

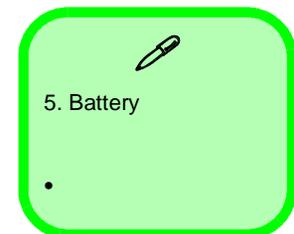
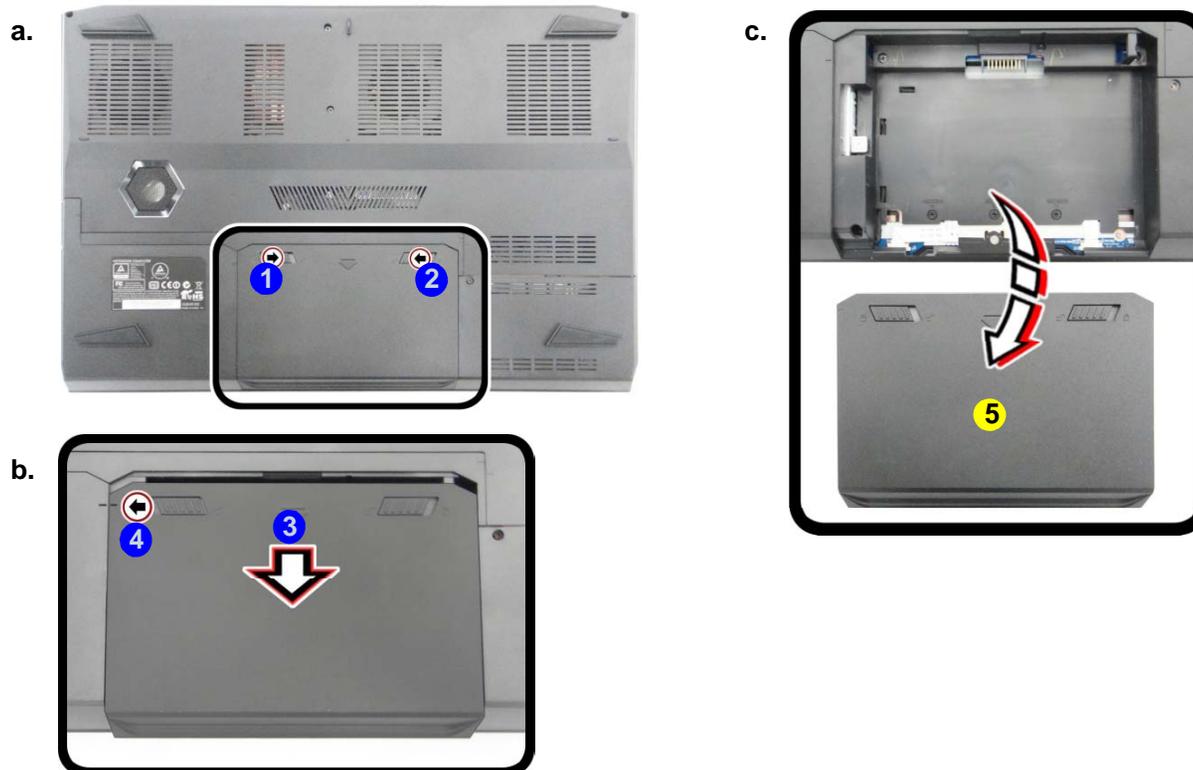
## Removing the Battery

If you are confident in undertaking upgrade procedures yourself, for safety reasons it is best to remove the battery.

1. Turn the computer off, remove the AC/DC adapter and turn it over.
2. Slide the latch ① - ② in the direction of the arrow.
3. Slide the battery forward in the direction of the arrow on the battery ③ until the markers on the battery and case align ④.
4. Lift the battery ⑤ up (*Figure b*) and out of the battery bay.

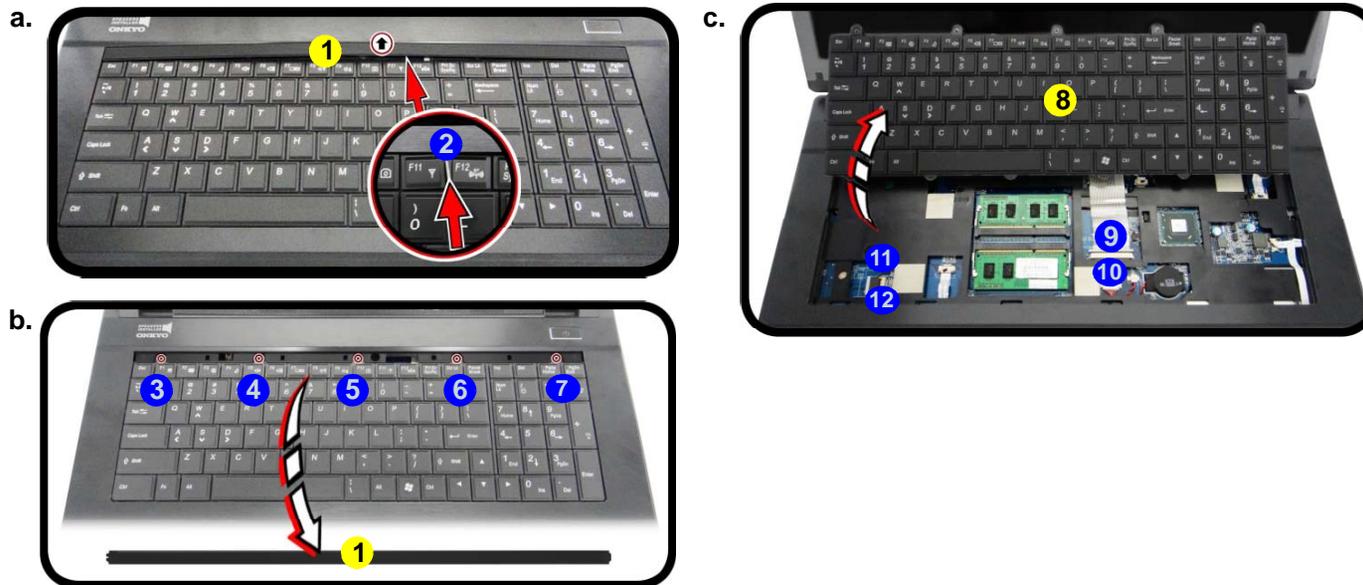
*Figure 1*  
**Battery Removal**

- a. Slide the latch and hold it in place.
- b. Slide the battery in the direction of the arrow.
- c. Lift the battery out of the bay as indicated.



## Removing the Keyboard

1. Turn off the computer, and turn it over and remove the battery ([page 2 - 5](#)).
2. Turn the computer over, open the Lid/LCD, and carefully unsnap up the center cover module **1** from point **2** (between F11 & F12) using non-metallic instrument.
3. Lift up the center cover module **1**.
4. Remove screws **3** - **7** from the keyboard.
5. Carefully lift the keyboard **8** up, being careful not to bend the keyboard ribbon cable.
6. Disconnect the keyboard ribbon cable **9** from the locking collar socket **10**, and the keyboard LED cable **11** from its locking collar socket **12**.
7. Remove the keyboard **8**.
8. Reverse the process to replace the keyboard (make sure to reconnect the keyboard cable).



*Figure 7*  
**Keyboard Removal**

- a. Open the lid/LCD and unsnap the LED cover at point 2.
- b. Lift the LED cover module and remove the screws from the keyboard.
- c. Disconnect the cables from the locking collar.
- d. Remove the keyboard.



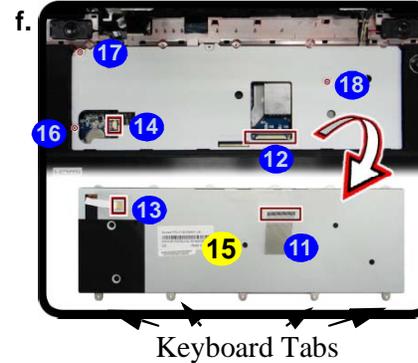
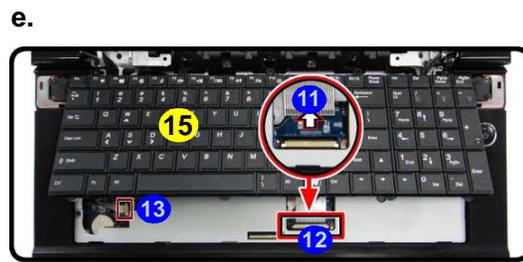
- 1. Center Cover Module
- 8. Keyboard
- 5 Screws

## Disassembly

*Figure 8*  
**Keyboard Removal**  
 (cont'd.)

- e. Disconnect the cable from the locking collar.
- f. Remove the keyboard.
- g. Push the center cover on the left side and the slide toward the right to secure it in place.

9. Remove the keyboard **15**, and screws **16** - **18** from the keyboard shielding plate.



### Re-Inserting the Keyboard

When re-inserting the keyboard firstly align the **five** keyboard tabs at the bottom (*Figure 8f*) at the bottom of the keyboard with the slots in the case.

10. Reverse the process to replace the keyboard (make sure to reconnect the keyboard cable).
11. Push the center cover module down on the left side at point **19**, and then slide the module to the right (as illustrated) and snap down to secure it in place.
12. Replace the screws on the bottom of the computer.



15. Keyboard

- 3 Screws

## Removing the System Memory (RAM)

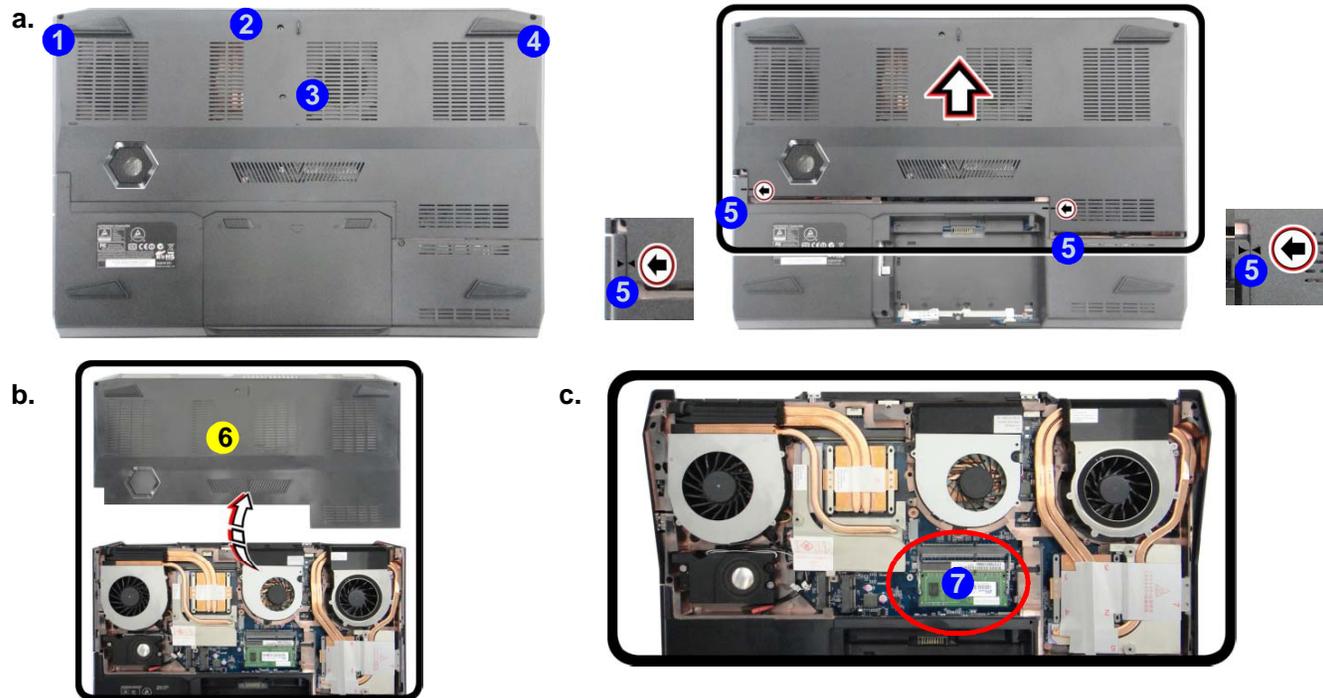
The computer has three memory sockets for 204 pin Small Outline Dual In-line Memory Modules (SO-DIMM) DDR III (DDR3) supporting 1600 MHz. The main memory can be expanded up to 32GB. The total memory size is automatically detected by the POST routine once you turn on your computer.

### Primary System Memory Upgrade Process

1. Turn off the computer, and turn it over to remove the battery ([page 2 - 5](#)).
2. Remove screws **1** - **4** and slide the component bay cover until the cover and case indicators **5** are aligned.
3. Remove the component bay cover **6**.
4. The RAM module will be visible at point **7** on the mainboard ([Figure 9c](#)).

Figure 9  
RAM-1 Module Removal

- a. Remove screws and slide the component bay cover as indicated.
- b. Remove the component bay cover.
- c. Locate the module.



**Contact Warning**

Be careful not to touch the metal pins on the module's connecting edge. Even the cleanest hands have oils which can attract particles, and degrade the module's performance.

**6. Component Bay Cover**

- 4 Screws

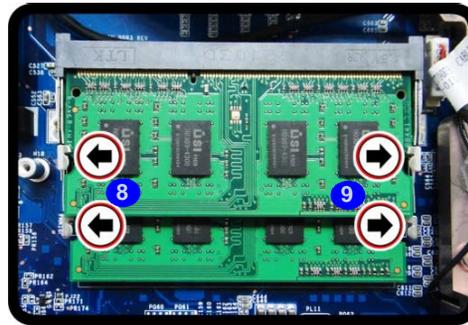
## Disassembly

*Figure 10*  
**RAM-1 Module  
 Removal (cont'd.)**

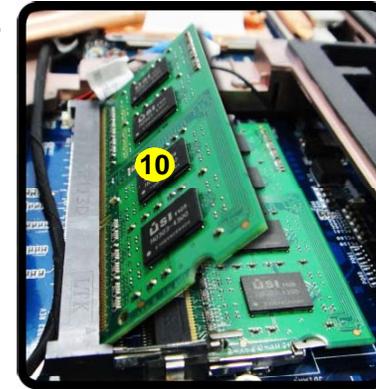
- d. Gently pull the release latch in the direction indicated.
- e. Remove the module.

5. Gently pull the two **release latches 8 & 9** on the sides of the memory socket in the direction indicated by the arrows (*Figure 10d*).
6. The RAM module **10** will pop-up, and you can then remove it.
7. Pull the latches to release the second module if necessary

d.



e.



8. Insert a new module holding it at about a 30° angle and fit the connectors firmly into the memory slot.
9. The module's pin alignment will allow it to only fit one way. Make sure the module is seated as far into the socket as it will go. **DO NOT FORCE** the module; it should fit without much pressure.
10. Press the module in and down towards the mainboard until the slot levers click into place to secure the module.
11. Replace the component bay cover and screws.
12. Restart the computer to allow the BIOS to register the new memory configuration as it starts up.



10. RAM Module

## Secondary System Memory Upgrade Process

1. Turn off the computer, and turn it over to remove the battery ([page 2 - 5](#)), and keyboard ([page 2 - 11](#)).
2. The RAM module will be visible at point **1** on the mainboard ([Figure 11a](#)).



3. Gently pull the two **release latches 2 & 3** on the sides of the memory socket in the direction indicated by the arrows ([Figure 10c](#)).
4. The RAM module **4** will pop-up, and you can then remove it.
5. Pull the latches to release the second module if necessary
6. Insert a new module holding it at about a 30° angle and fit the connectors firmly into the memory slot.
7. The module's pin alignment will allow it to only fit one way. Make sure the module is seated as far into the socket as it will go. **DO NOT FORCE** the module; it should fit without much pressure.
8. Press the module in and down towards the mainboard until the slot levers click into place to secure the module.
9. Replace the screws and keyboard.
10. Restart the computer to allow the BIOS to register the new memory configuration as it starts up.

*Figure 11*  
**RAM-2 Module Removal**

- a. Locate the module.
- b. Gently pull the release latch in the direction indicated.
- c. Remove the module.



### Contact Warning

Be careful not to touch the metal pins on the module's connecting edge. Even the cleanest hands have oils which can attract particles, and degrade the module's performance.



4. RAM Module