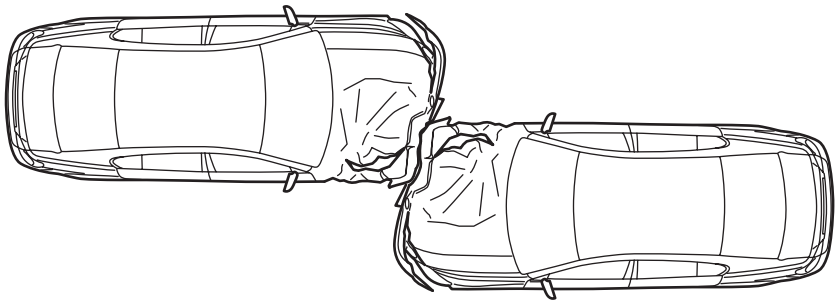
BODY STRUCTURE

Body Structure Outline

- A crash safety body is used to ensure the world's top-level occupant protection performance in its class, as well as Toyota's own stringent targets. Moreover, this vehicle pursues safety from various aspects, such as through the use of the "head impact protection structure" or the "Brake Pedal Construction for Colision".
- An "omni-directional compatibility body structure", an evolved form of the crash safety body structure that aims at the preservation of both vehicles during a collision between vehicles of different weight classes, is used. In terms of ensuring the survival space for the occupants, this vehicle aims at the world's top level of crash safety performance in its class.

Comparison of vehicles with the same cylinder displacement in the class.



Car-to-car 50% overlap offset frontal collision test

Note: The illustration has been created based on the vehicles used in a collision test. In an actual accident, the conditions of the vehicle may differ from those in the illustration, depending on the speed and the area of the vehicles where the collision occurred. Also, the appearance of the vehicles depicts representative vehicles.

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- Based on a monocoque structure, the allocation of the various parts and materials and their joining structure have been optimized. High-tensile sheet steel is positively used, comprising 45% of the entire body frame. Thus, a lightweight and highly rigid body with a minimal amount of vibration and noise has been achieved.
- To ensure a high level of rustproofing performance, the body uses rustproof sheet steel extensively, and the wheel housings and the front floor area (which are exposed to water and gravel) have been provided with a lightweight, chip-resistant undercoating.
- Sound-absorbing materials have been used throughout the body to ensure its quietness.
- To reduce wind noise, the shape of the various areas of the upper body has been optimized in accordance with the movement of air that flows from the front to the rear of the vehicle. Furthermore, items that guide airflow such as an engine under cover and spats have been provided under the floor in order to achieve superior aerodynamics.