Gateway 600 Notebook

service guide

Customizing | Troubleshooting | Gateway™

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Replacing Gateway 600YG2 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 your maintenance tasks for the Gateway 600YG2 notebook. All tasks covered in this guide can be performed by an **authorized field technician** without jeopardizing the notebook's warranty.

For information on the notebook'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.

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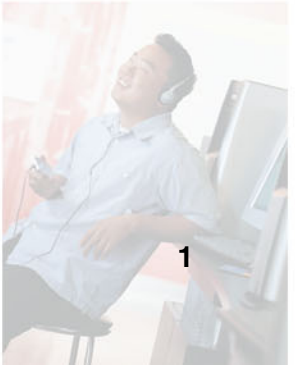

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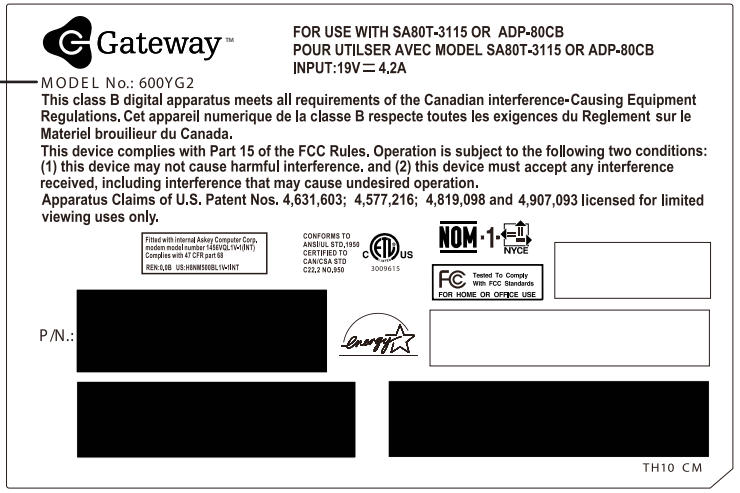
Identifying the notebook model

The label on the bottom of the notebook contains information that identifies the notebook model and its features.

Gateway model number



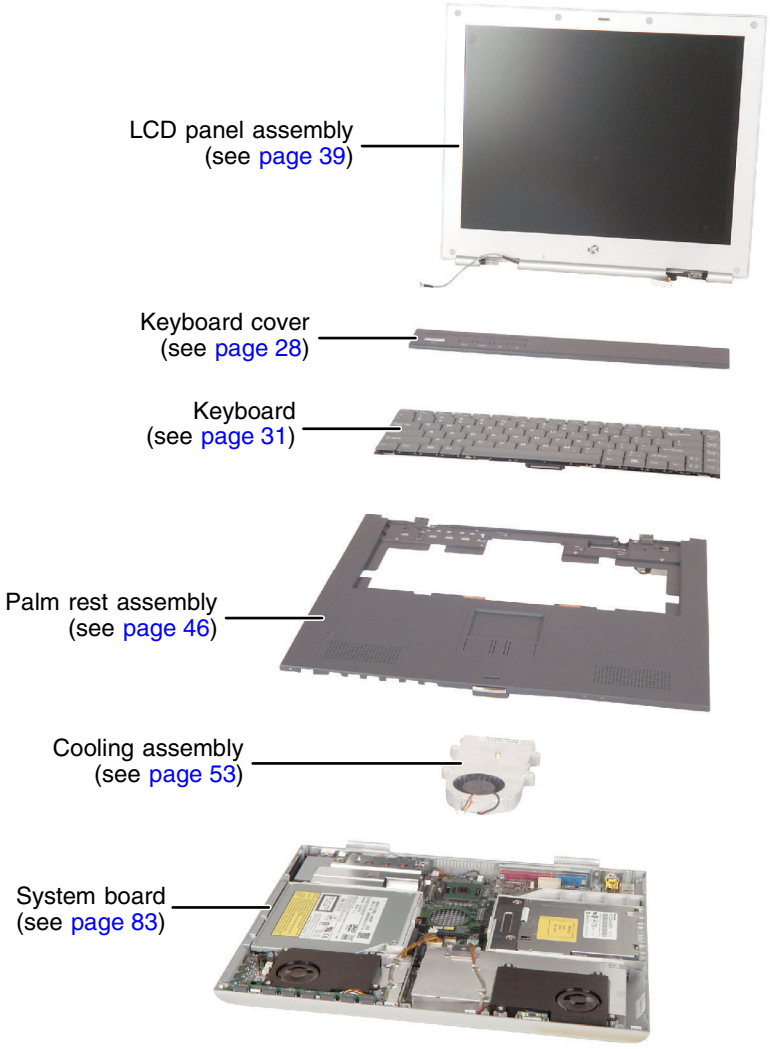
Warning

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

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 notebook. For a complete list of replaceable parts, see the Contents.



Preparing your work space

Before performing maintenance on the notebook, make sure that your work space and the notebook 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 notebook 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 notebook) 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.
  - After loosening screws that are deeply recessed in a hole (for example, on the bottom of the base assembly), you can leave the screws in the holes if you place small pieces of masking tape over the hole openings. When reassembling the component, just remove the tape and tighten the screws.
  - 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 notebook are extremely sensitive to static electricity, also known as *electrostatic discharge* (ESD).

Warning

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

Warning

To avoid exposure to dangerous electrical voltages and moving parts, turn off the notebook and unplug the power cord and modem and network cable before opening the case.

Before replacing components, follow these guidelines:

- Turn off the notebook.
- 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 notebook.

- Touch a bare metal surface on your workbench or other grounded object.
- Unplug the power cord and the modem and network cables.
- Remove the main and optional secondary batteries. For more information, see “Removing the batteries” on page 8.
- Disconnect all peripheral devices and remove any PC Cards.

Before working with notebook 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 notebook

Warning

To avoid exposure to dangerous electrical voltages and moving parts, turn off the notebook, remove the main and optional secondary batteries, 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 notebook for maintenance:

- Make sure that the modular drive is empty.
- Disconnect all peripheral devices and remove any PC Cards.
- Turn off the notebook and unplug the power cord and modem and network cables (if attached).
- Disconnect the notebook from the optional port replicator. For more information see “Disconnecting from the port replicator” on page 7.
- Turn over the notebook and remove the main and optional secondary batteries. For more information see “Removing the batteries” on page 8.

Disconnecting from the port replicator

To separate the notebook from the port replicator:

1 Press down on both docking release latches. The notebook will spring up slightly.

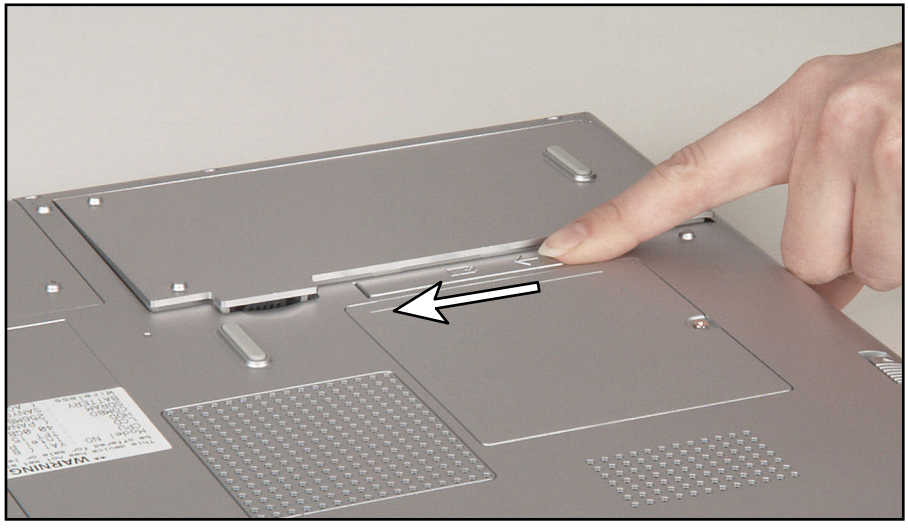
2 Lift the notebook off of the port replicator.

Removing the batteries

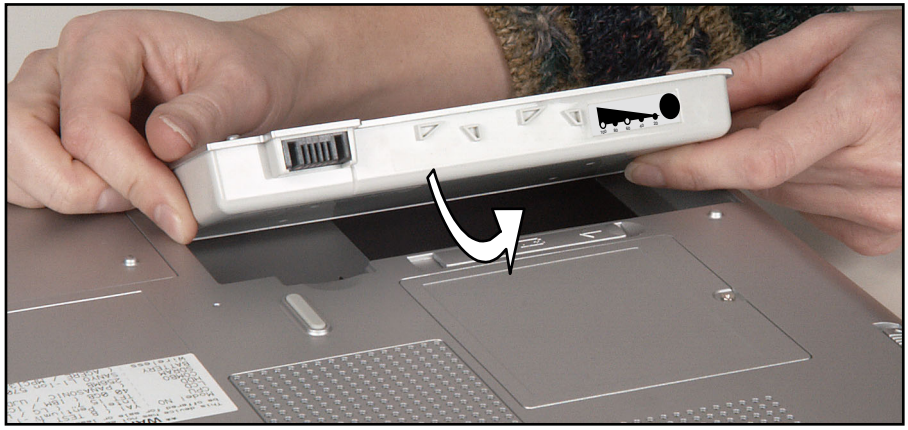
Removing the main battery

To remove the main battery:

1. Disconnect the AC adapter and modem and network cables and prepare the notebook by following the instructions in “Preparing the notebook” on page 6.
2. Disconnect the notebook from the optional port replicator by following the instructions in “Disconnecting from the port replicator” on page 7.
3. Turn the notebook over so the bottom is facing up.
4. Slide the battery release latch.



5 Lift the battery out of the bay.



Removing the optional secondary battery

To remove the secondary battery:

1 Disconnect the AC adapter and modem and network cables and prepare the notebook by following the instructions in "Preparing the notebook" on page 6.

2 Disconnect the notebook from the optional port replicator by following the instructions in "Disconnecting from the port replicator" on page 7.

3 Turn the notebook over so the bottom is facing up.

4 Slide and hold the modular bay latch and press the modular bay release button. The battery moves out slightly.

5 Slide the battery out.

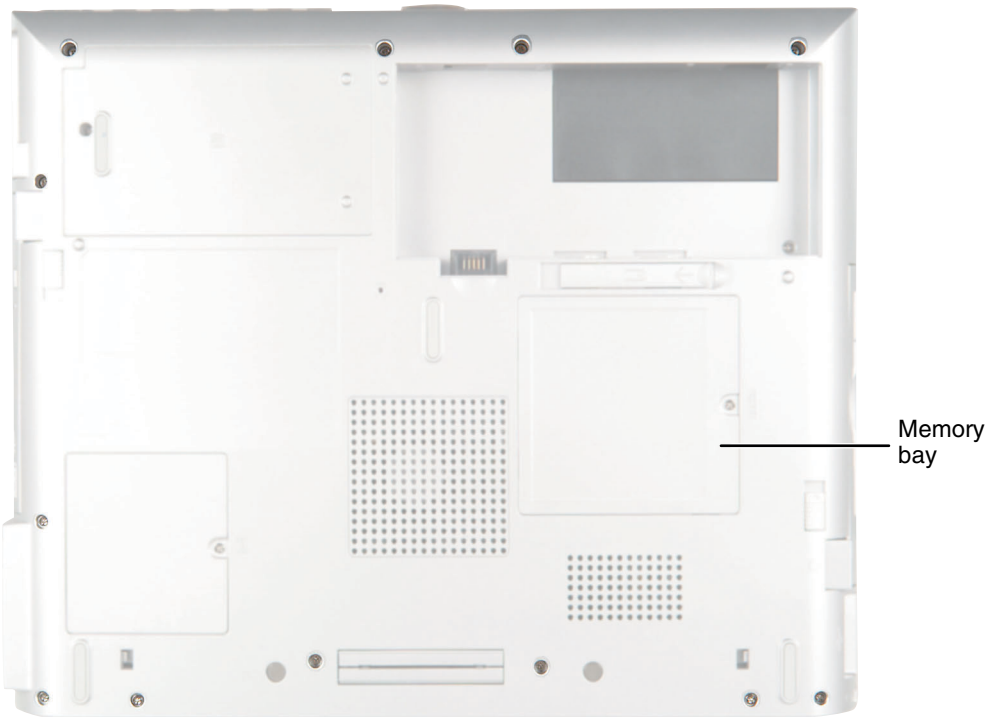
Adding or replacing memory modules

Tools you need to complete this task:

Phillips #0 screwdriver

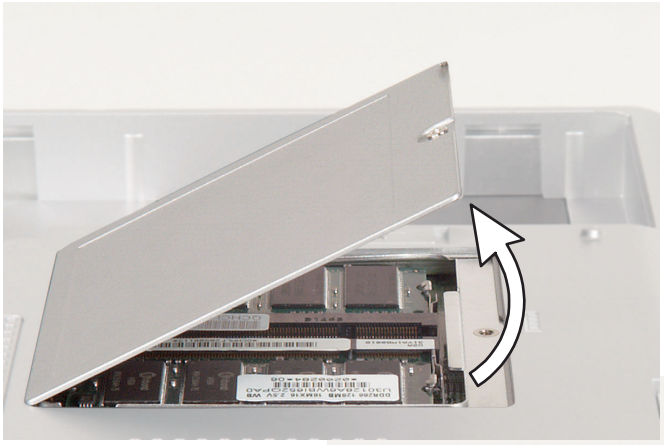
Important

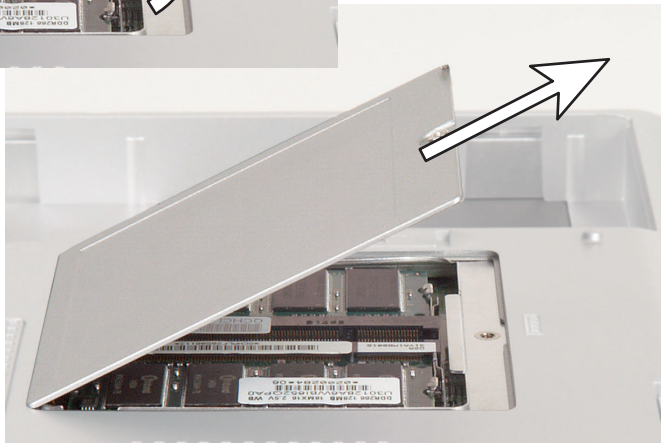
Use only memory modules designed for the Gateway 600YG2.



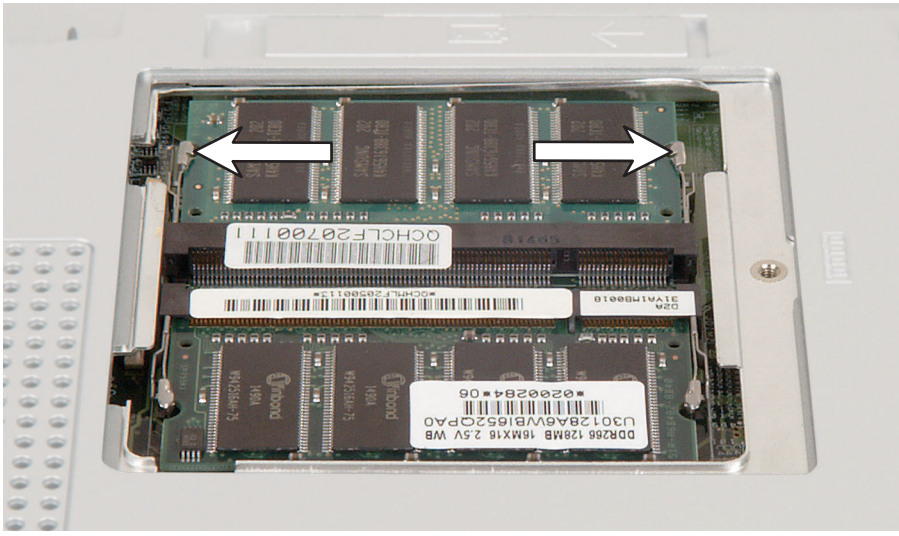
To add or replace memory modules:

1. Disconnect the AC adapter and modem and network cables and prepare the notebook by following the instructions in "Preparing your work space" on page 4.
2. Disconnect the notebook from the optional port replicator by following the instructions in "Disconnecting from the port replicator" on page 7.
3. Turn the notebook over so the bottom is facing up.
4. Remove the main and optional secondary batteries by following the instructions in "Removing the batteries" on page 8.
5. Loosen the captive screw that secures the memory cover. (The screw cannot be removed.)
6. Lift the screw side of the cover upward, then slide the cover out.

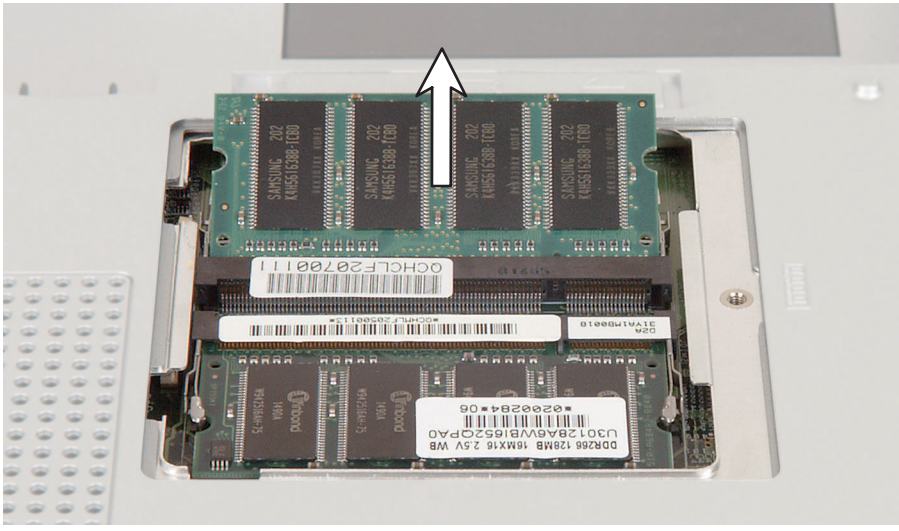




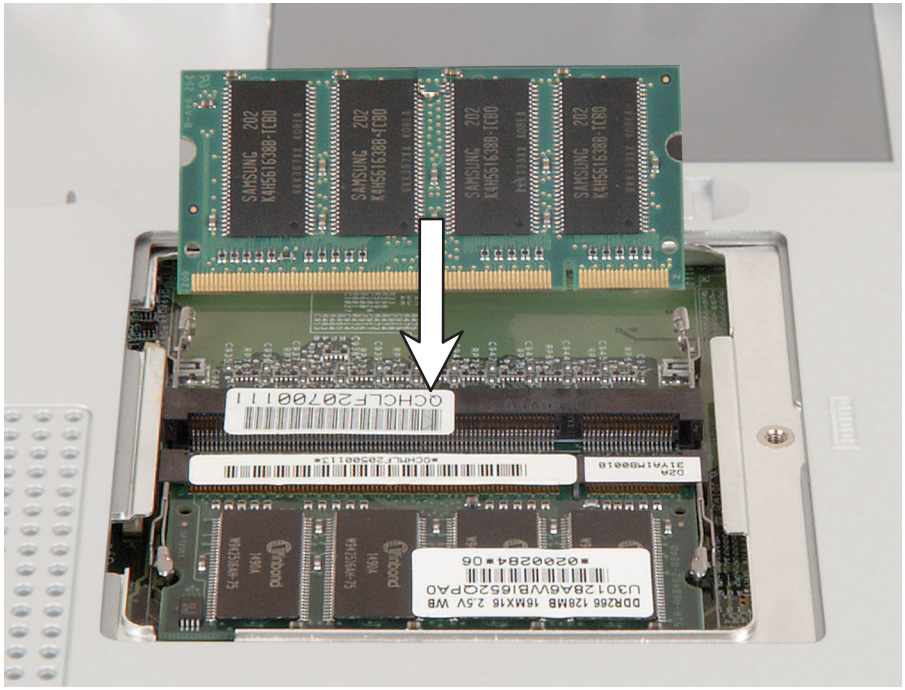
7 If you are removing a module, gently press outward on the clip at each end of the memory module until the module tilts upward.



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 slot.



10 Gently press the module down until it clicks into place.

11 Replace the memory cover and tighten the captive screw.

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 600YG2 may be installed in this notebook.

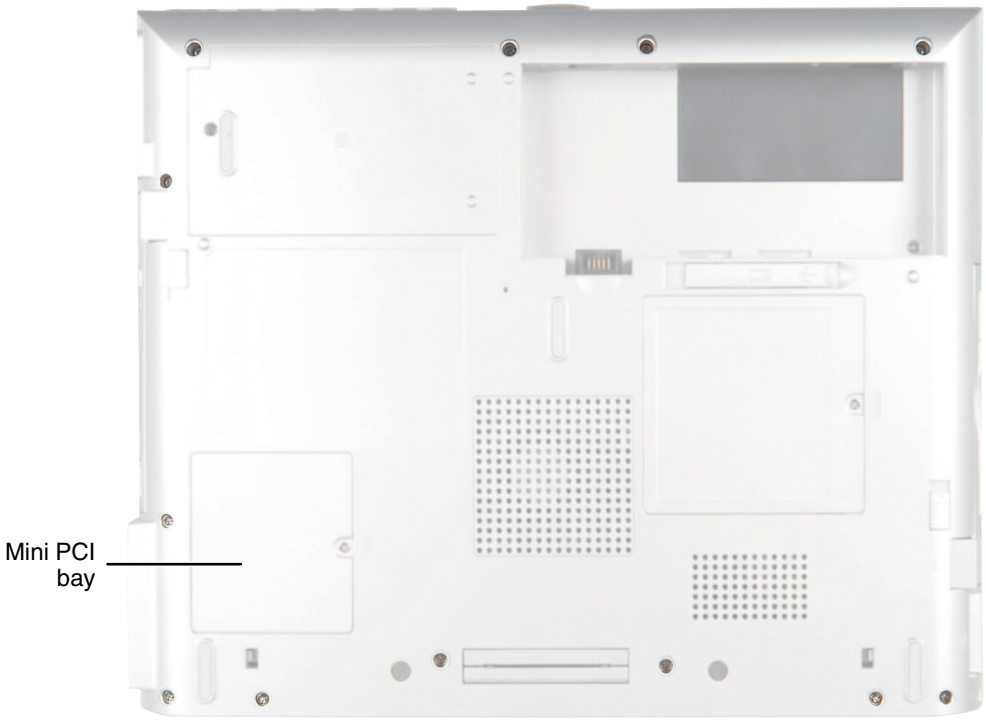
Caution

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 600YG2 notebooks manufactured after August 7, 2003 require a Torx head security screw to attach the mini-PCI cover.

Caution

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

Tools you need to complete this task:



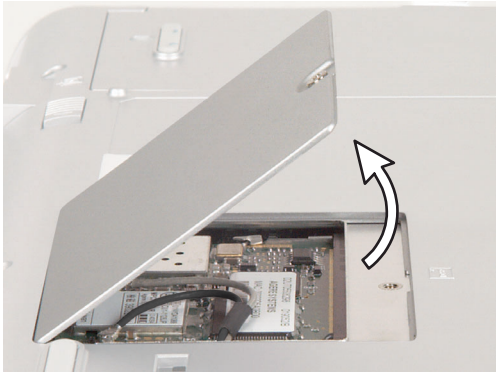
To replace the IEEE 802.11 Mini PCI card:

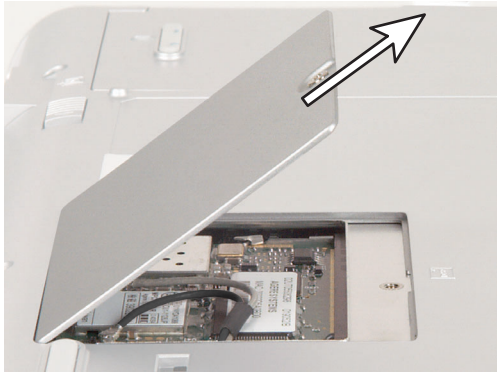
1. Disconnect the AC adapter and modem and network cables and prepare the notebook by following the instructions in "Preparing your work space" on page 4.
2. Disconnect the notebook from the optional port replicator by following the instructions in "Disconnecting from the port replicator" on page 7.
3. Turn the notebook over so the bottom is facing up.

4 Remove the main and optional secondary batteries by following the instructions in “Removing the batteries” on page 8.

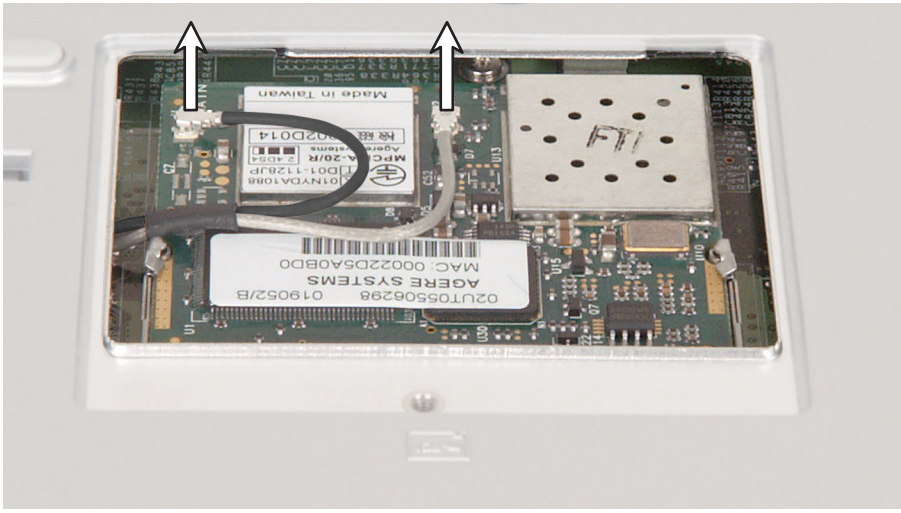
5 Use the appropriate screwdriver to loosen the captive screw that secures the Mini PCI cover. (The screw cannot be removed.)

6 Lift the screw side of the cover upward, then slide the cover out.

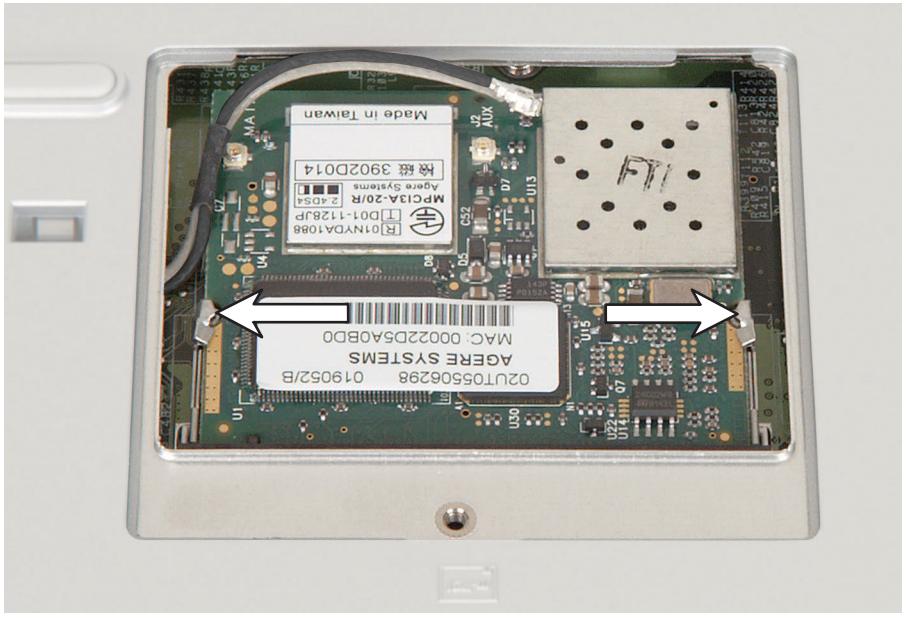




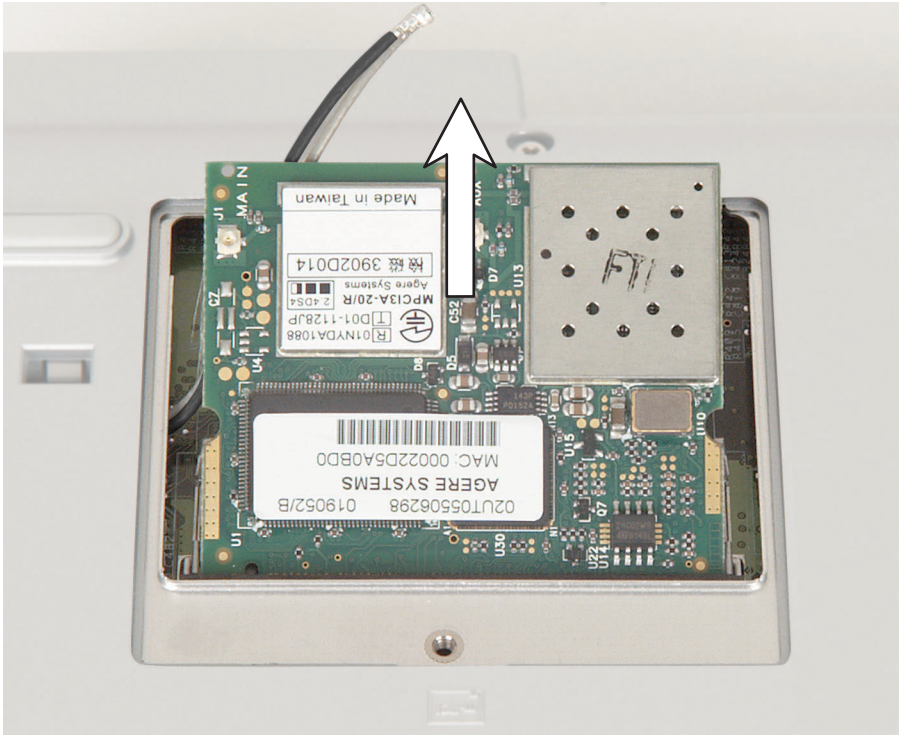
7 Unplug the two antenna cables.



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



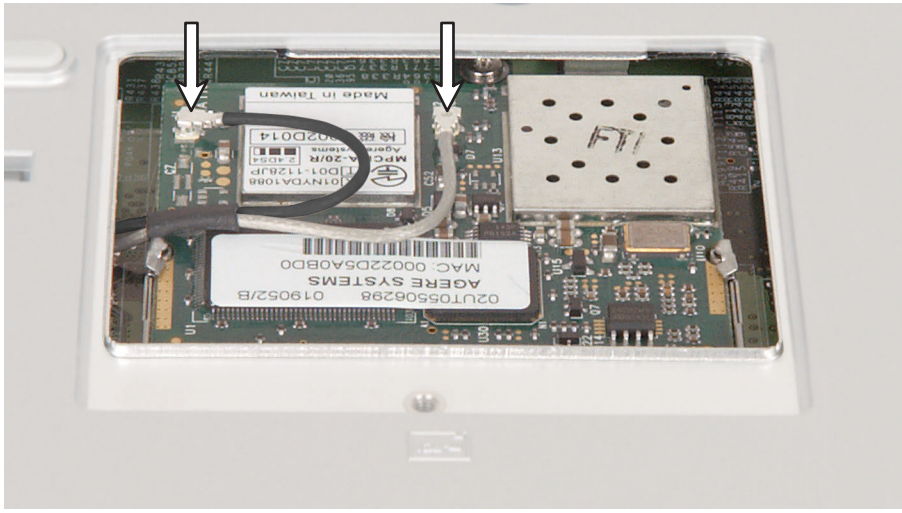
9 Pull the module out of the slot.



10 Hold the new module at a 30-degree angle and press it into the empty 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 module slot.

11 Move the antenna wires out of the way, then press the module down until it clicks into place.

12 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.



13 Replace the Mini PCI cover, then tighten the captive screw.

Replacing the hard drive kit

Tools you need to complete this task:

Phillips #0 screwdriver

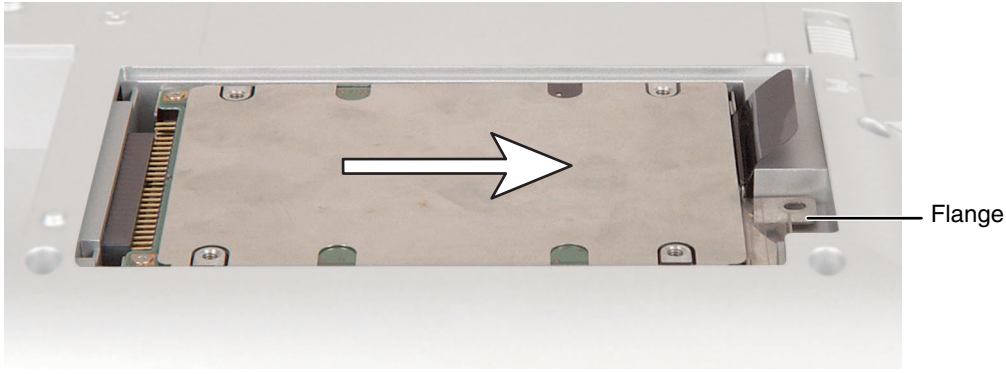
To replace the hard drive kit:

1. Disconnect the AC adapter and modem and network cables and prepare the notebook by following the instructions in "Preparing your work space" on page 4.
2. Disconnect the notebook from the optional port replicator by following the instructions in "Disconnecting from the port replicator" on page 7.
3. Turn the notebook over so the bottom is facing up.
4. Remove the main and optional secondary batteries by following the instructions in "Removing the batteries" on page 8.

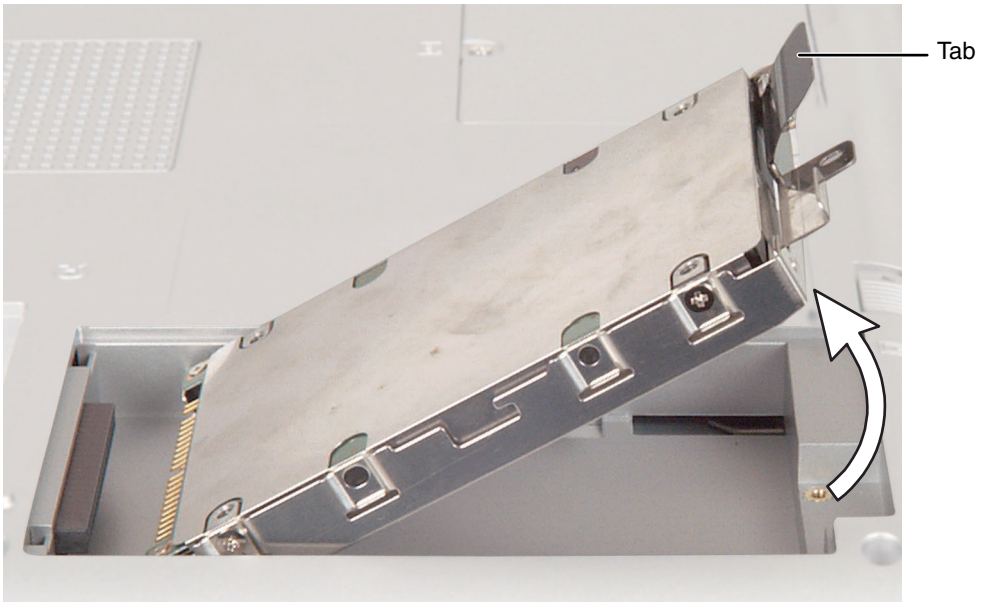
5 Loosen the captive screw that secures the hard drive cover. (The screw cannot be removed.)

6 Lift the screw side of the cover upward, then slide the cover out.

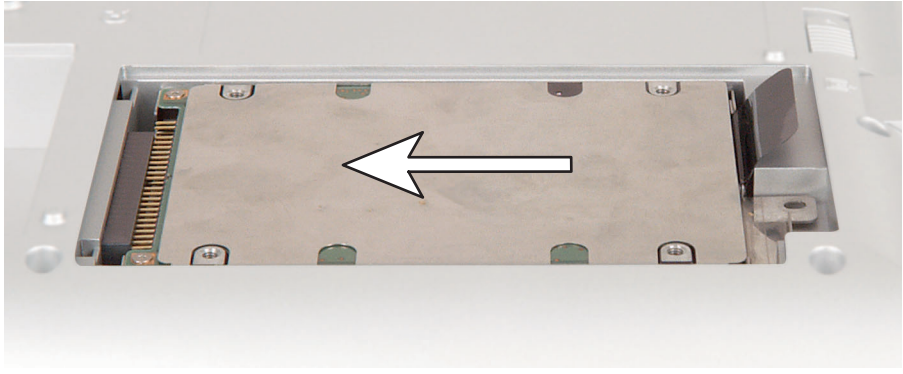
7 Pull on the metal flange to disconnect the hard drive kit from the connector.



8 Lift the plastic tab on the hard drive kit, then lift the kit out of the notebook.



9 Place the new hard drive kit into the drive bay, then slide the drive onto the connector.



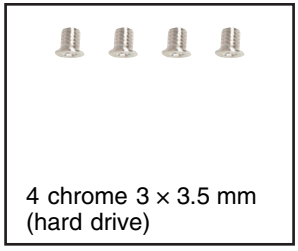
10 Replace the cover and tighten the screw.

Replacing the hard drive in the hard drive kit

Tools you need to complete this task:

Phillips #0 screwdriver

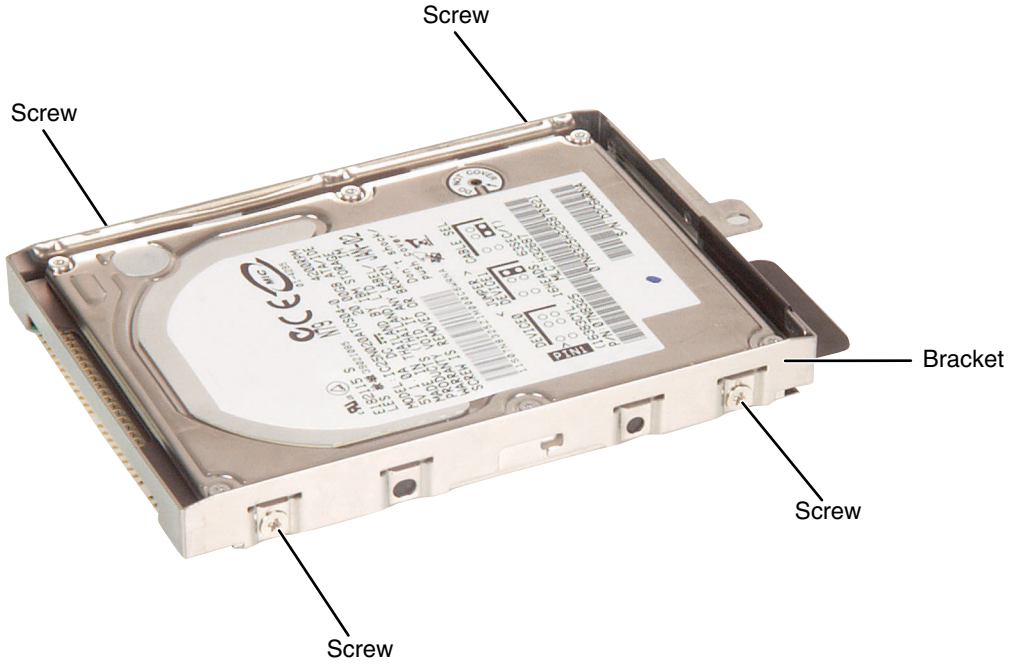
Screws removed during this task:



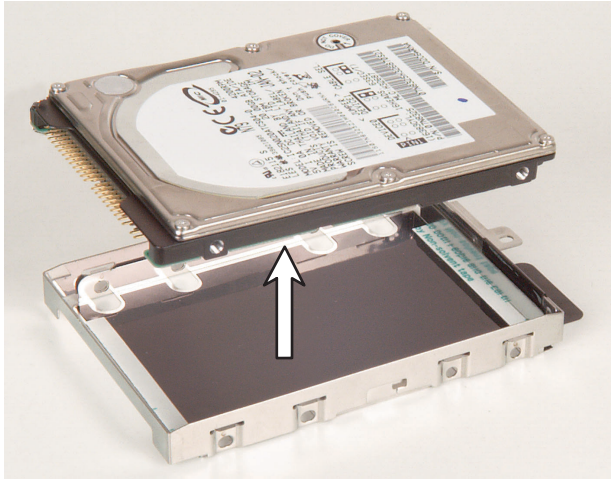
To install a new hard drive into the kit:

1. Disconnect the AC adapter and modem and network cables and prepare the notebook by following the instructions in "Preparing your work space" on page 4.
2. Disconnect the notebook from the optional port replicator by following the instructions in "Disconnecting from the port replicator" on page 7.
3. Turn the notebook over so the bottom is facing up.
4. Remove the main and optional secondary batteries by following the instructions in "Removing the batteries" on page 8.
5. Remove the hard drive kit by following the instructions in "Replacing the hard drive kit" on page 21.

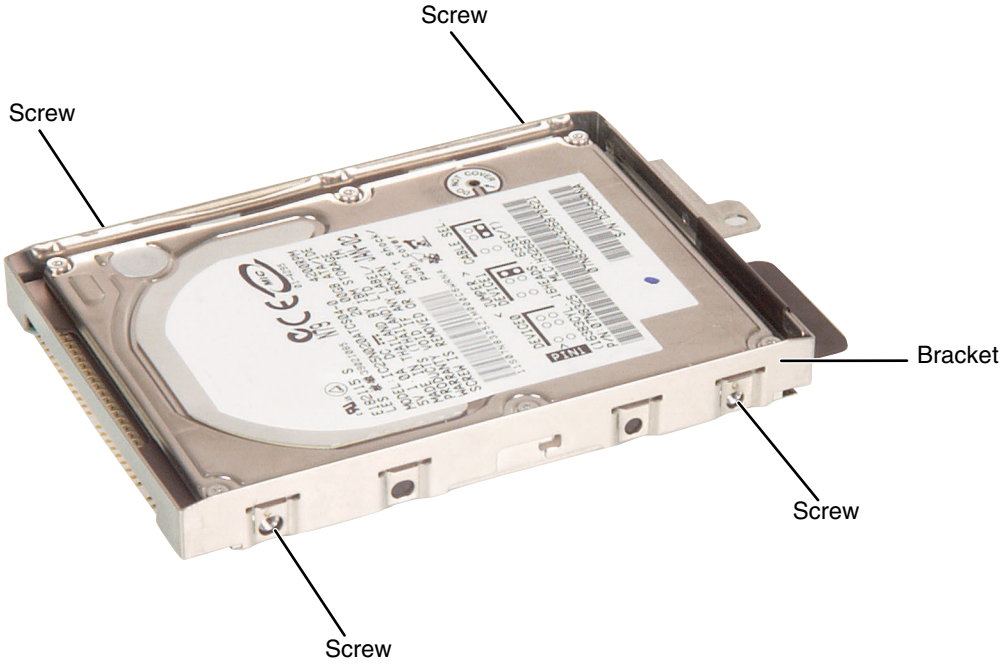
6 Remove the four screws that secure the hard drive to the hard drive kit bracket.



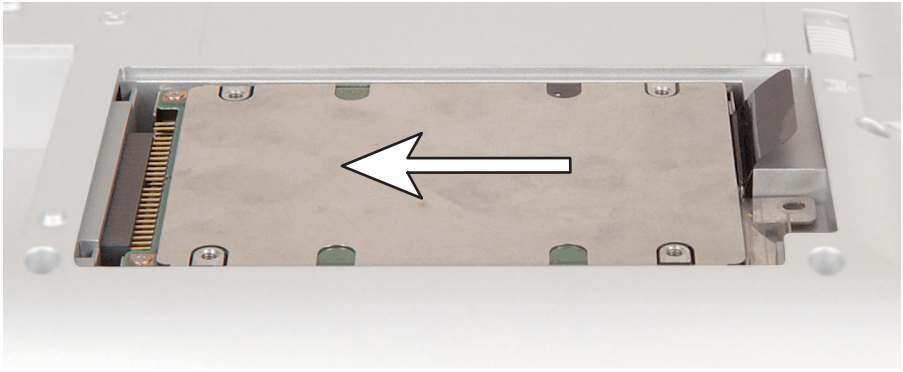
7 Remove the old drive from the bracket.



8 Insert the new drive into the bracket so the screw holes line up, then replace the four screws that secure the drive to the bracket.



9 Place the new hard drive kit into the drive bay, then slide the drive onto the connector.



10 Replace the cover and tighten the screw.

Replacing the keyboard cover

Tools you need to complete this task:

To replace the keyboard cover:

1. Disconnect the AC adapter and modem and network cables and prepare the notebook by following the instructions in "Preparing your work space" on page 4.
2. Disconnect the notebook from the optional port replicator by following the instructions in "Disconnecting from the port replicator" on page 7.
3. Turn the notebook over so the bottom is facing up.
4. Remove the main and optional secondary batteries by following the instructions in "Removing the batteries" on page 8.
5. Turn the notebook over so the top is facing up.
6. Open the LCD panel to the normal viewing position.

7 Insert the small flat-blade screwdriver or non-marring tool under the bottom right corner of the keyboard cover and gently pry it up.

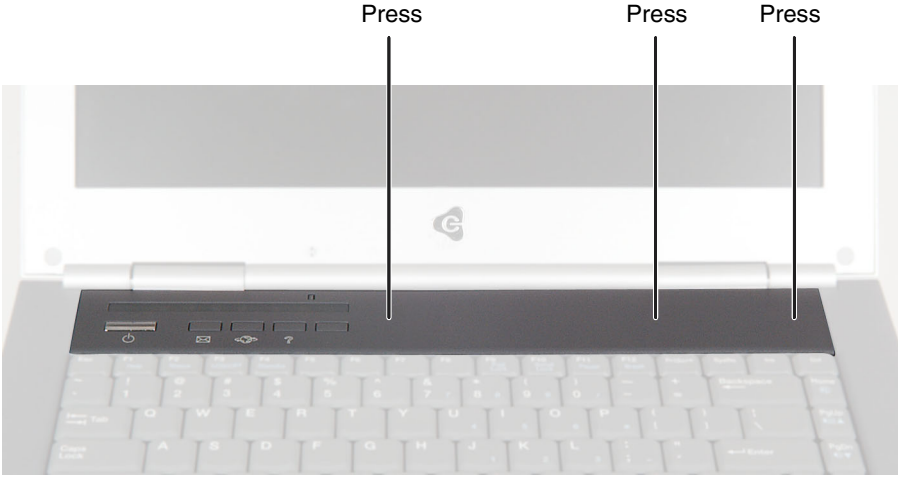
Important

Inserting a piece of cloth between the screwdriver and keyboard and notebook case will help prevent damage to the notebook.

8 Pull the cover off the notebook. You will hear small snapping sounds as the cover comes away from the notebook. Be careful not to break off the tabs found on the left end of the cover.

9 Slide the two tabs on the left end of the new cover under the notebook frame.

10 Press down on the cover in several places until it clicks in place. The cover is correctly mounted when you can run you finger along the cover and find no loose spots. The cover should be flat all the way across.

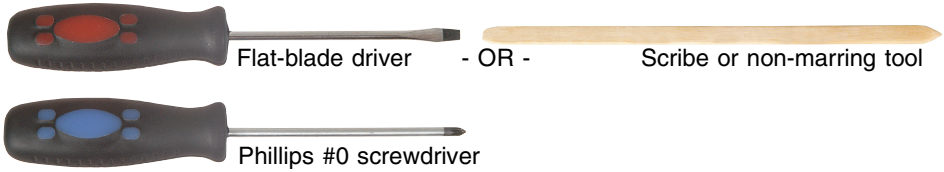


Warning

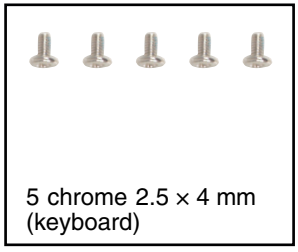
If the cover is not correctly replaced, the notebook could be damaged when you try to close the LCD panel.

Replacing the keyboard

Tools you need to complete this task:



Screws removed during this task:



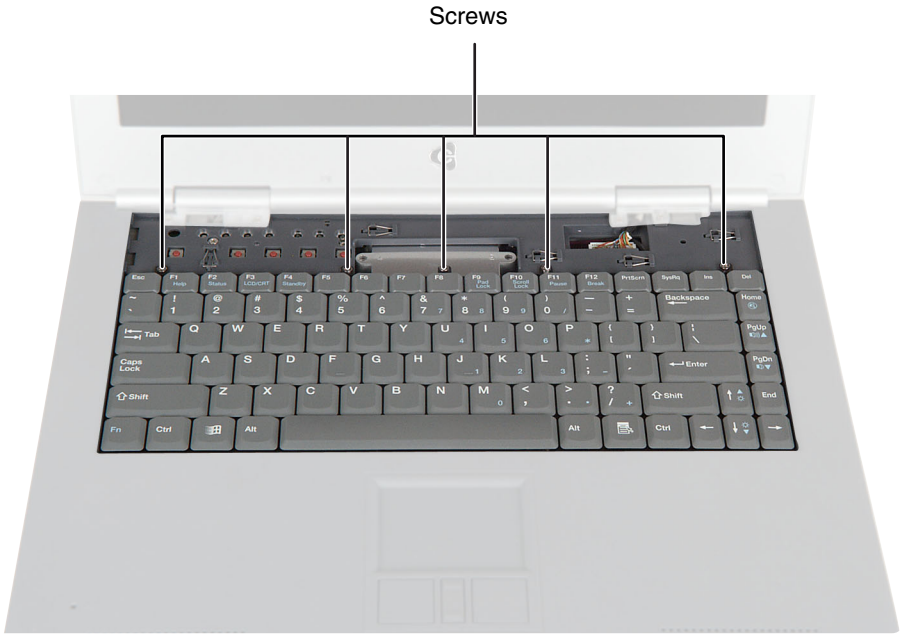
To remove the keyboard:

1. Disconnect the AC adapter and modem and network cables and prepare the notebook by following the instructions in "Preparing your work space" on page 4.
2. Disconnect the notebook from the optional port replicator by following the instructions in "Disconnecting from the port replicator" on page 7.
3. Turn the notebook over so the bottom is facing up.
4. Remove the main and optional secondary batteries by following the instructions in "Removing the batteries" on page 8.
5. Turn the notebook over so the top is facing up.
6. Remove the keyboard cover by following the instructions in "Replacing the keyboard cover" on page 28.

7 Remove the five keyboard screws that secure the keyboard to the notebook.

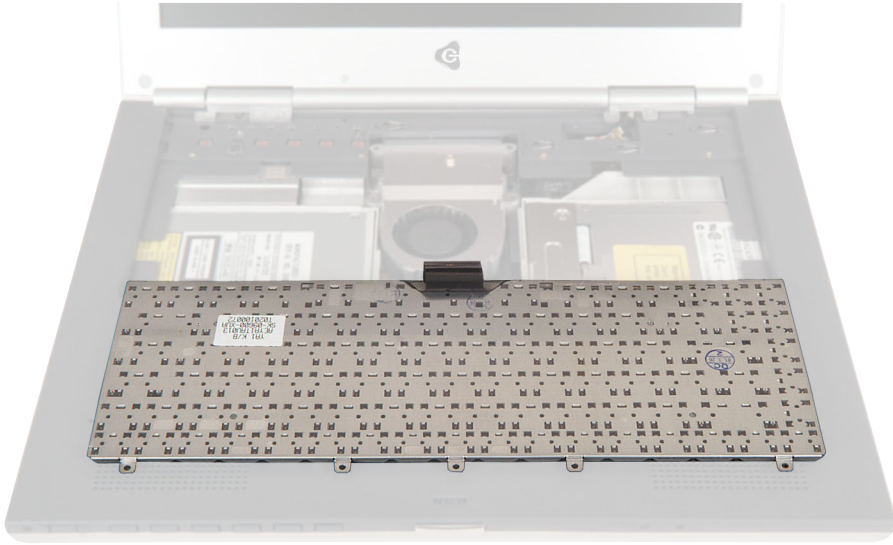
Important

There may be a grounding strap attached to the far-right screw. Make sure this strap is free from the keyboard before continuing.

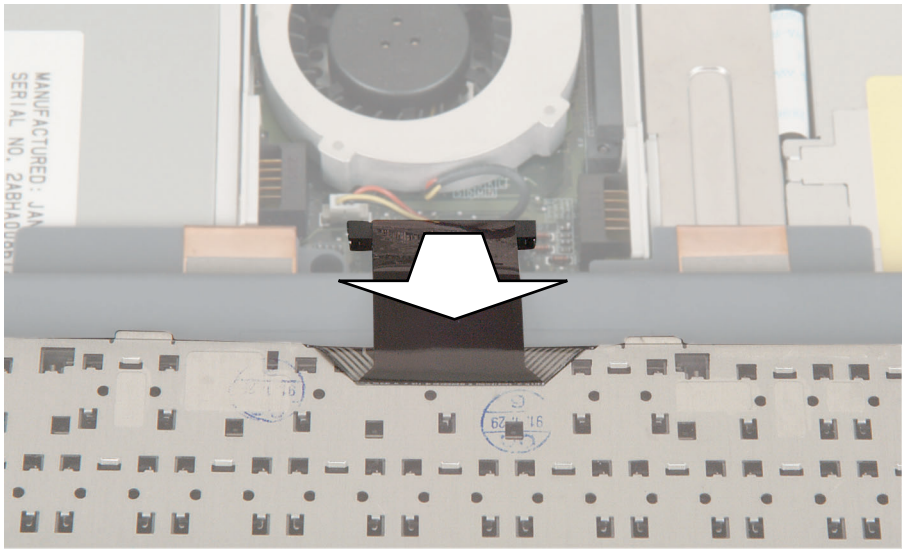


8 Lift the back edge of the keyboard slightly, then carefully slide the keyboard back until the four tabs on the front edge of the keyboard are free from their slots. Be careful not to damage the LCD panel.

9 Slowly rotate the keyboard toward you so it lies **keys-down** on top of the notebook. Be careful not to damage the LCD panel.



10 Use two fingers to unplug the keyboard panel connector from the notebook. Be careful not to touch or damage any other components.

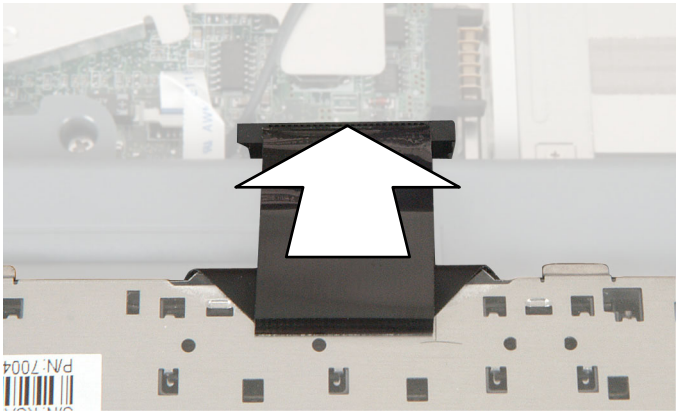


11 Place the new keyboard **keys-down** on the notebook with the space bar away from you.

12 Insert the keyboard plug, on the end of the keyboard cable, onto the keyboard connector.

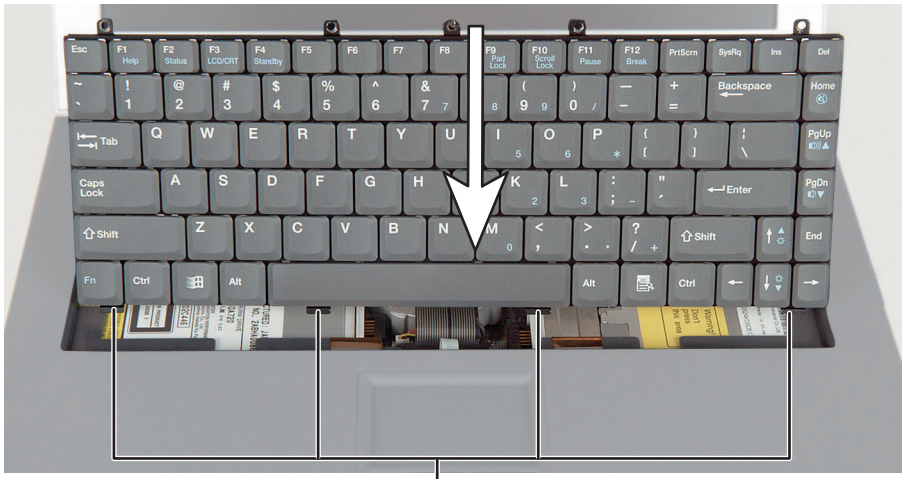
Important

The outside of the keyboard plug goes around the keyboard connector. The plug is correctly oriented if the cable is not twisted.



13 Rotate the keyboard toward the LCD panel until the keyboard is almost face-up.

14 Insert the four tabs located on the front edge of the keyboard into the corresponding slots under the palm rest.



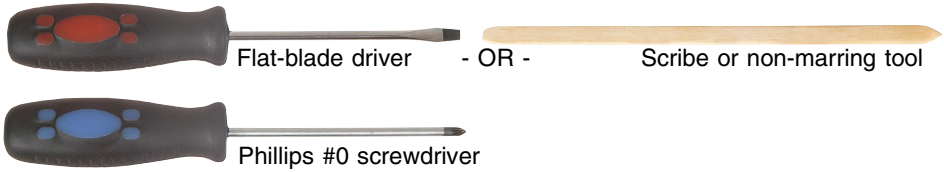
15 Gently press the keyboard down until it is flat all the way across. The keyboard should easily fall into place. Be careful not to damage the LCD panel.

16 Replace the five keyboard screws. If a grounding strap was connected to the far-right screw, make sure to reconnect it.

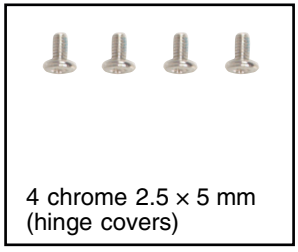
17 Reassemble the notebook.

Replacing the hinge covers

Tools you need to complete this task:



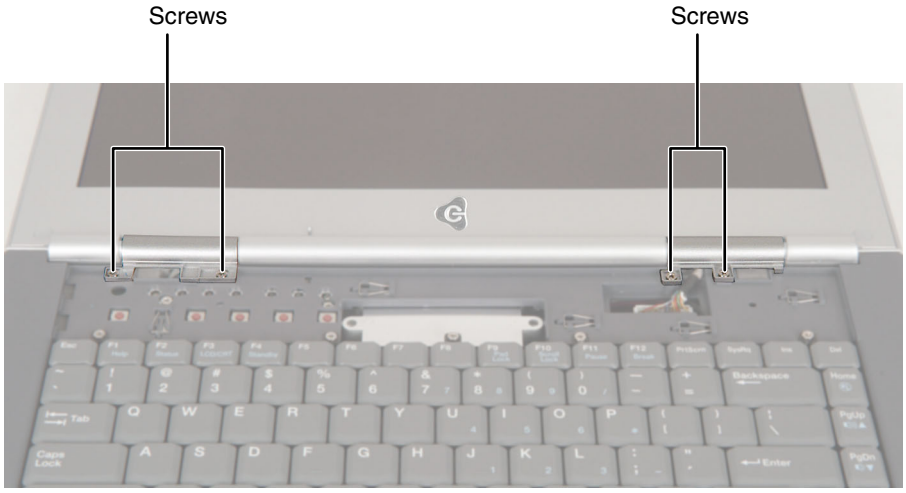
Screws removed during this task:



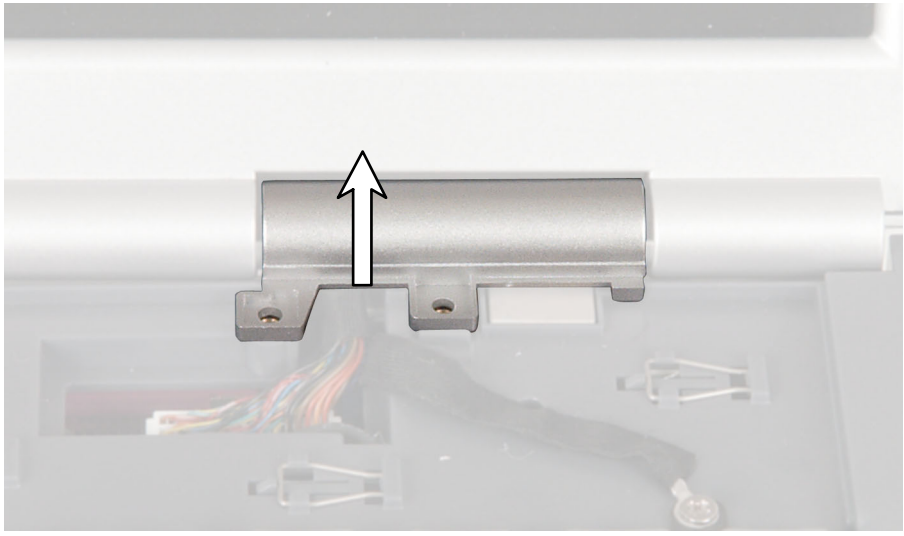
To replace the hinge covers:

1. Disconnect the AC adapter and modem and network cables and prepare the notebook by following the instructions in "Preparing your work space" on page 4.
2. Disconnect the notebook from the optional port replicator by following the instructions in "Disconnecting from the port replicator" on page 7.
3. Turn the notebook over so the bottom is facing up.
4. Remove the main and optional secondary batteries by following the instructions in "Removing the batteries" on page 8.
5. Turn the notebook over so the top is facing up.
6. Remove the keyboard cover by following the instructions in "Replacing the keyboard cover" on page 28.
7. Open the LCD panel all the way, so it lies flat on the table.

8 Remove the four screws that secure the hinge covers to the notebook.



9 Lift the hinge covers off the hinges.

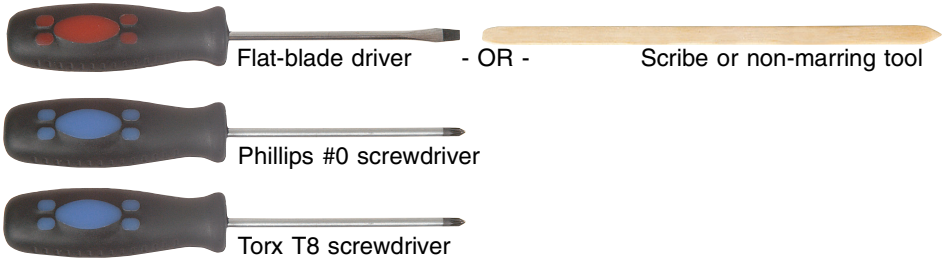


10 Snap the new covers into place over the hinges, then replace the four screws.

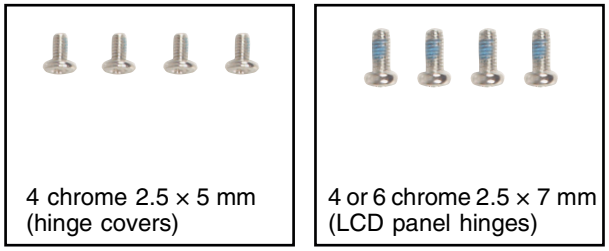
11 Reassemble the notebook.

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 notebook by following the instructions in "Preparing your work space" on page 4.
2. Disconnect the notebook from the optional port replicator by following the instructions in "Disconnecting from the port replicator" on page 7.
3. Turn the notebook over so the bottom is facing up.
4. Remove the main and optional secondary batteries by following the instructions in "Removing the batteries" on page 8.
5. If the notebook has IEEE 802.11 wireless networking built in, remove the IEEE 802.11 Mini PCI module by following the instructions in "Replacing the IEEE 802.11 Mini PCI card" on page 15.
6. Turn the notebook over so the top is facing up.

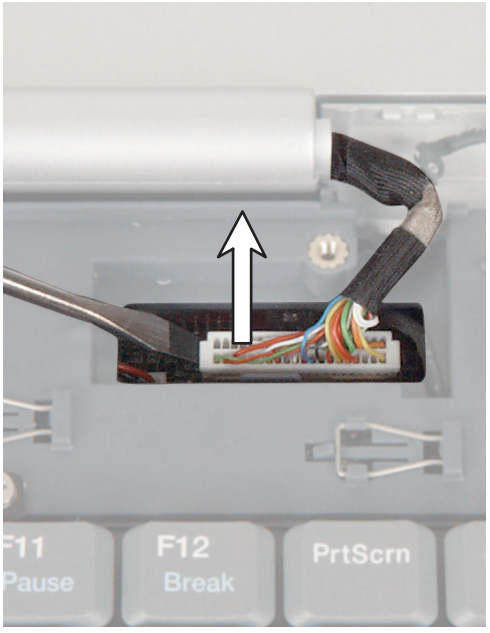
7 Remove the keyboard cover by following the instructions in "Replacing the keyboard cover" on page 28.

8 Remove the hinge covers by following the instructions in "Replacing the hinge covers" on page 37.

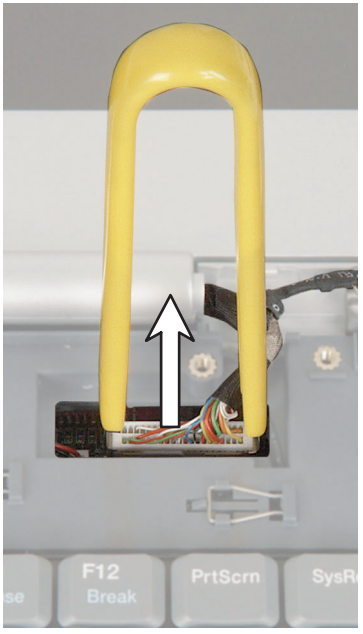
9 Use a flat-blade screwdriver or chip puller to carefully unplug the LCD video cable from the notebook. Make sure you grasp the connector, not the cable.

Warning

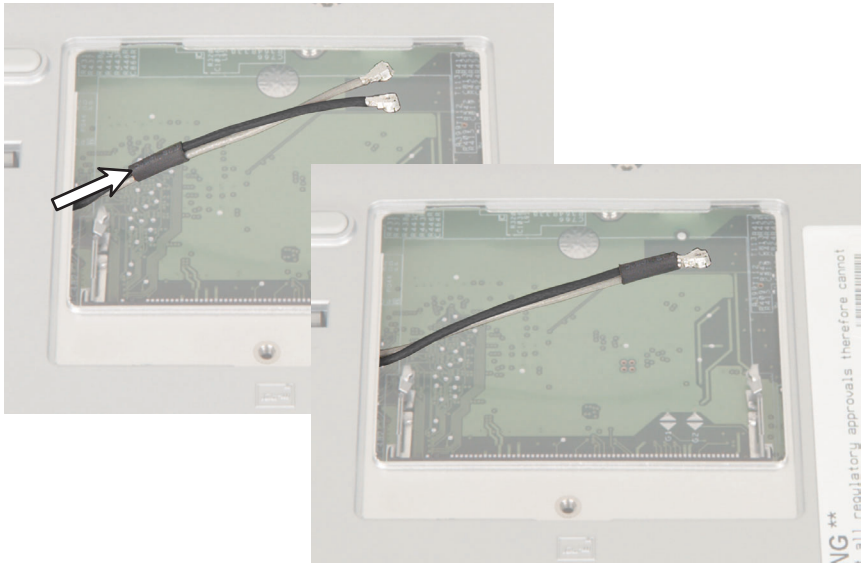
The connector is fragile. When using a flat-blade screwdriver to remove the connector, pry up one side slightly, then pry up the other side slightly. Continue alternating from side-to-side until the connector comes loose.

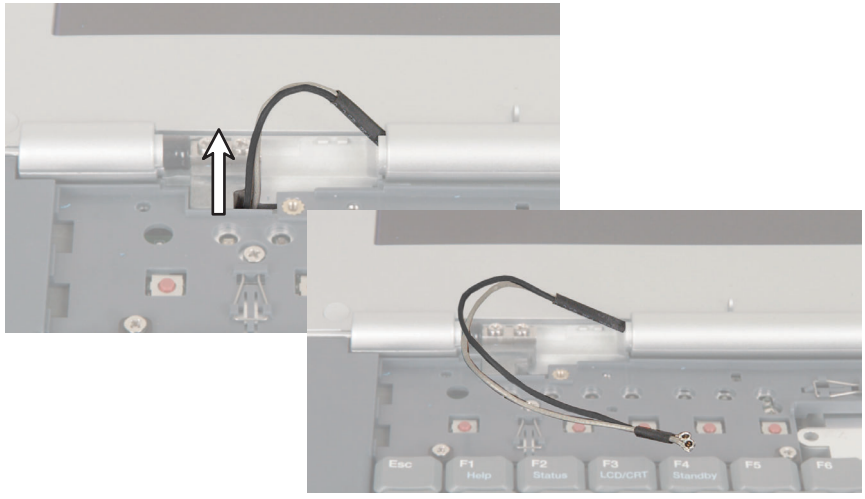


- OR -



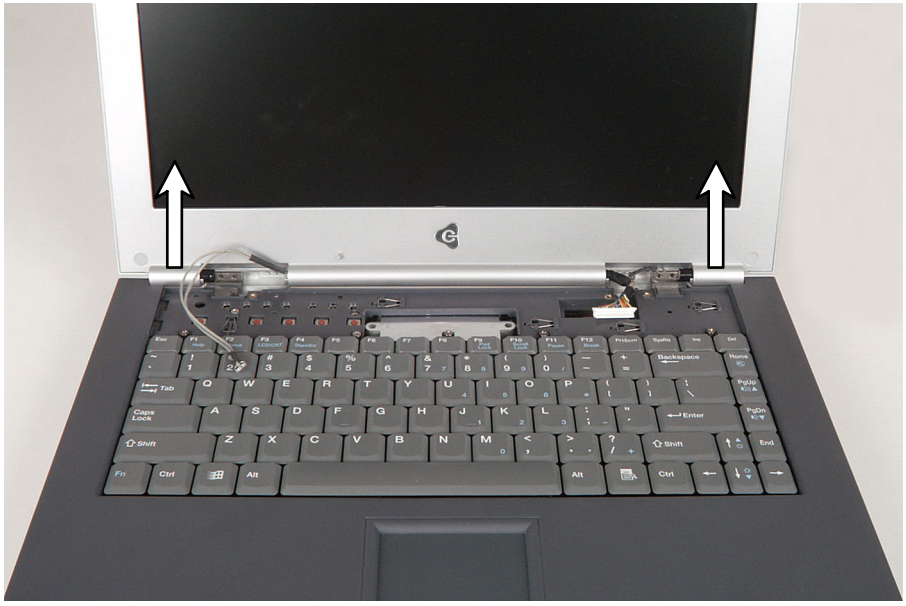
10 If the notebook has IEEE 802.11 wireless networking built in, carefully pull the detached IEEE 802.11 antenna cables through the opening near the left hinge. To prevent the antenna cables from snagging on other components, keep the antenna connectors close together by moving the cable wrap close to the connectors.



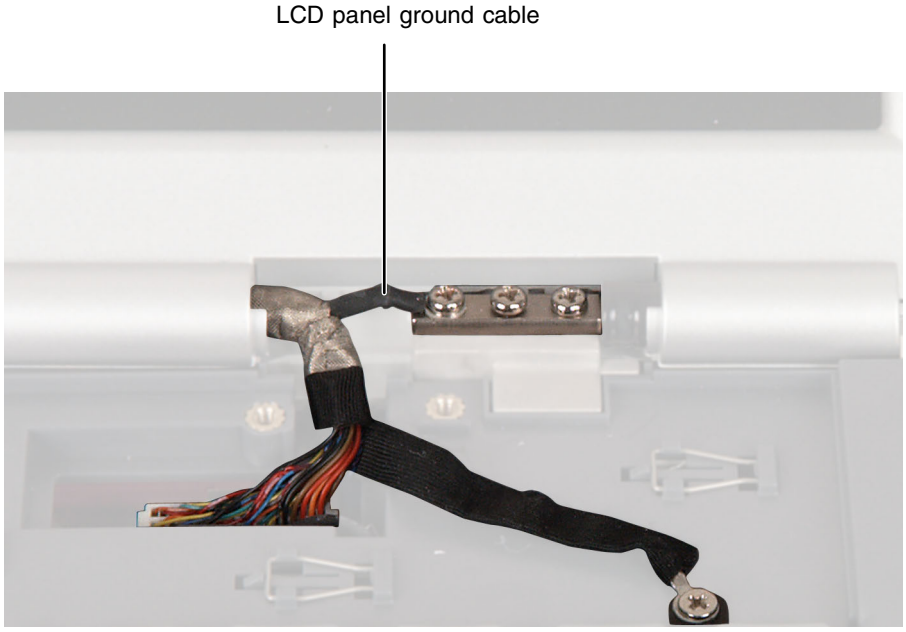


11 Remove the four (or six, depending on screen size) hinge screws. There is an LCD panel ground cable attached to a screw on the right hinge. Make sure that this cable is free before continuing.

12 Move the LCD panel upright, then lift it from the notebook. The LCD panel assembly is now completely detached from the notebook.

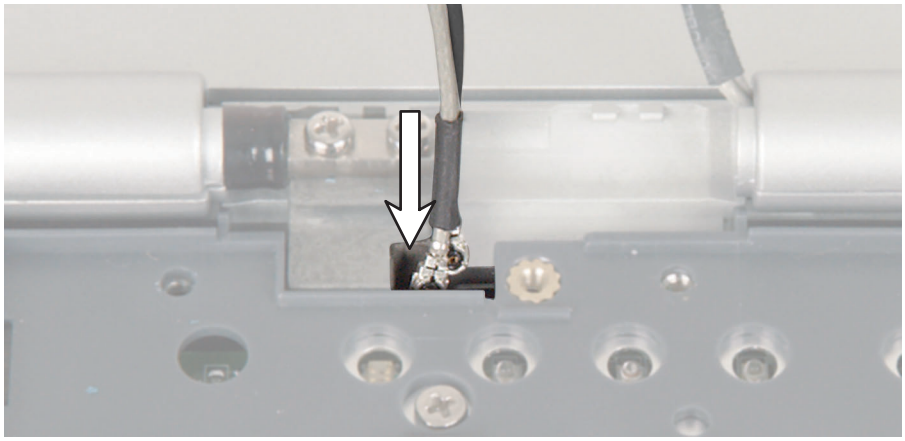


13 Place the new LCD panel assembly onto the notebook, then replace the four (or six, depending on screen size) hinge screws. Make sure that you connect the LCD panel's ground cable to the left screw of the right hinge.

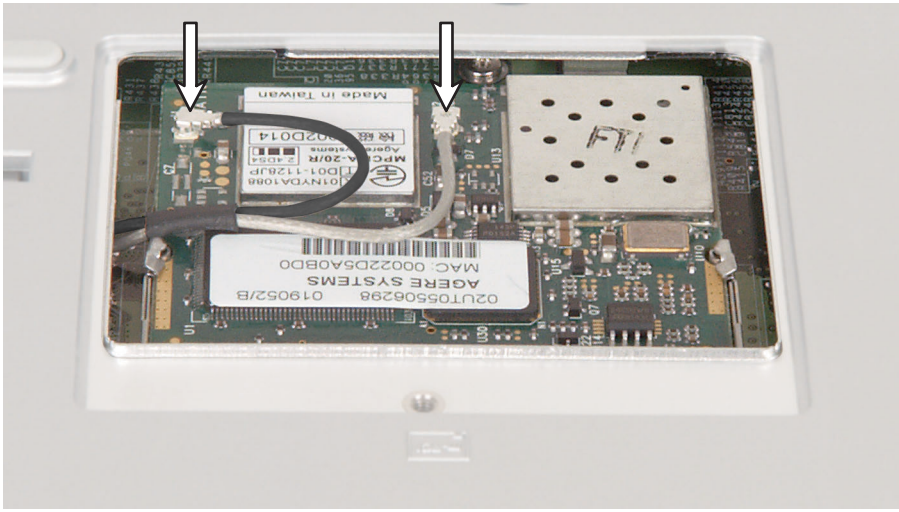


14 Plug the LCD video cable into the notebook.

15 If the notebook has IEEE 802.11 built in, carefully thread the antenna cables through the opening near the left hinge until they protrude into the Mini PCI bay. To prevent the antenna cables from snagging on other components, move the cable wrap close to the connectors.



16 If the notebook has IEEE 802.11 built in, slide the cable wrap down about two inches from the connectors to allow the connectors to widely separate.



17 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.

18 Reassemble the notebook.

Caution

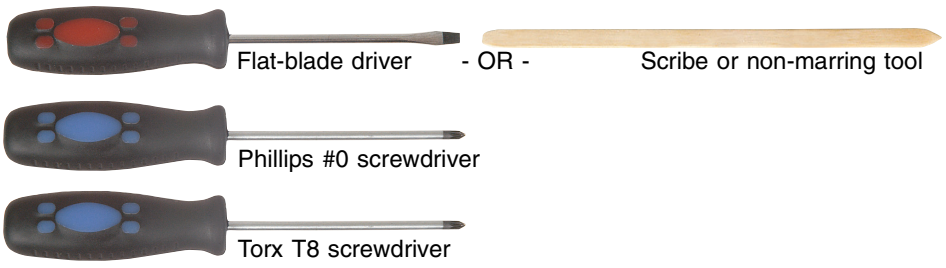
Legal requirements dictate that a security screw (or other means) be used to attach the mini-PCI cover to the chassis in a manner that restricts end user access. End users are strictly prohibited from having access to the wireless card. Due to manufacturing process changes, Gateway 600YG2 notebooks manufactured after August 7, 2003 require a Torx head security screw to attach the mini-PCI cover.

Caution

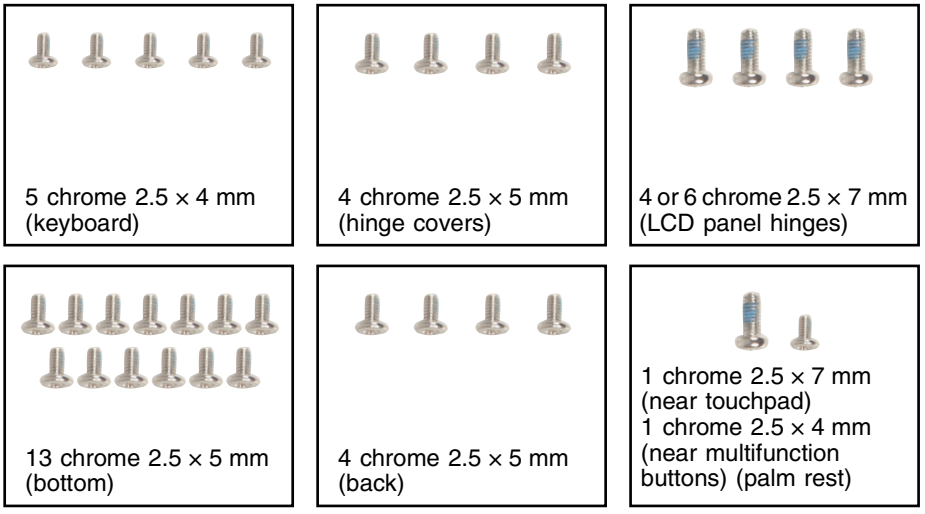
Legal requirements dictate the mini-PCI cover be in place during any and all operation of the notebook's wireless feature.

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 notebook by following the instructions in "Preparing your work space" on page 4.
2. Disconnect the notebook from the optional port replicator by following the instructions in "Disconnecting from the port replicator" on page 7.
3. Turn the notebook over so the bottom is facing up.

4 Remove the main and optional secondary batteries by following the instructions in "Removing the batteries" on page 8.

5 If the notebook has IEEE 802.11 wireless networking built in, remove the IEEE 802.11 Mini PCI module by following the instructions in "Replacing the IEEE 802.11 Mini PCI card" on page 15.

6 Turn the notebook over so the top is facing up.

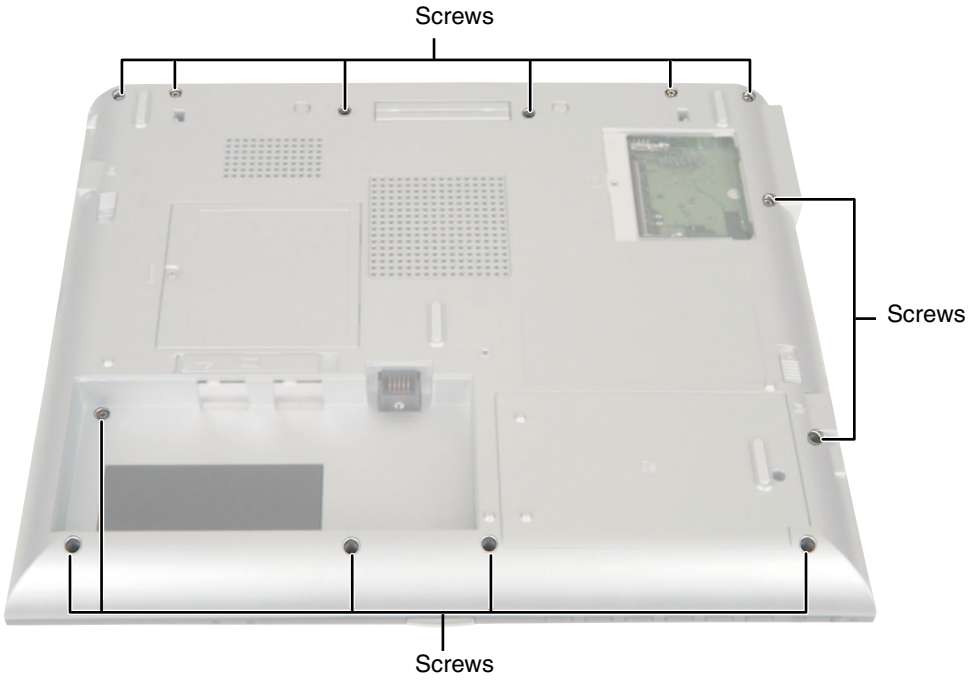
7 Remove the keyboard cover by following the instructions in "Replacing the keyboard cover" on page 28.

8 Remove the keyboard by following the instructions in "Replacing the keyboard" on page 31.

9 Remove the hinge covers by following the instructions in "Replacing the hinge covers" on page 37.

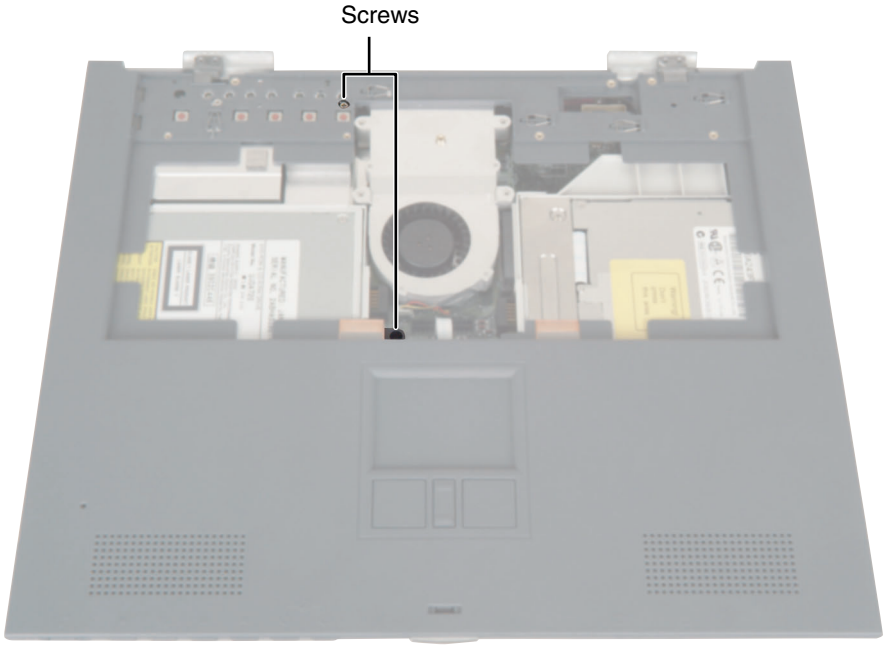
10 Remove the LCD panel by following the instructions in "Replacing the LCD panel assembly" on page 39.

11 Turn the notebook over, then remove the thirteen screws on the bottom of the notebook. Make sure that you remove the screw inside the battery bay.

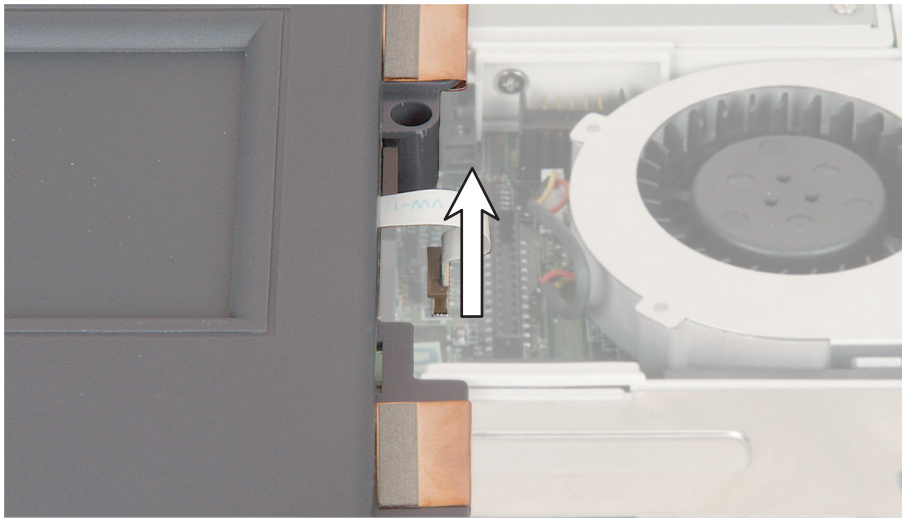


12 Turn the notebook over, then remove the four screws on the back of the notebook.

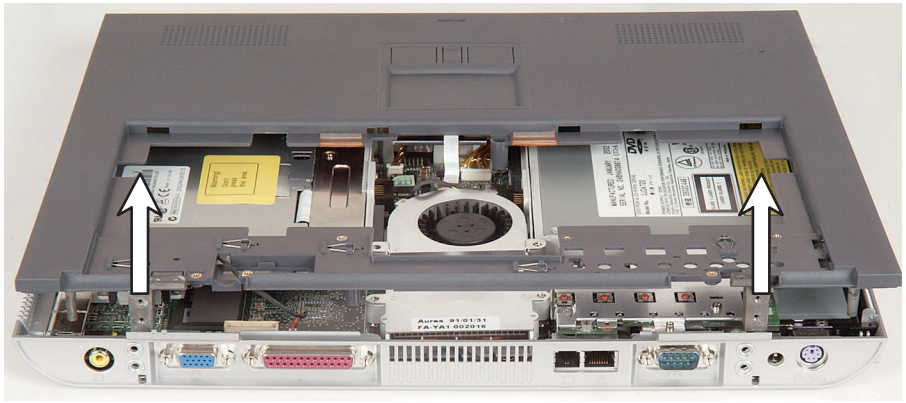
13 Remove the screw above the touchpad and the screw next to the multi-function button contacts.



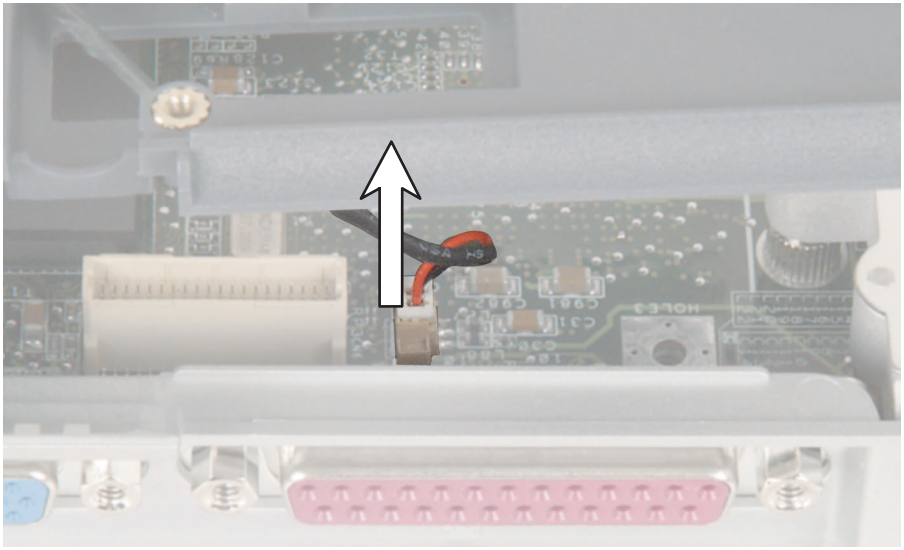
14 Use two fingers to carefully pull up on the touchpad connector tabs. After the connector is in the raised position, carefully pull the cable out of the connector.



15 Turn the notebook around so you are facing the back of the notebook, then pry the palm rest assembly up about two inches from the notebook.



16 While holding the palm rest assembly up, unplug the fan cable. Make sure that you unplug the connector by grasping the connector, not the cable.



17 Lift the palm rest assembly completely from the notebook.

18 Plug the new palm rest assembly's fan cable into the notebook, then place the new palm rest onto the notebook.

19 Replace the palm rest screws. The shortest screw should be used near the multi-function button contacts, and the longest screw should be used near the touchpad.

20 Replace the back and the bottom screws.

21 Pull up on the touchpad connector tabs to verify the connector is in the raised position.

22 Slide the end of the touchpad cable into the touchpad connector.

Important

The touchpad cable should slide easily into the touchpad connector. The cable is oriented correctly if it is not twisted.

23 Use two fingers to press down on the touchpad connector tabs. This locks the touchpad cable into the touchpad connector.

24 Reassemble the notebook.

Caution

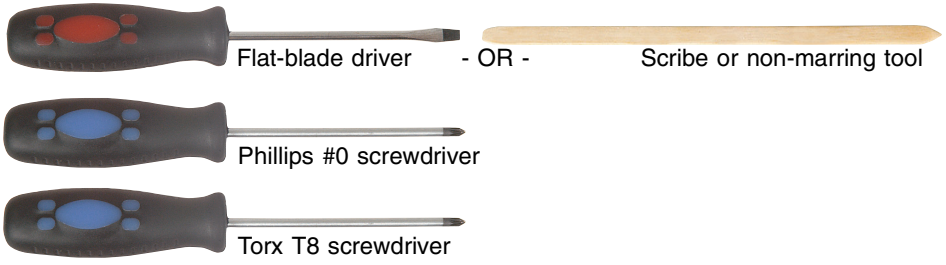
Legal requirements dictate that a security screw (or other means) be used to attach the mini-PCI cover to the chassis in a manner that restricts end user access. End users are strictly prohibited from having access to the wireless card. Due to manufacturing process changes, Gateway 600YG2 notebooks manufactured after August 7, 2003 require a Torx head security screw to attach the mini-PCI cover.

Caution

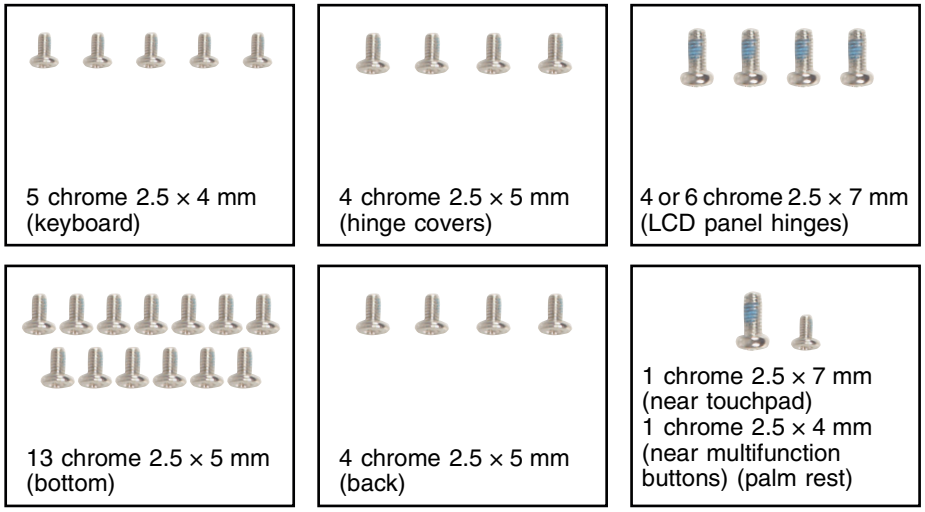
Legal requirements dictate the mini-PCI cover be in place during any and all operation of the notebook's wireless feature.

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 notebook by following the instructions in "Preparing your work space" on page 4.
2. Disconnect the notebook from the optional port replicator by following the instructions in "Disconnecting from the port replicator" on page 7.
3. Turn the notebook over so the bottom is facing up.

4 Remove the main and optional secondary batteries by following the instructions in “Removing the batteries” on page 8.

5 If the notebook has IEEE 802.11 wireless networking built in, remove the IEEE 802.11 Mini PCI module by following the instructions in “Replacing the IEEE 802.11 Mini PCI card” on page 15.

6 Turn the notebook over so the top is facing up.

7 Remove the keyboard cover by following the instructions in “Replacing the keyboard cover” on page 28.

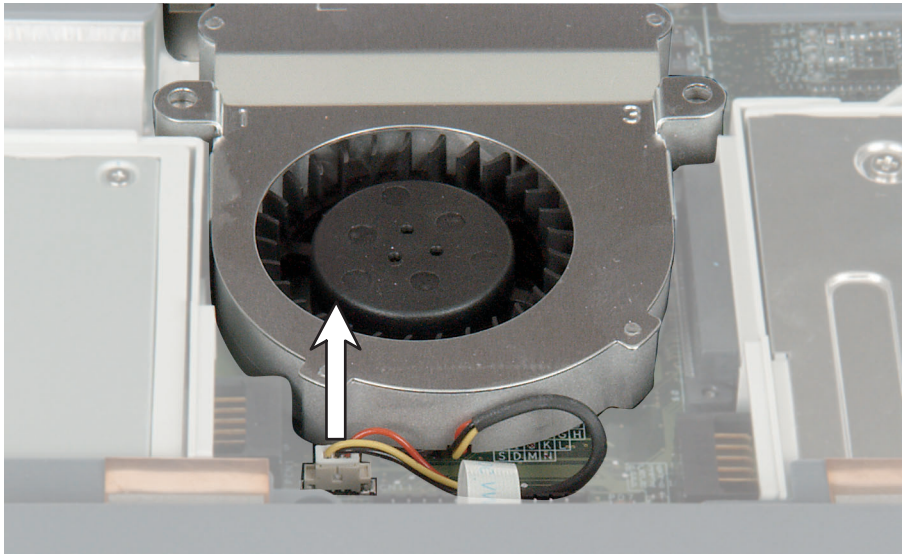
8 Remove the keyboard by following the instructions in “Replacing the keyboard” on page 31.

9 Remove the hinge covers by following the instructions in “Replacing the hinge covers” on page 37.

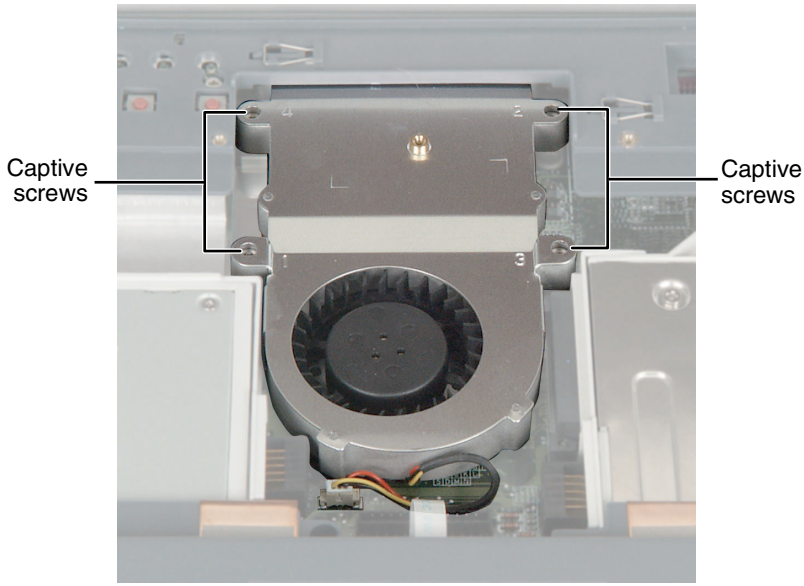
10 Remove the LCD panel by following the instructions in “Replacing the LCD panel assembly” on page 39.

11 Remove the palm rest assembly by following the instructions in “Replacing the palm rest assembly” on page 46.

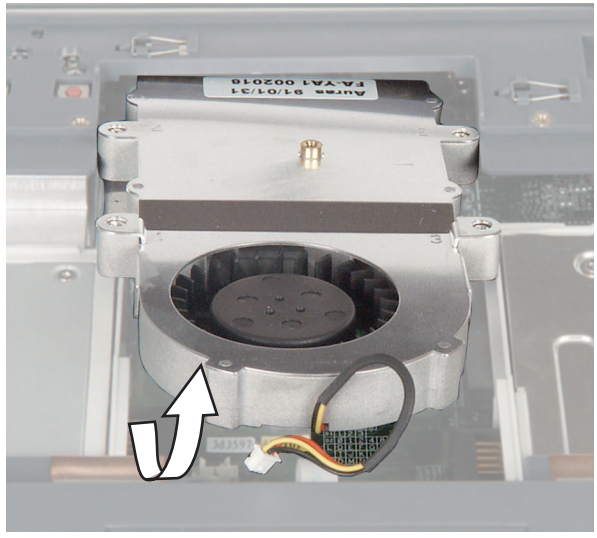
12 Unplug the cooling fan.



13 Loosen the four captive screws that secure the cooling assembly to the notebook. (These screws cannot be removed.)



14 Lift the cooling assembly out the notebook.



15 Insert the new cooling assembly into the notebook, then tighten the four captive screws. Make sure that you tighten the screws in numerical order. Each screw hole has a numeral next to it.

Warning

When tightening the cooling assembly's chrome screws into the numbered holes, tighten them **in numerical order**.

16 Plug in the cooling fan.

17 Reassemble the notebook.

Caution

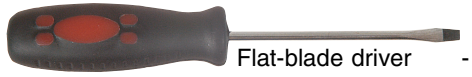
Legal requirements dictate that a security screw (or other means) be used to attach the mini-PCI cover to the chassis in a manner that restricts end user access. End users are strictly prohibited from having access to the wireless card. Due to manufacturing process changes, Gateway 600YG2 notebooks manufactured after August 7, 2003 require a Torx head security screw to attach the mini-PCI cover.

Caution

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

Replacing the LED indicator panel

Tools you need to complete this task:



Flat-blade driver - OR - Scribe or non-marring tool

Phillips #0 screwdriver

Torx T8 screwdriver

Screws removed during this task:

5 chrome 2.5 × 4 mm (keyboard)

4 chrome 2.5 × 5 mm (hinge covers)

4 or 6 chrome 2.5 × 7 mm (LCD panel hinges)

13 chrome 2.5 × 5 mm (bottom)

4 chrome 2.5 × 5 mm (back)

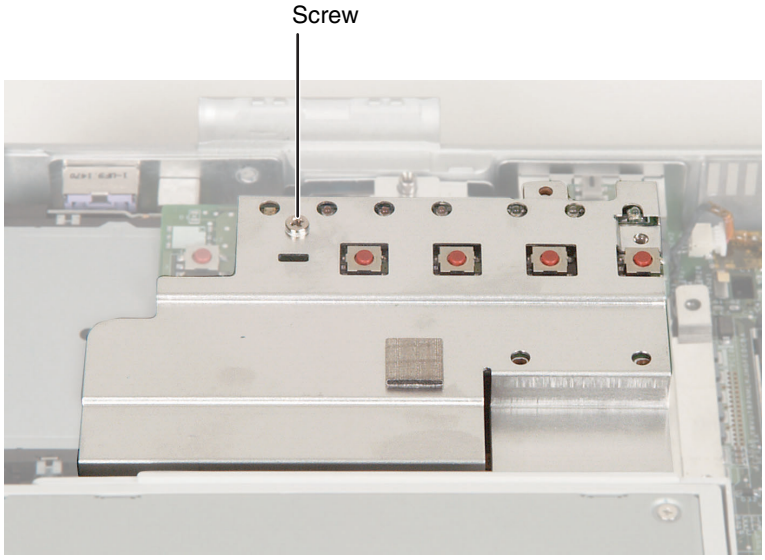
1 chrome 2.5 × 7 mm (near touchpad)
1 chrome 2.5 × 4 mm (near multifunction buttons) (palm rest)

1 chrome 2.5 × 4 mm (LED indicator panel)

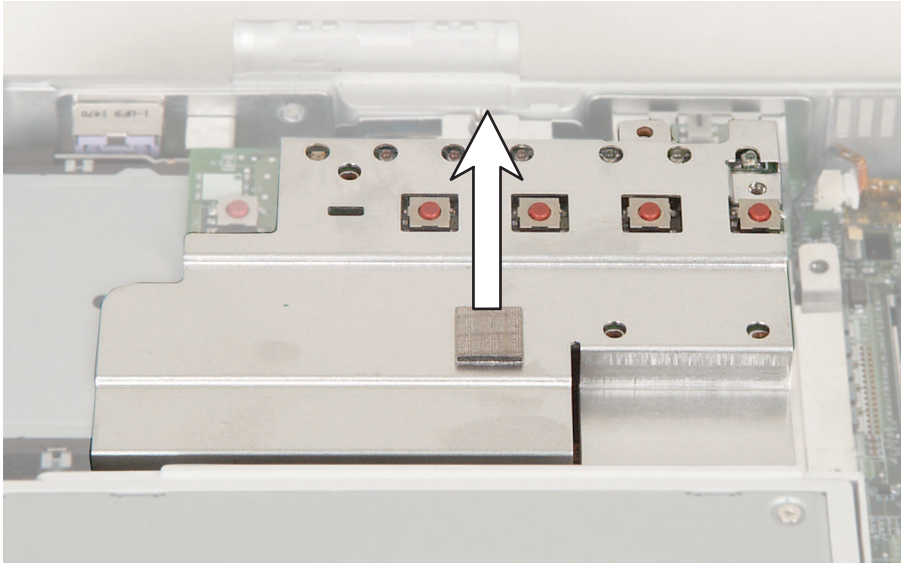
To replace the cooling assembly:

1. Disconnect the AC adapter and modem and network cables and prepare the notebook by following the instructions in "Preparing your work space" on page 4.
2. Disconnect the notebook from the optional port replicator by following the instructions in "Disconnecting from the port replicator" on page 7.
3. Turn the notebook over so the bottom is facing up.
4. Remove the main and optional secondary batteries by following the instructions in "Removing the batteries" on page 8.
5. If the notebook has IEEE 802.11 wireless networking built in, remove the IEEE 802.11 Mini PCI module by following the instructions in "Replacing the IEEE 802.11 Mini PCI card" on page 15.
6. Turn the notebook over so the top is facing up.
7. Remove the keyboard cover by following the instructions in "Replacing the keyboard cover" on page 28.
8. Remove the keyboard by following the instructions in "Replacing the keyboard" on page 31.
9. Remove the hinge covers by following the instructions in "Replacing the hinge covers" on page 37.
10. Remove the LCD panel by following the instructions in "Replacing the LCD panel assembly" on page 39.
11. Remove the palm rest assembly by following the instructions in "Replacing the palm rest assembly" on page 46.

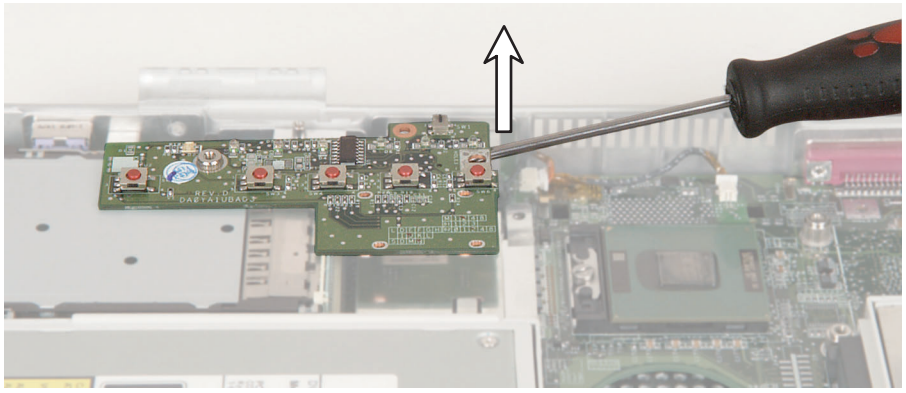
12 Remove the single screw that secures the LED indicator panel shield to the notebook.



13 Lift the shielding away from the indicator panel.



14 Insert the small flat-blade screwdriver or non-marring tool under the right side of the indicator panel and gently pry it up about ¼ inch, then lift the entire panel from the notebook.



15 Align the new indicator panel's screw hole with the hole on the notebook, then press the panel into place.

16 Replace the indicator panel's shielding, then replace the screw.

17 Reassemble the notebook.

Caution

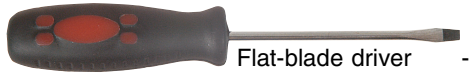
Legal requirements dictate that a security screw (or other means) be used to attach the mini-PCI cover to the chassis in a manner that restricts end user access. End users are strictly prohibited from having access to the wireless card. Due to manufacturing process changes, Gateway 600YG2 notebooks manufactured after August 7, 2003 require a Torx head security screw to attach the mini-PCI cover.

Caution

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

Replacing the speakers

Tools you need to complete this task:



Flat-blade driver - OR - Scribe or non-marring tool

Phillips #0 screwdriver

Torx T8 screwdriver

Screws removed during this task:

5 chrome 2.5 × 4 mm (keyboard)

4 chrome 2.5 × 5 mm (hinge covers)

4 or 6 chrome 2.5 × 7 mm (LCD panel hinges)

13 chrome 2.5 × 5 mm (bottom)

4 chrome 2.5 × 5 mm (back)

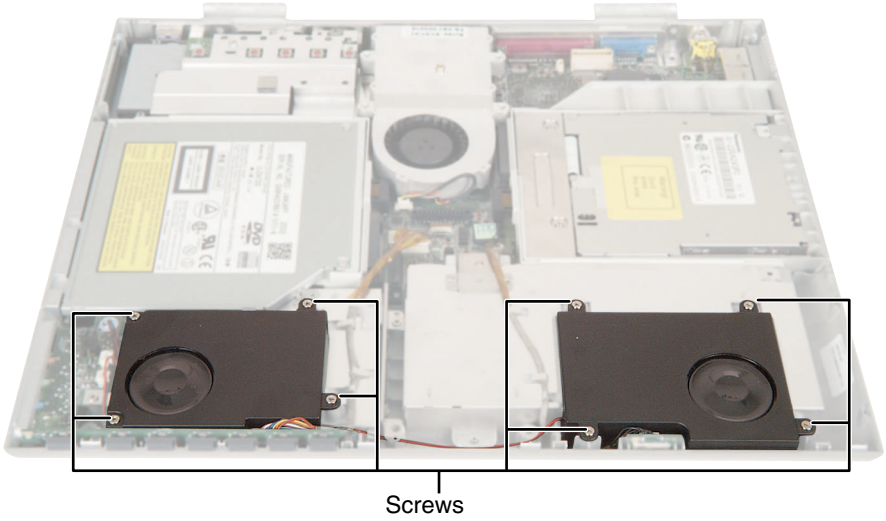
1 chrome 2.5 × 7 mm (near touchpad)
1 chrome 2.5 × 4 mm (near multifunction buttons) (palm rest)

8 chrome 2.5 × 4 mm (speakers)

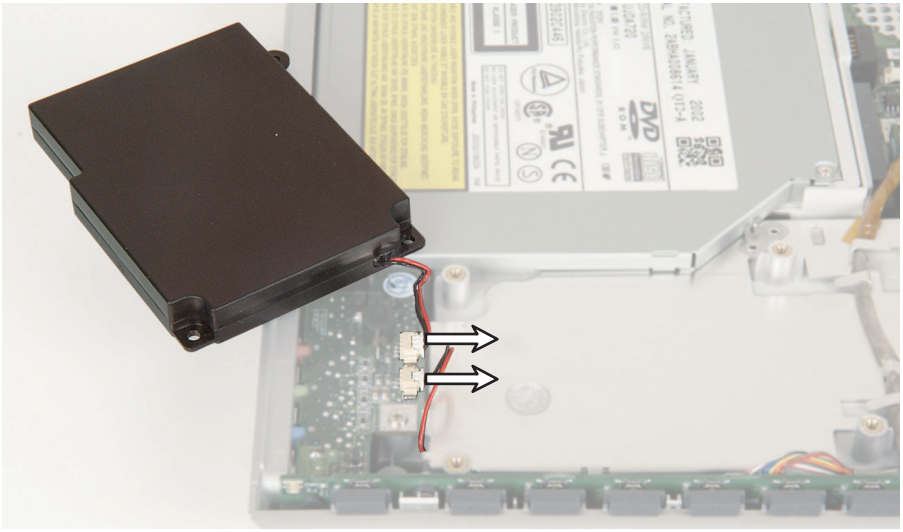
To replace the speakers:

1. Disconnect the AC adapter and modem and network cables and prepare the notebook by following the instructions in "Preparing your work space" on page 4.
2. Disconnect the notebook from the optional port replicator by following the instructions in "Disconnecting from the port replicator" on page 7.
3. Turn the notebook over so the bottom is facing up.
4. Remove the main and optional secondary batteries by following the instructions in "Removing the batteries" on page 8.
5. If the notebook has IEEE 802.11 wireless networking built in, remove the IEEE 802.11 Mini PCI module by following the instructions in "Replacing the IEEE 802.11 Mini PCI card" on page 15.
6. Turn the notebook over so the top is facing up.
7. Remove the keyboard cover by following the instructions in "Replacing the keyboard cover" on page 28.
8. Remove the keyboard by following the instructions in "Replacing the keyboard" on page 31.
9. Remove the hinge covers by following the instructions in "Replacing the hinge covers" on page 37.
10. Remove the LCD panel by following the instructions in "Replacing the LCD panel assembly" on page 39.
11. Remove the palm rest assembly by following the instructions in "Replacing the palm rest assembly" on page 46.

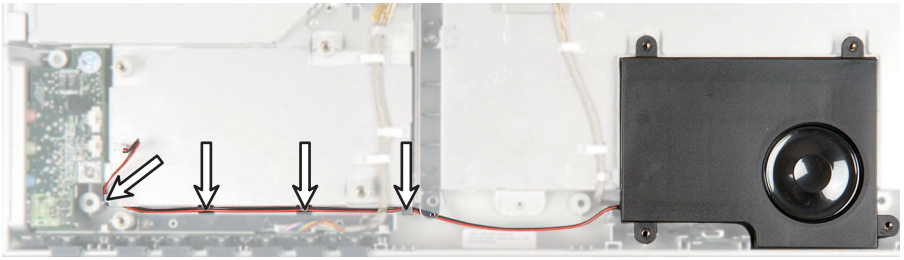
12 Remove the eight screws that secure the speakers to the notebook.



13 Move the left speaker out of the way, then unplug the connector for each speaker.



14 Use a flat-blade screwdriver or non-marring tool to carefully pry open the metal tabs that secure the wires for the right speaker, then completely remove both speakers.



15 Lay the new left speaker near the audio board and align the new right speaker over its screw holes on the notebook. The left speaker is the speaker with the shortest wires.

16 Plug in the connector for each speaker. The left speaker should be attached to the connector furthest from you.

17 Carefully thread the wires for the right speaker under the metal tabs, then press the tabs back down to secure the wires.

18 Replace the eight screws that secure the speakers to the notebook.

19 Reassemble the notebook.

Caution

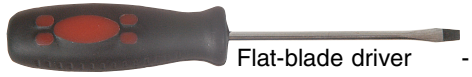
Legal requirements dictate that a security screw (or other means) be used to attach the mini-PCI cover to the chassis in a manner that restricts end user access. End users are strictly prohibited from having access to the wireless card. Due to manufacturing process changes, Gateway 600YG2 notebooks manufactured after August 7, 2003 require a Torx head security screw to attach the mini-PCI cover.

Caution

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

Replacing the audio board

Tools you need to complete this task:


Flat-blade driver

- OR -

Scribe or non-marring tool

Phillips #0 screwdriver

Torx T8 screwdriver

Screws removed during this task:

5 chrome 2.5 × 4 mm (keyboard)

4 chrome 2.5 × 5 mm (hinge covers)

4 or 6 chrome 2.5 × 7 mm (LCD panel hinges)

13 chrome 2.5 × 5 mm (bottom)

4 chrome 2.5 × 5 mm (back)

1 chrome 2.5 × 7 mm (near touchpad)
1 chrome 2.5 × 4 mm (near multifunction buttons) (palm rest)

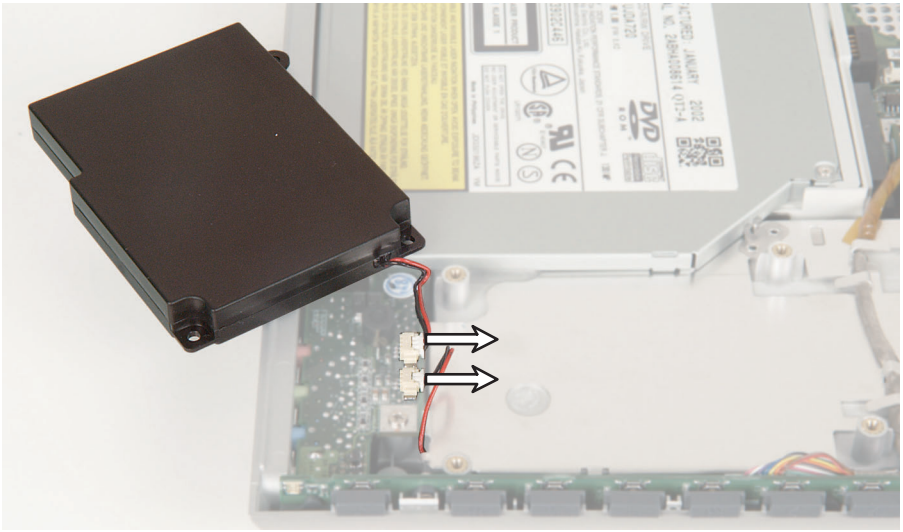
4 chrome 2.5 × 4 mm (left speaker)

1 chrome 2.5 × 4 mm (audio board)

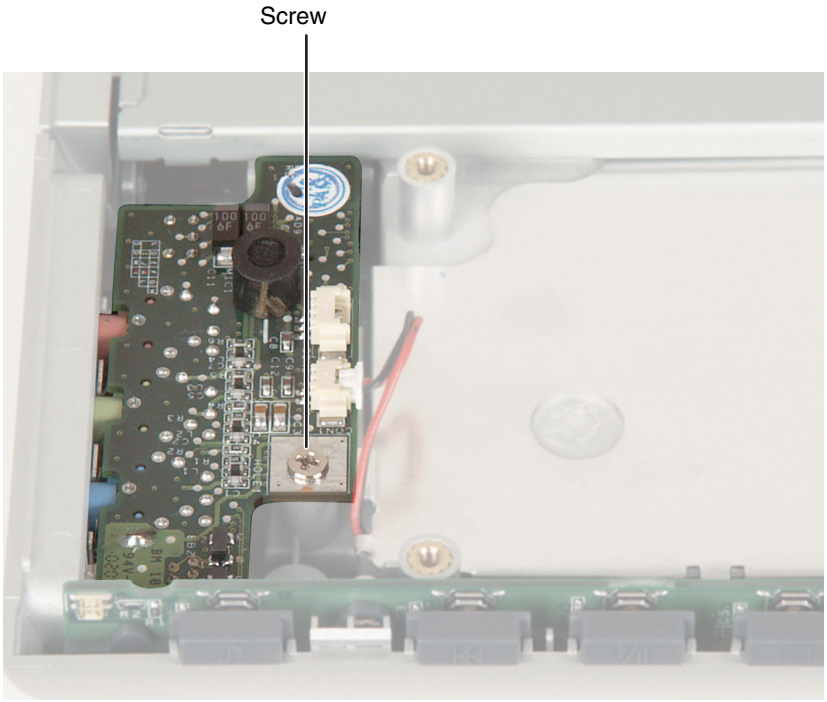
To replace the audio board:

1. Disconnect the AC adapter and modem and network cables and prepare the notebook by following the instructions in "Preparing your work space" on page 4.
2. Disconnect the notebook from the optional port replicator by following the instructions in "Disconnecting from the port replicator" on page 7.
3. Turn the notebook over so the bottom is facing up.
4. Remove the main and optional secondary batteries by following the instructions in "Removing the batteries" on page 8.
5. If the notebook has IEEE 802.11 wireless networking built in, remove the IEEE 802.11 Mini PCI module by following the instructions in "Replacing the IEEE 802.11 Mini PCI card" on page 15.
6. Turn the notebook over so the top is facing up.
7. Remove the keyboard cover by following the instructions in "Replacing the keyboard cover" on page 28.
8. Remove the keyboard by following the instructions in "Replacing the keyboard" on page 31.
9. Remove the hinge covers by following the instructions in "Replacing the hinge covers" on page 37.
10. Remove the LCD panel by following the instructions in "Replacing the LCD panel assembly" on page 39.
11. Remove the palm rest assembly by following the instructions in "Replacing the palm rest assembly" on page 46.
12. Remove the **left** speaker by following the instructions in "Replacing the speakers" on page 61.

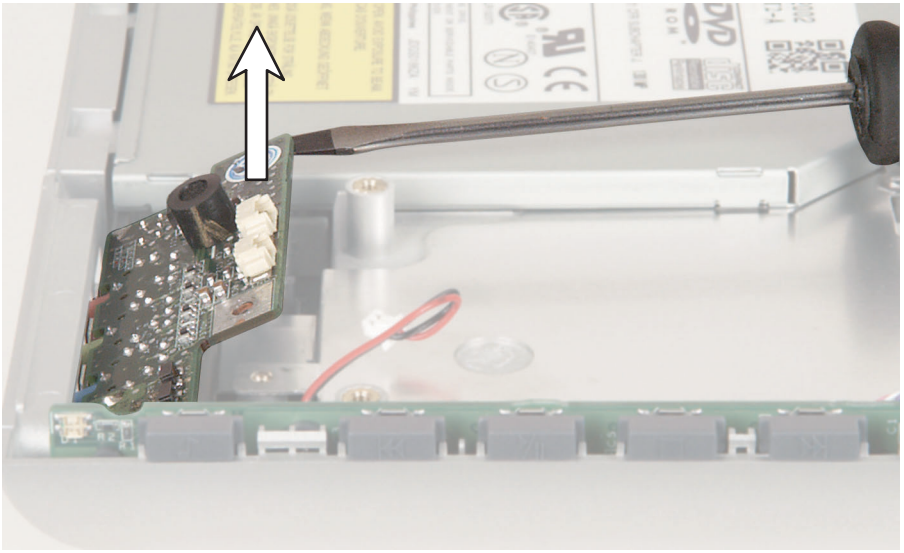
13 Unplug the speaker connectors for the left and right speakers.



14 Remove the single screw that secures the audio board to the notebook.



15 On the right side of the board where the connector is located, use a flat-blade screwdriver or non-marring tool to carefully pry the audio board up. Then lift the audio board completely out of the notebook.



16 Align the new audio board's screw hole with the hole on the notebook, then press the board into place.

17 Replace the screw.

18 Plug the connectors for each speaker into the audio board. The left speaker should be attached to the connector furthest from you.

19 Replace the four screws that secure the left speaker to the notebook.

20 Reassemble the notebook.

Caution

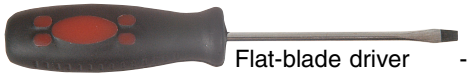
Legal requirements dictate that a security screw (or other means) be used to attach the mini-PCI cover to the chassis in a manner that restricts end user access. End users are strictly prohibited from having access to the wireless card. Due to manufacturing process changes, Gateway 600YG2 notebooks manufactured after August 7, 2003 require a Torx head security screw to attach the mini-PCI cover.

Caution

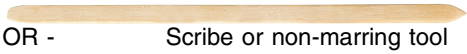
Legal requirements dictate the mini-PCI cover be in place during any and all operation of the notebook's wireless feature.

Replacing the modem or CMOS battery

Tools you need to complete this task:


Flat-blade driver

- OR -

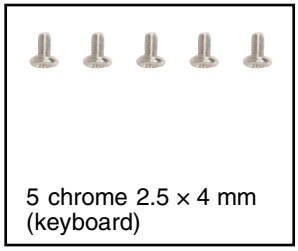

Scribe or non-marring tool

Phillips #0 screwdriver

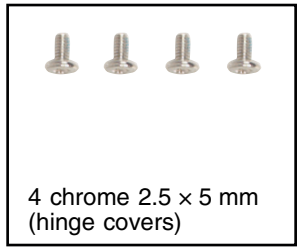
Torx T8 screwdriver

5.0 mm hex nutdriver

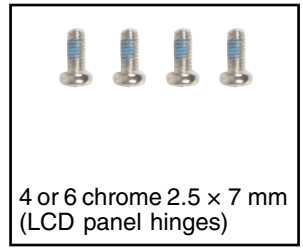
Screws removed during this task:



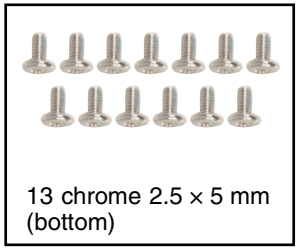
5 chrome 2.5 × 4 mm (keyboard)



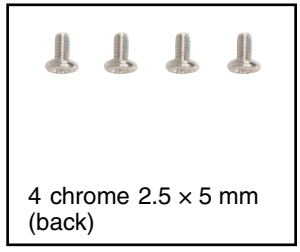
4 chrome 2.5 × 5 mm (hinge covers)



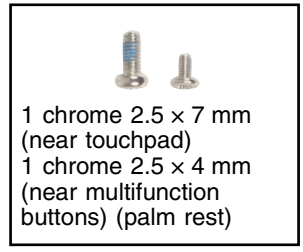
4 or 6 chrome 2.5 × 7 mm (LCD panel hinges)



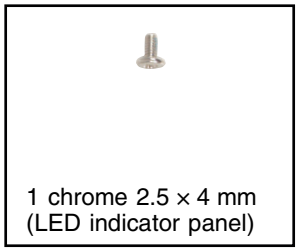
13 chrome 2.5 × 5 mm (bottom)



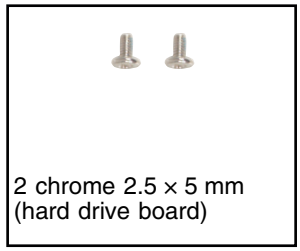
4 chrome 2.5 × 5 mm (back)



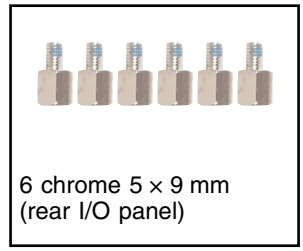
1 chrome 2.5 × 7 mm (near touchpad)
1 chrome 2.5 × 4 mm (near multifunction buttons) (palm rest)



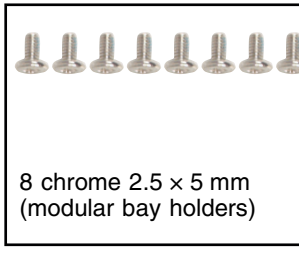
1 chrome 2.5 × 4 mm (LED indicator panel)



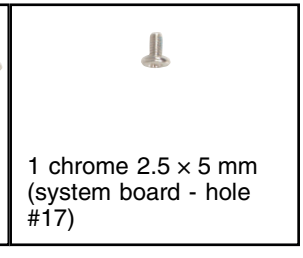
2 chrome 2.5 × 5 mm (hard drive board)



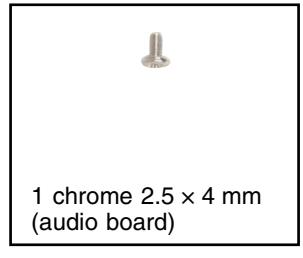
6 chrome 5 × 9 mm (rear I/O panel)



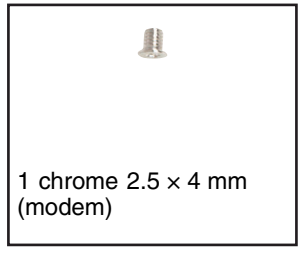
8 chrome 2.5 × 5 mm (modular bay holders)



1 chrome 2.5 × 5 mm (system board - hole #17)



1 chrome 2.5 × 4 mm (audio board)

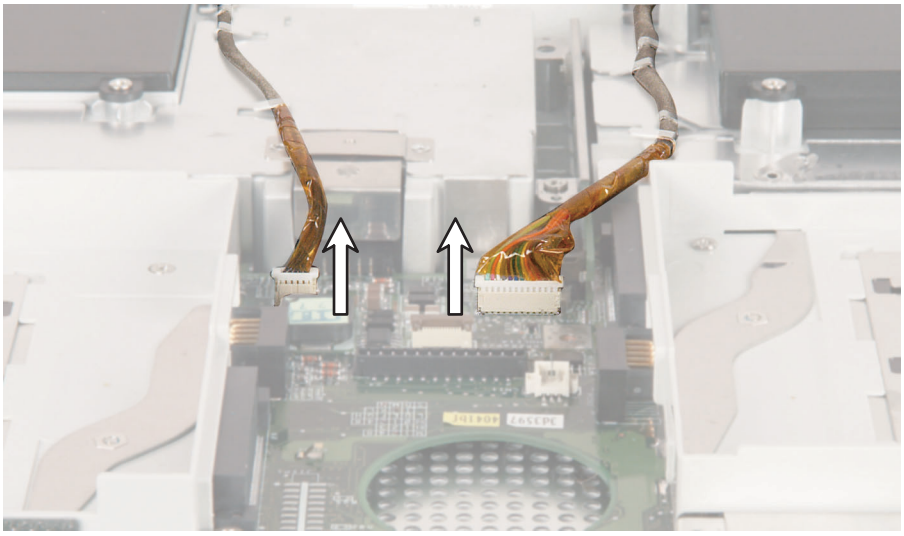


1 chrome 2.5 × 4 mm (modem)

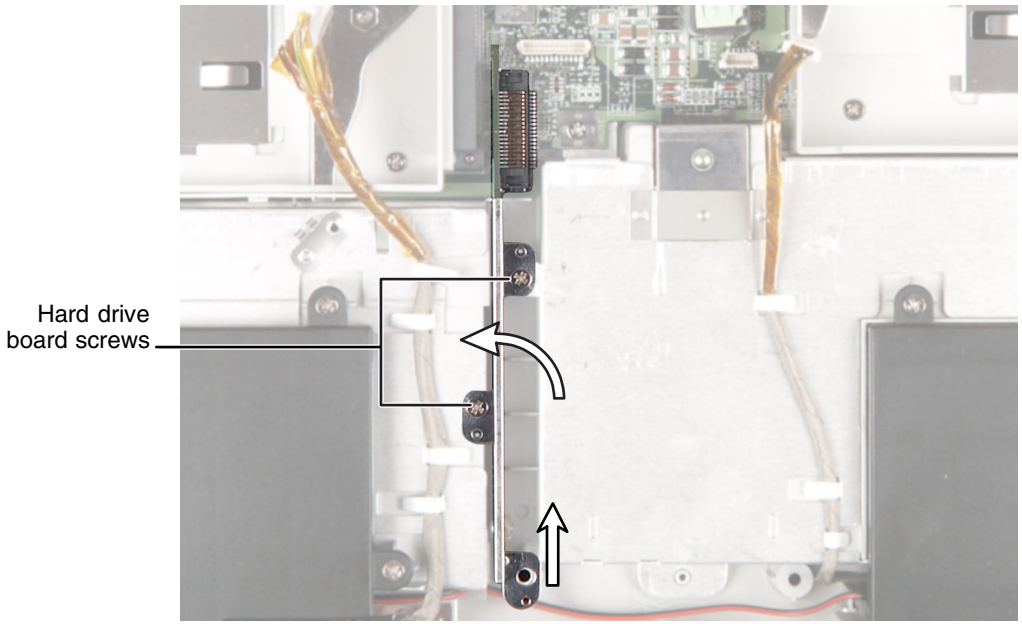
To replace the modem or CMOS battery:

1. Disconnect the AC adapter and modem and network cables and prepare the notebook by following the instructions in "Preparing your work space" on page 4.
2. Disconnect the notebook from the optional port replicator by following the instructions in "Disconnecting from the port replicator" on page 7.
3. Turn the notebook over so the bottom is facing up.
4. Remove the main and optional secondary batteries by following the instructions in "Removing the batteries" on page 8.
5. Remove the modular drives.
6. Remove the memory modules by following the instructions in "Adding or replacing memory modules" on page 11.
7. If the notebook has IEEE 802.11 wireless networking built in, remove the IEEE 802.11 Mini PCI module by following the instructions in "Replacing the IEEE 802.11 Mini PCI card" on page 15.
8. Remove the hard drive kit by following the instructions in "Replacing the hard drive kit" on page 21.
9. Turn the notebook over so the top is facing up.
10. Remove the keyboard cover by following the instructions in "Replacing the keyboard cover" on page 28.
11. Remove the keyboard by following the instructions in "Replacing the keyboard" on page 31.
12. Remove the hinge covers by following the instructions in "Replacing the hinge covers" on page 37.
13. Remove the LCD panel by following the instructions in "Replacing the LCD panel assembly" on page 39.
14. Remove the palm rest assembly by following the instructions in "Replacing the palm rest assembly" on page 46.
15. Remove the cooling assembly by following the instructions in "Replacing the cooling assembly" on page 53.
16. Remove the LED indicator panel by following the instructions in "Replacing the LED indicator panel" on page 57.

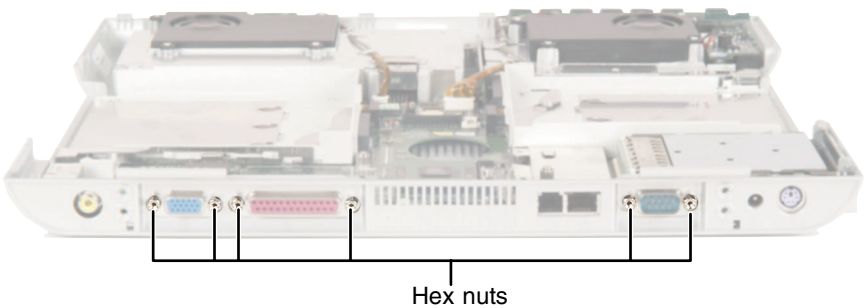
17 Unplug the speakers (one connector) and the front panel (Audio DJ) from the system board.



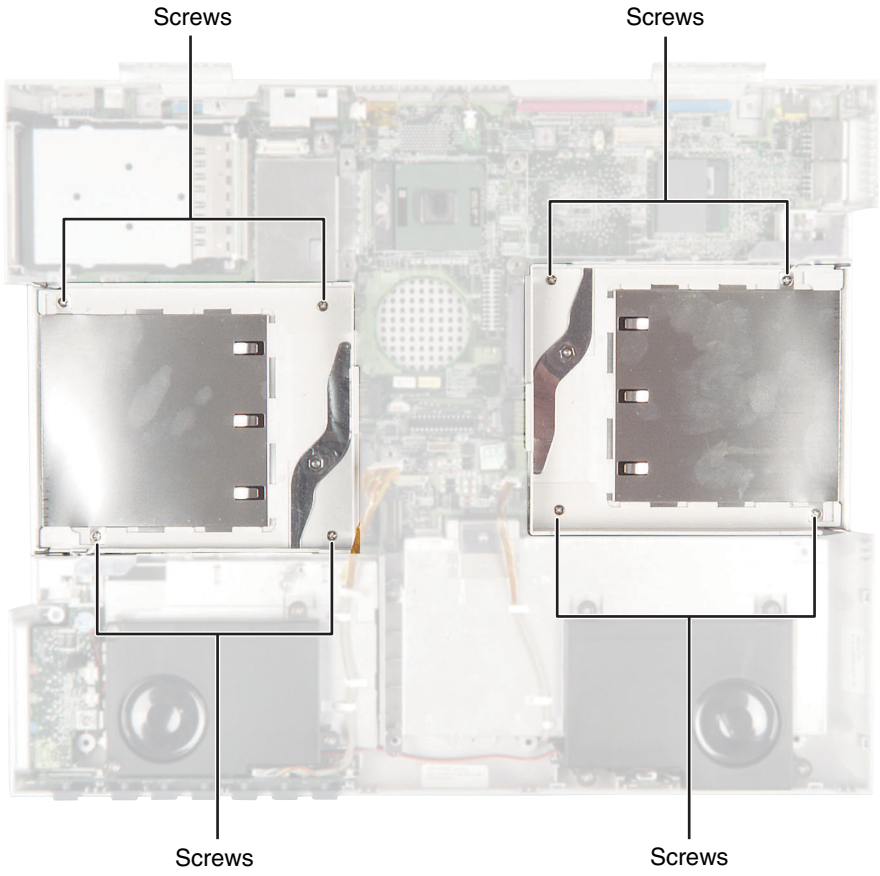
18 Remove the hard drive board screws, then remove the hard drive board by lifting it straight up and then rotating it to the left as you lift it past the hard drive connector.



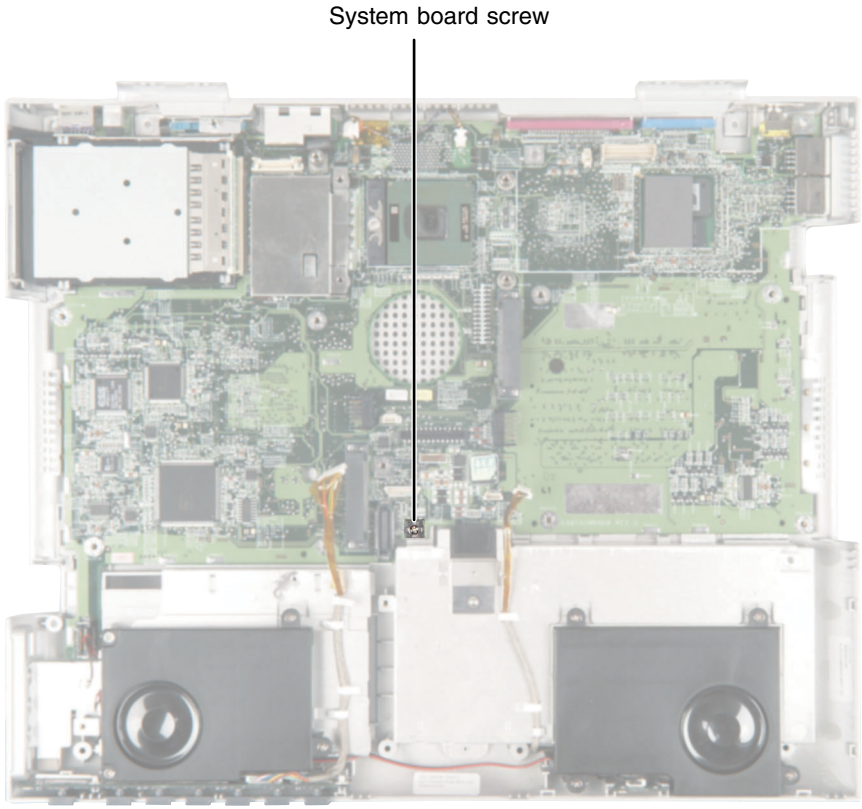
19 Remove the six hex nuts on the rear I/O panel.



20 Remove the eight modular bay holder screws, then remove the two modular bay holders.

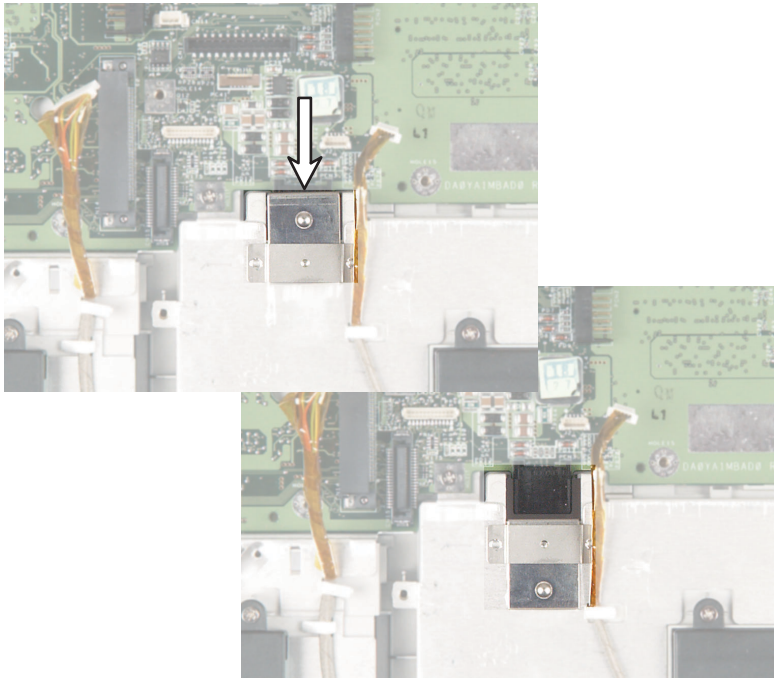


21 Remove the system board screw from system board hole #17.

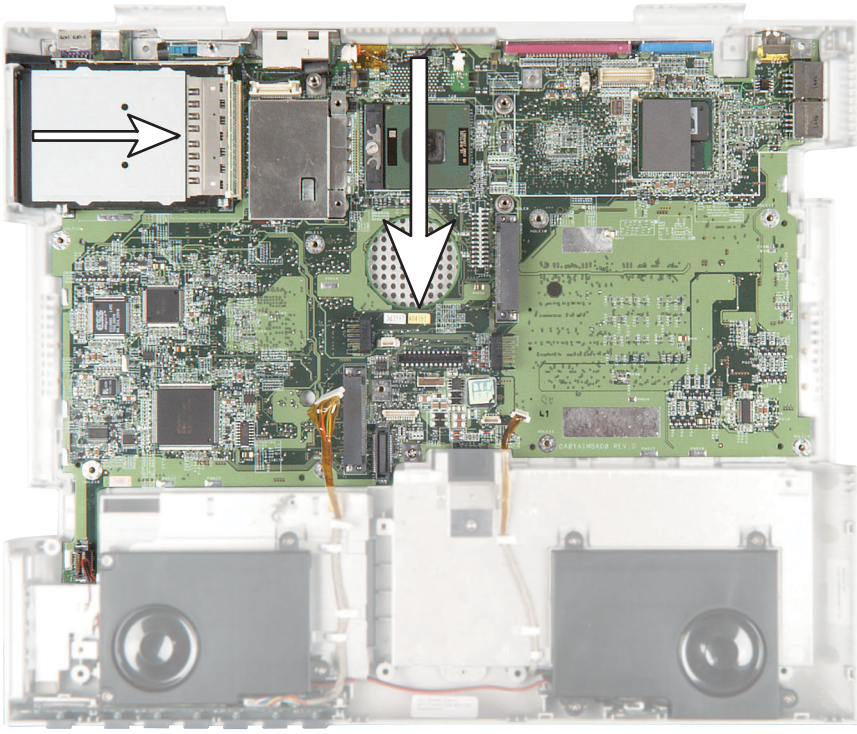


22 Remove the audio board by following the instructions in “Replacing the audio board” on page 65.

23 Slide the battery cover on the system board open.



24 While pushing in on the PC Card eject button, remove the system board. Make sure that the rear I/O panel clears the bottom of the chassis (shown by the top arrow) and the PC Card eject button clears the bottom of the chassis (shown by the left arrow).

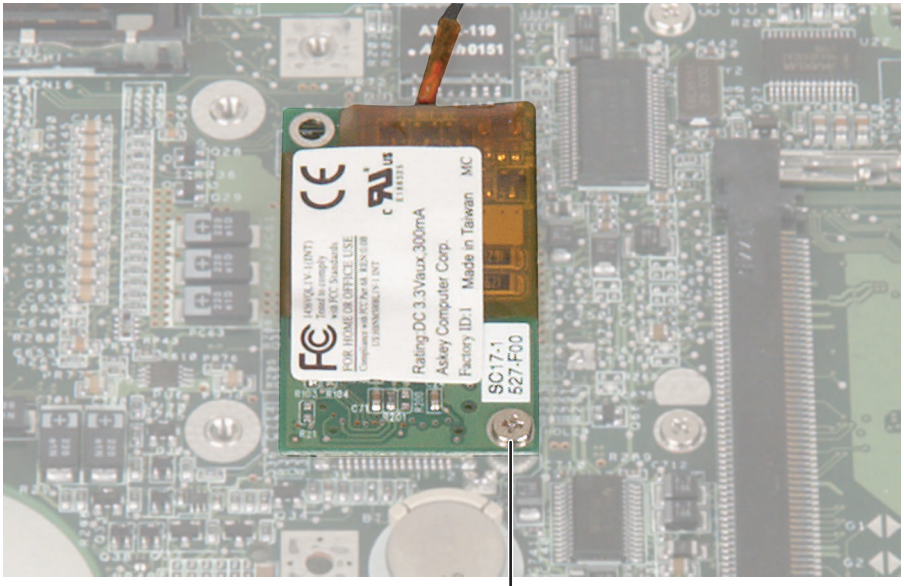


25 If you are replacing the modem on the existing system board, go to Step 26.

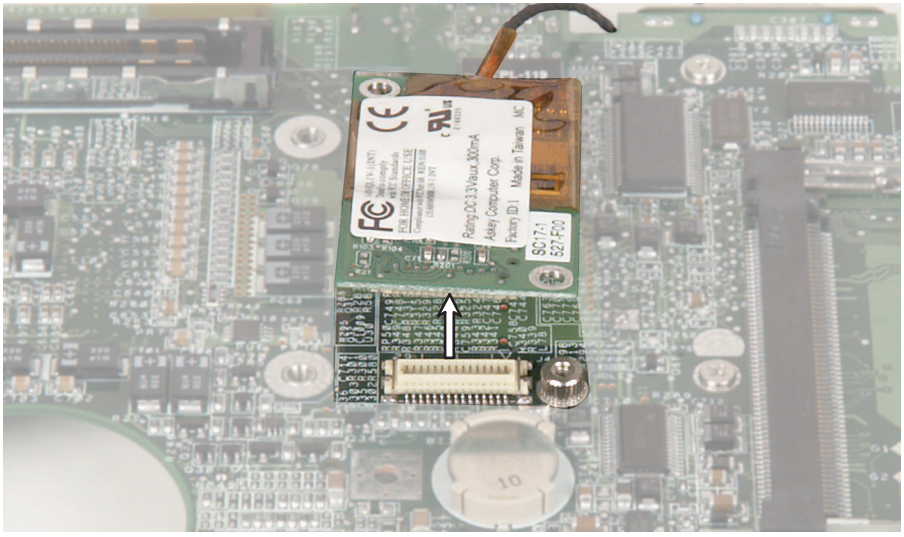
-OR-

If you are replacing the CMOS battery on the existing system board, go to Step 30.

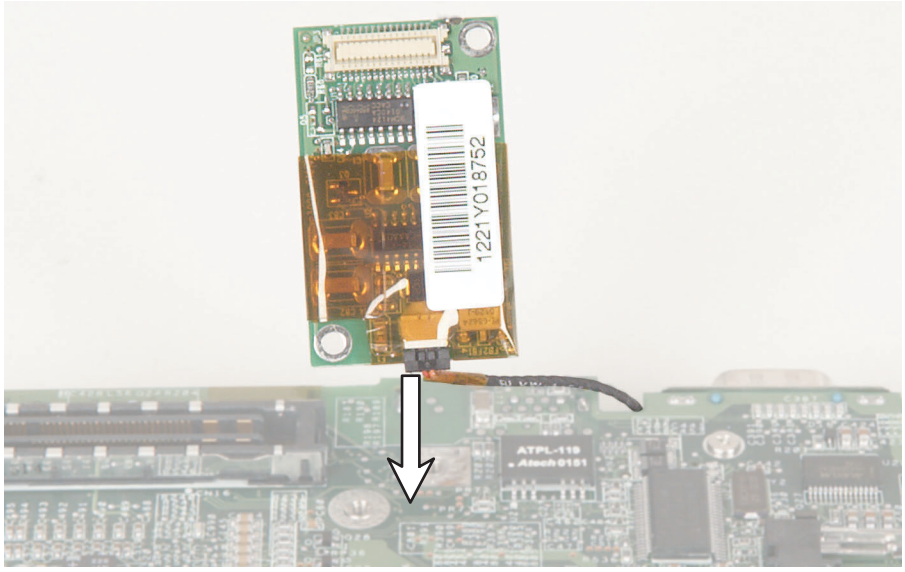
26 Turn the system board over and remove the screw that secures the modem to the system board.



27 Unplug the modem from the system board.



28 Unplug the modem cable from the modem.



29 Install the new modem into the system board and turn the board over. Go to step Step 33.

30 Turn the system board over and locate the old battery.

31 Insert the small flat-blade screwdriver or non-marring tool under the old battery and gently pry it up until it pops out of the socket.

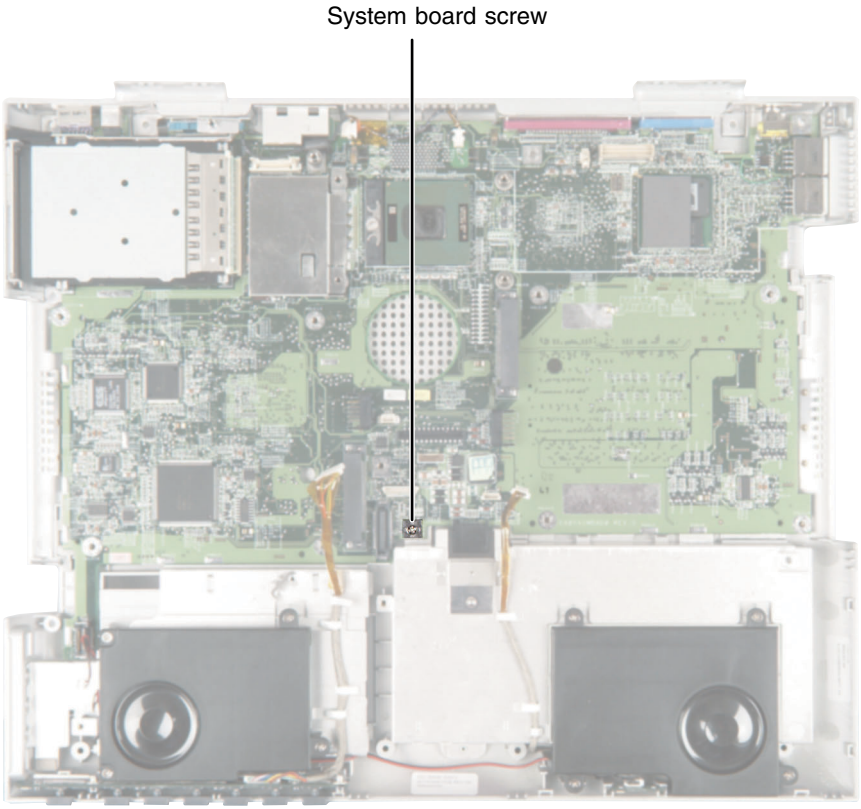
32 Make sure the positive (+) side of the new battery is facing up, then press the battery into the socket until it snaps into place.

33 Place the system board onto the notebook.

34 Slide the battery cover door closed.

35 Reinstall the audio board by following the instructions in “Replacing the audio board” on page 65.

36 Replace the system board screw into system board hole #17.



37 Reinstall the two modular bay holders (they are interchangeable).

38 Replace the six hex nuts on the rear I/O panel.

39 Reinstall the hard drive board and the hard drive board screw.

40 Connect the speaker cable and the front panel cable.

41 Reassemble the notebook.

Caution

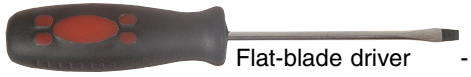
Legal requirements dictate that a security screw (or other means) be used to attach the mini-PCI cover to the chassis in a manner that restricts end user access. End users are strictly prohibited from having access to the wireless card. Due to manufacturing process changes, Gateway 600YG2 notebooks manufactured after August 7, 2003 require a Torx head security screw to attach the mini-PCI cover.

Caution

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

Replacing the system board

Tools you need to complete this task:


Flat-blade driver

- OR -

Scribe or non-marring tool

Phillips #0 screwdriver

Torx T8 screwdriver

5.0 mm hex nutdriver

Screws removed during this task:

5 chrome 2.5 × 4 mm (keyboard)

4 chrome 2.5 × 5 mm (hinge covers)

4 or 6 chrome 2.5 × 7 mm (LCD panel hinges)

13 chrome 2.5 × 5 mm (bottom)

4 chrome 2.5 × 5 mm (back)

1 chrome 2.5 × 7 mm (near touchpad)
1 chrome 2.5 × 4 mm (near multifunction buttons) (palm rest)

1 chrome 2.5 × 4 mm (LED indicator panel)

2 chrome 2.5 × 5 mm (hard drive board)

6 chrome 5 × 9 mm (rear I/O panel)

8 chrome 2.5 × 5 mm (modular bay holders)

1 chrome 2.5 × 5 mm (system board - hole #17)

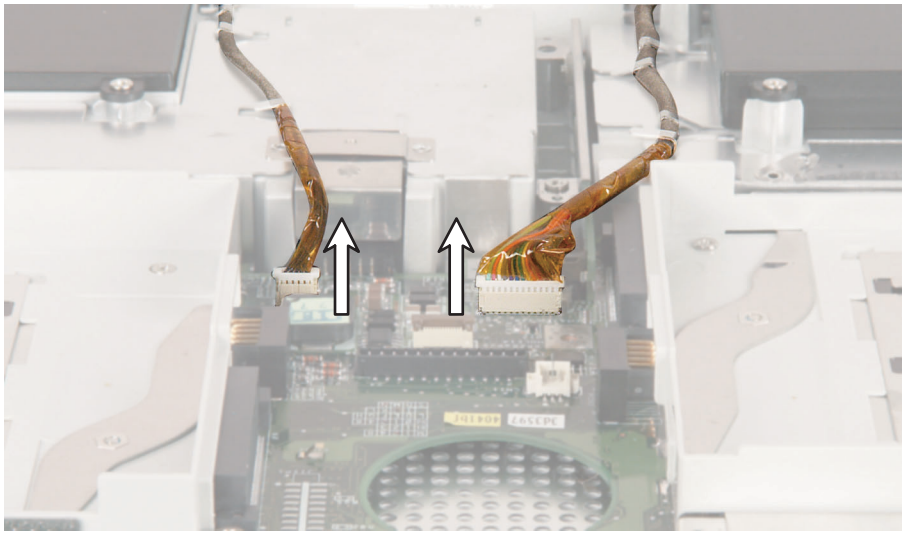
1 chrome 2.5 × 4 mm (audio board)

1 chrome 2.5 × 4 mm (modem)

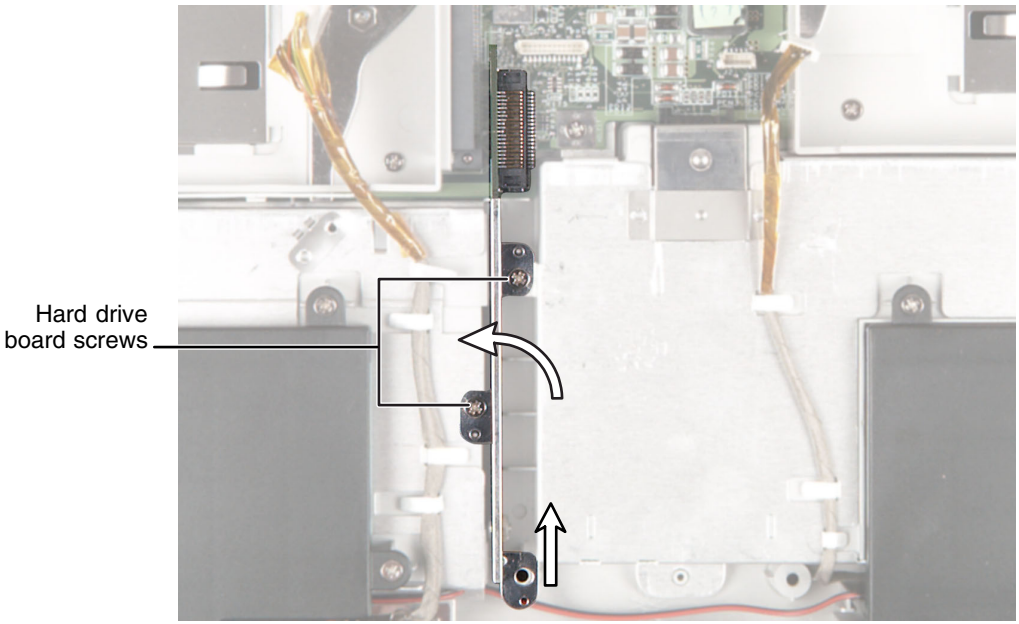
To replace the system board:

1. Disconnect the AC adapter and modem and network cables and prepare the notebook by following the instructions in "Preparing your work space" on page 4.
2. Disconnect the notebook from the optional port replicator by following the instructions in "Disconnecting from the port replicator" on page 7.
3. Turn the notebook over so the bottom is facing up.
4. Remove the main and optional secondary batteries by following the instructions in "Removing the batteries" on page 8.
5. Remove the modular drives.
6. Remove the memory modules by following the instructions in "Adding or replacing memory modules" on page 11.
7. If the notebook has IEEE 802.11 wireless networking built in, remove the IEEE 802.11 Mini PCI module by following the instructions in "Replacing the IEEE 802.11 Mini PCI card" on page 15.
8. Remove the hard drive kit by following the instructions in "Replacing the hard drive kit" on page 21.
9. Turn the notebook over so the top is facing up.
10. Remove the keyboard cover by following the instructions in "Replacing the keyboard cover" on page 28.
11. Remove the keyboard by following the instructions in "Replacing the keyboard" on page 31.
12. Remove the hinge covers by following the instructions in "Replacing the hinge covers" on page 37.
13. Remove the LCD panel by following the instructions in "Replacing the LCD panel assembly" on page 39.
14. Remove the palm rest assembly by following the instructions in "Replacing the palm rest assembly" on page 46.
15. Remove the cooling assembly by following the instructions in "Replacing the cooling assembly" on page 53.
16. Remove the LED indicator panel by following the instructions in "Replacing the LED indicator panel" on page 57.

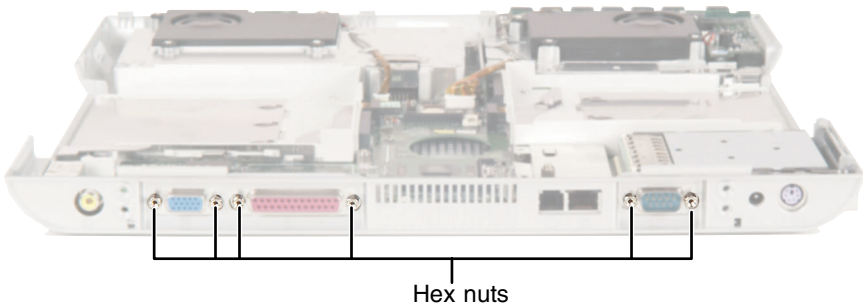
17 Unplug the speakers (one connector) and the front panel (Audio DJ) from the system board.



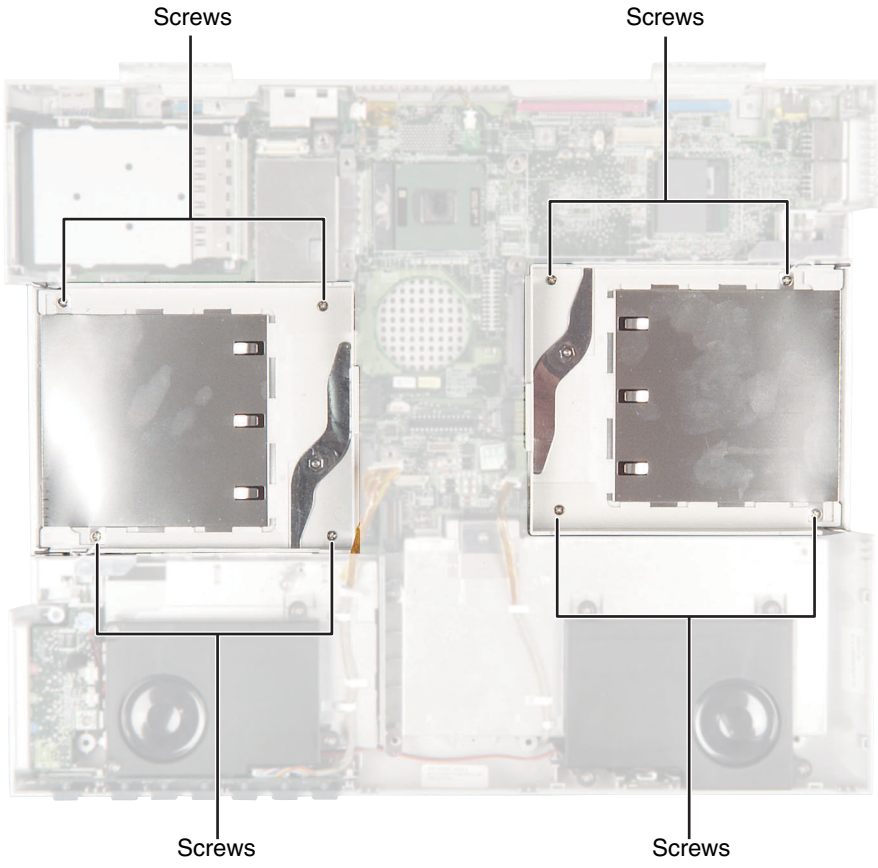
18 Remove the hard drive board screws, then remove the hard drive board by lifting it straight up and then rotating it to the left as you lift it past the hard drive connector.



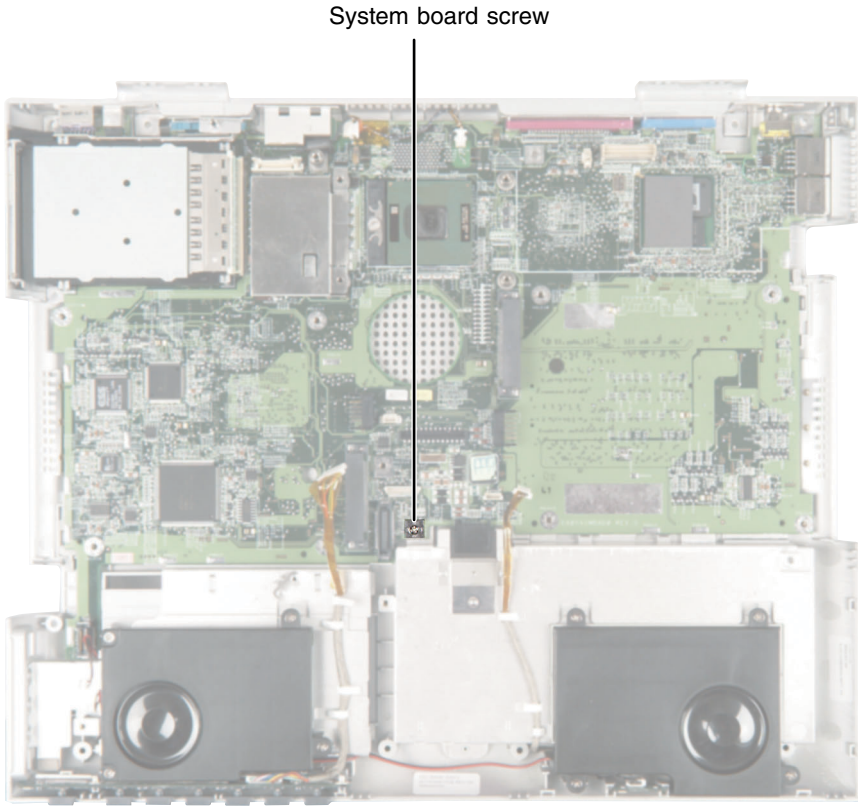
19 Remove the six hex nuts on the rear I/O panel.



20 Remove the eight modular bay holder screws, then remove the two modular bay holders.

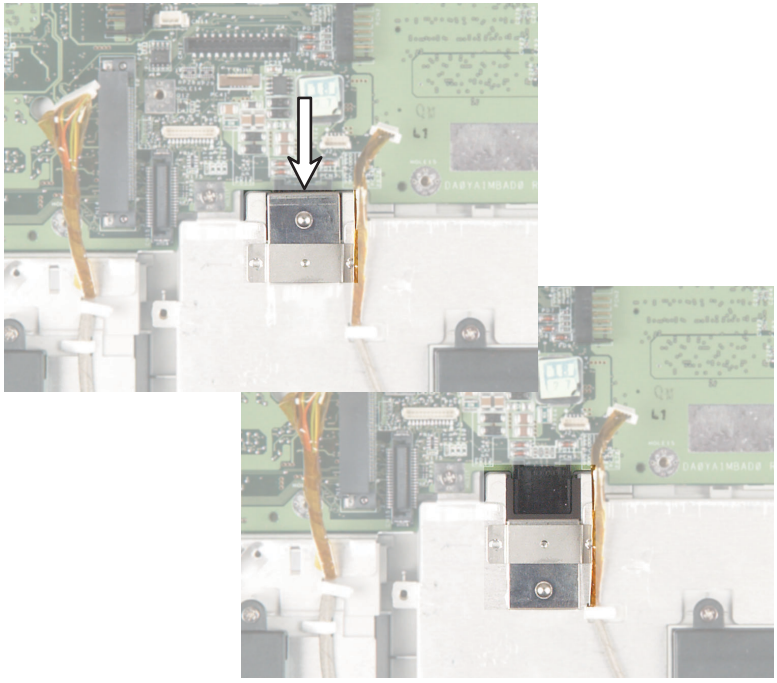


21 Remove the system board screw from system board hole #17.

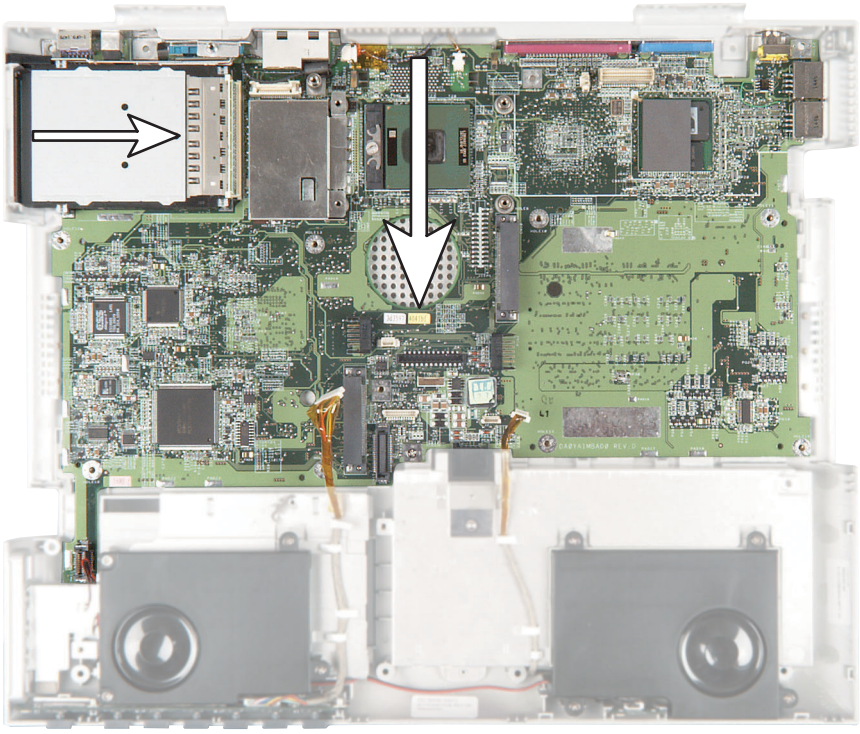


22 Remove the audio board by following the instructions in "Replacing the audio board" on page 65.

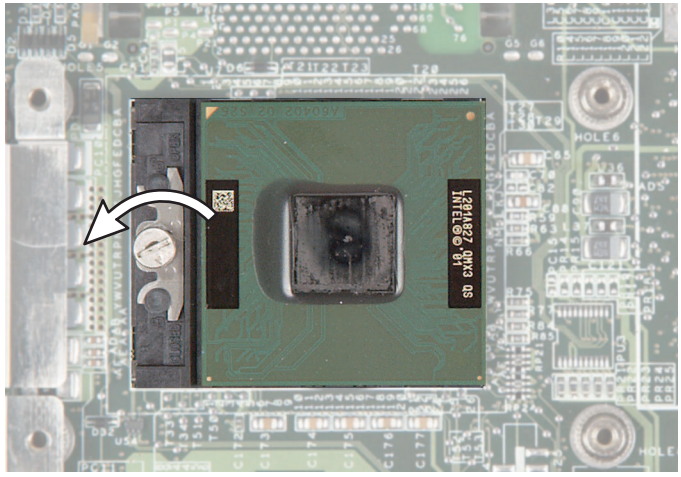
23 Slide the battery cover on the system board open.



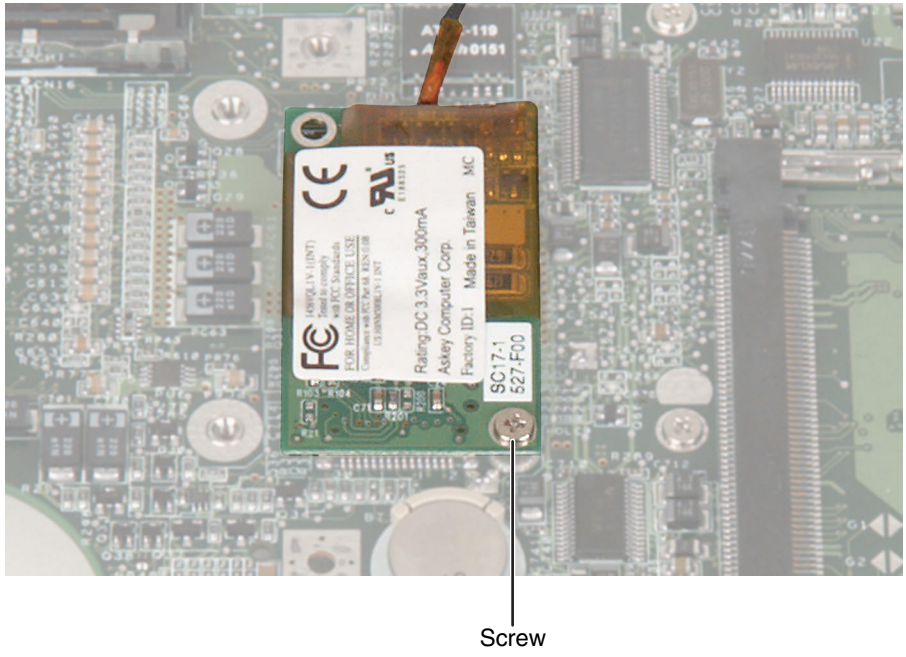
24 While pushing in on the PC Card eject button, remove the system board. Make sure that the rear I/O panel clears the bottom of the chassis (shown by the top arrow) and the PC Card eject button clears the bottom of the chassis (shown by the left arrow).



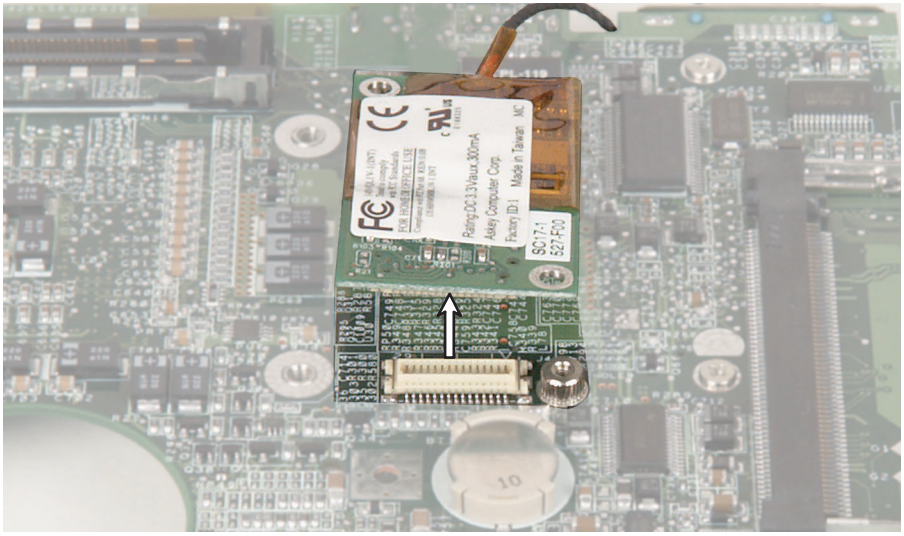
25 Use a flat-blade screwdriver to turn the processor lock screw ¼-turn counter-clockwise, then remove the processor from the old system board.



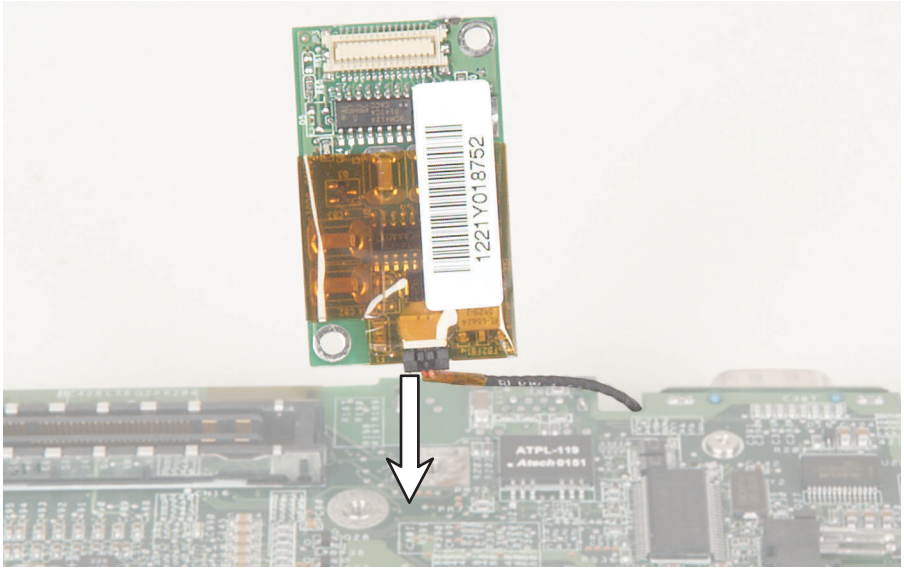
26 Turn the system board over and remove the screw that secures the modem to the system board.



27 Unplug the modem from the system board.

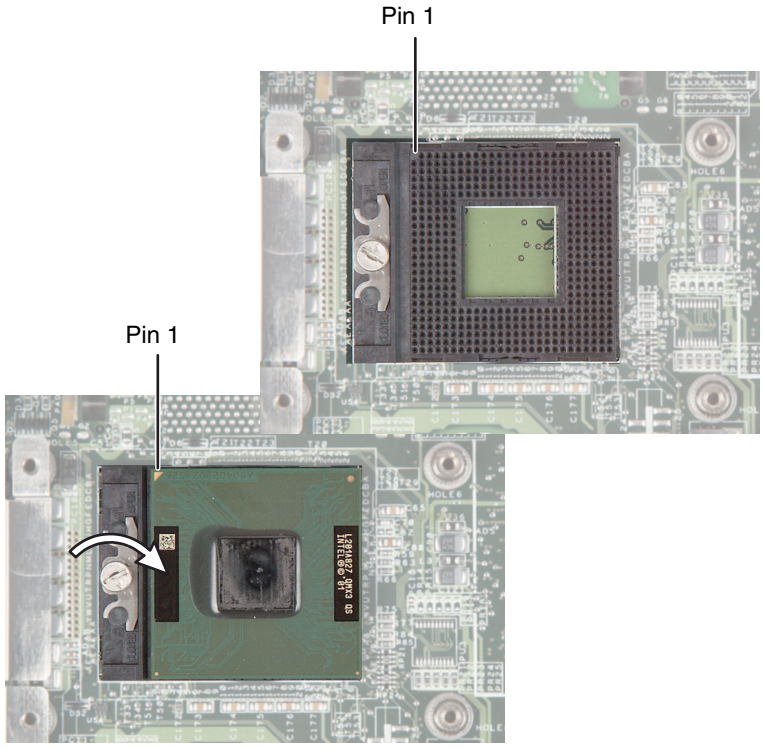


28 Unplug the modem cable from the modem.



29 Install the modem into the new system board and turn the board over.

30 Install the processor onto the new system board making sure that Pin 1 on the processor (indicated by the silk-screened arrow on the corner of the processor) aligns with Pin 1 on the processor socket (indicated by the absence of a pin hole in the processor socket), then lock the processor in place by using a flat-blade screwdriver to turn the processor lock screw ¼-turn clockwise.

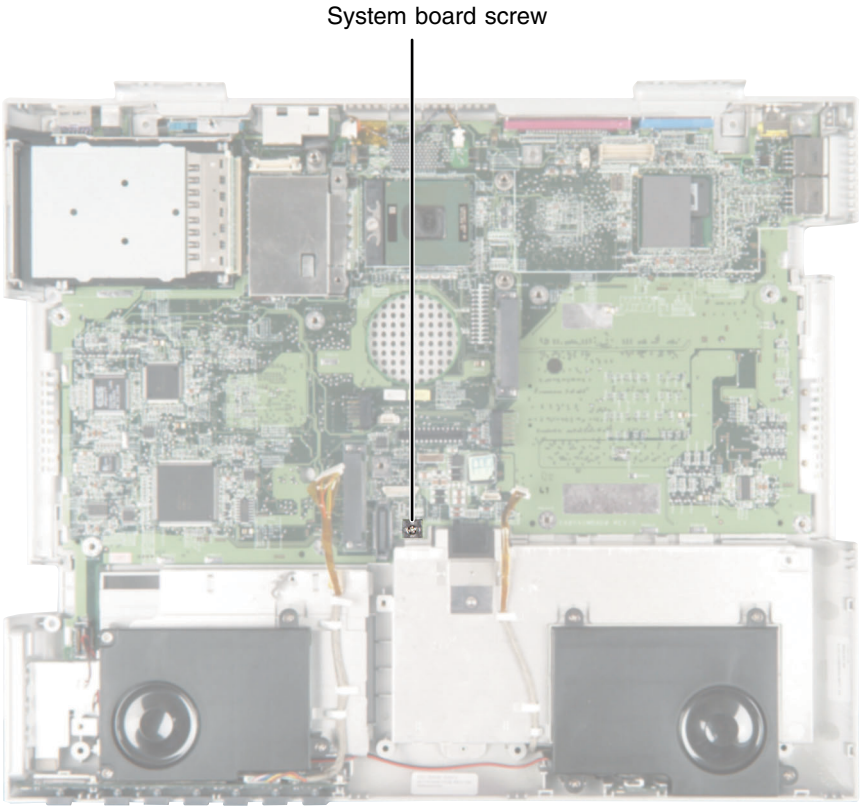


31 Place the new system board onto the notebook.

32 Slide the battery cover door closed.

33 Reinstall the audio board by following the instructions in "Replacing the audio board" on page 65.

34 Replace the system board screw into system board hole #17.



35 Reinstall the two modular bay holders (they are interchangeable).

36 Replace the six hex nuts on the rear I/O panel.

37 Reinstall the hard drive board and the hard drive board screw.

38 Connect the speaker cable and the front panel cable.

39 Reassemble the notebook.

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 600YG2 notebooks manufactured after August 7, 2003 require a Torx head security screw to attach the mini-PCI cover.

Caution

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

MAN SYS 600 YG2 SERVICE GDE R1 7/03

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