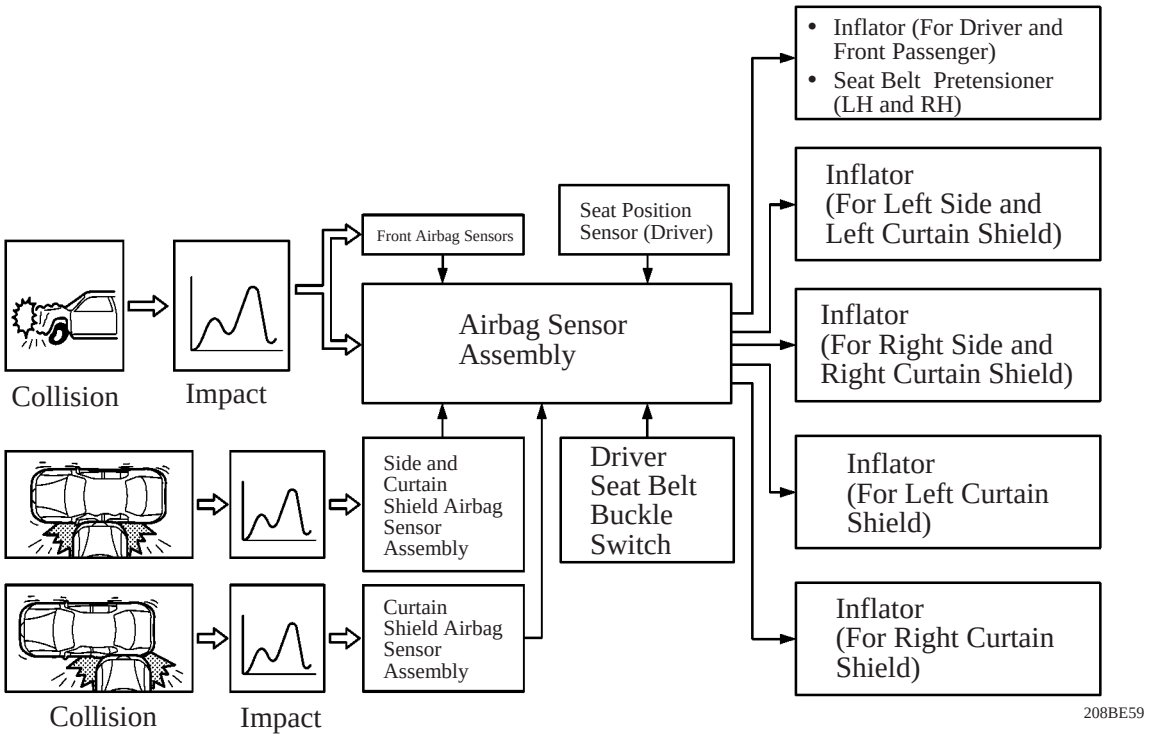
■SRS AIRBAG SYSTEM

1. General

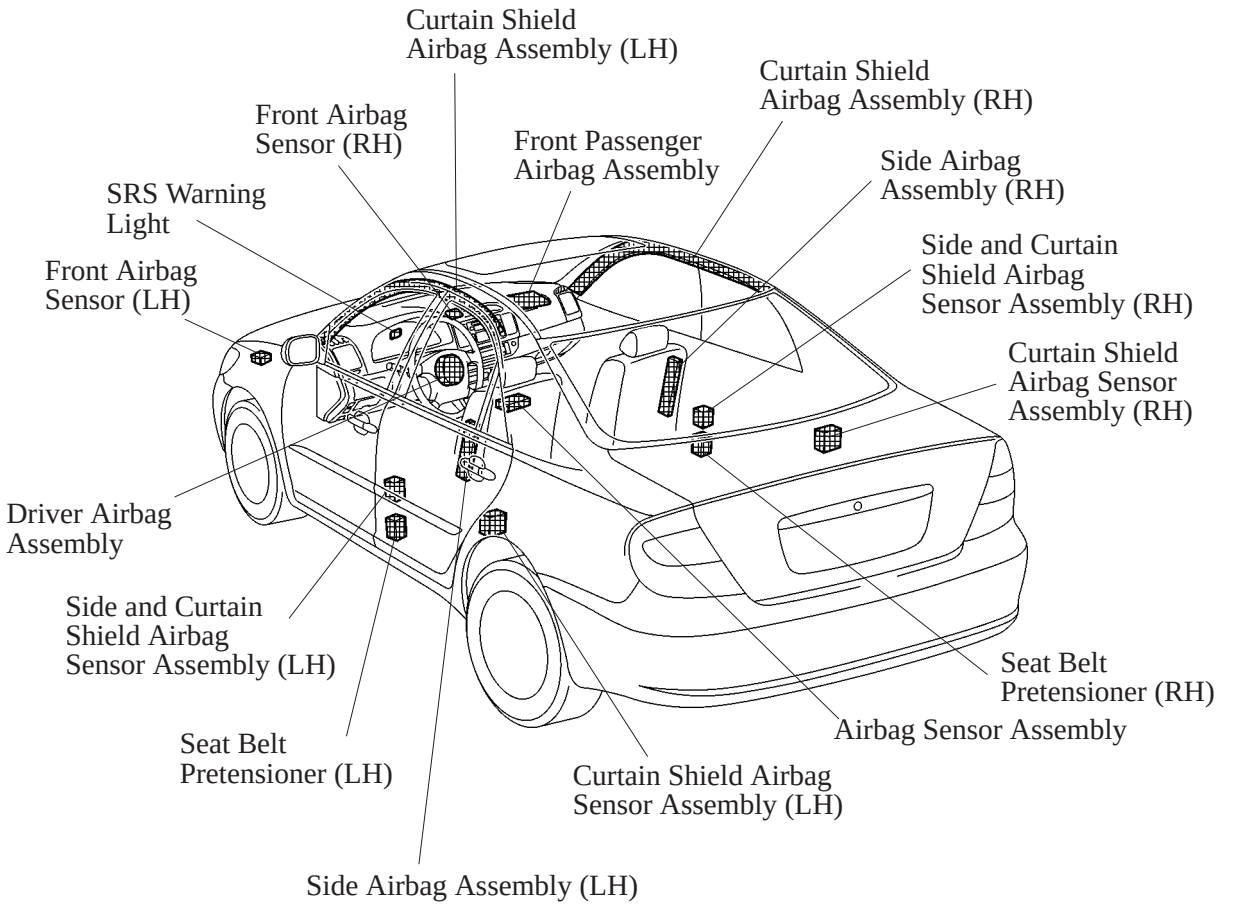
- The SRS (Supplemental Restraint System) airbag are provided for the driver and front passenger. The SRS airbags have been designed to help reducing the shocks to the heads and chests of the driver and front passenger in the event of a frontal impact collision as supplements to the seat belts.
  This system is a 3-sensor type airbag system to detect the impact during a front collision using the airbag sensor assembly and front airbag sensors, and to make the airbag system and seat belt pretensioner operate as well.
- On the new Camry, the previous mechanical type front airbag sensor assembly (consisting of movable and stationary contact points) has been changed to an electrical (deceleration sensor) type front airbag sensor assembly.
- Dual-stage SRS airbags system, that controls the airbag inflating output optimum by judging the extent of impact, seat position and whether or not the seat belt is fasten, has been adopted for the driver and front passenger airbags.
- In accordance with the adoption of the dual-stage SRS airbags system, a seat position sensor has been established for the driver seat.
- On the new Camry, a curtain shield airbag system that helps reduce the impact applied to the front and rear seat occupants with a single curtain shield airbag has been adopted.
  In conjunction with this system, a side and curtain shield airbag sensor assembly has been provided at the bottom of the center pillar and a curtain shield airbag sensor assembly at the bottom of the rear pillar.
- In this system, a front side collision is detected by the side and curtain shield airbag sensor assembly in order to simultaneously deploy the side and curtain shield airbags. A rear side collision is detected by the curtain shield airbag sensor assembly and the airbag sensor assembly in order to deploy only the curtain shield airbag.
- The function of the airbag sensor assembly to memorize the driver and front passenger's seat belt wearing condition while inflating the airbag is added.

▶ System Diagram ◀



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2. Layout of Main Component



LHD Model

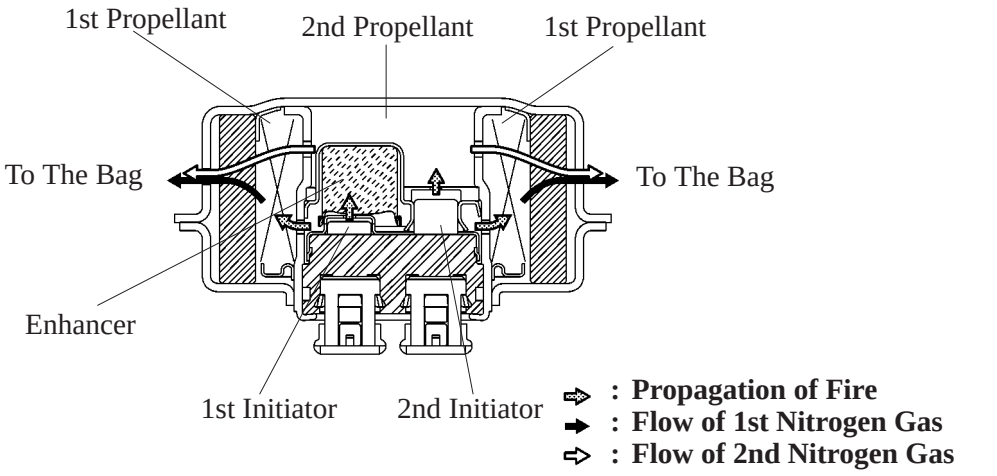
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3. Dual-stage SRS Airbags System

General

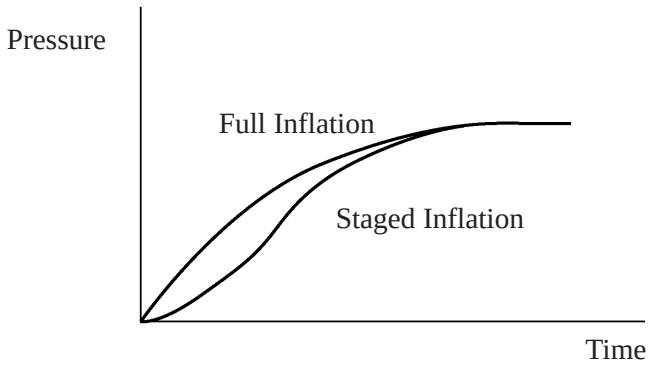
- In this system, when the front airbag sensors and airbag sensor assembly detect the front collision, it controls the airbag inflating output optimum by judging the extent of impact, seat position and whether or not the seat belt is fasten.
  For example, at the driver side airbag, when the front airbag sensors and airbag sensor assembly judge that the extent of impact is smaller than the specified value, the airbag inflating output is controlled by delaying the ignition timing of the 2nd initiator than that of the 1st initiator inside the inflator.

▶ Driver Side Inflator ◀



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▶ Pressure Curve Imaginary Diagram ◀



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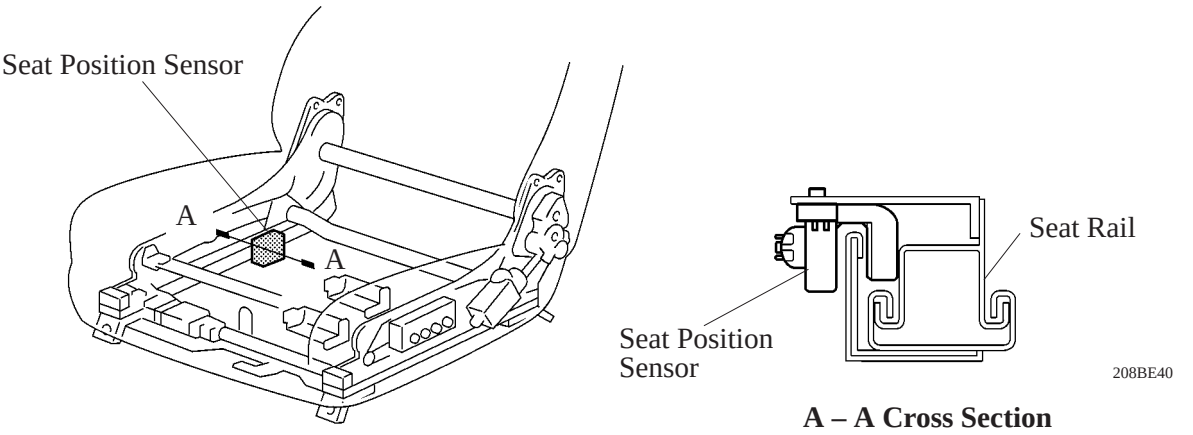
Service Tip

In accordance with the structure change of the driver and front passenger inflators on new Camry, a SST (09082-00800) used for scrapping driver and front passenger airbag assemblies of the vehicle has been newly established.

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Seat Position Sensor

The seat position sensor, which is attached to the seat rail of the driver seat, detects the sliding position of the seat.



A – A Cross Section

4. Self-Diagnosis Function

- If the airbag sensor assembly detects a malfunction in the SRS airbag system, the airbag sensor assembly stores the malfunction data in memory, in addition to illuminating the SRS warning light. Then, the DTCs (Diagnostic Trouble Codes) can be accessed by connecting a hand-held tester to the DLC3 terminal or the SST (09843-18040) to the Tc and CG terminals of the DLC3 and reading the blinking of the SRS warning light. For further details, see the Camry Repair Manual (Pub. No. RM915E).
- The following DTC is newly added.

DTC No.	Detection Item	DTC No.	Detection Item
B1180 / 17	Short in D squib (2nd step) circuit	B1148 / 36	Front airbag sensor (RH) malfunction
B1181 / 18	Open in D squib (2nd step) circuit	B1149 / 37	Front airbag sensor (LH) malfunction
B1182 / 19	Short in D squib (2nd step) circuit (to ground)	B1154 / 38	Curtain shield airbag sensor assembly (RH) malfunction
B1183 / 22	Short in D squib (2nd step) circuit (to B+)	B1155 / 39	Curtain shield airbag sensor assembly (LH) malfunction
B1153 / 25	Seat position sensor assembly malfunction	B1187 / 55	Short in P squib (2nd step) circuit (to ground)
B0121 / 26*1	Seat belt buckle switch (RH) malfunction	B1188 / 56	Short in P squib (2nd step) circuit (to B+)
B0122 / 26*1	Seat belt buckle switch (RH) malfunction	B1185 / 57	Short in P squib (2nd step) circuit
B0126 / 27*2	Seat belt buckle switch (LH) malfunction	B1186 / 58	Open in P squib (2nd step) circuit
B0127 / 27*2	Seat belt buckle switch (LH) malfunction	—	

*1: RHD Model
*2: LHD Model