

BODY

BODY STRUCTURE

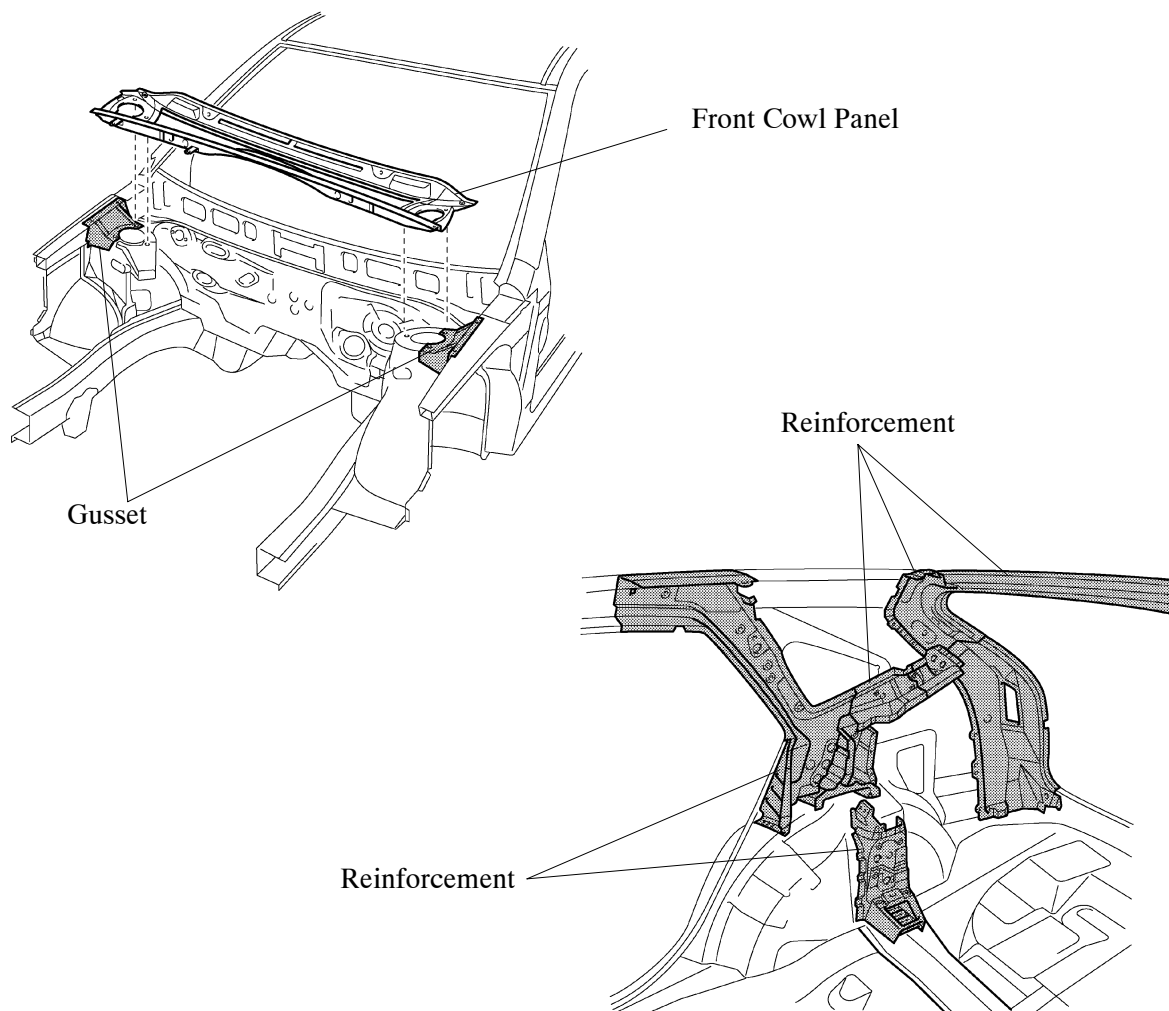
■ LIGHTWEIGHT AND HIGHLY RIGID BODY

1. High Strength Sheet Steel

High strength sheet steel is used in order to ensure body rigidity and realize a lightweight body.

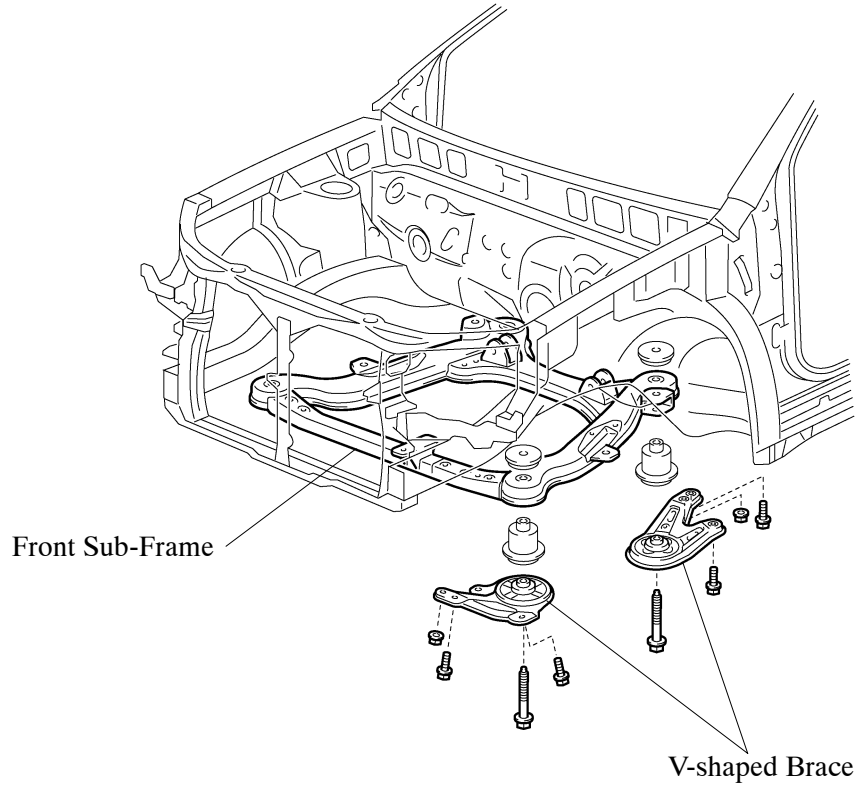
2. Body Shell Construction

- Gussets have been provided on the front suspension tower to ensure vertical rigidity.
- The front cowl panel has been fastened together with the suspension tower to ensure lateral rigidity.
- Reinforcements have been provided around the quarter window to achieve a construction that dissipates the force that is applied from the rear suspension tower, thus ensuring rigidity.
- Reinforcements have been provided along the entire back door opening to realize a highly rigid body.



3. Sub-frame and Brace

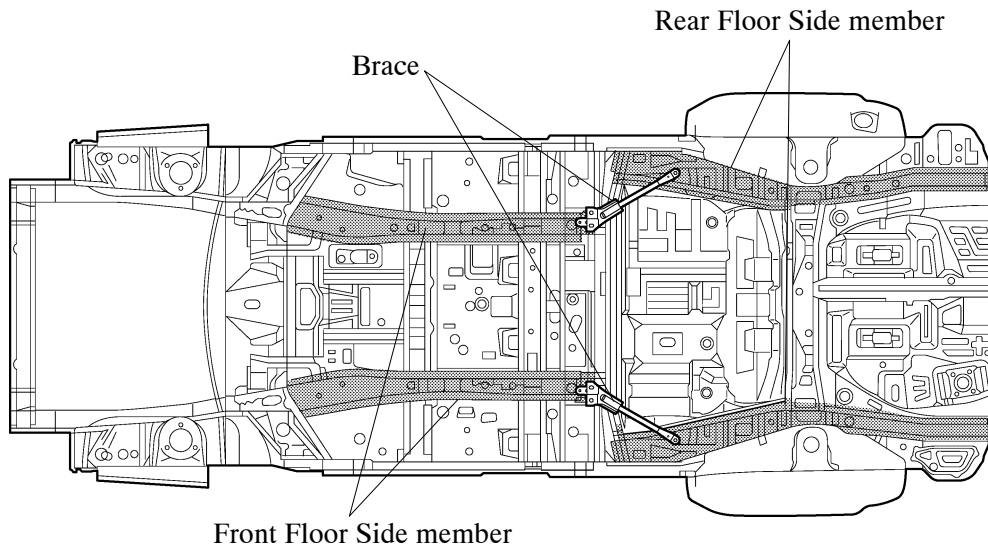
- V-shaped braces have been provided in the areas in which the front sub-frame is mounted to ensure their mounting rigidity.



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- A brace has been provided to join the front floor side member to the rear floor side member to ensure rigidity.



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View from Bottom Side

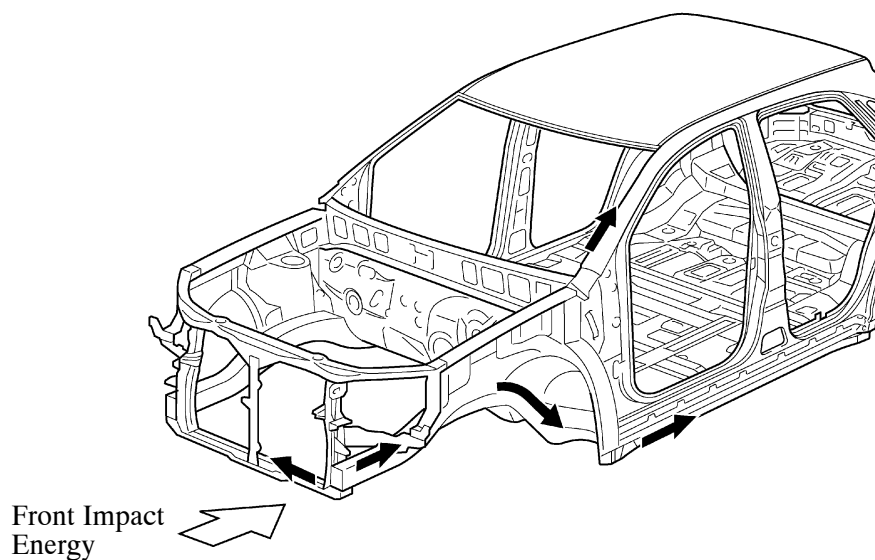
■ SAFETY FEATURES

1. General

The impact absorbing structure of the new RX400h minimizes cabin deformation by effectively helping to absorb the impact energy in the event of a front, side or rear collision. This provides high-performance occupant protection.

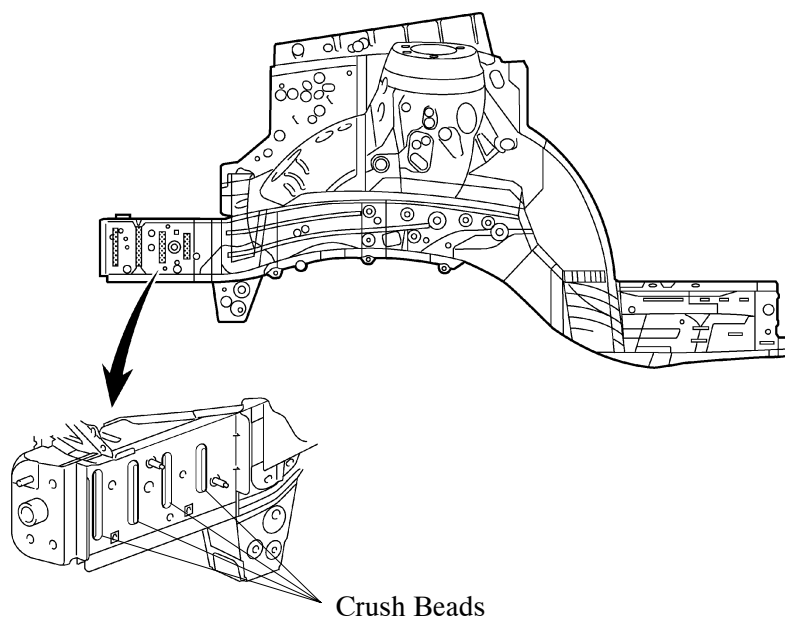
2. Impact Absorbing Structure for Front Collision

- In order to help minimize cabin deformation during a collision, the allocation of the parts that comprise the body and the body shell have been optimized.



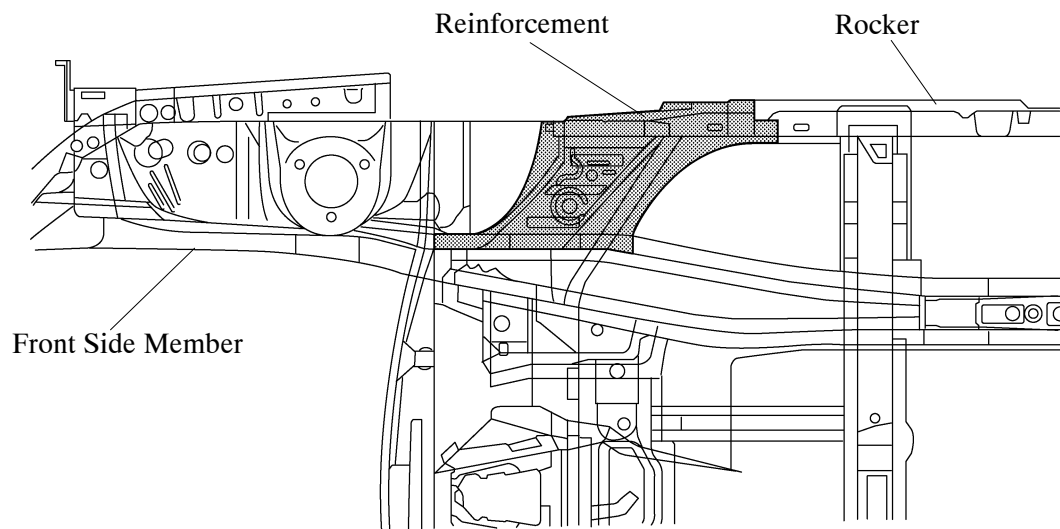
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- The side face of the front end of the left and right front side members has cut-out and raised beads that help to absorb collision impacts.



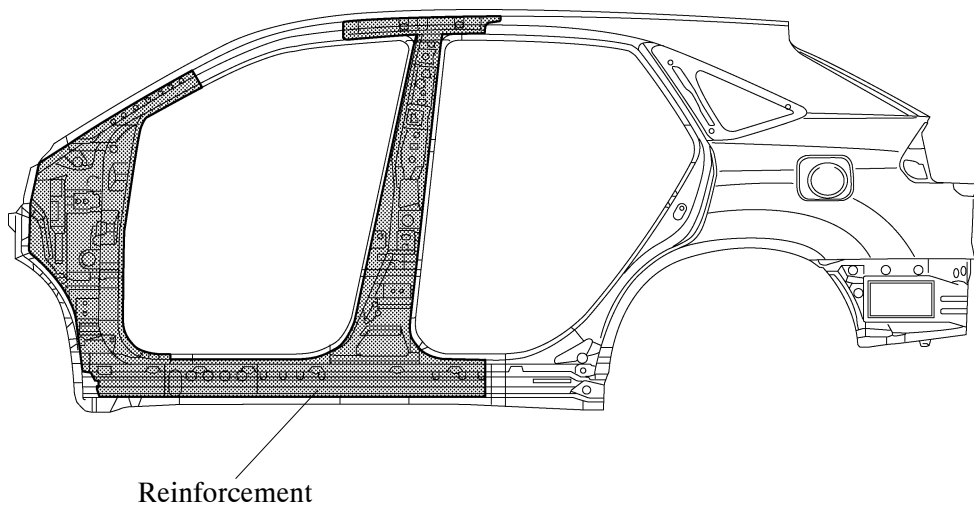
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- The shape of the reinforcement that joins the front side member and the rocker has been optimized to realize a highly rigid body.



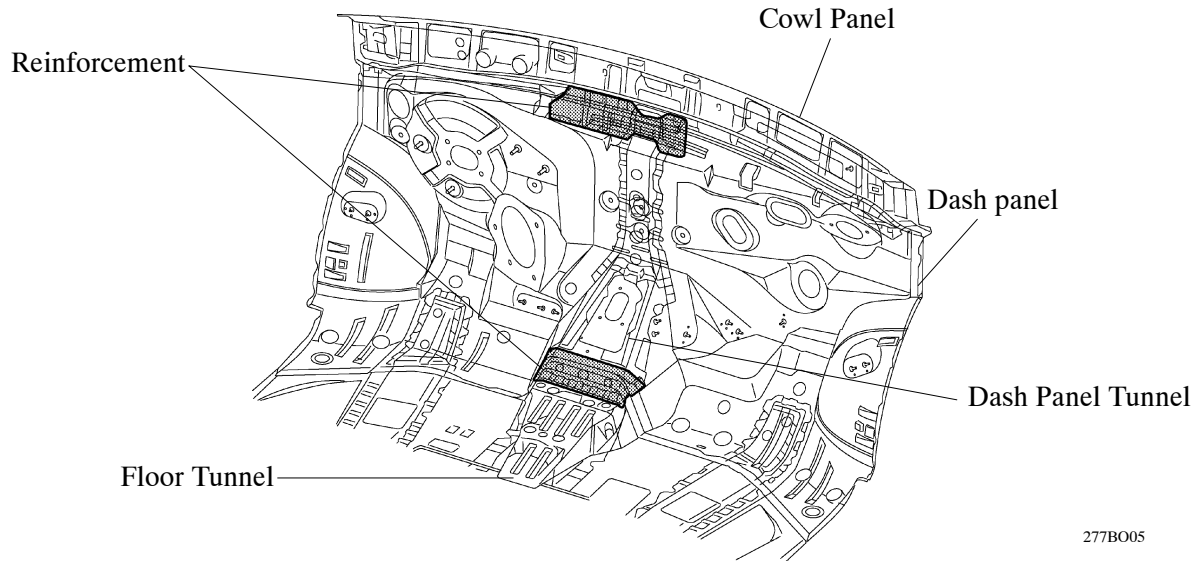
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- Reinforcements have been optimally allocated to the inner and outer rocker panels, and roof side rails.



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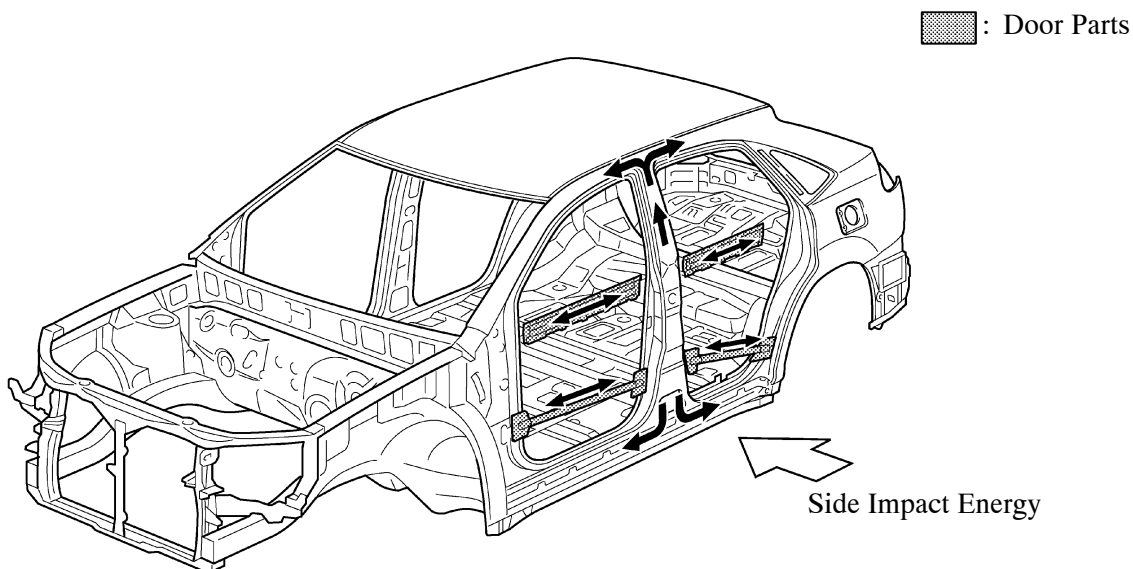
- In order to minimize the deformation of the cabin during a collision, reinforcements have been optimally allocated to the area that joins the cowl panel and the dash panel, as well as the area that joins the dash panel tunnel and the floor tunnel.



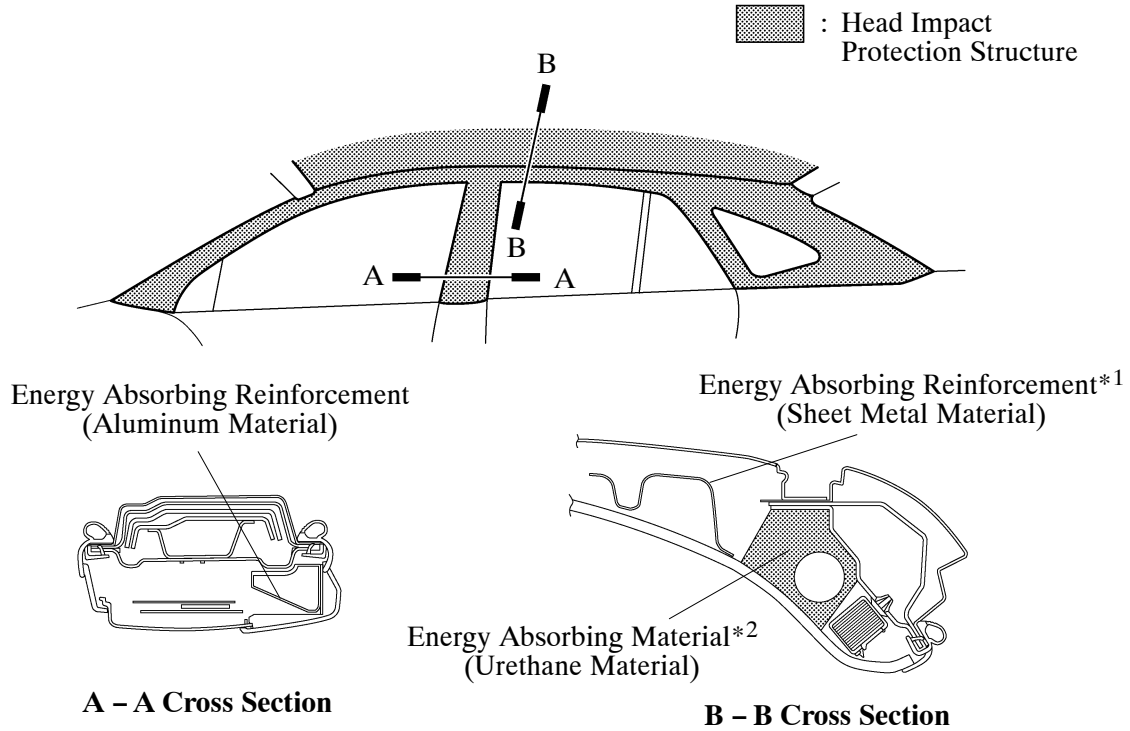
LHD Model

3. Impact Absorbing Structure for Side Collision

- Impact energy of a side collision directed to the cabin area is dispersed throughout the body via pillar, reinforcement, side impact protection beams, floor cross members, thus helping minimize the impact energy finally directed to the cabin.



- 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, roof area and pillar collapses to help reduce the impact.



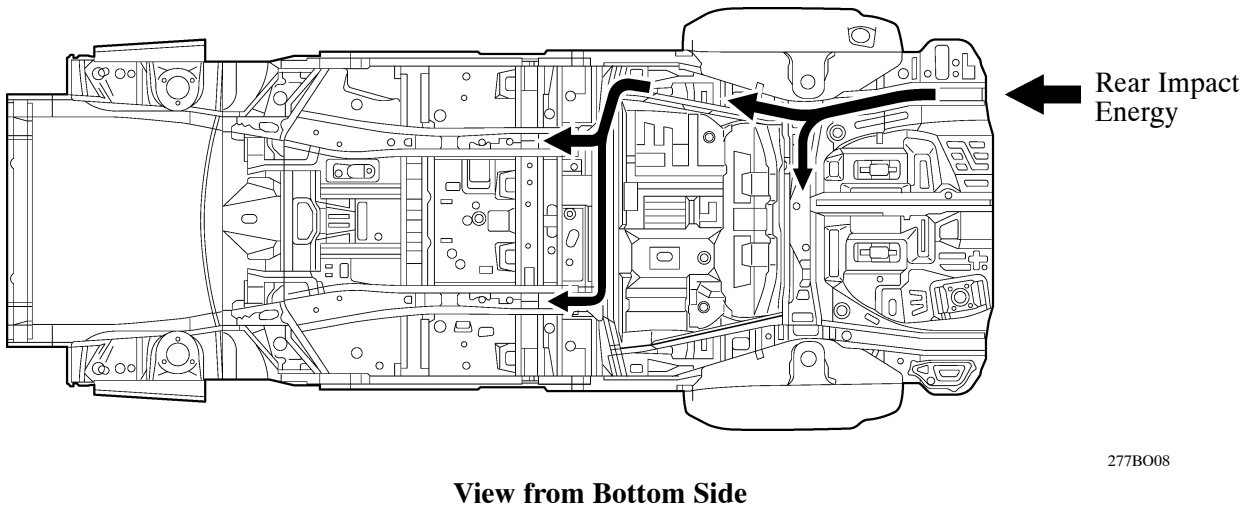
- *1 : Only on models with Curtain Shield Airbag
 *2 : Only on models without Curtain Shield Airbag

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4. Impact Absorbing Structure for Rear Collision

Rear floor members and reinforcements have been optimally allocated to reduce body deformation during a collision. By reducing the deformation of the fuel tank and the fuel pipe to the smallest possible extent, this construction minimizes the possibility of fuel leakage.



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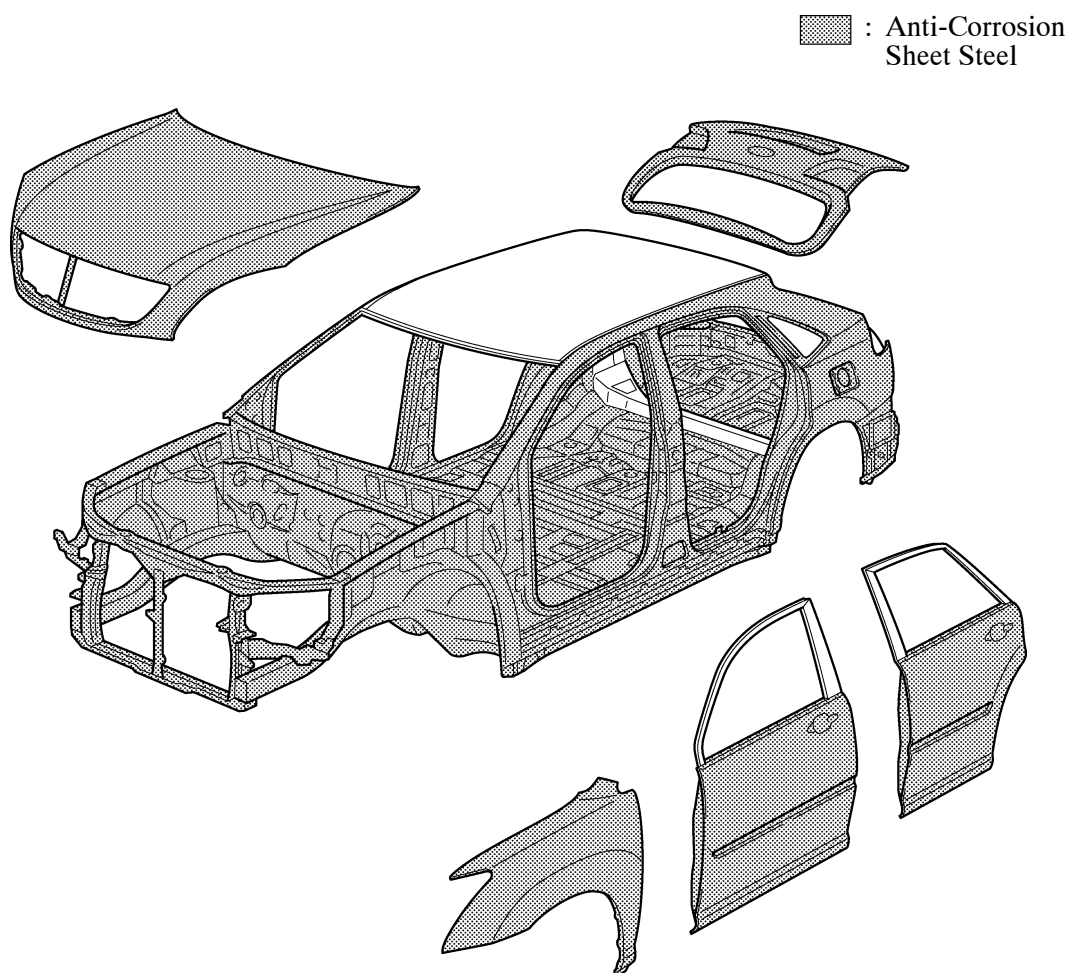
■ RUST-RESISTANT BODY

1. General

Rust-resistant performance is enhanced extensive use of anti-corrosion sheet steel, as well as by an anti-corrosion treatment which includes the application of anti-rust wax, sealer and anti-chipping paint to easily corroded parts such as the hood, doors and rocker panels.

2. Anti-Corrosion Sheet Steel

Anti-corrosion sheet steel is used in all areas other than the roof and interior parts.



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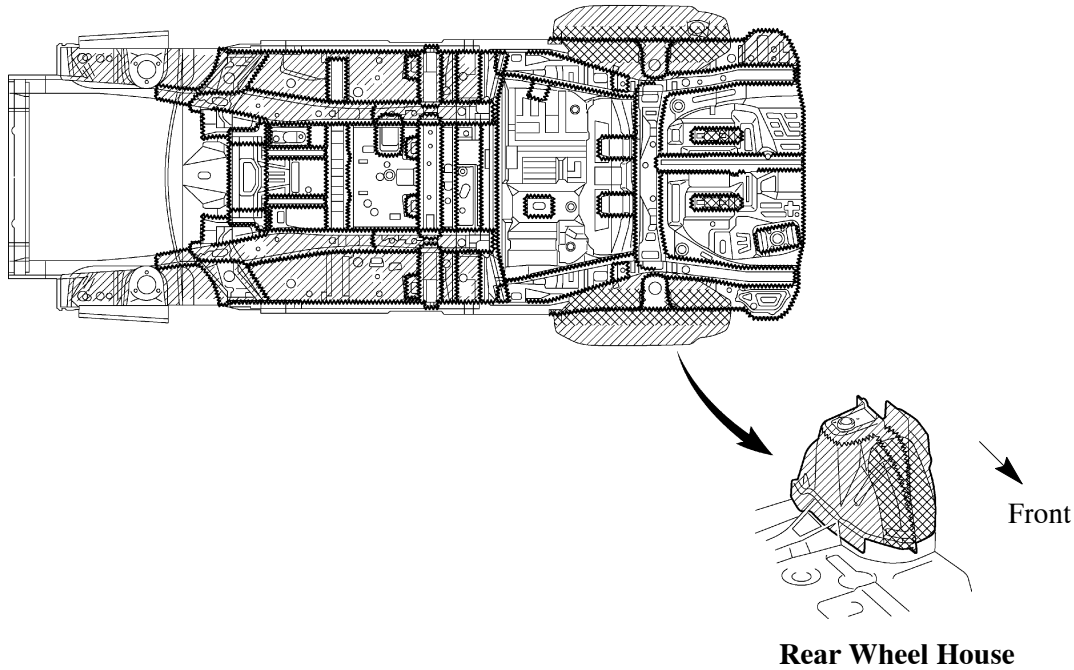
3. Wax and Sealer

Wax and sealer are applied to hemmed portions of the hood, door panels, rocker panels, and back door to improve rust-resistant performance.

4. Under Coat

Acrylic acid resin is applied to under side of the body, inside the rear wheel housing and other parts that are susceptible to stone chipping damage, thus improving the rust-resistant performance of these areas.

- www : Edge Seal
- ▨ : Acrylic acid resin Coating (Thick Coating)
- ▩ : Acrylic acid resin Coating

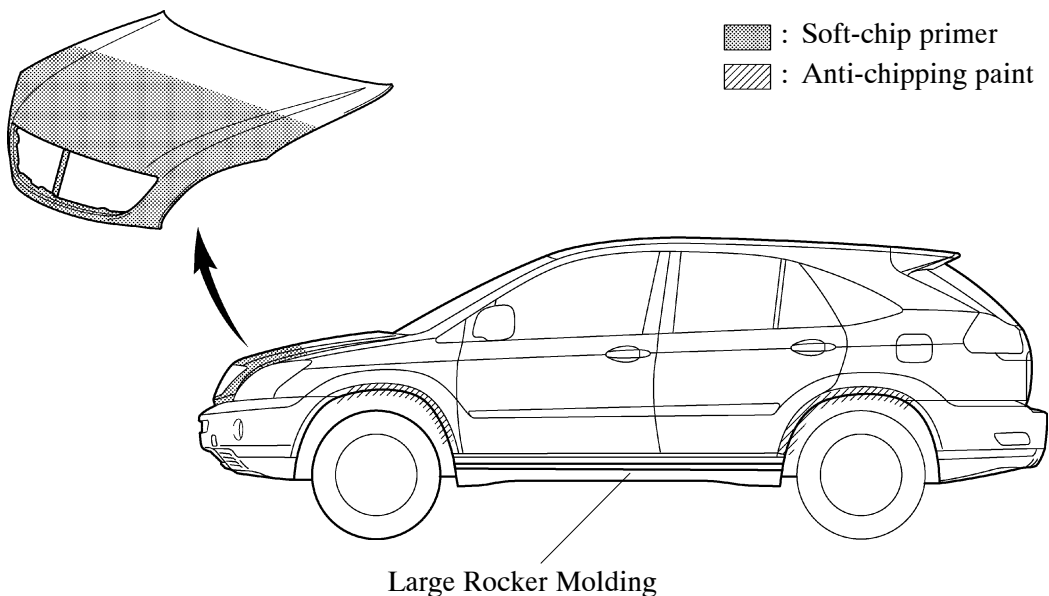


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5. Anti-Chipping Application

Anti-chipping paint has been applied around the wheel housing. In addition, soft-chip primer has been applied to the front end of the hood. Furthermore, a large rocker molding is used on all models as standard equipment in order to ensure chip resistance performance in the rocker panel area.



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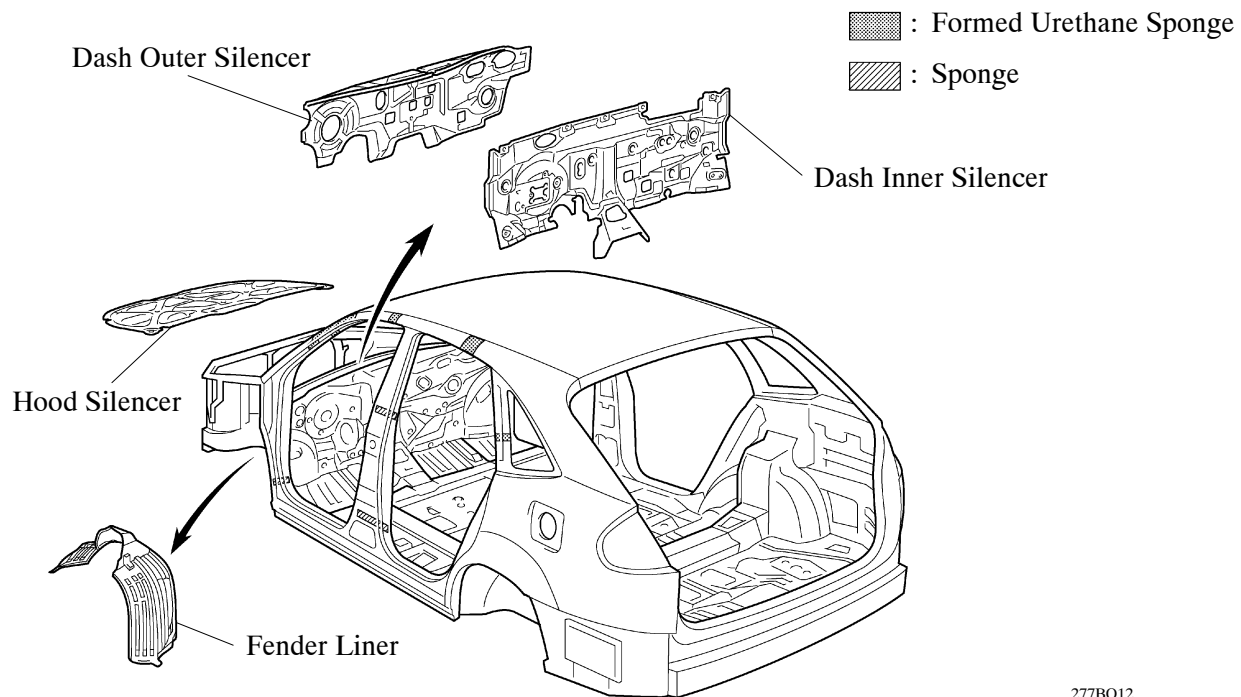
■ LOW VIBRATION AND LOW NOISE BODY

1. General

Effective application of vibration damping and noise suppressant materials reduce engine and road noise.

2. Sound Absorbing and Vibration Damping Materials

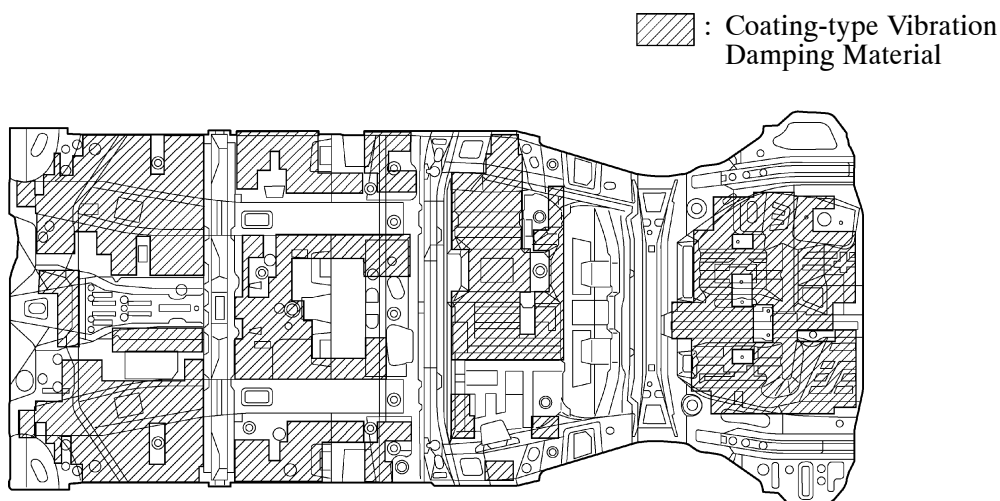
- Foamed urethane sponge and foamed seal material are applied onto the roof panel and pillars to reduce wind and road noise.
- A large-size dash inner silencer, dash outer silencer and hood silencer are used to reduce engine and road noise and improve quietness inside the passenger compartment.
- Fiber type fender liners, made of polyethylene terephthalate, polypropylene and polyamide resin material, have been provided inside of the front wheel houses, to reduce engine and motor noise, road noise and grit spraying sound.



LHD Model

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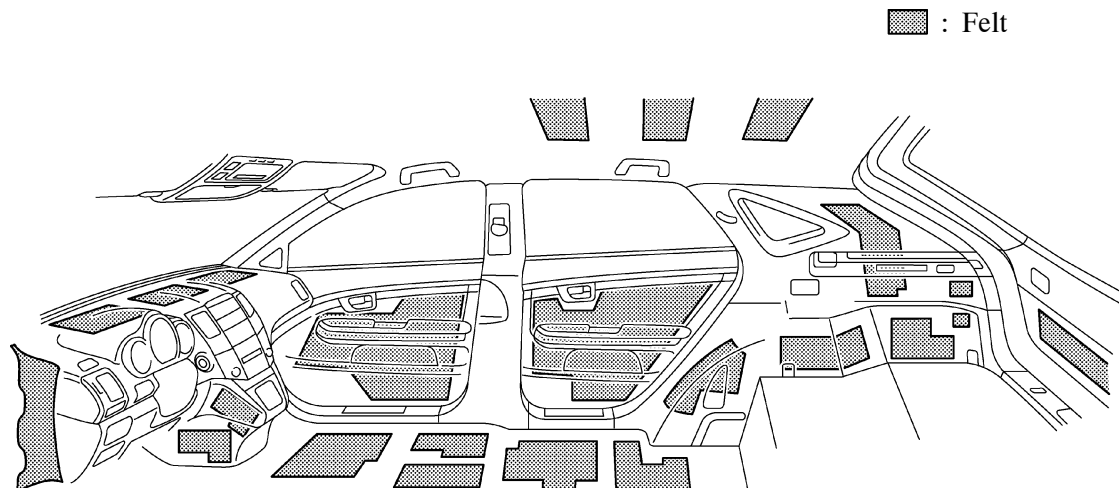
- In place of the asphalt sheet used on conventional models, a vibration damping foam coating is used on the floor of the new model to reduce road noise.



LHD Model

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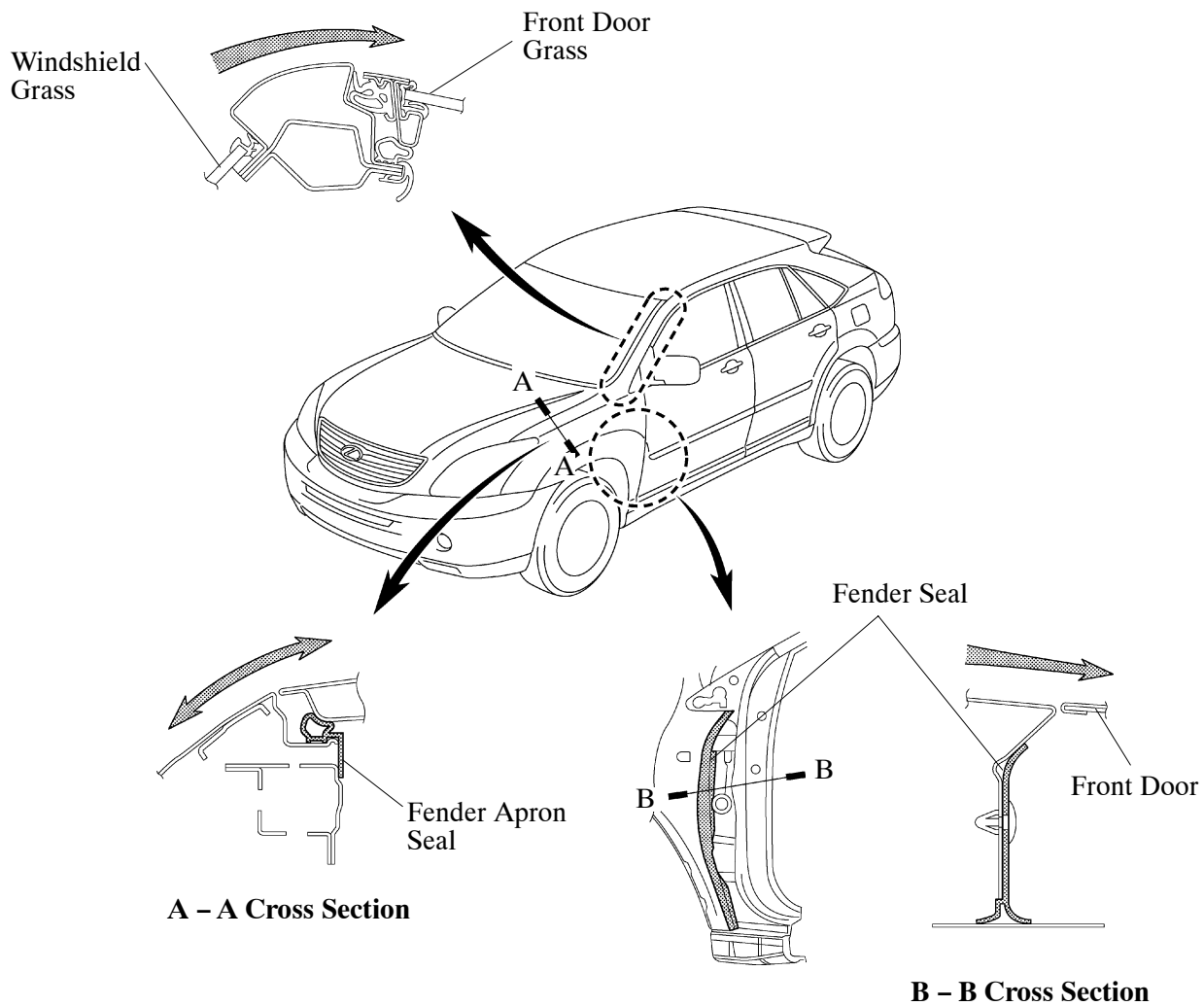
- Felt is used effectively on the floor, door, and roof to ensure a quiet interior.



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3. Reducing Wind Noise

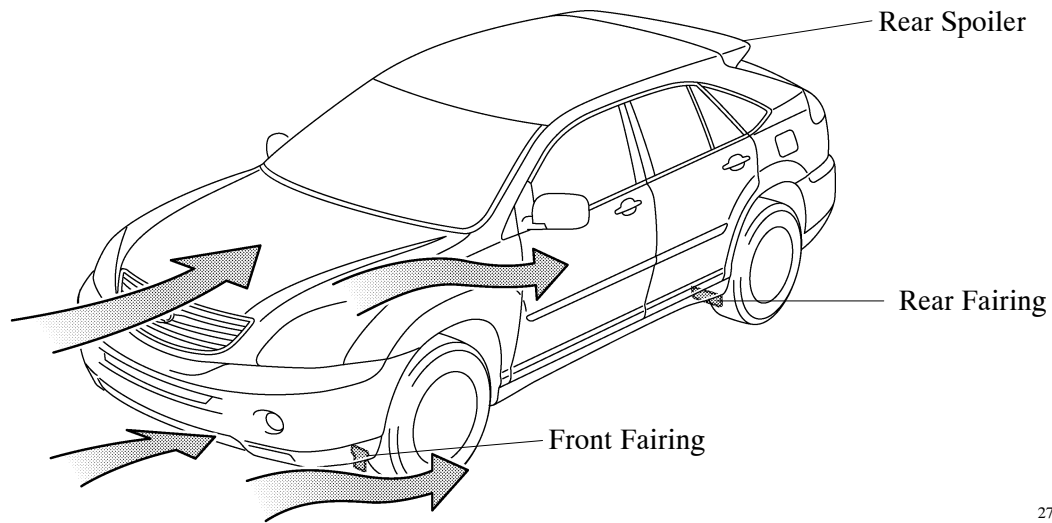
- The height offset has been eliminated from the glass and pillars to reduce wind noise.
- A hood to front fender apron seal and a large fender seal are used to reduce wind noise.



■ AERODYNAMICS

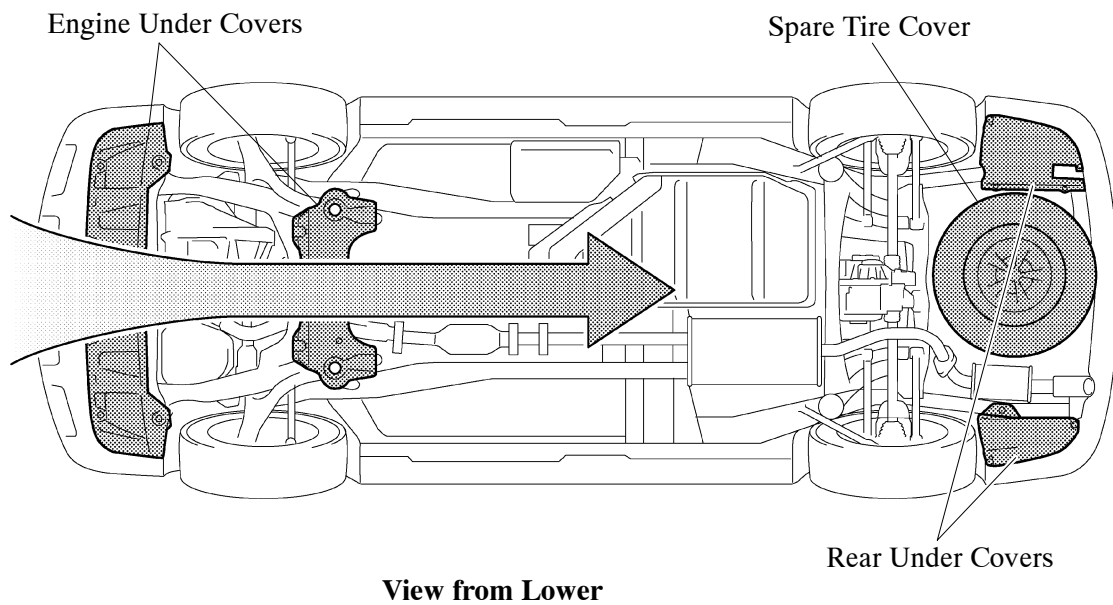
To improve aerodynamic performance, the following measures have been taken.

- For aerodynamics improvement, a rear spoiler is standard equipment. And furthermore, the large-size rear spoiler is available as an option.
- Front and rear fairings are provided to smooth out the airflow around the tires and reduce the air resistance while the vehicle is in motion.



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- The use of the parts below provides smooth airflow underneath the chassis and reduces the air resistance while the vehicle is in motion.

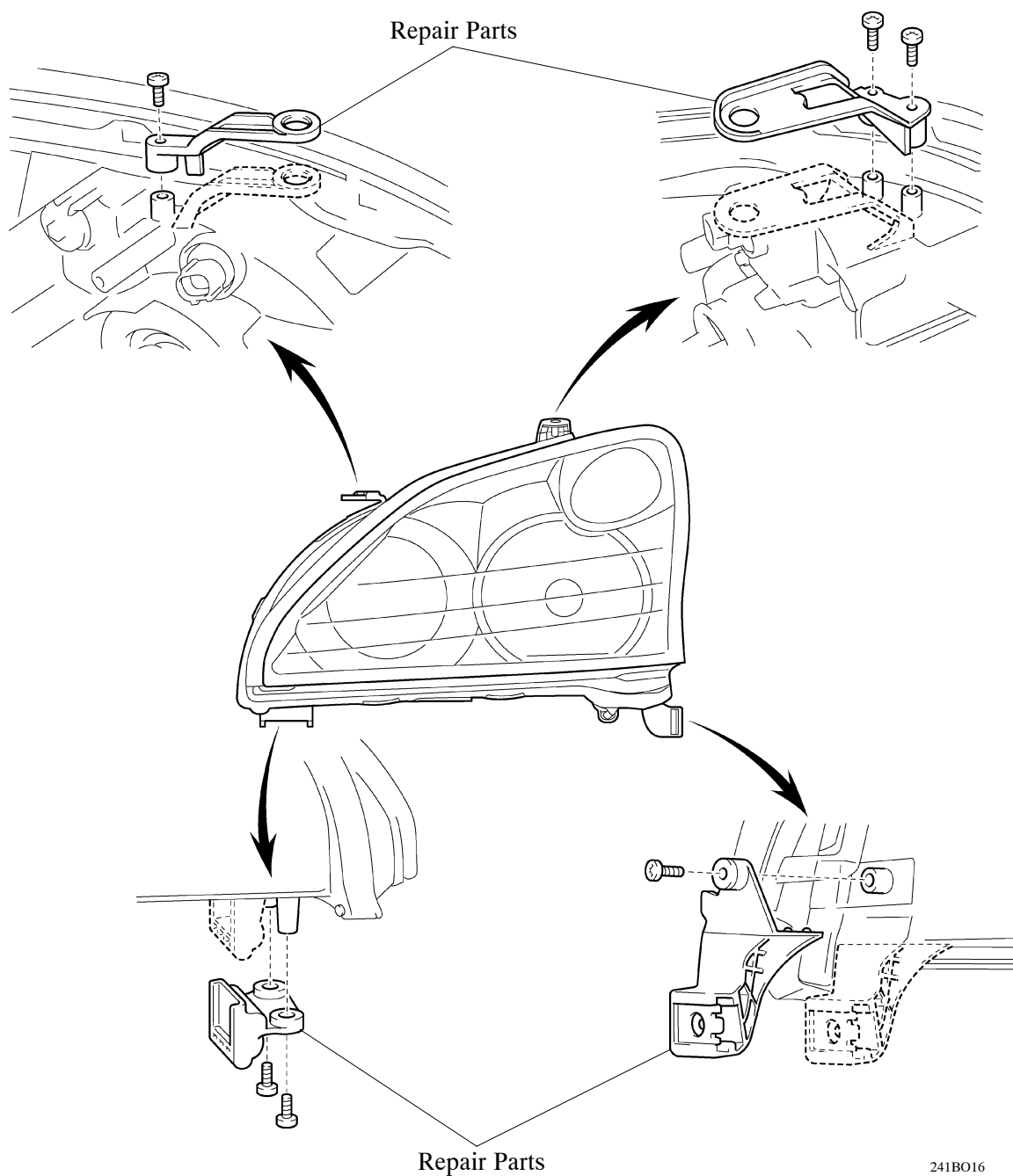


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ENHANCEMENT OF PRODUCT APPEAL

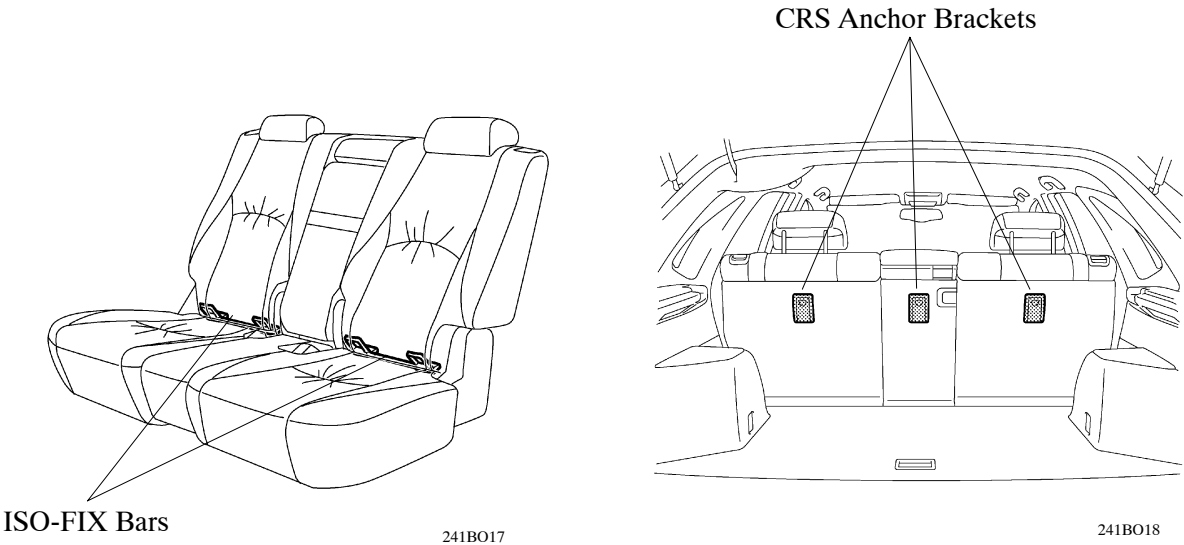
■ PARTS WITH LOW REPAIR COST

- Retaining stay for the headlights have been provided separately from the headlights housing to help protect them from severe damage in a minor collision.
- Retaining stays have been made available as service parts. The replacement stay is secured with the screws.
- The headlights housing can be reused replacing the damaged retaining stay with a new one.
- For details on the retaining stay replacement, refer to the 2006 LEXUS RX400h Repair Manual (Pub. No. RM1139E)



■ REAR SEAT

Two ISO-FIX bars for securing child seats have been provided behind the seat cushion of the rear seat.
Three CRS anchor brackets for securing child seats have been provided behind the rear seat backrest.



■ SEAT BELT

1. General

- The following types of seat belts are provided.
- Seat belt comfort guides for child or small occupant have been added on the both sides of rear seats.

Seat	Seat Belt Type	Remarks
Driver & Front Passenger	3-point ELR*1	Electrical Sensing Type Pretensioner & Force Limiter
Rear Passenger	3-point ELR*1 & ALR*2	-

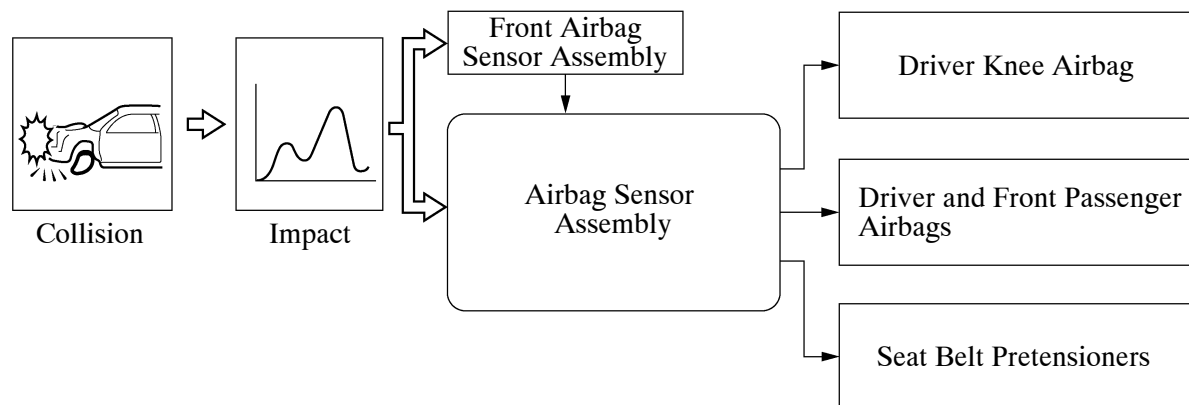
*1 : Emergency Locking Retractor

*2 : Automatic Locking Retractor

2. Pretensioner and Force Limiter

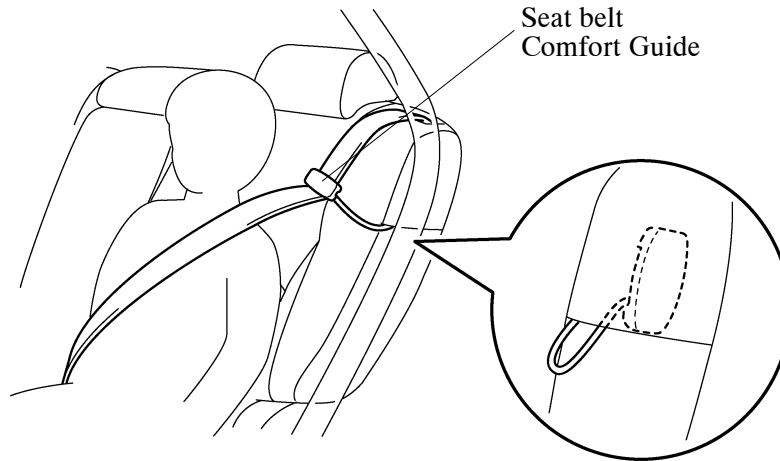
- In accordance with the ignition signal from the airbag sensor assembly, the seat belt pretensioner activates simultaneously with the deployment of SRS airbag for the driver and front passenger.
In the beginning of the collision if the tension of the seat belt applied to the occupant reaches a predetermined level, the force limiter activates to control the force.

► Front Airbag Operation ◀



3. Seat Belt Comfort Guide

This belt comfort guides for child or small occupant have been added on the both sides of rear seats. With this device, the belt guide can be slid to a position to reduce seatbelt discomfort.



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