Chapter 1. Disassembly & Assembly Guide
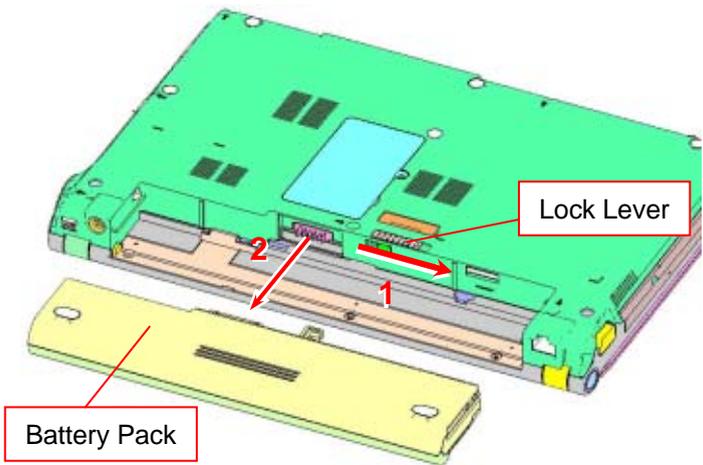
1-3. Disassembly & Assembly

- Main Section -

MS-1 Main Section Disassembly

Battery Pack/Cover

1)

Lock Lever

Battery Pack

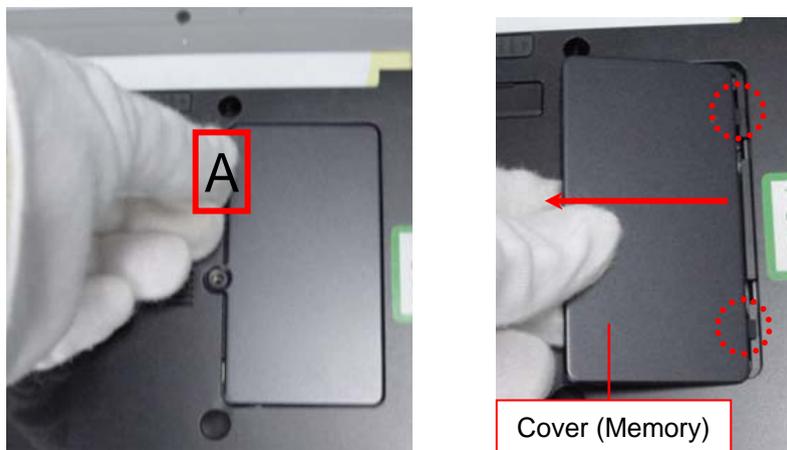Slide the lock lever in the direction of the arrow **1**, and remove the Battery Pack in the direction of the arrow **2**.
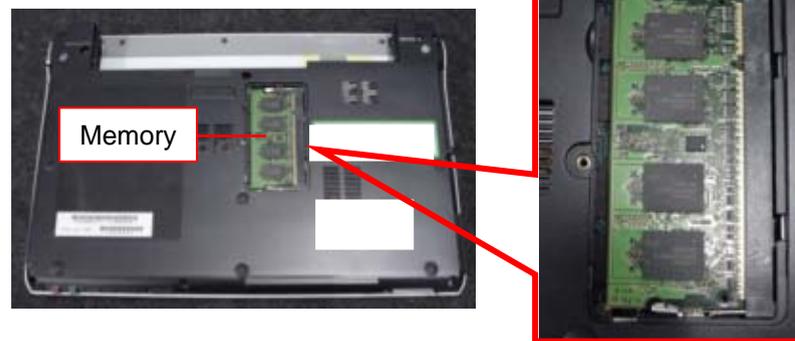
2)

Screw: B14

Remove the one screw.

3)

A

Cover (Memory)

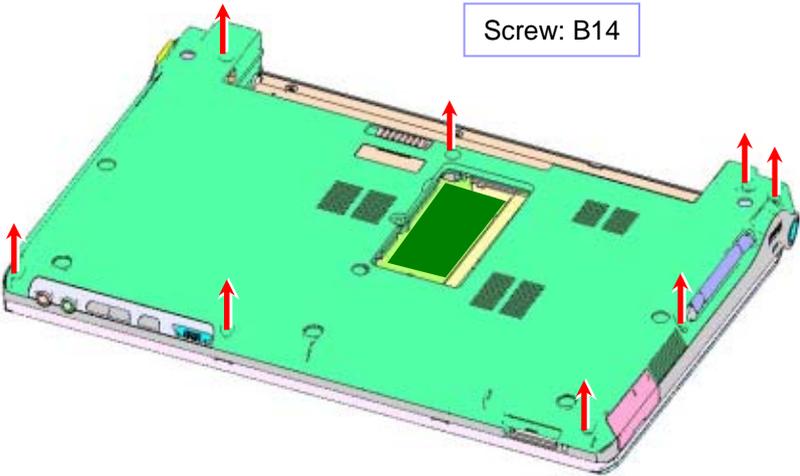Hook a finger on the A portion, raise the Cover, and remove it in the direction of the arrow.

Remark

Memory

The Memory on side B of the Mother Board can be removed.
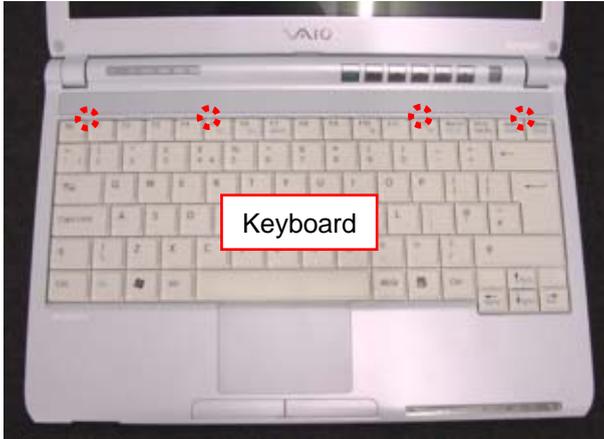
TX Series

Keyboard-1

1)
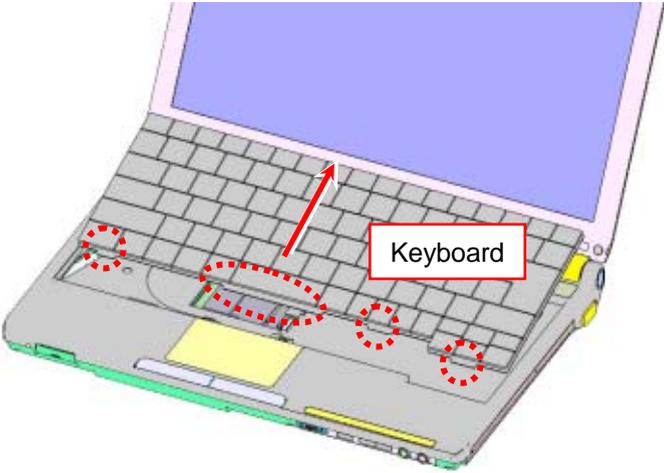
Screw: B14

Remove the eight screws on the bottom.

2)

Keyboard

Disengage the detent (four places).
* Raising the Keyboard, disengage the detents.
* Detents are located between the [Esc and F1], [F4 and F5], [Insert and Delete], and F12 Key.

3)

Keyboard

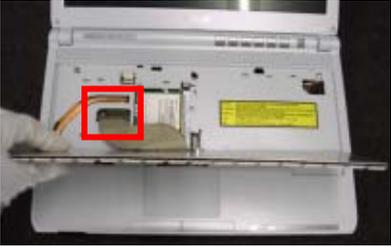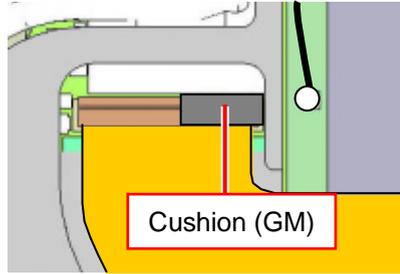Slide the Keyboard in the direction of the arrow to release the detent (four places) on the front.

* The FPC is connected on the backside of the Keyboard.
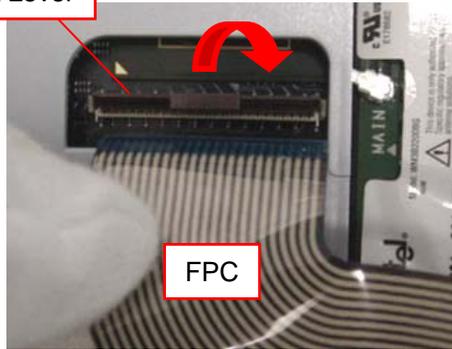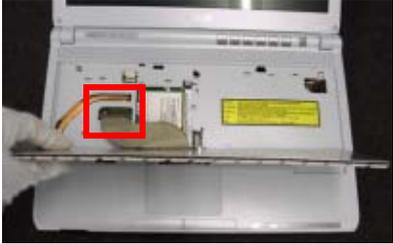
4)   ⚠8 [ADD]   **Except 1st Model**

⚠10 [MA] ⚠16 [MA]

Cushion (GM)

Peel off the Cushion (one place).

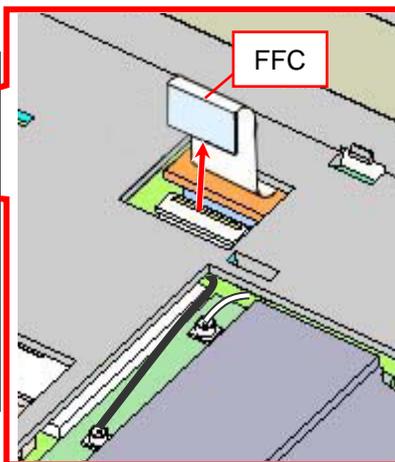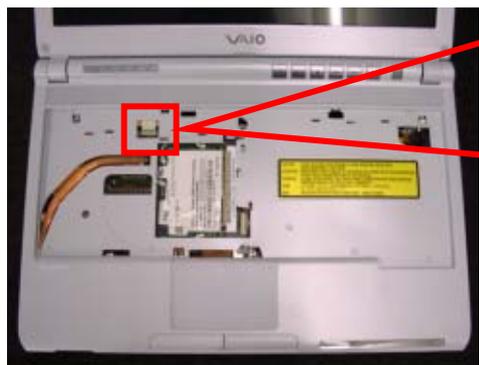*TX Series*

Keyboard-2

5)

Lock Lever

FPC

Release the lock, remove the FPC and remove the Keyboard.
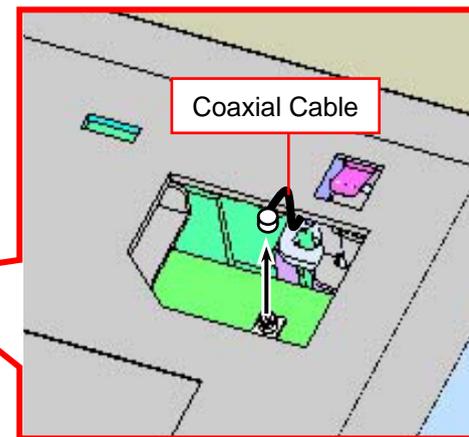* How to release the lock: Raise the lock lever toward the front.

Palmrest-1

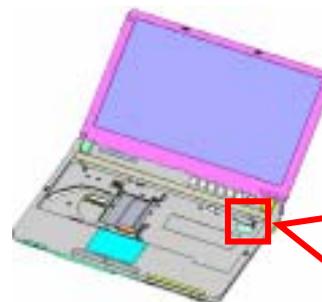**1)**

FFC

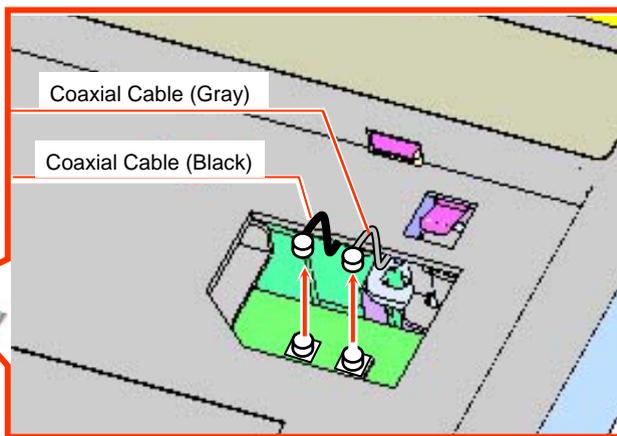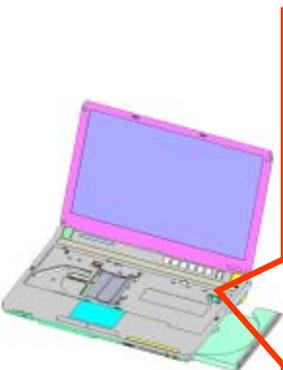Pull out the FFC (one place) in the direction of the arrow.

2) ⚠2 [MA]   **WAN Model**

Coaxial Cable

Disconnect the Coaxial Cable **vertically**.

3) ⚠5 [MA]   **TV Model**

Coaxial Cable (Gray)

Coaxial Cable (Black)

Disconnect the coaxial cable (two places) vertically.

4)

Screw: B13

Remove the one screw.

TX Series
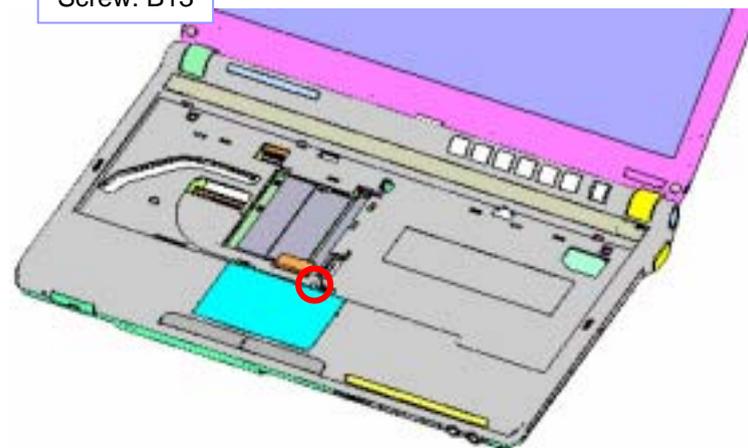
Palmrest-2

5) ⚠8 [ADD]

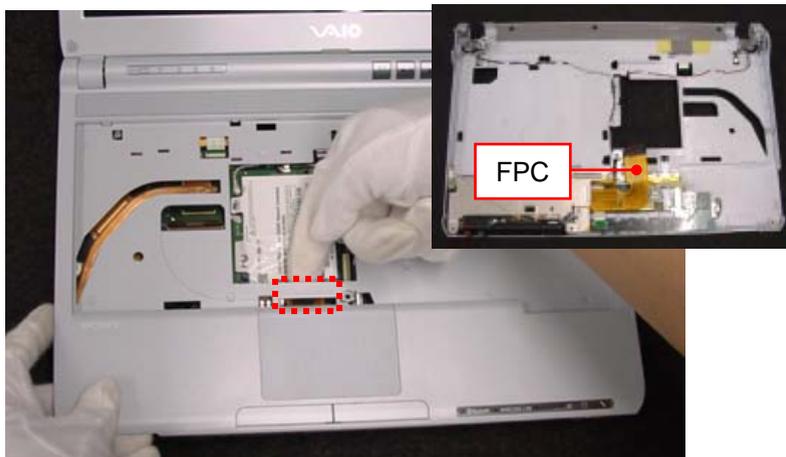**2nd, 3rd(Except FP) Model**

⚠10 [MA]
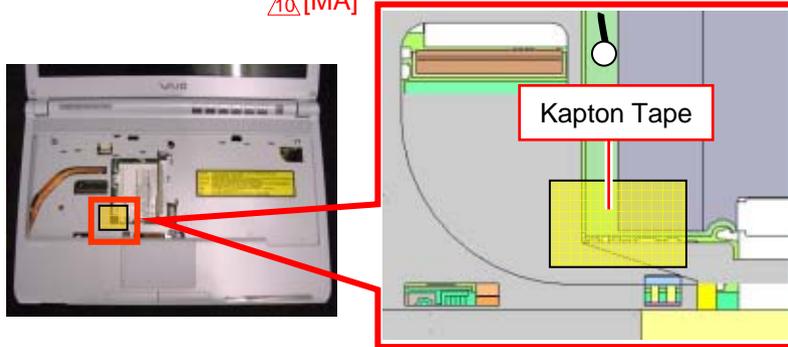
Kapton Tape

Peel off the Kapton Tape (one place).
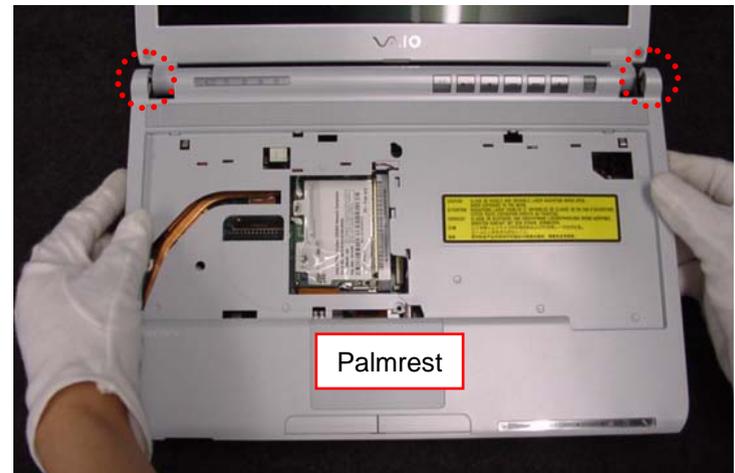
6)

Disengage the detent (three places) at the front.

7)

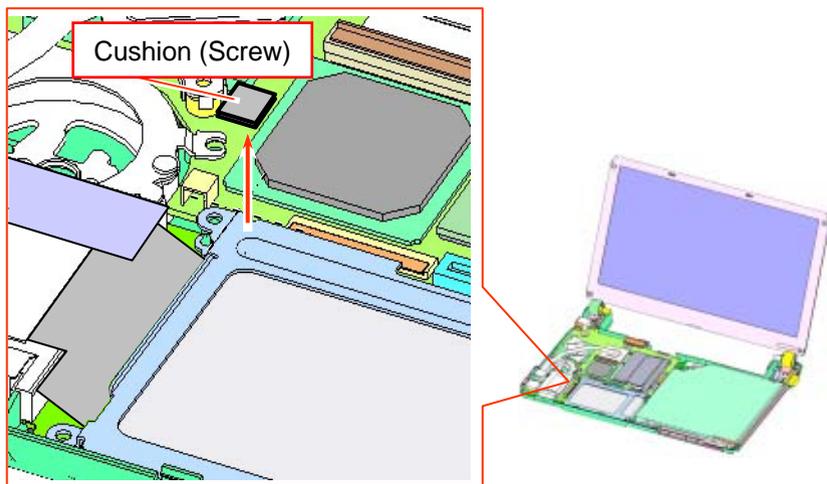FPC

Disconnect the FPC (one place) by raising it.

8)

Palmrest

Remove the Palmrest disengaging the detent (two places).

HDD-1 ⚠5[MA]

1)

Cushion (Screw)

Peel off the Cushion (Screw).

2) ⚠16[MA]   **4th Model**

Spacer (BKHD)
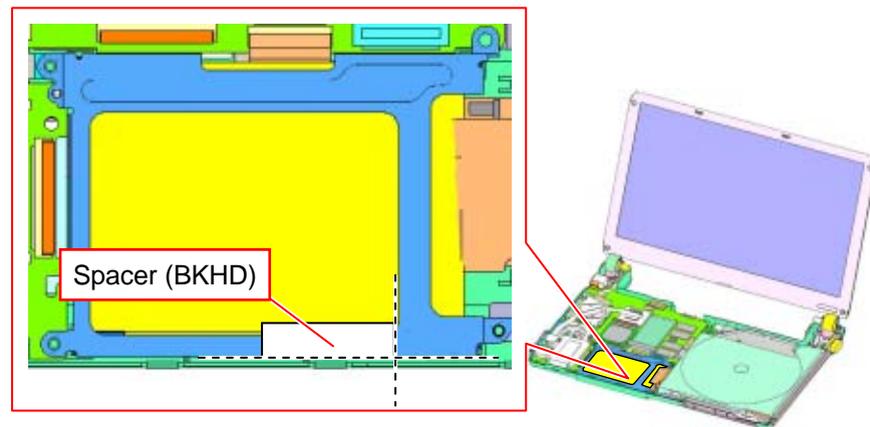
Peel off the Spacer.

3)

Screw: B2

Bracket (HDD)
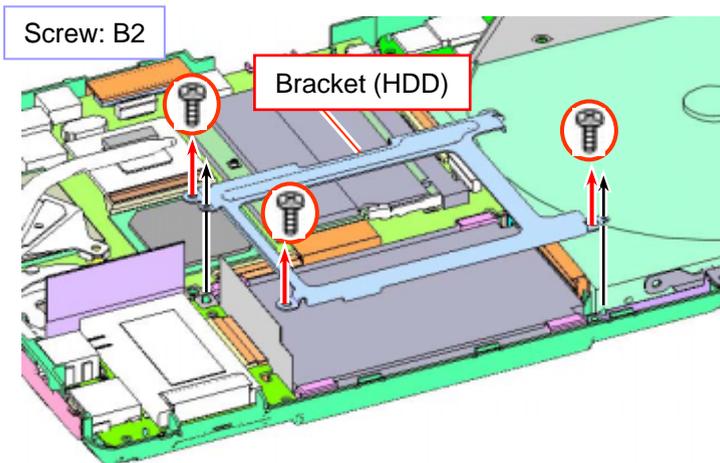
Remove the three screws, and then the Bracket.

4) **1st, 2nd, 3rd Model** ⚠16[MA]

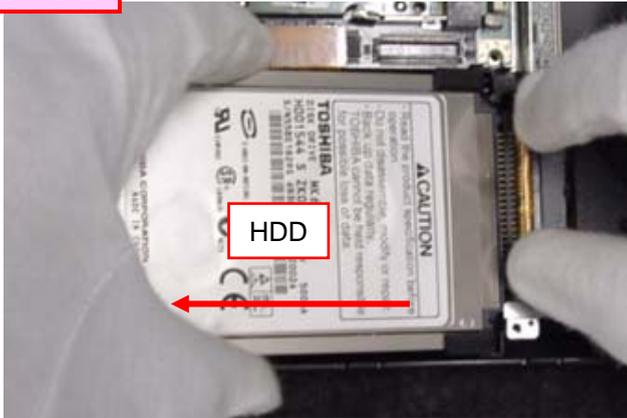Tape (40X15)   HDD
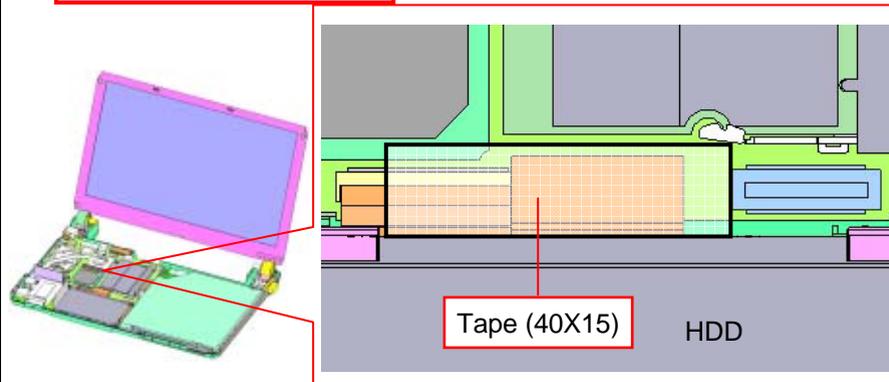
Peel off the Tape.

HDD-2
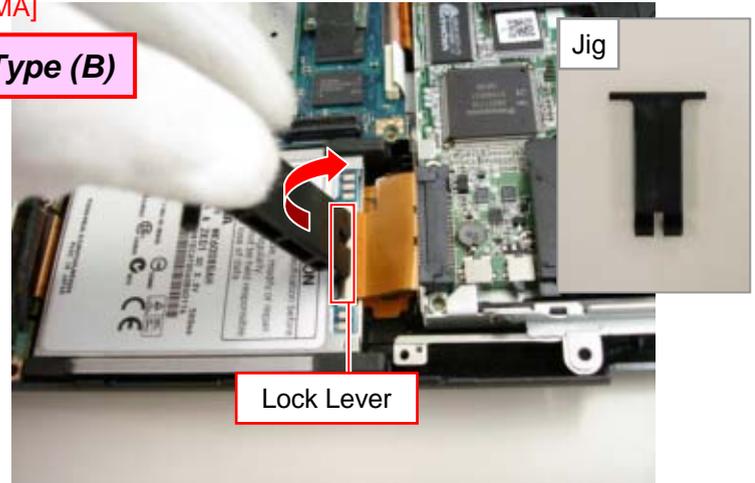
5)

To Type (A)   ⚠5 [MA]

⚠16 [MA]

HDD

Remove the HDD.
* Be careful not to bend the pins.
* Be sure to hold the HDD on the sides for handling.

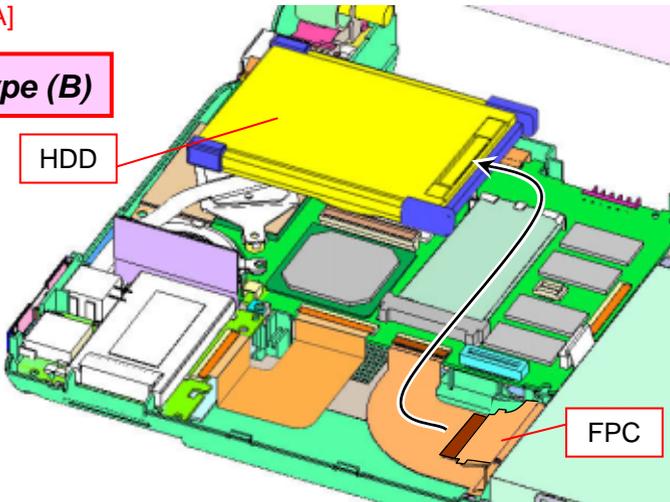**6)** ⚠16 [MA]

To Type (B)

Jig

Lock Lever

Raise the lock lever and release the lock.
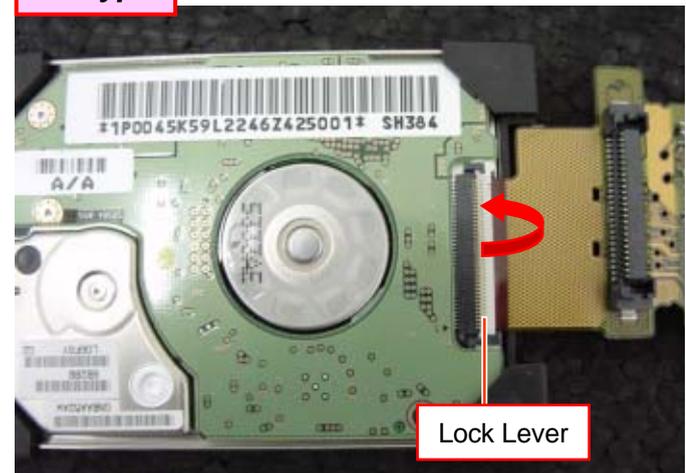* Use the Jig.

7) ⚠16 [MA]

To Type (B)

HDD

FPC

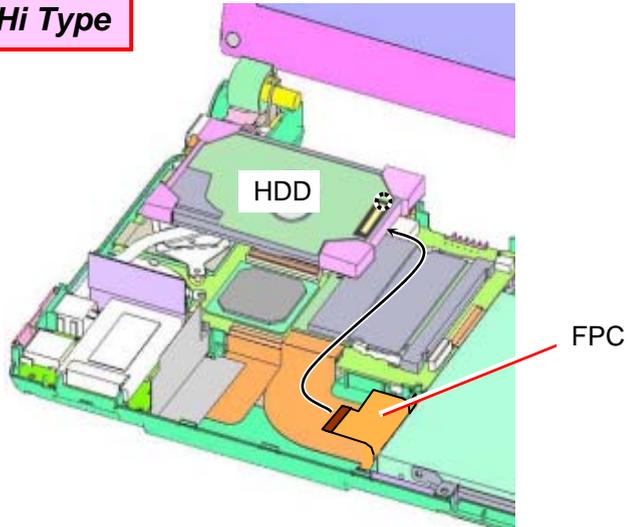While removing the FPC from the connector, remove the HDD.

8)

⚠5 [MA]   Hi Type

Lock Lever

Raise the lock lever to release the lock.   *TX Series*

HDD-3

9) ⚠5 [MA]   **Hi Type**

HDD

FPC

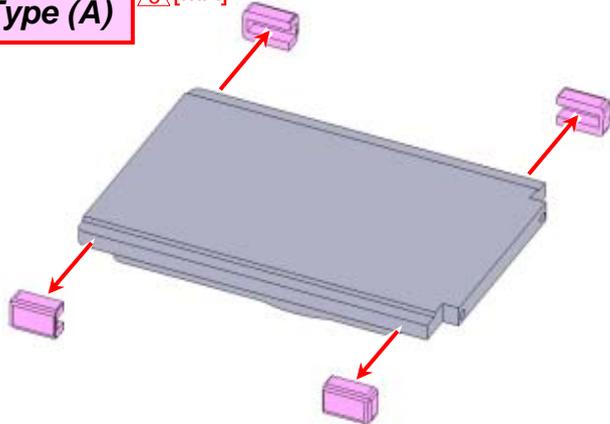While removing the FPC from the connector, remove the HDD.

Parts of the HDD

1)

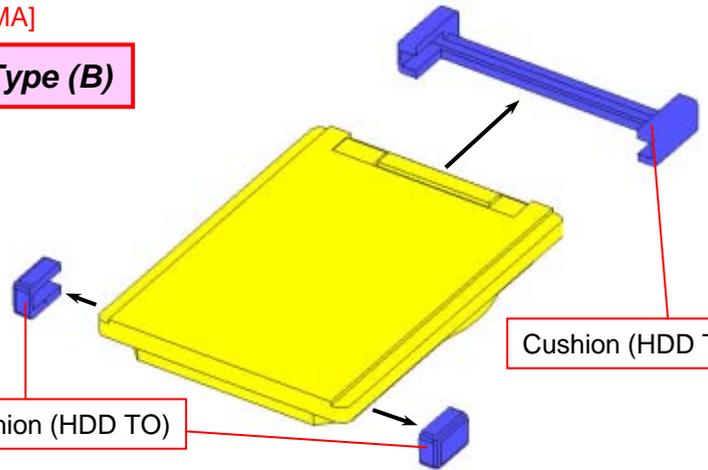To Type (A) △5 [MA]

△16 [MA]

Remove the Cushion (four places).

2) △16 [MA]

To Type (B)
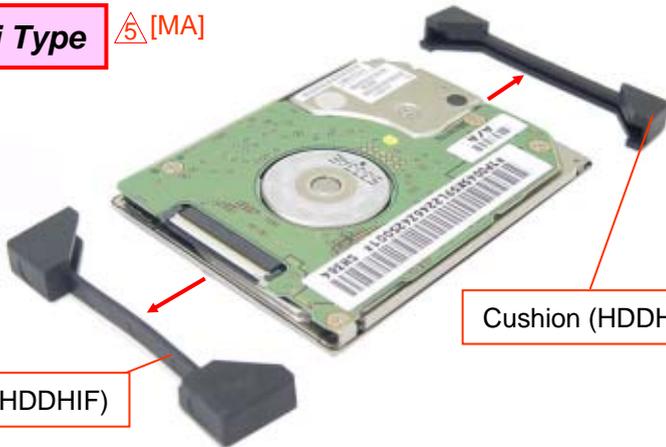
Cushion (HDD TOF)

Cushion (HDD TO)

Peel off the Cushion (three places).

3)

Hi Type △5 [MA]

Cushion (HDDHIB)
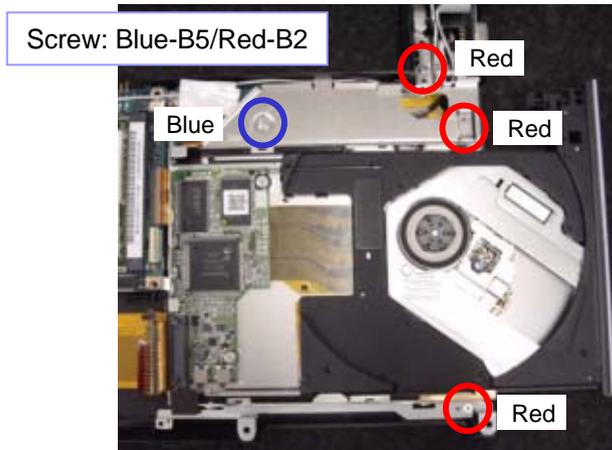
Cushion (HDDHIF)

Remove the Cushion (two places).

TX Series

Optical Disc Drive-1

1)

Tray

Bezel

Insert a thin tool into the hole of the Bezel, push it lightly and draw out the tray.

2)

Screw: Blue-B5/Red-B2

Red

Blue   Red

Red

Remove the four screws.

3)

1st,2nd,3rd Model

⚠16 [MA]

Tape (Common)
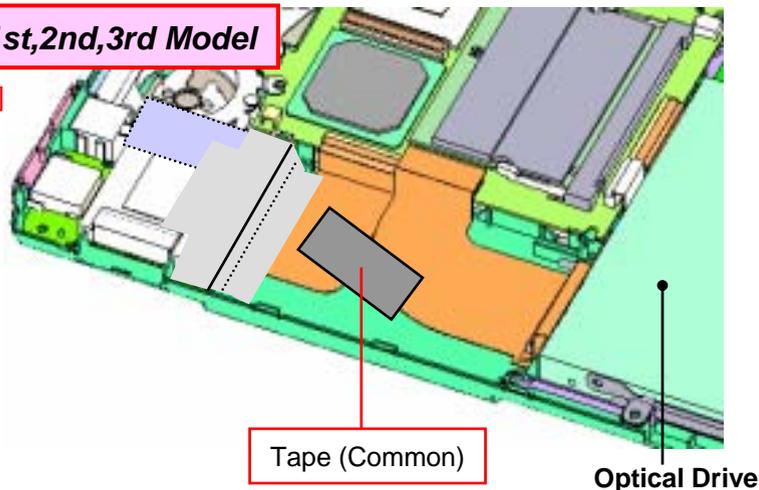
Optical Drive

Peel off the Tape (one place).

4)

1st,2nd Model

Optical Disc Drive

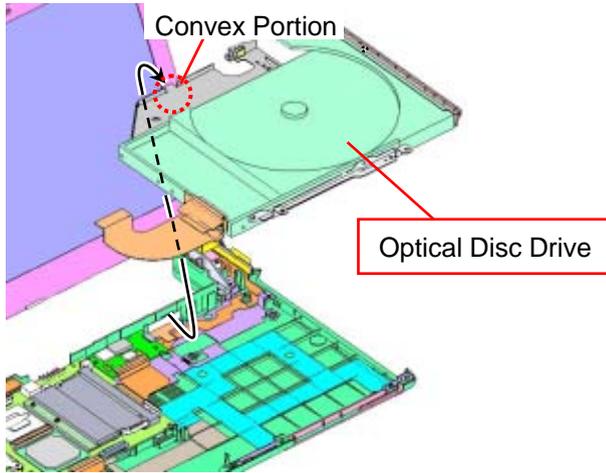⚠10 [MA] ⚠16 [MA]

Other Model

1

Lock Lever

2

FPC
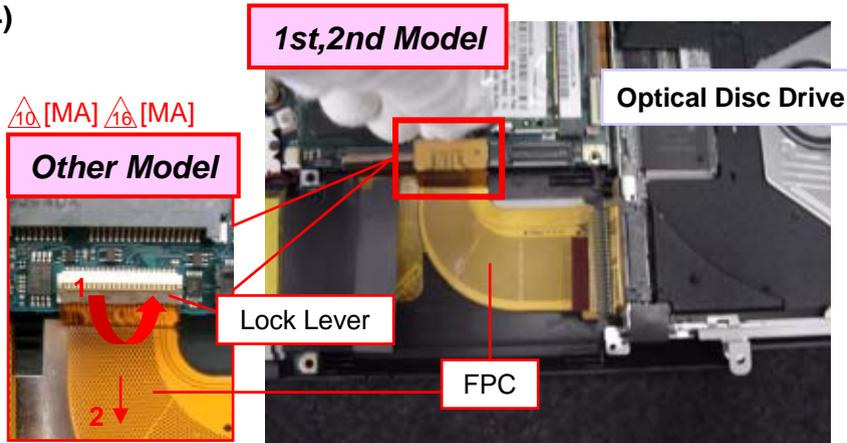
Disconnect the FPC (one place).
*1st, 2nd Model --- Pull out it upward.
3rd Model --- Raise the lock lever to release the lock, and disconnect it in the direction of the arrow.

TX Series

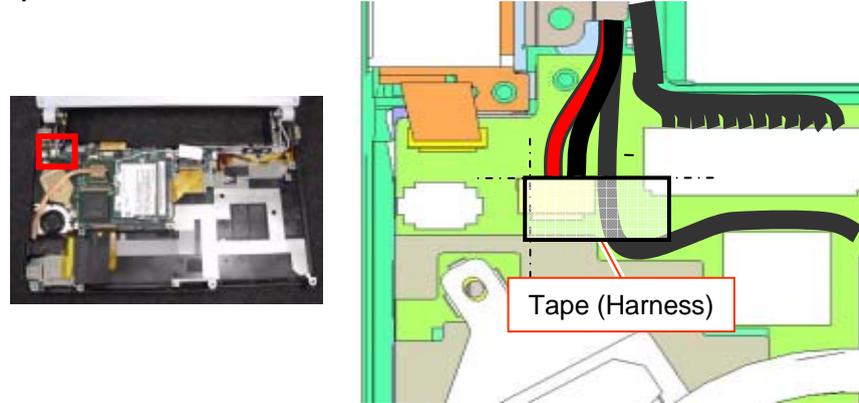## Optical Disc Drive-2

5)

Convex Portion

Optical Disc Drive

Raise the front side of the Optical Disc Drive, and remove it toward the front.
* The convex portion is engaged.

LCD Section-1
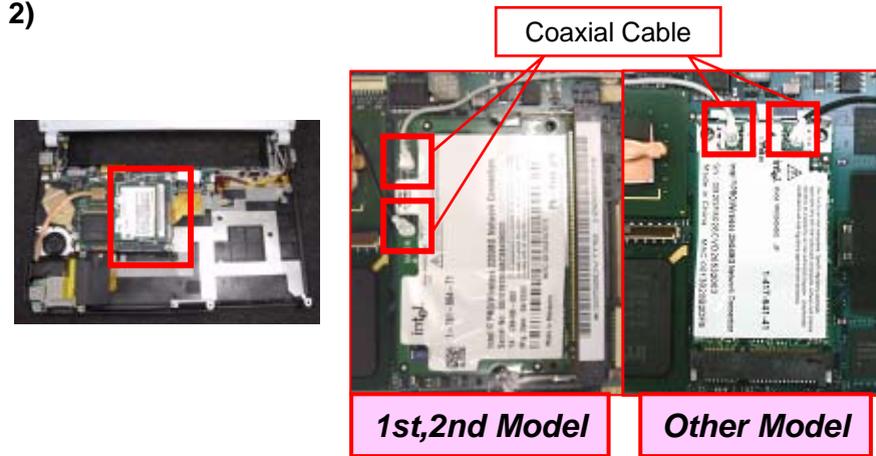
1)

Tape (Harness)

Peel off the Tape (Harness).

2)

Coaxial Cable

1st,2nd Model	Other Model

⚠10 [MA] ⚠16 [MA]

Disconnect the connectors of the coaxial cables **directly above**.
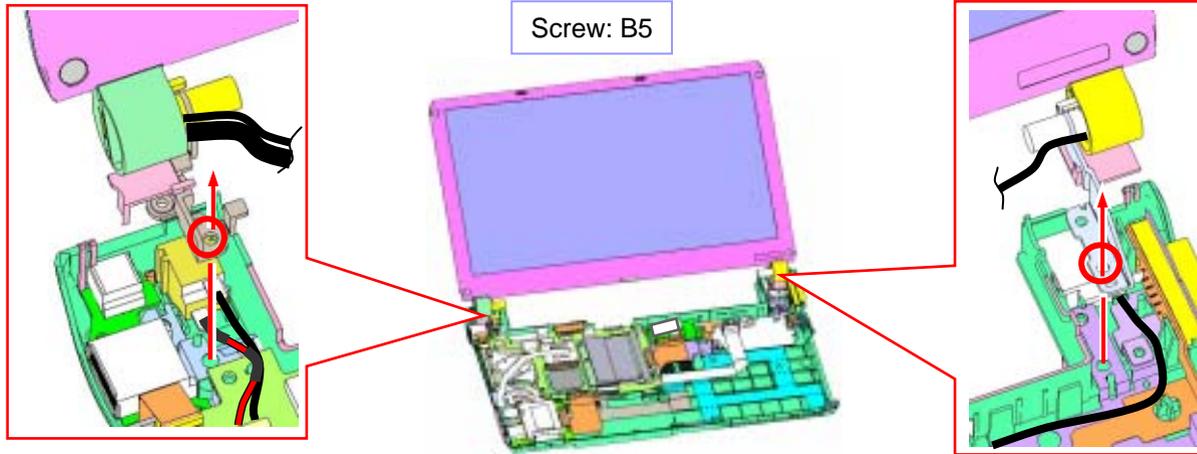
3)
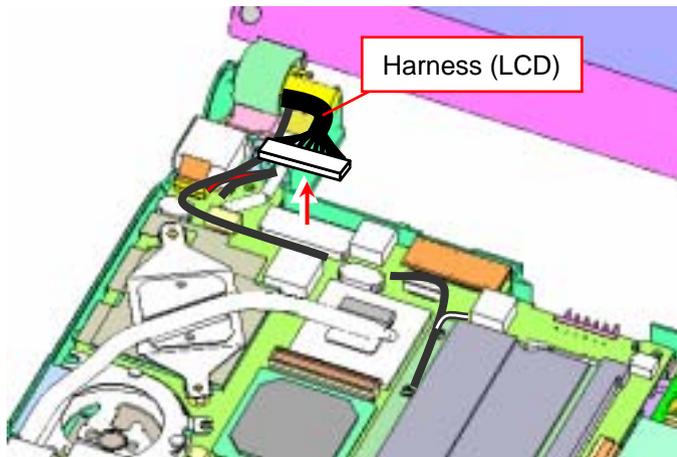
Harness (LCD)

Pull out the Harness (LCD) directly above and disconnect it.

LCD Section-2

4)

Screw: B5

Remove the two screws, and then the LCD Section.
* Hold the LCD Section with your hand not to fall down.
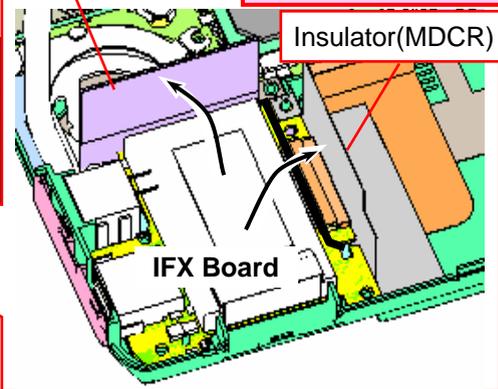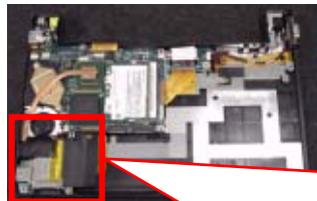* Release the coaxial cables from the main unit beforehand.

IFX-421 Board-1

1)

⚠[MA]

Sheet (Fan)

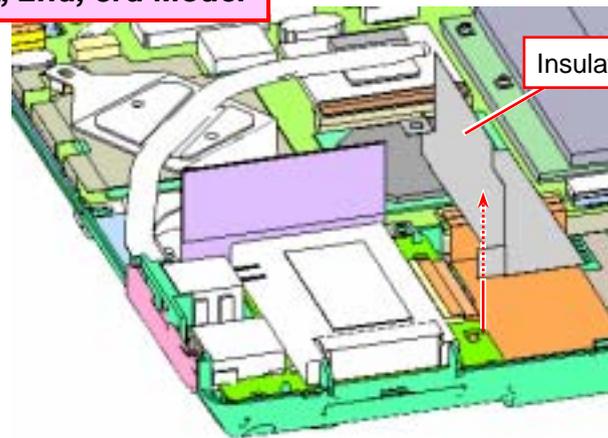**1st, 2nd, 3rd Model**

Insulator(MDCR)

IFX Board

Peel off the Sheet and Insulator from the IFX Board.

2)

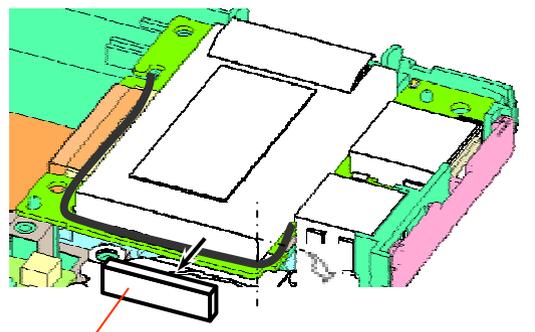**1st, 2nd, 3rd Model**

⚠[MA]

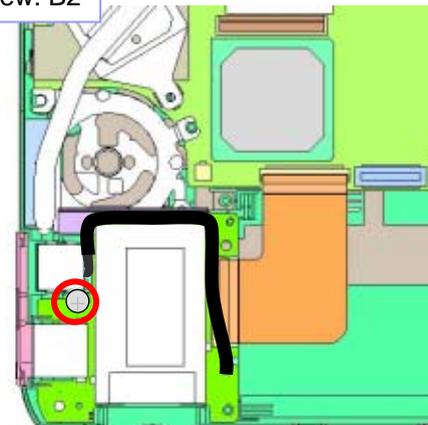Insulator(MDCR)

Peel off the Insulator.

3)

Cushion (KBMS)

Peel off the Cushion.

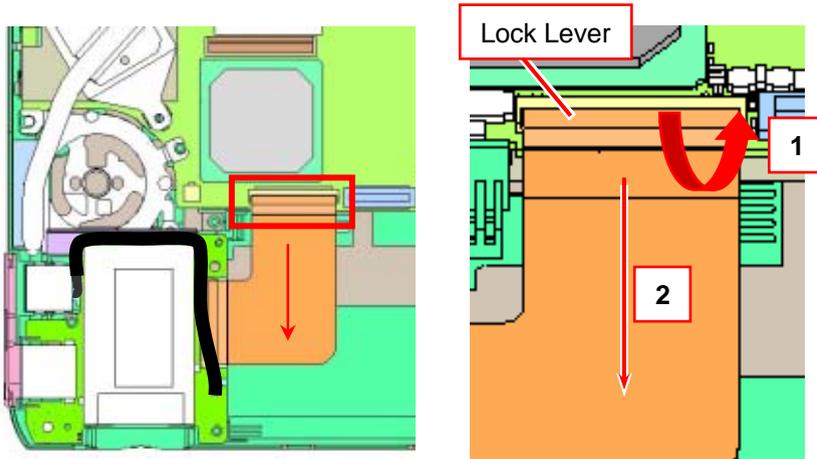**4)**

Screw: B2

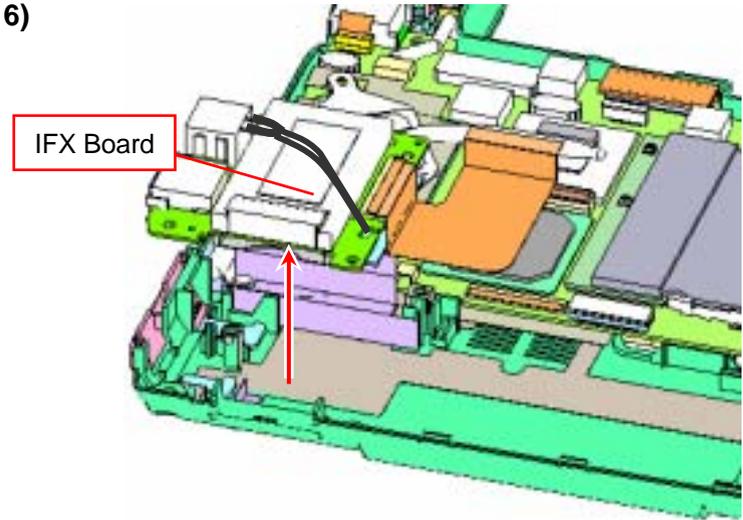Remove the one screw.

IFX-421 Board-2

5)

Lock Lever

1

2

Release the lock, and remove the FPC in the direction of the arrow.
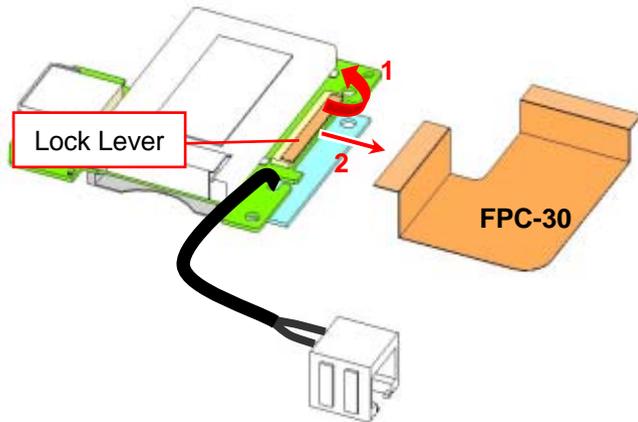* Raise the lock lever, and the lock is released.

6)

IFX Board

Remove the IFX Board.

Parts of the IFX-421 Board

1)

Lock Lever

FPC-30

Raise the lock lever to release the lock, and remove
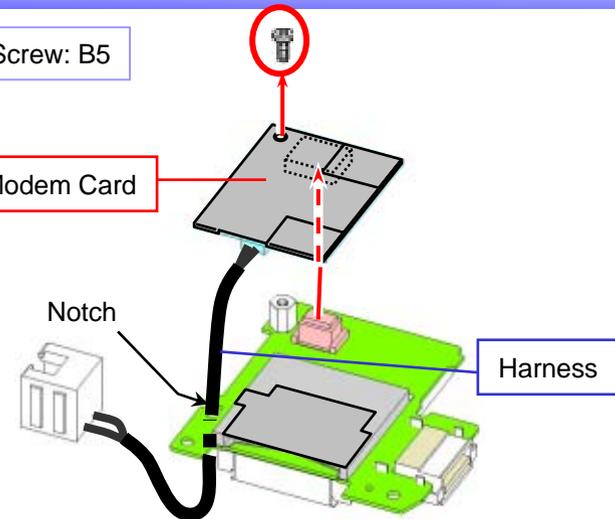the FPC in the direction of the arrow.

2)

Screw: B5

Modem Card

Notch

Harness

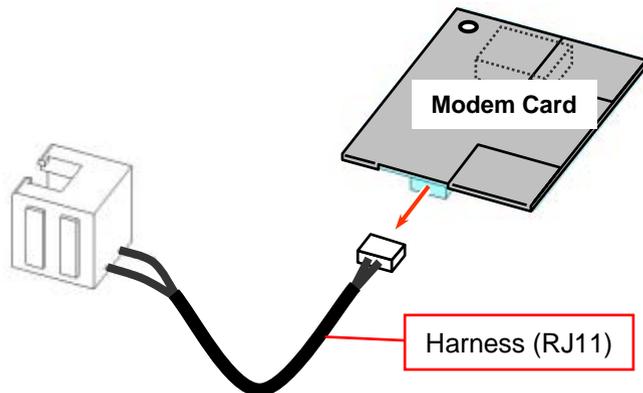Remove the one screw, and then the Modem Card.
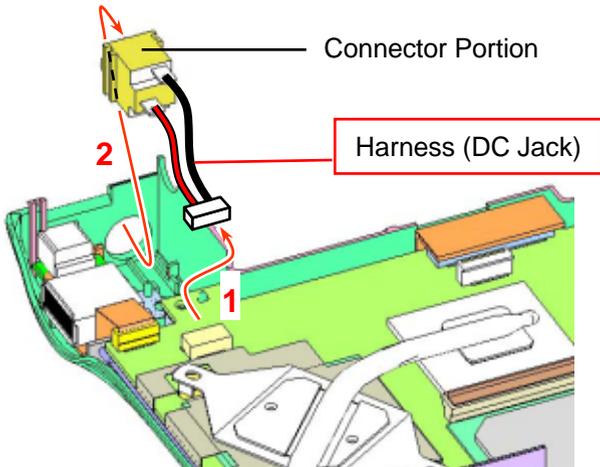* The Harness is hooked on the notch.

3)

Modem Card

Harness (RJ11)

Disconnect the Harness in the direction of the arrow.

Harness (DC Jack)/CNX-338 Board

1)

Connector Portion

2

Harness (DC Jack)

1

Pull out the Harness in the direction of the arrow **1**, and remove the Harness (DC Jack) toward the front.

2)

Screw: B2

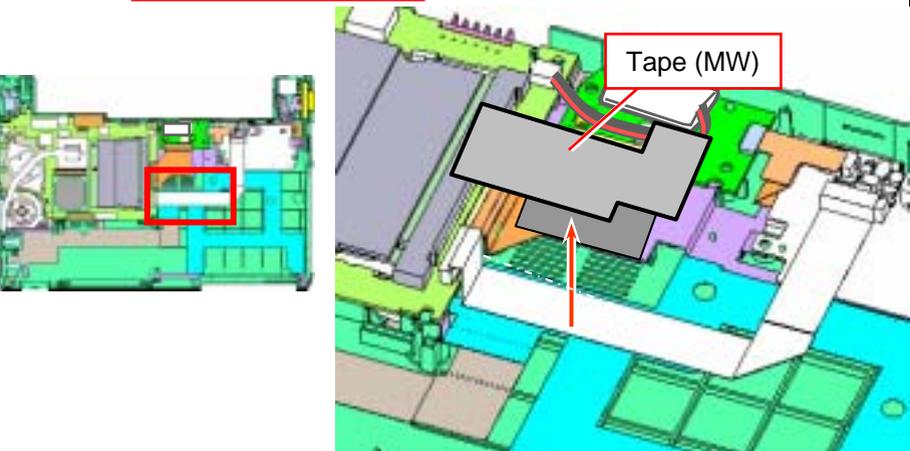Remove the one screw.

3)

CNX Board

FPC

2

3

1
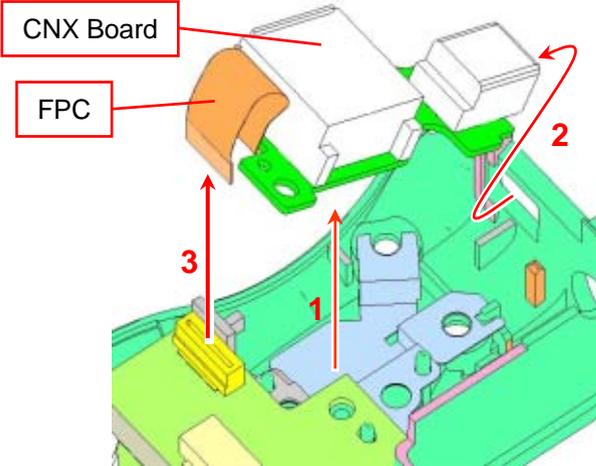
Raise the front side of the CNX Board lightly (arrow **1**), and take out it toward the front (arrow **2**). Then pull out the FPC directly above and remove the CNX Board (arrow **3**).
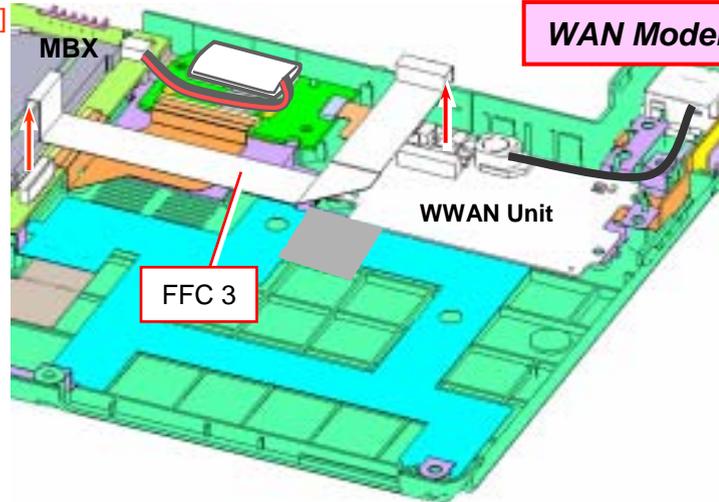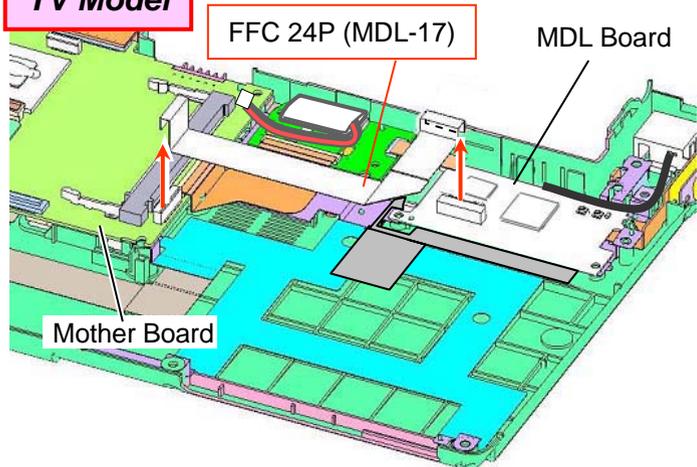
Mother Board-1

1) ⚠2 [MA]   **WAN / TV Model**   ⚠5 [MA]

Tape (MW)

Peel off the Tape (one place).

2) ⚠2 [MA]   **MBX**   **WAN Model**

WWAN Unit

FFC 3

Pull out the FFC (two places).

3) ⚠5 [MA]   **TV Model**   FFC 24P (MDL-17)   MDL Board

Mother Board

Disconnect the FFC (two places).
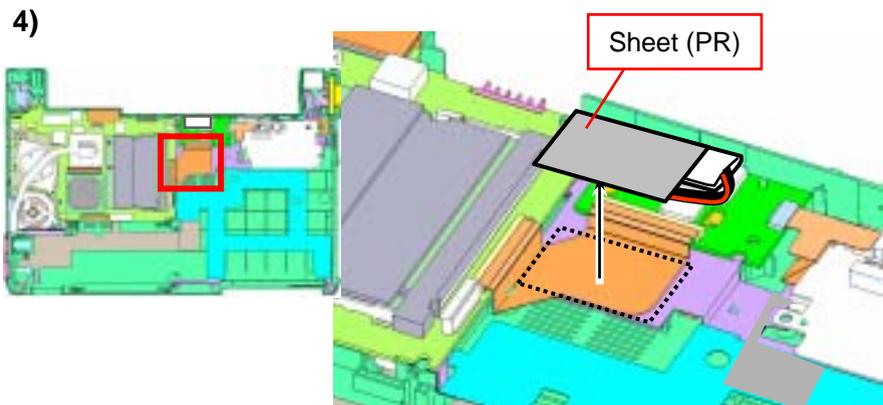
4)   Sheet (PR)

Peel off the Sheet (PR).

Mother Board-2

5)
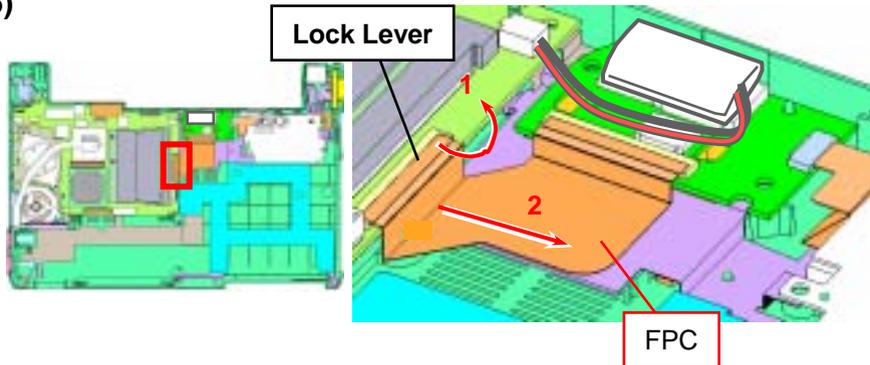
Lock Lever
FPC

Raise the lock lever to release the lock, and remove the FPC.

6) ⚠5 [MA]

2nd Model

Sheet (FPCPC)
FPC
Coil
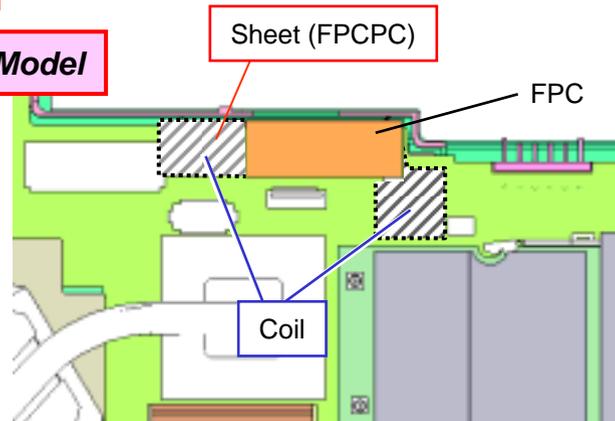
Peel off the Sheet from the coil (two places).
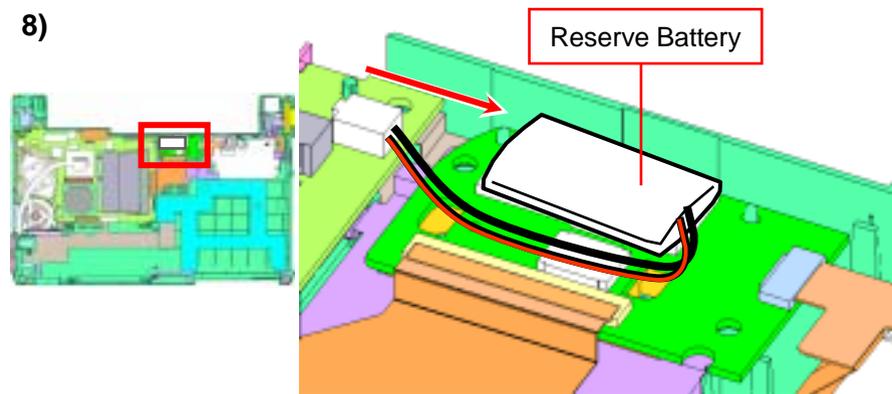
7) **1st,2nd Model** ⚠10 [MA]

FPC
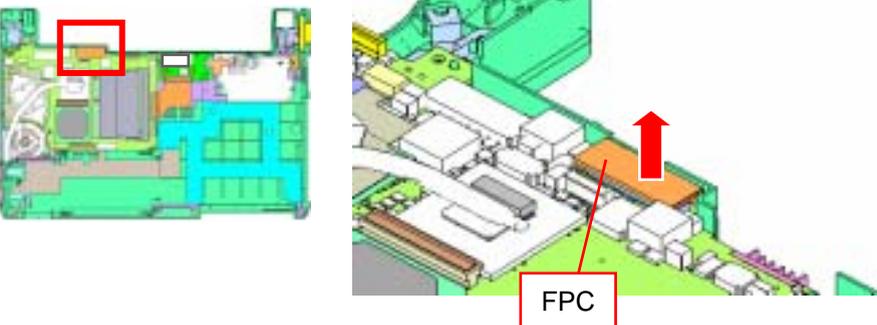
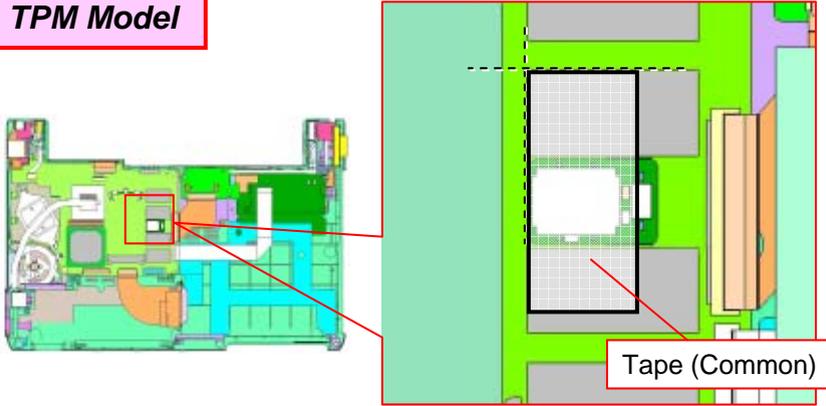Disconnect the FPC directly above.

8)

Reserve Battery

Disconnect the Harness (Reserve Battery) in the direction of the arrow, and remove the Reserve Battery.
* It is secured with adhesive tape.
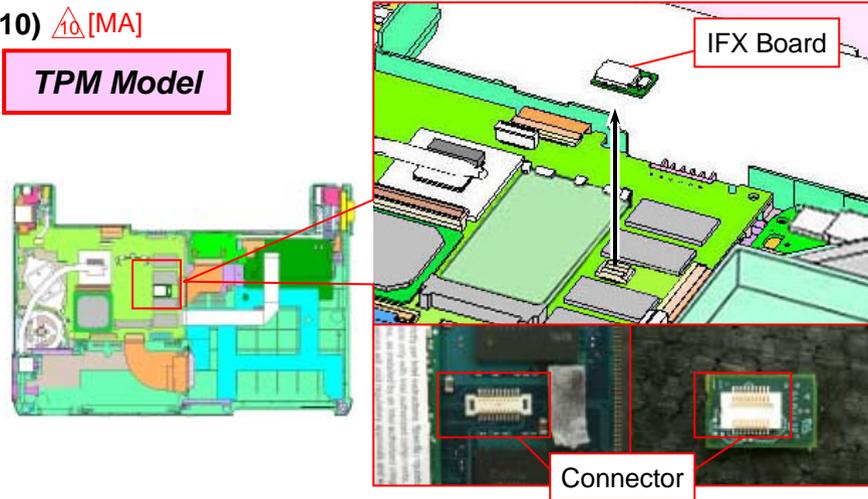
Mother Board-3

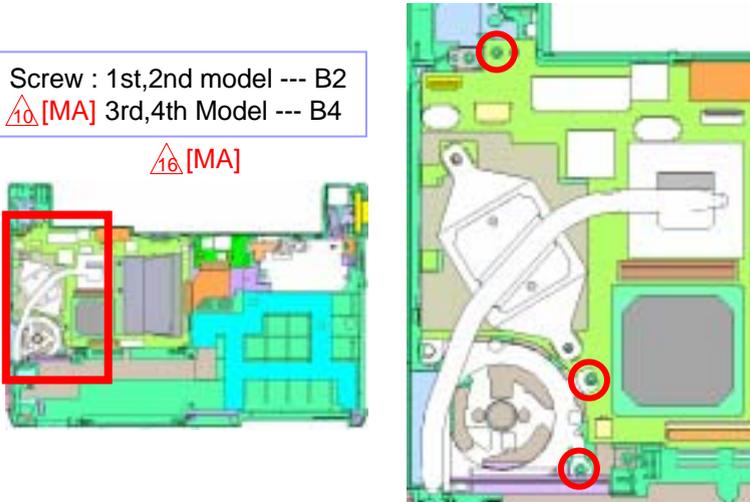**9)** ⚠️10 [MA]

TPM Model

Peel off the Tape (Common).

Tape (Common)

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10) ⚠️10 [MA]

TPM Model

IFX Board

Connector

Remove the IFX Board.

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11)

Screw : 1st,2nd model --- B2
⚠️10 [MA] 3rd,4th Model --- B4

⚠️16 [MA]

Remove the three screws.

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12) ⚠️10 [MA]

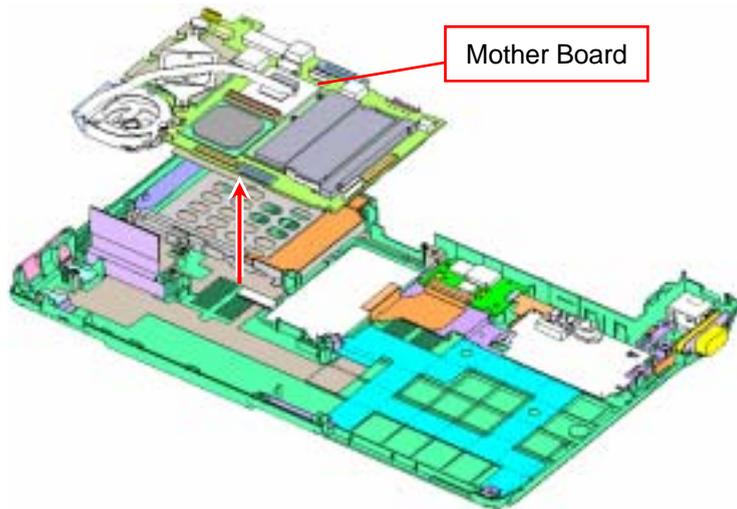**3rd,4th Model**

Mother Board

FPC

2
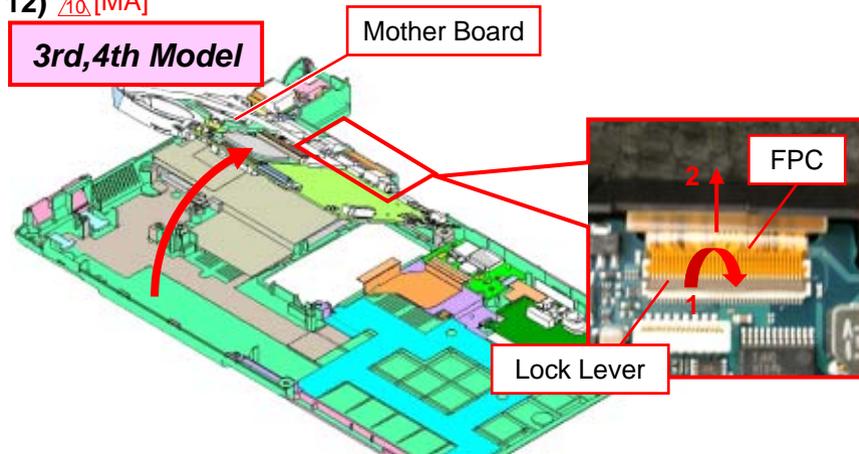
Lock Lever

Raise the Mother Board from the front side, and disconnect the FPC
 (one place).
*Raise the lock lever to release the lock, and disconnect it in the direction
of the arrow.
TX Series

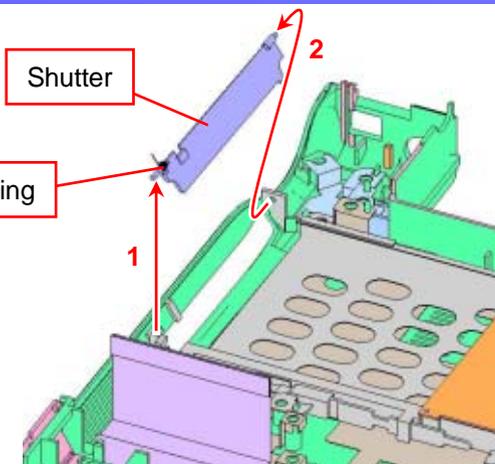## Mother Board-4

13)

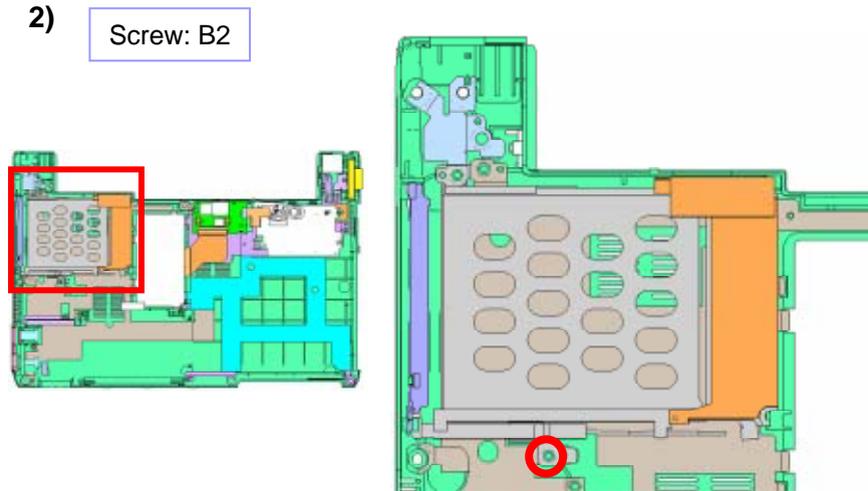Mother Board

Remove the Mother Board.

Shutter/PC Card Connector

1)

Shutter

Torsion Spring

Remove the Shutter.
* The Torsion Spring is removed together with the Shutter.

2) Screw: B2

Remove the one screw.

3)

Lever

PC Card Assy
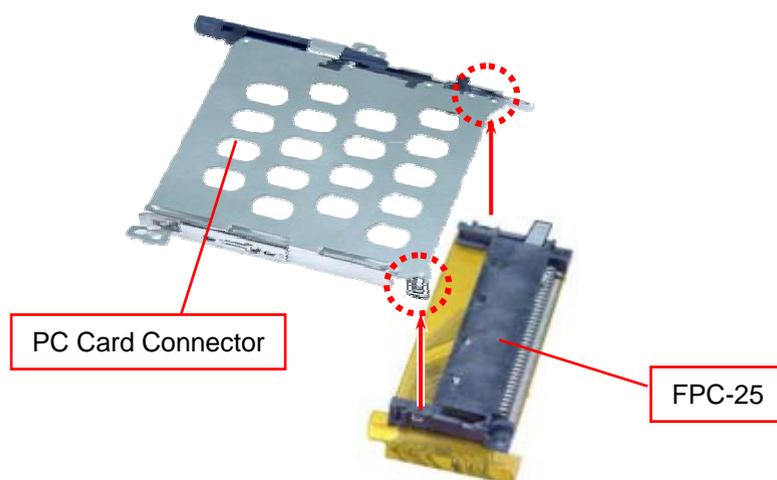
A
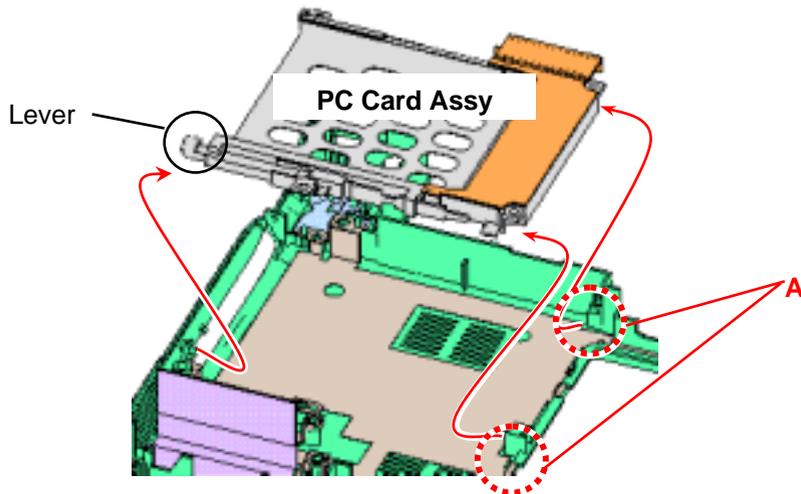
Lift up the PC Card Assy lightly and take out it from the A portion. Then take out the lever and remove the PC Card Assy.

4)

PC Card Connector
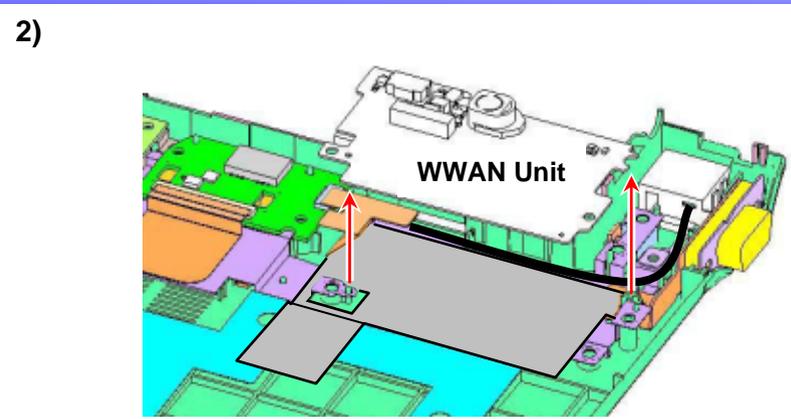
FPC-25

Disengage the detent (two places) and remove the PC Card Connector.

TX Series

WWAN Unit   *WAN Model*

1)

Screw: B3

Remove the two screws.

2)

WWAN Unit

Remove the WWAN Unit.

3)

Sheet (BTR)
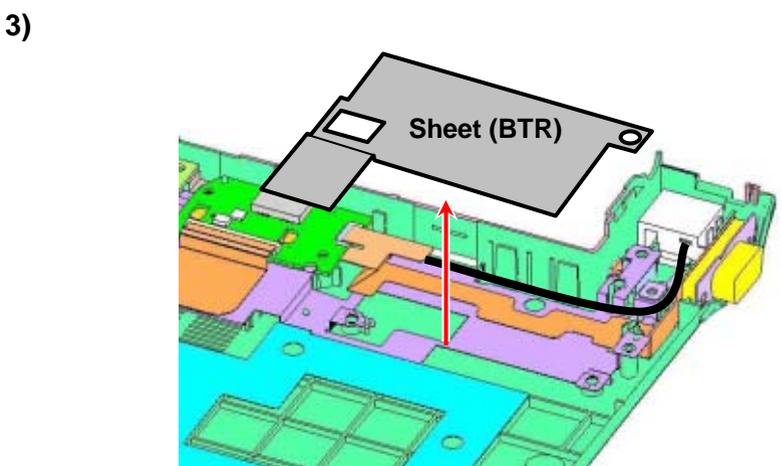
Peel off the Sheet.

MDL-17 Board   *TV Model*

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1)

Screw: B3

Remove the two screws.
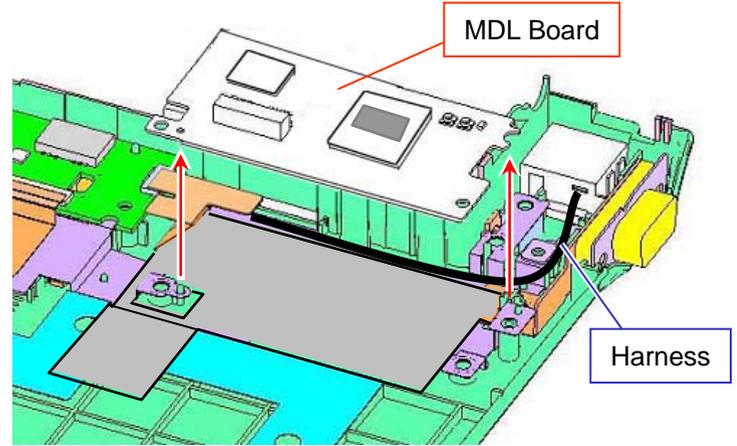
2)

MDL Board

Harness

Remove the MDL Board.

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3)

Sheet (BTR)

Remove the Sheet.

TX Series

CNX-316 Board

1)

Screw: B5

Remove the one screw.

2)

FPC
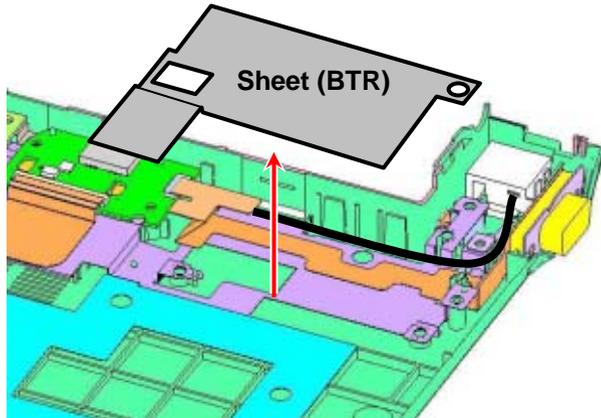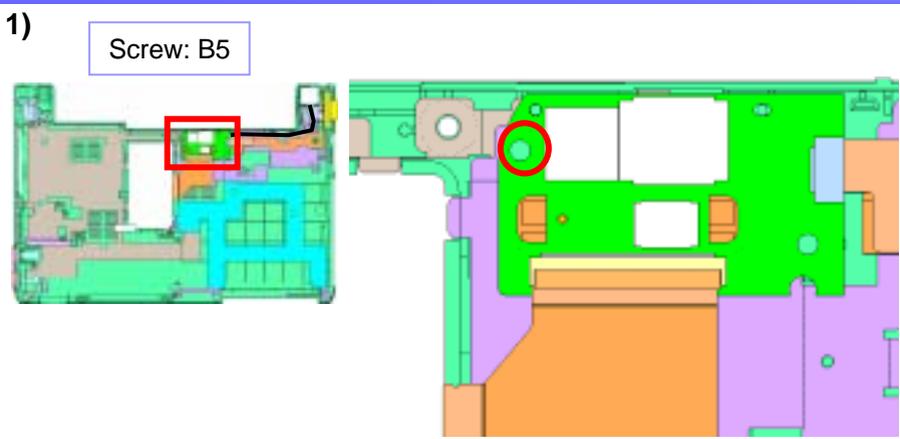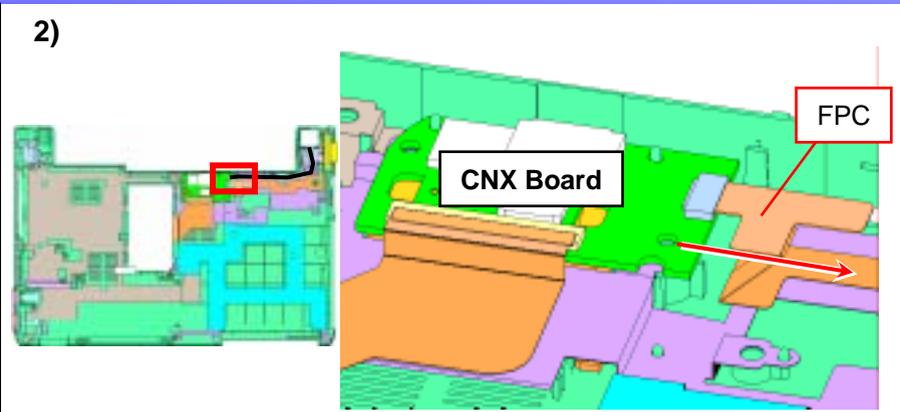
CNX Board

Disconnect the FPC in the direction of the arrow.

3)
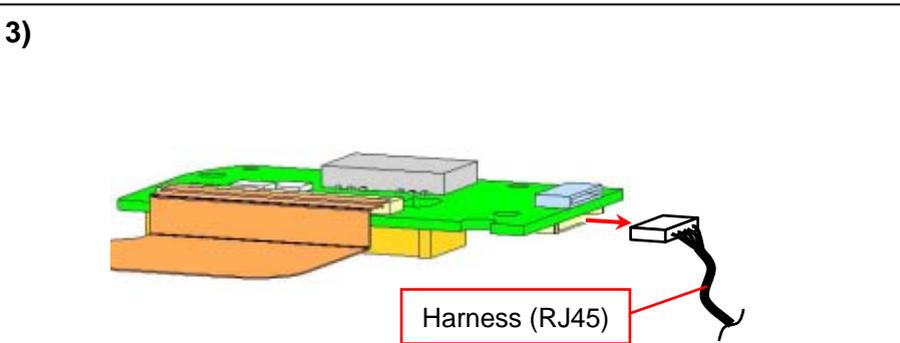
Harness (RJ45)

Pull out the Harness (RJ-45) from the CNX Board and remove the CNX Board.

4)

Lock Lever

CNX Board

2

1

FPC-27
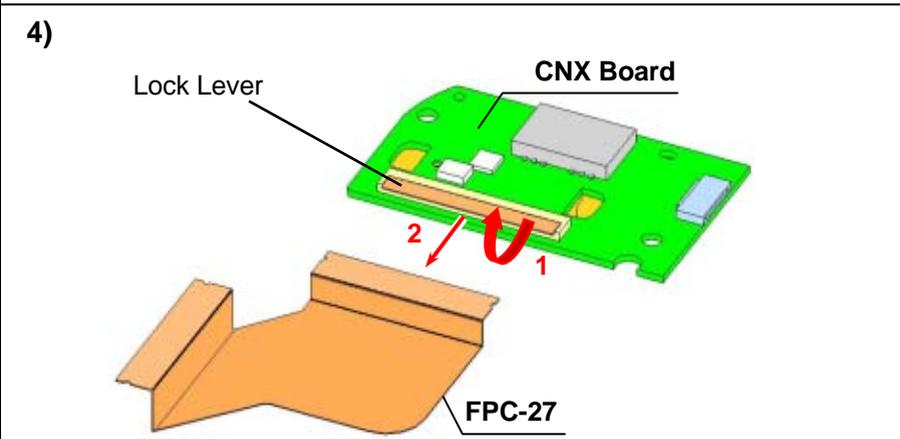
Raise the lock lever to release the lock and disconnect the FPC.

Harness (RJ 45)/FPC-28/Sheet (GPOP) -1

1)
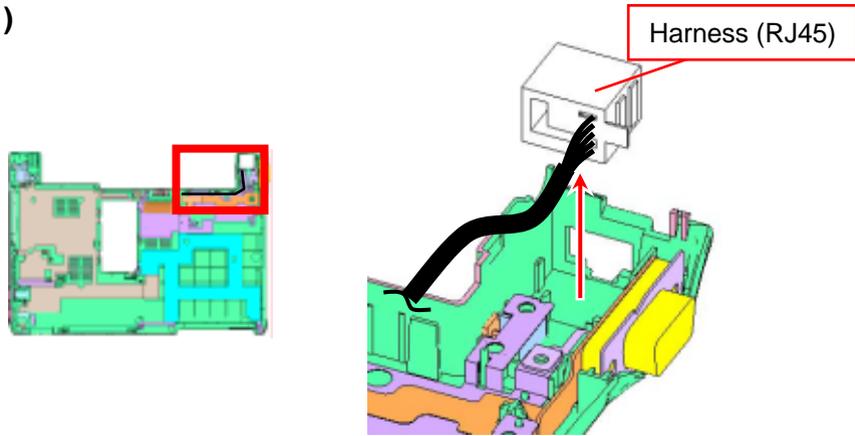
Harness (RJ45)

Raise the connector portion of the Harness (RJ45) and remove the Harness (RJ45).

2) ⚠10 [MA]   ⚠16 [MA]

3rd, 4th Model

Sheet (VGA)

FPC-28

Convex

Rib
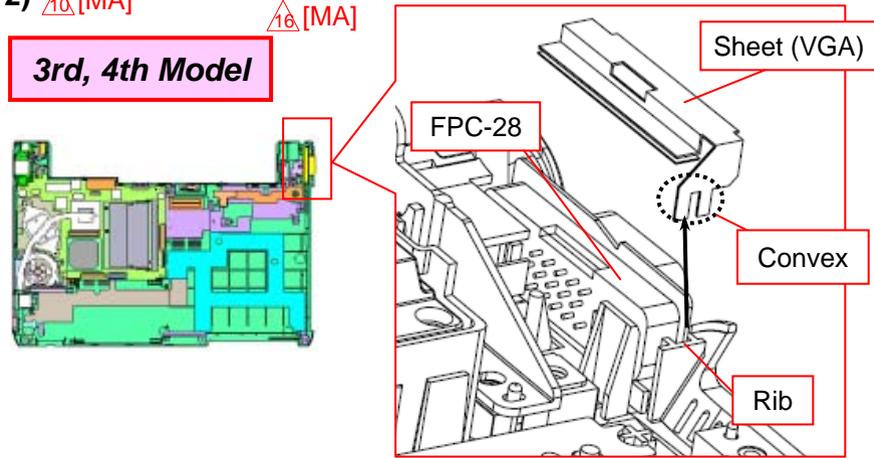
Peel off the Sheet (VGA), While removing the convex portion from between the FPC-28 and the rib.

3)

FPC-28

Bracket

Remove the FPC-28.

4)

Screw: B10

FPC-28

Bracket (VGA)
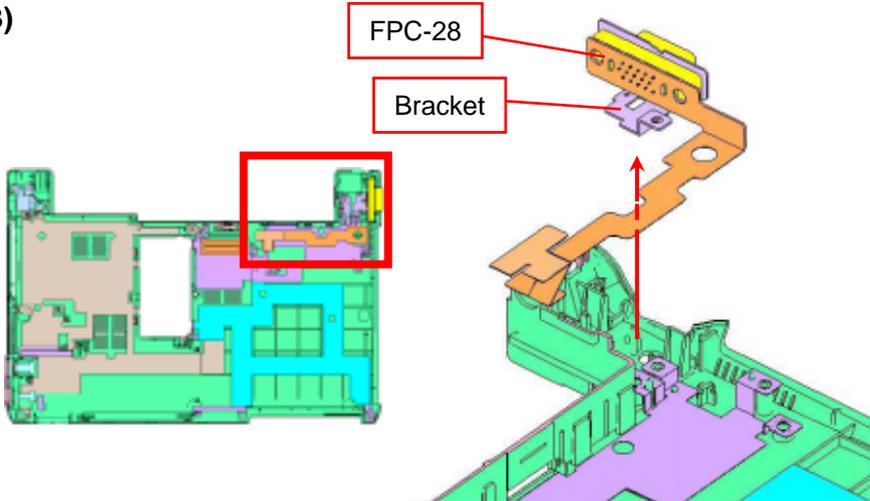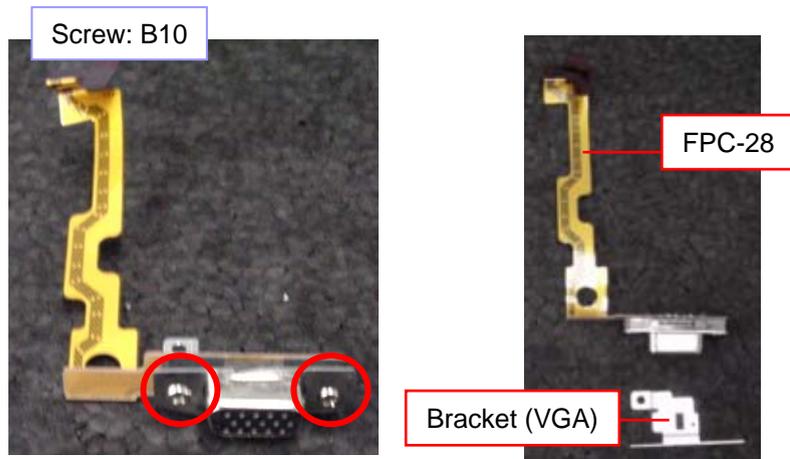
Remove the two screws, and the Bracket.

TX Series

Harness (RJ 45)/FPC-28/Sheet (GPOP) -2

5) **Except WAN Model** ⚠2 [MA]

Sheet (GPOP)

Remove the Sheet (GPOP).

Sheet

1)

Sheet (LAN)

Remove the Sheet (LAN).

2)
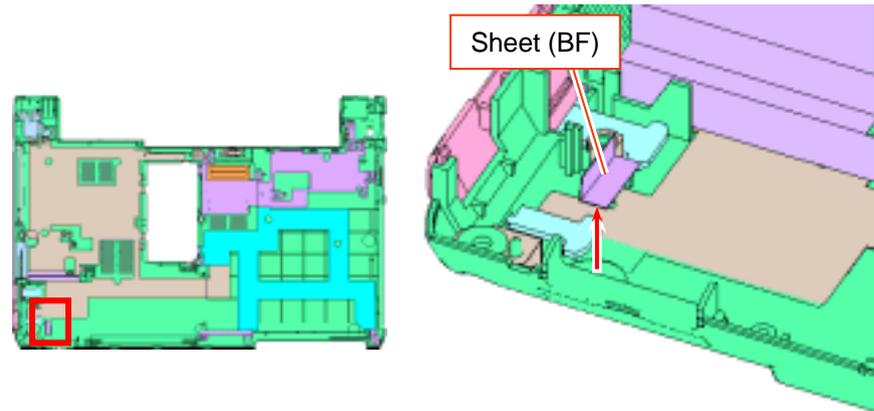
Sheet (BF)

Peel off the Sheet (BF).

3)
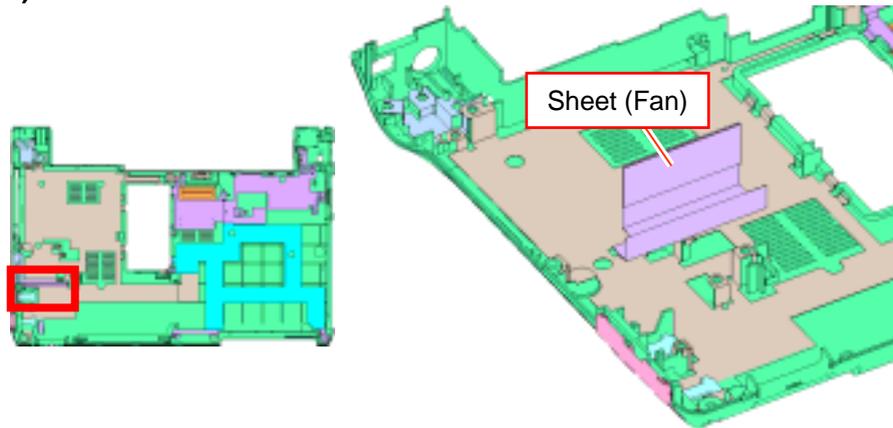
Sheet (Fan)

Peel off the Sheet (Fan).

4)

Sheet (PR)

Peel off the Sheet (PR).

TX Series
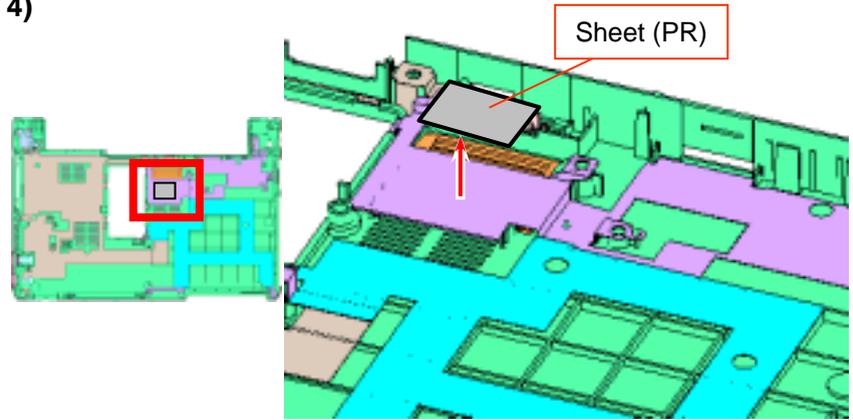
Lid (L)/Shield Plate-1 ⚠10[MA]

1)
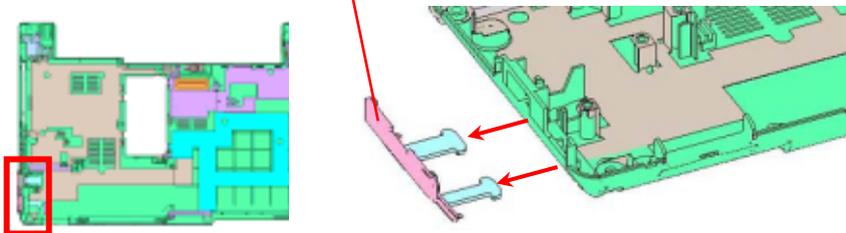
Lid (L)

Remove the Lid (L).

2) ⚠10[MA]

3rd(EU Area) Model
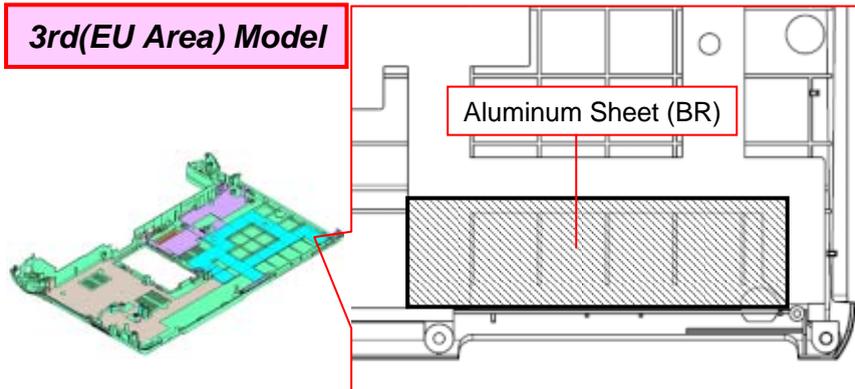
Aluminum Sheet (BR)

Peel off the Aluminum Sheet (BR).

3) ⚠10[MA]

3rd(TV) Model

Ferrite Sheet (B)

Fresh Air Intake Area
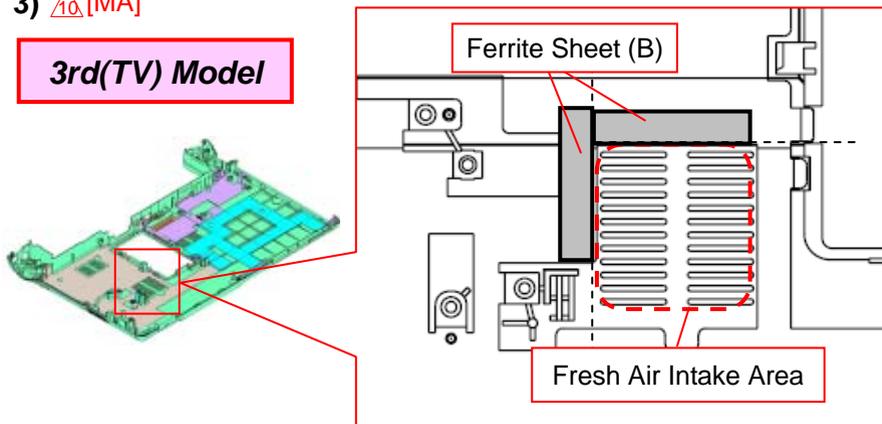
Peel off the Ferrite Sheet (two places).

4)

Shield Plate (BTR)

Remove the Shield Plate.

TX Series

Lid (L)/Shield Plate -2

5)
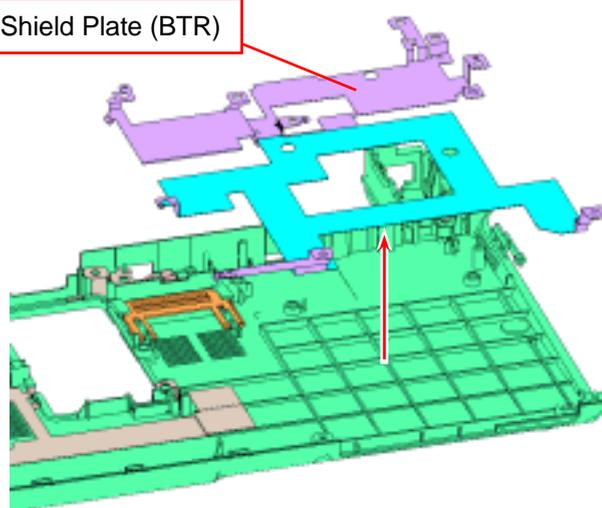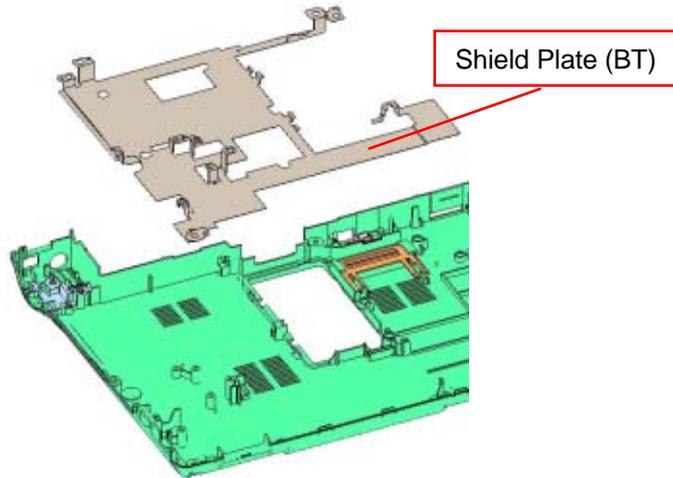
Shield Plate (BT)

Remove the Shield Plate.

6)
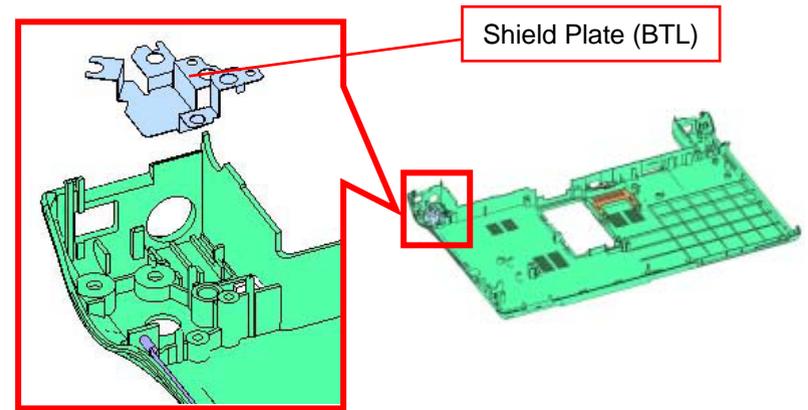
Shield Plate (BTL)

Remove the Shield Plate.

Update History

[**ADD**]---Addition [**DEL**]---Deletion [**CHG**]---Change [**COR**]---Correction [**MA**]---Model Addition

Date		Contents	Version No.
2005.10.13	△2	[MA] (Page 4, 16, 18(a), 20)	1.20
2005.12.28	△5	[MA] (Page 4, 6, 6(a), 7, 16, 17, 17(a), 18(b))	2.00
2006.03.10	△8	[ADD] Attachment (Page 3, 3(a), 5)	2.30
2006.06.16	△10	[MA] (Page 3, 5, 8, 10, 17, 17(a), 17(b), 20, 20(a), 22, 23)	3.00
2006.10.10	△16	[MA] (Page 3, 6, 6(a), 6(b), 7, 8, 10, 12, 17(a), 20)	4.10