Dell™ Inspiron™ N3010 Service Manual

Before You Begin Battery Memory-Module Cover Memory Module(s) <u>Keyboard</u> Palm Rest Assembly

Power Button Board

Internal Module With Bluetooth® Wireless Technology

Camera Module
Processor Heat Sink Fan

Middle Cover VGA Connector Board System Board Hard Drive Processor Heat Sink Processor Module Wireless Mini-Card Coin-Cell Battery Speakers

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 potential damage to hardware or loss of data if instructions are not followed.



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

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Regulatory model: P10S series Regulatory type: P10S001

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Battery

Dell™ Inspiron™ N3010 Service Manual

- Removing the Battery
- Replacing the Battery



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 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. Turn the computer 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 release latch	2	battery
ſ	3	battery lock latch		

Replacing the Battery

AUTION: To avoid damage to the computer, use only the battery designed for this particular Dell computer.

- 1. Slide the battery into the battery bay, until it clicks into place.
- 2. Slide the battery lock latch to the lock position.

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Before You Begin

Dell™ Inspiron™ N3010 Service Manual

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

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

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

Recommended Tools

The procedures in this document may require the following tools:

- 1 Small flat-blade screwdriver
- 1 Phillips screwdriver
- Plastic scribe
- 1 BIOS executable update program 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. Click Start 6, click the arrow , and then click Shut Down.

The computer turns off after the operating system shutdown process finishes.

3. Ensure that the computer and any attached devices are turned off. If your computer and attached devices did not automatically turn off when you shut down your 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: 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: 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: 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

A 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 <u>Turning Off Your Computer</u>).

△ 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.

Flashing the BIOS

Dell™ Inspiron™ N3010 Service Manual

- 1. Turn on the computer.
- 2. Go to support.dell.com/support/downloads.
- 3. Locate the BIOS update file for your computer:

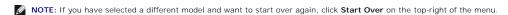


If you have your computer's Service Tag:

- 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 4.

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

- a. Click Select Model.
- b. Select the type of product in the **Select Your Product Family** list.
- c. Select the product brand in the **Select Your Product Line** list.
- d. Select the product model number in the Select Your Product Model list.



- e. Click Confirm.
- 4. A list of results appear on the screen. Click BIOS.
- Click Download Now to download the latest BIOS file. The File Download window appears.
- 6. Click Save to save the file on your desktop. The file downloads to your desktop.
- 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.
- 8. Double-click the file icon on the desktop and follow the instructions on the screen.

Memory-Module Cover

Dell™ Inspiron™ N3010 Service Manual

- Removing the Memory-Module Cover
- Replacing the Memory-Module 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.

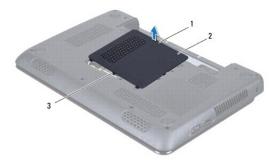
CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

△ 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 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 Memory-Module Cover

- 1. Follow the instructions in Before You Begin.
- 2. Remove the battery (see Removing the Battery).
- 3. Loosen the captive screw that secures the memory-module cover to the computer base.
- 4. Pry the memory-module cover up and lift it out of the computer base.



1	captive screw	2	memory-module cover
3	memory-module cover tabs (3)		

Replacing the Memory-Module Cover

- 1. Follow the instructions in Before You Begin.
- 2. Align the tabs on the memory-module cover with the slots on the computer base and place the memory-module cover in position.
- 3. Gently snap the memory-module cover into place.
- 4. Tighten the captive screw that secures the memory-module cover to the computer base.
- 5. Replace the battery (see Replacing the Battery)

Internal Module With Bluetooth® Wireless Technology

Dell™ Inspiron™ N3010 Service Manual

- Removing the Bluetooth Module
- Replacing the Bluetooth Module



MARNING: 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).

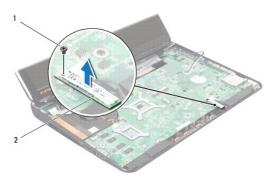
△ CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

AUTION: 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, it is already installed.

Removing the Bluetooth Module

- 1. Follow the instructions in Before You Begin.
- 2. Remove the battery (see Removing the Battery).
- 3. Remove the memory-module cover (see Removing the Memory-Module Cover).
- 4. Remove the memory module(s) (see Removing the Memory Module(s)).
- 5. Remove the keyboard (see Removing the Keyboard).
- 6. Remove the palm rest assembly (see Removing the Palm Rest Assembly).
- 7. Remove the screw that secures the Bluetooth module to the system board.
- 8. Lift the Bluetooth module to disconnect it from the connector on the system board.



1 screw 2	Bluetooth module
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Replacing the Bluetooth Module

- 1. Follow the instructions in Before You Begin
- 2. Align the connector on the Bluetooth module with the system board connector, and press down to connect the Bluetooth module to the system board.

- 3. Replace the screw that secures the Bluetooth module to the system board.
- 4. Replace the palm rest assembly (see Replacing the Palm Rest Assembly).
- 5. Replace the keyboard (see Replacing the Keyboard).
- 6. Replace the memory module(s) (see Replacing the Memory Module(s)).
- 7. Replace the memory-module cover (see $\underline{\text{Replacing the Memory-Module Cover}}).$
- 8. Replace the battery (see Replacing the Battery).

A 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.

Camera Module

Dell™ Inspiron™ N3010 Service Manual

- Removing the Camera Module
- Replacing the Camera Module



MARNING: 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).



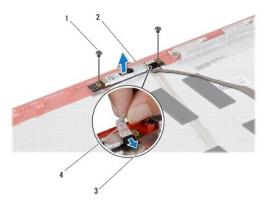
△ CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.



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

Removing the Camera Module

- 1. Follow the instructions in Before You Begin.
- 2. Remove the battery (see Removing the Battery).
- 3. Remove the memory-module cover (see Removing the Memory-Module Cover).
- 4. Remove the memory module(s) (see Removing the Memory Module(s)).
- 5. Remove the keyboard (see Removing the Keyboard).
- 6. Remove the palm rest assembly (see Removing the Palm Rest Assembly).
- 7. Remove the display assembly (see Removing the Display Assembly)
- 8. Remove the display bezel (see Removing the Display Bezel).
- 9. Remove the display panel (see Removing the Display Panel).
- 10. Remove the two screws that secure the camera module to the display cover.
- 11. Remove the tape that secures the display cable to the connector on the camera module.
- 12. Disconnect the display cable from the connector on the camera module.



1	screws (2)	2	camera module
3	display cable	4	tape

Replacing the Camera Module

- 1. Follow the instructions in <u>Before You Begin</u>.
- 2. Connect the display cable to the connector on the camera module.
- 3. Replace the tape that secures the display cable to the camera module.
- 4. Place the camera module in position and replace the two screws that secure the camera module to the display cover.
- 5. Replace the display panel (see Replacing the Display Panel).
- 6. Replace the display bezel (see Replacing the Display Bezel).
- 7. Replace the display assembly (see Replacing the Display Assembly).
- 8. Replace the palm rest assembly (see Replacing the Palm Rest Assembly).
- 9. Replace the keyboard (see Replacing the Keyboard).
- 10. Replace the memory module(s) (see Replacing the Memory Module(s)).
- 11. Replace the memory-module cover (see Replacing the Memory-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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Coin-Cell Battery Dell™ Inspiron™ N3010 Service Manual

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



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 Coin-Cell Battery

- 1. Follow the instructions in Before You Begin.
- 2. Follow the instructions from $\underline{\text{step 2}}$ to $\underline{\text{step 16}}$ in Removing the System Board
- 3. Use a plastic scribe and gently pry the coin-cell battery out of the battery socket on the system board.



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I	1	coin-cell battery	2	plastic scribe

Replacing the Coin-Cell Battery

- 1. Follow the instructions in Before You Begin.
- 2. With the positive side facing up, snap the coin-cell battery into the battery socket on the system board.
- 3. Follow the instructions from step 7 to step 21 in Replacing the System Board.

A 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.

Processor Module

Dell™ Inspiron™ N3010 Service Manual

- Removing the Processor Module
- Replacing the Processor Module



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.

A 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. Follow the instructions from step 2 to step 16 in Removing the System Board.
- 3. 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.

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

4. 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	processor module	2	ZIF socket
١	processor module	-	ZII SOCKET
3	pin-1 corner	4	ZIF-socket cam screw

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

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

5. Lift the processor module from the ZIF socket.

- 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.
- MOTE: 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 processor module are higher than the others, the processor module is not seated properly.

- CAUTION: To avoid damage to the processor module, hold the screwdriver such that it is 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 7 to step 21 in Replacing the System Board.

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.

Processor Heat Sink Fan

Dell™ Inspiron™ N3010 Service Manual

- Removing the Processor Heat Sink Fan
- Replacing the Processor Heat Sink 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.



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



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 Processor Heat Sink Fan

- 1. Follow the instructions in Before You Begin.
- 2. Remove the battery (see Removing the Battery).
- 3. Remove the memory-module cover (see Removing the Memory-Module Cover).
- 4. Remove the memory module(s) (see Removing the Memory Module(s)).
- 5. Remove the keyboard (see Removing the Keyboard).
- 6. Remove the palm rest assembly (see Removing the Palm Rest Assembly).
- 7. Lift the connector latch and pull the pull-tab to disconnect the VGA connector cable from the connector on the system board.
- 8. Disconnect the processor heat sink fan cable from the connector on the system board.
- 9. Remove the screw that secures the processor heat sink fan to the computer base.



1	screw	2	processor heat sink fan
3	processor heat sink fan cable	4	VGA connector cable

10. Lift the processor heat sink fan off the computer base.

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

- 1. Follow the instructions in Before You Begin.
- 2. Place the processor heat sink fan in position and replace the screw that secures the processor heat sink fan to the computer base.
- 3. Connect the processor heat sink fan cable to the connector on the system board.
- 4. Slide the VGA connector cable to the connector on the system board, and press down on the connector latch to secure the cable.
- 5. Replace the palm rest assembly (see Replacing the Palm Rest Assembly).
- 6. Replace the keyboard (see Replacing the Keyboard).
- 7. Replace the memory module(s) (see Replacing the Memory Module(s)).
- 8. Replace the memory-module cover (see Replacing the Memory-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.

Processor Heat Sink

Dell™ Inspiron™ N3010 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.



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



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 Processor Heat Sink

- 1. Follow the instructions in Before You Begin.
- 2. Follow the instructions from step 2 to step 16 in Removing the System Board.
- 3. In sequential order (indicated on the processor heat sink), loosen the seven captive screws that secure the processor heat sink to the system board.



processor heat sink captive screws (7)

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

Replacing the Processor Heat Sink



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



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.

- 1. Follow the instructions in Before You Begin.
- 2. Place the processor heat sink in position.
- 3. In sequential order (indicated on the processor heat sink), tighten the seven captive screws that secure the processor heat sink to the system board.
- 4. Turn the system board assembly over.
- 5. Follow the instructions from step 7 to step 21 in Replacing the System Board.

△ 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

Dell™ Inspiron™ N3010 Service Manual

- Display Assembly
- Display Panel
- Display Panel Bracket
- Display Cable



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.

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 memory-module cover (see Removing the Memory-Module Cover).
- 4. Remove the memory module(s) (see Removing the Memory Module(s)).
- 5. Remove the two screws on the bottom of the computer that secure the display assembly to the computer base.



- 6. Remove the keyboard (see Removing the Keyboard).
- 7. Remove the palm rest assembly (see Removing the Palm Rest Assembly).
- 8. Open the display as far as possible.
- 9. Pull the pull-tab to disconnect the display cable from the connector on the system board.
- 10. Remove the display cable grounding screw.



NOTE: Open the display at a 90-degree angle to the plane.

11. In sequential order (indicated on the display hinge), remove the four screws that secure the display assembly to the computer base.



1	display cable	2	display cable grounding screw
3	screws (4)	4	display assembly

12. Lift the display assembly off the computer.

Replacing the Display Assembly

- 1. Follow the instructions in Before You Begin.
- 2. Place the display assembly in position.
- 3. In sequential order (indicated on the display hinge), 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.
- 5. Replace the display cable grounding screw.
- 6. Turn the computer over and replace the two screws that secure the display assembly to the computer base.
- 7. Replace the palm rest assembly (see Replacing the Palm Rest Assembly).
- 8. Replace the keyboard (see Replacing the Keyboard).
- 9. Replace the memory module(s) (see Replacing the Memory Module(s)).
- 10. Replace the memory-module cover (see Replacing the Memory-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.

Removing the Display Bezel

 \triangle 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 to remove it from the display assembly.



Replacing the Display Bezel

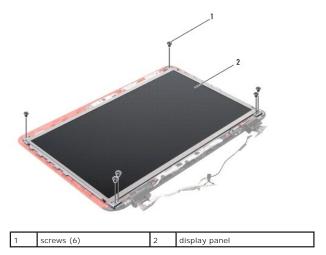
- 1. Follow the instructions in Before You Begin.
- 2. Align the display bezel over the display panel, and gently snap it into place.
- 3. Replace the display assembly (see Replacing the Display Assembly).

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 six screws that secure the display panel to the display cover.



- 5. Lift the display panel off the display cover.
- 6. Remove the display cable (see Removing the Display Cable).

Replacing the Display Panel

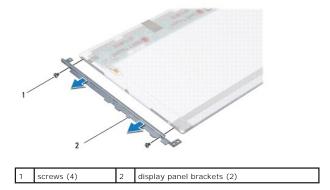
- 1. Follow the instructions in Before You Begin.
- 2. Replace the display cable (see Replacing the Display Cable).
- 3. Align the display panel with the display cover
- 4. Replace the six screws that secure the display panel to the display cover.
- 5. Replace the display bezel (see Replacing the Display 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.

Display Panel Bracket

Removing the Display Panel Bracket

- 1. Follow the instructions in <u>Before You Begin</u>.
- 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 four screws (two on each side) that secure the display panel brackets to the display panel.



6. Remove the display panel brackets off the display panel.

Replacing the Display Panel Bracket

- 1. Follow the instructions in Before You Begin.
- 2. Place the display panel brackets in position.
- 3. Replace the four screws (two on each side) that secure the display panel brackets to the display panel.
- 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.

Display Cable

Removing the Display Cable

- 1. Follow the instructions in <u>Before You Begin</u>.
- 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. Turn the display panel over and place it on a clean surface.
- 6. Remove the camera module (see Removing the Camera Module).
- 7. Peel the tape on the display cable and disconnect the display cable from the connector on the display panel.
- 8. Remove the display cable off the display panel.



display cable 2 display cable connector

Replacing the Display Cable

- 1. Follow the instructions in Before You Begin.
- 2. Connect the display cable to the connector on the display panel and replace the tape that secures the display cable to the display panel.
- 3. Replace the camera module (see Replacing the Camera Module).
- 4. Turn the display panel over and place it on the display cover.
- 5. Replace the display panel (see Replacing the Display Panel).
- 6. Replace the display bezel (see Replacing the Display Bezel).
- 7. Replace the display assembly (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

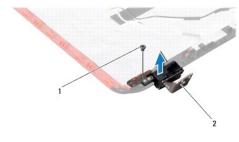
Removing the Display Hinges

- 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. Push the hinge cap tabs to release it from the display hinge.



1	hinge cap	2	display hinge
3	hinge cap tabs (2)		

6. Remove the two screws (one on each display hinge) that secure the display hinges to the display cover.



1	screws (2)	2	display hinges (2)

7. Lift the display hinges off the display cover.

Replacing the Display Hinges

- 1. Follow the instructions in <u>Before You Begin</u>.
- 2. Place the display hinges in position and replace the two screws (one on each display hinge) that secure the display hinges to the display cover.
- 3. Push the display hinge cap tabs into the slots on 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.

Hard Drive

Dell™ Inspiron™ N3010 Service Manual

- Removing the Hard Drive
- Replacing the Hard Drive

MARNING: 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

MARNING: 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: 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).

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

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

△ CAUTION: Hard drives are extremely fragile. Exercise care when handling 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: 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

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

Removing the Hard Drive

- 1. Follow the instructions in Before You Begin.
- 2. Follow the instructions from step 2 to step 16 in Removing the System Board.
- 3. Remove the screw that secures the hard-drive assembly to the system board.
- 4. Slide and disconnect the hard-drive assembly from the connector on the system board as indicated in the illustration.
- 5. Lift the hard-drive assembly off the system board.



1	screw	2	hard-drive assembly

- 6. Remove the four screws that secure the hard-drive bracket to the hard drive.
- 7. Lift the hard-drive bracket away from the hard drive.



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

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).

Replacing the Hard Drive

- 1. Follow the instructions in <u>Before You Begin</u>.
- 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 on the system board.
- 6. Slide and connect the hard-drive assembly to the system board connector.
- 7. Replace the screw that secures the hard-drive assembly to the system board.
- 8. Turn over the system board assembly.
- 9. Follow the instruction from step 7 to step 21 in Replacing the System Board.

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.

Middle Cover

Dell™ Inspiron™ N3010 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 memory-module cover (see Removing the Memory-Module Cover).
- 4. Remove the memory module(s) (see Removing the Memory Module(s)).
- 5. Remove the keyboard (see Removing the Keyboard).
- 6. Remove the palm rest assembly (see Removing the Palm Rest Assembly).
- 7. Remove the display assembly (see Removing the Display Assembly)
- 8. Turn the computer over.
- 9. Remove the four screws that secure the middle cover to the computer base.



middle cover tabs (4)

10. Using a plastic scribe, push the middle cover tabs to release it from the computer base.

Replacing the Middle Cover

1. Follow the instructions in Before You Begin.

- 2. Align the tabs on the middle cover with the slots on the computer base and snap the middle cover into place.
- 3. Turn over the computer and replace the four 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 assembly (see Replacing the Palm Rest Assembly).
- 6. Replace the keyboard (see Replacing the Keyboard).
- 7. Replace the memory module(s) (see Replacing the Memory Module(s)).
- 8. Replace the memory-module cover (see Replacing the Memory-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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Keyboard

Dell™ Inspiron™ N3010 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.

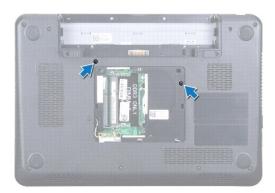
CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

△ 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 <u>Removing the Battery</u>) 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 memory-module cover (see Removing the Memory-Module Cover).
- 4. Remove the memory module(s) (see Removing the Memory Module(s)).
- 5. Remove the two screws that secure the keyboard to the computer base.



- 6. Turn the computer over.
- 7. Press the keyboard and slide it towards the bottom as far as possible.
- 8. 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.

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

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



- 1 plastic scribe 2 keyboard
 - 9. Ease the keyboard up and slide the five tabs at the bottom of the keyboard out of the slots on the palm rest.
- 10. Without pulling hard on the keyboard, hold it towards the display.
- 11. Lift the connector latch and pull the pull-tab to disconnect the keyboard cable from the connector on the system board.



1	keyboard cable	2	connector latch
3	tabs (5)		

12. Lift the keyboard off the palm rest assembly.

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 five tabs at the bottom of the keyboard into the slots on the palm rest.
- 4. Gently press around the edges of the keyboard to secure the keyboard under the tabs on the palm rest and slide the keyboard upwards.
- 5. Turn the computer over and replace the two screws that secure the keyboard to the computer base.
- 6. Replace the memory module(s) (see Replacing the Memory Module(s)).
- 7. Replace the memory-module cover (see $\underline{\text{Replacing the Memory-Module Cover}}).$
- 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.

Memory Module(s) Dell™ Inspiron™ N3010 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: 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 <u>Removing the Battery</u>) 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 for information on the type of memory supported by your computer.

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

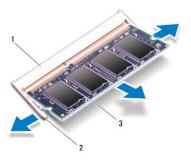
Your computer has two user-accessible SODIMM connectors that can be accessed from the bottom of the computer.

Removing the Memory Module(s)

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



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

5. Remove the memory module from the memory-module connector.

Replacing the Memory Module(s)

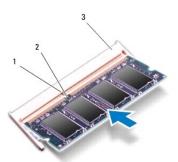
1. Follow the instructions in Before You Begin.



NOTE: If you need to install memory modules in two connectors, install a memory module in the lower connector before you install a memory module in the upper connector.

- 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.





1	tab	2	notch
3	memory-module connector		

- 4. Replace the memory-module cover (see Replacing the Memory-Module Cover).
- 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.

6. Turn on the computer.

As the computer boots, it detects the additional memory and automatically updates the system configuration information.

To confirm the amount of memory installed in the computer:

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

Wireless Mini-Card

Dell™ Inspiron™ N3010 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: 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 <u>Removing the Battery</u>) before working inside the computer.



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

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

Your computer supports one Mini-Card slot:

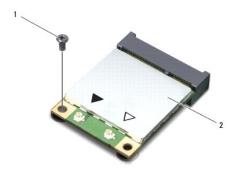
1 One half Mini-Card slot — for WLAN



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.

Removing the Mini-Card

- 1. Follow the instructions in Before You Begin.
- 2. Follow the instructions from step 2 to step 16 in Removing the System Board.
- 3. Remove the screw that secures the Mini-Card to the system board.



I I SCI	rew	2	Mini-Card
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4. Lift the Mini-Card out of the connector on the system board.



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

Replacing the Mini-Card

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

AUTION: 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.

- 3. Insert the Mini-Card connector at a 45-degree angle into the connector on the system board.
- 4. Press the other end of the Mini-Card down into the slot on the system board and replace the screw that secures the Mini-Card to the system board.
- 5. Turn the system board over.
- 6. Follow the instructions from step 7 to step 21 in Replacing the System Board.
- 7. 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.

card supported by your computer.		
Connectors on the Mini-Card	Antenna Cable Color Scheme	
WLAN (2 antenna cables)		
Main WLAN (white triangle)	white	
Auxiliary WLAN (black triangle)	black	

△ 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.

8. Install the drivers and utilities for your computer, as required.

-∞.

NOTE: If you are installing a communication card from a source other than Dell, you must install the appropriate drivers and utilities.

Palm Rest Assembly

Dell™ Inspiron™ N3010 Service Manual

- Removing the Palm Rest Assembly
- Replacing the Palm Rest Assembly



MARNING: 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 Assembly

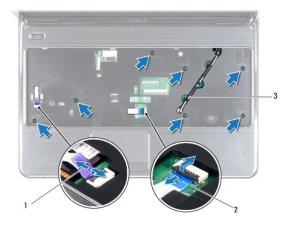
- 1. Follow the instructions in Before You Begin.
- 2. Remove the battery (see Removing the Battery).
- 3. Remove the memory-module cover (see Removing the Memory-Module Cover).
- 4. Remove the memory module(s) (see Removing the Memory Module(s)).
- 5. Disconnect the antenna cables from the connectors on the Mini-card.
- 6. Remove the seven screws that secure the palm rest assembly to the computer base.



- antenna cables (2)
- 7. Remove the keyboard (see Removing the Keyboard).

A CAUTION: To avoid damage to the connectors, lift the connector latch and then remove the cables.

- 8. Lift the connector latch and pull the pull-tab to disconnect the touch pad cable and power button board cable from the connectors on the system board.
- 9. Remove the seven screws that secure the palm rest assembly to the computer base.



- 1 power button board cable 2 touch pad cable 3 antenna cables (2)
- 10. Gently pull the antenna cables up from the bottom of the computer through the slot on the palm rest assembly.
- 11. Note the routing of the Mini-Card antenna cables and remove them from the routing guides on the palm rest assembly.
- 12. Using a plastic scribe carefully pry out the palm rest assembly along the rear edge and then ease the palm rest assembly from the computer base.



1	palm rest assembly	2	antenna cables (2)
3	plastic scribe		

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

13. Lift the palm rest assembly off the computer base.

Replacing the Palm Rest Assembly

- 1. Follow the instructions in Before You Begin.
- 2. Align the palm rest assembly on the computer base and gently snap the palm rest assembly into place.
- 3. Route the Mini-Card antenna cables through the routing guides on the palm rest assembly.
- 4. Slide the antenna cables through the slot on the palm rest assembly to the computer base.
- 5. Replace the seven screws that secure the palm rest assembly to the computer base.
- 6. Slide the touch pad cable and power button board cable into their connectors on the system board, and press down on the connector latches to secure the cables.

- 7. Replace the keyboard (see Replacing the Keyboard).
- 8. Turn the computer over and replace the seven screws that secure the palm rest assembly to the computer base.
- 9. Connect the antenna cables to the connectors on the Mini-card.
- 10. Replace the memory module(s) (see Replacing the Memory Module(s)).
- 11. Replace the memory-module cover (see Replacing the Memory-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.

Power Button Board

Dell™ Inspiron™ N3010 Service Manual

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



MARNING: 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.

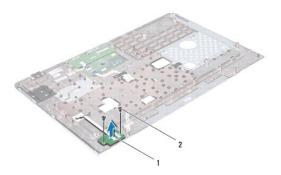
CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

△ 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.

A 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 memory-module cover (see Removing the Memory-Module Cover).
- 4. Remove the memory module(s) (see Removing the Memory Module(s)).
- 5. Remove the keyboard (see Removing the Keyboard).
- 6. Remove the palm rest assembly (see Removing the Palm Rest Assembly).
- 7. Turn the palm rest assembly over and remove the two screws that secure the power button board to the palm rest assembly.



1 power button board	2	screws (2)
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8. Lift the power button board off the palm rest assembly.

Replacing the Power Button Board

- 1. Follow the instructions in Before You Begin.
- 2. Place the power button board on the palm rest assembly and replace the two screws that secure the power button board to the palm rest assembly.
- 3. Turn the palm rest assembly over.
- 4. Replace the palm rest assembly (see Replacing the Palm Rest Assembly).

- 5. Replace the keyboard (see Replacing the Keyboard).
- 6. Replace the memory module(s) (see Replacing the Memory Module(s)).
- 7. Replace the memory-module cover (see Replacing the Memory-Module Cover).
- 8. Replace the battery (see Replacing the Battery).

A 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.

Speakers

Dell™ Inspiron™ N3010 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: 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).

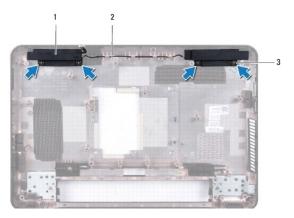
△ CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.



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

Removing the Speakers

- 1. Follow the instructions in <u>Before You Begin</u>.
- 2. Follow the instructions from step 2 to step 15 in Removing the System Board



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

- 3. Remove the four screws (two on each speaker) that secure the speakers to the computer base.
- 4. Note the routing of the speaker cable and remove the speakers and the cable from the computer base.

Replacing the Speakers

- 1. Follow the instructions in Before You Begin.
- 2. Place the speakers on the computer base and route the speaker cables in the routing guides.
- 3. Replace the four screws (two on each speaker) that secure the speakers to the computer base.
- 4. Follow the instructions from step 7 to step 21 in Replacing the System Board.

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.

System Board

Dell™ Inspiron™ N3010 Service Manual

- Removing 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: 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).

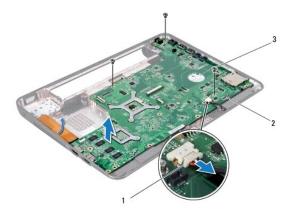
△ CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

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

 \triangle CAUTION: Handle components by their edges, and avoid touching pins and contacts.

Removing the System Board

- 1. Follow the instructions in Before You Begin.
- 2. Remove any installed card or blank from the 7-in-1 Media Card Reader slot.
- 3. Remove the battery (see Removing the Battery).
- 4. Remove the memory-module cover (see Removing the Memory-Module Cover).
- 5. Remove the memory module(s) (see Removing the Memory Module(s)).
- 6. Remove the keyboard (see Removing the Keyboard).
- 7. Remove the palm rest assembly (see Removing the Palm Rest Assembly).
- 8. Remove the $Bluetooth^{\textcircled{R}}$ card (see $\underline{Removing \ the \ Bluetooth \ Module}$).
- 9. Remove the display assembly (see Removing the Display Assembly).
- 10. Remove the processor heat sink fan (see Removing the Processor Heat Sink Fan).
- 11. Remove the middle cover (see Removing the Middle Cover).
- 12. Remove the VGA connector board (see Removing the VGA Connector Board).
- 13. Disconnect the speaker cable from the connector on the system board.



1	speaker cable connector	2	system board assembly
3	screws (3)		

- 14. Remove the three screws that secure the system board assembly to the computer base.
- 15. Carefully ease the connectors on the system board assembly out of the slots in the computer base, and lift the system board assembly out of the computer base.
- 16. Turn the system board assembly over.
- 17. Remove the hard-drive assembly (see Removing the Hard Drive).
- 18. Remove the processor heat sink (see Removing the Processor Heat Sink).
- 19. Remove the processor module (see Removing the Processor Module).
- 20. Remove the coin-cell battery (see Removing the Coin-Cell Battery).
- 21. Remove the Mini-Card (see Removing the Mini-Card).

Replacing the System Board

- 1. Follow the instructions in Before You Begin.
- 2. Replace the Mini-Card (see Replacing the Mini-Card).
- 3. Replace the coin-cell battery (see Replacing the Coin-Cell Battery).
- 4. Replace the processor module (see Replacing the Processor Module).
- 5. Replace the processor heat sink (see Replacing the Processor Heat Sink).
- 6. Replace the hard-drive assembly (see Replacing the Hard Drive).
- 7. Align the connectors on the system board assembly with the slots on the computer base and place it on the computer base.
- 8. Replace the three screws that secure the system board assembly to the computer base.
- 9. Connect the speaker cable to the connector on the system board.
- 10. Replace the VGA connector board (see Replacing the VGA Connector Board).
- 11. Replace the middle cover (see Replacing the Middle Cover).
- 12. Replace the processor heat sink fan (see Replacing the Processor Heat Sink Fan).
- 13. Replace the display assembly (see Replacing the Display Assembly).

- 14. Replace the Bluetooth® card (see Replacing the Bluetooth Module).
- 15. Replace the palm rest assembly (see Replacing the Palm Rest Assembly).
- 16. Replace the keyboard (see Replacing the Keyboard).
- 17. Replace the memory module(s) (see Replacing the Memory Module(s)).
- 18. Replace the memory-module cover (see $\underline{\text{Replacing the Memory-Module Cover}}$).
- 19. Replace the battery (see Replacing the Battery).
- 20. Replace any cards or blank that you removed from the 7-in-1 Media Card Reader slot.

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.

- 21. Turn on the computer.
 - MOTE: After you have replaced the system board, enter the computer Service Tag in the BIOS of the replacement system board.
- 22. 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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Dell™ Inspiron™ N3010 Service Manual

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

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

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VGA Connector Board

Dell™ Inspiron™ N3010 Service Manual

- Removing the VGA Connector Board
- Replacing the VGA Connector 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: 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.

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

Removing the VGA Connector Board

- 1. Follow the instructions in Before You Begin.
- 2. Remove the battery (see Removing the Battery).
- 3. Remove the memory-module cover (see Removing the Memory-Module Cover).
- 4. Remove the memory module(s) (see Removing the Memory Module(s)).
- 5. Remove the keyboard (see Removing the Keyboard).
- 6. Remove the palm rest assembly (see Removing the Palm Rest Assembly).
- 7. Remove the display assembly (see Removing the Display Assembly)
- 8. Remove the middle cover (see Removing the Middle Cover).
- 9. Lift the connector latch and pull the pull-tab to disconnect the VGA connector cable from the connector on the system board.
- 10. Remove the two screws that secure the VGA connector board to the computer base.



1	screws (2)	2	VGA connector board
3	VGA connector cable		

11. Lift the VGA connector board off the computer base.

Replacing the VGA Connector Board

1. Follow the instructions in Before You Begin.

- 2. Place the VGA connector board on the computer base and replace the two screws that secure the VGA connector board to the computer base.
- 3. Slide the VGA connector cable into the connector on the system board and press down on the connector latch to secure the cable.
- 4. Replace the middle cover (see Replacing the Middle Cover).
- 5. Replace the display assembly (see Replacing the Display Assembly).
- 6. Replace the palm rest assembly (see Replacing the Palm Rest Assembly).
- 7. Replace the keyboard (see Replacing the Keyboard).
- 8. Replace the memory module(s) (see Replacing the Memory Module(s)).
- 9. Replace the memory-module cover (see Replacing the Memory-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.