

Removing the Battery

1. Turn the computer **off**, and turn it over.
2. Remove the screws **1** - **9** (*Figure 1a*).
3. Carefully lift the bottom case **10** up in the direction of the arrow **11** and remove it (*Figure 1b*).
4. The battery will be visible at point **12** on the computer (*Figure 1c*).

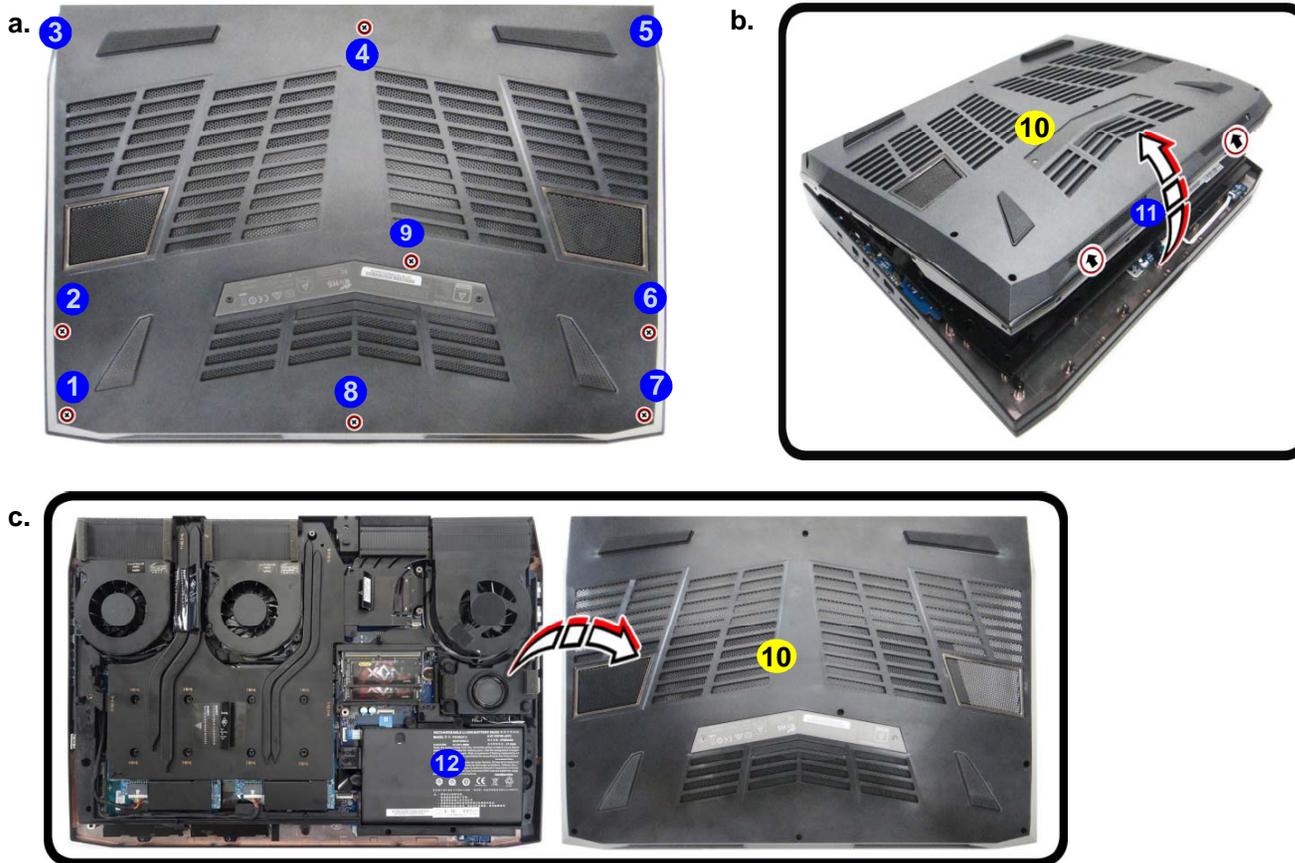


Figure 1
Battery Removal

- a. Remove the screws.
- b. Remove the bottom case.
- c. Locate the battery.



Powering the Computer On

After every disassembly, make sure that the bottom case's screws are all inserted and tightened before opening the Lid/LCD and turning the computer on.



10. Bottom Case

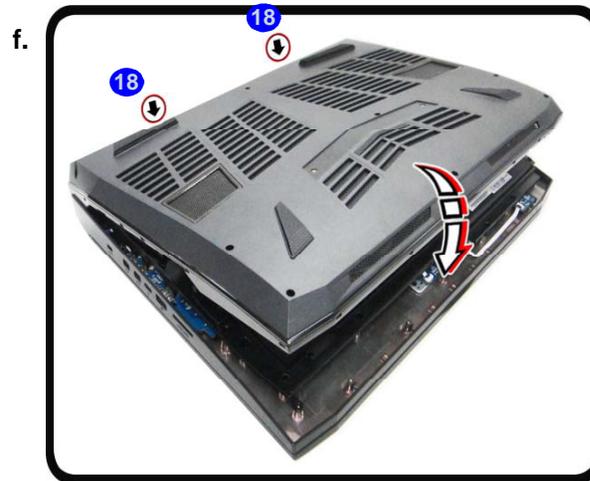
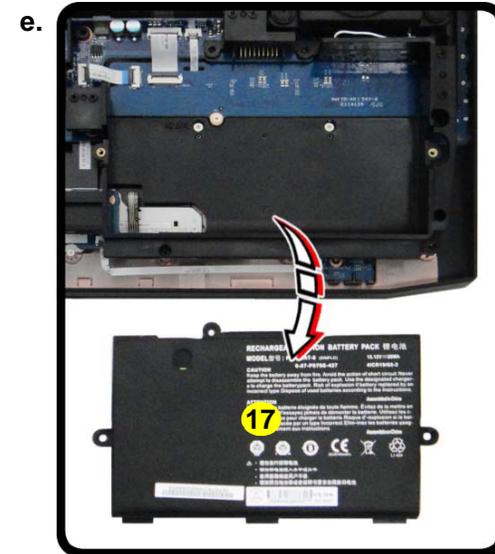
- 9 Screws

Disassembly

Figure 2 Battery Removal (cont'd.)

- d. Remove the screws.
- e. Lift the battery off the computer.
- f. Reinsert the bottom case and tighten the screws.

5. Carefully remove screws **13** - **16** (*Figure 2b*).
6. Lift the battery **17** off the computer (*Figure 2e*).
7. Reinsert the bottom case starting from point **18** as shown (*Figure 2f*) to avoid damaging the rear eSATA/USB 3.0 port. Tighten the screws to secure the bottom case in place.



17. Battery

- 4 Screws

Disassembly

Figure 6
RAM Module Removal

- Locate the module.
- Gently pull the two release latches on the sides of the memory socket(s) in the direction indicated below.
- The RAM module will pop-up, and you can remove it.

Removing the Primary System Memory (RAM)

The computer has **four** memory sockets for 260 pin Small Outline Dual In-line (SO-DIMM) **DDR 4** type memory modules. The total memory size is automatically detected by the POST routine once you turn on your computer.

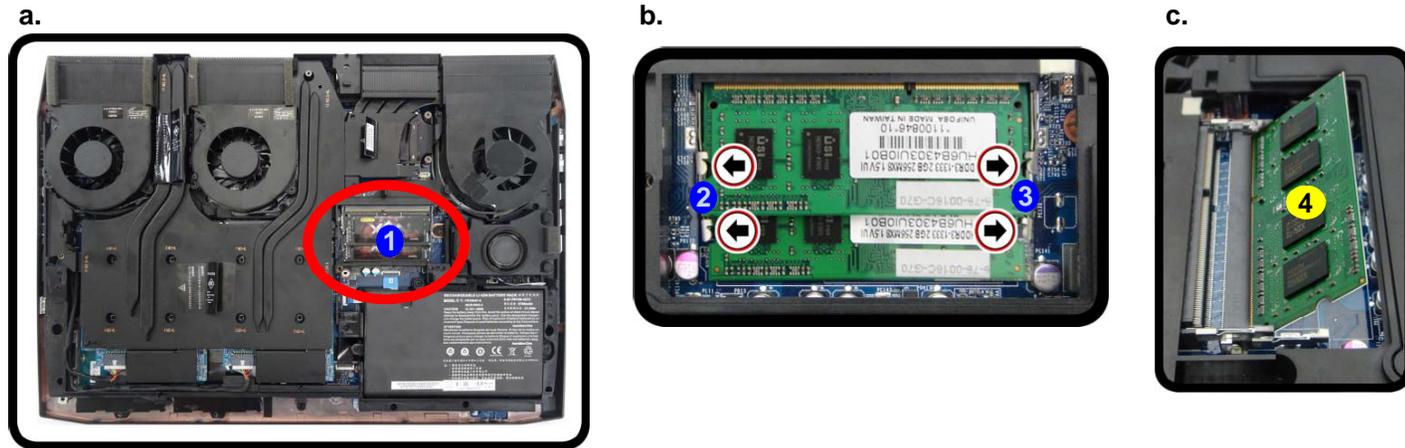
Note that **four SO-DIMMs are only supported by Quad-Core CPUs; Dual-Core CPUs support two SO-DIMMs maximum.**

Two primary memory sockets are located under component bay cover (the bottom case cover), and two secondary memory sockets are located under the keyboard (not user upgradable). If you are installing only two RAM modules then they should be installed in the primary memory sockets under the component bay cover.

Note that the RAM located under the keyboard is not user upgradable.

Memory Upgrade Process

- Turn **off** the computer, and turn it over, remove the battery ([page 2 - 5](#)).
- The modules will be visible at point **1** ([Figure 6a](#)).
- Gently pull the two release latches (**2** & **3**) on the sides of the memory socket(s) in the direction indicated below ([Figure 6b](#)).
- The RAM module **4** will pop-up, and you can remove it ([Figure 6c](#)).



4. RAM Module

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 slot 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 bay cover and screws.
10. Restart the computer to allow the BIOS to register the new memory configuration as it starts up.



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.

Disassembly

Figure 7 Keyboard Removal

- Remove the screw.
- Eject the keyboard using a special eject stick to push the keyboard out while releasing the keyboard as shown.

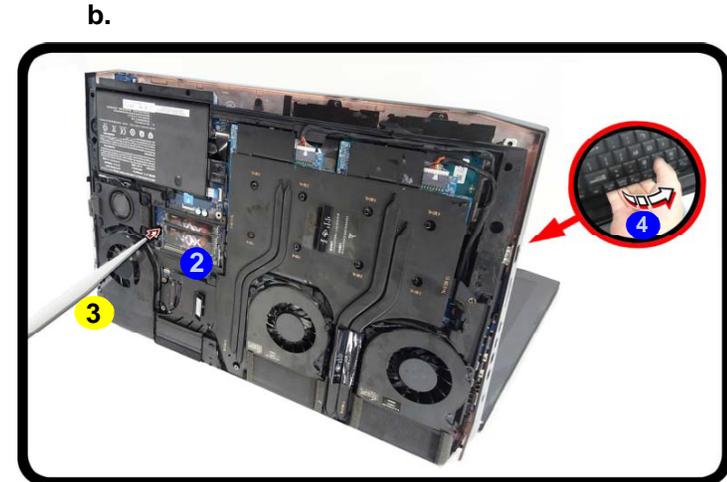
Removing the System Memory (RAM) from Under the Keyboard

The computer has **four** memory sockets for 260 pin Small Outline Dual In-line (SO-DIMM) **DDR 4** type memory modules. The total memory size is automatically detected by the POST routine once you turn on your computer.

Two primary memory sockets are located under component bay cover (the bottom case cover), and two secondary memory sockets are located under the keyboard. If you are installing only two RAM modules then they should be installed in the primary memory sockets under the component bay cover.

Memory Upgrade Process

- Turn **off** the computer, and turn it over, remove the battery ([page 2 - 5](#)).
- Remove the screw **1** ([Figure 7a](#)).
- Open it up with the LCD on a flat surface before pressing at point **2** to release the keyboard module (use an eject stick **3** with a diameter no bigger than 2.5mm) to do this while releasing the keyboard in the direction of the arrow **4** as shown ([Figure 7b](#)).



3. Eject Stick

- 1 Screw

Disassembly

Figure 8
KB & RAM Module Removal

- c. Lift the keyboard up, and disconnect the keyboard ribbon cable from the locking collar socket.
- d. Remove the keyboard and the memory sockets will be visible.
- e. Pull the two release latches on the sides of the memory socket(s) in the direction indicated.

4. Carefully lift the keyboard **5** up, being careful not to bend the keyboard ribbon cables **6** - **8**.
5. Disconnect the keyboard ribbon cables **6** - **8** from the locking collar socket **9** by using a small flat-head screwdriver to pry the locking collar pins **10** away from the base (*Figure 8c*).
6. Remove the keyboard and the memory sockets **11** & **12** will be visible (*Figure 8d*).
7. Gently pull the two release latches (**13** & **14**) on the sides of the memory socket(s) in the direction indicated below.
8. The RAM module **15** will pop-up, and you can remove it (*Figure 8e*).
9. Pull the latches to release the second module if necessary.
10. Insert a new module holding it at about a 30° angle and fit the connectors firmly into the memory slot.
11. The module's pin alignment will allow it to only fit one way. Make sure the module is seated as far into the slot as it will go. **DO NOT FORCE** the module; it should fit without much pressure.
12. Press the module in and down towards the mainboard until the slot levers click into place to secure the module.
13. Replace the keyboard, bay cover and screws.
14. Restart the computer to allow the BIOS to register the new memory configuration as it starts up.

