

Headlight cleaning system

Headlight cleaning systems are systems to clean the front headlights of vehicles. They improve visibility in the darkness and prevent glare for oncoming traffic due to diffused light.

Headlight cleaning systems are legally prescribed for light sources with a luminous flux of over 2000 lumens. This includes Xenon headlights in particular (exception: 25-watt version).

In the past, headlight cleaning systems were often designed with small wipers which were supposed to move the dirt away; nowadays, a cleaning principle using water jets is prevalent. The advantages are the simple design and a more discreet appearance.

Function

Headlight cleaning systems take the cleaning fluid needed to clean the headlights from the water tank for the front windscreen washer system. The cleaning fluid is sprayed under high pressure onto the headlight glass using special nozzles. Telescopic nozzles are particularly widespread; they are permanently attached in front of the headlights and only extend when they are supposed to clean. Other versions include static nozzles, as well as nozzles with single and double heads.

In the telescopic nozzle version, the water is pressed into a cylinder, the piston of which has a nozzle head attached and is extended against a pressure spring. This brings the nozzles into the washing position. Until the washing position is reached, a valve ensures that only the movement is carried out first without any water for the cleaning escaping from the nozzles. When the washing position has been reached, the valve opens and water is sprayed onto the headlights. Once the pump has been switched off, the return spring moves the piston back into its initial position. For stationary nozzles, one washing impulse takes approx. 0.5 seconds and approx. 0.8 seconds for telescopic nozzles due to the longer time required for extension.

Operation

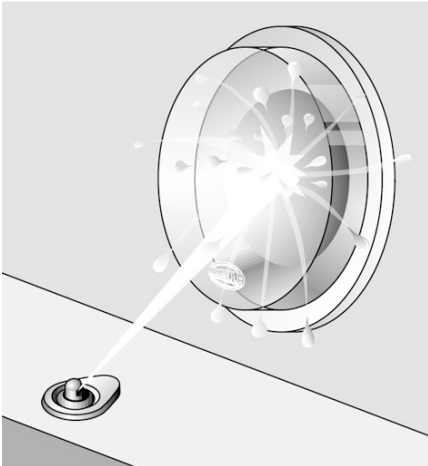
Generally, the headlight cleaning system is triggered with the windscreen cleaning system. Every time the driver activates the windscreen washers, the headlights are automatically cleaned at the same time. This coupling only takes place when the lights are switched on. There are also systems which have a separate switch for operation.

Safety

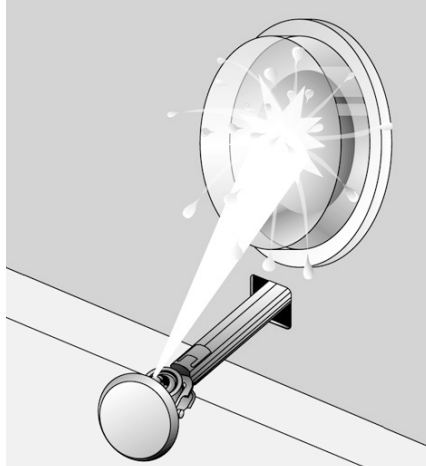
Headlight cleaning systems are safety-relevant systems. This is because the light output can be reduced by dirty headlights. And less light means less visibility in the darkness. Dirt also interferes with the optical characteristics of the headlights. This is the reason why there is a risk of glare for on-coming traffic due to diffusion of light when the headlights are dirty. Particularly bright headlights are much

more susceptible to causing glare due to dirt. Headlight cleaning systems therefore play a key role in providing safety.

Bilder



Headlight cleaning system by Hella



Headlight cleaning system by Hella

Hersteller



Bosch



HELLA



Herth+Buss



VDO_EN



Continental



Magneti Marelli_EN



Philips

Quelle: <http://www.my-cardictionary.com/lighting/headlight-cleaning-system.html>