

Delorean Lighted Key Parts List

Battery SR516SW: (dual 1.5v). Small button batteries x2



[https://www.amazon.com/gp/product/B07JGP7CX1/
ref=ppx_yo_dt_b_asin_title_o01_s00?ie=UTF8&psc=1](https://www.amazon.com/gp/product/B07JGP7CX1/ref=ppx_yo_dt_b_asin_title_o01_s00?ie=UTF8&psc=1)

- Wrap 2 batteries in series (stack them) with electrical tape to make a larger battery.
- Tape the wire end of the switch (that isn't soldered to the LED) to the NEGATIVE (GROUND) side..the idea is that when the switch is depressed the ground connection is made and the light powers up.
- You need 2 batteries to get the 3 volts that the bulb needs to power on!!!

Wires 2x

Small enough to fit in chassis and soldered to the microswitch
With bare wire exposed (or a VERY thin lead)

Microswitch. 6mmx6mmx5mm (twin prongs coming from one side)



6*6*5

[https://www.amazon.com/gp/product/B07QLK8J72/
ref=ppx_yo_dt_b_asin_title_o04_s00?ie=UTF8&psc=1](https://www.amazon.com/gp/product/B07QLK8J72/ref=ppx_yo_dt_b_asin_title_o04_s00?ie=UTF8&psc=1)

LED bulb (3mm).

I'm using white but there is a warm yellow that looks like an old incandescent bulb.

[https://www.amazon.com/gp/product/B01AUI4W5U/
ref=ppx_yo_dt_b_asin_title_o05_s00?ie=UTF8&psc=1](https://www.amazon.com/gp/product/B01AUI4W5U/ref=ppx_yo_dt_b_asin_title_o05_s00?ie=UTF8&psc=1)

Volvo X29 Key

(Taylor is the brand I'm using if you want a perfect fit to the 3d print, otherwise you can glue, epoxy, or grind the key down to fit). The Taylor just pops in.



ASSEMBLY:

- 3d Print the Top, Bottom, and Button portions of the chassis
- Take the Volvo key and slide it in at an angle into the "top" portion of the key side of the 3d print and then push down. It will fit VERY SNUGLY with no glue needed.
- Solder 2 wires to the microswitch and have one of the wires connect to the "short" end of the LED
- Now take the other "bottom" half of the 3d printed chassis with the hole in it and place the LED into the hole built for the LED near the front of the key. (It shouldn't need glue but it can be glued down if needed. You'll have to run the wire that is soldered around the "outside" edge of the chassis case and the microswitch will be free hanging. The other non soldered lead of the LED will go into the battery tray. (When you put the batteries on top of it you create the connection).
- Stack 2 of the batteries the same way and tape them together with electrical tape ONLY ON THE SIDES to hold them like one bigger stacked battery. You need the top and bottom clear so that the electrical contacts can touch it.
- Place the battery into the holder on top of the led contact in the tray.
- I know this part is tacky but I couldn't source an option...you can cut

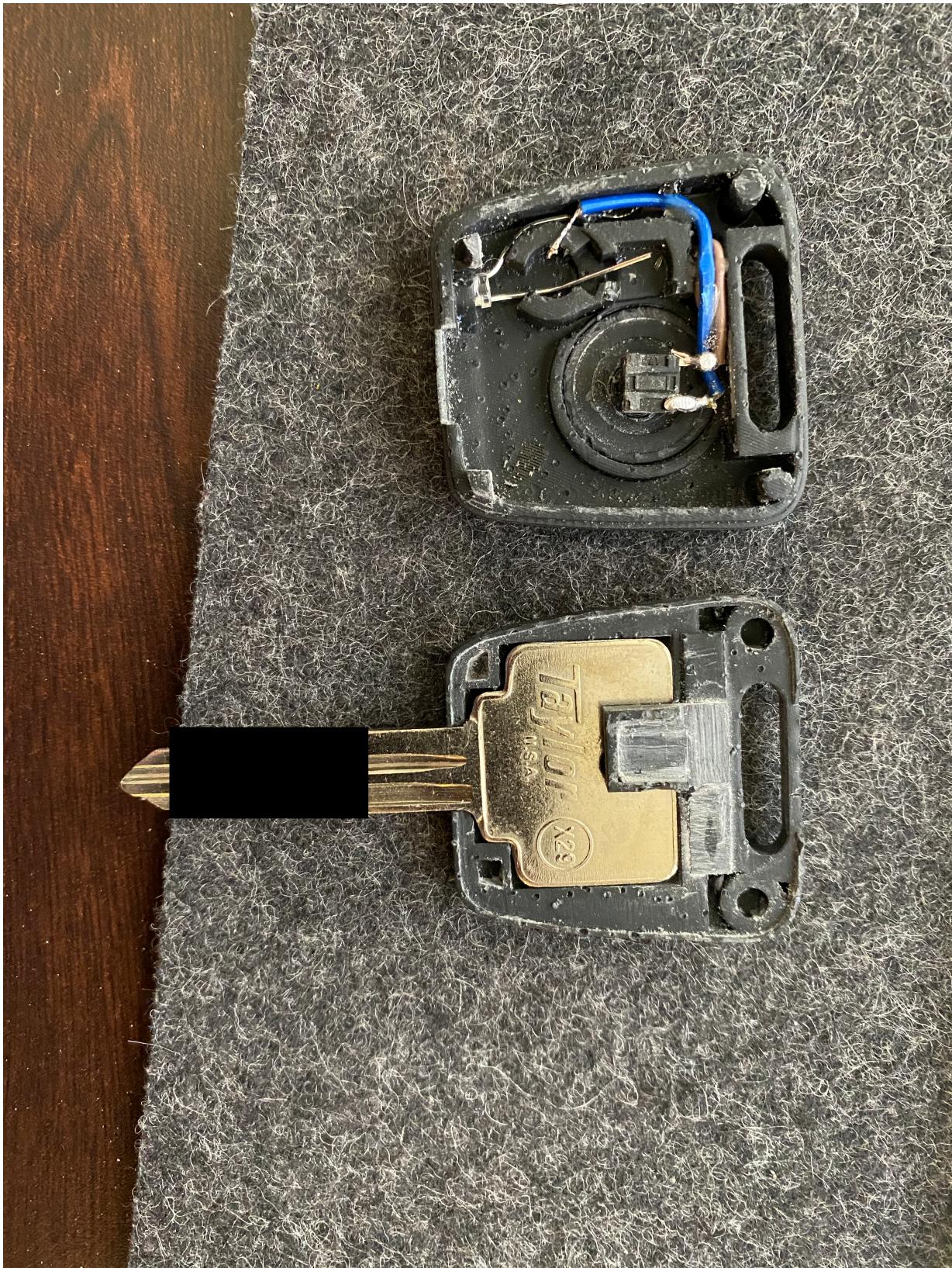
some metal to size and solder that to make a contact if you'd like but I just tape the other wire to the top of the battery stack when the battery is in place in the socket...the top is electrical taped down onto the negative side of the wrapped battery, the bottom is pushed down onto the led contact in the base of the tray.

- Test the microswitch, see if things light up. If they do, move on to the next step.
- Route the wires through the key to the microswitch platform.
- Glue or epoxy the microswitch to the platform above the Taylor key on the 3d print (It's made just for it so it should fit perfectly. It'll be beneath the hole for the button when the bottom is put on.)
- TEST THE KEY, does it work?
- Add the button cap into the equation by putting it between the top shell and the microswitch. The idea is that when you press the button you're pressing the microswitch down. You don't need to glue it because I've got guides in there to stop it from sliding out but you're welcome to glue it if you really want to.
- Carefully snap the top and bottom together after checking that the wires are routed.

That should be it! I'm not sure how long the battery will last if you constantly use the light but the shelf life on those batteries are 5 years so you may need to change them every so often. To take the thing apart I left a notch on the back on the key ring side that you can use to gently pry to get the thing to open up again.

Eventually the 3d print may wear down and you'll need to run a new chassis but if you print it in metal it should last for a very long time.

Pics of the wiring: (I had a little rough sanding to do for this test print. I've updated clearances since then so it should be pretty easy.



Wrapped stacked batteries:

