# 08–10

# 08-10 AIR BAG SYSTEM

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## **AIR BAG SYSTEM OUTLINE**

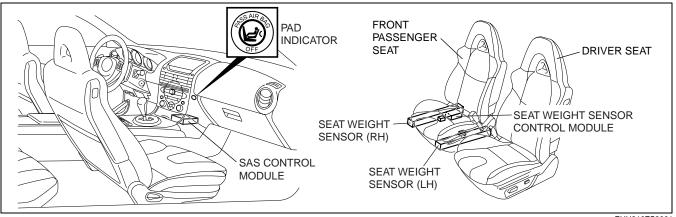
EHU081000000101

- Passenger sensing system has been added.
- In accordance with the system addition, the following components have been added.

| Item                              | Outline  |  |  |  |
|-----------------------------------|--|--|--|--|
| Seat weight sensor                | Measures the compression weight of the load applied to the passenger-side seat by the distortion amount using two seat weight sensor and sends an electrical signal corresponding to the distortion amount to the seat weight sensor control module. |  |  |  |
| Seat weight sensor control module | Based on the electrical signal sent from the seat weight sensor corresponding to the distortion amount, calculates the total seated weight to determine the passenger, and sends the determination result to the SAS control module.                 |  |  |  |
| PAD indicator                     | PAD indicator has been adopted to inform driver and front passenger of the deployment standby status of the passenger-side air bag module, passenger-side side air bag module and passenger-side pre-tensioner seat belt.                            |  |  |  |

# AIR BAG SYSTEM STRUCTURAL VIEW

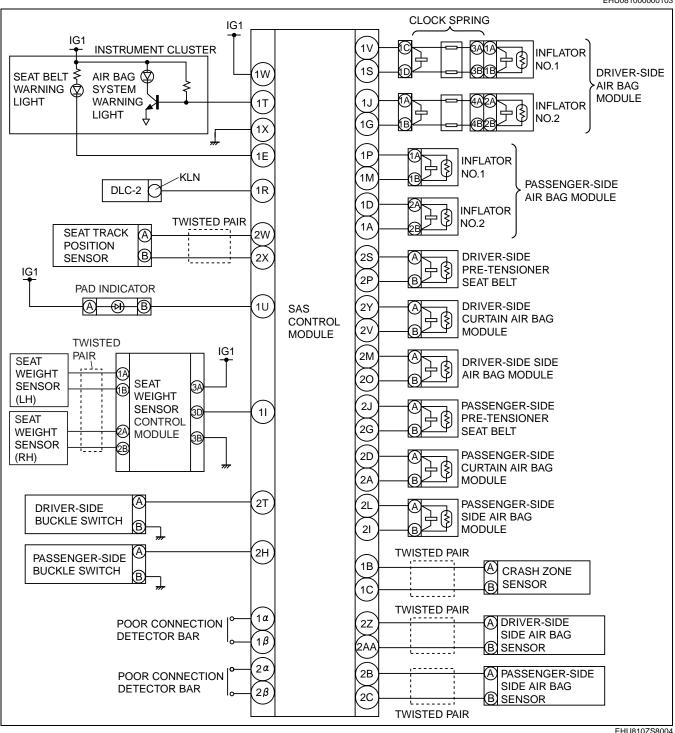
EHU081000000102



EHU810ZS8001

#### AIR BAG SYSTEM WIRING DIAGRAM

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### PASSENGER SENSING SYSTEM OUTLINE

Outline

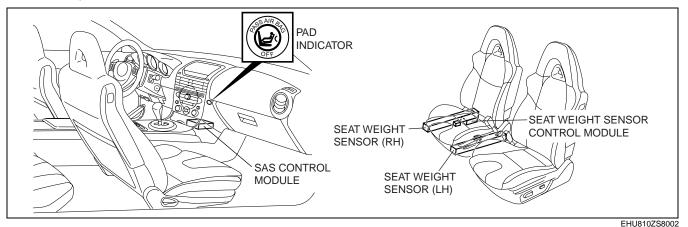
EHU081057031101

 Measures the total seated weight on the passenger-side seat, determines whether there is an adult or child (including a child-restraint seat), or that it is empty, and then controls operation (deployment) or non-operation (non-deployment) of the passenger-side air bag module and pre-tensioner seat belt.

### PASSENGER SENSING SYSTEM CONSTRUCTION

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Consists of the seat weight sensors installed on the underside of the front passenger slide adjuster, the seat
weight sensor control module installed to the underside of the seat weight sensor on the right, the PAD
indicator, and the SAS control module installed on the console.



# PASSENGER SENSING SYSTEM OPERATION

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- 1. The load on the passenger-side seat is converted into an electric signal by the strain gauge built into the seat weight sensor, and this signal is sent to the seat weight sensor control module.
- The electronic signals from the two seat weight sensor are used for calculation by the seat weight sensor control module, which divides the result and then determines whether there is an adult or child (including a child-restraint seat) in the passenger-side seat, or that it is empty. The determined result is sent to the SAS control module.
- 3. The SAS control module performs control based on this determined result as shown in the following table when the module detects a level of impact requiring operation (deployment).

×: Possible-: Not possible

| Determined result                      | Determined weight             | Passenger-side<br>air bag module<br>operation<br>(deployment) | Passenger-side<br>side air bag<br>module operation<br>(deployment) | Passenger-side<br>pre-tensioner seat<br>belt operation<br>(deployment) | PAD<br>indicator |
|--|-------------------------------|---|--|--|------------------|
| Adult                                  | Approx. 42 kg {93 lb} or more | ×   | ×  | ×  | Not illuminated  |
| Child (including child-restraint seat) | Approx. 30 kg {66 lb} or less | -   | -  | -  | Illuminated      |
| Empty                                  | Approx. 0 kg {0 lb}           | -   | -  | -  | Not illuminated  |

### Note

• The passenger-side air bag module, the passenger-side side air bag module and the passenger-side pretensioner seat belt system will be turned off as the total seated weight drops toward 30kg {66 lb} and they will be turned on again before the weight exceeds 42kg {93 lb}.