

Failsafe Pertaining to Setting Moon Roof Glass Position Data

Abnormal Moon Roof Glass Position Information

If the sliding roof control ECU determines that an error exceeding a predetermined value exists between the mechanical lock position of the sliding roof glass or the motor lock detection position and the position information that is memorized based on the pulse count provided by the Hall ICs (thus detecting that the sliding roof glass is in the abnormal region), the ECU will delete the memorized position information and transfers the control to the state in which it is not "taught" any position information.

Sensor (Hall IC) Failure Judgment

If a failure occurs in one of the two Hall ICs that are used for detecting the position, speed, and direction of the sliding roof glass, the sliding roof control ECU transfers the control to be the same as in the state in which it is not "taught" any position information. If a failure occurs in both Hall ICs, the sliding roof control ECU will effect control by changing the overload detection function that operates by way of a motor lock judgment.

Failsafe Pertaining to Moon Roof Motor Actuation

Continuous Operation Restriction Function

If the motor actuation time (relay ON time) provided by the sliding roof control ECU is too long, this function automatically turns OFF the relay after approximately 20 seconds (during slide operation) or approximately 3.5 seconds (during tilt operation) have elapsed. Thus, it protects the motor and the circuit.

Forced Teaching Operation (jam protection function Cancel Operation)

A failure in the jam protection function may create the problem of preventing the sliding roof glass from closing fully (by preventing it from stopping at the fully closed position). If this occurs, the driver can press the tilt switch UP or the slide switch CLOSE for more than approximately 10 continuous seconds in order to force the control to transfer into a state in which it is not "taught" any position information. Then, the driver can correct the position information by performing an initialization operation.

Moon Roof Glass and Side Garnish

- The offset between the sliding roof glass and the weatherstrip has been reduced to enhance the appearance from the vehicle exterior.
- A side deflector and a side screen (side garnish) are provided along the sides of the sliding roof glass to reduce wind noise during a tilt-up and to enhance the appearance from the vehicle interior.

