

# Replacing the Gateway 450 Keyboard

This package includes a replacement keyboard for your Gateway 450 notebook and these printed instructions.

## Tools you need

You need a small Phillips and flat blade screwdriver to replace the keyboard.

## Preventing static electricity discharge

The components inside your computer are extremely sensitive to static electricity, also known as *electrostatic discharge* (ESD).

### Caution



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

### Warning



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

Before replacing the keyboard, follow these guidelines:

- Turn off the computer power.
- Wear a grounding wrist strap (available at most electronics stores) and attach it to a bare metal part of the computer.

### 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 the back of the computer.
- Unplug the power cord and modem and network cables.
- Remove the battery.

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Before working with computer 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.

## Removing the keyboard



### To remove the keyboard:

- 1 Follow the guidelines under “Preventing static electricity discharge” on page 1.
- 2 Shut down your notebook.
- 3 Unplug the AC adapter and modem and network cables.

#### Warning



To avoid injury, disconnect the AC adapter and modem and network cables before removing the keyboard. Replace the keyboard before reconnecting power.

- 4 Remove the main battery and optional secondary battery.
- 5 Open the LCD panel to the normal viewing position.

- 6 Insert a small flat blade screwdriver under the bottom-right corner of the keyboard bezel, between the **INS** and **DEL** keys, and gently pry it up.

**Important**



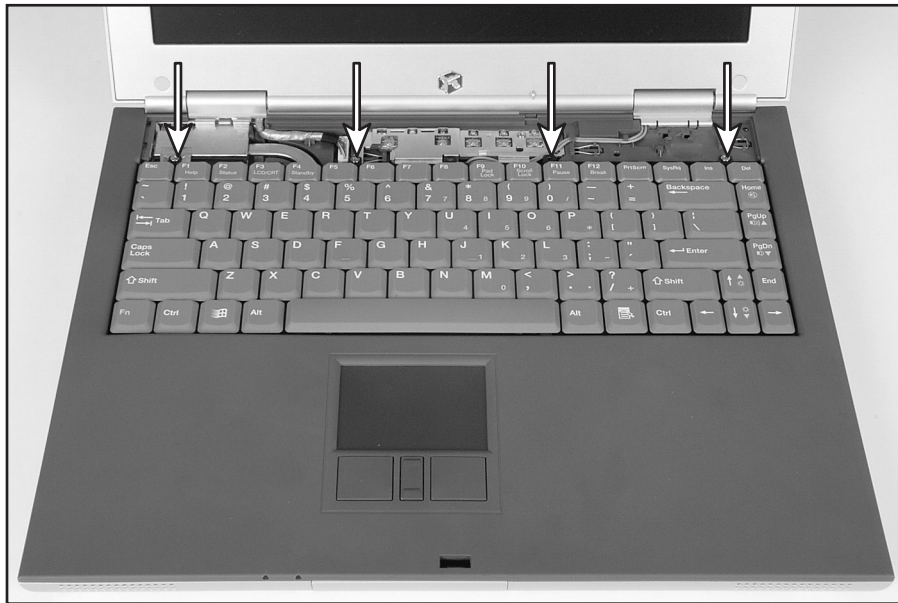
Inserting a piece of cloth between the screwdriver and keyboard and notebook case will help prevent damage to your notebook.



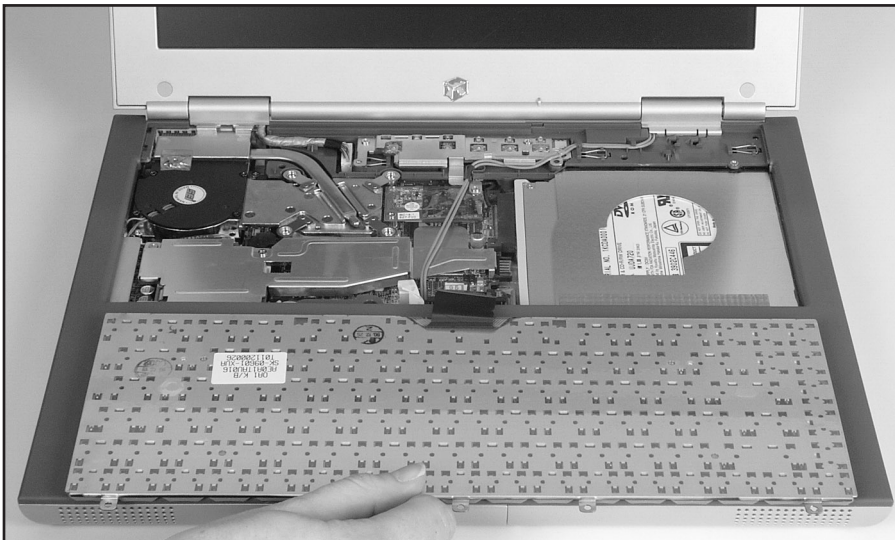
- 7** Pull the bezel off the notebook. You will hear small snapping sounds as the bezel comes off of the notebook. Be careful not to break off the tabs located on the left end of the bezel.



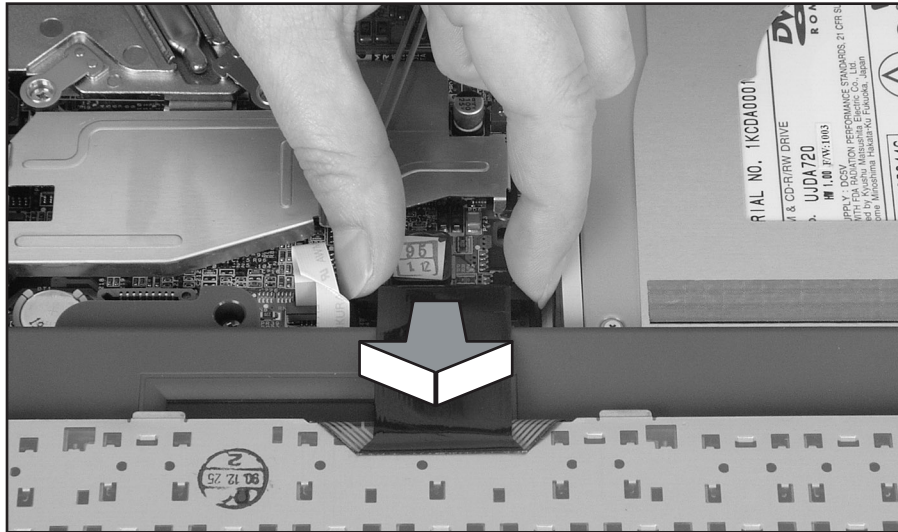
- 8** With a small Phillips screwdriver, remove the four keyboard screws and put them in a safe place.



- 9 Remove the keyboard by raising the back edge, then slowly rotating it toward you so it lies **keys-down** on top of the notebook. Be careful not to damage the LCD panel.



- 10** Disconnect the keyboard by lifting the keyboard connector using two fingers. Be careful to not touch or damage any other components.





# Installing the keyboard



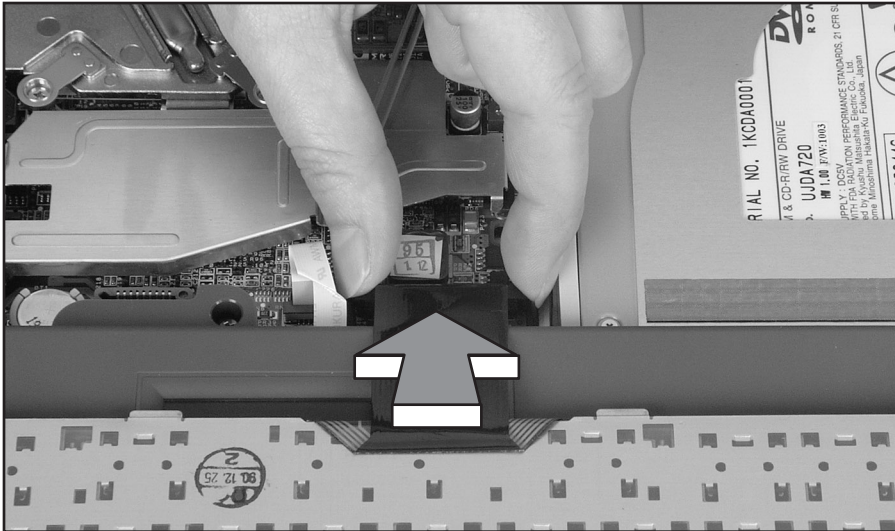
## To install the new keyboard:

- 1 Place the new keyboard **keys-down** on the notebook with the space bar away from you.
- 2 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.



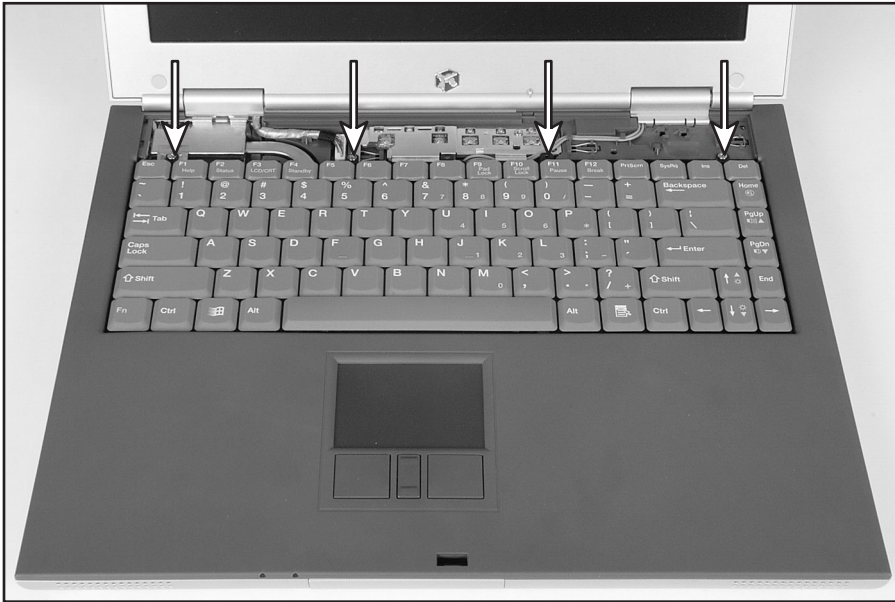
- 3 Rotate the keyboard toward the LCD panel until the keyboard is almost face-up.

- 4** Insert the front of the keyboard under the palm rest.



- 5** 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.

**6** Replace the four keyboard screws.



**7** Slide the two tabs located on the left end of the bezel under the notebook frame.

- 8** Press down on the bezel in several places until it clicks in place.



The bezel is correctly mounted when you can run your finger along the bezel and find no loose spots. The bezel should be flat all the way across. If the bezel is mounted incorrectly, complete the instructions under “Replacing the bezel” on page 12.

**Warning**



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

- 9** Replace the main battery and optional secondary battery.
- 10** Plug in the AC adapter and modem and network cables.
- 11** Turn on the notebook.



# Replacing the bezel

If the bezel was mounted incorrectly, complete the following procedure.

## Warning



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



## To replace the bezel:

- 1 Insert a small flat blade screwdriver under the bottom-right corner of the keyboard bezel, between the **INS** and **DEL** keys, and gently pry it up.
- 2 Pull the bezel off the notebook. You will hear small snapping sounds as the bezel comes off of the notebook. Be careful not to break off the tabs located on the left end of the bezel.
- 3 Slide the two tabs on the left end of the bezel under the notebook frame and press down on the bezel in several places until it clicks in place.



# Technical Support

Refer to your user's guide for Gateway Technical Support information.

# Safety, Regulatory, and Legal Information

Refer to your user's guide for important safety, regulatory, and legal information.

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