

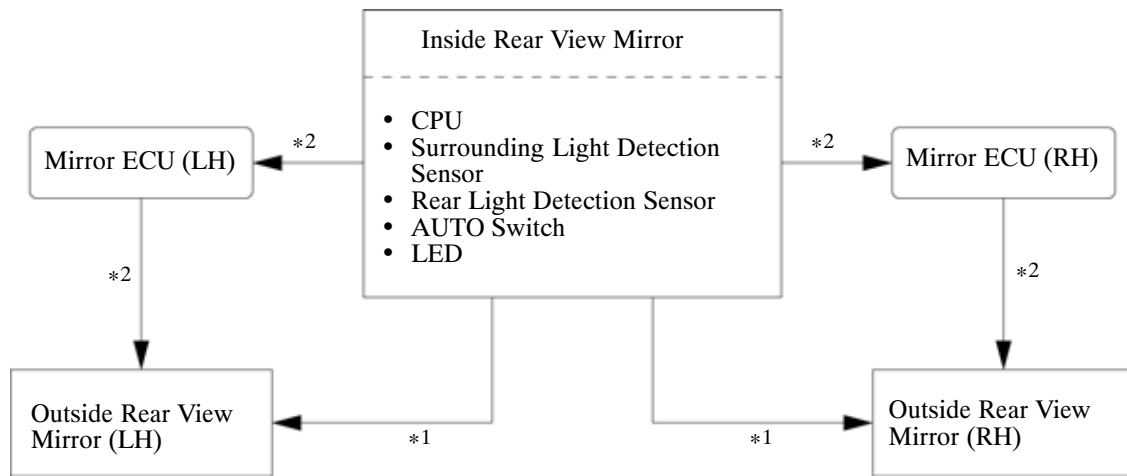
■ AUTOMATIC GLARE-RESISTANT EC MIRROR

1. General

During nighttime driving, if a large difference in intensity exists between the surrounding light and the light reflected off the inside rear view mirror from the headlights behind, an automatic glare-resistant EC (Electrochromic) mirror automatically reduces the reflection rate of the inside or outside rear view mirrors and thus dampens the glare from the mirror.

- This system uses two sensors (surrounding light detection sensor, rear light detection sensor) that are present in the inside rear view mirror to detect the difference between the intensity of light in the environment, and the light that the inside rear view mirror receives from the rear of the vehicle.
- When the power source is changed from OFF to IG-ON, this system defaults to AUTO mode.

► System Diagram ◀



*1: Without Memory System

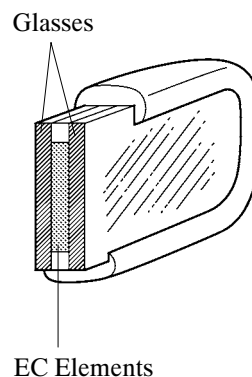
*2: With Memory System

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Component	Function
Surrounding Light Detection Sensor	Detect the intensity of the light surrounding the vehicle.
Rear Light Detection Sensor	Detects the intensity of the light that strikes the inside rear view mirror from behind the vehicle.
LED	Turns on to inform the driver during the AUTO mode is operating.
AUTO Switch	Selects to AUTO mode.
EC Mirror Cell	Varies the reflection rate of the mirror using the function of EC element.

2. EC Mirror Cell

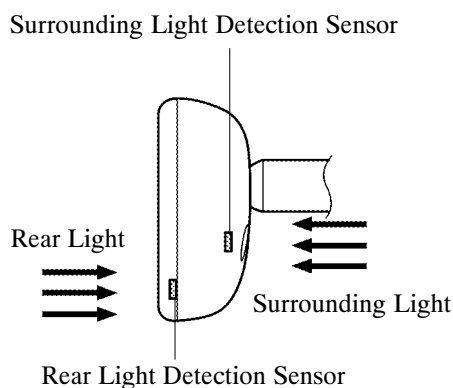
An EC mirror cell consists of 2 layers of glass, which sandwich the EC (Electrochromic) elements in the middle. The EC elements control their color changing characteristics through their electro-chemical oxidation reduction reaction. These characteristics are utilized to electronically vary the mirror's reflection rate.



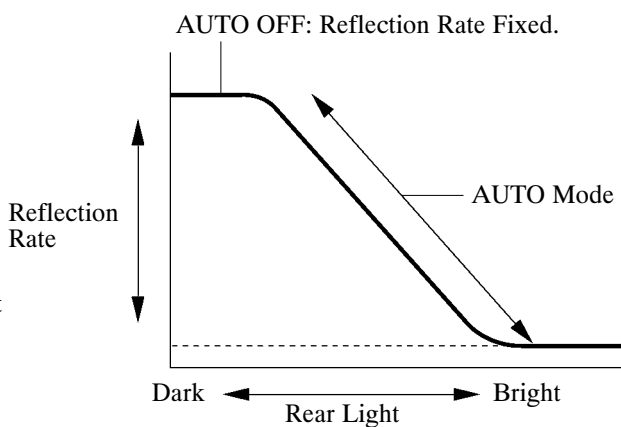
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3. Reflection Rate Control

This CPU detects the surrounding light using its surrounding light detection sensor, the rear light using its rear light detection sensor, and determines whether it is day or night based on the intensity of the surrounding light. At the same time, the intensity of the glare from the rear is determined through the difference in intensity between the surrounding and rear light. In accordance with the intensity of the rear light, the reflection rate is varied steplessly.



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