Before you begin

Warning: To reduce the risk of electric shock and damage to the equipment, unplug the power cord and remove the battery before installing a replaceable part.

Caution: Electrostatic discharge (ESD) can damage electronic components. Before beginning any procedure, ensure that you are discharged of static electricity by touching a grounded metal object.

1. Shut down the computer. Disconnect the power from the computer by unplugging the power cord from the AC outlet 1, and then unplugging the AC adapter from the computer 2. Also disconnect all external devices connected to the computer.

2. Slide and hold the battery release latch 1 and then slide the battery 2 out.

Computer part locations

1. Hard drive
2. Optical drive
3. Memory modules
4. Wireless local area network (WLAN) module
5. Keyboard
1. Hard drive

1. Loosen the 4 cover screws.

2. Remove the cover.

3. Loosen the hard drive screw.

4. Using the pull tab, disconnect the drive by sliding it away from the connector.

5. Remove the drive.

6. Install the replacement hard drive and use the pull tab to slide it into the connector until the drive is securely seated. Then tighten the screw.
1. Hard drive (continued)

7. Replace the cover.

8. Tighten the 4 cover screws.

2. Optical drive

1. Remove the screw that secures the optical drive to the computer.

2. Insert a flat-bladed tool into the access hole 1 and press the tool against the rear of the optical drive until the drive is released from the computer. Then remove the drive 2.

3. Install the replacement optical drive.

4. Reinstall the screw.
3. Memory modules

1. Loosen the 2 cover screws.

2. Remove the cover.

3. Spread the 2 retention clips until the memory module tilts up at a 45-degree angle.

4. Remove the memory module.

5. Align the notched edge of the replacement module with the tab in the memory module slot, and then press the module into the slot at a 45-degree angle until it is seated.

6. Press down on both sides of the memory module until the side retention clips snap back into place.
3. Memory modules
(continued)

7. Replace the cover.

8. Tighten the 2 cover screws.

4. WLAN module

1. Loosen the cover screw.

2. Remove the cover.

3. Disconnect the antenna cables. (Note the color and position of the cables.)

4. Remove the 2 module screws. This releases the module to tilt up at a slight angle.
4. WLAN module (continued)

5. Remove the module.

6. Align the notched edge of the replacement module with the tab in the slot, and then press the module into the slot at a slight angle until it is seated.

7. Press the module down and reinstall the 2 screws.

8. Reconnect the antenna cables.

9. Replace the cover.

10. Tighten the cover screw.
5. Keyboard

1. Remove the 3 bottom keyboard screws.

2. Turn the computer right-side up and open the display panel. Lift up the rear of the keyboard and slide it toward the display panel to expose the keyboard cable ZIF (Zero Insertion Force) connector.

3. Release the cable ZIF connector, and then remove the cable.

4. Remove the keyboard.

5. Position the replacement keyboard in front of the display panel so the cable and ZIF connector are exposed.

6. Insert the cable into the open ZIF connector and close the connector. Be sure that the cable is securely held in the connector.
5. Keyboard (continued)

7. Slide the keyboard into place over the cable connector.

8. Close the display panel and place the computer upside down on a flat surface. Reinstall the 3 bottom screws.