# **Dell™ Inspiron™ One 19 Service Manual**

Technical Overview Before You Begin I/O Cover Computer Stand Optical Drive
Decorative Cover Display Bezel Back Cover Hard Drive I/O Bracket I/O Card Inverter Back Metal Shield

System-Board Shield System-Board Fan Memory Module(s) Coin-Cell Battery Wireless Mini-Card Processor Heat Sink Heat-Sink Fans Processor Power Supply System Board Display Camera Speakers System Setup Utility

### 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.



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

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#### **Decorative Cover**

**Dell™ Inspiron™ One 19 Service Manual** 

- Removing the Decorative Cover
- Replacing the Decorative Cover



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.



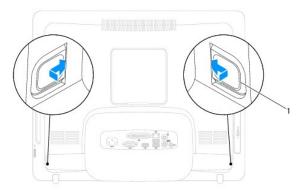
△ CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.



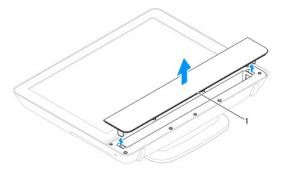
CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

### Removing the Decorative Cover

- 1. Follow the procedures in Before You Begin.
- 2. Place the computer in an upright position.
- 3. Press and push out the locks to release the decorative cover.
- 4. Place the computer face up on a flat surface.
- 5. Lift the decorative cover away from the computer.



locks (2)



decorative cover

- 1. Follow the procedures in <u>Before You Begin</u>.
- 2. Place the computer face up on a flat surface.
- 3. Guide the locks on the decorative cover through the holes on the speaker cover.
- 4. Press down the decorative cover until it snaps into place.
- 5. Connect your computer and all attached devices to electrical outlets, and turn them on.

#### **Back Cover**

**Dell™ Inspiron™ One 19 Service Manual** 

- Removing the Back Cover
- Replacing the Back Cover



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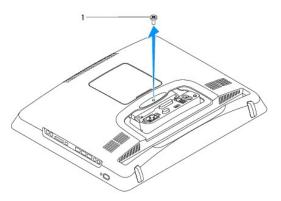
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CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

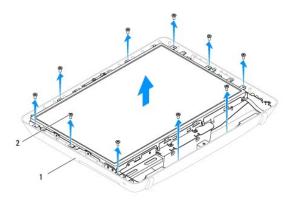
### Removing the Back Cover

- 1. Follow the procedures in Before You Begin.
- 2. Remove the I/O cover (see Removing the I/O Cover).
- 3. Remove the computer stand (see Removing the Computer Stand).
- 4. Remove the optical drive (see Removing the Optical Drive).
- 5. Remove the screw that secures the back cover to the computer.



screw

- 6. Remove the decorative cover (see Removing the Decorative Cover).
- 7. Remove the speaker cover (see Removing the Speaker Cover).
- 8. Remove the display bezel (see Removing the Display Bezel).
- 9. Remove the ten screws that secure the back cover to the chassis.
- 10. Lift the chassis away from the back cover, turn the chassis over, and keep it on a clean surface.
- 11. Place the back cover in a secure location.



1	back cover	2	screws (10)
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# Replacing the Back Cover

- 1. Follow the procedures in Before You Begin.
- 2. Lift the chassis from the clean surface.
- 3. Turn the chassis over and align the screw holes on the chassis with the screw holes on the back cover.
- 4. Replace the ten screws that secure the back cover to the chassis.
- 5. Replace the display bezel (see Replacing the Display Bezel).
- 6. Replace the speaker cover (see Replacing the Speaker Cover).
- 7. Replace the decorative cover (see Replacing the Decorative Cover).
- 8. Replace the screw that secures the back cover to the computer.
- 9. Replace the optical drive (see Replacing the Optical Drive).
- 10. Replace the computer stand (see Replacing the Computer Stand).
- 11. Replace the I/O cover (see Replacing the I/O Cover).

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.

12. Connect your computer and all attached devices to electrical outlets, and turn them on.

#### Before You Begin

**Dell™ Inspiron™ One 19 Service Manual** 

- Recommended Tools
- Turning Off Your Computer
- Safety Instructions

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 Turning Off Your Computer and Safety Instructions
- 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 Phillips screwdriver
- 1 Hex nut driver
- 1 Flash 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. Shut down the operating system:

Windows Vista<sup>®</sup>:

Click the Start button <sup>®</sup>, click the arrow •, and then click **Shut Down**.

Windows<sup>®</sup> 7:

Click the Start button <sup>®</sup> 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 your operating system, press and hold the power button until the computer turns off.

#### Safety Instructions

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

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.

WARNING: Disconnect all power sources before opening the enclosure to replace, remove, or install accessories. After the installation is completed, the enclosure must be replaced and all fasteners installed before connecting to the power source.

CAUTION: Only a certified service technician is authorized to remove the computer cover and access any of the components inside the computer. See the safety instructions for complete information about safety precautions, working inside your computer, and protecting against electrostatic discharge.

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: 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.

 $\triangle$  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 display 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. Disconnect your computer and all attached devices from their electrical outlets.
- 5. Disconnect all attached devices from your computer.
- 6. Press and hold the power button while the system is unplugged to ground the system board.

#### Camera

#### **Dell™ Inspiron™ One 19 Service Manual**

- Removing the Camera
- Replacing the Camera



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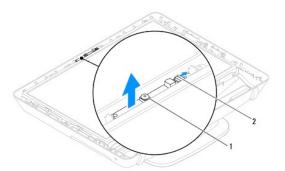
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CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

### Removing the Camera

- 1. Follow the procedures in Before You Begin.
- 2. Remove the display bezel (see Removing the Display Bezel).
- 3. Disconnect the camera cable from the connector on the camera module.
- 4. Using a plastic scribe, pry out the camera module to release it from the chassis.
- 5. Lift the camera module off the chassis.



1	camera	2	camera-cable connector
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### Replacing the Camera

- 1. Follow the procedures in Before You Begin.
- 2. Using the glue that shipped with the new camera module, affix the camera module on the chassis.
- 3. Connect the camera cable to the connector on the camera module.
- 4. Replace the display bezel (see Replacing the Display Bezel).

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.

5. Connect your computer and all attached devices to electrical outlets, and turn them on.

#### Wireless Mini-Card

Dell™ Inspiron™ One 19 Service Manual

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



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



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



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

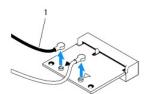
If you ordered a wireless Mini-Card with your computer, the card is already installed.

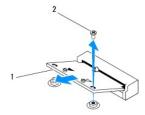
Your computer supports one half Mini-Card slot for Wireless Local Area Network (WLAN)

#### Removing the Mini-Card

- 1. Follow the procedures in Before You Begin.
- 2. Remove the I/O cover (see Removing the I/O Cover).
- 3. Remove the computer stand (see Removing the Computer Stand)
- 4. Remove the optical drive (see Removing the Optical Drive).
- 5. Remove the decorative cover (see Removing the Decorative Cover).
- 6. Remove the speaker cover (see Removing the Speaker Cover).
- 7. Remove the display bezel (see Removing the Display Bezel).
- 8. Remove the back cover (see Removing the Back Cover).
- 9. Remove the I/O bracket (see Removing the I/O Bracket).
- 10. Remove the inverter (see Removing the Inverter)
- 11. Remove the system-board shield (see Removing the System-Board Shield).
- 12. Disconnect the antenna cables from the Mini-Card
- 13. Remove the screw that secures the Mini-Card to the system-board connector.
- 14. Lift the Mini-Card away from the system-board connector.

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).





1	Mini-Card	2	screw
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# Replacing the Mini-Card

△ CAUTION: The connectors are keyed to ensure correct insertion. Use of excessive force may damage the connectors.

△ CAUTION: To avoid damage to the Mini-Card, ensure that there are no cables or antenna cables under the Mini-Card.

- 1. Follow the procedures in Before You Begin.
- 2. Align the notch on the Mini-Card with the tab in the system-board connector.
- 3. Insert the Mini-Card at a 45-degree angle into the system-board connector.
- 4. Press the other end of the Mini-Card down. Replace the screw that secures the Mini-Card to the system-board connector.
- 5. Connect the appropriate antenna cables to the Mini-Card you are installing. The following table provides the antenna cable color scheme for the Mini-Card supported by your computer.

Connectors on the Mini-Card	Antenna Cable Color Scheme		
WLAN (2 antenna cables)			
Main WLAN (white triangle)	white		
Auxiliary WLAN (black triangle)	black		

- 6. Replace the system-board shield (see Replacing the System-Board Shield).
- 7. Replace the inverter (see Replacing the Inverter).
- 8. Replace the I/O bracket (see Replacing the I/O Bracket).
- 9. Replace the back cover (see Replacing the Back Cover).
- 10. Replace the display bezel (see Replacing the Display Bezel).
- 11. Replace the speaker cover (see Replacing the Speaker Cover).
- 12. Replace the decorative cover (see Replacing the Decorative Cover).
- 13. Replace the optical drive (see Replacing the Optical Drive).
- 14. Replace the computer stand (see Replacing the Computer Stand).
- 15. Replace the I/O cover (see Replacing the I/O Cover).

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.

16. Connect your computer and all attached devices to electrical outlets, and turn them on.

#### Coin-Cell Battery Dell™ Inspiron™ One 19 Service Manual

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

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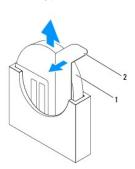
MARNING: A new battery can explode if it is incorrectly installed. Replace the battery only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

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).

# Removing the Coin-Cell Battery

- 1. Record all the screens in system setup utility (see System Setup Utility) so that you can restore the correct settings in step 14.
- 2. Follow the procedures in Before You Begin.
- 3. Remove the I/O cover (see Removing the I/O Cover).
- 4. Remove the computer stand (see Removing the Computer Stand).
- 5. Remove the optical drive (see Removing the Optical Drive).
- 6. Remove the decorative cover (see Removing the Decorative Cover)
- 7. Remove the speaker cover (see Removing the Speaker Cover).
- 8. Remove the display bezel (see Removing the Display Bezel).
- 9. Remove the back cover (see Removing the Back Cover).
- 10. Remove the I/O bracket (see Removing the I/O Bracket).
- 11. Remove the inverter (see Removing the Inverter).
- 12. Remove the system-board shield (see Removing the System-Board Shield).
- 13. Carefully pull the release lever away from the coin-cell battery and lift the coin-cell battery out of the socket.



1	coin-cell battery	2	release lever
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# Replacing the Coin-Cell Battery

- 1. Follow the procedures in <u>Before You Begin</u>.
- 2. Insert the new coin-cell battery into the socket with the side labeled "+" facing left and then snap the coin-cell battery into place.
- 3. Replace the system-board shield (see Replacing the System-Board Shield).
- 4. Replace the inverter (see Replacing the Inverter).
- 5. Replace the I/O bracket (see Replacing the I/O Bracket).
- 6. Replace the back cover (see Replacing the Back Cover).
- 7. Replace the display bezel (see Replacing the Display Bezel).
- 8. Replace the speaker cover (see Replacing the Speaker Cover).
- 9. Replace the decorative cover (see Replacing the Decorative Cover).
- 10. Replace the optical drive (see Replacing the Optical Drive).
- 11. Replace the computer stand (see Replacing the Computer Stand).
- 12. Replace the I/O cover (see Replacing the I/O Cover).

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. Connect your computer and devices to electrical outlets, and then turn them on.
- 14. Enter the system setup utility (see System Setup Utility) and restore the settings you recorded in step 1.

### Display

Dell™ Inspiron™ One 19 Service Manual

- Display Panel



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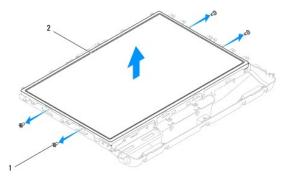


CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

### **Display Panel**

### **Removing the Display Panel**

- 1. Follow the procedures in Before You Begin.
- 2. Remove the system board (see Removing the System Board).
- 3. Turn the computer over.
- 4. Remove the four screws that secure the display panel to the chassis.
- 5. Remove the display cables from the routing guides on the chassis.
- 6. Lift the display panel off the chassis.



ı	1	screws (4)	2	display panel

### Replacing the Display Panel

- 1. Follow the procedures in Before You Begin.
- 2. Guide the display cables through the routing guides on the chassis.
- 3. Replace the four screws that secure the display panel to the chassis.
- 4. Replace the system board (see 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.

5. Connect your computer and all attached devices to electrical outlets, and turn them on.

# **Display Cable**

### Removing the Display Cable

- 1. Follow the procedures in Before You Begin.
- 2. Remove the display panel (see Removing the Display Panel)
- 3. Turn the display panel over.
- 4. Lift the conductive tape that secures the display cable to the display-panel connector; press the securing clips on either side of the display-panel connector and disconnect the display cable.
- 5. Lift the display cable off the display panel.

# Replacing the Display Cable

- 1. Follow the procedures in Before You Begin.
- 2. Slide the display cable into the display-panel connector until it is fully seated and secure the display cable with the conductive tape.
- 3. Turn the display panel over.
- 4. Replace the display panel (see Replacing the Display Panel).

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.

5. Connect your computer and all attached devices to electrical outlets, and turn them on.

### **Display Bezel**

Dell™ Inspiron™ One 19 Service Manual

- Removing the Display Bezel
- Replacing the Display Bezel



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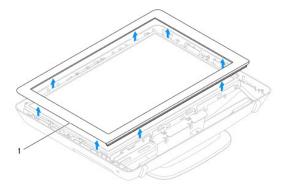
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CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

### Removing the Display Bezel

- 1. Follow the procedures in Before You Begin.
- 2. Remove the decorative cover (see Removing the Decorative Cover)
- 3. Remove the speaker cover (see Removing the Speaker Cover).
- 4. Using your fingertips, carefully pry up the inside edge of the display bezel.
- 5. Lift the display bezel away from the computer.



display bezel

# Replacing the Display Bezel

- 1. Follow the procedures in Before You Begin.
- 2. Align the display bezel over the display and gently snap the display bezel into place.
- 3. Replace the speaker cover (see Replacing the Speaker Cover)
- 4. Replace the decorative cover (see Replacing the Decorative Cover).

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.

5. Connect your computer and all attached devices to electrical outlets, and turn them on.

### **Speaker Cover**

Dell™ Inspiron™ One 19 Service Manual

- Removing the Speaker Cover
- Replacing the Speaker Cover



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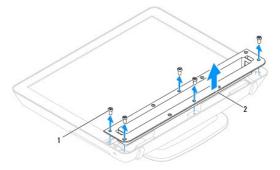
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CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

### Removing the Speaker Cover

- 1. Follow the procedures in Before You Begin.
- 2. Remove the decorative cover (see Removing the Decorative Cover)
- 3. Remove the five screws that secure the speaker cover to the computer.
- 4. Lift the speaker cover away from the computer.



1	screws (5)	2	speaker cover
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### Replacing the Speaker Cover

- 1. Follow the procedures in Before You Begin.
- Align the screw holes on the speaker cover with the screw holes on the computer. Replace the five screws that secure the speaker cover to the
- 3. Replace the decorative cover (see Replacing the Decorative Cover).

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.

4. Connect your computer and all attached devices to electrical outlets, and turn them on.

#### **Hard Drive**

**Dell™ Inspiron™ One 19 Service Manual** 

- Removing the Hard Drive
- Replacing the Hard Drive



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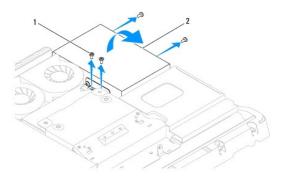
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CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

# Removing the Hard Drive

- 1. Follow the procedures in Before You Begin.
- 2. Remove the I/O cover (see Removing the I/O Cover).
- 3. Remove the computer stand (see Removing the Computer Stand).
- 4. Remove the optical drive (see Removing the Optical Drive).
- 5. Remove the decorative cover (see Removing the Decorative Cover).
- 6. Remove the speaker cover (see Removing the Speaker Cover).
- 7. Remove the display bezel (see Removing the Display Bezel).
- 8. Remove the back cover (see Removing the Back Cover).
- 9. Remove the aluminum foil tapes that secure the hard drive.
- 10. Remove the four screws that secure the hard drive to the chassis.
- 11. Disconnect the hard-drive cable from the connector on the hard drive.
- 12. Lift the hard drive out of the chassis.



1	screws (4)	2	hard drive
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# Replacing the Hard Drive

- 1. Follow the procedures in Before You Begin.
- 2. Align the screws holes on the hard drive with the screw holes on the chassis. Replace the four screws that secure the hard drive.

3. Connect the hard-drive cable to the connector on the hard drive.

CAUTION: Aluminum foil tapes are used for Electro Magnetic Induction (EMI) shielding and for grounding the components. To avoid damaging the hard drive, ensure that you affix the aluminum foil tapes after replacing the hard drive.

NOTE: Aluminum foil tapes will be shipped with the new hard drive.

- 4. Affix the aluminum foil tapes on the hard drive.
- 5. Replace the back cover (see Replacing the Back Cover).
- 6. Replace the display bezel (see Replacing the Display Bezel).
- 7. Replace the speaker cover (see Replacing the Speaker Cover).
- 8. Replace the decorative cover (see Replacing the Decorative Cover).
- 9. Replace the optical drive (see Replacing the Optical Drive).
- 10. Replace the computer stand (see Replacing the Computer Stand).
- 11. Replace the I/O cover (see Replacing the I/O Cover).

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.

12. Connect your computer and all attached devices to electrical outlets, and turn them on.

#### **Processor Heat Sink**

**Dell™ Inspiron™ One 19 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: The heat sink may be very hot during normal operation. Be sure that it has had sufficient time to cool before you touch it.

△ 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.

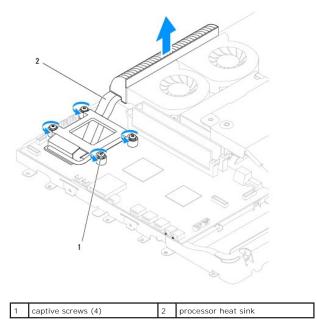
CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: Do not perform the following steps unless you are familiar with hardware removal and replacement. Performing these steps incorrectly could damage your system board. For technical service information, see the Setup Guide.

# Removing the Processor Heat Sink

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

- 1. Follow the procedures in Before You Begin.
- 2. Remove the I/O cover (see Removing the I/O Cover).
- 3. Remove the computer stand (see Removing the Computer Stand)
- 4. Remove the optical drive (see Removing the Optical Drive).
- 5. Remove the decorative cover (see Removing the Decorative Cover).
- 6. Remove the speaker cover (see Removing the Speaker Cover).
- 7. Remove the display bezel (see Removing the Display Bezel).
- 8. Remove the back cover (see Removing the Back Cover).
- 9. Remove the I/O bracket (see Removing the I/O Bracket).
- 10. Remove the inverter (see Removing the Inverter)
- 11. Remove the system-board shield (see Removing the System-Board Shield).
- 12. In sequential order (indicated on the processor heat sink), loosen the four captive screws in descending order that secure the processor heat sink to the system board.
- 13. Carefully lift the processor heat sink away from the computer.



# Replacing the Processor Heat Sink

△ CAUTION: Incorrect alignment of the processor heat sink can cause damage to the system board and processor.

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

1. Follow the procedures in <u>Before You Begin</u>.

- Clean the thermal grease from the bottom of the processor heat sink and reapply it.
- 3. Align the four captive screws on the processor heat sink with the screw holes on the system board and tighten the screws in ascending order.
- 4. Replace the system-board shield (see Replacing the System-Board Shield).
- 5. Replace the inverter (see Replacing the Inverter).
- 6. Replace the I/O bracket (see Replacing the I/O Bracket).
- 7. Replace the back cover (see Replacing the Back Cover).
- 8. Replace the display bezel (see Replacing the Display Bezel).
- 9. Replace the speaker cover (see Replacing the Speaker Cover)
- 10. Replace the decorative cover (see Replacing the Decorative Cover).
- 11. Replace the optical drive (see Replacing the Optical Drive).
- 12. Replace the computer stand (see Replacing the Computer Stand).
- 13. Replace the I/O cover (see Replacing the I/O Cover).

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.

14. Connect your computer and all attached devices to electrical outlets, and turn them on.

#### **Heat-Sink Fans**

**Dell™ Inspiron™ One 19 Service Manual** 

- Removing the Heat-Sink Fans
- Replacing the Heat-Sink Fans



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.



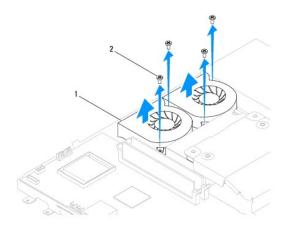
△ CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.



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).

### Removing the Heat-Sink Fans

- 1. Follow the procedures in Before You Begin.
- 2. Remove the I/O cover (see Removing the I/O Cover).
- 3. Remove the computer stand (see Removing the Computer Stand).
- 4. Remove the optical drive (see Removing the Optical Drive).
- 5. Remove the decorative cover (see Removing the Decorative Cover).
- 6. Remove the speaker cover (see Removing the Speaker Cover).
- 7. Remove the display bezel (see Removing the Display Bezel).
- 8. Remove the back cover (see Removing the Back Cover).
- 9. Remove the I/O bracket (see Removing the I/O Bracket).
- 10. Remove the inverter (see Removing the Inverter).
- 11. Remove the system-board shield (see Removing the System-Board Shield).
- 12. Remove the processor heat sink (see Removing the Processor Heat Sink).
- 13. Disconnect the heat-sink fan cables from the system-board connectors. For more information on the location of the heat-sink fan connectors, see System
- 14. Make a note of the heat-sink fan cables routing and remove the heat-sink fan cables from the routing guides on the chassis.
- 15. Remove the four screws that secure the heat-sink fans to the chassis.
- 16. Lift the heat-sink fans away from the chassis.



1	heat-sink fans (2)	2	screws (4)
' '	ricat sirik raris (2)	-	3010443 (4)

### Replacing the Heat-Sink Fans

- 1. Follow the procedures in Before You Begin.
- 2. Align the screw holes on the heat-sink fans with the screw holes on the chassis. Replace the four screws that secure the heat-sink fans to the chassis.
- 3. Route the heat-sink fan cables through the routing guides on the chassis.
- 4. Connect the heat-sink fan cables to the connectors on the system board.
- 5. Replace the processor heat sink (see Replacing the Processor Heat Sink).
- 6. Replace the system-board shield (see Replacing the System-Board Shield).
- 7. Replace the inverter (see Replacing the Inverter).
- 8. Replace the I/O bracket (see Replacing the I/O Bracket).
- 9. Replace the back cover (see Replacing the Back Cover).
- 10. Replace the display bezel (see Replacing the Display Bezel).
- 11. Replace the speaker cover (see Replacing the Speaker Cover).
- 12. Replace the decorative cover (see Replacing the Decorative Cover).
- 13. Replace the optical drive (see Replacing the Optical Drive).
- 14. Replace the computer stand (see Replacing the Computer Stand).
- 15. Replace the I/O cover (see Replacing the I/O Cover).
- △ 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.
- 16. Connect your computer and all attached devices to electrical outlets, and turn them on.

#### Inverter

#### **Dell™ Inspiron™ One 19 Service Manual**

- Removing the Inverter
- Replacing the Inverter



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.



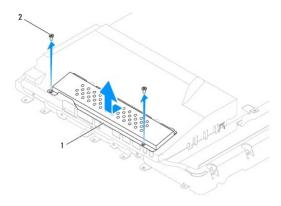
△ CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.



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).

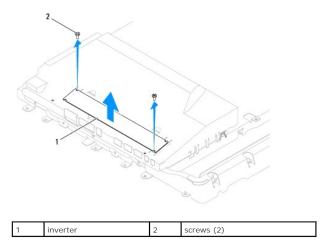
### Removing the Inverter

- 1. Follow the procedures in Before You Begin.
- 2. Remove the I/O cover (see Removing the I/O Cover).
- 3. Remove the computer stand (see Removing the Computer Stand).
- 4. Remove the optical drive (see Removing the Optical Drive).
- 5. Remove the decorative cover (see Removing the Decorative Cover).
- 6. Remove the speaker cover (see Removing the Speaker Cover).
- 7. Remove the display bezel (see Removing the Display Bezel).
- 8. Remove the back cover (see Removing the Back Cover).
- 9. Remove the two screws that secure the inverter shield to the system-board shield.
- 10. Remove the inverter shield away from the computer.



1	inverter shield	2	screws (2)

- 11. Disconnect the inverter cable and display cables from the connectors on the inverter.
- 12. Remove the two screws that secure the inverter to the system-board shield.
- 13. Lift the inverter out of the system-board shield.



# Replacing the Inverter

- 1. Follow the procedures in Before You Begin.
- 2. Align the screw holes on the inverter with the screw holes on the system-board shield. Replace the two screws that secure the inverter to the system-board shield.
- 3. Connect the inverter cable and display cables to the connectors on the inverter.
- 4. Slide the tabs on the inverter shield into the slots on the system-board shield. Replace the two screws that secure the inverter shield to the system-board shield.
- 5. Replace the back cover (see Replacing the Back Cover).
- 6. Replace the display bezel (see Replacing the Display Bezel).
- 7. Replace the speaker cover (see Replacing the Speaker Cover).
- 8. Replace the decorative cover (see Replacing the Decorative Cover).
- 9. Replace the optical drive (see Replacing the Optical Drive).
- 10. Replace the computer stand (see Replacing the Computer Stand).
- 11. Replace the I/O cover (see Replacing the I/O Cover).

△ 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.

12. Connect your computer and all attached devices to electrical outlets, and turn them on.

#### I/O Bracket

**Dell™ Inspiron™ One 19 Service Manual** 

- Removing the I/O Bracket
- Replacing the I/O Bracket



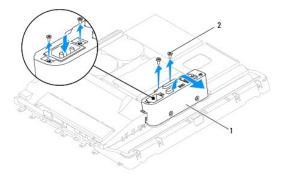
WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.

△ 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).

# Removing the I/O Bracket

- 1. Follow the procedures in Before You Begin.
- 2. Remove the I/O cover (see Removing the I/O Cover).
- 3. Remove the computer stand (see Removing the Computer Stand).
- 4. Remove the optical drive (see Removing the Optical Drive).
- 5. Remove the decorative cover (see Removing the Decorative Cover).
- 6. Remove the speaker cover (see Removing the Speaker Cover).
- 7. Remove the display bezel (see Removing the Display Bezel).
- 8. Remove the back cover (see Removing the Back Cover).
- 9. Remove the four screws that secure the I/O bracket to the chassis.
- 10. Without pulling hard on the I/O bracket, turn the I/O bracket to access the I/O board cable connectors.
- 11. Disconnect all the cables connected to the I/O board.
- 12. Lift the I/O bracket away from the chassis.



1 I/O bracket	2	screws (4)
---------------	---	------------

# Replacing the I/O Bracket

- 1. Follow the procedures in Before You Begin.
- 2. Connect all the cables connected to the I/O board

- 3. Align the screw holes on the I/O bracket with the screw holes on the chassis. Replace the four screws that secure the I/O bracket to the chassis.
- 4. Replace the back cover (see Replacing the Back Cover).
- 5. Replace the display bezel (see Replacing the Display Bezel).
- 6. Replace the speaker cover (see Replacing the Speaker Cover).
- 7. Replace the decorative cover (see Replacing the Decorative Cover).
- 8. Replace the optical drive (see Replacing the Optical Drive).
- 9. Replace the computer stand (see Replacing the Computer Stand).
- 10. Replace the I/O cover (see Replacing the I/O Cover).

△ 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.

11. Connect your computer and all attached devices to electrical outlets, and turn them on.

#### I/O Card

#### **Dell™ Inspiron™ One 19 Service Manual**

- Removing the I/O Card
- Replacing the I/O Card



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



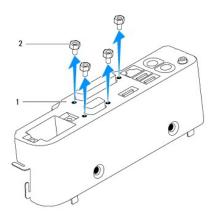
△ CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.



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

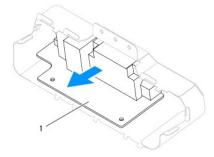
# Removing the I/O Card

- 1. Follow the procedures in Before You Begin.
- 2. Remove the I/O cover (see Removing the I/O Cover).
- 3. Remove the computer stand (see Removing the Computer Stand).
- 4. Remove the optical drive (see Removing the Optical Drive).
- 5. Remove the decorative cover (see Removing the Decorative Cover).
- 6. Remove the speaker cover (see Removing the Speaker Cover).
- 7. Remove the display bezel (see Removing the Display Bezel).
- 8. Remove the back cover (see Removing the Back Cover).
- 9. Remove the I/O bracket (see Removing the I/O Bracket).
- 10. Using a hex nut driver, remove the four screws that secure the I/O card to the I/O bracket.



1	I/O bracket	2	screws (4)

11. Slide the I/O card away from the computer.



1 I/O card

# Replacing the I/O Card

- 1. Follow the procedures in <u>Before You Begin</u>.
- 2. Align the screw holes on the I/O card with the screw holes on the I/O bracket. Replace the four screws that secure the I/O card to the I/O bracket.
- 3. Replace the I/O bracket (see Replacing the I/O Bracket).
- 4. Replace the back cover (see Replacing the Back Cover).
- 5. Replace the display bezel (see Replacing the Display Bezel).
- 6. Replace the speaker cover (see Replacing the Speaker Cover).
- 7. Replace the decorative cover (see Replacing the Decorative Cover).
- 8. Replace the optical drive (see Replacing the Optical Drive).
- 9. Replace the computer stand (see Replacing the Computer Stand).
- 10. Replace the I/O cover (see Replacing the I/O Cover).

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.

11. Connect your computer and all attached devices to electrical outlets, and turn them on.

#### I/O Cover

**Dell™ Inspiron™ One 19 Service Manual** 

- Removing the I/O Cover
- Replacing the I/O 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.



MARNING: To guard against electrical shock, always unplug your computer from the electrical outlet before removing the I/O cover.



△ 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).



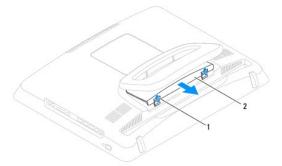
A CAUTION: Ensure that sufficient space exists to support the system with the computer cover removed—at least 30 cm (1 ft.) of desk top space.

### Removing the I/O Cover

1. Follow the procedures in Before You Begin.

CAUTION: Before opening your computer, ensure that you place the computer on a soft cloth or clean surface to avoid any scratches on the display.

- 2. Place the computer face down on a flat surface.
- 3. Lift the computer stand to access the I/O cover.
- 4. Using your fingers, press the two securing clips at the bottom of the I/O cover and lift the I/O cover to release the latches on the I/O cover from the slots on the back cover.
- 5. Pull the I/O cover out of the computer.



1	securing clips (2)	2	I/O cover

# Replacing the I/O Cover

- 1. Follow the procedures in Before You Begin.
- 2. Align the three tabs on the I/O cover with the slots on the back cover.
- 3. Press the two securing clips at the bottom of the I/O cover and gently ease the two latches into the slots on the back cover to secure the I/O cover.
- 4. Connect your computer and all attached devices to electrical outlets, and turn them on.

#### **Back Metal Shield**

**Dell™ Inspiron™ One 19 Service Manual** 

- Removing the Back Metal Shield
- Replacing the Back Metal Shield



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.



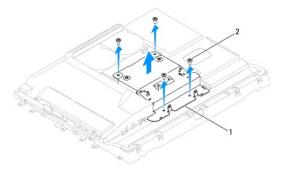
△ CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.



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).

### Removing the Back Metal Shield

- 1. Follow the procedures in Before You Begin.
- 2. Remove the I/O cover (see Removing the I/O Cover).
- 3. Remove the computer stand (see Removing the Computer Stand).
- 4. Remove the optical drive (see Removing the Optical Drive).
- 5. Remove the decorative cover (see Removing the Decorative Cover).
- 6. Remove the speaker cover (see Removing the Speaker Cover).
- 7. Remove the display bezel (see Removing the Display Bezel).
- 8. Remove the back cover (see Removing the Back Cover).
- 9. Remove the I/O bracket (see Removing the I/O Bracket).
- 10. Remove the aluminum foil tapes from the back metal shield.
- 11. Remove the four screws that secure the back metal shield to the chassis.
- 12. Lift the back metal shield away from the chassis.



1 back metal shield 2 screws (4)
----------------------------------

### Replacing the Back Metal Shield

- 1. Follow the procedures in Before You Begin.
- 2. Align the screw holes on the back metal shield with the screw holes on the chassis. Replace the four screws that secure the back metal shield to the

#### chassis.

CAUTION: Aluminum foil tapes are used for Electro Magnetic Induction (EMI) shielding and for grounding the components. To avoid damaging the back metal shield, ensure that you affix the aluminum foil tapes after replacing the back metal shield.

NOTE: Aluminum foil tapes will be shipped with the new back metal shield.

- 3. Affix the aluminum foil tapes on the back metal shield.
- 4. Replace the I/O bracket (see Replacing the I/O Bracket).
- 5. Replace the back cover (see Replacing the Back Cover).
- 6. Replace the display bezel (see Replacing the Display Bezel).
- 7. Replace the speaker cover (see Replacing the Speaker Cover).
- 8. Replace the decorative cover (see Replacing the Decorative Cover).
- 9. Replace the optical drive (see Replacing the Optical Drive).
- 10. Replace the computer stand (see Replacing the Computer Stand).
- 11. Replace the I/O cover (see Replacing the I/O Cover).

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.

12. Connect your computer and all attached devices to electrical outlets, and turn them on.

#### Memory Module(s) Dell™ Inspiron™ One 19 Service Manual

- Removing Memory Module(s)
- Replacing 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).

### Removing Memory Module(s)

- 1. Follow the procedures in Before You Begin.
- 2. Remove the I/O cover (see Removing the I/O Cover).
- 3. Remove the computer stand (see Removing the Computer Stand)
- 4. Remove the optical drive (see Removing the Optical Drive).
- 5. Remove the decorative cover (see Removing the Decorative Cover).
- 6. Remove the speaker cover (see Removing the Speaker Cover).
- 7. Remove the display bezel (see Removing the Display Bezel).
- 8. Remove the back cover (see Removing the Back Cover).
- 9. Remove the I/O bracket (see Removing the I/O Bracket).
- 10. Remove the inverter (see Removing the Inverter)
- 11. Remove the system-board shield (see Removing the System-Board Shield).
- 12. Use your fingertips to carefully spread apart the securing clips on each end of the memory-module connector until the memory module pops up.

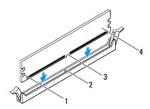


ı	1	memory-module connector	2	securing clips (2)

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

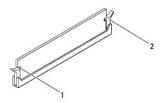
### Replacing Memory Module(s)

- 1. Follow the procedures in Before You Begin.
- 2. Align the notch of the memory module with the tab on the memory-module connector.



1	cutouts (2)	2	tab
3	notch	4	memory module

Insert the memory module into the connector until the memory module snaps into position.If you insert the memory module correctly, the securing clips snap into the cutouts at each end of the memory module.



1	cutouts (2)	2	securing clip (snapped in position)
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- 4. Replace the system-board shield (see Replacing the System-Board Shield).
- 5. Replace the inverter (see Replacing the Inverter).
- 6. Replace the I/O bracket (see Replacing the I/O Bracket).
- 7. Replace the back cover (see Replacing the Back Cover).
- 8. Replace the display bezel (see Replacing the Display Bezel).
- 9. Replace the speaker cover (see Replacing the Speaker Cover).
- 10. Replace the decorative cover (see Replacing the Decorative Cover).
- 11. Replace the optical drive (see Replacing the Optical Drive).
- 12. Replace the computer stand (see Replacing the Computer Stand).
- 13. Replace the I/O cover (see Replacing the I/O Cover).

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.

- 14. Connect your computer and all attached devices to electrical outlets, and then turn them on.
- 15. When the message appears stating that memory size has changed, press <F1> to continue.
- 16. Log on to your computer.
- 17. To verify that the memory is installed correctly, click **Start** button → **Control Panel** → **System**.
- 18. Check the amount of memory (RAM) listed.

# **Optical Drive**

Dell™ Inspiron™ One 19 Service Manual

- Removing the Optical Drive
- Replacing the Optical Drive



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

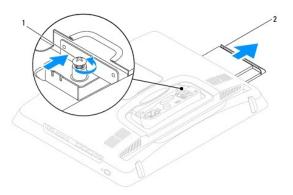
△ CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.



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

# Removing the Optical Drive

- 1. Follow the procedures in Before You Begin.
- 2. Remove the I/O cover (see Removing the I/O Cover).
- 3. Remove the computer stand (see Removing the Computer Stand).
- 4. Remove the screw that secures the optical drive to the computer.
- 5. Push the optical drive to release the optical drive from the optical-drive bay.
- 6. Slide the optical drive out of the optical-drive bay.



1 screw	2	optical drive
---------	---	---------------

#### Replacing the Optical Drive

- 1. Follow the procedures in Before You Begin.
- 2. Slide the optical drive into the optical-drive bay.
- 3. Replace the screw that secures the optical drive to the computer.
- 4. Replace the computer stand (see Replacing the Computer Stand).
- 5. Replace the I/O cover (see Replacing the I/O Cover).

6. Connect your computer and all attached devices to electrical outlets, and turn them on.

#### **Processor**

**Dell™ Inspiron™ One 19 Service Manual** 

- Removing the Processor
- Replacing the Processor



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.



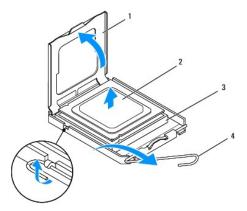
△ CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.



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).

### Removing the Processor

- 1. Follow the procedures in Before You Begin.
- 2. Remove the I/O cover (see Removing the I/O Cover).
- 3. Remove the computer stand (see Removing the Computer Stand).
- 4. Remove the optical drive (see Removing the Optical Drive).
- 5. Remove the decorative cover (see Removing the Decorative Cover).
- 6. Remove the speaker cover (see Removing the Speaker Cover).
- 7. Remove the display bezel (see Removing the Display Bezel).
- 8. Remove the back cover (see Removing the Back Cover).
- 9. Remove the I/O bracket (see Removing the I/O Bracket).
- 10. Remove the inverter (see Removing the Inverter).
- 11. Remove the system-board shield (see Removing the System-Board Shield).
- 12. Remove the processor heat sink (see Removing the Processor Heat Sink).
- 13. Press and push the release lever down and out to release it from the tab that secures it.
- 14. Open the processor cover.



1	processor cover	2	processor
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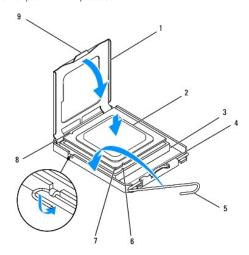
CAUTION: When removing or replacing the processor, do not touch any of the pins inside the processor socket or allow any objects to fall on the pins in the processor socket.

15. Lift the processor to remove it from the processor socket; place it aside in a safe and secure place.

#### Replacing the Processor

- 1. Follow the procedures in Before You Begin.
- 2. Lift the release lever to the release position so that the processor socket is ready for the new processor.

3. Unpack the new processor.



1	processor cover	2	processor		
3	processor socket	4	center cover latch		
5	release lever	6	front alignment notch		
7	processor pin-1 indicator	8	rear alignment notch		
9	tab				

4. Ensure that the release lever on the processor socket is fully extended.

CAUTION: Socket pins are delicate. To avoid damage, ensure that the processor is aligned properly with the processor socket, and do not use excessive force when you install the processor. Be careful not to touch or bend the pins on the system board.

△ CAUTION: You must position the processor correctly in the processor socket to avoid permanent damage to the processor.

- 5. Orient the front and rear alignment notches on the processor with the front and rear alignment notches on the processor socket.
- 6. Align the pin-1 corners of the processor and processor socket.
- 7. Place the processor lightly in the processor socket and ensure that the processor is positioned correctly.
- When the processor is fully seated in the processor socket, close the processor cover.
   Ensure that the tab on the processor cover is positioned underneath the center cover latch on the processor socket.

9. Pivot the processor socket release lever back towards the processor socket, and snap it into place to secure the processor. 10. Clean the thermal grease from the bottom of the heat sink. CAUTION: Ensure that you apply new thermal grease. New thermal grease is critical for ensuring adequate thermal bonding, which is a requirement for optimal processor operation. 11. Apply the new thermal grease to the top of the processor. 12. Replace the processor heat sink (see Replacing the Processor Heat Sink). 13. Replace the system-board shield (see Replacing the System-Board Shield). 14. Replace the inverter (see Replacing the Inverter). 15. Replace the I/O bracket (see Replacing the I/O Bracket). 16. Replace the back cover (see Replacing the Back Cover). 17. Replace the display bezel (see Replacing the Display Bezel). 18. Replace the speaker cover (see Replacing the Speaker Cover). 19. Replace the decorative cover (see Replacing the Decorative Cover). 20. Replace the optical drive (see Replacing the Optical Drive). 21. Replace the computer stand (see Replacing the Computer Stand). 22. Replace the I/O cover (see Replacing the I/O Cover). △ 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.

23. Connect your computer and all attached devices to electrical outlets, and then turn them on.

#### **Power Supply Dell™ Inspiron™ One 19 Service Manual**

- Removing the Power Supply
- Replacing the Power Supply

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.

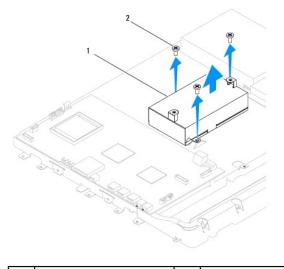
MARNING: To guard against likelihood of electric shock, laceration by moving fan blades or other unexpected injuries, always unplug your computer from the electrical outlet before removing the computer cover.

△ 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).

#### Removing the Power Supply

- 1. Follow the procedures in Before You Begin.
- 2. Remove the I/O cover (see Removing the I/O Cover).
- 3. Remove the computer stand (see Removing the Computer Stand)
- 4. Remove the optical drive (see Removing the Optical Drive).
- 5. Remove the decorative cover (see Removing the Decorative Cover).
- 6. Remove the speaker cover (see Removing the Speaker Cover).
- 7. Remove the display bezel (see Removing the Display Bezel).
- 8. Remove the back cover (see Removing the Back Cover).
- 9. Remove the I/O bracket (see Removing the I/O Bracket).
- 10. Remove the back metal shield (see Removing the Back Metal Shield).
- 11. Remove the inverter (see Removing the Inverter).
- 12. Remove the system-board shield (see Removing the System-Board Shield).
- 13. Remove the processor heat sink (see Removing the Processor Heat Sink).
- 14. Remove the heat-sink fans (see Removing the Heat-Sink Fans).
- 15. Disconnect the power-supply cable from the connector (PWR\_CN1) on the system board. For more information on the location of the power-supply
- 16. Make note of the power-supply cable routing and remove it from the chassis.
- 17. Remove the three screws that secure the power supply to the chassis.
- 18. Place the power supply in a secure location.



		1	power supply	2	screws (3)
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# **Replacing the Power Supply**

- 1. Follow the procedures in Before You Begin.
- 2. Replace the three screws that secure the power supply to the chassis.
- 3. Route the power-supply cable and connect the power-supply cable to the connector (PWR\_CN1) on the system board.
- 4. Replace the heat-sink fans (see Replacing the Heat-Sink Fans).
- 5. Replace the processor heat sink (see Replacing the Processor Heat Sink).
- ${\it 6.} \quad {\it Replace the system-board shield (see} \ \underline{\it Replacing the System-Board Shield}).$
- 7. Replace the inverter (see Replacing the Inverter).
- 8. Replace the back metal shield (see Replacing the Back Metal Shield).
- 9. Replace the I/O bracket (see Replacing the I/O Bracket).
- 10. Replace the back cover (see Replacing the Back Cover).
- 11. Replace the display bezel (see Replacing the Display Bezel).
- 12. Replace the speaker cover (see Replacing the Speaker Cover).
- 13. Replace the decorative cover (see Replacing the Decorative Cover).
- 14. Replace the optical drive (see Replacing the Optical Drive).
- 15. Replace the computer stand (see Replacing the Computer Stand).
- 16. Replace the I/O cover (see Replacing the I/O Cover).

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.

17. Connect your computer and all attached devices to electrical outlets, and turn them on.

# System-Board Fan

- **Dell™ Inspiron™ One 19 Service Manual**
- Removing the System-Board FanReplacing the System-Board Fan

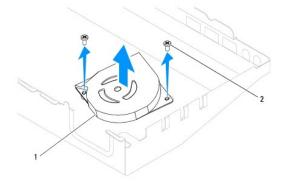
WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.

△ 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).

### Removing the System-Board Fan

- 1. Follow the procedures in Before You Begin.
- 2. Remove the I/O cover (see Removing the I/O Cover).
- 3. Remove the computer stand (see Removing the Computer Stand).
- 4. Remove the optical drive (see Removing the Optical Drive).
- 5. Remove the decorative cover (see Removing the Decorative Cover).
- 6. Remove the speaker cover (see Removing the Speaker Cover).
- 7. Remove the display bezel (see Removing the Display Bezel).
- 8. Remove the back cover (see Removing the Back Cover).
- 9. Remove the I/O bracket (see Removing the I/O Bracket).
- 10. Remove the inverter (see Removing the Inverter).
- 11. Remove the system-board shield (see Removing the System-Board Shield).
- 12. Turn the system-board shield over.
- 13. Remove the two screws that secure the system-board fan to the system-board shield.
- 14. Lift the system-board fan away from the system-board shield.



1	system-board fan	2	screws (2)
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# Replacing the System-Board Fan

- 1. Follow the procedures in <u>Before You Begin</u>.
- 2. Align the screw holes on the system-board fan with the screw holes on the system-board shield.
- 3. Replace the two screws that secure the system-board fan to the system-board shield.
- 4. Turn the system-board shield over.
- 5. Replace the system-board shield (see Replacing the System-Board Shield).
- 6. Replace the inverter (see Replacing the Inverter).
- 7. Replace the I/O bracket (see Replacing the I/O Bracket).
- 8. Replace the back cover (see Replacing the Back Cover).
- 9. Replace the display bezel (see Replacing the Display Bezel).
- 10. Replace the speaker cover (see Replacing the Speaker Cover).
- 11. Replace the decorative cover (see Replacing the Decorative Cover).
- 12. Replace the optical drive (see Replacing the Optical Drive).
- 13. Replace the computer stand (see Replacing the Computer Stand).
- 14. Replace the I/O cover (see Replacing the I/O Cover).

△ 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.

15. Connect your computer and all attached devices to electrical outlets, and turn them on.

# System-Board Shield

**Dell™ Inspiron™ One 19 Service Manual** 

- Removing the System-Board ShieldReplacing the System-Board Shield



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.



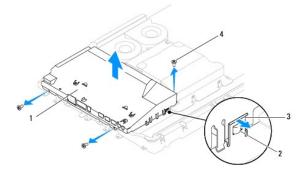
△ CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.



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).

### Removing the System-Board Shield

- 1. Follow the procedures in Before You Begin.
- 2. Remove the I/O cover (see Removing the I/O Cover).
- 3. Remove the computer stand (see Removing the Computer Stand)
- 4. Remove the optical drive (see Removing the Optical Drive).
- 5. Remove the decorative cover (see Removing the Decorative Cover).
- 6. Remove the speaker cover (see Removing the Speaker Cover).
- 7. Remove the display bezel (see Removing the Display Bezel).
- 8. Remove the back cover (see Removing the Back Cover).
- 9. Remove the I/O bracket (see Removing the I/O Bracket).
- 10. Remove the inverter (see Removing the Inverter)
- 11. Remove the three screws that secure the system-board shield to the chassis.
- 12. Remove the system-board shield by releasing the securing clips that secure the tabs on the system-board shield.
- 13. Lift the system-board shield out of the chassis.



1	system-board shield	2	tabs (2)
3	securing clips (2)	4	screws (3)

- 1. Follow the procedures in Before You Begin.
- 2. Replace the system-board shield by using the securing clips that secure the tabs on the system-board shield.
- 3. Replace the three screws that secure the system-board shield to the chassis.
- 4. Replace the inverter (see Replacing the Inverter).
- 5. Replace the I/O bracket (see Replacing the I/O Bracket).
- 6. Replace the back cover (see Replacing the Back Cover).
- 7. Replace the display bezel (see Replacing the Display Bezel).
- 8. Replace the speaker cover (see Replacing the Speaker Cover).
- 9. Replace the decorative cover (see Replacing the Decorative Cover).
- 10. Replace the optical drive (see Replacing the Optical Drive).
- 11. Replace the computer stand (see Replacing the Computer Stand).
- 12. Replace the I/O cover (see Replacing the I/O Cover).

△ 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. Connect your computer and all attached devices to electrical outlets, and turn them on.

#### **Speakers**

#### Dell™ Inspiron™ One 19 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.



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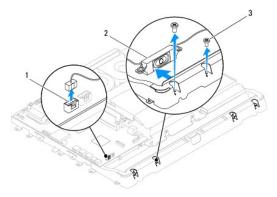
CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

### Removing the Speakers

- 1. Follow the procedures in Before You Begin.
- 2. Remove the I/O cover (see Removing the I/O Cover).
- 3. Remove the computer stand (see Removing the Computer Stand)
- 4. Remove the optical drive (see Removing the Optical Drive).
- 5. Remove the decorative cover (see Removing the Decorative Cover).
- 6. Remove the speaker cover (see Removing the Speaker Cover).
- 7. Remove the display bezel (see Removing the Display Bezel).
- 8. Remove the back cover (see Removing the Back Cover).
- 9. Remove the I/O bracket (see Removing the I/O Bracket).
- 10. Remove the inverter (see Removing the Inverter).
- 11. Remove the system-board shield (see Removing the System-Board Shield).
- 12. Disconnect the speaker cable from the connector (SPKR1) on the system board. For more information on the location of the speakers connector, see
- 13. Remove the four screws (two on each speaker) that secure the speakers to the chassis.



14. Lift the speakers off the chassis.



1	speaker-cable connector	2	speakers (2)

ĺ	3	screws (4)	
П	_	56.61.5 (1)	

# Replacing the Speakers

- 1. Follow the procedures in Before You Begin.
- 2. Route the speaker cable through the routing guides.
- 3. Connect the speaker cable to the connector (SPKR1) on the system board. For more information on the location of the speakers connector, see <a href="System Board Components">System Board Components</a>.
- 4. Replace the four screws (two on each speaker) that secure the speakers to the chassis.
- 5. Replace the system-board shield (see Replacing the System-Board Shield).
- 6. Replace the inverter (see Replacing the Inverter).
- 7. Replace the I/O bracket (see Replacing the I/O Bracket).
- 8. Replace the back cover (see Replacing the Back Cover).
- 9. Replace the display bezel (see Replacing the Display Bezel).
- 10. Replace the speaker cover (see Replacing the Speaker Cover).
- 11. Replace the decorative cover (see Replacing the Decorative Cover).
- 12. Replace the optical drive (see Replacing the Optical Drive).
- 13. Replace the computer stand (see Replacing the Computer Stand).
- 14. Replace the I/O cover (see Replacing the I/O Cover).

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.

15. Connect your computer and all attached devices to electrical outlets, and turn them on.

### **Computer Stand**

Dell™ Inspiron™ One 19 Service Manual

- Removing the Computer Stand
- Replacing the Computer Stand



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.

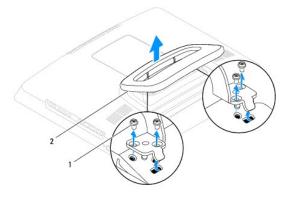
△ CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.



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).

# Removing the Computer Stand

- 1. Follow the procedures in Before You Begin.
- 2. Remove the I/O cover (see Removing the I/O Cover).
- 3. Remove the four screws that secure the computer stand to the computer.
- 4. Lift the computer stand away from the computer.



1	screws (4)	2	computer stand

#### Replacing the Computer Stand

- 1. Follow the procedures in Before You Begin.
- 2. Align the screw holes on the computer stand with the screw holes on the computer.
- 3. Replace the four screws that secure the computer stand to the computer.
- 4. Replace the I/O cover (see Replacing the I/O Cover).

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.

5. Connect your computer and all attached devices to electrical outlets, and turn them on.

# **System Board**

**Dell™ Inspiron™ One 19 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: 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).

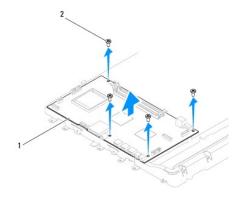
The system board's BIOS chip contains the Service Tag, which is also visible on a barcode label on the computer. The replacement kit for the system board includes a CD that provides a utility for transferring the Service Tag to the replacement system board.

### Removing the System Board

- 1. Follow the procedures in Before You Begin.
- 2. Remove the I/O cover (see Removing the I/O Cover).
- 3. Remove the computer stand (see Removing the Computer Stand)
- 4. Remove the optical drive (see Removing the Optical Drive).
- 5. Remove the decorative cover (see Removing the Decorative Cover)
- 6. Remove the speaker cover (see Removing the Speaker Cover).
- 7. Remove the display bezel (see Removing the Display Bezel).
- 8. Remove the back cover (see Removing the Back Cover).
- 9. Remove the I/O bracket (see Removing the I/O Bracket).
- 10. Remove the back metal shield (see Removing the Back Metal Shield).
- 11. Remove the inverter (see Removing the Inverter).
- 12. Remove the system-board shield (see Removing the System-Board Shield).
- 13. Remove the memory module(s) (see Removing Memory Module(s)).
- 14. Remove the Mini-Card (see Removing the Mini-Card).
- 15. Remove the coin-cell battery (see Removing the Coin-Cell Battery).
- 16. Remove the processor heat sink (see Removing the Processor Heat Sink).
- 17. Remove the processor (see Removing the Processor).

NOTE: Make note of the cable routing before disconnecting the cables from the system board.

- 18. Disconnect all the cables connected to the system board.
- 19. Remove the four screws that secure the system board to the chassis.
- 20. Lift the system board out of the chassis.



1	system board	2	screws (4)	
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# Replacing the System Board

- 1. Follow the procedures in Before You Begin.
- 2. Align the screw holes on the system board with the screw holes on the chassis.
- 3. Replace the four screws that secure the system board to the chassis.
- 4. Connect all the cables to the system board.
- 5. Replace the processor (see Replacing the Processor).
- 6. Replace the processor heat sink (see Replacing the Processor Heat Sink).
- 7. Replace the coin-cell battery (see Replacing the Coin-Cell Battery).
- 8. Replace the Mini-Card (see Replacing the Mini-Card).
- 9. Replace the memory module(s) (see Replacing Memory Module(s)).
- 10. Replace the system-board shield (see Replacing the System-Board Shield).
- 11. Replace the inverter (see Replacing the Inverter).
- 12. Replace the back metal shield (see Replacing the Back Metal Shield).
- 13. Replace the I/O bracket (see Replacing the I/O Bracket).
- 14. Replace the back cover (see Replacing the Back Cover).
- 15. Replace the display bezel (see Replacing the Display Bezel).
- 16. Replace the speaker cover (see Replacing the Speaker Cover).
- 17. Replace the decorative cover (see Replacing the Decorative Cover).
- 18. Replace the optical drive (see Replacing the Optical Drive).
- 19. Replace the computer stand (see Replacing the Computer Stand).
- 20. Replace the I/O cover (see Replacing the I/O Cover).

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'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. Turn on the computer.
- 2. Press <F2> during POST to enter the system setup program.
- 3. Navigate to the main tab and enter the service tag in the Service Tag Setting field.

### System Setup Utility

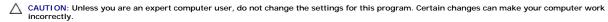
**Dell™ Inspiron™ One 19 Service Manual** 

- Clearing Forgotten Passwords and CMOS Settings
- Flashing the BIOS

#### Overview

Use system setup utility to:

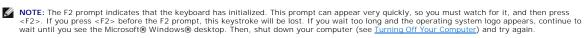
- 1 Change the system configuration information after you add, change, or remove any hardware in your computer
- 1 Set or change a user-selectable option such as the user password
- 1 Read the current amount of memory or set the type of hard drive installed



MOTE: Before you change system setup, it is recommended that you write down the system setup screen information for future reference.

#### **Entering System Setup Utility**

- 1. Turn on (or restart) your computer.
- 2. When the DELL™ logo is displayed, watch for the F2 prompt to appear and then press <F2> immediately.



#### **System Setup Screens**

The system setup screen displays current or changeable configuration information for your computer. Information on the screen is divided into three areas: the setup item, active help screen, and key functions.

**Setup I tem** — This field appears on the left side of the system setup window. The field is a scrollable list containing features that define the configuration of your computer, including installed hardware, power conservation, and security features.

Help Screen — This field appears on the right side of the system setup window and contains information about each option listed in the **Setup I tem**. In this field you can view information about your computer and make changes to your current settings.

Scroll up and down the list with the up- and down-arrow keys. As an option is highlighted, the **Help Screen** displays more information about that option and available settings

Press the up-arrow and down-arrow keys to highlight an option. Press <Enter> to make that selection active and return to the Setup I tem.

NOTE: Not all settings listed in the Setup I tem are changeable.

Key Functions — This field appears below the Help Screen and lists keys and their functions within the active system setup field.

### **System Setup Options**

NOTE: Depending on your computer and installed devices, the items listed in this section may appear, or may not appear exactly as listed.

System Info			
System	Displays the system name		
BIOS Version	Displays the BIOS version number		
Service Tag	Displays the service tag of the computer when the service tag is present		
Processor Type	Displays the processor information		
L2 Cache	Displays the L2 cache size		
Installed Memory	Indicates the amount of memory installed in MB		
Memory Speed	Indicates the memory speed in MHz		

Memory Channel Mode	Indicates if the memory is in single or dual channel mode
Memory Type	Indicates the type of installed memory
Main	
Service Tag Setting	Displays the service tag of the computer when the service tag is present
Service rag Setting	Displays the service tag of the computer when the service tag is present
	Displays a field to input the service tag manually when the service tag is absent
System Time	Displays current time in hh:mm:ss format
System Date	Displays the current date in mm/dd/yy format
SATA-0	Displays the SATA drive connected to the SATA-0 connector
SATA-1	Displays the SATA drive connected to the SATA-1 connector
SATA-2	Displays the SATA drive connected to the SATA-2 connector
Halt on Error	Enabled or Disabled (Enabled by default)
Keyboard Errors	Displays keyboard errors when set to Report Default is Report
Fan Errors	Displays fan errors when set to Report Default is Report
Advanced	
CPU Information	Max CPUID Value Limit—Enabled or Disabled (Disabled by default)     Execute-Disable Bit Capability—Enabled or Disabled (Enabled by default)
Integrated Chambier Configurati	Initiate Graphic Adapter—PEG/PCI
Integrated Graphics Configuration	1 Video Memory Size—32 MB
	1 DVMT Mode Select—DVMT Mode 1 DVMT/FIXED Memory—256 MB
Integrated Peripherals Configuration	
	USB Functions—Enabled or Disabled (Enabled by default)     USB Storage Function—Enabled or Disabled (Enabled by default)
	Audio Controller—Enabled or Disabled (Enabled by default)     Wireless LAN—Enabled or Disabled (Enabled by default)
	Integrated NIC—Enabled or Disabled (Enabled by default)
	LAN Boot ROM—Enabled or Disabled (Disabled by default)     1394/Card Reader—Enabled or Disabled (Enabled by default)
	Onboard Serial Port—3F8/IRQ4     Onboard Parallel Port—378/IRQ7
	1 Parallel Port Mode—SPP
Dockum Num Look	On or Off (On by default)
Bootup Num-Lock Quick Boot	Enabled or Disabled (Enabled by default)
QUICK BOOL	Enabled of Disabled (Enabled by default)
Power Management Features	
Power Management Features  Suspend mode	Specifies the suspend type Default is S3
Suspend mode	Default is S3
Suspend mode USB Wakeup From S3	Default is S3  Enabled or Disabled (Enabled by default)
Suspend mode  USB Wakeup From S3  Restore on AC Power Loss	Default is S3  Enabled or Disabled (Enabled by default)  Off, On, or Last (Off by default)
Suspend mode  USB Wakeup From S3  Restore on AC Power Loss  Low Power Mode	Default is S3  Enabled or Disabled (Enabled by default)  Off, On, or Last (Off by default)  Enabled or Disabled (Disabled by default)
Suspend mode  USB Wakeup From S3  Restore on AC Power Loss  Low Power Mode  Resume On LAN	Default is S3  Enabled or Disabled (Enabled by default)  Off, On, or Last (Off by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled (Disabled by default)
Suspend mode  USB Wakeup From S3  Restore on AC Power Loss  Low Power Mode  Resume On LAN  Resume On RTC Alarm	Default is S3  Enabled or Disabled (Enabled by default)  Off, On, or Last (Off by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled (Disabled by default)
Suspend mode  USB Wakeup From S3  Restore on AC Power Loss  Low Power Mode  Resume On LAN  Resume On RTC Alarm  Security	Default is S3  Enabled or Disabled (Enabled by default)  Off, On, or Last (Off by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled RTC to generate a wake event (Disabled by default)
Suspend mode  USB Wakeup From S3  Restore on AC Power Loss  Low Power Mode  Resume On LAN  Resume On RTC Alarm  Security  Unlock Setup Status	Default is S3  Enabled or Disabled (Enabled by default)  Off, On, or Last (Off by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled RTC to generate a wake event (Disabled by default)  Unlocked
Suspend mode  USB Wakeup From S3  Restore on AC Power Loss  Low Power Mode  Resume On LAN  Resume On RTC Alarm  Security  Unlock Setup Status  Supervisor Password	Default is S3  Enabled or Disabled (Enabled by default)  Off, On, or Last (Off by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled RTC to generate a wake event (Disabled by default)  Unlocked  Status of supervisor password installed
Suspend mode  USB Wakeup From S3  Restore on AC Power Loss  Low Power Mode  Resume On LAN  Resume On RTC Alarm  Security  Unlock Setup Status  Supervisor Password  User Password	Default is S3  Enabled or Disabled (Enabled by default)  Off, On, or Last (Off by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled RTC to generate a wake event (Disabled by default)  Unlocked  Status of supervisor password installed
Suspend mode  USB Wakeup From S3  Restore on AC Power Loss  Low Power Mode  Resume On LAN  Resume On RTC Alarm  Security  Unlock Setup Status  Supervisor Password  Change Supervisor Password	Default is S3  Enabled or Disabled (Enabled by default)  Off, On, or Last (Off by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled RTC to generate a wake event (Disabled by default)  Unlocked  Status of supervisor password installed  Allows to set the desired supervisor password
Suspend mode  USB Wakeup From S3  Restore on AC Power Loss  Low Power Mode  Resume On LAN  Resume On RTC Alarm  Security  Unlock Setup Status  Supervisor Password  User Password  Change Supervisor Password  Change User Password	Default is S3  Enabled or Disabled (Enabled by default)  Off, On, or Last (Off by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled RTC to generate a wake event (Disabled by default)  Unlocked  Status of supervisor password installed  Status of user password installed  Allows to set the desired supervisor password  Allows to set the desired user password
Suspend mode  USB Wakeup From S3  Restore on AC Power Loss  Low Power Mode  Resume On LAN  Resume On RTC Alarm  Security  Unlock Setup Status  Supervisor Password  Change Supervisor Password	Default is S3  Enabled or Disabled (Enabled by default)  Off, On, or Last (Off by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled RTC to generate a wake event (Disabled by default)  Unlocked  Status of supervisor password installed  Allows to set the desired supervisor password
Suspend mode  USB Wakeup From S3  Restore on AC Power Loss  Low Power Mode  Resume On LAN  Resume On RTC Alarm  Security  Unlock Setup Status  Supervisor Password  User Password  Change Supervisor Password  Change User Password	Default is S3  Enabled or Disabled (Enabled by default)  Off, On, or Last (Off by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled RTC to generate a wake event (Disabled by default)  Unlocked  Status of supervisor password installed  Status of user password installed  Allows to set the desired supervisor password  Allows to set the desired user password
Suspend mode  USB Wakeup From S3  Restore on AC Power Loss  Low Power Mode  Resume On LAN  Resume On RTC Alarm  Security  Unlock Setup Status  Supervisor Password  User Password  Change Supervisor Password  Change User Password	Default is S3  Enabled or Disabled (Enabled by default)  Off, On, or Last (Off by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled RTC to generate a wake event (Disabled by default)  Unlocked  Status of supervisor password installed  Status of user password installed  Allows to set the desired supervisor password  Allows to set the desired user password
Suspend mode  USB Wakeup From S3  Restore on AC Power Loss  Low Power Mode  Resume On LAN  Resume On RTC Alarm  Security  Unlock Setup Status  Supervisor Password  User Password  Change Supervisor Password  Change User Password  Boot Menu Security	Default is S3  Enabled or Disabled (Enabled by default)  Off, On, or Last (Off by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled RTC to generate a wake event (Disabled by default)  Unlocked  Status of supervisor password installed  Status of user password installed  Allows to set the desired supervisor password  Allows to set the desired user password
Suspend mode  USB Wakeup From S3  Restore on AC Power Loss  Low Power Mode  Resume On LAN  Resume On RTC Alarm  Security  Unlock Setup Status  Supervisor Password  User Password  Change Supervisor Password  Change User Password  Boot Menu Security	Default is S3  Enabled or Disabled (Enabled by default)  Off, On, or Last (Off by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled (Disabled by default)  Enabled or Disabled RTC to generate a wake event (Disabled by default)  Unlocked  Status of supervisor password installed  Status of user password installed  Allows to set the desired supervisor password  Allows to set the desired user password  Enabled or Disabled (Disabled by default)

Exit Options	Provides options to Save Changes and Exit, Discard Changes and Exit, and Load Default Setting
Exit	
Network Drives	Specifies the boot device priority sequence from the available network drives
CD/DVD Drives	Specifies the boot device priority sequence from the available CD/DVD drives
USB Drives	Specifies the boot device priority sequence from the available USB drives
Hard Disk Drives	Specifies the boot device priority sequence from the available hard disk drives
Removable Drives	Specifies the boot device priority sequence from the available removable drives
	Removable; SATA; USB; CD/DVD; Network; Disabled (Network by default)
5th Boot Device	Specifies the boot sequence from the available devices
	Removable; SATA; USB; CD/DVD; Network; Disabled (CD/DVD by default)
4th Boot Device	Specifies the boot sequence from the available devices
	Removable; SATA; USB; CD/DVD; Network; Disabled (USB by default)
3rd Boot Device	Specifies the boot sequence from the available devices
	Removable; SATA; USB; CD/DVD; Network; Disabled (SATA by default)

#### **Boot Sequence**

This feature allows you to change the boot sequence for devices.

#### **Boot Options**

- 1 Hard Drive The computer attempts to boot from the primary hard drive. If no operating system is on the drive, the computer generates an error message.
- 1 **CD/DVD Drive** The computer attempts to boot from the CD/DVD drive. If no CD/DVD is in the drive, or if the CD/DVD has no operating system, the computer generates an error message.
- 1 USB Flash Device Insert the memory device into a USB port and restart the computer. When F12 = Boot Menu appears in the lower-right corner of the screen, press <F12>. The BIOS detects the device and adds the USB flash option to the boot menu.



#### **Changing Boot Sequence for the Current Boot**

You can use this feature to change the current boot sequence, for example, to boot from the CD/DVD drive to run the Dell Diagnostics on the *Drivers and Utilities* media. On completion of diagnostic tests, the previous boot sequence is restored.

- 1. If you are booting to a USB device, connect the USB device to a USB connector
- 2. Turn on (or restart) your computer.
- 3. When F2 = Setup, F12 = Boot Menu appears in the lower-right corner of the screen, press <F12>.

If you wait too long and the operating system logo appears, continue to wait until you see the Microsoft Windows desktop. Then shut down your computer and try again.

The Boot Device Menu appears, listing all available boot devices.

4. On the Boot Device Menu choose the device you want to boot from.

For example, if you are booting to a USB memory key, highlight USB Flash Device and press <Enter>.

NOTE: To boot to a USB device, the device must be bootable. To ensure your device is bootable, check the device documentation.

#### **Changing Boot Sequence for Future Boots**

- Enter system setup utility (see <u>Entering System Setup Utility</u>).
- 2. Use the arrow keys to highlight the **Boot** menu option and press <Enter> to access the menu.
  - NOTE: Write down your current boot sequence in case you want to restore it.

- 3. Press the up- and down-arrow keys to move through the list of devices.
- 4. Press plus (+) or minus (-) to change the boot priority of the device.

### **Clearing Forgotten Passwords and CMOS Settings**

MARNING: Before you begin any of the procedures in this section, follow the safety instructions that shipped with your computer.

MARNING: The computer must be disconnected from the electrical outlet to clear the CMOS setting.

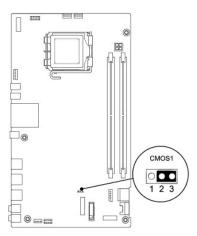
△ CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

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).

1. Follow the procedures in Before You Begin.

NOTE: The computer must be disconnected from the electrical outlet to clear the CMOS setting.

- 2. Remove the system-board shield (see Removing the System-Board Shield).
- 3. Locate the 3-pin CMOS connector (CMOS1) on the system board (see System Board Components).
- 4. Remove the 2-pin jumper plug from pins 2 and 3 and fix it on pins 1 and 2.



- 5. Wait for approximately five seconds to clear the CMOS setting.
- 6. Remove the 2-pin jumper plug from pins 1 and 2 and replace it on pins 2 and 3.
- 7. Replace the system-board shield (see Replacing the System-Board Shield).

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. Connect your computer and devices to electrical outlets, and turn them on.

# Flashing the BIOS

1. Turn on the computer.

- 2. Go to the Dell Support website at **support.dell.com**.
- 3. Click Drivers & Downloads→ Select Model.
- 4. Select the type of product in the **Select Your Product Family** list.
- 5. Select the product brand in the Select Your Product Line list.
- 6. 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.
- 7. Click Confirm.
- 8. A list of results appear on the screen. Click BIOS.
- 9. Click **Download Now** to download the latest BIOS file. The **File Download** window appears.
- 10. 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.
- 12. Double-click the file icon on the desktop and follow the procedures on the screen.

### **Technical Overview**

**Dell™ Inspiron™ One 19 Service Manual** 

- Inside View of Your Inspiron OneSystem Board Components



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.

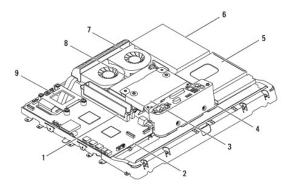


△ CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.



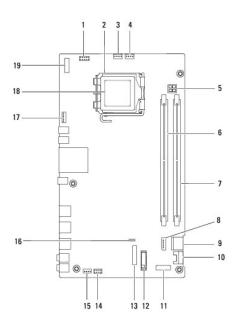
CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

# Inside View of Your Inspiron One



1	memory module(s)	2	system board
3	back metal shield	4	I/O bracket
5	optical-drive shield	6	hard drive
7	heat-sink fans	8	power supply
9	processor heat sink		

**System Board Components** 



1	inverter connector (INV_CN1)	2	processor socket
3	heat-sink fan connector (SYSFAN1)	4	heat-sink fan connector (CPUFAN1)
5	P4 power socket (PWR_CN1)	6	memory-module connector (DIMM1)
7	memory-module connector (DIMM2)	8	SATA power connector (SATAPWR1)
9	SATA drive connector (SATA1)	10	SATA drive connector (SATA2)
11	I/O panel_2 connector (RISER2)	12	battery socket (BT1)
13	I/O panel_1 connector (RISER1)	14	power switch connector (PWRSW1)
15	speakers connector (SPKR1)	16	CMOS jumper (CMOS1)
17	camera connector (CAM_CN1)	18	processor
19	display connector (LVDS1)		

#### Back to Contents Page

#### **Dell™ Inspiron™ One 19 Service Manual**

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

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

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

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