Dell™ Inspiron™ N7010 Service Manual

Before You Begin
Battery
Optical Drive
Module Cover
Memory Module(s)
Hard Drive
Keyboard
Palm Rest
Power Button Board
Coin-Cell Battery
Status Light Board
Wireless Mini-Card
Internal Card With Bluetooth® Wireless Technology
Processor Fan
Speakers
Subwoofer Assembly
Display
Camera Module
Middle Cover
I/O Board
System Board
Processor Heat Sink
Processor Module
Daughter Board
AC Adapter Connector
Flashing the BIOS

Notes, Cautions, and Warnings

NOTE: A NOTE indicates important information that helps you make better use of your computer.

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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Regulatory model: P08E series
Regulatory type: P08E001

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AC Adapter Connector

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- Removing the AC Adapter Connector
- Replacing the AC Adapter Connector

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

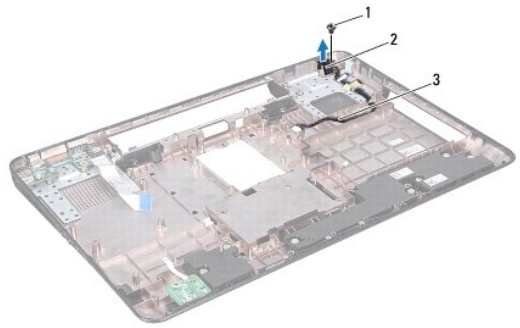
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the AC Adapter Connector

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Follow the instructions from step 3 to step 17 in Removing the System Board.
4. Remove the display assembly (see Removing the Display Assembly).
5. Remove the middle cover (see Removing the Middle Cover).
6. Remove the daughter board (see Removing the Daughter Board).
7. Remove the screw that secures the AC adapter connector to the computer base.
8. Make a note of the AC adapter connector cable routing and lift the AC adapter connector off the computer base.



1	screw	2	AC adapter connector
3	AC adapter connector cable		

Replacing the AC Adapter Connector

1. Follow the instructions in Before You Begin.
2. Route the AC adapter connector cable and place the AC adapter connector on the computer base.

3. Replace the screw that secures the AC adapter connector to the computer base.
4. Replace the daughter board (see Replacing the Daughter Board).
5. Replace the middle cover (see Replacing the Middle Cover).
6. Replace the display assembly (see Replacing the Display Assembly).
7. Follow the instructions from step 7 to step 22 in Replacing the System Board.
8. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Battery

Dell™ Inspiron™ N7010 Service Manual

- Removing the Battery
- Replacing the Battery

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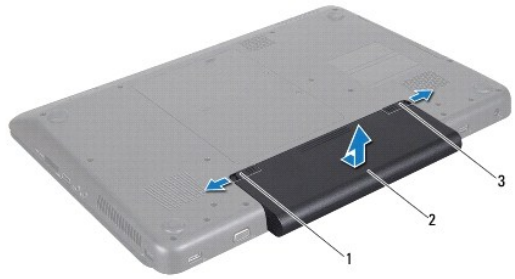
CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To avoid damage to the computer, use only the battery designed for this particular Dell computer. Do not use batteries designed for other Dell computers.

Removing the Battery

1. Follow the instructions in Before You Begin.
2. Shut down the computer and turn it over.
3. Slide the battery lock latch to the unlock position.
4. Slide the battery release latch to the side.
5. Slide and lift the battery out of the battery bay.



1	battery lock latch	2	battery
3	battery release latch		

Replacing the Battery

1. Follow the instructions in Before You Begin.
2. Align the tabs on the battery with the slots on the battery bay.
3. Slide the battery into the battery bay, until it clicks into place.
4. Slide the battery lock latch to the lock position.

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Before You Begin

Dell™ Inspiron™ N7010 Service Manual

- Recommended Tools
- Turning Off Your Computer
- Before Working Inside Your Computer

This manual provides instructions for removing and installing components in your computer. Unless otherwise noted, each procedure assumes that the following conditions exist:

- You have performed the steps in Turning Off Your Computer and Before Working Inside Your Computer.
- You have read the safety information that shipped with your computer.
- A component can be replaced or—if purchased separately—installed by performing the removal procedure in the reverse order.

Recommended Tools

The procedures in this document may require the following tools:

- Small flat-blade screwdriver
- Phillips screwdriver
- Plastic scribe
- BIOS executable update program available at **support.dell.com**

Turning Off Your Computer

CAUTION: To avoid losing data, save and close all open files and exit all open programs before you turn off your computer.

1. Save and close all open files and exit all open programs.
2. Shut down the operating system:

   Windows Vista®:

   Click **Start** , click the arrow , and then click **Shut Down**.

   Windows® 7:

   Click **Start** and then click **Shut Down**.

3. Ensure that the computer is turned off. If your computer did not automatically turn off when you shut down the operating system, press and hold the power button until the computer turns off.

Before Working Inside Your Computer

Use the following safety guidelines to help protect your computer from potential damage and to help to ensure your own personal safety.

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell is not covered by your warranty.

CAUTION: Handle components and cards with care. Do not touch the components or contacts on a card. Hold a card by its edges or by its metal mounting bracket. Hold a component such as a processor by its edges, not by its pins.

CAUTION: When you disconnect a cable, pull on its connector or on its pull-tab, not on the cable itself. Some cables have connectors with locking tabs; if you are disconnecting this type of cable, press in on the locking tabs before you disconnect the cable. As you pull connectors apart, keep them evenly aligned to avoid bending any connector pins. Also, before you connect a cable, ensure that both connectors are correctly oriented and aligned.

CAUTION: To avoid damaging the computer, perform the following steps before you begin working inside the computer.

1. Ensure that the work surface is flat and clean to prevent the computer cover from being scratched.
2. Turn off your computer (see Turning Off Your Computer) and all attached devices.

CAUTION: To disconnect a network cable, first unplug the cable from your computer and then unplug the cable from the network device.

3. Disconnect all telephone or network cables from the computer.
4. Press and eject any installed cards from the 7-in-1 Media card reader.
5. Disconnect your computer and all attached devices from their electrical outlets.
6. Disconnect all attached devices from your computer.

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

7. Remove the battery (see Removing the Battery).
8. Turn the computer top-side up, open the display, and press the power button to ground the system board.

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Flashing the BIOS

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1. Turn on the computer.
2. Go to **support.dell.com/support/downloads**.
3. Click **Select Model**.
4. Locate the BIOS update file for your computer:

   NOTE: The Service Tag for your computer is located on a label at the bottom of the computer.

   If you have your computer's Service Tag:

   a. Click **Enter a Service Tag**.

   b. Enter your computer's Service Tag in the **Enter a service tag:** field, click **Go**, and proceed to step 5.

   If you do not have your computer's Service Tag:

   a. Select the type of product in the **Select Your Product Family** list.

   b. Select the product brand in the **Select Your Product Line** list.

   c. Select the product model number in the **Select Your Product Model** list.

   NOTE: If you have selected a different model and want to start over again, click **Start Over** on the top right of the menu.

   d. Click **Confirm**.
5. A list of results appear on the screen. Click **BIOS**.
6. Click **Download Now** to download the latest BIOS file.
   The **File Download** window appears.
7. Click **Save** to save the file on your desktop. The file downloads to your desktop.
8. Click **Close** if the **Download Complete** window appears.
   The file icon appears on your desktop and is titled the same as the downloaded BIOS update file.
9. Double-click the file icon on the desktop and follow the instructions on the screen.

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Internal Card With Bluetooth® Wireless Technology

Dell™ Inspiron™ N7010 Service Manual

- Removing the Bluetooth Card
- Replacing the Bluetooth Card

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CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

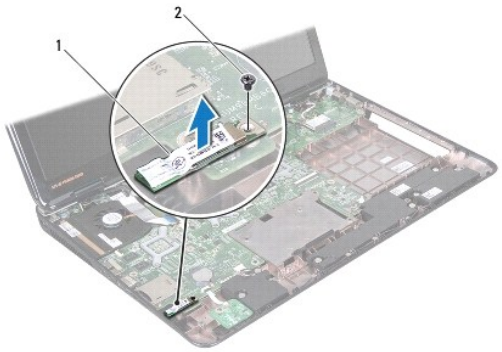
CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

If you ordered a card with Bluetooth wireless technology with your computer, the card is already installed.

Removing the Bluetooth Card

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Remove the module cover (see Removing the Module Cover).
4. Remove the optical drive (see Removing the Optical Drive).
5. Follow the instructions from step 4 to step 6 in Removing the Hard Drive.
6. Remove the keyboard (see Removing the Keyboard).
7. Remove the palm rest (see Removing the Palm Rest).
8. Remove the screw that secures the Bluetooth card to the system board.
9. Lift the Bluetooth card to disconnect it from the connector on the system board.



1	Bluetooth card	2	screw

Replacing the Bluetooth Card

1. Follow the instructions in Before You Begin.

2. Align the connector on the Bluetooth card with the connector on the system board, and press the Bluetooth card until it is fully seated.
3. Replace the screw that secures the Bluetooth card to the system board.
4. Replace the palm rest (see Replacing the Palm Rest).
5. Replace the keyboard (see Replacing the Keyboard).
6. Replace the optical drive (see Replacing the Optical Drive).
7. Follow the instructions from step 5 to step 7 in Replacing the Hard Drive.
8. Replace the module cover (see Replacing the Module Cover).
9. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Camera Module

Dell™ Inspiron™ N7010 Service Manual

- Removing the Camera Module
- Replacing the Camera Module

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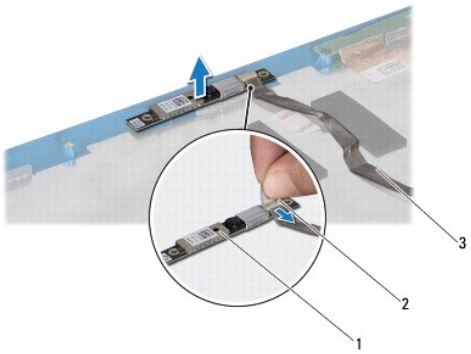
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Camera Module

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Remove the module cover (see Removing the Module Cover).
4. Follow the instructions from step 4 to step 6 in Removing the Hard Drive.
5. Remove the optical drive (see Removing the Optical Drive).
6. Remove the keyboard (see Removing the Keyboard).
7. Remove the palm rest (see Removing the Palm Rest).
8. Remove the display assembly (see Removing the Display Assembly).
9. Remove the display bezel (see Removing the Display Bezel).
10. Remove the display panel (see Removing the Display Panel).
11. Carefully lift the camera module off the display cover.
12. Remove the tape that secures the camera cable to the camera module.
13. Disconnect the camera cable from the camera module.



1	camera module	2	tape
3	camera cable		

Replacing the Camera Module

1. Follow the instructions in Before You Begin.
2. Connect the camera cable to the connector on the camera module.
3. Replace the tape to secure the camera cable to the camera module.
4. Use the alignment posts to place the camera module on the display cover.
5. Press down on the camera module to secure it to the display cover.
6. Replace the display panel (see Replacing the Display Panel).
7. Replace the display bezel (see Replacing the Display Bezel).
8. Replace the display assembly (see Replacing the Display Assembly).
9. Replace the palm rest (see Replacing the Palm Rest).
10. Replace the keyboard (see Replacing the Keyboard).
11. Replace the optical drive (see Replacing the Optical Drive).
12. Follow the instructions from step 5 to step 7 in Replacing the Hard Drive.
13. Replace the module cover (see Replacing the Module Cover).
14. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Coin-Cell Battery

Dell™ Inspiron™ N7010 Service Manual

- Removing the Coin-Cell Battery
- Replacing the Coin-Cell Battery

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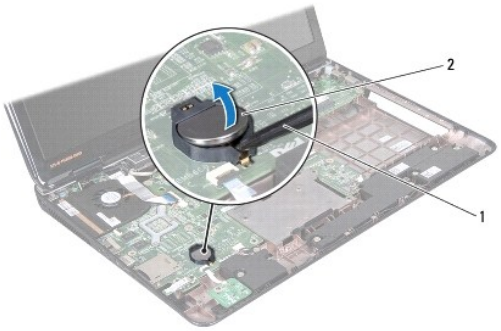
CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Coin-Cell Battery

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Remove the module cover (see Removing the Module Cover).
4. Follow the instructions from step 4 to step 6 in Removing the Hard Drive.
5. Remove the optical drive (see Removing the Optical Drive).
6. Remove the keyboard (see Removing the Keyboard).
7. Remove the palm rest (see Removing the Palm Rest).
8. Use a plastic scribe to pry the coin-cell battery out of the slot on the system board.



1	plastic scribe	2	coin-cell battery

Replacing the Coin-Cell Battery

1. Follow the instructions in Before You Begin.
2. Hold the coin-cell battery with the positive side facing up.
3. Slide the coin-cell battery into the slot and gently press until it snaps into place.

4. Replace the palm rest (see Replacing the Palm Rest).
5. Replace the keyboard (see Replacing the Keyboard).
6. Replace the optical drive (see Replacing the Optical Drive).
7. Follow the instructions from step 5 to step 7 in Replacing the Hard Drive.
8. Replace the module cover (see Replacing the Module Cover).
9. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Module Cover

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- Removing the Module Cover
- Replacing the Module Cover

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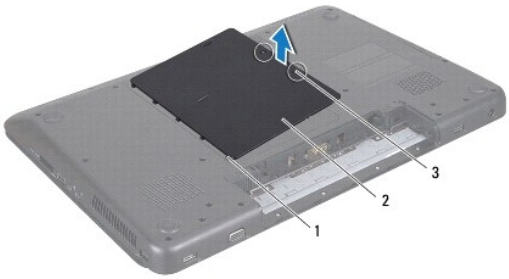
CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Module Cover

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Loosen the two captive screws that secure the module cover to the computer base.
4. Pry the module cover with your fingers and release the tabs from the slots on the computer base.
5. Lift the module cover off the computer base.



1	module cover tabs (5)	2	module cover
3	captive screws (2)		

Replacing the Module Cover

1. Follow the instructions in Before You Begin.
2. Slide the tabs on the module cover into the slots on the computer base and gently snap the module cover into place.
3. Tighten the two captive screws that secure the module cover to the computer base.
4. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Processor Module

Dell™ Inspiron™ N7010 Service Manual

- Removing the Processor Module
- Replacing the Processor Module

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CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

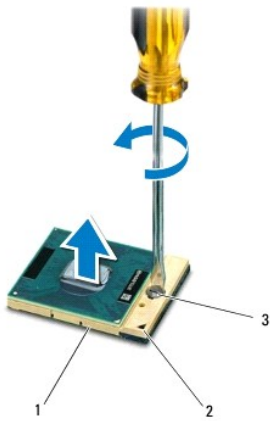
Removing the Processor Module

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Follow the instructions from step 3 to step 18 in Removing the System Board.
4. Remove the processor heat sink (see Removing the Processor Heat Sink).

CAUTION: To prevent intermittent contact between the ZIF-socket cam screw and the processor module when removing or replacing the processor module, press to apply slight pressure to the center of the processor module while turning the cam screw.

CAUTION: To avoid damage to the processor, hold the screwdriver so that it is perpendicular to the processor when turning the cam screw.

5. To loosen the ZIF socket, use a small, flat-blade screwdriver and rotate the ZIF-socket cam screw counterclockwise until it comes to the cam stop.



1	ZIF socket	2	pin-1 corner
3	ZIF-socket cam screw		

CAUTION: To ensure maximum cooling for the processor module, do not touch the heat transfer areas on the processor heat sink. The oils in your skin can reduce the heat transfer capability of the thermal pads.

CAUTION: When removing the processor module, lift the module straight up. Be careful not to bend the pins on the processor module.

6. Lift the processor module from the ZIF socket.

Replacing the Processor Module

NOTE: If a new processor module is installed, you will receive a new thermal-cooling assembly, which will include an affixed thermal pad, or you will receive a new thermal pad along with documentation to illustrate proper installation.

1. Follow the instructions in Before You Begin.
2. Align the pin-1 corner of the processor module with the pin-1 corner of the ZIF socket, then place the processor module.

NOTE: The pin-1 corner of the processor module has a triangle that aligns with the triangle on the pin-1 corner of the ZIF socket.

When the processor module is properly seated, all four corners are aligned at the same height. If one or more corners of the module are higher than the others, the module is not seated properly.

CAUTION: To avoid damage to the processor module, hold the screwdriver perpendicular to the processor module when turning the cam screw.

3. Tighten the ZIF socket by turning the cam screw clockwise to secure the processor module to the system board.
4. Replace the processor heat sink (see Replacing the Processor Heat Sink).
5. Follow the instructions from step 6 to step 22 in Replacing the System Board.
6. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Processor Heat Sink

Dell™ Inspiron™ N7010 Service Manual

- Removing the Processor Heat Sink
- Replacing the Processor Heat Sink

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

WARNING: If you remove the processor heat sink from the computer when the heat sink is hot, do not touch the metal housing of the processor heat sink.

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

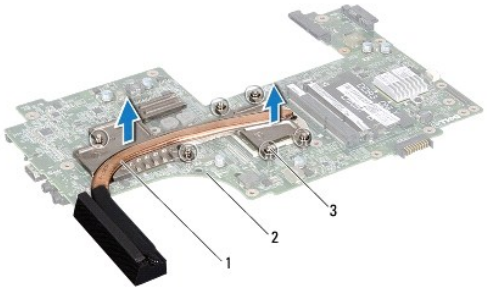
CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Processor Heat Sink

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Follow the instructions from step 3 to step 18 in Removing the System Board.
4. Loosen the captive screws that secure the processor heat sink to the system board in sequential order (indicated on the processor heat sink).

NOTE: The appearance and number of screws on the processor heat sink may vary based on your computer model.

5. Lift the processor heat sink off the system board.



1	processor heat sink	2	system board
3	captive screws (6)		

Replacing the Processor Heat Sink

NOTE: The original thermal pad can be reused if the original processor and heat sink are reinstalled together. If either the processor or heat sink is replaced, use the thermal pad provided in the kit to ensure that thermal conductivity is achieved.

NOTE: This procedure assumes that you have already removed the processor heat sink and are ready to replace it.

1. Follow the instructions in Before You Begin.
2. Align the captive screws on the processor heat sink with the screw holes on the system board and tighten the screws in sequential order (indicated on the processor heat sink).

NOTE: The appearance and number of screws on the processor heat sink may vary based on your computer model.

3. Follow the instructions from step 6 to step 22 in Replacing the System Board.

4. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Daughter Board

Dell™ Inspiron™ N7010 Service Manual

- Removing the Daughter Board
- Replacing the Daughter Board

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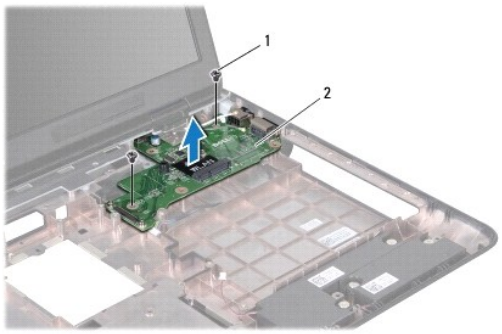
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Daughter Board

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Follow the instructions from step 3 to step 17 in Removing the System Board.
4. Remove the two screws that secure the daughter board to the computer base.
5. Ease the connectors on the daughter board out of the slots on the computer and lift the board off the computer base.



1	screws (2)	2	daughter board

Replacing the Daughter Board

1. Follow the instructions in Before You Begin.
2. Align the connectors on the daughter board with the slots on the computer and place the board on the computer base.
3. Replace the two screws that secure the daughter board to the computer base.
4. Follow the instructions from step 7 to step 22 in Replacing the System Board.
5. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Display

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- Display Assembly
- Display Bezel
- Display Panel
- Display Hinges
- Hinge Caps

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

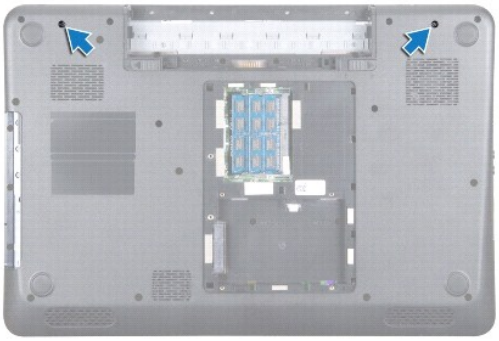
CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Display Assembly

Removing the Display Assembly

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Remove the optical drive (see Removing the Optical Drive).
4. Remove the module cover (see Removing the Module Cover).
5. Follow the instructions from step 4 to step 6 in Removing the Hard Drive.
6. Remove the two screws that secure the display assembly to the computer base.



7. Remove the keyboard (see Removing the Keyboard).
8. Remove the palm rest (see Removing the Palm Rest).
9. Disconnect the antenna cables from the Mini-Card.
10. Disconnect the display cable from the connector on the system board, and remove the display cable grounding screw.
11. Hold the display assembly in place and remove the four screws (two on each side) that secure the display assembly to the computer base.

12. Lift and remove the display assembly off the alignment posts on the computer base.

1	display assembly	2	screws (4)
3	display cable grounding screw	4	display cable connector
5	Mini-Card antenna cables		

Replacing the Display Assembly

1. Follow the instructions in Before You Begin.
2. Align the display assembly with the alignment posts on the computer base.
3. Replace the four screws that secure the display assembly to the computer base.
4. Connect the display cable to the connector on the system board, and replace the display cable grounding screw.
5. Connect the Mini-Card antenna cables to the connectors on the Mini- Card.
6. Turn the computer over and replace the two screws that secure the display assembly to the computer base.
7. Replace the palm rest (see Replacing the Palm Rest).
8. Replace the keyboard (see Replacing the Keyboard).
9. Follow the instructions from step 5 to step 7 in Replacing the Hard Drive.
10. Replace the module cover (see Replacing the Module Cover).
11. Replace the optical drive (see Replacing the Optical Drive).
12. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

Display Bezel

Removing the Display Bezel

CAUTION: The display bezel is extremely fragile. Be careful when removing it to prevent damaging the bezel.

1. Follow the instructions in Before You Begin.
2. Remove the display assembly (see Removing the Display Assembly).
3. Using your fingertips, carefully pry up the inside edge of the display bezel.
4. Remove the display bezel.

1	display bezel

Replacing the Display Bezel

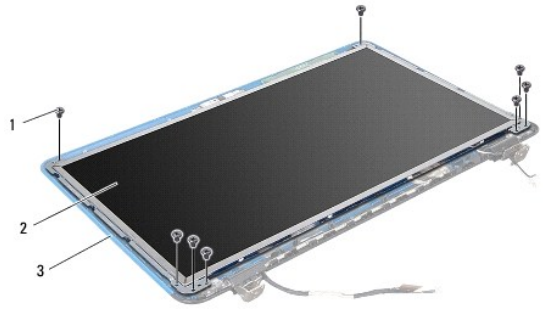
1. Follow the instructions in Before You Begin.
2. Align the display bezel over the display panel, and gently snap into place.
3. Replace the display assembly (see Replacing the Display Assembly).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

Display Panel

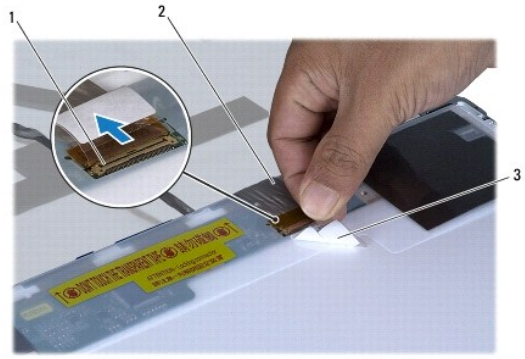
Removing the Display Panel

1. Follow the instructions in Before You Begin.
2. Remove the display assembly (see Removing the Display Assembly).
3. Remove the display bezel (see Removing the Display Bezel).
4. Remove the eight screws that secure the display panel to the display cover.



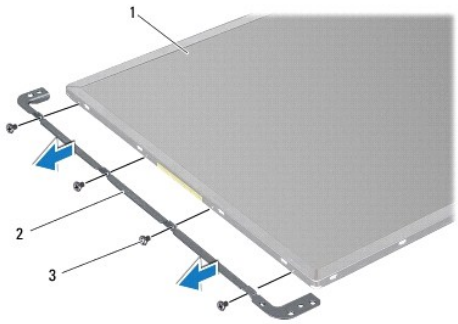
1	screws (8)	2	display panel
3	display cover		

5. Lift the display panel off the display cover.
6. Turn the display panel over and place it on a clean surface.
7. Lift the tape that secures the display cable to the display board connector and disconnect the display cable.



1	display board connector	2	display cable
3	tape		

8. Remove the eight screws (four on each side) that secure the display panel brackets to the display panel.



1	display panel	2	display panel brackets (2)
3	screws (8)		

Replacing the Display Panel

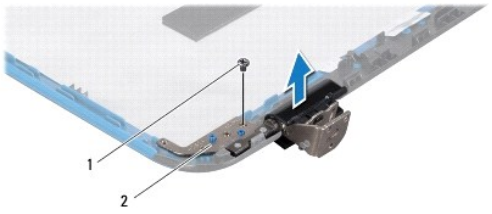
1. Follow the instructions in Before You Begin.
2. Replace the eight screws (four on each side) that secure the display panel brackets to the display panel.
3. Connect the display cable to the display board connector, and secure it with the tape.
4. Use the alignment posts to correctly place the display panel on the display cover.
5. Replace the eight screws that secure the display panel to the display cover.
6. Replace the display bezel (see Replacing the Display Bezel).
7. Replace the display assembly (see Replacing the Display Assembly).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

Display Hinges

Removing the Display Hinges

1. Follow the instructions in Before You Begin.
2. Remove the display assembly (see Removing the Display Assembly).
3. Remove the display bezel (see Removing the Display Bezel).
4. Remove the display panel (see Removing the Display Panel).
5. Remove the two screws (one on each side) that secure the display hinges to the display cover and remove the hinges.



1	screws (2)	2	display hinges (2)

Replacing the Display Hinges

1. Follow the instructions in Before You Begin.
2. Use the alignment posts to place the display hinges on the display cover. Ensure that the Mini-Card antenna cables and display cable route under the notch on the hinges.
3. Replace the two screws (one on each side) that secure the display hinges to the display cover.
4. Replace the display panel (see Replacing the Display Panel).
5. Replace the display bezel (see Replacing the Display Bezel).

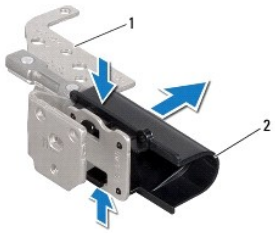
6. Replace the display assembly (see Replacing the Display Assembly).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

Hinge Caps

Removing the Hinge Caps

1. Follow the instructions in Before You Begin.
2. Remove the display assembly (see Removing the Display Assembly).
3. Remove the display bezel (see Removing the Display Bezel).
4. Remove the display panel (see Removing the Display Panel).
5. Remove the display hinges (see Removing the Display Hinges).
6. Press the hinge cap to release the hinge cap tabs from the slots on the display hinges.
7. Lift the hinge cap off the display hinges.



1	display hinges (2)	2	hinge caps (2)

Replacing the Hinge Caps

1. Follow the instructions in Before You Begin.
2. Place the hinge caps on the display hinges and snap them into place.
3. Replace the display hinges (see Replacing the Display Hinges).
4. Replace the display panel (see Replacing the Display Panel).
5. Replace the display bezel (see Replacing the Display Bezel).
6. Replace the display assembly (see Replacing the Display Assembly).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Processor Fan

Dell™ Inspiron™ N7010 Service Manual

- Removing the Processor Fan
- Replacing the Processor Fan

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

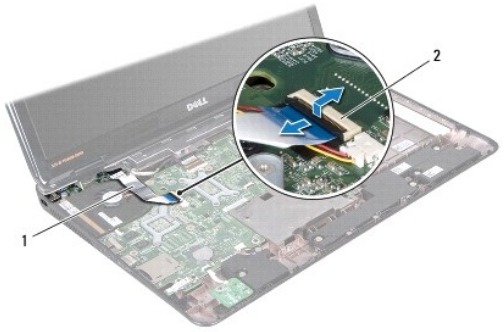
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

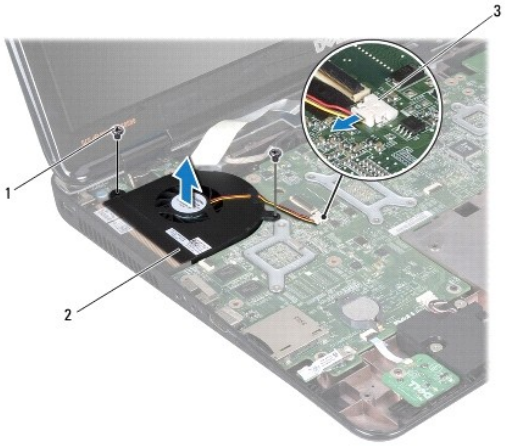
Removing the Processor Fan

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Remove the module cover (see Removing the Module Cover).
4. Follow the instructions from step 4 to step 6 in Removing the Hard Drive.
5. Remove the optical drive (see Removing the Optical Drive).
6. Remove the keyboard (see Removing the Keyboard).
7. Remove the palm rest (see Removing the Palm Rest).
8. Lift the connector latch and disconnect the I/O board cable from the connector on the system board.



1	I/O board cable	2	I/O board cable connector

9. Disconnect the processor fan cable from the connector on the system board.
10. Remove the two screws that secure the processor fan to the computer base.
11. Lift the processor fan off the computer base.



1	screws (2)	2	processor fan
3	processor fan cable connector		

Replacing the Processor Fan

1. Follow the instructions in Before You Begin.
2. Place the processor fan in the computer base.
3. Replace the two screws that secure the processor fan to the computer base.
4. Connect the processor fan cable to the connector on the system board.
5. Slide the I/O board cable into the connector on the system board and press down on the connector latch to secure the cable.
6. Replace the palm rest (see Replacing the Palm Rest).
7. Replace the keyboard (see Replacing the Keyboard).
8. Replace the optical drive (see Replacing the Optical Drive).
9. Follow the instructions from step 5 to step 7 in Replacing the Hard Drive.
10. Replace the module cover (see Replacing the Module Cover).
11. Replace the battery (see Replacing the Battery).

△ **CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.**

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Hard Drive

Dell™ Inspiron™ N7010 Service Manual

- Removing the Hard Drive
- Replacing the Hard Drive

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

WARNING: If you remove the hard drive from the computer when the drive is hot, do not touch the metal housing of the hard drive.

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell is not covered by your warranty.

CAUTION: To prevent data loss, turn off your computer (see Turning Off Your Computer) before removing the hard drive. Do not remove the hard drive while the computer is On or in Sleep state.

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: Hard drives are extremely fragile. Exercise care when handling the hard drive.

NOTE: Dell does not guarantee compatibility or provide support for hard drives from sources other than Dell.

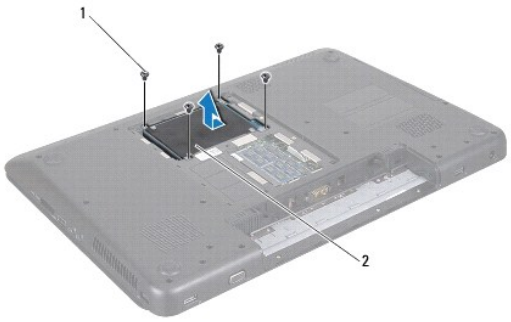
NOTE: If you are installing a hard drive from a source other than Dell, you need to install an operating system, drivers, and utilities on the new hard drive (see the *Dell Technology Guide*).

Removing the Hard Drive

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Remove the module cover (see Removing the Module Cover).

CAUTION: When the hard drive is not in the computer, store it in protective antistatic packaging (see "Protecting Against Electrostatic Discharge" in the safety instructions that shipped with your computer).

4. Remove the four screws that secure the hard-drive assembly to the computer base.
5. Slide the hard-drive assembly towards the left and lift to disconnect the hard drive from the connector on the system board.
6. Lift the hard-drive assembly off the computer base.



1	screws (4)	2	hard-drive assembly

7. Remove the four screws that secure the hard-drive bracket to the hard drive.

8. Lift the hard drive out of the hard-drive bracket.

1	screws (4)	2	hard drive
3	hard-drive bracket		

Replacing the Hard Drive

1. Follow the instructions in Before You Begin.
2. Remove the new hard drive from its packaging.

   Save the original packaging for storing or shipping the hard drive.
3. Place the hard drive in the hard-drive bracket.
4. Replace the four screws that secure the hard-drive bracket to the hard drive.
5. Place the hard-drive assembly in the computer base.
6. Push the hard-drive assembly towards the right to connect it to the connector on the system board.
7. Replace the four screws that secure the hard-drive assembly to the computer base.
8. Replace the module cover (see Replacing the Module Cover).
9. Replace the battery (see Replacing the Battery).

△ **CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.**

10. Install the operating system for your computer, as needed. See "Restoring Your Operating System" in the *Setup Guide*.
11. Install the drivers and utilities for your computer, as needed. For more information, see the *Dell Technology Guide*.

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Middle Cover

Dell™ Inspiron™ N7010 Service Manual

- Removing the Middle Cover
- Replacing the Middle Cover

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

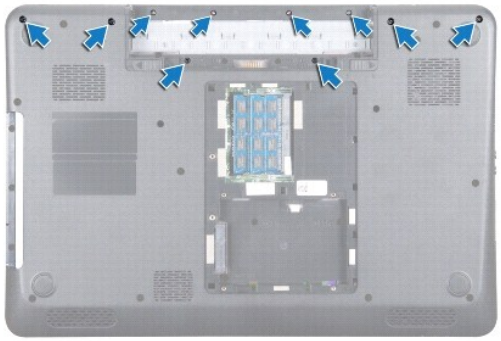
CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

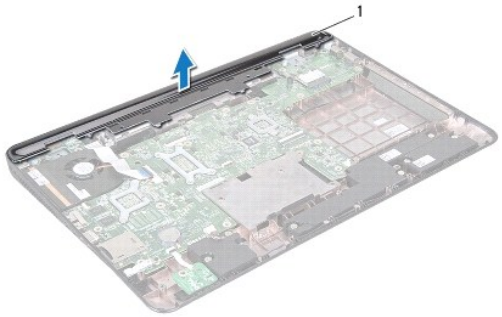
CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Middle Cover

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Remove the optical drive (see Removing the Optical Drive).
4. Remove the module cover (see Removing the Module Cover).
5. Follow the instructions from step 4 to step 6 in Removing the Hard Drive.
6. Remove the ten screws that secure the middle cover to the computer base.



7. Remove the keyboard (see Removing the Keyboard).
8. Remove the palm rest (see Removing the Palm Rest).
9. Remove the display assembly (see Removing the Display Assembly).
10. Release the four tabs that secure the middle cover to the computer base.
11. Lift the middle cover off the computer base.



1	middle cover

Replacing the Middle Cover

1. Follow the instructions in Before You Begin.
2. Align the four tabs on the middle cover with the slots on the computer base and snap the middle cover into place.
3. Turn the computer over and replace the ten screws that secure the middle cover to the computer base.
4. Replace the display assembly (see Replacing the Display Assembly).
5. Replace the palm rest (see Replacing the Palm Rest).
6. Replace the keyboard (see Replacing the Keyboard).
7. Follow the instructions from step 5 to step 7 in Replacing the Hard Drive.
8. Replace the module cover (see Replacing the Module Cover).
9. Replace the optical drive (see Replacing the Optical Drive).
10. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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I/O Board

Dell™ Inspiron™ N7010 Service Manual

- Removing the I/O Board
- Replacing the I/O Board

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

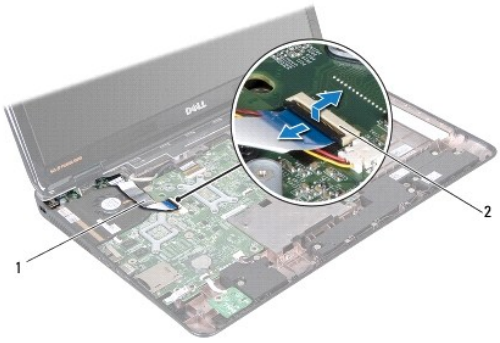
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

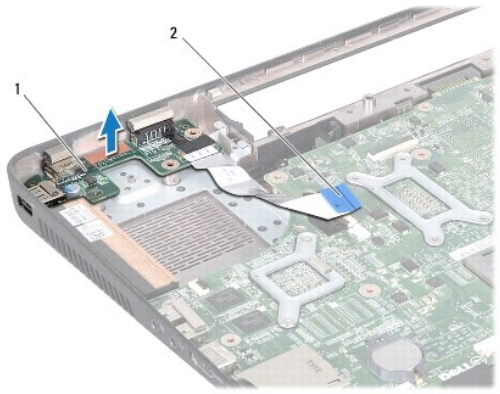
Removing the I/O Board

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Remove the module cover (see Removing the Module Cover).
4. Follow the instructions from step 4 to step 6 in Removing the Hard Drive.
5. Remove the optical drive (see Removing the Optical Drive).
6. Remove the keyboard (see Removing the Keyboard).
7. Remove the palm rest (see Removing the Palm Rest).
8. Disconnect the I/O board cable from the connector on the system board.



1	I/O board cable	2	I/O board cable connector

9. Remove the processor fan (see Removing the Processor Fan).
10. Remove the display assembly (see Removing the Display Assembly).
11. Remove the middle cover (see Removing the Middle Cover).
12. Lift the I/O board off the computer base.



1	I/O board	2	I/O board cable

Replacing the I/O Board

1. Follow the instructions in Before You Begin.
2. Align the connectors on the I/O board with the slots on the computer base and press the I/O board until it is seated fully.
3. Replace the middle cover (see Replacing the Middle Cover).
4. Replace the display assembly (see Replacing the Display Assembly).
5. Replace the processor fan (see Replacing the Processor Fan).
6. Connect the I/O board cable to the connector on the system board.
7. Replace the palm rest (see Replacing the Palm Rest).
8. Replace the keyboard (see Replacing the Keyboard).
9. Follow the instructions from step 5 to step 7 in Replacing the Hard Drive.
10. Replace the module cover (see Replacing the Module Cover).
11. Replace the optical drive (see Replacing the Optical Drive).
12. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Keyboard

Dell™ Inspiron™ N7010 Service Manual

- Removing the Keyboard
- Replacing the Keyboard

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

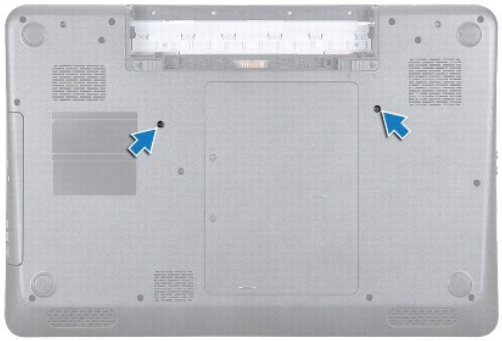
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Keyboard

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Remove the two screws that secure the keyboard to the computer base.



4. Turn the computer over and open the display as far as possible.

CAUTION: The keycaps on the keyboard are fragile, easily dislodged, and time-consuming to replace. Be careful when removing and handling the keyboard.

5. Press the keyboard and slide it towards the bottom as far as possible.
6. Slide a plastic scribe between the keyboard and palm rest, and pry and lift the keyboard to disengage it from the tabs on the palm rest.

1	plastic scribe	2	keyboard
3	palm rest		

7. Ease the keyboard up and slide the five tabs at the bottom of the keyboard out of the slots on the palm rest.

CAUTION: Be extremely careful when removing and handling the keyboard. Failure to do so could result in scratching the display panel.

8. Without pulling hard on the keyboard, hold it towards the display.
9. Lift the connector latch and pull the pull-tab to disconnect the keyboard cable from the connector on the system board.
10. Lift the keyboard off the computer.

1	keyboard tabs (5)	2	connector latch

Replacing the Keyboard

1. Follow the instructions in Before You Begin.
2. Slide the keyboard cable into the connector on the system board, and press down on the connector latch to secure the cable.
3. Slide the tabs at the bottom of the keyboard into the slots on the palm rest and lower the keyboard into place.
4. Gently press around the edges of the keyboard and slide it upwards to secure the keyboard under the tabs on the palm rest.
5. Turn the computer over and replace the two screws that secure the keyboard to the computer base.
6. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Status Light Board

Dell™ Inspiron™ N7010 Service Manual

- Removing the Status Light Board
- Replacing the Status Light Board

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

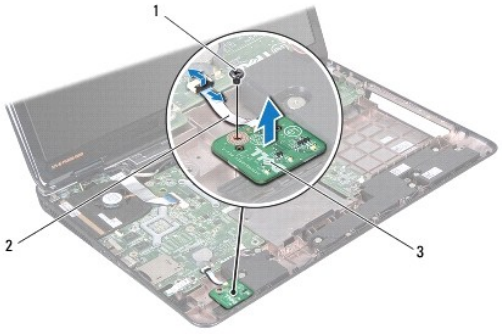
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Status Light Board

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Remove the optical drive (see Removing the Optical Drive).
4. Remove the module cover (see Removing the Module Cover).
5. Follow the instructions from step 4 to step 6 in Removing the Hard Drive.
6. Remove the keyboard (see Removing the Keyboard).
7. Remove the palm rest (see Removing the Palm Rest).
8. Lift the connector latch to disconnect the status light board cable from the connector on the system board.
9. Remove the screw that secures the status light board to the computer base.
10. Lift the status light board off the computer.



1	screw	2	status light board cable
3	status light board		

Replacing the Status Light Board

1. Follow the instructions in Before You Begin.
2. Align the screw hole on the status light board with the screw hole on the computer base.
3. Replace the screw that secures the status light board to the computer base.
4. Slide the status light board cable into the connector on the system board and press down on the connector latch to secure the cable.
5. Replace the palm rest (see Replacing the Palm Rest).
6. Replace the keyboard (see Replacing the Keyboard).
7. Replace the optical drive (see Replacing the Optical Drive).
8. Follow the instructions from step 5 to step 7 in Replacing the Hard Drive.
9. Replace the module cover (see Replacing the Module Cover).
10. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Memory Module(s)

Dell™ Inspiron™ N7010 Service Manual

- Removing the Memory Module(s)
- Replacing the Memory Module(s)

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid eltectrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

You can increase your computer memory by installing memory modules on the system board. See "Specifications" in your *Setup Guide* at **support.dell.com/manuals** for information on the memory supported by your computer.

NOTE: Memory modules purchased from Dell™ are covered under your computer warranty.

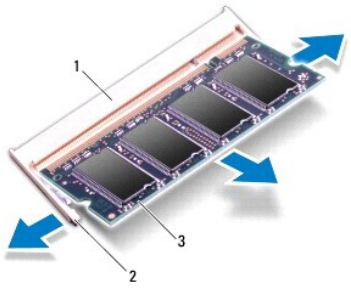
Your computer has two user-accessible SODIMM sockets, labeled DIMM A and DIMM B, that can be accessed from the bottom of your computer.

Removing the Memory Module(s)

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Remove the module cover (see Removing the Module Cover).

CAUTION: To prevent damage to the memory-module connector, do not use tools to spread the memory module securing clips.

4. Use your fingertips to carefully spread apart the securing clips on each end of the memory-module connector until the memory module pops up.
5. Remove the memory module from the memory-module connector.



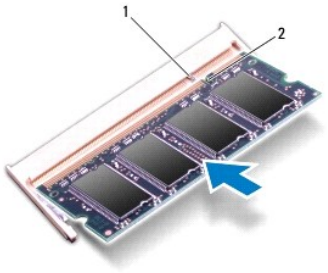
1	memory-module connector	2	securing clips (2)
3	memory module		

Replacing the Memory Module(s)

CAUTION: If you need to install memory modules in two connectors, install a memory module in the connector labeled "DIMM A" before you install a memory module in the connector labeled "DIMM B".

1. Follow the instructions in Before You Begin.
2. Align the notch in the memory module with the tab in the memory- module connector.
3. Slide the memory module firmly into the connector at a 45-degree angle, and press the memory module down until it clicks into place. If you do not hear the click, remove the memory module and reinstall it.

NOTE: If the memory module is not installed properly, the computer may not boot.



1	tab	2	notch

4. Replace the module cover (see Replacing the Module Cover).
5. Replace the battery (see Replacing the Battery), or connect the AC adapter to your computer and an electrical outlet.

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

6. Turn on the computer.

As the computer boots, it detects the memory module(s) and automatically updates the system configuration information.

To confirm the amount of memory installed in the computer:

Windows Vista®:

Click **Start** → **Help and Support**→ **Dell System Information**.

Windows® 7:

Click **Start** → **Control Panel**→ **System and Security**→ **System**.

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Wireless Mini-Card

Dell™ Inspiron™ N7010 Service Manual

- Removing the Mini-Card
- Replacing the Mini-Card

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

CAUTION: When the Mini-Card is not in the computer, store it in protective antistatic packaging (see "Protecting Against Electrostatic Discharge" in the safety instructions that shipped with your computer).

NOTE: Dell does not guarantee compatibility or provide support for Mini-Cards from sources other than Dell.

NOTE: Depending on the configuration of the computer when it was sold, the Mini-Card slot may or may not have a Mini-Card installed in them.

If you ordered a wireless Mini-Card with your computer, the card is already installed.

Your computer supports:

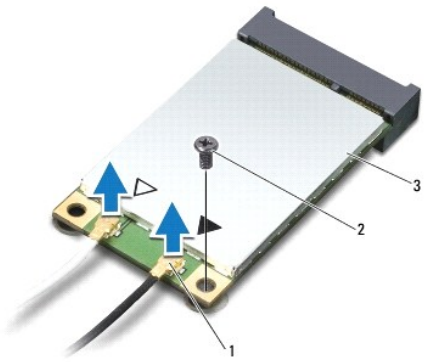
- One half Mini-Card slot — Wireless Local Area Network (WLAN), Wi-Fi, or Worldwide Interoperability for Microwave Access (WiMax)

Removing the Mini-Card

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Remove the module cover (see Removing the Module Cover).
4. Follow the instructions from step 4 to step 6 in Removing the Hard Drive.
5. Remove the optical drive (see Removing the Optical Drive).
6. Remove the keyboard (see Removing the Keyboard).
7. Remove the palm rest (see Removing the Palm Rest).

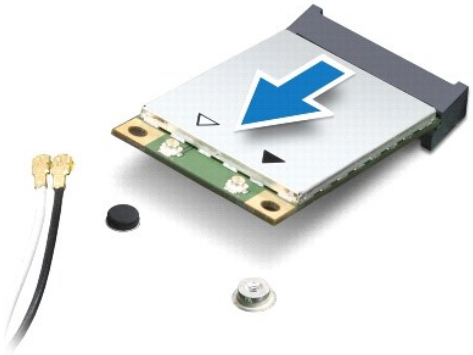
CAUTION: When you disconnect a cable, pull on its connector or on its pull-tab, not on the cable itself. Some cables have connectors with locking tabs; if you are disconnecting this type of cable, press in on the locking tabs before you disconnect the cable. As you pull connectors apart, keep them evenly aligned to avoid bending any connector pins. Also, before you connect a cable, ensure that both connectors are correctly oriented and aligned.

8. Disconnect the antenna cables from the Mini-Card.
9. Remove the screw that secures the Mini-Card to the daughter board.



1	antenna cable connectors (2)	2	screw	3	Mini-Card

10. Lift the Mini-Card out of the connector on the daughter board.



Replacing the Mini-Card

1. Follow the instructions in Before You Begin.
2. Remove the new Mini-Card from its packaging.

CAUTION: Use firm and even pressure to slide the card into place. If you use excessive force, you may damage the connector.

CAUTION: The connectors are keyed to ensure correct insertion. If you feel resistance, check the connectors on the card and on the system board, and realign the card.

CAUTION: To avoid damage to the Mini-Card, never place cables under the card.

3. Insert the Mini-Card connector at a 45-degree angle into the connector on the daughter board.
4. Press the other end of the Mini-Card down into the slot on the daughter board and replace the screw that secures the Mini-Card to the connector on the daughter board.
5. Connect the appropriate antenna cables to the Mini-Card you are installing. The following table provides the antenna cable color scheme for the Mini-Card supported by your computer.

Connectors on the Mini-Card	Antenna Cable Color Scheme

WLAN, Wi-Fi, WiMax (2 antenna cables)	
Main (white triangle)	white
Auxiliary (black triangle)	black

6. Secure the unused antenna cables in the protective mylar sleeve.
7. Replace the palm rest (see Replacing the Palm Rest).
8. Replace the keyboard (see Replacing the Keyboard).
9. Replace the optical drive (see Replacing the Optical Drive).
10. Follow the instructions from step 5 to step 7 in Replacing the Hard Drive.
11. Replace the module cover (see Replacing the Module Cover).
12. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

13. Install the drivers and utilities for your computer, as required. For more information, see the *Dell Technology Guide*.

NOTE: If you are installing a wireless Mini-Card from a source other than Dell, you must install the appropriate drivers and utilities. For more generic driver information, see the *Dell Technology Guide*.

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Optical Drive

Dell™ Inspiron™ N7010 Service Manual

- Removing the Optical Drive
- Replacing the Optical Drive

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

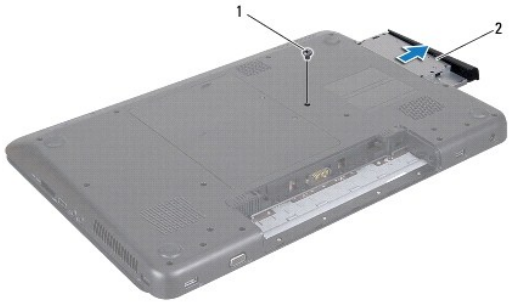
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Optical Drive

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Remove the screw that secures the optical drive to the computer base.
4. Slide the optical drive out of the optical drive bay.



1	screw	2	optical drive

Replacing the Optical Drive

1. Follow the instructions in Before You Begin.
2. Remove the new optical drive from its packaging.
   Save the original packaging for storing or shipping the optical drive.
3. Slide the optical drive into the optical drive bay.
4. Replace the screw that secures the optical drive to the computer base.
5. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Palm Rest

Dell™ Inspiron™ N7010 Service Manual

- Removing the Palm Rest
- Replacing the Palm Rest

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

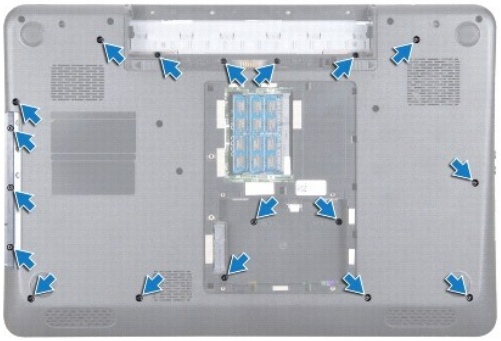
CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Palm Rest

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Remove the optical drive (see Removing the Optical Drive).
4. Remove the module cover (see Removing the Module Cover).
5. Follow the instructions from step 4 to step 6 in Removing the Hard Drive.
6. Remove the eighteen screws that secure the palm rest to the computer base.



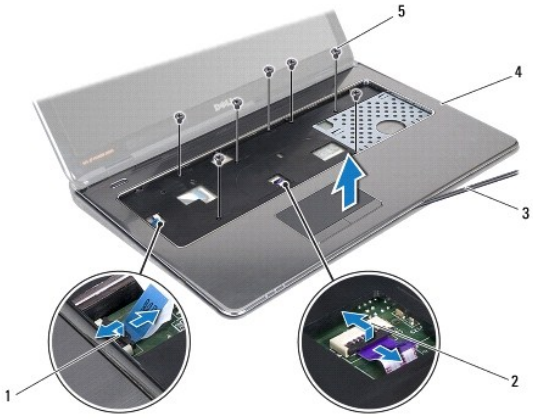
7. Remove the keyboard (see Removing the Keyboard).

CAUTION: To avoid damage to the connectors, lift the connector latch and pull the plastic tab on top of the connectors to remove the cables.

8. Disconnect the touch pad cable and the power button cable from the connectors on the system board.
9. Remove the seven screws that secure the palm rest.

CAUTION: Carefully separate the palm rest from the computer base to avoid damage to the palm rest.

10. Slide a plastic scribe between the computer base and the palm rest, and pry out the palm rest off the computer base.



1	power button cable connector	2	touch pad cable connector
3	plastic scribe	4	palm rest
5	screws (7)		

Replacing the Palm Rest

1. Follow the instructions in Before You Begin.
2. Slide the tabs on the palm rest into the slots on the computer base and gently snap the palm rest into place.
3. Slide the touch pad cable and the power button cable into the connectors on the system board, and press down on the connector latches to secure the cables.
4. Replace the seven screws that secure the palm rest.
5. Replace the keyboard (see Replacing the Keyboard).
6. Replace the eighteen screws that secure the palm rest to the computer base.
7. Follow the instructions from step 5 to step 7 in Replacing the Hard Drive.
8. Replace the optical drive (see Replacing the Optical Drive).
9. Replace the module cover (see Replacing the Module Cover).
10. Replace the battery (see Replacing the Battery).

△ **CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.**

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Thermal Cooling Assembly

Dell™ Inspiron™ N7010 Service Manual

- Removing the Thermal Cooling Assembly
- Replacing the Thermal Cooling Assembly

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

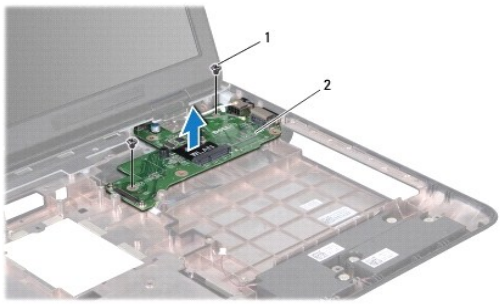
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface.

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Thermal Cooling Assembly

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Follow the instructions from step 3 to step 20 in Removing the System Board.
4. Loosen the two captive screws that secure the thermal cooling assembly to the system board.
5. Lift the thermal cooling assembly from the system board.



1	captive screws (2)	2	thermal cooling assembly

Replacing the Thermal Cooling Assembly

1. Follow the instructions in Before You Begin.
2. Align the screw holes on the thermal cooling assembly with the screw holes on the computer base.
3. Tighten the two captive screws that secure the thermal cooling assembly to the system board.
4. Follow the instructions from step 5 to step 23 in Replacing the System Board.
5. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Power Button Board

Dell™ Inspiron™ N7010 Service Manual

- Removing the Power Button Board
- Replacing the Power Button Board

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

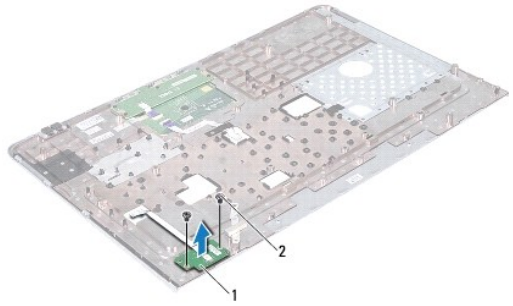
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Power Button Board

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Remove the module cover (see Removing the Module Cover).
4. Follow the instructions from step 4 to step 6 in Removing the Hard Drive.
5. Remove the optical drive (see Removing the Optical Drive).
6. Remove the keyboard (see Removing the Keyboard).
7. Remove the palm rest (see Removing the Palm Rest).
8. Turn the palm rest over.
9. Remove the two screws that secure the power button board to the palm rest.



1	power button board	2	screws (2)

NOTE: The power button board cable is affixed to the palm rest.

10. Carefully release the power button board cable from the palm rest.

CAUTION: Be extremely careful when removing the power button board. The board is very fragile.

11. Lift the power button board away from the palm rest.

Replacing the Power Button Board

1. Follow the instructions in Before You Begin.
2. Align the slots on the power button board with the alignment guides on the palm rest and carefully place the power button board.
3. Replace the two screws that secure the power button board to the palm rest.
4. Adhere the power button board cable on the palm rest.
5. Turn the palm rest over.
6. Replace the palm rest (see Replacing the Palm Rest).
7. Replace the keyboard (see Replacing the Keyboard).
8. Replace the optical drive (see Replacing the Optical Drive).
9. Follow the instructions from step 5 to step 7 in Replacing the Hard Drive.
10. Replace the module cover (see Replacing the Module Cover).
11. Replace the battery (see Replacing the Battery).

△ **CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.**

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Speakers

Dell™ Inspiron™ N7010 Service Manual

- Removing the Speakers
- Replacing the Speakers

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

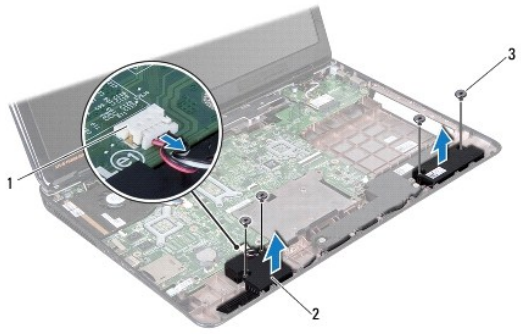
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Speakers

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Remove the module cover (see Removing the Module Cover).
4. Follow the instructions from step 4 to step 6 in Removing the Hard Drive.
5. Remove the optical drive (see Removing the Optical Drive).
6. Remove the keyboard (see Removing the Keyboard).
7. Remove the palm rest (see Removing the Palm Rest).
8. Remove the status light board (see Removing the Status Light Board).
9. Disconnect the speaker cable from the connector on the system board.
10. Remove the four screws that secure the speakers to the computer base.
11. Note the routing of the speaker cable and remove the speakers and cable from the computer base.



1	speaker cable connector	2	speakers (2)
3	screws (4)		

Replacing the Speakers

1. Follow the instructions in Before You Begin.
2. Place the speakers in the computer base.
3. Route the speaker cable in the routing guide on the computer base.
4. Connect the speaker cable to the connector on the system board.
5. Replace the four screws that secure the speakers to the computer base.
6. Replace the status light board (see Replacing the Status Light Board).
7. Replace the palm rest (see Replacing the Palm Rest).
8. Replace the keyboard (see Replacing the Keyboard).
9. Replace the optical drive (see Replacing the Optical Drive).
10. Follow the instructions from step 5 to step 7 in Replacing the Hard Drive.
11. Replace the module cover (see Replacing the Module Cover).
12. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Subwoofer Assembly

Dell™ Inspiron™ N7010 Service Manual

- Removing the Subwoofer Assembly
- Replacing the Subwoofer Assembly

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

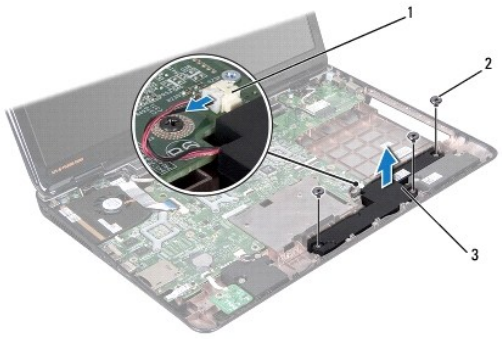
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Subwoofer Assembly

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Remove the module cover (see Removing the Module Cover).
4. Follow the instructions from step 4 to step 6 in Removing the Hard Drive.
5. Remove the optical drive (see Removing the Optical Drive).
6. Remove the keyboard (see Removing the Keyboard).
7. Remove the palm rest (see Removing the Palm Rest).
8. Disconnect the subwoofer cable from the connector on the system board.
9. Remove the three screws that secure the subwoofer assembly to the computer base.
10. Lift the subwoofer assembly off the computer base.



1	subwoofer cable connector	2	screws (3)
3	subwoofer assembly		

Replacing the Subwoofer Assembly

1. Follow the instructions in Before You Begin.

2. Place the subwoofer assembly on the computer base.
3. Replace the three screws that secure the subwoofer assembly to the computer base.
4. Connect the subwoofer cable to the connector on the system board.
5. Replace the palm rest (see Replacing the Palm Rest).
6. Replace the keyboard (see Replacing the Keyboard).
7. Replace the optical drive (see Replacing the Optical Drive).
8. Follow the instructions from step 5 to step 7 in Replacing the Hard Drive.
9. Replace the module cover (see Replacing the Module Cover).
10. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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System Board

Dell™ Inspiron™ N7010 Service Manual

- Removing the System Board
- Replacing the System Board
- Entering the Service Tag in the BIOS

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

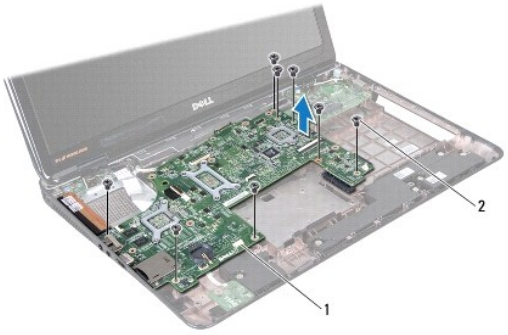
Removing the System Board

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Remove the optical drive (see Removing the Optical Drive).
4. Remove the module cover (see Removing the Module Cover).
5. Follow the instructions from step 4 to step 6 in Removing the Hard Drive.
6. Remove the memory module(s) (see Removing the Memory Module(s)).
7. Remove the keyboard (see Removing the Keyboard).
8. Remove the palm rest (see Removing the Palm Rest).
9. Remove the Mini-Card (see Removing the Mini-Card).
10. Remove the coin-cell battery (see Removing the Coin-Cell Battery).
11. Remove the Bluetooth card (see Removing the Bluetooth Card).
12. Remove the processor fan (see Removing the Processor Fan).
13. Disconnect the status light board cable from the connector on the system board.
14. Disconnect the display cable from the connector on the system board, and remove the display cable grounding screw.
15. Disconnect the speaker cable, subwoofer cable, and AC adapter connector cable from their connectors on the system board.

1	display cable grounding screw	2	display cable
3	AC adapter connector cable	4	subwoofer cable
5	speaker cable	6	status light board cable

16. Remove the eight screws that secure the system board assembly to the computer base.

17. Carefully ease the connectors on the system board assembly out of the slots in the computer, and lift the system board assembly off the computer base.

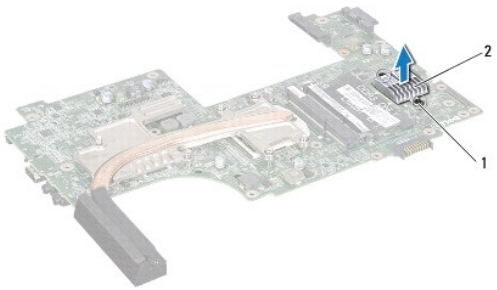


1	system board assembly	2	screws (8)

18. Turn the system board assembly over.

19. Loosen the two captive screws that secure the platform controller hub (PCH) cooler to the system board.

20. Lift the PCH cooler off the system board.



1	captive screws (2)	2	PCH cooler

21. Remove the processor heat sink (see Removing the Processor Heat Sink).
22. Remove the processor module (see Removing the Processor Module).

Replacing the System Board

1. Follow the instructions in Before You Begin.
2. Replace the processor module (see Replacing the Processor Module).
3. Replace the processor heat sink (see Replacing the Processor Heat Sink).
4. Align the captive screws on the PCH cooler with the screw holes on the system board.
5. Tighten the two captive screws that secure the PCH cooler to the system board.
6. Turn the system board over.
7. Align the connectors on the system board with the slots on the computer base.
8. Use the alignment posts on the computer base to correctly place the system board.
9. Replace the eight screws that secure the system board to the computer base.
10. Connect the status light board cable to the connector on the system board.
11. Connect the display cable to the connector on the system board, and replace the display cable grounding screw.
12. Connect the speaker cable, subwoofer cable, and the AC adapter connector cable to the connectors on the system board.
13. Replace the processor fan (see Replacing the Processor Fan).
14. Replace the Bluetooth card (see Replacing the Bluetooth Card).
15. Replace the coin-cell battery (see Replacing the Coin-Cell Battery).
16. Replace the palm rest (see Replacing the Palm Rest).
17. Replace the keyboard (see Replacing the Keyboard).
18. Follow the instructions from step 5 to step 7 in Replacing the Hard Drive.
19. Replace the Mini-Card (see Replacing the Mini-Card).
20. Replace the memory module(s) (see Replacing the Memory Module(s)).
21. Replace the module cover (see Replacing the Module Cover).

22. Replace the optical drive (see Replacing the Optical Drive).

23. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

24. Turn on the computer.

NOTE: After you have replaced the system board, enter the computer's Service Tag into the BIOS of the replacement system board.

25. Enter the service tag (see Entering the Service Tag in the BIOS).

Entering the Service Tag in the BIOS

1. Ensure that the AC adapter is plugged in and that the main battery is installed properly.
2. Turn on the computer.
3. Press <F2> during POST to enter the system setup program.
4. Navigate to the security tab and enter the service tag in the **Set Service Tag** field.

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NOTE: A NOTE indicates important information that helps you make better use of your computer.

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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