■INSIDE REAR VIEW MIRROR

1. General

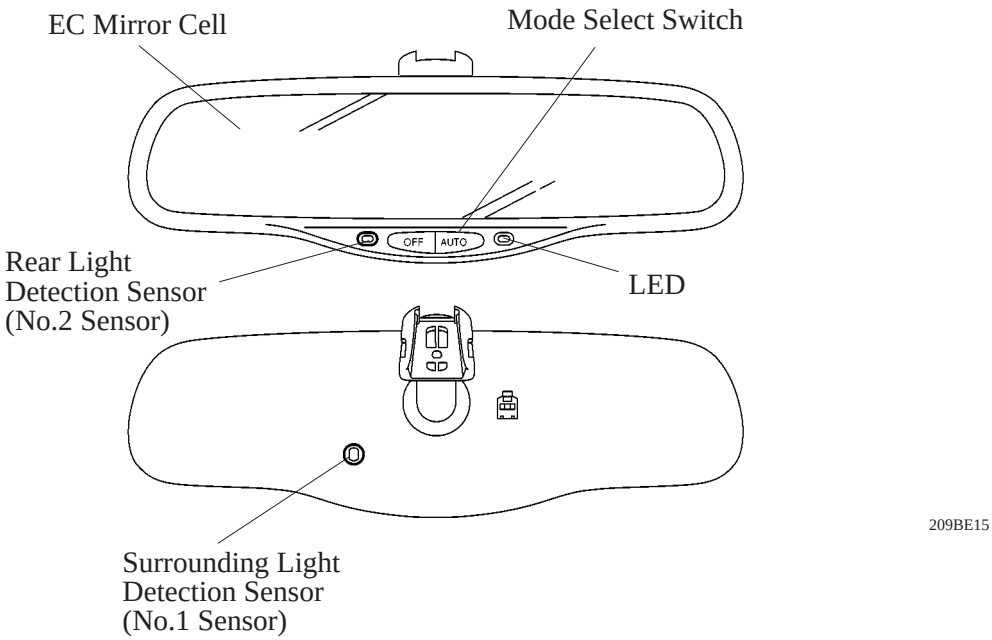
An automatic glare-resistant EC (electrochromic) mirror for the inside rearview mirror has been made available as an option.

2. Automatic Glare-Resistant EC Mirror

General

- This system uses 2 sensors that are attached onto the inside rear view mirror to detect the difference between the intensity of light entering the inside rear view mirror from the rear of the vehicle, and of the light surrounding the vehicle.
- During nighttime driving, if a large difference in intensity exists between the surrounding light and the light entering the inside rear view mirror from the headlights of the vehicle driving behind, this system automatically reduce the reflection rate of the inside rear view mirror and thus dampens the glare on the mirror.

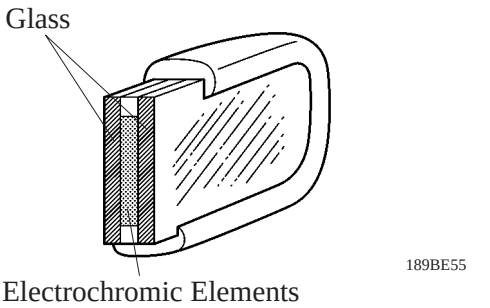
Function of Components



Components	Function
Surrounding Light Detection Sensor (No.1 Sensor)	Detects the intensity of the light surrounding the vehicle.
Rear Light Detection Sensor (No.2 Sensor)	Detects the intensity of the light entering the inside rear view mirror from behind the vehicle.
LED	Turns on to inform the driver that the mirror control mode is operating in the AUTO mode.
Mode Select Switch (AUTO, OFF)	Selects the inside rear view mirror control to AUTO mode or DAY mode.
EC Mirror Cell	Varies the refection rate of the mirror through the function of EC elements.

EC Mirror Cell

An EC mirror cell consists of 2 layers of glass which sandwich the EC elements in the middle. The EC elements control coloring and discoloring characteristics through their electro-chemical oxidation reduce reaction. These characteristics are utilized to electronically vary the mirror's reflection rate.



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Operation

1) General

The EC mirror system provides 2 types of control modes, the AUTO and DAY modes, which can be selected using the mode select switch.
In the AUTO mode, the system switches (Fig. 1) the inside rear view mirror's glare resistant and non-glare resistant functions in accordance with the difference in intensity between the surrounding and rear lights and automatically varies the reflection rate of the inside and outside rear view mirrors.
When the mode select switch is fixed to the DAY mode, the reflection rate of the inside and outside rear view mirrors are fixed to maximum reflection (DAY mode) regardless of the intensity of the surrounding or rear light. This system, when selected to the AUTO mode, is activated only when the ignition switch is ON.

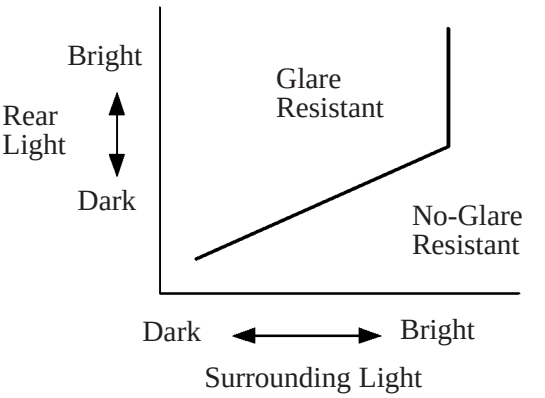


Fig. 1

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2) Auto Mode

During daytime driving, the inside and outside rear view mirrors remain in the DAY mode. The automatic glare-resistant circuit detects the surrounding light through its No. 1 sensor, the rear light through its No. 2 sensor, and determines whether it is day or night through 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.
When the automatic glare-resistant circuit determines that the rear light is too bright, the EC drive circuit applies voltage to the inside and outside rear view mirror cells to vary their reflection rate.
In accordance with the intensity of the rear light, the inside and outside rear view mirror's reflection rate varies steplessly (Fig. 2).

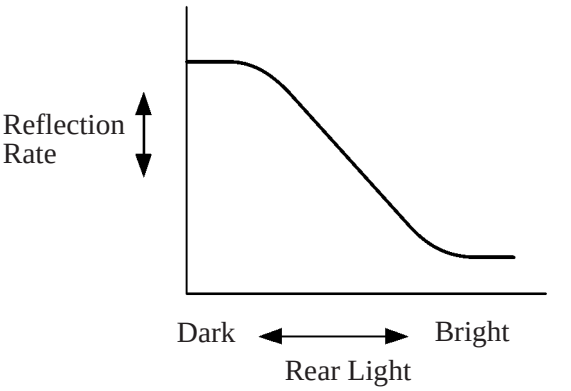


Fig. 2

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