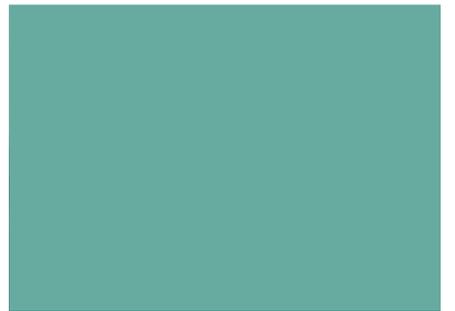




# Gateway M275 Notebook serviceguide



Customizing

Troubleshooting

Gateway®

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# Contents

<b>Replacing Gateway M275 Components</b> . . . . .	<b>1</b>
Identifying the convertible tablet PC model . . . . .	2
Identifying components . . . . .	3
Preparing your work space . . . . .	4
Preventing static electricity discharge . . . . .	5
Preparing the convertible tablet PC . . . . .	6
Replacing the pen point . . . . .	7
Removing the battery . . . . .	8
Replacing the hard drive kit . . . . .	10
Replacing the hard drive in the hard drive kit . . . . .	13
Replacing the optical drive . . . . .	15
Replacing the keyboard cover . . . . .	18
Replacing the keyboard . . . . .	22
Adding or replacing memory modules . . . . .	27
Adding or replacing memory in the memory bay . . . . .	28
Replacing memory under the keyboard . . . . .	32
Replacing the LED panel . . . . .	35
Replacing the hinge cover . . . . .	38
Replacing the LCD panel assembly . . . . .	40
Replacing the palm rest assembly . . . . .	44
Replacing the fan . . . . .	50
Replacing the cooling assembly . . . . .	54
Replacing the modem . . . . .	57
Replacing the IEEE 802.11 Mini PCI card . . . . .	62
Replacing the latch . . . . .	70
Replacing the speaker . . . . .	72
Replacing the system board . . . . .	75



# Replacing Gateway M275 Components

## Important



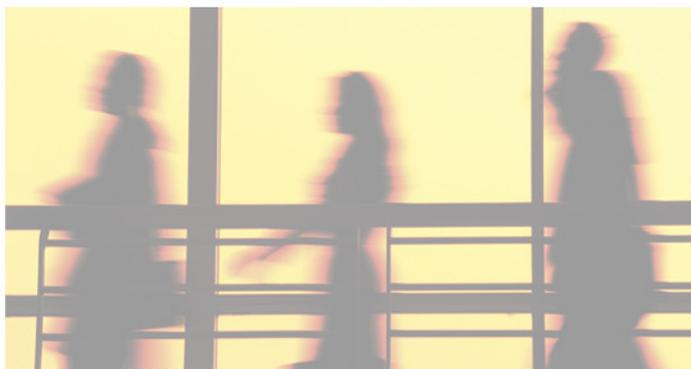
This service guide is not intended to be provided to individual users or consumers. It cannot be provided to anyone other than an authorized service provider.

Use this service guide to help plan maintenance tasks for the Gateway M275 convertible tablet PC. All tasks covered in this guide can be performed by an **authorized field technician** without jeopardizing the tablet PC's warranty.

For information on the convertible tablet PC's general maintenance, technical support, safety notices, and regulatory notices, see the Gateway user's guide.

If you have suggestions regarding the content of this guide, send an e-mail with the subject "Service Guide Comments" to [channel.services@gateway.com](mailto:channel.services@gateway.com).

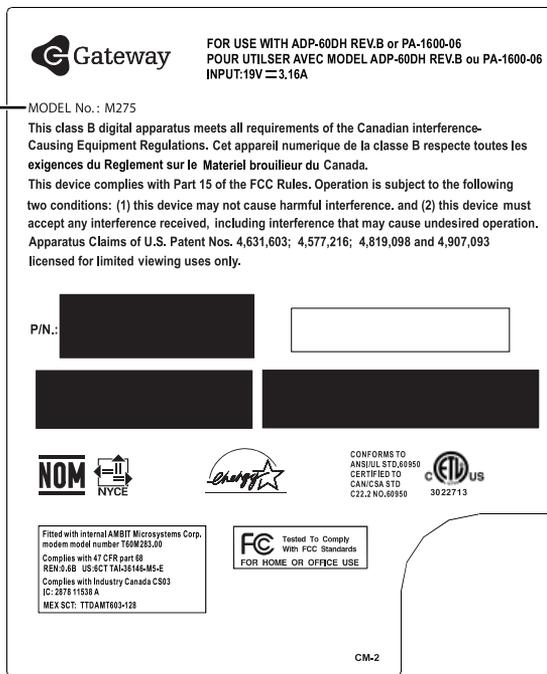
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# Identifying the convertible tablet PC model

The label on the bottom of the convertible tablet PC contains information that identifies the convertible tablet PC model and its features.

Gateway  
model  
number



## Warning

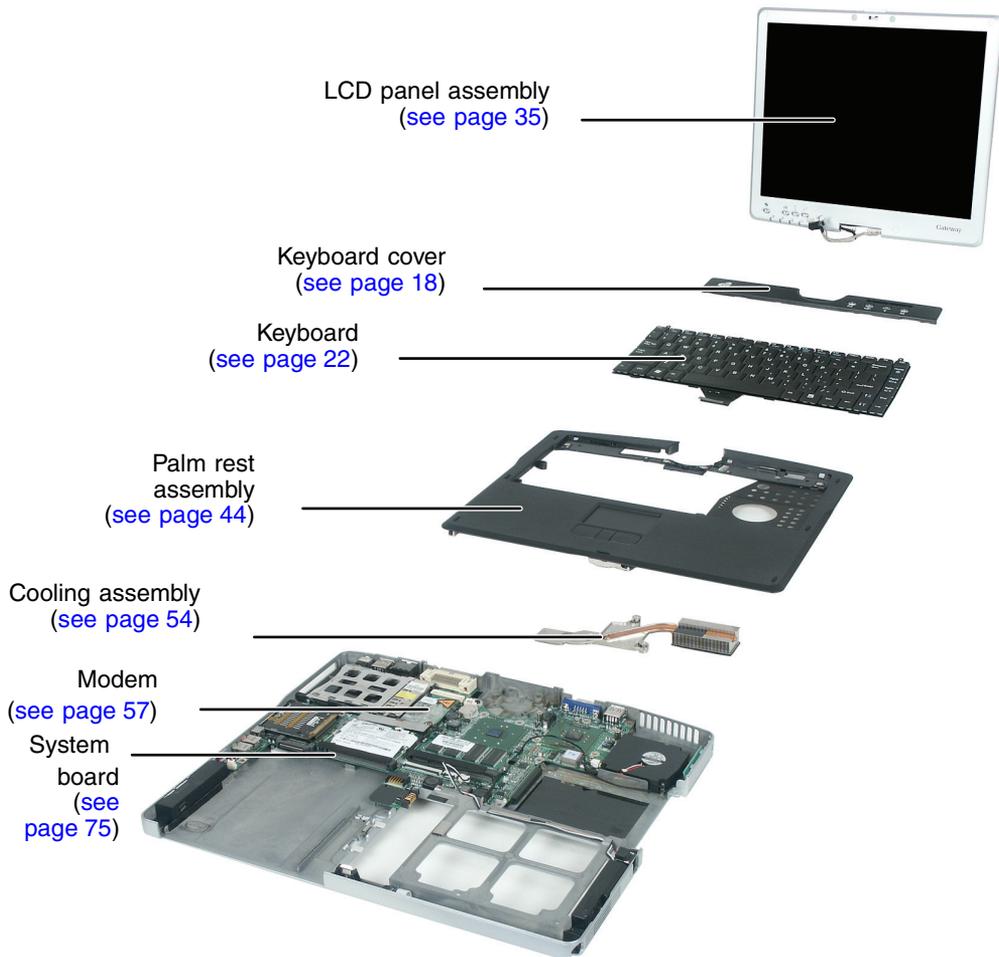


It is important that you use the correct service guide for the convertible tablet PC. Failure to follow the approved tasks for the convertible tablet PC model may result in damage to the convertible tablet PC.

# Identifying components

Where screw measurements are shown, the first number indicates screw head width, and the second number indicates screw length.

Use this chart to identify the main components of the convertible tablet PC. For a complete list of replaceable parts, see the “[Contents](#)” on page i.



# Preparing your work space

Before performing maintenance on the convertible tablet PC, make sure that your work space and the convertible tablet PC are correctly prepared.

- Wear a grounding (ESD) wrist strap, and use a grounded or dissipative work mat.
- Use a stable and strong table, and make sure that the table top is large enough to hold each component as you remove it.
- Use bright lighting to make part identification easier.
- Keep your work surface free from clutter and dust that may damage components.
- Use a magnetized screwdriver for removing screws.
- When removing components that are attached to the convertible tablet PC by a cable, unplug the cable before removing the screws, when possible, to avoid damaging the cable.
- As you remove components and screws, lay them toward the rear of your work surface (behind the convertible tablet PC) or far enough to the side that your arms do not accidentally brush them onto the floor.
- To help keep track of screws, try the following:
  - Place each component's screws in their own section of a parts sorter.
  - Place each component's screws next to the component on your work surface.
  - Print the first page of each task, then place the page toward the rear of your work surface. As you remove screws, place the screws in their respective boxes on the page. Where screw measurements are shown, the first number indicates screw head width, and the second number indicates screw length.
  - When you place flat-headed screws on your work surface, stand them on their heads to prevent the screws from rolling off the table.

# Preventing static electricity discharge

The components inside the convertible tablet PC are extremely sensitive to static electricity, also known as *electrostatic discharge* (ESD).

**Warning**



ESD can permanently damage electrostatic discharge-sensitive components in the convertible tablet PC. Prevent ESD damage by following ESD guidelines every time you open the convertible tablet PC case.

**Warning**



To avoid exposure to dangerous electrical voltages and moving parts, turn off the convertible tablet PC and unplug the power cord and modem and network cables before opening the case.

Before replacing components, follow these guidelines:

- Turn off the convertible tablet PC.
- Wear a grounding wrist strap (available at most electronics stores) and attach it to a bare metal part of your workbench or other grounded connection.

**Warning**



To prevent risk of electric shock, do not insert any object into the vent holes of the convertible tablet PC.

- Touch a bare metal surface on your workbench or other grounded object.
- Unplug the power cord and the modem and network cables.
- Turn over the convertible tablet PC and remove the battery. For more information see [“Removing the battery” on page 8](#).
- Disconnect all peripheral devices and remove any PC Cards.

Before working with convertible tablet PC components, follow these guidelines:

- Avoid static-causing surfaces such as carpeted floors, plastic, and packing foam.
- Remove components from their antistatic bags only when you are ready to use them. Do not lay components on the outside of antistatic bags because only the inside of the bags provide electrostatic protection.
- Always hold components by their edges. Avoid touching the edge connectors. Never slide components over any surface.

## Preparing the convertible tablet PC

### Warning



To avoid exposure to dangerous electrical voltages and moving parts, turn off the convertible tablet PC, remove the battery, and unplug the power cord and modem and network cables before opening the case. Replace the cover before you restore power or reconnect the modem and network cables.

To prepare the convertible tablet PC for maintenance:

- Make sure that the CD or DVD drive is empty.
- Disconnect all peripheral devices.
- Remove any memory cards, PC Cards, and diskettes.
- Turn off the convertible tablet PC and unplug the power cord and modem and network cables (if attached).
- Turn over the convertible tablet PC and remove the battery. For more information see [“Removing the battery” on page 8](#).

# Replacing the pen point

Normal use wears down the pen's point, so the pen ships with extra points and a replacement tool.

▶ **To replace the pen point:**

- 1 Use the replacement tool to grab the old point and pull it out of the pen.



- 2 Insert a new point and apply slight pressure to set it in place.

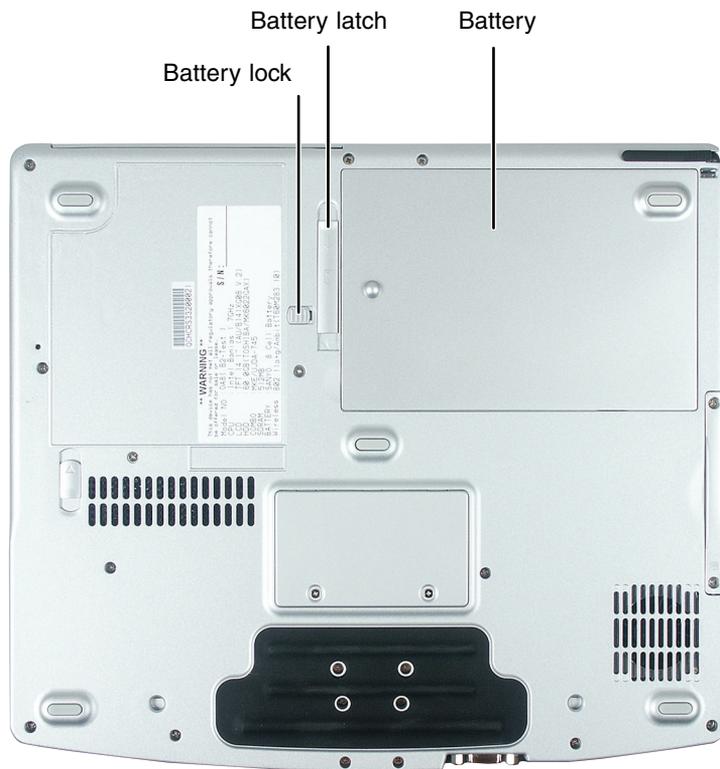


# Removing the battery



## To remove the battery:

- 1 Disconnect the AC adapter, modem and network cables and prepare the convertible tablet PC by following the instructions in [“Preparing the convertible tablet PC”](#) on page 6.
- 2 Turn the convertible tablet PC over so the bottom is facing up.
- 3 Slide the battery lock to the unlocked position, then slide the battery release latch.



- 4 Lift the battery out of the bay.



# Replacing the hard drive kit

Tools you need to complete this task:



Phillips #0 screwdriver

Screws removed during this task:



2 chrome 2.5 x 6 mm  
(hard drive kit)



 **To replace the hard drive kit:**

- 1** Disconnect the AC adapter and modem and network cables and prepare the convertible tablet PC by following the instructions in [“Preparing the convertible tablet PC” on page 6.](#)
- 2** Turn the convertible tablet PC over so the bottom is facing up.
- 3** Remove the battery by following the instructions in [“Removing the battery” on page 8.](#)
- 4** Remove the two screws securing the hard drive kit to the convertible tablet PC.



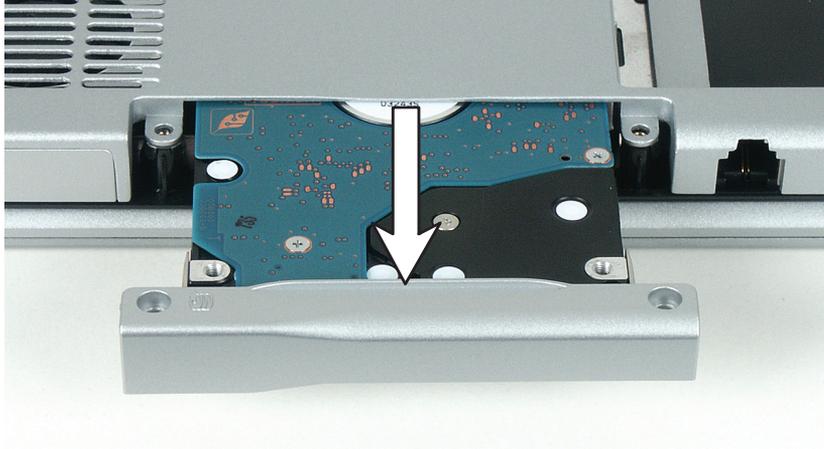
Screws

**Tips & Tricks**



Use a magnetic screwdriver or turn the convertible table PC over to remove the screws.

- 5 Slide the old hard drive kit away from the connector.



- 6 Lift the end of the hard drive kit furthest from the connector, then remove the kit from the bay.
- 7 If the new hard drive kit already includes the hard drive kit bracket, go to [Step 9](#).

- OR -

If you need to move the hard drive kit bracket from the old hard drive kit to the new hard drive, follow the instructions in [“Replacing the hard drive in the hard drive kit”](#) on page 13.

- 8 Place the new hard drive kit into the bay and slide it into the connector.
- 9 Replace the screws that secure the hard drive kit to the convertible tablet PC.
- 10 Replace the battery, connect the AC adapter and modem and network cables, then turn on the convertible tablet PC.



# Replacing the hard drive in the hard drive kit

**Tools you need to complete this task:**



Phillips #0 screwdriver

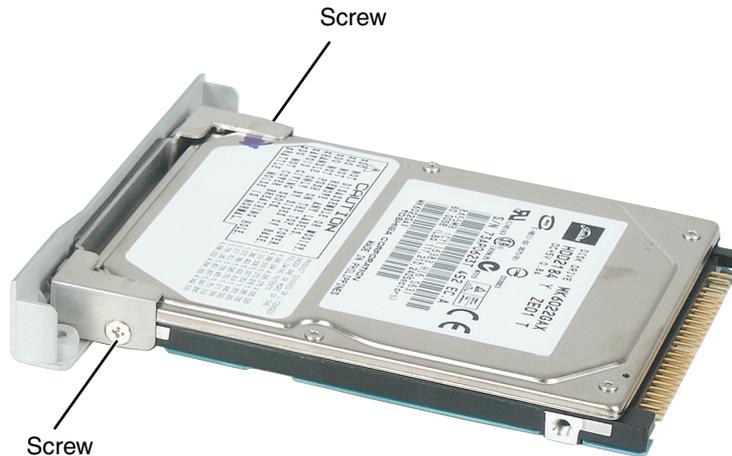
**Screws removed during this task:**



**To replace the hard drive in the hard drive kit:**

- 1** Disconnect the AC adapter and modem and network cables and prepare the convertible tablet PC by following the instructions in [“Preparing the convertible tablet PC” on page 6](#).
- 2** Turn the convertible tablet PC over so the bottom is facing up.
- 3** Remove the battery by following the instructions in [“Removing the battery” on page 8](#).
- 4** Remove the hard drive kit by following the instructions in [“Replacing the hard drive kit” on page 10](#).

- 5 Remove the two screws that secure the hard drive to the hard drive kit bracket.



- 6 Remove the bracket from the old drive.
- 7 Insert the new drive into the bracket so the screw holes line up.
- 8 Replace the two screws that secure the bracket to the drive.
- 9 Place the new hard drive kit into the bay and slide it into the connector.
- 10 Replace the screws that secure the hard drive kit to the convertible tablet PC.
- 11 Replace the battery, connect the AC adapter and modem and network cables, then turn on the convertible tablet PC.



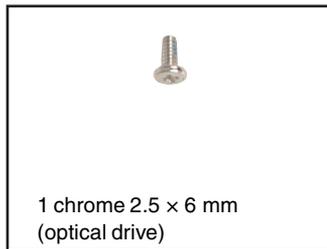
# Replacing the optical drive

**Tools you need to complete this task:**



Phillips #0 screwdriver

**Screws removed during this task:**



## **To replace the optical drive:**

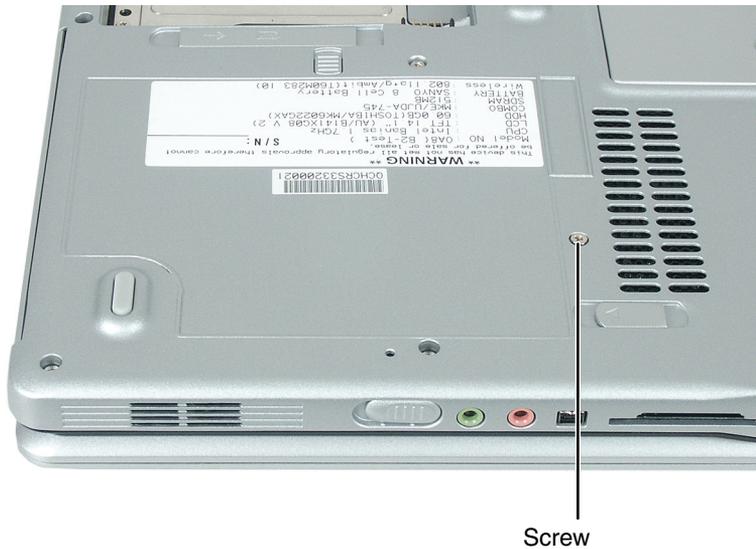
- 1** Disconnect the AC adapter and modem and network cables and prepare the convertible tablet PC by following the instructions in [“Preparing the convertible tablet PC” on page 6](#).
- 2** Turn the convertible tablet PC over so the bottom is facing up.
- 3** Remove the battery by following the instructions in [“Removing the battery” on page 8](#).

### **Important**



Only another Gateway M275 optical drive can be installed in the optical drive bay.

- 4 Remove the optical drive latch screw, then slide the optical drive release latch next to the optical drive screw.



- 5 Slide the old drive out of the convertible tablet PC.



- 6 Slide the new drive into the convertible tablet PC. Installing the optical drive repositions the optical drive release latch.
- 7 Replace the optical drive latch screw.

- 8** Replace the optical drive screw.
- 9** Replace the battery, connect the AC adapter and modem and network cables, then turn on the convertible tablet PC.



# Replacing the keyboard cover

**Tools you need to complete this task:**



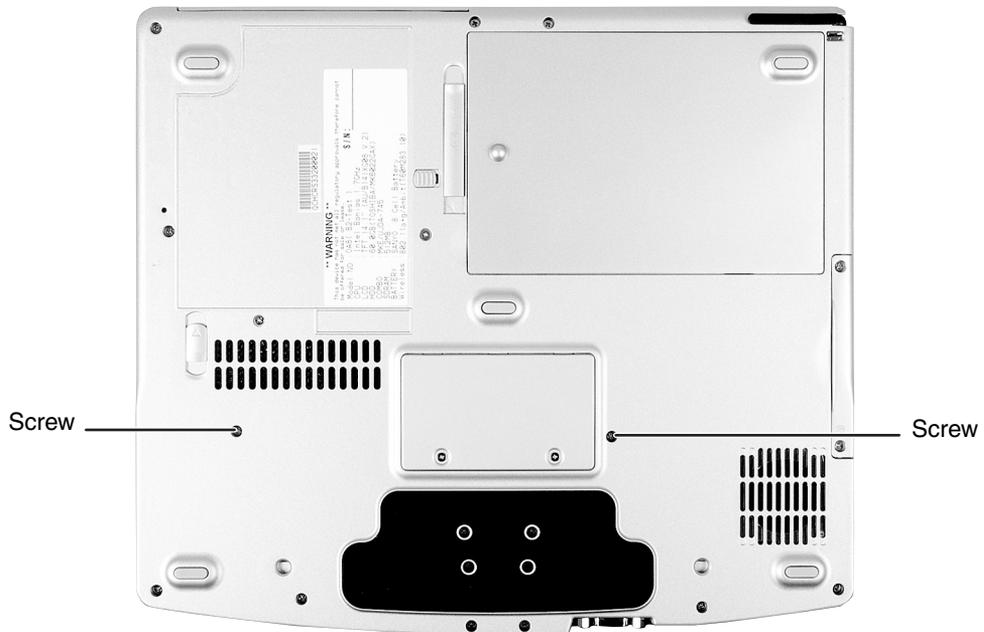
**Screws removed during this task:**



## **To replace the keyboard cover:**

- 1** Disconnect the AC adapter and modem and network cables and prepare the convertible tablet PC by following the instructions in [“Preparing the convertible tablet PC”](#) on page 6.
- 2** Turn the convertible tablet PC over so the bottom is facing up.
- 3** Remove the battery by following the instructions in [“Removing the battery”](#) on page 8.

- 4 Remove the two keyboard screws marked with a K.



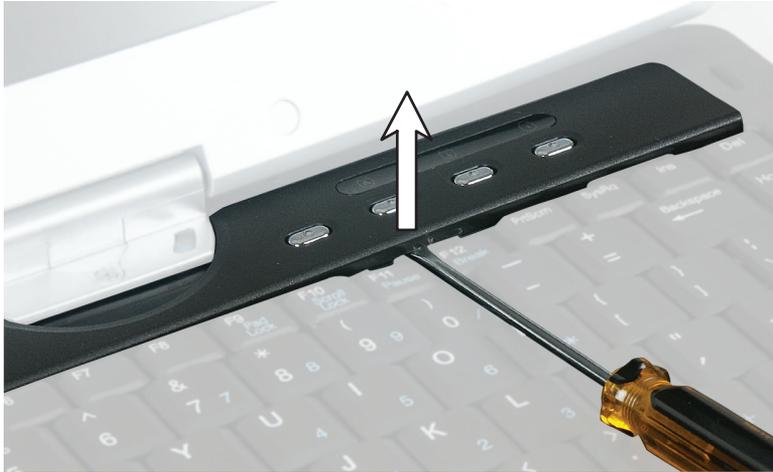
- 5 Turn the convertible tablet PC over so the top is facing up.
- 6 Open the LCD panel to the fully open position.

- 7 Insert the small flat-blade screwdriver under the bottom of the keyboard cover between the F11 and F12 keys and gently pry it up.

**Important**



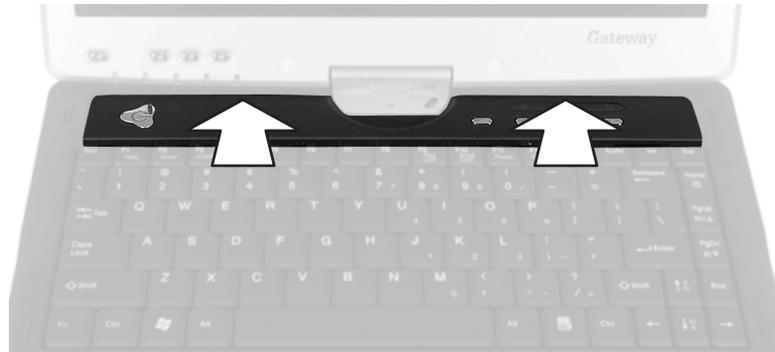
Inserting a piece of cloth between the screwdriver and keyboard will help prevent damage to the convertible tablet PC.



- 8 Remove the keyboard cover from the convertible tablet PC by pulling the keyboard cover toward you and at the same time lifting its front to clear the keyboard. You will hear small snapping sounds as the keyboard cover comes away from the convertible tablet PC. Be careful not to break off the tabs found on the bottom of the keyboard cover.



- Slide the tabs on the bottom side of the new keyboard cover under the convertible tablet PC frame.



- Press down on the keyboard cover in several places to make sure that it is correctly mounted. The keyboard cover is correctly mounted when you can run the finger along the keyboard cover and find no loose spots. The keyboard cover should be flat all the way across.

**Warning**



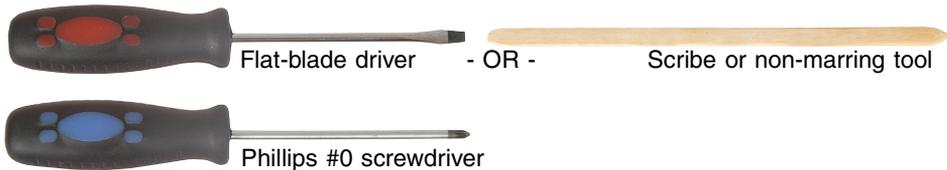
If the keyboard cover is not correctly replaced, the convertible tablet PC could be damaged when you try to close the LCD panel.

- Close and latch the LCD panel.
- Turn the convertible tablet PC over so the bottom is facing up.
- Replace the two keyboard screws.
- Replace the battery, connect the AC adapter and modem and network cables, then turn on the convertible tablet PC.



# Replacing the keyboard

**Tools you need to complete this task:**



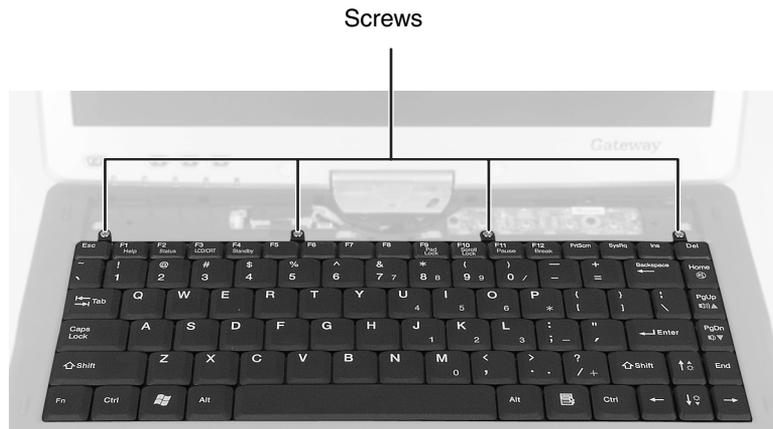
**Screws removed during this task:**



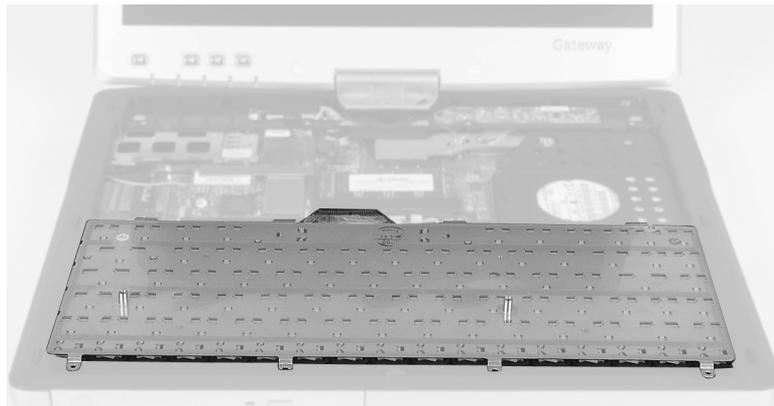
**To replace the keyboard:**

- 1** Disconnect the AC adapter and modem and network cables and prepare the convertible tablet PC by following the instructions in [“Preparing the convertible tablet PC” on page 6](#).
- 2** Turn the convertible tablet PC over so the bottom is facing up.
- 3** Remove the battery by following the instructions in [“Removing the battery” on page 8](#).
- 4** Remove the keyboard cover by following the instructions in [“Replacing the keyboard cover” on page 18](#).

- 5 Make sure that the convertible tablet PC is positioned so the top is facing up.
- 6 With a small Phillips screwdriver, remove the four keyboard screws.



- 7 Lift the back edge of the keyboard, then slowly rotate it toward you so it lies **keys-down** on top of the convertible tablet PC. Be careful not to damage the LCD panel.



- 8 Carefully insert the small flat-blade screwdriver between the keyboard cable and the black plastic hinge where the cable connects to the system board. Gently lift the hinge off the cable. The cable is now free and you can remove the keyboard.

- 9 Place the new keyboard **keys-down** on the convertible tablet PC with the space bar away from you.



- 10 Make sure that the black plastic hinge on the system board keyboard connector is in the raised position.
- 11 Insert the end of the keyboard cable between the black plastic hinge and the white connector.

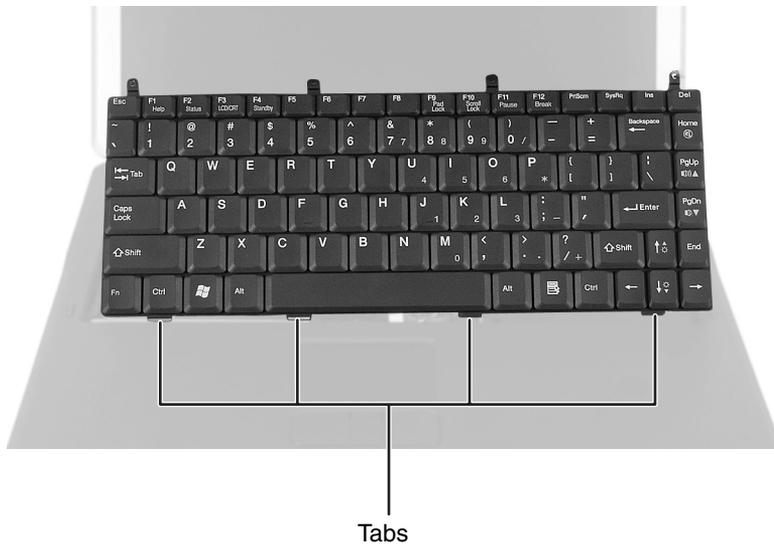
**Important**



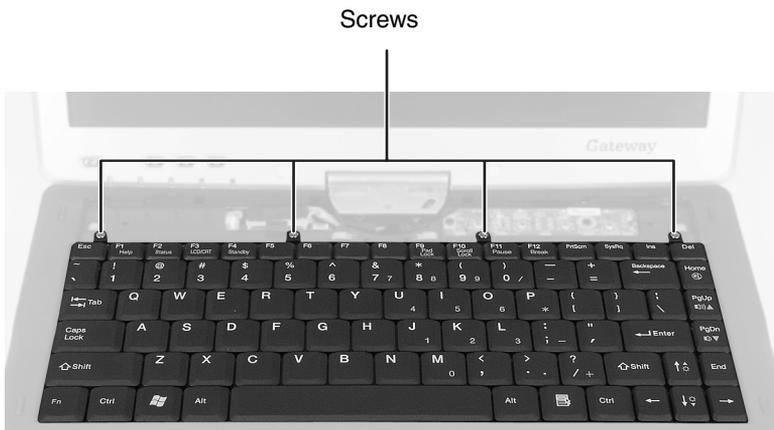
The plug is correctly oriented if the cable is not twisted.

- 12 Press the black plastic hinge onto the keyboard cable.
- 13 Rotate the keyboard toward the LCD panel until the keyboard is almost face-up.

- 14 Insert the tabs on the front of the keyboard under the palm rest.



- 15 Gently press the keyboard down until it is flat all the way across. Be careful not to damage the LCD panel.
- 16 Replace the four keyboard screws.



- 17 Replace the keyboard cover and battery, connect the AC adapter and modem and network cables, then turn on the convertible tablet PC.



# Adding or replacing memory modules

The convertible tablet PC uses memory modules called SO-DIMMs (Small Outline Dual Inline Memory Modules). The modules are available in various capacities and any module can be placed in the memory bay. Use only memory modules designed for the Gateway M275 for upgrading the memory.

SO-DIMMs are located in two places inside the convertible tablet PC. Both SO-DIMMs can be upgraded. For instructions on upgrading the SO-DIMM located on the bottom of the convertible tablet PC, see [“Adding or replacing memory in the memory bay” on page 28](#). For instructions on upgrading the SO-DIMM located under the keyboard of the convertible tablet PC, see [“Replacing memory under the keyboard” on page 32](#).

**Important**



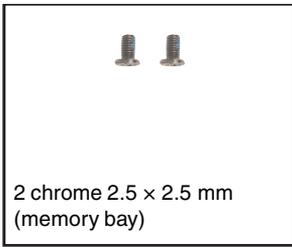
Use only memory modules designed for the Gateway M275.

# Adding or replacing memory in the memory bay

## Tools you need to complete this task:



## Screws removed during this task:

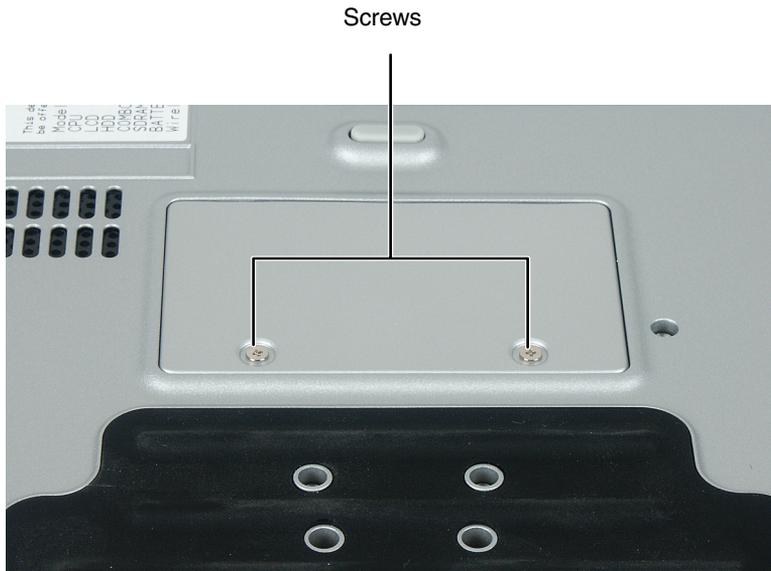




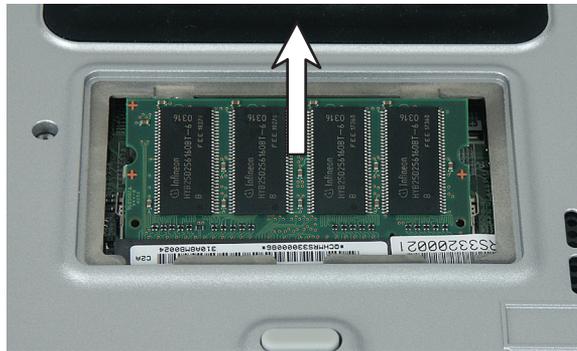
**To add or replace memory modules:**

- 1** Disconnect the AC adapter and modem and network cables and prepare the convertible tablet PC by following the instructions in [“Preparing the convertible tablet PC”](#) on page 6.
- 2** Turn the convertible tablet PC over so the bottom is facing up.
- 3** Remove the battery by following the instructions in [“Removing the battery”](#) on page 8.

- 4 Loosen the two memory bay cover screws, then remove the memory bay cover.



- 5 If you are removing a module, gently press outward on the clip at each end of the memory module until the module tilts upward.



- 6 Pull the memory module out of the slot.

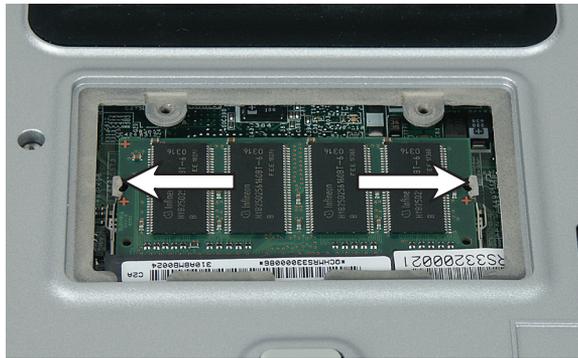
- 7 Hold the new or replacement module at a 30-degree angle and press it into the empty memory slot. This module is keyed so it can only be inserted in one direction. If the module does not fit, make sure that the notch in the module lines up with the tab in the memory bay.

**Important**



Use only memory modules designed for the Gateway M275.

- 8 Gently push the module down until it clicks in place.

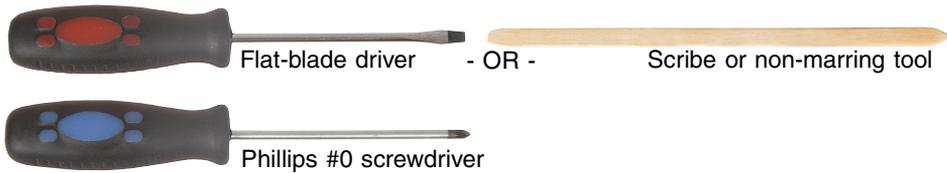


- 9 Replace the memory bay cover and tighten the cover screws.
- 10 Replace the keyboard cover and battery, connect the AC adapter and modem and network cables, then turn on the convertible tablet PC.

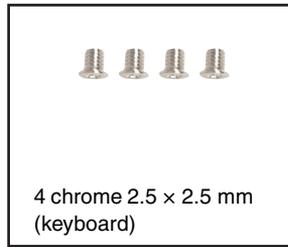


# Replacing memory under the keyboard

## Tools you need to complete this task:



## Screws removed during this task:



### Important



Use only memory modules designed for the Gateway M275 for upgrading the memory.

## ▶ To replace memory modules:

- 1 Disconnect the AC adapter and modem and network cables and prepare the convertible tablet PC by following the instructions in [“Preparing the convertible tablet PC” on page 6](#).
- 2 Turn the convertible tablet PC over so the bottom is facing up.
- 3 Remove the battery by following the instructions in [“Removing the battery” on page 8](#).
- 4 Remove the keyboard cover by following the instructions in [“Replacing the keyboard cover” on page 18](#).
- 5 Make sure that the convertible tablet PC is positioned so the top is facing up.

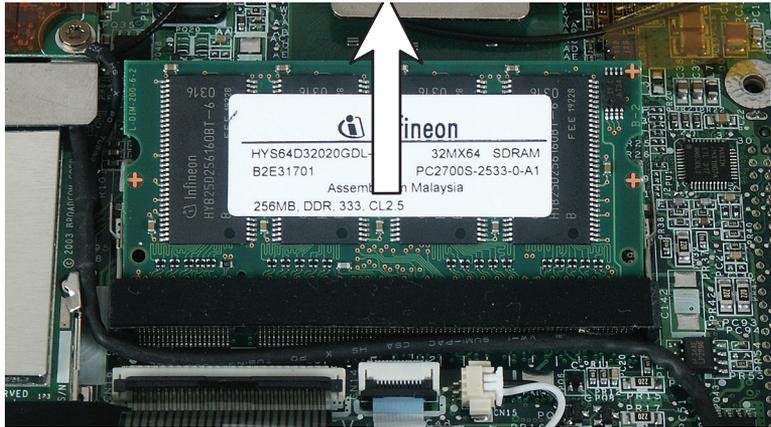
- 6 Open the keyboard compartment by following the instructions in “Replacing the keyboard” on page 22.

**Important**



You do not need to disconnect the keyboard from the system board.

- 7 Gently press outward on the clip at each end of the memory module until the module tilts upward.



- 8 Pull the memory module out of the slot.
- 9 Hold the new or replacement module at a 30-degree angle and press it into the empty memory slot. This module is keyed so it can only be inserted in one direction. If the module does not fit, make sure that the notch in the module lines up with the tab in the memory bay.

**Important**



Use only memory modules designed for the Gateway M275.

- 10 Gently push the module down until it clicks in place.

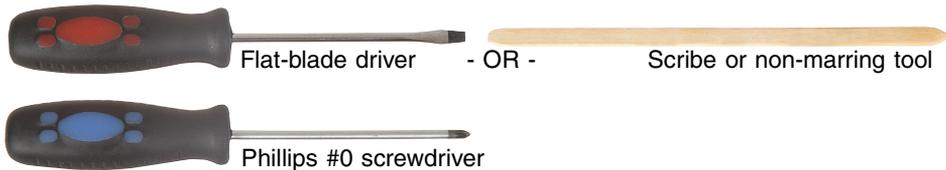


- 11 Close the keyboard compartment by following the instructions in “Replacing the keyboard” on page 22.
- 12 Replace the keyboard cover by following the instructions in “Replacing the keyboard cover” on page 18.
- 13 Replace the battery, connect the AC adapter and modem and network cables, then turn on the convertible tablet PC.

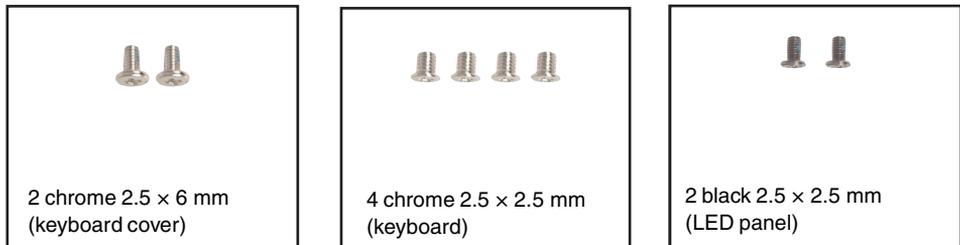


# Replacing the LED panel

## Tools you need to complete this task:



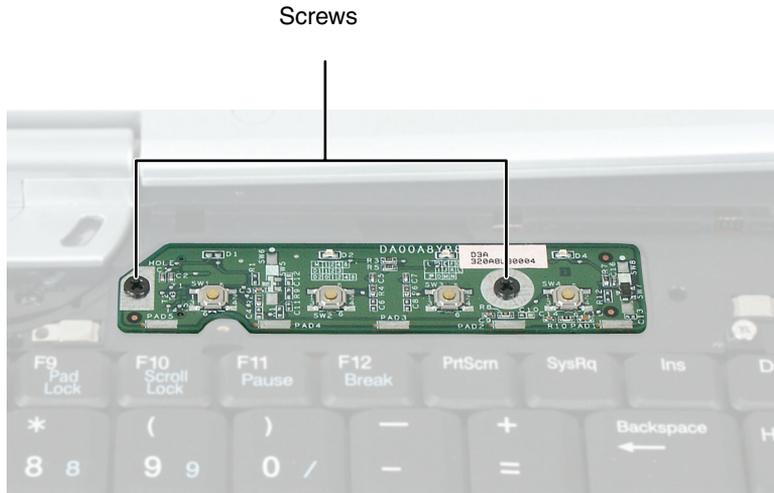
## Screws removed during this task:



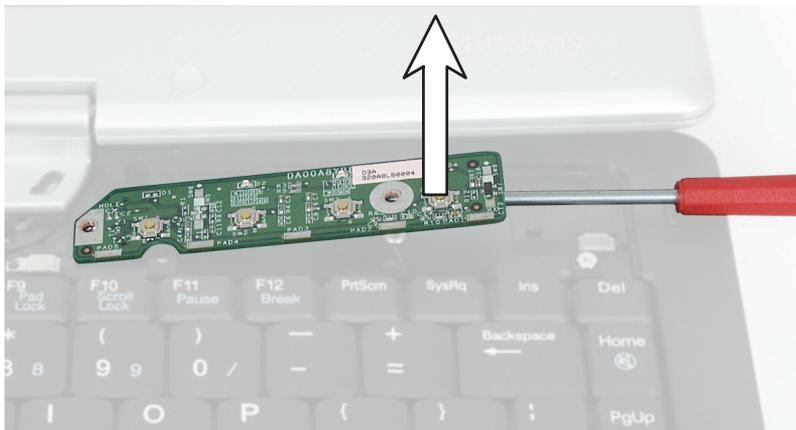
## ▶ To replace the LED panel:

- 1 Disconnect the AC adapter and modem and network cables and prepare the convertible tablet PC by following the instructions in [“Preparing the convertible tablet PC” on page 6](#).
- 2 Turn the convertible tablet PC over so the bottom is facing up.
- 3 Remove the battery by following the instructions in [“Removing the battery” on page 8](#).
- 4 Remove the keyboard cover by following the instructions in [“Replacing the keyboard cover” on page 18](#).
- 5 Make sure that the convertible tablet PC is positioned so the top is facing up.
- 6 Open the keyboard compartment by following the instructions in [“Replacing the keyboard” on page 22](#).

- 7 With a small Phillips screwdriver, remove the two screws securing the LED panel.



- 8 Insert the small flat-blade screwdriver or non-marring tool under the edge of the LED panel, then carefully pry it up.

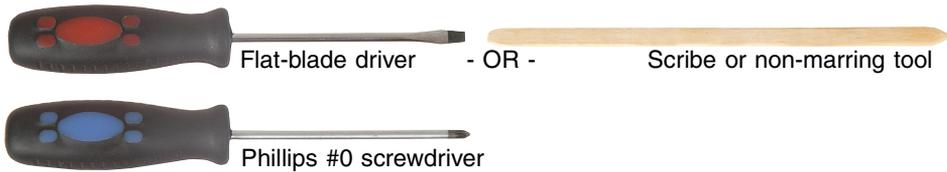


- 9** Insert the new LED panel and secure with two screws.
- 10** Replace the keyboard, keyboard cover and battery, connect the AC adapter and modem and network cables, then turn on the convertible tablet PC.



# Replacing the hinge cover

**Tools you need to complete this task:**



**Screws removed during this task:**



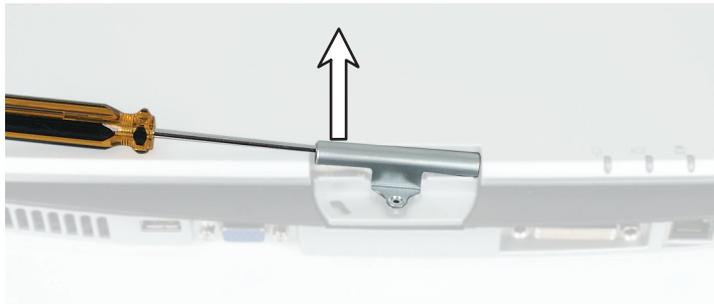
## To replace the hinge cover:

- 1** Disconnect the AC adapter and modem and network cables and prepare the convertible tablet PC by following the instructions in [“Preparing the convertible tablet PC” on page 6](#).
- 2** Turn the convertible tablet PC over so the bottom is facing up.
- 3** Remove the battery by following the instructions in [“Removing the battery” on page 8](#).
- 4** Turn the convertible tablet PC over so the top is facing up.

- 5 Remove the hinge cover screw from the back of the hinge.



- 6 Insert the small flat-blade screwdriver or non-marring tool under the bottom of the hinge cover, then carefully pry it up.

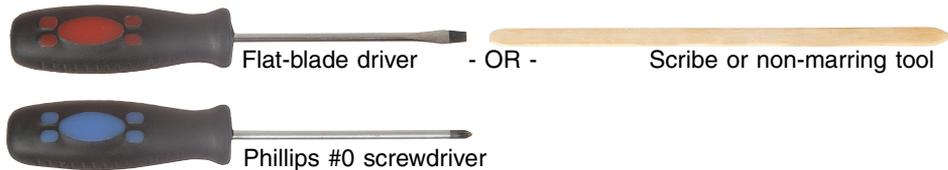


- 7 Snap the new cover into place over the hinge.
- 8 Replace the hinge cover screw.
- 9 Replace the battery, connect the AC adapter and modem and network cables, then turn on the convertible tablet PC.

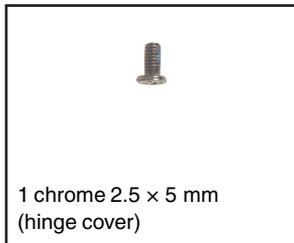
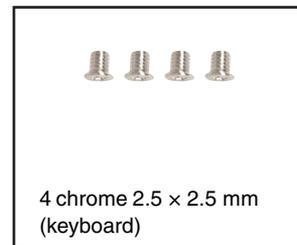


# Replacing the LCD panel assembly

## Tools you need to complete this task:



## Screws removed during this task:



## ▶ To replace the LCD panel assembly:

- 1 Disconnect the AC adapter and modem and network cables and prepare the convertible tablet PC by following the instructions in [“Preparing the convertible tablet PC” on page 6](#).
- 2 Turn the convertible tablet PC over so the bottom is facing up.
- 3 Remove the battery by following the instructions in [“Removing the battery” on page 8](#).
- 4 Remove the four screws on the bottom that secure the hinge to the chassis.



- 5 Remove the keyboard cover by following the instructions in [“Replacing the keyboard cover”](#) on page 18.
- 6 Make sure that the convertible tablet PC is positioned so the top is facing up.
- 7 Open the keyboard compartment by following the instructions in [“Replacing the keyboard”](#) on page 22.

**Important**



You do not need to disconnect the keyboard from the system board.

- 8 Remove the hinge cover by following the instructions in [“Replacing the hinge cover”](#) on page 38.

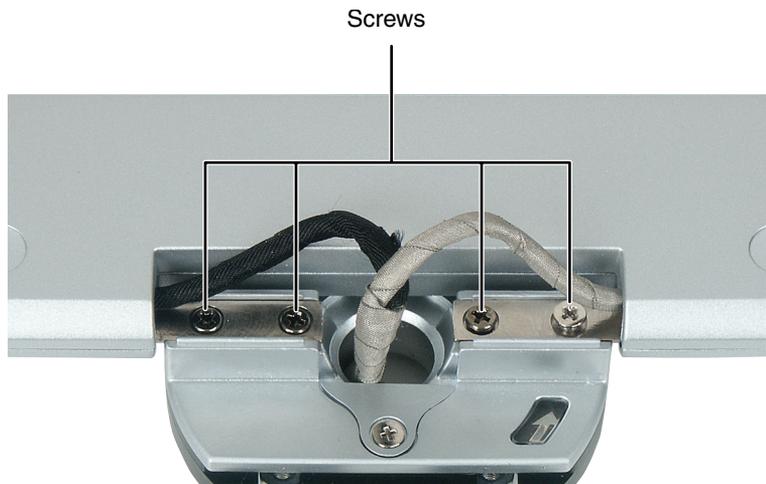
- 9 Open the LCD panel to the fully open position.

**Warning**



Be careful not to use too much force when opening the LCD panel.

- 10 Remove the single hinge chassis screw that secures the hinge to the convertible tablet PC. The hinge chassis screw is located in front of the cable channel on the hinge.
- 11 Remove the four hinge screws that secure the LCD panel to the hinge. Note the location of the grounding cable.



**Warning**



The IEEE 802.11 connectors may catch on the EMI shielding. Be careful not to break off the connectors on the antenna cable.

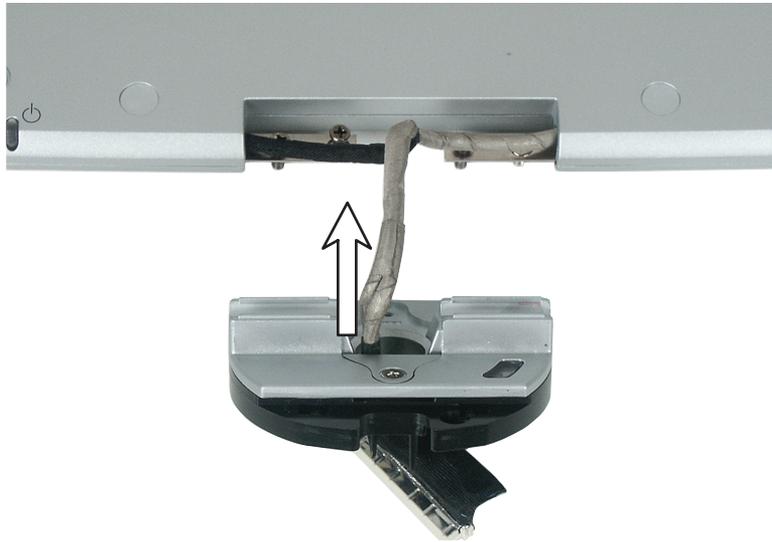
- 12 Detach the microphone cable from the system board.

- 13 Grasp the plastic tab carefully and pull to unplug the LCD video cable from the convertible tablet PC. Make sure you grasp the tab, not the cable.

**Warning**



The connector is fragile.

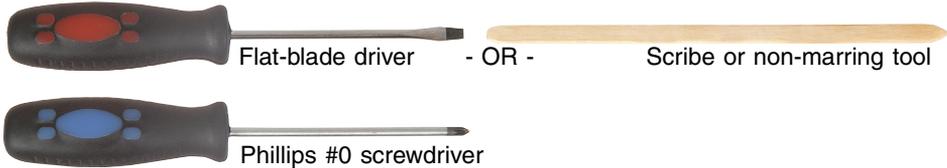


- 14 Lift the LCD panel assembly up and away from the convertible tablet PC. The LCD panel assembly is now completely detached from the convertible tablet PC.
- 15 Place the new LCD panel assembly onto the hinge of the convertible tablet PC, then replace the four hinge screws. Make sure to reattach the grounding cables to the appropriate screws.
- 16 Replace the single hinge chassis screw that secures the hinge to the chassis.
- 17 Plug the LCD video cable into the convertible tablet PC.
- 18 Reattach the microphone cable to the appropriate connector on the system board.
- 19 Reassemble the convertible tablet PC, then replace the four screws on the bottom that secure the hinge to the chassis.

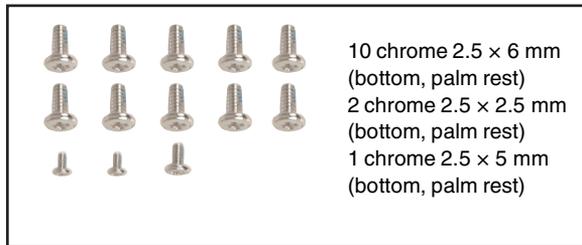


# Replacing the palm rest assembly

**Tools you need to complete this task:**

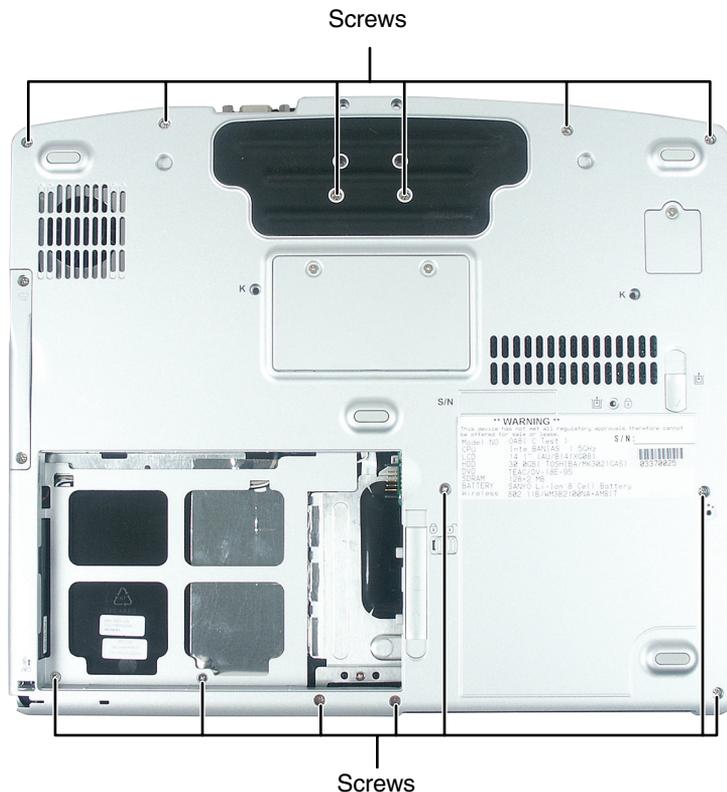


**Screws removed during this task:**



**To replace the palm rest assembly:**

- 1** Disconnect the AC adapter and modem and network cables and prepare the convertible tablet PC by following the instructions in [“Preparing the convertible tablet PC”](#) on page 6.
- 2** Turn the convertible tablet PC over so the bottom is facing up.
- 3** Remove the battery by following the instructions in [“Removing the battery”](#) on page 8.
- 4** Remove the four screws on the bottom that secure the hinge to the chassis by following the instructions in [Step 4 of “Replacing the LED panel”](#) on page 35.
- 5** Remove the thirteen screws on the bottom of the convertible tablet PC.



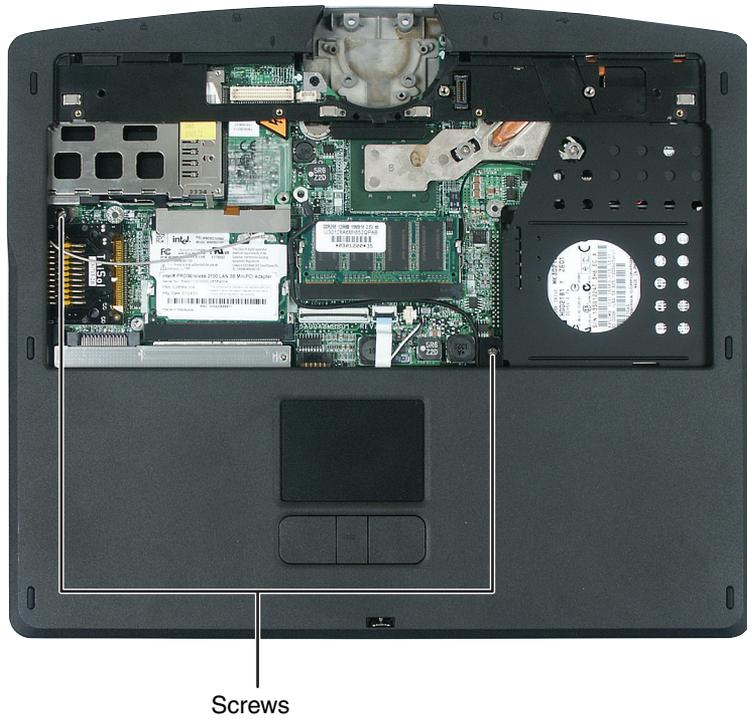
**Important**



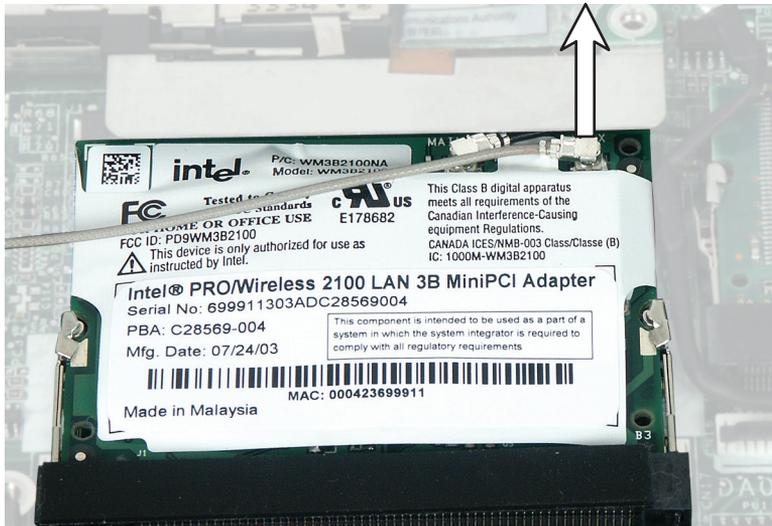
The two shorter screws fit into the battery bay. The single screw fits next to the optical drive.

- 6** Remove the keyboard cover by following the instructions in [“Replacing the keyboard cover” on page 18.](#)
- 7** Make sure that the convertible tablet PC is positioned so the top is facing up.
- 8** Remove the keyboard by following the instructions in [“Replacing the keyboard” on page 22.](#)
- 9** Remove the hinge cover by following the instructions in [“Replacing the hinge cover” on page 38.](#)
- 10** Complete removal of the LCD panel by following the instructions in [“Replacing the LCD panel assembly” on page 40.](#)

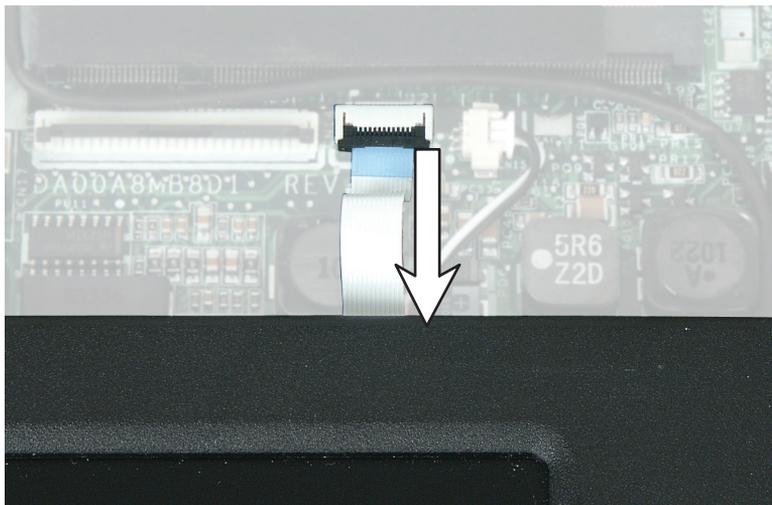
- 11 Remove the two screws on the top of the convertible tablet PC.



- 12 Unplug the gray secondary antenna cable.



- 13 Carefully insert the small flat-blade screwdriver between the touchpad cable and the black plastic hinge where the cable connects to the system board. Gently lift the hinge off the cable. The cable is now free and you can remove the palm rest assembly.



- 14 Lift the palm rest assembly up and away from the convertible tablet PC
- 15 Place the new palm rest assembly onto the convertible tablet PC.

**Important**



The palm rest assembly does not snap into place. The magnesium cover sits on top of the convertible tablet PC and is secured with screws.

- 16 Reattach the gray secondary antenna cable to the system board.
- 17 Replace the two top palm rest screws.
- 18 Make sure that the black plastic hinge on the system board touchpad connector is in the raised position.
- 19 Insert the end of the touchpad cable between the black plastic hinge and the white connector.
- 20 Press the black plastic hinge onto the touchpad cable.
- 21 Replace the LCD panel, the hinge cover, the keyboard, and the keyboard cover.
- 22 Make sure that the convertible tablet PC is positioned so the bottom is facing up.
- 23 Replace the thirteen palm rest screws on the bottom of the convertible tablet PC.

**Important**



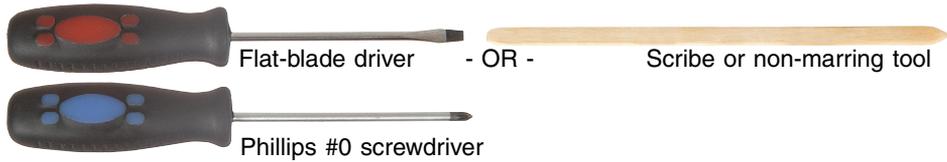
The two shorter screws fit into the battery bay. The single screw fits next to the optical drive.

- 24 Replace the battery, connect the AC adapter and modem and network cables, then turn on the convertible tablet PC.

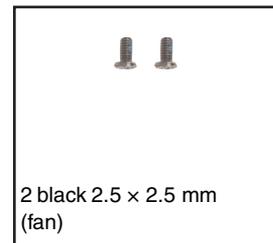
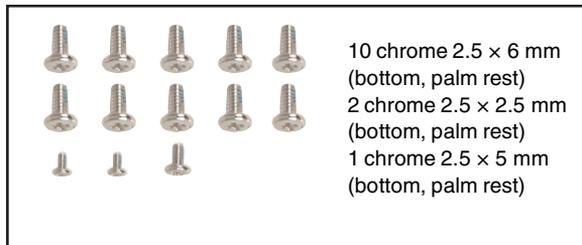


# Replacing the fan

## Tools you need to complete this task:



## Screws removed during this task:

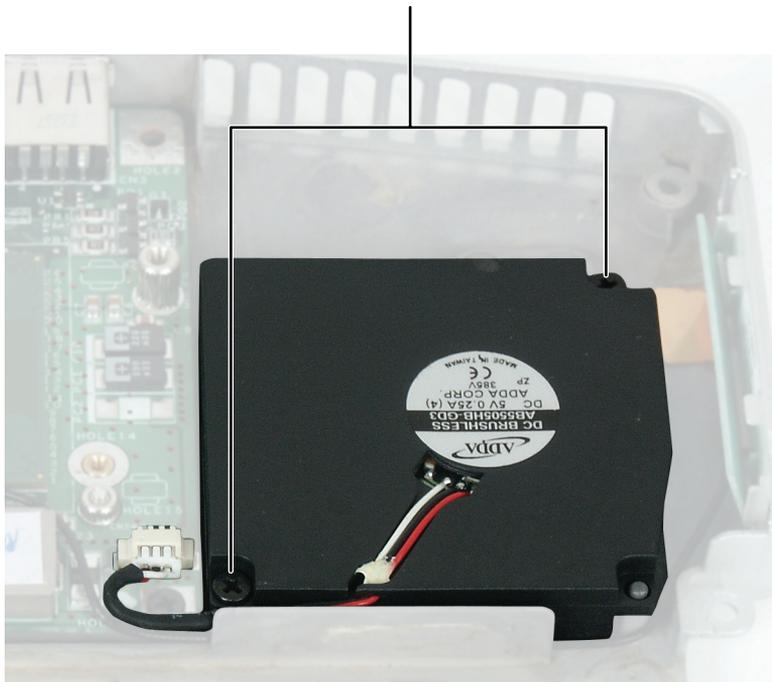


**To replace the fan:**

- 1** Disconnect the AC adapter and modem and network cables and prepare the convertible tablet PC by following the instructions in [“Preparing the convertible tablet PC” on page 6](#).
- 2** Turn the convertible tablet PC over so the bottom is facing up.
- 3** Remove the battery by following the instructions in [“Removing the battery” on page 8](#).
- 4** Remove the four screws on the bottom that secure the hinge to the chassis by following the instructions in [Step 4 of “Replacing the LED panel” on page 35](#).
- 5** Remove the thirteen screws on the bottom of the convertible tablet PC that secure the palm rest assembly to the chassis by following the instructions in [Step 5 of “Replacing the palm rest assembly” on page 44](#).
- 6** Remove the keyboard cover by following the instructions in [“Replacing the keyboard cover” on page 18](#).
- 7** Make sure that the convertible tablet PC is positioned so the top is facing up.
- 8** Remove the keyboard by following the instructions in [“Replacing the keyboard” on page 22](#).
- 9** Remove the hinge cover by following the instructions in [“Replacing the hinge cover” on page 38](#).
- 10** Complete removal of the LCD panel by following the instructions in [“Replacing the LCD panel assembly” on page 40](#).
- 11** Complete removal of the palm rest assembly by following the instructions in [“Replacing the palm rest assembly” on page 44](#).

**12** Remove the two screws from the fan.

Screws



- 13 Unplug the fan wires from the system board.

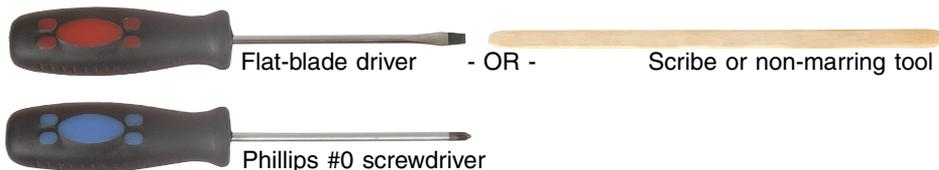


- 14 Lift the fan up and away from the convertible tablet PC. Replace with new fan assembly.
- 15 Secure the new fan with the two screws.
- 16 Reassemble the convertible tablet PC.

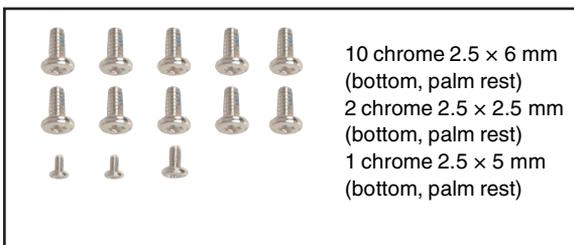


# Replacing the cooling assembly

## Tools you need to complete this task:



## Screws removed during this task:

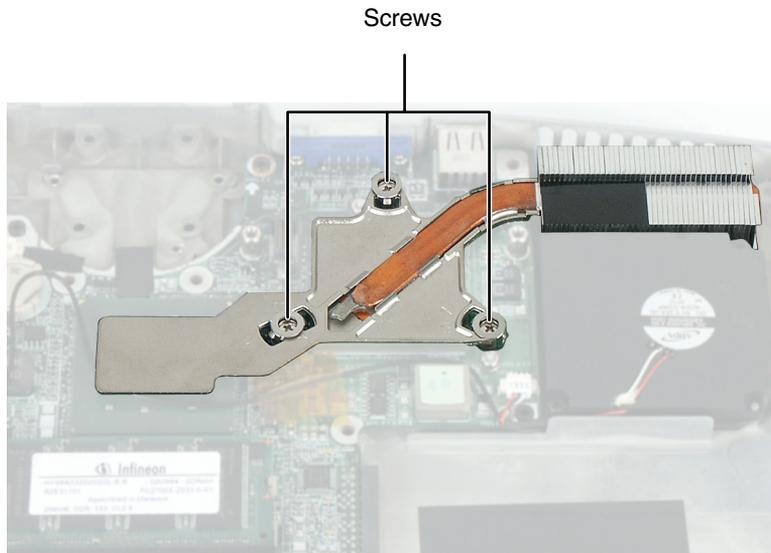




## To replace the cooling assembly:

- 1** Disconnect the AC adapter and modem and network cables and prepare the convertible tablet PC by following the instructions in [“Preparing the convertible tablet PC” on page 6](#).
- 2** Turn the convertible tablet PC over so the bottom is facing up.
- 3** Remove the battery by following the instructions in [“Removing the battery” on page 8](#).
- 4** Remove the four screws on the bottom that secure the hinge to the chassis by following the instructions in [Step 4 of “Replacing the LED panel” on page 35](#).
- 5** Remove the thirteen screws on the bottom of the convertible tablet PC that secure the palm rest assembly to the chassis by following the instructions in [Step 5 of “Replacing the palm rest assembly” on page 44](#).
- 6** Remove the keyboard cover by following the instructions in [“Replacing the keyboard cover” on page 18](#).
- 7** Make sure that the convertible tablet PC is positioned so the top is facing up.
- 8** Remove the keyboard by following the instructions in [“Replacing the keyboard” on page 22](#).
- 9** Remove the hinge cover by following the instructions in [“Replacing the hinge cover” on page 38](#).
- 10** Complete removal of the LCD panel by following the instructions in [“Replacing the LCD panel assembly” on page 40](#).
- 11** Complete removal of the palm rest assembly by following the instructions in [“Replacing the palm rest assembly” on page 44](#).

- 12 Loosen the three captive screws from the cooling assembly.



**Warning**



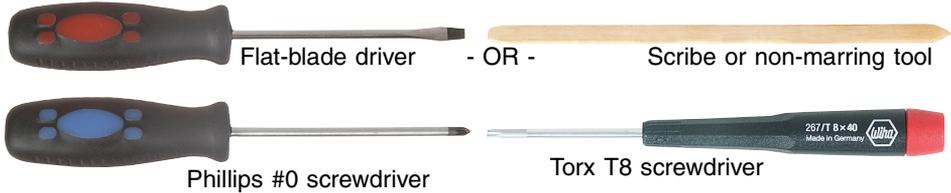
There is a thermal pad beneath the cooling assembly on the system board. To replace this thermal pad, you must remove and replace the system board.

- 13 Lift the cooling assembly up and away from the convertible tablet PC.
- 14 Install the new cooling assembly in the convertible tablet PC.
- 15 Tighten the three cooling assembly screws in the numerical order marked on the cooling assembly. Each screw hole has a numeral next to it.
- 16 Reassemble the convertible tablet PC.

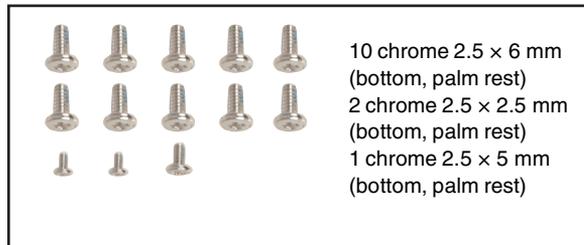


# Replacing the modem

## Tools you need to complete this task:



## Screws removed during this task:

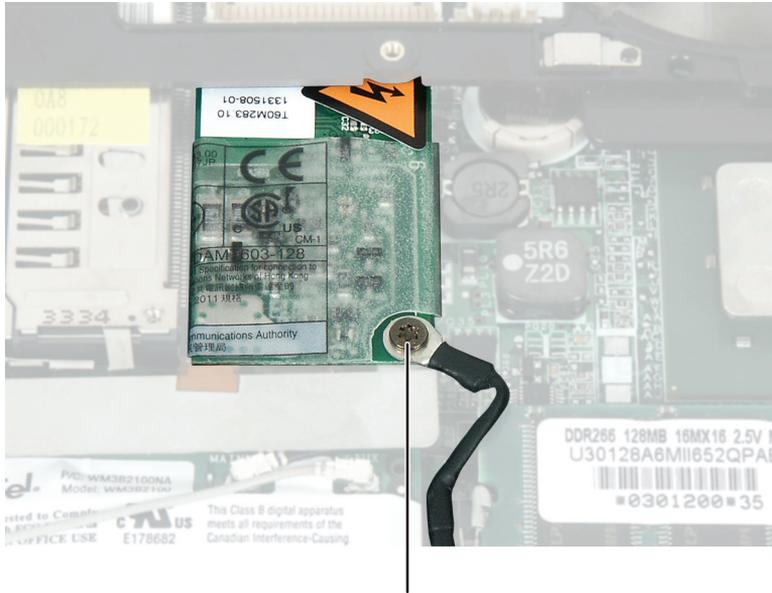




### To replace the modem:

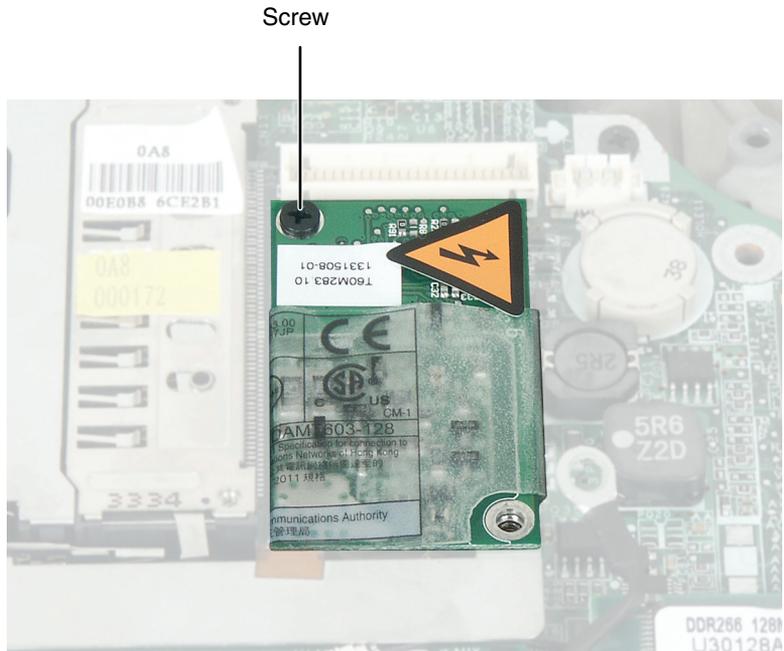
- 1** Disconnect the AC adapter and modem and network cables and prepare the convertible tablet PC by following the instructions in [“Preparing the convertible tablet PC” on page 6](#).
- 2** Turn the convertible tablet PC over so the bottom is facing up.
- 3** Remove the battery by following the instructions in [“Removing the battery” on page 8](#).
- 4** Remove the four screws on the bottom that secure the hinge to the chassis by following the instructions in [Step 4 of “Replacing the LED panel” on page 35](#).
- 5** Remove the thirteen screws on the bottom of the convertible tablet PC that secure the palm rest assembly to the chassis by following the instructions in [Step 5 of “Replacing the palm rest assembly” on page 44](#).
- 6** Remove the keyboard cover by following the instructions in [“Replacing the keyboard cover” on page 18](#).
- 7** Make sure that the convertible tablet PC is positioned so the top is facing up.
- 8** Remove the keyboard by following the instructions in [“Replacing the keyboard” on page 22](#).
- 9** Remove the hinge cover by following the instructions in [“Replacing the hinge cover” on page 38](#).
- 10** Complete removal of the LCD panel by following the instructions in [“Replacing the LCD panel assembly” on page 40](#).
- 11** Complete removal of the palm rest assembly by following the instructions in [“Replacing the palm rest assembly” on page 44](#).

- 12 Remove the Torx screw that secures the modem cable to the modem.



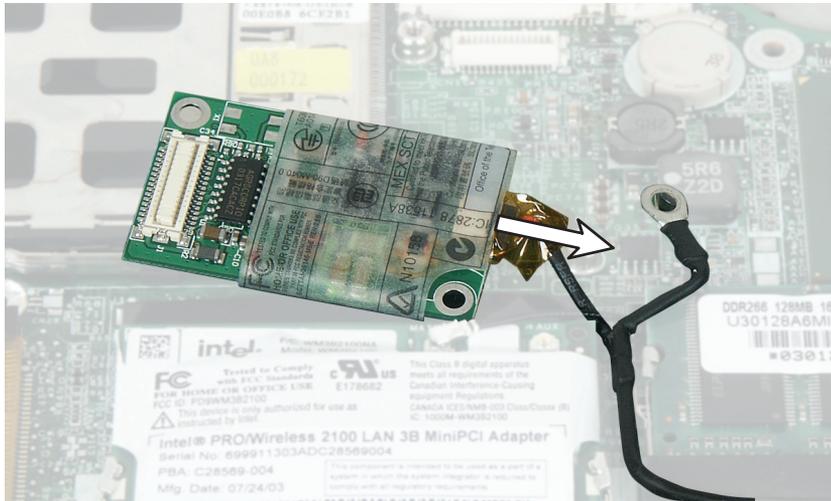
Torx Screw

- 13 Remove the screw that secures the modem to the convertible tablet PC.



- 14 Insert the small flat-blade screwdriver or non-marring tool under the modem and gently pry it up about ¼ inch.

- 15 Turn the modem over, then unplug the modem cable from the modem.



- 16 Connect the modem cable into the new modem.
- 17 Align the modem's screw holes with the holes on the convertible tablet PC, then press the modem into place.
- 18 Replace the screw that secures the modem to the convertible tablet PC.
- 19 Replace the Torx screw that secures the modem cable to the modem.
- 20 Reassemble the convertible tablet PC.



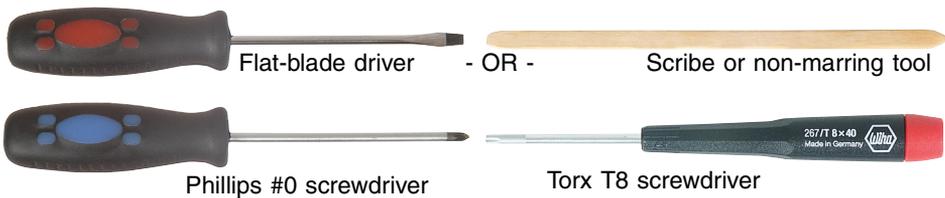
# Replacing the IEEE 802.11 Mini PCI card

**Caution**

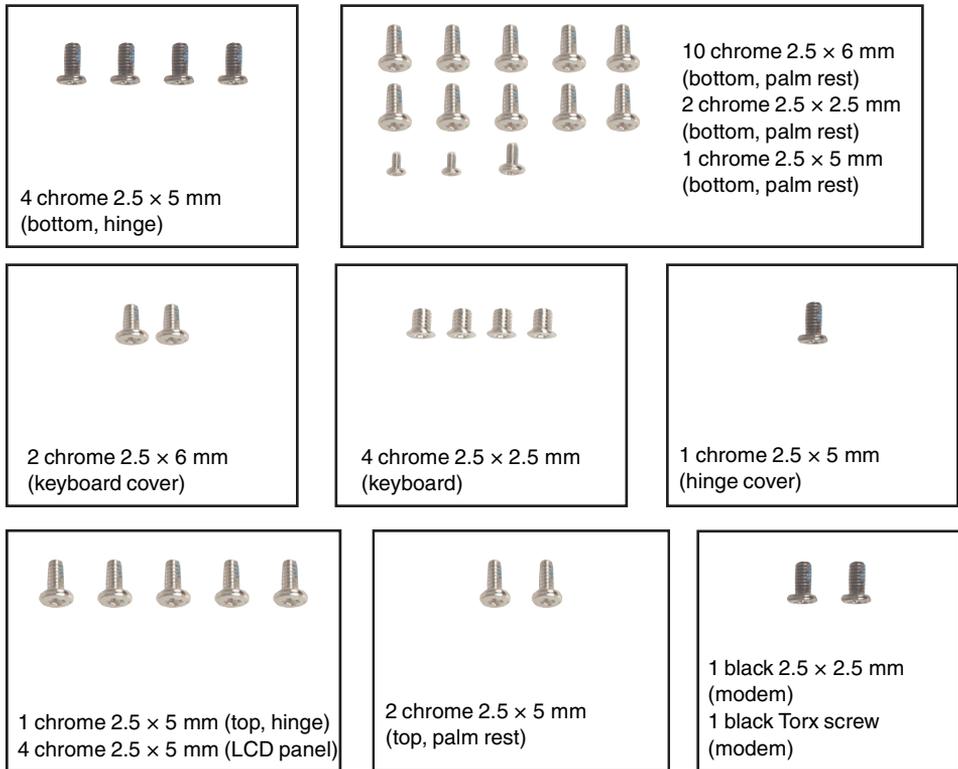


By law, only approved wireless modules provided by Gateway, or a Gateway authorized representative, explicitly for the Gateway M275 may be installed in this notebook.

**Tools you need to complete this task:**



## Screws removed during this task:



## To replace the IEEE 802.11 Mini PCI card:

- 1 Disconnect the AC adapter and modem and network cables and prepare the convertible tablet PC by following the instructions in [“Preparing the convertible tablet PC”](#) on page 6.
- 2 Turn the convertible tablet PC over so the bottom is facing up.
- 3 Remove the battery by following the instructions in [“Removing the battery”](#) on page 8.
- 4 Remove the four screws on the bottom that secure the hinge to the chassis by following the instructions in [Step 4 of “Replacing the LED panel”](#) on page 35.

- 5** Remove the thirteen screws on the bottom of the convertible tablet PC that secure the palm rest assembly to the chassis by following the instructions in [Step 5 of “Replacing the palm rest assembly” on page 44.](#)
- 6** Remove the keyboard cover by following the instructions in [“Replacing the keyboard cover” on page 18.](#)
- 7** Make sure that the convertible tablet PC is positioned so the top is facing up.
- 8** Remove the keyboard by following the instructions in [“Replacing the keyboard” on page 22.](#)
- 9** Remove the hinge cover by following the instructions in [“Replacing the hinge cover” on page 38.](#)
- 10** Complete removal of the LCD panel by following the instructions in [“Replacing the LCD panel assembly” on page 40.](#)
- 11** Complete removal of the palm rest assembly by following the instructions in [“Replacing the palm rest assembly” on page 44.](#)

- 12 Remove the Torx screw that secures the modem cable to the modem. This screw holds down a metal plate that covers the antenna connections.



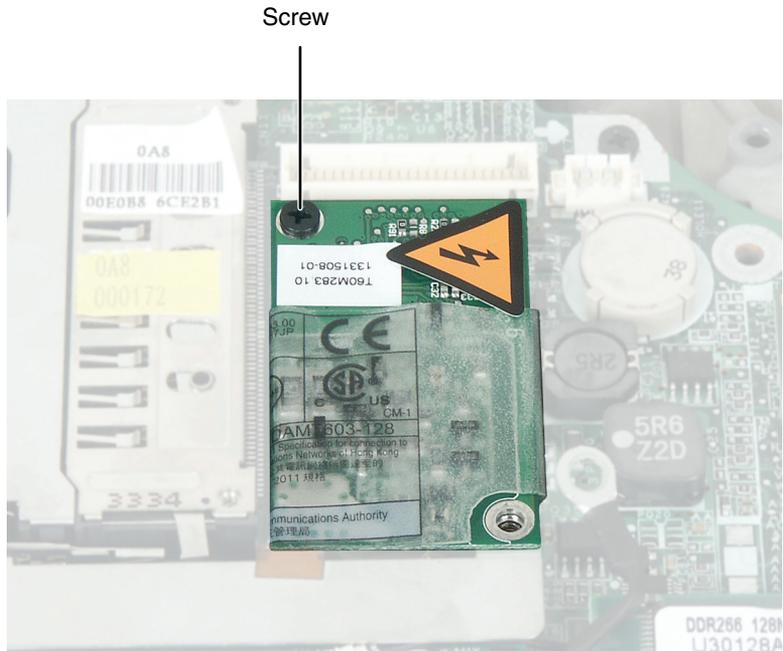
Torx Screw

**Caution**



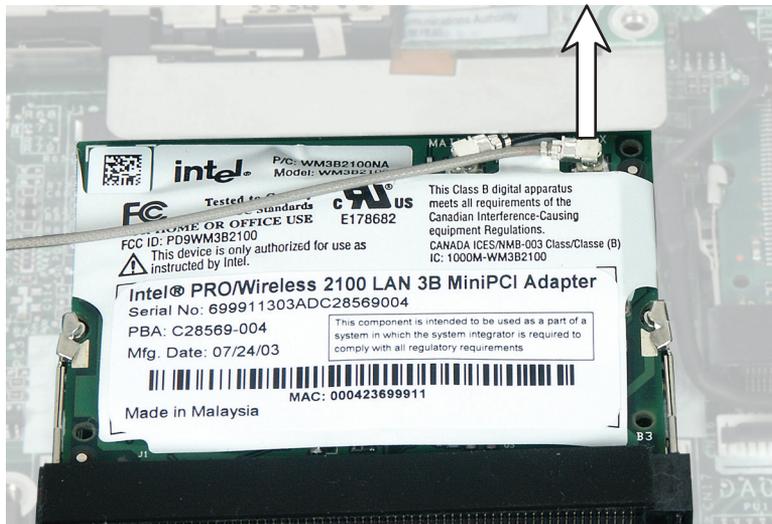
Legal requirements dictate that a security screw (or other means) be used to attach the mini-PCI cover to the chassis in a manner that restricts end user access. End users are strictly prohibited from having access to the wireless card. Due to manufacturing process changes, Gateway M275 notebooks require a Torx head security screw to attach the mini-PCI cover.

- 13 Remove the screw that secures the modem to the convertible tablet PC.



- 14 Insert the small flat-blade screwdriver or non-marring tool under the modem and gently pry it up about ¼ inch.
- 15 Remove the metal plate between the mini PCI card and the modem. Be careful when pulling the plate from under the modem.

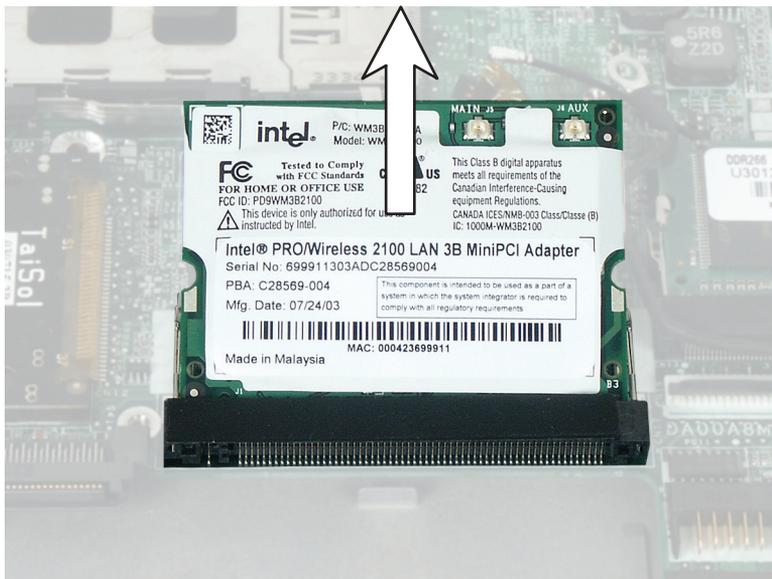
- 16 Unplug the two antenna cables on the mini PCI card, noting how they are installed for later re-assembly.



- 17 Move the antenna wires out of the way, then press outward on the clips at both sides of the card until the card tilts upward.



- 18 Pull the card out of the slot.



- 19** Hold the new card at a 30-degree angle and press it into the empty slot. This card is keyed so it can only be inserted in one direction. If the card does not fit, make sure that the notch in the card lines up with the tab in the card slot.
- 20** Move the antenna wires out of the way, then press the card down until it clicks into place.

**Caution**



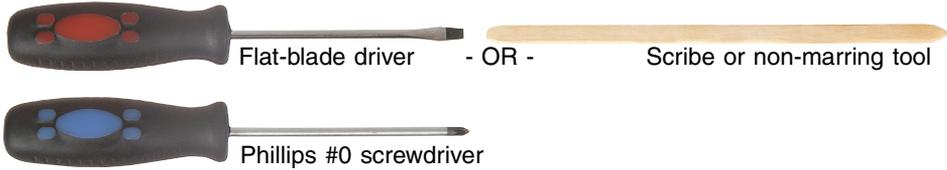
Legal requirements dictate the mini-PCI cover be in place during any and all operation of the notebook's wireless feature.

- 21** Reattach the black antenna cable to the connector labelled MAIN or M, then reattach the light gray antenna cable to the connector labelled AUX or A.
- 22** Slide the metal plate under the Torx screw hole on the modem and position the plate between the mini PCI card and the modem.
- 23** Align the modem's screw holes with the holes on the convertible tablet PC, then press the modem into place.
- 24** Replace the Torx screw that secures the modem to the convertible tablet PC.
- 25** Replace the screw that secures the modem to the convertible tablet PC.
- 26** Reassemble the convertible tablet PC.

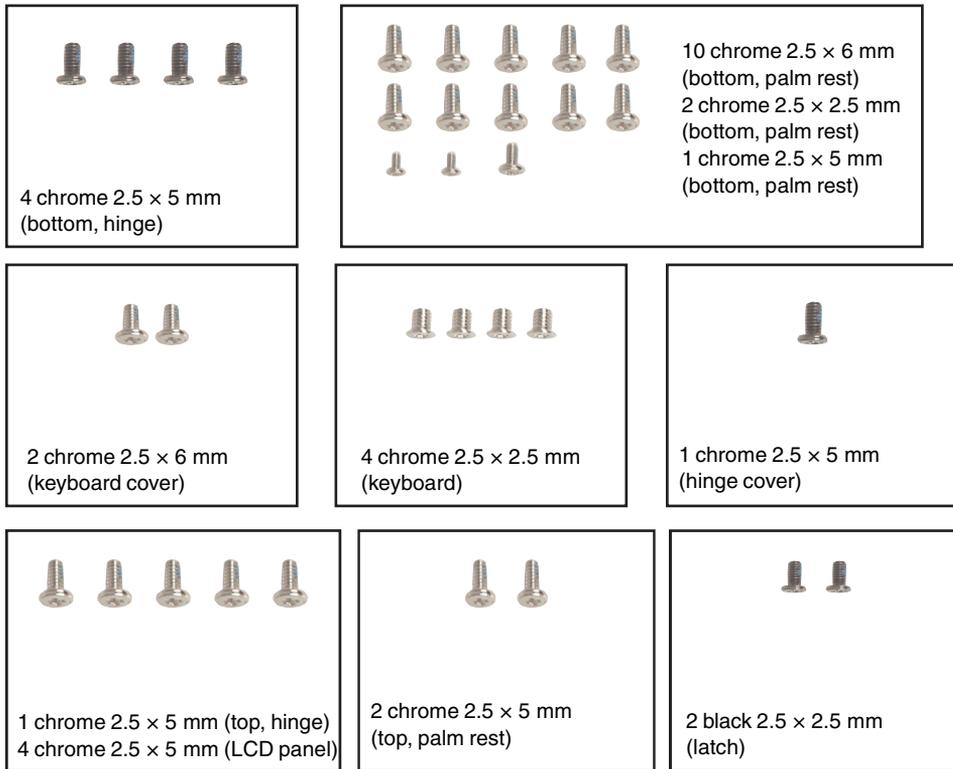


# Replacing the latch

**Tools you need to complete this task:**



**Screws removed during this task:**



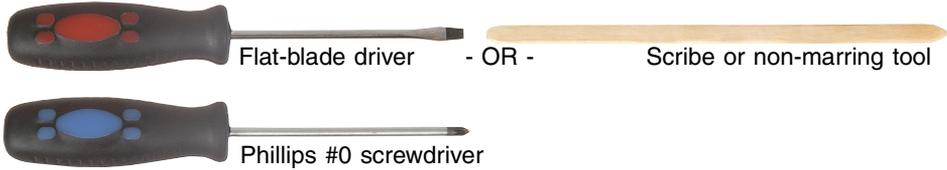
**To replace the latch:**

- 1** Disconnect the AC adapter and modem and network cables and prepare the convertible tablet PC by following the instructions in [“Preparing the convertible tablet PC” on page 6](#).
- 2** Turn the convertible tablet PC over so the bottom is facing up.
- 3** Remove the battery by following the instructions in [“Removing the battery” on page 8](#).
- 4** Remove the four screws on the bottom that secure the hinge to the chassis by following the instructions in [Step 4 of “Replacing the LED panel” on page 35](#).
- 5** Remove the thirteen screws on the bottom of the convertible tablet PC that secure the palm rest assembly to the chassis by following the instructions in [Step 5 of “Replacing the palm rest assembly” on page 44](#).
- 6** Remove the keyboard cover by following the instructions in [“Replacing the keyboard cover” on page 18](#).
- 7** Make sure that the convertible tablet PC is positioned so the top is facing up.
- 8** Remove the keyboard by following the instructions in [“Replacing the keyboard” on page 22](#).
- 9** Remove the hinge cover by following the instructions in [“Replacing the hinge cover” on page 38](#).
- 10** Complete removal of the LCD panel by following the instructions in [“Replacing the LCD panel assembly” on page 40](#).
- 11** Complete removal of the palm rest assembly by following the instructions in [“Replacing the palm rest assembly” on page 44](#).
- 12** Remove the two screws from the latch that secures the LCD panel to the convertible tablet PC.
- 13** Lift the latch up and away from the convertible tablet PC. Replace with new latch.
- 14** Secure the new latch with the two screws.
- 15** Reassemble the convertible tablet PC.

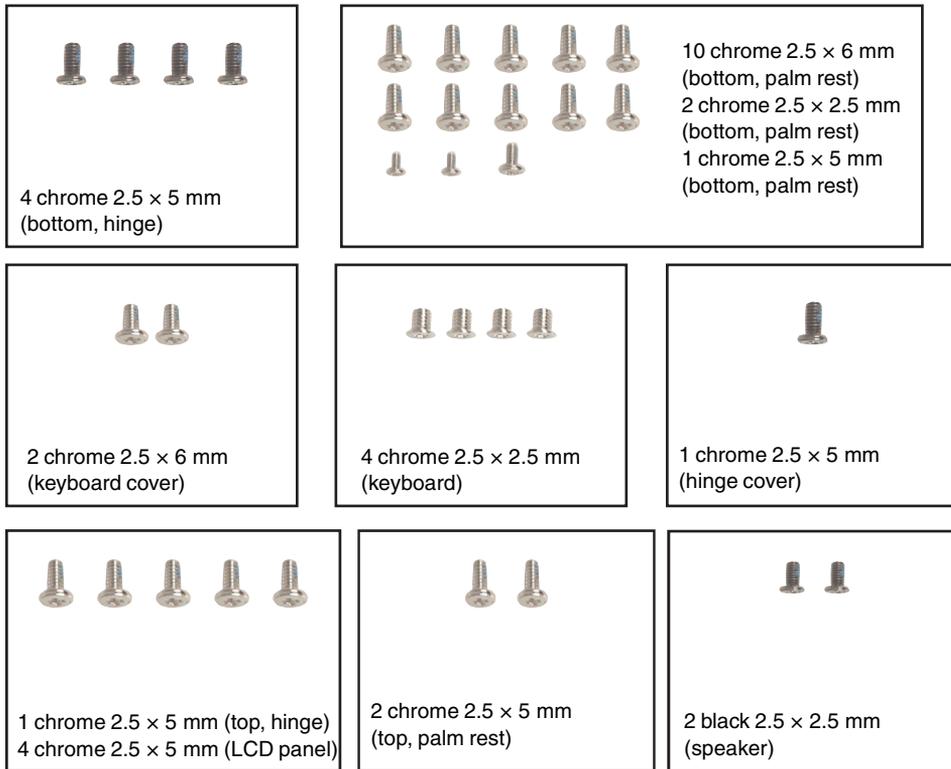


# Replacing the speaker

**Tools you need to complete this task:**



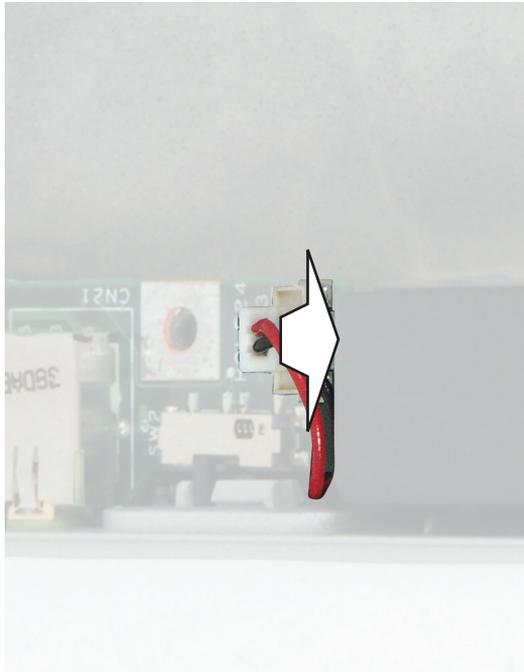
**Screws removed during this task:**



**To replace the speaker:**

- 1** Disconnect the AC adapter and modem and network cables and prepare the convertible tablet PC by following the instructions in [“Preparing the convertible tablet PC” on page 6](#).
- 2** Turn the convertible tablet PC over so the bottom is facing up.
- 3** Remove the battery by following the instructions in [“Removing the battery” on page 8](#).
- 4** Remove the four screws on the bottom that secure the hinge to the chassis by following the instructions in [Step 4 of “Replacing the LED panel” on page 35](#).
- 5** Remove the thirteen screws on the bottom of the convertible tablet PC that secure the palm rest assembly to the chassis by following the instructions in [Step 5 of “Replacing the palm rest assembly” on page 44](#).
- 6** Remove the keyboard cover by following the instructions in [“Replacing the keyboard cover” on page 18](#).
- 7** Make sure that the convertible tablet PC is positioned so the top is facing up.
- 8** Remove the keyboard by following the instructions in [“Replacing the keyboard” on page 22](#).
- 9** Remove the hinge cover by following the instructions in [“Replacing the hinge cover” on page 38](#).
- 10** Complete removal of the LCD panel by following the instructions in [“Replacing the LCD panel assembly” on page 40](#).
- 11** Complete removal of the palm rest assembly by following the instructions in [“Replacing the palm rest assembly” on page 44](#).

- 12 Unplug the speaker cables from the system board (one connector).

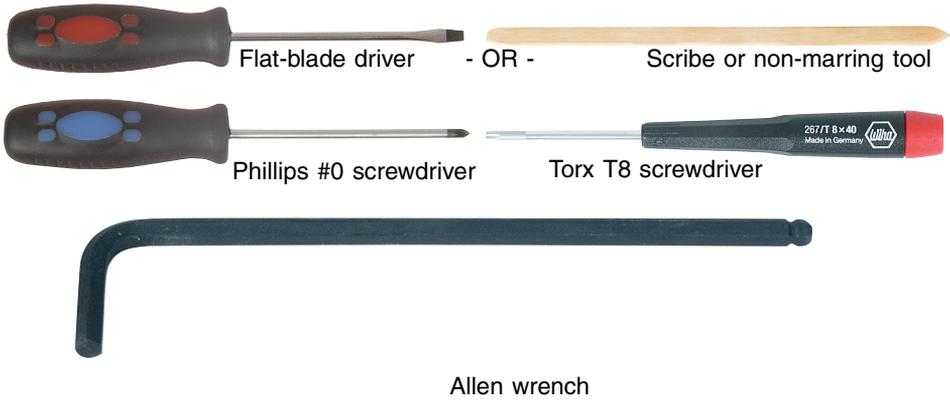


- 13 Slide speaker cables away from slots on convertible tablet PC.
- 14 Remove the single screw near the front corner securing the speakers to the convertible tablet PC.
- 15 Install the new speakers and secure with the screw.
- 16 Plug the speaker cables into system board and secure the speaker cables in the slots provided.
- 17 Reassemble the convertible tablet PC.

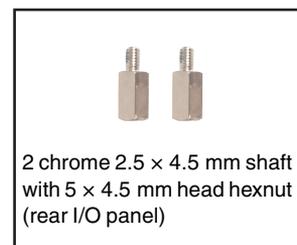
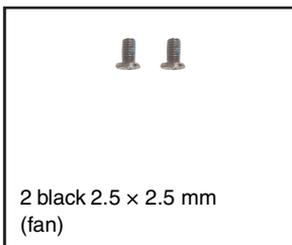
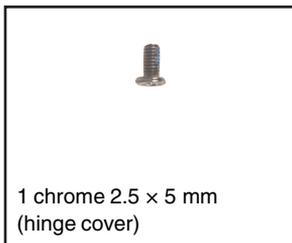
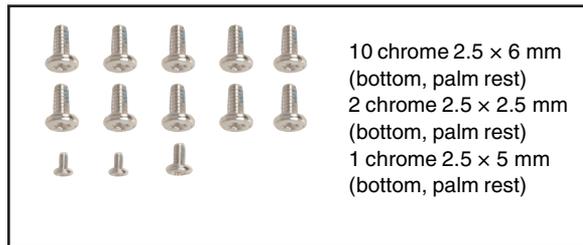
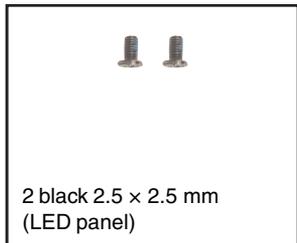
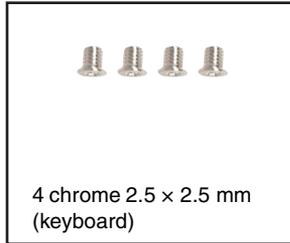
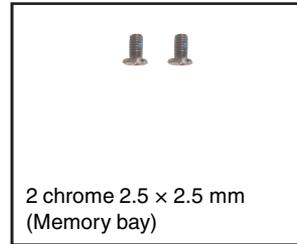


# Replacing the system board

Tools you need to complete this task:



**Screws removed during this task:**



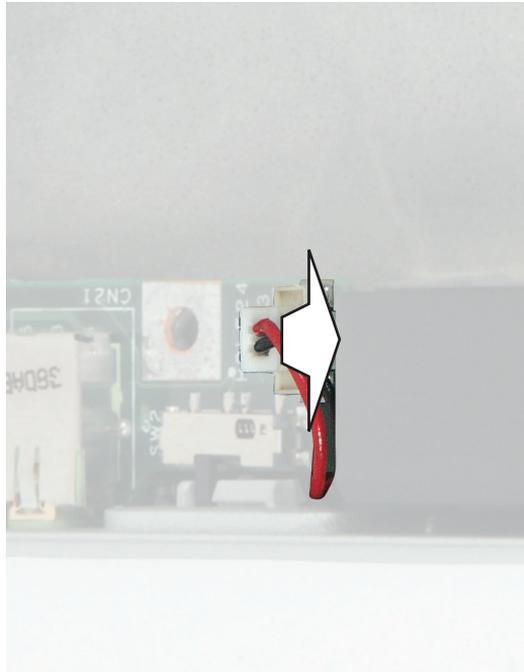


**To replace the system board:**

- 1** Disconnect the AC adapter and modem and network cables and prepare the convertible tablet PC by following the instructions in [“Preparing the convertible tablet PC” on page 6](#).
- 2** Turn the convertible tablet PC over so the bottom is facing up.
- 3** Remove the battery by following the instructions in [“Removing the battery” on page 8](#).
- 4** Remove the hard drive kit by following the instructions in [“Replacing the hard drive kit” on page 10](#).
- 5** Remove the optical drive by following the instructions in [“Replacing the optical drive” on page 15](#).
- 6** Remove the memory modules from the memory bay by following the instructions in [“Adding or replacing memory in the memory bay” on page 28](#).
- 7** Remove the battery by following the instructions in [“Removing the battery” on page 8](#).
- 8** Remove the four screws on the bottom that secure the hinge to the chassis by following the instructions in [Step 4 of “Replacing the LED panel” on page 35](#).
- 9** Remove the thirteen screws on the bottom of the convertible tablet PC that secure the palm rest assembly to the chassis by following the instructions in [Step 5 of “Replacing the palm rest assembly” on page 44](#).
- 10** Remove the keyboard cover by following the instructions in [“Replacing the keyboard cover” on page 18](#).
- 11** Make sure that the convertible tablet PC is positioned so the top is facing up.

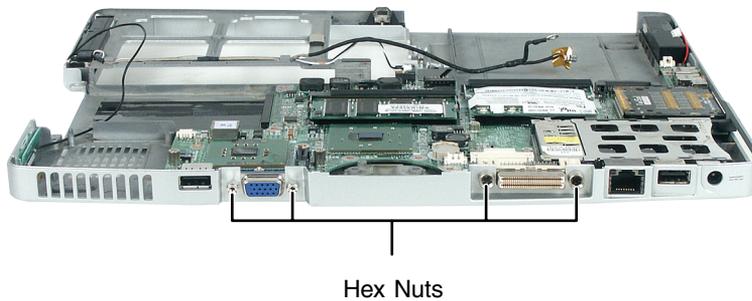
- 12** Remove the keyboard by following the instructions in [“Replacing the keyboard” on page 22.](#)
- 13** Remove the hinge cover by following the instructions in [“Replacing the hinge cover” on page 38.](#)
- 14** Remove the memory modules on the system board by following the instructions in [“Replacing memory under the keyboard” on page 32.](#)
- 15** Remove the LED panel by following the instructions in [“Replacing the LED panel” on page 35.](#)
- 16** Complete removal of the LCD panel by following the instructions in [“Replacing the LCD panel assembly” on page 40.](#)
- 17** Complete removal of the palm rest assembly by following the instructions in [“Replacing the palm rest assembly” on page 44.](#)
- 18** Remove the fan from the convertible tablet PC by following the instructions in [“Replacing the fan” on page 50.](#)
- 19** Remove the cooling assembly from the convertible tablet PC by following the instructions in [“Replacing the cooling assembly” on page 54.](#)
- 20** Remove the modem from the convertible tablet PC by following the instructions in [“Replacing the modem” on page 57.](#)
- 21** Remove the mini PC card from the convertible tablet PC by following the instructions in [“Replacing the IEEE 802.11 Mini PCI card” on page 62.](#)

- 22** Unplug the speakers from the system board (one connector).

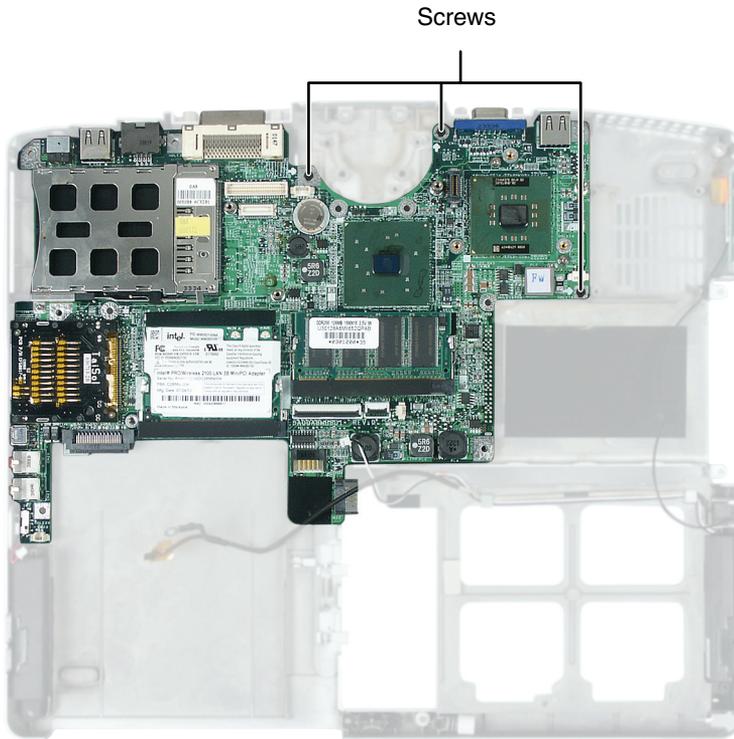


- 23** Unplug the modem cable from the system board.

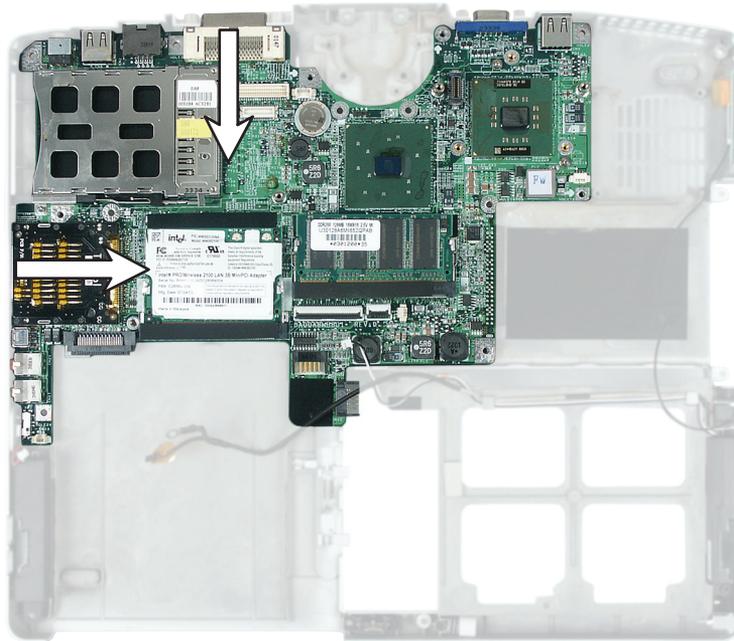
- 24** Remove the two small hex nuts on the rear I/O panel. Use the Allen wrench to remove the two larger hex nuts securing the docking station connector.



**25** Remove the three system board screws.



- 26 Remove the system board. Make sure that the rear I/O panel clears the bottom of the chassis and the side audio jacks clear the bottom of the chassis.



- 27 Place the new system board into the convertible tablet PC.
- 28 Replace the three system board screws in the holes on the top of the system board.
- 29 Replace the two rear I/O panel hex nuts and the two rear docking station hex nuts.
- 30 Reassemble the convertible tablet PC.





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