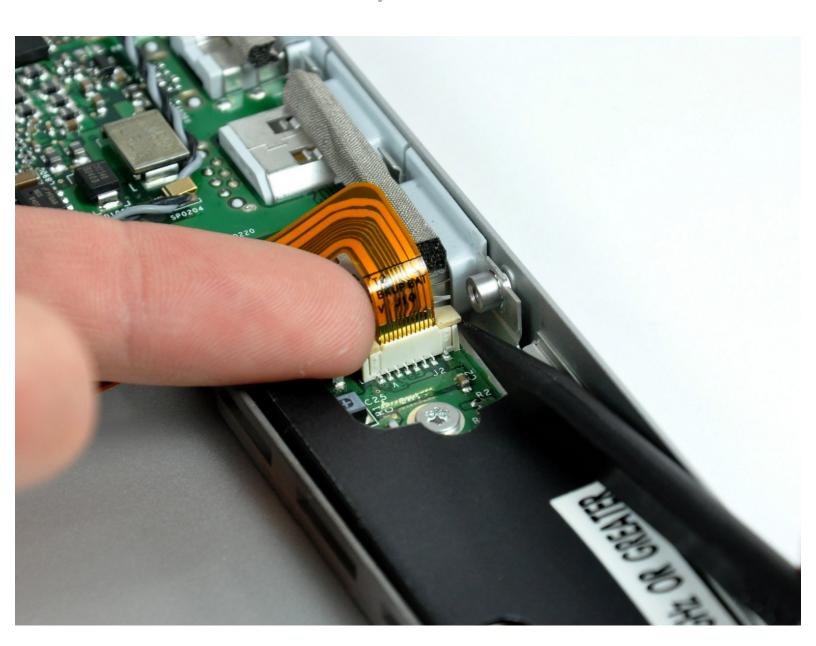


# PowerBook G4 Aluminum 17" 1.67 GHz (High-Res) PRAM Battery & USB Board Replacement

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#### **INTRODUCTION**

Replace your PRAM battery & USB board to preserve date and time after system shutdowns and to fix an unresponsive front USB port.



# **TOOLS:**

- Phillips #00 Screwdriver (1)
- Spudger (1)
- T8 Torx Screwdriver (1)



#### **PARTS:**

 G4 Aluminum 17" 1.67 GHz (HR) PRAM Battery & USB Board (1)

#### Step 1 — Battery



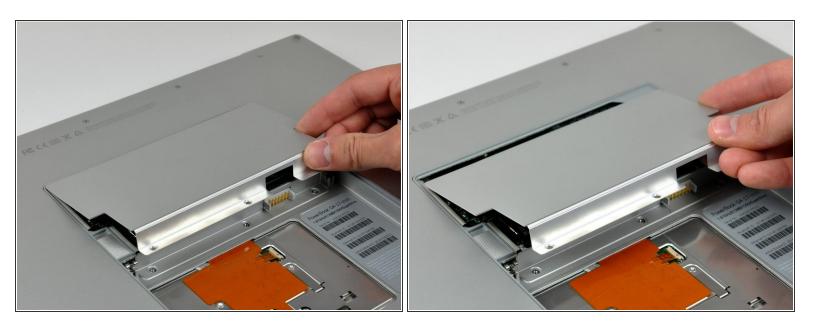


- Use your thumbs to push the two battery retaining tabs away from the battery.
- The battery should pop up enough to rotate it toward yourself and lift it out of the lower case.

# **Step 2** — **Memory Door**



 Remove the three 2.3 mm Phillips screws securing the memory cover to the lower case.

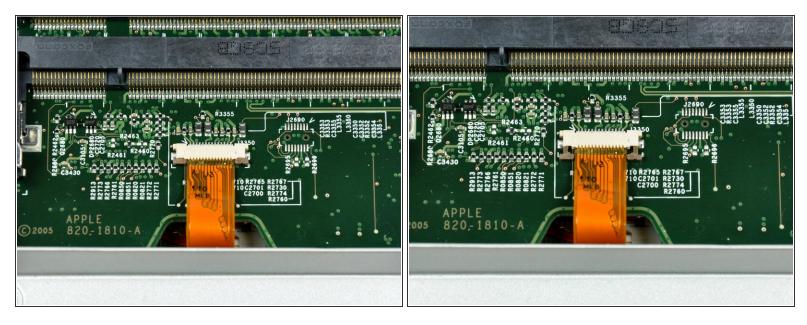


• Lift the memory cover slightly and pull it toward yourself to remove it from the lower case.

#### Step 4 — Upper Case



- Remove the following ten screws:
  - Two 14.7 mm shouldered Phillips.
  - Three 12.3 mm Phillips.
  - One 3.8 mm T8 Torx.
  - One 6.8 mm T8 Torx.
  - Three 1.3 mm Phillips.



- (i) The ZIF cable is located underneath the bottom RAM slot. If your PowerBook has both RAM slots occupied, make sure to <u>remove</u> the RAM chip.
- Use your fingernails to separate the ZIF cable lock away from its socket. (Move the two brown bits down 1mm)
- The ZIF cable lock will move about a millimeter away from the socket before it stops (see picture 2). **Do not** try to remove the ZIF cable lock.



 Use the tip of a spudger to slide the trackpad ribbon cable out of its socket.

#### Step 7



- Remove the four 3.4 mm Phillips screws from the PC card side of the PowerBook.
- When replacing these screws, you must reinstall each screw in the correct order. Begin by installing the screw closest to the display hinge, and go out from there.



- Remove the four 3.4 mm Phillips screws from the DVI connector side of the PowerBook.
- when replacing these screws, you must reinstall each screw in the correct order. Begin by installing the screw closest to the display hinge, and go out from there.
- During reassembly, make sure to reinstall the two screws on the right into their appropriate locations, and not the DVI port anchor holes.

#### Step 9



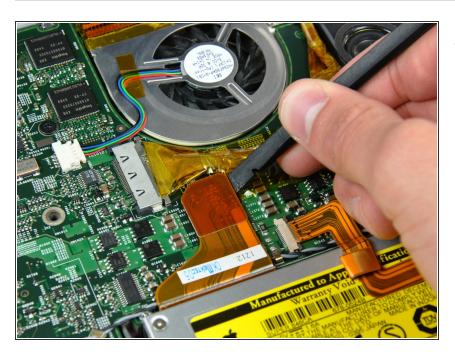
Depress the display latch release button and open your display.





 Starting near the display, lift the upper case straight up off the lower case, minding any cables that may get caught.

# Step 11 — Optical Drive



 Use the flat end of a spudger to pry the optical drive cable connector up off the logic board.



- Remove the following four screws securing the optical drive to the lower case:
  - Three 6.8 mm T8 Torx.
  - One 3.8 mm T8 Torx.

### Step 13



 Lift the optical drive out of the lower case, being careful not to disturb the PRAM battery & USB board ribbon cable.

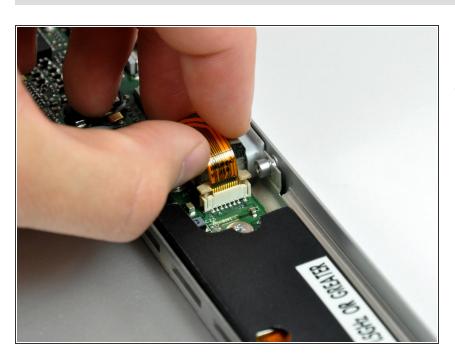
#### Step 14 — PRAM Battery & USB Board





- Use your fingernail and the tip of a spudger to raise the ZIF cable lock slightly up off its socket.
- The ZIF cable lock should raise about 1 mm and stop. **Do not** attempt to completely remove the ZIF cable lock.

#### Step 15



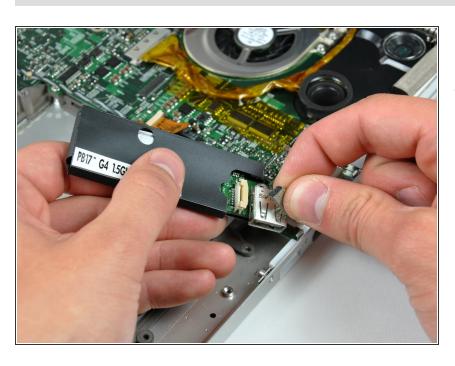
 Pull the ribbon cable straight up out of the ZIF socket.





- Remove the two T8 Torx screws securing the PRAM battery & USB board to the lower case.
- Pull the board away from the side of the lower case to separate the USB socket from the bezel on the lower case.

# Step 17



 Lift the board slightly out of the lower case and peel the small foam EMI gasket off the USB socket, then remove the PRAM battery & USB board from your powerbook. To reassemble your device, follow these instructions in reverse order.