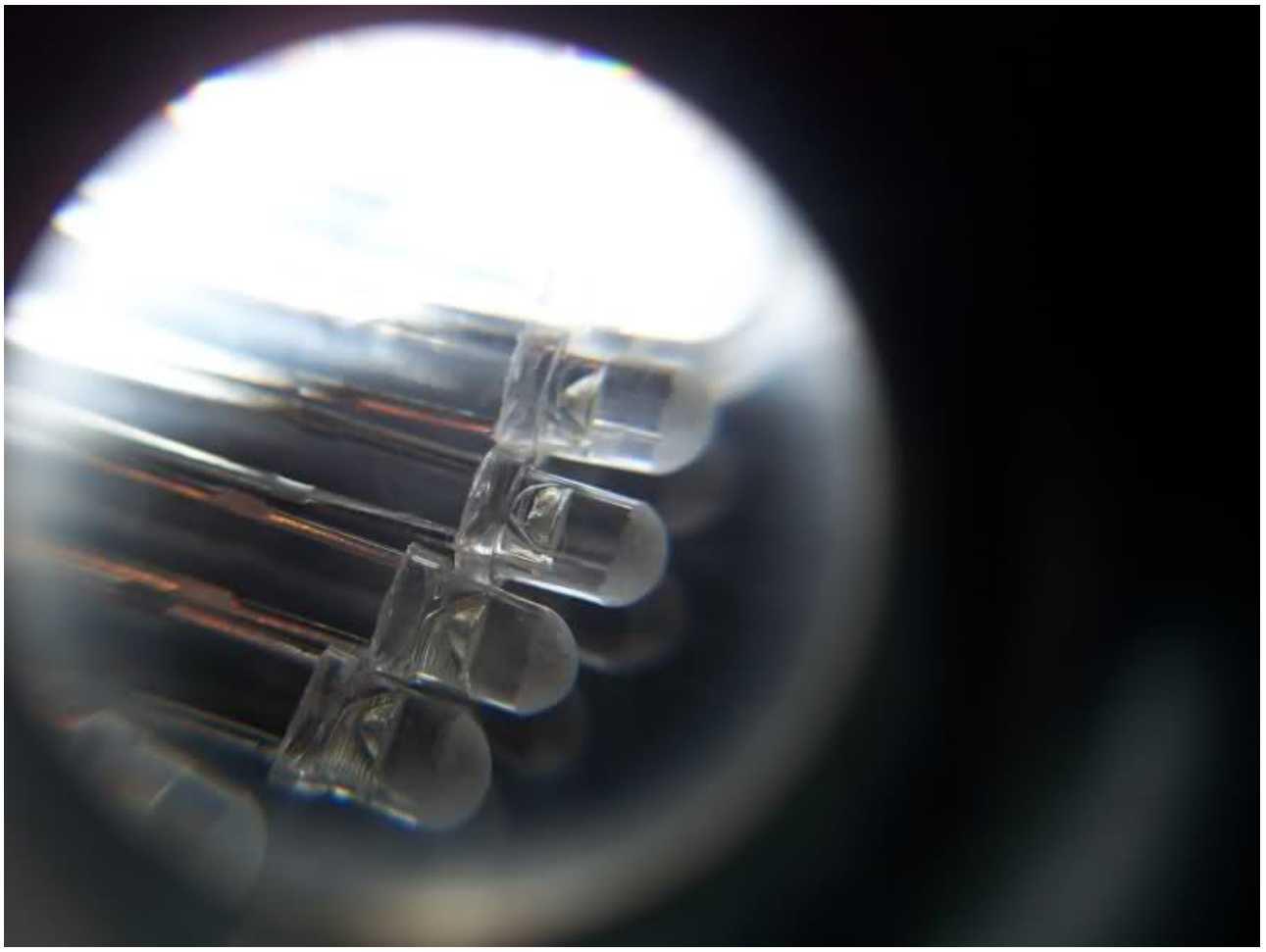
Hello everyone. I did this write-up to show everyone how to hook up your oem audio and climate controls modules with LED's. To anyone that wants to do it, it takes alot of time to get them right. It seems simple, but it gets pretty complicated. I would recommend that you have some soldering skills before attempting this also. You WILL have to modify the OEM plastic twist base's the lights are in. So be careful doing this because if you mess up, you will have to get a new one.

First thing you need is some LED's. All these are 3mm. The forward voltage of my LED's were only 3 volts, so you need resistors. You can look up resistor calculators to find which resistors you need for your LED's.

Okay the main thing people are concerned about is hot spots with small LED's. So I sanded the tips of them to help spread the light better.



Normal LED:

Sanded LED:

As you can tell, the light is much more spread out, and no hot spots anywhere. So that is accomplished.

Next, take either one of the controls, and twist out the bulbs. Once you have these out, unwire the OEM light bulb that is in the plastic base. Take whatever color LED your using for your back lights (mine are going to be white), and insert it into the plastic twist base. Before you do anything else, you must know what side of the LED is postive, and which is negative. If you look at the legs coming off the LED, one is slightly longer than the other. The longer leg is the positive side. Also if you look into the side of the actual LED, the thin side is positive, and the thick side is negative. (NOTE: I had to use an exacto knife on the little slits in the base where the legs of the bulbs go through to make them a little wider since the legs on the resistor, and the LED are thicker than the OEM bulb.) Okay, now take the negative side leg, and go ahead and wrap it around the base just how the OEM bulb was in there. Its easy to do this, then pinch it with needle nose pliers so its on there tight. Now your positive leg is sticking out. The positive side is where you put your resistor. This is where the soldering comes in. You are going to trim your resistor down a little bit, and solder one end to the leg of the LED. From there you bend the leg of the resistor back up towards the base, and then wrap it in the base just like you did to the negative side. The LED is in! Should look something like this.

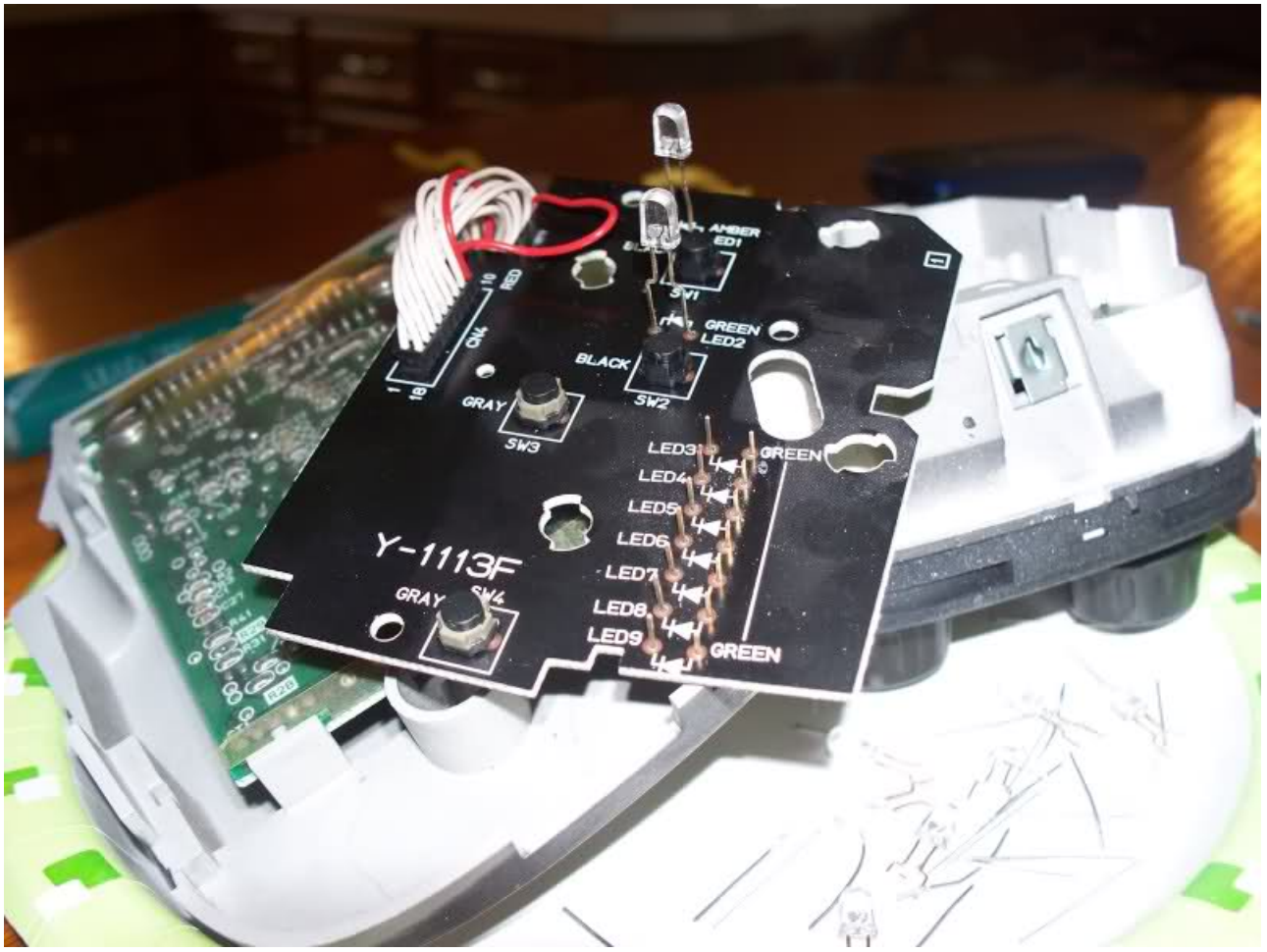
Since you have your exacto knife out, you still have to trim a little bit on the base. Since the legs of the LED and resistor are much thicker than the oem bulb, it wont just twist in like normal b/c of this. When looking at the plastic base, there are two little latches coming off the base. These are what hold the base in place when you twist it in. You are going to take your knife and make that thinner. Dont accidentally cut it all off. Test fit, if it doest fit, trim a little more. Once it twists in, your done with one! Here is a pic of one of the little latches circled in orange, so you know what im talking about if you dont know.

You are going to do that to all the bulbs in the plastic bases for the back lights. Once you have those all done, the back lights are completed.

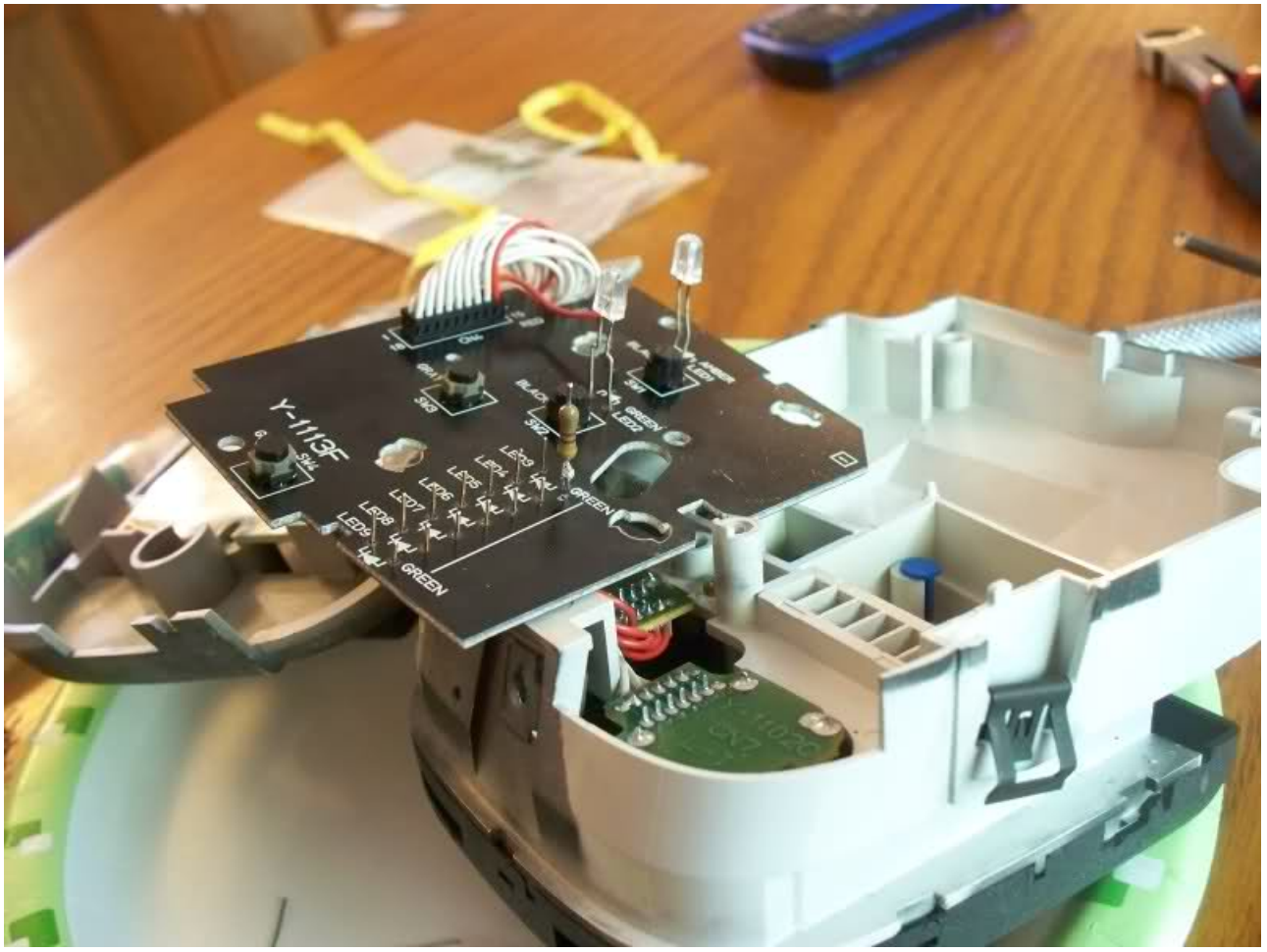
Now for the more complicated parts. We are going to replace the actual LED's for the indicator lights inside of the modules. The only one I could not replace was the Mute button indiactor. The reason for this is because the LED slides into a very narrow space on that one bulb, and a resistor would not fit in there with it. So it will have to stay. All the others (Fan, A/C, and the Recirculation button indiactors we can do.) This is pretty strait forward but it can be time consuming to get it right.

First take your resistors and trim them down so there isnt much of the legs showing. (Look at pics for reference at end of this paragraph) Then take your LED's your going to be using to replace the OEM ones, and trim down the positive side so not much of the leg is sticking out. Most LED's have little notches near the top of the legs, I trimmed mine right there and worked perfect.

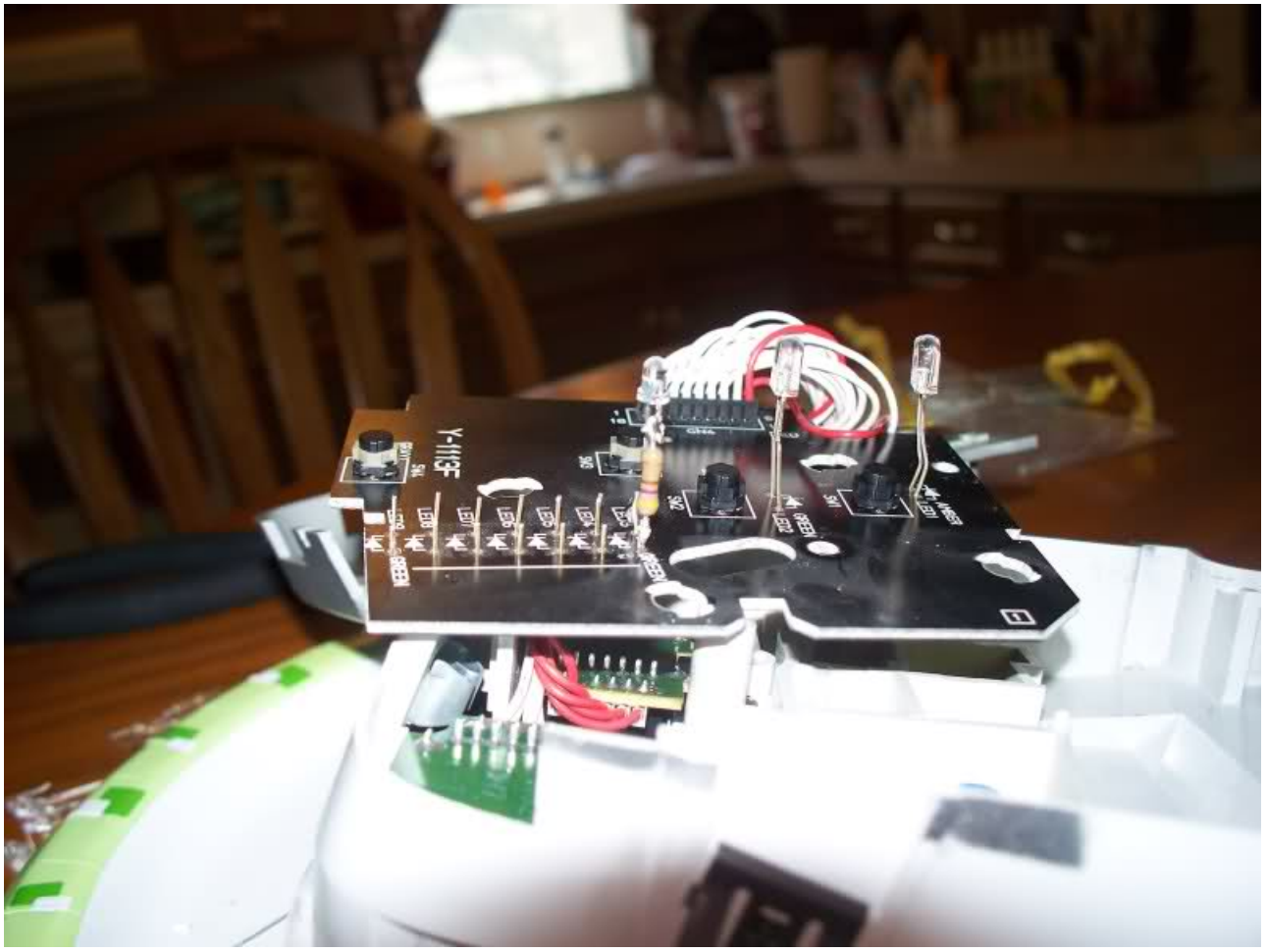
Now take your snips and cut off the OEM green LED's. I cut the positive side shorter so there is room for the resistor without the LED being to high. The negative side is longer so its easier to solder.



Okay take your needle nose pliers and grab one of your trimmed resistors. (They will get hot) and solder your resistor in. Should look something like this.



Make sure that is very sturdy before doing anything else. If it checks out, grab your LED and hold it up where your are going to be soldering it in. Bend the legs of the LED so they line up good, and trim more if needed. Now grab the LED with your pliers and hold it where you want it, and solder the negative side first. This makes it easier so you dont have to hold the LED anymore. Then solder the LED to the end of the resistor. Adjust the LED if needed. You are now done with one of the indicators! Now you just repeat for the rest of the indicators.

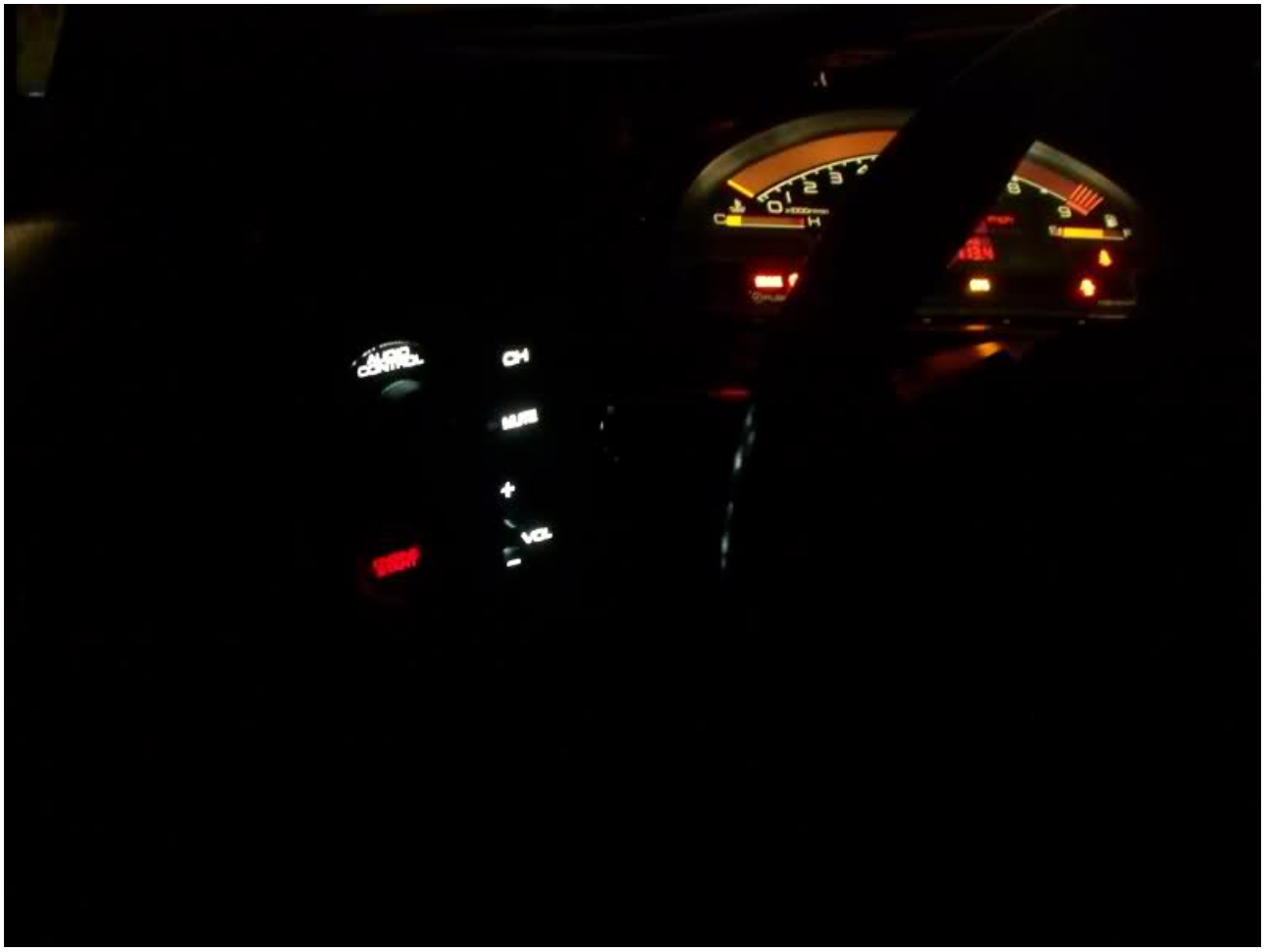


One tip you do need to know, on the climate controle module where you select where you want the air to blow, the back lights have to be red. There is an orange filter built into the back of the actual control you cannot remove. You can do it in blue, but wont show up right. If you put a red LED, it shows up red, so thats why I did them red like that. The only downside to doing this, is that the blue on the temp control wont really illumitate, but the red will. This wouldnt really bother me though. I did mine with White back lights, Blue fan indiacators and A/C indicator, and Red recurculation indicator and engine start button. I also got another set im working on that I painted Silverstone. They will have blue back lights, White fan and A/C indicators, and Red recirculation indicator and start button. Hopefully have those done this weekend.

Finish all of those indicator lights and carefully screw everything back together. Your done! Go to your car, plug them in and test them. I any of them dont work, un-twist it, take it out and turn it, and twist it in the opposite direction and it should work.

In these pics I didnt realize on the audio control module, the light on the bottom of the button where it says Audio Control, wasnt illuminated in the pics. But it now works since I just twisted it the other way. I have a crappy camera and it sucks b/c they look so much better in person. My camera couldnt capture the light right, but you get the idea.

Enjoy your new custom LED dash controls!


AUDIO CONTROL
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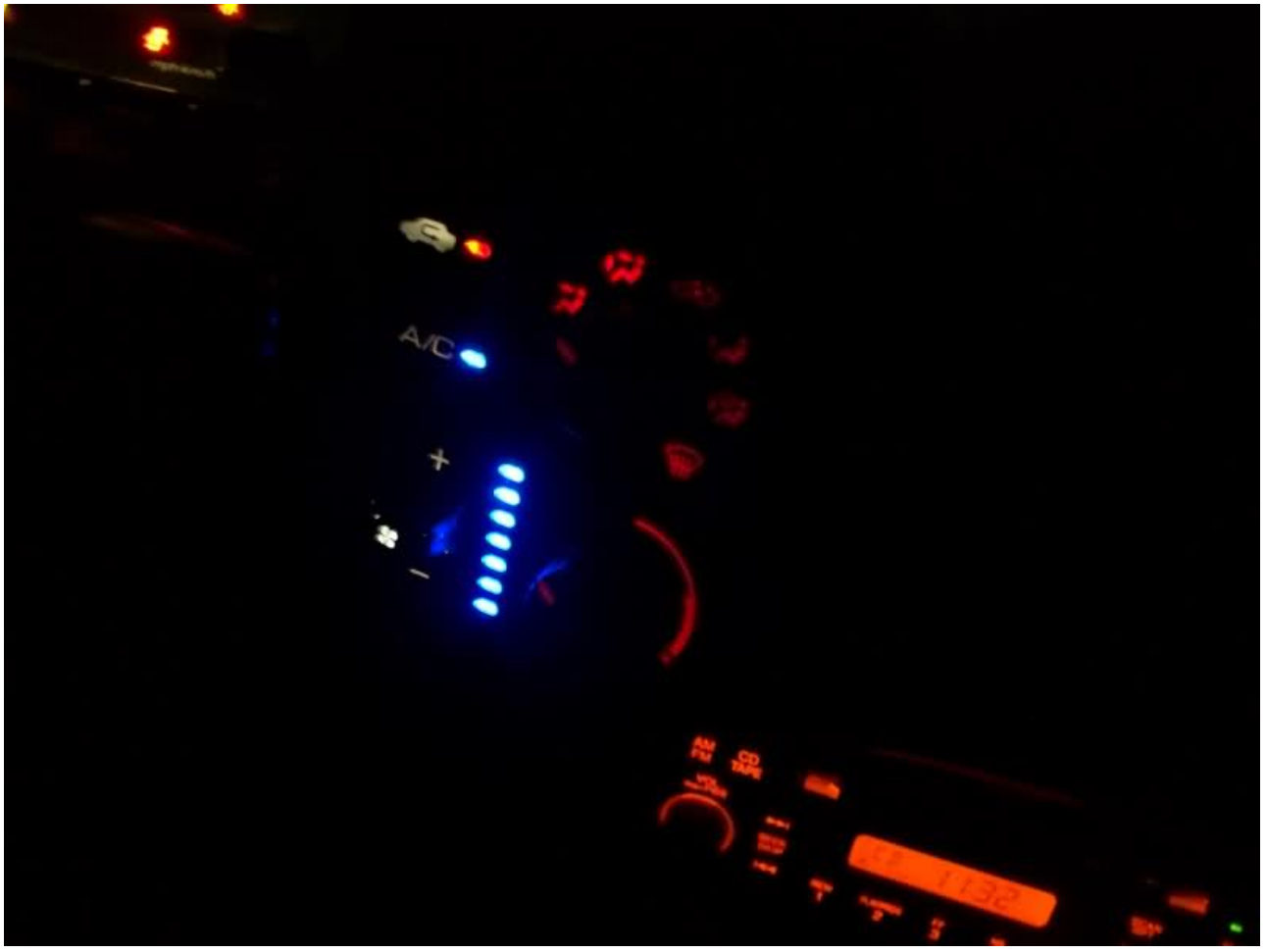
A/C