Cougar Door Switch Color Mod How To

CougarDB.com

Parts List 3mm LED(s) ([check FAQ for more info](#))
2-Flat head Jeweler's screw drivers
1-Standard size Flat head screw driver
1-Roll of solder
1-Fine-tip soldering iron
1-"Fine" Side cutter
Suggested items 1-5" forceps or needle nose pliers

Remove the switch(es) that you are modifying.

To do this you need a jeweler flat head screwdriver and a standard size flat head screwdriver.

Use the jeweler screw driver the lift each switch enough to allow the larger flat head to be placed between the door and the switches outer lip.

With a prying motion the switch will pop out enough to get a finger hold of it then pull it out of the door.

After its in your hand (Photo to the right) on one side of the switch is a tap. Push the tap down while pulling the switch assembly from the wire harness.

Removing Switch Button Cap

This cap is just snap together.

You need to pry both sides of the switch out far enough to get past the "hooks" that hold the cap closed.

CAUTION: When prying you run the risk of cracking/braking this switch button cap. Generally even with a crack/brake the cap can be placed back on after modding and still function.

(click for bigger image)

Word of caution when removing Switch Button Cap

When you take off the Switch button cap make sure the buttons are facing down. (Gravity is your friend)

The reason being there are two copper contactors in the switch that will fall out and could become missing.

If these fall out that can be placed back in the switch....keep in mind the "narrow" part of the plate should be pointed toward the wire harness plug-in. (Refer to Photo)

(click for bigger image)

Disassembled Switch

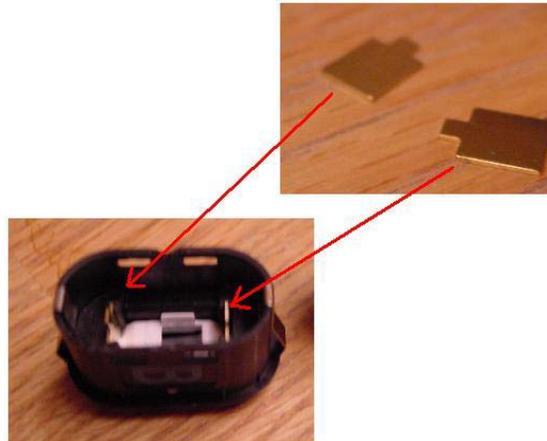This is what the switch looks like disassembled.

The Resistor reduces the cars 12 Volts to approx. 5 Volts. (LED's get real bright for a second and then dark when you apply 12 Volts to them)

We are only going to remove the LED. Keeping the resistor in place.

Why does the LED look clear when it glows green?

(click for bigger image)

What/Where to cut to remove the Green Stock LED

We want to use a side cutters and snip the LED in two locations.

1. At the resistor

2. 12 Volt Negative post.

I tried to desolder in these location however it was much easier to snip.

Snip here

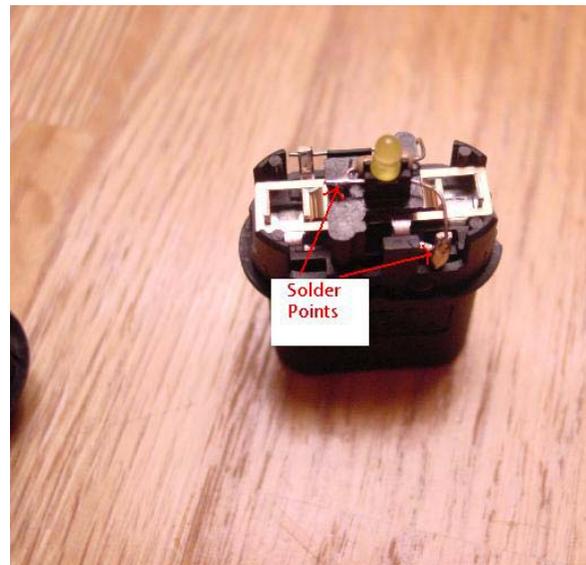(Click for bigger image)

Soldering in the New LED

Place the LED in the center stand of (where the stock LED was located)

The Anode of the LED (Positive) will solder to the resistor side.

The Cathode of the LED (Negative) will go to the -12V post.

A touch of solder in each location should do.

Cut any flying leads with a side cutters (View Photo below)

Solder Points

(click for bigger image)

Complete-Testing and Assembly.

The photo to the right shows you your end result after soldering..

Now we need to snap the button cap back on. **REMEMBER* there are copper contactors that can fall out. Buttons down and wire harness plug up during reassembly. (Gravity is your friend)

Also make sure the Cathode (Negative) lead from the LED is not going to interfere with the function of the switch. It should be up and out of the way like the photo(s) show.
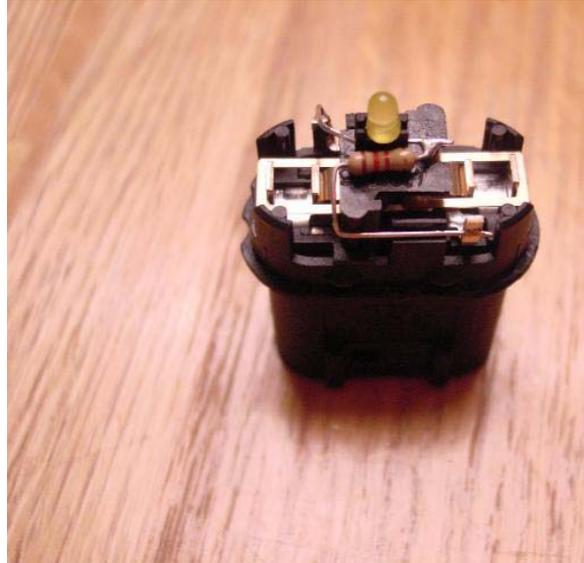
Place the switches back in the car. Do they all light up? (follow good electronics procedure...install one at a time to confirm they work. Fix them before preceding to the next.)

(click for bigger image)

If not check out the FAQ

Not the Best Images But

Drivers Side (Yellow)   Passenger Side (Yellow)

Cougar Door Switch Color Mod FAQ

Q. How do I turn on the door switch back lights

A. Insert the key in the ignition and turn it to accessory (the last click before you start your engine). These switches glow at all times. They are not controlled by the parking lights or headlight. Keep in mind they are hard to see unless you are in a very dark environment.

Q. One or all of my LED's don't light up

A. The LED's may be soldered in backwards. LED's are polarity specific. Which means the negative has to be negative and positive has to be to positive. They are still good but they are in backwards. (How do you check)
There is a slight change the LED's received too much voltage which would cause them to burn up.

Q. I have one of the two passenger window switches in but the window will not operate.

A. In the cougar you have to have the Driver's Side passenger window switch and the passenger's side window switch in for the window to operate

Q. I don't know how to find the Anode or Cathode

A. Generally on the back of the LED package they will tell you that one lead is shorter and that is either the Anode or Cathode.(refer to package. Cathode usually is the shorter one of the two) If the package does not give any type of instruction. Then you will need a multi-meter with diode checking.

Place the positive and negative leads on either side of the LED....you should get a reading. If you don't swap sides with the leads. When you get a reading....take note what lead (Red for Positive, Black for Negative) is on what side. Black side is Cathode....Red side is Anode. (further detail will be in the multi-meter owners manual)

Q. Will the LED's ever burn out

A. Generally speaking....no. LED's are diodes. Really the only way it they will "burn out" is if an over voltage situation occurs or they are physically damaged in some way.

Q. Will a "normal" (5mm) size LED work for this mod

A. Don't know. I have only used the 3mm LED's for this project. If the bigger size (5mm) works drop me an email and tell me about it.

Q. What color LED's are available.

A. Red, Green, Yellow, Orange, Blue, White. Keep in mind "exotic" colors will cost much more. Exotic colors include White, Blue, Orange, and most "Ultra/Super Bright" LED's. Blue will cost roughly $5.00 an LED.

Q. I can't seem to find 3mm LED's

A. The package may or may not say 3mm on it. This is merely the width of the LED. Other package indicators are a "T1" or "Mini-size". The LED's for this projects are roughly 1/3 the size of a "normal" (5mm) LED.(visually) Which makes it a little tougher to find them. You may have to mail order them.

Q. Where can I mail order some 3mm LED's

A. DigiKey or Radio Shack owns a good mail order service.

Color	DigiKey Part Number	Radio Shack Mail order Part number
Red:	160-1138-ND	Normal Red (is available in the stores)/Red (Ultra Bright)
Yellow:	160-1146-ND	Normal Yellow/Yellow(Ultra Bright)
Orange:	160-1141-ND	Not Available :(
Blue:	P466-ND ($2.67)	Blue LED
White:	67-1606-ND ($3.00)	White LED
Green:	160-1143-ND	Normal Green (is available in the stores)/Green(Ultra Bright)

**These part numbers may be wrong. Use these at your own risk.

Q. I want to put the switch assembly back in the car but I don't know where they go.

A. Each switch has a letter designation. This will tell you the color to which connector in

the car it belongs. (ie O = Orange, B = Blue) [PHOTO](#)

Q. If the Stock LED is green why does it look clear

A. This is because LED's produce light based on the chemical make up inside of them. When you apply an electrical charge to and LED the chemical inside between the "gap" emits light radiation. Some LED's may look clear but produce a different color (clear shell but emits blue) don't let this alarm you.