

SYSTEM DESCRIPTION

1. GENERAL

In this system, the available functions are: AUTO tilt-up and tilt-down; AUTO sliding open and close; jam protection; key-linked open and close; transmitter-linked open; AUTO operation open and close (with ignition switch OFF); and AUTO operation open (with ignition switch OFF).

For European models, the function AUTO tilt-down is not available. For Australian models, the functions AUTO sliding close, wireless close, AUTO tilt-down and jam protection are not available.

2. FUNCTION OF COMPONENT

Function	Outline
Sliding roof motor	Sliding roof ECU controls sliding roof motor to rotate forward and backward, which tilts or slides sliding roof glass.
Overhead J/B (Sliding roof switch)	Output of operation signals from built-in sliding roof switch to sliding roof ECU is handled by overhead J/B.

3. SYSTEM OPERATION

The sliding roof has following features:

Function	Outline	Europe (including Israel and Turkey)	Australia	Others
AUTO tilt-up and down	When sliding roof ECU detects control signal for AUTO tilt-up or tilt-down from tilt switch, sliding roof ECU controls sliding roof accordingly.	–	–	○
AUTO tilt-up	When sliding roof ECU detects control signal for AUTO tilt-up from tilt switch, sliding roof ECU controls sliding roof accordingly.	○	○	–
AUTO sliding open and close	When sliding roof ECU detects control signal for AUTO sliding-open or sliding-close from slide switch, sliding roof ECU controls sliding roof accordingly.	○	–	○
AUTO sliding-open	When sliding roof ECU detects control signal for AUTO sliding-open from slide switch, sliding roof ECU controls sliding roof accordingly.	–	○	–
Jam protection	If foreign object is jammed in sliding roof during AUTO tilt-down or AUTO sliding-close operation, jam protection automatically stops sliding roof and tilts it upward or slides it open.	○	–	○
Key-linked open and close	When key is not in ignition key cylinder: (a) Driver's door is locked and key in door key cylinder is turned and held in lock direction for 2 seconds or more, sliding roof ECU activates sliding roof motor to close sliding roof while key is held in lock direction. (b) Driver's door is unlocked and key in door key cylinder is turned and held in unlock direction for 2 seconds or more, sliding roof ECU activates sliding roof motor to open sliding roof while key is held in unlock direction.	○	○	○
Wireless open and close	When theft warning ECU receives unlock signal from transmitter continuously for longer than 2.5 seconds, theft warning ECU transmits sliding roof control signal to sliding roof ECU. Then sliding roof ECU opens sliding roof accordingly. When theft warning ECU receives lock signal from transmitter continuously for longer than 2.5 seconds, theft warning ECU transmits sliding roof control signal to sliding roof ECU. Then sliding roof ECU closes sliding roof accordingly.	–	–	○
Wireless open	When theft warning ECU receives unlock signal from transmitter continuously for longer than 2.5 seconds, theft warning ECU transmits sliding roof control signal to sliding roof ECU. Then sliding roof sliding roof ECU opens sliding roof accordingly.	○	○	–

DIAGNOSTICS – SLIDING ROOF SYSTEM

Function	Outline	Europe (including Israel and Turkey)	Australia	Others
After ignition switch is turned OFF position open and close	<ul style="list-style-type: none"> • Close with ignition switch OFF After the ignition switch is turned from ON to ACC or LOCK, the functions tilt-down, sliding close can be operated for 45 seconds or until either front door is opened.	○	–	–
After ignition switch is turned OFF position open and close	<ul style="list-style-type: none"> • Open and close with ignition switch OFF After the ignition switch is turned from ON to ACC or LOCK, the functions tilt-down, sliding close, AUTO tilt-up, AUTO sliding open can be operated for 45 seconds or until either front door is opened.	–	○	–
After ignition switch is turned OFF position open and close	<ul style="list-style-type: none"> • AUTO operation open and close with ignition switch OFF After the ignition switch is turned from ON to ACC or LOCK, the functions AUTO tilt-up, AUTO tilt-down, AUTO sliding open and AUTO sliding close can be operated for 45 seconds or until either front door is opened.	–	–	○