



Title: Dashboard light replacment
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Electrical / Instrument Cluster
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Replacing lights on the dashboard and performing general maintenance on the binnicle

Tools Required :

- 1 - Multimeter that does resistance (ohms)
- 1 - Q-tips (pack)
- 1 - flashlight

By using this guide you consent to the following...

- *Neither the author of this howto or this website is responsible for any personal injury.**
- *Neither the author of this howto or this website is responsible for any damage to your car.**
- *You will use a reasonable amount of common sense and observe good safety practices.**

Step 1 - Remove binnicle and scope of project



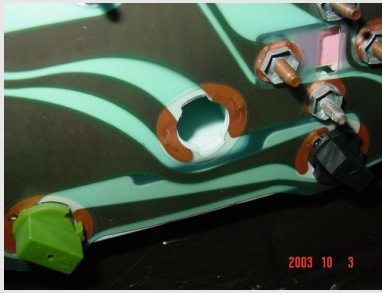
Upon completion of the HOWTO remove the binnacle instructions. The binnacle is situated on the diningroom table. Actual gauge issues are not addressed in this HOWTO, just lighting issues.

Step 2 - Light placment green sockets



Sockets can be removed by turning slightly counter-clockwise. Here is the dash turned right side up with the correct sockets in place, now ready for the next step.

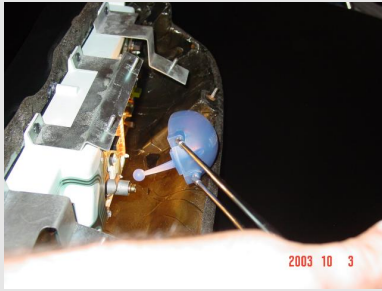
Step 3 - Cleaning front glass and bulds



Sockets can be removed by turning slightly counter-clockwise....

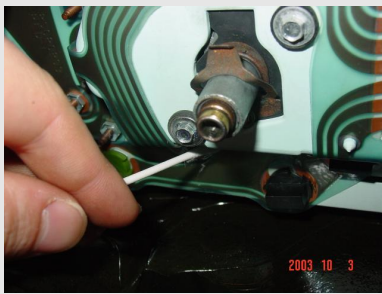
The first thing that was done was to remove one socket at a time and check the contacts on the circuit board. If the contact needs to be clean, use a cleaning solution and a qtip.

Step 4 - Light test



With the socket removed, shine a light into the hole and look at the other side. Some lights showed dirt spots on the front.

Step 5 - When light test proves dirty



For the ones that showed dirty, a qtip was used to gently clean the colored glass in the front.

Step 6 - Q-tip results



The debris appeared to be dried out foam rubber that had fallen from the top of the dash

Step 7 - Bulb before cleaning



The bulbs themselves were covered with dust.

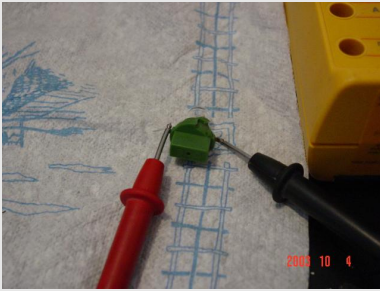
Here is a bulb untouched, as removed from the dash.

Step 8 - Bulb after cleaning



Here is the same bulb after being cleaned with a paper towel and put back in the socket, big difference.

Step 9 - Continuity testing



Each bulb should be tested for continuity (to see if it works) and then tested for its actual resistance in OHMS. Test the resistance value directly off of the bulb for a true reading.

Step 10 - Bulb levels



According to the specifications:

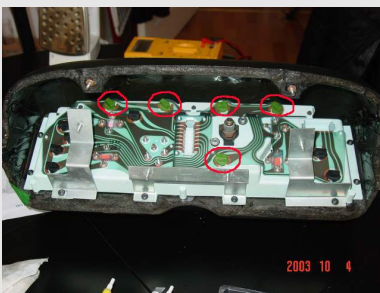
3 to 4 ohms (#194) is for the dash lumination bulbs

7 to 8 ohms (#161) is for the instrument bulbs

I found that all bulbs except for 5 of them were between 7.0 and 7.2ohms. These bulbs go in the black sockets. The other five bulbs read between 4 and 4.5ohms and go into the green sockets.

Dont forget to clean the terminals on the sockets themselves.

Step 11 - install all bulbs and test at connector



Now all of the correct bulbs, in the correct sockets, can now be installed in the correct places.

Notice the green sockets locations with the red circles.

I then ran a continuity test from the actual connections where the plugs go, back to the bulbs. With everything in order, the dash is ready to be re-installed.