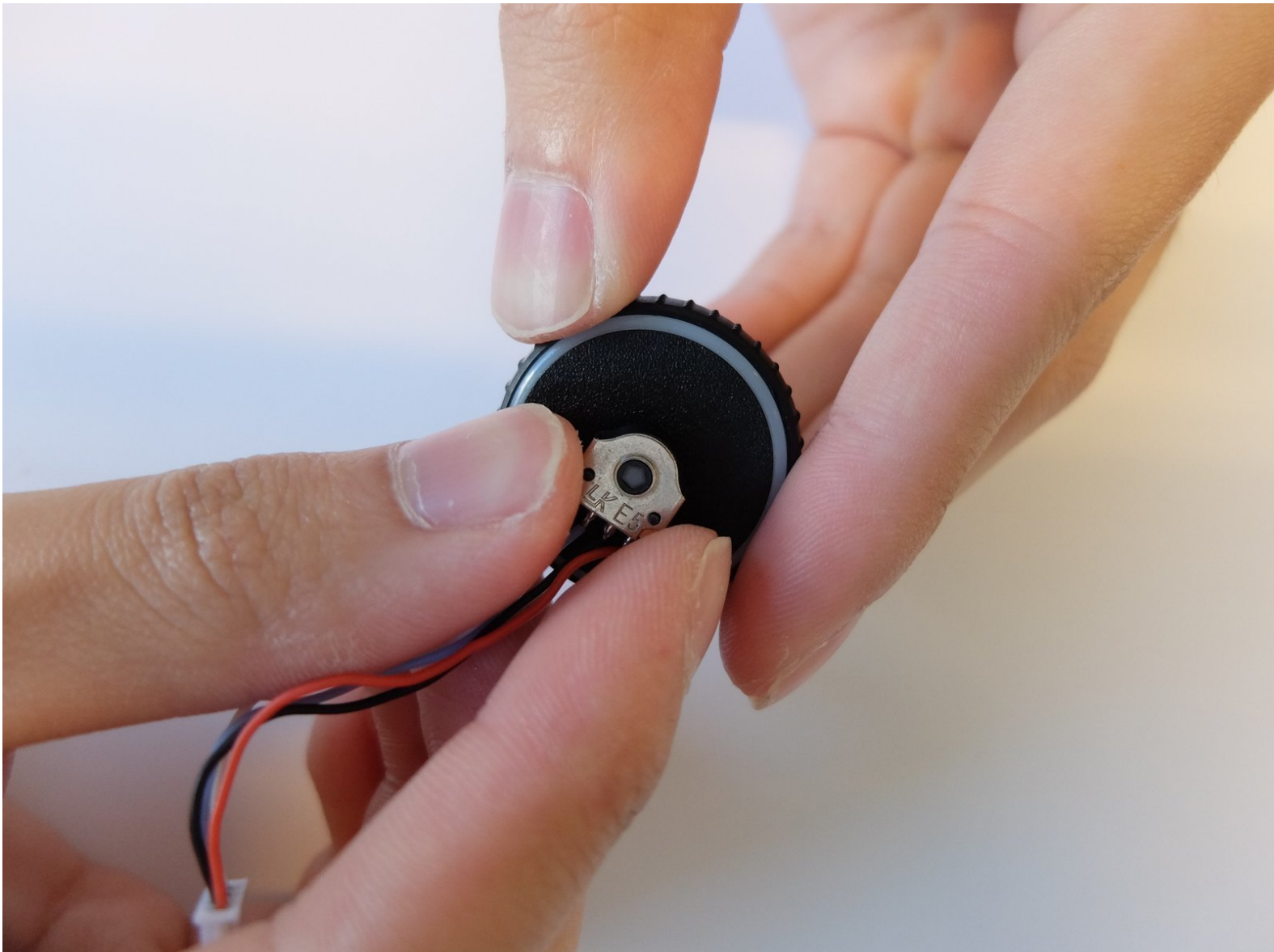




# Razer Naga Trinity LK-E5 Optical Encoder Replacement

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## INTRODUCTION

If the mouse scroll wheel will not respond as it should, the scroll wheel encoder might need replacement. Reasons for the scroll wheel encoder to be repaired is because it is either out of date and needs a replacement or you need to reinstall Synapse 3. This guide will list all required steps to properly replace the LK-E5 Optical Encoder from the Razer Naga Trinity.



### TOOLS:

- [Spudger](#) (1)
- [JIS #1](#) (1)
- [Anti-Static Wrist Strap](#) (1)
- [Halberd Spudger](#) (1)
- [1 x Opening Picks](#) (1)
- [Phillips #000 Screwdriver](#) (1)



### PARTS:

- [LK-E5 Optical Encoder](#) (1)

## Step 1 — Razer Naga Trinity Disassembly



- Remove the interchangeable side plate.

## Step 2



- Remove the mouse's feet using the opening pick.

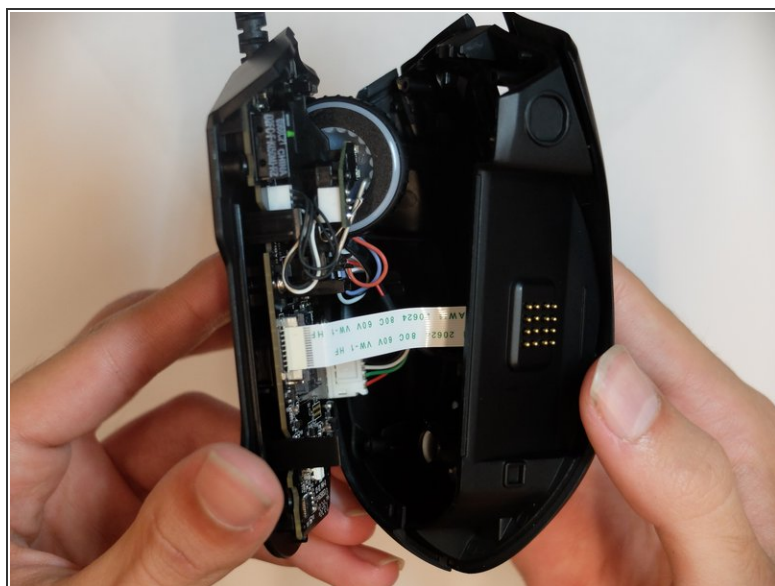


## Step 3



- Remove the four 6mm screws by using a JIS #1 screwdriver.

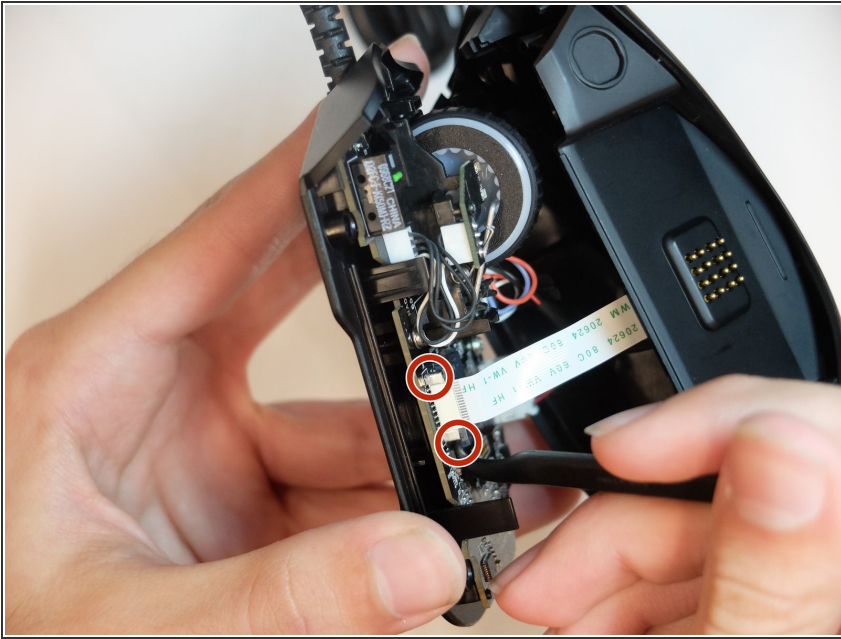
## Step 4



- Separate the top mouse housing from the bottom mouse housing using the opening pick.

⚠ Be careful not to tug too hard on the ribbon connector.

## Step 5



- Unlock the ribbon connector that is held down by the main board clips using the spudger's pointed end.

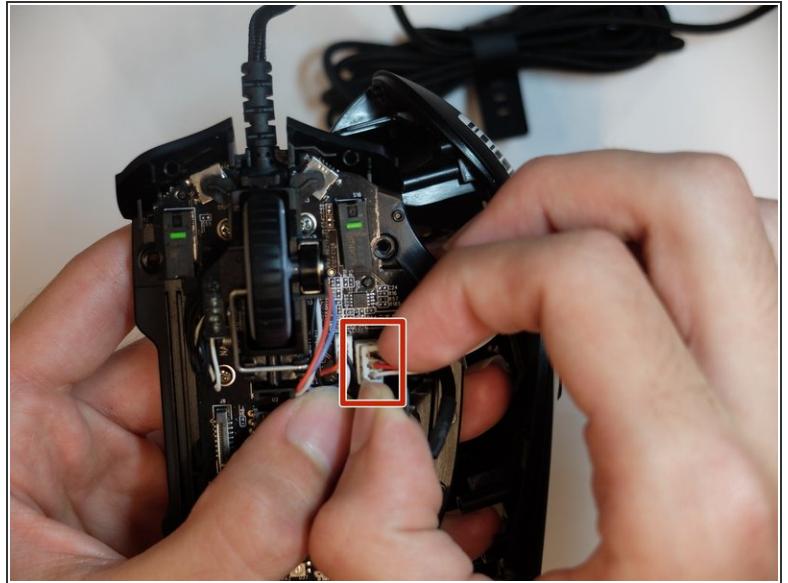
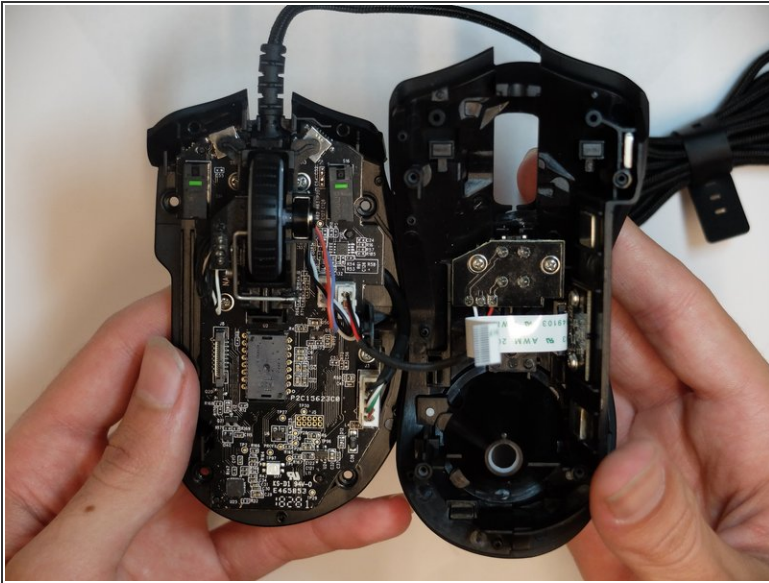
## Step 6



- Remove the side housing using the opening pick.

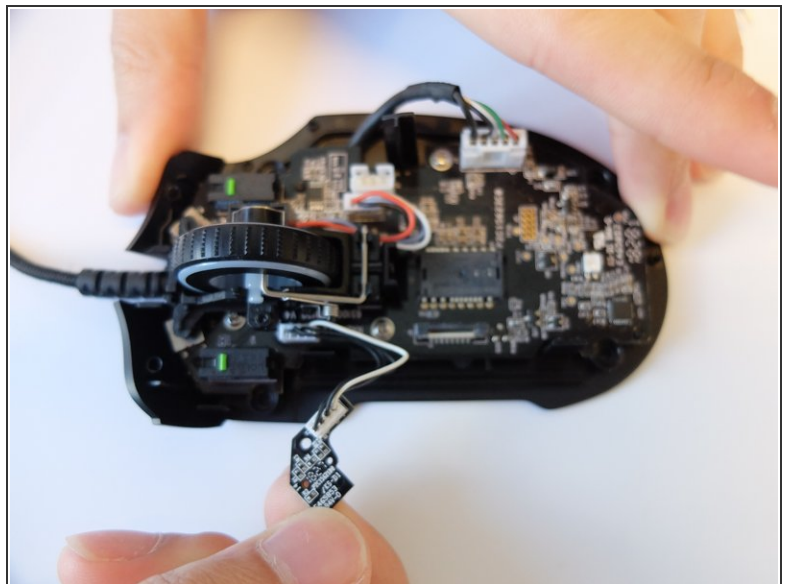
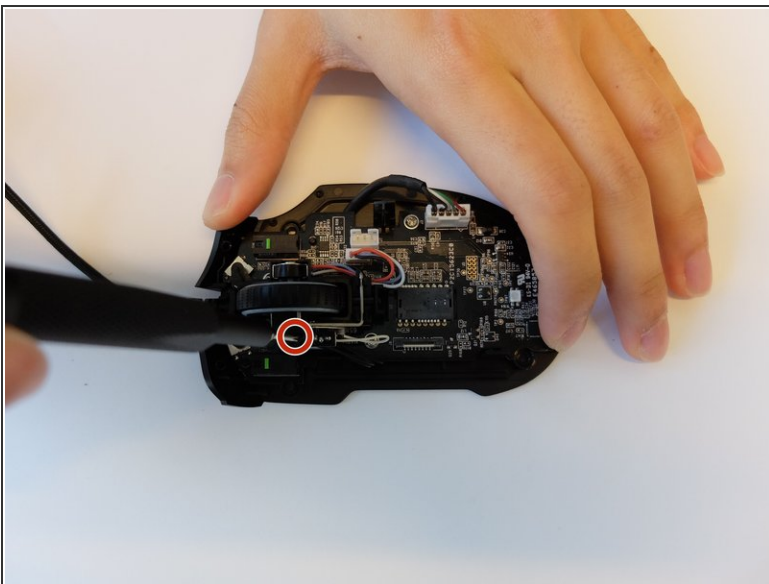


## Step 7



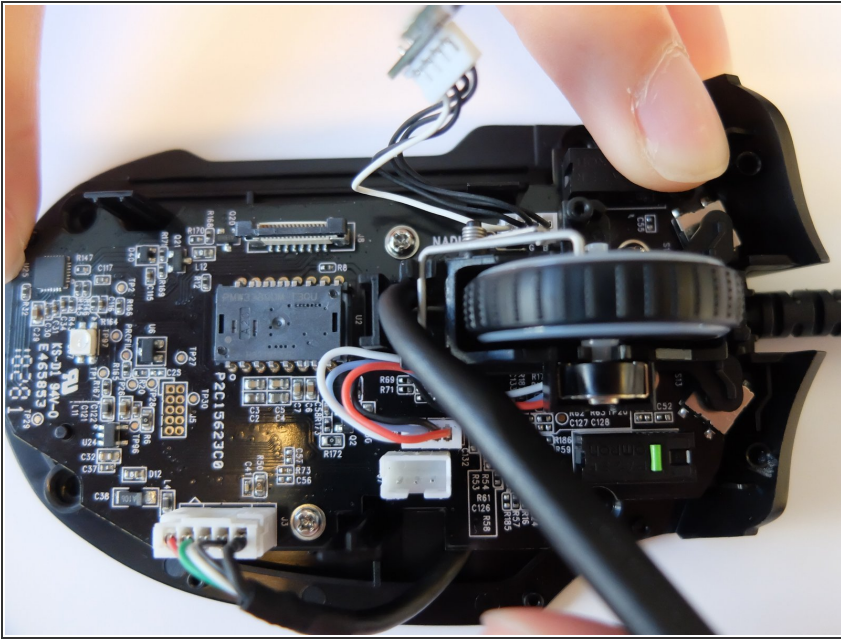
- Remove the top housing LED 3-Pin connector that is near the main board.

## Step 8 — Scroll Wheel Housing



- Remove one 4mm black Phillips #000 screw from the left side of the mouse holding the scroll wheel LED controller board.
- Then pull the LED controller board upwards and out.

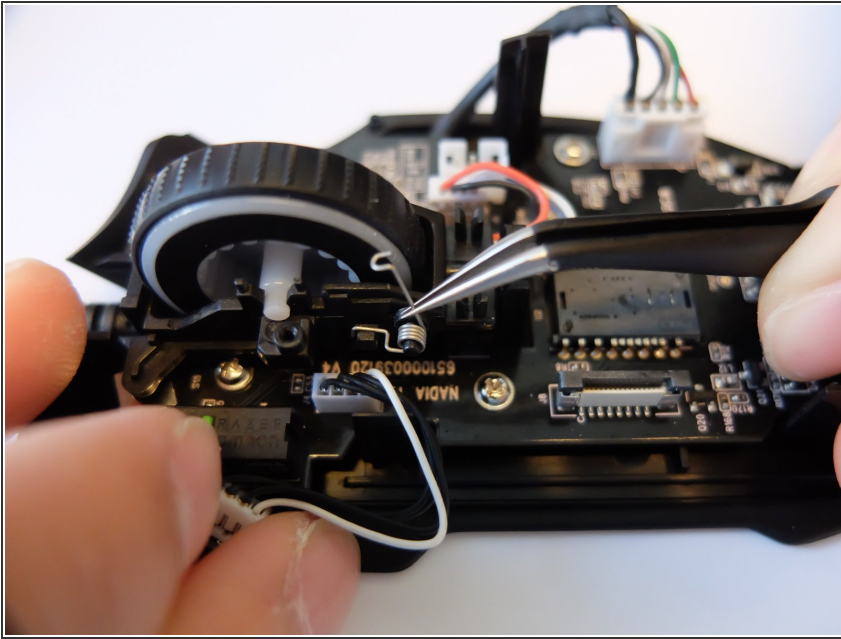
## Step 9



- Pry and remove the scroll wheel feedback bar from its hold-down clips using the hook end of a halberd spudger.

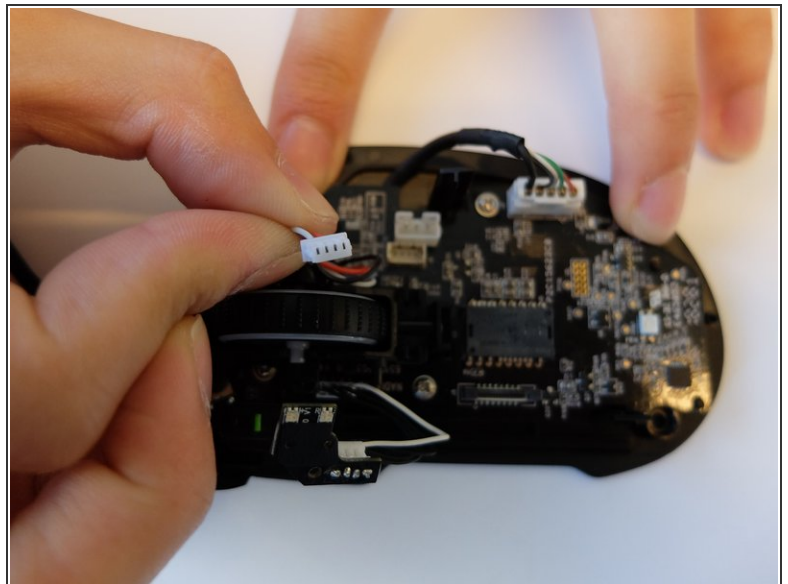
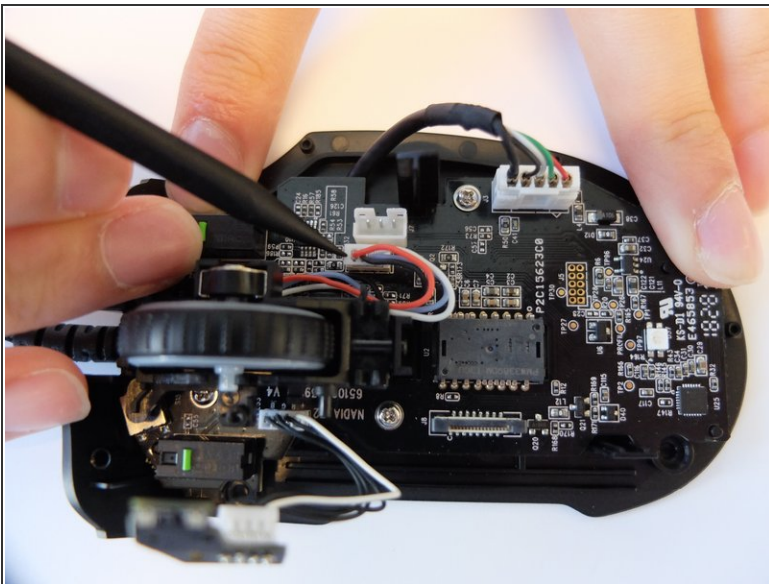


## Step 10



- Remove the scroll wheel feedback bar from the scroll wheel by holding down the spring and using angled tweezers to remove it from its placement.

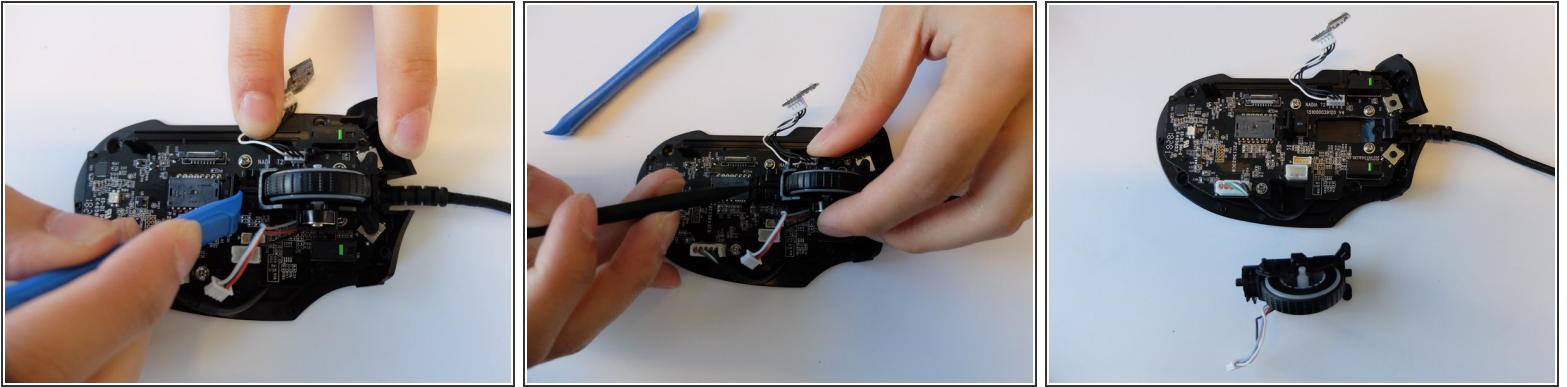
## Step 11



- Remove the scroll wheel optical encoder 3-pin connector from the main board by wiggling the connector upwards.

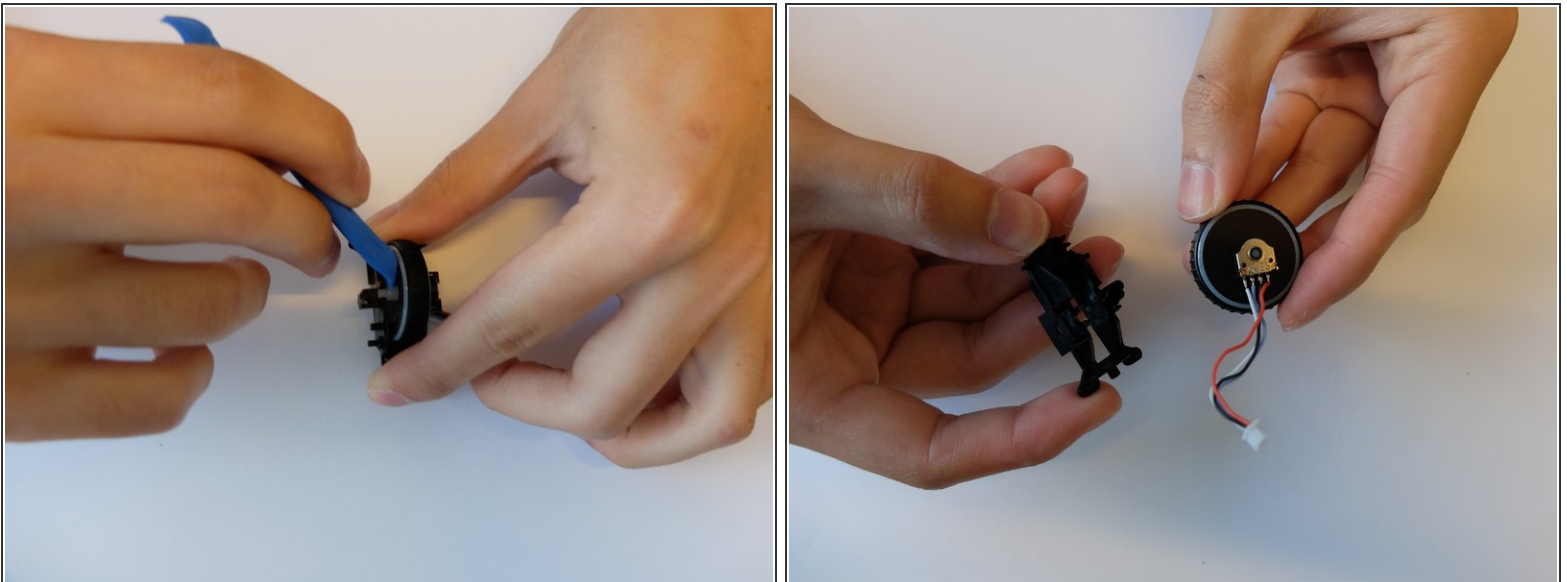


## Step 12



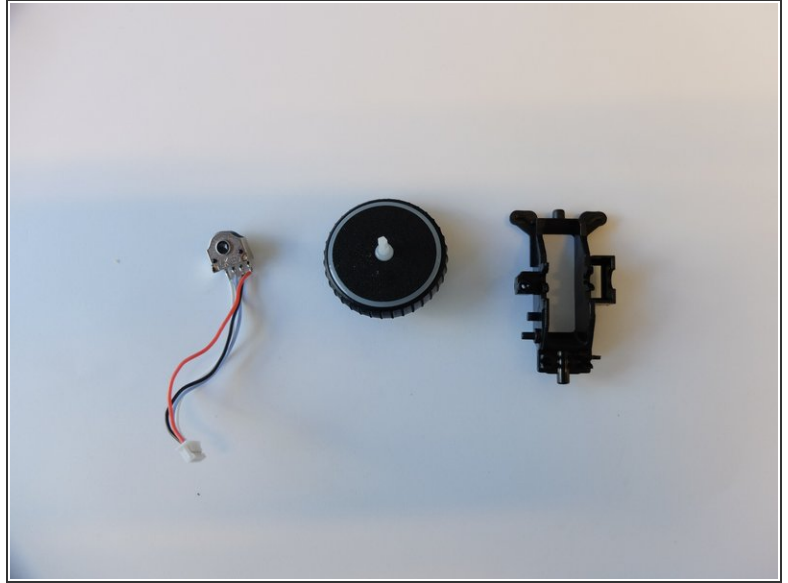
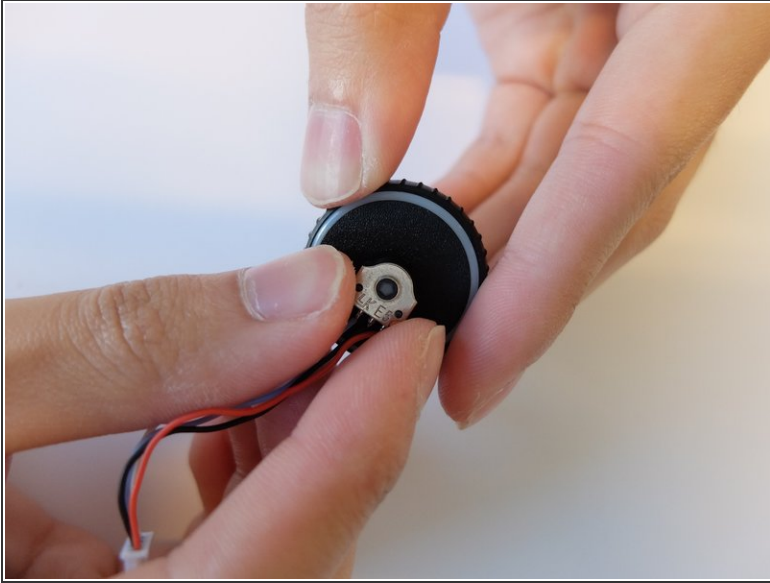
- Using the opening tool, pry the black bracket holding the scroll wheel in place backwards until the scroll wheel housing pops out.

## Step 13 — LK-E5 Optical Encoder



- Remove the scroll wheel from the scroll wheel housing using the opening tool.

## Step 14



- Remove the scroll wheel optical encoder from the scroll wheel.

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