■IMPACT ABSORBING STRUCTURE

1. General

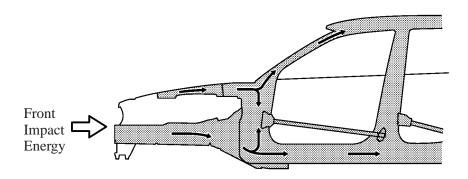
The impact absorbing structure of the new GS300 provides a body construction that can effectively absorb the energy of impact in the event of a front, rear, or side collision. Also, it realizes an excellent occupant protection performance through the use of reinforcements and members that help minimize cabin deformation.

2. Construction

Impact Absorbing Structure for Front/Rear Collision

In conjunction with the excellent impact absorbing structure for a front or rear collision, the underbody members, the reinforcements and members that surround the cabin have been optimally allocated. Accordingly, the underbody and cabin framework help absorb and dissipate the impact energy efficiently in case of a front or rear collision, thus realizing a body structure to minimize cabin deformation.

▶ Impact Absorbing Structure for Front Collision **◄**



152BO08

Impact Absorbing Structure for Side Collision

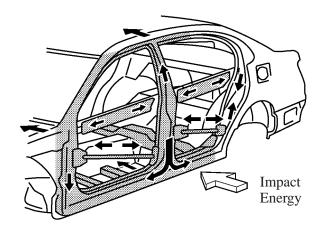
Impact energy of a side collision directed to the cabin area is dispersed throughout the body via pillar reinforcements, side impact protection beams, floor cross members, etc. This dispersion of energy keeps the energy directed to the cabin to a minimum level.

In addition, the body construction has been optimized by providing the center pillar reinforcement with a vertical two-split construction, enlarging the cross section of the roof side rail, and by using front floor cross members with higher rigidity.

And, in order to make the door energy absorbent, a closed cross section configuration is provided at the belt line area of the front and rear doors and side impact protection beams are optimally allocated.

Also, a Head Impact Protection Structure has been adopted. 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 ribs of the roof side rail and aluminum pipe of front pillar collapses to help reduce the impact.

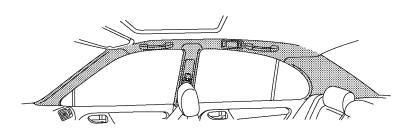
► Impact Absorbing Structure for Side Collision



152BO09

▶ Head Impact Protection Structure <</p>





152BO10