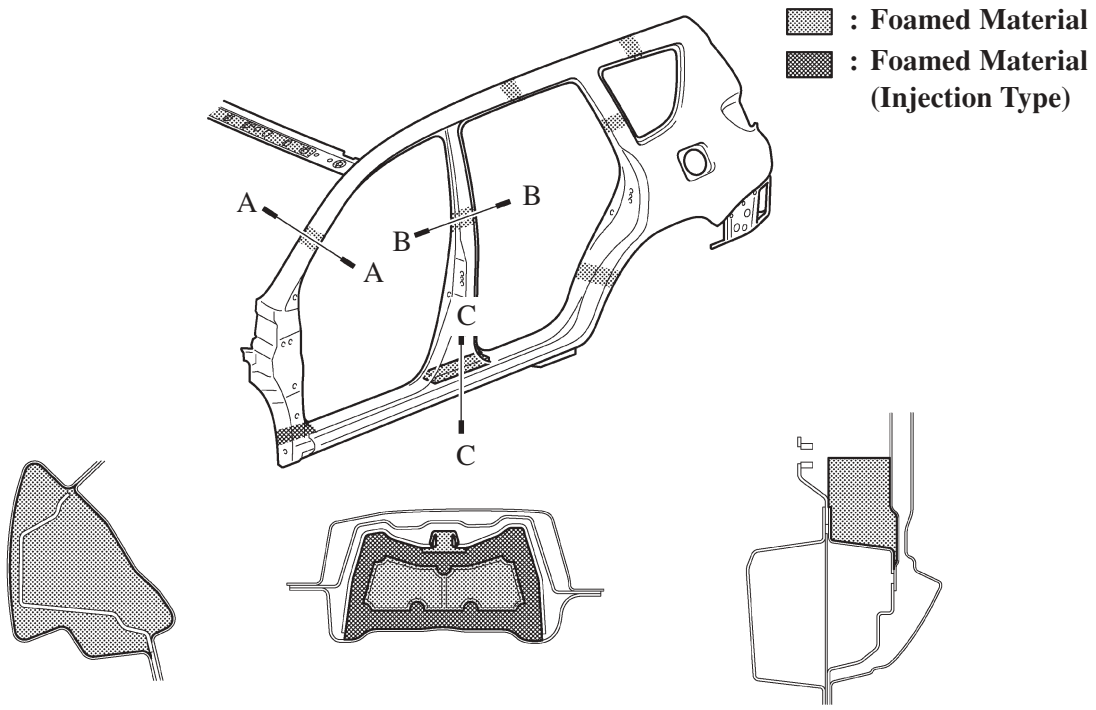
■LOW VIBRATION AND LOW NOISE BODY

1. General

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

2. Sound Absorbing and Vibration Damping Materials

- Foamed sound insulation materials have been optimally located in the cross sections of the body frame parts.

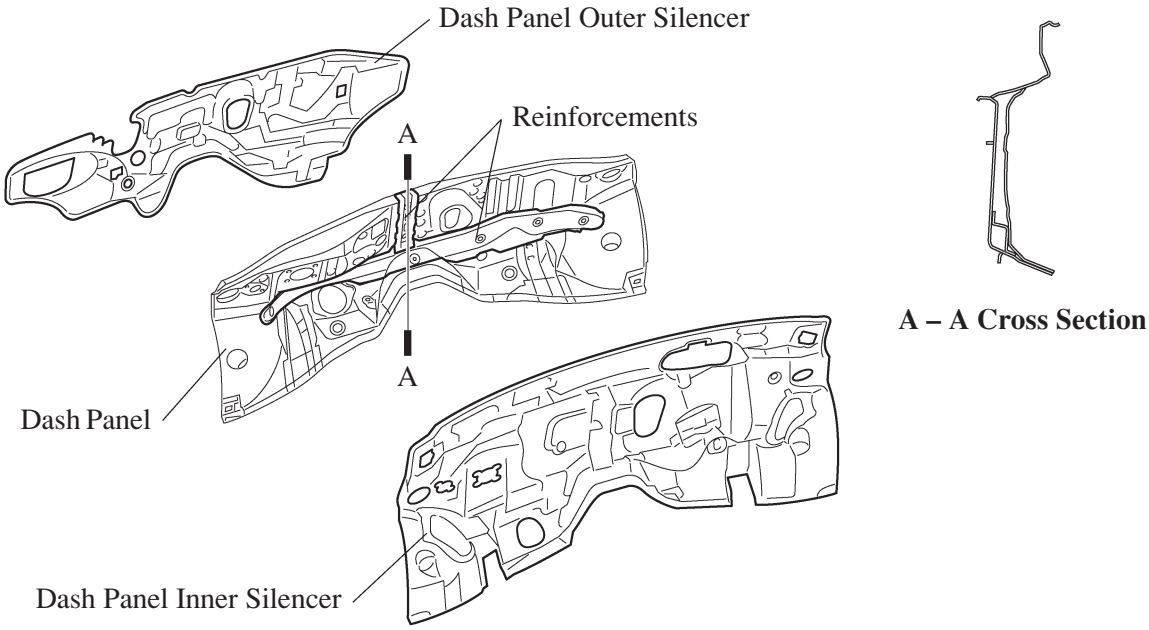


A – A Cross Section **B – B Cross Section** **C – C Cross Section**

Long Body Model

01NBO18Y

- The dash panel inner silencer has been changed from the silencing type to the sound absorption type to ensure quietness. At the same time, a dash panel outer silencer has been provided to reduce the entry of the engine noise into the cabin.
- Reinforcements have been effectively located inside the dash panel to reduce panel vibration and the entry of road noise.

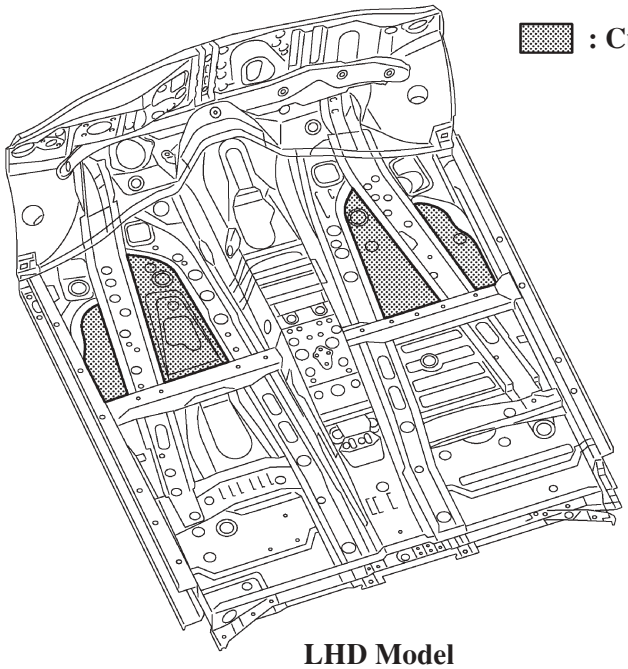


A – A Cross Section

LHD Model

01NBO19Y

- Curved areas have been provided on the floor panel and the beads have been optimized to reduce the entry of road noise.

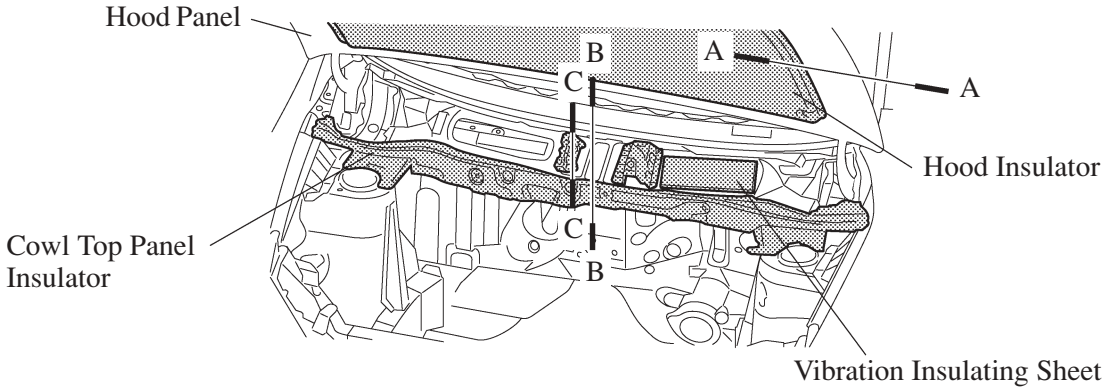


: Curved Area

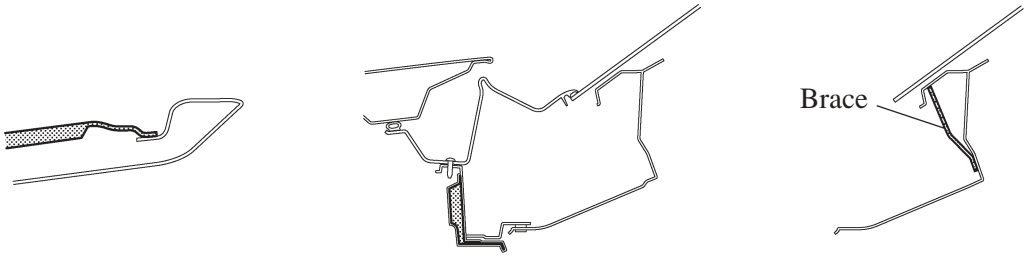
01NBO20Y

LHD Model

- The hood has a dual construction in which an air layer has been provided between the hood panel and the hood insulator, in order to ensure the proper sound insulation performance.
- Braces have been optimally located on the cowl top panel to suppress the vibration of the windshield glass and ensure quietness.
- An insulator and a vibration insulating sheet have been provided forward of the front cowl panel in order to reduce the entry of engine noise from the engine compartment to the cabin.



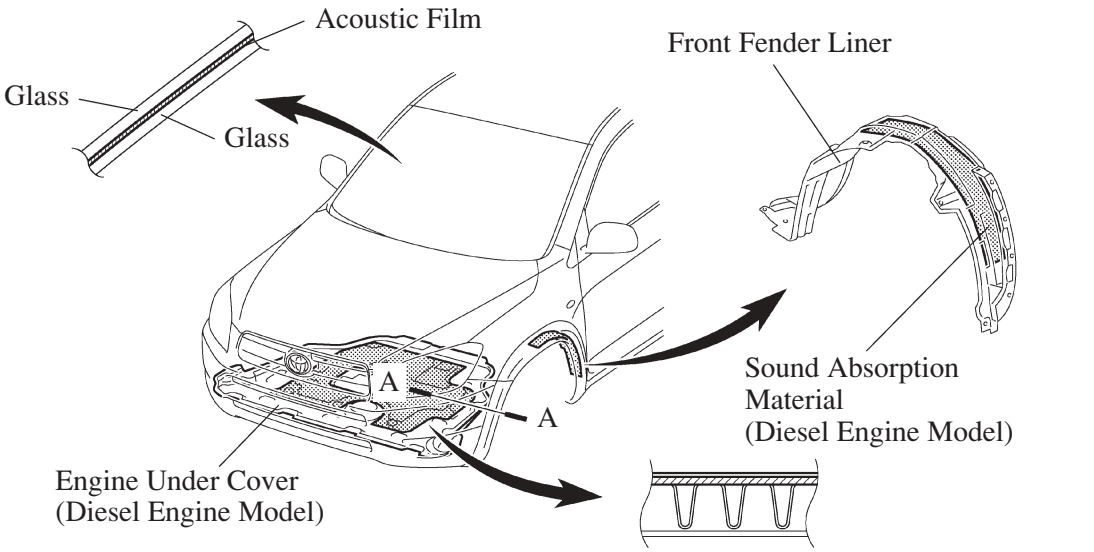
LHD Model



A – A Cross Section **B – B Cross Section** **C – C Cross Section**

01NBO21Y

- On the models for Europe, an acoustic film is used in the middle of the laminated windshield glass to ensure quietness.
- On the diesel engine models, a lattice-shaped sound absorption material has been provided in the engine under cover to reduce the seepage of engine noise to the outside of the vehicle.
- On the diesel engine models, a sound absorption material has been provided in the front fender liner to reduce the entry of road noise.

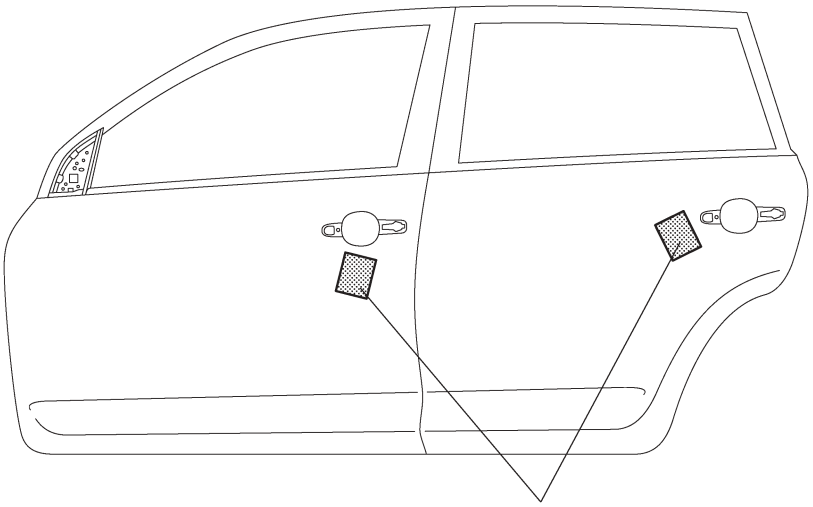


A – A Cross Section

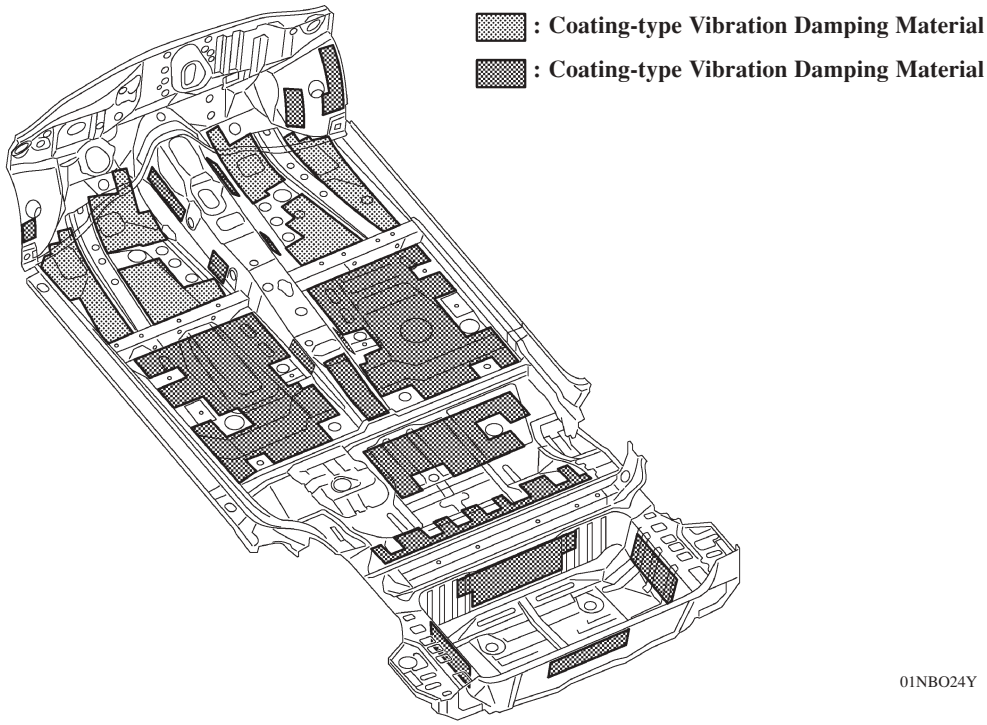
01NBO22Y

BO

- A damping material has been provided in the side door outer panel to reduce the door closure sound.



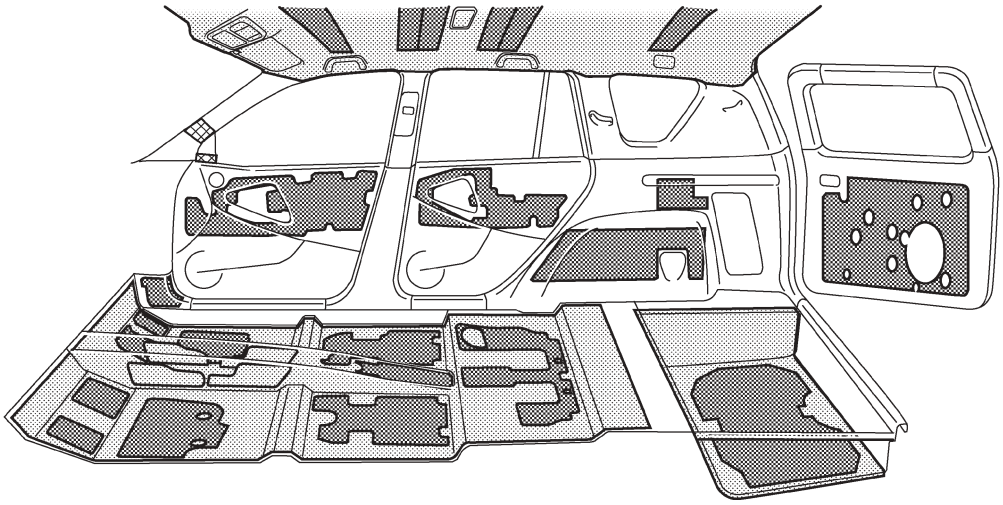
- Coating type vibration damping materials have been applied to the surfaces of the floor panel and the dash panel facing the interior (with a thicker coat applied to the forward area of the vehicle) to ensure sound insulation performance.



Long Body LHD Model

- Sound absorption and sound insulation materials have been located throughout the cabin to ensure quietness.

: Sound Insulation Material
: Sound Absorption Material
: Sound Absorption and Insulation Material



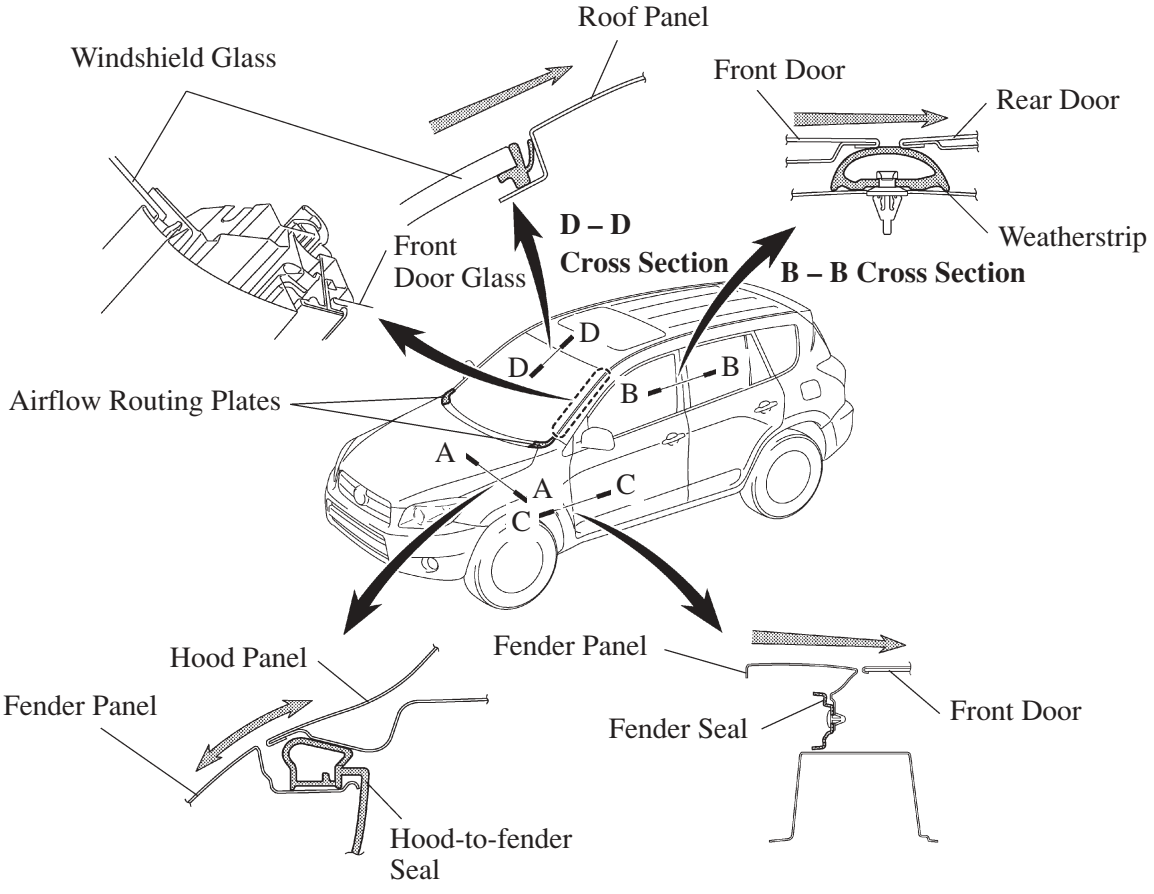
Long Body Model

01NBO25Y

3. Reducing Wind Noise

Wind noise has been reduce through the adoption of the following constructions:

- The offset between various areas of the body and the glass surface has been reduced.
- A hood-to-fender seal has been provided along the parting line between the hood panel and the fender panel.
- A weatherstrip has been provided along the parting line between the front door and the rear door.
- Airflow routing plates have been provided to both sides of the cowl louver, in order to properly route the airflow.
- A fender seal has been provided to block the flow of sound towards the door.



Long Body Model

01NBO26Y