Dell[™] Inspiron[™] 1545 Service Manual

Before You Begin
Base Cover
Hard Drive
Memory
Optical Drive
Processor Heat Sink
Processor
Center Control Cover
Keyboard
Internal Card With Bluetooth® Wireless Technology
Power Board
Display
Camera (Optional)

Palm Rest Speakers Daughter Board System Board Wireless Mini-Card Audio Connector Cover Thermal Fan USB Extend Cable Charger Board Coin-Cell Battery Battery Latch Assembly Flashing the BIOS

Notes, Notices, and Cautions

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

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

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

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Model PP41L

March 2009 Rev. A01

Audio Connector Cover Dell[™] Inspiron[™] 1545 Service Manual

- <u>Removing the Audio Connector Cover</u>
 <u>Replacing the Audio Connector Cover</u>
- A CAUTION: 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.

• NOTICE: 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 the back of the computer).

• NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.

O NOTICE: 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 Audio Connector Cover

- 1. Follow the instructions in Before You Begin.
- 2. Remove the system board (see Removing the System Board).
- 3. Lift the audio connector cover and remove it from the computer.



audio connector cover

Replacing the Audio Connector Cover

- 1. Place the audio connector cover in the computer base.
- 2. Replace the system board (see Replacing the System Board).

Base Cover

Dell[™] Inspiron[™] 1545 Service Manual

- Removing the Base Cover
- Replacing the Base Cover

CAUTION: 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: Before performing this procedures, turn off the computer, disconnect the AC adapter from the electrical outlet and the computer, disconnect the modem from the wall connector and the computer, and remove any other external cables from the computer.

• NOTICE: 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 the back of the computer).

• NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.

● NOTICE: 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 Base Cover

- 1. Ensure that the computer is turned off.
- 2. Remove the battery (see Before Working Inside Your Computer).
- 3. Loosen the four captive screws on the base cover and lift the cover away from the computer at an angle as shown in the figure.

A CAUTION: Do not touch the processor heat sink. Processor components should be removed only by trained support personnel.



Replacing the Base Cover

- 1. Align the tabs on the base cover to the bottom of the computer.
- 2. Tighten the four captive screws on the base cover.
- 3. Slide the battery into the battery bay until it clicks into place.

Battery Latch Assembly Dell[™] Inspiron[™] 1545 Service Manual

- <u>Removing the Battery Latch Assembly</u>
 <u>Replacing the Battery Latch Assembly</u>
- CAUTION: 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.

• NOTICE: 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 the back of the computer).

• NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.

O NOTICE: 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 Battery Latch Assembly

- 1. Follow the instructions in Before Working Inside Your Computer.
- 2. Remove the system board (see Removing the System Board).
- 3. Squeeze the plastic clip to release the battery latch assembly.
- 4. Remove the spring from the hook that holds it in place.
- 5. Lift the assembly out of the computer base.



1	battery latch assembly	2	plastic clip
3	spring		

Replacing the Battery Latch Assembly

- 1. Place the latch assembly in the channel on the computer base.
- 2. Using a small screwdriver, place the spring over the hook on the computer base.

Ensure that the newly installed latch moves smoothly and freely when pushed and released.

• NOTICE: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

3. Replace the system board (see Replacing the System Board).

Before You Begin Dell™ Inspiron™ 1545 Service Manual

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

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

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

Recommended Tools

The procedures in this document may require the following tools:

- 1 Small flat-blade screwdriver
- 1 Phillips screwdriver
- 1 Processor extraction tool
- 1 BIOS upgrade CD

Turning Off Your Computer

NOTICE: 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. In Windows Vista[®], click **Start** 📀 , click the arrow 🏊 , and then click **Shut Down**.

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

 Ensure that the computer and any attached devices are turned off. If your computer and attached devices did not automatically turn off when you shut down your operating system, press and hold the power button for at least 8 to 10 seconds until the computer turns off.

Before Working Inside Your Computer

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

CAUTION: 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.

• NOTICE: Handle components and cards with care. Do not touch the components or contacts on a card. Hold a card by its edges or by its metal mounting bracket. Hold a component such as a processor by its edges, not by its pins.

● NOTICE: 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.

• NOTICE: 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.

NOTICE: 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)
- 3. If the computer is connected to a docking device (docked), undock it. See the documentation that came with your docking device for instructions.

SNOTICE: To disconnect a network cable, first unplug the cable from your computer and then unplug the cable from the network device.

- 4. Disconnect all telephone or network cables from the computer.
- 5. Press and eject any installed cards from the ExpressCard slot and the 8-in-1 memory card reader.
- 6. Disconnect your computer and all attached devices from their electrical outlets.
- SNOTICE: To help prevent damage to the system board, you must remove the battery from the battery bay before you service the computer.

• NOTICE: To avoid damage to the computer, use only the battery designed for this particular Dell computer. Do not use batteries designed for other Dell computers.

- 7. Turn the computer over.
- 8. Slide and hold the battery release latch.
- 9. Slide the battery out of the battery bay.



10. Press the power button to ground the system board.

Flashing the BIOS Dell™ Inspiron™ 1545 Service Manual

- Flashing the BIOS From a CD
- Flashing the BIOS From the Hard Drive

If a BIOS upgrade CD is provided with the new processor or new system board, flash the BIOS from the CD. If you do not have a BIOS upgrade CD, flash the BIOS from the hard drive.

Flashing the BIOS From a CD

1. Ensure that the AC adapter is plugged in and that the main battery is installed properly.

MOTE: If you use a BIOS upgrade CD to flash the BIOS, set up the computer to boot from a CD before inserting the CD.

2. Insert the BIOS upgrade CD, and restart the computer.

Follow the instructions that appear on the screen. The computer continues to boot and updates the new BIOS. When the flash update is complete, the computer will automatically reboot.

- 3. Press <F2> during POST to enter the system setup program.
- 4. Click Load Defaults and click OK in pop-up window to reset the computer defaults.
- 5. Remove the BIOS upgrade CD from the drive.
- 6. Press <Esc> and click Yes in the pop-up window to save configuration changes.
- 7. The BIOS upgrade finishes and the computer restarts automatically.

Flashing the BIOS From the Hard Drive

- 1. Ensure that the AC adapter is plugged in, the main battery is properly installed, and a network cable is attached.
- 2. Turn on the computer.
- 3. Locate the latest BIOS update file for your computer at support.dell.com.
- 4. Click Download Now to download the file.
- 5. If the Export Compliance Disclaimer window appears, click Yes, I Accept this Agreement.

The File Download window appears.

6. Click Save this program to disk and then click OK.

The Save In window appears.

7. Click the down arrow to view the Save In menu, select Desktop, and then click Save.

The file downloads to your desktop.

8. Click Close if the Download Complete window appears.

The file icon appears on your desktop and is titled the same as the downloaded BIOS update file.

9. Double-click the file icon on the desktop and follow the instructions on the screen.

Internal Card With Bluetooth® Wireless Technology Dell[™] Inspiron[™] 1545 Service Manual

- Removing the Card
- Replacing the Card
- CAUTION: 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.
- NOTICE: 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 the back of the computer).
- NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.
- ▶ NOTICE: 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.

If you ordered a card with Bluetooth wireless technology with your computer, it is already installed.

Removing the Card

- 1. Follow the instructions in Before You Begin.
- 2. Remove the center control cover (see Removing the Center Control Cover).
- 3. Remove the keyboard (see Removing the Keyboard).
- 4. Remove the screw that secures the Bluetooth card and lift the card off the computer.
- NOTICE: Be extremely careful when removing the cable board. The cable board is glued to the computer. Do not pull on the cable to loosen the cable board.
- 5. Use a plastic scribe or screwdriver to pry the cable board off the computer.
- 6. Remove the cable from its routing.



1	cable connector	2	screwdriver
3	cable board	4	Bluetooth card
5	screw		

7. Disconnect the cable from the system board connector.

8. Remove the cable board from the computer.

Replacing the Card

- 1. Replace the cable board.
- 2. Route the cable through the routing guides.
- 3. Connect the cable to the system board connector.
- 4. Replace the screw that secures the Bluetooth card.
- 5. Replace the keyboard (see Replacing the Keyboard).
- 6. Replace the center control cover (see Replacing the Center Control Cover).
- 7. Slide the battery into the battery bay until it clicks into place.

Camera (Optional) Dell™ Inspiron™ 1545 Service Manual

- Removing the Camera
- Replacing the Camera

A CAUTION: 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.

• NOTICE: 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 the back of the computer).

• NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.

● NOTICE: 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 Camera

- 1. Follow the instructions in Before You Begin.
- 2. Remove the display assembly (see Removing the Display Assembly).
- 3. Remove the display bezel (see Removing the Display Bezel).
- 4. Remove the display panel (see Removing the Display Panel).
- 5. Remove the four screws securing the brackets to the camera board.
- 6. Remove the camera board brackets.
- 7. Disconnect the camera cable from the connector on the camera board.
- 8. Remove the camera board.



1	camera	2	screws (4)
3	camera board brackets (2)	4	camera cable connector

Replacing the Camera

- 1. Align the camera board over the screw holes.
- 2. Replace the camera board brackets.
- 3. Replace the four screws that secure the camera board brackets to the display frame.
- 4. Connect the camera cable to the connector on the camera board.
- 5. Replace the display panel (see Replacing the Display Panel).

- 6. Replace the display bezel (see Replacing the Display Bezel).
- 7. Replace the display assembly (see <u>Replacing the Display Assembly</u>).

Center Control Cover Dell™ Inspiron™ 1545 Service Manual

- Removing the Center Control Cover
- Replacing the Center Control Cover
- CAUTION: 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.

• NOTICE: 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 the back of the computer).

• NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.

● NOTICE: 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 Center Control Cover

- 1. Follow the instructions in Before You Begin.
- 2. Remove the two screws that secure the center control cover to the computer base.



3. Turn the computer top side up, and open the display as far as possible.

S NOTICE: Be extremely careful when removing the center control cover. The cover is very fragile.

- 4. Ease the center control cover up with a plastic scribe from the back of the computer.
- 5. Lift the center control cover away from the computer.



Replacing the Center Control Cover

1. Align the hooks beneath the center control cover and snap the cover in place.

- 2. Turn the computer over and replace the two screws that secure the center control cover to the computer base.
- 3. Slide the battery into the battery bay until it clicks into place.

Charger Board Dell™ Inspiron™ 1545 Service Manual

Removing the Charger Board

Replacing the Charger Board

CAUTION: 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.

• NOTICE: 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 the back of the computer).

• NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.

● NOTICE: 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 Charger Board

- 1. Follow the instructions in Before You Begin.
- 2. Remove the system board (see Removing the System Board).
- 3. Remove the two screws that secure the charger board to the computer base.
- 4. Lift the charger board out of the computer base.



Replacing the Charger Board

- 1. Place the charger board in the computer base.
- 2. Replace the two screws that secure the charger board to the computer base.
- 3. Replace the system board (see Replacing the System Board).

Coin-Cell Battery Dell™ Inspiron™ 1545 Service Manual

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<u>Removing the Coin-Cell Battery</u>
 <u>Replacing the Coin-Cell Battery</u>

CAUTION: 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.

• NOTICE: 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 the back of the computer).

• NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.

O NOTICE: 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. Follow the instructions in Before You Begin.
- 2. Remove the system board (see Removing the System Board).
- 3. Turn the system board over.
- 4. Use a plastic scribe to push the coin cell battery forward and upward to release it from the slot.



Replacing the Coin-Cell Battery

- 1. Replace the coin cell battery with the positive (+) side facing upwards.
- 2. Replace the system board (see Replacing the System Board).

Processor

Dell[™] Inspiron[™] 1545 Service Manual

<u>Removing the Processor</u> <u>Installing the Processor</u>

CAUTION: 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.

• NOTICE: 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 the back of the computer).

• NOTICE: To prevent intermittent contact between the ZIF-socket cam screw and the processor when removing or replacing the processor, press to apply slight pressure to the center of the processor while turning the cam screw.

ONOTICE: To avoid damage to the processor, hold the screwdriver so that it is perpendicular to the processor when turning the cam screw.

• NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.

O NOTICE: 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 Processor

- 1. Follow the instructions in Before You Begin.
- 2. Remove the base cover (see <u>Removing the Base Cover</u>).
- 3. Remove the processor heat sink (see Removing the Processor Heat Sink).

S NOTICE: When removing the processor, pull it straight up. Be careful not to bend the pins on the processor.

4. To loosen the ZIF socket, use a small, flat-blade screwdriver and rotate the ZIF-socket cam screw counterclockwise until it comes to the cam stop. The ZIF-socket cam screw secures the processor to the system board. Take note of the arrow on the ZIF-socket cam screw.



1	processor	2	pin-1 corner of processor	3	ZIF socket
4	ZIF-socket cam screw				

5. Use a processor extraction tool to remove the processor.

Installing the Processor

• NOTICE: Ensure that the cam screw is in the fully open position before seating the processor. Seating the processor properly in the ZIF socket does not require force.

SNOTICE: A processor that is not properly seated can result in an intermittent connection or permanent damage to the processor and ZIF socket.

1. Align the pin-1 corner of the processor so that it points to the triangle on the ZIF socket, and place the processor into the ZIF socket.

When the processor is correctly seated, all four corners are aligned at the same height. If one or more corners of the processor are higher than the others, the processor is not seated correctly.



- 2. Tighten the ZIF socket by turning the cam screw clockwise to secure the processor to the system board.
- 3. Peel the backing off the thermal cooling pad and adhere the pad to the portion of the processor heat sink that covers the processor.
- 4. Replace the processor heat sink (see Replacing the Processor Heat Sink).
- 5. Replace the base cover (see Replacing the Base Cover).
- 6. Slide the battery into the battery bay until it clicks into place.
- 7. Update the BIOS using the BIOS upgrade CD (see Flashing the BIOS).

Processor Heat Sink Dell™ Inspiron™ 1545 Service Manual

- Removing the Processor Heat Sink
- Replacing the Processor Heat Sink

CAUTION: 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.

• NOTICE: 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 the back of the computer).

• NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.

● NOTICE: 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 Processor Heat Sink

- 1. Follow the instructions in Before You Begin.
- 2. Remove the base cover (see Removing the Base Cover).
- 3. Loosen the five captive screws that secure the processor heat sink to the system board.



1	captive screws (5)	2	processor heat sink
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4. Lift the processor heat sink away from the computer.

Replacing the Processor Heat Sink

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

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

- 1. Peel the backing off the thermal cooling pad and adhere the pad to the portion of the heat sink that covers the processor.
- 2. Place the processor heat sink on the system board.
- 3. Tighten the five captive screws that secure the processor heat sink to the system board.
- 4. Replace the base cover (see Replacing the Base Cover).
- 5. Slide the battery into the battery bay until it clicks into place.

Daughter Board Dell™ Inspiron™ 1545 Service Manual

Removing the Daughter Board

- Replacing the Daughter Board
- CAUTION: 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.
- NOTICE: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as the back panel) on the computer.

• NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.

● NOTICE: 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 Daughter Board

- 1. Follow the instructions in Before You Begin.
- 2. Remove the palm rest (Removing the Palm Rest).
- 3. Remove the three screws that secure the daughter board.
- 4. Lift the daughter board out of the computer.



1 daughter board 2 screws (3)

Replacing the Daughter Board

- 1. Align the daughter board with the system board connector and with the screw holes on the computer base.
- 2. Replace the three screws that secure the daughter board.
- NOTICE: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.
- 3. Replace the palm rest (Replacing the Palm Rest).

Display

Dell[™] Inspiron[™] 1545 Service Manual

- Display Assembly
- Display Bezel
- Display Panel
- Display Panel Cable
- Display Inverter
- CAUTION: 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.
- NOTICE: 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 the back of the computer).
- NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.
- O NOTICE: 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.

Display Assembly

Removing the Display Assembly

NOTE: The location of the Mini-Card may change according to the display adapter supported by your computer. To find the type of display adapter on your computer, click Start -> Control Panel -> System -> Device Manager -> Display adapters.

- 1. Follow the instructions in Before You Begin.
- 2. Remove the center control cover (see Removing the Center Control Cover).
- 3. Remove the base cover (see Removing the Base Cover).
- 4. Disconnect the Mini-Card cables from the Mini-Card, if applicable.
- 5. Make note of the cable routing and carefully dislodge the Mini-Card antenna cables from their routing guides.

ATI Mobility Radeon:



Mobile Intel® GMA:



6. Remove the two screws from the computer base.



- 7. Turn the computer over.
- 8. Remove the keyboard (see Removing the Keyboard).
- 9. Make note of the cable routing and carefully dislodge the Mini-Card antenna cables from their routing guides and pull the cables out through the system board so that they are clear of the computer base.
- 10. Pull the display cable pull-tab to disconnect the display cable from the connector on the system board.
- 11. Disconnect the optional camera cable from the system board connector.
- 12. Make note of the cable routing and carefully dislodge the cables from their routing guides.



1	Mini-Card antenna cable route	2	camera cable route (optional)
3	display cable route		

- 13. Remove the four screws (two on either side) that secure the display assembly.
- 14. Lift the display assembly off the computer.



	Mini-Card antenna cable routing slot	2	camera cable connector (optional)
3	display cable pull-tab	4	screws (4)

Replacing the Display Assembly

- 1. Place the display assembly in position and replace the four screws (two on either side) that secure the display assembly.
- 2. Route the optional camera cable and display cable through the routing guides and connect the cables to the respective system board connectors.
- 3. Route the Mini-Card antenna cables into their routing guides on the palm rest and through the system board.
- 4. Replace the keyboard (see Replacing the Keyboard).
- 5. Replace the center control cover (see Replacing the Center Control Cover).
- 6. Replace the two screws at the computer base.
- 7. Turn the computer and route the Mini-Card antenna cables through their routing guides.
- 8. Connect the appropriate antenna cables to the Mini-Card. The following table provides the antenna cable color scheme for the Mini-Card supported by your computer:

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

- 9. Replace the base cover (see Replacing the Base Cover).
- NOTICE: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.
- 10. Slide the battery into the battery bay until it clicks into place.

Display Bezel

Removing the Display Bezel

S NOTICE: The display bezel is extremely fragile. Be careful when removing it to prevent damaging the bezel.

1. Remove the display assembly (see Removing the Display Assembly).

- 2. Remove the six rubber screw covers.
- 3. Remove the captive screw and the five screws securing the display bezel.
- 4. Using your fingertips, carefully pry up the inside edge of the display bezel.
- 5. Remove the display bezel.



1	display bezel	2	screws (5)
3	rubber screw covers (6)	4	captive screw

Replacing the Display Bezel

- 1. Realign the display bezel over the display panel, and gently snap into place.
- 2. Replace the five screws and tighten the captive screw.
- 3. Replace the six rubber screw covers.
- 4. Replace the display assembly (see Replacing the Display Assembly).

Display Panel

Removing the Display Panel

- 1. Remove the display assembly (see <u>Removing the Display Assembly</u>).
- 2. Remove the display bezel (see Display Bezel).
- 3. Remove the two screws securing the display panel.
- 4. Remove the two screws securing the inverter board.



1	display panel screws (2)	2	inverter board screws (2)
3	display panel	4	inverter board

- 5. Disconnect the cables from the connectors on either side of the inverter board.
- 6. Remove the display panel cable (see Removing the Display Panel Cable).
- 7. Remove the six screws (three on either side) that secure the display panel brackets to the display panel.



Replacing the Display Panel

- 1. Attach the display panel brackets to the display panel by replacing the six screws (three on either side).
- 2. Replace the display panel cable (see Replacing the Display Panel Cable).
- 3. Connect the cables to the connectors on either side of the inverter board.
- 4. Align the display panel and the inverter board with the display frame.
- 5. Replace the two screws securing the display panel.
- 6. Replace the two screws securing the inverter board.
- 7. Replace the display bezel (see Replacing the Display Bezel).
- 8. Replace the display assembly (see Replacing the Display Assembly).

Display Panel Cable

Removing the Display Panel Cable

NOTE: The display panel cables and connectors may differ depending on the display panel you ordered.

- 1. Remove the display assembly (see <u>Removing the Display Assembly</u>).
- 2. Remove the display bezel (see Display Bezel).
- 3. Remove the display panel (see Display Panel).
- 4. Turn the display panel over and place it on a clean surface.



	tape securing the display panel cable to the connector on top	display panel cable
3	back of display panel	

5. Lift the tape that secures the display panel cable to the connector on top and disconnect the cable from the connector.

Replacing the Display Panel Cable

- 1. Reconnect the display cable to the connector on top.
- 2. Replace the display panel (see Replacing the Display Panel).
- 3. Replace the display bezel (see Replacing the Display Bezel).
- 4. Replace the display assembly (see Replacing the Display Assembly).

Display Inverter

Removing the Display Inverter

- 1. Remove the display assembly (see Removing the Display Assembly).
- 2. Remove the display bezel (see Removing the Display Bezel).
- 3. Remove the display panel (see <u>Removing the Display Panel</u>).
- 4. Disconnect the cables from the connectors on either side of the inverter board.



inverter board

5. Lift the inverter board off the display panel.

Replacing the Display Inverter

- 1. Connect the cables to the connectors on either side of the inverter board.
- 2. Replace the display panel (see Replacing the Display Panel).
- 3. Replace the display bezel (see Replacing the Display Bezel).
- 4. Replace the display assembly (see Replacing the Display Assembly).

Thermal Fan Dell™ Inspiron™ 1545 Service Manual

Removing the Thermal Fan

Replacing the Thermal Fan

CAUTION: 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.

• NOTICE: 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 the back of the computer).

• NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.

● NOTICE: 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 Thermal Fan

- 1. Follow the instructions in Before You Begin.
- 2. Remove the system board (see Removing the System Board).
- 3. Remove the two screws that secure the thermal fan to the computer base.
- 4. Lift the thermal fan off the computer.



1	thermal fan	2	thermal fan cable
3	screws (2)		

Replacing the Thermal Fan

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

NOTE: This procedure assumes that you have already removed the thermal fan and are ready to replace it.

- 1. Replace the thermal fan.
- 2. Replace the two screws that secure the fan to the computer base.
- 3. Replace the system board (see Replacing the System Board).

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Hard Drive

Dell[™] Inspiron[™] 1545 Service Manual

- Removing the Hard Drive
- Replacing the Hard Drive

CAUTION: If you remove the hard drive from the computer when the drive is hot, do not touch the metal housing of the hard drive.

CAUTION: 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.

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

S NOTICE: Hard drives are extremely fragile. Exercise care when handling the hard drive.

NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.

O NOTICE: 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.

MOTE: Dell does not guarantee compatibility or provide support for hard drives from sources other than Dell.

NOTE: If you are installing a hard drive from a source other than Dell, you need to install an operating system, drivers, and utilities on the new hard drive (for more information see the Dell Technology Guide).

Removing the Hard Drive

- 1. Follow the instructions in Before You Begin.
- 2. Remove the two screws securing the hard drive assembly to the computer base.
- 3. Slide the hard drive assembly out of the bay.
- NOTICE: When the hard drive is not in the computer, store it in protective antistatic packaging (see "Protecting Against Electrostatic Discharge" in the safety instructions that shipped with your computer).



4. Remove the two screws (one from either side) securing the hard drive cage and bezel to the hard drive.

- 5. Remove the hard drive bezel.
- 6. Lift the hard drive cage off the hard drive.



Replacing the Hard Drive

1. Remove the new drive from its packaging.

Save the original packaging for storing or shipping the hard drive.

NOTICE: Use firm and even pressure to slide the drive into place. If you use excessive force, you may damage the connector.

- 2. Replace the hard drive cage and the hard drive bezel.
- 3. Replace the two screws (one on either side) that secure the hard drive cage and bezel to the hard drive.
- 4. Slide the hard drive assembly into the bay.
- 5. Replace the two screws that secure the hard drive assembly to the computer base.
- NOTICE: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.
- 6. Slide the battery into the bay until it clicks into place.
- 7. Install the operating system for your computer, as needed (see Dell Technology Guide).
- 8. Install the drivers and utilities for your computer, as needed (see Dell Technology Guide).

Keyboard

Dell[™] Inspiron[™] 1545 Service Manual

- Removing the Keyboard
- Replacing the Keyboard

CAUTION: 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.

• NOTICE: 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 the back of the computer).

• NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.

● NOTICE: 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 Keyboard

1. Follow the instructions in Before You Begin.

2. Remove the center control cover (see Removing the Center Control Cover).

3. Remove the two screws at the top of the keyboard.

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

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

4. Carefully slide the keyboard out of the computer and turn it over to access the keyboard connector. Do not pull hard on the keyboard.



1	keyboard	2	screws (2)
3	keyboard tabs (6)	4	connector latch
5	keyboard cable		

5. Lift the connector latch that secures the keyboard cable to the connector on the system board and remove the cable.

6. Lift the keyboard away from the computer

Replacing the Keyboard

- 1. Slide the keyboard cable into the connector on the system board and press down on the connector latch that secures the keyboard cable to the system board connector.
- 2. Align the tabs along the bottom of the keyboard with the slots of the palm rest and slide the keyboard under the palm rest.

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

- 3. Replace the two screws at the top of the keyboard.
- 4. Replace the center control cover (see Replacing the Center Control Cover).
- 5. Slide the battery into the battery bay until it clicks into place.

Memory Dell™ Inspiron™ 1545 Service Manual

Removing the Memory Module(s)

Replacing the Memory Module(s)



● NOTICE: 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.

You can increase your computer memory by installing memory modules on the system board. See "Specifications" in your Setup Guide for information on the memory supported by your computer. Install only memory modules that are intended for your computer.



Your computer has two user-accessible SODIMM sockets that can be accessed from the bottom of the computer. The DIMM B memory module is located directly above the DIMM A memory module located on the bottom of the computer.

• NOTICE: If you need to install memory modules in two connectors, install a memory module in the connector labeled "DIMM A" before you install a module in the connector labeled "DIMM B."

Removing the Memory Module(s)

- 1. Follow the instructions in Before You Begin.
- 2. Remove the base cover (see <u>Removing the Base Cover</u>).
- S NOTICE: To prevent damage to the memory module connector, do not use tools to spread the memory module securing clips.
- 3. Use your fingertips to carefully spread apart the securing clips on each end of the memory module connector until the module pops up.
- 4. Remove the memory module from the connector



Replacing the Memory Module(s)

- 1. Align the notch in the edge of the memory module with the tab in the memory module connector.
- 2. Slide the module firmly into the slot at a 45-degree angle, and press the module down until it clicks into place. If you do not hear the click, remove the module and reinstall it.

NOTE: If the memory module is not installed properly, the computer may not boot.


1 tab 2	notch
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NOTICE: If the cover is difficult to close, remove the memory module and reinstall it. Forcing the cover to close may damage your computer.

- 3. Replace the base cover (see Replacing the Base Cover).
- 4. Slide the battery into the battery bay, or connect the AC adapter to your computer and an electrical outlet.
- 5. Turn on the computer.

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

To confirm the amount of memory installed in the computer, click Start 9 \rightarrow Help and Support \rightarrow Dell System Information.

Wireless Mini-Card Dell™ Inspiron™ 1545 Service Manual

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

CAUTION: 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.
 NOTICE: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such a connector on the back of the computer).
 NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.
 NOTICE: 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.
 NOTE: Dell does not guarantee compatibility or provide support for Mini-Cards from sources other than Dell.
 If you ordered a wireless Mini-Card with your computer, the card is already installed.
 Your computer supports one half Mini-Card slot for WLAN.

NOTE: The WLAN slot supports a half Mini-Card.

💋 NOTE: Depending on the configuration of the system when it was sold, the Mini-Card slot may not have any Mini-Card installed.

Removing the Mini-Card

NOTE: The location of the Mini-Card may change according to the display adapter supported by your computer. To find the type of display adapter on your computer, click Start -> Control Panel -> System -> Device Manager -> Display adapters.

- 1. Follow the instructions in Before You Begin.
- 2. Remove the following parts based on the display adapter supported by your computer.
 - 1 Mobile Intel[®] GMA:
 - o Remove the base cover (see Removing the Base Cover).
 - 1 ATI Mobility Radeon:
 - o Remove the system board and turn it over (see Removing the System Board).
- 3. Disconnect the Mini-Card cables from the Mini-Card, if applicable.
- 4. Remove the screw that secures the Mini-Card to the system board connector.



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



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

Replacing the Mini-Card

NOTE: The location of the Mini-Card may change according to the display adapter supported by your computer. To find the type of display adapter on your computer, click Start -> Control Panel -> System -> Device Manager -> Display adapters.

1. Remove the new Mini-Card from its packaging.

S NOTICE: Use firm and even pressure to slide the card into place. If you use excessive force, you may damage the connector.

2. Insert the Mini-Card connector at a 45-degree angle into the appropriate system board connector. For example, the WLAN card connector is labeled WLAN and so on.

3. Press the other end of the Mini-Card down into the slot on the system board.

- 4. Replace the screw that secures the Mini-Card to the system board connector.
- Connect the appropriate antenna cables to the Mini-Card. The following table provides the antenna cable color scheme for the Mini-Card supported by your computer:

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

- 6. Replace the following parts based on the display adapter supported by your computer.
 - 1 Mobile Intel® GMA:
 - o Replace the base cover (see Replacing the Base Cover).
 - 1 ATI Mobility Radeon:
 - o Replace the system board (see Replacing the System Board).
- 7. Slide the battery into the battery bay until it clicks into place.
- 8. Install the drivers and utilities for your computer, as required. For more information, see the Dell Technology Guide.

NOTE: If you are installing a communication card from a source other than Dell, you must install the appropriate drivers and utilities. For more generic driver information, see the Dell Technology Guide.

Optical Drive Dell™ Inspiron™ 1545 Service Manual

Removing the Optical Drive

Replacing the Optical Drive

CAUTION: 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.

• NOTICE: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as the back panel) on the computer.

• NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.

O NOTICE: 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 Optical Drive

- 1. Follow the instructions in Before You Begin.
- 2. Remove the screw that secures the optical drive to the computer base.
- 3. Using a plastic scribe or screwdriver, push the optical drive out of the bay.



Replacing the Optical Drive

- 1. Slide the optical drive into the bay.
- 2. Replace the screw that secures the optical drive to the computer base.
- 3. Slide the battery into the battery bay until it clicks into place.

Palm Rest

Dell[™] Inspiron[™] 1545 Service Manual

- <u>Removing the Palm Rest</u>
 <u>Replacing the Palm Rest</u>
- CAUTION: 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.
- NOTICE: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as the back panel) on the computer.

• NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.

● NOTICE: 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 Palm Rest

NOTE: The location of the Mini-Card may change according to the display adapter supported by your computer. To find the type of display adapter on your computer, click Start - Control Panel -> System -> Device Manager -> Display adapters.

- 1. Follow the instructions in Before You Begin.
- 2. Remove the hard drive (see Removing the Hard Drive).
- 3. Remove the optical drive (see Removing the Optical Drive).
- 4. Remove the center control cover (see Removing the Center Control Cover).
- 5. Remove the keyboard (see Removing the Keyboard).
- 6. Remove the base cover (see Removing the Base Cover).
- 7. Remove any installed memory modules (see Removing the Memory Module(s)).
- 8. Remove the processor heat sink and processor (see Removing the Processor Heat Sink and Removing the Processor).
- 9. Remove the display assembly (see Removing the Display Assembly).
- 10. Remove the eleven screws from the computer base.

ATI Mobility Radeon:



Mobile Intel[®] GMA:



11. Turn the computer top side up and remove the five screws from the top of the palm rest.

S NOTICE: Pull on the plastic tab on top of the connectors to avoid damaging the connectors.

12. Disconnect the touch pad cable, Bluetooth card cable, and power board cable from the respective system board connectors.



1	touch pad cable connector	2	palm rest
3	Bluetooth card cable connector	4	screws (5)
5	power board cable connector		

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

13. Starting at the back center of the palm rest, use your fingers to gently ease the palm rest from the computer base by lifting the inside of the palm rest while pulling on the outside.

Replacing the Palm Rest

- 1. Align the palm rest with the computer base and gently snap the palm rest into place.
- 2. Connect the touch pad cable, Bluetooth card cable, and power board cable to the system board connectors.
- 3. Replace the five screws on the top of the palm rest.
- 4. Turn the computer and replace the eleven screws in the computer base.
- 5. Replace the display assembly (see Replacing the Display Assembly).
- 6. Replace the processor heat sink and the processor (see Replacing the Processor Heat Sink and Installing the Processor).
- 7. Reinstall the memory modules, if any (see Replacing the Memory Module(s)).

- 8. Replace the base cover (see Replacing the Base Cover).
- 9. Replace the keyboard (see Replacing the Keyboard).
- 10. Replace the center control cover (see <u>Replacing the Center Control Cover</u>).
- 11. Replace the optical drive (see Replacing the Optical Drive).
- 12. Replace the hard drive (see Replacing the Hard Drive).
- 13. Reinstall the ExpressCards in the ExpressCard slot, if any.
- 14. Slide the battery into the battery bay until it clicks into place.

Power Board Dell™ Inspiron™ 1545 Service Manual

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- <u>Removing the Power Board</u>
 <u>Replacing the Power Board</u>
- CAUTION: 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.

• NOTICE: 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 the back of the computer).

• NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.

● NOTICE: 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 Board

- 1. Follow the instructions in Before You Begin.
- 2. Remove the center control cover (see Removing the Center Control Cover).
- 3. Remove the keyboard (see Removing the Keyboard).
- 4. Lift the cable connector latch that secures the power board cable to the connector on the system board and remove the cable.

• NOTICE: Be extremely careful when removing the power board. The power board is glued to the computer. Do not pull on the cable to loosen the power board.

- 5. Use a plastic scribe or screwdriver to pry the power board off the computer.
- 6. Lift the power board off the computer.



1	cable connector	2	cable pull-tab
3	power board		

Replacing the Power Board

- 1. Replace the power board.
- 2. Slide the power board cable into the cable connector on the system board and press down on the cable connector latch that secures the power board cable to the system board connector.
- 3. Replace the keyboard (see Replacing the Keyboard).

- 4. Replace the center control cover (see Replacing the Center Control Cover).
- 5. Slide the battery into the battery bay until it clicks into place.

Speakers Dell™ Inspiron™ 1545 Service Manual

- <u>Removing the Speakers</u>
 <u>Replacing the Speakers</u>
- **CAUTION:** 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.
- NOTICE: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as the back panel) on the computer.

• NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.

● NOTICE: 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 Speakers

- 1. Follow the instructions in Before You Begin.
- 2. Remove the palm rest (Removing the Palm Rest).
- 3. Remove the four speaker screws (two on each speaker) from the computer.



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

- 4. Disconnect the speaker cable from the connector on the system board.
- 5. Make note of the speaker cable routing and dislodge the cable from the routing guides.
- 6. Remove the speakers and the cable.

Replacing the Speakers

- 1. Place the speakers in position.
- 2. Route the speaker cable through the routing guides.
- 3. Connect the speaker cable to the connector on the system board.
- 4. Replace the four speaker screws (two on each speaker) that secure the speakers.
- 5. Replace the palm rest (Replacing the Palm Rest).

System Board Dell™ Inspiron™ 1545 Service Manual

- Removing the System Board
- Replacing the System Board

CAUTION: 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.

• NOTICE: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as the back panel) on the computer.

• NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.

● NOTICE: 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.

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

NOTICE: Handle components and cards by their edges, and avoid touching pins and contacts.

Removing the System Board

- 1. Follow the instructions in Before You Begin.
- 2. Remove the hard drive (see Removing the Hard Drive).
- 3. Remove the optical drive (see Removing the Optical Drive).
- 4. Remove the center control cover (see Removing the Center Control Cover).
- 5. Remove the keyboard (see Removing the Keyboard).
- 6. Remove the base cover (see Removing the Base Cover).
- 7. Remove any installed memory modules (see <u>Removing the Memory Module(s)</u>).
- 8. Remove the processor heat sink and processor (see Removing the Processor Heat Sink and Removing the Processor).
- 9. Remove the display assembly (see Removing the Display Assembly).
- 10. Remove the palm rest (see Removing the Palm Rest).
- 11. Remove the daughter board (see Removing the Daughter Board).
- 12. Remove the four screws that secure the system board to the computer base.



3	speaker cable connector	4	system board
5	screws (4)		

- 13. Disconnect the thermal fan cable, speaker cable, and USB board cable from the respective system board connectors.
- 14. Lift the system board at an angle toward the side of the computer and out of the computer base.
- 15. If required, remove any installed Mini-Card (see Removing the Mini-Card).

Replacing the System Board

- 1. If required, replace Mini-Card, (see Replacing the Mini-Card).
- 2. Replace the system board in the computer base.
- 3. Connect the thermal fan cable, speaker cable, and USB board cable to the respective system board connectors.
- 4. Replace the four screws that secure the system board to the computer base.
- 5. Replace the daughter board (see Replacing the Daughter Board).
- 6. Replace the palm rest (see Replacing the Palm Rest).
- 7. Replace the display assembly (see Replacing the Display Assembly).
- 8. Replace the processor heat sink and the processor (see Replacing the Processor Heat Sink and Installing the Processor).
- 9. Replace any installed memory modules (see <u>Replacing the Memory Module(s)</u>).
- 10. Replace the base cover (see Replacing the Base Cover).
- 11. Replace the keyboard (see Replacing the Keyboard).
- 12. Replace the center control cover (see Replacing the Center Control Cover).
- 13. Replace the optical drive (see Replacing the Optical Drive).
- 14. Replace the hard drive (see Replacing the Hard Drive).
- 15. Reinstall the ExpressCards in the ExpressCard slot, if any.
- 16. Slide the battery into the battery bay until it clicks into place.

• NOTICE: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

17. Turn on the computer.

💋 NOTE: After you have replaced the system board, enter the computer Service Tag into the BIOS of the replacement system board.

18. Insert the BIOS upgrade CD that accompanied the replacement system board into the appropriate drive. Follow the instructions that appear on the screen.

Dell[™] Inspiron[™] 1545 Service Manual

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

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

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

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USB Extend Cable Dell™ Inspiron™ 1545 Service Manual

- Removing the USB Extend Cable
- Replacing the USB Extend Cable

CAUTION: 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.

• NOTICE: 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 the back of the computer).

• NOTICE: To help prevent damage to the system board, remove the main battery (see <u>Before Working Inside Your Computer</u>) before working inside the computer.

● NOTICE: 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 USB Extend Cable

- 1. Follow the instructions in Before Working Inside Your Computer.
- 2. Remove the palm rest (see Removing the Palm Rest).
- 3. Remove the two screws that secure the USB connector.
- 4. Remove the USB extend cable from the routing guide.
- 5. Disconnect the USB extend cable from the system board connector.
- 6. Lift the cable out of the computer base.



1	cable connector	2	cable routing
3	screws (2)	4	USB connector

Replacing the USB Extend Cable

- 1. Place USB connector along with the USB extend cable in the routing guide on the computer base.
- 2. Replace the two screws that secure the USB connector.
- 3. Connect the cable to the system board connector.

• NOTICE: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

4. Replace the palm rest (see Replacing the Palm Rest).