Converting Panel Lights to LED's, plus adding Interior lights to an Austin Healey:

I'm writing this article to address the problems with converting the original panel lights that are inadequate and frequently burn out just when you need them the most. I first converted my 1963 AH BJ7 to Pos Battery before converting, I'm not sure if this is necessary but the red LED's are marked POS/NEG on the base and you have to be careful when installing in the wedge base. There are other articles on this subject, for instance Glenn Abello's conversion on his '67 BJ8, <u>http://www.superbrightleds.com/blog/blog.php?search=austin+healey</u> Glenn's article is excellent, but like the other article's I've found they are all on BJ8 models. So I've gathered all my notes and photos on converting my '63 AH BJ7 model which, as you know, uses the older style dash panel. I also included some of my methods and shop notes that may help others attempting this conversion.

First, here's a photo showing the original panel lights, and then a photo of the same panel light after converting. I chose red LED's because I have a red car, they do come in several colors, however:



Besides the pleasing color I shouldn't have to worry about changing bulbs out again for 10K hours. Plus with the additional brightness by replacing the High Beam indicator with a blue LED, and the green turn signal bulb with a green LED, you can now actually "see" the indicators.

In addition to converting the panel bulbs I added floor lamps and a center strip light under the heater box.:





Rather than installing door jamb switches I added a simple ON/OFF switch and mounted on the dash panel. My reasoning is the car is small enough that I can easily reach in and operate the switch before entering from either side. As you can see I mounted a 7 inch strip LED light under the heater, **part # LT-R12SMD-Red**. Do not screw the strip to the lower heater panel, there's a small radiator inside the box that you don't want to puncture. I used a black strip caulking that holds it very tight. For the floor lights I used a 4 LED lamp **part # ALM-OB-R4 Red**. I fastened the drivers side light inside the steering column brace. The passenger side I mounted under the shelf. Both come with wiring leads attached to the light making it easy to wire to the panel switch.

Now to the "nitty-gritty" shop notes. **You must DISCONNECT THE BATTERY before you start.** By removing six screws from the dash, (2 on left side 2 on right side, and 2 in the middle) you can pull the dash panel towards the steering wheel enough to access the wiring to the gauges. You also have to unscrew both the oil line and the speedometer cable from the associated gauge. Note: The water Temp line is long enough to leave in place.

It's important to place wide cushioned tape or cardboard around the steering column where the column passes through the dash. The chrome ring around the column has very sharp edges and will scratch the paint on the column.



My car had wedge bulbs already in the large gauges so it was simply a matter of replacing the glass bulb with the colored LED of your choice. On the smaller gauges I had to add wedge type sockets **part # T3-25S-TW.25 Socket**. I found by bending the old lamp mounting downward it'll focus the LED onto the blue plastic surrounding the gauge. Note, don't pull out the face of the two smaller gauges as you'll break the needles. I found that on my car I could break the blue plastic off the gauge where I'm pointing the LED without removing the face. If you're unable to break the plastic just leave it in, the LED will override the blue color and looks pretty good.

In order to wire the wedge socket's I used you first have to attach wiring to the sockets by drilling a 1/16" hole on each side of the socket to insert and solder the wire to the terminals. Since LED's use so few amps compared to filament bulbs you'll need very small wire, I found small speaker wire is adequate. When cutting the wiring to the smaller gauge lamps you have to cut off the resistor that is wired in series. LED's take full 12vdc-14vdc.



Now to the cost. I ordered my LED parts from "Super Bright LED's Inc." located in St. Louis at 4400 Earth City Expressway, St Louis Mo 63045-1328. Telephone 3149726200. <u>http://superbrightleds.com</u>

I paid \$24.43 for the 2 floor lamps and one 7" strip LED. For the other parts required for the panel lights I paid \$41.10. As mentioned I didn't need 8 twistlock wedge sockets at \$1.19 each only 2. Oddly, the blue and green LED's (WLED-B-90)(WLED-G-90) were only \$1.39 each where the 5 red (WLED-RHP RED) were \$4.95 each. The 5 red LED's are polarity sensitive and are marked + and - on the base and must be inserted correctly in the base. It's easy to tell because the AH wiring is colored red and black usually.

In the future I hope to add trunk lighting and under the hood lighting as well. Overall I'm very pleased with the effect the lights provide. Some people have added brighter LED's to the panel lights, but then you'll have to add a dimmer switch because it's quite tiresome while driving. I've found the LED's listed are plenty bright for normal viewing without the need for a dimmer switch.

I hope you've found this article useful. If you have further questions please contact me via email: <u>jlore26@sbcglobal.net</u>

Sincerely, John Lore