Technical Information



© Hella KGaA Hueck & Co., Lippstadt

10. September 2001

4.4

Condensation of headlamp systems

The problem of steamed up glass covers with clear glass headlamps

The most common complaint are steamed up glass covers with clear glass headlamps. This effect appears after driving through rain or after cold nights and is a normal physical process. Through the headlamp ventilation the warmed up expanded air is pushed out with the headlamp switched on. After switching off the headlamp cold and damp air enters in through the ventilation. This moisture evaporates in the warm headlamp and appears as condensation on the front glass of the headlamp. This process is called dewing. After a short drive in dry weather or after switching on the head lights, an evaporation process starts which dries up the dew. Technically this process is harmless because the reflector is protected from the effects of dewing. This dewing effect appears in headlamps with profiled lenses too, but through the profile the condensed water is not as noticeable as by the clear glass headlamps.

If excess dewing occurs, the headlamp should be checked for damages or leaks. If there are no faults the headlamp is okay and can be operated normally.

This should be explained to the customer so that they can understand it is not a fault with the product.

