4.9 Keyboard

Removing the Keyboard

To remove the keyboard, follow the steps below and refer to figures 4-11 to 4-12.

1. Turn the computer face up and open the display panel.

2. Insert your finger into the latches between the keyboard brace and the computer, and lift up the **keyboard brace** to unlatch and remove it.

3. Remove the following **screw** securing the keyboard and keyboard hold plates. Then remove the **keyboard hold plate**.

   - M2×4B   BIND screw   ×1
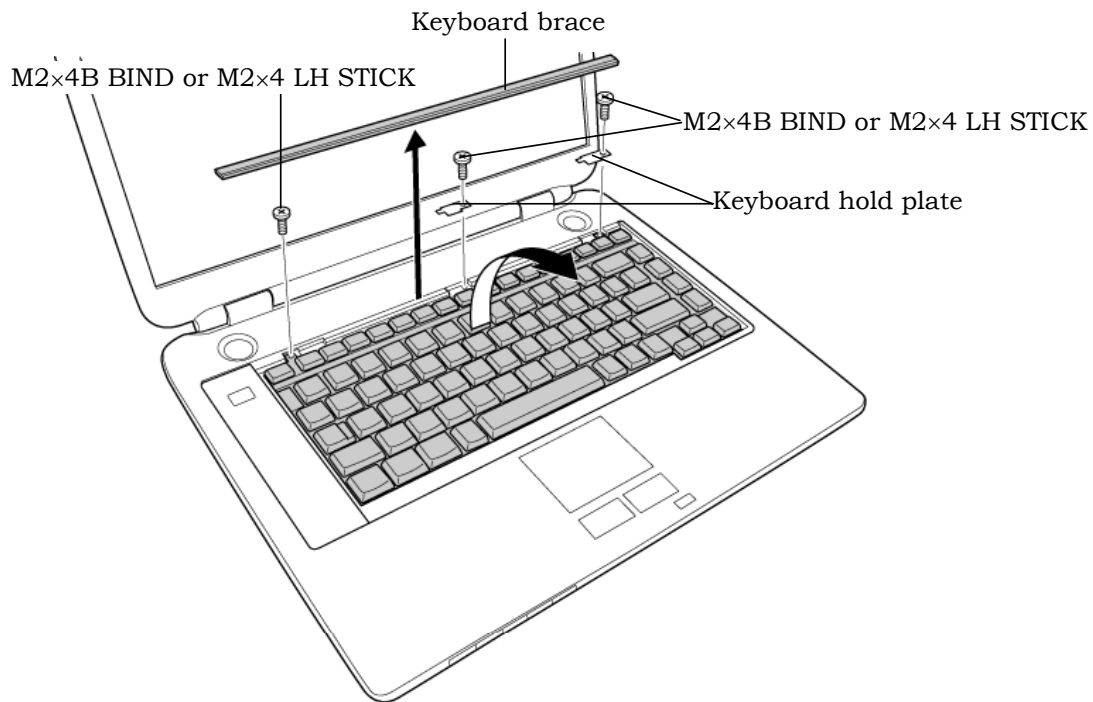   Or
   - M2×4   LH STICK screw   ×1

Figure 4-11　Removing the keyboard brace and keyboard hold plate

4. Lift the upper side of the **keyboard** out and turn it's face down on the palm rest.

5. Remove the following **screw** securing the **keyboard support plate** and remove the keyboard support plate.
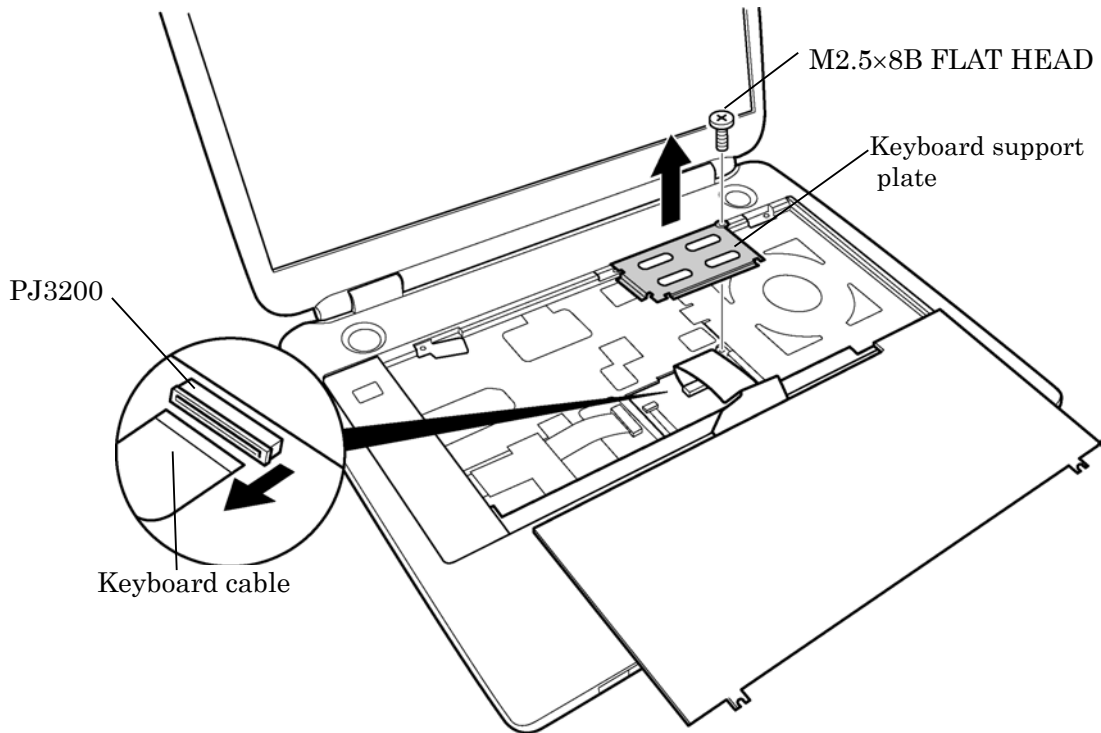
    - M2.5×8B   FLAT HEAD screw   ×1

Figure 4-12   Removing the keyboard support plate

7. Disconnect the **keyboard cable** from the connector **PJ3200** on the system board, and remove the keyboard.

Installing the Keyboard

To install the keyboard, follow the steps below and refer to figures 4-11 to 4-12.

1. Place the keyboard face down on the palm rest.

2. Connect the **keyboard cable** to the connector **PJ3200** on the system board.

3. Place the **keyboard support plate** and secure it with the following **screw**.

    *   M2.5×8B FLAT HEAD screw   ×1

4. Turn the keyboard face up and put it on the computer. Make sure that there is no gap between the keyboard and the computer.

5. Place the **keyboard hold plates** on the keyboard. Then secure the **keyboard hold plates** and the **keyboard** with the following **screws**.

    *   M2×4B   BIND screw   ×2
              Or
    *   M2×4   LH STICK screw   ×2

6. Install the **keyboard brace** by pressing it from the topside.

4.10 Switch cover ASSY/Switch membrane

Removing the Switch cover ASSY/Switch membrane

To remove the Switch cover ASSY/Switch membrane, follow the steps below and refer to figure 4-13 and 4-14.

1. Remove the **switch cover ASSY** by lifting the left side up, while releasing the latches.
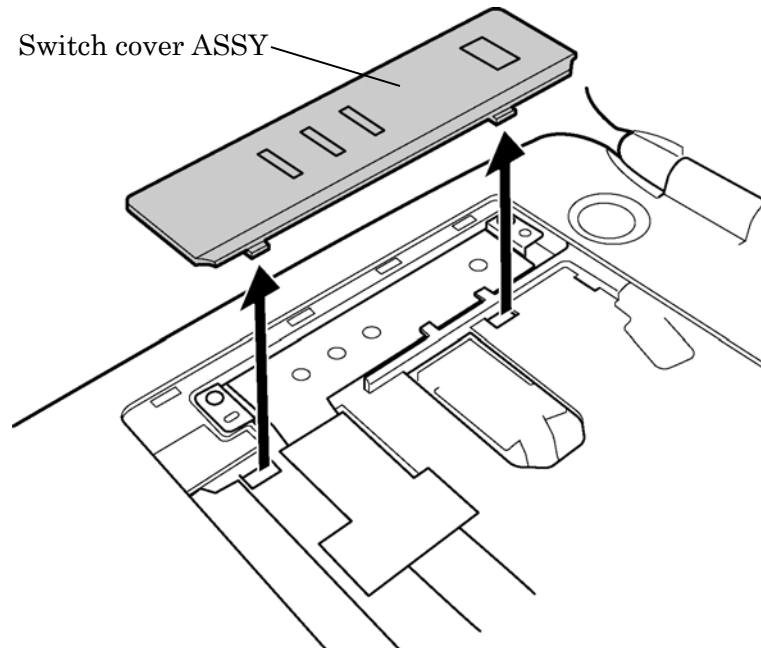
Switch cover ASSY

Figure 4-13   Removing the switch cover ASSY

2. Pull up the **insulator**.

3. Disconnect the **switch membrane cable** from the connector **PJ7001** on the system board.

4. Remove the following **screws** fixing the **switch membrane**.

    *   M2.5×4B FLAT HEAD screw   ×2

5. Remove the **switch membrane** by lifting up the left side of the switch membrane.
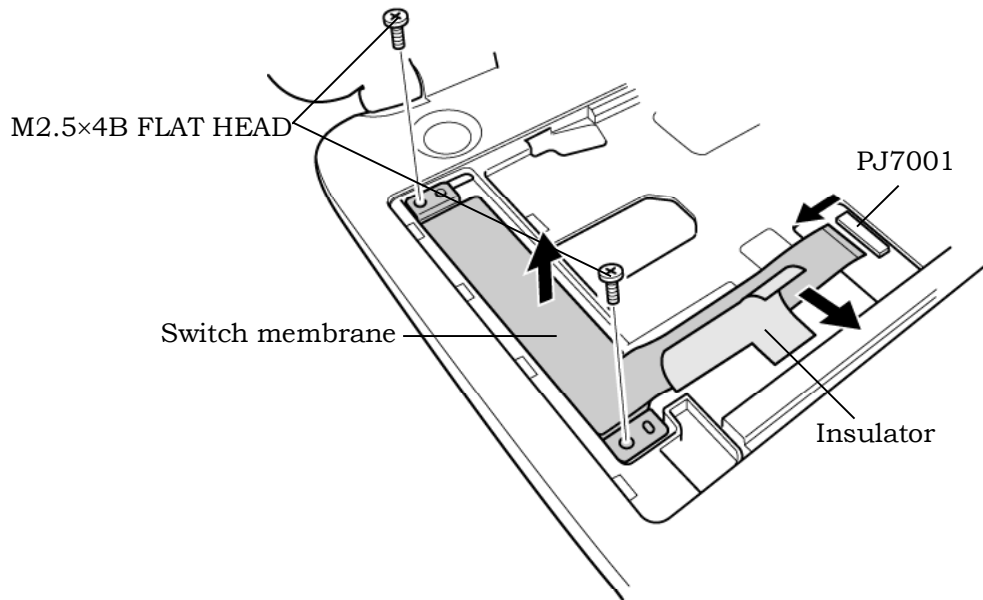

Figure 4-14   Removing the switch membrane

Installing the Switch cover ASSY/Switch membrane

To install the Switch cover ASSY/Switch membrane, follow the steps below and refer to figure 4-13 and 4-14.

1. Place the **switch membrane** with the right side under the guides and secure it with the following **screws**.

   - M2.5×4B   FLAT HEAD screw   ×2

2. Connect the **switch membrane cable** to the connector **PJ7001** on the system board.

3. Stick the **insulator** to fix the switch membrane.

4. Install the **switch cover ASSY** and engage the right-side latches.

4.11 Display Assembly

Removing the Display Assembly

To remove the display assembly, follow the steps below and refer to figures
4-15 to 4-17.

1. Turn the computer face down, and remove the following **screws**.

    - M2.5×16B   FLAT HEAD screw   ×8 ("16" in the figure below)
    - M2.5×10B   FLAT HEAD screw   ×8 ("10" in the figure below)
    - M2×6B   BIND screw   ×2 ("6" in the figure below)
    - M2×4B   S-FLAT HEAD screw   ×1 ("4" in the figure below)
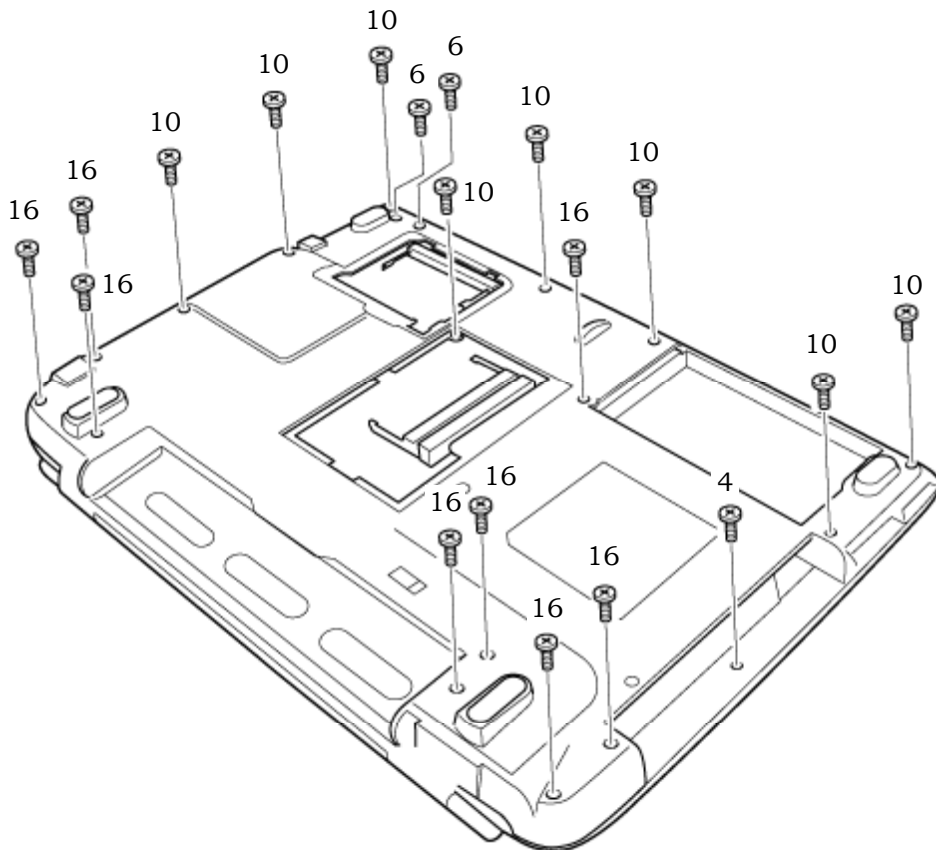

Figure 4-15   Removing the display assembly (1)

2. Turn the computer face up and open the display panel.

3. Remove the following **screws** securing the display assembly.

    - M2.5×6B FLAT HEAD screw   ×3
    - M2.5×8B FLAT HEAD screw   ×1

4. Disconnect the **LCD cable** from the connector **PJ5600** on the system board.

5. Disconnect the two **wireless LAN cables** from the connectors, white and black on the power board.

6. Disconnect the **internal microphone cable** from the connector **PJ6001** on the system board.

7. Disconnect the **panel switch cable** from the connector **PJ7004** on the system board.
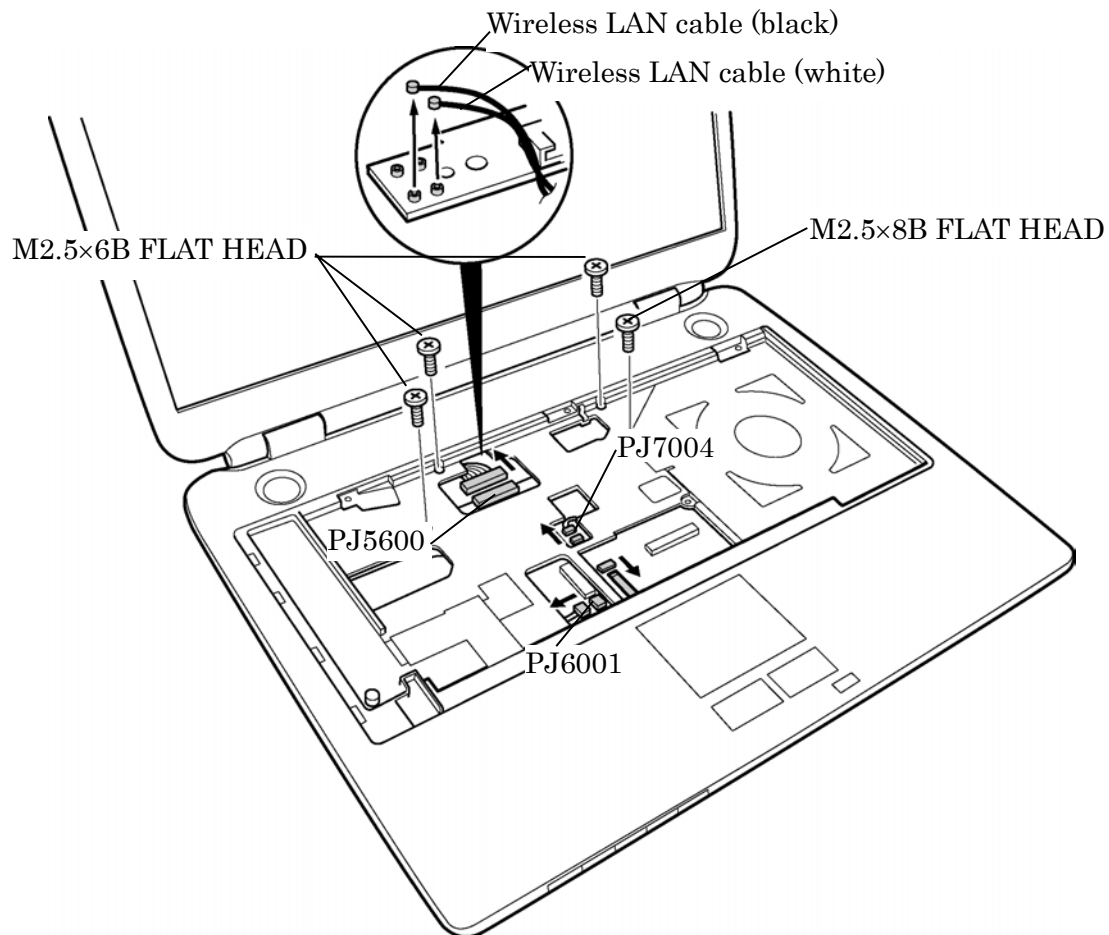

Figure 4-16   Removing the display assembly (2)

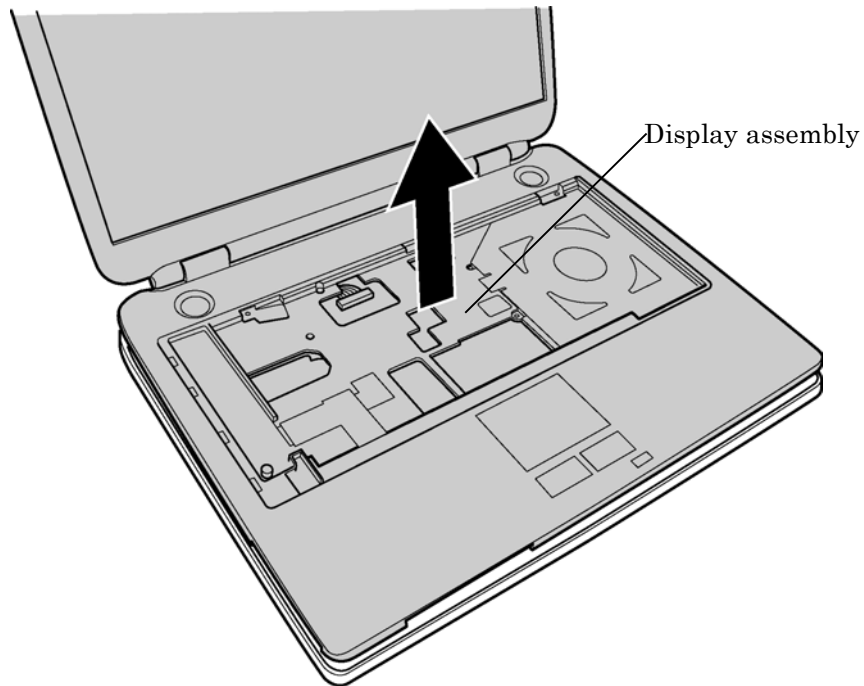8. Remove the **display assembly** from the base assembly.

Display assembly

Figure 4-17   Removing the display assembly (3)

NOTE: *When removing the display assembly, be careful not to damage any cables.*

Installing the Display Assembly

To install the display assembly, follow the steps below and refer to figures 4-15 to 4-17.

1. Install the **display assembly** on the base assembly.

NOTE: *When installing the display assembly, be careful not to pinch or damage any cables.*

2. Press along the edges of the display assembly to secure the latches.

3. Connect the **panel switch cable** to the connector **PJ7004** on the system board.

4. Connect the **internal microphone cable** to the connector **PJ6001** on the system board.

5. Connect the **LCD cable** to the connector **PJ5600** on the system board.

6. Connect the two **wireless LAN cables** to the connectors, white and black on the power board.

7. Secure the display assembly with the following **screws**.

   - M2.5×6B FLAT HEAD screw   ×3
   - M2.5×8B FLAT HEAD screw   ×1

8. Turn the computer face down and secure the display assembly with the following **screws**.
   - M2.5×16B   FLAT HEAD screw   ×8
   - M2.5×10B   FLAT HEAD screw   ×8
   - M2×6B   BIND screw   ×2
   - M2×4B   S-FLAT HEAD screw   ×1

4.12 Touch Pad Button

Removing the Touch Pad Button

To remove the touch pad button, follow the steps below and refer to figure 4-18.

1. Remove the following **screws** fixing the touch pad button.

   - M2.5×4   Tapping screw   ×3
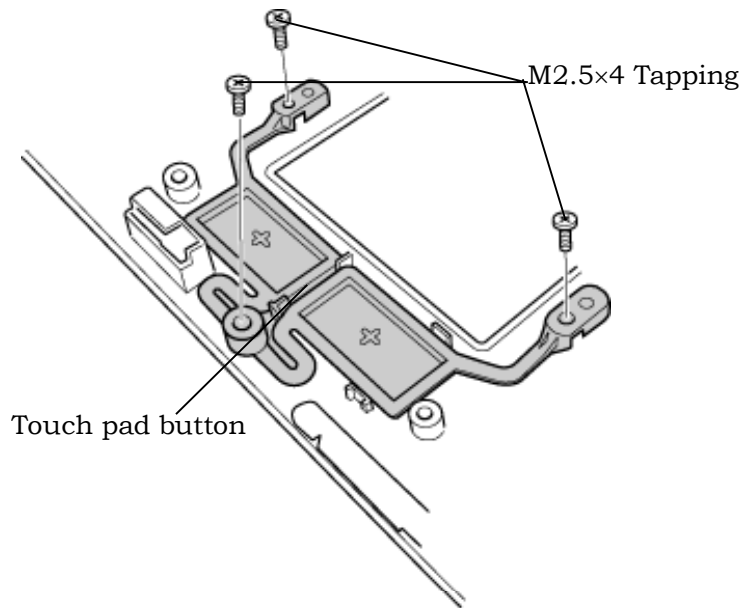
2. Remove the **touch pad button**.

Figure 4-18   Removing the touch pad button

Installing the Touch Pad Button

To installing the touch pad button, follow the steps below and refer to figure 4-18.

1. Install the **touch pad button** and fix it with the following **screws**.

   - M2.5×4   Tapping screw   ×3

4.13 Microphone

Removing the Microphone

To remove the Microphone, follow the steps below and refer to figures 4-19 and 20.

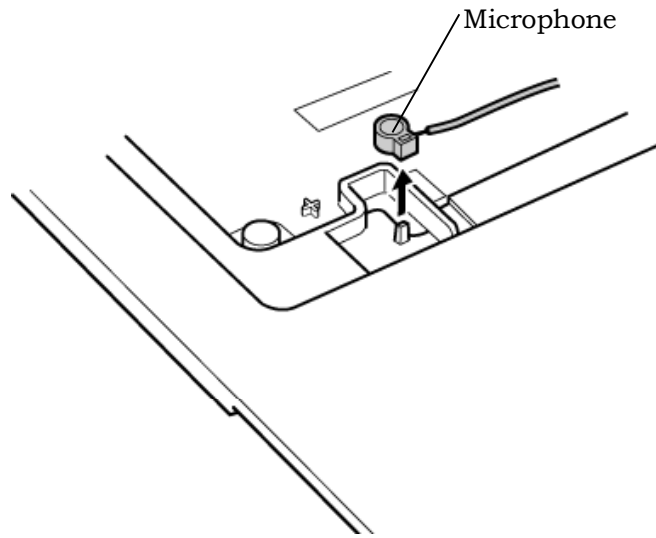1. Remove the **microphon**e from the guide.

Figure 4-19   Removing the microphone

2. Peel the **insulator** on the back and remove the microphone cable from the guide.

3. Remove the **microphone** (with cable) through the hole to the front.
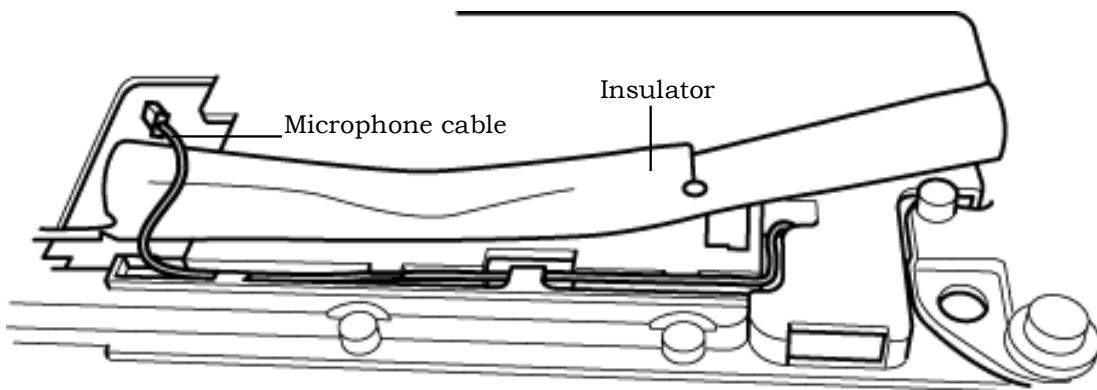

Figure 4-20   Removing the microphone cable

Installing the Microphone

To install the Microphone, follow the steps below and refer to figures 4-19 and 20.

1. Pass the **microphone cable** from the front to the back.

2. Set the **microphone**, putting the hole in the guide.

3. Pass the **microphone cable** through the slot with guides.

4.14 Touch Pad

Removing the Touch Pad

To remove the touch pad, follow the steps below and refer to figures 4-21.

1. Disconnect the **touch pad flexible cable** from the connector **PJ3201** on the system board.

2. Remove the following **screws** securing the touch pad.

    -   M2.5×8B   FLAT HEAD screw   ×1
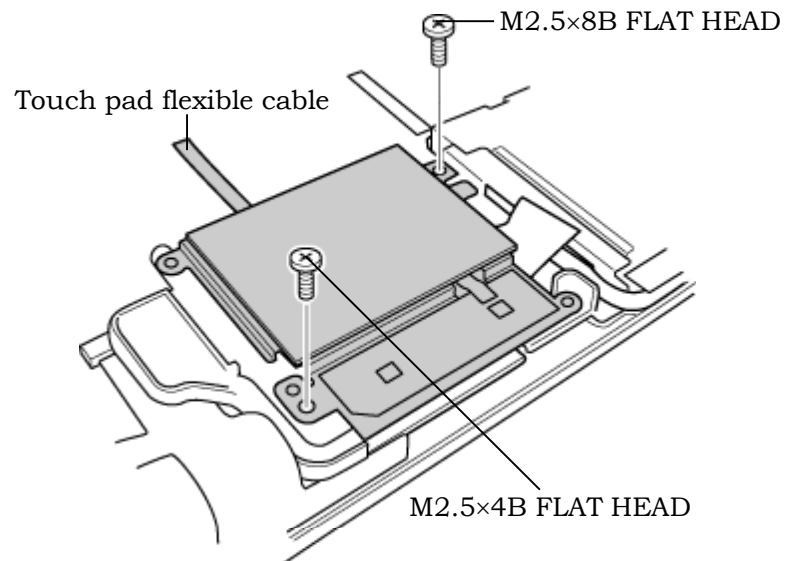   -   M2.5×4B   FLAT HEAD screw   ×1

3. Remove the **touch pad**.

Figure 4-21   Removing the touch pad

4. Disconnect the **touch pad flexible cable** from the connector on the touch pad.

Installing the Touch Pad

To install the touch pad, follow the steps below and refer to figures 4-21.

1. Connect the **touch pad flexible cable** to the connector on the touch pad.

2. Install the **touch pad** and secure it with the following **screws**.

   - M2.5×8B   FLAT HEAD screw   ×1
   - M2.5×4B   FLAT HEAD screw   ×1

3. Connect the **touch pad flexible cable** to the connector **PJ3201** on the system board.

4.15 RTC Battery

WARNING: *When replacing the RTC battery, be sure to use genuine batteries or replacement batteries authorized by Toshiba. Installing the wrong battery could cause a battery explosion or other damage.*

If the RTC battery is found abnormal, it must not be installed. Replace it with a new battery, and dispose of the old one according to the local regulations.

Check for any of the following signs of damage:

1) *Electrolyte leakage*

- *Corrosion (greenish color) on the battery connector or cable*

- *Corrosion on the computer's battery connector*

- *White powder on any part of the battery*

- *White powder in the battery tray*

- *Clear liquid on the battery*

- *Clear liquid in the battery tray*

- *Clear liquid on any board near the battery*

2) *Damage to the connection cable*

3) *Damage to the connector housing*

If any powder or liquid is found in or around the battery tray, clean it. Be careful not to let any leaked material contact your eyes or mouth. Do not inhale fumes from leaked material.

If leaked material contacts your skin, eyes or mouth, wash the affected area thoroughly with clean water.

Removing the RTC Battery

To remove the RTC battery, follow the steps below and refer to figure 4-22.

1. Peel off the **insulator**.

2. Disconnect the **RTC battery cable** from the connector **PJ8490** on the system board.

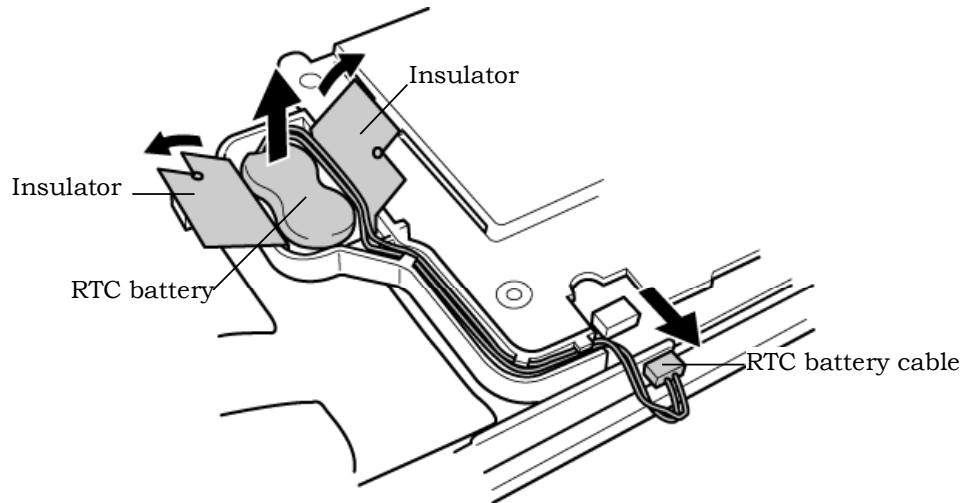3. Remove the **RTC battery**.

Figure 4-22   Removing the RTC battery

Installing the RTC Battery

To install the RTC battery, follow the steps below and refer to figure 4-22.

1. Place the **RTC battery** into the slot.

2. Pass the RTC battery cable through the battery guide and connect the **RTC battery cable** to the connector **PJ8490** on the system board.

3. Fix the **RTC battery** with the **insulator**.

4.16 Sound Board/Touch Pad holder

4.16.1 Sound Board

Removing the Sound Board

To remove the sound board, follow the steps below and refer to figure 4-23.

1. Remove the following **screw** and the **sound board**.

   - M2.5×6B   FLAT HEAD screw   ×1

2. Disconnect the **sound board I/F cable** from the connector on the sound board.
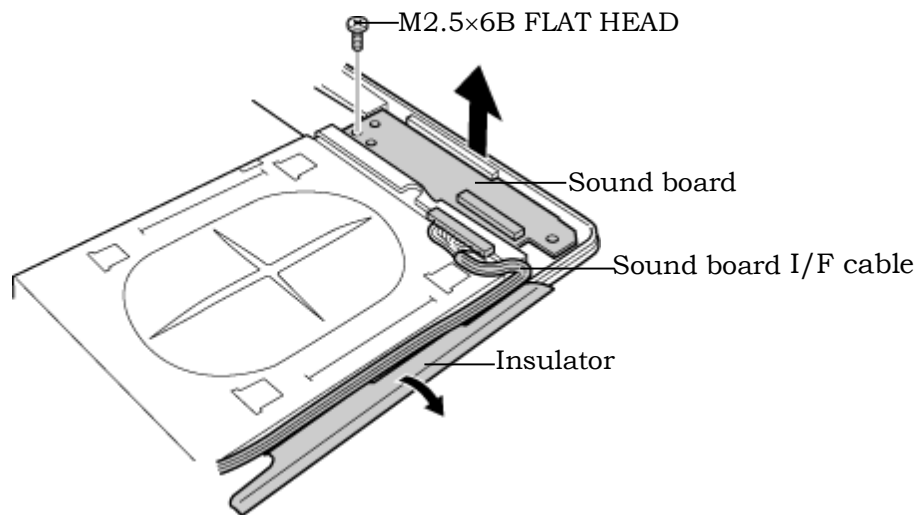
3. Peel the **insulator**.

Figure 4-23 Removing the sound board

Installing the Sound Board

To install the sound board, follow the steps below and refer to figure 4-23.

1. Connect the **sound board I/F cable** to the connector on the sound board and secure it with the **insulator**.

2. Install the **sound board** from the side with jacks and secure it with the following **screw**.

    -   M2.5×6B   FLAT HEAD screw   ×1

4.16.2 Touch Pad holder

Removing the Touch Pad holder

To remove the touch pad holder, follow the steps below and refer to figures 4-24.

1. Disconnect the **sound board I/F cable** from the connector **PJ7002** on the system board.

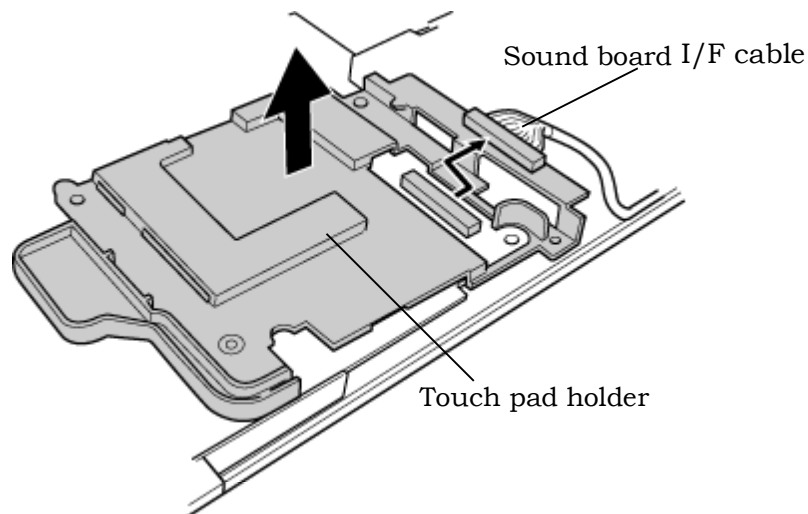2. Remove the **touch pad holder** from the system board.

Figure 4-24   Removing the touch pad holder

Installing the Touch Pad holder

To install the touch pad holder, follow the steps below and refer to figures 4-24.

1. Install the **touch pad holder** on the system board.

2. Connect the **sound board I/F cable** to the connector **PJ7002** on the system board.

4.17 CD-Key assembly

Removing the CD-Key assembly

To remove the CD-key assembly, follow the steps below and refer to figures 4-25.

1. Disconnect the **CD-key flexible cable** from the connector **PJ7000** on the system board.

2. Remove the following **screw** and the **CD-key assembly**.
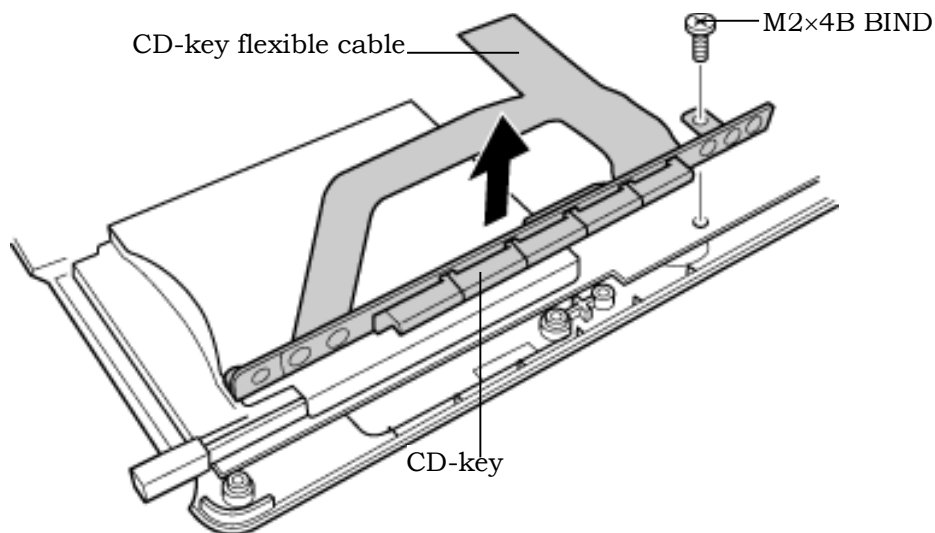
    - M2×4B   BIND screw   ×1

Figure 4-25   Removing the CD-key assembly

Installing the CD-Key assembly

To install the CD-key assembly, follow the steps below and refer to figures 4-25.

1. Place the **CD-key assembly** and secure it with the following **screw**.

    - M2×4B   BIND screw   ×1

2. Connect the **CD-key flexible cable** to the connector **PJ7000** on the system board.

4.18 System Board

Removing the System Board

To remove the system board, follow the steps below and refer to figures 4-26 and 4-27.

1. Peel off the **glass tape** and disconnect the **RGB cable** from the connector **PJ5621** on the system board.

2. Disconnect the **speaker cables** from the connectors **PJ6003** (red) and **PJ6004** (blue) on the system board.

3. Disconnect the **USB cable** from the connector **PJ7003** on the system board.

4. Peel off the **glass tapes** and disconnect the **battery cable** from the connector **PJ8810** and the **network cable** from the connector **PJ4100**on the system board.

5. Disconnect the **fan cable** from the connector **PJ8770** on the system board and the **power cable** from the connector **CN3** on the power board.

6. Peel off the **glass tape** and disconnect the **USB cable** from the connector **PJ7005** on the system board.(VRAM64 only)
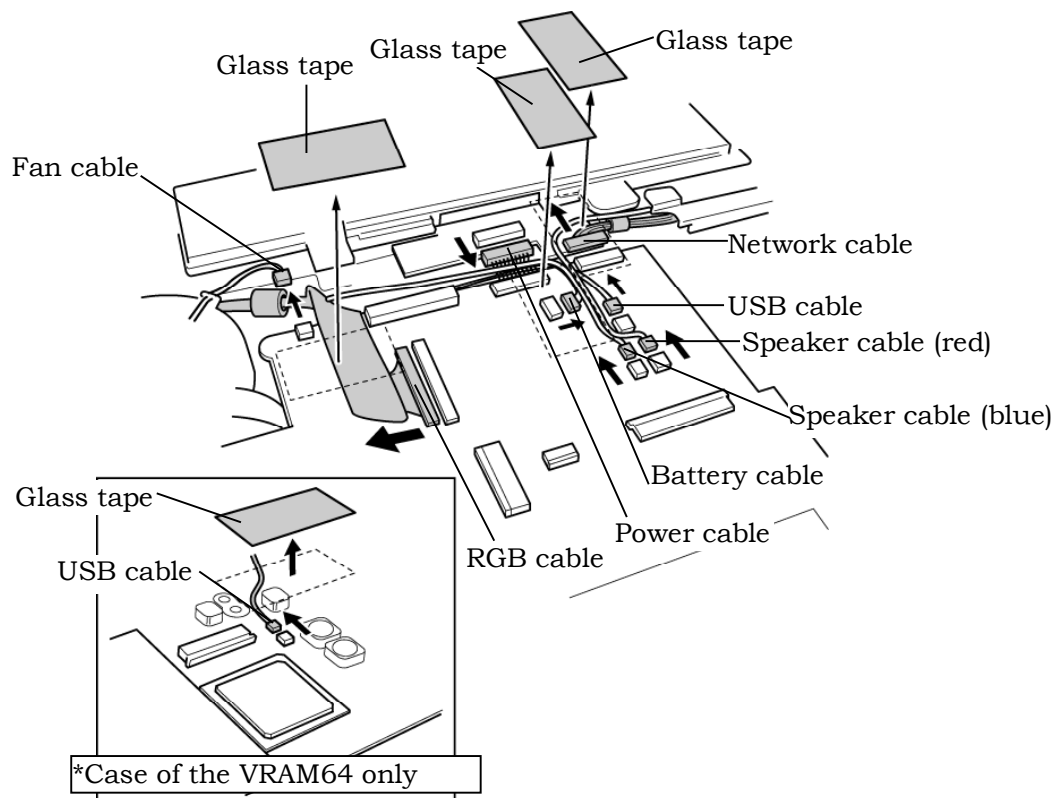
Figure 4-26   Removing the system board (1)

7. Remove the following **screws** securing the system board.

   - M2.5×6B FLAT HEAD screw   ×1

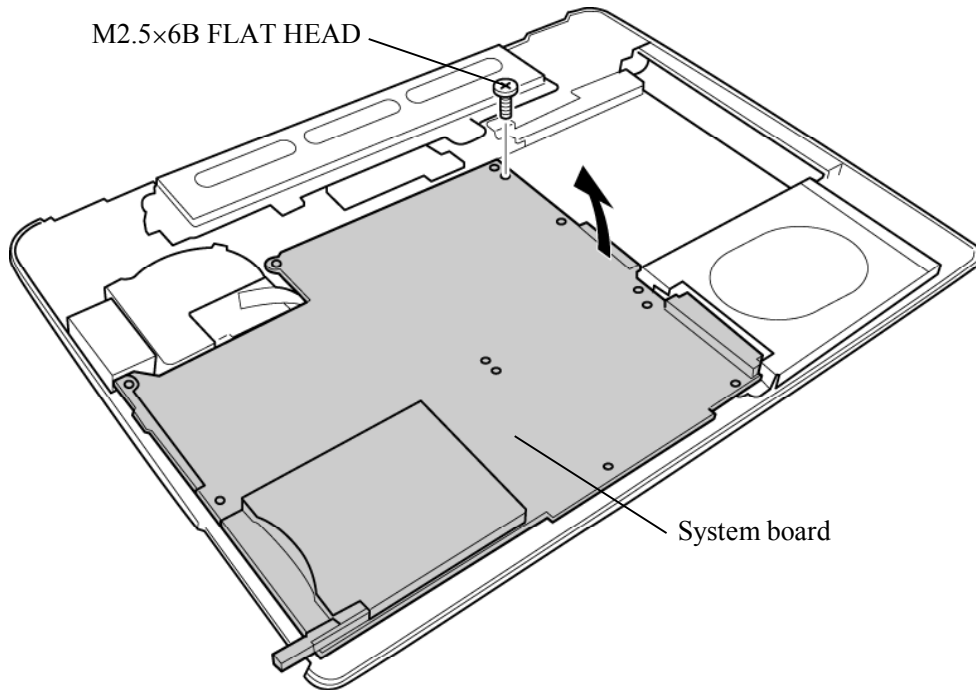8. Lift up the right side of the **system board** and remove it.

Figure 4-27   Removing the system board (2)

Installing the System Board

To install the system board, follow the steps below and refer to figures 4-26 and 27.

1. Install the **system board** from the left side.

NOTE: *When installing the system board, be careful not to pinch or damage the USB cable, RGB cable, battery cable speaker cable, network cable, fan cable or power cable.*

---

2. Secure the system board with the following **screws**.

    *   M2.5×6B   FLAT HEAD screw   ×1

3. Connect the **USB cable** to the connector **PJ7005** on the system board and stick the **glass tape**.(VRAM64 only)

4. Connect the **fan cable** to the connector **PJ8770** on the system board.

5. Connect the **RGB cable** to the connector **PJ5621** on the system board and stick the **glass tape**.

6. Connect the **battery cable** to the connector **PJ8810** on the system board.

7. Connect the **power cable** to the connector **CN3** on the power board.

8. Connect the **USB cable** to the connector **PJ7003** on the system board.

9. Connect the **speaker cables** to the connectors **PJ6003** and **PJ6004** on the system board.

10. Connect the **network cable** to the connector **PJ4100** on the system board and stick the **glass tapes**.