PHRED SEZ.....

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Malfunction Indicator Light

A dashboard light that looked like a small engine block kept lighting and staying on when I started my Jeep. The owner's manual revealed that the light was an indication of a problem sensed by the onboard diagnostic system that monitors engine and automatic transmission control systems. Further reading revealed that a loose or missing gas cap, among several other things, could illuminate the light after engine start, but that the car could be driven and would not require towing. If it stayed on during several engine cycles, professional service was recommended.

My light stayed on during several engine cycles, even after carefully replacing the gas cap. In order to see if it was a momentary fault, the negative pole of the battery was disconnected for thirty seconds to clear the on-board computer memory and reboot the system. This was successful for several days but then the light came back on.

Larry Jones, WBCCI # 9805, suggested I take the vehicle to **Advance Auto Parts** to have them connect their scanner to determine what fault codes would be detected. This is an Advance Auto Parts company-wide free service for the motoring public. Advance came up with the code P0456 which showed "EVAP Emission Control System, Leak Very Small"

A subsequent careful investigation of the gas cap showed that the rubber gasket was somewhat deteriorated.

After replacing it with a same size newer gasket from a spare cap for another vehicle and disconnecting the battery again, the light did not come on for about a week….but then it appeared again!

The role of the gas cap is to provide a slight vacuum for the fuel tank, so that fuel evaporation does not enter the atmosphere but is burned in the engine. It also is designed to allow air into the tank to replace fuel as the tank empties during driving. A little metal valve deep inside the cap accomplishes this delicate task.

Careful inspection of the gas cap revealed that the top black part could be removed from the bottom screw-on part by pushing out six black tabs on the top and separating the bottom screw-on part. This allowed me to actually see the valve, which was a rusted mess on my six year old Jeep (see attached photo). Evidently, the rust would periodically block the metal valve, resulting in the gas tank lacking vacuum and the fault light illuminating on the dash.

Advance Auto Parts had the gas cap I needed for about $13.00. The new cap seems to have solved the problem as the light has not come on again. I no longer find myself feeling like Bill Murray in the movie **Groundhog Day** – living the same experience over and over again.

The CD book, Phred Sez - the First Ten Years, has been well received and is in its third printing. It is available on computer CD (written in Microsoft Works and also Microsoft Word). Order by mail for yourself or for loved ones by sending a check for $15 each (Includes shipping) to the address below.

Help me with topics for the PHRED SEZ column. Send your creative experiences and ideas by US mail, E-Mail, Fax, or phone:

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