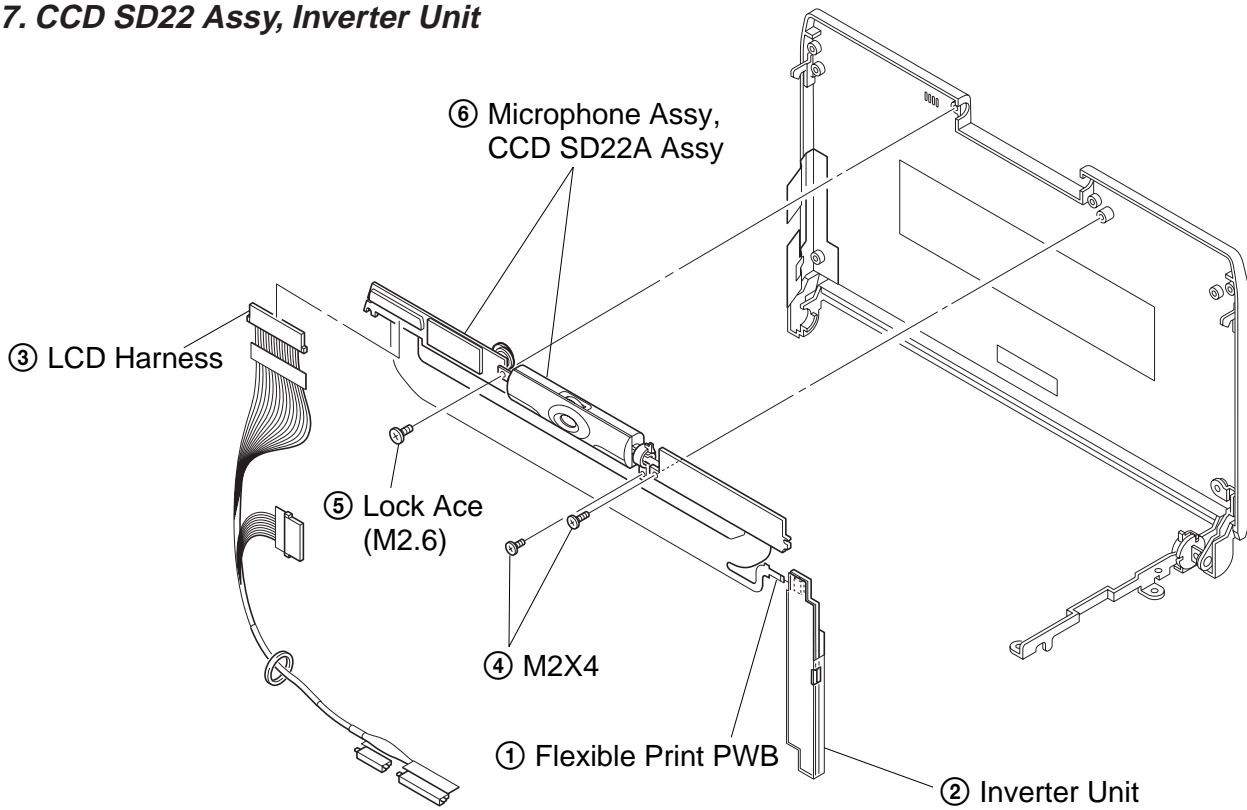
15. Bezel Assy



16. LCD 1210 Assy



17. CCD SD22 Assy, Inverter Unit



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CHAPTER 2.

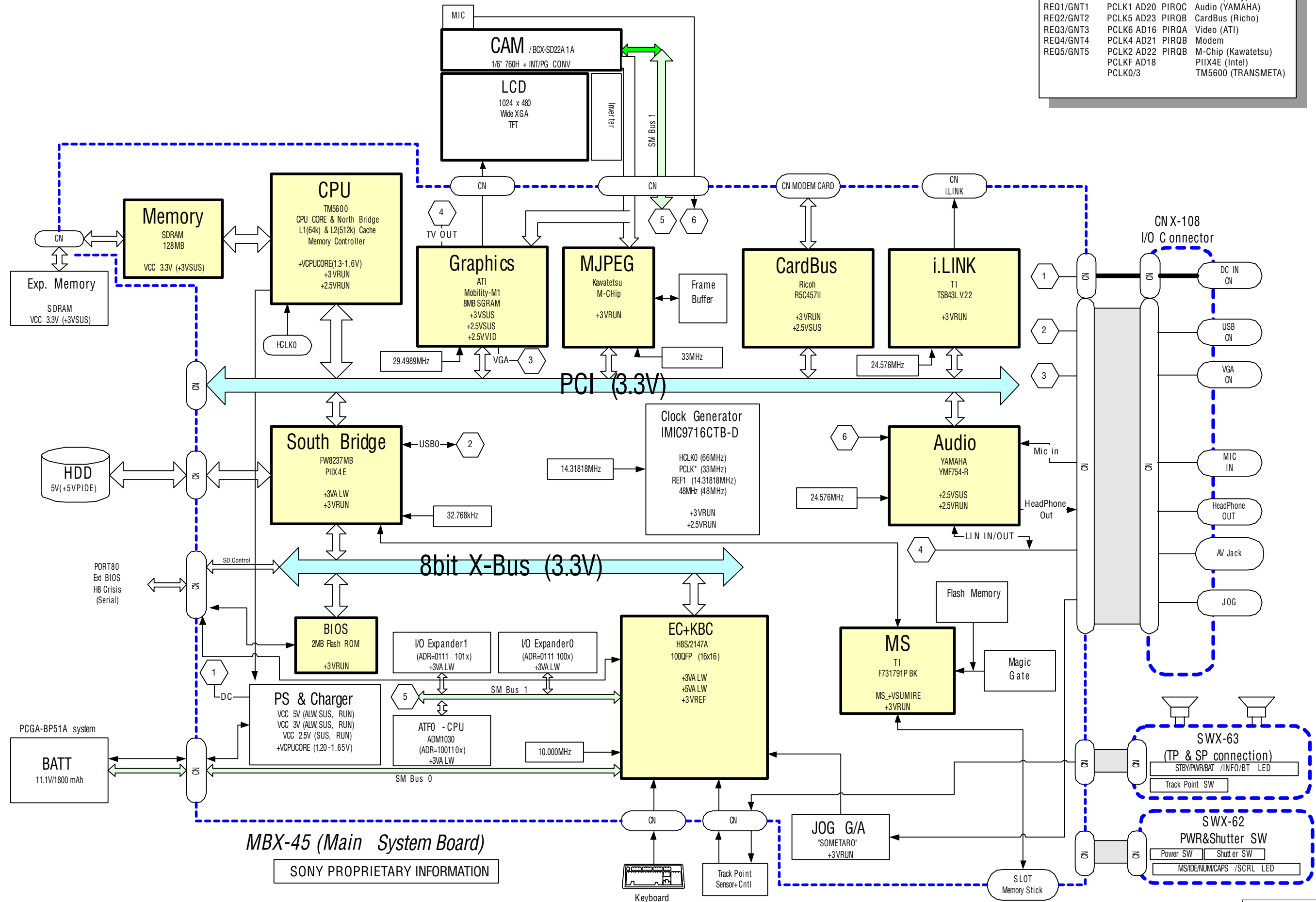
SELF DIAGNOSTICS

< ATTENTION >

**Please confirm “Self Diagnostics” method which will be informed
you with distribution of “Self Diagnostics” software.**

CHAPTER 3. BLOCK DIAGRAM

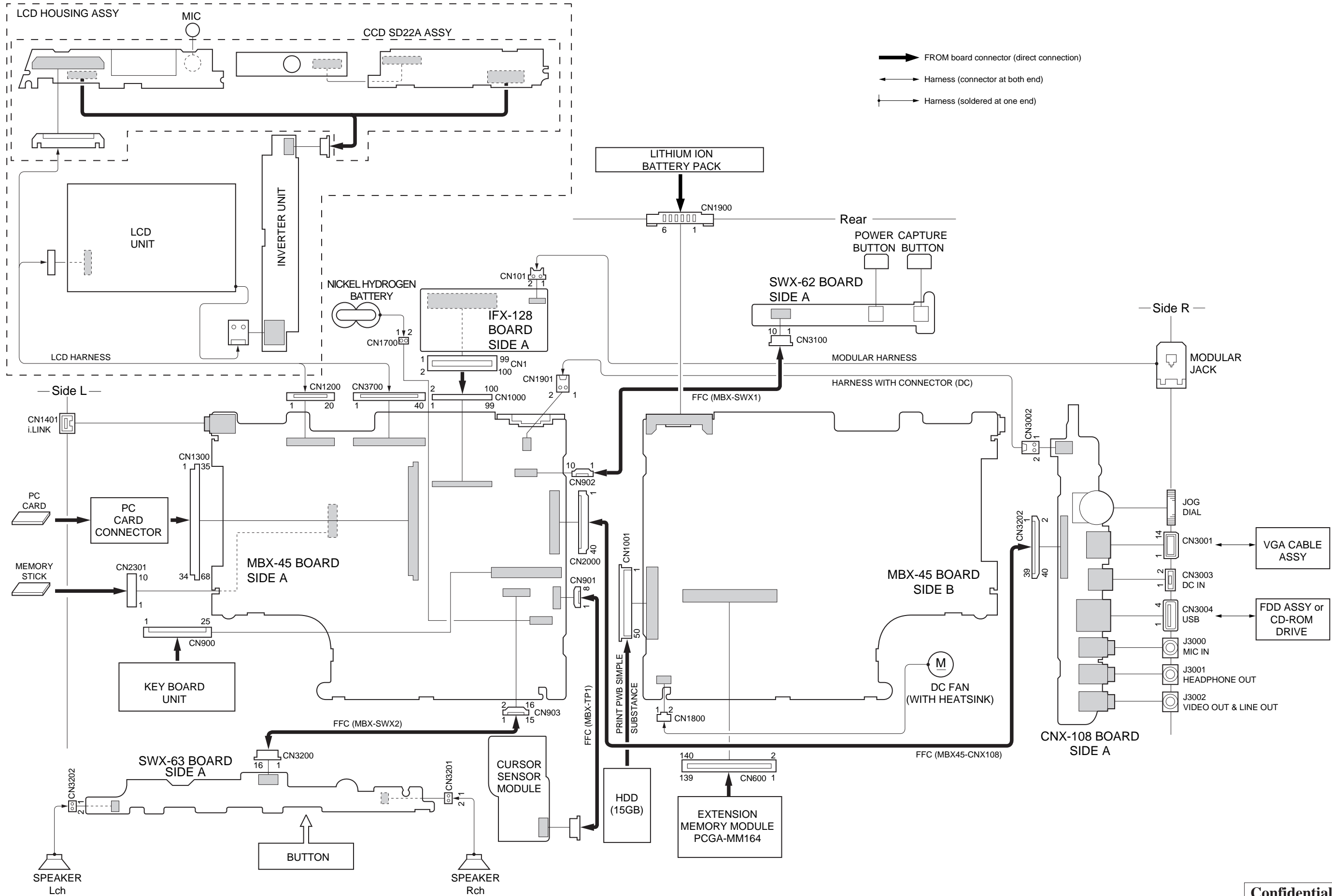
BusMaster	PCLK	IDSEL	INTA
REQ0/GNT0	PCLK0 AD19	PIRQD	i.LINK (Sony)
REQ1/GNT1	PCLK1 AD20	PIRQC	Audio (YAMAHA)
REQ2/GNT2	PCLK5 AD23	PIRQB	CardBus (Richo)
REQ3/GNT3	PCLK6 AD16	PIRQA	Video (ATI)
REQ4/GNT4	PCLK4 AD21	PIRQB	Modem
REQ5/GNT5	PCLK2 AD22	PIRQB	M-Chip (Kawatetsu)
	PCLKF AD18		PIIX4E (Intel)
	PCLK0/3		TM5600 (TRANSMETA)



MBX-45 (Main System Board)

SONY PROPRIETARY INFORMATION

CHAPTER 4. FRAME HARNESS DIAGRAM



CHAPTER 5.

EXPLODED VIEWS AND PARTS LIST

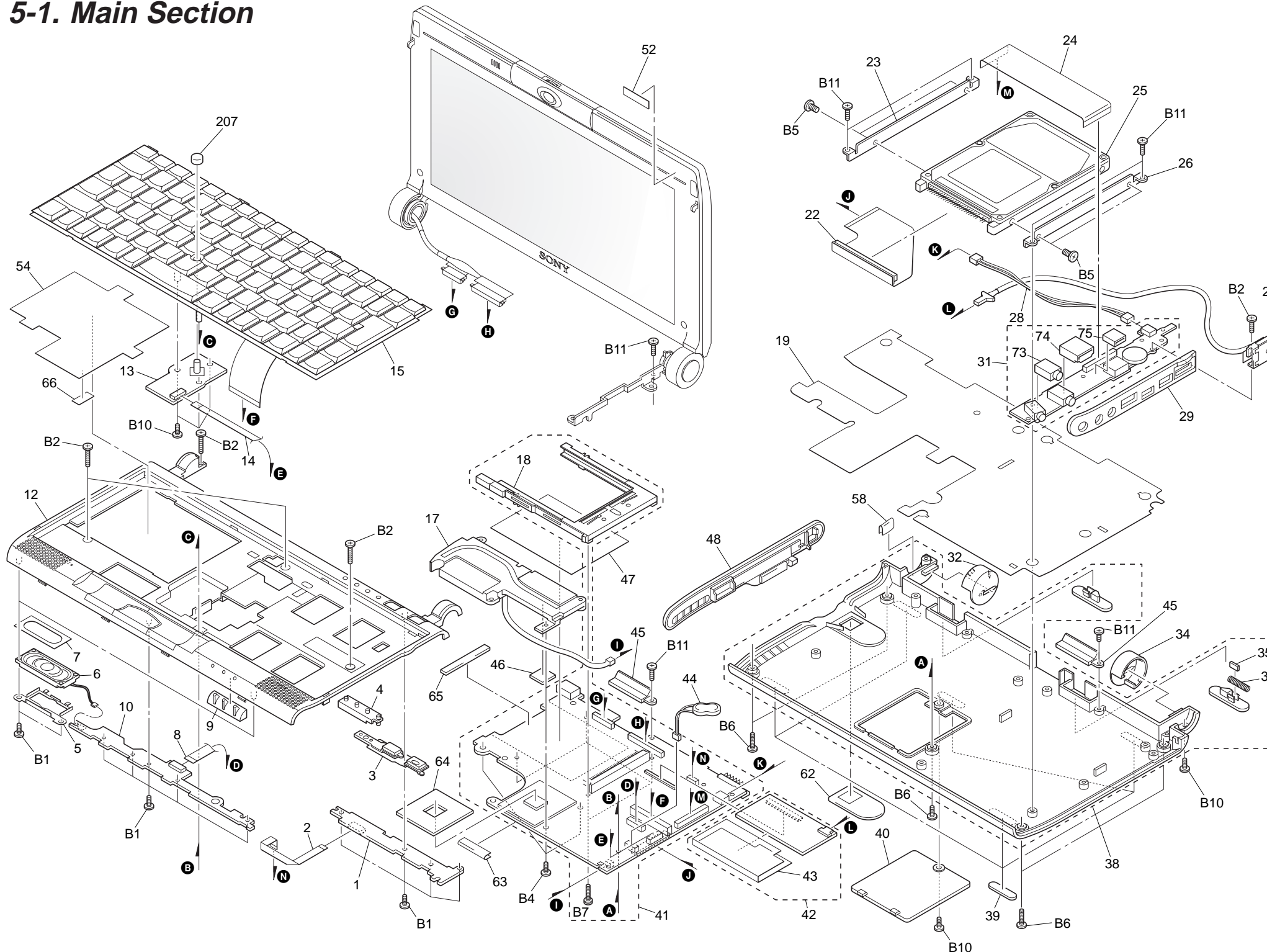
NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked “ * ” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- When the same reference numbers are written down in the list, please use the one listed in the first place as the main part.

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.

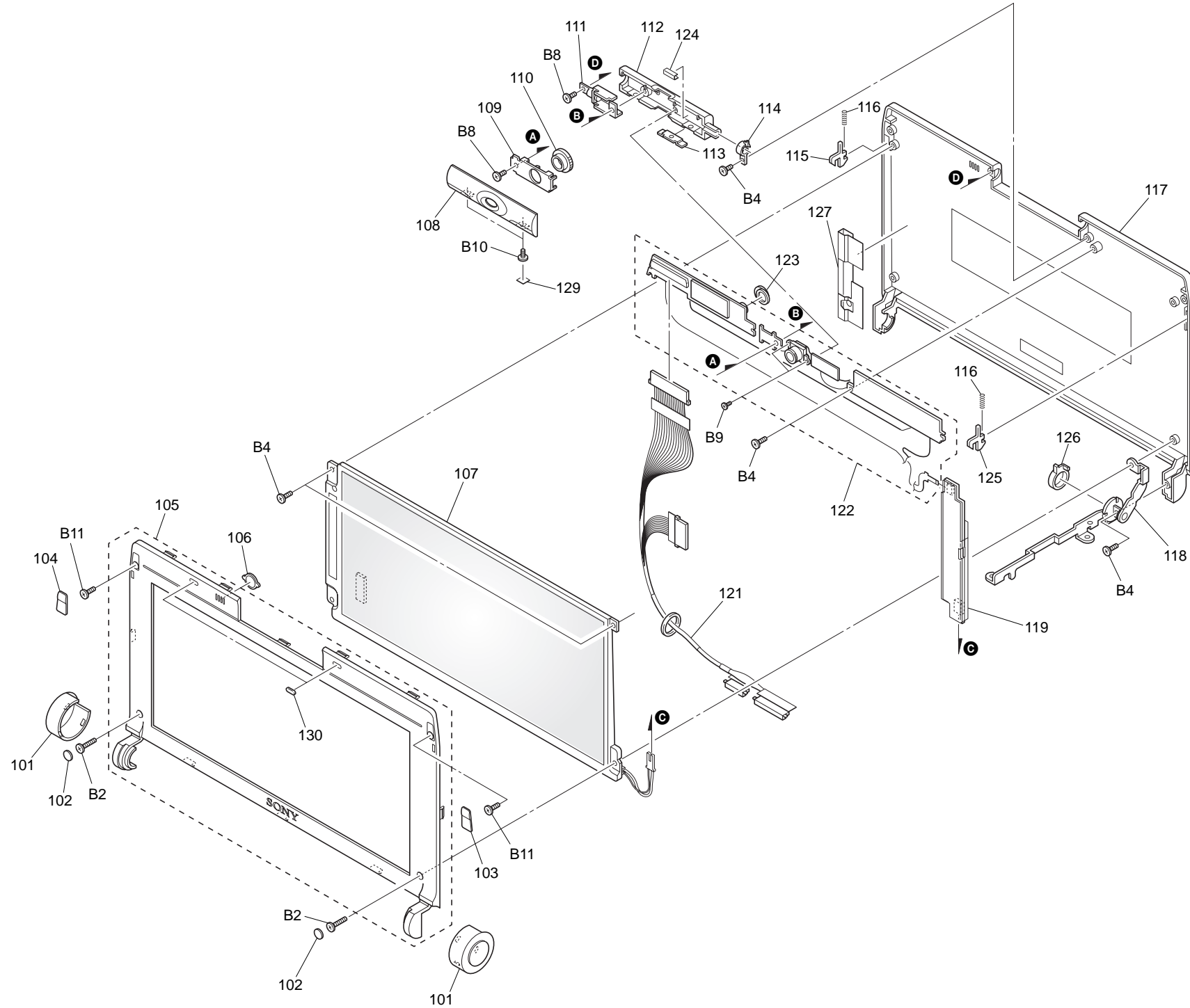
5-1. Main Section



Ref.No.	Part No.	Description	Ref.No.	Part No.	Description
1	A-8066-764-A	MOUNTED PWB SWX-62	6	1-529-886-11	SPEAKER (3X1.5 CM)
2	1-794-957-11	CABLE, FLEXIBLE FLAT	7	4-648-697-01	SHEET (SPEAKER), ADHESIVE
3	4-643-063-01	BUTTON, POWER	8	1-791-607-12	FFC (MBX-SW2)
4	4-648-579-01	LED (KEY BOARD)	9	4-648-580-01	LED (POWER)
* 5	4-648-584-02	RETAINER, SPEAKER	10	A-8066-859-A	SWX-63 J/UC/E/I ASSY (S)
			12	X-4622-964-1	REST SUB ASSY, PALM
			13	A-8066-753-A	COMPLETE PWB IFX-158
			14	1-791-606-11	FFC (MBX-TP1)
			15	1-418-674-24	KEY BOARD UNIT
			17	1-763-589-11	FAN WITH HEATSINK
			18	1-793-637-12	CONNECTOR, PC CARD (EJECTOR)
* 19	4-648-856-01	SHEET (T), INSULATING	22	1-791-650-11	SUBSTANCE, PRINT PWB SIMPLE
22	1-791-650-11	SUBSTANCE, PRINT PWB SIMPLE	* 23	4-643-048-12	BRACKET (L), HDD
* 23	4-643-048-12	BRACKET (L), HDD	24	1-794-958-11	CABLE, FLEXIBLE FLAT
24	1-794-958-11	CABLE, FLEXIBLE FLAT	25	A-8048-990-A	ASSY HDD 15GB T (S)
25	A-8048-990-A	ASSY HDD 15GB T (S)	* 26	4-643-049-12	BRACKET (R), HDD
* 26	4-643-049-12	BRACKET (R), HDD	27	1-959-997-21	HARNESS, MODULAR
27	1-959-997-21	HARNESS, MODULAR	28	1-791-608-11	CONNECTOR, HARNESS WITH (DC)
28	1-791-608-11	CONNECTOR, HARNESS WITH (DC)	29	4-648-550-01	ESCUTCHEON (R)
29	4-648-550-01	ESCUTCHEON (R)	31	A-8066-749-A	COMPLETE PWB CNX-108
31	A-8066-749-A	COMPLETE PWB CNX-108	32	4-643-040-01	COVER (L), MAIN
32	4-643-040-01	COVER (L), MAIN	34	4-643-041-01	COVER (R), MAIN
34	4-643-041-01	COVER (R), MAIN	35	4-636-934-01	SPACER (SPRING)
35	4-636-934-01	SPACER (SPRING)	36	4-635-956-01	SPRING (B), COMPRESSION COIL
36	4-635-956-01	SPRING (B), COMPRESSION COIL	38	X-4623-005-2	CABINET SUB ASSY, BOTTOM
38	X-4623-005-2	CABINET SUB ASSY, BOTTOM	39	4-650-469-01	FOOT
39	4-650-469-01	FOOT	40	4-643-028-11	LID, MEMORY
40	4-643-028-11	LID, MEMORY	41	A-8066-846-A	MBX-45 UC/E ASSY (S)
41	A-8066-846-A	MBX-45 UC/E ASSY (S)	42	A-8066-844-A	IFX-128 COM (S)
42	A-8066-844-A	IFX-128 COM (S)	43	4-643-811-04	SHEET (IFX), INSULATING
43	4-643-811-04	SHEET (IFX), INSULATING	44	1-756-038-21	BATTERY, NICKEL HYDROGEN
44	1-756-038-21	BATTERY, NICKEL HYDROGEN	45	4-643-046-01	BLIND, HOLE
45	4-643-046-01	BLIND, HOLE	46	4-648-575-02	SHEET (T), THERMAL
46	4-648-575-02	SHEET (T), THERMAL	47	4-648-586-02	SHEET (M), BLIND
47	4-648-586-02	SHEET (M), BLIND	48	X-4623-006-3	ESCUTCHEON (L) SUB ASSY
48	X-4623-006-3	ESCUTCHEON (L) SUB ASSY	52	4-654-659-21	(C1VP)...LABEL, ID
52	4-654-659-21	(C1VP)...LABEL, ID	52	4-654-659-31	(C1VPK)...LABEL, ID
52	4-654-659-31	(C1VPK)...LABEL, ID	* 54	4-646-035-02	HEATSINK (CARD SLOT)
* 54	4-646-035-02	HEATSINK (CARD SLOT)	58	4-645-941-01	GASKET (RING)
58	4-645-941-01	GASKET (RING)	62	4-648-546-01	WINDOW (M)
62	4-648-546-01	WINDOW (M)	63	4-651-288-04	SHEET (BOARD), BLIND
63	4-651-288-04	SHEET (BOARD), BLIND	64	4-651-484-01	SHEET, EMI
64	4-651-484-01	SHEET, EMI	65	4-651-287-02	SPACER (CARD)
65	4-651-287-02	SPACER (CARD)	66	4-640-515-21	GASKET
66	4-640-515-21	GASKET	73	1-766-847-41	JACK (HEADPHONE)
73	1-766-847-41	JACK (HEADPHONE)	74	1-794-548-11	CONNECTOR, USB (A)
74	1-794-548-11	CONNECTOR, USB (A)	75	1-793-275-21	JACK, DC
75	1-793-275-21	JACK, DC	B1	4-639-112-01	SCREW M2X4
B1	4-639-112-01	SCREW M2X4	B2	4-653-582-21	SCREW M2 (NE) (2X6)
B2	4-653-582-21	SCREW M2 (NE) (2X6)	B4	4-653-582-01	SCREW (M2 (NE)), SPECIAL HEAD (2X4)
B4	4-653-582-01	SCREW (M2 (NE)), SPECIAL HEAD (2X4)	B5	4-635-301-01	SCREW M3X4
B5	4-635-301-01	SCREW M3X4	B6	4-644-637-11	GRIP, M2 EG (2X8)
B6	4-644-637-11	GRIP, M2 EG (2X8)	B7	7-628-253-35	SCREW +PS 2X8
B7	7-628-253-35	SCREW +PS 2X8	B10	4-645-214-01	GRIP, M2 (2X3)
B10	4-645-214-01	GRIP, M2 (2X3)	B11	4-653-582-11	SCREW M2 (NE) (2X5)
B11	4-653-582-11	SCREW M2 (NE) (2X5)			

* To paste the thermal sheet (T) (46) to the fan with heatsink, warm the thermal sheet (T) adequately until it becomes soft.
For further information, refer to the removal (page 1-7).

5-2. LCD Section

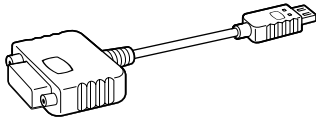


Ref.No.	Part No.	Description
101	X-4623-091-1	COVER ASSY, HINGE
102	4-648-046-01	RUBBER (LOWER), BLIND
103	4-643-076-01	RUBBER (RIGHT), BLIND
104	4-643-077-01	RUBBER (LEFT), BLIND
105	X-4622-406-6	BEZEL ASSY
106	4-644-102-01	INSULATOR (UPPER), MICROPHONE
107	A-8046-178-A	LCD 1210 ASSY (S)
108	X-4622-314-1	COVER ASSY, MICROPHONE
109	4-643-033-02	HOLDER, MICROPHONE
110	4-643-080-01	RING (F)
111	4-643-066-03	HINGE (C)
112	4-643-067-12	CABINET, MICROPHONE
113	4-643-034-01	NUT (MIC), PLATE
114	4-643-079-02	BEARING (C)
115	4-643-035-01	LATCH (L)
116	4-643-051-01	SPRING, COMPRESSION
117	X-4623-099-2	HOUSING ASSY (TPI)
118	4-643-081-11	HINGE (LCD)
119	1-476-365-12	INVERTER UNIT
121	1-960-040-12	HARNESS, LCD
122	A-8049-344-A	CCD SD22A ASSY (S)
123	4-644-103-01	INSULATOR (UNDER), MICROPHONE
* 124	4-645-340-01	GUARD, CABLE
125	4-643-029-01	LATCH (R)
126	4-643-072-02	LEVER, SWITCH
127	4-643-038-02	CLAMP
129	4-643-812-11	PLATE (MICROPHONE), BLIND
130	4-646-976-03	CUSHION (LATCH)
B2	4-653-582-21	SCREW M2 (NE) (2X6)
B4	4-653-582-01	SCREW (M2 (NE)), SPECIAL HEAD (2X4)
B8	4-644-493-11	ACE (M2.6), LOCK
B9	3-318-382-31	SCREW (1.7X3), TAPPING
B10	4-645-214-01	GRIP, M2 (2X3)
B11	4-653-582-11	SCREW M2 (NE) (2X5)

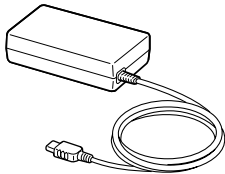
- * Do not dismantle the CCD SD22 assy (122).
For example, removing the connector.
- * When mounting the ring (F) (110), align markings of camera (side of gear) and groove of ring (F).
- * If disintegrated, do not turn ring (F) (110).
Focus adjustment is off.

5-3. Accessories

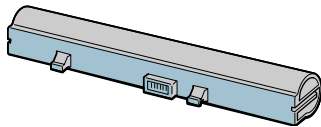
202 Display Adaptor (1)



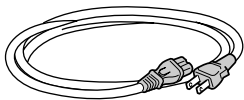
203 AC Adaptor



204 Battery Pack (1)



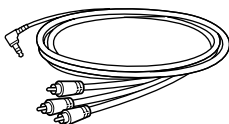
206 Power Cord (1)



207 Spare Cap (for Stick) (2)



209 AV Connecting Cable



Ref.No.	Part No.	Description
		ACCESSORIES *****
202	1-757-026-11	CABLE, VGA
△ 203	1-418-518-32	ADAPTOR, A.C.
204	1-756-074-21	BATTERY PACK, LITHIUM ION
△ 206	1-757-562-31	CORD, POWER
207	4-643-958-01	CAP (IN BAG), SENSOR
209	1-765-080-31	CORD, CONNECTION
	4-655-539-11	QUICK START, C1

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

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



PCG-C1VP/C1VPK (UC)

WAVIO

PCG-C1VP/C1VPK (UC)

9-872-222-11

2001F0500-1

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