

## Tech Info Library

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### TITLE

PowerBook G3 Series: Upgrading Memory

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### TOPIC

This article provides the necessary information for upgrading memory in the PowerBook G3 Series computer. These directions are taken from the PowerBook G3 Series User Manual, Chapter 4, titled "Installing a RAM Expansion Card And Removing Your Hard Disk."

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### DISCUSSION

**Note:** Macintosh PowerBook G3 Series computers should not be confused with Macintosh PowerBook G3 computers. Though the names are similar, there are significant differences. For more information differentiating between the computers, please see the following Tech Info Library article:

Article 24604: "[PowerBook G3 & G3 Series: Identifying Different Models](#)"

For information on upgrading memory in a PowerBook G3 Series (Bronze keyboard) computer, see the following Tech Info Library article:

Article 58325: "[PowerBook G3 \(Bronze keyboard\): Upgrading Memory](#)"

**Warning:** To avoid damage to your computer, Apple recommends that only an Apple-certified technician install additional RAM. Consult the service and support information that came with your Apple product for instructions on how to contact an Apple-authorized service provider or Apple for service. If you attempt to install additional RAM yourself, any damage you may cause to your equipment will not be covered by the limited warranty on your computer. See an Apple-authorized dealer or service provider for additional information about this or any other warranty question.

#### Getting Ready

Before you open your computer, make sure that you have a Phillips or a Torx T-8 screwdriver (available from a hardware or electronics supply store).

#### Removing the Keyboard and Internal Heat Sink

The design of your Macintosh PowerBook allows you to easily access the internal components of the computer by removing the keyboard. The steps in this section explain how to remove the PowerBook keyboard and internal heat sink to access the RAM expansion slot.

##### Step One

Place your PowerBook on a hard, flat surface.

##### Step Two

If your PowerBook is turned on, press the Power button. In the Shut Down dialog box, click Shut Down.

**Warning:** The internal components (including the internal heat sink) of your PowerBook may be hot. If you have been using your PowerBook, wait 10 minutes before continuing, to let the internal components cool down.

##### Step Three

Unplug the power adapter and any other devices from the back of your PowerBook. Unplug any phone line from the internal modem.

##### Step Four

Adjust your display so that it is at a 90-degree angle to the computer.

If your display is tilted too far back, your PowerBook may tip backward when the expansion bay modules are removed in the next step.

## Step Five

Pull out both expansion bay release levers to eject the modules or batteries in both the expansion bays.

## Step Six

Remove the modules or batteries from both the expansion bays.

## Step Seven

With your thumbs positioned slightly below the keyboard, place your fingers inside the expansion bays and locate the small plastic tabs that hold the keyboard in place. The plastic tabs have small ridges on them and are located on the underside of the top shell of the PowerBook approximately one inch inside each expansion bay.

## Step Eight

Slide the plastic tabs toward you until you see the lower portion of the keyboard pop up.

## Step Nine

Lift the lower portion of the PowerBook keyboard up slightly and pull it back enough to displace the five metal tabs that hold the front of the keyboard in place.

## Step Ten

Flip the keyboard over and lay it on the palm rests and trackpad.

## Step Eleven

Remove the two screws that secure the internal heat sink (using a Phillips or Torx T-8 screwdriver) and then lift it up by pulling on the small metal tab.

**Warning:** The PowerBook internal heat sink may be hot. If you have been using your PowerBook, wait 10 minutes before continuing to let the internal components cool down.

You now have access to the internal components of your PowerBook.

## Installing A RAM Expansion Card

To install a RAM expansion card in your PowerBook, follow these steps:

**Important:** Make sure that the RAM expansion card you are installing is made for your Macintosh PowerBook model. Components designed for other PowerBook models will not work with your computer.

### Step One

Locate the empty RAM expansion slot. See Figure 6.

**Note:** If you ordered your PowerBook with additional memory, this slot may already have a RAM card installed.

### Step Two

Gently touch the metal surface on the right side of the inside of the computer to discharge any static electricity built up on your body. This prevents damage to your Macintosh PowerBook or RAM card.

Don't walk around while installing the card. If you do, touch the metal surface again to discharge any static electricity.

### Step Three

Position the RAM expansion card at a 30-degree angle. Line up the notch in the PowerBook RAM expansion card with the small tab in the RAM expansion slot.

### Step Four

Push the RAM expansion card into the plastic expansion slot. You may feel some resistance. If you are having trouble inserting the card, try pushing one side at a time.

### Step Five

Gently push the RAM expansion card down until the two snaps on either side of the card lock into place.

Your RAM expansion card is now ready to use.

### **Replacing the Keyboard and Internal Heat Sink**

Follow the steps in this section to replace your PowerBook keyboard.

#### **Step One**

Insert the internal heat sink and replace the two screws to secure it in place.

#### **Step Two**

Press down on the bottom portion of the heat sink to secure it into place.

#### **Step Three**

Flip the keyboard back on top of the opening in your PowerBook.

#### **Step Four**

Insert the five small tabs at the top of the keyboard into the opening in the PowerBook case.

#### **Step Five**

Press down on the lower portion of the keyboard until it snaps into place.

#### **Step Six**

Replace the expansion bay modules.

You are now ready to start working with your PowerBook again.

**Warning:** Never turn on your PowerBook G3 Series computer unless all of its internal and external parts are in place. Operating the computer when it is open or missing parts can be dangerous, and can damage your computer.

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**EXTENDED Information - [Apple Internal Use - Service Providers and Support Professional](#)**

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#### **Document Information**

Product Area: Computers

Category: PowerBook

Sub Category: PowerBook G3 Series

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