

JVC

SERVICE MANUAL

Mobile mini note PC

MP-XP7220KR,MP-XP5220KR



Area Suffix

KR ----- Korea



TABLE OF CONTENTS

1	SPECIFIC SERVICE INSTRUCTIONS	1-2
1.1	Disassembly procedure	1-2
1.2	Preinstallation procedure	1-7
1.3	Caution in exchanging a bottom case	1-8
1.4	Replace procedure of main board	1-8
1.5	Operation check item list after the repair is completed	1-9
1.6	Another sales option list	1-9

SECTION 1

SPECIFIC SERVICE INSTRUCTIONS

1.1 Disassembly procedure

1.1.1 Removing the internal battery (See Figure 1)

Prior to performing the following procedure, remove the external battery.

- (1) Remove one screw **A** on the bottom of the main body.
- (2) Pull out the internal battery in the rear direction.

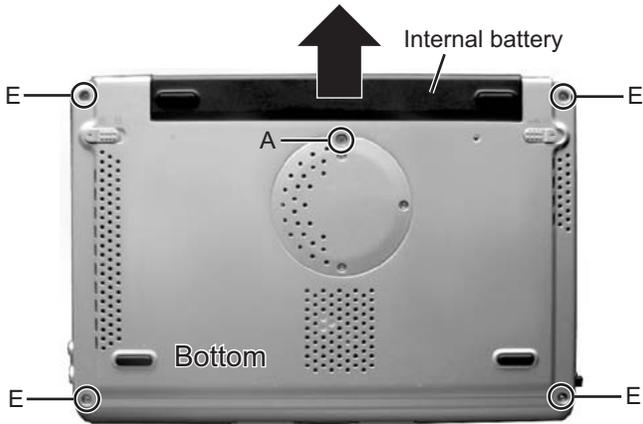


Fig.1

1.1.2 Removing the keyboard assembly (See Figure 2 ~ Figure 4)

- (1) Push the three latches (**a**) in the upper part of the keyboard with a single-slotted screwdriver or a flat screwdriver, and lift the keyboard.
- (2) Disconnect the wires from connectors **CN4** and **CN1** on the mother board respectively.

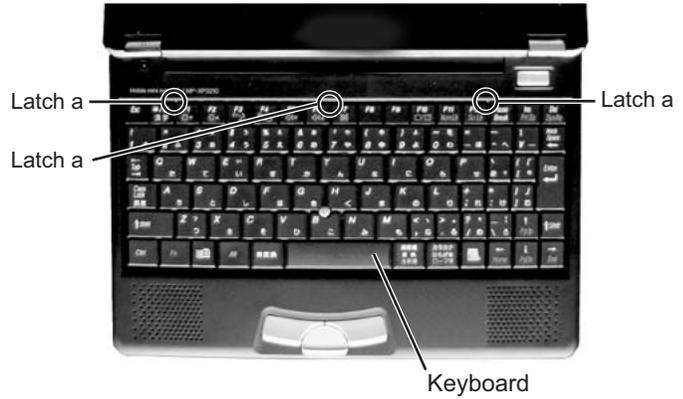


Fig.2

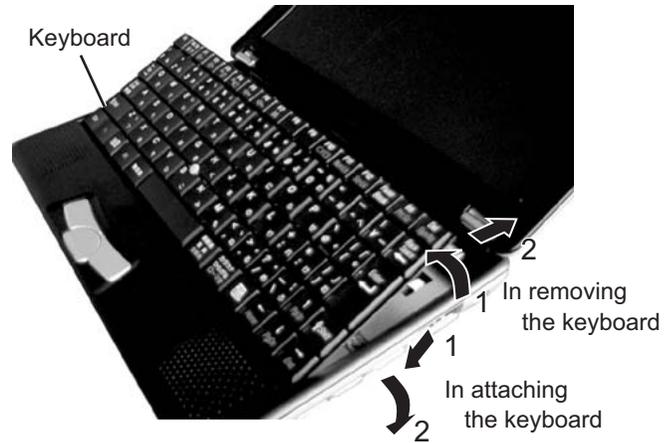


Fig.3

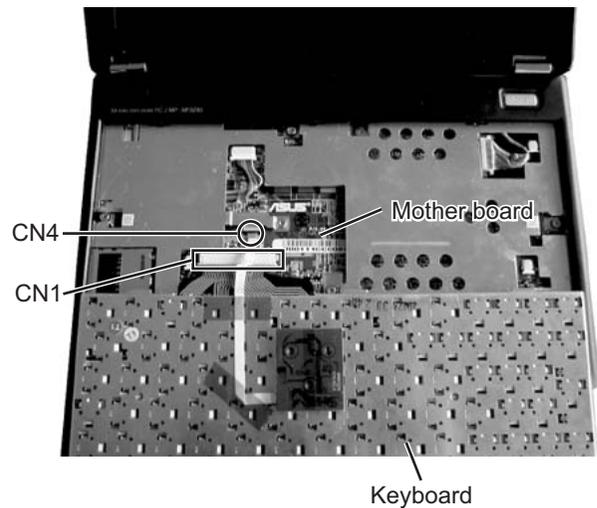


Fig.4

1.1.3 Removing the top case and LCD panel assembly (See Figure 1 and Figure 5 ~ Figure 8)

- Prior to performing the following procedure, remove the keyboard assembly.

(1) Insert a single-slotted screwdriver or a flat screwdriver in a space **b** on the underside of the hinge cover. Then, remove the hinge cover by pulling the screwdriver in the direction indicated by the arrow.

And then, remove one more hinge cover at the other side of the main body.

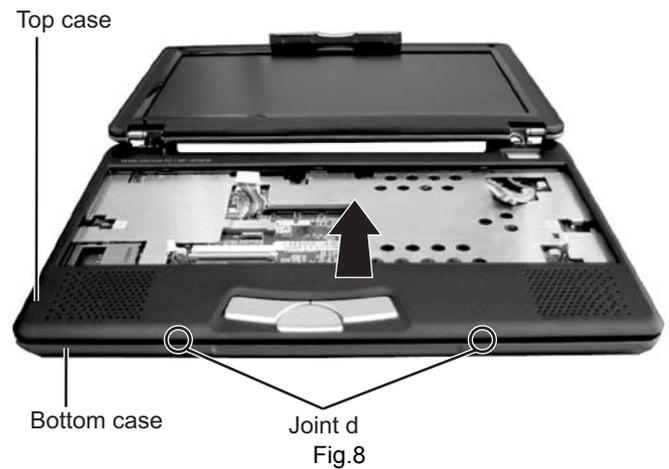
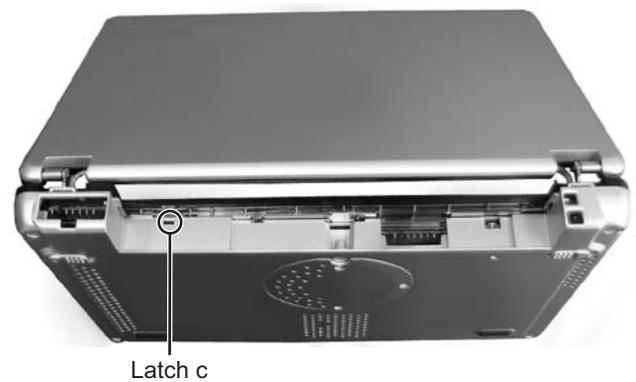
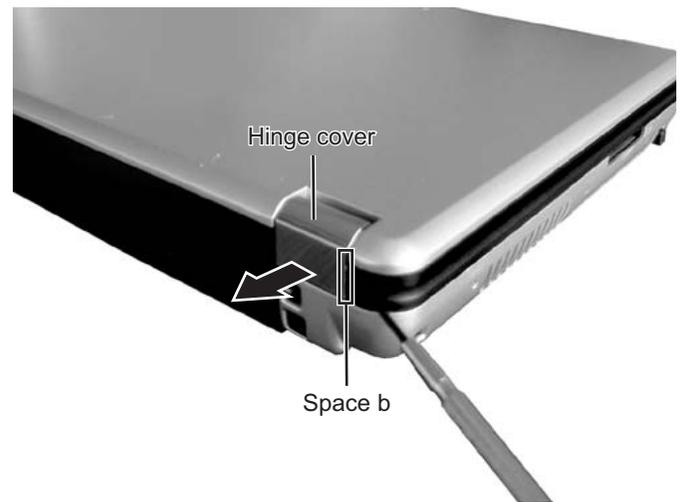
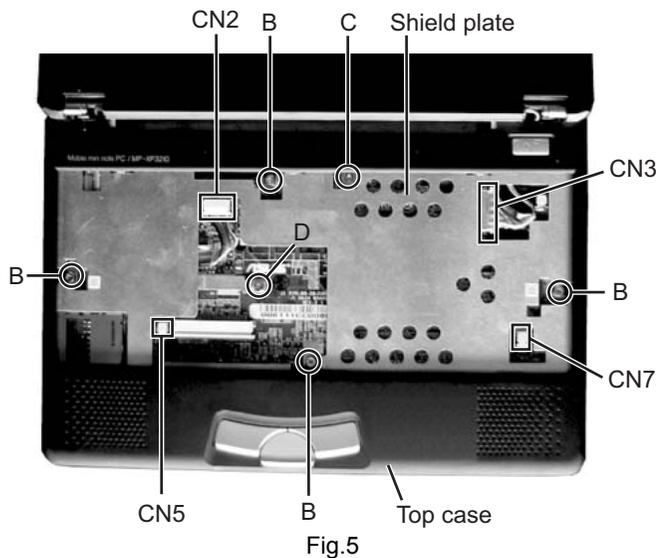
(2) Remove the four screws **B** attaching the top case.

(3) Remove one screw **C** (short) and one screw **D** (long) attaching the shield plate.

(4) Reverse the main body, and remove the four screws **E** on the bottom of the main body. (See Figure 1)

(5) Disconnect the connector wire from the connector CN2 on the mother board. Similarly, remove the connector wires from the connectors CN3, CN5, and CN7.

(6) Remove one latch **c** on the rear side of the main body, and release the two joints **d** while moving the top case in the rear direction.



**1.1.4 Removing the mother board
(See Figure 9 ~ Figure 11)**

- Prior to performing the following procedure, remove the keyboard assembly, the top case, and the LCD panel assembly.
 - (1) Remove one screw **F** (short), one screw **G** (middle), and the two screws **H** (long) attaching the mother board.
 (*In attaching the mother board, tighten **H₁**, **H₂**, **G**, and **F** in this order.)
 - (2) Lift the mother board while pushing the microphone and headphone jack in the direction indicated by the arrow, and remove the mother board.
 *Be careful not to damage the battery detector switch on the backside of the mother board.
- * In attaching the mother board, put the lever of the PCMCIA slot through the bottom case, and then push and attach the microphone and headphone jack.

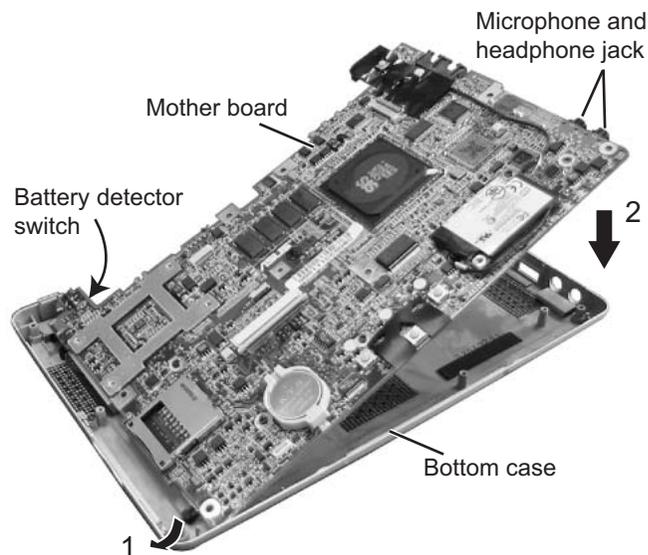


Fig.11

Caution

In attaching the mother board to the bottom case or in attaching the top case to the bottom case, soft workbench must not be used because it may distort the bottom case and the top case. Attachment operation must be performed on workbench hard enough.

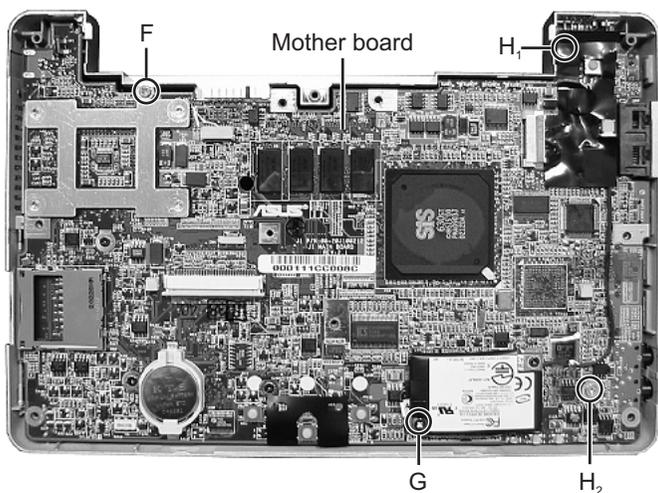


Fig.9

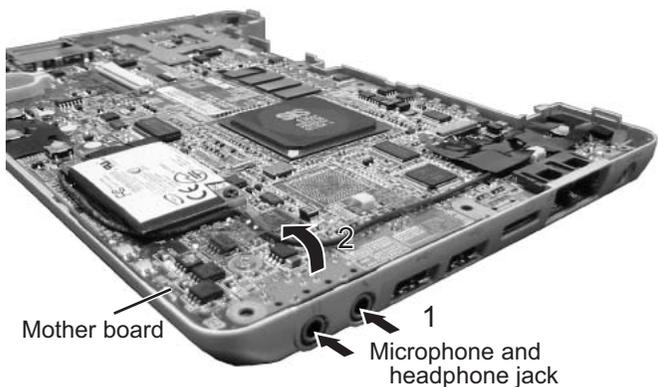


Fig.10

1.1.5 Removing the parts on the mother board (See Figure 12 ~ 15)

- Prior to performing the following procedure, remove the mother board.

*Removing the fan assembly

- (1) Remove the four screws **I** attaching the fan assembly.
- (2) Disconnect the connector wire from the connector CN13 on the mother board.

*Removing the hard disc drive

- (1) Remove one screw **J** at the side of the mother board where the hard disc drive is not attached.
- (2) Remove the hard disc drive by moving the hard disc drive in the direction indicated by the arrow.

*Removing the PCMCIA slot

- (1) Remove one screw **K** (long) and the two screws **L** (short) at the side of the mother board where the PCMCIA slot is not attached.
- (2) Hold and lift the connector side of the PCMCIA slot, and remove the PCMCIA slot.

*Removing the modem pack

- (1) Remove one screw **M** attaching the modem pack.
- (2) Pull out the socket wire connected to the modem pack.
- (3) Lift the modem pack, and remove it.

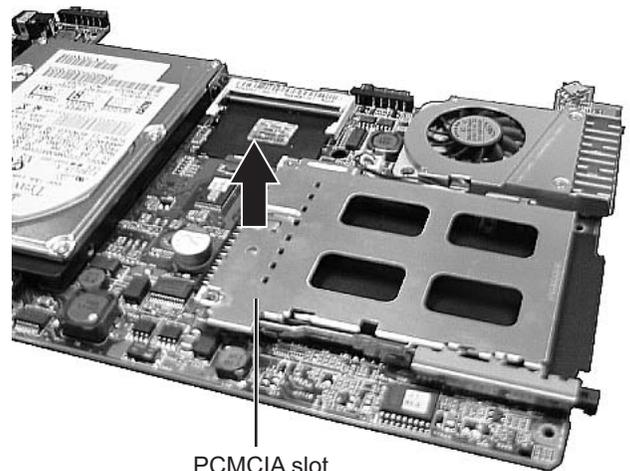


Fig.14

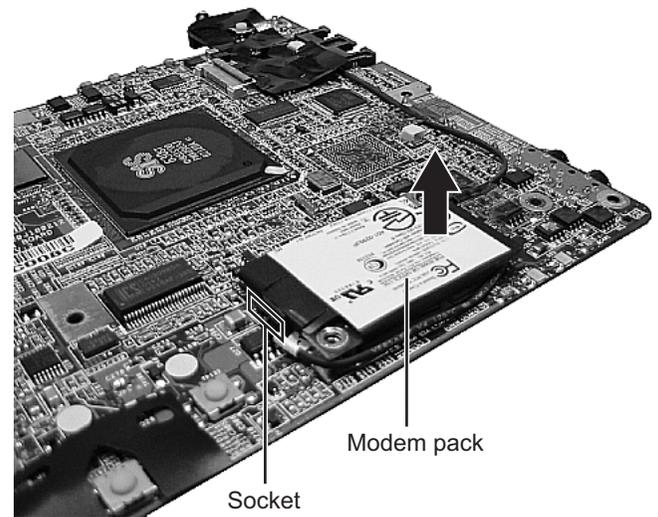


Fig.15

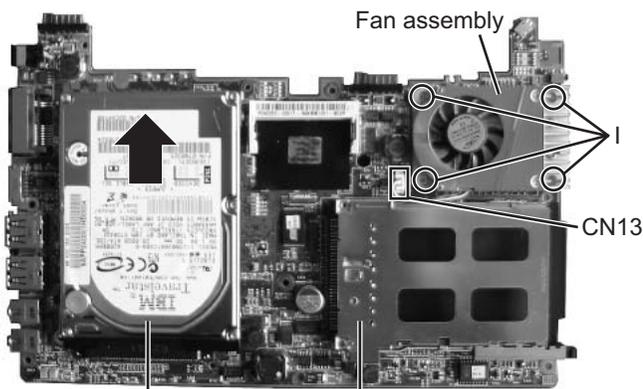


Fig.12

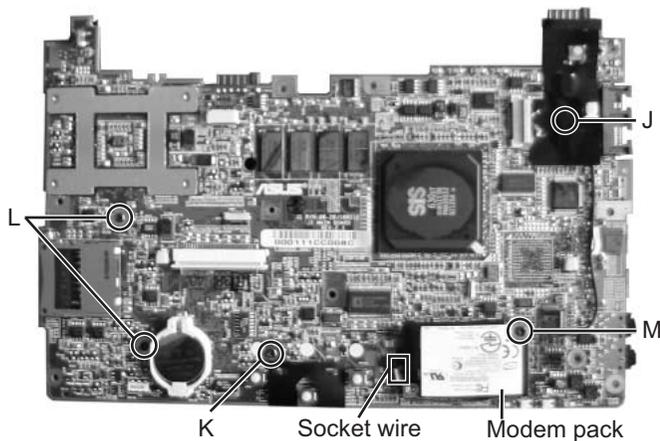


Fig.13

1.1.6 Removing the top case and the LCD panel assembly (See Figure 16)

- Prior to the following procedure, remove the top case and the LCD panel assembly from the bottom case.
 - Remove the two screws **N** attaching the hinge.
 - Remove the tapes fixing the two wires of the LCD panel assembly if necessary.

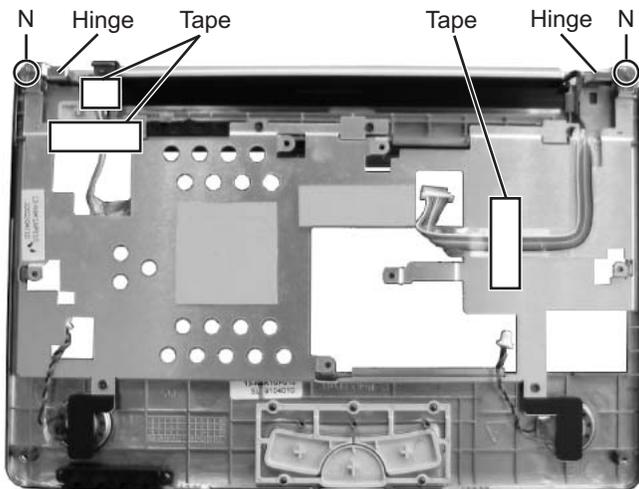


Fig.16

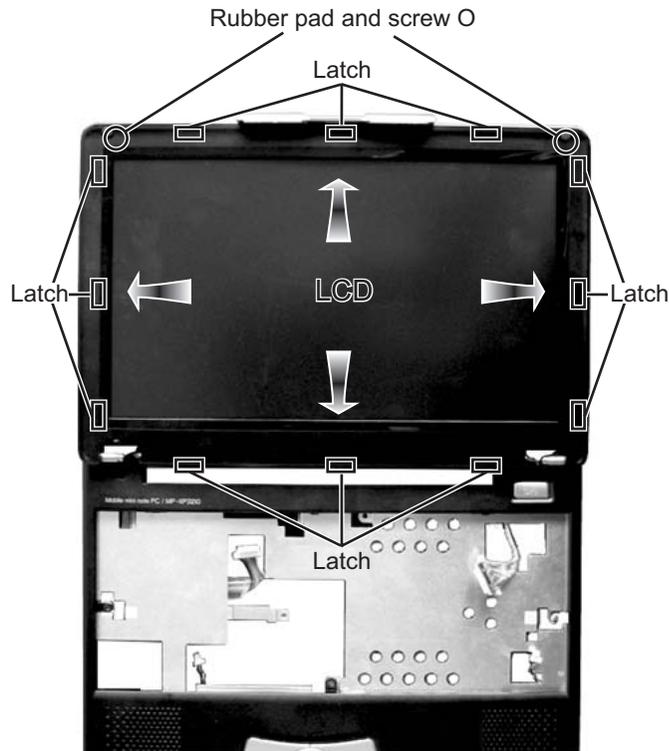


Fig.17

1.1.7 Removing the LCD panel (See Figure 17 and Figure 18)

- Prior to the following procedure, remove the LCD panel assembly.
 - Remove the two rubber pads (fixed to the panel with adhesive tapes) by using a sharp tool.
 - Remove the two screws **O** attaching the LCD panel frame.
 - Lift and the centers of the four sides of the LCD panel from inside to an outward direction. (It is soft enough to be lifted.) Then, latches in the centers of the four sides and also other latches are removed. To remove all the latches, lift the four sides from inside to an outward direction.
 - * Be careful not to damage the LCD or apply any stress to the LCD.
 - Remove the two screws **P** attaching the LCD.
 - Remove one screw **Q** attaching the inverter board, and disconnect the socket wire from the connector **CN2** on the inverter board.

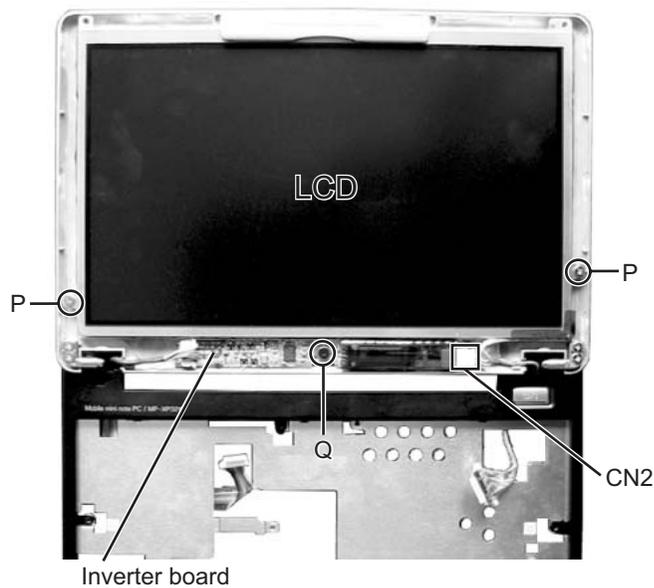


Fig.18

1.2 Preinstallation procedure

**No data including Windows XP has been recorded in service parts HDD.
It is necessary to put data in HDD after HDD is replaced.**

< The following materials are needed >

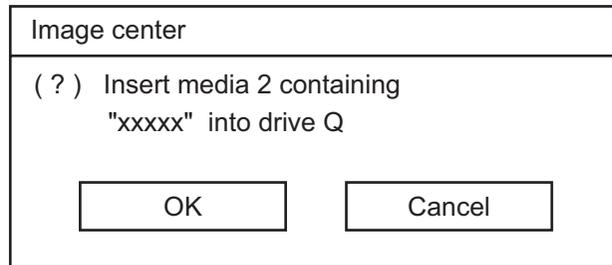
- *CD-ROM drive (model name MP-CDX1E)
- *CD for installing HD Image (a set of five CDs)

<Procedure>

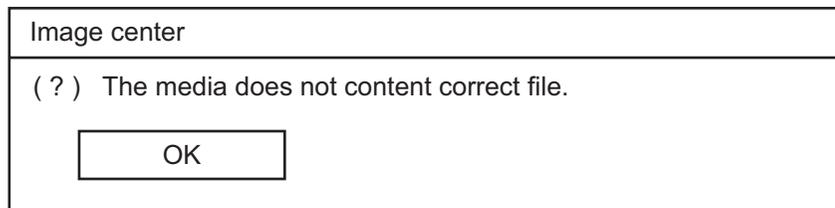
- (1) Connect CD-ROM drive (model name MP-CDX1E) and the Mobile Mini Note PC by using PC card slot.
- (2) Insert the 1st CD for installing HD Image in CD-ROM drive.
- (3) Push a power supply button.

The 1st CD starts its operation, and then installation starts.

After a while, the 1st CD finishes its operation. Then, the following message is displayed.



- (4) Take out the 1st CD inside the CD-ROM drive.
 - (5) Insert the 2nd CD in CD-ROM drive.
 - (6) Click "OK" button.
After a while, the 2nd CD finishes its operation.
Then, the message "Please insert the next CD." is displayed in the same way as in the 1st CD.
 - (7) In the same way as in the 1st and the 2nd CD, insert each 3rd, 4th, and 5th CD in this order and install them.
 - (8) When the 5th CD finishes to be installed, push a power supply button and turn the power off.
- * When the following error message is displayed, perform the procedure again from Procedure 1 started above.



1.3 Caution in exchanging a bottom case

1.3.1 As for COA LABEL

Neither "LE40888-001A/COA LABEL PRO" nor "LE40888-002A/COA LABEL HOME" can be reused. COA LABEL is also necessary in exchanging a bottom case.

1.3.2 As for serial label

"Serial label" where model name and serial number are written is not dealt with as service parts.

Please reuse it.

Please remove a label with exfoliation agent:

Parts number -- UN-001

Parts name ---- SUBSIDIALLY MATERIAL

*How to remove a label

- (1) Drip a few drops of exfoliation agent on an attached spatula.
- (2) Immediately after (1), turn over the label from its edge with the spatula while dripping the exfoliation agent on a label by using the spatula.
- (3) If adhesive agent still remains in the surface of the bottom case, please drip a few drops of exfoliation agent on the agent and wipe it with clean tissue paper.

1.4 Replace procedure of main board

1.4.1 Parts are put and substituted from former main board to a new main board.

- * The [15-100324200 / AWARD BIOS LABEL] is pasted and substituted.
- * The [13-N6K10P220 / SD DUMMY CARD] is replaced.
- * The [07-016402032 / BATT-LI] is put and substituted.
- * The [04-132051170 / MODEM 56K] is put and substituted.
- * The [14-140522020 / WIRE CABLE FOR MDC] is put and substituted.
- * The [HDD] is put and substituted.
- * The [13-N6K10M122 / FAN HEAT SINC BLOCK] is put and substituted.
- * The [04-001212250 / SDRAM] is put and substituted. (Only when SDRAM is installed)
- * The [13-N6K10C020 / GASKET] is pasted and changes.
- * The [13-N6K10L252 / COAXIAL MYLAR] is pasted and changes.
- * The [13-N6K10L160 / THERMAL PAD RAM] is pasted and changes.

1.4.2 Adjust it after exchanging the substrate.

- * Make the version of BIOS equal to former main board.
The version of BIOS of a new main board is 0200.
Follow it when the up-grade of BIOS is hoped to the customer.
- * Set the clock of BIOS.
Because the coin type battery has not placed to the main board, the clock is not accurate.

1.4.3 Do the operation check after exchanging the substrate.

Execute the operation check following "Operation check item list after the repair is completed".

1.5 Operation check item list after the repair is completed

	Item	Contents	Required equipment
1	IEEE1394	Is connected with IEEE1394 port the Digital video camera and do recognize it?	Digital video camera made of our company.
2	SD CARD	Is connected with SD card slot the SD card and do recognize it?	SD card on the market.
3	PC CARD	Check whether PC card operates properly when it is connected to PC card slot for Card Bus. Check whether PC card operates properly when option CD-ROM drive is inserted in PC card slot.	PC card corresponding to Card Bus on the market. (Example:100Mbase-T LAN card) CD-ROM drive of option.
4	USB	Is connected with USB the Digital video camera and do recognize it? Is connected with USB the mouse and do recognize it?	Digital video camera made of our company. USB mouse on the market.(Transfer rate:Low)
5	MIC	Is connected with the MIC terminal a MIC on the market, and is recognized it?	MIC on the market.
6	HEADPHONE	Is connected with the headphone terminal a headphone on the market, and is recognized it?	Headphone on the market.
7	LAN	Do connect with the network, and do recognize it?	Network
8	MODEM	Can the telephone line be connected, and it connect it with the Internet?	Telephone line.PPP account to connect dial-up with the Internet.
9	VGA	Does it connect with the monitor, and is the image displayed?	Monitor for PC VGA Cable (Provision)
10	DC in	Can AC be driven?	General power supply
11	BATTERY	Is the outer battery recognized?	Outer battery
12	LID SWITCH	Does the LID switch work?	
13	RESET	Is RESET effective?	
14	KEYBOARD	Is the key input effective?	
15	STICK	Is the STICK effective?	
16	SPEAKER	Is the sound emitted from both channels of the speaker?	
17	RUNNING	Is not there trouble after it playback by using Windows media player for continuousness eight hours?	

1.6 Another sales option list

Product category	Model name	Note
BATTERY CHARGER	MP-BCX1E	
Lithium-Ion BATTERY	BN-LS12E	Same as attached goods of the main body.
Lithium-Ion BATTERY	BN-LL21E	
CD-ROM DRIVE	MP-CDX1E	
EXTERNAL DISPLAY CABLE	MP-VGX1E	
CARRYING BAG	MP-BGX2E	



VICTOR COMPANY OF JAPAN, LIMITED
AV & MULTIMEDIA COMPANY MOBILE IT CATEGORY 1644, Shimotsuruma, Yamato, Kanagawa 242-8514, Japan

(No.G1004)