

# Tandem Wipers | Windshield Wiper Blades | Electronic Wiper Control

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## Windshield Wipers:

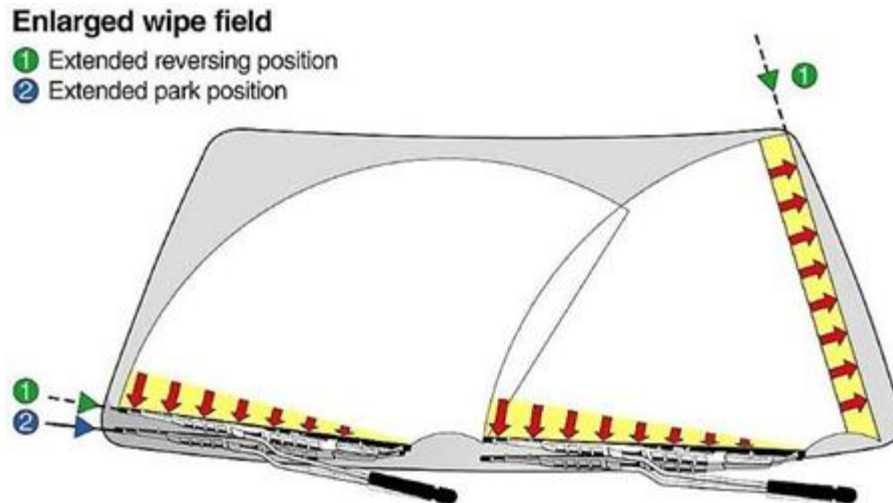


Conventional wiper drives have only one direction of rotation, and the direction of wiping is changed mechanically. The new electronically controlled motor reverses its direction of rotation at the turning point of the wiper – therefore, the mechanical components require less space.



The electronic controller ensures a maximum visibility area at all times, irrespective of wiping speed, coefficient of friction or wind force. Through exact

adherence to the wiping angle, it is possible to reduce the tolerance distance to the edge of the windscreen to a minimum and thus to enlarge the swept area. The controller can detect obstacles such as packed snow at the reversing points and automatically reduces the swept area to prevent the system from blocking. The speed of the motor is reduced before reversal to ensure quiet running.



The electronic speed controller is also very practical in conjunction with a rain sensor: depending on the quantity of water on the windshield, the drive unit can be operated at a continuously variable wiping speed.

The electronically controlled wiper motor also allows the use of two-motor wiper systems. Each wiper arm is moved by its own drive unit, and the electronic controller is responsible for the coordination of the movements.

#### **Advantages:**

- This system requires no connecting rods
- Reduced space requirements and
- Lower weight.

#### **Features & Benefits:**

An extended parking position is available as an additional function: this means that when the wipers are switched off, the wiper arms are parked under the trailing edge of the bonnet. This improves the aerodynamics of the vehicle. Driving noise is reduced and the driver's field of vision is enlarged. At the same

time, the risk of injury is reduced in the event of accidents with pedestrians and two-wheeled traffic.

Source:

<http://www.mechanicalengineeringblog.com/category/latest-automobile-technology/wipers/>