

Rain Sensor

- 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.

Function

- The rain sensor consists mainly of 4 LED (Light Emitting Diode) that emits infrared rays, and 2 photo diode that receive 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 reflection 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.

