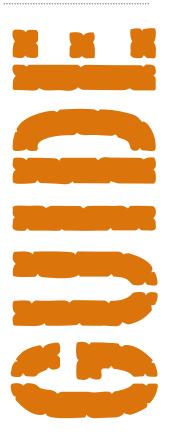
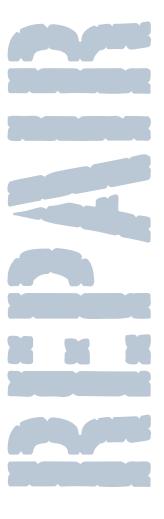
## Keys







### **Keycap Replacement Guide**

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The hardest part about a repair is reassembly. Our guides will assist you in getting those screws back where they

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This manual is presented as a guide in order to help you repair problems with your machine. Working on electrical components can be dangerous if not done properly. We at Powerbookmedic.com take no responsibility for any damage or harm done to yourself or your machine as a result of reading this guide.

Apple manufactures several revisions in each line of their products. This guide will try to cover each of these revisions, but you may find subtle differences between our manual and what you see in your unit. This may require small adjustments to the repair procedure as described in our manual. If you are confused at what you are seeing in comparison to the manual's description and pictures, you may contact us by email or by using our forums and we will try to assist you.

As of the writing of this manual, Apple's warranty policy denotes that opening up your Apple product will void the warranty. If you are

still under coverage by Apple for your unit, we would suggest contacting them before performing any repair. Keycap replacement should have no effect on your warranty however.

### **Repair Center**

Powerbookmedic.com offers a repair service if you do not feel confident on performing the repair yourself after reading this manual. The repair service is a flat labor charge plus the cost of the parts needed.

You can view our labor fees on our website by clicking on the repair center link at the top of homepage.

### Suggestions?

If you see any problems with the manual, tips you would like added, or any suggestions to make the manual better, don't hesitate to email us with your ideas to...

support@powerbookmedic.com

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### **TOOLS NEEDED**

None

### Other tools...

The only tool that may be needed for key replacement is a flat head tool such as the nylon spudger available from our site or a flat head screwdriver.

# REPLACING KEYS

### **Introduction:**

General information on the different types of keys you may find on your unit.



# YOUR QUICK GUIDE TO REPLACING APPLE KEYS

There are several types of Apple laptops and therefore a lot of different keycaps. Luckily, most of the keys work the same way across all of the Powerbook, iBook, and Macbook models.

Keys get a lot of punishment, and sooner or later they are destined to have problems. The letter or symbol can get rubbed off, they can get sticky from a spill, and even get lost. Most companies will tell you you need a new keyboard, but in most cases, you just need to replace the single key and this can save you a lot of money. Powerbookmedic.com offers keys for this very purpose. We have developed this guide to help you install the keys without having to worry about sending your unit off to be repaired. There are several types of keys that we sell, so you need to make sure you know what type of Powerbook, iBook, or MacBook you have to ensure you purchase the right type of key. As long as you know what type of laptop you have, you shouldn't have any worry, but there are exceptions to every rule.

Powerbook G4 Aluminum keys are generally all the same and work in any model. (The 12" 1.33GHZ and 1.5GHZ units use a different key style which we currently do not carry.) MacBook Pro keys are the same on every model. MacBook keys come in two colors. There are also both plastic and metal scissor models. iBook G3 keys are a translucent white color and have plastic scissor mechanisms. Both 12" and 14" models use the same keycaps. iBook G4 came in both plastic and metal scissor styles as detailed later in this manual. Both 12" and 14" models use the same keycaps. Titanium G4 keys are translucent smoky black. The Lombard / Pismo keys are bronze and the Wallstreet has solid black keys.



#### **Key Components**

There are two parts to every key. The keycap itself and the scissor mechanism.

### Changing out a key...

There are two parts to a keyboard key on an Apple keyboard. The first piece is the keycap which is the part that actually has the print on it. The second piece is the scissor mechanism. Technically, the scissor mechanism is two parts connected together, but if ordered from our, store they should already be together. There are some abnormal keys which will be discussed in the following section.

The first step is going to be to remove the old key if it is still there. To remove the key, simply lift the keycap from one of the corners and gently pull up until it pops off. Depending how well it comes off, it may take the scissor mechanism with the key, or you may need to remove the scissors from the keyboard afterwards. As you can see in the pictures to the left, the keycap has been removed and we have the scissor mechanism remaining. The scissors are held on by two prongs. You can either squeeze the scissor together or use a flat tool as pictured to the right to release each prong. Once each prong is released, the key should be free as pictured in the second picture to the right. It is now only held in by the small silver hook. You can just move the key towards yourself to get it out from underneath the hook.

You are now ready to replace the key. To accomplish this, simply repeat the procedure in reverse. You will need to get the scissors separated from the keycap if they are not already. This can be done by flipping the keycap over and pulling off the scissors. Then, slide the scissors underneath the hook. Note: The best way to judge which side of the scissors faces upwards is to see which way the inner scissor swings. It needs to swing down. Once the scissors are under the hook, squeeze the key from the sides and slide the pegs into the holes to lock it in place. Once the scissor is in properly, get the keycap and simply place it directly on top of the scissors and press down. It should snap in place. Once snapped in, test it to make sure it is springing back up properly. If it is not, then try again and make sure everything is where it is supposed to be. Note: The rubber nub underneath the key is what does the spring action, so make sure it is present on the keyboard and sticking straight up. If the nub is not present, a new keyboard will be required.









### THE METAL VARIETY







### **Metal Scissors**

Apple decided to have two different styles of key-boards for some models. The keycaps look the same, so you will need to make sure if you have metal or plastic scissors prior to ordering the key replacement.

### **Metal Scissor Keys**

Some model laptops had two different keyboards produced during their product line. One type was the normal plastic scissor type that is more commonly found on Apple keyboards. The other type used metal scissor mechanisms instead of plastic ones. These work a little differently, so an explanation on installing these is necessary. As pictured to the left, you can see the keycap with the metal scissor in the top picture. There are two parts to the scissor. One part is the larger outer scissor that goes around the edge of the keycap and the second is seen in the second image to the left which will be the smaller inner scissor.

To remove the old scissor (if needed, but usually not) just use your fingers or a flat tool and slightly bend the metal scissor on the keyboard to release it from the hole as seen in the second picture to the left. **Note:** The outer scissor should remain on the keycap.

Once the old keycap and scissor mechanism are removed you can install the new one. Install the inner scissor first. Install it with the hooks pointing to the right and slightly bend the scissor in order to fit the hooks into the holes. Get the keycap and make sure the outer scissor is properly installed on the keycap as pictured in the first image to the left. The scissor should just snap in to the grooves on the bottom side of the keycap. You can then slide the hooks on the outer scissor into their respective holes on the keyboard. Next, sit the keycap straight up on the keyboard and press down to snap it in place.

After installing the key, test the key to make sure it is working properly. If not, check to make sure the scissors are installed properly and the rubber nub is working normally.

### Timeline:

The plastic scissors were found on the earlier versions while the metal scissors came in the late revisions.



### **Replacing Longer Keys**

Some of the longer keys on a keyboard have a slightly different design than the other keys we have discussed so far. Those keys have a metal stabilizer bar on the keycap and a different plastic mechanism for the keyboard.

As seen in the first picture to the right, the metal bar attaches to the bottom of the key by lining it up with the grooves in the keycap. The scissor mechanism is the large plastic piece shown in the middle picture on the right. This piece has several plastic pegs that need to be snapped in correctly, similar to the way a normal plastic mechanism would snap into place. One side should have two pegs for each side. This will be for the top of the scissor. Note: The inner scissor mechanism should swing downward if you have it upright. Place the mechanism without the keycap on the keyboard and slightly bend it to get it snapped into the appropriate holes for the pegs on the top of the scissors. Once in, you will need to take the keycap with the metal bar and insert that bar into the holes on the sides of the key area. Once in place, you can flip the key upright and snap it

into place. This key can be tricky, so it may take a few attempts before you get the hang of it.

Once it is installed, test it to make sure it works properly and is getting the right spring action. If it isn't working properly, pull the keycap back off and make sure all of the pegs are correctly locked in place on the keyboard.

### Other information

If you are still having trouble installing your key, don't hesitate to email or post a question in our forums for further instructions. You can also find a guide in Apple's support system if you go to their Support section and do a search on their knowledgebase for "keycap".



# STEP BY STEP







### **Longer Keys**

The design on the longer keys, such as the shift key, is different from the other keys. They have a different style scissor mechanism that sometimes gives people trouble.