# 2. Construction

## A: GENERAL

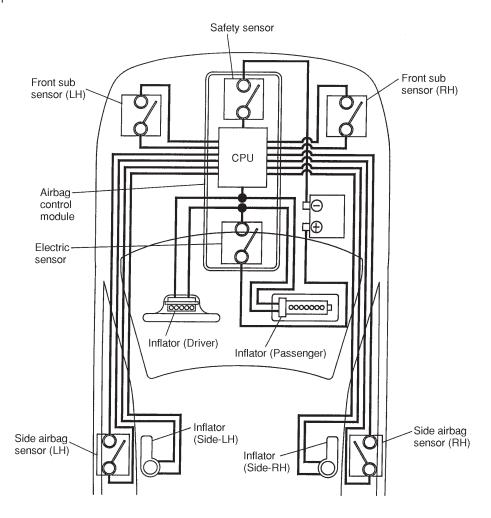
• The SRS airbag consists of an airbag control module, left and right front sub sensors, electric sensor and safety sensor built into the control module, airbag modules of driver and passenger containing an inflator and airbag, and side airbag sensor and side airbag module containing an inflator and airbag (Side airbag equipped model).

#### • FRONT AIRBAG SYSTEM:

A frontal impact causes the safety sensor, electric sensor and front sub sensor to input an impact signal to the CPU. The CPU judges whether the airbags should be inflated or not based on these input signal values.

## • SIDE AIRBAG SYSTEM:

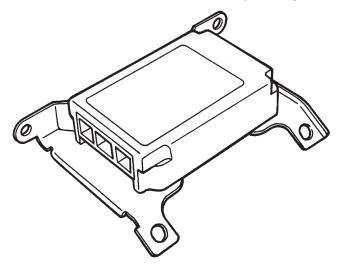
Input of a side impact signal that exceeds a preset value causes the airbag on the side that received the impact to inflate.



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#### **B: AIRBAG CONTROL MODULE**

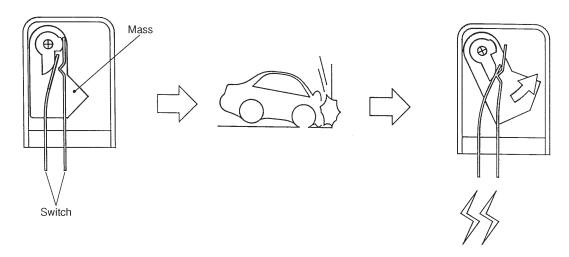
The airbag control module is installed ahead of the front floor tunnel. It detects the vehicle's deceleration by receiving electrical signals from the sensors and judges whether to fire the airbag. This control module has a built-in self-diagnosis function. If a trouble occurs inside the system, it lights up the airbag warning light in the combination meter. The trouble data is stored in the module. A back-up power supply is provided for possible damage to the battery during an accident, and a boosting circuit is built into the module in case of a battery voltage drop.



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## C: FRONT SUB SENSOR

One front sub sensor is installed on both left and right sides ahead of the front wheel apron wall. Front sub sensor is the pendulum type sensor. If the sensor receives a frontal impact exceeding a certain limit, the mass in the sensor revolves forward to turn the switch ON.



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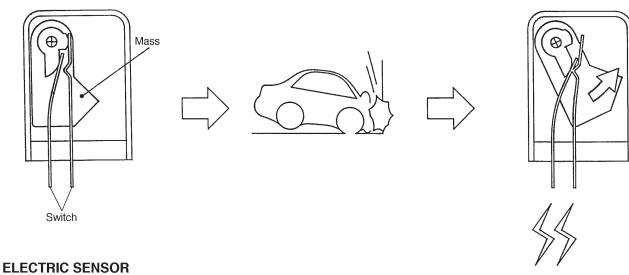
# D: AIRBAG SENSOR

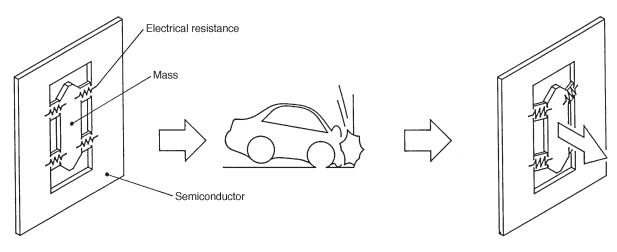
Safety sensor and electric sensor are built into the airbag control module and side airbag sensor.

Safety sensor is the pendulum type sensor. If the sensor receives a frontal or side impact exceeding a certain limit, the mass in the sensor moves forward to turn the switch ON.

The electric sensor consists of the semiconductor type sensor which senses the deceleration at collision by the change of the electrical resistance and the impact sensing circuit.

#### **SAFETY SENSOR**





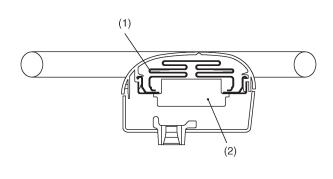
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## **E: AIRBAG MODULE**

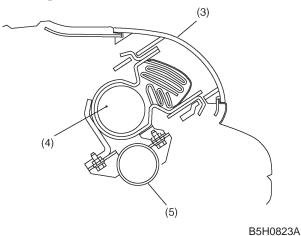
#### 1. FRONT AIRBAG

The driver's airbag module is located at the center of the steering wheel, and passenger's airbag module is located at upper side of instrument panel, and it each contains an airbag and inflator. If a collision occurs, the inflator produces a large volume of gas inflating the airbag in a very short time.

#### **Driver side**



Passenger side



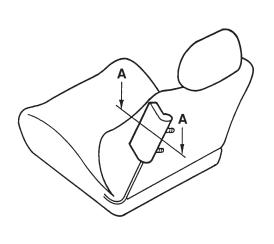
- (1) Airbag
- (2) Inflator (Driver)
- (3) Airbag module lid

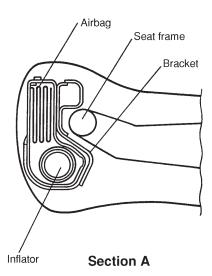
- (4) Inflator (Passenger)
- (5) Steering support beam

#### 2. SIDE AIRBAG

The side airbag module is located at the outside of the front backrest, and it contains an airbag and an inflator.

If a side collision occurs, the inflator produces a large volume of gas inflating the airbag in a very short time.





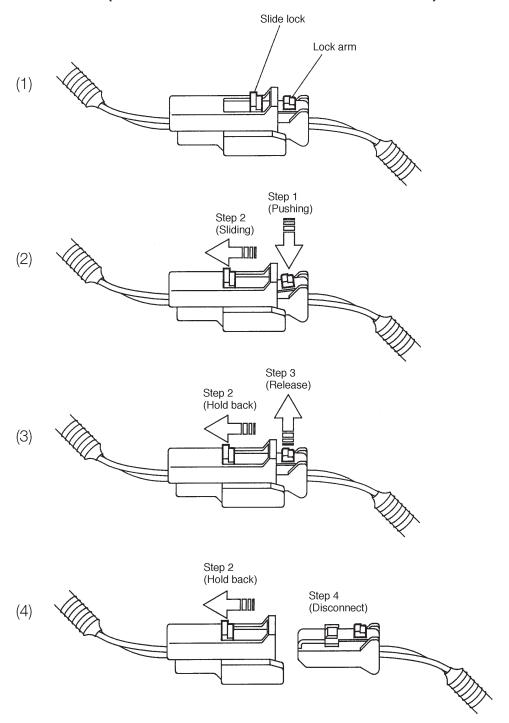
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## F: AIRBAG CONNECTOR

## 1. DISCRIPTION

The SRS airbag adopts a connector which has a double lock mechanism and coupling error detection mechanism for enhanced reliability. If coupling is incomplete, the airbag warning light comes on in the combination meter.

# 2. DISCONNECTION (AIRBAG HARNESS TO AIRBAG HARNESS)

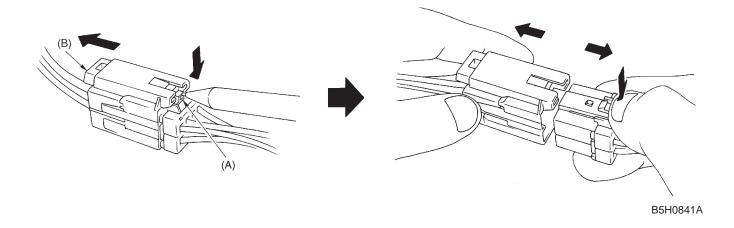


(5) When couple the connector, insert both connectors until a "click" is heard.

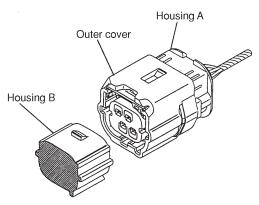
## 3. DISCONNECTION (AIRBAG HARNESS TO BODY HARNESS)

To disconnect the connector, press lever (A) to pop green lever (B) out, this unlocks the double lock system. Then separate the connector by pulling both sides while holding the connector sections and pressing in lever (A).

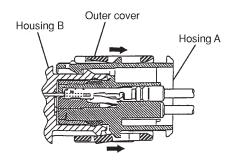
To couple the connector, insert both connectors until a "click" is heard, then push in the green lever (B) until a "click" is heard; this applies the double lock.



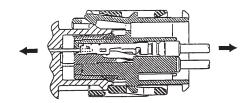
# 4. DISCONNECTION (FRONT SUB SENSOR AND SIDE AIRBAG SENSOR)



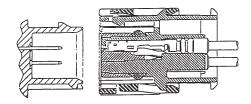
Step 1: Pull housing A at direction of arrow while pull down outer cover.



Step 2: Release lock of connector.



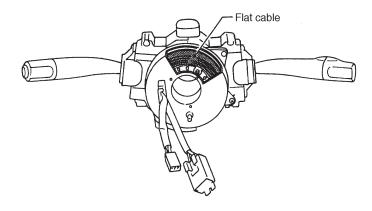
Step 3: Disconnect housing A and housing B.



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## **G: STEERING ROLL CONNECTOR**

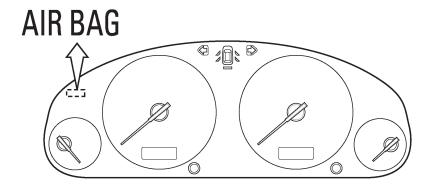
The steering roll connector is located between the steering column and steering wheel. A flat cable stored in a spiral form transmits the electrical signal from the airbag control module to the steering wheel from the body harness.



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## **H: AIRBAG WARNING LIGHT**

The airbag warning light is located inside the combination meter. It illuminates if a poor connection occurs, or if the airbag control module detects an abnormality, When the airbag system is normal, this light goes out about 7 seconds after turning the ignition switch ON.

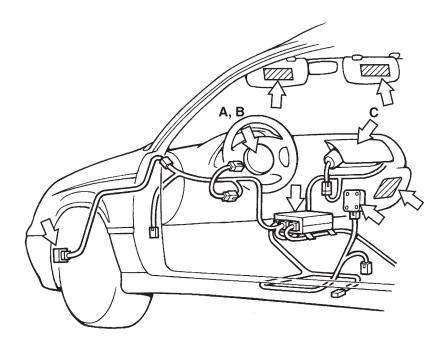


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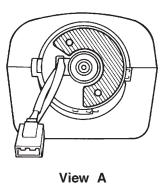
## **I: WIRE HARNESS**

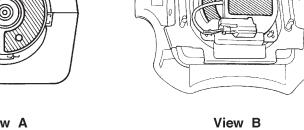
The wire harness of the SRS airbag is entirely covered with a yellow protective tube, and can easily be identified from harnesses of other systems.

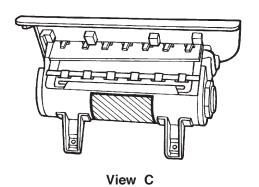
# J: LOCATIONS OF WARNING AND CAUTION LABELS











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# **MECHANISM AND FUNCTION**

**MEMO**