

# AIR BAG SYSTEM

7430-00/8810-00/8810-01/8810-03/  
8810-06/8810-11/8810-16/8810-18

## INDEX

## AIR BAG SYSTEM

### GENERAL INFORMATION

1. SPECIFICATION.....	3
2. MAJOR REPLACEMENT PARTS AFTER AIR BAG DEPLOYMENT.....	3
3. OPERATING CONDITIONS.....	4
4. CAUTIONS FOR AIR BAG OPERATION.	8

### OVERVIEW AND OPERATING PROCESS

1. SYSTEM CONFIGURATION.....	10
2. OPERATING CONDITIONS.....	12
3. OPERATION.....	13
4. AIR BAG WARNING LAMP OPERATIONAL CONDITION.....	17
5. CIRCUIT DIAGRAM.....	19

### COMPONENT

8810-00 AIR BAG SYSTEM.....	20
8810-03 DRIVER AIR BAG MODULE.....	21
8810-06 PASSENGER AIR BAG MODULE.....	23
8810-11 INFLATABLE CURTAIN AIR BAG MODULE.....	25
8810-16 SAB (SIDE AIR BAG).....	26
7430-00 SEAT BELT PRETENSIONER.....	30
8810-18 FRONT IMPACT SENSOR ASSEMBLY.....	33
8810-16 SIDE AIR BAG SENSOR ASSEMBLY.....	35
8810-01 SDM UNIT ASSEMBLY.....	37

### REMOVAL AND INSTALLATION

8810-03 DRIVER AIR BAG MODULE .....	40
8810-00 CONTACT COIL.....	42
8810-06 PASSENGER AIR BAG MODULE .....	44
8810-11 INFLATABLE CURTAIN AIR BAG MODULE.....	47
8810-18 FRONT IMPACT SENSOR ASSEMBLY.....	50
8810-16 SIDE AIR BAG SENSOR ASSEMBLY.....	52
8810-01 SDM UNIT ASSEMBLY.....	54



# GENERAL INFORMATION

## 1. SPECIFICATION

Operating voltage	9 to 16 V
Voltage for system diagnosis and SDM self diagnosis	9 to 16 V
Ignition voltage for side air bag and pretensioner	9 to 16 V
Communication voltage for front impact sensor	9 to 16 V
Communication voltage for side impact sensor	9 to 16 V
Operating temperature	-40°C to 85°C
Storage temperature	-40°C to 90°C
Ignition temperature	-30°C to 85°C
Over voltage protection	24 V

## 2. MAJOR REPLACEMENT PARTS AFTER AIR BAG DEPLOYMENT

### 1) In Case of Front Air Bag Deployment

Air bag unit and its wiring (including connector), seat belt pretensioner and its wiring (including connector), whole front air bags, instrument panel, front impact sensor and other damaged components

### 2) In Case of Curtain Air Bag Deployment

Deployed curtain air bag, air bag unit and its wiring (including connector), impact G sensor assembly for curtain air bag, damaged trim, seat and roof headlining

Modification basis	
Application basis	
Affected VIN	

### 3. OPERATION

#### 1) Front Air Bag System



► **The air bag deploys when:**

- A front collision occurs, which occupants cannot be protected by seat belt.

► **The air bag can deploy when:**

- Underbody impact from the road surface, impact against the curb at a very high speed, or dropping impact onto the road surface with a large angle occurs.

► **The air bag does not deploy when:**

- The vehicle rolls over or tips over sideward, or a side/rear collision occurs.  
A minor collision occurs, which occupants can be protected by seat belts.

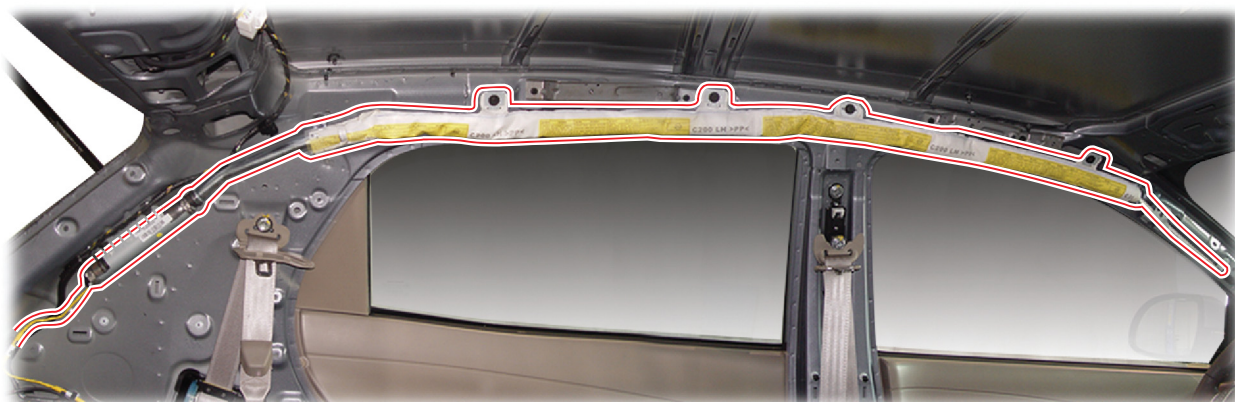
► **The air bag seldom deploys when:**

- A collision to diagonal direction (not a front collision) occurs or the vehicle tips over.
- A weak collision, which the sensor cannot detect, occurs (under the activation requirements).
- A collision against narrow objects such as a telegraph pole or a tree occurs.
- The vehicle falls into a drainage or a puddle.
- The front of the vehicle crashes into high impact point vehicle such as a truck.
- The hood is hit by falling stones.
- The air bag warning lamp is on.
- When a oblique collision occurs, only the side air bags will be deployed, and driver/passenger's air bags will not be deployed.

Modification basis	
Application basis	
Affected VIN	

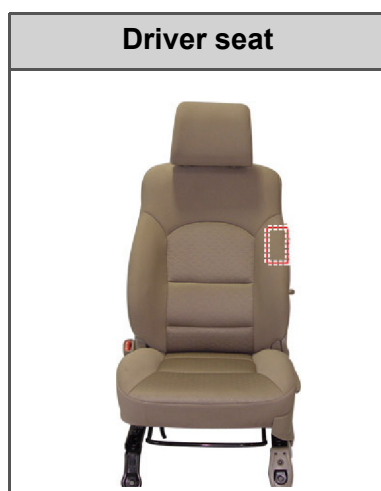
## 2) Side Air Bag System

### ▶ Curtain air bag



The curtain air bags, which are part of the side air bag system, are installed in both roof side rails.

### ▶ Side air bag



The side air bags are installed in the outer sides of the driver's and passenger's seats to minimize occupants' side injuries in case of a side impact.



### CAUTION

Side airbags and curtain air bags operate independently from the front airbag system.

Modification basis	
Application basis	
Affected VIN	