■SAFETY FEATURES

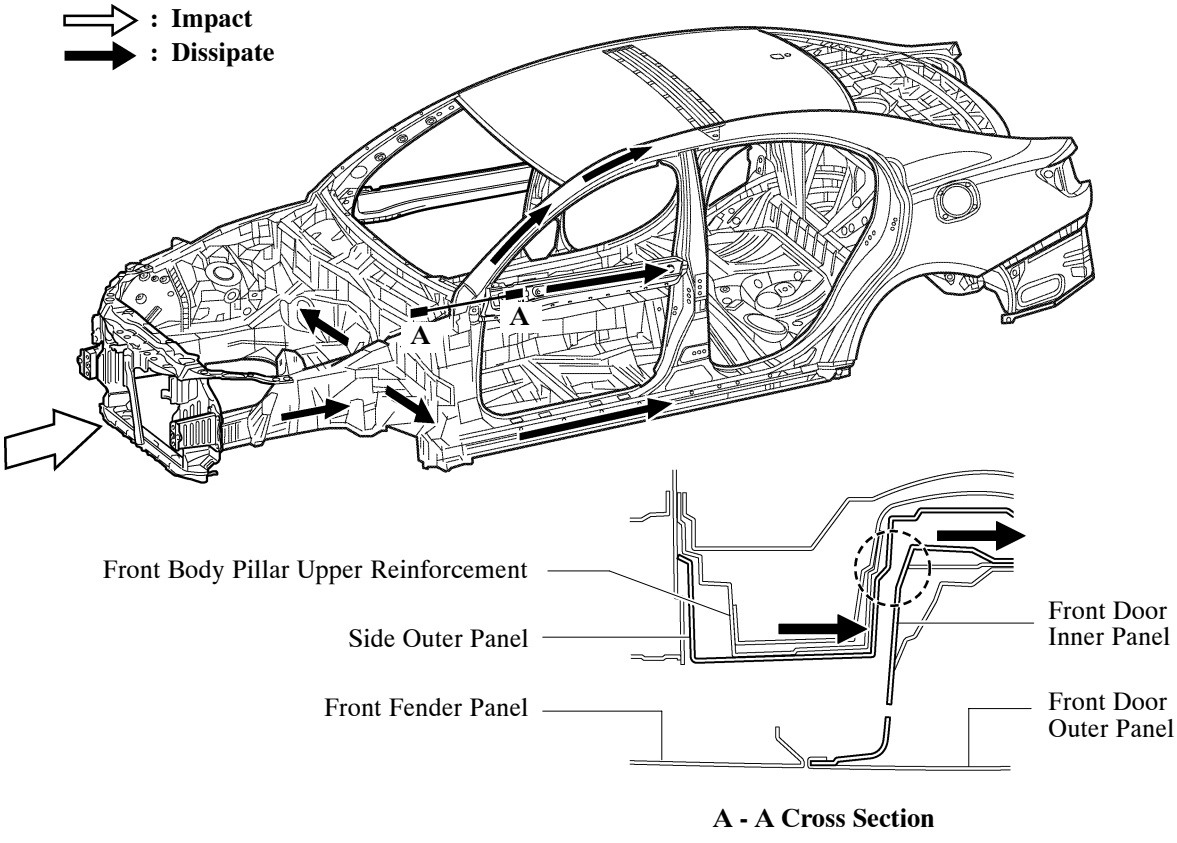
1. General

The impact absorbing structure provides a construction that can effectively absorb the energy of impact in the event of a front or side collision. Also, it realizes excellent occupant protection performance through the use of reinforcements and members that help minimize cabin deformation.

2. Impact Absorbing Structure for Frontal Collision

An optimal arrangement of the basic frame and reinforcements helps to minimize cabin deformation in the event of a collision.

- The Minimum Intrusion Cabin System is adopted to disperse impact force in the event of an offset frontal collision.
- The Minimum Intrusion Cabin System strengthens inner door reinforcements and reduces the gap between the door inner panel and the pillar. This communicates impact load to the door belt line reinforcement, reducing load to the pillar in the event of an offset frontal collision.



A - A Cross Section

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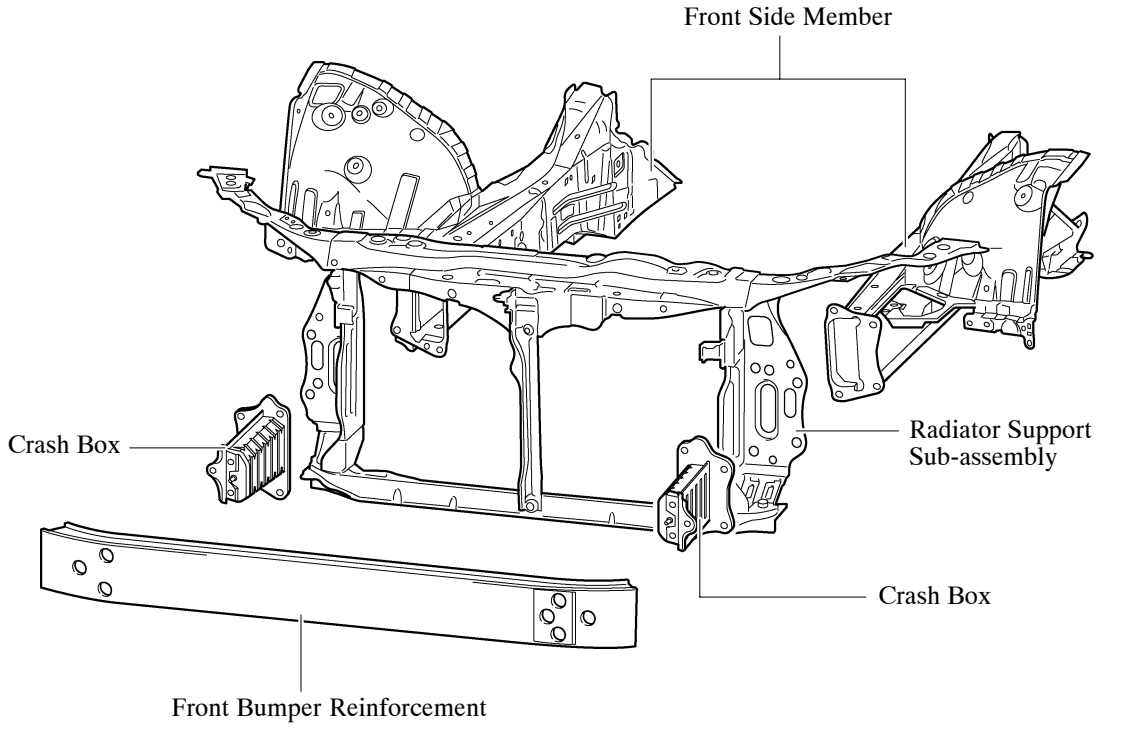
- A crash box structure for the front end of the front side member is used to achieve excellent energy absorption efficiency.
- A front side member with a hexagonal cross section is used to achieve excellent energy absorption efficiency and ensure stress-proofing.

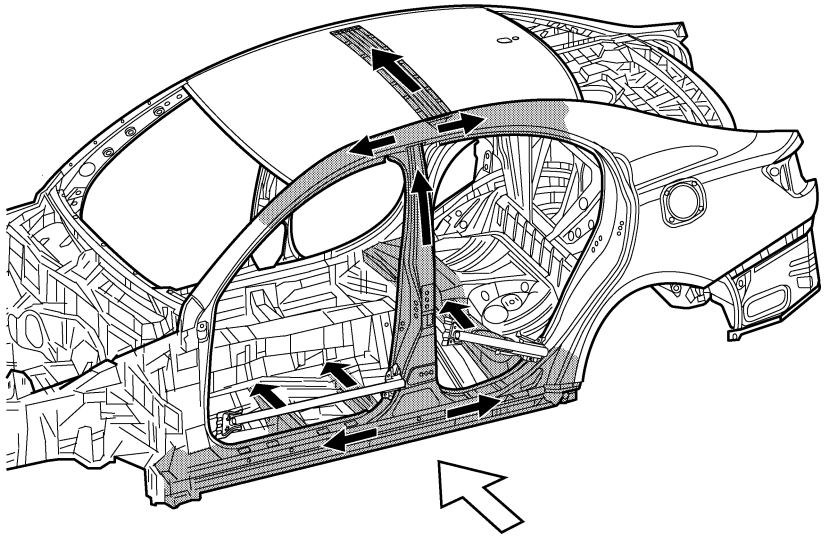


3. Impact Absorbing Structure for Side Collision

General

Impact energy of a side collision directed to the cabin area is dispersed throughout the body via center pillar, rocker, floor cross member, front pillar, rear pillar and roof reinforcement, thus helping minimize the impact energy finally directed to the cabin.

⇨ : **Impact**
➡ : **Dissipate**



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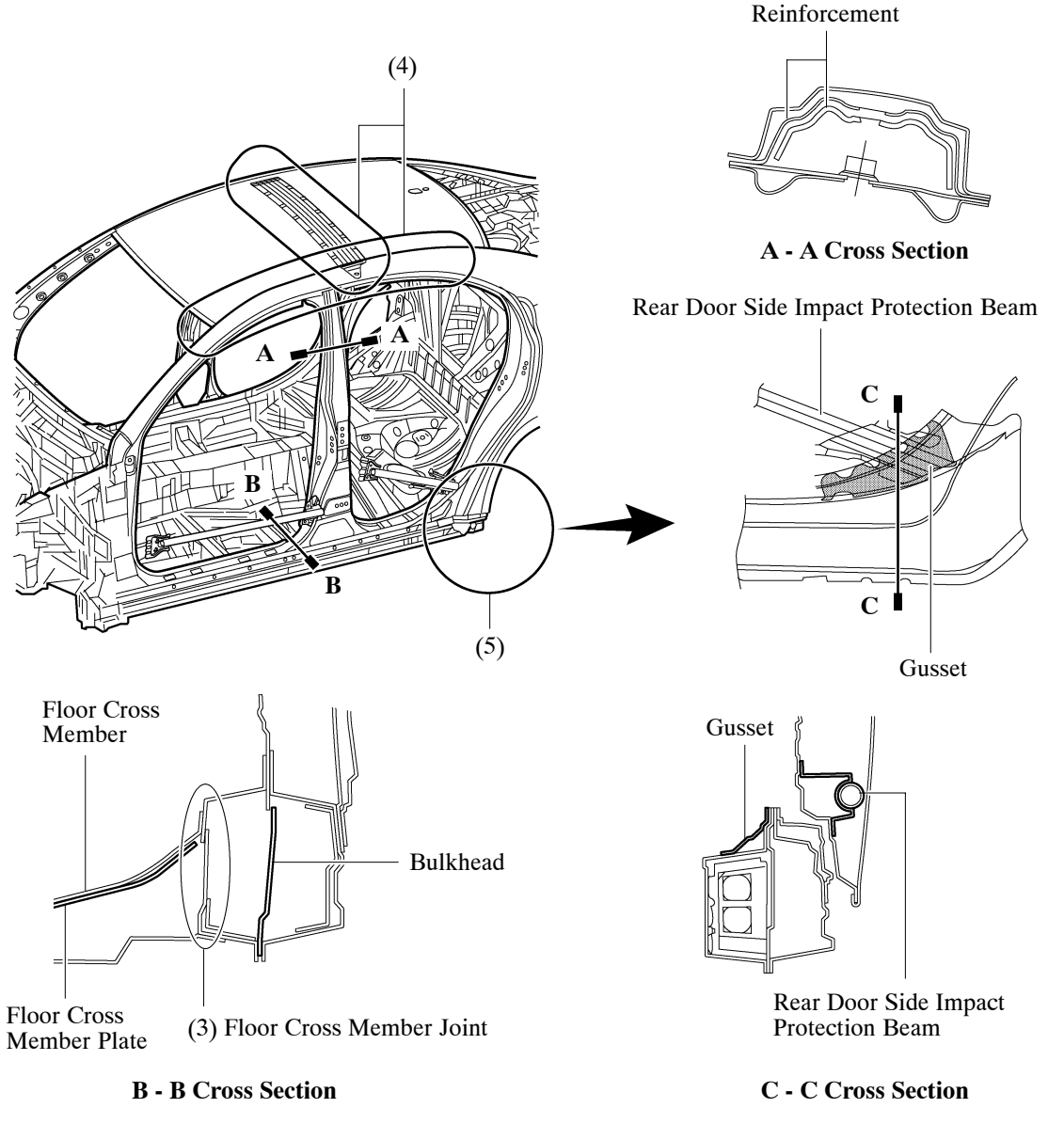
Impact Absorbing Structure

Impact energy is efficiently absorbed via the following structures.

(1) By positioning reinforcement inside the center pillar reinforcement, center pillar strength is ensured. (A - A cross section)
(2) High tensile strength steel plates are adopted for the bulkhead inside the rocker and for the floor cross member plate, optimizing structural strength. (B - B cross section)
(3) The floor cross member joint between the floor cross member and the rocker is optimized to prevent deformation of the rocker in the event of a side collision.
(4) The roof reinforcement, the front pillar reinforcement rear-end joint and the rear pillar reinforcement front-end joint are integrated. This reduces the intrusion of the roof rail into the cabin in the event of a side collision.
(5) A gusset is adopted for the rear-end of the rocker on the cabin interior side. Overlapping the gusset and the rear door side impact protection beam ensures strength, reducing deformation of the vehicle body in the event of a side collision. (C - C cross section)



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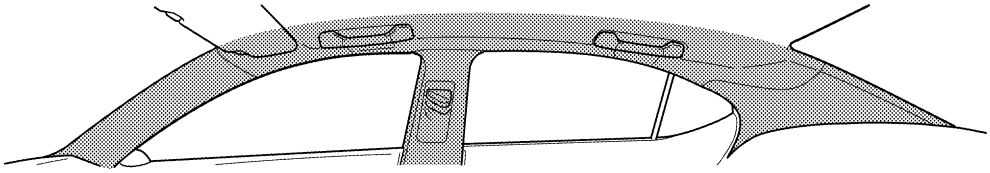
Head Impact Protection Structure

A head impact protection structure is used. With this type of construction, if the occupant's head hits against the roof side rail and pillar in reaction to a collision, the inner panel of the roof side rail and pillar collapses to help reduce the impact.

: Head Impact Protection Structure



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