Dash Lights Upgrade

By Roger Kizer

How many times have you strained to see the gauges in your classic car while driving at night? They just didn't put enough bulbs in the gauge cluster to properly illuminate the dials. Combine that with the 45 years of wear and corrosion on the circuit boards you get some pretty dim bulbs. We are going to clean and repair our circuit boards as well as upgrade the bulbs to ultra bright LEDs.

This is how the dash looks like now. Dim and not well lit, and yes, all the bulbs are installed and functional.

The first order of business is to remove the gauge assembly from the car and seperate the trim from the cluster.

Remove the trip odometer knob first then take your time and get all the screws.

Next is to remove all the gauges. TIP: the Performance Indicator comes out the back while all the others come out the front.

Remove the circuit boards too and this is what you have left. You may ask, "Why did we remove the gauges?"

So we can remove the diffusers, they are what gives the "green glow" to the gauges. The new led bulbs will fit inside them with no clearance issues, but I wanted a more white light to the dash so I will remove them for this project.

If you want to leave the diffusers then just remove the circuit boards, leave the gauges and cluster trim in place.

You may be asking yourself "Hey! I pulled out 6 bulbs but there are only 5 of these." One of the bulbs is for the high beam indicator which has a red lens located in the gauge cluster trim. You should leave that lens alone.

I will leave a non-LED bulb for the high beam indicator as its not on enough and when it is I don't want a bright red light staring at me.

Just drill the rivits carefully so the difussers don't break. This way if you want to re-install them you can.

With that done lets move on to the circuit boards.

Here is the end of the large board and you can see the dark copper color on the contacts. Get out some steel wool and clean these up.

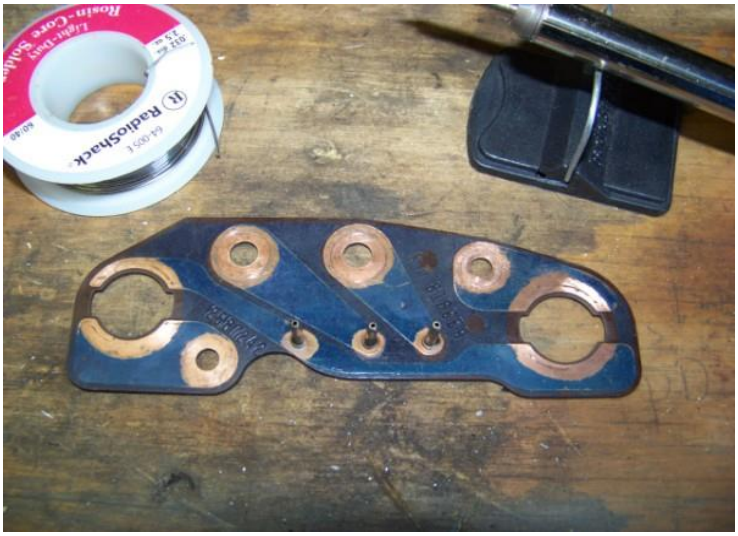
Fresh clean contacts! Do this for all the exposed board mounting points, the gauge contact points and the cresent contacts for the bulb sockets.

Clean the pins carefully. The ones on the large board are tight and in good shape but if they are lose they can be repaired.

Use a continuity tester and make sure the power and grounds are good after cleaning.

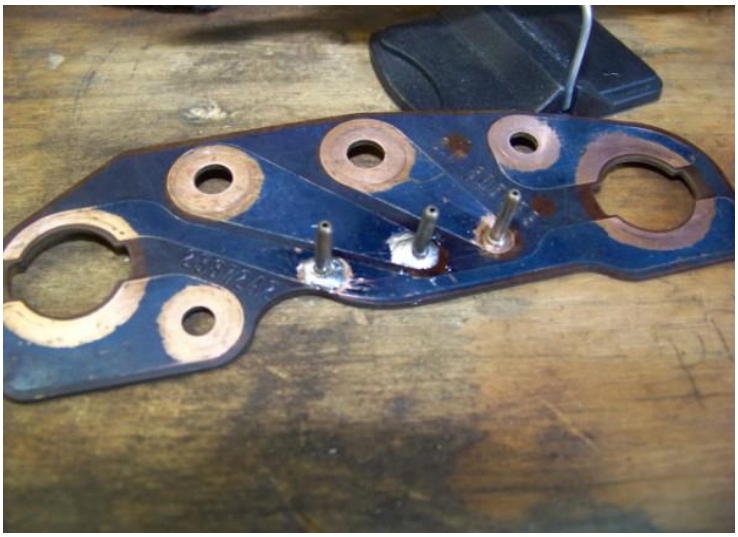
You can see here on the small board that the pins are loose and ready to fall off. The little "tabs" that are folded over on the back side to keep them tight have fallen off.

A soldering iron and solder is all you need to repair the board and restore the lost connection to the printed circuit on the front. Clean the area around the base of the pins on the board and the pins so the solder will stick.



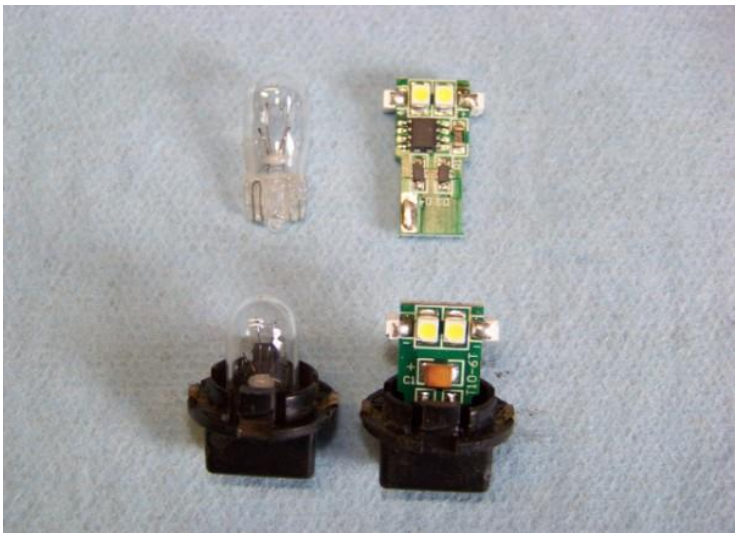
Here two of the three pins are soldered. Once they are done they will be tight and have the proper contact needed to keep the juice flowing to the lights and gauges.

Now, clean the inside of the cluster, dust off the gauges, clean the inside of the trim and make sure the gauge leneses are clean. Time to reassemble everything.



Here is the new LED bulb side by side with the old bulb. The new bulb has 6 seperate LEDs to push light in all directions. These were purchased from www.superbrightleds.com, Cool White WLED-CWHP6 and cost $4.95 each.

Check the contacts on the bulb sockets and clean them if necessary. Install the bulbs in the sockets, put them in the cluster and re-install the gauge cluster in the car.



Light 'Em Up! Here is the dash with the new bulbs. Quite a difference from the old filiment bulbs. I replaced the tachometer bulb with a LED bulb as well.

A better view of the tach.

The bulbs are bright enough to actually see the ignition switch and inside the ash tray.

Simple repairs and a change of the bulbs gives this dramatic difference. I don't think the LEDs would be as bright if the diffusers were left in place.

I still need to remove the console to replace the shift indicator light, but I think you can agree that its a stunning improvement over the original bulbs.

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