

Logitech Mouse M525 Disassembly & Scroll Wheel Repair

The one thing to hate about Logtech mice is that they hide their screws under the glide pads...

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INTRODUCTION

Disassemble and reassemble Logitech M525 mouse, with additional instructions to clean/repair the scroll wheel when it is not working, dirty, or the rubber is disintegrating.



TOOLS:

- Phillips #0 Screwdriver (1)
- Needle Nose Plier (1) optional
- Paper Clip (1) optional
- Slip Joint Pliers (1)

optional-vice grip or channel lock will also work.

Step 1 — Remove battery cover.



 Switch for this is on the bottom. Very findable, so no image.

Step 2 — Remove batteries



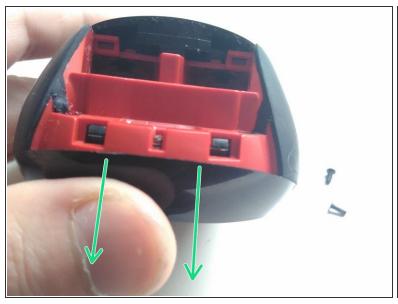
 And the Unifying receiver, if its in the mouse. This is not strictly needed, but you shold probably still do it.

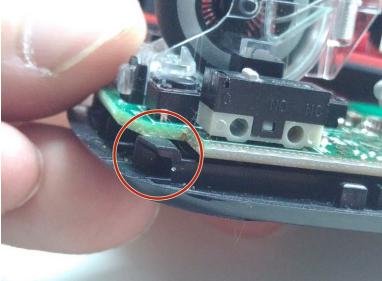
Step 3 — Find the fixation screws



 They are hidden below the two glide pads on the sides of the release switch for the battery cover. Just stick your Phillips in there and get them out.

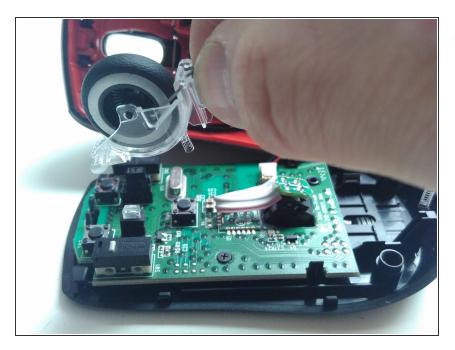
Step 4 — Pull down the downside cover





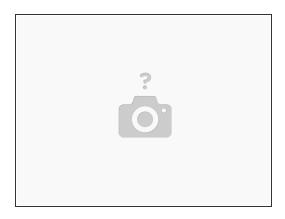
- It will resist a little, gently pull. When you have a little gap, gently rock it for- and backward a little, until it gets loose.
- The second image tries to show the clutches that hold it to the upper cover.

Step 5 — Now you can just remove the rest, like the mouse wheel and stuff.



To remove the scroll wheel, pull straight upwards, taking care the spring on the bottom stays intact. There is a plastic guide on the front of the clear housing that sits between the two plastic posts at the front. Make sure this comes straight up/down to release.

Step 6 — Cleaning and reassembling the scroll wheel



- On my mouse, the rubber on the scroll wheel started to disentegrate. (No photos) but basically, touching the rubber would leave a black streak on your finger. The inside of the plastic housing was also black.
- In addition to other debris, this caused the scroll wheel to stop working entirely, because the wheel registers scrolling by shining light through the clear housing through to the other side. You'll notice there are "fins" inside the wheel; the interruption of the light by these fins is how the mouse registers scrolling.
- By placing a little outward tension on the center spoke, you can remove the wheel to clean the housing. Be careful not to lose the arm and the spring at the rear of this assembly.

Step 7 — Reassembling scroll wheel assembly





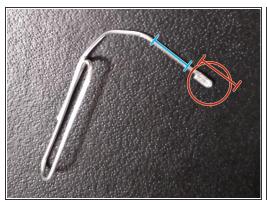


- In my case, the rubber/glue was so disintegrated that the "tire" / wheel cover would not stay centered and kept leaving marks. So I just got rid of it. You could place a thin strip of duct tape or something else if you wanted a cover, but there's no real need for it.
- I decided to photograph this after I had reassembled it. I would recommend you do this assembly before placing the scroll wheel back onto the logic board.

Reassembling the scroll wheel:

- With the recess pointing to the left mouse button, line up one of the hubs and push the other side until both center hubs lock in place.
- Then, place the haptic feedback arm in place by inserting it into the recess, and lining up the left of the two locking clips at the rear of the plastic housing and clipping it in place. Leave the right side unclipped at this point.
- I found it easiest to insert the spring at this point.
- Compress the spring so that it sits entirely underneath the arm. (See photos #2-3)
 - After a few tries, I was successful by compressing it with a paper clip, prepared as shown in the next step. But anything will do the job. The important thing is that it's small enough to allow the right side to click into place while the spring is compressed so the arm sits entirely above the spring.

Step 8 — Compressing the Spring & preparing optional spring compressor







- Prepare the paper clip spring compressor (optional) by unbending the end of a paper clip 90°.
- With needle-nose pliers, grab about 1/8" (red) of the end in your dominant hand. Further below, use channel lock or vice grip pliers (with a wider face) to stabilize (blue).
- Holding the channel lock (blue) pliers in place, bend the end in half (90⁰) and then in half again.
 Then, use the flat part of the needle-nose pliers to compress this fold unto a tight U-bend.
- As shown in the second photo (but prior to reinstalling the housing to the logic board to avoid damaging), compress the spring with the left side of the arm clipped in place, but the right side not yet clipped in. Once the spring is compressed, the paper clip is thin enough that you can click the other side of the arm into place.
- The small bend in the arm must sit entirely on top of the spring.

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