



Roccat Ryos MK Glow key led and key switch Replacement

regardless if you want to replace a burned out...

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INTRODUCTION

regardless if you want to replace a burned out led, or replace a switch for a different kind. this guide will show you the the steps necessary to open your keyboard, desolder the led, desolder the switch, remove both and resolder the new led and the new switch.

in my case, I spilled tea on the keyboard, this burned the left shift led and switch. instead of buying new parts, I used the "break" key switch and led as a donor.

the tools you'll need are:

[a Phillips head screw driver](#) (I recommend the protech toolkit)]

a [Jimmy](#) or a similar tool to separate the foam feet.

[Tweezers](#) or a small plier to help you pull the leds and key switches from their sockets

a soldering iron

[some new solder](#)

some desoldering braid or a [desoldering pump](#) (personally, I prefer the pump and this guide is done using the pump)

you will void your warranty with this fix and I take no responsibility for anything that goes wrong or any damage that may incur, that said. the changes are very slim that something will go wrong (if I didnt break my keyboard, you wont either!)

TOOLS:

- [Phillips Screwdriver](#) (1)
 - [Jimmy](#) (1)
 - [Tweezers](#) (1)
 - [Soldering Iron](#) (1)
 - [Lead-Free Solder](#) (1)
 - [Desoldering Braid](#) (1)
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Step 1 — unscrew all visible Screws



- there are 7 screws in total, you will need to rip the warranty information to get to the 7th

Step 2 — remove the foam feet



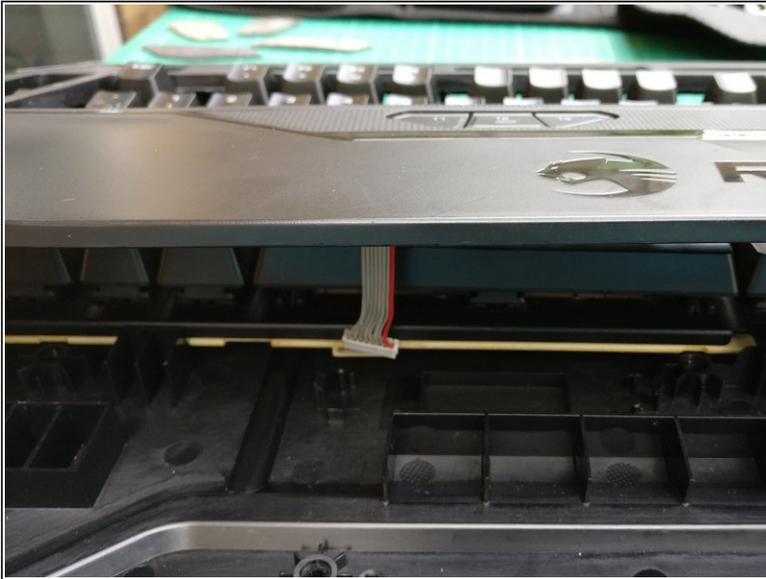
- Using a [Jimmy](#), separate the foam feet from the body to expose the hidden screws underneath.
- Go slow and try to conserve as much glue as possible on the feet or the keyboard itself, this way you should be able to just stick it back once you are done.

Step 3 — remove the hidden screws



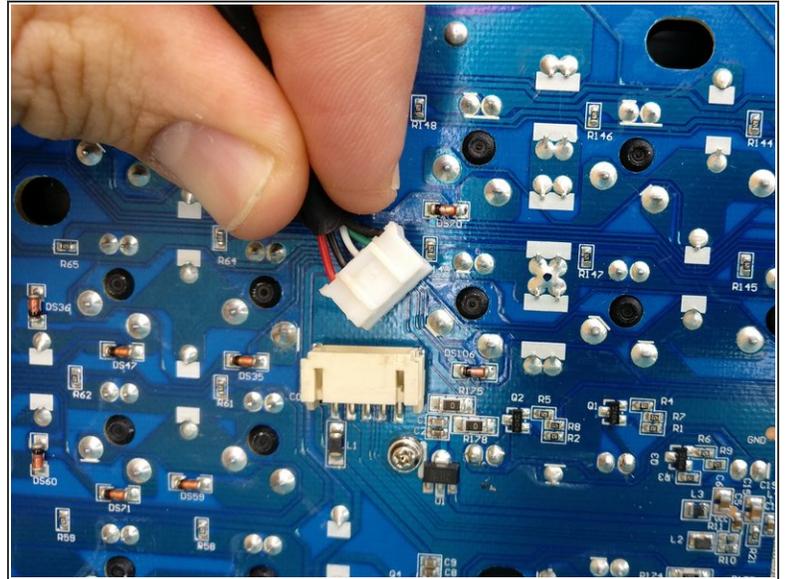
- there are another 7 hidden screws that need to be removed. once that is done you can slowly start separating the plastic shell
- be careful, the thumb keys (underneath the spacebar) has a tendency to stay stuck to the the top plastic part but its attached to the main PCB that is attached to the bottom, hence the next step.

Step 4 — separate the thumb keys



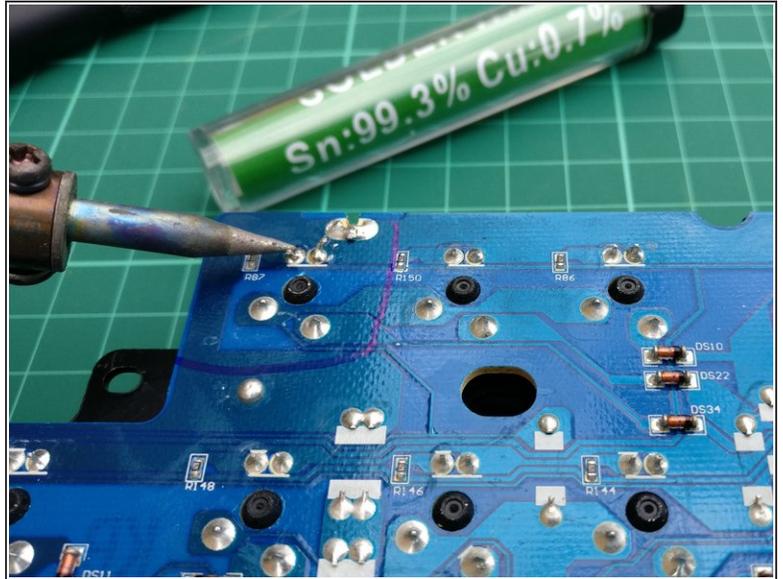
- carefully separate the cable from the main body
- remove the thumb key PCB from the top plastic bit (you can put the top plastic part to the side as you'll only need it when you are closing up the keyboard
- I recommend reconnecting the thumb key PCB to the main keyboard as it can be easily forgotten when closing up.
- enjoy the easter egg.(after all you are now a l337 h4x0r yourself)

Step 5 — remove the usb plug



- flip over the PCB and remove the USB cable. (more of an optional step but worth the effort)

Step 6 — remove the key caps from the keys you want to change



- here we are removing the shift led and switch with the "break" key led and switch.
- if you want to take out all the key caps and do some basic maintenance on your keyboard, now is a good time but erm.. take a picture of your layout first.
- flip the keyboard over and identify the keys, here I have outlined them with a sharpie

Step 7 — unsolder the leds.



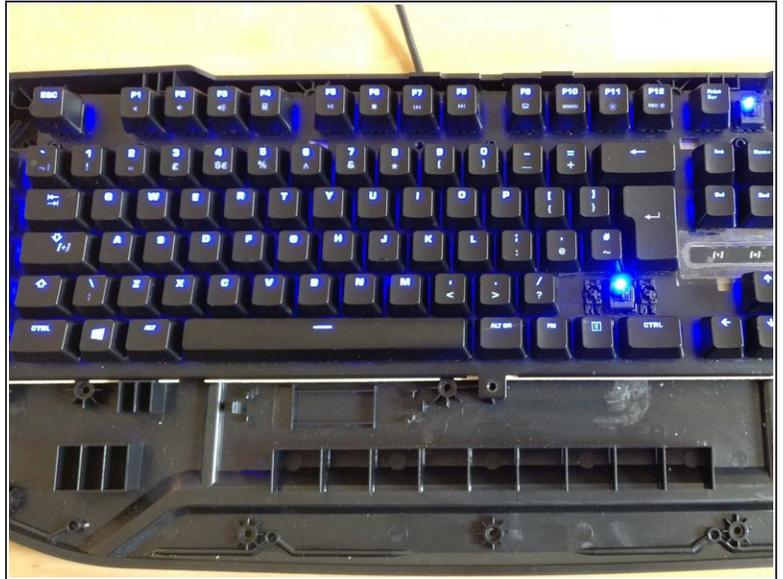
- Every key will have at least four solder points. Two for the LED, and two for the switch.
 - The ones that are parallel to each other are for the LED.
 - The switch solder points are in an offset placement (like a knight in chess).
- after removing the solder , you should be able to pull the led free. take it slow and if you feel that it is still stuck, repeat the process to ensure there isn't any solder holding it in place.
- if you are replacing the switch, after removing the solder push the switch from the back

Step 8 — resolder your switch/led



- get your new donor switch and led and get ready to resolder. look at other keys for reference on the correct way to pop in your led
- if you have access to bluetac, it may help hold the key and led in place without leaving any residue (and being easy to clean)
- when soldering, less is more, I actually redid this because I used too much solder

Step 9 — test your changes



- before testing your changes, hit the keyboard with some compressed air to remove any solder that may have fallen on it and could cause a short. doing basic maintenance now is also a good idea.
- reconnect the usb power and test your keyboard while it is still open and easier for you to work on.
- success! everything is working and you can now go ahead and close up your keyboard, you are finished

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