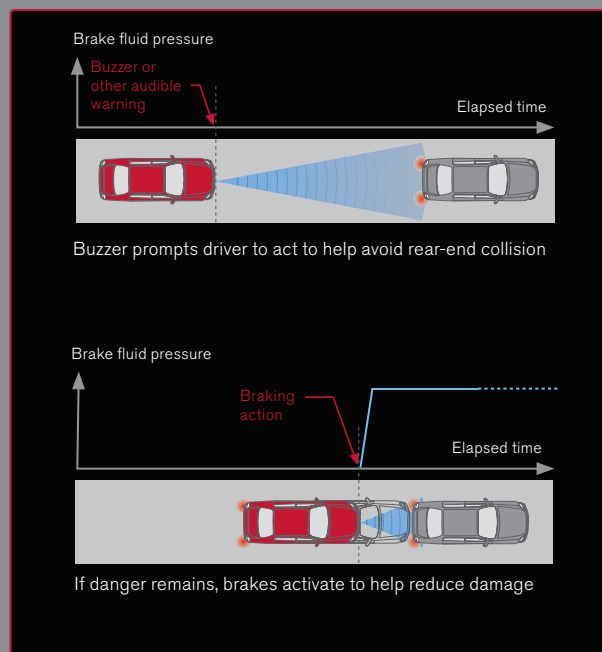
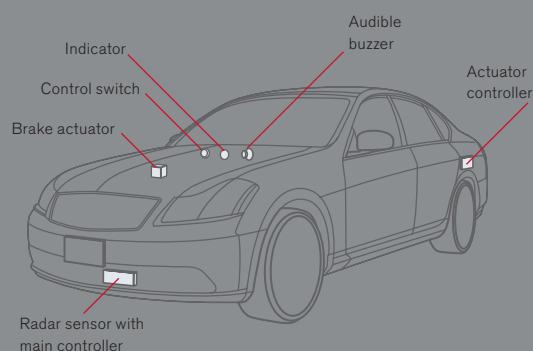


## Helps minimize the damage when a collision is unavoidable

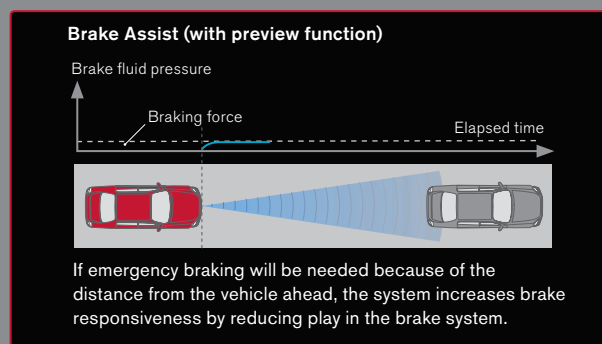
In cases where a crash cannot be avoided, additional Nissan technology helps reduce injuries and damage by activating the brakes, restraining passengers, and applying other measures.

### Intelligent Brake Assist

Using a radar sensor, this system measures the distance from a vehicle being followed and gives an audible and visual warning if it determines that the driver should take evasive measures to help avoid a direct rear-end collision. In addition, if the system judges that a collision remains unavoidable even after driver action, brakes are applied to slow the vehicle and help reduce injuries and mitigate damage.



The Intelligent Brake Assist System in operation

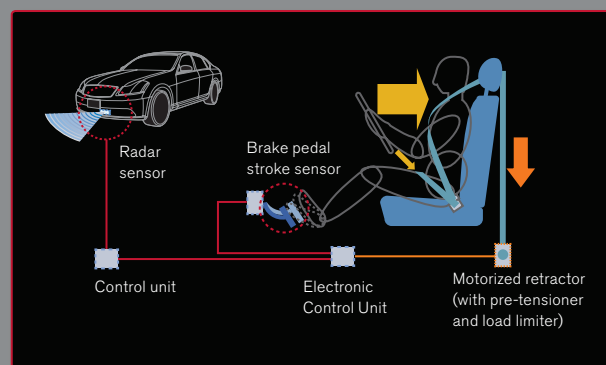


The Brake Assist with Preview System in operation

### Front Pre-Crash Seat Belts

A motor tightens the front seatbelts if the system determines that the driver is performing emergency braking or if Intelligent Brake Assist is activated. This helps keep the driver in a posture conducive to performing evasive maneuvers. If a collision cannot be avoided, this technology also helps reduce occupant motion so airbags and other safety measures can operate optimally.

Nissan holds the basic patent on this technology, but is providing the license to other automakers to promote safer vehicle performance.

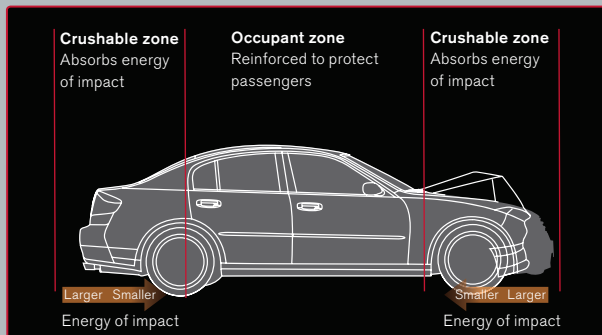


Front Pre-Crash Seat Belts configuration

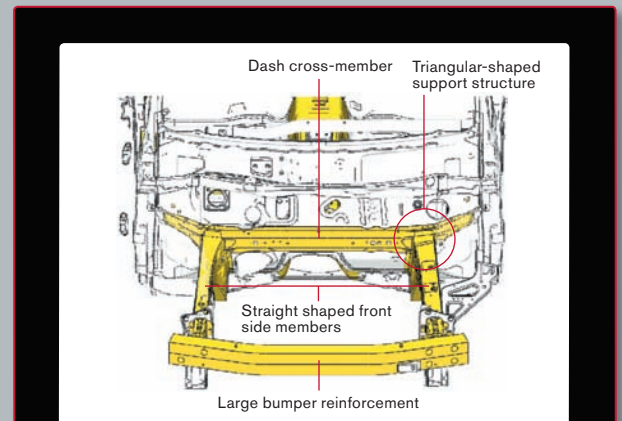
If a crash does occur, the Zone Body, SRS airbag systems and other measures help mitigate injury. After a crash, systems such as HELPNET can hasten assistance to diminish the danger of secondary damage.

## Zone Body construction

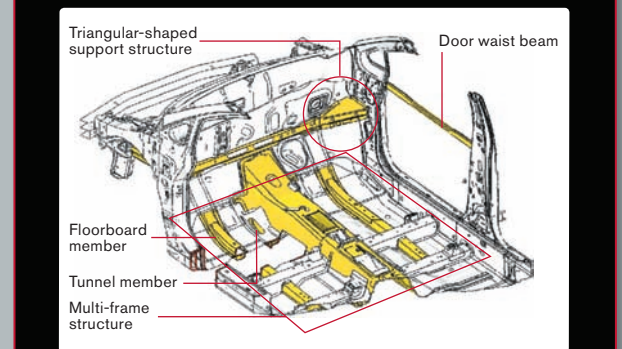
Nissan's Zone Body combines impact-absorbing structures (crushable zones) with a high-strength cabin (occupant zone) to help protect occupants. With the version of the Nissan March (Japan model name) launched in 2002, Nissan introduced a more advanced "crash-compatible" Zone Body that not only enhances occupant protection of the host vehicle, but also reduces "aggressiveness" to the other vehicle involved in an accident. In case of pedestrian involvement, energy-absorbing construction in areas of the vehicle's hood, fenders and cowl help mitigate head injuries, while energy-absorbing material in the front bumper helps reduce impact to the legs.



**Zone Body construction**



**Crushable zone (Tiida)**



**Occupant zone (Tiida)**

**Compatibility body**



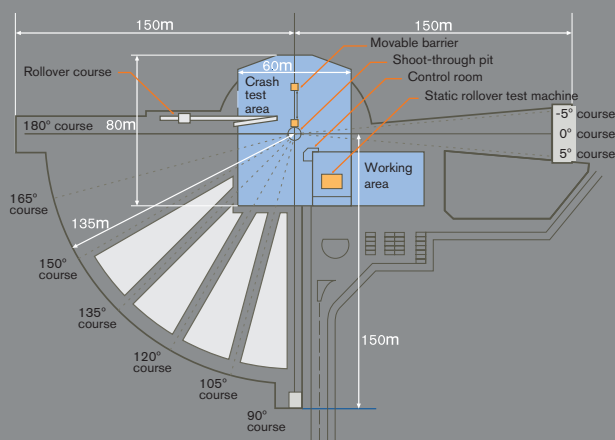
**Pedestrian injuries reduction body**

## Nissan Advanced Crash Laboratory

These advanced facilities in Japan are used for testing safety performance in vehicle-to-vehicle crashes and occupant protection performance in rollover accidents. The lab tests head-on collisions at speeds of up to 120km/h for each vehicle, as well as offset collisions at angles of between 185 and 85 degrees in 5-degree intervals. Based on analysis of a vast number of accidents, this laboratory enables accident re-creation with a greater degree of fidelity to the original circumstances.

### Testing capabilities

Maximum collision speed (vehicle mass)	Vehicle-to-vehicle, each vehicle: 120km/h (2,000 kg) Single vehicle: 140km/h (3,000 kg) 80km/h (9000kg)
Collision angles (vehicle-to-vehicle)	5, 10, 15, 30, 45, 60, 75° 85~185° (5-degree pitch)
Vehicle-to-vehicle speed ratios	1:1.5 1:2 1:3
Barrier crash tests	Movable barrier
Rollover tests	4 types: Trip-over Corkscrew Ditch rollover FMVSS 208 dolly rollover



## SRS\* Airbag Systems

In addition to the SRS dual airbag system, Nissan offers SRS side airbags for chest protection of front seat occupants and SRS curtain airbags for head protection of front- and rear-seat passengers in case of side impact. Nissan was first to install a driver's seat SRS airbag system as a standard feature in Japan and has led the industry with adoption of SRS curtain airbag systems, previously considered a luxury car feature, even on small passenger cars, such as the March, since 2002.



\*SRS: Supplemental Restraint System

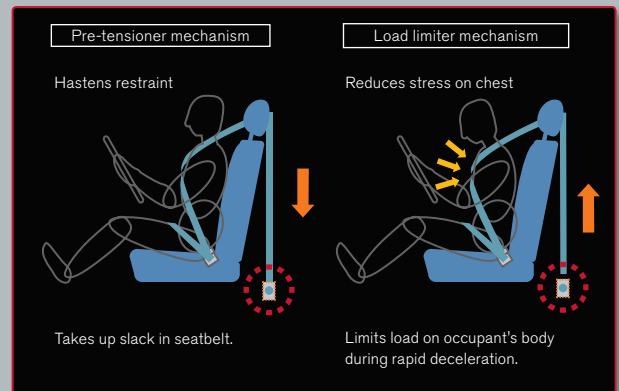
## Front-seat Active Head Restraints

The Active Head Restraint instantly moves forward to support the head and reduce sudden backward movement in case the occupant's vehicle is struck from the rear. This is designed to help minimize stress on the neck and thereby help mitigate the risk of whiplash and related injuries. Since about half of Japan's traffic accidents are rear-end collisions and about 90% of those result in neck injuries, Nissan is moving forward with the adoption of Active Head Restraint systems in its vehicles.



## Seatbelts

Seatbelts raise the effectiveness of SRS airbag systems and other safety measures. In a frontal collision, a pre-tensioner prepares for impact and a load limiter reduces post-impact stress on the chest. A two-stage load limiter matched to front-seat airbag deployment and deflation characteristics lowers the belt load, while a lap belt pre-tensioner complements the shoulder belt. These systems work with Nissan's Front Pre-Crash Seat Belts and other systems for more effective passenger restraint optimized to individual vehicle characteristics.



Seatbelt system with pre-tensioner and load limiter

## HELPNET (Emergency call service)

In case of injury, illness or other emergency on the road, the driver simply presses a Help button to connect to the HELPNET operation center and automatically send navigation system data pinpointing the vehicle's location. No handset is used, so the driver simply answers questions from the HELPNET operator, who contacts emergency services, as necessary.

\*HELPNET is a trademark of Japan Mayday Service Co., Ltd.

### Helpnet reporting sequence

