

FIELD REPLACEABLE UNIT DOCUMENTATION

Tecra™

M1 Series

GENERAL INFORMATION

Tools Required for Proper Disassembly and Reassembly:

- 1. Phillips Screwdriver (Size 0&1)**
- 2. Flat head Screwdriver**
- 3. Case Separator**
- 4. ESD Wrist Strap**
- 5. ESD mats**
- 6. Tweezers**

Before attempting any of the following procedures, make sure that the main battery and AC adaptor is not connected to the unit and the environment in which you are working on is protected from Electro-Static Discharge(ESD).

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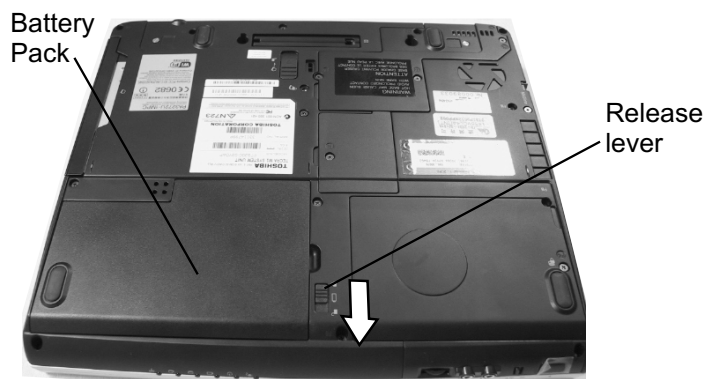
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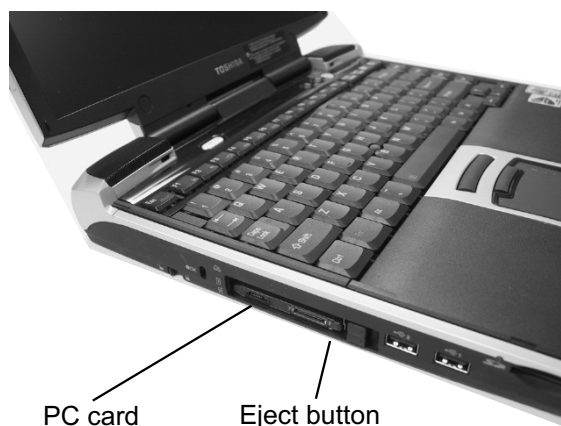
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BATTERY PACK REMOVAL



1. Turn the computer upside down as shown.
2. Slide the **battery release lever** in the direction of the arrow.
3. Lift out the **battery**.

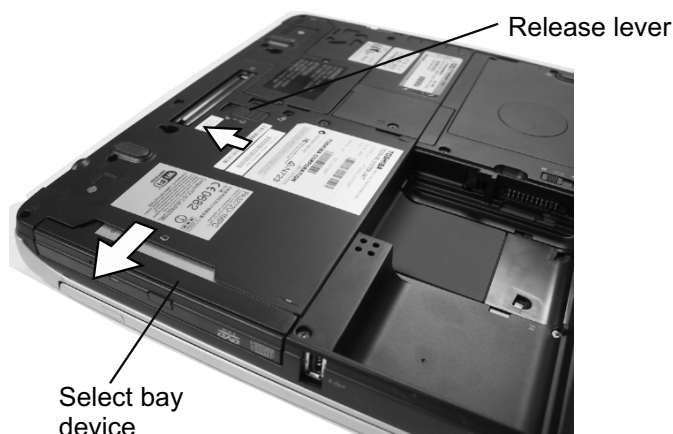
OPTIONAL PC CARD REMOVAL



1. Press the **eject button** for the PC card you want to remove.
2. Press the extended **eject button** to pop the PC Card out.
3. Grasp the **PC card** and remove it.

NOTE: Before removing any PC Card device, make sure it is "STOPPED" in the PC Card manager.

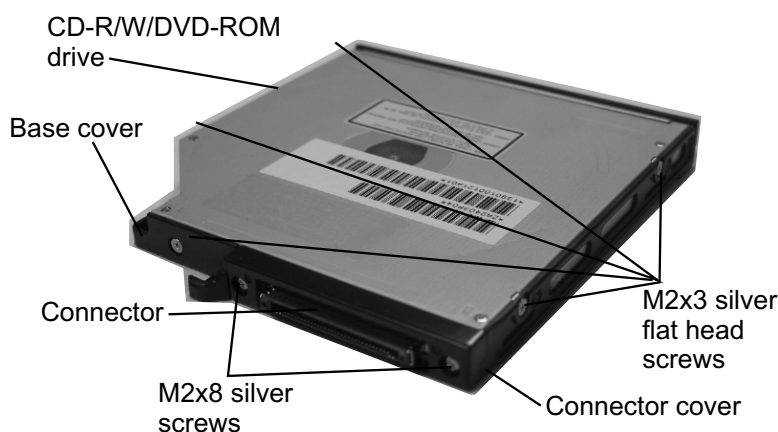
SELECT BAY REMOVAL



1. Turn the computer upside down.
2. Slide the **release lever** in the direction of the arrow.
3. Pull out the **select bay device** in the direction of the arrow.

NOTE: If the lock screw is in locked position, remove it and attach it to the other hole for temporary retention of the screw.

CD-R/W/DVD-ROM DRIVE DISASSEMBLY



1. Remove **five M2x3 silver flat head screws** securing the base cover and lift out the **cover**.
2. Remove **two M2x8 silver screws** securing the connector cover.
3. Remove the **connector cover** and the **connector** from the CD-R/W/DVD-ROM drive.

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HDD REMOVAL



HDD cover

M2.5x4 black flat head screw

1. Turn the computer upside down.
2. Remove **one M2.5x4 black flat head screw** securing HDD cover.
3. Remove the **HDD cover**.

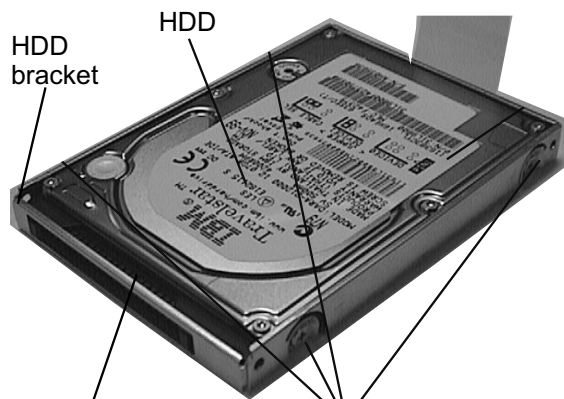


HDD pack

Plastic Tab

4. Unfold the **plastic tab** and pull to remove the HDD from the bay.

MODEM BOARD REMOVAL



HDD bracket

HDD

HDD connector

M3x4 brass flat head screws

5. Remove **four M3x4 brass flat head screws** securing the HDD to the bracket and lift the drive out of the **bracket**.
6. Unplug the **HDD connector** from the drive.



M2.5x4 black flat head screws

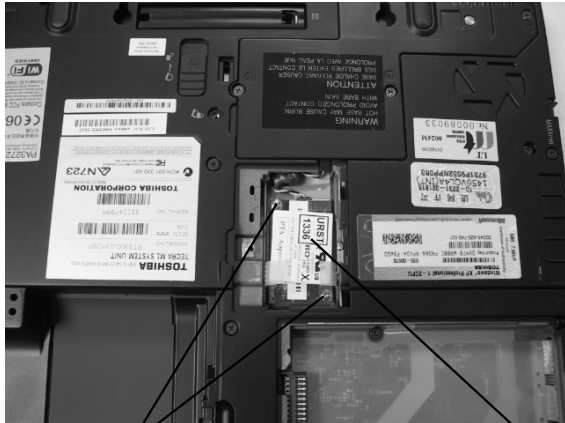
Modem/CPU cover

1. Turn the computer upside down.
2. Remove **one M2.5x4 black flat head screws** securing the modem cover.
3. Remove the **modem cover**.

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MODEM BOARD REMOVAL



M2x4 brass screws

Modem board

1. Remove **two M2x4 brass screws** securing the modem board.
2. Disconnect the **modem board** from PJ2017 on the system board.
3. Disconnect the **modem cable** from JP1 on the modem card.

COOLING MODULE REMOVAL



M2.5x16
black flat
head screw

CPU cover

M2.5x4 black flat head screws

1. Turn the computer upside down.
2. Remove **three M2.5x4 black flat head screws** and **one M2.5x16 black flat head screw** securing the CPU cover.
3. Lift out the **CPU cover**.

COOLING MODULE REMOVAL

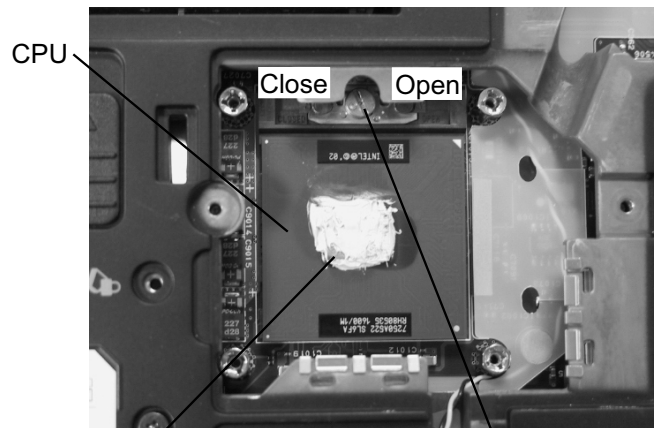


M2.5x10 black flat head screws

Cooling
module assy

4. Remove **four M2x6 brass screws** securing the cooling module.
5. Lift out the **cooling module assembly**.

CPU REMOVAL



CPU

Close

Open

Silicone grease

CPU lock

6. Insert a **flat head screwdriver** to the **CPU lock** and rotate it counter-clockwise to unlock the **CPU**.
7. Lift out the **CPU**.

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KEYBOARD REMOVAL

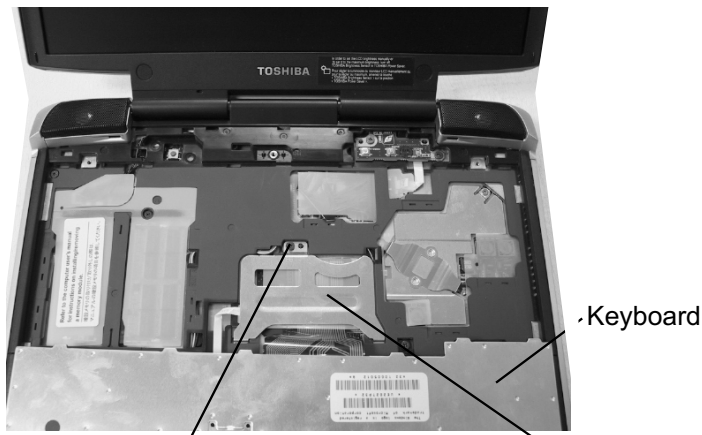


1. Turn the computer right side up and open the display panel.
2. Using the **case separator**, unlatch the **keyboard holder** at the top of the keyboard.

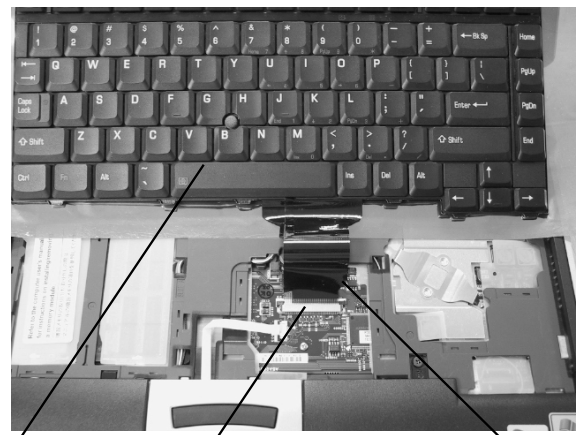


3. Remove **two M2.5x2.8 black flat head screws** securing the keyboard.
4. Remove **one M2.5x2.8 black flat flat head screw** securing the keyboard holder plate and lift out the plate.

KEYBOARD REMOVAL



5. Lift out the **keyboard** and set it as shown above.
6. Remove the **one M2.5x6 black screw** securing the keyboard support plate and lift out the plate.

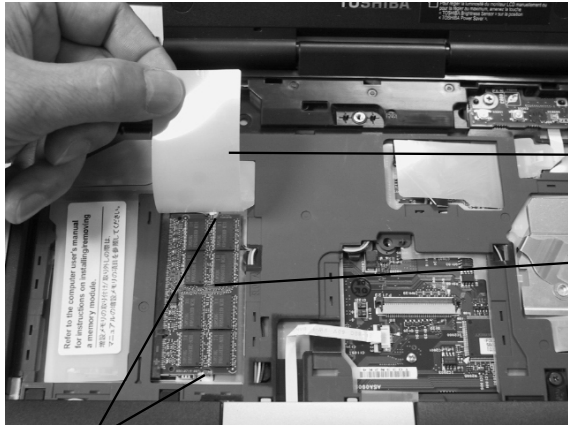


7. Set the **keyboard** as shown above. Make sure to put insulator between the LCD and the Keyboard.
8. Disconnect the **keyboard cable** from **PJ123** on the system board.
8. Lift out the **keyboard**.

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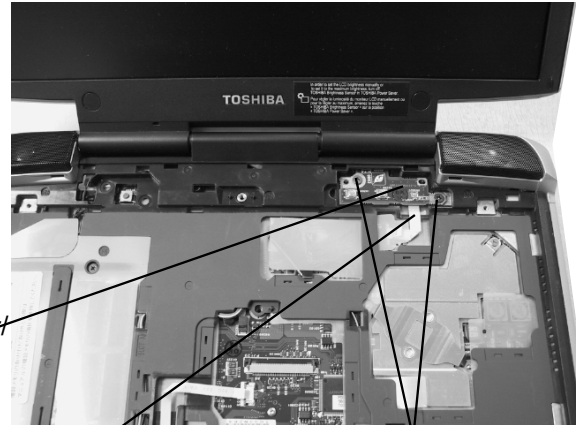
MEMORY MODULE REMOVAL



Memory clips

1. Lift up the **plastic insulator** covering the memory slots.
2. Spread the **memory clips** outward and pull the **memory module** out of the connector on a 30 degree angle.

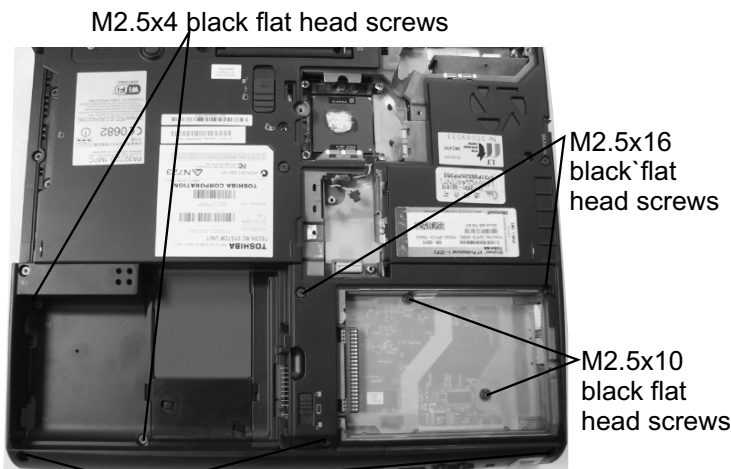
SENSOR/SWITCH BOARD REMOVAL



Sensor/switch board cable M2.5x2.8 black flat head screws

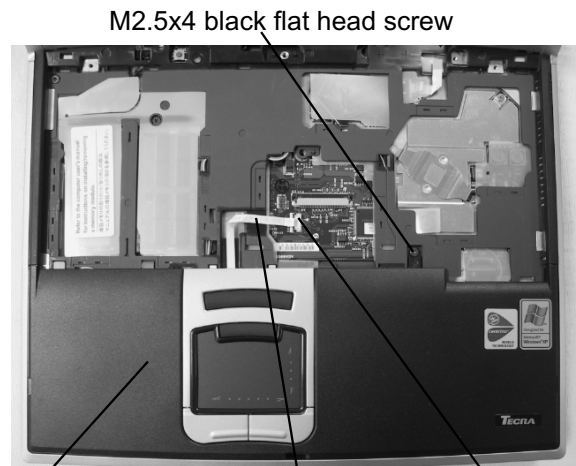
1. Remove **two M2.5x2.8 black flathead screws** securing the sensor switch board.
2. Disconnect the **sensor/switch board cable** from PJ3200 on the back of the sensor/switch board.
2. Lift out the **sensor/switch board**.

PALM REST COVER REMOVAL



M2.5x6 black flat head screw

1. Turn the computer up side down.
2. Remove nine screws securing the palm rest cover:
 - 2 M2.5x4 black flat head screws
 - 3 M2.5x6 black flat head screws
 - 2 M2.5x10 black flat head screws
 - 2 M2.5x16 black flat head screws.



Palmrest cover Touch pad cable PJ2003

3. Turn the computer right side up and open the display panel.
4. Disconnect the touch pad cable from PJ2003 on the system board.
5. Remove **one M2.5x4 black flat head screw** securing the palm rest cover.
6. Lift out the **palm rest cover**.

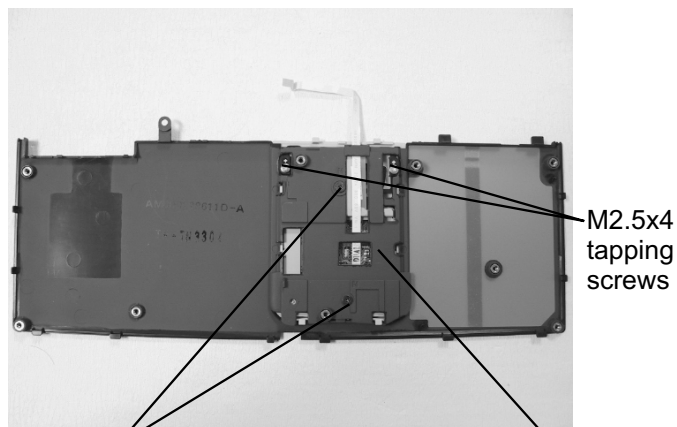
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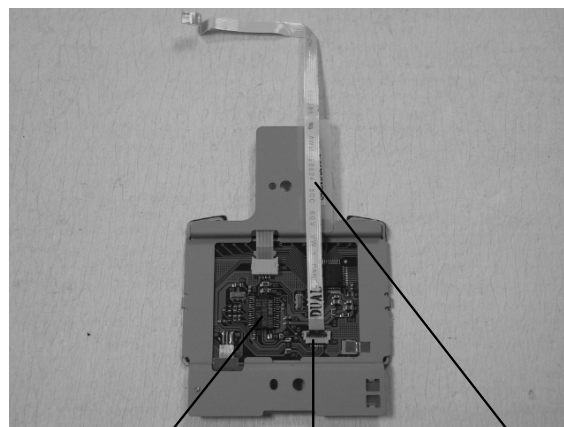
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TOUCH PAD REMOVAL



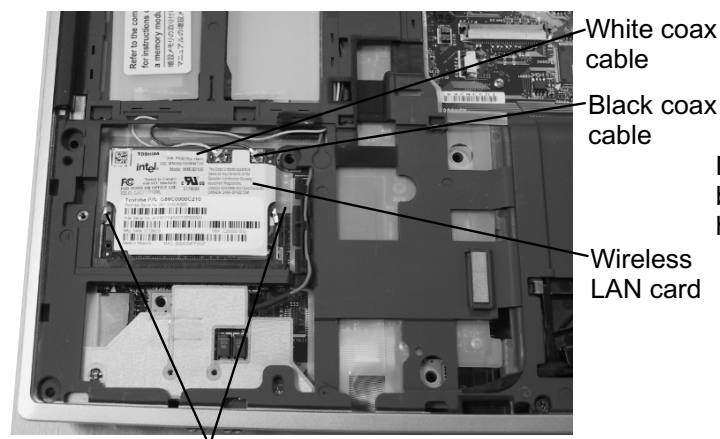
Touch pad cover

1. Remove **two M2.5x4 black flat head screws** and **two M2.5x4 tapping screws** securing the touch pad cover.
2. Turn the palm rest cover and lift out the **touch pad assembly**.



4. Disconnect the **touch pad cable** from CN1 on the touch pad board.

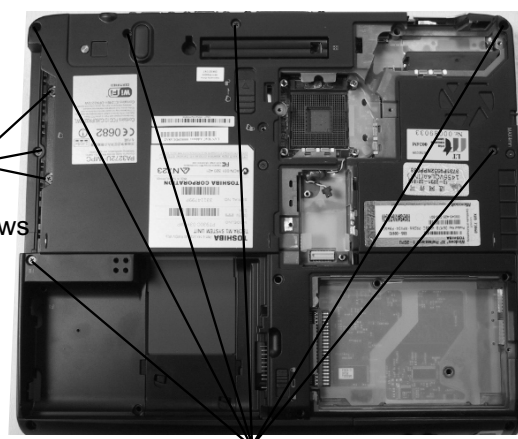
WIRELESS LAN CARD REMOVAL



Mini-PCI connector clips

3. Disconnect the **black** and **white coax** from the wireless LAN card.
4. Spread the **Mini-PCI connector clips** and pull the **Wireless LAN card** out of the connector about 45 degree angle.

TOP COVER REMOVAL



M2.5X16 black flat head screws

1. Turn the computer upside down.
2. Remove **nine screws** securing the bottom cover:
 - 3 M2.5x4 black flat head screws
 - 6 M2.5x16 black flat head screws

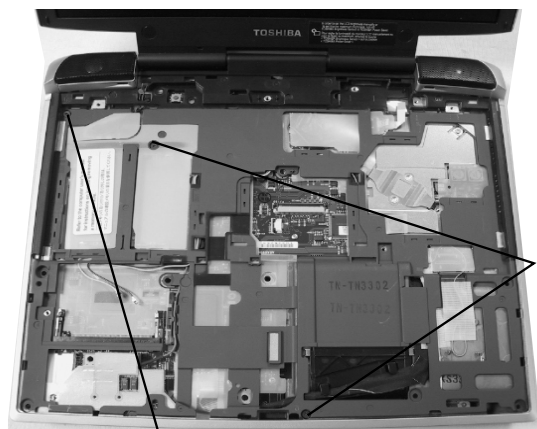
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TOP COVER REMOVAL



M2.5x4 black flat head screw

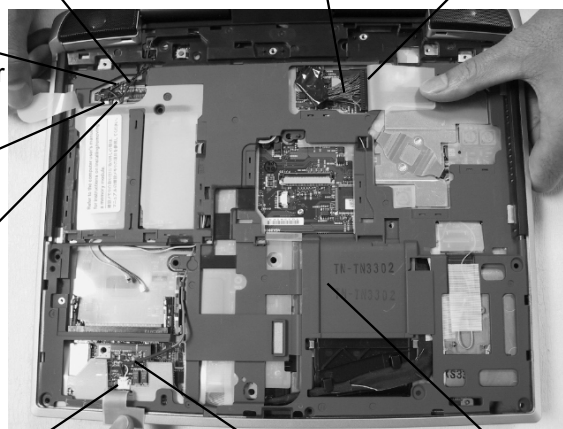
3. Turn the computer right side up.
4. Remove **two M2.5x6 black flat head screws** and **one M2.5x4 black flat head screw** securing the top cover.
3. Disconnect the **Mic cable** from **CN13** and the **speaker extension cable** from **CN5005**.
4. Gently lift out the **top cover**.

Right speaker cable LCD cable PJ550

Left speaker cable

PJ2027

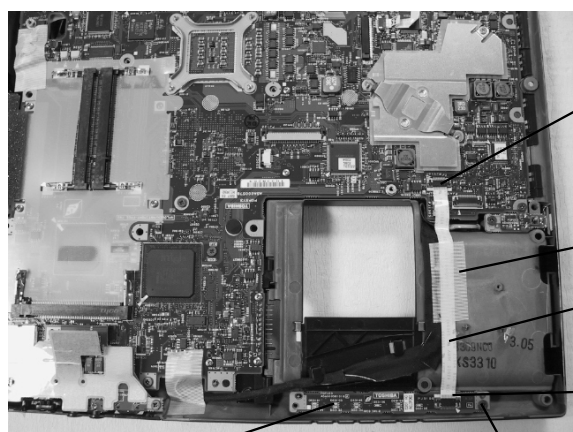
PJ2026



PJ3001 Microphone cable Top cover assembly

1. Disconnect the following cables from the system board:
 - **LCD cable** from **PJ550**
 - **Left speaker cable** from **PJ2027**
 - **Right speaker cable** from **PJ2026**
2. Disconnect the **microphone cable** from **PJ3001** on the sound board and lift out the **top cover assembly**.

SOUND BOARD REMOVAL



LED board

M2.5x4 black flat head screw

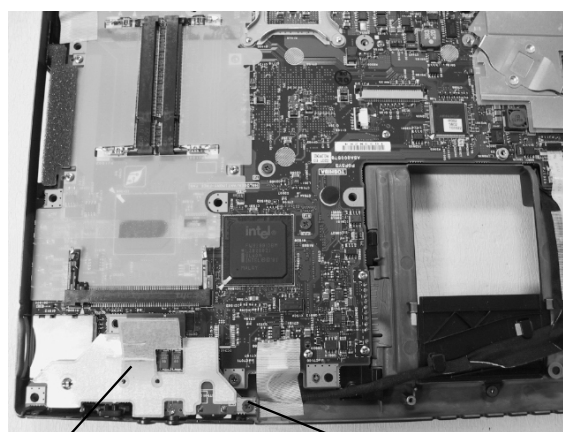
PJ1101

Glass tape

LED board cable

PJ3100

1. Peel off the **tape** securing the LED board cable..
2. Disconnect the **LED board** from **PJ1101** on the system board and **PJ3000** on the LED board.
3. Remove **one M2.5x4 black flat head screw** securing the LED board.
4. Lift out the **LED board**.



Sound board

M2.5x4 black flat head screw

1. Remove **one M2.5x4 black screw** securing the sound board.
2. Disconnect the **sound board** from **PJ1100** on the system board..

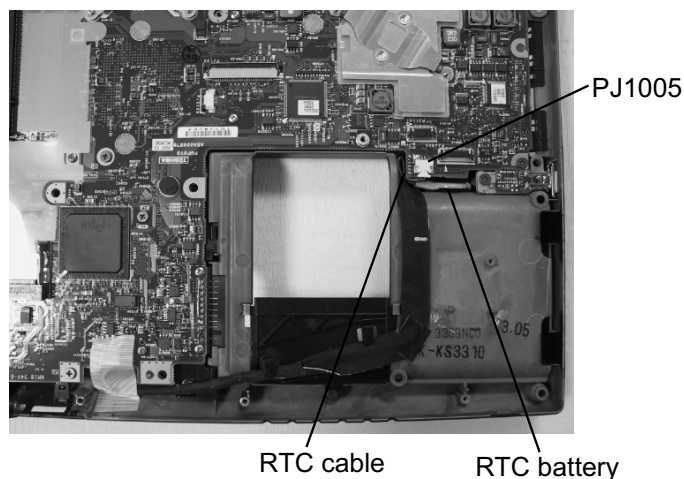
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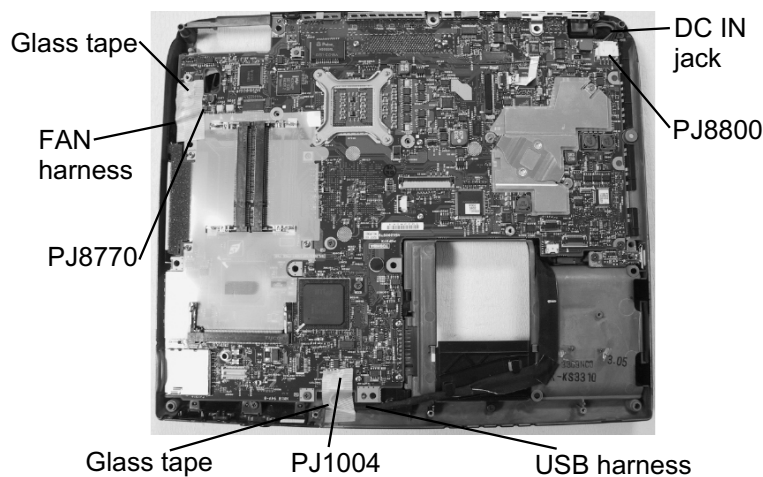
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RTC BATTERY REMOVAL



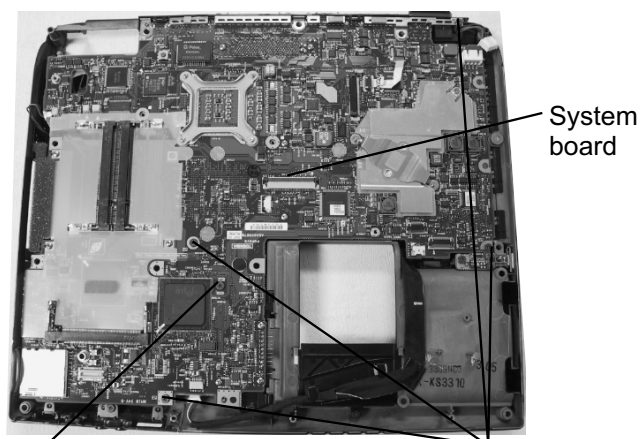
1. Disconnect the **RTC battery cable** from **PJ1005** on the system board.
3. Lift out the **RTC battery**.

SYSTEM BOARD REMOVAL



1. Disconnect the **DC IN jack** from **PJ8800** on the system board.
2. Peel off the **glass tape** securing the FAN harness and disconnect the **FAN harness** from **PJ8770** on the system board.
3. Peel off the **glass tape** securing the USB harness and disconnect the **USB harness** from **PJ1004** on the system board.

SYSTEM BOARD REMOVAL



- M2.5x10 black flat head screw M2.5x4 black flat head screws
1. Remove **four M2.5x4 black flat head screws** and **one M2.5x10 black flat head screw** securing the system board.
 2. Lift out the **system board**.

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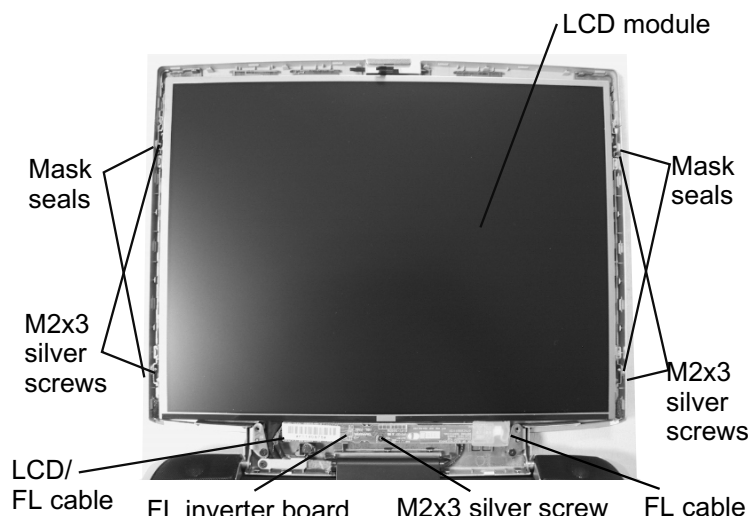
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14.1" DISPLAY MASK REMOVAL



1. Remove **two mask seals** and **two rubber seals** on the display mask using a pair of fine-tipped tweezers.
2. Remove **four M2.5x6 black flat head screws** securing the display mask.
3. There are **22 latches** securing the **display mask**. Carefully insert your fingers between the mask and the LCD panel and pry open the latches starting from the **six top latches**, to the **five latches on each right and left sides**, ending with the **bottom seven latches**.

FL INVERTER AND 14.1" LCD REMOVAL



1. Remove **one M2x3 silver flat head screw** securing the FL inverter board.
2. Carefully lift up the **FL inverter board** and disconnect the **LCD/FL cable** from **CN1** and the **FL cable** from **CN2**.
3. Remove **four mask seals** to expose four screws securing the LCD module assembly.
4. Remove **four M2X3 silver flat head screws** securing the **LCD module assembly**.
5. Carefully rotate out the top of the **LCD module** enough to access the display cable
6. Peel off the tape securing the LCD/FL cable and disconnect the cable.
7. Remove **four M2x3 silver flat head screws** securing the right and left LCD brackets.

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