

# PCG-C1MW/C1MWP

## SERVICE MANUAL

Ver. 1-2002F

Revision History



Lineup: PCG-C1MW  
PCG-C1MWP

*For American Area*

*US Model*



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Notebook Computer  
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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  $\Delta$  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.

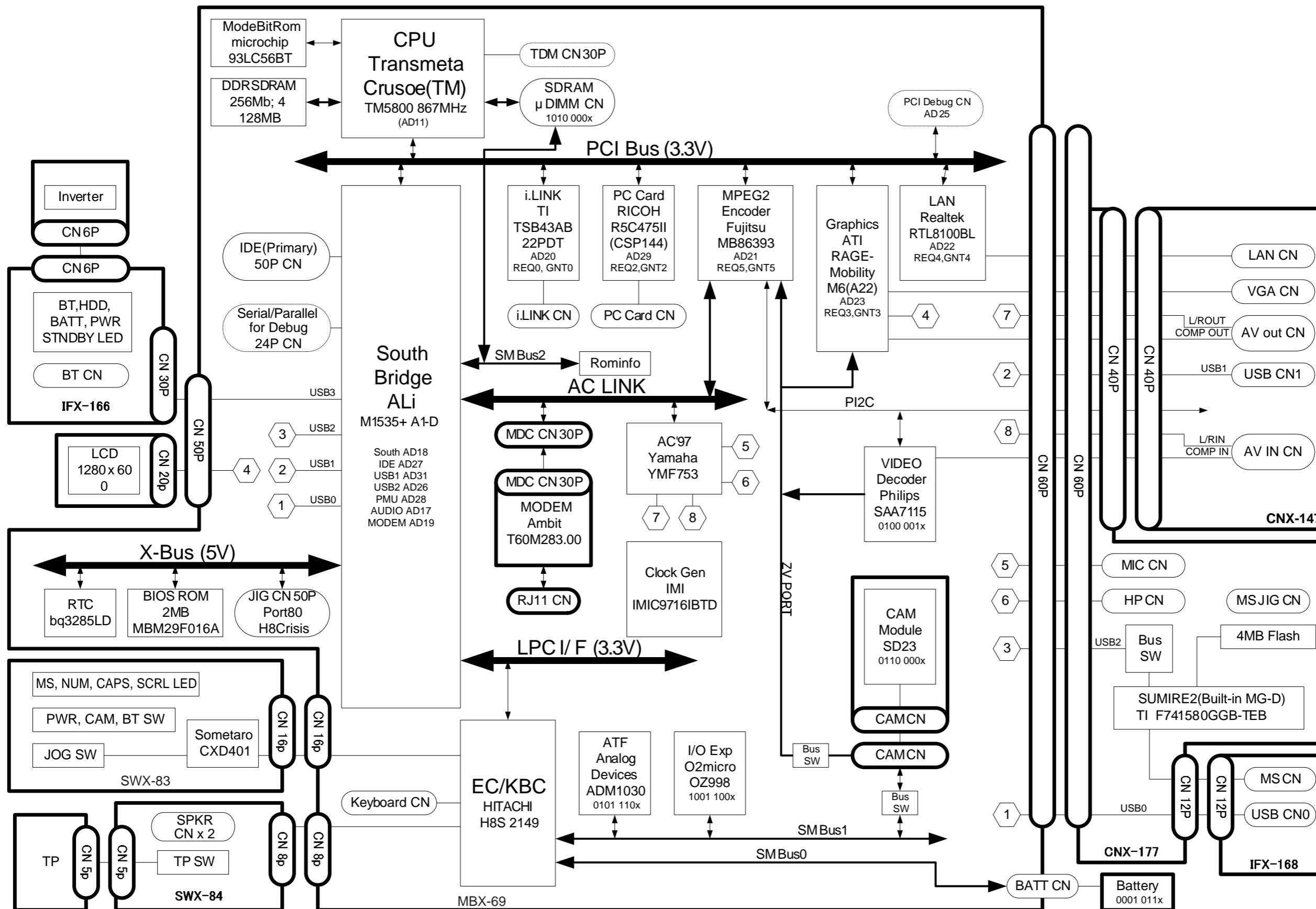
Caution: Remember that hard disk drives are easily damaged by vibration. Always handle with care.

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

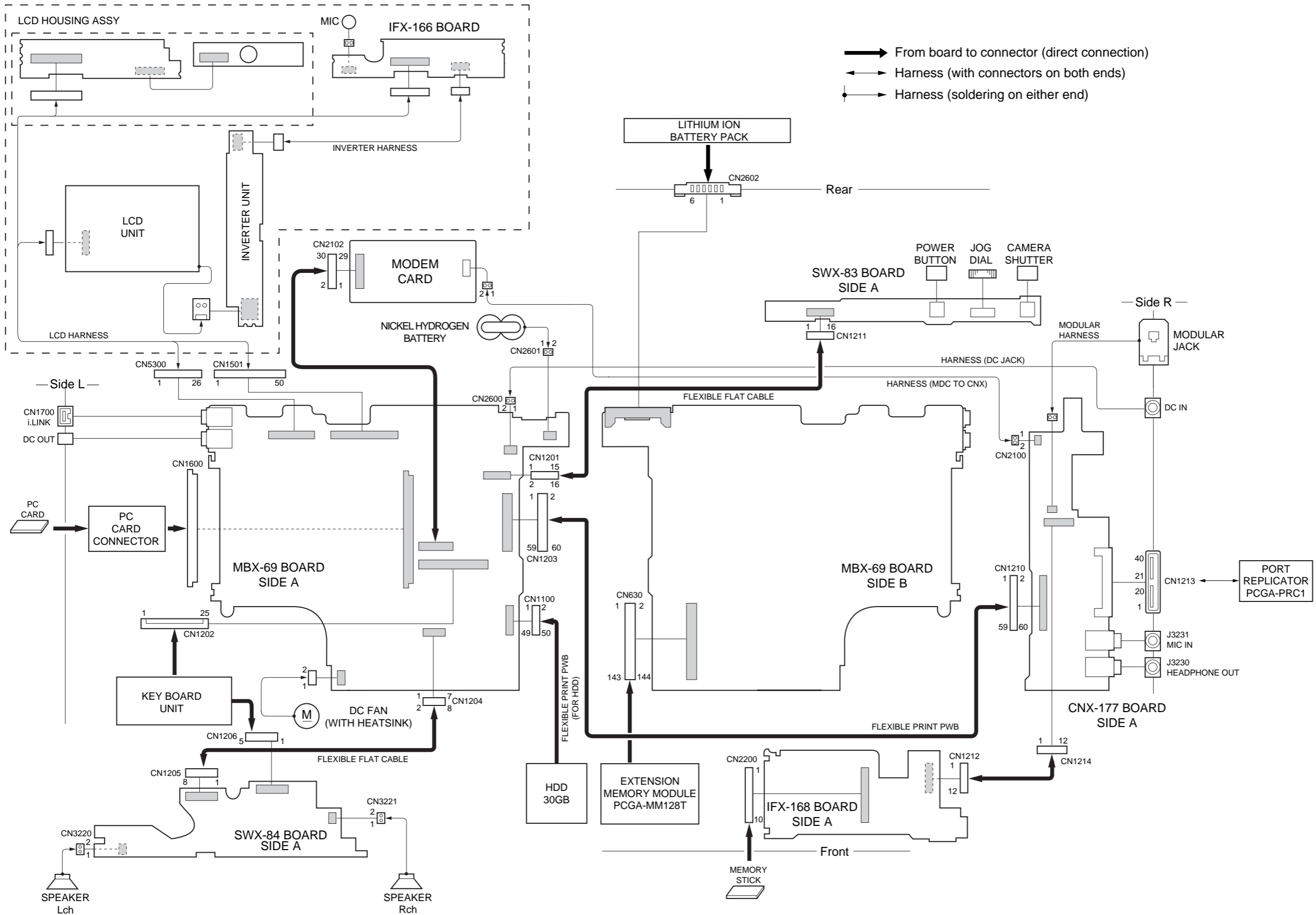
# CHAPTER 1. BLOCK DIAGRAM



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# CHAPTER 2.

## FRAME HARNESS DIAGRAM



# CHAPTER 3.

## EXPLODED VIEWS AND PARTS LIST

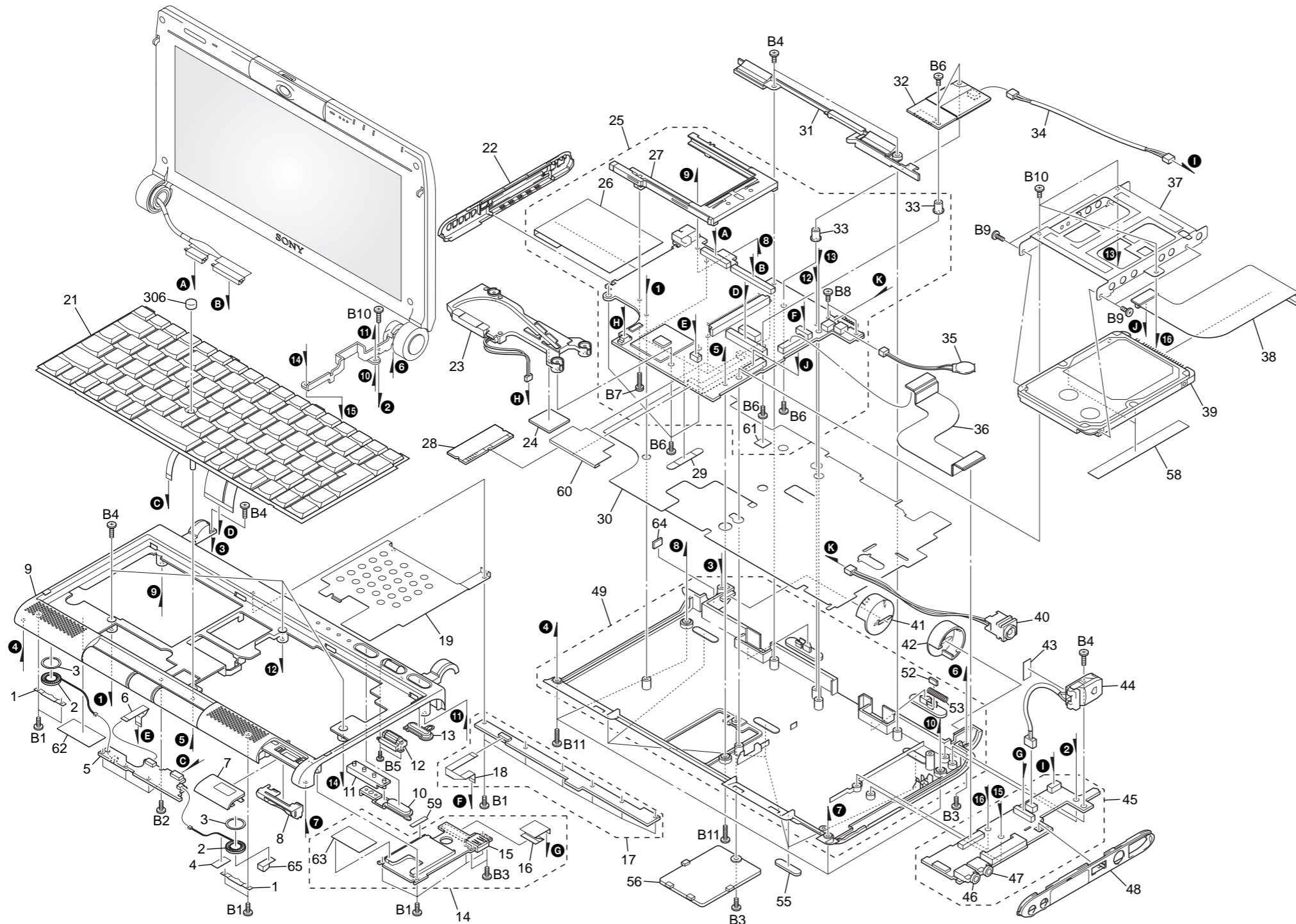
### NOTE:

- 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  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

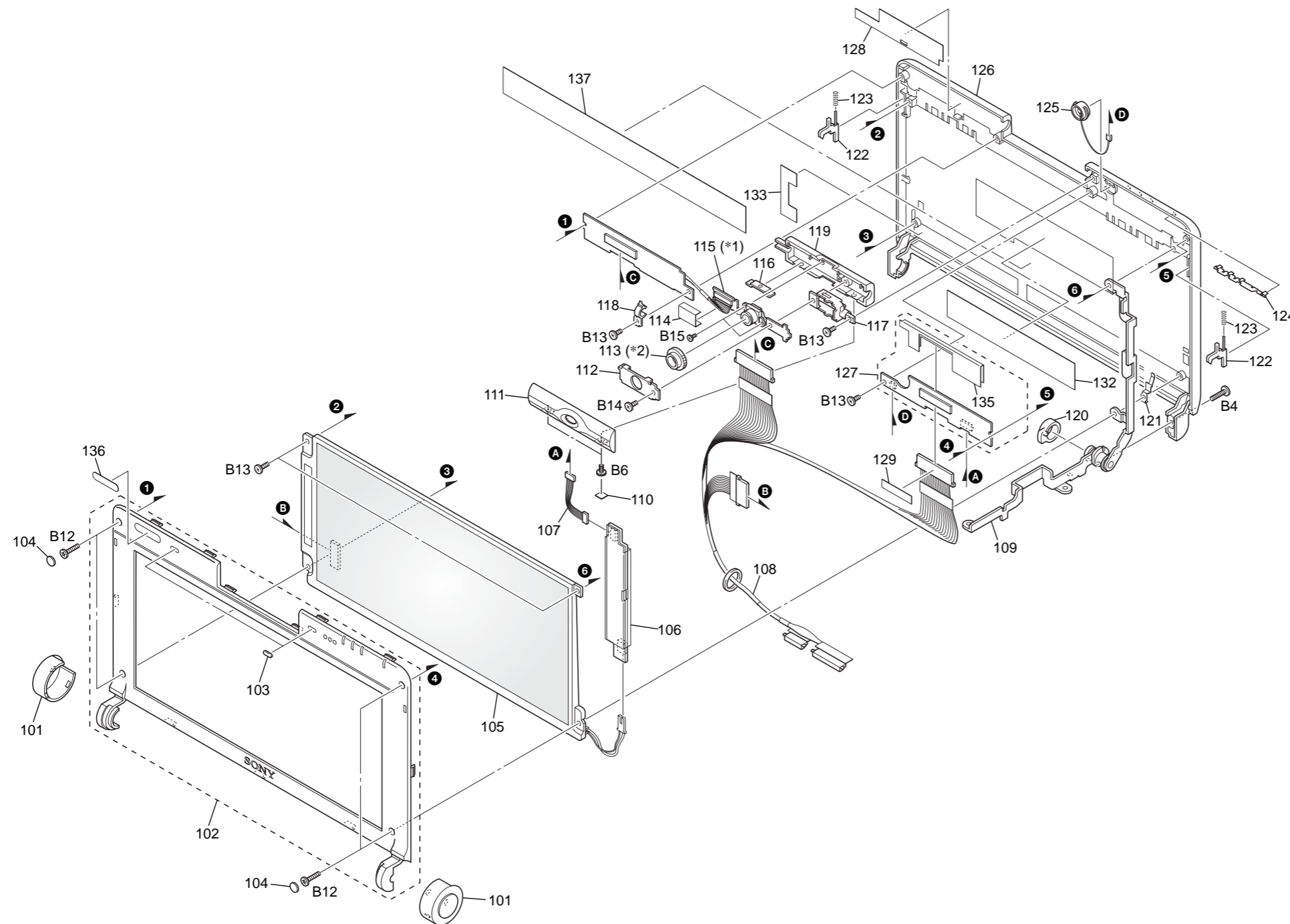
Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

### 3-1. Main Section



Ref.No.	Part No.	Description	Ref.No.	Part No.	Description
1	4-655-327-01	RETAINER, SPEAKER	16	1-823-465-11	FFC 12P
2	1-544-951-11	LOUD SPEAKER	17	A-8067-126-A	SWX-83 NON-BT ASSY (S)
3	4-643-073-11	SHEET (SPEAKER), ADHESIVE	18	1-823-466-11	CABLE, FLEXIBLE FLAT 16P
4	4-641-838-01	CUSHION (SP)	* 19	4-656-219-01	HEAT SINK
5	A-8067-402-A	MOUNTED PWB SWX-84	21	1-476-912-42	KEYBOARD UNIT (US)
6	1-823-467-11	CABLE, FLEXIBLE FLAT 8P	22	X-4623-997-1	ESCUTCHEON (L) SUB ASSY
7	4-655-318-01	WINDOW, MS	23	1-763-741-11	FAN, DC (WITH HEAT SINK)
8	X-4623-996-2	ESCUTCHEON (MS) SUB ASSY	24	4-654-350-01	SHEET (CPU), THERMAL
9	X-4623-814-7	SUB ASSY PALMREST (B)	25	A-8067-483-A	MBX-69 2290U ASSY (S)
10	4-655-346-01	BUTTON, POWER	26	4-655-344-02	SHEET (PC CARD), INSULATING
11	4-655-314-01	LENS (KEYBOARD), LED	27	1-793-637-31	CONNECTOR, PC CARD (EJECTOR)
12	1-476-762-61	ENCODER (ROTARY)	28	6-701-830-01	IC M463S1654CT1-L7A
13	4-655-460-01	BUTTON, CAPTURE	29	4-658-557-01	SHEET (FAN), INSULATING
14	A-8066-887-A	COMPLETE PWB IFX-168	30	4-655-345-01	SHEET (BOTTOM), INSULATING
15	1-793-100-11	CONNECTOR, USB	31	4-655-333-02	COVER, BATTERY CONNECTOR
			32	1-761-457-11	CARD, MODEM
			33	4-655-326-01	OFF, STAND
			34	1-961-397-11	HARNESS (MDC TO CNX)
			35	1-468-624-11	BATTERY, VANADIUM-LITHIUM
			36	1-761-449-11	PWB, FLEXIBLE PRINT
			* 37	4-655-311-01	BRACKET, HDD
			38	1-761-452-11	PWB, FLEXIBLE PRINT (FOR HDD)
			39	A-8059-344-A	ASSY HDD 30GB (T, 20, F) (S)
			40	1-961-370-11	HARNESS (DC POWER)
			41	4-643-040-11	COVER (L), MAIN
			42	4-643-041-11	COVER (R), MAIN
			43	4-658-021-01	SHEET (MODULAR), INSULATING
			44	1-961-414-11	HARNESS (MODEM)
			45	A-8067-232-A	COMPLETE PWB CNX-177
			46	1-694-760-21	JACK, SMALL TYPE (HEAD PHONE)
			47	1-694-760-31	JACK, SMALL TYPE (MIC)
			48	X-4623-882-2	ESCUTCHEON (R) SUB ASSY
			49	X-4623-815-2	CABINET SUB ASSY, BOTTOM
			52	4-636-934-01	SPACER (SPRING)
			53	4-635-956-01	SPRING (B), COMPRESSION COIL
			55	4-650-469-01	FOOT
			56	4-655-339-01	LID, MEMORY
			58	4-659-658-01	CUSHION (HDD)
			59	4-659-659-01	GASKET (IFX)
			60	4-659-656-02	SHEET (MBX), INSULATING
			61	4-659-657-01	CUSHION (MDC)
			62	4-659-774-01	CUSHION (FAN)
			63	4-659-683-02	SHEET (MS), BLIND
			64	4-645-941-11	GASKET (RING)
			65	4-661-192-02	GASKET (SPEAKER)
			B1	4-639-112-31	SCREW M2X4
			B2	4-657-192-01	SCREW, TAPPING, SPECIAL (2X3)
			B3	4-645-214-01	GRIP, M2 (2X3)
			B4	4-645-214-21	GRIP, M2 (2X5.5)
			B5	3-930-461-11	SCREW (DIA. 1.4X3.5),PRECISION
			B6	4-656-239-01	M2 SCREW (2X3)
			B7	7-628-253-35	SCREW +PS 2X8
			B8	4-641-726-61	SCREW (M2), SPECIAL HEAD (2X5)
			B9	4-635-301-01	SCREW M3X4
			B10	4-659-702-01	SCREW (M2 (EG)), +PS (2X4)
			B11	4-644-637-21	GRIP, M2 EG (2X7)

### 3-2. LCD Section



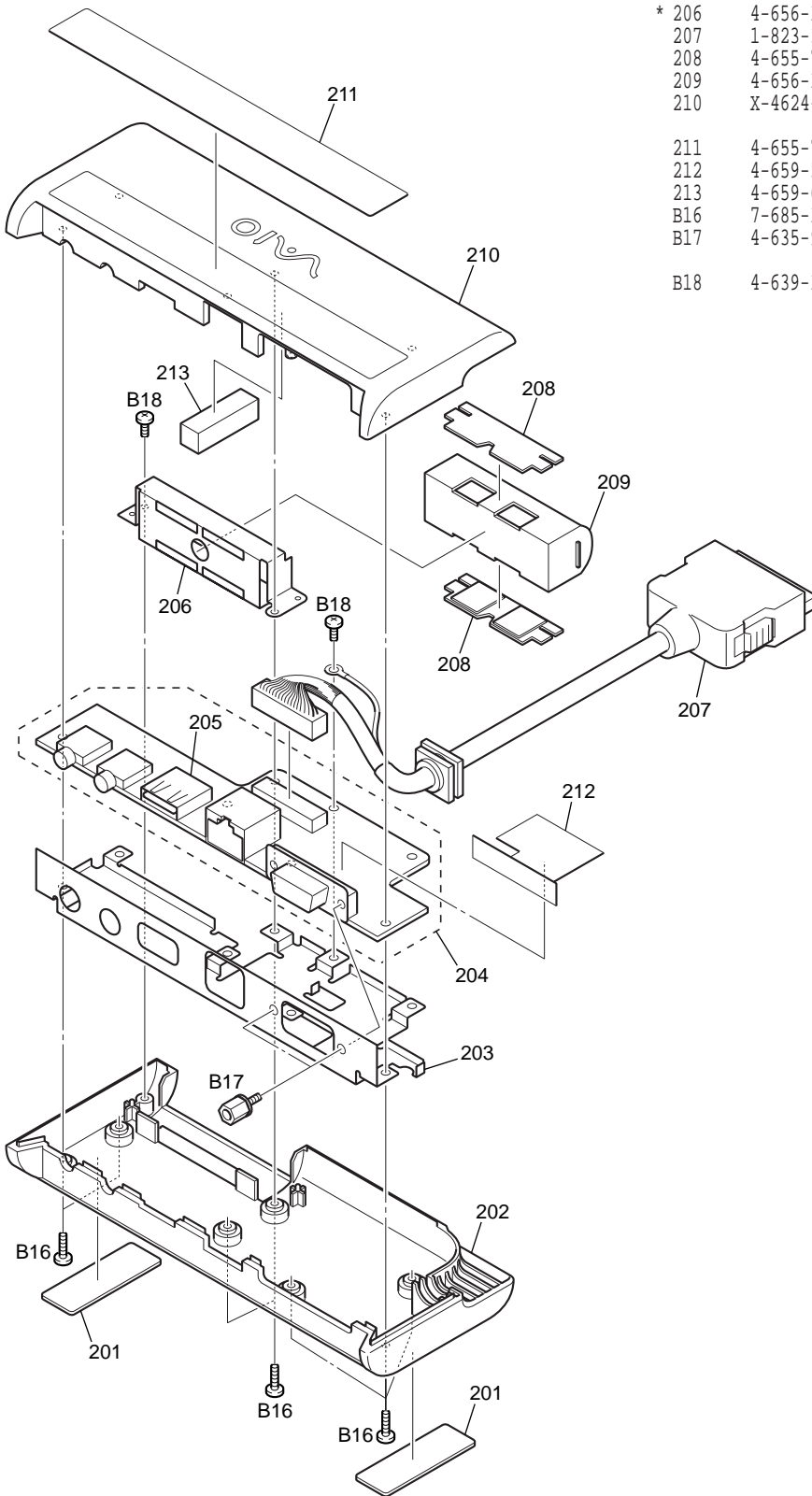
Ref.No.	Part No.	Description
101	X-4623-818-2	COVER SUB ASSY, HINGE
102	X-4623-812-3	BEZEL SUB ASSY (B), LCD
103	4-646-976-11	CUSHION (LATCH)
104	4-643-078-11	RUBBER (UNDER), BLIND
105	A-8067-128-A	LCD 8.9WSXGA ASSY (S)
106	1-476-913-11	INVERTER UNIT
107	1-961-294-11	INVERTER HARNESS (6PIN)
108	1-961-422-12	LCD HARNESS
109	4-655-335-01	HINGE (L)
110	4-655-343-01	PLATE (CAMERA), ORNAMENTAL
111	X-4623-813-1	COVER SUB ASSY, CAMERA
112	4-655-341-01	HOLDER, RING
113	4-655-336-01	RING, FOCUS
114	4-656-886-01	SHEET (CAMERA), PROTECTION
115	A-8067-127-A	CCD BCX-SD23 ASSY (S)
116	4-655-347-01	NUT PLATE
117	4-655-334-01	HINGE (C)
118	4-655-445-01	BEARING (C)
119	4-655-323-01	CABINET, CAMERA
120	4-655-330-02	DETECTOR
121	4-656-052-01	PLATE (SMALL), GROUND
122	4-655-340-01	LATCH
123	4-656-237-01	SPRING, COMPRESSION
124	4-655-316-13	LENS (HOUSING), LED
125	1-542-472-11	MICROPHONE, ELECTRET CONDENSER
126	X-4623-816-5	HOUSING SUB ASSY (B)
127	A-8067-124-A	IFX-166 NON-BT ASSY (S)
128	4-660-539-01	SHEET (CAMERA), ESD
129	4-661-726-02	SHEET (KEL), ADHESIVE
132	4-659-134-01	CUSHION (HOUSING)
133	4-659-655-01	SHEET (EMI), HINGE
135	4-659-652-03	SHEET (IFX-166), INSULATING
136	4-663-885-01	(C1MW)...LABEL (ID)
136	4-663-885-11	(C1MWP)...LABEL (ID)
137	4-667-078-01	SHEET, LCD
B4	4-645-214-21	GRIP, M2 (2X5.5)
B6	4-656-239-01	M2 SCREW (2X3)
B12	4-653-582-21	SCREW M2 (NE) (2X6)
B13	4-653-582-31	SCREW M2 (NE) (2X4)
B14	4-645-497-21	SCREW (M2.6), CROSS (HOLE) BIND
B15	3-318-382-31	SCREW (1.7X3), TAPPING

\*1 Do not dismantle the CCD BCX-SD23 assy (Ref. 115).  
For example, removing the connector.

\*2 When mounting the focus ring (Ref. 113), align markings of camera (side of gear) and groove of focus ring.  
If disintegrated, do not turn focus ring (Ref. 113).  
Focus adjustment is off.

### 3-3. Port Assy Section

Ref.No.	Part No.	Description
201	4-655-763-01	FOOT, RUBBER
202	4-655-758-02	CABINET (LOWER)
* 203	4-655-760-01	PLATE, CONNECTOR
204	A-8066-914-A	COMPLETE PWB CNX-147
205	1-794-548-11	CONNECTOR, USB (A)
* 206	4-656-128-01	BRACKET
207	1-823-344-13	CABLE, I/F
208	4-655-761-01	HOLDER, CONNECTOR
209	4-656-127-02	ESCUTCHEON (CONNECTOR)
210	X-4624-077-2	CABINET (UPPER) SUB ASSY
211	4-655-762-01	LABEL, CONNECTOR
212	4-659-565-01	SHEET (PORT REPLICATOR)
213	4-659-666-01	GASKET
B16	7-685-105-14	TAPPING +P 2X8 NON-SLIT
B17	4-635-966-01	SCREW (HEX)
B18	4-639-112-01	SCREW M2X4

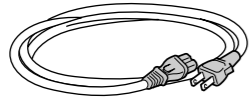


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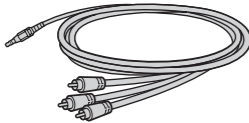


### 3-4. Accessories

**301  
Power Cord**



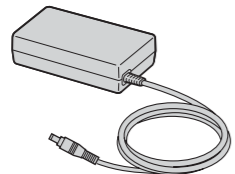
**303  
AV Connecting Cable**



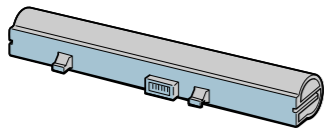
**306  
Spare Cap  
(for Stick)**



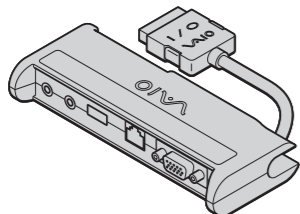
**307  
AC Adaptor**



**308  
Battery Pack**



**309  
Port Replicator**  
\*Refer to "3-3. Port Assy Section"



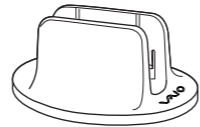
**312  
i Link Connecting Cable**



**313  
Clamp**



**314  
Stand**



**315  
CD-RW/DVD-ROM Drive  
(PCGA-CRWD2)**



\* The CD-RW/DVD-ROM Drive itself does not have the Part No. Refer to the PCGA-CRWD2 Service manual (9-874-566-01).

Because only the 312 i Link Connection Card is required for connection with a computer, the Following parts are not supplied with the CD-RW/DVD-ROM drive.

- 1-476-940-21 ADAPTOR, AC
- 1-757-562-31 CORD, POWER
- 1-790-763-21 CORD, CONNECTION
- 4-663-161-11 MANUAL, INSTRUCTION
- 4-663-751-11 MANUAL, INSTRUCTION (FIRST)

Ref.No.	Part No.	Description
ACCESSORIES *****		
△ 301	1-757-562-31	CORD, POWER
303	1-757-673-12	CORD, CONNECTION
306	4-655-329-01	CAP (IN BAG), SENSOR
△ 307	1-476-942-31	ADAPTOR, AC
308	A-8067-449-A	BP51A/L (U) ASSY (S)
309	—	PORT ASSY
312	1-823-439-11	CORD, I LINK CONNECTION
313	4-657-363-01	CLAMP
314	X-4625-087-1	STAND ASSY
	4-665-258-01	QUICK START, 2290U

LOOK AT EXPLODED VIEWS OF THE PART  
\*\*\*\*\*

315 PCGA-CRWD2

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.

**List of PCG-C1 Series for American Area  
(As of June, 2002)**

<b>Model</b>	<b>Service Manual Parts No.</b>
PCG-C1XS	9-872-053-11
PCG-C1VN	9-872-126-11
PCG-C1VP PCG-C1VPK	9-874-422-11
PCG-C1MV PCG-C1MV/M PCG-C1MVP PCG-C1MVP/M	9-874-449-01
PCG-C1MW PCG-C1MWP	9-874-577-01



: Additional Model

American Area : North, Central and South Americas

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# Revision History

Suffix	Ver.	Date	Contents	QM No.
-01	Ver. 1	2002.06.24	First Edition	
<Remarks>				