

## Instruction Process for changing over Land Rover 3 Button Key Fob Case as used in Range Rover Sport 2005-2009 and Discovery 3 Vehicles

*Disclaimer: This process involves you forcibly taking apart your key fob and then re-assembling into a replacement case. This is fiddly and you risk damaging your existing key fob, the new case or yourself in the process. Please read all the instructions, take advice from other forums and decide yourself whether you want to do this. You should make sure you have all your necessary tools to hand, any necessary safety equipment and a good slice of common sense before embarking on this. The author cannot accept any responsibility for loss if you decide to perform this yourself.*

The objective of this process is three fold; 1) open up your old key, 2) check and clean the key internals, 3) reassemble the new key.

You are likely to need the following items:

- Various sized flat blade screwdrivers
- Snipe nosed pliers
- A thin punch to remove the roll pin holding the key blade
- A small hammer
- Abrasive paper (glass paper)
- A safe working area (rubber mat)
- Any other safety equipment you deem necessary
- Plastic glue (I used super glue)
- Rubber bands to hold the key together while the glue sets
- Metal cleaner to clean any glue vapour from the chrome components

***One last check is to make sure your spare key is operational – just as a precaution.*** If you are ready then we can start...

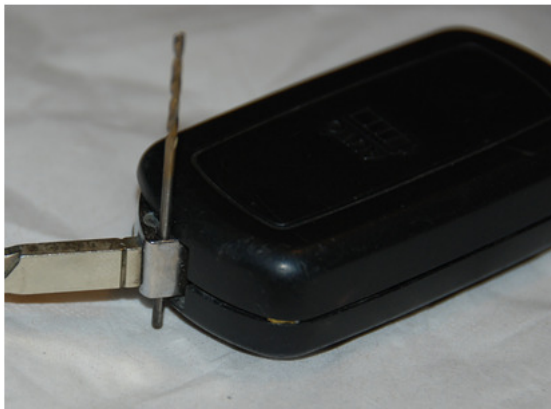
- 1) Remove the house keys and rings from your old key fob. The LR 3 button fob should look like this:



- 2) Check over the new key fob and satisfy yourself that you have all the necessary components and they are in good condition. The new fob will look like this:



- 3) Start disassembly of the old key fob. Remove the key blade from the fob by knocking out the roll pin (carefully) with a suitable punch or an old drill bit of the correct size. (This is when you should protect your fingers and eyes in case the punch shatters.) You are then left with the good blade and the old roll-pin.



- 4) It is a good idea to clean your key blade at this time while it is readily accessible. (I used some solvent and a little bit of wire wool.)
- 5) The next step is the most destructive and hardest part of the whole job (*are you sure you want to do this?*) Start opening the old key fob with a small flat screw driver. Work around the join in the case. The key fob is glued shut and requires force to open. Be very careful not to poke anything too far into the case as you might damage the circuit board and then you are knackered!



6) Eventually and carefully you will open the case and find the following inside:



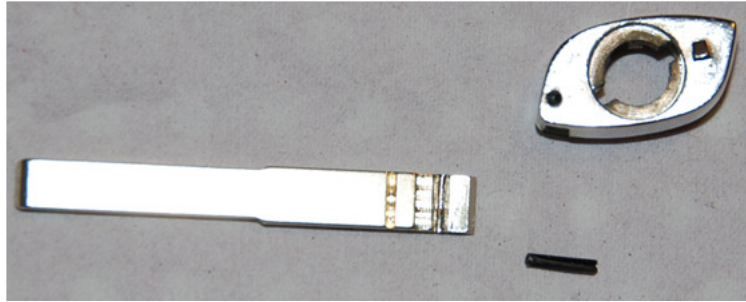
7) Here is an exploded view of all the components from the original key fob:



The parts are; front case with buttons, rear case, key blade holder, button and spring, key ring holder, rubber internal board insulator and lastly, the board itself.

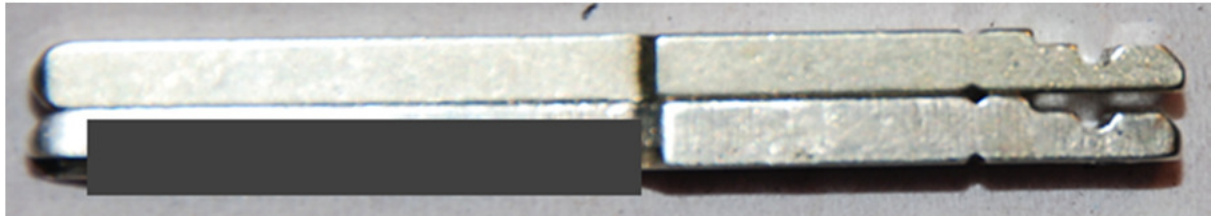
- 8) At this point you can check the function of the circuit board with the car to ensure it is still working by pressing one of the three buttons to unlock, lock and perform whatever you have the 3<sup>rd</sup> button programmed to do. Note: Don't short the circuit board on any metal or conductors such as your rings, watch etc. The circuit board is live and prone to damage!
- 9) Now we need to prepare the new key fob. First remove the blank key blade from the key holder in much the same way as you did in step 3 with the original key blade. The new key blank is not required unless you want to have it laser cut to the profile of your original key as a spare.



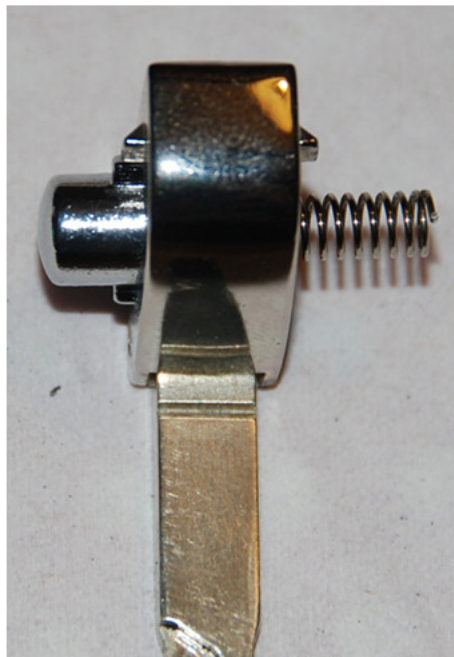


We will use the new blade holder and roll pin with the original key blade.

- 10) Try to fit the original key blade to the new blade holder. I found I had to take a small amount of metal off of the end of the blade to fit it into the holder so that the roll pin hole and groove lines up. Here is a picture of the original blade (cut blade at the bottom) and the new uncut blade. The profile on the right hand end of the original blade can be adjusted to fit the holder with a few rubs across a piece of abrasive paper on a flat surface. You will need to take small steps to adjust your blade to the new holder.



- 11) Once the blade fits into the holder you can punch the new roll pin into position.
- 12) Now it is time for a dry fit of all the components. The key button and spring locate into the holder like this:



The internal end of the spring goes into the button, the outward pointing end of the spring will locate in the rear case. The button will fit a number of ways into the blade holder but only one way

will allow the button to pass through enough to also then pass through the front case when assembled.

- 13) The next few steps are not easy to show in pictures but I will try to explain. Mount the circuit board and rubber insulator into the rear case.
- 14) Mount the blade holder, button and spring in the front case. Have a couple of rubber bands to hand.
- 15) Place the two halves of the case together and locate the spring end into the rear case. Do not close the case.
- 16) Carefully, rotate the front case anti-clockwise around the spring once. This adds the necessary tension to the spring to allow the key to flip open.
- 17) Close the two halves of the case together and fit the key ring holder. Fit a couple of rubber bands to hold the key fob together.
- 18) Now test the key fob is working with the car.
- 19) If all has gone well to this point you are ready to glue the key fob together.
- 20) The gluing assembly process is the same as for the assembly process above but you will need to run a bead of glue around the ridge on the rear case highlighted in red below. The glue should be on the side of this ridge, not the top, but you will see from trial fitting the two cases together where the glue should go.



Be careful not to use too much glue but try to run a bead all the way around so to seal the key internals from moisture and dust.

- 21) Carefully assemble the glued components, add the tension to the spring and then hold the two halves together with rubber bands or cable ties. Don't forget to add the key ring holder.
- 22) Before the glue goes off, check the action of the key blade and button.
- 23) Note: If you use super glue you might need to clean any glue vapour off of the blade holder before it sets hard.
- 24) And that should be it. Check all functions of the key fob with the car and give yourself a pat on the back!



**Credits:**

Thanks to all those at [www.disco3.co.uk](http://www.disco3.co.uk), especially to BBS SPY who wrote up the disassembly of his key within the posting here -> <http://www.disco3.co.uk/forum/topic39609.html>