Dell™ Inspiron™ 535/537/545/546 Service Manual

Technical Overview
Before You Begin
Computer Cover
Front Bezel
Memory
PCI and PCI Express Cards
Drives
Fans
Front I/O Panel
Processor
System Board
Power Supply
Battery
System Setup

Models DCME and DCMF

Notes, Cautions, and Warnings

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

CAUTION: A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.

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

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Before You Begin

Dell™ Inspiron™ 535/537/545/546 Service Manual

- Technical Specifications
- Recommended Tools
- Turning Off Your Computer
- Safety Instructions

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

- You have performed the steps in Turning Off Your Computer and Safety Instructions.
- You have read the safety information that ships with your computer.
- 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* that shipped with your computer or see the Dell Support website at **support.dell.com**.

Recommended Tools

The procedures in this document may require the following tools:

- Small Phillips screwdriver
- Small flat-blade screwdriver

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. Shut down the operating system.
2. Ensure that the computer and all attached devices are turned off. If your computer and attached devices did not automatically turn off when you shut down your operating system, press and hold the power button for about 4 seconds to turn them 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.

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

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

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

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. Press and hold the power button while the system is unplugged 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.

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Front Bezel

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- Removing the Front Bezel
- Replacing the Front Bezel

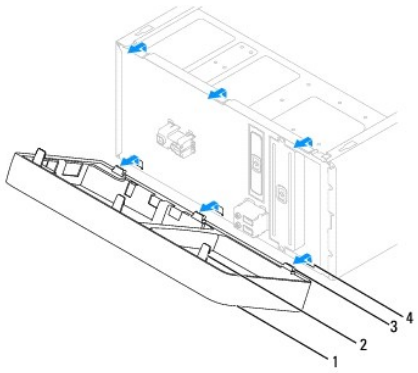
WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

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

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

Removing the Front Bezel

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



1	bezel	2	bezel grips (3)
3	bezel clamps (3)	4	bezel inserts (3)

3. Grasp and lift the bezel grips one at a time to release it from the front panel.
4. Rotate and pull the bezel away from the front of the computer to release the bezel clamps from the bezel inserts.
5. Set aside the bezel in a secure location.

Replacing the Front Bezel

1. Align and insert the bezel clamps in the bezel inserts.
2. Rotate the bezel towards the computer until the bezel grips snap into place.
3. Replace the computer cover (see Replacing the Computer Cover).

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PCI and PCI Express Cards

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- Removing the Card Retention Bracket
- Replacing the Card Retention Bracket
- Removing PCI and PCI Express Cards
- Replacing PCI and PCI Express Cards
- Configuring Your Computer After Removing or Installing a PCI/PCI Express 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.

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

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

Removing the Card Retention Bracket

1. Follow the procedures in Before You Begin.
2. Remove the computer cover (see Removing the Computer Cover).
3. Remove the screw holding the card retention bracket.
4. Lift the card retention bracket and set it aside in a secure place.

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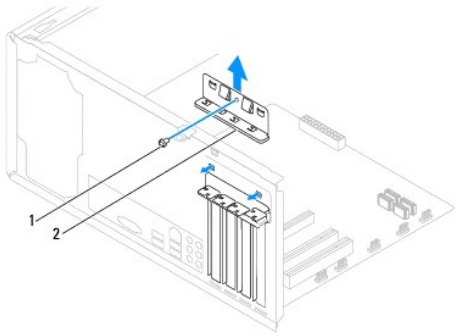
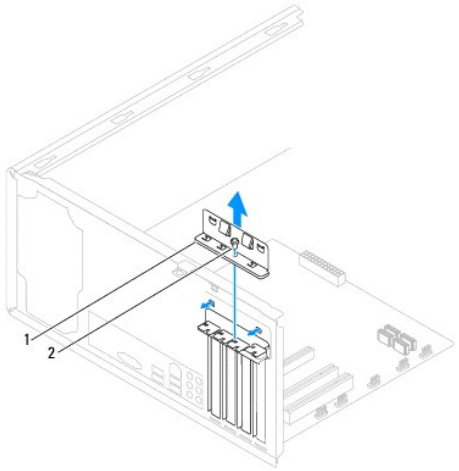


1	screw	2	card retention bracket

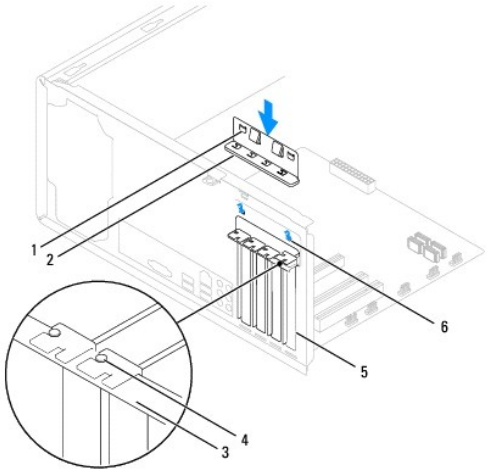
Inspiron 545/546



1	card retention bracket	2	screw

Replacing the Card Retention Bracket

1. Follow the procedures in Before You Begin.
2. Replace the card retention bracket, ensuring that:
   - The guide clamp is aligned with the guide notch.
   - The tops of all cards and filler brackets are flush with the alignment bar.
   - The notch in the top of the card or filler bracket fits around the alignment guide.

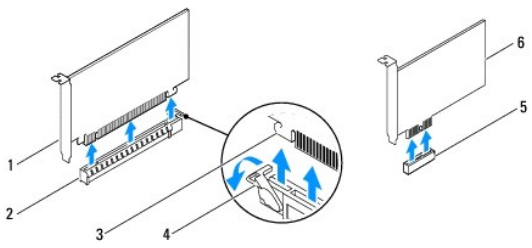


1	guide clamps (2)	2	card retention bracket	3	alignment bar
4	alignment guide	5	filler bracket	6	guide notch (2)

3. Fix the card retention bracket by replacing the screw.

Removing PCI and PCI Express Cards

1. Follow the procedures 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. If necessary, disconnect any cables connected to the card.
   - For a PCI or PCI Express x1 card, grasp the card by its top corners, and ease it out of its connector.
   - For a PCI Express x16 card, press down on the retention mechanism, grasp the card by its top corners, and then ease it out of its connector.



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

4	retention mechanism	5	PCI Express x1 card slot	6	PCI Express x1 card

5. 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.

6. Replace the card retention bracket (see Replacing the Card Retention Bracket).

7. Replace the computer cover, reconnect the computer and devices to electrical outlets, and then turn them on.

8. Remove the card's driver from the operating system.

9. To complete the removal procedure, see Configuring Your Computer After Removing or Installing a PCI/PCI Express Card.

Replacing PCI and PCI Express Cards

1. Follow the procedures in Before You Begin.

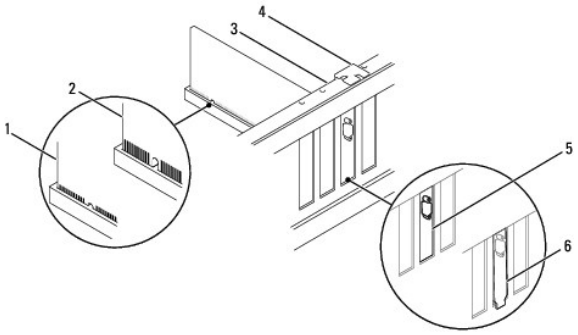
2. Remove the computer cover (see Removing the Computer Cover).

3. Remove the card retention bracket (see Removing the Card Retention Bracket).

4. Prepare the card for installation.

   See the documentation that came with the card for information on configuring the card, making internal connections, or otherwise customizing it for your computer.

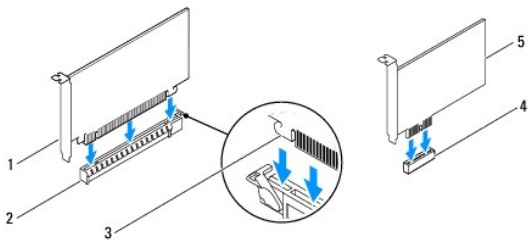
5. Place the card in the connector and press down firmly. Ensure that the card is fully seated in the slot.



1	fully-seated card	2	not fully-seated card	3	alignment bar
4	alignment guide	5	bracket within slot	6	bracket caught outside of slot

6. If you are installing the PCI Express card into the x16 card connector, position the card so the securing slot is aligned with the securing tab.

7. Place the card in the connector and press down firmly. Ensure that the card is fully seated in the slot.



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

4	PCI Express x1 card slot	5	PCI Express x1 card		

8. Replace the card retention bracket (see Replacing the Card Retention Bracket).

9. Connect any cables that should be attached to the card.

   See the documentation for 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.

10. Replace the computer cover, reconnect the computer and devices to electrical outlets, and then turn them on.

11. To complete the installation, see Configuring Your Computer After Removing or Installing a PCI/PCI Express Card.

Configuring Your Computer After Removing or Installing a PCI/PCI Express Card

NOTE: For information on 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	1. Enter system setup (see Entering System Setup) 2. Go to **Onboard Audio Controller** and then change the setting to **Disabled**. 3. Connect the external audio devices to the sound card's connectors.	1. Enter system setup (see Entering System Setup) 2. Go to **Onboard Audio Controller** and then change the setting to **Enabled**. 3. Connect the external audio devices to the computer's back panel connectors.
Network Card	1. Enter system setup (see Entering System Setup) 2. Go to **Onboard LAN Controller** and then change the setting to **Disabled**. 3. Connect the network cable to the network card's connector.	1. Enter system setup (see Entering System Setup) 2. Go to **Onboard LAN Controller** and then change the setting to **Enabled**. 3. Connect the network cable to the integrated network connector.

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Battery

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- Removing the Battery
- Replacing the Battery

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

WARNING: 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.

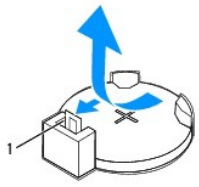
WARNING: To guard against electrical shock, always unplug your computer from the electrical outlet before removing the cover.

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

Removing the Battery

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

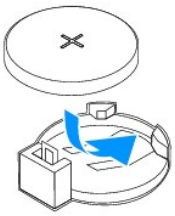


1	battery release lever

5. Press the battery release lever to remove the battery.

Replacing the Battery

1. Insert the new battery (CR2032) into the socket with the side labeled "+" facing up, and press the battery into place.



2. Replace the computer cover (see Replacing the Computer Cover).
3. Connect your computer and devices to electrical outlets, and then turn them on.
4. Enter system setup (see Entering System Setup) and restore the settings you recorded in step 1.

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Computer Cover

Dell™ Inspiron™ 535/537/545/546 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 www.dell.com/regulatory_compliance.

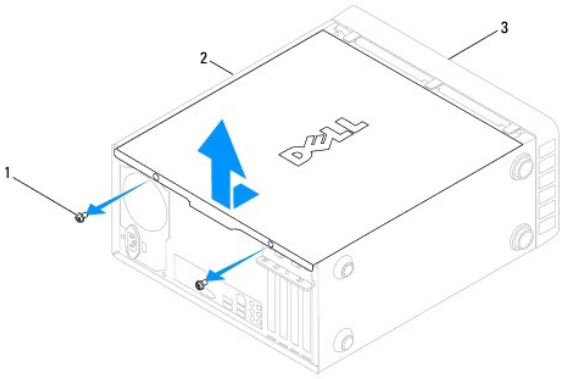
WARNING: To guard against electrical shock, always unplug your computer from the electrical outlet before removing the cover.

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

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

Removing the Computer Cover

1. Follow the procedures in Before You Begin.
2. Lay your computer on its side with the computer cover facing up.
3. Remove the two screws securing the cover, using a screwdriver.

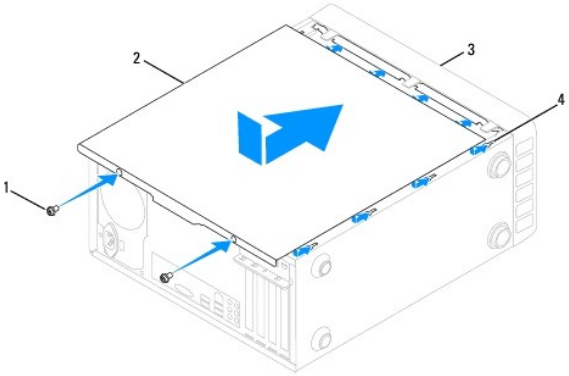


1	screws (2)	2	computer cover	3	front of computer

4. Release the computer cover by pulling it away from the front of the computer and lifting it up.
5. Set the cover aside in a secure location.

Replacing the Computer Cover

1. Ensure that all cables are connected, and fold cables out of the way.
2. Ensure that no tools or extra parts are left inside the computer.
3. Align the tabs at the bottom of the computer cover with the slots located along the edge of the computer.
4. Press the computer cover down and slide it towards the front of the computer until you feel a click or feel the computer cover securely installed.
5. Ensure that the cover is seated correctly.
6. Replace the two screws that secure the computer cover, using a screwdriver.



1	screws (2)	2	computer cover
3	front of the computer	4	slot

7. Place the computer in an upright position.

CAUTION: Ensure that none of the system air-vents are blocked. Blocking them would cause serious thermal problems.

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Processor

Dell™ Inspiron™ 535/537/545/546 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.

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

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

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, see the Setup Guide.

Removing the Processor

1. Follow the procedures 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. Be sure that it has had sufficient time to cool before you touch it.

3. Remove the processor fan and heat sink assembly from the computer (see Removing the Processor Fan and Heat Sink Assembly).

NOTE: Unless a new heat sink is required for the new processor, reuse the original heat sink assembly when you replace the processor.

4. Press and push the release lever down and out to release it from the tab that secures it.
5. Open the processor cover, if applicable.

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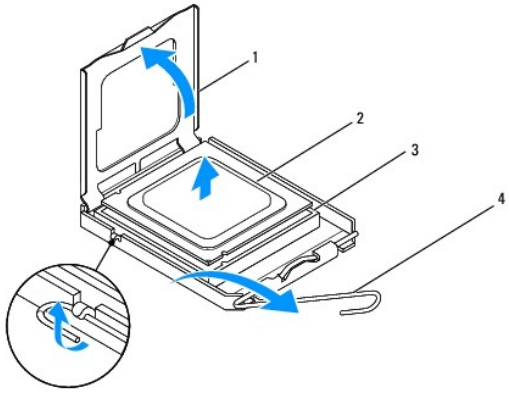
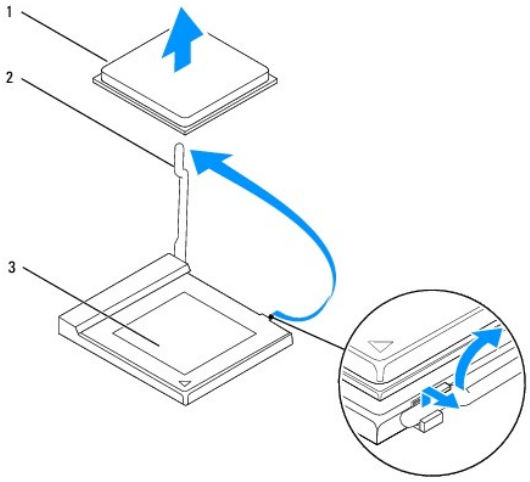


1	processor cover	2	processor
3	socket	4	release lever

Inspiron 546



1	processor	2	release lever
3	socket		

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

CAUTION: Ground yourself by touching an unpainted metal surface on the back of the computer.

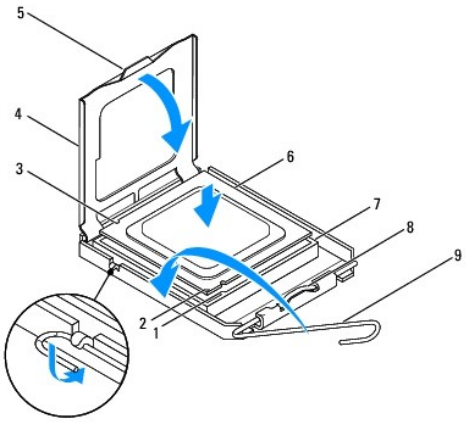
CAUTION: When replacing the processor, do not touch any of the pins inside the socket or allow any objects to fall on the pins in the socket.

1. Follow the procedures in Before You Begin.
2. Unpack the new processor, being careful not to touch the underside of the processor.

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.

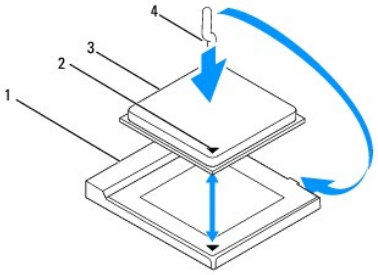
   Inspiron 535/537/545



1	front alignment notch	2	processor pin-1 indicator	3	rear alignment notch

4	processor cover	5	center cover latch	6	processor
7	socket	8	tab	9	release lever

Inspiron 546



1	socket	2	processor pin-1 indicator
3	processor	4	release lever

4. For Inspiron 535/537/545, orient the front and rear alignment-notches on the processor with the front and rear alignment-notches 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.

6. Set the processor lightly in the socket and ensure that the processor is positioned correctly.
7. When the processor is fully seated in the socket, close the processor cover, if applicable.

   Ensure that the tab on the processor cover is positioned underneath the center cover latch on the socket.
8. Pivot the socket release lever back toward the socket, and snap it into place to secure the processor.
9. 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.

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

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

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

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Drives

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- Removing a Hard Drive
- Replacing a Hard Drive
- Removing a Media Card Reader
- Replacing a Media Card Reader
- Removing an Optical Drive
- Replacing an 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.

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

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

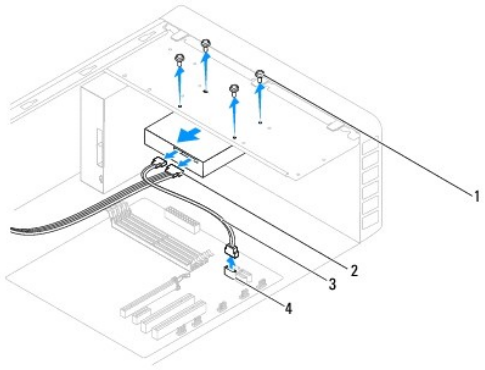
Removing a Hard Drive

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

1. Follow the procedures in Before You Begin.
2. Remove the computer cover (see Removing the Computer Cover).
3. Disconnect the power cable and the data cable from the 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 and set it aside. You can use the data cable to install a hard drive at a later time.

NOTE: The location and number of SATA connectors may vary based on your computer model. For more information, see System Board Components.



1	screws (4)	2	power cable
3	data cable	4	SATA connector (on the system board)

CAUTION: Ensure that you do not scratch the screw holes with the screwdriver as the hard disk circuit board assembly is exposed here.

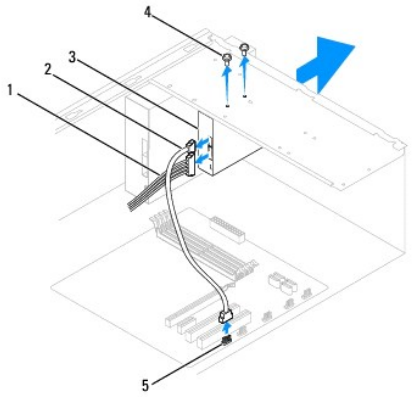
4. Remove the four screws securing the hard drive.
5. Slide the drive out towards the back of the computer.
6. If removing the hard drive changes the drive configuration, ensure that you reflect these changes in system setup (see System Setup).
7. Replace the computer cover (see Replacing the Computer Cover).
8. Connect the computer and other devices to an electrical outlet.

Replacing a Hard Drive

1. Follow the procedures in Before You Begin.
2. Remove the computer cover (see Removing the Computer Cover).
3. Check the documentation for the drive to verify that it is configured for your computer.
4. Slide the hard drive into the hard drive bay.
5. Align and replace the four screws that secure the hard drive to the hard drive bay.
6. Connect the power and data cables to the hard drive.
7. Connect the data cable to the system board connector.
8. Check all cables to be certain that they are properly connected and firmly seated.
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 came with the drive for instructions on installing any software required for drive operation.
12. Check the System Setup for drive configuration changes (see Entering System Setup).

Removing a Media Card Reader

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



1	power cable	2	FlexBay USB cable	3	media card reader (not present on all computers)
4	custom screws (2)	5	USB connector (on the system board)		

4. Disconnect the FlexBay USB cable and the power cable from the back of the media card reader.

   NOTE: If you are not replacing the media card reader at this time, disconnect the other end of the FlexBay USB cable from the system board and set it aside. You can use the FlexBay USB cable to install a media card reader at a later time.

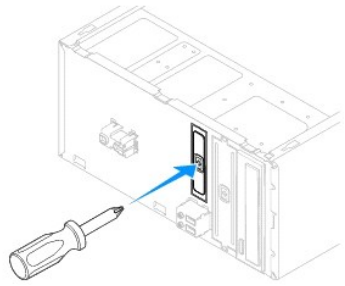
   NOTE: The location of the internal USB connector may vary based on your computer model. For more information, see System Board Components.

5. Remove the two screws securing the media card reader.

6. Slide the media card reader out through the front of the computer.
7. Replace the bezel (see Replacing the Front Bezel).
8. Replace the computer cover (see Replacing the Computer Cover).
9. Connect your computer and devices to electrical outlets, and then turn them on.

Replacing a Media Card Reader

1. Follow the procedures in Before You Begin.
2. Remove the computer cover (see Removing the Computer Cover).
3. Remove the bezel (see Removing the Front Bezel).
4. If this is a new media card reader installation, remove the break-away metal plate. Align the tip of a Phillips screwdriver with the slot on the break-away metal plate and rotate the screwdriver outwards to break and remove the metal plate.



5. Gently slide the media card reader into place in the FlexBay slot.
6. Align the screw holes in the media card reader with the screw holes in the FlexBay slot.
7. Replace the two screws that secure the media card reader to the FlexBay slot.

   NOTE: Ensure that the media card reader is installed before the FlexBay USB cable is connected.

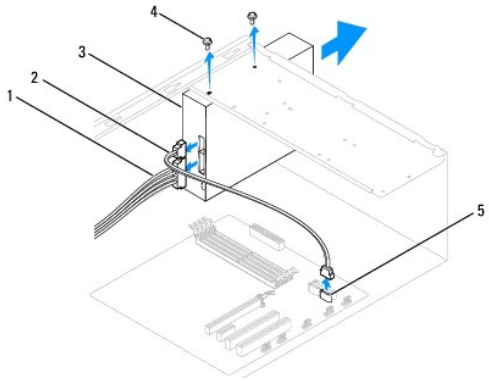
8. Connect the FlexBay USB cable and power cable to the back of the media card reader.
9. Connect the FlexBay USB cable to the internal USB connector on the system board (see System Board Components).
10. Replace the bezel (see Replacing the Front Bezel).
11. Replace the computer cover (see Replacing the Computer Cover).
12. Connect your computer and devices to electrical outlets, and then turn them on.

Removing an Optical Drive

1. Follow the procedures in Before You Begin.
2. Remove the computer cover (see Removing the Computer Cover).
3. Remove the bezel (see Removing the Front Bezel).
4. Disconnect the power cable and the data cable from the back of the 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 and set it aside. You can use the data cable to install an optical drive at a later time.

NOTE: The location and number of SATA connectors may vary based on your computer model. For more information, see System Board Components.



1	power cable	2	data cable	3	optical drive
4	custom screws (2)	5	SATA connector (on the system board)		

5. Remove the two screws securing the optical drive.
6. Slide the optical drive out through the front of the computer.
7. Replace the bezel (see Replacing the Front Bezel).
8. Replace the computer cover (see Replacing the Computer Cover).
9. Connect your computer and devices to electrical outlets, and then turn them on.
10. Configure the drives in system setup (see System Setup Options).

Replacing an Optical Drive

1. Follow the procedures in Before You Begin.
2. Remove the computer cover (see Removing the Computer Cover).
3. Remove the bezel (see Removing the Front Bezel).
4. Gently slide the optical drive into place.
5. Align the screw holes in the optical drive with the screw holes in the optical drive bay.
6. Replace the two screws that secure the optical drive to the optical drive bay.
7. Connect the power and data cables to the optical drive.
8. Replace the bezel (see Replacing the Front Bezel).
9. Replace the computer cover (see Replacing the Computer Cover).
10. Connect your computer and devices to their electrical outlets, and turn them on.

    See the documentation that came with the drive for instructions on installing any software required for drive operation.
11. Check the System Setup for drive configuration changes (see Entering System Setup).

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Fans

Dell™ Inspiron™ 535/537/545/546 Service Manual

- Removing the Processor Fan and Heat Sink Assembly
- Replacing the Processor Fan and Heat Sink Assembly
- Removing the Chassis Fan
- Replacing the Chassis 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.

WARNING: 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 equipment with any cover(s) (including computer covers, bezels, filler brackets, front-panel inserts, etc.) removed.

Removing the Processor Fan and Heat Sink Assembly

CAUTION: The processor fan with the heat sink is one single unit. Do not try to remove the fan separately.

CAUTION: Do not touch the fan blades when you are removing the processor fan and heat sink assembly. This could damage the fan.

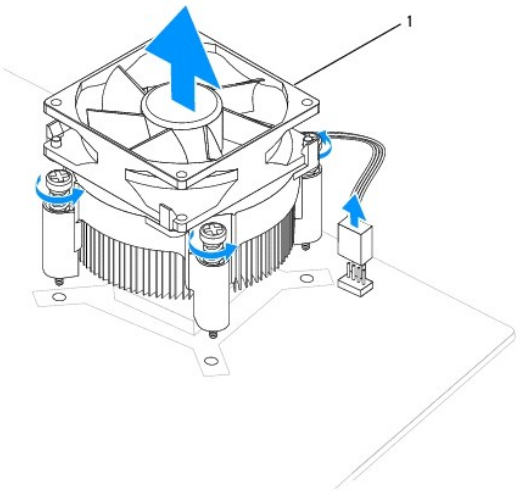
1. Follow the procedures in Before You Begin.
2. Remove the computer cover (see Removing the Computer Cover).
3. Disconnect the processor fan and heat sink assembly cable from the processor fan connector on the system board (see System Board Components).
4. Carefully move away any cables that are routed over the processor fan and heat sink assembly.

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

5. Remove the processor fan and heat sink assembly.

Inspiron™ 535/537/545

a. Loosen the four captive screws securing the processor fan and heat sink assembly and lift it straight up.



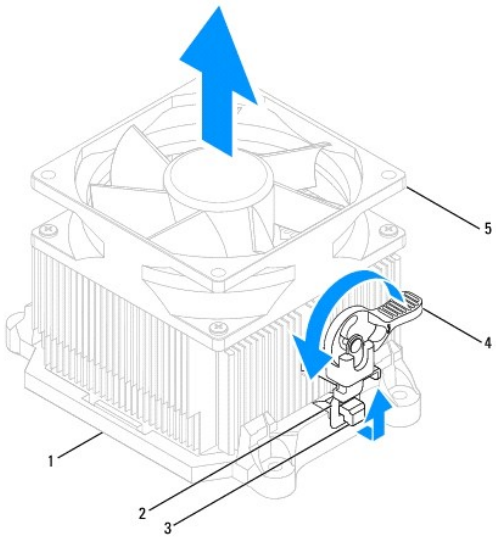
1	processor fan and heat sink assembly

NOTE: The processor fan and heat sink assembly in your computer may not look exactly like the one shown in the illustration above.

Inspiron 546

a. Rotate the clamp lever 180 degrees counter-clockwise to release the clamp grip from the bracket projection.

b. Rotate the processor fan and heat sink assembly upward gently, and remove it from the computer. Lay the processor fan and heat sink assembly down on its top, with the thermal grease facing upward.



1	bracket	2	clamp grip	3	bracket projection
4	clamp lever	5	processor fan and heat sink assembly		

NOTE: The processor fan and heat sink assembly in your computer may not look exactly like the one shown in the illustration above.

Replacing the Processor Fan and Heat Sink Assembly

CAUTION: When reinstalling the fan, ensure that you do not pinch the wires that run between the system board and the fan.

1. Clean the thermal grease from the bottom of the processor fan and heat sink assembly.

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.

2. Apply the new thermal grease to the top of the processor.
3. Replace the processor fan and heat sink assembly.

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a. Align the captive screws on the processor fan and heat sink assembly to the four metal screw hole projections on the system board.

b. Tighten the four captive screws that secure the processor fan and heat sink assembly to the system board.

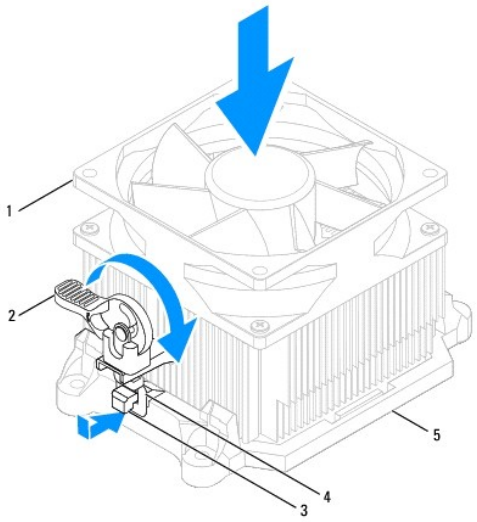
NOTE: Ensure that the processor fan and heat sink assembly is correctly seated and secure.

Inspiron 546

a. Place the processor fan and heat sink assembly back onto the bracket.

b. Ensure that the two clamp grips are aligned with the two bracket projections.

c. Hold the processor fan and heat sink fan assembly in place and rotate the clamp lever 180 degrees clockwise to secure the processor fan and heat sink assembly.



1	processor fan and heat sink assembly	2	clamp lever	3	bracket projection
4	clamp grip	5	bracket		

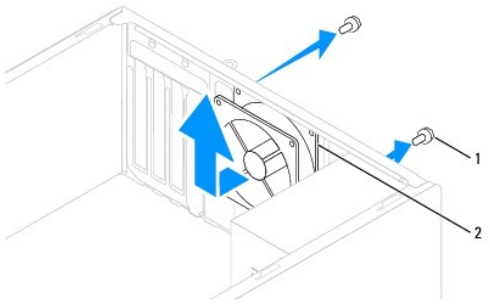
4. Connect the processor fan and heat sink assembly cable to the fan connector on the system board (see System Board Components).
5. Replace the computer cover (see Replacing the Computer Cover).
6. Connect your computer and devices to an electrical outlet, and turn them on.

Removing the Chassis Fan

CAUTION: Do not touch the fan blades when you are removing the chassis fan. This could damage the fan.

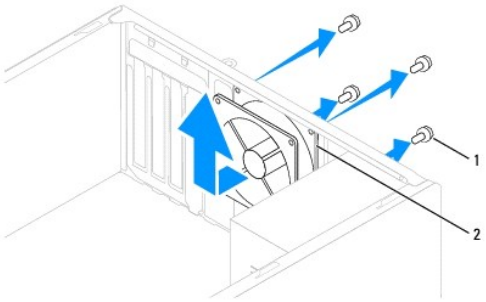
1. Follow the procedures in Before You Begin.
2. Remove the computer cover (see Removing the Computer Cover).
3. Disconnect the chassis fan cable from the chassis fan connector on the system board (see System Board Components).
4. Remove the screws securing the chassis fan.
5. Slide the chassis fan towards the front of the computer and lift it up.

Inspiron™ 535/537



1	screws (2)	2	chassis fan

Inspiron 545/546



1	screws (4)	2	chassis fan

Replacing the Chassis Fan

1. Follow the procedures in Before You Begin.
2. Slide the chassis fan in place towards the back of the computer.
3. Replace the screws that secure the chassis fan.
4. Connect the chassis fan cable to the chassis fan connector on the system board (see System Board Components).
5. Replace the computer cover (see Replacing the Computer Cover).
6. Connect your computer and devices to an electrical outlet, and turn them on.

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Front I/O Panel

Dell™ Inspiron™ 535/537/545/546 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 www.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 equipment with any cover(s) (including computer covers, bezels, filler brackets, front-panel inserts, etc.) removed.

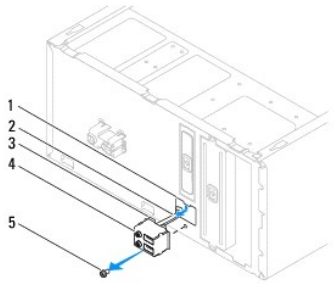
Removing the Front I/O Panel

NOTE: Note 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 procedures in Before You Begin.
2. Remove the computer cover (see Removing the Computer Cover).
3. Remove the bezel (see Removing the Front Bezel).

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

4. Disconnect all the cables that are connected to the I/O panel from the system board connectors.
5. Remove the screw that secures the I/O panel to the chassis.
6. Carefully remove the I/O panel from the computer.



1	I/O panel clamp slot	2	cables	3	I/O panel clamp
4	I/O panel	5	screw		

Replacing the Front I/O Panel

CAUTION: Take care not to damage the cable connectors and the cable routing clips when sliding the I/O panel into the I/O panel clamp slot.

1. Align and slide the I/O panel clamp into the I/O panel clamp slot.
2. Replace the screw that secures the I/O panel to the chassis.
3. Connect the cables to the system board connectors.
4. Replace the bezel (see Replacing the Front Bezel).

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

6. Connect your computer and devices to an electrical outlet, and turn them on.

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Memory

Dell™ Inspiron™ 535/537/545/546 Service Manual

- Removing Memory
- Replacing Memory
- Recommended Memory Configuration
- Setting Up Dual Channel Memory Configuration

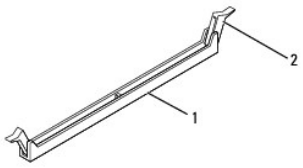
WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

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

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

Removing Memory

1. Follow the procedures in Before You Begin.
2. Remove the computer cover (see Removing the Computer Cover).
3. Locate the memory modules 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 clip

5. Grasp the memory module and pull it upwards.

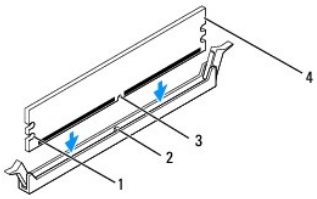
   If the memory module is difficult to remove, gently ease the memory module back and forth to remove it from the connector.

Replacing Memory

1. Follow the procedures in Before You Begin.
2. Press out the securing clip at each end of the memory module connector.
3. Follow the memory installation guidelines (see Recommended Memory Configuration).

CAUTION: Do not install ECC memory modules.

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



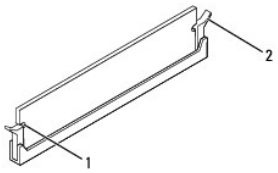
1	cutouts (2)	2	tab

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.

5. 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)

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

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

8. Log on to your computer.
9. Right-click the **My Computer** icon on your Microsoft® Windows® desktop and click **Properties**.
10. Click the **General** tab.
11. To verify that the memory is installed correctly, check the amount of memory (RAM) listed.

Recommended Memory Configuration

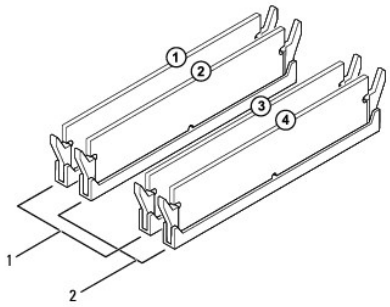
While installing or replacing memory, refer to the table below:

Model	One module	Two modules	Three modules	Four modules
535/537	DIMM1	DIMM1 DIMM2	NA	NA
545	DIMM1	DIMM1 DIMM3	DIMM1 DIMM3 DIMM2	DIMM1 DIMM3 DIMM2 DIMM4
546	DIMM1	DIMM1 DIMM2	DIMM1 DIMM2 DIMM3	DIMM1 DIMM2 DIMM3 DIMM4

Setting Up Dual Channel Memory Configuration

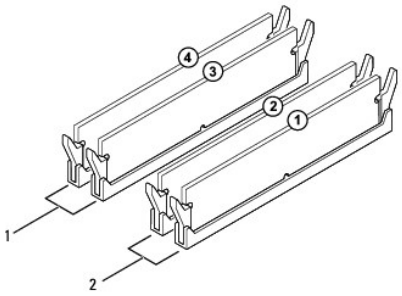
NOTE: Dual channel memory is not supported on Inspiron™ 535/537.

Inspiron 545



1	Pair A: matched pair of memory modules in connectors DIMM1 and DIMM3	2	Pair B: matched pair of memory modules in connectors DIMM2 and DIMM4

Inspiron 546



1	Pair B: matched pair of memory modules in connectors DIMM3 and DIMM4	2	Pair A: matched pair of memory modules in connectors DIMM1 and DIMM2

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Power Supply

Dell™ Inspiron™ 535/537/545/546 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 on www.dell.com at the following location: www.dell.com/regulatory_compliance.

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

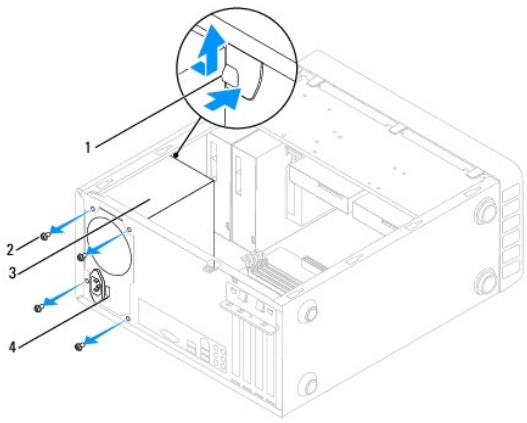
WARNING: Do not operate your equipment with any cover(s) (including computer covers, bezels, filler brackets, front-panel inserts, etc.) removed.

Removing the Power Supply

1. Follow the procedures 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.

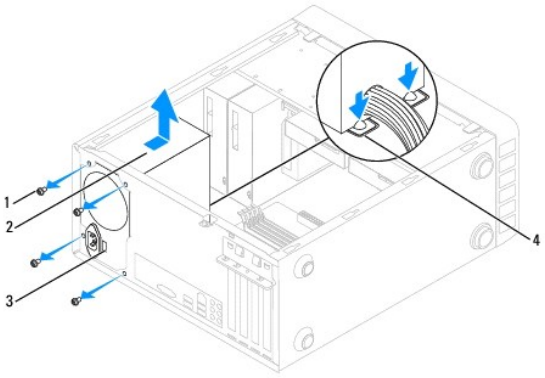
   Note the routing of the DC power cables underneath the tabs in the computer chassis as you remove them from the system board and drives. You must route these cables properly when you replace them to prevent them from being pinched or crimped.
4. Remove all the cables from the securing clip on the side of the power supply.
5. Remove the four screws that attach the power supply to the back of the computer chassis.

Inspiron™ 535/537



1	power supply retention snap	2	screws (4)
3	power supply	4	voltage selector switch

Inspiron 545/546



1	screws (4)	2	power supply
3	voltage selector switch	4	power supply retention snaps (2)

6. While pressing down on the power supply retention snap(s), slide out the power supply and lift it out.

Replacing the Power Supply

1. Press down on the power supply retention snap(s) and slide the replacement power supply towards the back of the computer.

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

2. Replace the four screws that secure the power supply to the back of the computer chassis.

   NOTE: Route the DC power cables under the chassis tabs. The cables must be properly routed to prevent the cables from being damaged.

3. Connect the DC power cables to the system board and drives.
4. Secure all the cables to the securing clip on the side of the power supply.

   NOTE: Double-check all cable connections to make sure they are secure.

5. Replace the computer cover (see Replacing the Computer Cover).
6. Check the voltage selector switch (if applicable) to ensure that the correct voltage is selected.
7. Connect your computer and devices to an electrical outlet, and turn them on.

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System Setup

Dell™ Inspiron™ 535/537/545/546 Service Manual

- Overview
- Entering System Setup
- Clearing Forgotten Passwords
- Clearing CMOS Settings
- Flashing the BIOS

Overview

Use System Setup:

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

Before you use System Setup, it is recommended that you write down the system setup screen information for future reference.

CAUTION: Do not change the settings in system setup unless you are an expert computer user. Certain changes can cause your computer to work incorrectly.

Entering System Setup

1. Turn on (or restart) your computer.
2. When the DELL logo appears, press <F2> immediately.

   NOTE: Keyboard failure may result when a key on the keyboard is held down for extended periods of time. To avoid possible keyboard failure, press and release <F2> in even intervals until the system setup screen appears.

   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.

System Setup Screens

Options List — This field appears on the top of the system setup window. The tabbed options contain features that define the configuration of your computer, including installed hardware, power conservation, and security features.

Option Field — This field contains information about each option. In this field you can view your current settings and make changes to your settings. Use the right- and left-arrow keys to highlight an option. Press <Enter> to make that selection active.

Help Field — This field provides context sensitive help based on the options selected.

Key Functions — This field appears below the Option Field 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 not appear, or may not appear exactly as listed.

Inspiron 535/537

System Info	
System	Displays the computer model number.
BIOS Info	Shows the BIOS version number and date information.
Asset Tag	Displays the asset tag for the computer, if present.
Service Tag	Displays the service tag of the computer.
Processor Type	Displays the processor type.
Processor Level 2 Cache	Displays the amount of processor Level 2 cache.

Memory Installed	Indicates the amount of installed memory.
Memory Available	Indicates the amount of available memory.
Memory Speed	Indicates the frequency of installed memory.
Memory Channel Mode	Indicates the channel mode of installed memory.
System Memory Type	Indicates the type of installed memory.
Standard CMOS Features	
Date	Displays current date in the format (mm:dd:yyyy).
Time	Displays current time in the format (hh:mm:ss).
SATA 0	Displays the SATA drives connected to the SATA 0 connector.
SATA 1	Displays the SATA drives connected to the SATA 1 connector.
Halt On	All Errors; All, But Keyboard (All, But Keyboard by default)
Advanced BIOS Features	
CPU Feature	• Limit CPUID Value—Enabled; Disabled (Disabled by default) • Execute Disable Bit—Enabled; Disabled (Enabled by default) • Core Multi-Processing—Enabled; Disabled (Enabled by default)
Boot Up Numlock Status	Off; On (On by default)
Module Bay	Identifies the device installed in the module bay.
Boot Device Configuration	
Removable Boot Priority	Used to set the device priority of removable devices like USB floppy drives. The items displayed are dynamically updated according to the removable devices connected.
Hard Disk Boot Priority	Used to set the device priority of hard drives. The items displayed are dynamically updated according to the hard drives detected.
CD/DVD Boot Priority	Used to set the device priority of CD/DVD drives. The items displayed are dynamically updated according to the CD/DVD drives detected.
Network Boot Priority	Used to set the device priority of network devices. The items displayed are dynamically updated according to the network devices detected.
USB Boot Priority	Used to set the device priority of USB drives. The items displayed are dynamically updated according to the USB drives detected.
First Boot Device	Removable Dev.; Hard Drive; CD/DVD; Network; USB; Disabled (Removable Dev. by default)
Second Boot Device	Removable Dev.; Hard Drive; CD/DVD; Network; USB; Disabled (Hard Drive by default)
Third Boot Device	Removable Dev.; Hard Drive; CD/DVD; Network; USB; Disabled (CD/DVD by default)
Fourth Boot Device	Removable Dev.; Hard Drive; CD/DVD; Network; USB; Disabled (Network by default)
Fifth Boot Device	Removable Dev.; Hard Drive; CD/DVD; Network; USB; Disabled (USB by default)
Boot Other Device	Enabled; Disable (Enabled by default)
Advanced Chipset Features	
Init Display First	PCI Slot, Onboard (PCI Slot by default)
Video Memory Size	1 MB, 8 MB (8 MB by default)
DVMT Mode	FIXED, DVMT (DVMT by default)
DVMT/FIXED Memory Size	128 MB, 256 MB, MAX (128 MB by default)
NOTE: The DVMT Mode and FIXED Memory Size features are not available in Inspiron 537	
Integrated Peripherals	
USB Device Setting	• USB Controller—Enabled or Disabled (Enabled by default) • USB Operation Mode—High Speed; Full Speed; Low Speed (High Speed by default)
Onboard SATA Controller	Enabled or Disabled (Enabled by default)
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)
Power Management Setup	
ACPI Suspend Type	S1(POS); S3(STR) (S3(STR) by default)

Remote Wake Up	On; Off (On by default)
Auto Power On	Enabled; Disabled (Disabled by default)
Auto Power On Date	0
Auto Power On Time	0:00:00
AC Recovery	Off; On; Last (Off by default)
Set Supervisor Password	
Supervisor Password	Installed; Not Installed (Not Installed by default)
Change Supervisor Password	Press Enter to change the supervisor password
Set User Password	
User Password	Installed; Not Installed (Not Installed by default)
Change User Password	Press Enter to change the user password

Inspiron 545

System Info	
System	Displays the computer model number.
BIOS Info	Shows the BIOS version number and date information.
Service Tag	Displays the service tag of the computer.
Processor Type	Displays the processor type.
Processor L2 Cache	Displays the amount of processor Level 2 cache
Memory Installed	Indicates the amount of installed memory.
Memory Available	Indicates the amount of available memory.
Memory Speed	Indicates the frequency of installed memory.
Memory Channel Mode	Indicates the channel mode of installed memory.
Memory Technology	Indicates the type of installed memory.
Standard CMOS Features	
Date	Displays current date in the format (mm:dd:yyyy).
Time	Displays current time in the format (hh:mm:ss).
SATA 0	Displays the SATA drives connected to the SATA 0 connector.
SATA 1	Displays the SATA drives connected to the SATA 1 connector.
SATA 4	Displays the SATA drives connected to the SATA 4 connector.
SATA 5	Displays the SATA drives connected to the SATA 5 connector.
Halt On	All Errors; All, But Keyboard (All, But Keyboard by default)
Advanced BIOS Features	
CPU Feature	• Limit CPUID Value—Enabled; Disabled (Disabled by default) • Execute Disable Bit—Enabled; Disabled (Enabled by default) • Core Multi-Processing—Enabled; Disabled (Enabled by default)
Boot Up Numlock Status	Off; On (On by default)
Module Bay	Identifies the device installed in the module bay.
Boot Device Configuration	
Hard Disk Boot Priority	Used to set the device priority of hard drives. The items displayed are dynamically updated according to the hard drives detected.
First Boot Device	Removable; Hard Disk; CDROM; USB-CDROM; Disabled (Removable by default)
Second Boot Device	Removable; Hard Disk; CDROM; USB-CDROM; Disabled (Hard Disk by default)
Third Boot Device	Removable; Hard Disk; CDROM; USB-CDROM; Disabled (CDROM by default)
Boot Other Device	Enabled; Disable (Enabled by default)
Advanced Chipset Features	
Init Display First	PCI Slot, Onboard (PCI Slot by default)
Video Memory Size	1 MB, 8 MB (8 MB by default)

DVMT Mode	FIXED, DVMT (DVMT by default)
DVMT/FIXED Memory Size	128 MB, 256 MB, MAX (128 MB by default)
Integrated Peripherals	
USB Device Setting	• USB Controller—Enabled or Disabled (Enabled by default) • USB Operation Mode—High Speed; Full/Low Speed (High Speed by default)
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	IDE; RAID (IDE by default)
Power Management Setup	
ACPI Suspend Type	S1(POS); S3(STR) (S3(STR) by default)
Remote Wake Up	On; Off (On by default)
Auto Power On	Enabled; Disabled (Disabled by default)
Auto Power On Date	0
Auto Power On Time	0:00:00
AC Recovery	Off; On; Last (Off by default)
Set Supervisor Password	
Supervisor Password	Installed; Not Installed (Not Installed by default)
Change Supervisor Password	Press Enter to change the supervisor password
Set User Password	
User Password	Installed; Not Installed (Not Installed by default)
Change User Password	Press Enter to change the user password

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System Info	
BIOS Info	Shows the BIOS version number and date information.
System	Displays the computer model number.
Asset Tag	Displays the asset tag for the computer, if present.
Service Tag	Displays the service tag of the computer.
Processor Type	Displays the processor type.
CPU Speed	Displays the processor speed.
Processor L2 Cache	Displays the amount of processor Level 2 cache
Memory Installed	Indicates the amount of installed memory.
Memory Available	Indicates the amount of available memory.
Memory Speed	Indicates the frequency of installed memory.
Memory Channel Mode	Indicates the channel mode of installed memory.
Memory Technology	Indicates the type of installed memory.
Standard CMOS Features	
System Time	Displays current time in the format (hh:mm:ss).
System Date	Displays current date in the format (mm:dd:yy).
SATA 0	Displays the SATA drives connected to the SATA 0 connector.
SATA 1	Displays the SATA drives connected to the SATA 1 connector.
SATA 2	Displays the SATA drives connected to the SATA 2 connector.
SATA 3	Displays the SATA drives connected to the SATA 3 connector.
Advanced BIOS Features	
CPU Feature	• AMD Virtualization—Enabled; Disabled (Enabled by default) • AMD Cool 'N' Quiet Function—Enabled; Disabled (Enabled by default)

	• AMD Live!—indicates the AMD Live! status.
USB Device Setting	• USB Controller—Enabled or Disabled (Enabled by default) • USB Operation Mode—High Speed; Full/Low Speed (High Speed by default)
Advanced Chipset Features	
Init Display First	PCI-E 16X Slot; PCI-E 1X Slot; PCI Slot; Onboard (PCI-E 16X Slot by default)
UMA Frame Buffer Size	Auto; 32 MB; 64 MB; 128 MB; 256 MB; 512 MB (Auto by default)
Onboard Audio Controller	Auto; Disabled; Enabled (Enabled by default)
HD Audio	Disabled; Enabled (Enabled by default)
Onboard LAN Controller	Disabled; Enabled (Enabled by default)
Onboard LAN Boot ROM	Enabled; Disabled (Disabled by default)
SATA Mode	RAID; ATA (ATA by default)
Module Bay	Identifies the device installed in the module bay.
Boot Device Configuration	
Boot Settings Configuration	• Fast Boot—Disabled; Enabled (Enabled by default) • Numlock Key—OFF; ON (ON by default) • Keyboard Errors—Report; Do Not Report (Report by default)
Hard Disk Boot Priority	• 1st Boot Device—Removable; CD/DVD; Hard Drive; Disabled (Removable by default) • 2nd Boot Device—Removable; CD/DVD; Hard Drive; Disabled (CD/DVD by default) • 3rd Boot Device—Removable; CD/DVD; Hard Drive; Disabled (Hard Drive by default)
Boot Other Device	No; Yes (Yes by default)
Power Management Setup	
ACPI Suspend Type	S1(POS); S3(STR) (S3(STR) by default)
C1E Support	Disabled; Enabled (Disabled by default)
Remote Wake Up	Disabled; Enabled (Enabled by default)
AC Recovery	Off; On; Last (Off by default)
Auto Power On	Disabled; Enabled (Disabled by default)
Auto Power On Date	0
Auto Power On Time	0:00:00
BIOS Security Features	
Supervisor Password	Displays the status of the supervisor password
User Password	Displays the status of the user password
Set Supervisor Password	Set the supervisor password through this menu
The following options are available when the Supervisor Password is set.	
User Access Level	
Set User Password	
Password Check	

Changing Boot Sequence for the Current Boot

You can use this feature, for example, to tell the computer to boot from the CD drive so that you can run the Dell Diagnostics on the *Drivers and Utilities* media, but you want the computer to boot from the hard drive when the diagnostic tests are complete. You can also use this feature to restart your computer to a USB device such as a floppy drive, memory key, or CD-RW drive.

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 bottom- 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. Each device has a number next to it.

4. At the bottom of the menu, enter the number of the device that is to be used for the current boot only.

   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 make sure 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 Device Configuration** 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 device.

Clearing Forgotten Passwords

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.

1. Follow the procedures in Before You Begin.
2. Remove the computer cover (see Removing the Computer Cover).
3. Locate the 3-pin password reset jumper on the system board.

   NOTE: The location of the password connector may vary depending on the system.

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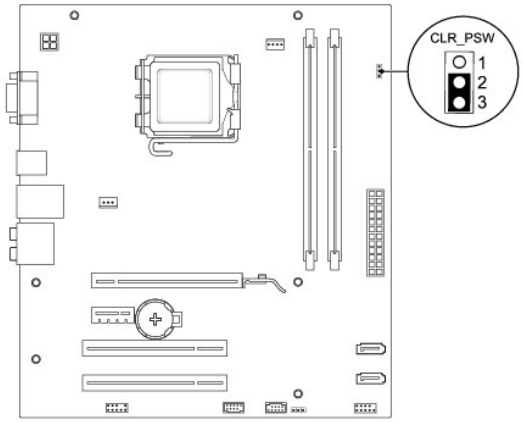
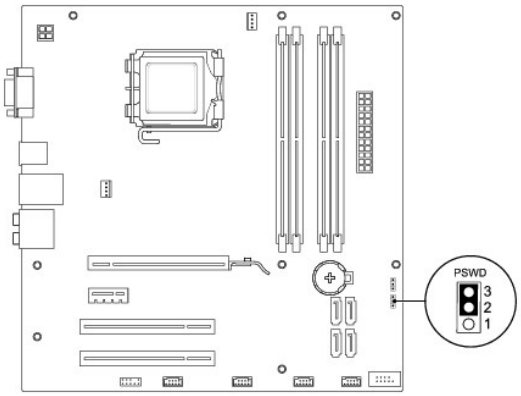
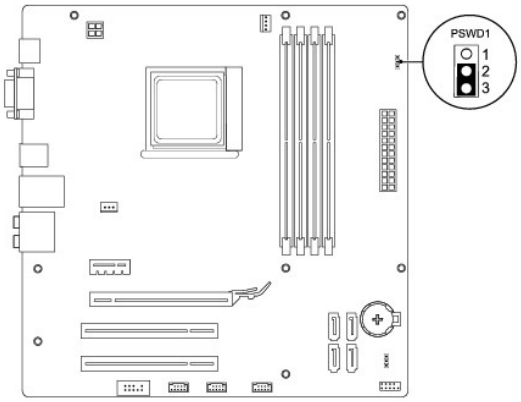


Inspiron 545



Inspiron 546



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, wait for approximately five seconds, and then turn off the computer. If required, press and hold the power button to turn off the computer.
6. Remove the 2-pin jumper plug from pins 1 and 2 and replace it on pins 2 and 3 to enable the password feature.
7. Replace the computer cover (see Replacing the Computer Cover).
8. Connect your computer and devices to electrical outlets, and turn them on.

Clearing CMOS Settings

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 computer cover (see Removing the Computer Cover).
3. Reset the current CMOS settings:
   a. Locate the 3-pin CMOS reset jumper on the system board.
   b. Remove the jumper plug from the CMOS reset jumper pins 2 and 3.
   c. Place the jumper plug on the CMOS reset jumper pins 1 and 2 and wait approximately five seconds.
   d. Remove the jumper plug and replace it on the CMOS reset jumper pins 2 and 3.

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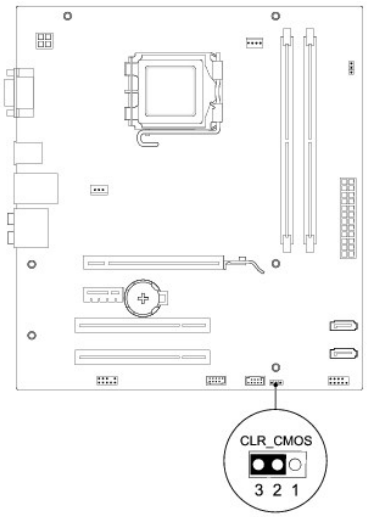

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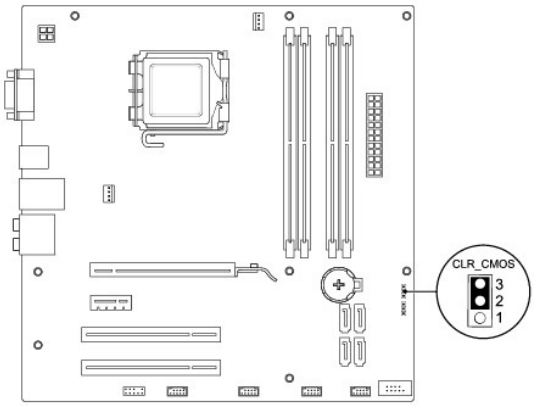

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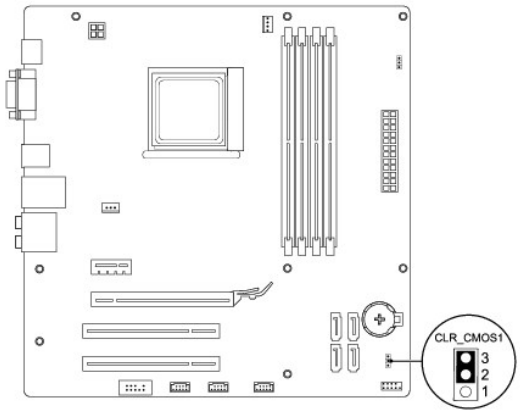

4. Replace the computer cover (see Replacing the Computer Cover).

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

Flashing the BIOS

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

1. Turn on the computer.
2. Locate the BIOS update file for your computer at the Dell Support website at **support.dell.com**.
3. Click **Download Now** to download the file.
4. If the **Export Compliance Disclaimer** window appears, click **Yes, I Accept this Agreement**.

   The **File Download** window appears.
5. Click **Save this program to disk**, and then click **OK**.

   The **Save In** window appears.
6. Click the down arrow to view the **Save In** menu, select **Desktop**, and then click **Save**.

   The file downloads to your desktop.
7. Click **Close** when the **Download Complete** window appears.

   The file icon appears on your desktop and is titled the same as the download BIOS update file.
8. Double-click the file icon on the desktop and follow the instructions on the screen.

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System Board

Dell™ Inspiron™ 535/537/545/546 Service Manual

- Removing the System Board
- Replacing the System Board

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

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

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

Removing the System Board

1. Follow the procedures in Before You Begin.
2. Remove the computer cover (see Removing the Computer Cover).
3. Remove any add-in cards on the system board (see Removing PCI and 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).
6. Remove the memory modules (see Removing Memory) and document which memory module is removed from each memory socket so that the memory modules can be installed in the same location after the board is replaced.
7. Disconnect all cables from the system board. 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 screws from the system board.
9. Lift the system board up and out.

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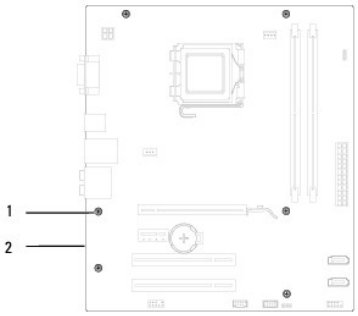

1	screws (6)	2	system board

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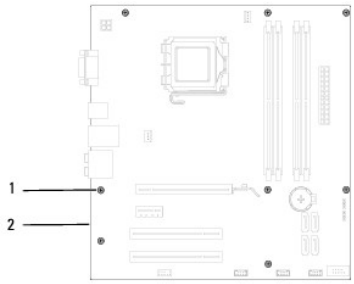


1	screws (8)	2	system board

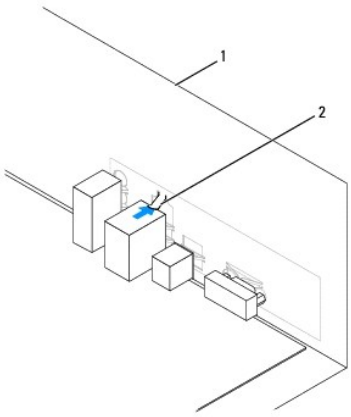
Compare the system board that you just removed with the replacement system board to ensure that they are identical.

Replacing the System Board

1. Gently align the board into the chassis and slide it towards the back of the computer.

CAUTION: Ensure that the port retention springs are not damaged while replacing the sytem board.

Inspiron 535/537



1	back of the computer	2	port retention spring

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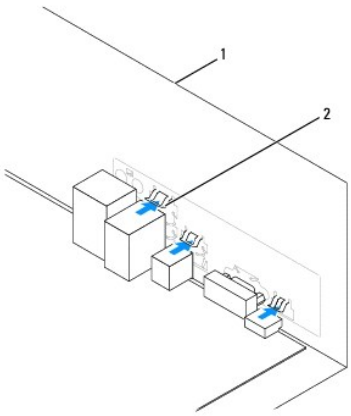

1	back of the computer	2	port retention springs (3)

2. Replace the screws that secure the system board to the chassis.
3. Replace the cables that you removed from the system board.

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

4. Replace the processor (see Replacing the Processor).
5. Replace the processor fan and the heat sink assembly (see Replacing the Processor Fan and Heat Sink Assembly).

6. Replace the memory modules into the memory sockets at the same locations from which you removed them (see Replacing Memory).
7. Replace any add-in cards on the system board (see Replacing PCI and PCI Express Cards).
8. Replace the computer cover (see Replacing the Computer Cover).
9. Connect your computer and devices to an electrical outlet, and turn them on.

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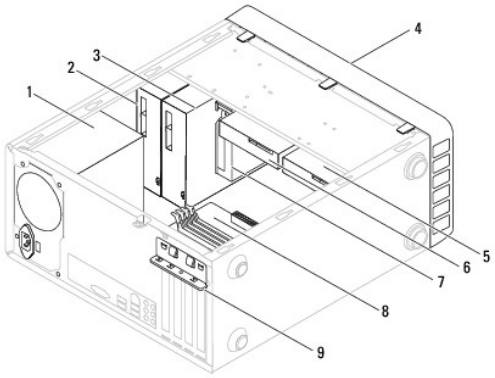
Technical Overview

Dell™ Inspiron™ 535/537/545/546 Service Manual

- Inside View of Your Computer
- System Board Components

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.

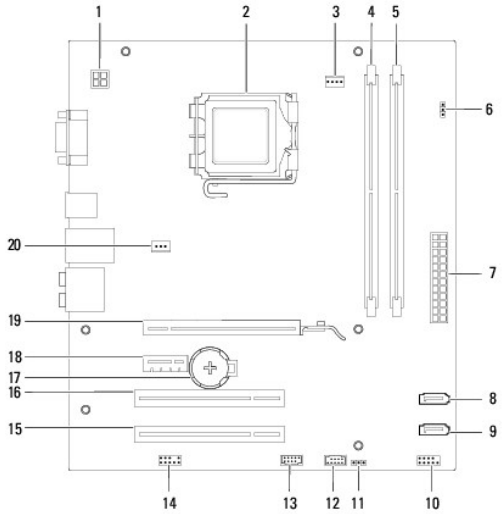
Inside View of Your Computer



1	power supply	2	primary optical drive
3	secondary optical drive (optional)*	4	front bezel
5	secondary hard drive (optional)*	6	primary hard drive
7	media card reader (optional)	8	system board
9	card retention bracket		
* available only on Inspiron™ 545/546			

System Board Components

Inspiron 535/537



1	12 V power connector (ATX12V1)	2	processor socket
3	processor fan connector (FAN_CPU)	4	memory module connector (DIMM1)
5	memory module connector (DIMM2)	6	password reset jumper (CLR_PSW)
7	main power connector (ATX1_POWER1)	8	SATA connector (SATA_1)
9	SATA connector (SATA_0)	10	front panel connector (FRONTPANEL)
11	CMOS reset jumper (CLR_CMOS)	12	front panel USB connector (F_USB2)
13	front panel USB connector (F_USB1)	14	front panel audio (FP_AUDIO)
15	PCI card slot (PCI_2)	16	PCI card slot (PCI_1)
17	battery socket (BATTERY)	18	PCI-Express x1 card slot (PCIEX1)
19	PCI-Express x16 card slot (PCIEX16)	20	chassis fan connector (FAN_SYS)

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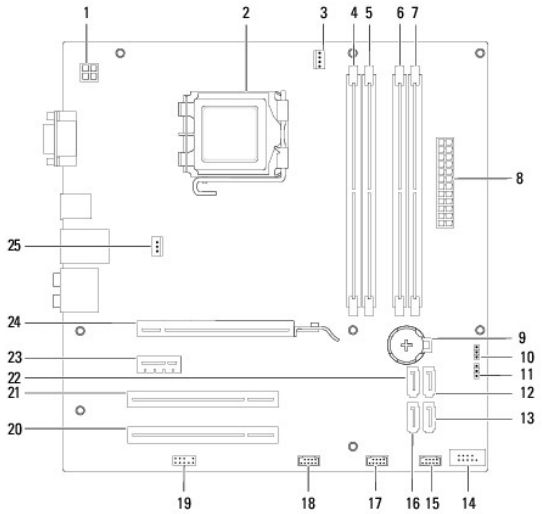

1	12 V power connector (PWR2)	2	processor socket
3	processor fan connector (CPU_FAN)	4	memory module connector (DIMM1)
5	memory module connector (DIMM2)	6	memory module connector (DIMM3)
7	memory module connector (DIMM4)	8	main power connector (PWR1)
9	battery socket (BAT)	10	CMOS reset jumper (CLR_CMOS)
11	password reset jumper (PSWD)	12	SATA connector (SATA_1)
13	SATA connector (SATA_4)	14	front panel connector (FP1)
15	front panel USB connector (F_USB1)	16	SATA connector (SATA_5)
17	front panel USB connector (F_USB2)	18	front panel USB connector (F_USB3)
19	front panel audio (F_AUDIO)	20	PCI card slot (PCI2)
21	PCI card slot (PCI1)	22	SATA connector (SATA_0)
23	PCI-Express x1 card slot (PCI-E_1X)	24	PCI-Express x16 card slot (PCI-E1_16X)
25	chassis fan connector (SYS_FAN1)		

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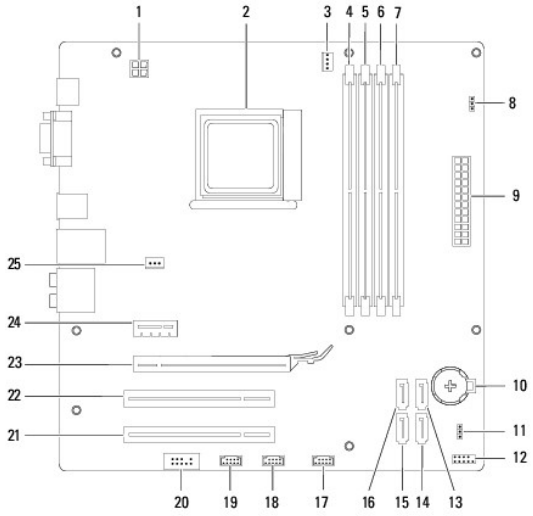

1	12 V power connector (PWR2)	2	processor socket
3	processor fan connector (CPU_FAN1)	4	memory module connector (DIMM4)
5	memory module connector (DIMM3)	6	memory module connector (DIMM2)
7	memory module connector (DIMM1)	8	password reset jumper (PSWD1)
9	main power connector (PWR1)	10	battery socket (BAT1)
11	CMOS reset jumper (CLR_CMOS1)	12	front panel connector (FP1)
13	SATA connector (SATA_2)	14	SATA connector (SATA_1)
15	SATA connector (SATA_0)	16	SATA connector (SATA_3)
17	front panel USB connector (F_USB1)	18	front panel USB connector (F_USB2)
19	front panel USB connector (F_USB3)	20	front panel audio (F_AUDIO1)
21	PCI card slot (PCI2)	22	PCI card slot (PCI1)
23	PCI-Express x16 card slot (PCI-E_16X_1)	24	PCI-Express x1 card slot (PCI-E_1X_1)
25	chassis fan connector (SYS_FAN1)		

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