# Logitech G700s Top Button PCB Assembly Replacement

A guide on how to replace the top PCB assembly...

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# INTRODUCTION

A guide on how to replace the top PCB assembly on a Logitech G700s mouse.

## 🔧 TOOLS:

iFixit Opening Tool (1)
Tweezers (1)
Soldering Iron 60w Hakko 503F (1)
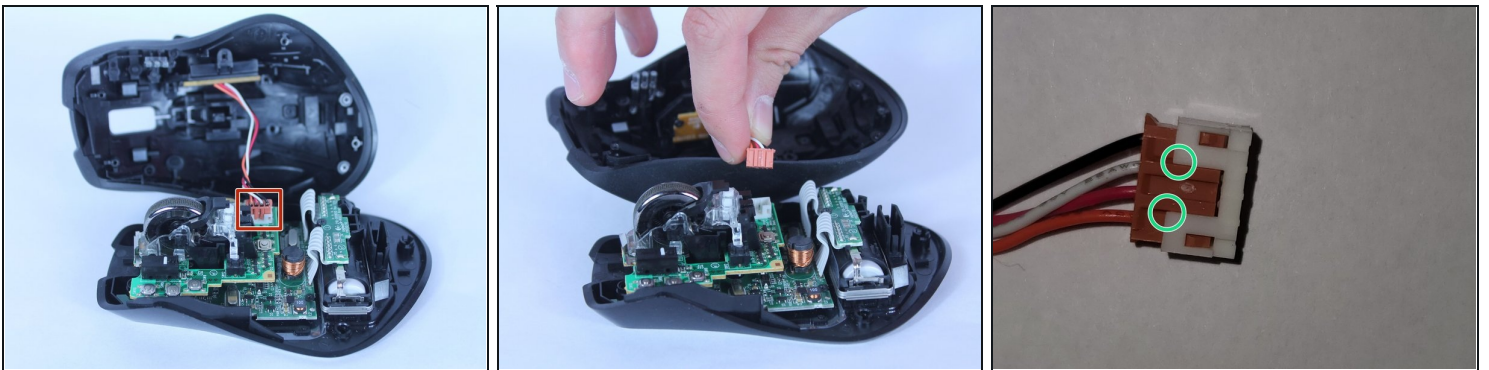Phillips #00 Screwdriver (1)

## Step 1 — Top Case Replacement



- Remove the batteries from the mouse.

- Use a plastic opening tool to peel up the four mouse feet.

## Step 2



- Remove the five 5.5mm Phillips #00 screws found underneath the mouse feet.

## Step 3



- Pull the top of the mouse off of the bottom half.
  - ⓘ There's a wire connecting the two halves.

- Unplug the programmable buttons from the motherboard.
  - ⓘ The white pin housing on the motherboard may come off while unplugging. In that case, use tool to pry between at location indicated to separate them and insert the housing back onto the motherboard.
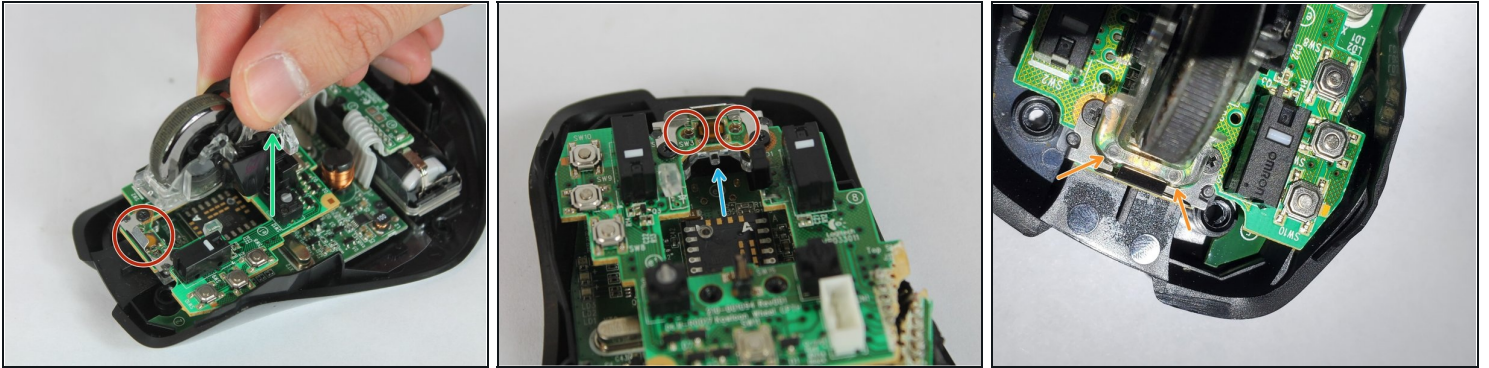
## Step 4 — Scroll Wheel
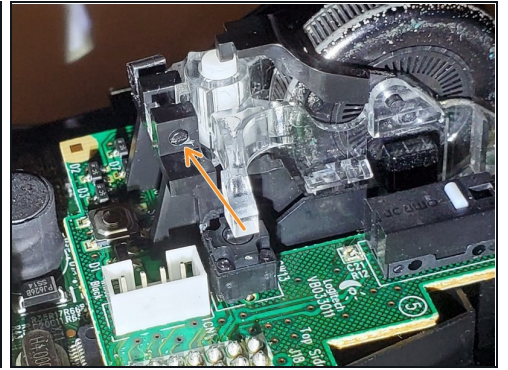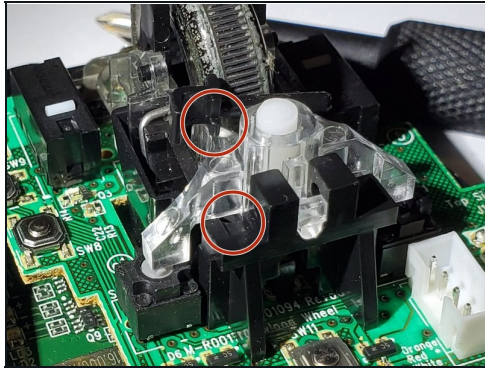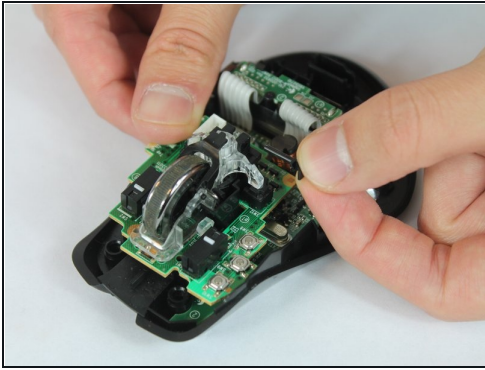


- Remove the black pin that holds the scroll wheel to the motherboard.
  - The protrusion on the bottom side of the pin clicks into the dimple on the base.

  - I find the easiest way to remove the pin is to use the pointy end of the spudger to push on this end of the pin.

## Step 5



- First, lift the assembly from the back (green arrow), while keeping the front clear plastic part resting on the springs (red circle).

- Then, while pulling it toward the back *very* slightly, carefully lift the front part off the springs.
  - (i) It might jump a little bit from the springs.

  - The clear front part has a hole that attaches onto a clear nibble just below the bracket (blue arrow in second picture) for the scrollwheel to pivot left and right for the left and right scroll function.

  - Though the pivot point isn't attached too deeply. When reassembling, align the circular marks in the front to the springs, then press the back side down into the holder and it will self align.

⚠ Be careful not to lose the two small springs! They are magnetic and could attach to any magnetic tip screw driver!
  - (i) Leaving a magnet on the metal clip might help to retain the springs, though I haven't tried it.

- Remove the springs and keep them safe.

## Step 6 — Top button PCB assembly
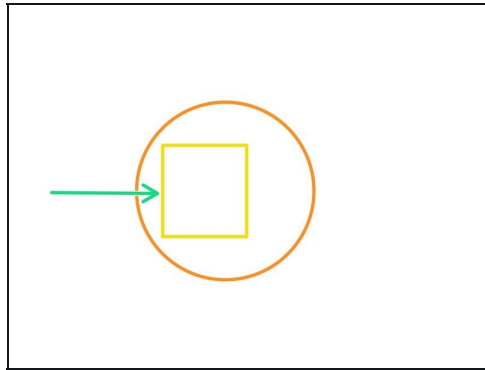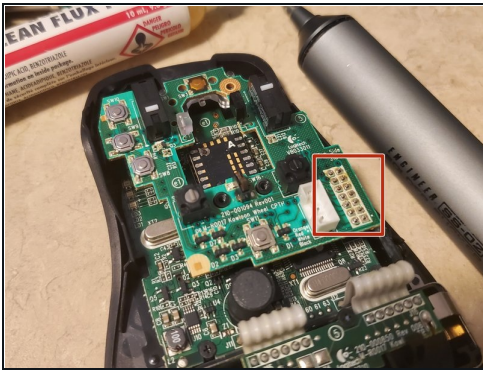


- Desolder the header pins. Desolder while the screws and mounting hardware in the next two steps are still attached, so the board is more stable.

  ⚠ Pay attention to the plastic parts near the header. Find a comfortable position where your iron isn't likely to come into contact with the plastic parts, as they will melt if the iron comes into contact with them.

  ⓘ Use plenty of flux. I find engineer SS-02 [solder sucker](#) to be much less frustrating to use, since its cylinder has O-ring seals and pulls a good suction. It also has a flexible heat resistant tip that allows you to press it against the PCB and the iron.

- Look straight down and check that there most of the solder between the pin and the sidewall is removed. Push each pin sideways to make sure it is detached.

  ⓘ If there are still significant amount of solder, reheat the joint and try sucking again.

  - If it looks mostly clear but the pin is still attached, try pushing the pin to the opposite wall (where it is clearly detached) with a moderate amount of force. (Do not force it too much though or you risk damaging the through hole plating)

  - If it doesn't budge with a moderate amount of force, try using the iron to push on the pin the same way. If it attaches to another part, then the solder isn't sucked up enough.

- Optionally, you may want to mod the PCB to use a socket to connect between the top and bottom, so it will be easier to access in the future. You will need to replace or cut short the header pins. It uses 2.0mm pitch 2x7 headers. There is approximately 7.2mm between the boards. I used Molex 87758-1450 pins and Amphenol 63453-114LF socket.
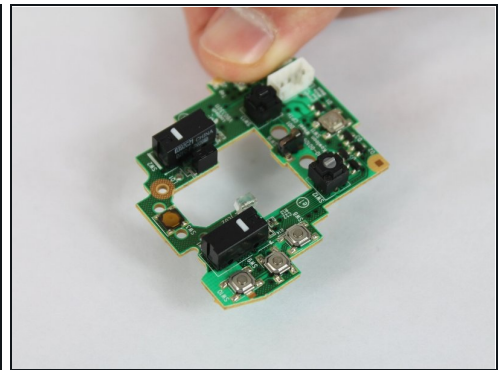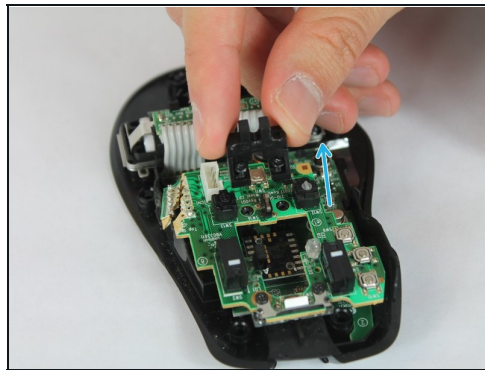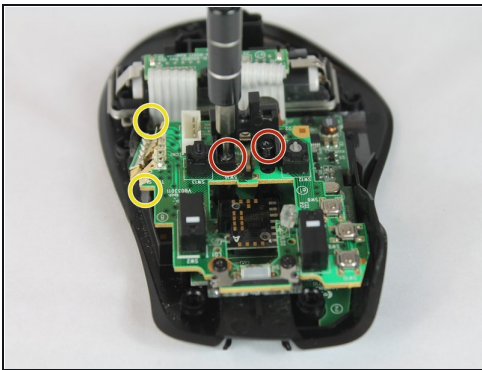
## Step 7
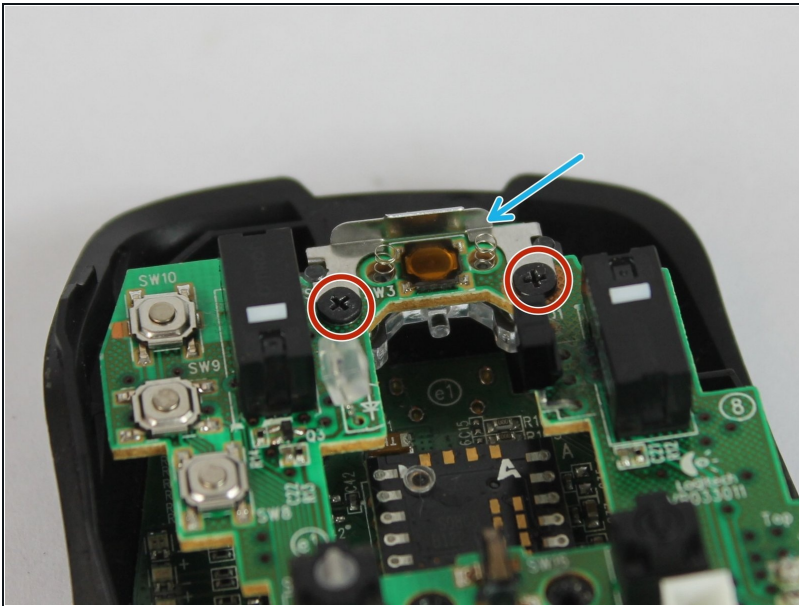


- Remove the two Phillips #00 screws from the motherboard.
  ⚠ The springs should have already been removed and kept safe in the scrollwheel step. If not, do it before removing the screws

- Remove the metal bracket

## Step 8



- Remove the two Phillips #00 screws.

- Next, remove the plastic mount for scroll wheel.

- The top button board can now be removed.
  ⚠ Do not force it if it doesn't lift up easily. Go back to the header pin desoldering step and check for any still remaining connections.

- If you have modded your mouse to use socket instead of soldered connections, lift the board up from the locations indicated by the yellow circles to avoid breaking the PCB. When reassembling, first align the two center posts that the scroll wheel mount attaches to the holes, then press down on the header area.

To reassemble your device, follow these instructions in reverse order.