Inspiron 3268 Service Manual

Computer Model: Inspiron 3268 Regulatory Model: D13S Regulatory Type: D13S002



Notes, cautions, and warnings



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



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



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

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2017 - 01

Rev. A00

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Before working inside your computer



NOTE: The images in this document may differ from your computer depending on the configuration you ordered.

Before you begin

- 1 Save and close all open files and exit all open applications.
- 2 Shut down your computer. Click Start $\rightarrow \bigcup$ Power \rightarrow Shut down.

NOTE: If you are using a different operating system, see the documentation of your operating system for shut-down instructions.

- **3** Disconnect your computer and all attached devices from their electrical outlets.
- **4** Disconnect all attached network devices and peripherals, such as keyboard, mouse, and monitor from your computer.
- 5 Remove any media card and optical disc from your computer, if applicable.
- 6 After the computer is unplugged, press and hold the power button for 5 seconds to ground the system board.

After working inside your computer



CAUTION: Leaving stray or loose screws inside your computer may severely damage your computer.

- 1 Replace all screws and ensure that no stray screws remain inside your computer.
- 2 Connect any external devices, peripherals, or cables you removed before working on your computer.
- **3** Replace any media cards, discs, or any other parts that you removed before working on your computer.
- 4 Connect your computer and all attached devices to their electrical outlets.
- **5** Turn on your computer.

Safety instructions

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



WARNING: Before working inside your computer, read the safety information that shipped with your computer. For more safety best practices, see the Regulatory Compliance home page at <u>www.dell.com/</u>regulatory_compliance.



WARNING: Disconnect all power sources before opening the computer cover or panels. After you finish working inside the computer, replace all covers, panels, and screws before connecting to the electrical outlet.



CAUTION: To avoid damaging the computer, ensure that the work surface is flat and clean.



CAUTION: To avoid damaging the components and cards, handle them by their edges, and avoid touching pins and contacts.

CAUTION: You should only perform troubleshooting and repairs as authorized or directed by the Dell technical assistance team. Damage due to servicing that is not authorized by Dell is not covered by your warranty. See the safety instructions that shipped with the product or at <u>www.dell.com/</u> <u>regulatory_compliance</u>.



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.



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 or thumb-screws that you must disengage before disconnecting the cable. When disconnecting cables, keep them evenly aligned to avoid bending any connector pins. When connecting cables, ensure that the ports and connectors are correctly oriented and aligned.



CAUTION: Press and eject any installed card from the media-card reader.



Recommended tools

The procedures in this document may require the following tools:

- · Phillips screwdriver
- · Plastic scribe

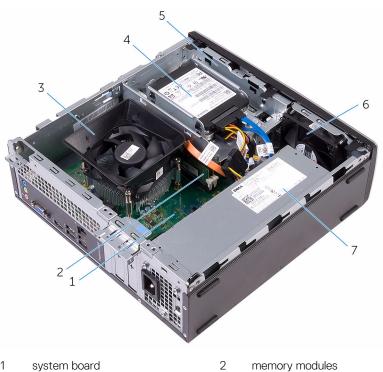
Screw list

The following table provides the list of screws that are used for securing different components to the computer.

Table 1. Screw list

| Component | Secured to | Screw type | Quantity |
|---------------------|---------------------|-------------|----------|
| Computer cover | Chassis | #6-32xL6.35 | 2 |
| 2.5-inch hard drive | Drive cage | #6-32xL6.35 | 1 |
| 2.5-inch hard drive | Hard-drive bracket | #6-32xL3.6 | 8 |
| 3.5-inch hard drive | Drive cage | #6-32xL6.35 | 2 |
| 3.5-inch hard drive | Hard-drive bracket | #6-32xL3.6 | 2 |
| Optical drive | Chassis | #6-32xL3.6 | 1 |
| Optical drive | Drive cage | M2xL2 | 3 |
| Wireless card | System board | M2xL3.5 | 1 |
| Processor fan | Processor heat sink | M6xL10 | 4 |
| Power-supply unit | Chassis | #6-32xL6.35 | 3 |
| Front I/O bracket | Chassis | #6-32xL6.35 | 1 |
| System board | Chassis | #6-32xL6.35 | 6 |

Inside view of your computer

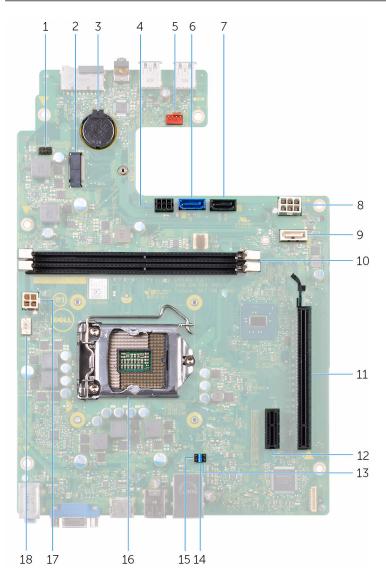


- system board 1
- 3 processor fan and heat-sink assembly
- 5 drive cage

2.5-inch hard-drive assembly 4

7 power-supply unit 6 chassis fan

System board components





- 1 power-button cable connector
- 3 coin-cell battery
- 5 chassis-fan cable connector
- 7 SATA 2 connector
- 9 SATA 1 connector
- 11 graphics card slot (PCle x16)
- 13 CMOS jumper
- 15 service-mode jumper
- 17 power-supply unit cable connector

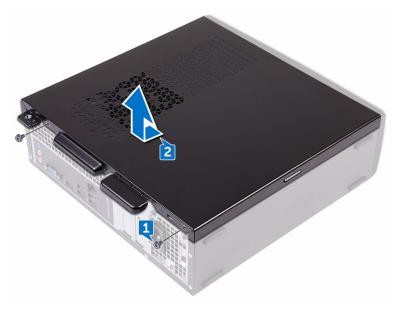
- 2 wireless-card slot
- 4 hard drive and optical drive powercable connector
- 6 SATA 0 connector
- 8 power-supply unit cable connector
- 10 memory-module slots (2)
- 12 PCI-card slot(PCIe x1)
- 14 password jumper
- 16 processor socket
- 18 processor-fan cable connector

Removing the computer cover

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Procedure

- 1 Place the computer on its side.
- 2 Remove the two screws (#6-32xL6.35) that secure the cover to the chassis.
- **3** Release the computer cover by sliding it towards the back of the computer, lift the cover off the chassis.



Replacing the computer cover

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Procedure

- 1 Align the tabs on the computer cover with the slots on the chassis and slide it towards the front of the computer.
- 2 Replace the two screws (#6-32xL6.35) that secure the computer cover to the chassis.
- **3** Place the computer in an upright position.

Removing the front bezel



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Prerequisites

Remove the <u>computer cover</u>.

Procedure

1 Place the computer in an upright position.

2 Grasp and release the front bezel tabs sequentially from the top, by moving them outward from the chassis.



3 Rotate and pull the front bezel away from the front of the computer to release the front bezel tabs from the front panel slots.



Replacing the front bezel



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Procedure

- 1 Align and insert the front bezel tabs into the front panel slots.
- **2** Rotate the front bezel towards the chassis until the front-bezel tabs snap into place.
- **3** Place the computer on its side.

Post-requisites

Replace the <u>computer cover</u>.

Removing the fan shroud



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Prerequisites

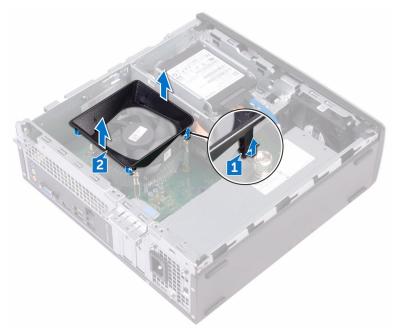
Remove the <u>computer cover</u>.

Procedure

1 Grasp and release the fan shroud tabs sequentially from the bottom, by moving them upward from the processor fan and heat-sink assembly.

2 Lift the fan shroud off the processor fan and heat-sink assembly.

D/c



Replacing the fan shroud



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Procedure

Align and insert the fan shroud clamps into the slots on the processor fan and heat sink.

Post-requisites

Replace the <u>computer cover</u>.

Removing the 2.5-inch hard drives



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Prerequisites

Remove the <u>computer cover</u>.

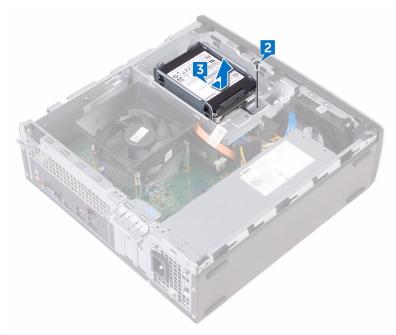
Procedure

1 Disconnect the power cables and the data cables from the hard drive.



2 Remove the screw (#6-32xL3.6) that secures the hard-drive assembly to the drive cage.

3 Slide and lift the hard-drive bracket out of the slot on the drive cage.



4 Remove the four screws (M3xL3.5) that secure the top hard drive to the harddrive bracket. 5 Lift the top hard drive off the hard drive bracket.



NOTE: Note the orientation of the hard drive so that you can replace it correctly.



- 6 Remove the four screws (M3xL3.5) that secure the bottom hard drive to the hard-drive bracket.
- 7 Slide the bottom hard drive out of the hard-drive bracket.



NOTE: Note the orientation of the hard drive so that you can replace it correctly.



Replacing the 2.5-inch hard drives



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Procedure

- 1 Slide the bottom hard drive into the hard-drive bracket.
- 2 Align the screw holes on the bottom hard drive with the screw holes on the hard-drive bracket.
- **3** Replace the four screws (M3xL3.5) that secure the bottom hard-drive to the hard-drive bracket.
- 4 Place the top hard drive in the hard-drive bracket.
- **5** Align the screw holes on the top hard drive with the screw holes on the harddrive bracket.
- 6 Replace the four screws (M3xL3.5) that secure the top hard drive to the harddrive bracket.
- 7 Slide the hard drive towards the back of the slot on the drive cage until it snaps into place.
- 8 Connect the data cables and power cables to the hard drive.

Post-requisites

Replace the <u>computer cover</u>.



Removing the 3.5-inch hard drive



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Prerequisites

Remove the <u>computer cover</u>.

Procedure

1 Disconnect the power cable and the data cable from the hard drive.

2 Remove the two screws (#6-32xL6.35) that secure the hard-drive assembly to the drive cage.



3 Using the pull-tab, slide the hard-drive assembly toward the inside of the computer and lift it off the drive cage.



- **4** Turn the hard-drive assembly over.
- **5** Remove the two screws (#6-32xL3.6) that secure the hard-drive bracket to the hard-drive assembly.

6 Slide the hard drive out of the hard-drive bracket.



Replacing the 3.5-inch hard drive



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Procedure

- 1 Slide the hard drive into the hard-drive bracket.
- 2 Align the screw holes on the hard drive with the screw holes on the hard-drive bracket.
- **3** Replace the two screws (#6-32xL3.6) that secure the hard-drive bracket to the hard drive.
- **4** Turn over the hard-drive assembly.
- **5** Slide and place the hard-drive assembly into the drive cage.
- 6 Replace the two screws (#6-32xL6.35) that secure the hard-drive assembly to the drive cage.
- 7 Connect the power cable and data cable to the hard-drive assembly.

Post-requisites

Replace the <u>computer cover</u>.

Removing the optical drive



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Prerequisites

- 1 Remove the <u>computer cover</u>.
- 2 Remove the <u>front bezel</u>.

Procedure

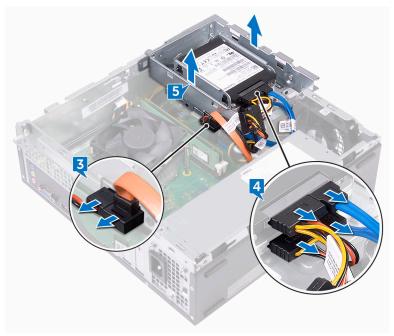
1 Remove the two screws (#6-32xL6.35) that secure the drive cage to the chassis.

2 Push the release tab on the chassis and slide the drive cage to release it from the chassis



- **3** Disconnect the data cable and power cable from the optical drive.
- **4** Disconnect the data cables and power cables from the hard drives.

5 Lift the drive cage out of the chassis.



6 Remove the three screws (M2xL2) that secure the optical drive to the drive cage.

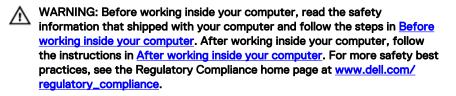
7 Slide the optical drive out of the optical-drive bracket.



8 Gently pull and disconnect the optical-drive bezel from the optical drive.



Replacing the optical drive



Procedure

- 1 Align and snap the optical-drive bezel to the optical drive.
- **2** Align the screw holes on the optical drive with the screw holes on the drive cage.
- **3** Replace the three screws (M2xL2) that secure the optical drive to the drive cage.
- 4 Slide the drive cage into the slot on the chassis and snap it into place.
- 5 Align the screw hole on the drive cage with the screw hole on the chassis.
- 6 Replace the two screws (#6-32xL3.6) that secure the drive cage to the chassis.
- 7 Connect the data cable and power cable to the optical drive.
- 8 Connect the data cables and power cables to the hard drives.

- 1 Replace the <u>front bezel</u>.
- 2 Replace the <u>computer cover</u>.

Removing the memory modules



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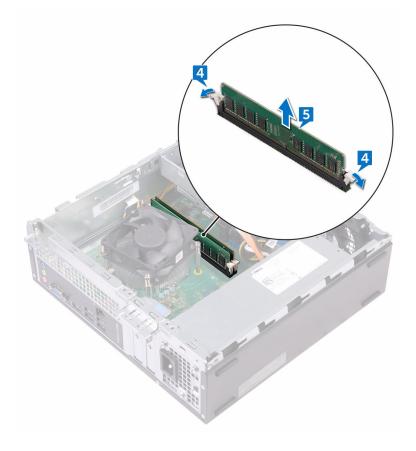
Prerequisites

- 1 Remove the <u>computer cover</u>.
- 2 Remove the <u>front bezel</u>.
- **3** Remove the <u>Fan shroud</u>.
- **4** Follow the procedure from step 1 to step 2 in "<u>Removing the optical drive</u>".

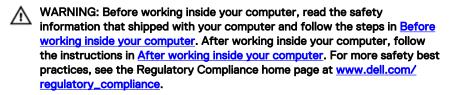
Procedure

1 Using the fingertips, spread apart the securing clip at each end of the memorymodule slot until the memory module pops up. 2 Lift the memory module out of the memory-module slot.

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



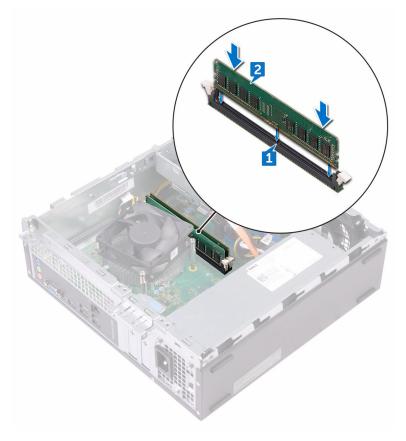
Replacing the memory modules



Procedure

- 1 Ensure that the securing clips are extended away from the memory-module slot.
- 2 Align the notch on the memory module with the tab on the memory-module slot.

3 Insert the memory module into the memory-module slot and press the memory module down until it snaps into position and the securing clips lock in place.



- 1 Follow the procedure from step 4 to step 6 in "<u>Replacing the optical drive</u>".
- 2 Replace the <u>Fan shroud</u>.
- **3** Replace the <u>front bezel</u>.
- **4** Replace the <u>computer cover</u>.

Removing the coin-cell battery

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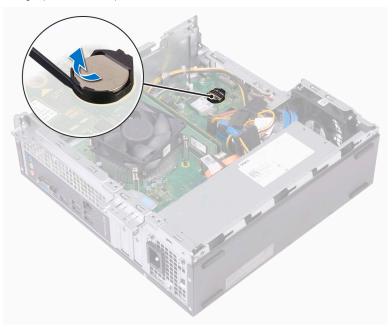
CAUTION: Removing the coin-cell battery resets the BIOS setup program's settings to default. It is recommended that you note the BIOS setup program's settings before removing the coin-cell battery.

Prerequisites

- 1 Remove the <u>computer cover</u>.
- 2 Remove the <u>front bezel</u>.
- **5** Follow the procedure from step 1 to step 5 in "<u>Removing the optical drive</u>".

Procedure

Using a plastic scribe, pry the coin-cell battery out of its socket.



Replacing the coin-cell battery



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Procedure

Insert a new coin-cell battery (CR2032) into the battery socket with the positive side facing up, and snap the battery into place.

- 1 Follow the procedure from step 5 to step 8 in "<u>Replacing the optical drive</u>".
- 2 Replace the <u>front bezel</u>.
- **3** Replace the <u>computer cover</u>.

Removing the wireless card



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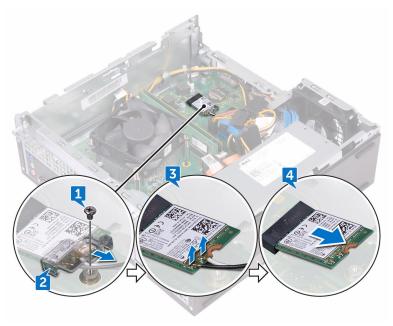
Prerequisites

- 1 Remove the <u>computer cover</u>.
- 2 Remove the <u>front bezel</u>.
- **5** Follow the procedure from step 1 to step 5 in "<u>Removing the optical drive</u>".

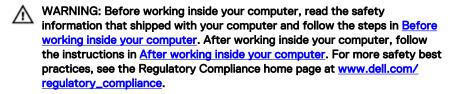
Procedure

- 1 Remove the screw (M2xL3.5) that secures the wireless card to the system board.
- 2 Lift the wireless-card bracket off the wireless card.
- **3** Disconnect the antenna cables from the wireless card.

4 Slide and remove the wireless card from the wireless-card slot.



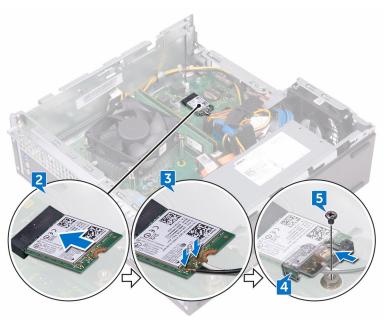
Replacing the wireless card



Procedure

- 1 Align the notch on the wireless card with the tab on the wireless-card slot.
- 2 Slide the wireless card at an angle into the wireless-card slot.
- **3** Connect the antenna cables to the wireless card.
- 4 Slide the wireless-card bracket over the wireless card.

5 Replace the screw (M2xL3.5) that secures the wireless card to the system board.



- 1 Follow the procedure from step 5 to step 8 in "<u>Replacing the optical drive</u>".
- **2** Replace the <u>front bezel</u>.
- **3** Replace the <u>computer cover</u>.

Removing the antenna modules



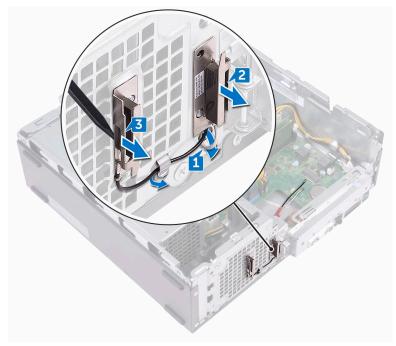
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Prerequisites

- 1 Remove the <u>computer cover</u>.
- 2 Remove the <u>front bezel</u>.
- **5** Follow the procedure from step 1 to step 5 in "<u>Removing the optical drive</u>".
- 4 Follow the procedure from step 1 to step 3 in "<u>Removing the wireless card</u>".

Procedure

1 Note the antenna-cable routing and remove the antenna cables from the routing guide on the chassis.



2 Using a plastic scribe, gently pry the antenna modules off the side-chassis.

Replacing the antenna modules

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Procedure

- 1 Align the antenna modules with the bump on the chassis and adhere the antenna modules to the chassis.
- 2 Route the antenna cables through the routing guides on the chassis.

- 1 Follow the procedure from step 3 to step 5 in "<u>Replacing the wireless card</u>".
- 2 Follow the procedure from step 5 to step 8 in "<u>Replacing the optical drive</u>".
- **3** Replace the <u>front bezel</u>.
- **4** Replace the <u>computer cover</u>.

Removing the power-button module



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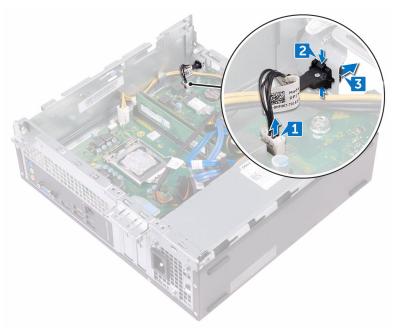
Prerequisites

- Remove the computer cover. 1
- 2 Remove the front bezel.
- 3 Follow the procedure from step 1 to step 5 in "Removing the optical drive".

Procedure

- Disconnect the power-button cable from the system board. 1
- 2 Press the tabs on the power-button module to release the module from the front panel.

3 Remove the power-button module along with its cable through the slot on the front panel.



Replacing the power-button module



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Procedure

- 1 Route the power-button board cable through the slot on the front panel.
- 2 Align and snap the power-button module into the slot on the front panel.
- **3** Connect the power-button board cable to the system board.

- 1 Follow the procedure from step 5 to step 8 in "<u>Replacing the optical drive</u>".
- 2 Replace the <u>front bezel</u>.
- **3** Replace the <u>computer cover</u>.

Removing the chassis fan



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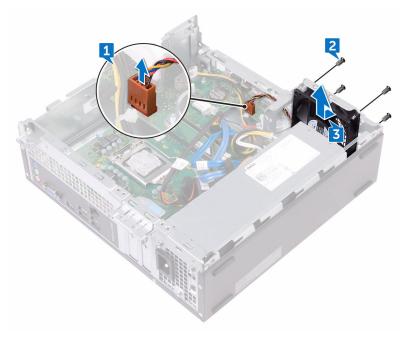
Prerequisites

- 1 Remove the <u>computer cover</u>.
- 2 Remove the <u>front bezel</u>.
- **5** Follow the procedure from step 1 to step 5 in "<u>Removing the optical drive</u>".

Procedure

- 1 Disconnect the chassis-fan cable from the system board.
- 2 Remove the four screws (#6-32xL6.35) that secure the chassis fan to the chassis.

Remove the chassis fan from the chassis.



Replacing the chassis fan



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Procedure

- 1 Align the screw holes on the chassis fan with the screw holes on the chassis.
- 2 Replace the four screws (#6-32xL6.35) that secure the chassis fan to the chassis.
- **3** Route the chassis-fan cable under the bracket.
- 4 Connect the chassis-fan cable to the system board.

- 1 Follow the procedure from step 5 to step 8 in "<u>Replacing the optical drive</u>".
- 2 Replace the <u>front bezel</u>.
- **3** Replace the <u>computer cover</u>.

Removing the power-supply unit



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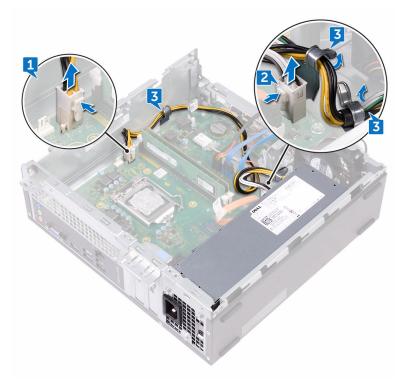
Prerequisites

- 1 Remove the <u>computer cover</u>.
- 2 Remove the <u>front bezel</u>.
- **5** Follow the procedure from step 1 to step 5 in "<u>Removing the optical drive</u>".

Procedure

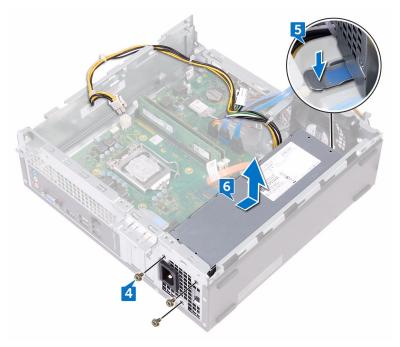
- 1 Press the securing clip and disconnect the power-supply unit cable (ATX2) from the system board.
- **2** Press the securing clip and disconnect the power-supply unit cable (ATX1) from the system board.

3 Note the power-supply unit cable routing and remove the power-supply unit cable from the routing guides on the chassis.



- **4** Remove the three screws (#6-32xL6.35) that secure the power-supply unit to the chassis.
- **5** Press the clamp and slide the power-supply unit towards the front of the chassis to release it from the chassis.

6 Lift the power-supply unit, along with the cables, off the chassis.



Replacing the power-supply unit

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Procedure

- 1 Place the power-supply unit on the chassis.
- 2 Slide the power-supply unit towards the back of the chassis until it snaps into place.
- **3** Align the screw holes on the power-supply unit with the screw holes on the chassis.
- **4** Replace the three screws (#6-32xL6.35) that secure the power-supply unit to the chassis.
- **5** Route the power-supply unit cable through the routing guides inside the chassis.
- 6 Connect the power-supply unit cables (ATX 1 and ATX 2) to the system board.

- 1 Follow the procedure from step 5 to step 8 in "<u>Replacing the optical drive</u>".
- 2 Replace the <u>front bezel</u>.
- **3** Replace the <u>computer cover</u>.

Removing the processor fan



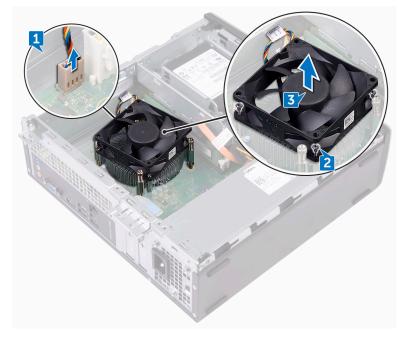
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Prerequisites

- 1 Remove the <u>computer cover</u>.
- 2 Remove the <u>Fan shroud</u>.

Procedure

- 1 Disconnect the processor-fan cable from the system board.
- 2 Remove the four screws (M6xL10) that secure the processor fan to the heat sink.



3 Lift the processor fan off the processor heat sink.

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Replacing the processor fan



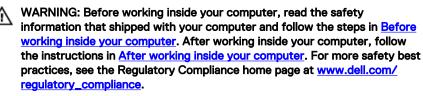
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Procedure

- 1 Align the screw holes on the processor fan with the screw holes on the heat sink.
- 2 Replace the four screws (M6xL10) that secure the processor fan to the heat sink.
- **3** Connect the processor-fan cable to the system board.

- 1 Replace the <u>Fan shroud</u>.
- 2 Replace the <u>computer cover</u>.

Removing the processor heatsink





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

Prerequisites

- 1 Remove the <u>computer cover</u>.
- 2 Remove the <u>Fan shroud</u>.
- **3** Remove the processor fan.

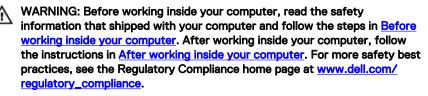
Procedure

1 Loosen the captive screws that secure the heat-sink assembly to the system board.

2 Lift the heat-sink assembly off the system board.



Replacing the processor heatsink





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

Procedure

- 1 Place the heat sink over the processor.
- **2** Align the captive screws on the heat-sink assembly with the screw holes on the system board.
- **3** Tighten the captive screws that secure the heat sink to the system board.

- 1 Replace the processor fan.
- 2 Replace the <u>Fan shroud</u>.
- **3** Replace the <u>computer cover</u>.

Removing the system board

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NOTE: Your computer's Service Tag is stored in the system board. You must enter the Service Tag in the BIOS setup program after you replace the system board.



NOTE: Replacing the system board removes any changes you have made to the BIOS using the BIOS setup program. You must make the appropriate changes again after you replace the system board.



NOTE: Before disconnecting the cables from the system board, note the location of the connectors so that you can reconnect the cables correctly after you replace the system board.

Prerequisites

- 1 Remove the <u>computer cover</u>.
- 2 Remove the <u>front bezel</u>.
- **3** Remove the <u>Fan shroud</u>.
- 4 Follow the procedure from step 1 to step 5 in "<u>Removing the optical drive</u>".
- **5** Remove the <u>memory modules</u>.
- 6 Remove the <u>wireless card</u>.
- 7 Remove the processor fan.
- 8 Remove the <u>heat sink</u>.



Procedure

- NOTE: Note the routing of all cables as you remove them so that you can reroute them correctly after you replace the system board. For information on system board connectors, see "System board components'.
- 1 Remove the screw (#6-32xL6.35) that secures the front I/O bracket to the chassis.



2 Swivel open the front I/O bracket from the Chassis.

- **3** Disconnect the optical-drive data cable from the system board.
- **4** Disconnect the power-supply unit cable from the system board.
- **5** Disconnect the hard-drive data cable from the system board.
- 6 Disconnect the hard-drive data cable from the system board.
- 7 Disconnect the hard-drive and optical drive power cable from the system board.
- 8 Disconnect the chassis-fan cable from the system board.
- **9** Disconnect the power-button cable from the system board.

10 Disconnect the power-supply unit cable from the system board.



11 Remove the six screws (#6-32xL6.35) that secure the system board to the chassis.

12 Slide and lift the system board at an angle to remove it from the chassis.



Replacing the system board

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NOTE: Your computer's Service Tag is stored in the system board. You must enter the Service Tag in the BIOS setup program after you replace the system board.



NOTE: Replacing the system board removes any changes you have made to the BIOS using the BIOS setup program. You must make the appropriate changes again after you replace the system board.

Procedure

- 1 Align the system board with the slots on the chassis and place the system board in position.
- **2** Replace the six screws (#6-32xL6.35) that secure the system board to the chassis.
- 3 Route the chassis-fan cable, optical-drive data cable, hard-drive data cables, hard-drive and optical-drive power cable, and power-button cable through their routing guides and connect the cables to their respective connectors on the system board.
- **4** Route the power-supply unit cable through the routing guides on the chassis and connect the cable to the system board.
- 5 Rotate the front I/O bracket towards the chassis.
- 6 Align the screw hole on the front I/O bracket with the screw hole on the chassis.
- 7 Replace the screw (#6-32xL6.35) that secure the front I/O bracket to the chassis.

Post-requisites

- 1 Replace the processor heat sink.
- 2 Replace the processor fan.
- **3** Replace the <u>wireless card</u>.
- 4 Replace the <u>memory modules</u>.
- **5** Follow the procedure from step 5 to step 8 in "<u>Replacing the optical drive</u>".
- 6 Replace the Fan shroud.
- 7 Replace the <u>front bezel</u>.
- 8 Replace the <u>computer cover</u>.

BIOS setup program

BIOS overview

The BIOS manages data flow between the computer's operating system and attached devices such as hard disk, video adapter, keyboard, mouse, and printer.

Entering BIOS setup program

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

NOTE: The F2 prompt indicates that the keyboard is initialized. This prompt can appear very quickly, so you must watch for it, and then press F2. If you press F2 before the F2 prompt, this keystroke is lost. If you wait too long and the operating system logo appears, continue to wait until you see the desktop. Then, turn off your computer and try again.

Clearing Forgotten Passwords



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Prerequisites

Remove the computer cover.

Procedure

1 Locate the password jumper on the system board.

NOTE: For more information on the location of the jumper, see <u>System-board components</u>.

- 2 Remove the jumper plug from the password jumper-pins.
- **3** Wait for 5 seconds and then replace the jumper plug in its original location.



Post-requisites

Replace the <u>computer cover</u>.



Clearing CMOS Settings

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Prerequisites

Remove the <u>computer cover</u>.

Procedure

1 Locate the CMOS jumper on the system board.



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NOTE: For more information on the location of the jumper, see System-board components.

2 Remove the jumper plug from the password jumper-pins (PSWD) and connect it to the CMOS jumper-pins.



3 Wait for 5 seconds and then replace the jumper plug to its original location.

Post-requisites

Replace the <u>computer cover</u>.

Flashing the BIOS

You may need to flash (update) the BIOS when an update is available or when you replace the system board. To flash the BIOS:

- 1 Turn on your computer.
- 2 Go to www.dell.com/support.
- 3 Click **Product support**, enter the Service Tag of your computer, and then click Submit.



NOTE: If you do not have the Service Tag, use the auto-detect feature or manually browse for your computer model.

- 4 Click Drivers & downloads → Find it myself.
- 5 Select the operating system installed on your computer.
- 6 Scroll down the page and expand **BIOS**.
- 7 Click **Download** to download the latest version of the BIOS for your computer.
- 8 After the download is complete, navigate to the folder where you saved the BIOS update file.
- 9 Double-click the BIOS update file icon and follow the instructions on the screen.

Getting help and contacting Dell

Self-help resources

You can get information and help on Dell products and services using these self-help resources:

www.dell.com

Table 2. Self-help resources

Information about Dell products and services

Dell Help & Support app

Get started app

Accessing help

Online help for operating system

Troubleshooting information, user manuals, setup instructions, product specifications, technical help blogs, drivers, software updates, and so on.

Learn about your operating system, See *Me and My D* setting up and using your computer, data <u>support/manuals</u>. backup, diagnostics, and so on.

In Windows search, type Help and Support, and press Enter.

www.dell.com/support/windows www.dell.com/support/linux

www.dell.com/support

See *Me and My Dell* at <u>www.dell.com/</u> <u>support/manuals</u>.

Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see www.dell.com/contactdell.





NOTE: Availability varies by country and product, and some services may not be available in your country.



NOTE: If you do not have an active internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.