

Dell™ Inspiron™ M301Z/N301Z Service Manual

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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: P11S series
Regulatory type: P11S001; P11S002

May 2010 Rev. A00

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AC Adapter Connector

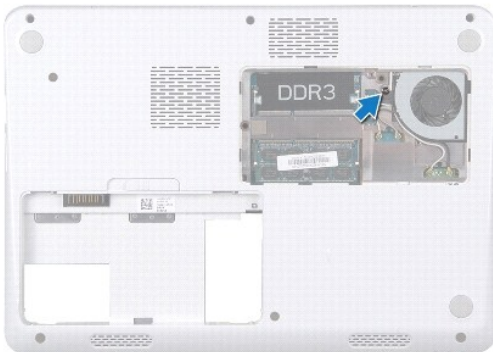
Dell™ Inspiron™ M301Z/N301Z Service Manual

- [Removing the AC Adapter Connector](#)
- [Replacing the AC Adapter Connector](#)

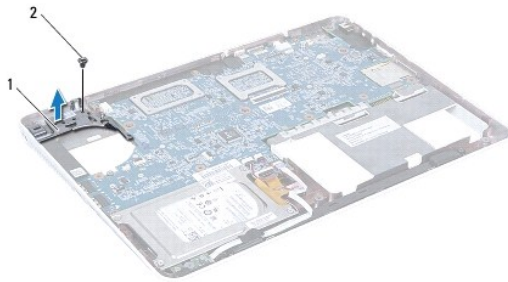
- ⚠ WARNING:** Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.
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- ⚠ CAUTION:**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

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 keyboard (see [Removing the Keyboard](#)).
5. Remove the palm rest (see [Removing the Palm Rest](#)).
6. Remove the display assembly (see [Removing the Display Assembly](#)).
7. Remove the processor fan (see [Removing the Processor Fan](#)).
8. Remove the middle cover (see [Removing the Middle Cover](#)).
9. Remove the screw that secures the left hinge-bracket to the computer base.

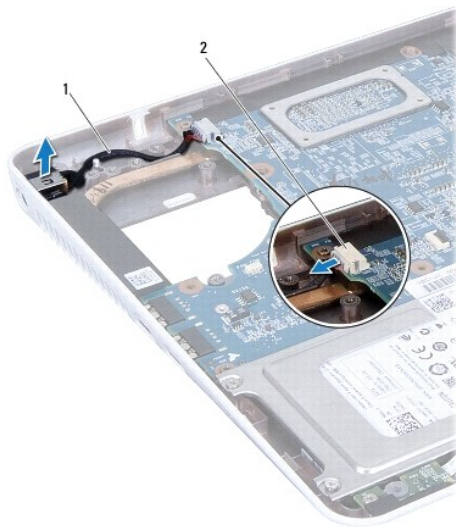


10. Turn the computer and remove the screw that secures the left hinge- bracket.
11. Lift the left hinge-bracket off the computer base.



1	left hinge-bracket	2	screw
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12. Disconnect the AC adapter connector cable from the connector on the system board.
13. Note the routing of the AC adapter connector cable and lift the AC adapter connector off the computer base.




1	AC adapter connector cable	2	system board connector
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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. Connect the AC adapter connector cable to the connector on the system board.
4. Place the left hinge-bracket over the AC adapter connector.
5. Replace the screw that secures the left hinge-bracket.
6. Replace the middle cover (see [Replacing the Middle Cover](#)).
7. Replace the processor fan (see [Replacing the Processor Fan](#)).

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. Turn the computer and replace the screw that secures the left hinge- bracket to the computer base.
12. Replace the module cover (see [Replacing the Module Cover](#)).
13. 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

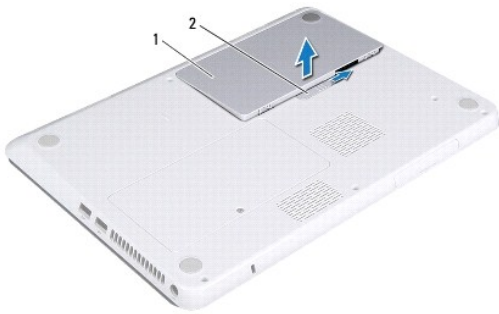
Dell™ Inspiron™ M301Z/N301Z Service Manual

- [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. Turn off the computer and turn it over.
3. Slide the battery release latch to the side.
4. Lift the battery out of the battery bay.



1	battery	2	battery release latch
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Replacing the Battery

- ⚠ **CAUTION:** To avoid damage to the computer, use only the battery designed for this particular Dell computer.
1. Follow the instructions in [Before You Begin](#).
 2. Place the battery in the battery bay and press down until it clicks into place.
-

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Before You Begin

Dell™ Inspiron™ M301Z/N301Z 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:

- 1 You have performed the steps in [Turning Off Your Computer](#) and [Before Working Inside Your Computer](#).
- 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 the reverse order.

Recommended Tools

The procedures in this document may require the following tools:

- 1 Phillips screwdriver
- 1 Small flat-blade screwdriver
- 1 Plastic scribe
- 1 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 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 computer, 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 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 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.

Internal Card With Bluetooth® Wireless Technology

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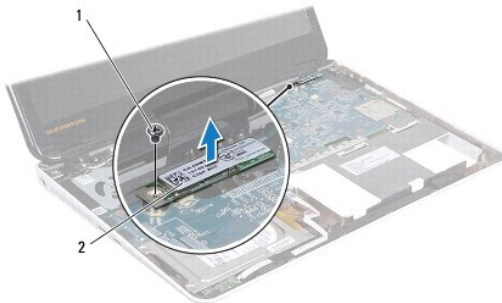
- [Removing the Bluetooth Card](#)
- [Replacing the Bluetooth Card](#)

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- ⚠ 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, it 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 keyboard (see [Removing the Keyboard](#)).
5. Remove the palm rest (see [Removing the Palm Rest](#)).
6. Remove the screw that secures the Bluetooth card to the system board.
7. Lift the Bluetooth card to disconnect it from the connector on the system board.




1	screw	2	Bluetooth card
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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 down to connect the Bluetooth card to the system board.
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 module cover (see [Replacing the Module Cover](#)).
7. 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

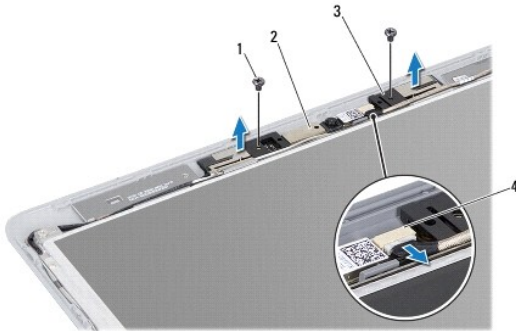
Dell™ Inspiron™ M301Z/N301Z Service Manual

- [Removing the Camera](#)
- [Replacing the Camera](#)

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- ⚠ CAUTION:** To help prevent damage to the system board, remove the main battery (see [Removing the Battery](#)) before working inside the computer.
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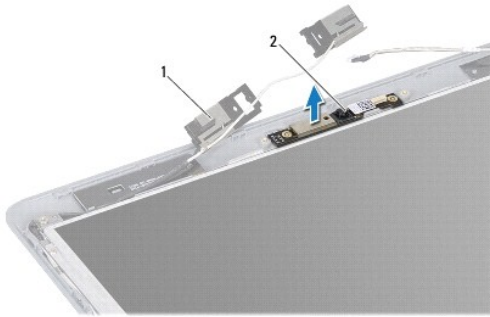
Removing the Camera

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 two screws that secure the WLAN antenna to the display cover.
5. Disconnect the camera cable from the connector on the camera module.
6. Lift the WLAN antenna off the display panel.



1	screws (2)	2	camera module
3	WLAN antenna	4	camera cable connector

7. Lift the camera module off the display cover.



1	WLAN antenna	2	camera module
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Replacing the Camera

1. Follow the instructions in [Before You Begin](#).
2. Place the camera module on the display cover using the alignment posts.
3. Press down on the camera module to secure it to the display cover.
4. Place the WLAN antenna on the camera module and replace the two screws that secure the WLAN antenna to the display cover.
5. Connect the camera cable to the connector on the camera.
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.

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Coin-Cell Battery

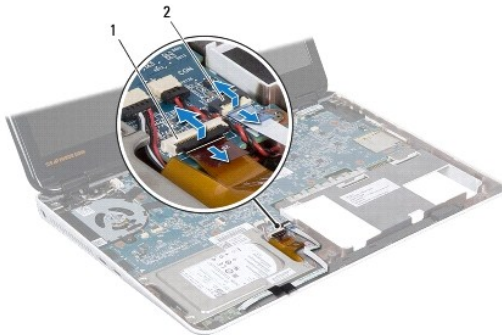
Dell™ Inspiron™ M301Z/N301Z Service Manual

- [Removing the Coin-Cell Battery](#)
- [Replacing the Coin-Cell Battery](#)

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-

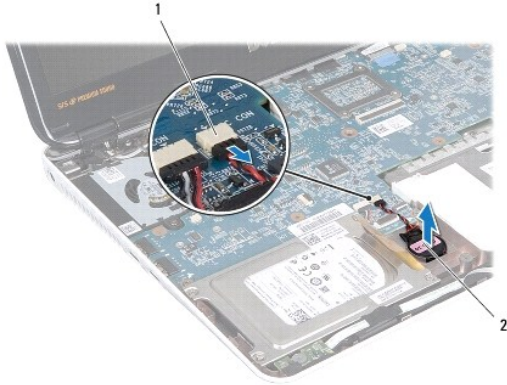
Removing the Coin-Cell Battery

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. Remove the keyboard (see [Removing the Keyboard](#)).
5. Remove the palm rest (see [Removing the Palm Rest](#)).
6. Lift the connector latches and pull the pull-tabs to disconnect the hard-drive cable and the status light board cable from their connectors on the system board.



1	hard-drive cable connector	2	status light board cable connector
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7. Disconnect the coin-cell battery cable from the connector on the system board.
8. The coin-cell battery is glued to the computer base. Using a plastic scribe gently pry the coin-cell battery out of the battery socket on the computer base.



1	system board connector	2	coin-cell battery
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Replacing the Coin-Cell Battery

1. Follow the instructions in [Before You Begin](#).
2. With the adhesive side of the coin-cell battery facing down, press the coin-cell battery into the socket on the computer base.
3. Connect the coin-cell battery cable to the connector on the system board.
4. Slide the hard-drive cable and the status light board cable into their connectors on the system board. Press down on the connector latches to secure the cables.
5. Replace the palm rest (see [Replacing the Palm Rest](#)).
6. Replace the keyboard (see [Replacing the Keyboard](#)).
7. Replace the module cover (see [Replacing the 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.

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Module Cover

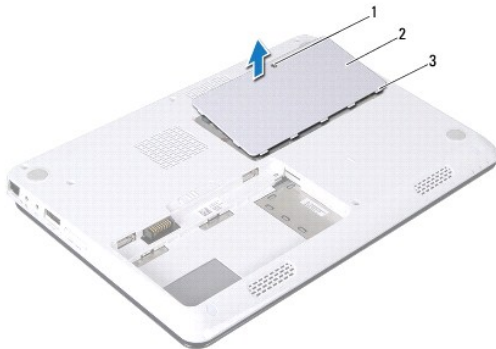
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- [Removing the Module Cover](#)
- [Replacing the Module Cover](#)

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- ⚠ 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 captive screw that secures the module cover to the computer base.
4. Lift the module cover off the computer base.



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

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 captive screw that secures 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.
-

Processor Heat Sink Assembly

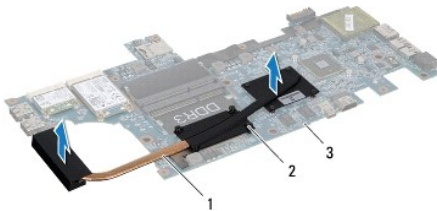
Dell™ Inspiron™ M301Z/N301Z Service Manual

- [Removing the Processor Heat Sink Assembly](#)
- [Replacing the Processor Heat Sink 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.
- ⚠ WARNING:** If you remove the processor heat sink assembly from the computer when the heat sink is hot, do not touch the metal housing of the processor heat sink assembly.
- ⚠ 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 Assembly

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



1	processor heat sink assembly	2	captive screws (8)
3	system board		

Replacing the Processor Heat Sink Assembly

- 🔧 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 assembly and are ready to replace it.

1. Follow the instructions in [Before You Begin](#).
2. Align the eight captive screws on the processor heat sink assembly with the screw holes on the system board and tighten the screws in sequential order (indicated on the processor heat sink).
3. Follow the instructions from [step 4](#) to [step 20](#) 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

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- [Hinge Caps](#)
- [Display Assembly](#)
- [Display Bezel](#)
- [Display Panel](#)

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

Hinge Caps

Removing the Hinge Caps

- ⚠ CAUTION:** The hinge caps are extremely fragile. Be careful when removing the hinge caps to prevent damaging them.

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 memory module(s) (see [Removing the Memory Module\(s\)](#)).
5. Remove the keyboard (see [Removing the Keyboard](#)).
6. Remove the palm rest (see [Removing the Palm Rest](#)).
7. Remove the Bluetooth card (see [Removing the Bluetooth Card](#)).
8. Using a plastic scribe, release the hinge caps from the display assembly.



1	plastic scribe	2	hinge caps (2)
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Replacing the Hinge Caps

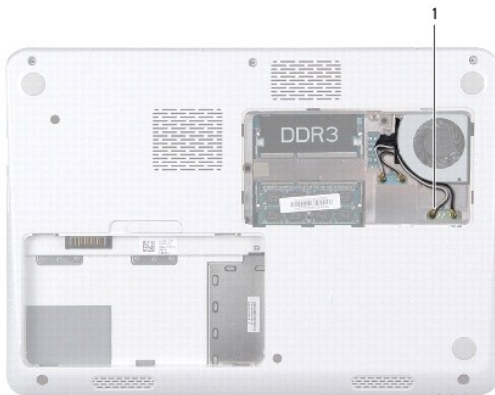
1. Follow the instructions in [Before You Begin](#).
2. Place and snap the hinge caps over the display hinges.
3. Replace the Bluetooth card (see [Replacing the Bluetooth Card](#)).
4. Replace the palm rest (see [Replacing the Palm Rest](#)).
5. Replace the keyboard (see [Replacing the Keyboard](#)).
6. Replace the memory module(s) (see [Replacing the Memory Module\(s\)](#)).
7. Replace the module cover (see [Replacing the 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.

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 module cover (see [Removing the 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 (see [Removing the Palm Rest](#)).
7. Turn the computer over.
8. Disconnect the Mini-Card antenna cables from the computer base.



1	Mini-Card antenna cables (4)
---	------------------------------

9. Turn the computer over and open the display as far as possible.
10. Remove the Bluetooth card (see [Removing the Bluetooth Card](#)).

11. Remove the hinge caps (see [Removing the Hinge Caps](#)).
12. Disconnect the display cable and the camera cable from their connectors on the system board.
13. Make a note of the routing of the Mini-Card antenna cables and remove the cables from the routing guides.
14. Remove the six screws (three on each side) that secure the display assembly to the computer base.
15. Lift and remove the display assembly off the computer base.



1	display assembly	2	screws (6)
3	camera cable connector	4	display cable connector
5	Mini-Card antenna cables		

Replacing the Display Assembly

1. Follow the instructions in [Before You Begin](#).
2. Place the display assembly in position and replace the six screws (three on each side) that secure the display assembly to the computer base.
3. Route the Mini-Card antenna cables through the slot on the computer base.
4. Replace the hinge caps (see [Replacing the Hinge Caps](#)).
5. Connect the display cable and the camera cable to their connectors on the system board.
6. Replace the Bluetooth card (see [Replacing the Bluetooth Card](#)).
7. Replace the palm rest (see [Replacing the Palm Rest](#)).
8. Replace the keyboard (see [Replacing the Keyboard](#)).
9. Turn the computer over and connect the antenna cables to the Mini- Card(s) (see [step 7](#) of [Replacing the Mini-Card\(s\)](#)).
10. Replace the memory module(s) (see [Replacing the Memory Module\(s\)](#)).
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.

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 edges of the display bezel to remove it from the display assembly.



1	display bezel
---	---------------

Replacing the Display Bezel

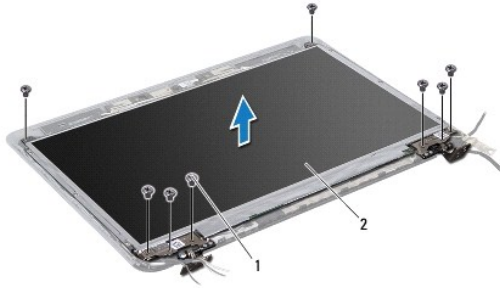
1. Follow the instructions in [Before You Begin](#).
2. Align the display bezel with the display panel, and snap the display bezel into place. Ensure that the display cable and the camera cable route through the hinge portion of the bezel.
3. Replace the display assembly (see [Replacing the Display Assembly](#)).

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

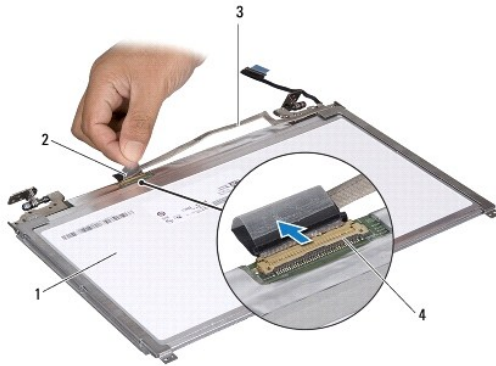
Removing the Display Panel

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.



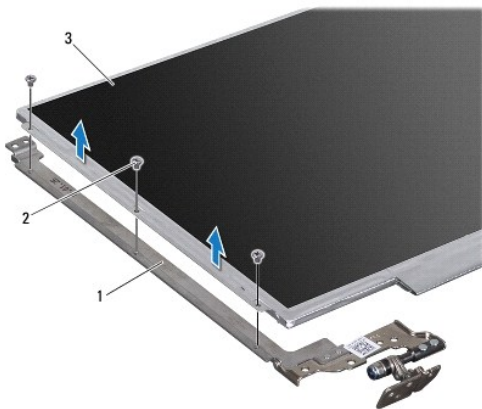
1	screws (8)	2	display panel
---	------------	---	---------------

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	back of the display panel	2	tape
3	display cable	4	display board connector


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



1	display panel brackets (2)	2	screws (6)
3	display panel		

Replacing the Display Panel

1. Follow the instructions in [Before You Begin](#).
2. Replace the six screws (three on each side) that secure the display panel brackets to the display panel.
3. Connect the display cable to the display board connector on the back of the display panel 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.

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Processor Fan

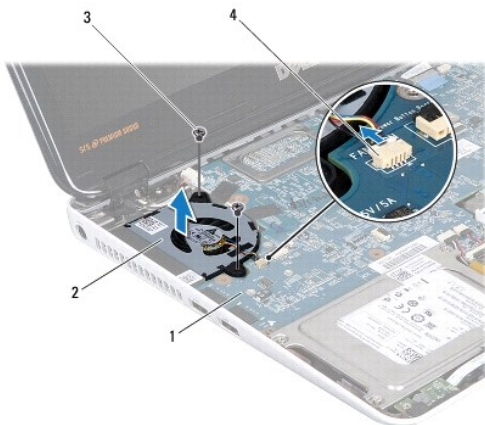
Dell™ Inspiron™ M301Z/N301Z Service Manual

- [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. Remove the keyboard (see [Removing the Keyboard](#)).
5. Remove the palm rest (see [Removing the Palm Rest](#)).
6. Disconnect the processor fan cable from the connector on the system board.
7. Remove the two screws that secure the processor fan to the computer base.
8. Lift the processor fan off the computer base.




1	system board	2	processor fan
3	screws (2)	4	system board connector

Replacing the Processor Fan

1. Follow the instructions in [Before You Begin](#).
2. Place the processor fan on the computer base.

3. Replace the two screws that secure the processor fan to the system board.
4. Connect the processor fan 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 module cover (see [Replacing the 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.

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Hard Drive Assembly

Dell™ Inspiron™ M301Z/N301Z Service Manual

- [Removing the Hard Drive Assembly](#)
- [Replacing the Hard Drive Assembly](#)

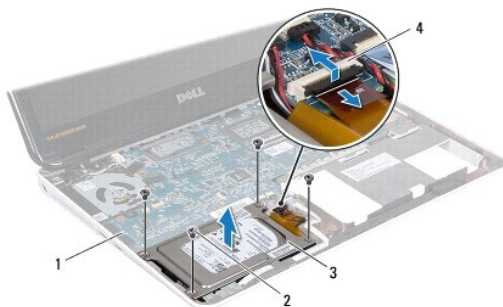
- ⚠ **WARNING:** Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.
- ⚠ **WARNING:** If you remove the hard drive from the computer 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 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 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:** 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 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. Remove the keyboard (see [Removing the Keyboard](#)).
5. Remove the palm rest (see [Removing the Palm Rest](#)).
6. Remove the four screws that secure the hard-drive assembly to the computer base.
7. Lift the connector latch and pull the pull-tab to disconnect the hard-drive cable from the connector on the system board.

⚠ **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).

8. Lift the hard-drive assembly out of the computer base.



1	system board	2	screws (4)
3	hard-drive assembly	4	hard-drive cable connector

-
9. Remove the four screws that secure the hard-drive bracket to the hard drive.
 10. Lift the hard drive out of the hard-drive bracket.
 11. Pull the interposer to disconnect it from the hard drive.



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

Replacing the Hard Drive Assembly

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. Connect the interposer to the hard drive.
4. Place the hard drive in the hard-drive bracket.
5. Replace the four screws the hard-drive bracket to the hard drive.
6. Place the hard-drive assembly in the computer base.
7. Slide the hard-drive cable into the connector on the system board and press down on the latch to secure the hard-drive cable.
8. Replace the four screws that secure the hard-drive assembly to the computer base.
9. Replace the palm rest (see [Replacing the Palm Rest](#)).
10. Replace the keyboard (see [Replacing the Keyboard](#)).
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 operating system for your computer, as needed. See "Restoring Your Operating System" in the *Setup Guide*.
14. Install the drivers and utilities for your computer, as needed. For more information, see the *Dell Technology Guide*.

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Middle Cover

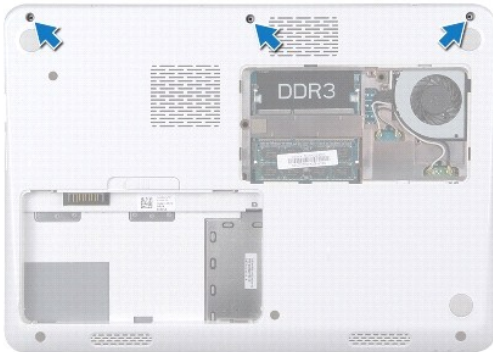
Dell™ Inspiron™ M301Z/N301Z Service Manual

- [Removing the Middle Cover](#)
- [Replacing the Middle Cover](#)

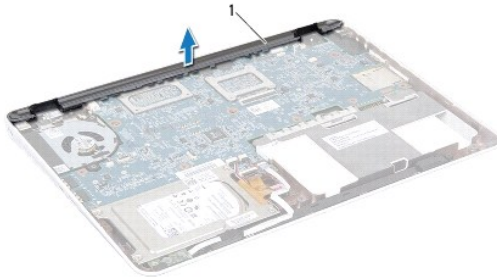
- ⚠ WARNING:** Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.
- ⚠ CAUTION:** To avoid electrostatic discharge, ground yourself 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 module cover (see [Removing the Module Cover](#)).
4. Remove the three screws that secure the middle cover to the computer base.



5. Turn the computer over and open the display as far as possible.
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. Release the four tabs that secure the middle cover to the computer base.
10. Lift the middle cover away from 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. Replace the display assembly (see [Replacing the Display Assembly](#)).
4. Replace the palm rest (see [Replacing the Palm Rest](#)).
5. Replace the keyboard (see [Replacing the Keyboard](#)).
6. Turn the computer over.
7. Replace the three screws that secure the middle cover 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.

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Keyboard

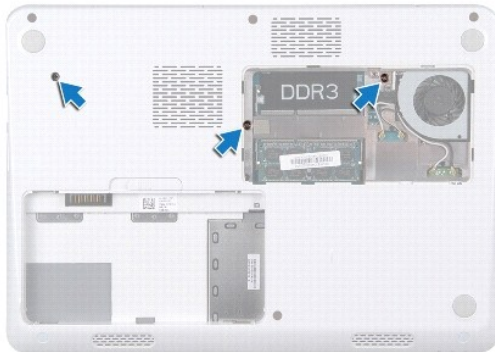
Dell™ Inspiron™ M301Z/N301Z Service Manual

- [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.
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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 Keyboard

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 three screws that secure the keyboard to the computer base.



5. 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.
 - ⚠ **CAUTION:** Be extremely careful when removing and handling the keyboard. Failure to do so could result in scratching the display panel.
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. Carefully lift the keyboard and slide the keyboard tabs out of the slots on the palm rest.
8. Turn the keyboard over and place it on the palm rest.
9. Lift the connector latch and disconnect the keyboard cable from the connector on the system board.
10. Lift the keyboard off the palm rest.



1	keyboard cable connector	2	keyboard
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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 keyboard cable.
3. Align the tabs at the bottom of the keyboard with the slots on the palm rest and lower the keyboard into place.
4. Gently press around the edges of the keyboard to secure the keyboard under the tabs on the palm rest.
5. Turn the computer over and replace the three screws that secure the keyboard to the computer base.
6. Replace the module cover (see [Replacing the Module Cover](#)).
7. 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

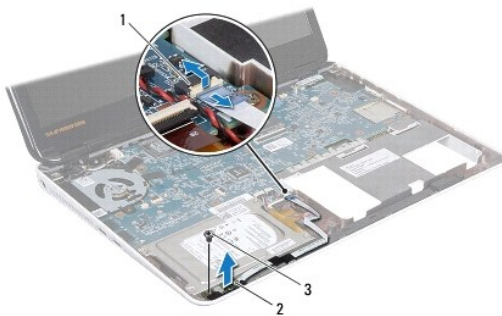
Dell™ Inspiron™ M301Z/N301Z Service Manual

- [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 module cover (see [Removing the Module Cover](#)).
4. Remove the keyboard (see [Removing the Keyboard](#)).
5. Remove the palm rest (see [Removing the Palm Rest](#)).
6. Lift the connector latch and pull the pull-tab to disconnect the status light board cable from the connector on the system board.
7. Peel the status light board cable that is glued on the speaker.
8. Remove the screw that secures the status light board to the system board.
9. Lift the status light board along with the black sponge off the computer base.




1	status light board cable connector	2	status light board
3	screw		

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. Press the adhesive side of the status light board cable over the speaker.
6. Replace the palm rest (see [Replacing the Palm Rest](#)).
7. Replace the keyboard (see [Replacing the Keyboard](#)).
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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Memory Module(s)

Dell™ Inspiron™ M301Z/N301Z 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 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.

You can increase your computer memory by installing memory modules on the system board. See "Specifications" in the *Setup Guide* that shipped with your computer or 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.

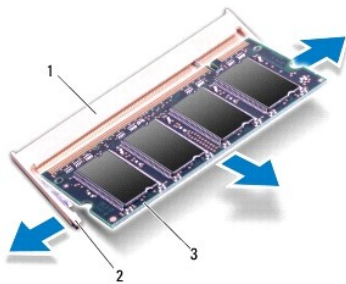
Your computer has two user-accessible SODIMM connectors that can be accessed from the bottom of your computer.

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.




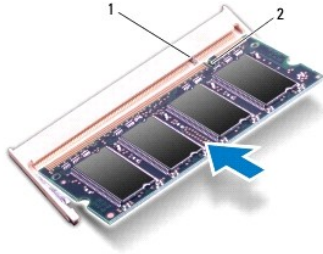
1	memory-module connector	2	securing clips (2)
3	memory module		

Replacing the Memory Module(s)

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

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 memory-module 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
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4. Replace the module cover (see [Replacing the Module Cover](#)).
5. Replace the battery (see [Replacing the Battery](#)). Connect the AC adapter to your computer and an electrical outlet.
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(s)

Dell™ Inspiron™ M301Z/N301Z Service Manual

- [Removing the Mini-Card\(s\)](#)
- [Replacing the Mini-Card\(s\)](#)

- ⚠ **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 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.

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

Your computer has one full Mini-Card slot and one half Mini-Card slot:

- 1 One full Mini-Card slot — supports Mobile broadband or Wireless Wide Area Network (WWAN) or TV tuner module
- 1 One half Mini-Card slot — supports Wireless Local Area Network (WLAN), or Worldwide Interoperability for Microwave Access (WiMax)

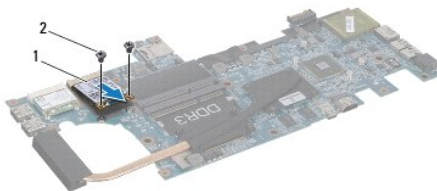
🔧 **NOTE:** Depending on the configuration of the computer when it was sold, the Mini-Card slots may or may not have Mini-Cards installed in them.

Removing the Mini-Card(s)

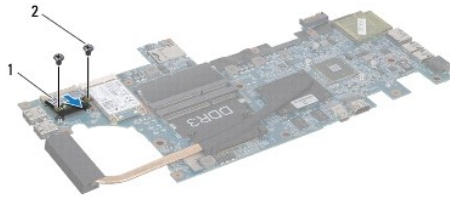
1. Follow the instructions in [Before You Begin](#).
2. Remove the battery (see [Removing the Battery](#)).
3. Follow the instructions from [step 3](#) to [step 18](#) in [Removing the System Board](#).
4. Remove the four screws (two on each Mini-Card) that secure the full Mini-Card and the half Mini-Card to the system board connector.

🔧 **NOTE:** Your computer can only support either one WWAN Mini-Card or one TV Tuner card in the full Mini-Card slot at a time.

5. Lift the Mini-Card(s) out of the system board connector.



1	full Mini-Card	2	screws (2)
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1	half Mini-Card	2	screws (2)
---	----------------	---	------------

Replacing the Mini-Card(s)

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(s) connector at a 45-degree angle into the appropriate system board connector. For example, the WLAN card connector is labeled **WLAN** and so on.

4. Press the other end of the Mini-Card(s) down into the slot on the system board and replace the screws (two on each Mini-Card) that secure the Mini-Card(s) to the system board.

5. Turn the system board over.

6. Follow the instructions from [step 5](#) to [step 18](#) 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 each Mini-Card supported by your computer.

Connectors on the Mini-Card	Antenna Cable Color Scheme
WWAN (2 antenna cables)	
Main WWAN (white triangle)	white with gray stripe
Auxiliary WWAN (black triangle)	black with gray stripe
WLAN (2 antenna cables)	
Main WLAN (white triangle)	white
Auxiliary WLAN (black triangle)	black
TV tuner (1 antenna cable)	black

8. Secure the unused antenna cables in the protective mylar sleeve.

9. Replace the module cover (see [Replacing the Module Cover](#)).

10. Replace the battery (see [Replacing the Battery](#)).

11. 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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Palm Rest

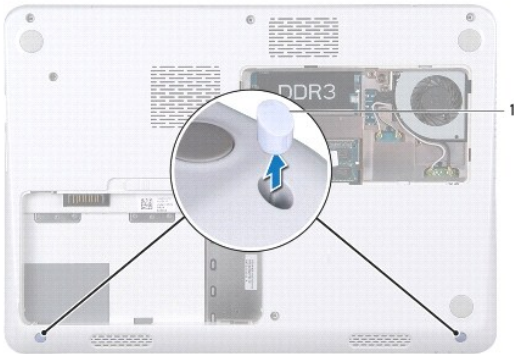
Dell™ Inspiron™ M301Z/N301Z Service Manual

- [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.
-

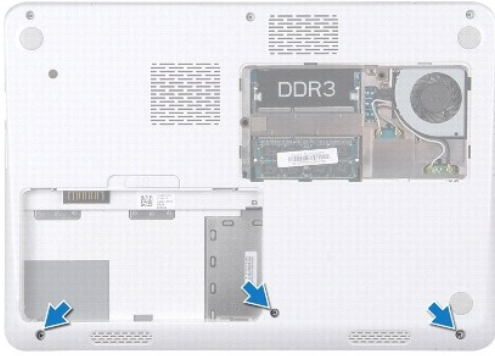
Removing the Palm Rest

1. Follow the instructions in [Before You Begin](#).
2. Remove the battery (see [Removing the Battery](#)).
3. Remove the module cover (see [Removing the Module Cover](#)).
4. Remove the keyboard (see [Removing the Keyboard](#)).
5. Turn the computer over.
6. Using a plastic scribe, remove the two rubber caps that cover the palm rest screws on the computer base.

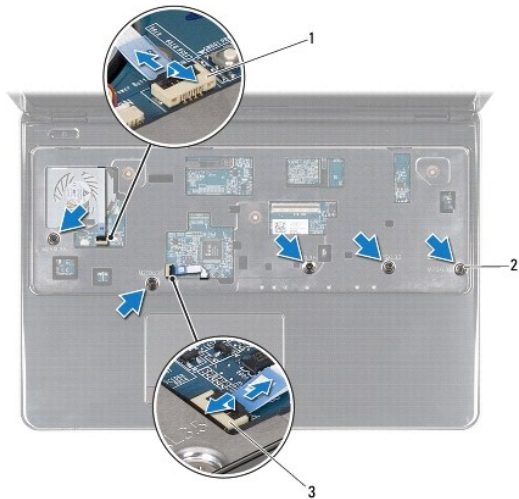


1	rubber caps (2)
---	-----------------

7. Remove the three screws that secure the palm rest to the computer base.



8. Turn the computer over and open the display as far as possible.
9. Remove the five screws that secure the palm rest to the system board.
10. Lift the connector latch and pull the pull-tab to disconnect the touch pad cable and the power button board cable from their connectors on the system board.



1	power button board cable connector	2	screws (5)
3	touch pad cable connector		

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

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



1	palm rest	2	plastic scribe
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Replacing the Palm Rest

1. Follow the instructions in [Before You Begin](#).
2. Align the palm rest on the computer base and gently snap the palm rest into place.
3. Slide the touch pad cable and the power button cable into their connectors on the system board and press down on the connector latch to secure the cables.
4. Replace the five screws that secure the palm rest to the system board.
5. Replace the keyboard (see [Replacing the Keyboard](#)).
6. Turn the computer over and replace the three screws that secure the palm rest to the computer base.
7. Replace the two rubber caps that cover the palm rest screws on 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.

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Power Button Board

Dell™ Inspiron™ M301Z/N301Z Service Manual

- [Removing the Power Button Board](#)
- [Replacing the Power Button Board](#)

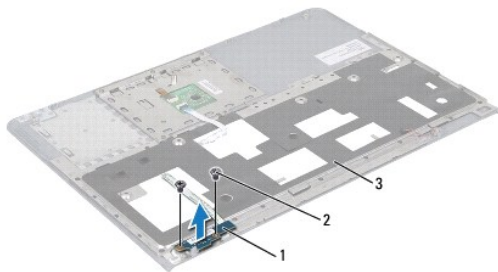
- ⚠ WARNING:** Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.
- ⚠ CAUTION:** Only a certified service technician should perform 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.
- ⚠ 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. Remove the keyboard (see [Removing the Keyboard](#)).
5. Remove the palm rest (see [Removing the Palm Rest](#)).
6. Turn the palm rest over.
7. Remove the two screws that secure the power button board to the palm rest.

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

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




1	power button board	2	screws (2)
3	palm rest		

Replacing the Power Button Board

1. Follow the instructions in [Before You Begin](#).
2. Place the power button board on the palm rest and replace the two screws that secure the power button board to the palm rest.
3. Turn the palm rest over.

4. Replace the palm rest (see [Replacing the Palm Rest](#)).
5. Replace the keyboard (see [Replacing the Keyboard](#)).
6. Replace the module cover (see [Replacing the Module Cover](#)).
7. 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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Speaker

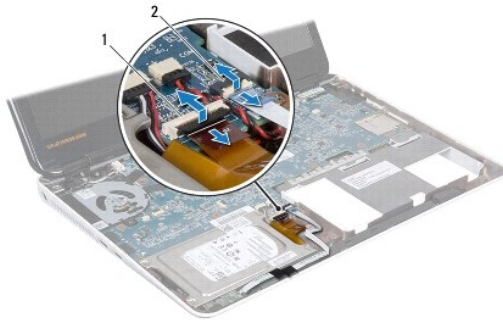
Dell™ Inspiron™ M301Z/N301Z Service Manual

- [Removing the Speaker](#)
- [Replacing the Speaker](#)

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-

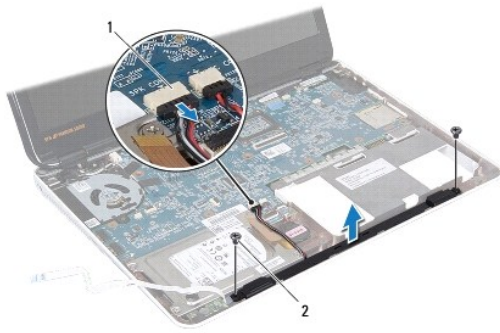
Removing the Speaker

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 keyboard (see [Removing the Keyboard](#)).
5. Remove the palm rest (see [Removing the Palm Rest](#)).
6. Lift the connector latches and pull the pull-tabs to disconnect the hard-drive cable and the status light board cable from their connectors on the system board.
7. Peel the status light board cable that is glued on the speaker.



1	hard-drive cable connector	2	status light board cable connector
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8. Disconnect the speaker cable from the connector on the system board.
9. Remove the two screws that secure the speaker to the computer base.



1	speaker cable connector	2	screws (2)
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10. Note the routing of the speaker cable and remove the speaker from the computer base.
-

Replacing the Speaker

1. Follow the instructions in [Before You Begin](#).
2. Place the speaker in the computer base.
3. Replace the two screws that secure the speaker to the computer base.
4. Connect the speaker cable to the connector on the system board.
5. Slide the hard-drive cable and the status light board cable into their connectors on the system board. Press down on the connector latches to secure the cables.
6. Press the adhesive side of the status light board cable over the speaker.
7. Replace the palm rest (see [Replacing the Palm Rest](#)).
8. Replace the keyboard (see [Replacing the Keyboard](#)).
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

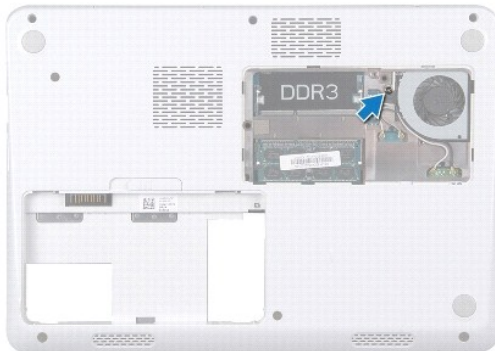
Dell™ Inspiron™ M301Z/N301Z Service Manual

- [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.
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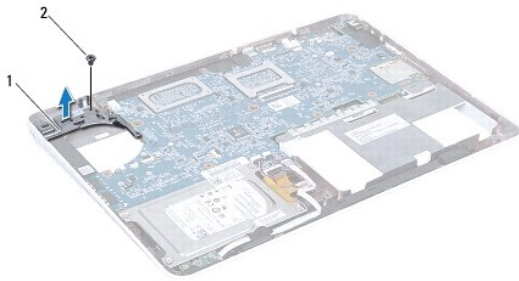
Removing the System Board

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. Remove the memory module(s) (see [Removing the Memory Module\(s\)](#)).
5. Remove the keyboard (see [Removing the Keyboard](#)).
6. Remove the palm rest (see [Removing the Palm Rest](#)).
7. Follow the instructions from [step 6](#) to [step 8](#) in "[Removing the Hard Drive Assembly](#)".
8. Remove the screw that secures the left hinge-bracket to the computer base.



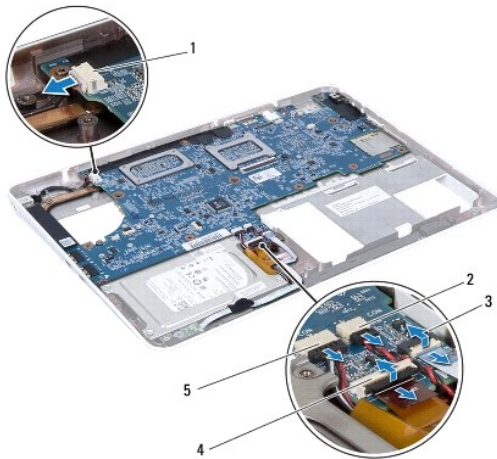
9. Remove the Bluetooth® card (see [Removing the Bluetooth Card](#)).
10. Remove the processor fan (see [Removing the Processor Fan](#)).
11. Remove the display assembly (see [Removing the Display Assembly](#)).
12. Remove the middle cover (see [Removing the Middle Cover](#)).
13. Remove the screw that secures the left hinge-bracket.

14. Lift the left hinge-bracket off the computer base.



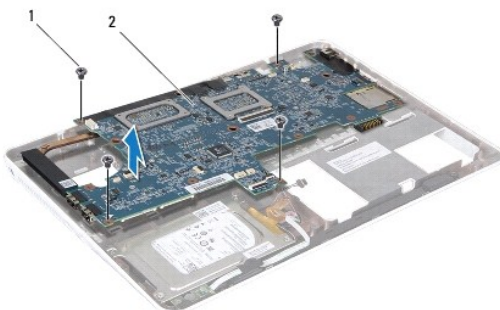
1	left hinge-bracket	2	screw
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15. Disconnect the coin-cell battery cable, speaker cable, status light board cable, and the AC adapter connector cable from their respective connectors on the system board.



1	AC adapter cable connector	2	coin-cell battery cable connector
3	status light board cable connector	4	hard-drive cable connector
5	speaker cable connector		

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




1	screws (4)	2	system board
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17. Carefully ease the connectors on the system board out of the slots in the computer, and lift the system board out of the computer.
 18. Turn the system board assembly over.
 19. Remove the Mini-Card(s) (see [Removing the Mini-Card\(s\)](#)).
 20. Remove the processor heat sink assembly (see [Removing the Processor Heat Sink Assembly](#)).
-

Replacing the System Board

1. Follow the instructions in [Before You Begin](#).
2. Replace the processor heat sink assembly (see [Replacing the Processor Heat Sink Assembly](#)).
3. Replace the Mini-Card(s) (see [Replacing the Mini-Card\(s\)](#)).
4. Turn the system board assembly over.
5. Align the connectors on the system board with the slots on the computer base, and use the alignment posts on the computer base to correctly place the system board.
6. Replace the four screws that secure the system board to the computer base.
7. Connect the coin-cell battery cable, speaker cable, status light board cable, and the AC adapter connector cable to their respective connectors on the system board.
8. Place the left hinge-bracket on the computer base.
9. Replace the screw that secures the left hinge-bracket.
10. Replace the middle cover (see [Replacing the Middle Cover](#)).
11. Replace the display assembly (see [Replacing the Display Assembly](#)).
12. Follow the instructions from [step 6](#) to [step 8](#) in [Replacing the Hard Drive Assembly](#).
13. Replace the processor fan (see [Replacing the Processor Fan](#)).
14. Replace the Bluetooth card (see [Replacing the Bluetooth Card](#)).
15. Replace the palm rest (see [Replacing the Palm Rest](#)).
16. Replace the keyboard (see [Replacing the Keyboard](#)).
17. Turn the computer over and replace the screw that secures the left hinge- bracket to the computer base.
18. Replace the memory module(s) (see [Replacing the Memory Module\(s\)](#)).
19. Replace the module cover (see [Replacing the Module Cover](#)).
20. 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.

21. 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.

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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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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