

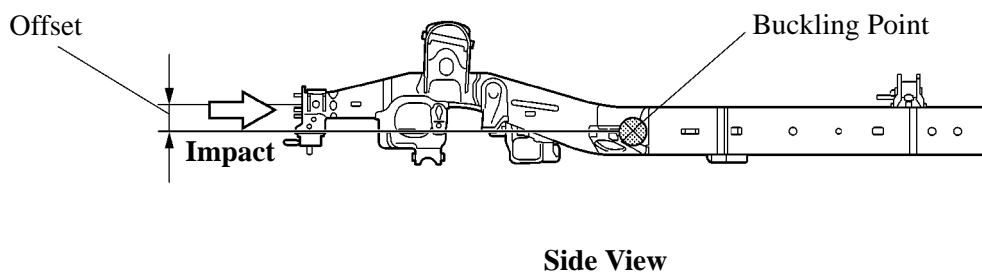
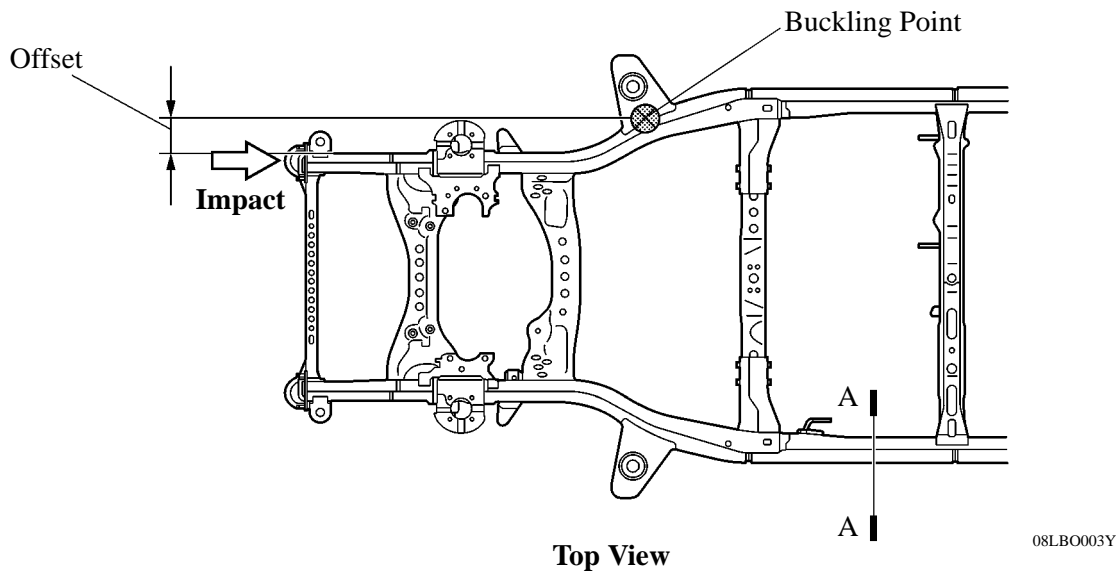
■ SAFETY FEATURES

1. General

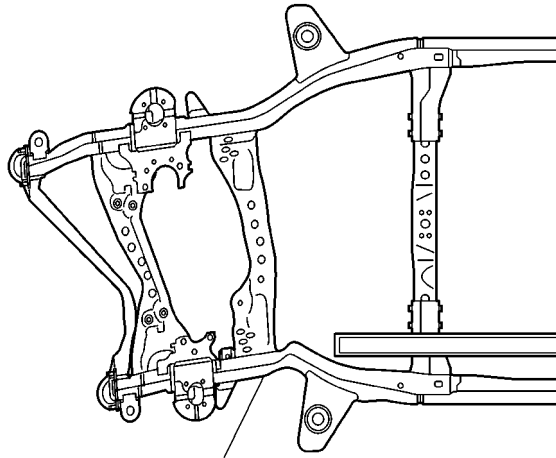
The impact absorbing structure of the '08 Sequoia can effectively help reduce the impact in the event of a front, or rear collision. This structure also realizes high-performance occupant protection through the use of reinforcements and members that help minimize cabin deformation.

2. Impact Absorbing Structure for Front Collision

- A high-strength, high-rigidity frame structure with axial-compression collision safety is used. This frame structure helps minimize frame buckling as much as possible, and reduces the amount of offset between the load application point and the frame buckling point when a collision occurs.



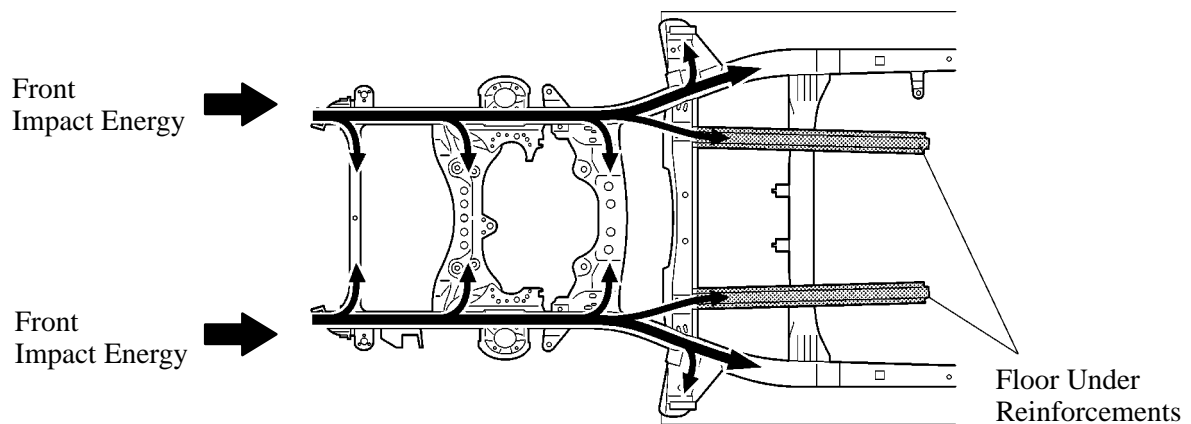
- The frame undergoes an axial compressive deformation in order to efficiently absorb the front impact energy and help minimize cabin deformation.



Axial Compressive Deformation

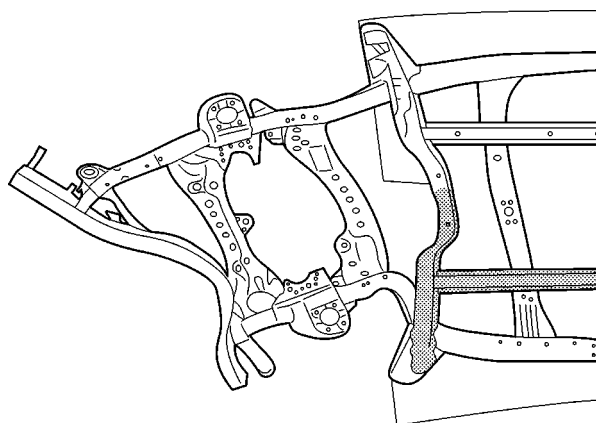
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- When a collision occurs, the frame is integrated to the body to distribute and absorb front impact energy.



Front Impact Energy Distribution Structure

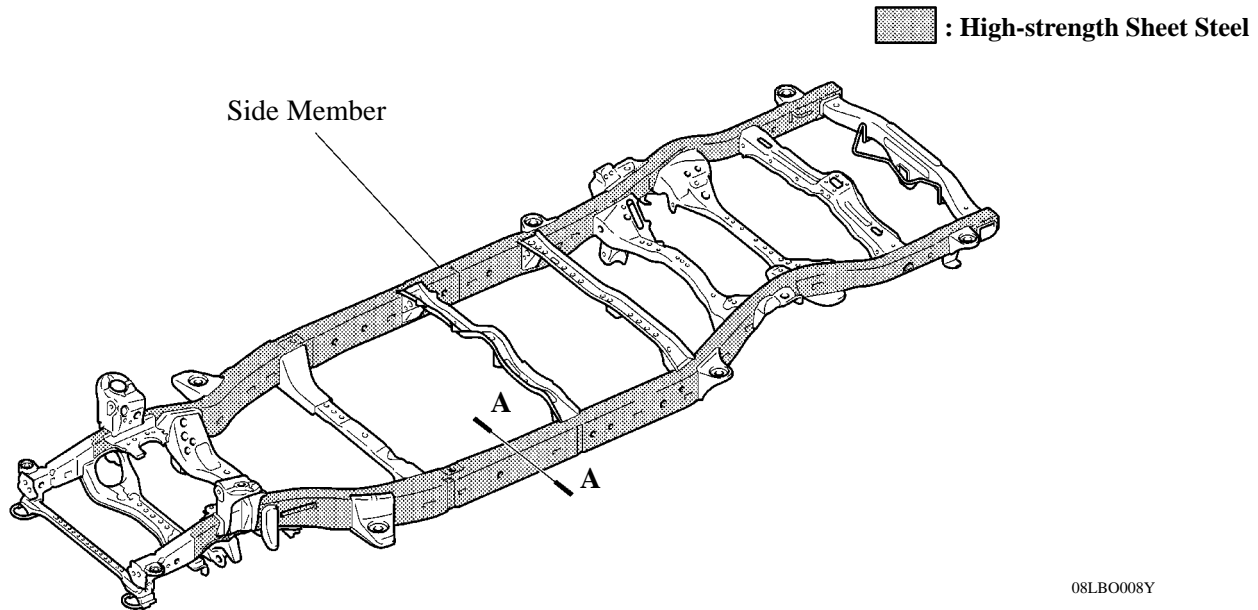
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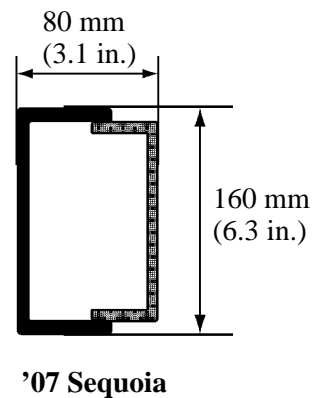
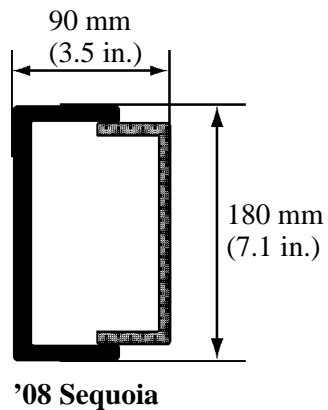
Frame and Body Integrated Deformation Structure

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- Except for the very front, high-strength steel sheet is used for all side members to secure stable energy absorption at the time of a collision.
- Large cross-section structure for the side rails secures vertical bending rigidity.

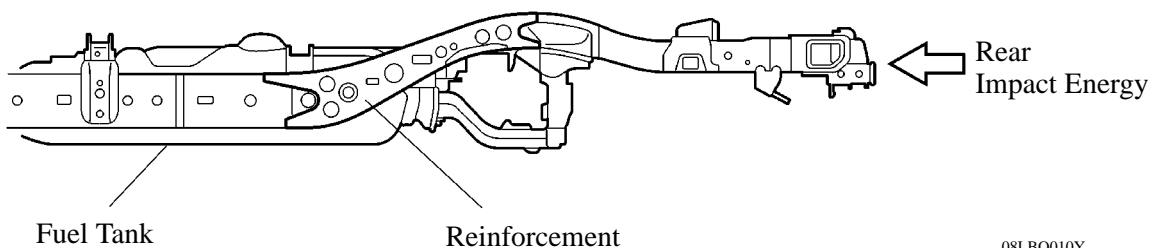


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**A – A Cross Section**

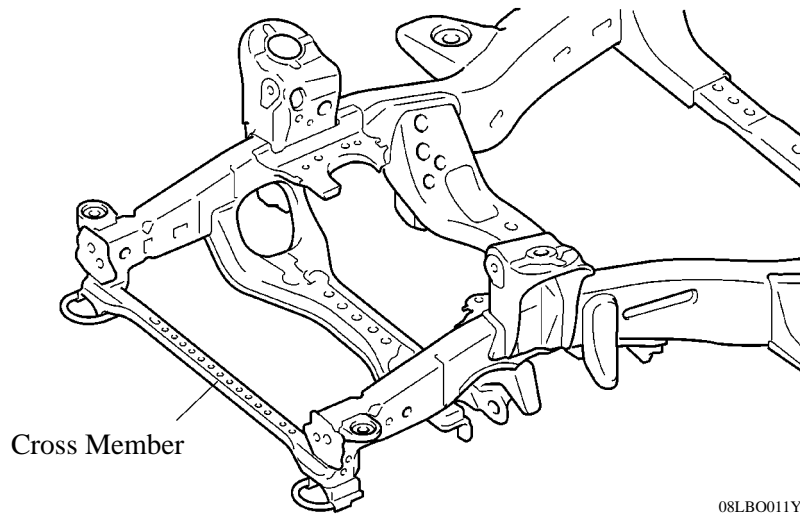
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- The reinforcement is used for the frame kick section to help minimize frame deformation around the fuel tank and help prevent the leakage of fuel at the time of a collision.

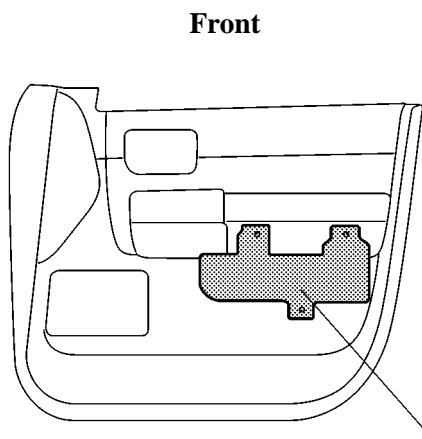


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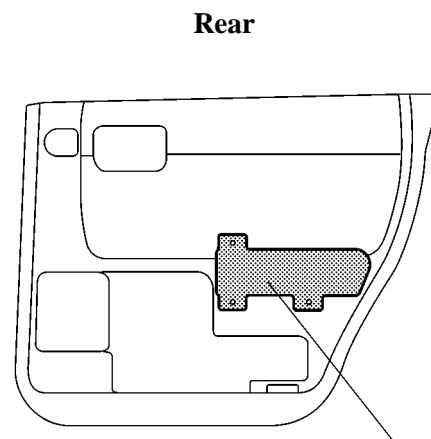
- A cross member is used for the front lower section of the frame to prevent a low-height vehicle from getting under the vehicle in the event of a collision, thereby realizing good compatibility with passenger vehicles.



- Energy absorbing pads are provided in the door panels and door trims to help dampen the impact applied from the sides of the vehicle to the occupants.



Energy Absorbing Pad

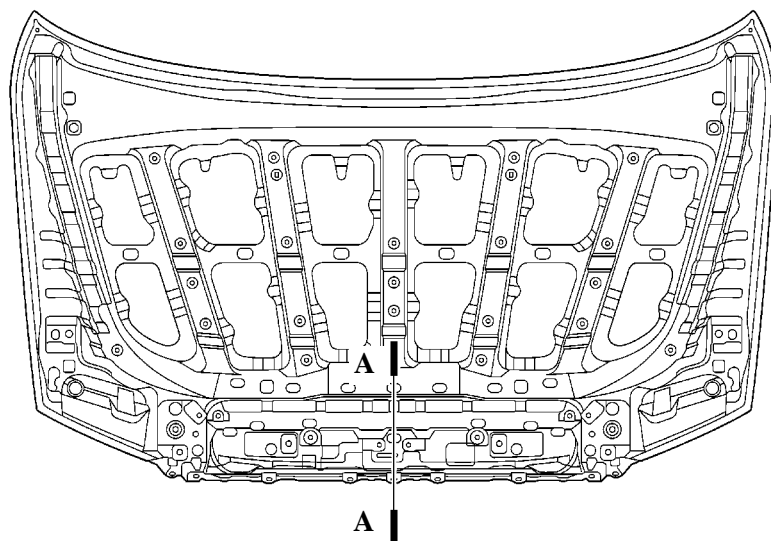


Energy Absorbing Pad

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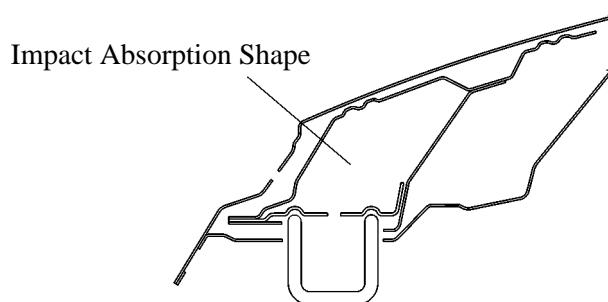
3. Lessening Pedestrian Head Injury

- In order to enhance the pedestrian protection performance, the engine hood has been designed with a longitudinal frame structure which brings uniform engine hood rigidity and efficiently absorbs the impact.
- An impact absorption shape has been provided at the front of the engine hood. If someone short such as a child hits the front, the impact will be absorbed more efficiently, helping minimize head injuries.



Engine Hood

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A – A Cross Section

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