

# HOW TO CHANGE THE BATTERY WITHIN LAND ROVER DISCOVERY 3 KEY FOB

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First, I need to say that this manual is my way of saying THANK YOU to everybody who contributed anything to the forum DISCO3.CO.UK  
ALL WHAT IS DESCRIBED IN THIS MANUAL ARE MINE PERSONAL EXPERIENCES AND NEED TO BE USED ONLY AS A GUIDELINE.  
EVERYONE WHO FOLLOWS THIS HOW TO GUIDE IS DOING IT AT THEIR OWN RISK.

Sadly, everything needs to start in this matter..

### 1. Diagnostics

When key fob of your DISCOVERY 3 stops working there are several things that can go wrong. I am quite confident that vast majority of them are related with loss of contacts (terminals) between battery and circuit in the fob. But not all of them!

I will show you how to fix only the above mentioned problem. Why? Because I had it...

First we need to discover if this manual is of any help to you.

Are both of your key fobs inoperational? Did they stopped working at the same time?

If they did so than you probably have a different problem and I can not hepl you.

One of the best ways to diagnose the nature of damage is to tap the key fob against hard surface. Try not to damage the fob on rough surfaces.

After every tap try the key fob for function. If it starts to work on one or another occasion then you can fix the problem.

### 2. Nature of the damage

Answer on this question is quite simple. The Land Rover key fobs are big and heavy.

With normal use drivers tend to drop them on the surfaces that the cars are parked on.

With every drop the circuit-battery assembly gets stressed and one day it separates.

Now we have an inoperative key fob.

3. What do we need to have, buy, borrow, steal,...

Now you are at the point of giving up on your fob. Before you get rid of it you can try to repair it.

To do the job properly you need to buy a new key fob case on the eBay (I payed 20 to 25 €for one). The old one will be damaged in the process, but it can be re-used. I bought the new one.

The second thing you will need is a replacement battery. I bought the same one that I found in the fob. I used PANASONIC VL 2330 battery.



Old and new battery

You will need to have a soldering station. The battery is soldered to the circuit. For disassembling the fob you will need a pizza knife (any thin jagged knife) and a flat screwdriver.

#### 4. How do we do it?

Put the old key fob on the flat surface. With use of the pizza knife gently saw all around the fob. The knife should run along the gap between upper and lower case shell. The blade should be opened (otherwise you will not be able to saw through the blade well).



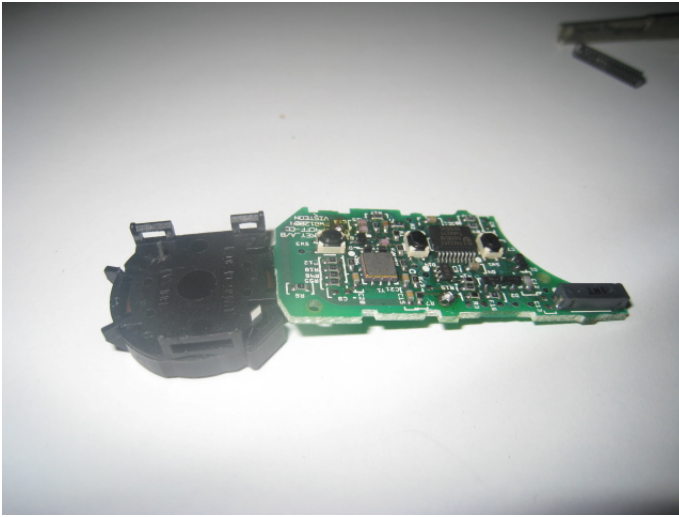
Cutting around the key fob

The depth of the cut should be between 2 and 3 mm. Try to separate the two case shells with flat screwdriver. **IT WILL FIGHT BACK.** When you open the case be a bit careful with key blade assembly that is spring-operated.



When you get to above pictured step the rest is easy. The spring in the blade is rather gentle so you do not need to worry to much about it.

Then take out the circuit from the fob case. Try to handle it on the edges without touching the delicate circuit. The battery is connected to underside of the circuit with the plastic cradle and soldering.



The plastic cradle is connected to the circuit with three slings that are fixed on the edge of the circuit. First melt the soldering agent on the battery terminals (be certain which ones you melt) and get rid of the agent by vacuuming it. Or shaking it away in melted state. This could also be a bit fiddly. Then gently remove plastic cradle and you have three separate pieces on the table: circuit board, battery and plastic cradle.

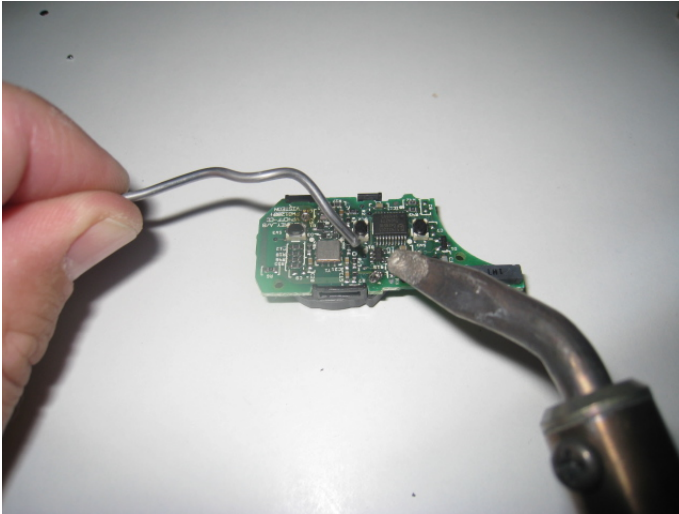
*\*\*\* When I opened the fob case I did not had the right battery so I fixed the problem by removing plastic cradle entirely and connected battery directly to the circuit board. Afterward I squeezed in-between some rubber foam and taped the fob case back again. This method is good for quick fix and to check out if diagnosed the problem correctly without any additional costs. We reused the key fob case and the old battery.*



But I prefer more solid solutions.

So I bought the new fob case and new battery and fixed the problem thoroughly.

Now you put the new battery into the plastic cradle and return the plastic cradle with the battery back where it was. When you do everything right the battery terminals will protrude through the circuit board.



Now you just need to solder it back. The key fob will work at once. At least mine did.

Put the circuit back into the fob case (it can be an old one but I opted for a new one). I also made a small shock damper out of rubber foam and stuck it between battery and lower fob case to immobilise the circuit in the fob case (my way of improving things-usually useless).



Then reassemble the key blade system. I used entire original key blade set in the new aftermarket case and it performed O.K. Before gluing it back together you need to check

the entire key fob for function-electronically and mechanically (I managed twice to reassemble key blade incorrectly).

Then you glue the darn thing together. Apply the glue on all interconnected surfaces of the fob case (only on the sidewalls) and be generous with it. The fob case is made out of non-glue friendly plastics so it can fall apart.

YOU ARE DONE!

Go to the car and use the key fob wisely. When you use the same circuit board and the same key blade you do not need to pair the key fob. Again I did not need to do this.

Regards

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