

Removing the Battery

1. Turn the computer **off**, and turn it over.
2. Slide the latch **1** in the direction of the arrow (*Figure 1a*).
3. Slide the latch **2** in the direction of the arrow, and hold it in place (*Figure 1a*).
4. The battery may be levered up at point **3** (*Figure 1b*).
5. Lift the battery **4** out of the compartment (*Figure 1c*).

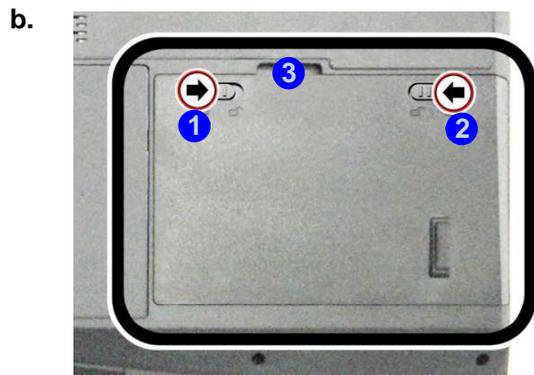
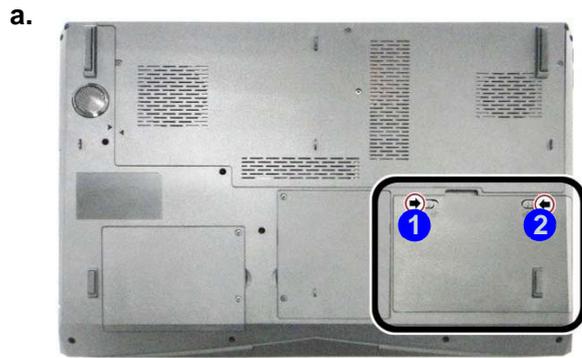
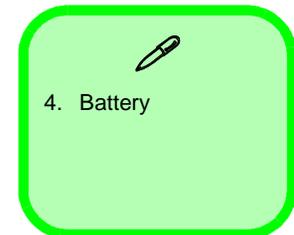


Figure 1
Battery Removal

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



Disassembly

Figure 10
RAM Module Removal

- Remove the screws.
- Remove the screws at the rear of the computer
- Slide the bottom cover until the cover and case indicators are aligned.

Removing the Primary System Memory (RAM)

The computer has **four** memory sockets for 204 pin Small Outline Dual In-line (SO-DIMM) **DDR III (DDR3)** type memory modules (see *“Memory” on page 1 - 2*). The total memory size is automatically detected by the POST routine once you turn on your computer.

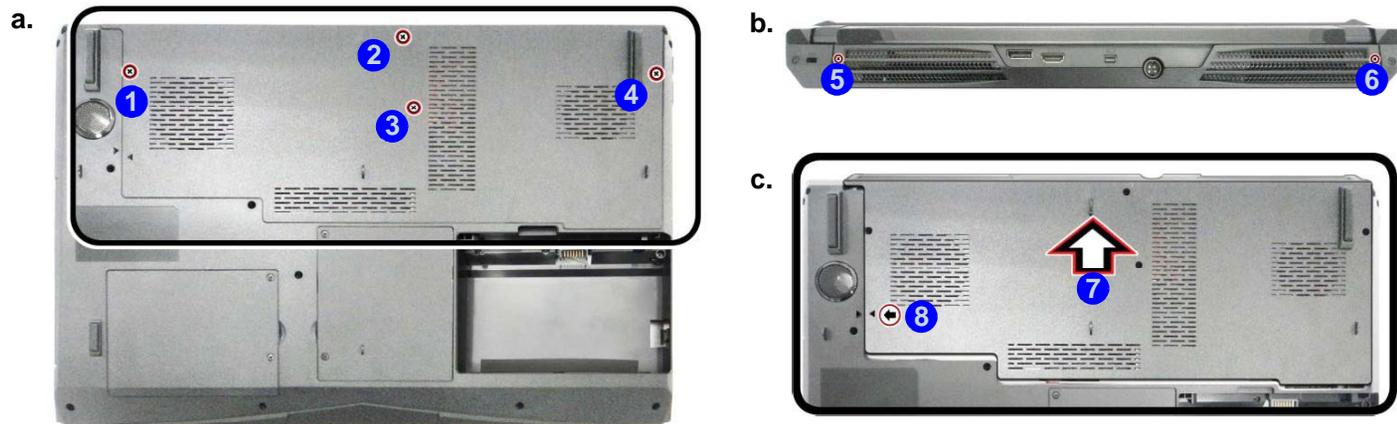
Note that **four SO-DIMMs are only supported by Quad-Core CPUs; Dual-Core CPUs support two SO-DIMMs maximum** (see *“Memory” on page 1 - 2* for full details).

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. Contact your service center for more information if you wish to upgrade the memory in the secondary memory sockets.

Memory Upgrade Process

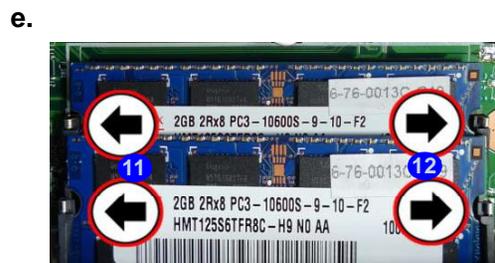
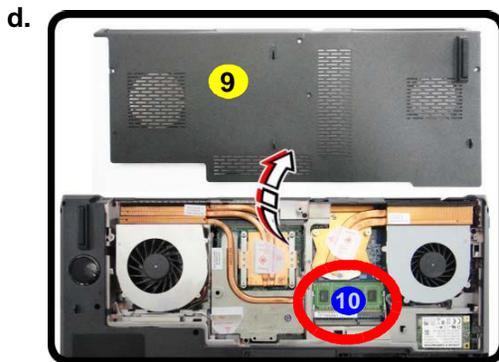
- Turn **off** the computer, and turn it over, remove the battery (*page 2 - 5*).
- Remove screws **1 - 4** at the bottom of the computer (*Figure 10a*).
- Remove screws **5 - 6** at the rear of the computer (*Figure 10b*).
- Slide the bottom cover in the direction of the arrow **7** until the cover & case indicators **8** are aligned (*Figure 10c*).



- 6 Screws

Disassembly

5. Lift the component bay cover **9** off the computer case. The modules will be visible at point **10** (*Figure 11d*).
6. Gently pull the two release latches (**11** & **12**) on the sides of the memory socket(s) in the direction indicated below (*Figure 11e*).
7. The RAM module **13** will pop-up, and you can remove it (*Figure 11f*).
8. Pull the latches to release the second module if necessary.
9. Insert a new module holding it at about a 30° angle and fit the connectors firmly into the memory slot.
10. 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.
11. Press the module in and down towards the mainboard until the slot levers click into place to secure the module.
12. Replace the bay cover and screws.
13. 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.



9. Component Bay Cover
13. RAM Module

Figure 11
RAM Module Removal (cont'd.)

- d. Lift the component bay cover off the computer case. The modules will be visible at point **10**.
- e. Gently pull the two release latches on the sides of the memory socket(s) in the direction indicated below.
- f. The RAM module will pop-up, and you can remove it.

Disassembly

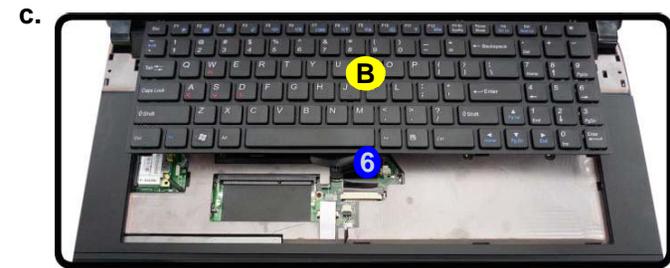
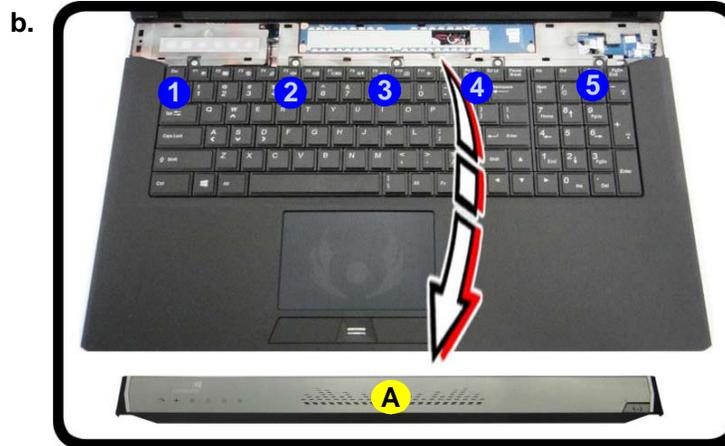
Figure 12
RAM Module
Removal

- Remove the top cover module.
- Remove the screws.
- Carefully lift the keyboard up, being careful not to bend the keyboard ribbon cable.

Removing the Secondary System Memory (RAM)

Memory Upgrade Process

- Turn **off** the computer, and turn it over, remove the battery ([page 2 - 5](#)), and component bay cover ([page 2 - 14](#)).
- Remove the top cover module **A** ([Figure 12a](#)).
- Remove screws **1 - 5** ([Figure 12a](#)).
- Carefully lift the keyboard **B** up, being careful not to bend the keyboard ribbon cable **6** ([Figure 12c](#)).



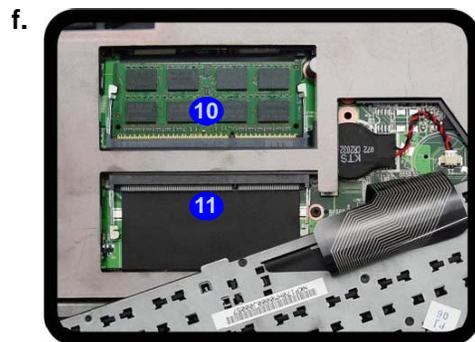
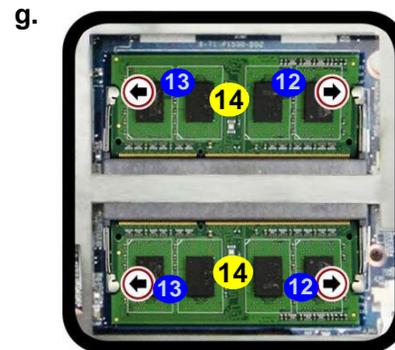
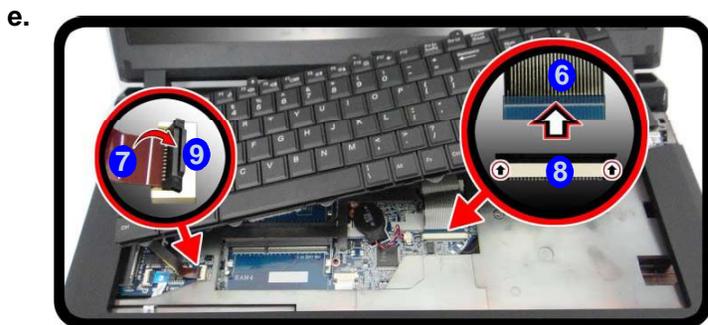
A. Top Cover Module
B. Keyboard

- 5 Screws

5. Disconnect the keyboard ribbon cable **6** and LED ribbon cable **7** from the locking collar socket **8** & **9** by using a small flat-head screwdriver to pry the locking collar pins away from the base. (*Figure 13e*).
6. Remove the keyboard and the memory sockets **10** & **11** will be visible (*Figure 13f*).
7. Gently pull the two release latches (**12** & **13**) on the sides of the memory socket(s) in the direction indicated below (*Figure 13g*).
8. The RAM module **14** will pop-up, and you can remove it.
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 bay cover and screws.
14. Restart the computer to allow the BIOS to register the new memory configuration as it starts up.

Figure 13
RAM Module Removal (cont'd.)

- e. Disconnect the keyboard ribbon cable and LED ribbon cable from the locking collar socket by using a small flat-head screwdriver to pry the locking collar pins away from the base.
- f. Remove the keyboard and the memory sockets will be visible.
- g. Gently pull the two release latches on the sides of the memory socket(s) in the direction indicated below.





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.



14. RAM Modules