■RAINDROP SENSING FUNCTION

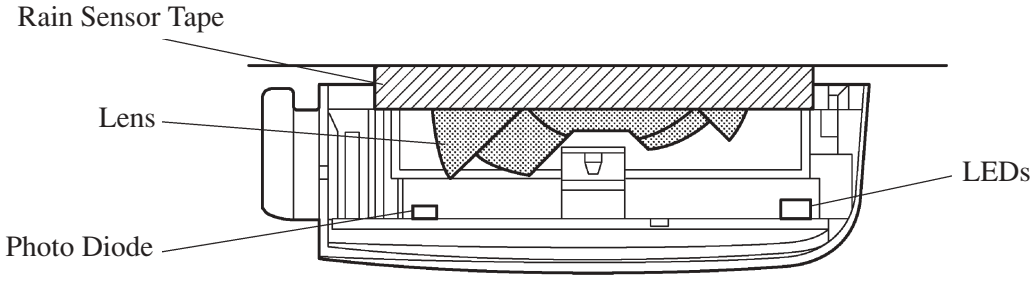
1. General

The raindrop sensing function controls the wiping timing in accordance with the amount of raindrops when the wiper control switch is in the AUTO position.

- The wiper ECU controls the timing based on the raindrops signal from the rain sensor.

2. Rain Sensor

The rain sensor consists of two LEDs (Light Emitting Diodes) that emits infrared rays, one photo diode that receives those rays, lens and rain sensor tape.



Service Tip

If the rain sensor tape has been peeled during a windshield glass replacement, make sure to affix a new rain sensor tape. Failure to do so will lead to a system malfunction.

- 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 reflection index 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 intermittent, low, and high operations in order to operate the wipers at an optimal wiping timing.

