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Cleaning windshields the intelligent way **Not a drop of water wasted with the Bosch Jet Wiper** Wiper arm to be standard equipment in new Volvo XC90

- ▶ Bosch Jet Wiper features integrated spray nozzles
- ▶ Dr. Bernhard Straub: “Washer fluid is deployed precisely where it is needed”
- ▶ No impairment of drivers’ vision, significantly less water used
- ▶ Bosch Aerotwin wiper blades rank first in ADAC windshield-wiper test

STUTTGART, Germany – A clear field of vision is essential for safe driving. And whenever this field of vision is impaired by dirt, the Bosch Jet Wiper gets to work. As part of a Bosch system featuring a wiper drive and Aerotwin wiper blades, the innovative wiper arm will now be standard equipment in the new Volvo XC90. The Jet Wiper is far superior to conventional windshield wipers. The reason for this is its smart control, combined with spray nozzles integrated in the wiper arm. These nozzles distribute the washer fluid evenly, thus ensuring that the windshield is cleaned over the entire length of the wiper blade. “The Jet Wiper deploys the right amount of washer fluid, precisely where it is needed,” says Dr. Bernhard Straub, president of the Bosch Electrical Drives division. The benefits of this system are that drivers’ vision is not impaired by spray mist, and consumption of washer fluid is reduced by as much as 50 percent.

Not a drop of washer fluid is wasted when using the Bosch Jet Wiper. This is also due to the reversing wiper drive, also made by Bosch. This drive alternates the rotation of the motor between the wiper arms’ two final positions – parked position and A-pillar. Its integrated electronics means that it can detect the Jet Wiper’s position on the windshield at all times. To achieve the best cleaning effect, spraying is done only when the wiper arm is moving upward. In this way, the washer liquid is immediately picked up by the two Aerotwin wiper blades and distributed over the entire windshield. “The Bosch system thus provides optimum cleaning along the entire wiper blade,” Straub says. This also ensures a clear field of vision for a video sensor used for driver assistance systems, which is normally positioned at the same height as the rear-view mirror.

Bosch Aerotwin: best wiper blades in the market

Most importantly, the end result of cleaning with the Jet Wiper is independent of driving speed. Conventional wiper systems spray the washer fluid from nozzle elements on the engine hood, and these elements are designed for a certain speed. As speed increases, the airflow diverts the spray, which means less washer fluid is sprayed on the area to be cleaned, resulting in a poor cleaning of the windshield. With the Jet Wiper, there is practically no effect from the airflow since the nozzle elements are mounted directly along the wiper arm. And that's not all: the spray nozzles are fitted with tiny valves that open when drivers activate the wind-shield-washing function and close as soon as spraying has finished. This means there are no subsequent drips, and the wiper blades only have to wipe once. In winter, the nozzles are heated, making them ready for use even in the worst of weather.

In opting for the Bosch Aerotwin, Volvo is also choosing what are currently the best wiper blades in the market. This was recently confirmed by a test carried out by ADAC, the German automobile club. Out of eight wiper blades tested, only three were evaluated as "good". "The secret of our wiper blades is their twin technology," Straub says. At the cleaning lip, the rubber is harder, and thus hard-wearing. By contrast, the back of the Aerotwin is more flexible, facilitating the reverse movement of the blade when the wiper arm switches from downward to upward motion. This means that the Aerotwin is practically silent in operation. And if a wiper blade should show signs of wear and tear, it can be quickly, easily, and inexpensively replaced, thanks to the Jet Wiper's sophisticated clip system.

Press photos: 1-ED-20942, 1-ED-19362

Related links:

Bosch wiper blades rank 1st and 2nd at latest ADAC test

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