

### VGN-N SERIES



# **Disassemble Instruction**

## **VGN-N Series – Preliminary Considerations**

### **Safety Precautions**

In order to prevent harm to both yourself and the unit, **ALWAYS** disconnect all peripherals and cables, and unplug the AC Adapter before performing any repairs on the unit. Shoes with non-conductive rubber soles should be worn to minimize the chance of shock or injury.

### **ESD Protection**

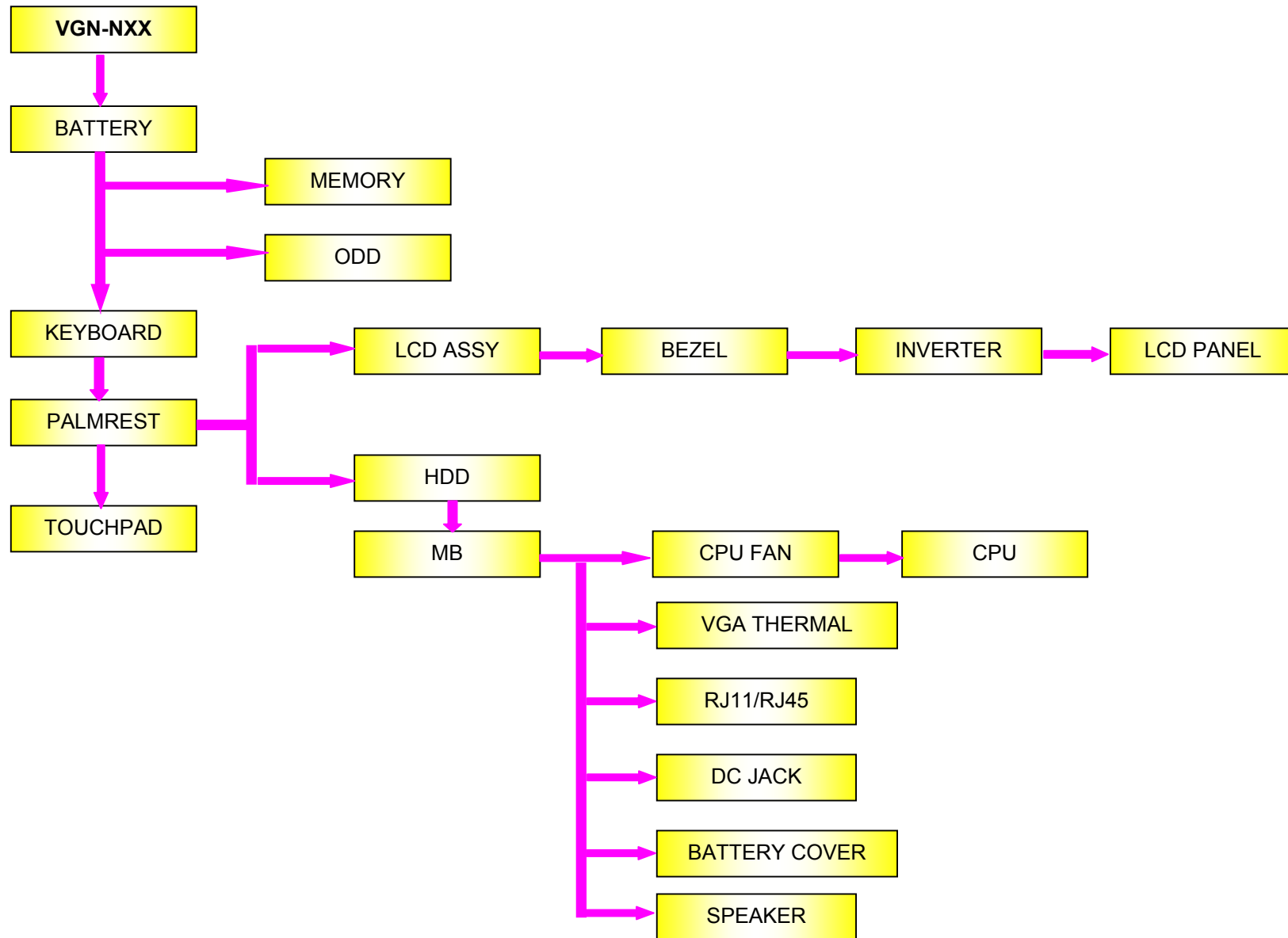
The components of the VGN-N Series are susceptible to damage caused by ESD (electrostatic discharge). Always follow proper grounding procedures and utilize appropriate equipment such as a wrist grounding strap and anti-static mat when performing any repairs on the unit. If a properly grounded wrist strap is not available, touch an unpainted metal surface of the computer chassis to discharge static electricity. This should be done periodically during the repair to discharge any static charge that has been accumulated. When removing a component from the system, be sure to place it on an anti-static mat.

### **Cosmetic Care**

Always protect both the unit and the repair surface from scratches, dings, dents, and other cosmetic damage by placing a protective mat between the unit and the repair surface. Never place an LCD face-down on an unprotected surface.

# Disassemble Instruction

## VGN-N Series – Flow Chart



# Disassemble Instruction

## VGN-N Series - Screws



### Screw needed for Disassembly

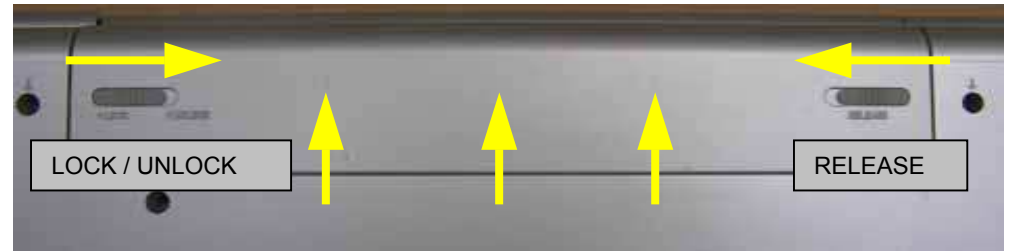
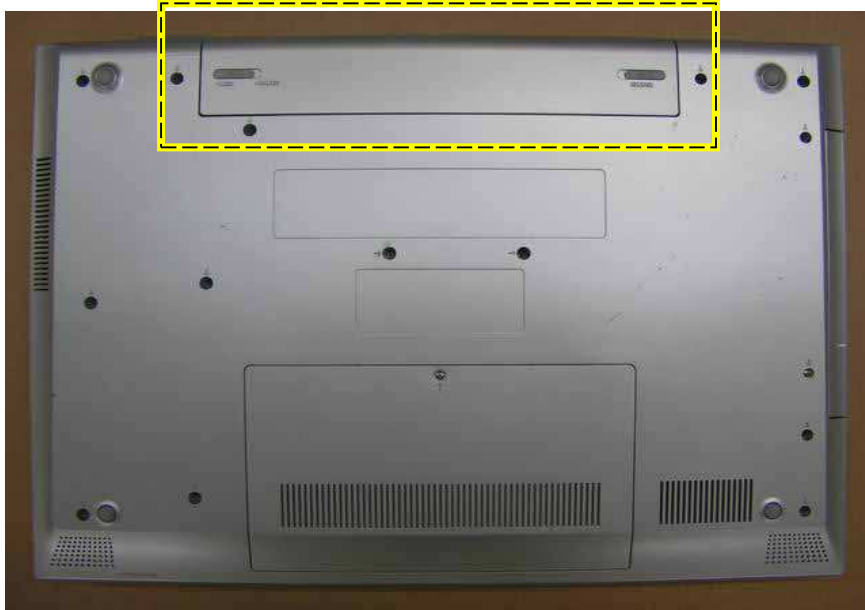
| Station       | Screw model |         | Amount |
|---------------|-------------|---------|--------|
| ODD           | B3          | M2*L7   | 2      |
| KEYBOARD      | B3          | M2*L7   | 1      |
| BOTTOM        | B3          | M2*L7   | 12     |
| BOTTOM        | B7          | M2*L3   | 3      |
| BOTTOM        | B2          | M2*L1.8 | 3      |
| BATTERY COVER | B2          | M2*L1.8 | 1      |
| PALMREST      | B9          | M2*L10  | 1      |
| HINGE         | B1          | M3*L6   | 6      |
| HDD           | B9          | M2*L10  | 2      |
| MOTHERBOARD   | B3          | M2*L7   | 3      |
| CPU FAN       | B4          | M2*L5   | 4      |
| VGA THERMAL   | B4          | M2*L5   | 2      |
| LCD BEZEL     | B4          | M2*L5   | 4      |
| SPEAKER       | B10         | T2*L3   | 4      |

# Disassemble Instruction

## VGN-N Series - Battery Removal

1)

OVERVIEW-BACK

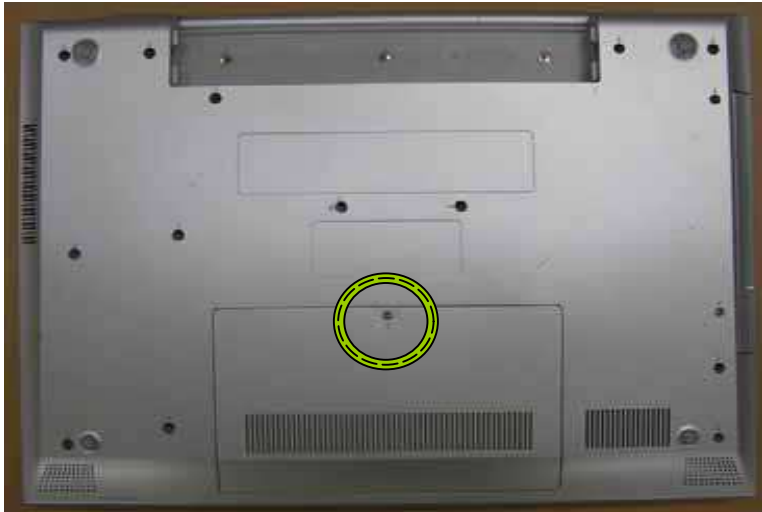


PRESS THE UNLOCK TAB AND THE RELEASE TAB TOWARDS THE CENTER OF THE BATTERY. SLIDE THE BATTERY AWAY THE SYSTEM.

# Disassemble Instruction

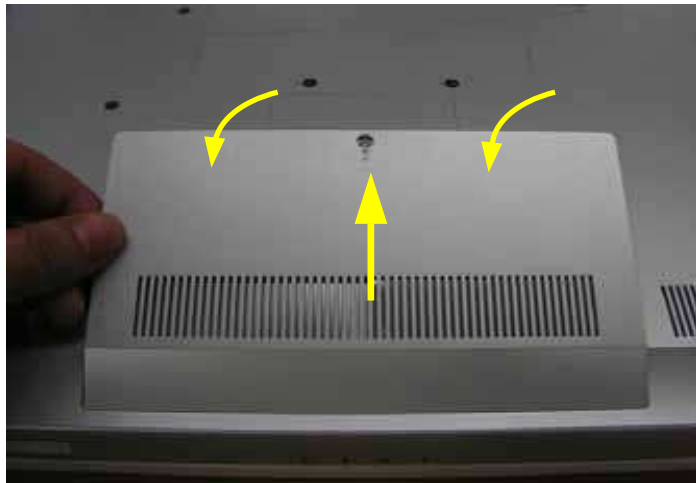
## VGN-N Series - Memory Removal

1)



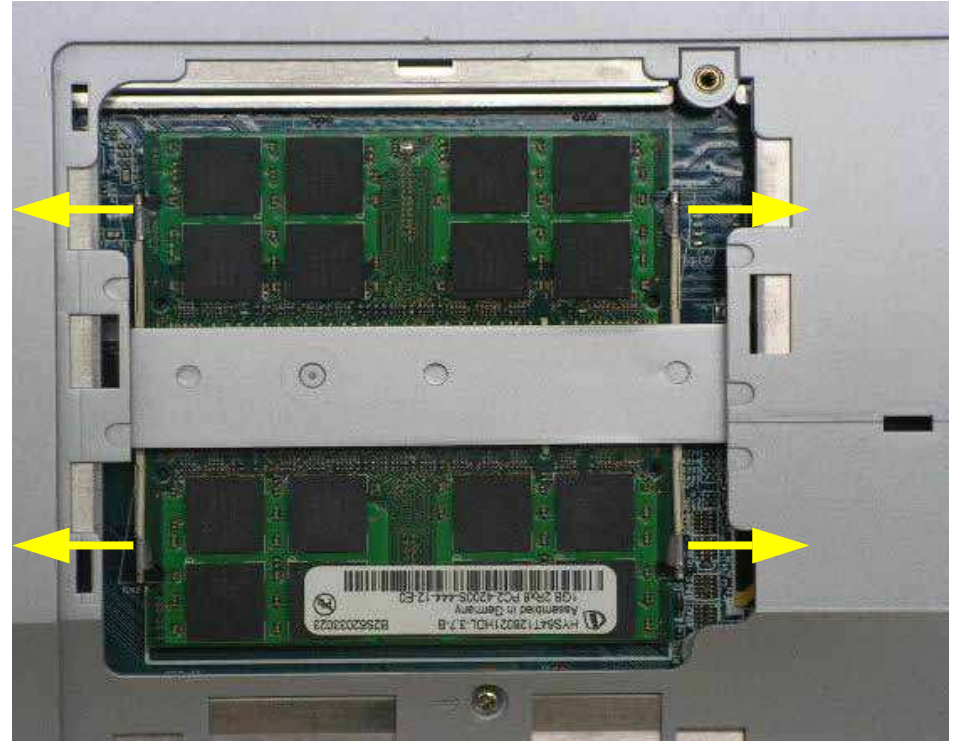
LOOSEN ONE RETAINED SCREW

2)



ROTATE THE RAM DOOR FROM THE UPPER EDGE AND LIFT UP

3)

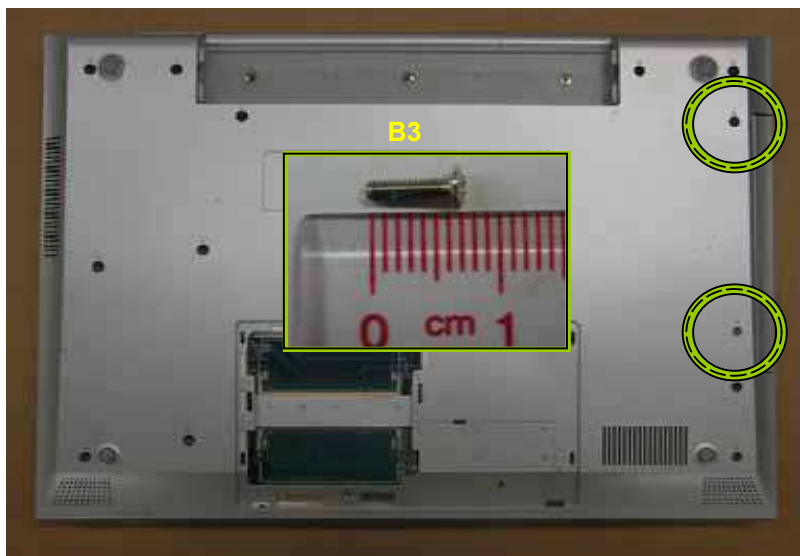


REMOVE EACH RAM MODULE BY RELEASING THE CLIPS AND LIFTING THE RAM FROM THE SOCKET

# Disassemble Instruction

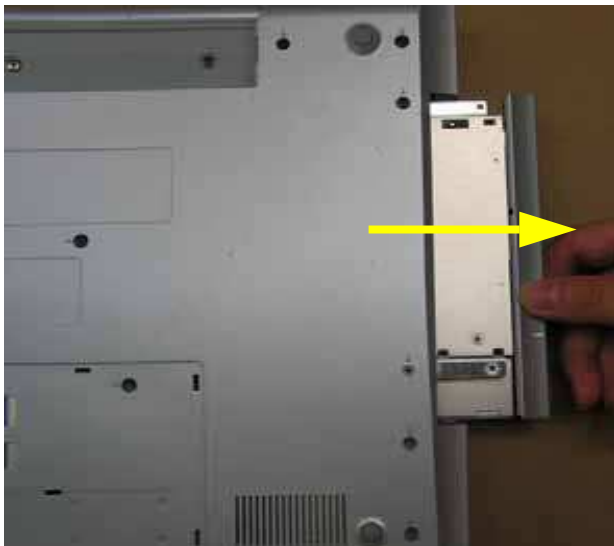
## VGN-N Series - Optical Drive Removal

1)



REMOVE TWO SCREWS

2)

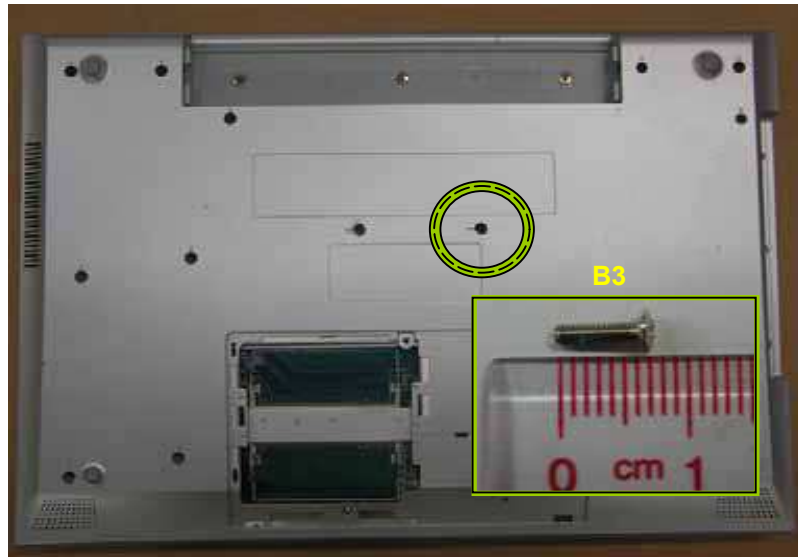


SLIDE THE OPTICAL DRIVE OUT OF THE SYSTEM

# Disassemble Instruction

## VGN-N Series - Keyboard Removal

1)



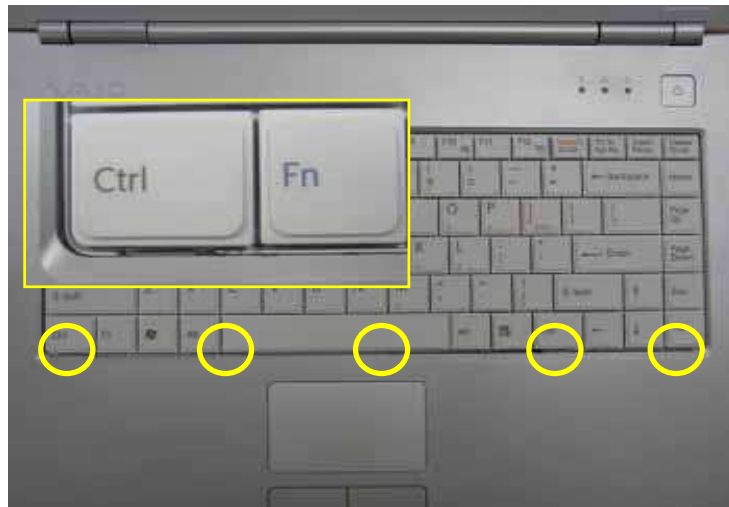
REMOVE ONE SCREW

3)



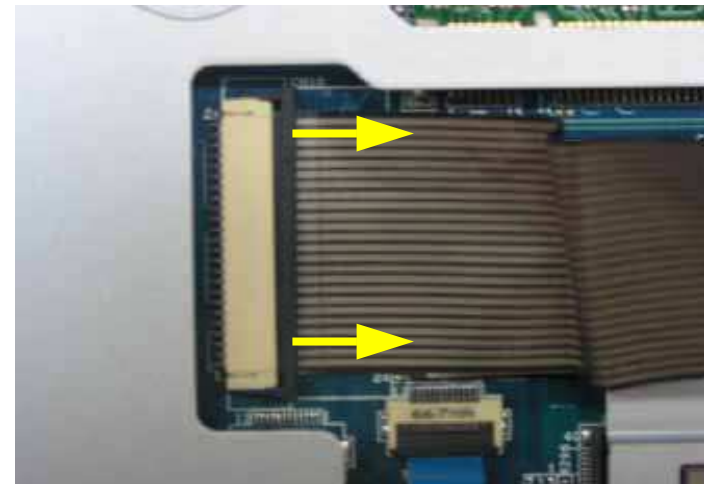
ROTATE THE KEYBOARD FROM THE BOTTOM TO REMOVE

2)



RELEASE FIVE TABS FROM THE BOTTOM OF THE KEYBOARD

4)



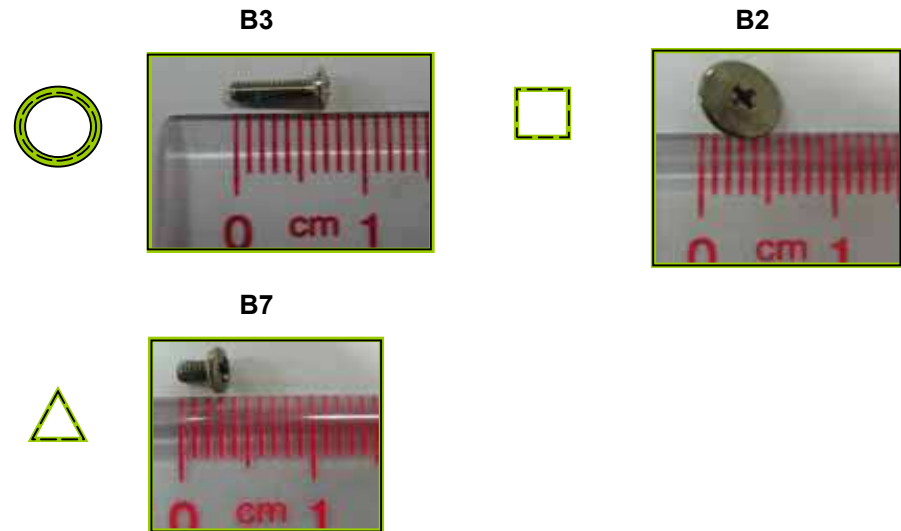
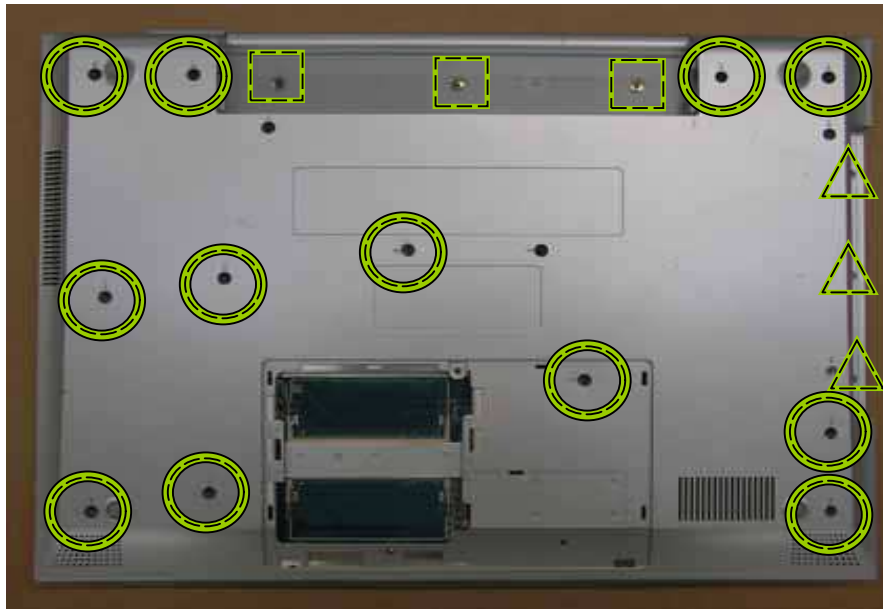
DISCONNECT THE KEYBOARD CABLE



# Disassemble Instruction

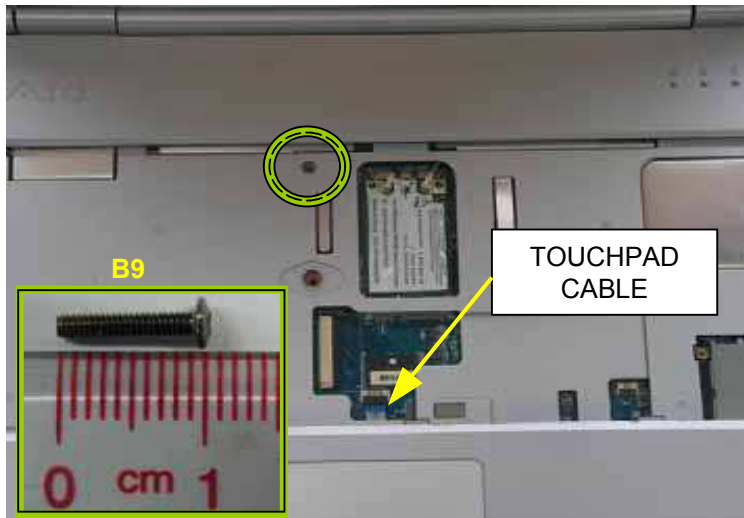
## VGN-N Series - Palmrest Removal

1)



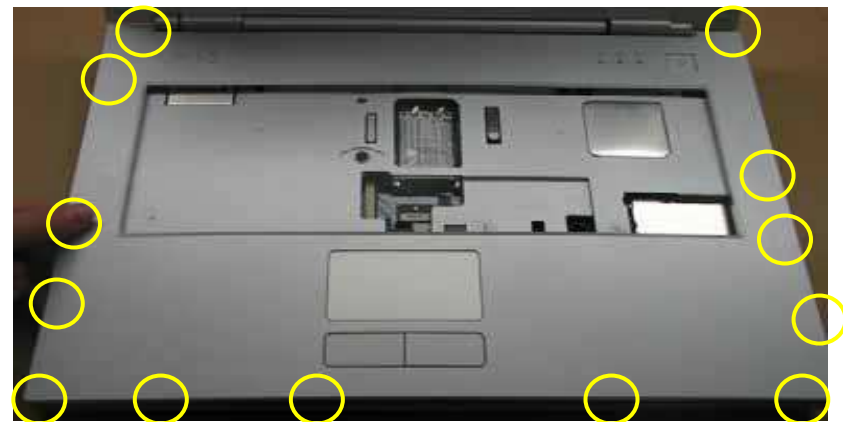
REMOVE EIGHTEEN SCREWS FROM THE PALMREST. NOTE THERE ARE THREE DIFFERENT LENGTHS

2)



DISCONNECT THE TOUCHPAD CABLE. REMOVE ONE SCREW

3)

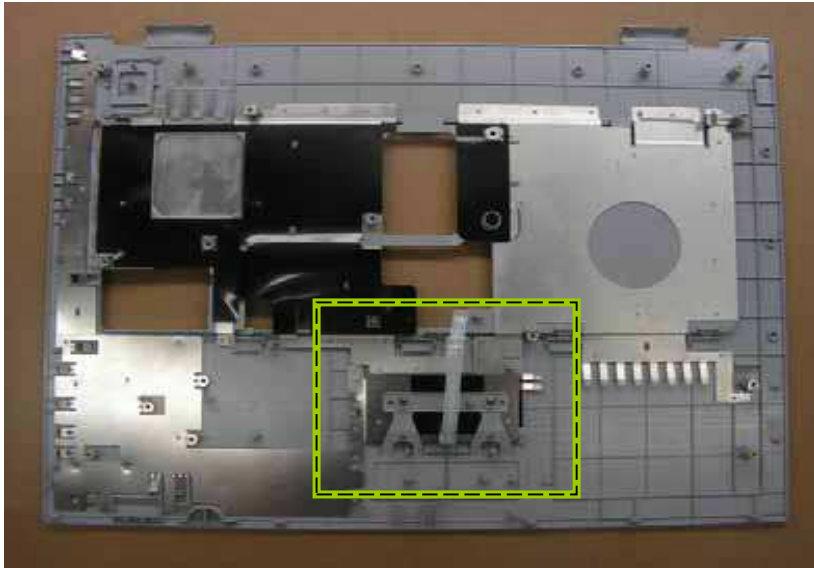


LIFT THE PALMREST FROM THE FRONT EDGE. GENTLY RELEASING THE DETENTS

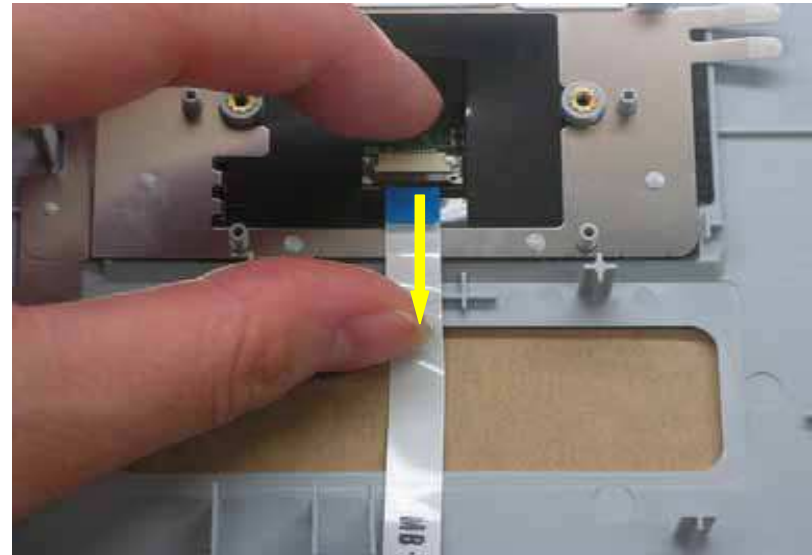
# Disassemble Instruction

## VGN-N Series - Touchpad Removal

### OVERVIEW-BACK

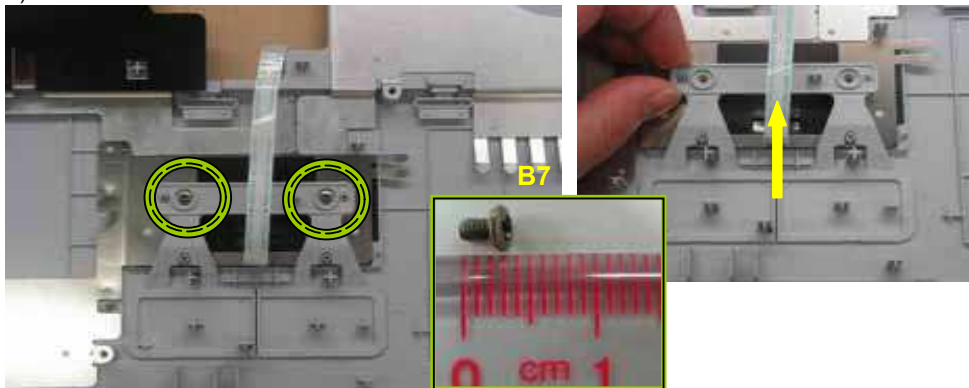


2)



DISCONNECT THE TOUCHPAD CABLE

1)



REMOVE TWO SCREWS. LIFT THE TOUCHPAD BUTTONS FROM THE TOP EDGE

3)

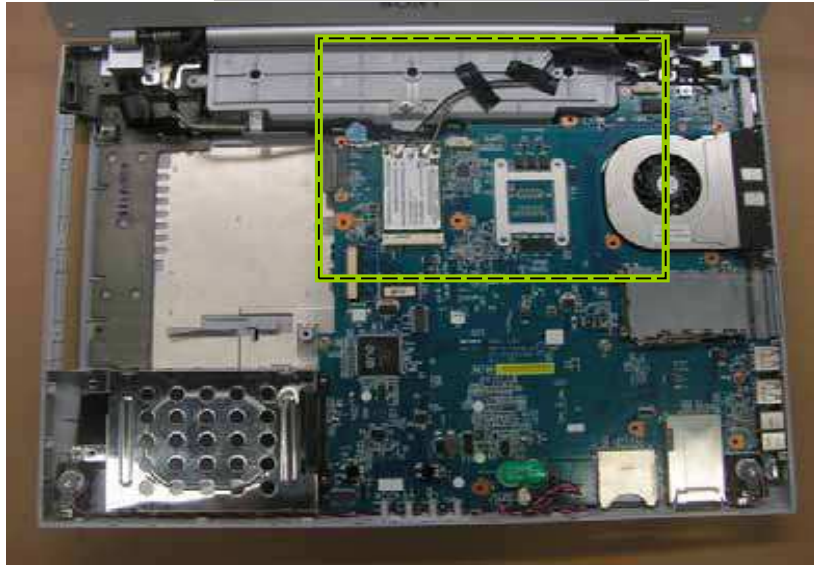


THE TOUCHPAD IS AFFIXED TO THE PALMREST WITH DOUBLE-SIDED ADHESIVE

# Disassemble Instruction

## VGN-N Series - Wireless LAN Card Removal

OVERVIEW-FRONT



2)



RELEASE THE WIRELESS CARD BY PRESSING THE TWO CLIPS AWAY FROM THE CARD

1)



DISCONNECT THE WLAN ANTENNAS. NOTE THE ROUTING OF THE ANTENNAS

3)



LIFT THE SIDE OF THE WIRELESS CARD UP. REMOVE THE CARD AWAY FROM THE SOCKET



## Disassemble Instruction

### VGN-N Series - LCD Assembly Removal

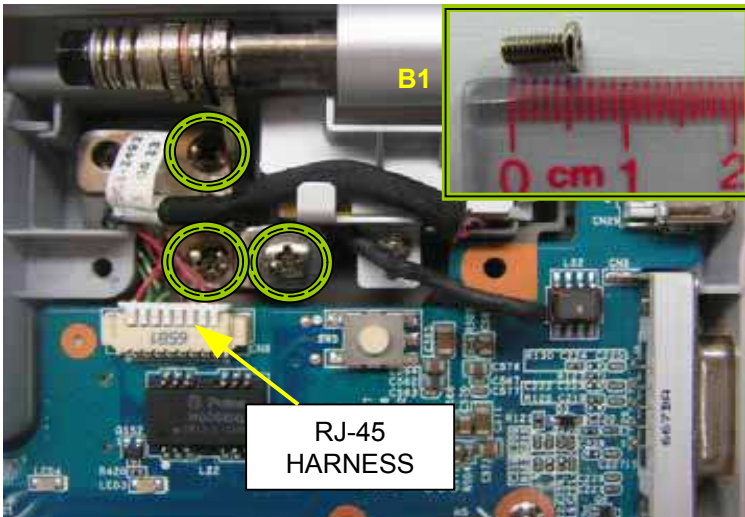
## Disassemble Instruction

### VGN-N Series - LCD Assembly Removal

OVERVIEW-FRONT

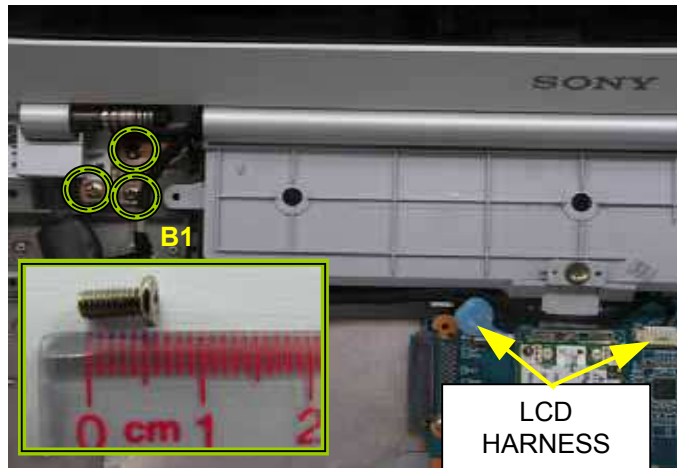


2)



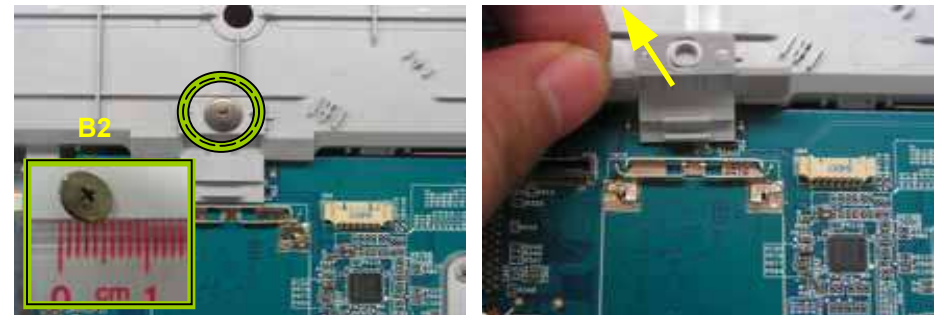
DISCONNECT THE RJ-45 HARNESS. REMOVE THREE SCREWS ON THE RIGHT HINGE AND LIFT LCD ASSEMBLY FROM THE SYSTEM

1)



DISCONNECT THE TWO CONNECTORS ON THE LCD HARNESS.  
REMOVE THREE SCREWS FROM THE LEFT HINGE

3)

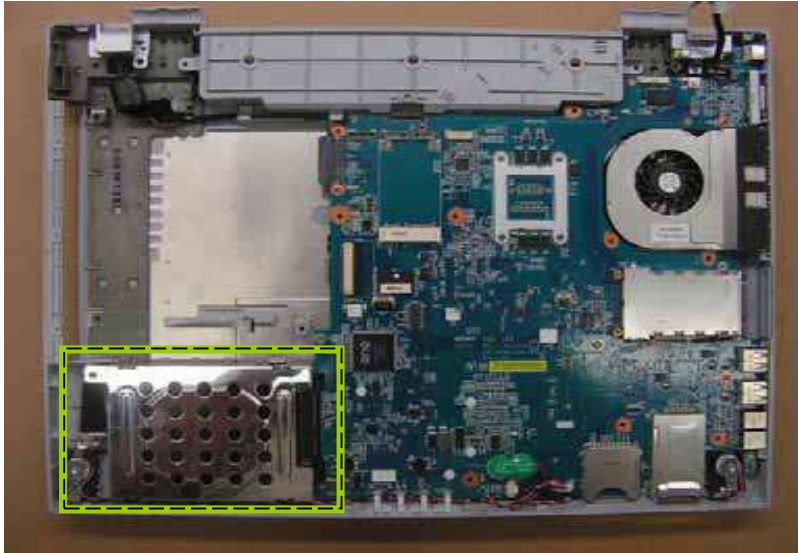


REMOVE ONE SCREW FROM THE LCD HARNESS ROUTING GUIDE. LIFT THE ROUTING GUIDE UP

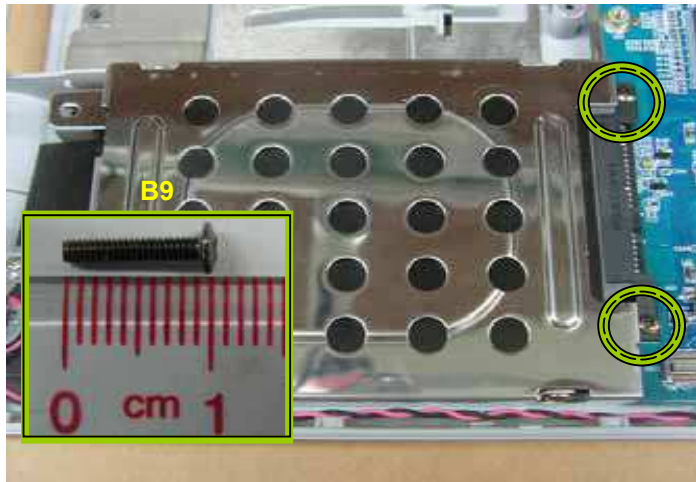
# Disassemble Instruction

## VGN-N Series - Hard Drive Removal

OVERVIEW-FRONT

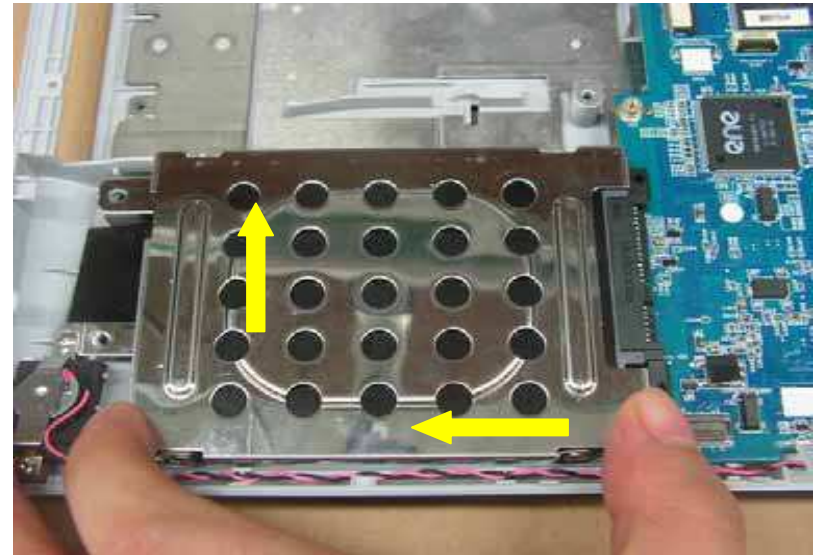


1)



REMOVE TWO SCREWS

2)



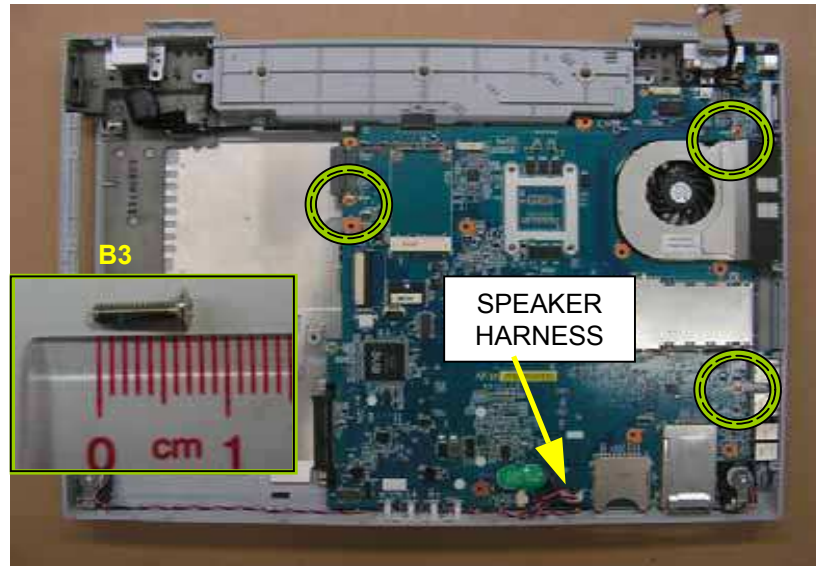
SLIDE THE HDD TO THE LEFT AND LIFT UP



# Disassemble Instruction

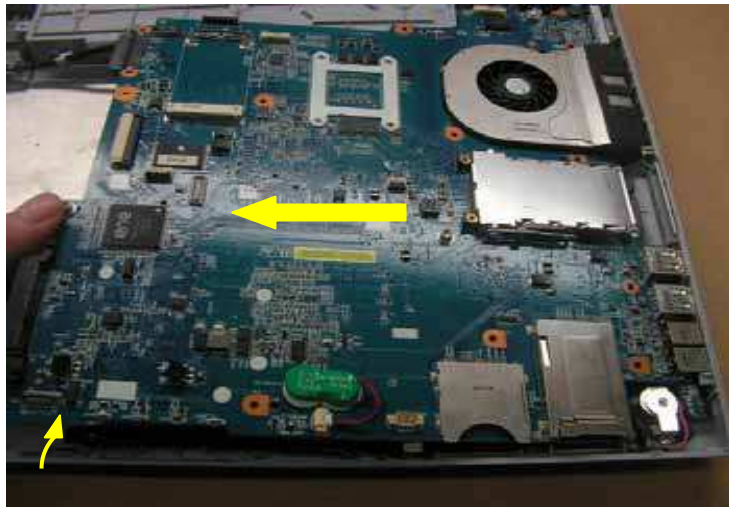
## VGN-N Series - Motherboard Removal

1)



DISCONNECT THE SPEAKER HARNESS. REMOVE THREE SCREWS

2)



LIFT UP THE LEFT SIDE OF THE MOTHERBOARD AND SLIDE THE MOTHERBOARD TO THE LEFT TO REMOVE

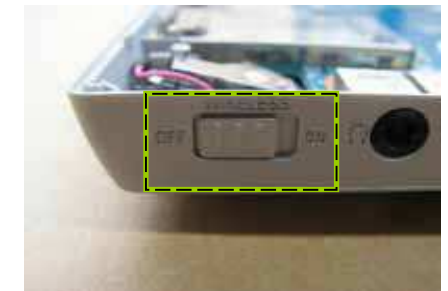
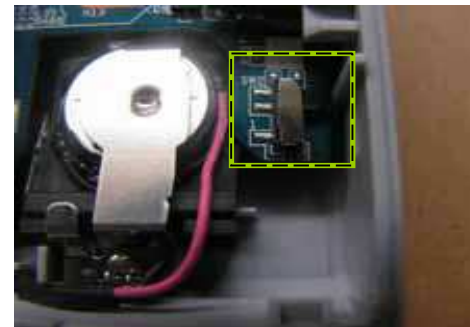
Rev 1.01.100906

3)



GENTLY TURN THE MOTHERBOARD OVER AND DISCONNECT THE DC JACK HARNESS AND THE RJ-11 HARNESS

### NOTICE



WHEN INSTALLING THE MOTHERBOARD, ENSURE THE WIRELESS LAN SWITCH ON THE MOTHERBOARD IS IN THE SAME POSITION THE WIRELESS LAN SWITCH ON THE BOTTOM HOUSING

SONY CONFIDENTIAL

14

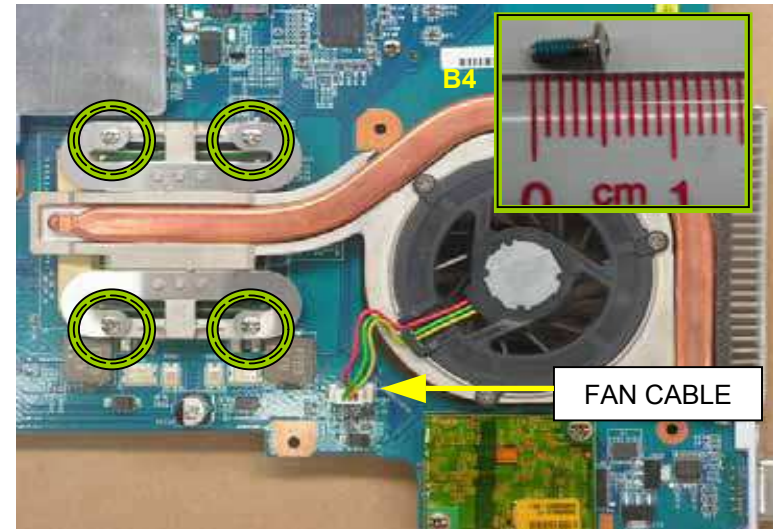
# Disassemble Instruction

## VGN-N Series - CPU Removal

### OVERVIEW-BACK



1)



DISCONNECT THE CPU FAN. REMOVE FOUR SCREWS AND LIFT THE COOLING UNIT UP

2)



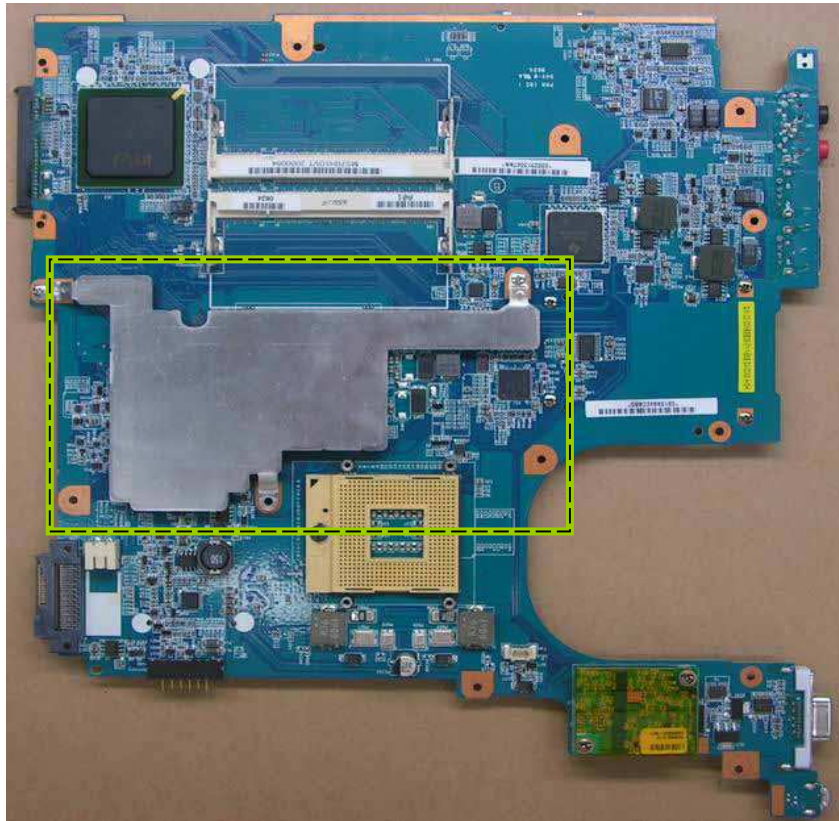
RELEASE THE CPU LOCK BY ROTATING THE LOCK CLOCKWISE WITH A FLAT-BLADE SCREWDRIVER. CAREFULLY LIFT THE CPU UP



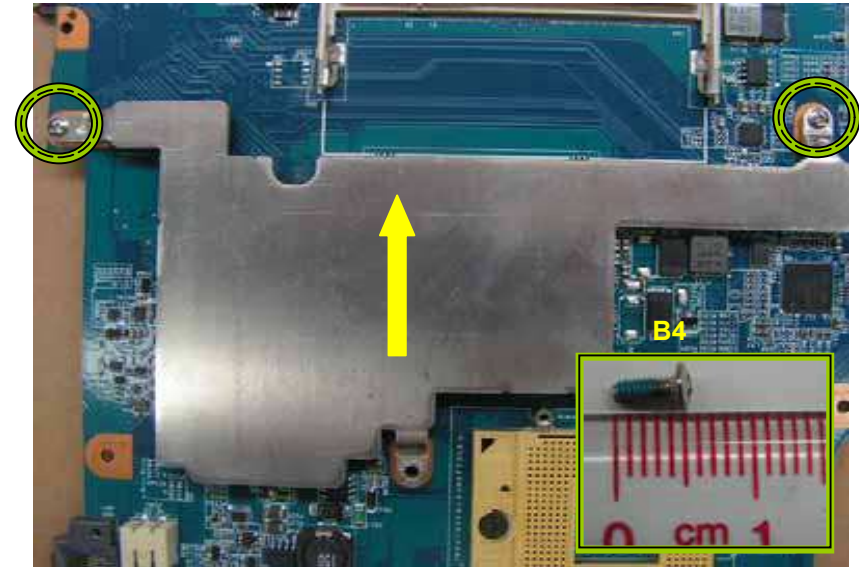
# Disassemble Instruction

## VGN-N Series - VGA Thermal Removal

OVERVIEW-BACK



1)



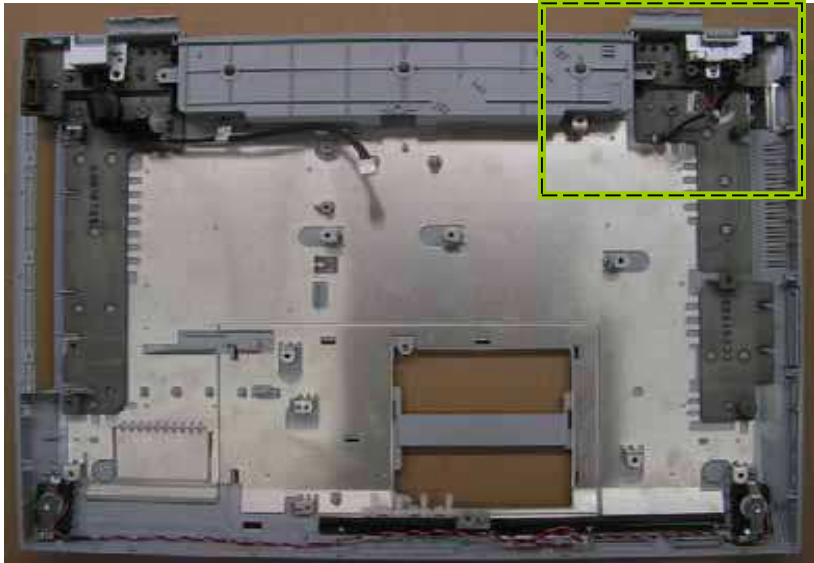
REMOVE TWO SCREWS AND LIFT THE VGA THERMAL UNIT UP



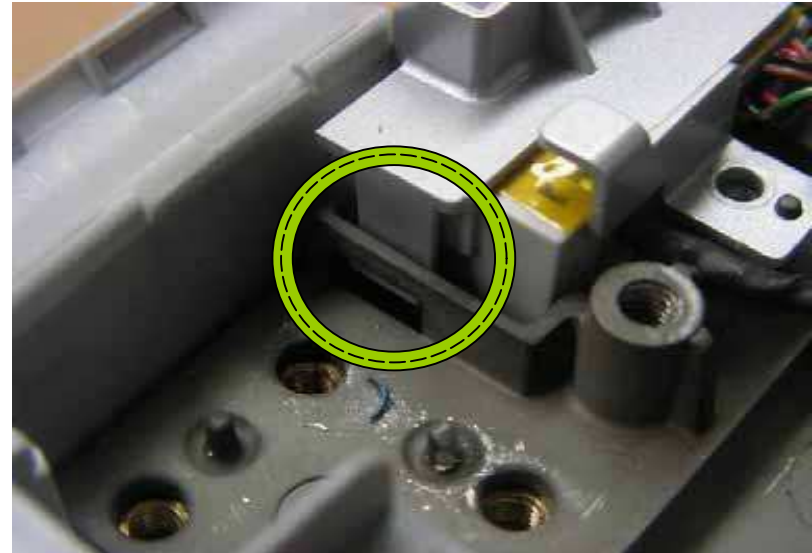
# Disassemble Instruction

## VGN-N Series - RJ-11/RJ-45 Harness Removal

OVERVIEW-FRONT

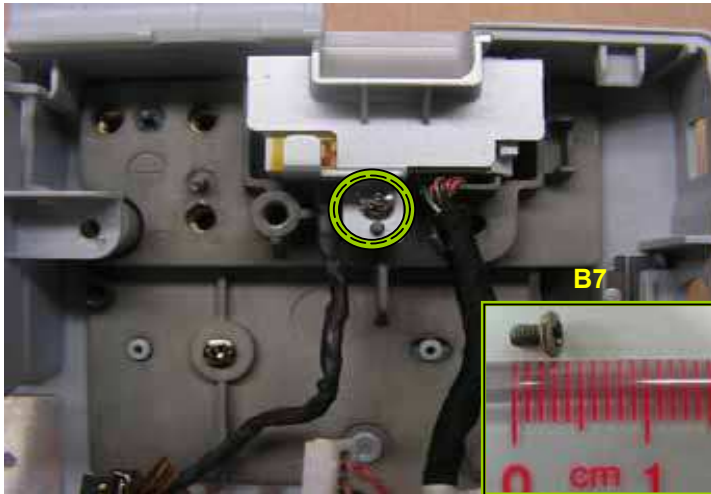


2)



RELEASE THE CLIP ON EACH SIDE OF THE RJ-11 /RJ-45 BRACKET AND LIFT THE BRACKET UP

1)



REMOVE ONE SCREW FROM THE RJ-11 /RJ-45 HARNESS

3)

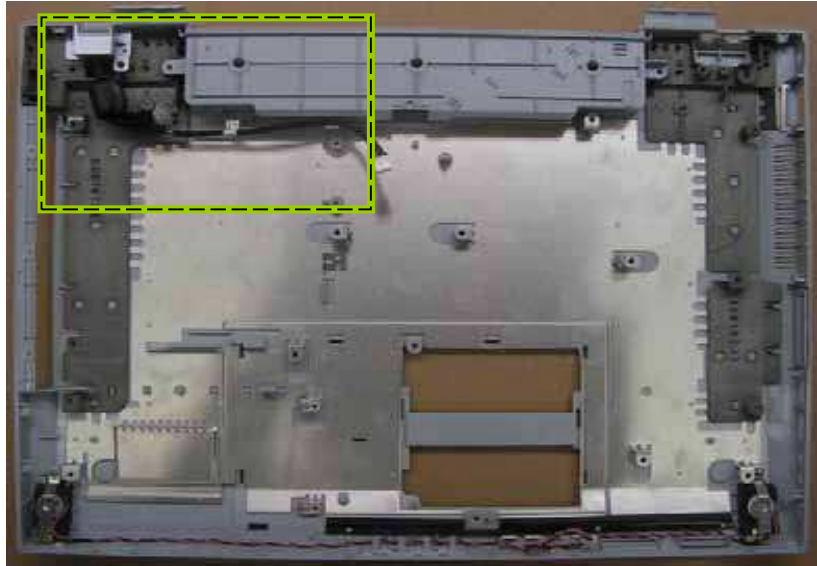


LIFT THE RJ-11 /RJ-45 HARNESS UP

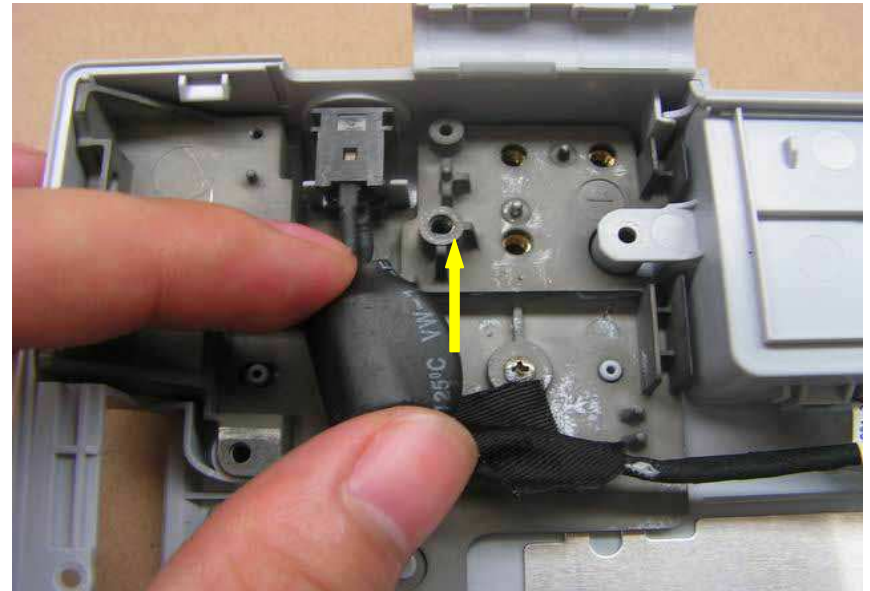
# Disassemble Instruction

## VGN-N Series - DC Jack Harness Removal

OVERVIEW-FRONT

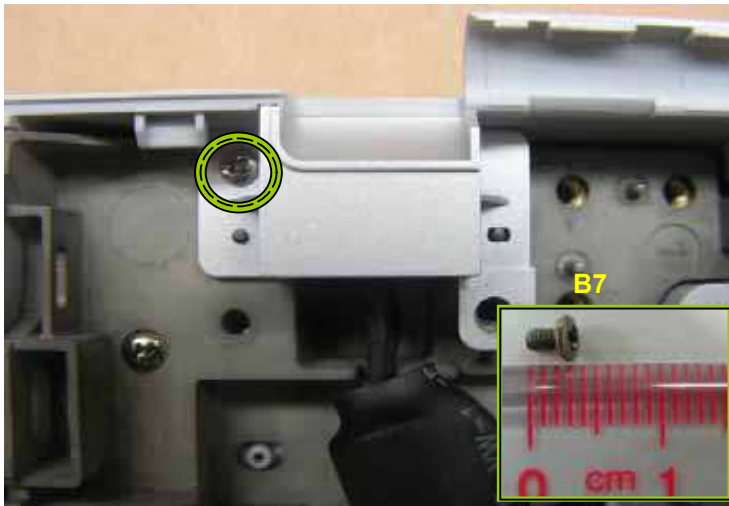


2)



LIFT THE DC JACK HARNESS UP

1)

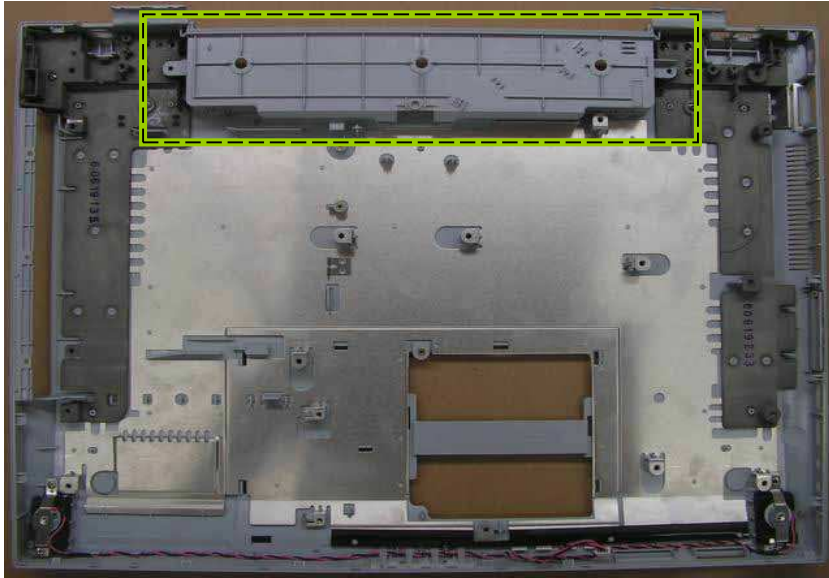


REMOVE ONE SCREW AND LIFT THE DC JACK BRACKET UP

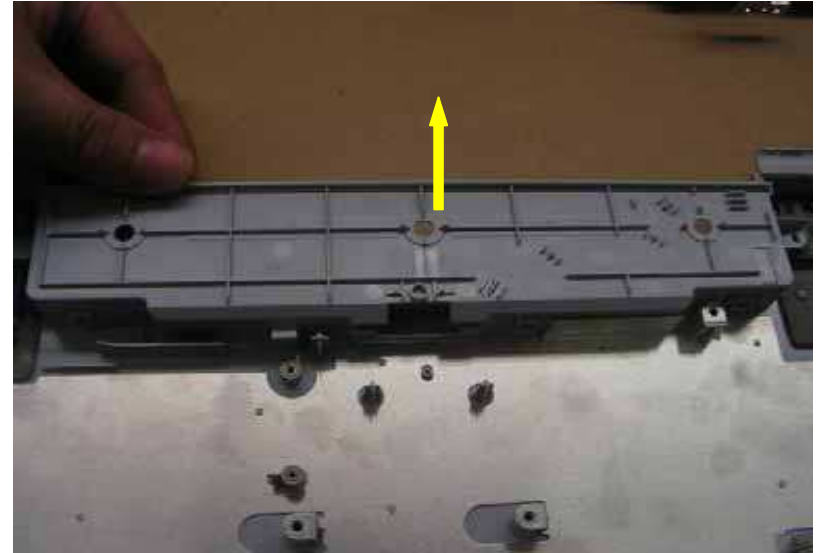
# Disassemble Instruction

## VGN-N Series - Battery Bay Cover Removal

OVERVIEW-FRONT



2)



LIFT THE BATTERY BAY COVER UP

1)

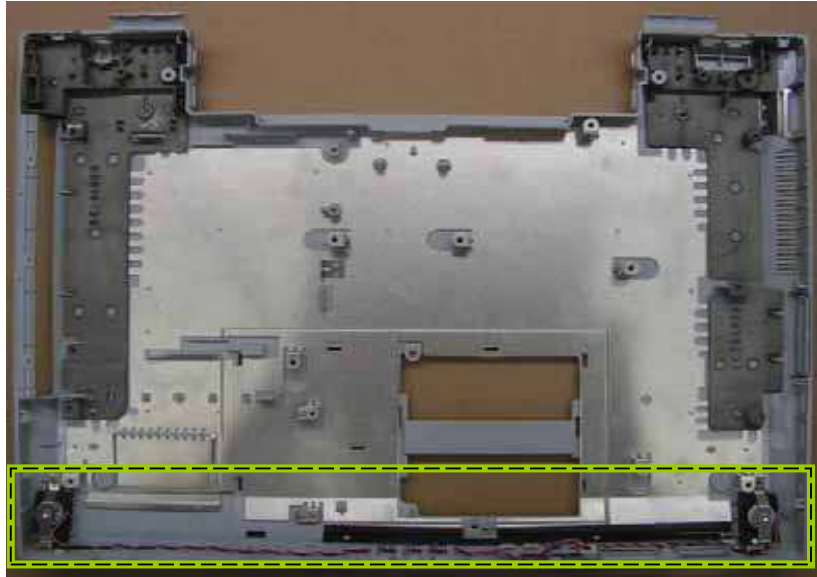


GENTLY RELEASE THE FOUR CLIPS ON THE BATTERY BAY COVER

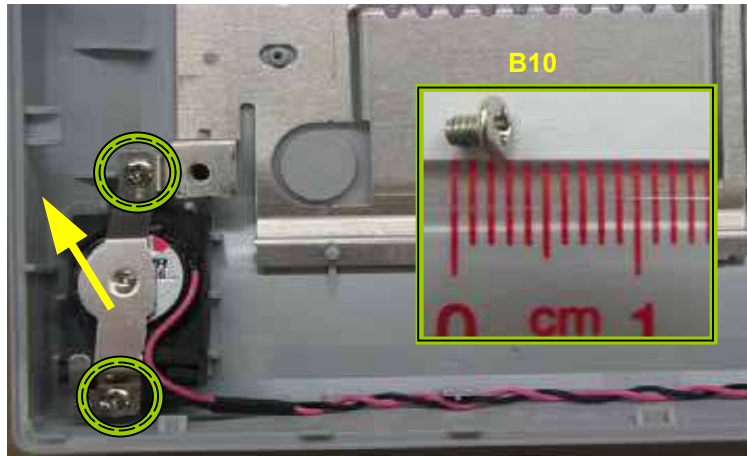
# Disassemble Instruction

## VGN-N Series - Speaker Removal

OVERVIEW-FRONT

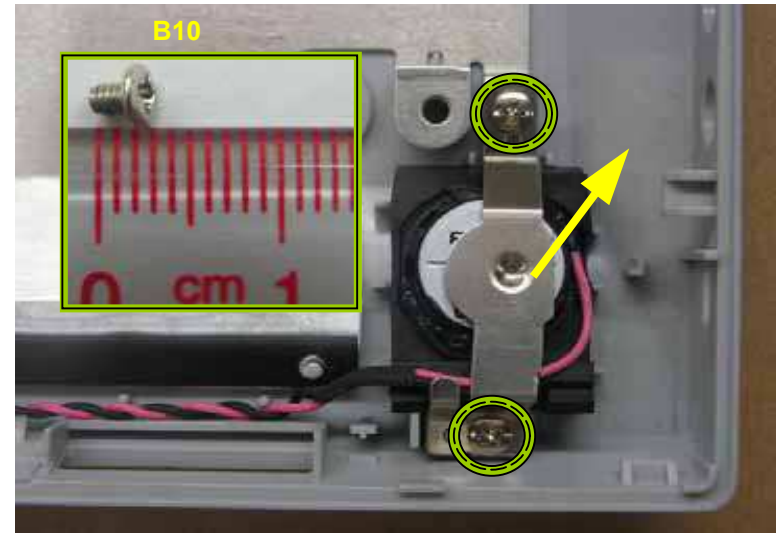


1)



REMOVE TWO SCREWS AND LIFT THE LEFT SPEAKER BRACKET UP. NOTE THE ROUTING OF THE CABLE

2)



REMOVE TWO SCREWS AND LIFT THE SPEAKER BRACKET UP. LIFT THE SPEAKERS AND HARNESS UP. NOTE THE ROUTING OF THE HARNESS



# Disassemble Instruction

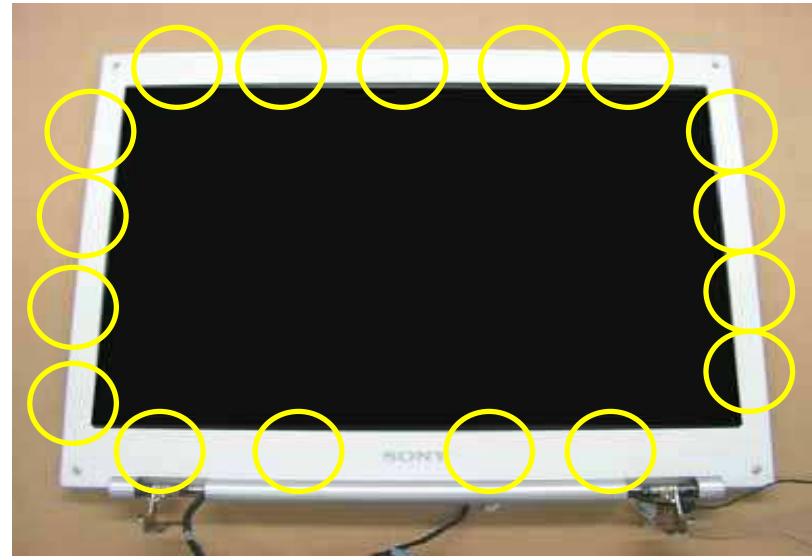
## VGN-N Series – LCD Bezel Removal

1)



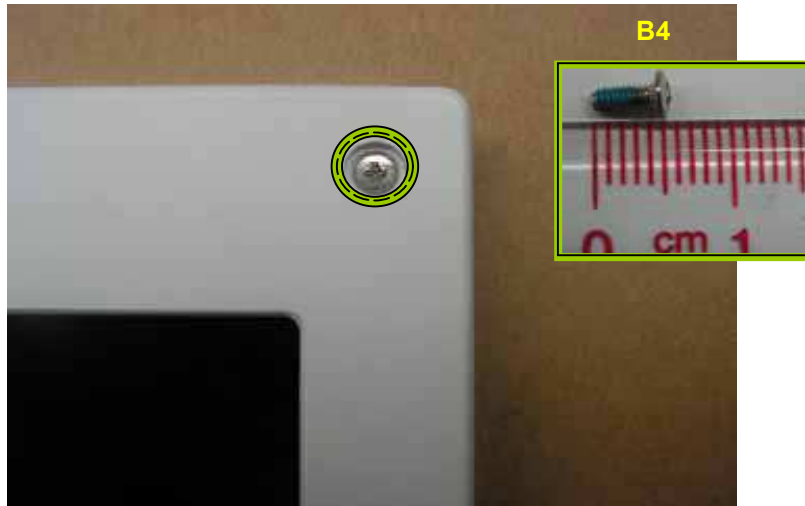
REMOVE FOUR SCREW COVERS

3)



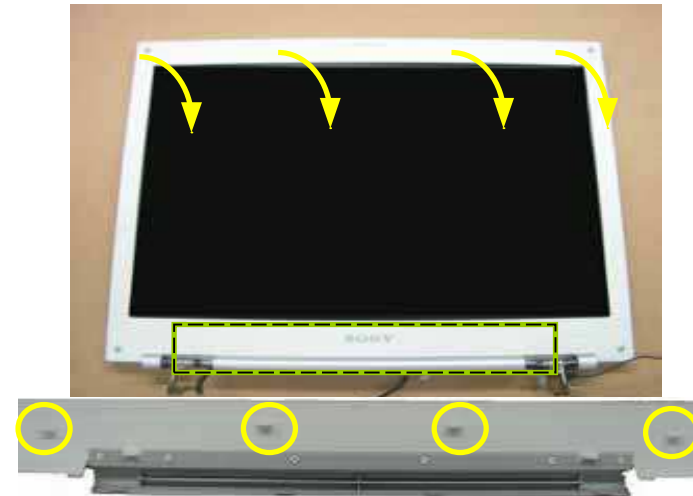
USING GENTLE PRESSURE FROM THE INNER EDGES. RELEASE THE DETENTS ON THE BEZEL

2)



REMOVE ONE SCREW FROM BENEATH EACH SCREW COVER

4)



ROTATE THE BEZEL TOWARDS THE BOTTOM OF THE UNIT TO RELEASE THE FOUR TABS

# Disassemble Instruction

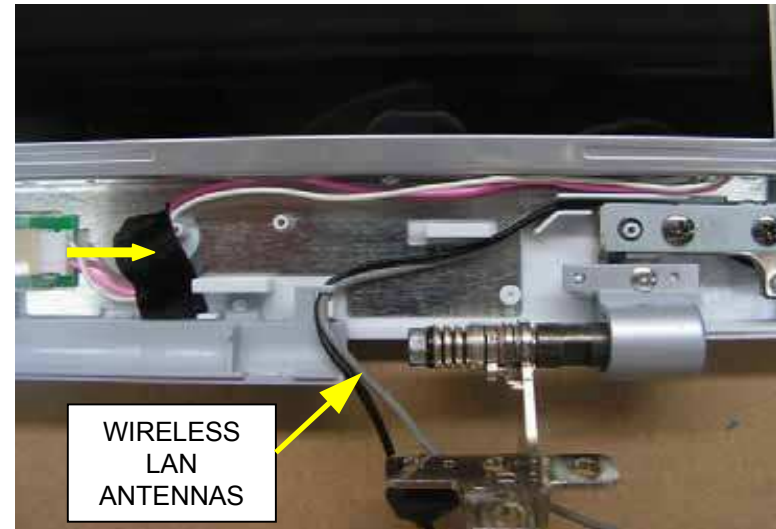
## VGN-N Series – Inverter Removal

1)

OVERVIEW-FRONT

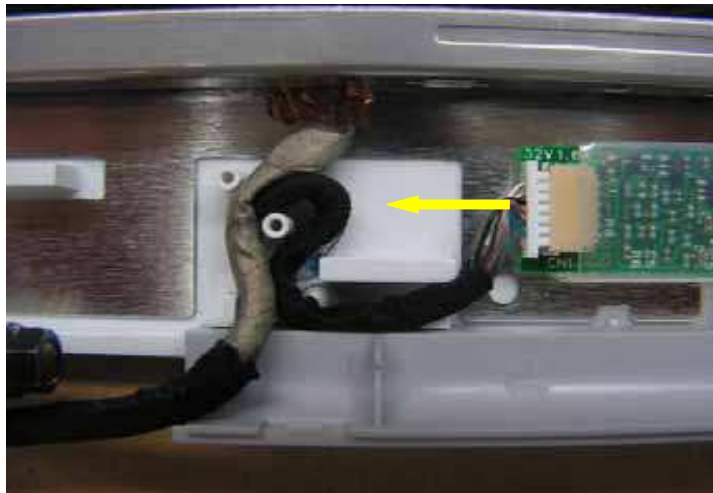


3)



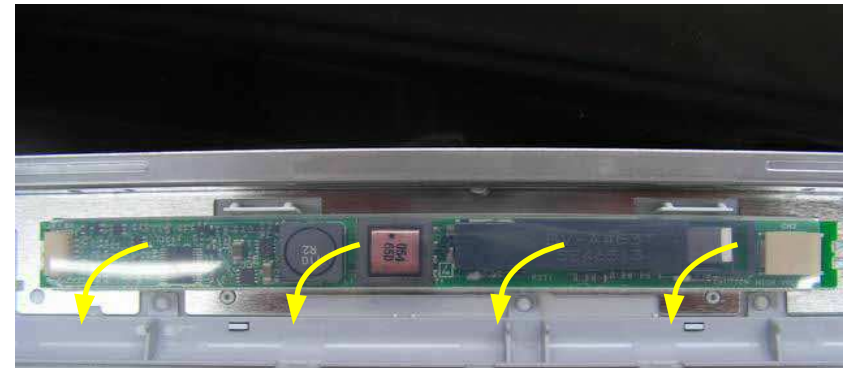
DISCONNECT THE INVERTER CABLE. NOTE THE ROUTING OF THE CABLE AND THE WIRELESS LAN ANTENNAS

2)



DISCONNECT THE LCD HARNESS FROM THE INVERTER. NOTE THE TOUTING OF THE HARNESS

4)

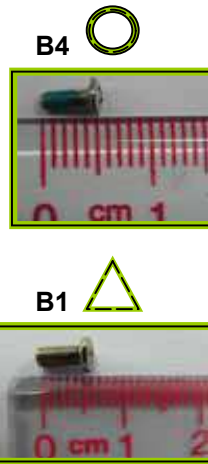


THE INVERTER IS AFFIXED TO THE DISPLAY HOUSING WITH DOUBLE SIDED ADHESIVE. GENTLY REMOVE THE INVERTER TOWARDS THE BOTTOM OF THE HOUSING.

# Disassemble Instruction

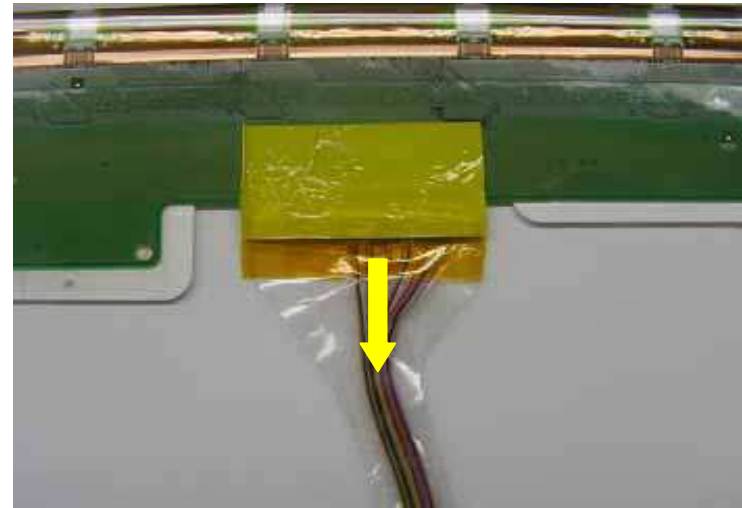
## VGN-N Series – LCD Panel Removal

1)



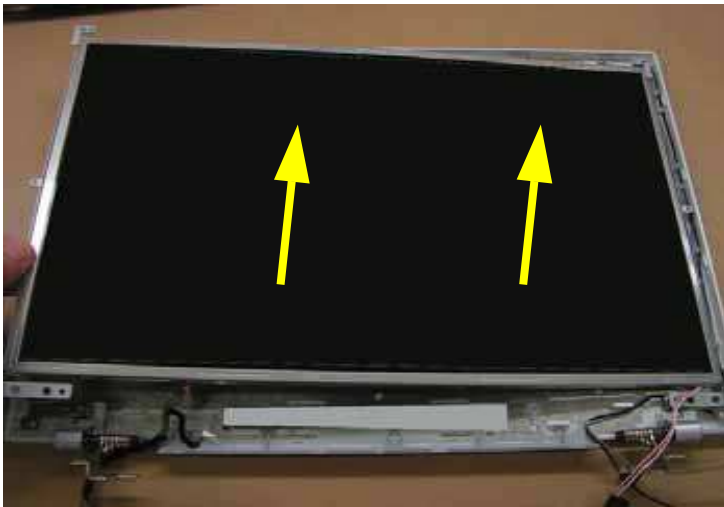
REMOVE SIX SCREWS FROM THE LCD BRACKET. NOTE THERE ARE TWO DIFFERENT LENGTHS

3)



REMOVE THE TAPE AND DISCONNECT THE LCD HARNESS ON THE REVERSE SIDE OF THE LCD

2)



LIFT THE LCD PANEL UP FROM THE HOUSING