## **HEADLIGHT AND TAIL LIGHT CONDENSATION**

Condensation buildup inside the headlight can happen due to a number of reasons. There are vents at the top and bottom of the headlight housing that are necessary for equalizing the pressure differences and preventing your lamp from cracking and failing. The heat emitted from the light source and the cooling of the lens by the airflow create a temperature contrast. While the heated and expanding air is removed from the headlight through



the air vents, humidity is sucked into the headlight from the outside. So, when you turn off your headlights after hours of driving, low pressure inside the headlight draws humid air in, thus the fogging of the lens occurs.

If there is a contrast between the humidity of the environment and high temperature inside the headlamp housing, condensation on the inner side of the lens may take place. This is true especially during winter time or in humid weather conditions.

Condensation can also occur in other situations. For instance, when you're driving through a car wash. Or, when you have just parked your car and it's cooling down, but the still-hot engine heats the backside of the headlight and at the same time the lens is affected by the cold air. In all the situations described above, some moisture may appear in the headlight.

Condensation in the headlight lens usually dissipates after around 20 minutes of driving with the low beams switched on. Some small and insignificant areas of the lens may be misted after that for a while. The process of fogging doesn't influence the optical functions of the headlight in any way. The condensation will never cause any corrosion in the headlight housing.

To minimize condensation buildup inside the headlight, make sure the rubber seal is on tightly. Also make sure that the headlight vents are not blocked, which could prevent the condensation from escaping.

To sum up, condensation is a naturally occurring physical phenomenon that can affect most lights. The condensation does not mean that the light is defective, and the presence of fogging or misting due to condensation is not considered a matter for warranty replacement.



