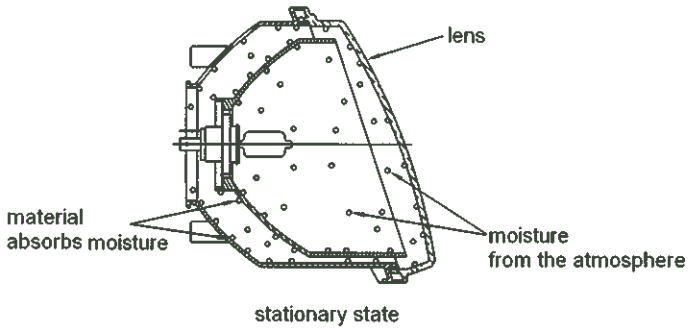
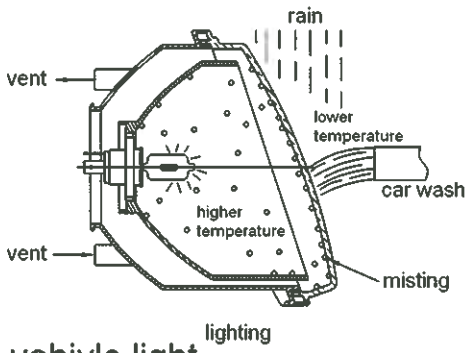
DEPO®

" CONDENSATION IN A VEHICLE LIGHT DOESN'T EQUAL WATER LEAKING "





Condensation phenomenon in a vehivle light

Q Why is there condensation in vehicle lights?

A Condensation occurs in a vehicle lamp because the materials inside the lamp absorb moisture from the atmosphere. When the lamp is turned on the temperature of the lamp will increase, which generates thermal convection due to the theory of warm air moving upwards and cool air moving downwards.
When the warm air encounters the lower temperature, it will cause misting.
Therefore, having mist is a normal effect when the inner and outer of the vehicle light has different temperatures.

Q Why does mist often appear on the inner surface of the vehicle light lens?

A Nowadays, in order to improve the style and aesthetics, most vehicle light lenses are designed without a pattern which makes it easier to notice the mist than those lights with patterns. In addition, the surface of the lens directly encounters the outside air, which causes it to become the area where inner and outer have greatest difference in temperature.

Q Can the vehicle light be demisted?

A After you turn off the vehicle light, the inner and outer temperature of the light will slowly become balanced as inner the temperature begins to cooling down. When the inner and outer temperatures become balanced the mist will be discharged throughout the vehicle light vents. Therefore the mist will disappear or be reducing to a minimum.

Q Will the mist have influence on the vehicle lights service life or function?

A After examining and reviewing the test results, there is no evidence that shows the mist in a vehicle light will shorten its service life or affect its functioning. Furthermore, all reflectors have been treated with insulator spray, which prevents rusting or deteriorating of the lamp materials from the mist.


Condensation


Misting