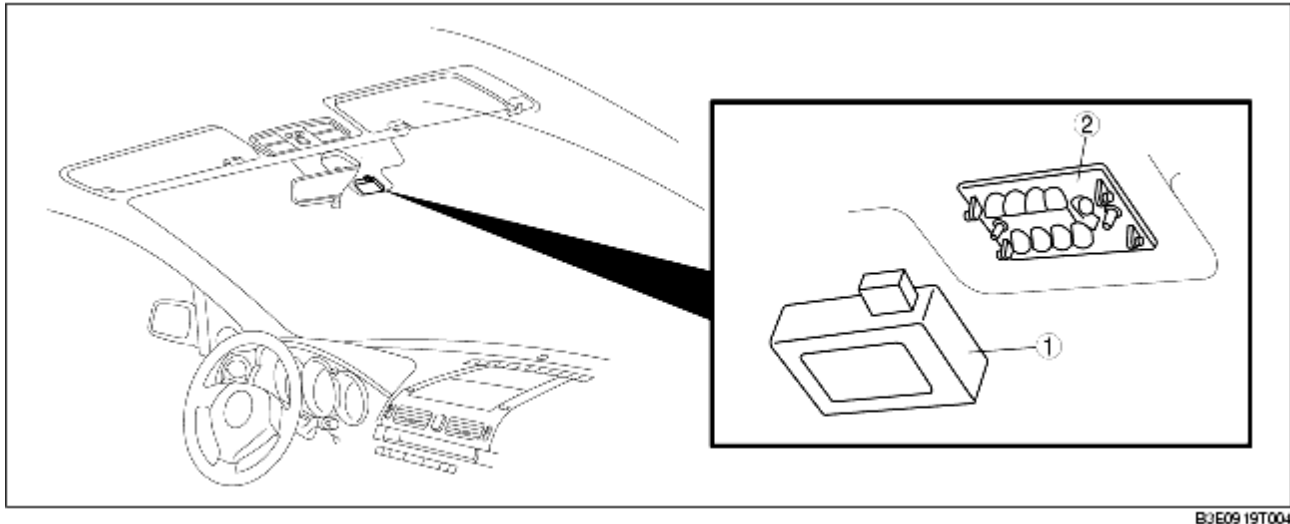


RAIN SENSOR CONSTRUCTION/OPERATION

B3E091901052T14

- Installed on the underside of the rearview mirror (windshield center).

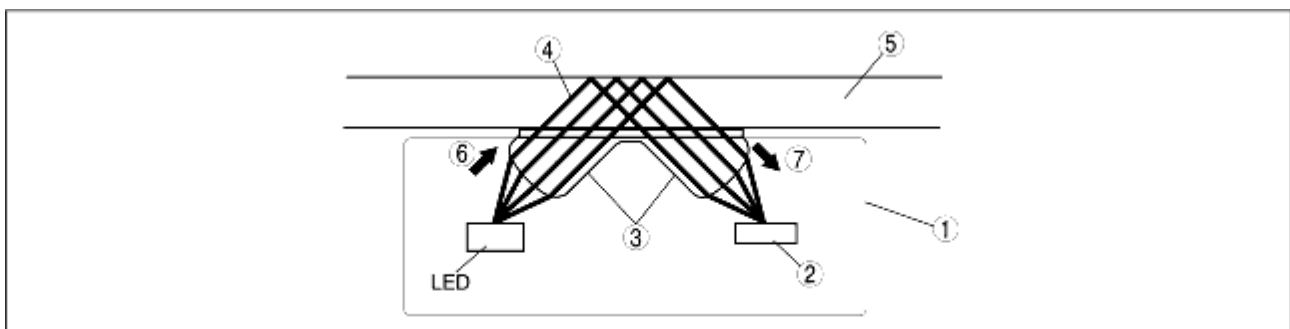


B3E09 19T004

1	Rain sensor
2	Lens sensor

Operation With No Rainfall Contacting Windshield

1. Infrared light is emitted from the LED in the rain sensor towards the windshield.
2. The emitted infrared light passes through the lens sensor and is reflected off the windshield.
3. The infrared light reflected off the window is received by the photodiode in the lens sensor.
4. The photodiode receives the light, the microcomputer in the rain sensor calculates the rainfall amount from the reflection rate, converts this to an electric signal and sends a windshield wiper control signal to the PJB.

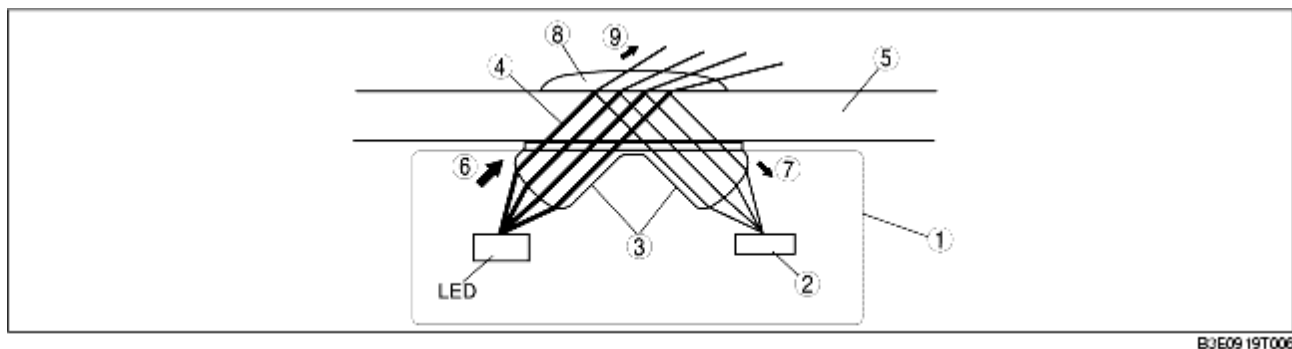


B3E09 19T005

1	Rain sensor
2	Photodiode
3	Lens sensor
4	Infrared light
5	Windshield
6	Emitted light
7	Received light

Operation With Rainfall Contacting Windshield

1. Infrared light is emitted from the LED in the rain sensor towards the windshield.
2. The emitted infrared light passes through the lens sensor, is received by the windshield and diffused by the rainfall contacting the windshield.
3. The infrared light that is not diffused is reflected by the windshield and received by the photodiode in the lens sensor.
4. The photodiode receives the light, the microcomputer in the rain sensor calculates the rainfall amount from the reflection rate, converts this to an electric signal and sends a windshield wiper control signal to the PJB.



1	Rain sensor
2	Photodiode
3	Lens sensor
4	Infrared light
5	Windshield
6	Emitted light
7	Received light
8	Rainfall
9	Diffusion