Dell™ Inspiron™ 620 Service Manual

Technical Overview Power Button Module Before You Begin <u>Fans</u> Processor Computer Cover Coin-Cell Battery Memory Module(s) Power Supply Front Bezel Card Retention Bracket System Board PCI Express Cards System Setup Flashing the BIOS Drives Front I/O Panel

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.

Information in this document is subject to change without notice. © 2011 Dell Inc. All rights reserved.

Trademarks used in this text: Dell™, the DELL logo, and Inspiron™ are trademarks of Dell Inc.; Microsoft®, Windows®, and the Windows start button logo

are either trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

 $Reproduction \ of \ these \ materials \ in \ any \ manner \ what so ever \ without \ the \ written \ permission \ of \ Dell \ Inc. \ is \ strictly \ forbidden.$

Regulatory model: D11M series Regulatory type: D11M001

2011 - 05 Rev. A00

Before You Begin

Dell™ Inspiron™ 620 Service Manual

- Technical Specifications
- Turning Off Your Computer
- Safety Instructions

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

- 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

Technical Specifications

For information on technical specifications of your computer, see the Setup Guide at support.dell.com/manuals

Recommended Tools

The instructions in this document may require the following tools:

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

Turning Off Your Computer

A 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. To shut down the operating system, click Start 6 and then click Shut Down.
- Ensure that the computer is turned off. If your computer did not automatically turn off when you shut down the operating system, press and hold the

Safety Instructions

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



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

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

1. Ensure that the work surface is flat and clean to prevent the computer cover from being scratched.

- 2. Turn off your computer (see <u>Turning Off Your Computer</u>) 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 eject any installed cards from the Media Card Reader.
- 7. Press and hold the power button to ground the system board.

CAUTION: Before touching anything inside your computer, ground yourself by touching an unpainted metal surface, such as the metal at the back of the computer. While you work, periodically touch an unpainted metal surface to dissipate static electricity, which could harm internal components.

Front Bezel

Dell™ Inspiron™ 620 Service Manual

- Removing the Front Bezel
- Replacing the Front Bezel

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 dell.com/regulatory_compliance.

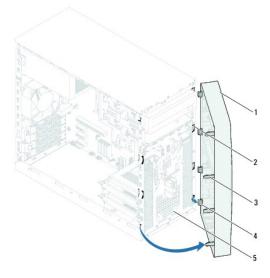
MARNING: To guard against electrical shock, always unplug your computer from the electrical outlet before removing the cover.

WARNING: Do not operate your computer with any cover(s) (including computer covers, front bezels, filler brackets, front-panel inserts, etc.)

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.

Removing the Front Bezel

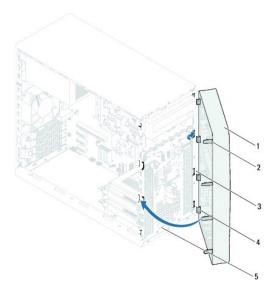
- 1. Follow the instructions in Before You Begin.
- 2. Remove the computer cover (see Removing the Computer Cover).
- 3. Place the computer in an upright position.
- 4. Grasp and release the front bezel tabs sequentially, one at a time by moving them outward from the front panel.
- 5. Rotate and pull the front bezel away from the front of the computer to release the front bezel clamps from the front panel slots.



1	front bezel	2	front panel slots (4)
3	front bezel tabs (4)	4	front bezel clamps (4)
5	front panel		

6. Set aside the front bezel in a secure location.

- 1. Follow the instructions in <u>Before You Begin</u>.
- 2. Align and insert the front bezel clamps into the front panel slots.
- 3. Rotate the front bezel towards the computer until the front bezel tabs snap into place.



1	front bezel	2	front bezel tabs (4)
3	front panel slots (4)	4	front bezel clamps (4)
5	front panel		

4. Replace the computer cover (see Replacing the Computer Cover).

Flashing the BIOS

Dell™ Inspiron™ 620 Service Manual

The BIOS may require flashing when an update is available or when replacing the system board. To flash the BIOS:

- 1. Turn on the computer.
- 2. Go to support.dell.com/support/downloads.
- 3. Locate the BIOS update file for your computer.
 - NOTE: The Service Tag for your computer is located on a label on the top of your computer.

If you have your computer's Service Tag:

- a. Click Enter a Tag.
- b. Enter your computer's Service Tag in the Enter a service tag field, click Go, and proceed to step 4.

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

- a. Click Select Model.
- b. Select the type of product in the **Select Your Product Family** list.
- c. Select the product brand in the Select Your Product Line list.
- d. Select the product model number in the Select Your Product Model list.
- NOTE: If you have selected a different model and want to start over again, click Start Over on the top right of the menu.
- e. Click Confirm.
- 4. A list of results appears on the screen. Click BIOS.
- 5. Click **Download Now** to download the latest BIOS file. The **File Download** window appears.
- 6. Click Save to save the file on your desktop. The file downloads to your desktop.
- 7. 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
- 8. Double-click the file icon on the desktop and follow the instructions that appear on the screen.

PCI Express Cards

Dell™ Inspiron™ 620 Service Manual

- Removing PCI Express Cards
- Replacing PCI Express Cards
- Configuring Your Computer After Removing or Installing the PCI Express Card

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 dell.com/regulatory_compliance.

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

MARNING: Do not operate your computer with any cover(s) (including computer covers, bezels, filler brackets, front-panel inserts, etc.) removed.

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.

Removing PCI Express Cards

- 1. Follow the instructions in Before You Begin.
- 2. Remove the computer cover (see Removing the Computer Cover).
- 3. Remove the card retention bracket (see Removing the Card Retention Bracket).
- 4. Disconnect any cables connected to the card, if applicable.
- 5. Remove the PCI Express card from the card slot:

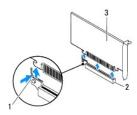
PCI Express x1 card — Grasp the card by its top corners, and ease it out of its connector.



1 PCI Express x1 card 2 PCI Express x1 card slot

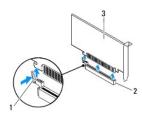
PCI Express x16 card — The securing tab on the PCI Express x16 card slot may vary based on your computer model. Perform one of the following instructions based on the type of securing tab on the PCI Express x16 card slot.

1 Push the securing tab to the side, grasp the card by its top corners, and then ease it out of the connector.



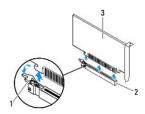
1 securing tab 2 PCI Express x16 card slot

3 PCI Express x16 card

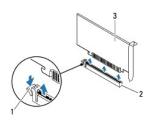


1	securing tab	2	PCI Express x16 card slot			
3	PCI Express x16 card					

1 Press the securing tab down, grasp the card by its top corners, and then ease it out of the connector.



1	securing tab	2	PCI Express x16 card slot					
2	2 DCI Express v16 card							



1	securing tab	2	PCI Express x16 card slot
3	PCL Express	×16	card

6. If you are removing the card permanently, install a filler bracket in the empty card-slot opening.



NOTE: Installing filler brackets over empty card-slot openings is necessary to maintain FCC certification of the computer. The brackets also keep dust and dirt out of your computer.

Replacing PCI Express Cards

- 1. Follow the instructions in <u>Before You Begin</u>.
- 2. Prepare the card for installation.

See the documentation that shipped with the card for information on configuring the card, making internal connections, or otherwise customizing it for

3. Connect the PCI Express card to the card slot:

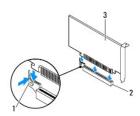
PCI Express x1 card — Place the PCI Express card in the slot on the system board and press down firmly. Ensure that the PCI Express card is fully seated in the slot.



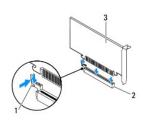
1 PCI Express x1 card 2 PCI Express x1 card slot

PCI Express x16 card — The securing tab on the PCI Express x16 card slot may vary based on your computer model. Perform one of the following instructions based on the type of securing tab on the PCI Express x16 card slot.

1 Push the securing tab to the side and place the PCI Express card in the slot on the system board and press down firmly. Ensure that the PCI Express card is fully seated in the slot.



1	securing tab	2	PCI Express x16 card slot				
	PCI Express v16 card						

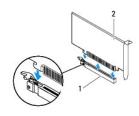


1	securing tab	2	PCI Express x16 card slot
'n	PCI Evnress	(16	card

1 Place the PCI Express card in the slot on the system board and press down firmly. Ensure that the PCI Express card is fully seated in the slot.



1 PCI Express x16 card slot 2 PCI Express x16 card



1 PCI Express x16 card slot 2 PCI Express x16 card

- 4. Replace the card retention bracket (see Replacing the Card Retention Bracket).
- 5. Connect any cables that should be attached to the card.

See the documentation that shipped with the card for information about the card's cable connections.

CAUTION: Do not route card cables over or behind the cards. Cables routed over the cards can prevent the computer cover from closing properly or cause damage to the equipment.

- 6. Replace the computer cover (see Replacing the Computer Cover).
- 7. Reconnect the computer and devices to electrical outlets, and then turn them on.
- 8. To complete the installation, see Configuring Your Computer After Removing or Installing the PCI Express Card.

Configuring Your Computer After Removing or Installing the PCI Express Card

NOTE: For information about the location of external connectors, see the Setup Guide. For information on installing drivers and software for your card, see the documentation that shipped with the card.

	Installed	Removed
Sound card	Enter system setup (see System Setup). Go to Onboard Audio Controller and then change the setting to Disabled. Connect the external audio devices to the sound card's connectors.	Enter system setup (see System Setup). Go to Onboard Audio Controller and then change the setting to Enabled. Connect the external audio devices to the computer's back panel connectors.
Network card	Enter system setup (see System Setup). Go to Onboard LAN Controller and then change the setting to Disabled. Connect the network cable to the network card's connector.	Enter system setup (see System Setup). Go to Onboard LAN Controller and then change the setting to Enabled. Connect the network cable to the integrated network connector.

Card Retention Bracket

Dell™ Inspiron™ 620 Service Manual

- Removing the Card Retention Bracket
- Replacing the Card Retention 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 dell.com/regulatory_compliance.

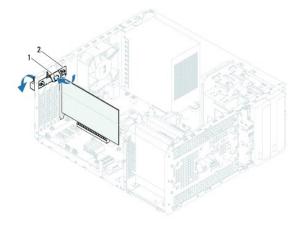
WARNING: To guard against electrical shock, always unplug your computer from the electrical outlet before removing the cover.

WARNING: Do not operate your computer with any cover(s) (including computer covers, bezels, filler brackets, front-panel inserts, etc.)

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.

Removing the Card Retention Bracket

- 1. Follow the instructions in Before You Begin.
- 2. Remove the computer cover (see Removing the Computer Cover).
- 3. Push the release tab to release the card retention bracket from the chassis.



1 release tab 2 card retention bracket

Replacing the Card Retention Bracket

- 1. Follow the instructions in Before You Begin.
- 2. Rotate and push the card retention bracket towards the computer until it snaps into place.
- 3. Replace the computer cover (see Replacing the Computer Cover)

Coin-Cell Battery

Dell™ Inspiron™ 620 Service Manual

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

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

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.

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

WARNING: Do not operate your computer with any cover(s) (including computer covers, bezels, filler brackets, front-panel inserts, etc.)

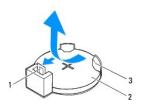
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell is not covered by your warranty.

Removing the Coin-Cell Battery

- 1. Record all the screens in system setup (see System Setup) so that you can restore the correct settings after the new coin-cell battery has been
- 2. Follow the instructions in Before You Begin.
- 3. Remove the computer cover (see Removing the Computer Cover)
- 4. Locate the battery socket on the system board (see System Board Components).

CAUTION: If you pry the battery out of its socket with a blunt object, be careful not to touch the system board with the object. Ensure that the object is inserted between the battery and the socket before you attempt to pry out the battery. Otherwise, you may damage the system board by prying off the socket or by breaking circuit traces on the system board.

5. Press the battery-release lever to remove the coin-cell battery.

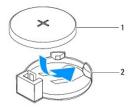


1	battery-release lever	2	coin-cell battery
2	hattery socket		

6. Set aside the battery in a secure location.

Replacing the Coin-Cell Battery

- 1. Follow the instructions in Before You Begin
- 2. Insert the new coin-cell battery (CR2032) into the socket with the side labeled "+" facing up, and press the coin-cell battery into place.



1 coin-cell battery 2 battery socket

- 3. Replace the computer cover (see Replacing the Computer Cover).
- 4. Connect your computer and devices to electrical outlets, and then turn them on.
- 5. Enter system setup (see $\underline{\text{System Setup}}$) and restore the settings you recorded in $\underline{\text{step 1}}$.

Computer Cover

Dell™ Inspiron™ 620 Service Manual

- Removing the Computer Cover
- Replacing the Computer 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 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 cover.

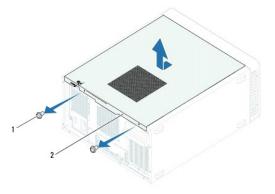
WARNING: Do not operate your computer with any cover(s) (including computer covers, bezels, filler brackets, front-panel inserts, etc.)

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

Removing the Computer Cover

- 1. Follow the instructions in Before You Begin.
- 2. Lay the computer on its side with the computer cover facing up.
- 3. Using a screwdriver, remove the two screws that secure the computer cover to the chassis.
- 4. Release the computer cover by sliding it away from the front of the computer.
- 5. Lift the cover away from the computer and set it aside in a secure location.

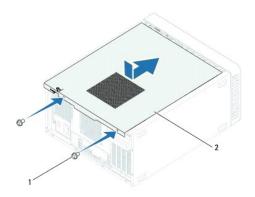


ì	$\overline{}$			
	1	screws (2)	2	computer cover

Replacing the Computer Cover

- 1. Follow the instructions in <u>Before You Begin</u>.
- 2. Connect all the cables and fold the cables out of the way.
- 3. Ensure that no tools or extra parts are left inside the computer.
- 4. Align the tabs at the bottom of the computer cover with the slots located along the edge of the chassis.
- 5. Press the computer cover down and slide it towards the front of the computer.

6. Using a screwdriver, replace the two screws that secure the computer cover to the chassis.



|--|

7. Place the computer in an upright position.

Processor

Dell™ Inspiron™ 620 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 dell.com/regulatory_compliance.

WARNING: To guard against electrical shock, always unplug your computer from the electrical outlet before removing the cover.

MARNING: Do not operate your equipment with any cover(s) (including computer covers, bezels, filler brackets, front-panel inserts, etc.)

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: 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

- 1. Follow the instructions in Before You Begin.
- 2. Remove the computer cover (see Removing the Computer Cover).

CAUTION: Despite having a plastic shield, the heat-sink assembly may be very hot during normal operation. Ensure that it has had sufficient time to cool before you touch it.

- 3. Remove the processor fan and heat-sink assembly (see Removing the Processor Fan and Heat-Sink Assembly).
- MOTE: Unless a new heat-sink is required for the new processor, reuse the original heat-sink assembly when you replace the processor.
- 4. Press the release lever down and then pull it outwards to release it from the tab that secures it.
- 5. Extend the release lever completely to open the processor cover.



1 processor cover 2 tab 3 release lever

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

- 6. Gently lift the processor to remove it from the socket.
 - Leave the release lever extended in the release position so that the socket is ready for the new processor.

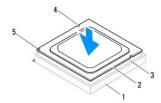




Replacing the Processor

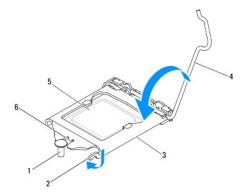
- \triangle CAUTION: Ground yourself by touching an unpainted metal surface on the back of the computer.
- AUTION: When replacing the processor, do not touch any of the pins inside the socket or allow any objects to fall on the pins in the socket.
- 1. Follow the instructions in Before You Begin.
- 2. Unpack the new processor, being careful not to touch the underside of the processor.
- A CAUTION: You must position the processor correctly in the socket to avoid permanent damage to the processor and the computer when you turn on the computer.
- 3. If the release lever on the socket is not fully extended, move it to that position.
- 4. Orient the alignment notches on the processor with the alignment tabs on the socket.
- 5. Align the pin-1 corners of the processor and socket.
- CAUTION: To avoid damage, ensure that the processor aligns properly with the socket, and do not use excessive force when you install the processor.

Set the processor lightly in the socket and ensure that the processor is positioned correctly.



1	1	socket	2	processor	3	alignment tabs (2)
1	4	alignment notches (2)	5	processor pin-1 indicator	Г	

- △ CAUTION: Ensure that the processor cover notch is positioned underneath the alignment post.
- 6. When the processor is fully seated in the socket, close the processor cover.
- 7. Pivot the release lever down and place it under the tab on the processor cover.



1	alignment post	2	tab	3	processor cover
4	release lever	5	processor	6	processor cover notch

8. 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.

- 9. Apply the new thermal grease to the top of the processor.
- 10. Replace the processor fan and heat-sink assembly (see Replacing the Processor Fan and Heat-Sink Assembly).

 \triangle CAUTION: Ensure that the processor fan and heat-sink assembly is correctly seated and secure.

- 11. Replace the computer cover (see Replacing the Computer Cover).
- 12. Connect your computer and devices to electrical outlets, and turn them on.

Drives

Dell™ Inspiron™ 620 Service Manual

- Hard Drive(s)
- 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 dell.com/regulatory_compliance.

WARNING: To guard against electrical shock, always unplug your computer from the electrical outlet before removing the cover.

WARNING: Do not operate your computer with any cover(s) (including computer covers, bezels, filler brackets, front-panel inserts, etc.)

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

Hard Drive(s)

Removing Hard Drive(s)

A CAUTION: If you are replacing a hard drive that contains data you want to keep, back up your files before you begin this procedure.

- 1. Follow the instructions in Before You Begin.
- 2. Remove the computer cover (see Removing the Computer Cover).
- 3. If you are removing the primary hard-drive, disconnect the power and data cables from the primary hard-drive.
- 4. If you are removing the secondary hard-drive:
 - a. Disconnect the power cable from the primary and secondary hard- drives.
 - b. Disconnect the data cable from the secondary hard-drive.

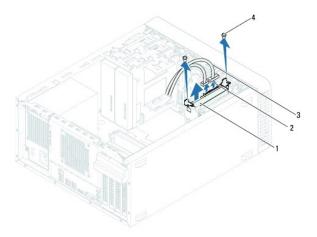
NOTE: If you are not replacing the hard drive at this time, disconnect the other end of the data cable from the system board connector and set it aside. You can use the data cable to install a hard drive at a later time.

5. Remove the two screws that secure the hard-drive assembly to the drive panel.

A CAUTION: Ensure that you do not scratch the hard drive's circuit board, while removing or replacing the hard drive.

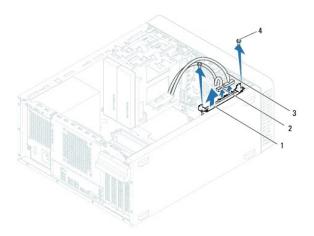
6. Lift the hard-drive assembly away from the computer.

Primary Hard Drive



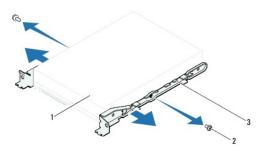
ĺ	1	primary hard-drive assembly	2	data cable
I	3	power cable	4	screws (2)

Secondary Hard Drive



1	secondary hard-drive assembly	2	data cable
3	power cable	4	screws (2)

- 7. Remove the two screws (one on each side) that secure the hard-drive brackets to the hard-drive.
- 8. Remove the hard-drive brackets off the hard drive.



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

9. If removing the hard drive changes the drive configuration, ensure that you reflect these changes in the system setup (see System Setup).

Replacing the Hard Drive

- 1. Follow the instructions in <u>Before You Begin</u>.
- 2. Check the documentation that shipped with the hard drive to verify that it is configured for your computer.
- 3. Place the hard-drive brackets in position.
- 4. Replace the two screws (one on each side) that secure the hard-drive brackets to the hard drive.
- 5. Slide the hard-drive assembly into the hard-drive bay.
- 6. Replace the two screws that secure the hard-drive assembly to the drive panel.
- 7. If you are replacing the primary hard-drive, connect the power and data cables to the primary hard drive.

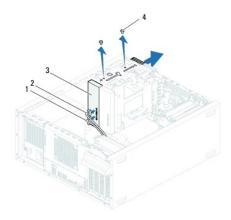
- 8. If you are replacing the secondary hard-drive:
 - a. Connect the power cable to the primary and secondary hard-drives.
 - b. Connect the data cable to the secondary hard-drive.
- 9. Replace the computer cover (see Replacing the Computer Cover).
- 10. Connect your computer and devices to electrical outlets, and then turn them on.
- 11. See the documentation that shipped with the hard drive for instructions on installing any software required for drive operation.
- 12. Check the System Setup for drive configuration changes (see System Setup).

Optical Drive

Removing the Optical Drive

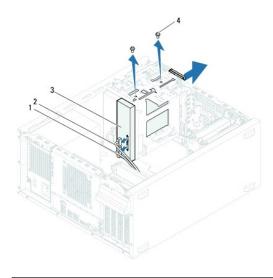
- 1. Follow the instructions in Before You Begin.
- 2. Remove the computer cover (see Removing the Computer Cover).
- 3. Remove the front bezel (see Removing the Front Bezel).
- 4. If you are removing the primary optical-drive, disconnect the power and data cables from the primary optical-drive.
- 5. If you are removing the secondary optical-drive:
 - a. Disconnect the power cable from the primary and secondary optical- drives.
 - b. Disconnect the data cable from the secondary optical-drive.
- NOTE: If you are not replacing the optical drive at this time, disconnect the other end of the data cable from the system board connector and set it aside. You can use the data cable to install an optical drive at a later time.
- 6. Remove the two screws that secure the optical drive to the chassis.
- 7. Push and slide the optical drive out through the front of the computer.

Primary Optical Drive



l	1	power cable	2	data cable
ı	3	primary optical-drive	4	screws (2)

Secondary Optical Drive

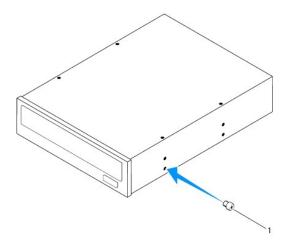


1	power cable	2	data cable
3	secondary optical-drive	4	screws (2)

8. Set aside the optical drive in a secure location.

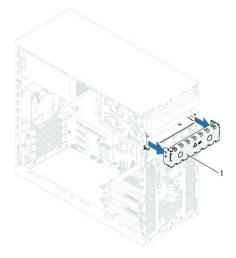
Replacing the Optical Drive

- 1. Follow the instructions in <u>Before You Begin</u>.
- 2. Remove the screw from the old optical drive and insert it in the new optical drive.



1 screw

3. To install a secondary optical drive, pull the break-away metal plate away from the chassis.



1 break-away metal plate

- 4. Gently slide the optical drive into the optical drive bay through the front of the computer.
- 5. Align the screw holes on the optical drive with the screw holes on the chassis.
- 6. Replace the two screws that secure the optical drive to the chassis.
- 7. If you are replacing the primary optical-drive, connect the power and data cables to the primary optical-drive.
- 8. If you are replacing the secondary optical-drive:
 - a. Connect the power cable to the primary and secondary optical- drives.
 - b. Connect the data cable to the secondary optical-drive.
- 9. Replace the front bezel (see Replacing the Front Bezel).
- 10. Replace the computer cover (see Replacing the Computer Cover).
- 11. Connect your computer and devices to electrical outlets, and turn them on.
- 12. See the documentation that shipped with the drive for instructions on installing any software required for drive operation.
- 13. Check the System Setup for drive configuration changes (see <u>System Setup</u>).

Fans

Dell™ Inspiron™ 620 Service Manual

- Chassis Fan
- Processor Fan and Heat-Sink Assembly

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

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

WARNING: Do not operate your computer with any cover(s) (including computer covers, bezels, filler brackets, front-panel inserts, etc.)

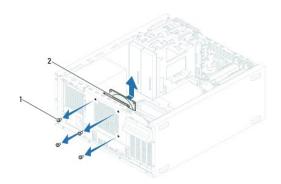
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell is not covered by your warranty.

Chassis Fan

Removing the Chassis Fan

A CAUTION: Do not touch the fan blades when you are removing the chassis fan, as this could damage the fan.

- 1. Follow the instructions in Before You Begin.
- 2. Remove the computer cover (see Removing the Computer Cover).
- 3. Disconnect the chassis fan cable from the system board connector, FAN_SYS1 (see System Board Components).
- 4. Remove the four screws that secure the chassis fan to the chassis.
- 5. Slide and lift the chassis fan away from the computer as shown in the illustration.



1 screws (4) 2 chassis fan

Replacing the Chassis Fan

- 1. Follow the instructions in Before You Begin.
- 2. Align the screw holes on the chassis fan with the screw holes on the chassis.
- 3. Replace the four screws that secure the chassis fan to the chassis.

- 4. Connect the chassis fan cable to the system board connector, FAN_SYS1 (see System Board Components).
- 5. Replace the computer cover (see Replacing the Computer Cover).

Processor Fan and Heat-Sink Assembly

MARNING: Despite having a plastic shield, the processor fan and heat-sink assembly may be very hot during normal operation. Ensure that it has had sufficient time to cool before you touch it.

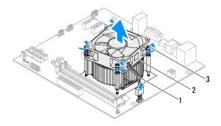
↑ CAUTION: The processor fan and heat-sink assembly is a single unit. Do not try to remove the fan separately.

Removing the Processor Fan and Heat-Sink Assembly

- 1. Follow the instructions in Before You Begin.
- 2. Remove the computer cover (see Removing the Computer Cover).
- 3. Disconnect the processor fan cable from the system board connector, FAN_CPU (see System Board Components).
- 4. Using a flat-blade screwdriver loosen the four captive screws that secure the processor fan and heat-sink assembly to the system board.

CAUTION: When you remove the processor fan and heat-sink assembly, lay it upside down or on its side to avoid damaging the heat-sink thermal interface.

5. Lift the processor fan and heat-sink assembly out of the computer.



1	processor fan cable	2	processor fan and heat-sink assembly
3	captive screws (4)		

Replacing the Processor Fan and Heat-Sink Assembly

- 1. Follow the instructions in Before You Begin.
- 2. 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.

- 3. Apply new thermal grease to the top of the processor.
- 4. Place the processor fan and heat-sink assembly over the processor.
- 5. Align the four captive screws on the processor fan and heat-sink assembly with the screw holes on the system board.
- 6. Tighten the four captive screws that secure the processor fan and heat-sink assembly to the system board.
- NOTE: Ensure that the processor fan and heat-sink assembly is correctly seated and secure.

- 7. Connect the processor fan cable to the system board connector, FAN_CPU (see <u>System Board Components</u>).
- 8. Replace the computer cover (see Replacing the Computer Cover).
- 9. Connect your computer and devices to electrical outlets, and turn them on.

Front I/O Panel

Dell™ Inspiron™ 620 Service Manual

- Removing the Front I/O Panel
- Replacing the Front I/O Panel

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 dell.com/regulatory_compliance.

WARNING: To guard against electrical shock, always unplug your computer from the electrical outlet before removing the cover.

WARNING: Do not operate your computer with any cover(s) (including computer covers, bezels, filler brackets, front-panel inserts, etc.)

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.

Removing the Front I/O Panel

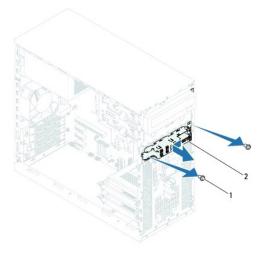


NOTE: Make note of the routing of all cables as you remove them so that you can re-route them correctly when installing the new front I/O panel.

- 1. Follow the instructions in Before You Begin.
- 2. Remove the computer cover (see Removing the Computer Cover)
- 3. Remove the front bezel (see Removing the Front Bezel).

CAUTION: When sliding the front USB panel out of the computer, be extremely careful. Carelessness may result in damage to the cable connectors and the cable routing clips.

- 4. Disconnect the front I/O panel cables from the system board connectors, AUDIOF1, USBF1, and USBF2 (see System Board Components).
- 5. Remove the two screws that secure the front I/O panel to the front panel.
- 6. Slide the front I/O panel towards the side as shown in the illustration to release the clamps from the front panel and pull it away.



1 screws (2) 2 front I/O panel

Replacing the Front I/O Panel

CAUTION: To avoid damage to the cable connectors and the cable routing clips, carefully slide the front I/O panel into the front I/O panel clamp slot.

- 1. Follow the instructions in Before You Begin.
- 2. Align and slide the front I/O panel clamps into the front I/O panel clamp slots.
- 3. Replace the two screws that secure the I/O panel to the front panel.
- 4. Connect the front I/O panel cables to the system board connectors, AUDIOF1, USBF1, and USBF2 (see System Board Components).
- 5. Replace the front bezel (see Replacing the Front Bezel).
- 6. Replace the computer cover (see Replacing the Computer Cover).
- 7. Connect your computer and devices to electrical outlets, and turn them on.

Memory Module(s) Dell™ Inspiron™ 620 Service Manual

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

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

WARNING: To guard against electrical shock, always unplug your computer from the electrical outlet before removing the cover.

WARNING: Do not operate your computer with any cover(s) (including computer covers, bezels, filler brackets, front-panel inserts, etc.)

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

Removing the Memory Module(s)

- 1. Follow the instructions in Before You Begin.
- 2. Remove the computer cover (see Removing the Computer Cover).
- 3. Locate the memory module(s) on the system board (see System Board Components)
- 4. Press out the securing clip at each end of the memory module connector.



1	memory module connector	2	securing clips (2)

5. Grasp the memory module and pull it upwards.

If the memory module is difficult to remove, gently ease the memory module back and forth to remove it from the connector

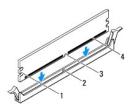
Replacing the Memory Module(s)

- 1. Follow the instructions in Before You Begin
- 2. Press out the securing clip at each end of the memory module connector.

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

CAUTION: If you remove the original memory module(s) from your compute during a memory upgrade, keep them seperate from any new memory module(s) that you may have, even if you purchased the new memory module(s) from Dell. If possible, do not pair an original memory module with a new memory module. Otherwise, your computer may not start properly.

3. Align the notch on the bottom of the memory module with the tab in the memory module connector



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

CAUTION: To avoid damage to the memory module, press the memory module straight down into the connector while you apply equal force to each end of the memory module.

- 4. 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 clips (2) (snapped in position)	
--	--

- 5. Replace the computer cover (see Replacing the Computer Cover).
- 6. Connect your computer and devices to electrical outlets, and then turn them on.

If a message appears stating that the memory size has changed, press <F1> to continue.

7. Log on to your computer.

To verify that the memory is installed correctly, click $Start \otimes \to Control Panel \to System$.

Check the amount of memory (RAM) listed.

Power Supply Dell™ Inspiron™ 620 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 dell.com/regulatory_compliance.

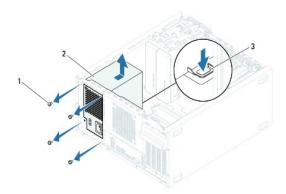
WARNING: To guard against electrical shock, always unplug your computer from the electrical outlet before removing the cover.

WARNING: Do not operate your computer with any cover(s) (including computer covers, bezels, filler brackets, front-panel inserts, etc.)

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.

Removing the Power Supply

- 1. Follow the instructions in Before You Begin.
- 2. Remove the computer cover (see Removing the Computer Cover).
- 3. Disconnect the DC power cables from the system board and the drives (see System Board Components).
- 4. Remove the four screws that secure the power supply to the chassis.
- 5. Press the power supply clamp to release the power supply from the chassis.
- 6. Slide and lift the power supply away from the chassis.



screws (4) 2 power supply power supply clamp

Replacing the Power Supply

- 1. Follow the instructions in Before You Begin.
- 2. Slide the power supply towards the back of the chassis.
- 3. Align the screw holes on the power supply with the screw holes on the chassis.

MARNING: Failure to replace and tighten all screws may cause electrical shock as these screws are a key part of the system grounding.

- 4. Replace the four screws that secure the power supply to the chassis.
- 5. Connect the DC power cables to the system board and drives (see <u>System Board Components</u>).
- 6. Replace the computer cover (see Replacing the Computer Cover).
- 7. Connect your computer and devices to electrical outlets, and turn them on.

Power Button Module

Dell™ Inspiron™ 620 Service Manual

- Removing the Power Button Module
- Replacing the Power Button Module

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

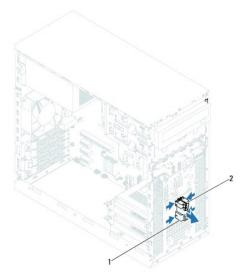
MARNING: To guard against electrical shock, always unplug your computer from the electrical outlet before removing the cover.

WARNING: Do not operate your computer with any cover(s) (including computer covers, bezels, filler brackets, front-panel inserts, etc.)

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.

Removing the Power Button Module

- 1. Follow the instructions in Before You Begin.
- 2. Remove the computer cover (see Removing the Computer Cover).
- 3. Remove the front bezel (see Removing the Front Bezel).
- 4. Disconnect the power button module cable from the system board connector, LEDH1 (see System Board Components).
- 5. Press the power button module tabs and pull the power button module to release it from the front panel.



1 power button module 2 power button module tabs (4)

6. Set aside the power button module in a secure location.

Replacing the Power Button Module

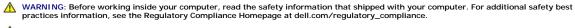
- 1. Follow the instructions in Before You Begin.
- 2. Align and push the power button module tabs into the slots on the front panel.

- 3. Connect the power button module cable to the system board connector, LEDH1 (see System Board Components).
- 4. Replace the front bezel (see Replacing the Front Bezel).
- 5. Replace the computer cover (see Replacing the Computer Cover).
- 6. Connect your computer and devices to electrical outlets and turn them on.

System Board

Dell™ Inspiron™ 620 Service Manual

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



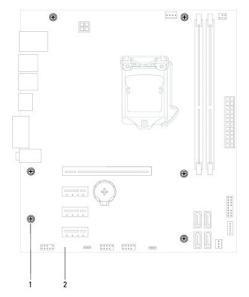


WARNING: To guard against electrical shock, always unplug your computer from the electrical outlet before removing the cover. WARNING: Do not operate your computer with any cover(s) (including computer covers, bezels, filler brackets, front-panel inserts, etc.) removed.

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.

Removing the System Board

- 1. Follow the instructions in Before You Begin.
- 2. Remove the computer cover (see Removing the Computer Cover).
- 3. Remove any PCI Express cards, if applicable (see Removing PCI Express Cards).
- 4. Remove the processor fan and heat-sink assembly (see Removing the Processor Fan and Heat-Sink Assembly)
- 5. Remove the processor (see Removing the Processor).
- Remove the memory modules (see <u>Removing the Memory Module(s)</u>) and record which memory module is removed from each DIMM slot so that the memory modules can be installed in the same slot after the system board is replaced.
- 7. Disconnect all cables connected to the system board (see System Board Components). Note the routing of all cables as you remove them so that you can re-route them correctly after installing the new system board.
- 8. Remove the six screws that secure the system board to the chassis.



- 9. Lift the system board up and out of the chassis.
- 10. Compare the system board that you removed with the replacement system board to ensure that they are identical.
 - NOTE: Some components and connectors on the replacement system board may be in different locations compared to the components and connectors on the existing system board.
 - NOTE: Jumper settings on the replacement system board is preset at the factory.

Replacing the System Board

- 1. Follow the instructions in Before You Begin.
- 2. Gently place the system board into the chassis and slide it towards the back of the computer.
- 3. Replace the six screws that secure the system board to the chassis.
- 4. Connect the cables that you disconnected from the system board (see System Board Components)
- 5. Replace the processor (see Replacing the Processor).
- 6. Replace the processor fan and the heat-sink assembly (see Replacing the Processor Fan and Heat-Sink Assembly).
- CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell is not covered by your warranty.
- △ CAUTION: Ensure that the heat-sink assembly is correctly seated and secure.
- 7. Replace the memory modules (see Replacing the Memory Module(s)).
- 8. Replace any PCI Express cards, if applicable (see Replacing PCI Express Cards).
- 9. Replace the computer cover (see Replacing the Computer Cover).
- 10. Connect your computer and devices to electrical outlets and turn them on.
- 11. Flash the system BIOS, as needed (see Flashing the BIOS).
- 12. 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. From the main tab enter the service tag in the Set Service Tag field.
- MOTE: The Set Service Tag field allows you to enter the service tag manually only when the service tag is absent.

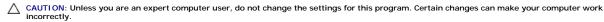
System Setup Dell™ Inspiron™ 620 Service Manual

- Overview
- Clearing Forgotten Passwords
- Clearing CMOS Passwords

Overview

Use the system setup to:

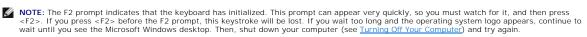
- 1 Change the system configuration information after you add, change, or remove any hardware in your computer
- 1 Set or change a user-selectable option such as the user password
- 1 Read the current amount of memory or set the type of hard drive installed



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

Entering System Setup

- 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.

Main	<i>M</i> ain					
System Information	Displays the system name					
BIOS Version	Displays the BIOS version number					
Build Date	Displays the build date in mm/dd/yyyy format					
System Date	Displays the current date in mm/dd/yyyy format					
System Time	Displays the current time in hh:mm:ss format					
Service Tag	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					

Asset Tag	Displays the asset tag of the computer when the asset tag is present
Processor Information	
Processor Type	Displays the processor type
L2 Cache	Displays the L2 cache size
L3 Cache	Displays the L3 cache size
Memory Information	
Memory Installed	Indicates the amount of memory installed in MB
Memory Speed	Indicates the memory speed in MHz
Memory Technology	Indicates the type of installed memory
Memory Channel	Indicates single channel or dual channel mode
Device Information	malacies single statistics of data statistics made
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
SATA 3	Displays the SATA drive connected to the SATA 3 connector
Advanced	
CPU Configuration	Hyper-threading — Enabled or Disabled (Enabled by default) Active Processor Cores — All; 1: 2: 3 (All by default) Limit CPUID Value — Enabled or Disabled (Disabled by default) CPU XD Support — Enabled or Disabled (Enabled by default) Intel Virtualization Technology — Enabled or Disabled (Enabled by default) Intel SpeedStep — Enabled or Disabled (Enabled by default) Intel Turbo Boost Technology — Enabled or Disabled (Enabled by default) CPU C6 Report — Enabled or Disabled (Enabled by default)
Graphics Configuration	Intel Multiple Monitor Feature — Enabled or Disabled (Disabled by default)
System Configuration	Onboard Audio Controller — Enabled or Disabled (Enabled by default) Onboard LAN Controller — Enabled or Disabled (Enabled by default) Onboard LAN Boot ROM — Enabled or Disabled (Disabled by default) SATA Mode — AHCI; RAID (AHCI by default) USB Controller — Enabled or Disabled (Enabled by default) USB Storage Boot Function — Enabled or Disabled (Enabled by default) Onboard Card Reader — Enabled or Disabled (Enabled by default) Onboard Serial Port — Enabled or Disabled (Enabled by default) Serial Port IO Address/IRQ — 3F8h/IRQ4; 2F8h/IRQ3; 3E8h/IRQ4; 2E8h/IRQ3 (3F8h/IRQ4 by default)
Power Management	USB Powershare in Sleep State — Normal; Enhanced (Normal by default) Resume by PS/2 Devices — Enabled or Disabled (Enabled by default) Auto Power On — Enabled or Disabled (Disabled by default) Auto Power On Date — 0 to 31, 0 for everyday (15 by default) Auto Power On Hour — 0 to 23 (12 by default) Auto Power On Minute — 0 to 59 (30 by default) Auto Power On Second — 0 to 59 (30 by default)
Post Behavior	Bootup NumLock State — On; Off (On by default) Keyboard Error Report — Enabled; Disabled (Enabled by default)
Security	
Unlock Setup Status	Displays the setup status
Admin Password Status	Displays the admin password status
System Password Status	Displays the system password status
Admin Password	Allows to set, change, or delete the administrator password NOTE: Deleting the administrator password will delete the system password. Hence, the administrator password must be set before the system password.
Contain Dan 3	setting the system password.
System Password	Allows to set, change, or delete the system password
Boot Menu Security	Enabled or Disabled User must enter Admin Password to access the F12 Boot Menu when this setting is enabled (Disabled by default)
HDD Protection Feature	Enabled or Disabled (Disabled by default)
Boot	
	Specifies the heat sequence from the available devises
1st Boot Priority	Specifies the boot sequence from the available devices

	Hard Disk; CD/DVD; Network; USB Floppy; USB Hard Disk; USB CD/DVD; Disabled (Hard Disk by default)			
2nd Boot Priority Specifies the boot sequence from the available devices				
	Hard Disk; CD/DVD; Network; USB Floppy; USB Hard Disk; USB CD/DVD; Disabled (CD/DVD Drive by default)			
3rd Boot Priority Specifies the boot sequence from the available devices				
	Hard Disk; CD/DVD; Network; USB Floppy; USB Hard Disk; USB CD/DVD; Disabled (USB Floppy by default)			
4th Boot Priority	Specifies the boot sequence from the available devices			
	Hard Disk; CD/DVD; Network; USB Floppy; USB Hard Disk; USB CD/DVD; Disabled (Network by default)			
5th Boot Priority	Specifies the boot sequence from the available devices			
	Hard Disk; CD/DVD; Network; USB Floppy; USB Hard Disk; USB CD/DVD; Disabled (USB Hard Disk by default)			
6th Boot Priority	Specifies the boot sequence from the available devices			
	Hard Disk; CD/DVD; Network; USB Floppy; USB Hard Disk; USB CD/DVD; Disabled (USB CD/DVD by default)			
Exit				
Exit options	Provides options to Save Changes and Reset, Discard Changes and Reset, and Load Defaults			

Boot Sequence

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

Boot Options

- 1 USB Floppy The computer attempts to boot from the USB floppy disk drive. If no operating system is on the floppy disk, the computer generates an error message.
- 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/CD-RW Drive The computer attempts to boot from the CD/DVD/CD-RW drive. If no CD/DVD/CD-RW is in the drive, or if the CD/DVD/CD-RW has no operating system, the computer generates an error message.
- 1 USB Storage Device Insert the memory device into a USB connector and restart the computer. When F12 Boot Options 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.
 - MOTE: To boot to a USB device, the device must be bootable. To ensure that your device is bootable, check the device documentation.
- 1 Network The computer attempts to boot from the network. If no operating system is found on the network, the computer generates an error message.
 - NOTE: To boot from the network, ensure that onboard LAN boot ROM option is enabled in the system setup (see System Setup).

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/CD-RW drive to run the Dell Diagnostics from the *Drivers* and Utilities disc. On completion of diagnostic tests, the previous boot sequence is restored.

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

- 1. Enter system setup (see Entering System Setup).
- 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

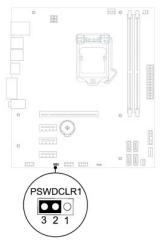
MARNING: Before you begin any of the procedures in this section, follow the safety instructions that shipped with your computer.

MARNING: The computer must be disconnected from the electrical outlet to clear the password 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 instructions in Before You Begin.
- 2. Remove the computer cover (see Removing the Computer Cover).
- 3. Locate the 3-pin password reset jumper (PSWDCLR1) 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. Turn on the computer to clear the password.
- 6. Turn off the computer and disconnect your computer and all attached devices from their electrical outlets.
- 7. Remove the 2-pin jumper plug from pins 1 and 2 and replace it on pins 2 and 3 to enable the password feature.
- 8. Replace the computer cover (see Replacing the Computer Cover).
- 9. Connect your computer and devices to electrical outlets and turn them on.

Clearing CMOS Passwords

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

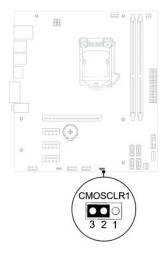


MARNING: The computer must be disconnected from the electrical outlet to clear the password setting.

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 instructions in <u>Before You Begin</u>.
- 2. Remove the computer cover (see Removing the Computer Cover).
- 3. Locate the 3-pin CMOS reset jumper (CMOSCLR1) 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 computer cover (see Replacing the Computer Cover).
- 8. Connect your computer and devices to electrical outlets and turn them on.

Technical Overview

Dell™ Inspiron™ 620 Service Manual

- Inside View of Your ComputerSystem Board Components



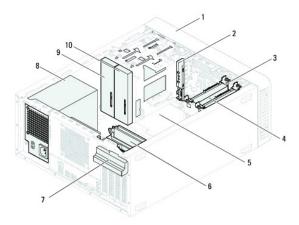
MARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at dell.com/regulatory_compliance.



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

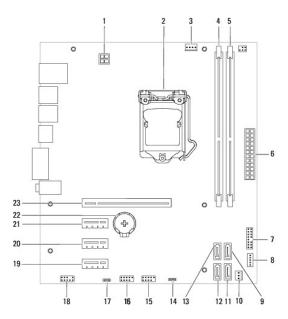
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell is not covered by your warranty.

Inside View of Your Computer



1	front bezel	2	front I/O panel
3	primary hard drive	4	secondary hard drive
5	system board	6	memory modules
7	card retention bracket	8	power supply
9	primary optical drive	10	secondary optical drive

System Board Components



1	power connector (ATX12V)	2	processor socket
3	processor fan connector (FAN_CPU)	4	memory module connector (DIMM1)
5	memory module connector (DIMM2)	6	main power connector (ATX)
7	power button connector (LEDH1)	8	internal speaker connector (INTSPKR1)
9	SATA drive connector (SATA 2)	10	chassis fan connector (FAN_SYS1)
11	SATA drive connector (SATA 1)	12	SATA drive connector (SATA 0)
13	SATA drive connector (SATA 3)	14	CMOS reset jumper (CMOSCLR1)
15	front panel USB connector (USBF2)	16	front panel USB connector (USBF1)
17	password reset jumper (PSWDCLR1)	18	front panel audio connector (AUDIOF1)
19	PCI Express x1 card slot (SLOT4)	20	PCI Express x1 card slot (SLOT3)
21	PCI Express x1 card slot (SLOT2)	22	battery socket (BATTERY)
23	PCI Express x16 card slot (SLOT1)		

Dell™ Inspiron™ 620 Service Manual

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

 \triangle 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.

Information in this document is subject to change without notice. © 2011 Dell Inc. All rights reserved.

Trademarks used in this text: Dell™, the DELL logo, and Inspiron™ are trademarks of Dell Inc.; Microsoft®, Windows®, and the Windows start button logo

are either trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

Reproduction of these materials in any manner whatsoever without the written permission of Dell Inc. is strictly forbidden.

2011 - 05 Rev. A00