



## SYSTEM OUTLINE

Current is applied at all times through the POWER fuse to TERMINAL 5 of the PWR relay.

With the ignition SW turned on, the current flows from TERMINAL 1 of the PWR relay to TERMINAL 2 to GROUND through the ECU-IG fuse. As a result, the PWR relay is activated and the current to TERMINAL 5 of the PWR relay flows from TERMINAL 3 of the relay to TERMINAL 2 of the moon roof control relay and SW.

### 1. SLIDE OPEN OPERATION

When the ignition SW is turned on and the moon roof control SW is pushed to the OPEN position, a signal is input to HALL IC of the moon roof control relay and SW. The moon roof limit SW no. 2 is turned on at this time.

This activates the moon roof control relay and SW and rotates the motor to fully open the moon roof automatically. If other operation SW or the open SW is operated while the moon roof is being opened, the moon roof control relay and SW is activated to stop the moon roof operation.

### 2. SLIDE CLOSE OPERATION

With the ignition SW turned on, moon roof completely open and the moon roof limit switch no. 1 and no. 2 both are on, when the moon roof control SW is pushed to the CLOSE position, a signal is input to HALL IC of the moon roof control relay and SW.

When this occurs, the relay is activated and the current to TERMINAL 2 of the moon roof control relay and SW flows from TERMINAL 4 to TERMINAL 2 of the moon roof control motor to TERMINAL 1 to TERMINAL 5 of the moon roof control relay and SW to TERMINAL 8 to GROUND, rotating the motor to close the moon roof while the SW is being pushed to CLOSE position.

When the moon roof limit SW no. 1 is turned off (The moon roof limit SW no. 2 is on), and moon roof reaches 100mm from fully close position, signal is input from TERMINAL 5 of the moon roof limit SW to TERMINAL 6 of the moon roof control relay and SW. This signal activates the relay and stops continuity from TERMINAL 2 of the moon roof control relay and SW to TERMINAL 8, as a result, the moon roof stops at this position.

To close the moon roof completely, pushing the moon roof control SW again to the close side causes a signal to be input again to HALL IC of the moon roof control relay and SW. This activates the relay and the moon roof will close as long as the moon roof control SW is being pushed, allowing the moon roof to fully close.

### 3. TILT UP OPERATION

When the moon roof control SW is pushed to UP position, with the ignition SW turned on and the moon roof completely closed (Moon roof limit SW no.2 is off), a signal is input to HALL IC of the moon roof control relay and SW. As a result, the relay is activated and the current to TERMINAL 2 of the moon roof control relay and SW flows from TERMINAL 4 of the moon roof control relay and SW to TERMINAL 2 of the moon roof control motor to TERMINAL 1 to TERMINAL 5 of the moon roof control relay and SW to TERMINAL 8 to GROUND, rotating the motor so that tilt up operation occurs as long as the moon roof control SW is pushed on the tilt up side.

### 4. TILT DOWN OPERATION

When the moon roof control SW is pushed to DOWN position, with the ignition SW turned on and the moon roof tilted up (The moon roof limit SW no.1 and no.2 are both off.), a signal input to HALL IC of the moon roof control relay and SW.

As the result, the moon roof control relay is activated and the current to TERMINAL 2 of the moon roof control relay and SW flows from TERMINAL 5 of the moon roof control relay and SW to TERMINAL 1 of the moon roof control motor to TERMINAL 2 to TERMINAL 4 of the moon roof control relay and SW to TERMINAL 8 to GROUND, rotating the motor so that tilt down operation occurs as long as the moon roof control SW is pushed on the tilt down side. (During tilt down, the moon roof limit SW no. 1 is changes off to on.)

### 5. KEY OFF MOON ROOF OPERATION

With the ignition SW turned from on to off, the body ECU operates and the current flows from the POWER fuse to TERMINAL 3 of the body ECU to TERMINAL 2 to TERMINAL 1 of the PWR relay to TERMINAL 2 to GROUND, at this time, for about 43 seconds the same as normal operation, the current flows from the POWER fuse to TERMINAL 5 of the PWR relay to TERMINAL 3 to TERMINAL 2 of the moon roof control relay and SW. As a result, for about 43 seconds after the ignition SW is turned off, the function of this relay makes it possible to open and close the moon roof. Also, by opening the front door LH (Door courtesy SW front LH on) within about 43 seconds after turning the ignition SW to off, a signal is input to TERMINAL (A) 19 of the body ECU. As a result, the relay turns off, and open and close, movement of the moon roof stops.

# MOON ROOF

## SERVICE HINTS

### PWR RELAY

5-3 : Closed with the ignition SW at **ON** position or key off operated

### M3 MOON ROOF CONTROL RELAY AND SW

8-GROUND : Always continuity

2-GROUND : Approx. **12** volts with the ignition SW at **ON** position or key off operated

4-GROUND : Approx. **12** volts with the ignition SW on and the moon roof control SW at **CLOSE** or **UP** position

5-GROUND : Approx. **12** volts with the ignition SW on and the moon roof control SW at **OPEN** or **DOWN** position

## ○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
B16	A 30	J4	31	M2	33
D16	32	J9	31	M3	33

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Roof Wire and Driver Side J/B (Lower Finish Panel)
1J	24	Cowl Wire and Driver Side J/B (Lower Finish Panel)
3E	26	Cowl Wire and Center J/B (Near the Steering Column Tube)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IH1	40	Roof Wire and Cowl Wire (Instrument Panel Reinforcement Left)

## ▽ : GROUND POINTS

Code	See Page	Ground Points Location
IE	38	Cowl Side Panel LH
IF	38	Cowl Side Panel RH

## ○ : SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B3	42	Roof Wire			

