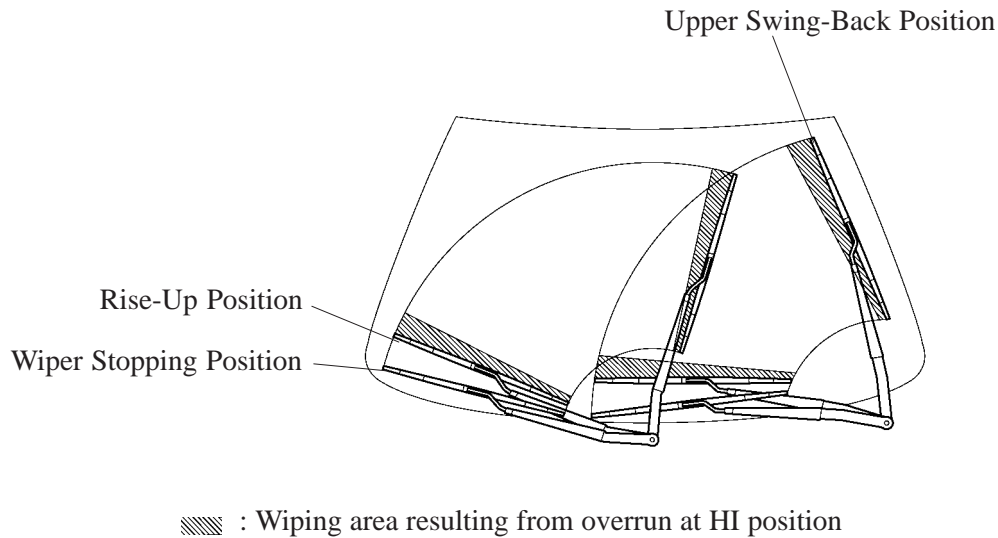


■ FULL AREA WIPING FUNCTION

The full area wiper motor that is mounted on the wiper link moves the position of the idle lever to perform the swing-back operation of the wipers from their retracted position, the rise-up operation to move the blades to the INT stopping position, and to automatically correct the overrun of the blades when the wipers are operating at the high speed.



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■ RAINDROP SENSING FUNCTION

1. General

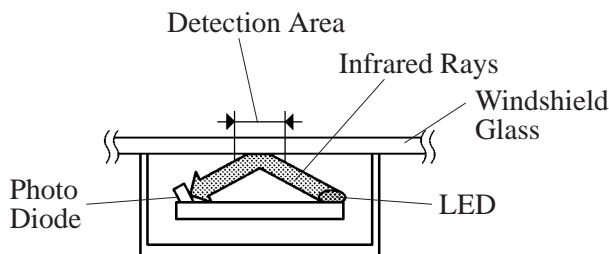
When the wiper switch is in the AUTO position, this function uses a rain sensor that is mounted on the front windshield glass to detect the amount of raindrops, and controls an optimal wiping timing accordingly.

2. Construction and Operation

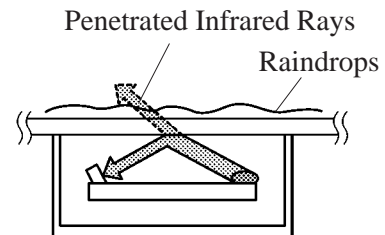
Rain Sensor

The rain sensor consists mainly of an LED (Light Emitting Diode) that emits infrared rays, and a photo diode that receives those rays. The detection method is based on the infrared rays that are reflected by the front windshield glass.

For example, if no raindrops are present in the detection area, the infrared rays emitted by the LED are all reflected from the windshield glass and are received by the photo diode. If raindrops are present in the detection area, a portion of the emitted infrared rays penetrates with the change of index of refraction outward of the windshield glass via the raindrops, thus reducing the amount of infrared rays that are received by the photo diode. The amount of this reduction is then used to detect the amount of raindrops. Thus, this function controls the INT, LO, and HI operations in order to operate the wipers at an optimal wiping timing.



If no raindrops are present



If raindrops are present

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3. Fail-Safe

If the Passenger side J/B ECU has determined that a malfunction has occurred in the raindrop sensing function, it operates the wipers intermittently in accordance with the vehicle speed, as a fail-safe measure. Also, the wipers can be operated normally in the LO or HI speed by engaging the wiper switch in the LO or HI position.