

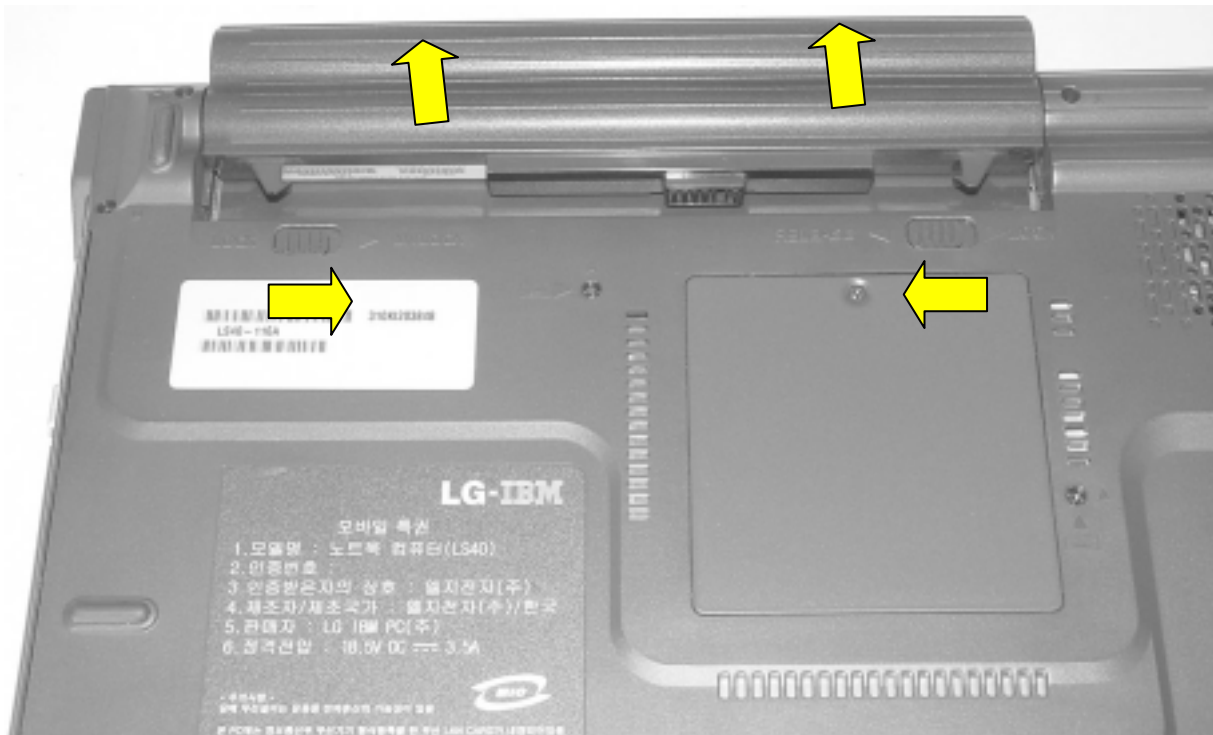
# **Service Manual**

**(LS40, LS50)**

**LG Electronics**

## 1010 Battery Pack

1. Push the battery latch in the direction shown below; then slide the battery pack out of the slot.

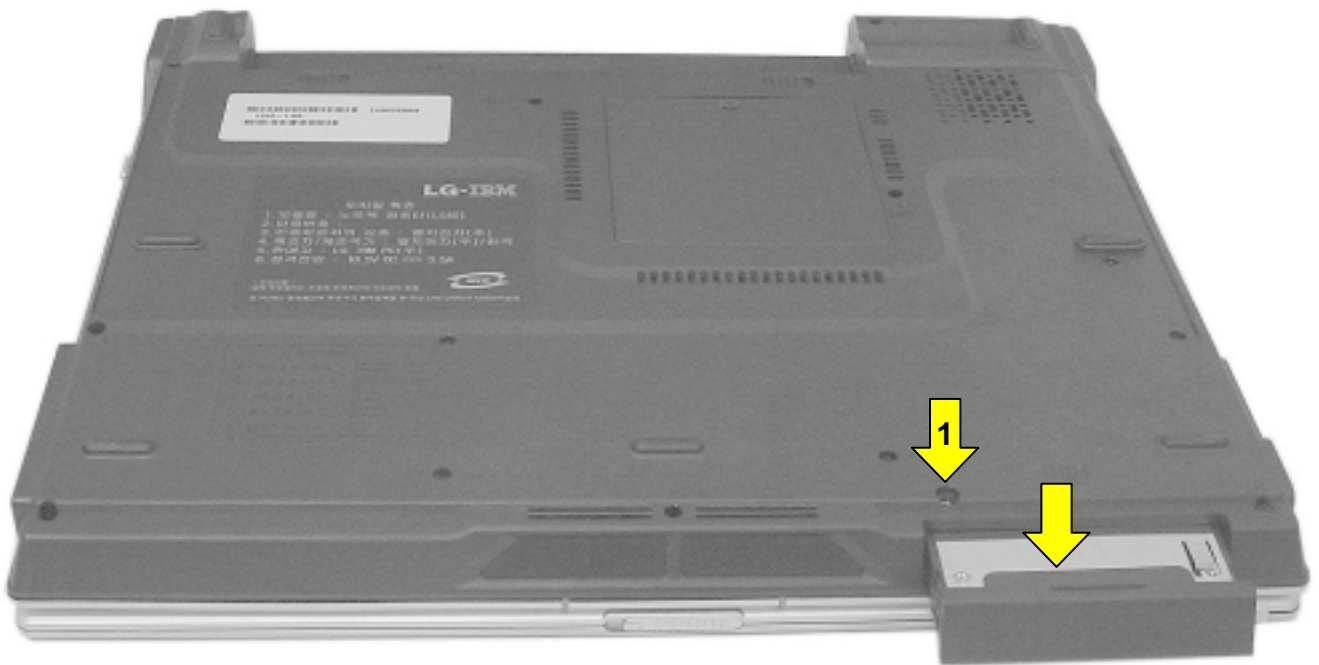


# Removing and replacing a part (FRU)

## 1020 Hard Disk Drive

⚠ Remove the battery pack (1010) before replacing this part

1. Remove a screw as indicated in the picture, then pull the HDD Assy out in the direction shown below.

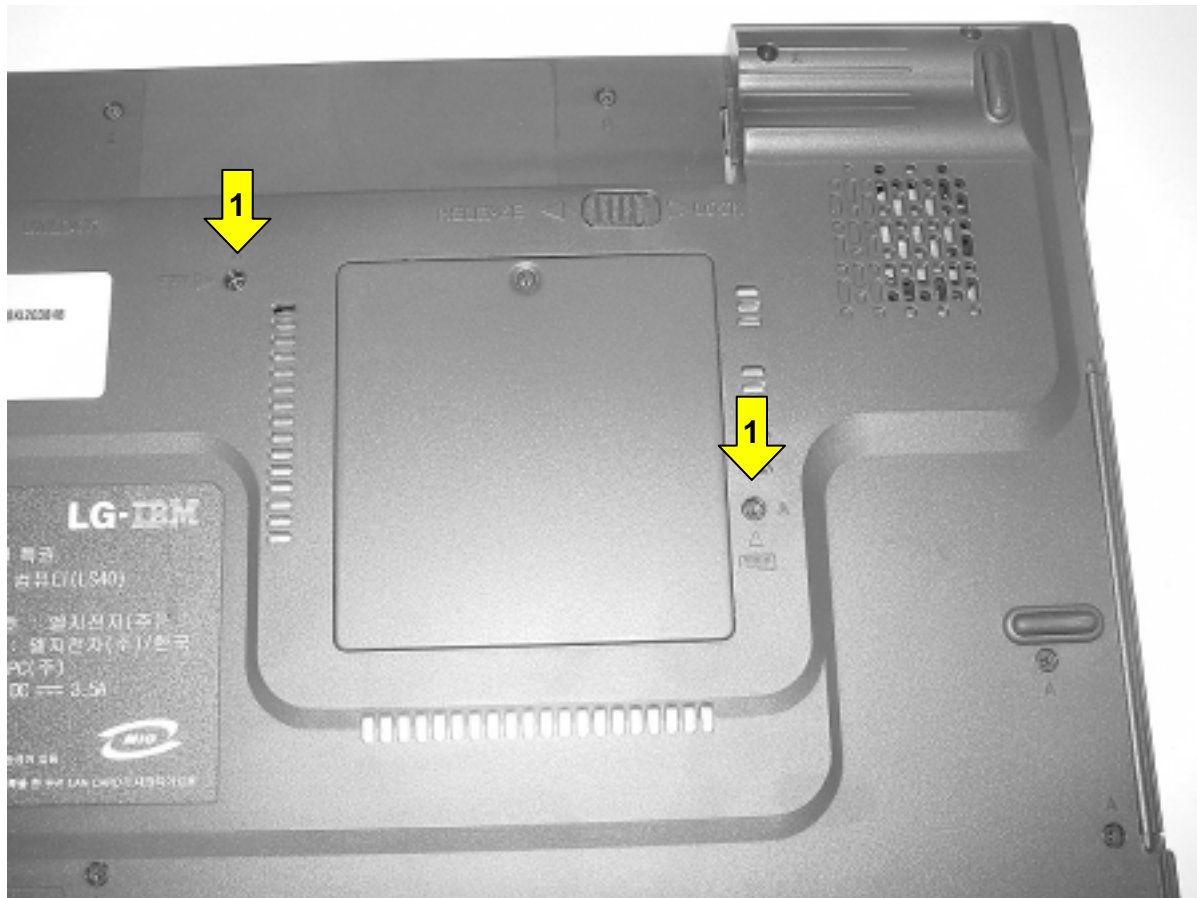


No.	FRU No.	Specification	EA
1	1SZZBA4085A	M3.0 X L6.0	1

## 1030 Keyboard

※ Remove the battery pack (1010) before replacing this part

1. Remove 2 screws.

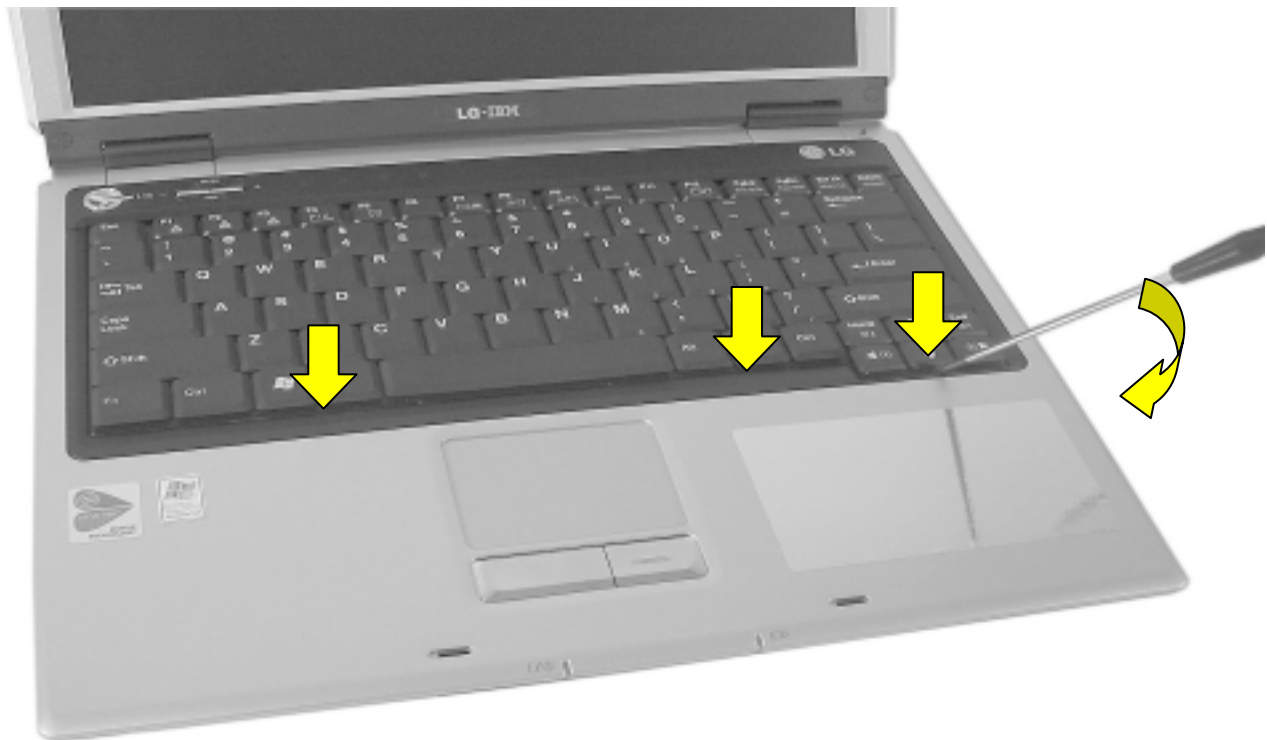


No.	FRU No.	Specification	EA
1	1SZZBA4083A	M2.0 X L8.0	2

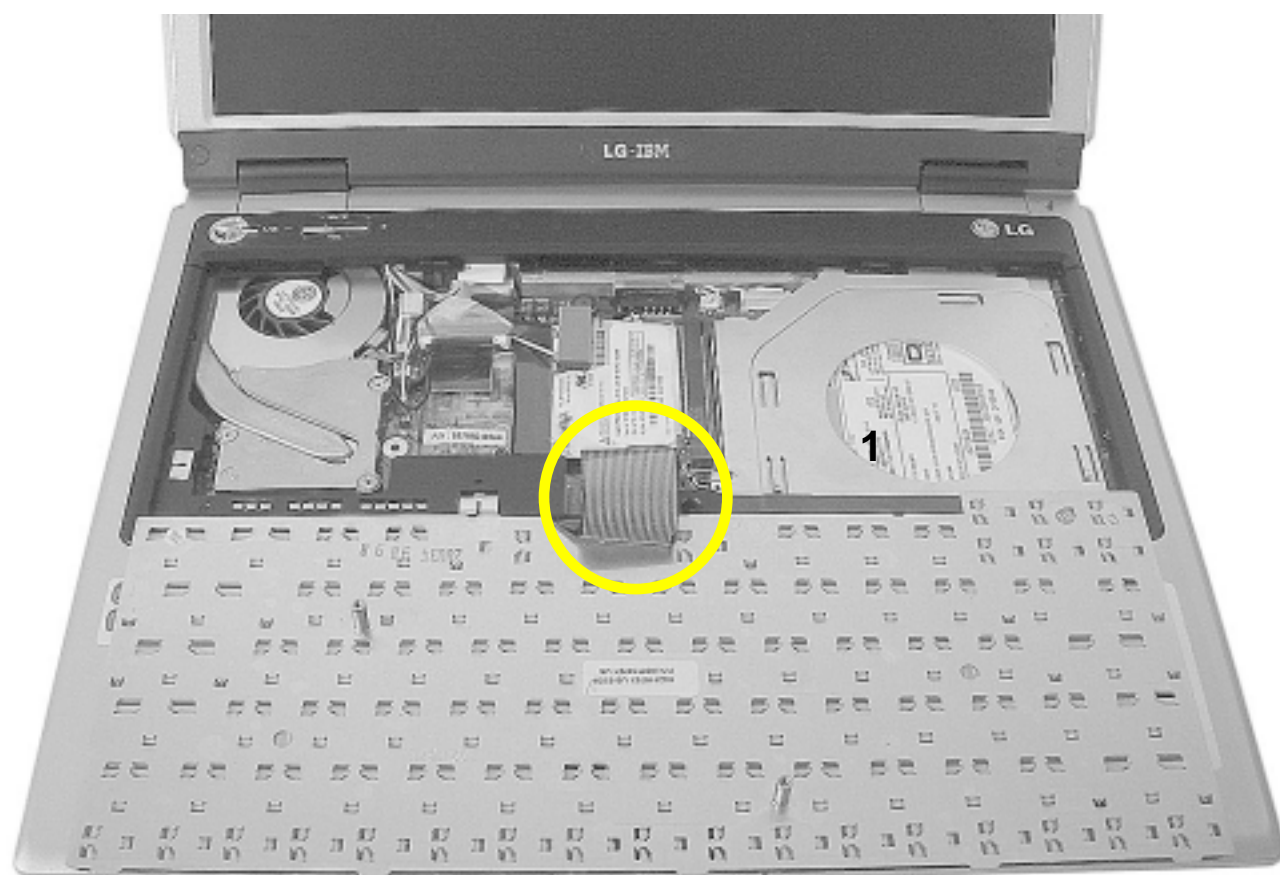
## Removing and replacing a part (FRU)

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2. To remove three hooks, insert a (-) type screwdriver into a hook located at the lower end of keyboard, and pull it up.



3. Disconnect the keyboard connector.

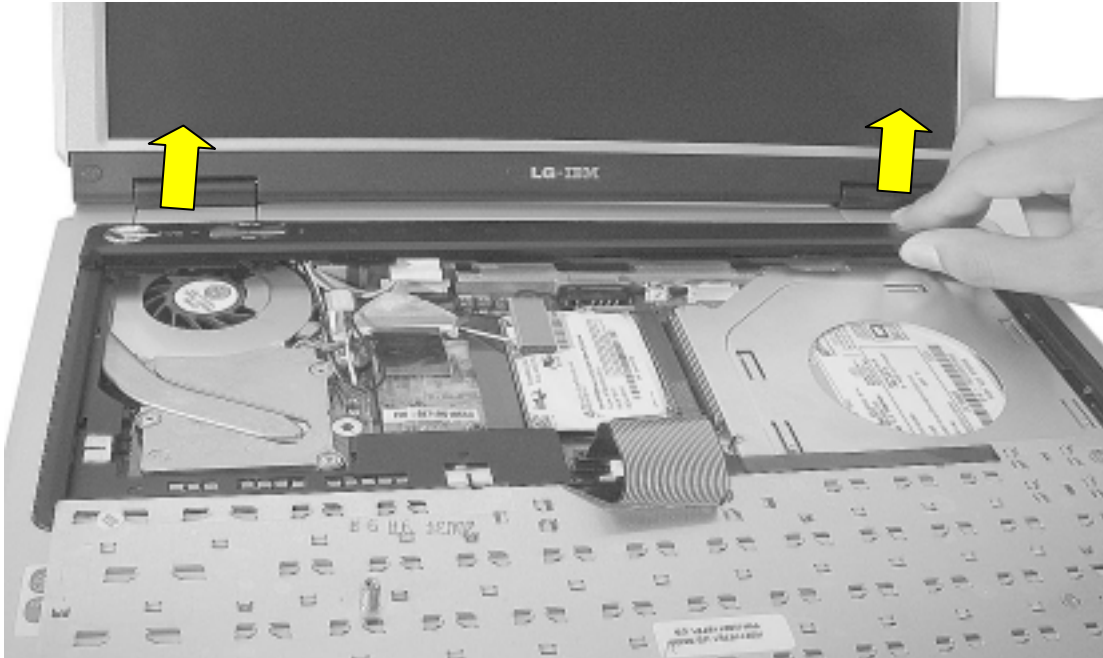


# Removing and replacing a part (FRU)

## 1040 Retainer

- ✖ Remove the following parts in order before replacing this part
- ✖ Battery Pack (1010)                      ✖ Keyboard (1030)

1. Pull up the retainer, and remove the connector using a (-) type screwdriver.

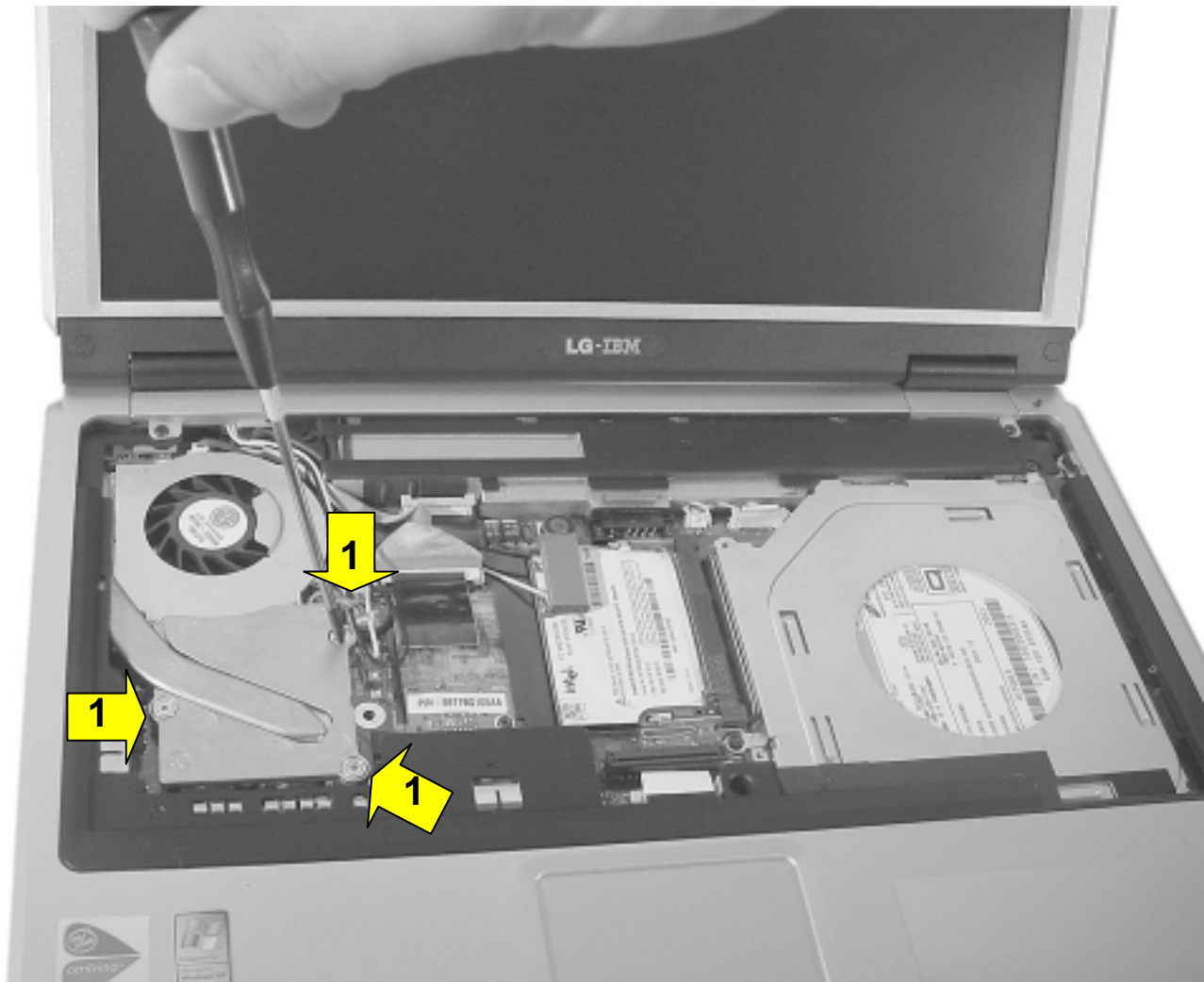




## 1050 Fan Assembly

- |  |                   |                   |
|--|-------------------|-------------------|
| ✖ Remove the following parts in order before replacing this part |                   |                   |
| ✖ Battery Pack (1010)  | ✖ Keyboard (1030) | ✖ Retainer (1040) |

1. After removing a screw and the connector, pull up and remove the fan Assy using a (-) type screwdriver.



No.	FRU No.	Specification	EA
1	1SZZBZ4020A	M2.0 X L8.8	3



# Removing and replacing a part (FRU)

## 1050 Fan Assembly

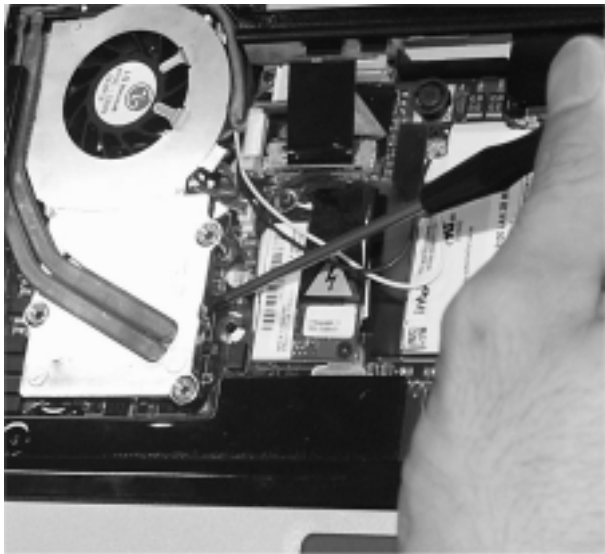
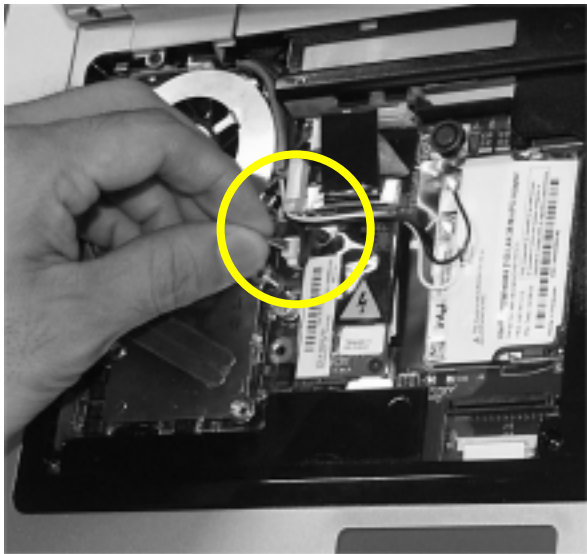
⌘ Remove the following parts in order before replacing this part

⌘ Battery Pack (1010)

⌘ Keyboard (1030)

⌘ Retainer (1040)

1. After removing a screw and the connector, pull up and remove the fan Assy using a (-) type screwdriver.



No.	FRU No.	Screw	Qty
1	1SZZBZ4020A	M2.0 X L8.8	3

## 1060-1 Optical Disk Drive (14.1" Model)

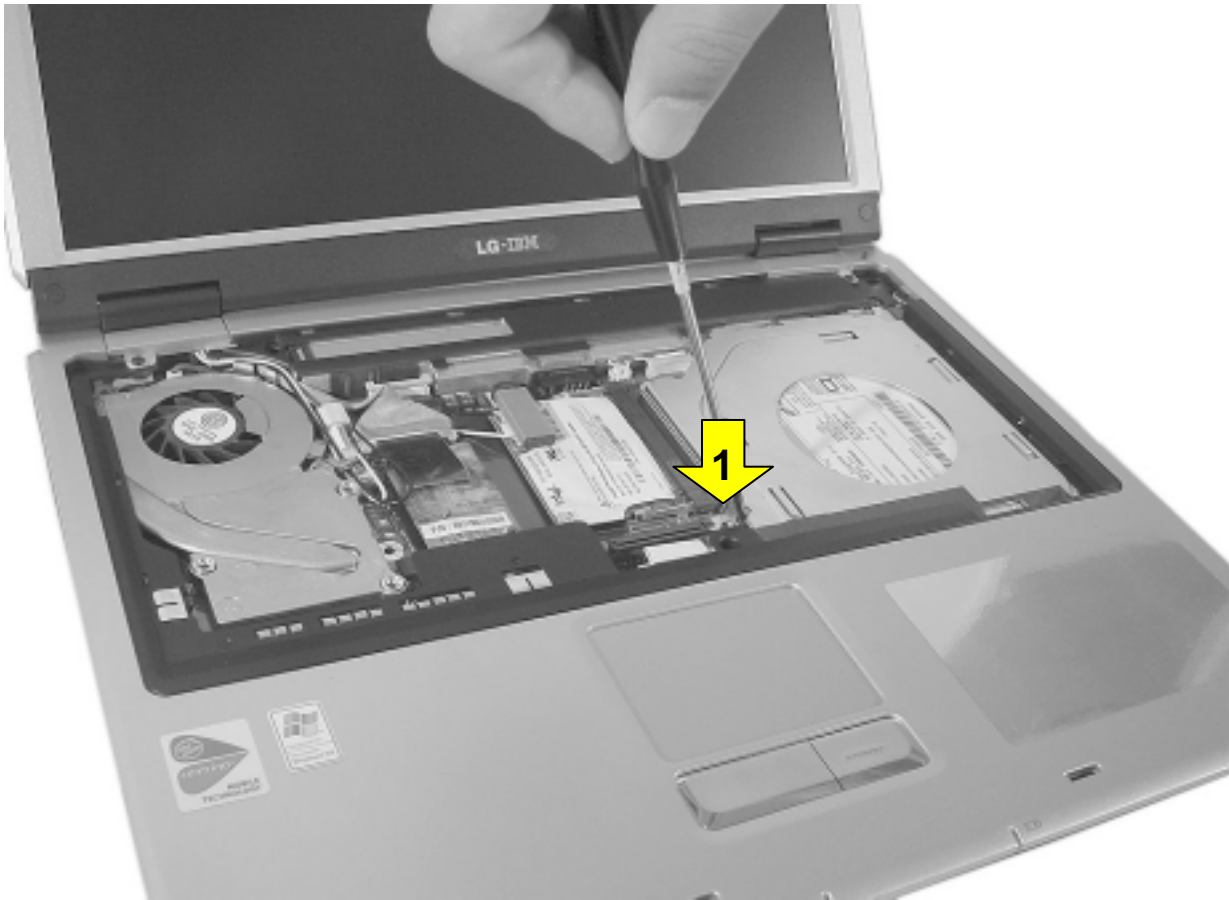
✖ Remove the following parts in order before replacing this part

✖ Battery Pack (1010)

✖ Keyboard (1030)

✖ Retainer (1040)

1. Remove a screw, insert a screwdriver into the back side of ODD and push it out.



No.	FRU No.	Screw	Qty
1	1SZZBZ4014A	M2.0 X L5.0	1

# Removing and replacing a part (FRU)

## 1060-2 Optical Disk Drive (15" Model)

✖ Remove the following parts in order before replacing this part

✖ Battery Pack (1010)

✖ Keyboard (1030)

✖ Retainer (1040)

1. Remove a screw, insert a screwdriver into the hole located at the rear of ODD and push it out.



No.	FRU No.	Screw	Qty
1	1SZZBZ4014A	M2.0 X L5.0	1

## 1070 Wireless LAN Card

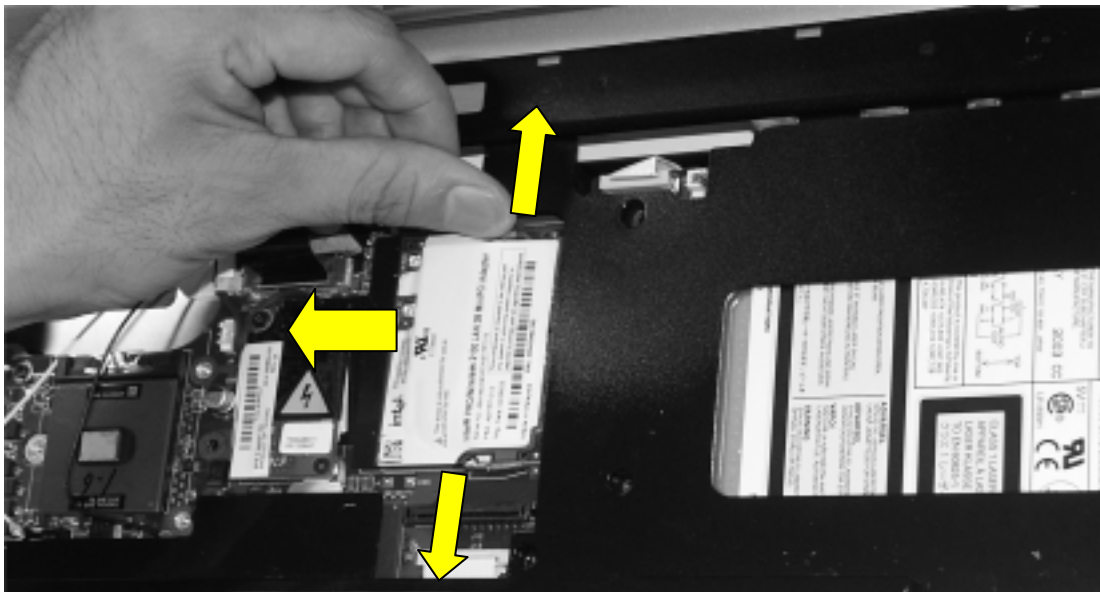
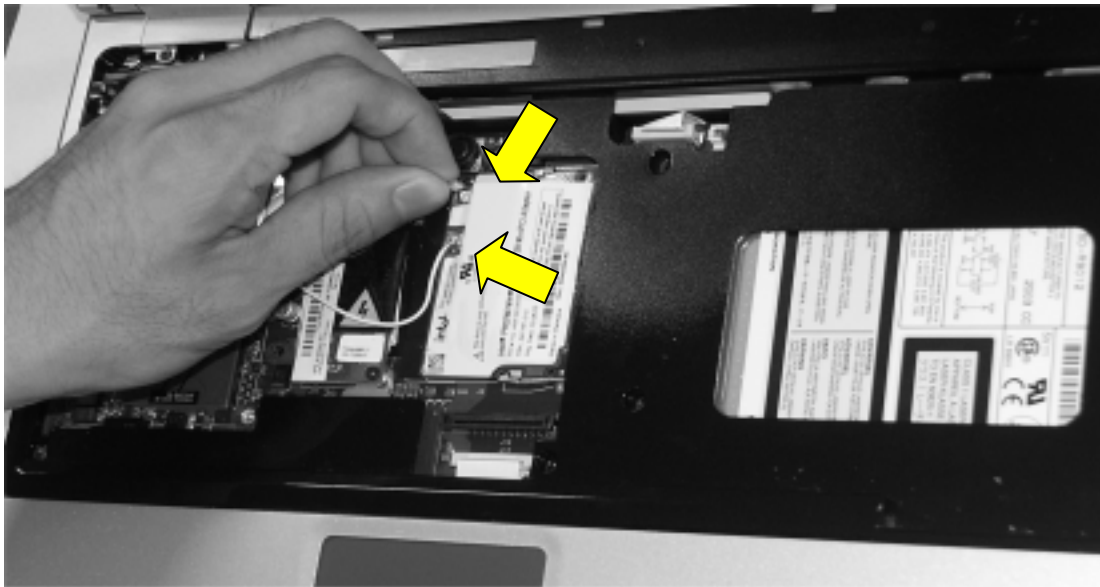
❌ Remove the following parts in order before replacing this part

❌ Battery Pack (1010)

❌ Keyboard (1030)

❌ Retainer (1040)

1. Remove two wireless LAN card connector, open card knob to take out the card.



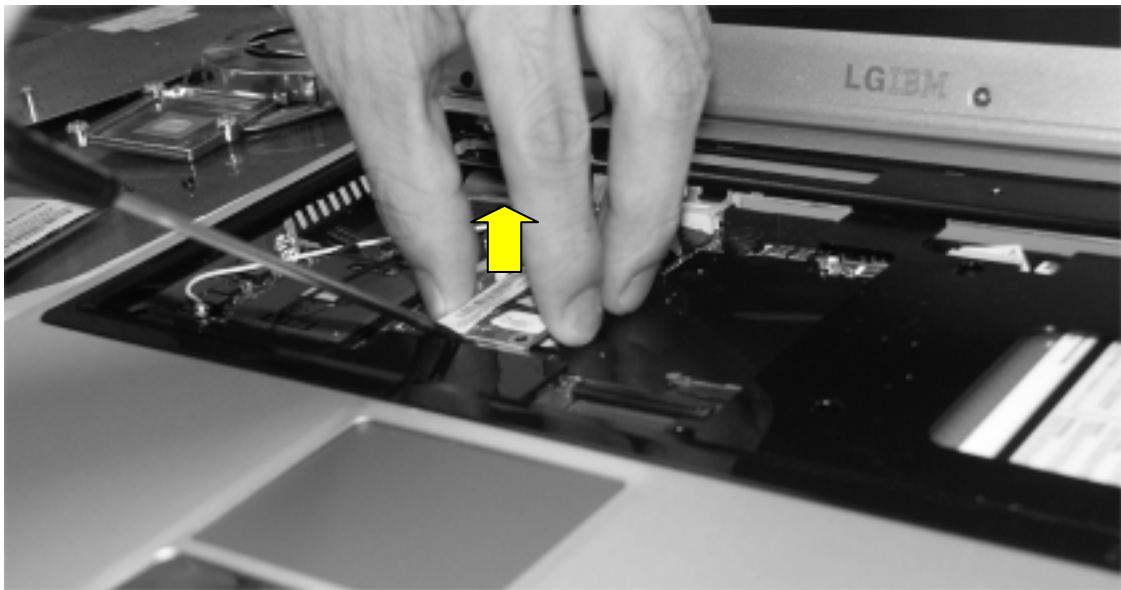
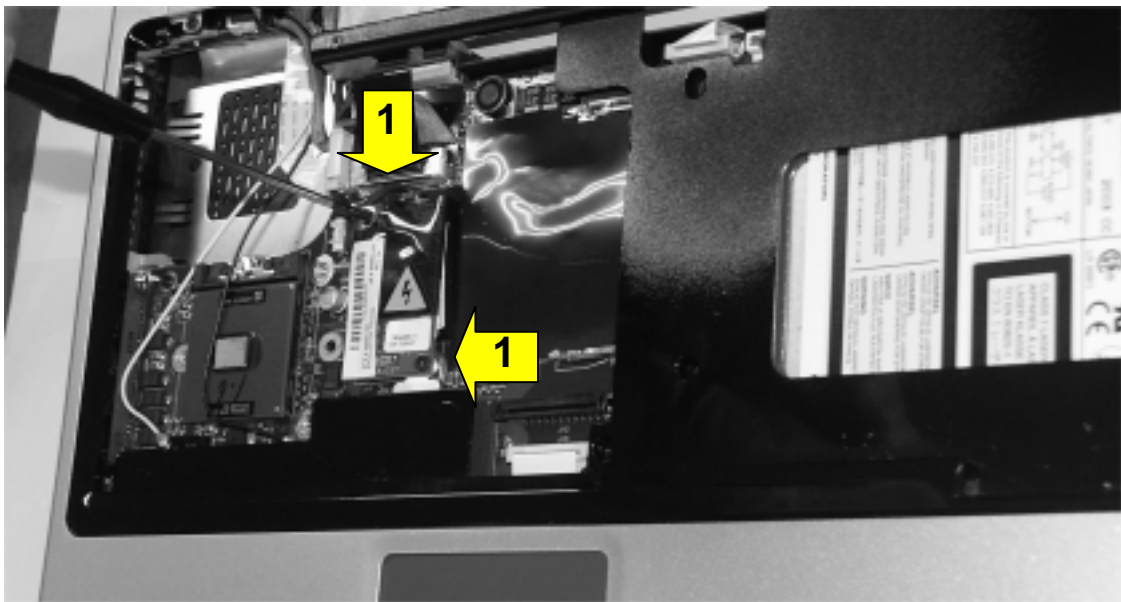
# Removing and replacing a part (FRU)

## 1080 MDC Modem Card

✖ Remove the following parts in order before replacing this part

✖ Battery Pack (1010)                      ✖ Keyboard (1030)                      ✖ Retainer (1040)

1. Remove two screws and insert a screwdriver below the modem. Pull it up to disassemble.



No.	FRU No.	Screw	Qty
1	1SZZBA4017B	M2.0 X L3.5	2

## 1090 Display Module

❖ Remove the following parts in order before replacing this part

❖ Battery Pack (1010)

❖ Keyboard (1030)

❖ Retainer (1040)

❖ Wireless LAN Card (1070)

1. Remove two screws.



No.	FRU No.	Screw	Qty
1	1SZZBA4039B	M2.5 X L8.0	2

2. Remove two hinge cover screws.

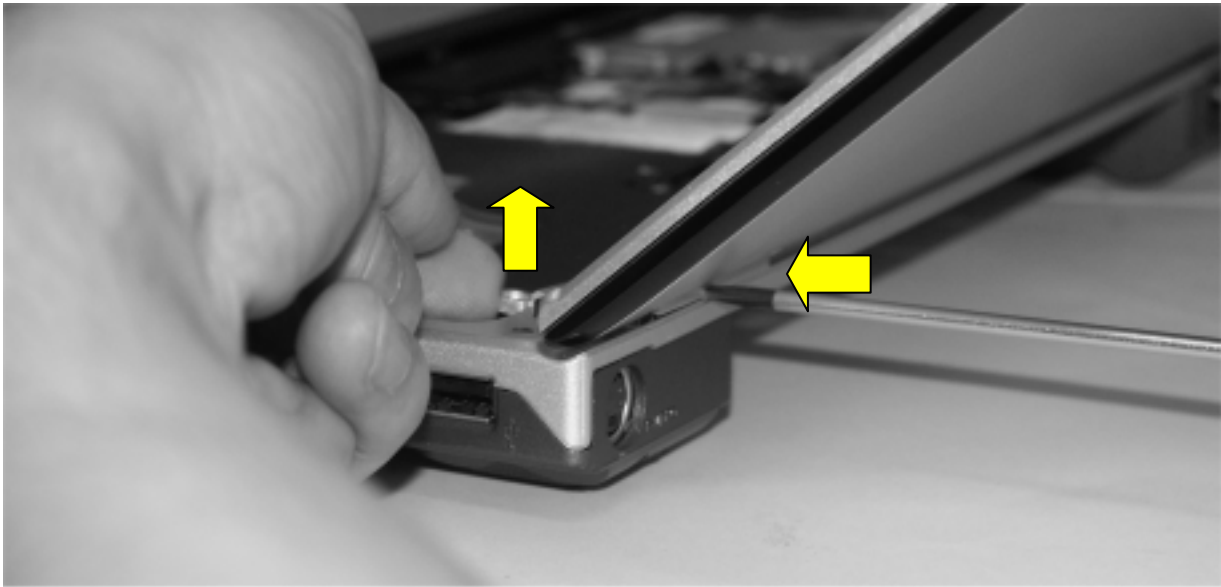


No.	FRU No.	Screw	Qty
1	1SZZBZ4014A	M2.0 X L5.0	2

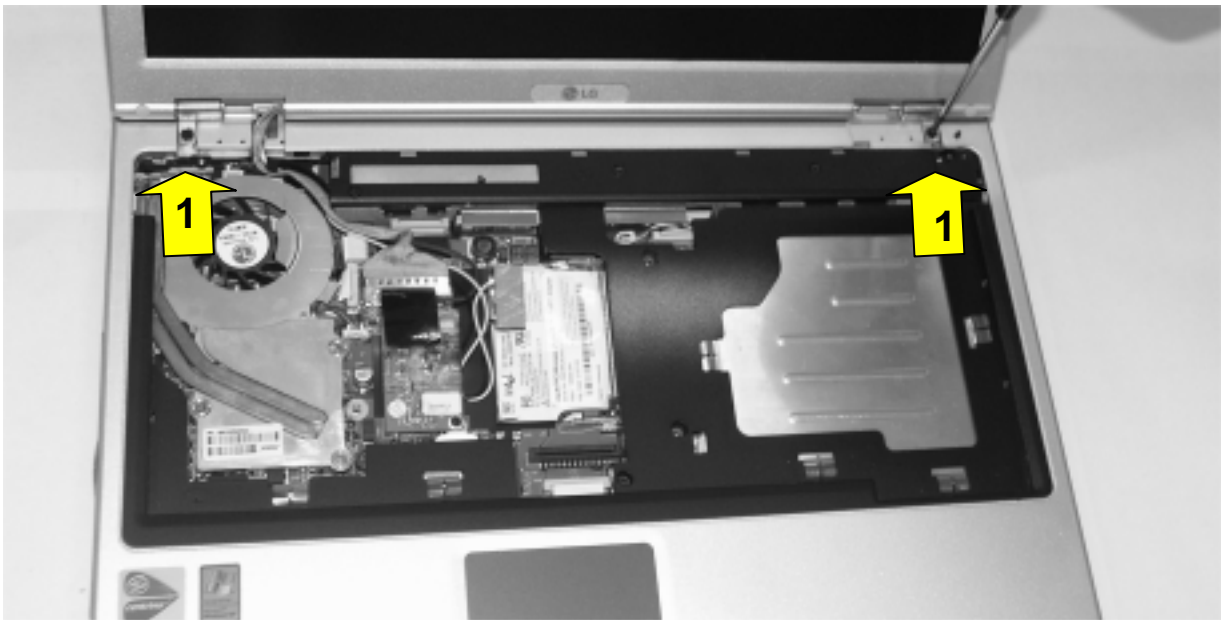


# Removing and replacing a part (FRU)

3. Using a (-) type screwdriver from the back of the LCD, pull up the hinge cover with your finger. The more you move the LCD to the back, the easier the hinge cover will pull out. Remove another hinge cover located on the other side.



4. Remove two hinge screws.

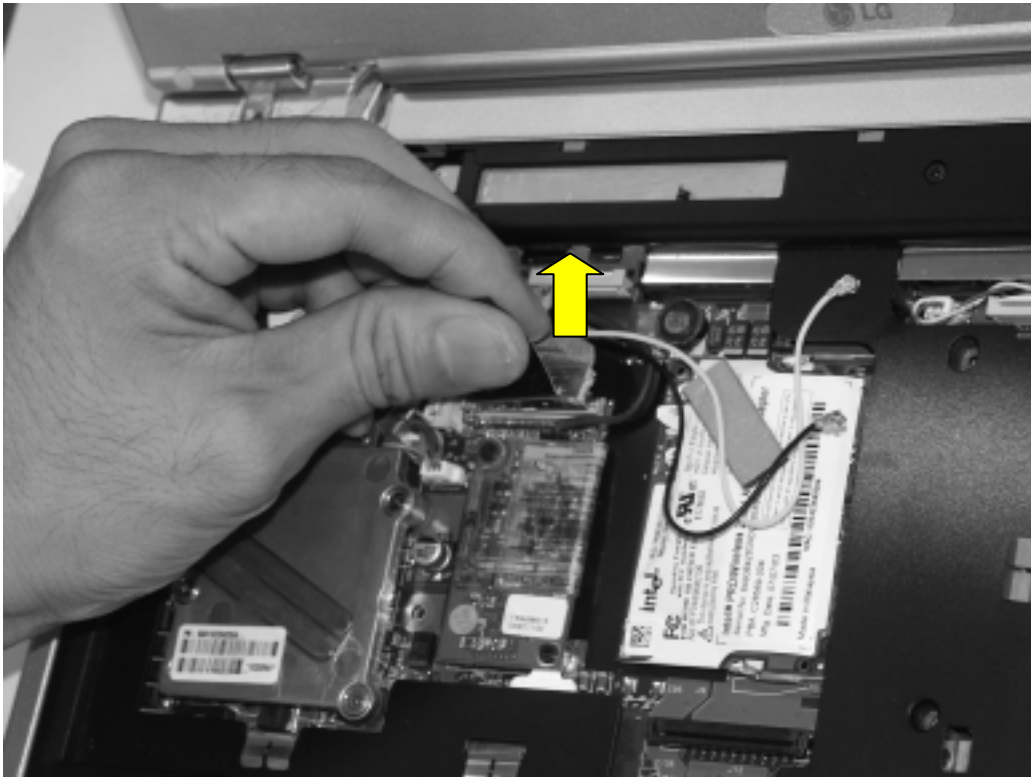


No.	FRU No.	Screw	Qty
1	1SZZBA4039B	M2.5 X L8.0	2



## Removing and replacing a part (FRU)

5. Remove the LCD connector located at the upper end of MCD modem. You will see a tag designed to make the work easier. Pull out the tag.



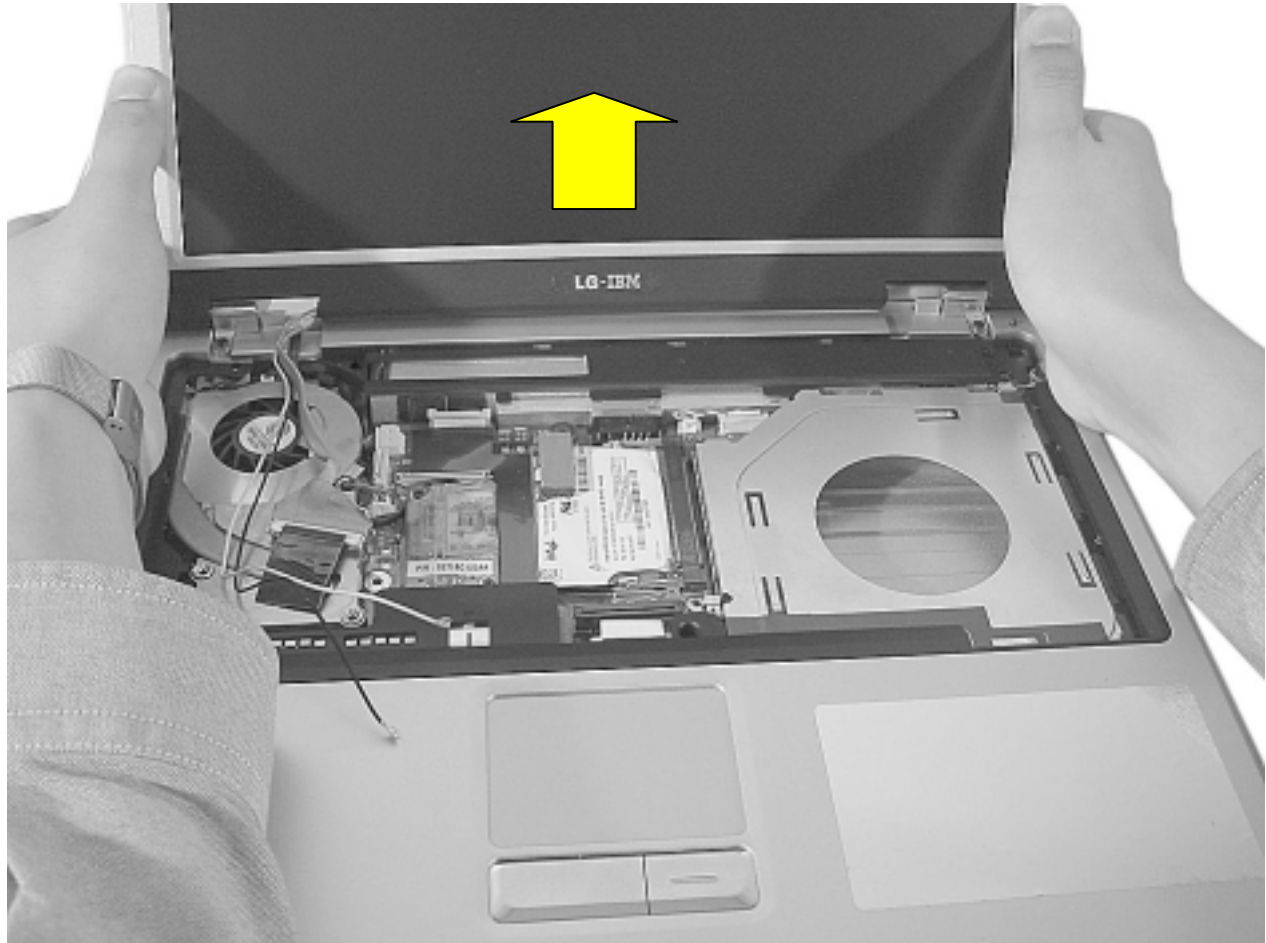
6. Remove the LCD cable.



## Removing and replacing a part (FRU)

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7. Hold the LCD with your both hands, and pull it up to remove.



✎ See: Display Module disassembly in detail (1140)

## 1100 Key Deck

※ Remove the following parts in order before replacing this part

※ Battery Pack (1010)

※ Keyboard (1030)

※ Retainer (1040)

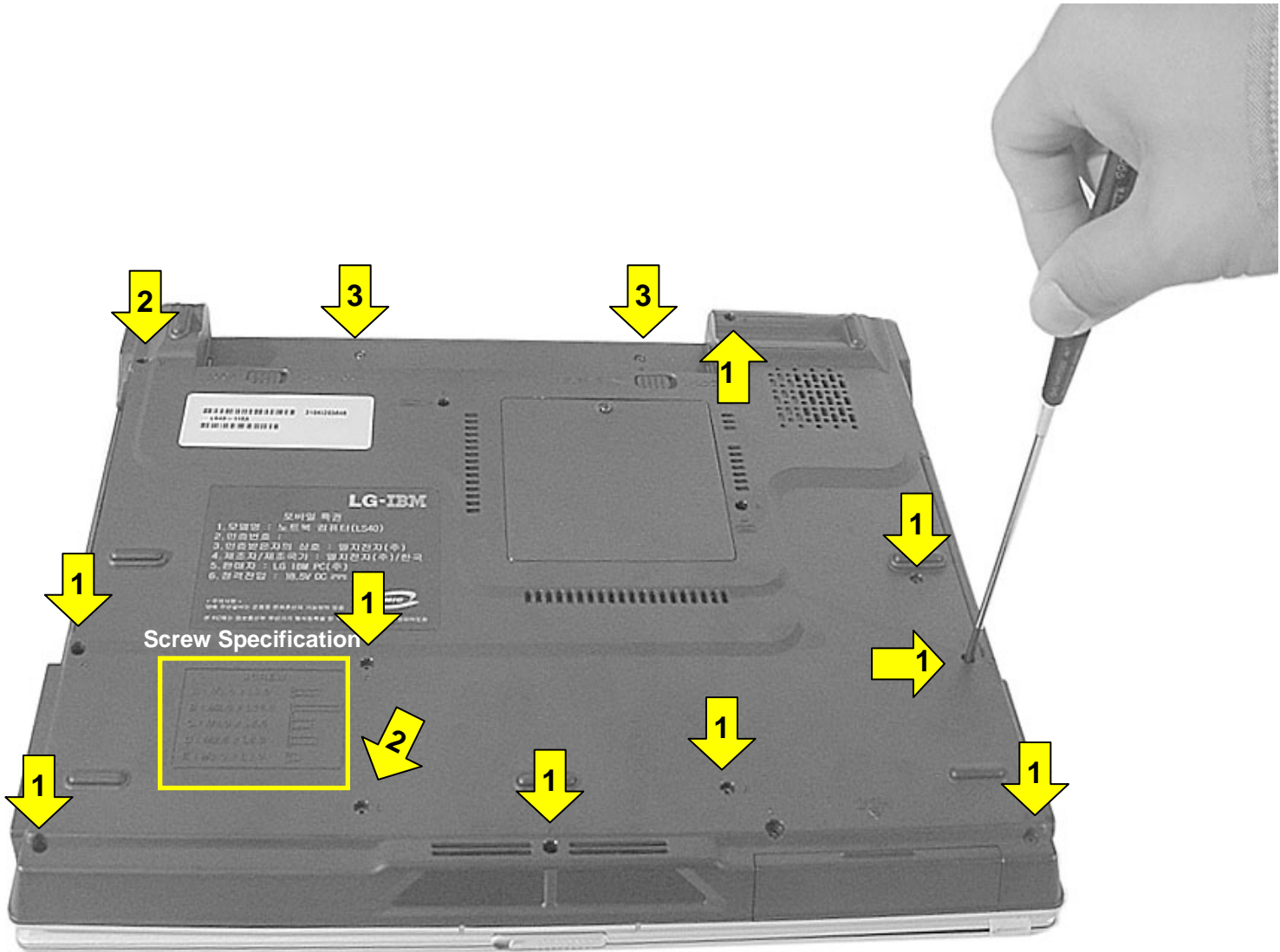
※ Fan Assembly (1050)

※ Wireless LAN Card (1070)

※ MDC Modem Card (1080)

※ Display Module (1090)

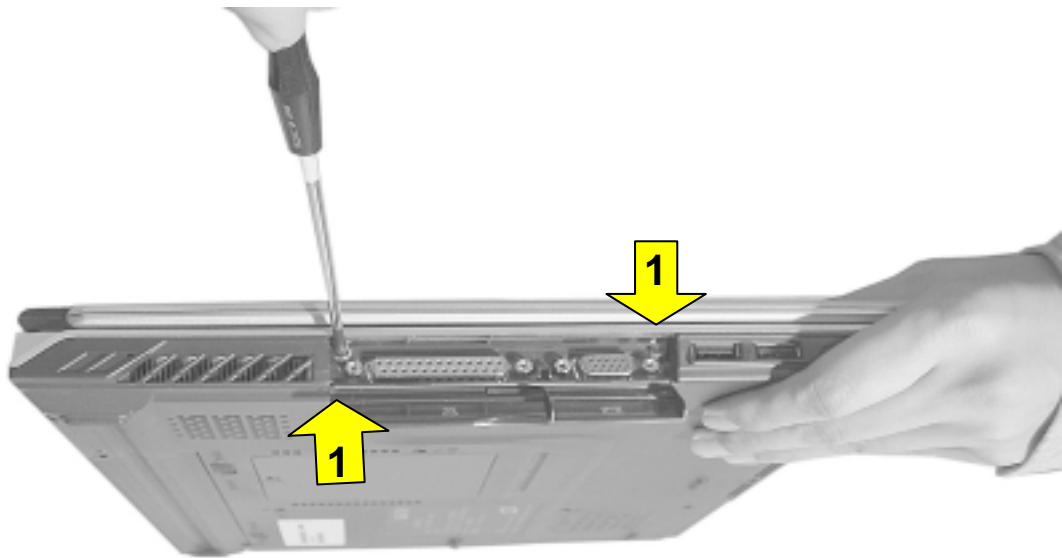
1. Remove 14 screws (for 15" model) or 11 screws (for 14.1" model). The screw type is shown on the set for your reference.



No.	FRU No.	Screw	Qty
1	1SZZBA4083A	M2.0 X L8	9
2	1SZZBZ3010Z	M2.0 X L15	2
3	1SZZBA4017A	M2.0 X L3.0	2

# Removing and replacing a part (FRU)

2. Open the I/O port cover and remove two screws.



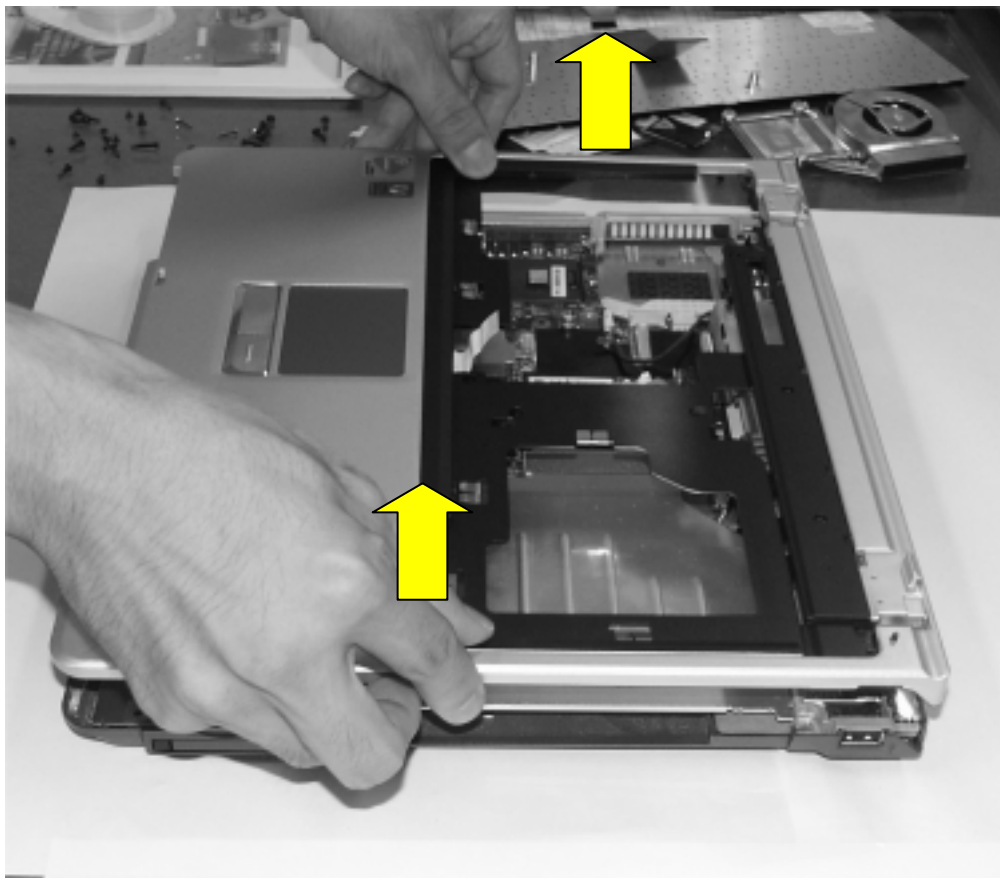
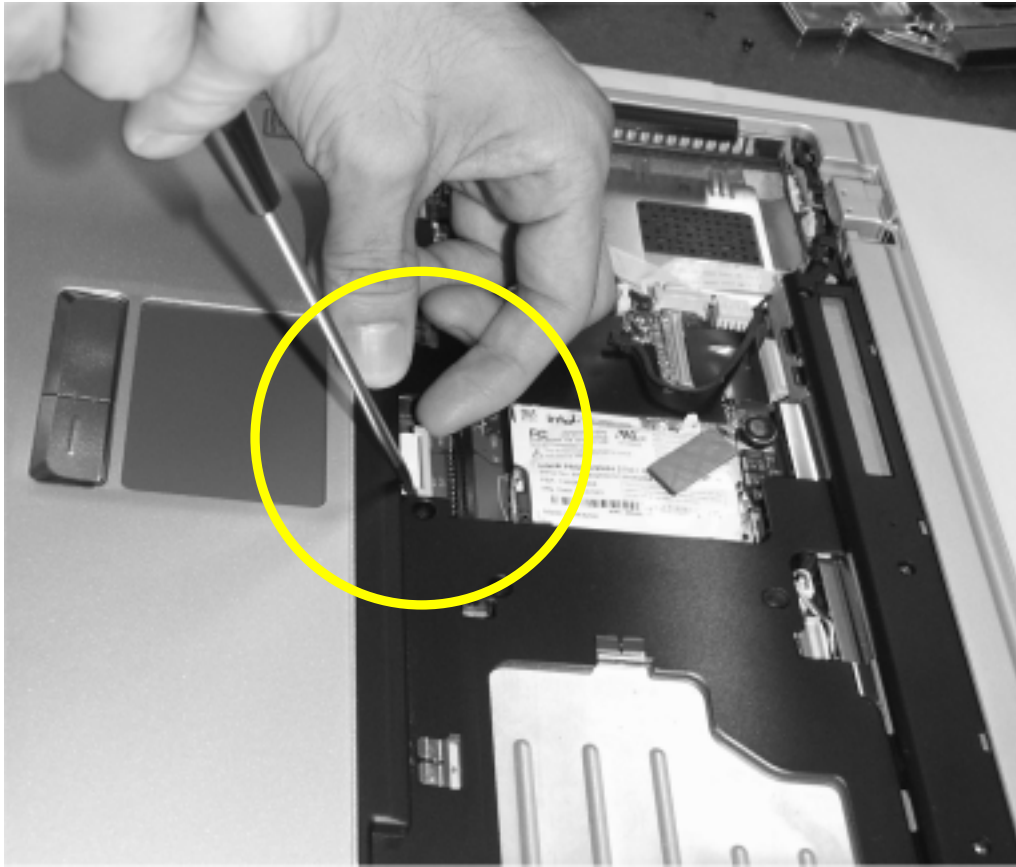
No.	FRU No.	Screw	Qty
1	1SZZBA4017A	M2.0 X L3.0	2

3. Open ODD plate and remove two screws



No.	FRU No.	Screw	Qty
1	1SZZBA4041A	M2.0 X L3.0	2

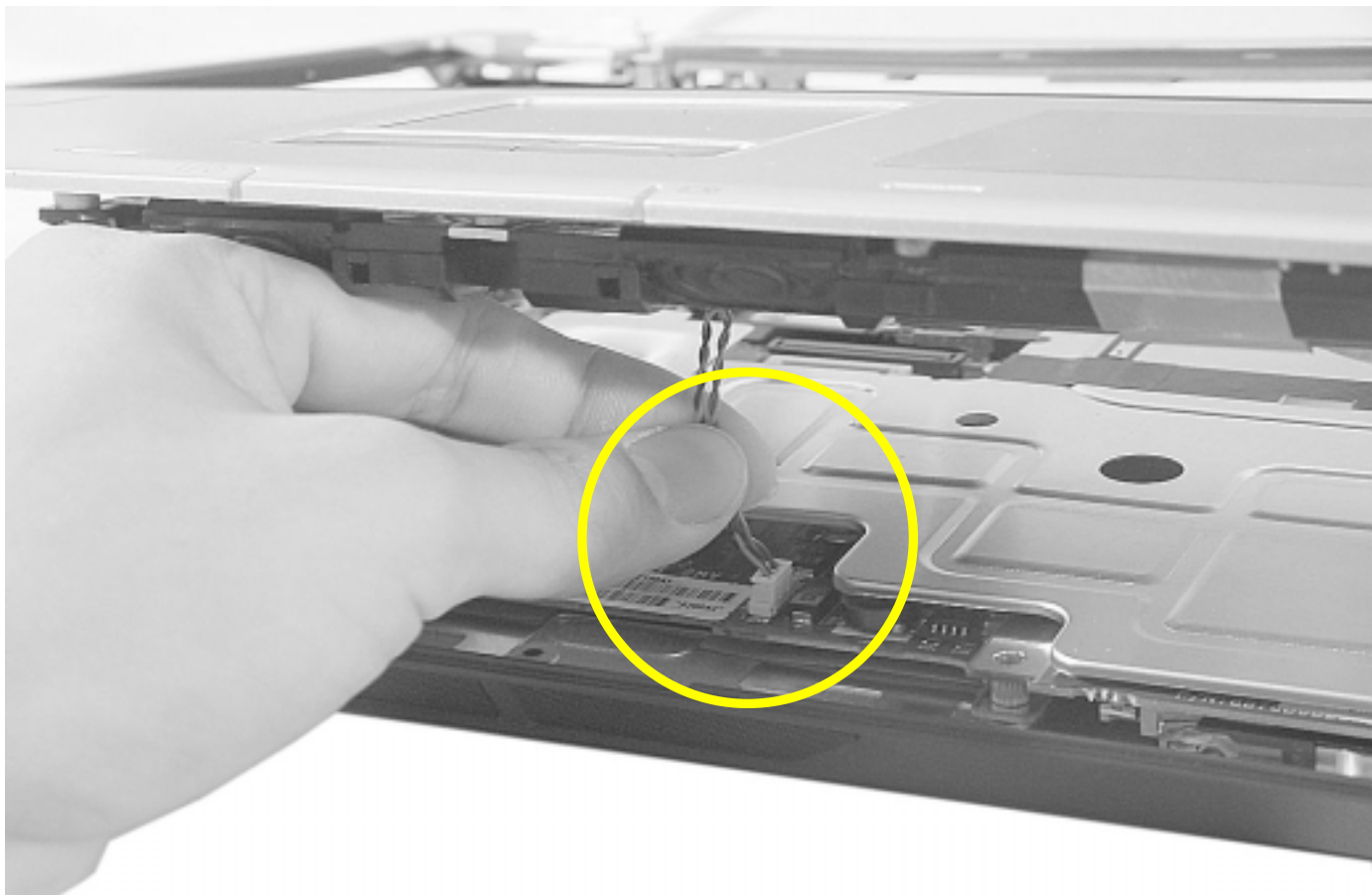
4. Remove the cable, hold the keyboard deck with your both hands and pull it out.



## Removing and replacing a part (FRU)

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5. Remove the speaker cable located at the front of key deck that is pulled up.





## 1110 Main Board

※Remove the following parts in order before replacing this part.

※Battery Pack (1010)

※Keyboard (1030)

※Retainer (1040)

※Fan Assembly (1050)

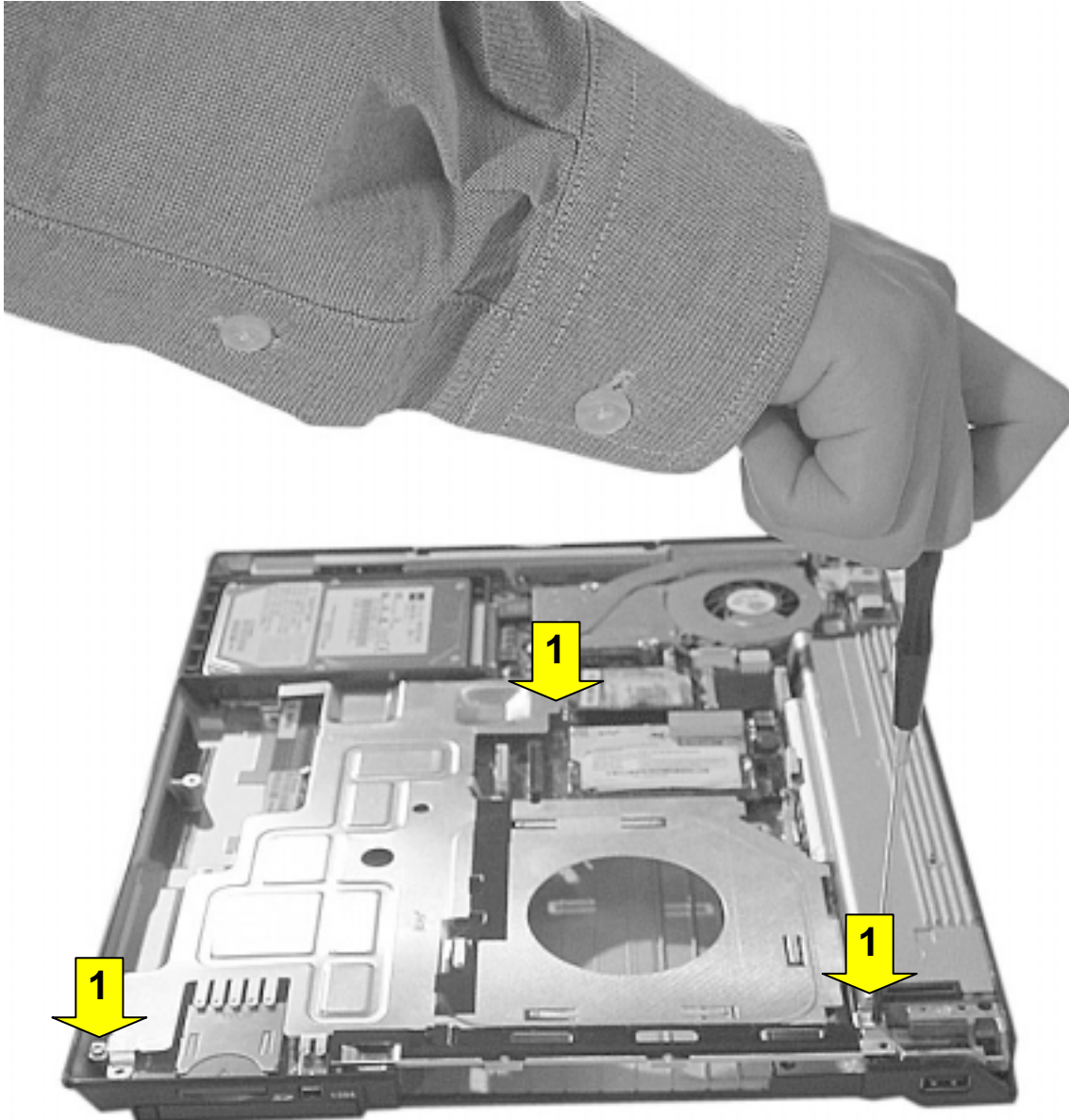
※Wireless LAN Card (1070)

※MDC Modem Card (1080)

※Display Module (1090)

※Key Deck (1100)

1. Remove two screws and disassemble the ODD Plate Assy.



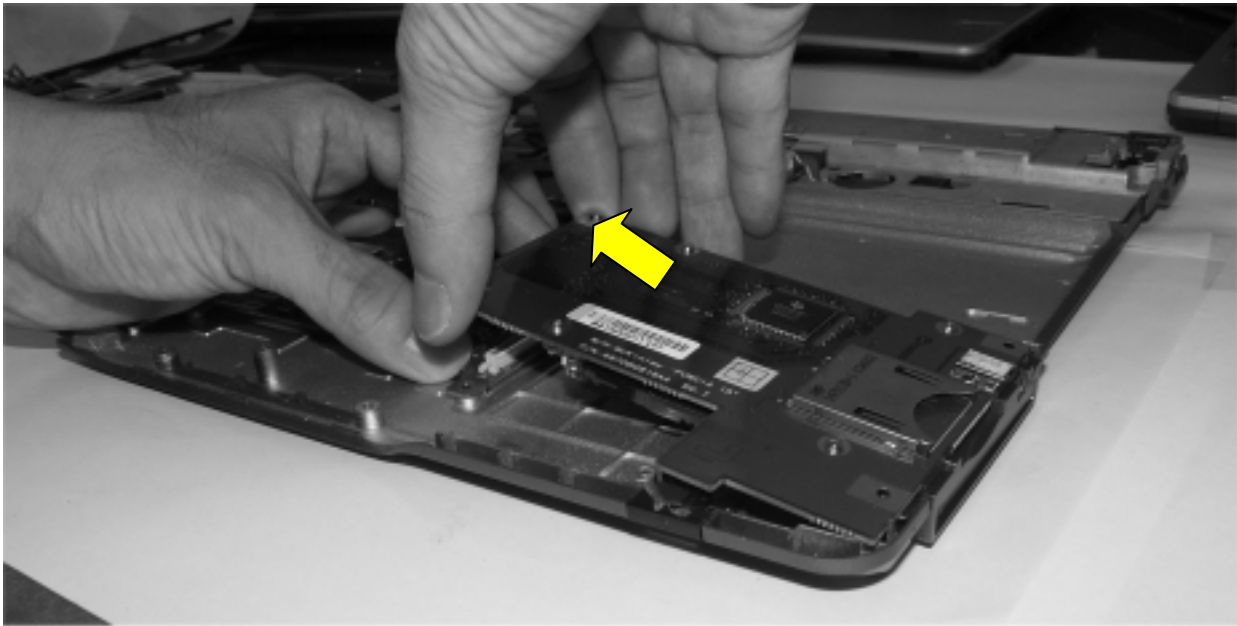
No.	FRU No.	Screw	Qty
1	1SZZBA4017B	M2.0 X L3.5	3



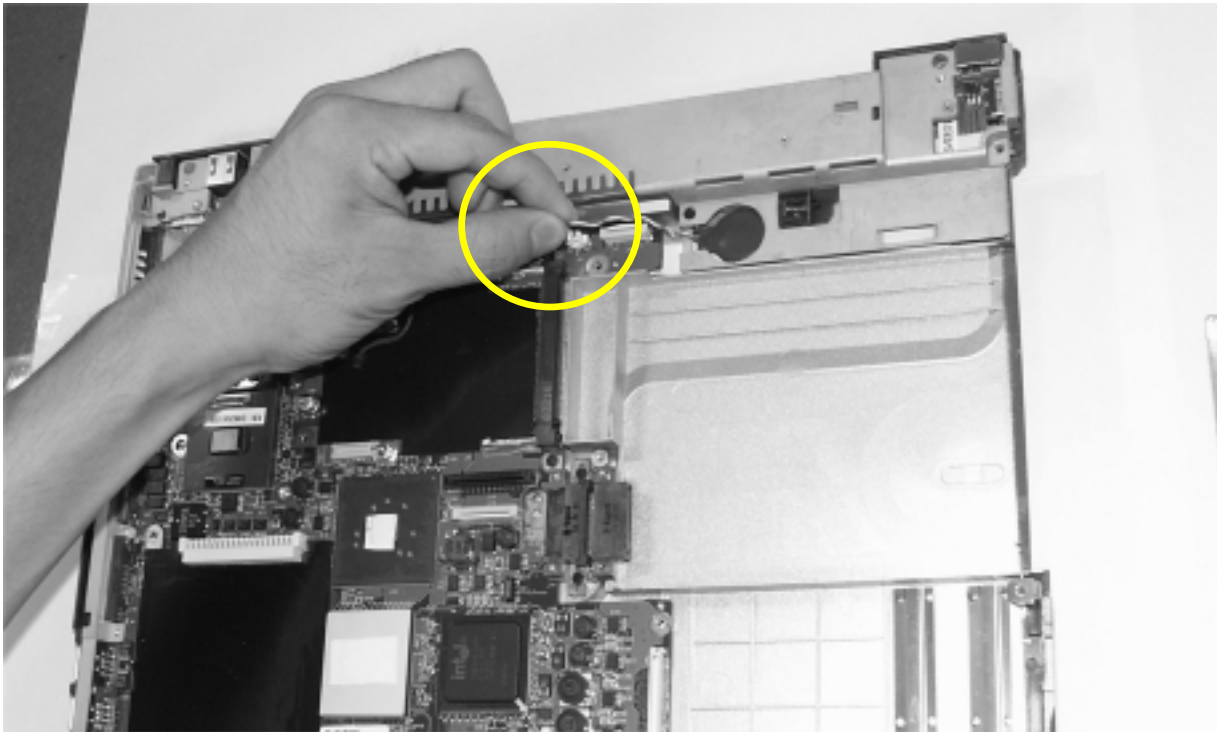
## Removing and replacing a part (FRU)

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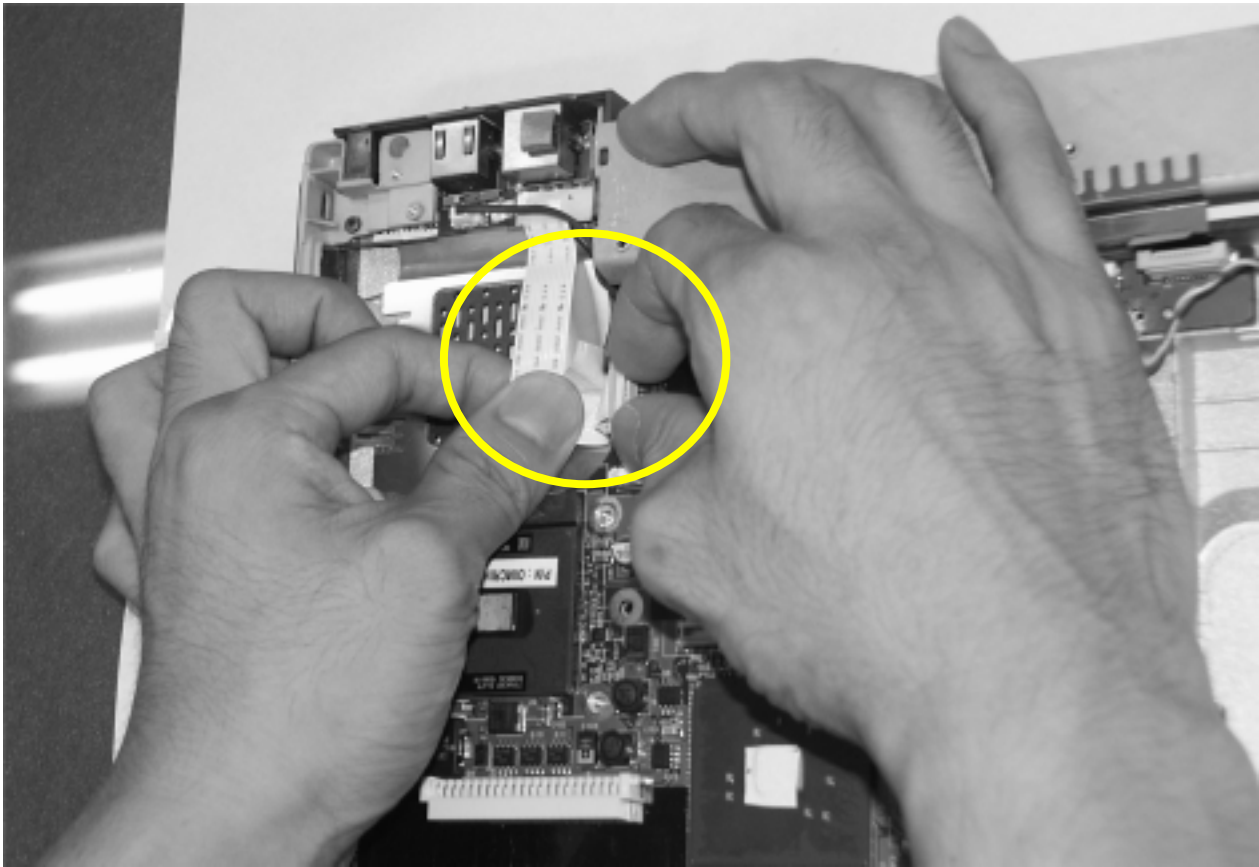
2. Remove the PCMCIA B/D.



3. Remove the RTC battery connector from M/B.



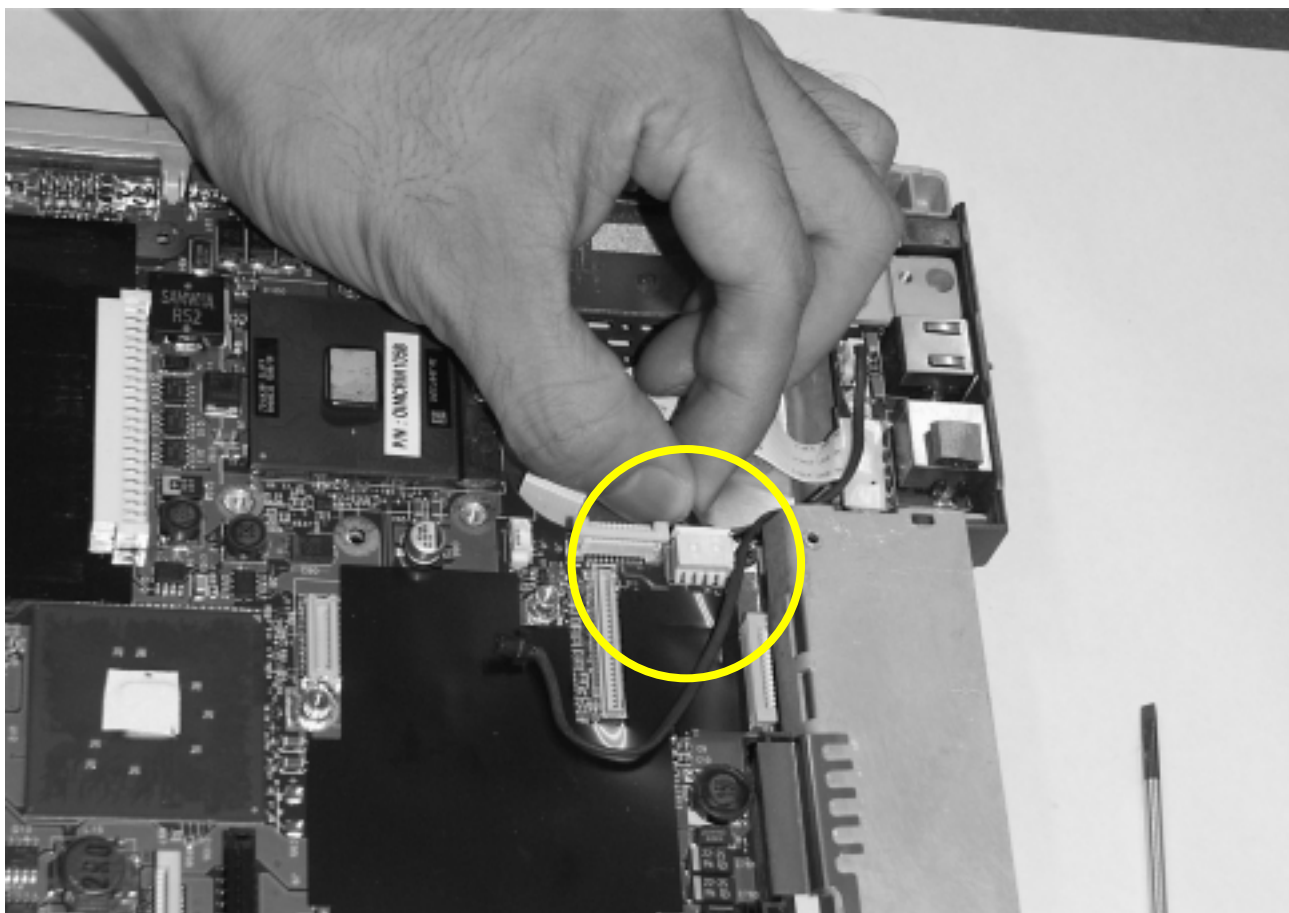
5. Remove the LAN S/B connector.



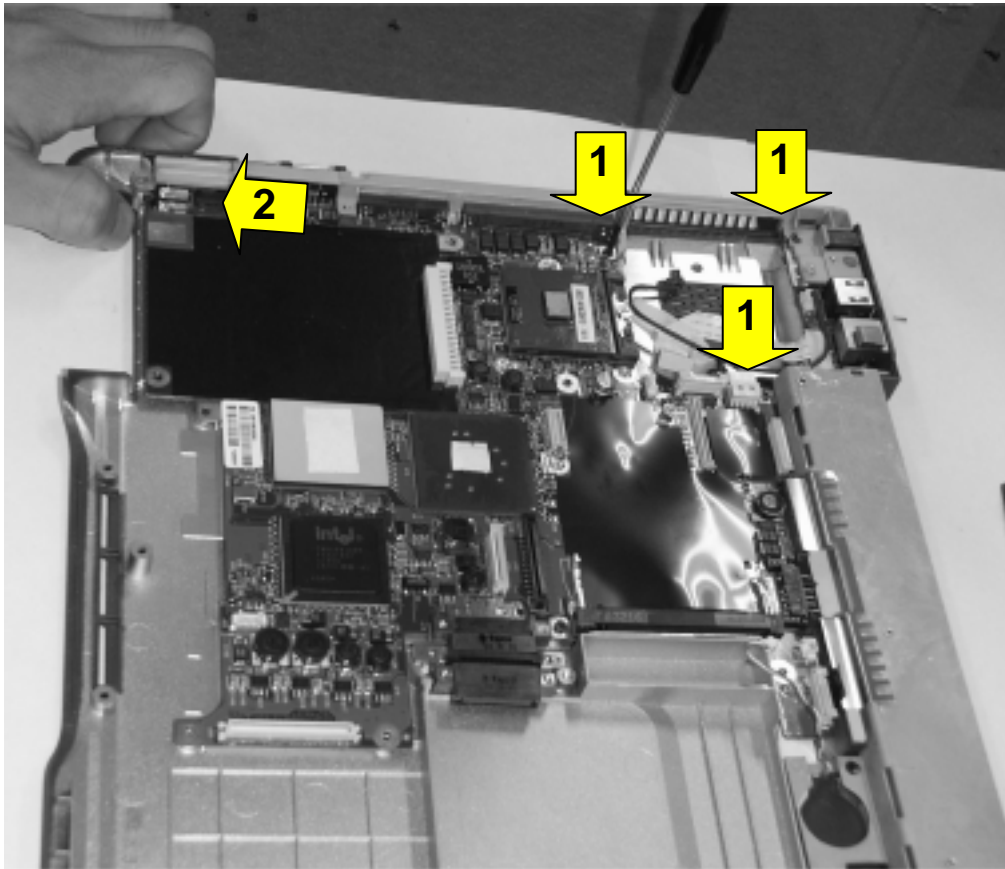
## Removing and replacing a part (FRU)

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6. Remove the power cable.



7. Remove 4 M/B screws.

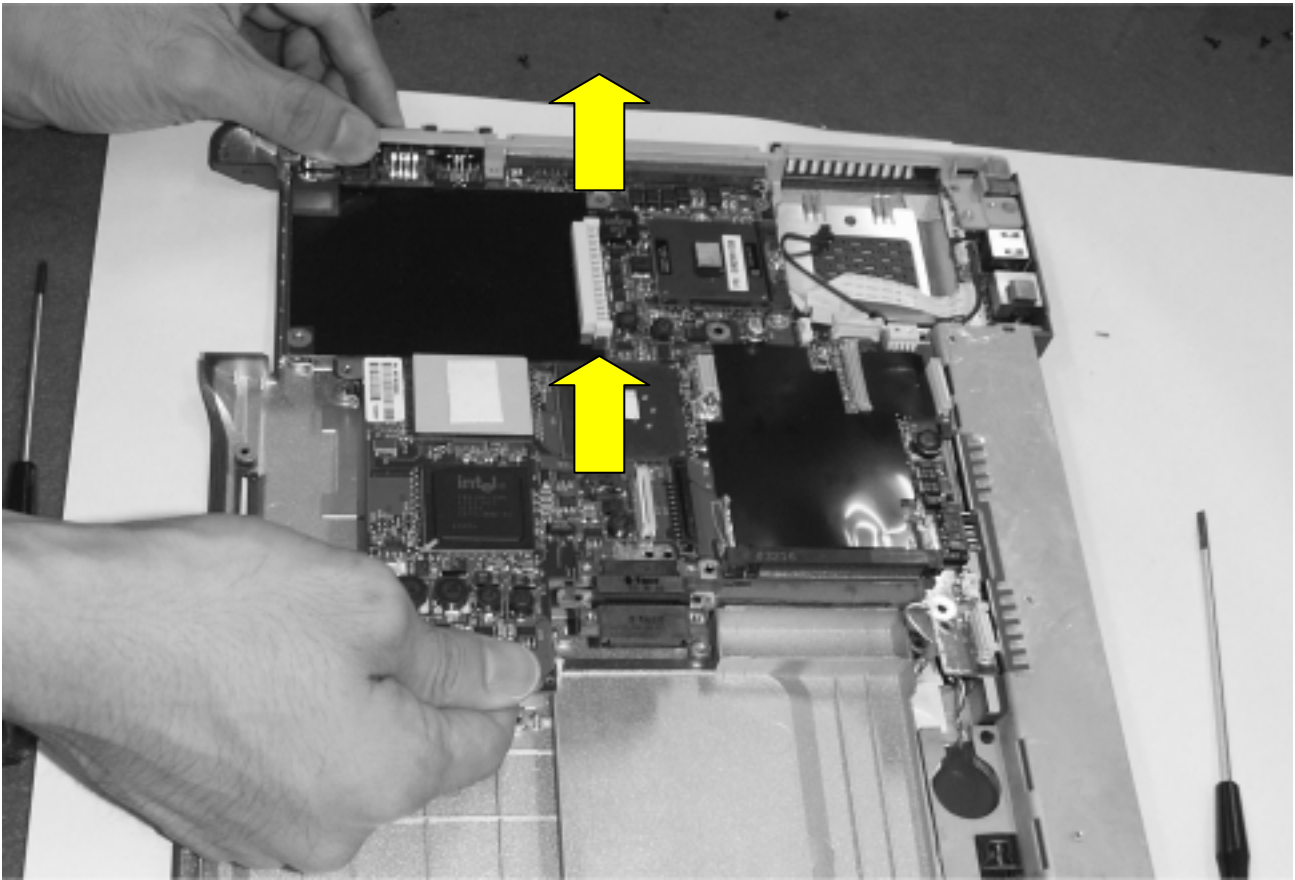


No.	FRU No.	Screw	Qty
1	1SZZBZ4014A	M2.0 X L5.0	3
2	1SZZBA4017B	M2.0 X L3.5	1

## Removing and replacing a part (FRU)

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8. Hold M/B with your both hand and pull it up to remove.



## 1120 Battery Frame Assy

※ Remove the following parts in order before replacing this part.

※ Battery Pack (1010)

※ Keyboard (1030)

※ Retainer (1040)

※ Fan Assembly (1050)

※ Wireless LAN Card (1070)

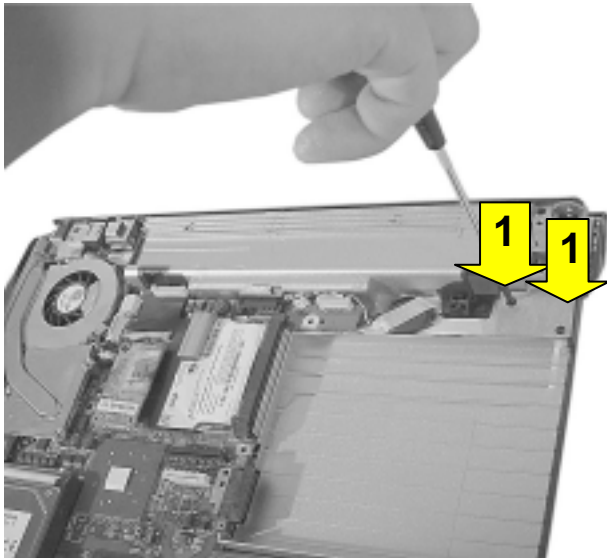
※ MDC Modem Card (1080)

※ Display Module (1090)

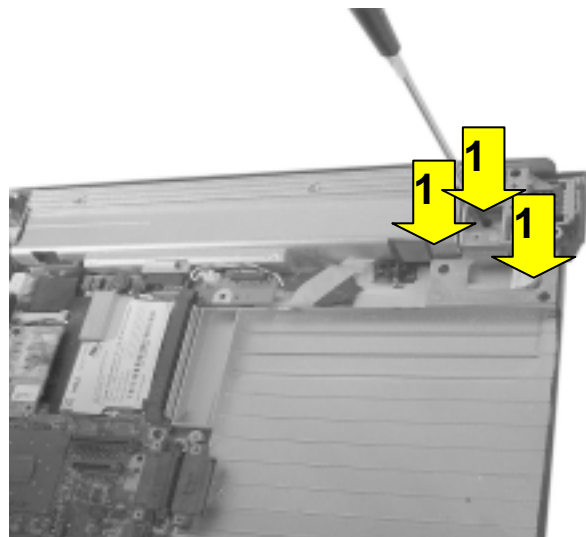
※ Key Deck (1100)

※ Main Board (1110)

1. Remove a screw.



14.1"



15"

No.	FRU No.	Screw	Qty
1	1SZZBA4017B	M2.0 X L3.5	2(14.1") 3(15.0")

# Removing and replacing a part (FRU)

## 1130 S-Video Sub-Board

✖ Remove the following parts in order before replacing this part.

✖ Battery Pack (1010)

✖ Keyboard (1030)

✖ Retainer (1040)

✖ Fan Assembly (1050)

✖ Wireless LAN Card (1070)

✖ MDC Modem Card (1080)

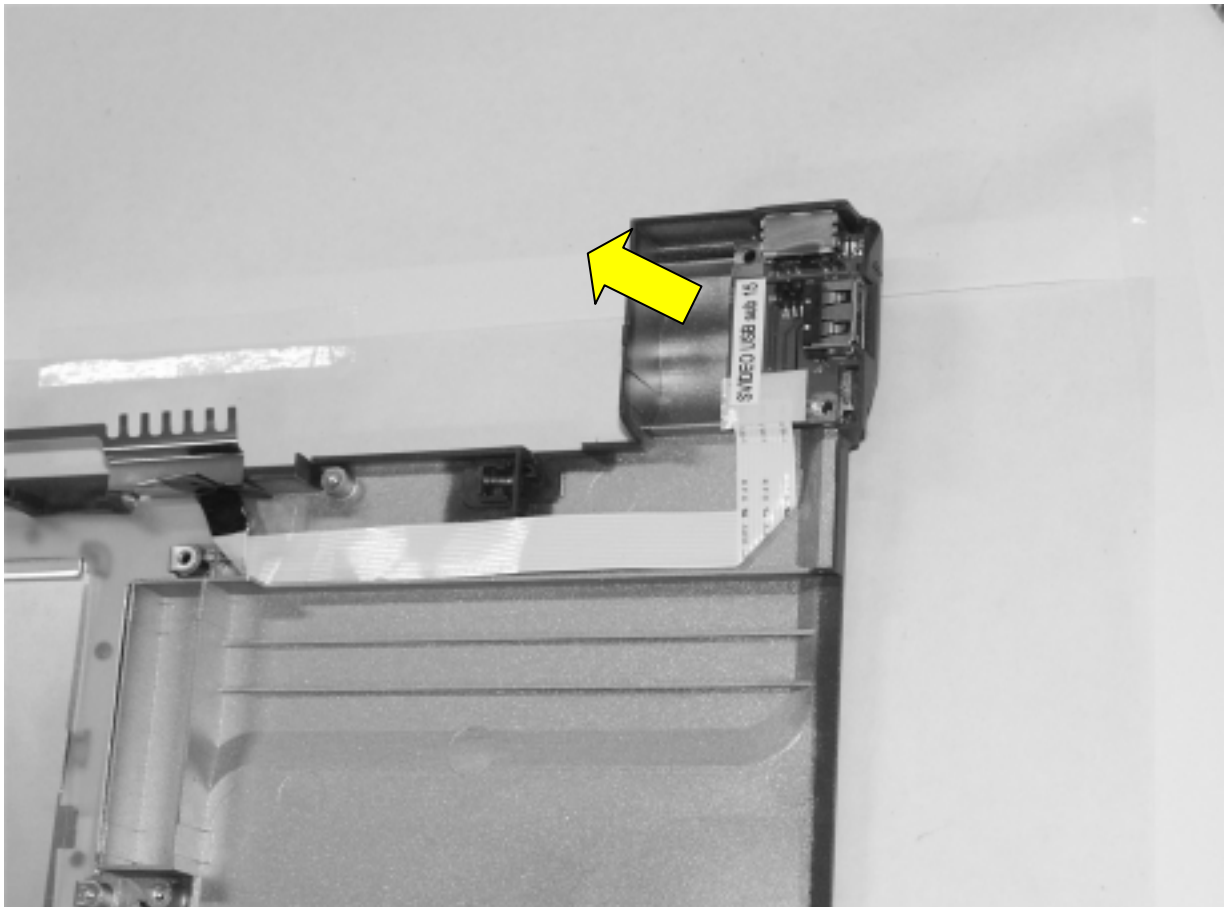
✖ Display Module (1090)

✖ Key Deck (1100)

✖ Main Board (1110)

✖ Battery Frame Assy (1120)

1. Remove the S-Video sub-board.





## 1140 Display Module

✖ Remove the following parts in order before replacing this part.

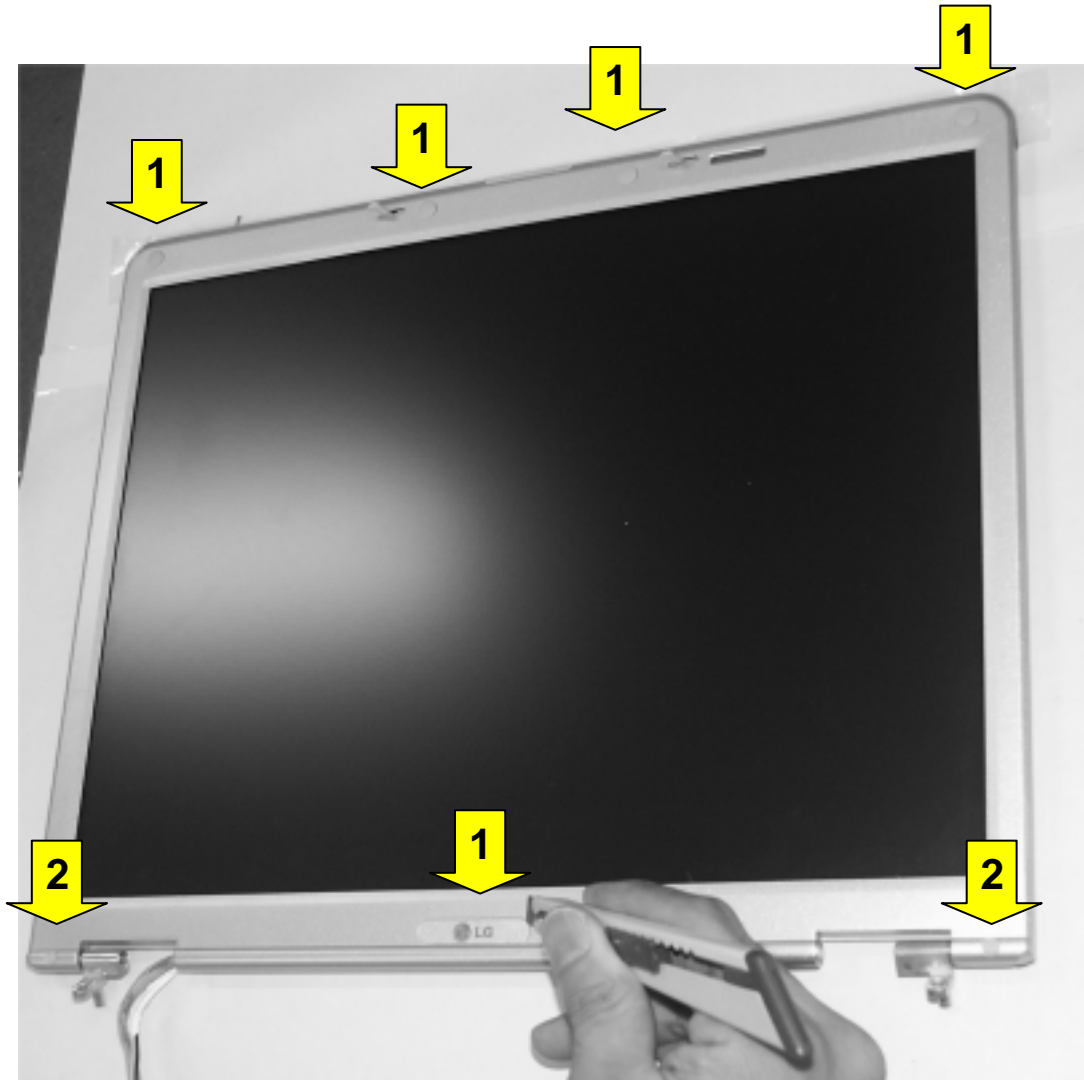
✖ Battery Pack (1010)

✖ Keyboard (1030)

✖ Retainer (1040)

✖ Wireless LAN Card (1070)

1. Using a knife, remove the logo and rubbers that are covering the screws. Then remove all 7 screws.

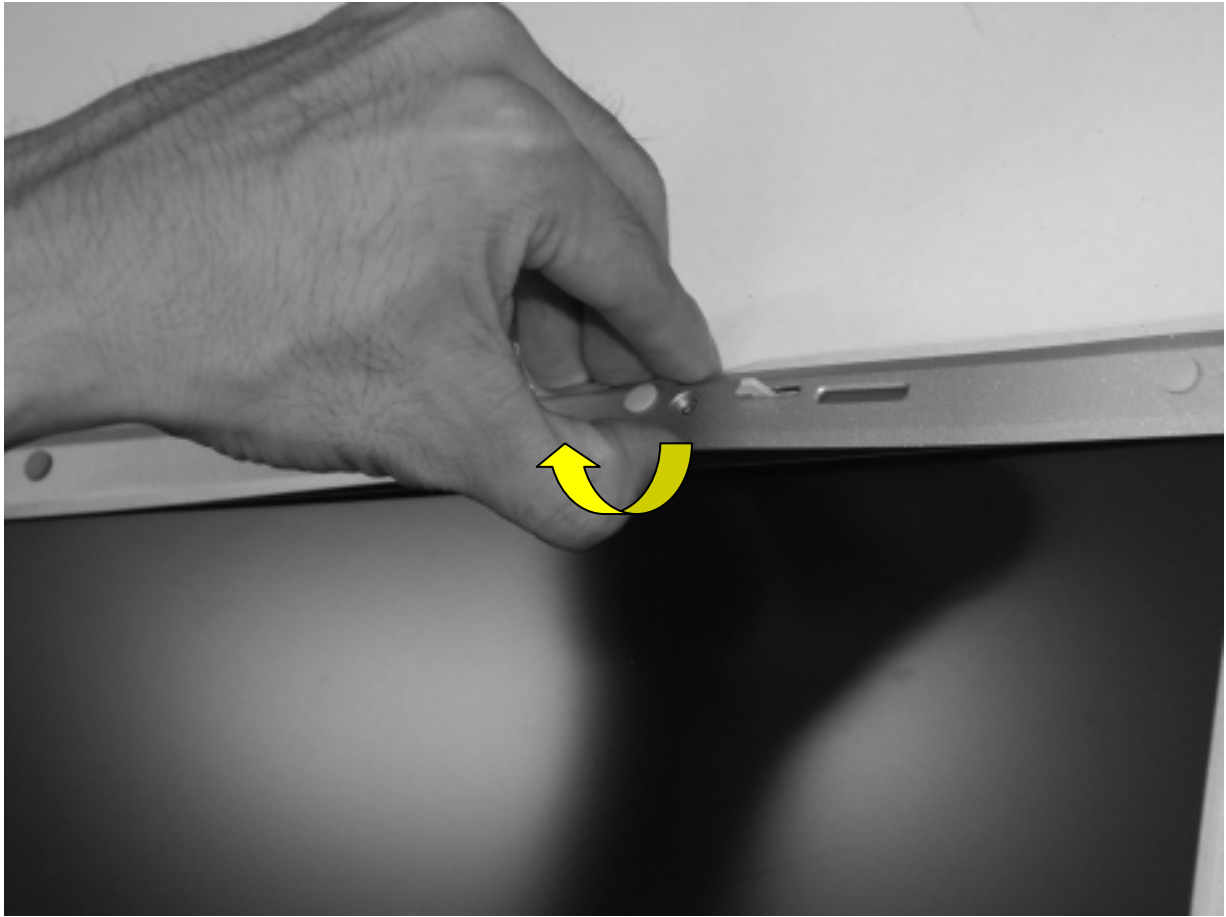


No.	FRU No.	Screw	Qty
1	1SZZBA4044B	M2.5 X L4.0	5
2	1SZZBA4068A	M2.5 X L5.0	2

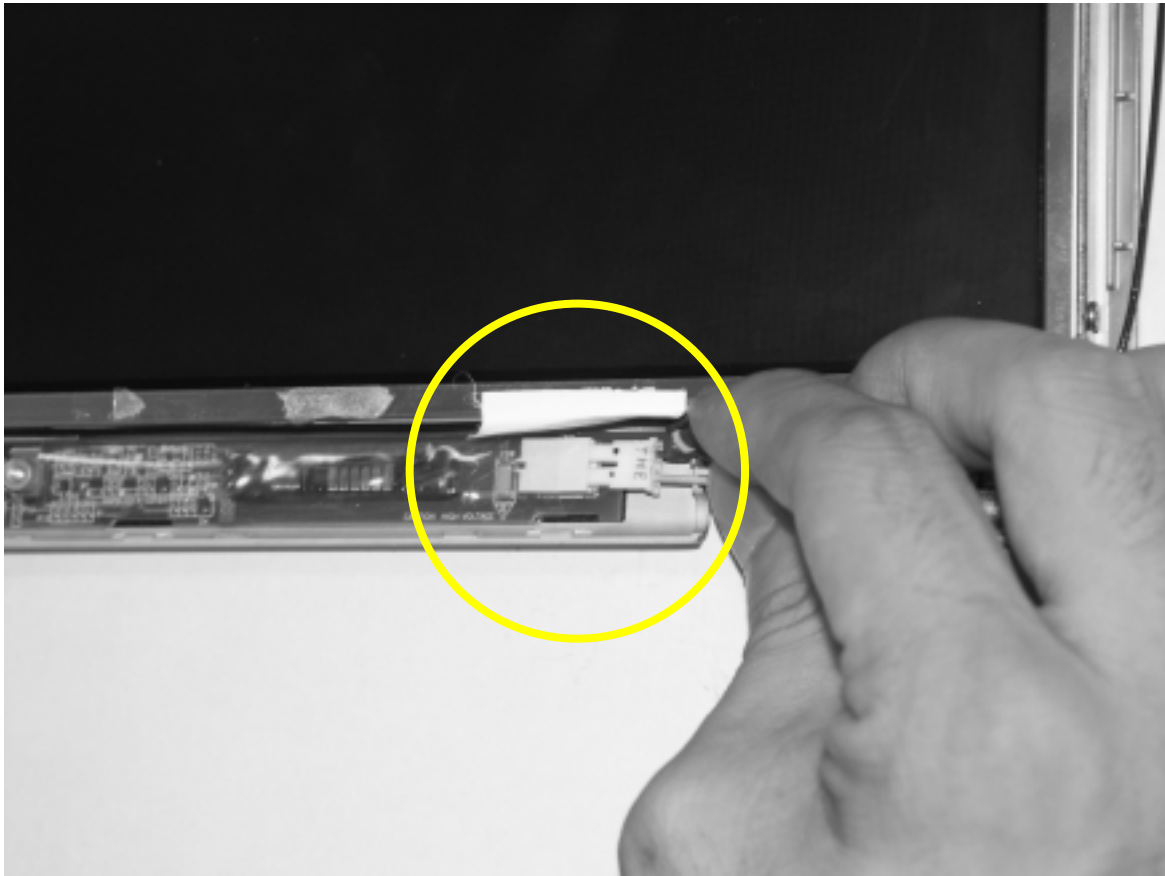
## Removing and replacing a part (FRU)

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2. Disassemble the LCD front. The front hook located on the middle of LCD upper and lower end. Be careful of the direction when removing because it is connected from inside out.

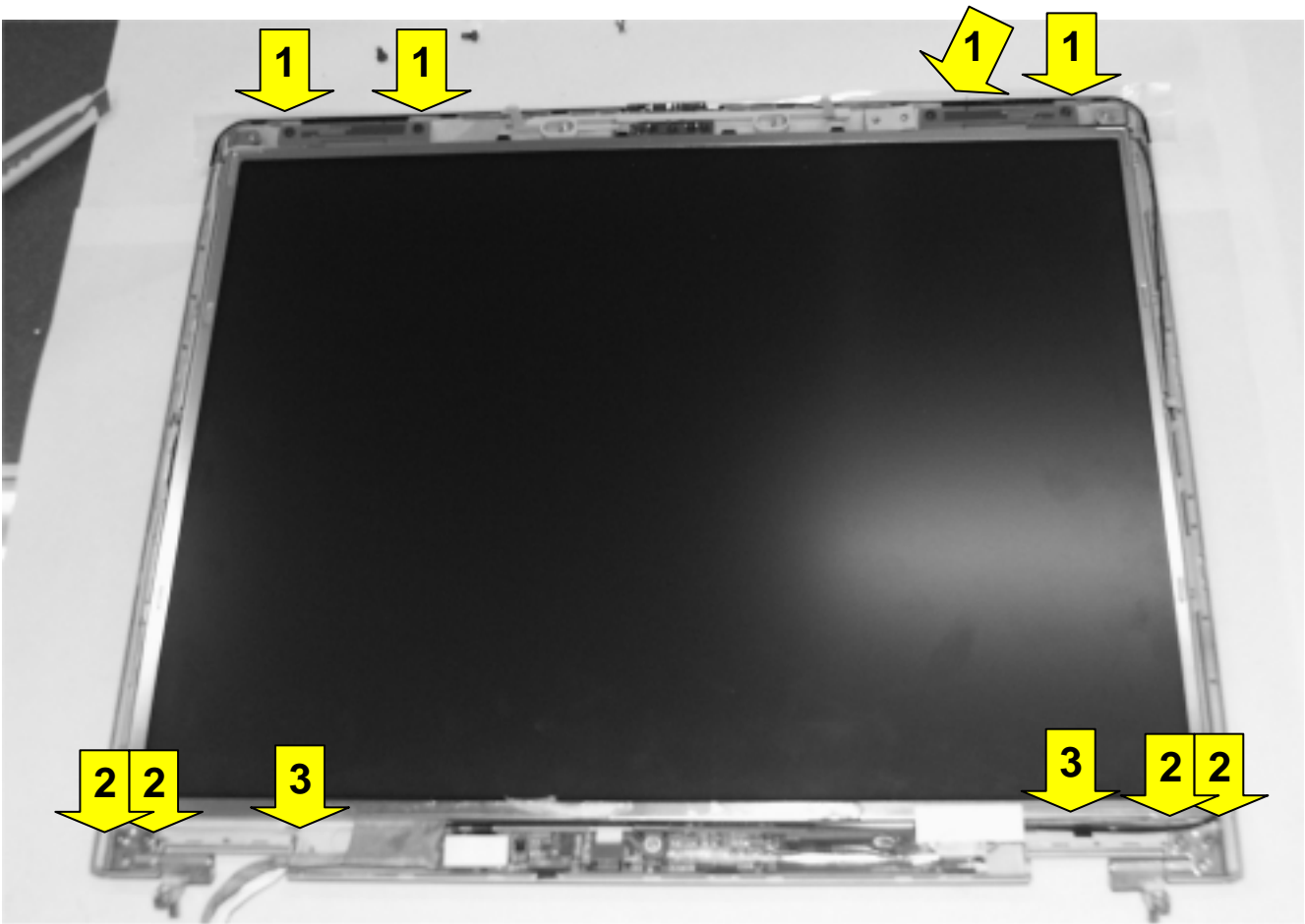


3. Remove cable connector. Remove the cable that is arranged around LCD from the LCD frame.



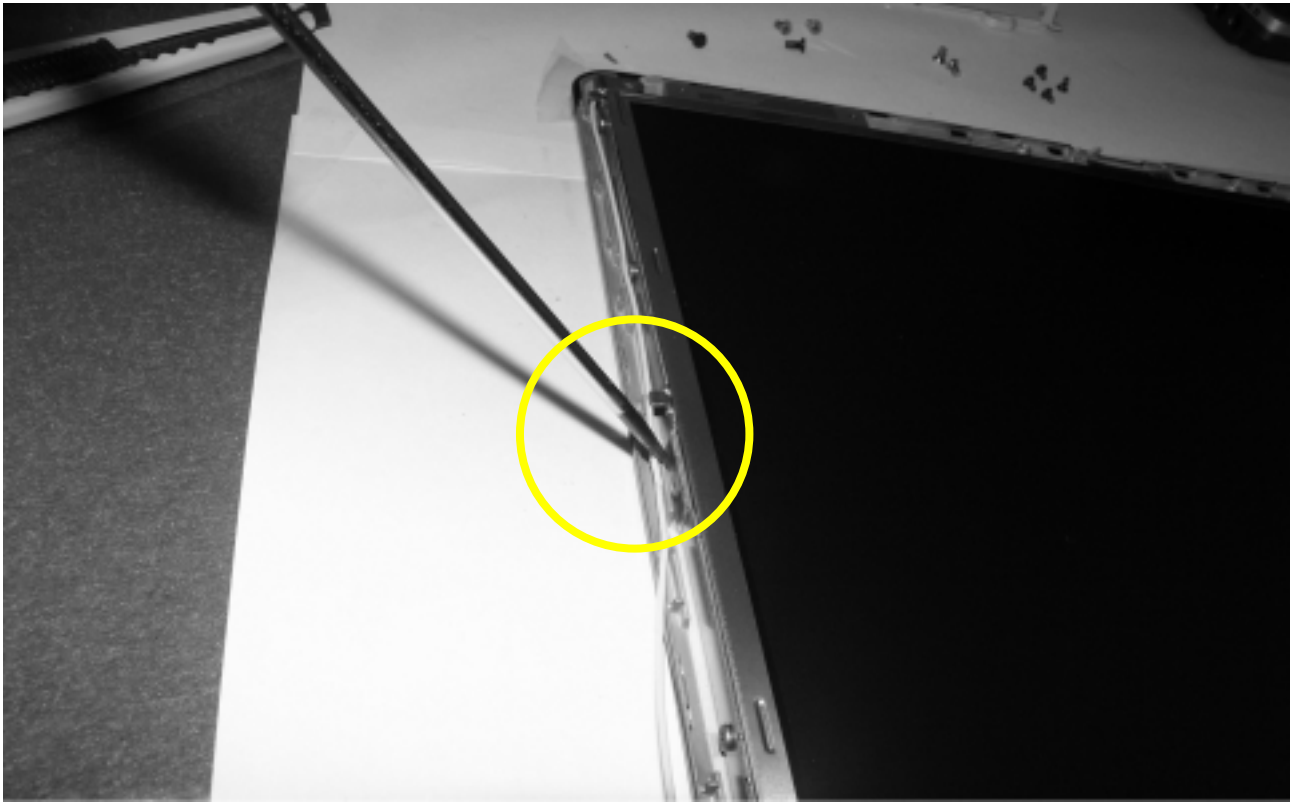
# Removing and replacing a part (FRU)

4. Remove 9 screws (for 15" model) or 8 screws (for 14.1")



No.	FRU No.	Screw	Qty
1	1SZZBZ3009B	M2.0 X L2.5	4
2	1SZZBA4068A	M2.5 X L5.0	4
3	1SZZBA4082A	M2.0 X L4.5	2

5. Press the hook on the both side of LCD with a (-) type screwdriver and remove from the LCD rear panel.



## Removing and replacing a part (FRU)

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6. Remove LCD from the LCD rear panel.

