

Volvo Cars makes driving at night safer and more comfortable with innovative, permanent high beam

March 5 2013



The new Volvo S60, V60 and XC60 - shown to the public for the first time at the Geneva Motor Show - can be fitted with an innovation that makes driving in the dark safer and more comfortable. The renewed Active High Beam Control makes it possible to use high beam



continuously thanks to an ingenious mechanism that prevents dazzling of oncoming drivers. At a press conference in Geneva, Volvo Car Group will also present a new world-first collision-avoiding technology.

Driving at night presents <u>car drivers</u> all over the world with challenging conditions. "Our aim with the renewed Active High Beam Control technology is to enhance visibility in the dark by making it possible to use high beam permanently, without having to switch to low beam when meeting or catching up with other cars," says Prof. Lotta Jakobsson, Senior Technical Specialist Safety at Volvo Cars Safety Centre.

Easier to spot unprotected road users

The main advantage of Active High Beam Control is that the traffic environment outside the shaded area is still illuminated by the high beam. This improves the driver's chances of detecting objects at the side of the road, such as parked cars, unprotected <u>road users</u> and animals.

"The technology makes driving at night more comfortable and safe. It also makes it easier to focus on the driving and is an excellent example of our Designed Around You approach, always focusing on features that really make a difference to the customer," says Lotta Jakobsson.





Ingenious shading mechanism

When an oncoming car approaches or when catching up with another car from behind, the system helps to prevent dazzling of the other driver by shading out only as much of the beam as necessary.

Active High Beam Control uses the camera already used for the detection and auto brake systems located by the rear-view mirror at the top of the windscreen to identify the other vehicle and the area that needs to be shaded. The technology is accurate enough to frame the chosen object with only a 1.5° margin.

The control unit relays the information to an ingenious projector module



mechanism integrated into the headlamp. A tiny cylinder with metal pieces of different sizes allows the possibility of shading just as much of the beam as necessary.

The Active High beam Control, which also works for motorcycles ahead, features Xenon lamps. The technology is active at speeds down to 15 km/h. It will be available in the Volvo S60, V60 and XC60 from spring 2013.

Another safety world-first in Geneva

At a press conference on the first press day at the 2013 <u>Geneva Motor Show</u> next week, Volvo Car Group will reveal another world-first safety feature.

"We have enhanced our collision-avoiding technologies continuously, and in Geneva we will present the next, groundbreaking step," reveals Lotta Jakobsson and adds that "As the leader in automotive safety, we have reduced the risk of being injured in an accident in one of our latest car models by more than 50 per cent since the year 2000. By continuously introducing new preventive and protective systems, we keep moving towards our aim that by 2020 no one should be injured or killed in a new Volvo."

The six new cars in Volvo Cars model range - the Volvo S60, V60 (including V60 Plug-in Hybrid), XC60, V70, XC70 and S80 - will also be on display in Geneva.

Provided by Volvo

Citation: Volvo Cars makes driving at night safer and more comfortable with innovative, permanent high beam (2013, March 5) retrieved 19 April 2024 from



https://phys.org/news/2013-03-volvo-cars-night-safer-comfortable.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.