

## SLIDING ROOF SYSTEM

### DESCRIPTION

A sliding roof dial and push switch is adopted to enhance the operation of the sliding roof. In addition, the sliding roof can be fully opened or fully closed more easily by just pushing the dial once.

The sliding roof drive gear sub-assembly (sliding roof ECU) controls the sliding roof system. This ECU uses two Hall ICs to detect the position of sliding roof. The sliding roof drive gear sub-assembly (sliding roof ECU) and the two Hall ICs are integrated in the sliding roof motor assembly.

- This system is optional equipment.
- The sliding roof system has following functions:

Function	Outline	Customizable
Manual open-and-close	This function opens or closes the sliding roof in 7 stages according to the sliding roof dial switch position.	—
One touch auto open-and-close	Pushing the sliding roof dial switch once enables the sliding roof to be fully opened or closed. If the dial switch is pushed again during the sliding roof open or close operation, the sliding roof will stop the operation.	—
One touch auto tilt up-and-down	Turning the sliding roof dial switch to the TILT UP or DOWN position enables the sliding roof to be fully tilted up or down.	—
Jam protection*1	The jam protection function automatically stops the sliding roof and moves it open half way (or to the fully tilted up position) if a foreign object gets jammed in the sliding roof during close or tilt down operation. The jam protection function is now enabled even during the tilt-down operation. The sliding roof drive gear sub-assembly (sliding roof ECU) receives a vehicle speed signal when the vehicle is in motion. This is done to prevent inappropriate operation of jam protection due to the air resistance that is applied to the sliding roof.	—
Key-off operation	The key-off operation function makes it possible to operate the sliding roof for approximately 43 seconds after the engine switch or power source is turned to ACC or OFF, if the front doors have not been opened.	—
Key-linked open-and-close function	When the driver door is locked, and the key cylinder in the driver door is turned and maintained in the lock direction for 2.5 seconds or more, the sliding roof drive gear sub-assembly (sliding roof ECU) activates the sliding roof motor to close the moon roof while the key cylinder is turned. Similarly, when the driver door is unlocked, turning and maintaining the driver door key cylinder in the unlock direction for 2.5 seconds or more will cause the moon roof to open.	*2
Transmitter-linked open function	When the main body ECU RH (cowl side junction block RH) receives an unlock signal from the transmitter continuously for longer than 3.4 seconds, the sliding roof drive gear sub-assembly (sliding roof ECU) opens the moon roof.	*2
Sliding roof open warning	When the engine switch is turned from on (IG) to off and the driver door is opened with the sliding roof open, the buzzer in the combination meter sounds once. Then, a warning message appears on the multi-information display.	—

\*1: The jam protection detection method is the same as for the power window system. For details, [see page BE-136](#).

\*2: Default setting is ON: The setting can be changed using the customized function. For details, [see page BE-18](#).