

Replacing the Gateway 450ROG and 450RGH Keyboard

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

Tools you need

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

Preventing static electricity discharge

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

Warning



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

Caution



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

Before replacing the keyboard, follow these guidelines:

- Turn off your 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 your 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 “Changing batteries” in your user guide.
- 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.

Removing the keyboard

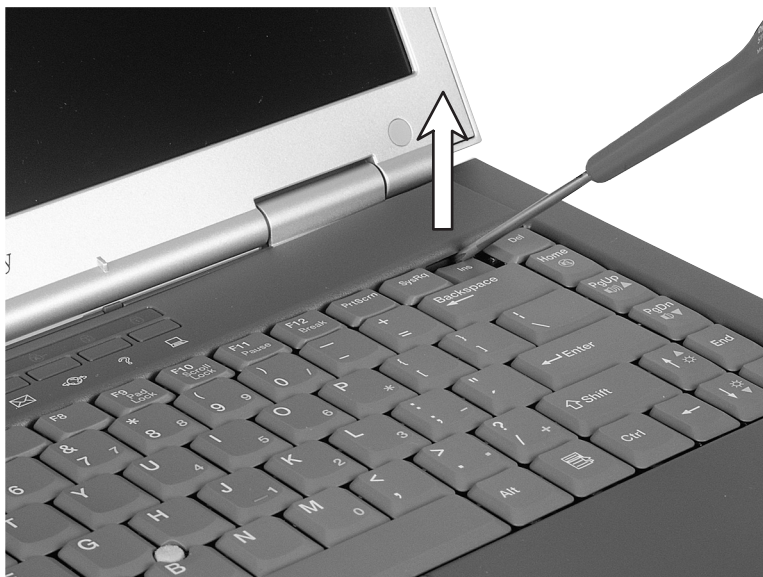
To remove the keyboard:

- 1 Follow the instructions under “Preventing static electricity discharge” on page 1.
- 2 Turn off your notebook.
- 3 Disconnect the AC adapter and modem and network cables.
- 4 Turn your notebook over so the bottom is facing up.
- 5 Remove the main and optional secondary batteries.
- 6 Turn your notebook over so the top is facing up.
- 7 Open the LCD panel to the normal viewing position.
- 8 Insert the small flat-blade screwdriver under the bottom right corner of the keyboard bezel and gently pry it up.

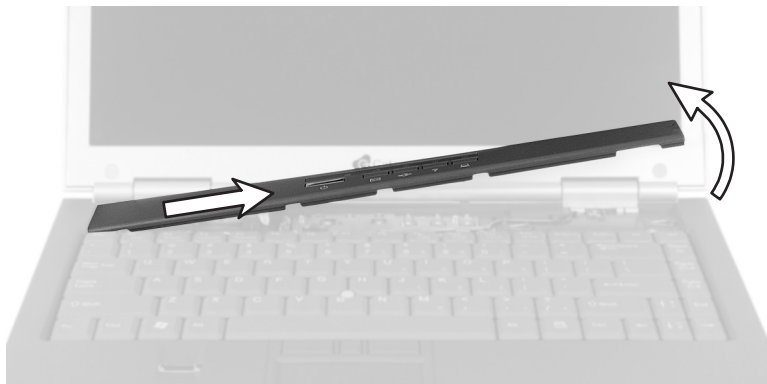
Important



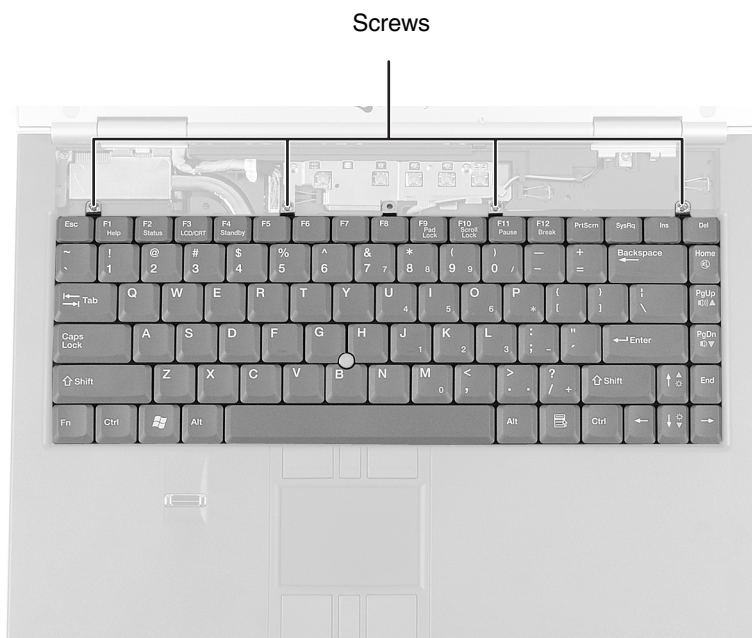
Inserting a piece of cloth between the screwdriver and keyboard and notebook case will help prevent damage to your notebook.



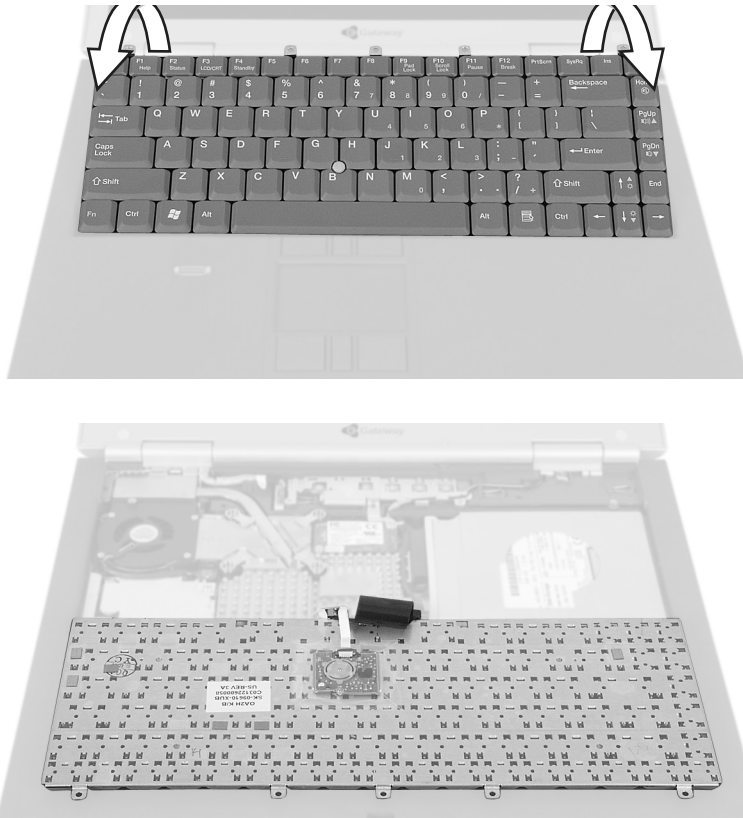
- 9** Pull the bezel off your notebook. You will hear small snapping sounds as the bezel comes away from your notebook. Be careful not to break off the tabs found on the left end of the bezel.



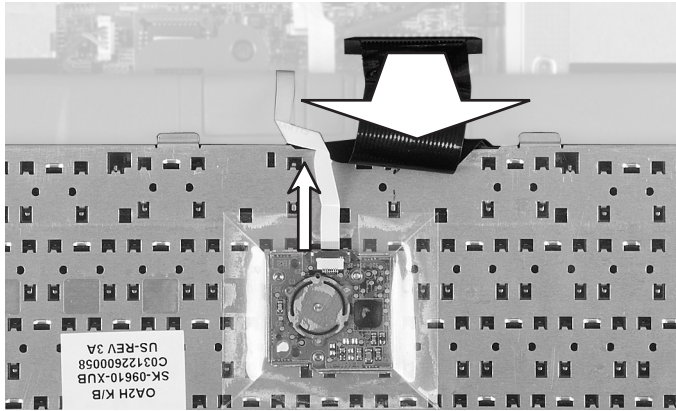
- 10** With a small Phillips screwdriver, remove the four keyboard screws and put them in a safe place.



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



- 12** Lift the keyboard connector using two fingers and remove the black keyboard cable. Be careful not to touch or damage any other components.



- 13** If your notebook has the optional EZ Point pointing device, lift the cable connector on the back of the keyboard and remove the white cable.



Installing the keyboard



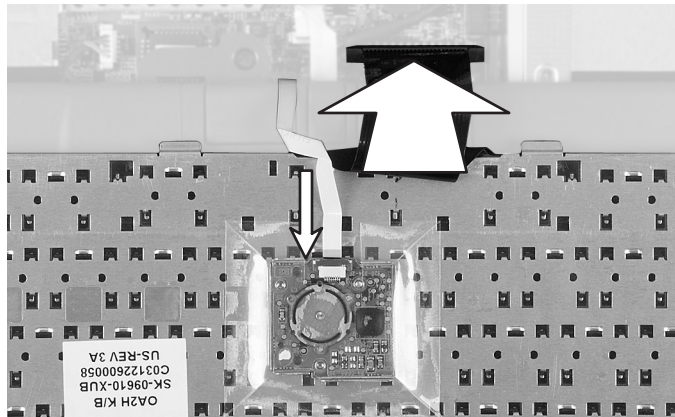
To install the keyboard:

- 1 Place the new keyboard **keys-down** on your notebook with the space bar away from you.
- 2 Insert the keyboard plug, on the end of the black keyboard cable, onto the keyboard connector.

Important

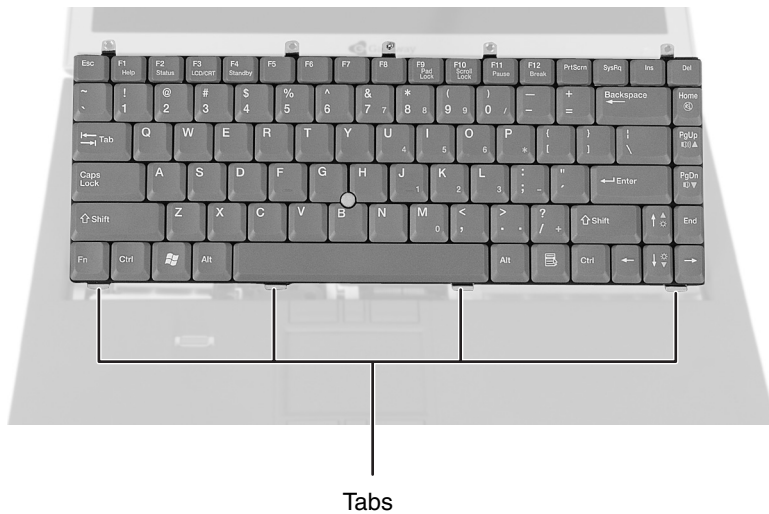


The outside of the keyboard plug goes around the keyboard connector. The plug is correctly oriented if the cable is not twisted.

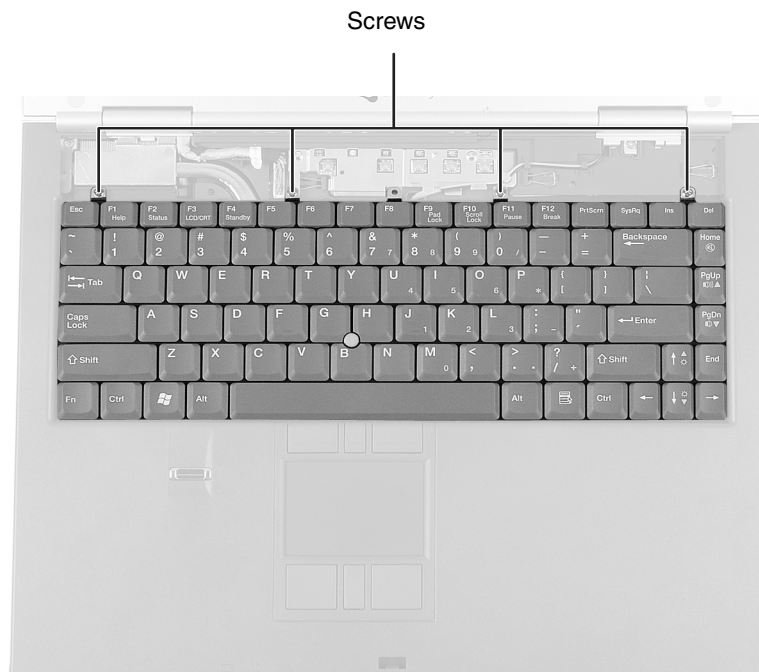


- 3 If your notebook has the optional EZ Point pointing device, insert the white cable into the cable connector on the back of the keyboard. Press down gently on the cable connector to lock into place.
- 4 Rotate the keyboard toward the LCD panel until the keyboard is almost face-up.

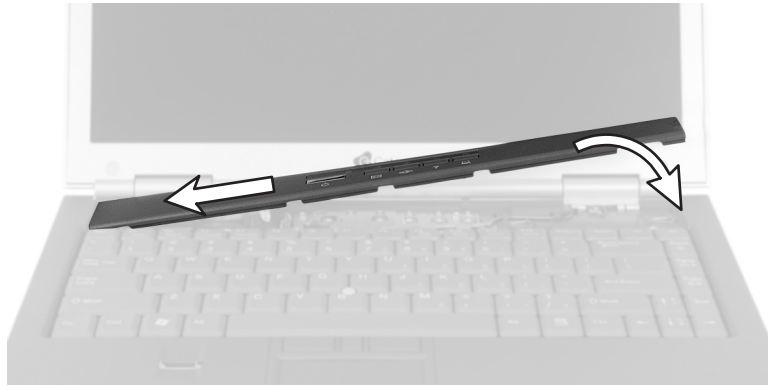
- 5** Insert the tabs on the front of the keyboard under the palm rest.



- 6** 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.
- 7** Replace the four keyboard screws.



- 8** Slide the two tabs on the left end of the bezel under your notebook frame.



- 9** 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.

Caution



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

- 10** Replace the main and optional secondary batteries.
- 11** Connect the power adapter and modem and network cables, then turn on your notebook.



Technical Support

See your user's guide for Gateway Technical Support information.

Safety, Regulatory, and Legal Information

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

© 2003 Gateway, Inc. All rights reserved. Gateway, Gateway Country, the Gateway stylized logo, and the black-and-white spot design are trademarks or registered trademarks of Gateway, Inc. in the United States and other countries. All other brands and product names are trademarks or registered trademarks of their respective companies.



MAN RPL 450 ROG KB INST R2 2/04

