2013 CX-5
Body and Accessories

1 ABBREVIATIONS

AAS	Active Adaptive Shift
ABS	Antilock Brake System
ABDC	After Bottom Dead Center
ACC	Accessories
AFS	Adaptive Front Lighting System
ALC	Auto Level Control
ALR	Automatic Locking Retractor
ATX	Automatic Transmission
AWD	All-Wheel Drive
ATDC	After Top Dead Center
ATF	Automatic Transaxle Fluid
BBDC	Before Bottom Dead Center
BDC	Bottom Dead Center
BTDC	Before Top Dead Center
CAN	Controller Area Network
CCM	Comprehensive Component Monitor
CV	Canister Vent
CM	Control Module
CPU	Central Processing Unit
DC	Drive Cycle
DRL	Daytime Running Light
DSC	Dynamic Stability Control

EBD	Electronic Brakeforce Distribution
EEPROM	Electrically Erasable Programmable Read-Only Memory
EHPAS	Electro Hydraulic Power Assist Steering
EPS	Electric Power Steering
ELR	Emergency Locking Retractor
ESA	Electronic Spark Advance
FBCM	Front Body Control Module
FET	Field Effect Transistor
FSC	Forward Sensing Camera
GPS	Global Positioning System
HF/TEL	Hands-Free Telephone
HI	High
HLA	Hydraulic Lash Adjuster
HS	High Speed
HU	Hydraulic Unit
IDS	Integrated Diagnostic Software
IG	Ignition
INT	Intermittent
KOEO	Key On Engine Off
KOER	Key On Engine Running
LCD	Liquid Crystal Display
LED	Light Emitting Diode
LF	Left Front
LH	Left Hand

LO	Low
LR	Left Rear
M	Motor
MAX	Maximum
MIN	Minimum
MOS	Metal Oxide Semiconductor
MS	Middle Speed
MTX	Manual Transaxle
OCV	Oil Control Valve
OFF	Switch Off
ON	Switch On
PAD	Passenger Air Bag Deactivation
PCV	Positive Crankcase Ventilation
PID	Parameter Identification
P/W CM	Power Window Control Module
PTC	Positive Temperature Coefficient
RBCM	Rear Body Control Module
REC	Recirculate
RF	Right Front
RH	Right Hand
RR	Right Rear
SAS	Sophisticated Air Bag Sensor
SST	Special Service Tool
SW	Switch

TCS	Traction Control System
TDC	Top Dead Center
TFT	Transaxle Fluid Temperature
TNS	Tail Number Side Lights
TPMS	Tire Pressure Monitoring System
VENT	Ventilation
1GR	First Gear
2GR	Second Gear
2WD	2-Wheel Drive
3GR	Third Gear
4GR	Fourth Gear
5GR	Fifth Gear
6GR	Sixth Gear

FEATURES

- The following systems have been adopted to the headlights.
  - Discharge headlight system (with discharge headlight system)
  - Auto light system (with auto light system)
  - Adaptive front lighting system (AFS) (with AFS)
  - Headlight auto leveling system (with headlight auto leveling system)
  - Auto-light OFF system
  - Day timr running right system
- Front fog lights have been adopted. (with front fog lights)
- LED type side turn lights have been adopted.
- LED type high-mount brake light has been adopted.
- A room light control system has been adopted in which illumination time and illumination level of the interior lights change.

- An LCD has been adopted to the instrument cluster which displays the ambient temperature, trip computer, and odometer/tripmeter.
- A blind spot monitoring (BSM) system has been adopted which notifies the driver of vehicles approaching from behind on the left or right adjacent lanes in the driver's blind spot, and warns the driver if the driver tries to change lanes to the side of the approaching vehicle. (With blind spot monitoring (BSM) system)
- A clock has been adopted to the LCD which displays the current time, passenger/rear seat belt warning light, and front passenger air bag deactivation indicator light. (With manual A/C)
- A front body control module (FBCM) has been adopted for the vehicle front which controls systems such as the headlights, windshield wipers, and turn lights.
- A rear body control module (RBCM) has been adopted for the vehicle rear which controls systems such as the power door lock, rear wiper, and interior light.
- The following entertainment system has been adopted.
    - Audio system (with audio system)
    - Car-navigation system (with car-navigation system)
    - Park assist system (with park assist system)
    - Bluetooth system (with Bluetooth system)
- The following security and locks system has been adopted.
    - Power door lock system
    - Liftgate opener system
    - Keyless entry system
    - Advanced keyless entry system
    - Push button start system
    - Immobilizer system
    - Theft-deterrent system

2 HOOD & BODY PANEL

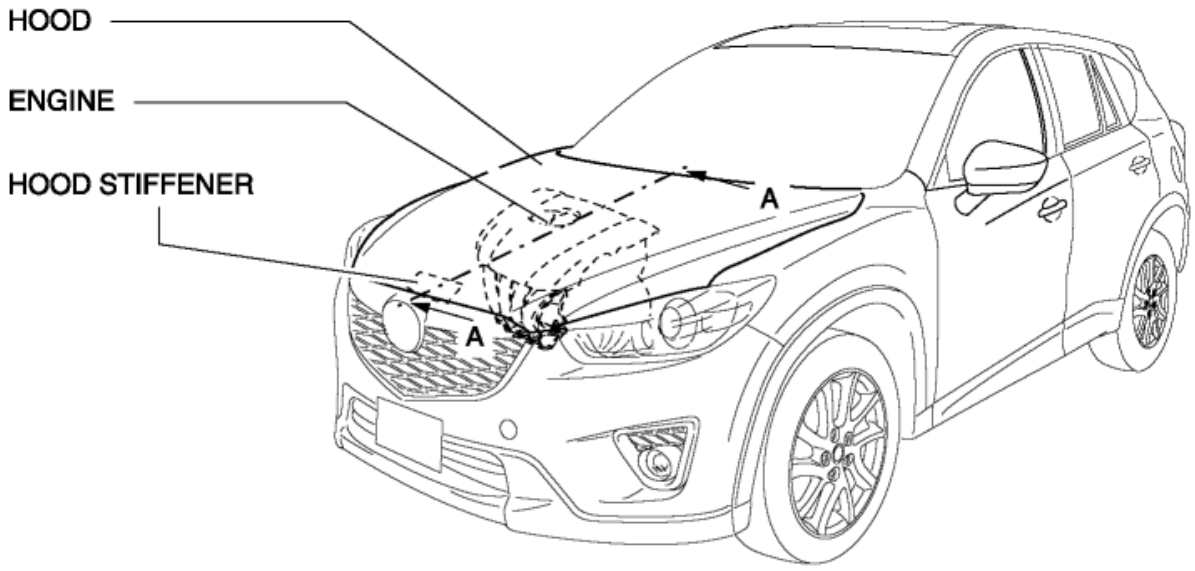
2.1 HOOD

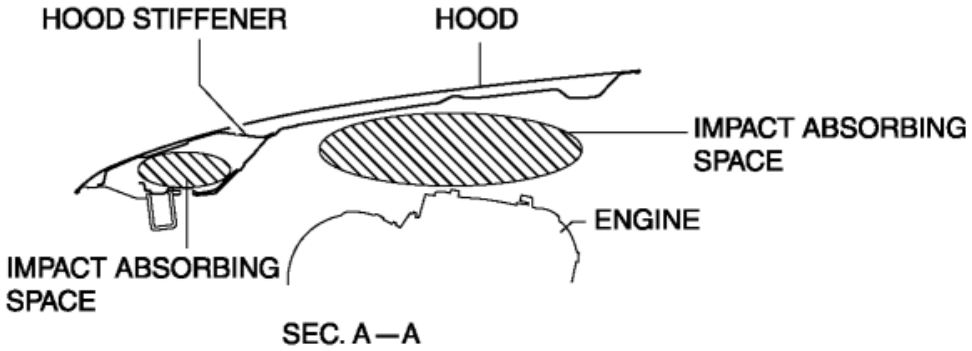
2.1.1 Purpose/Function

- The hood is constructed with a large space between the front end of the hood and the engine to absorb an impact.

2.1.2 Construction

- The hood stiffener positioned at the front end of the hood is shaped so that it collapses easily during an impact. In addition, there is an impact absorbing space which facilitates impact absorption.
- The large space between the hood and the engine facilitates impact absorption.



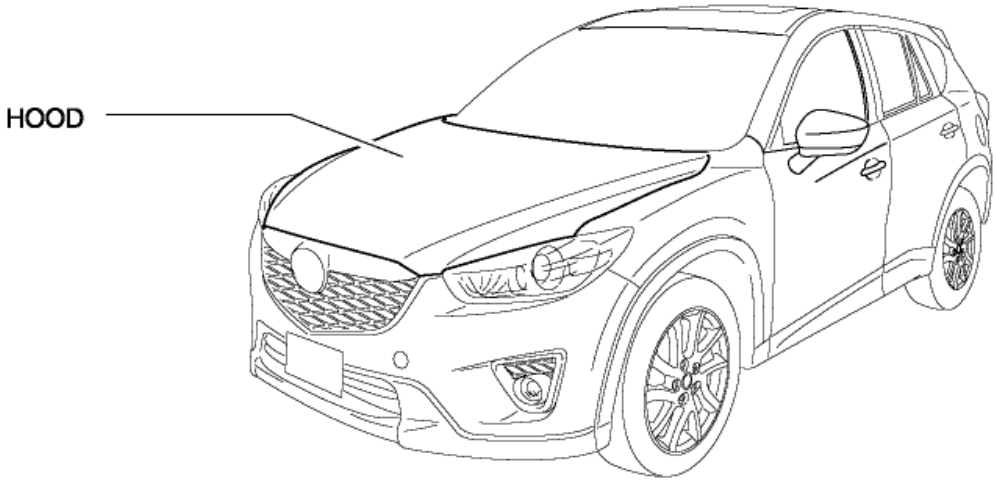


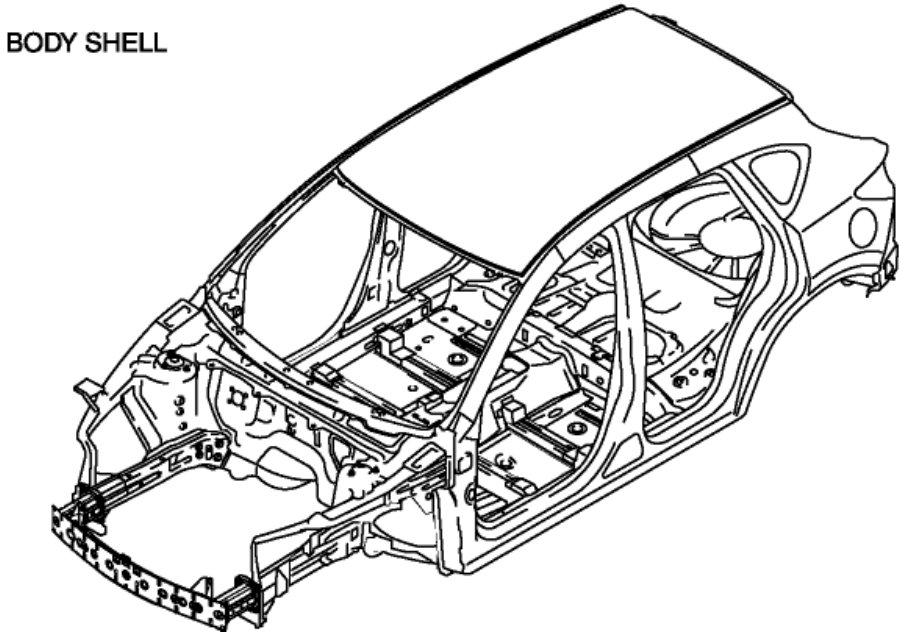
2.2 BODY PANEL

2.2.1 Outline

- The multi-load path and triple H-shaped structure of distributing the power absorbed at the collision were used for the body shell.
- A ring structure has been adopted for the triple H structure, realizing top-level crash safety performance.
- Crushable structure from which an engine mounting bracket and suspension crossmember are made to secede at the collision is used for the body frame of an engine room.
- The energy absorption space between a hood and engine was secured.

2.2.2 Structure View

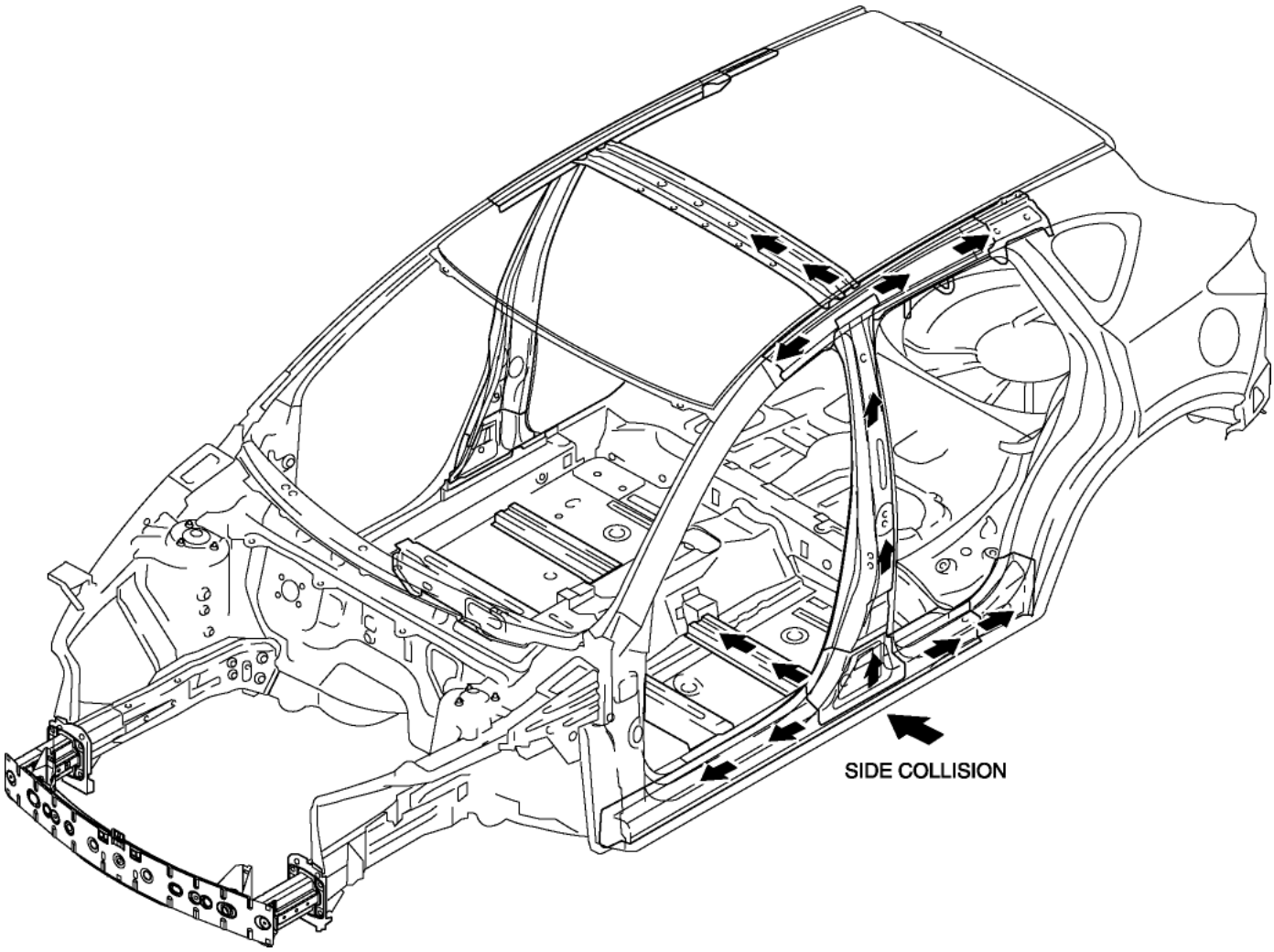




2.2.3 Construction

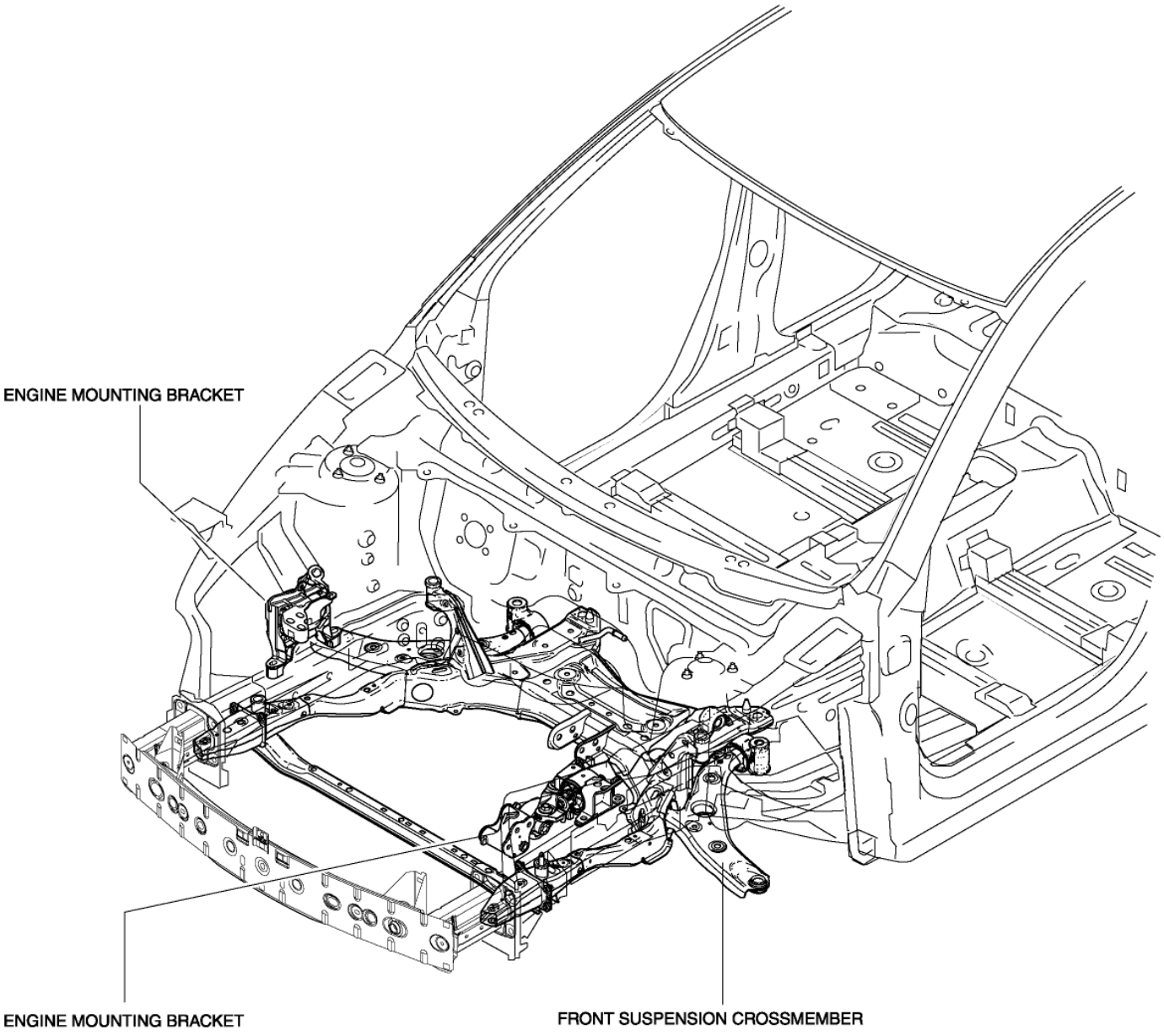
Triple H-shaped structure

- An H-shaped structure has been adopted in which reinforcements are equipped in the floor, side frame, and roof, and each connection area is strengthened.
- The combination of these three structural areas provide the strong triple H-shaped structure.
- Triple H structure distributes the impulse force at the side collision to reinforcement of the roof, cabin side frame, and floor.
- Triple H-shaped structure controls the twisting of the cabin while driving.



Crushable structure

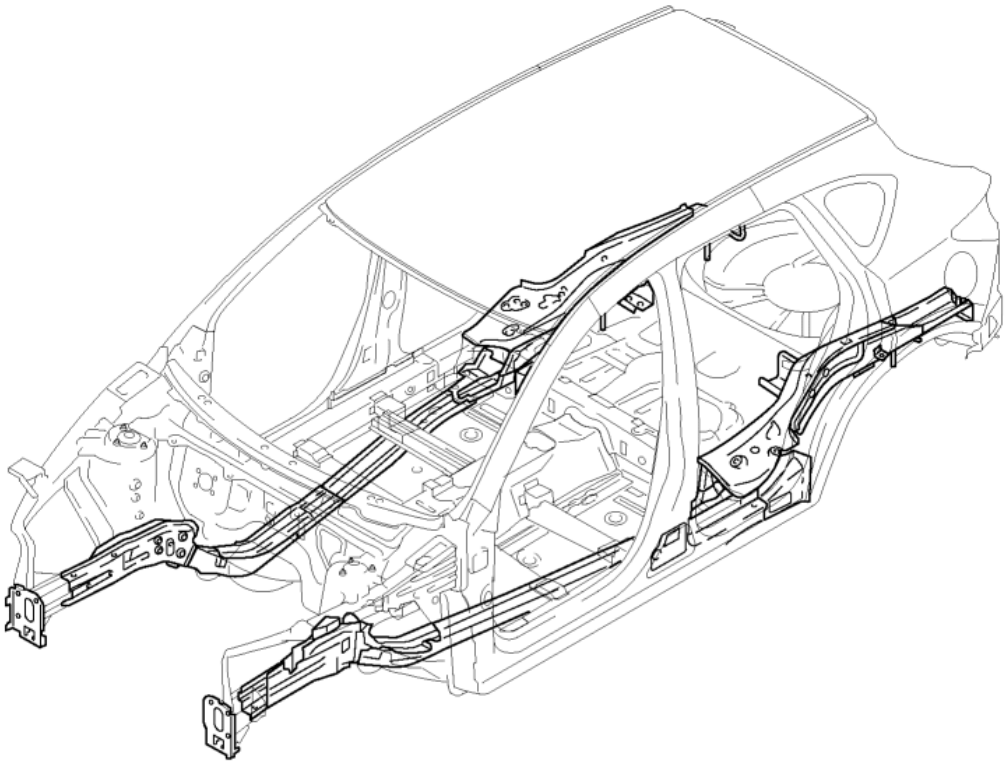
- Engine mounting brackets and front suspension crossmember are made to break away during a collision.



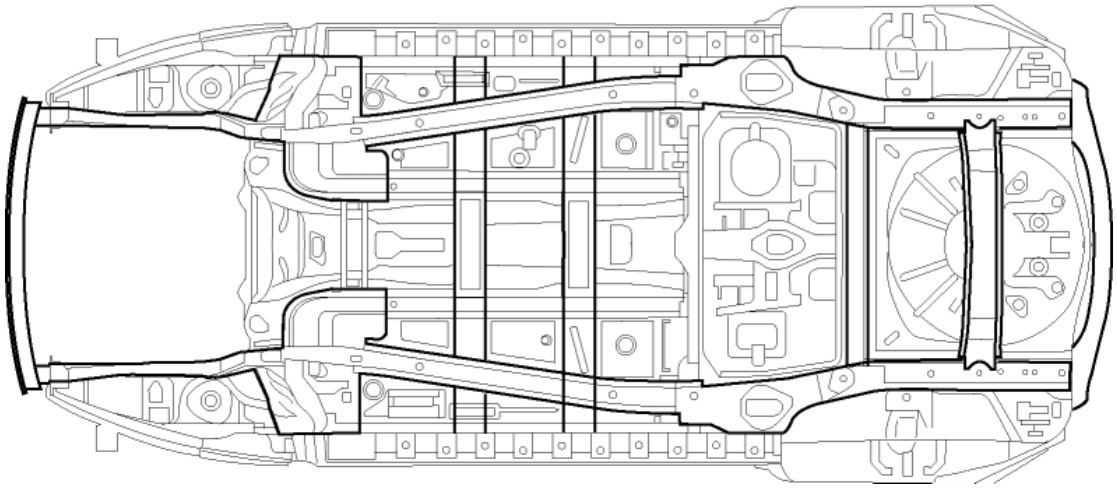
Ring structure

- For the ring structure, the basic framework is thoroughly straightened.
- For the ring structure, the frames are circularly linked.

BASIC FRAMEWORK



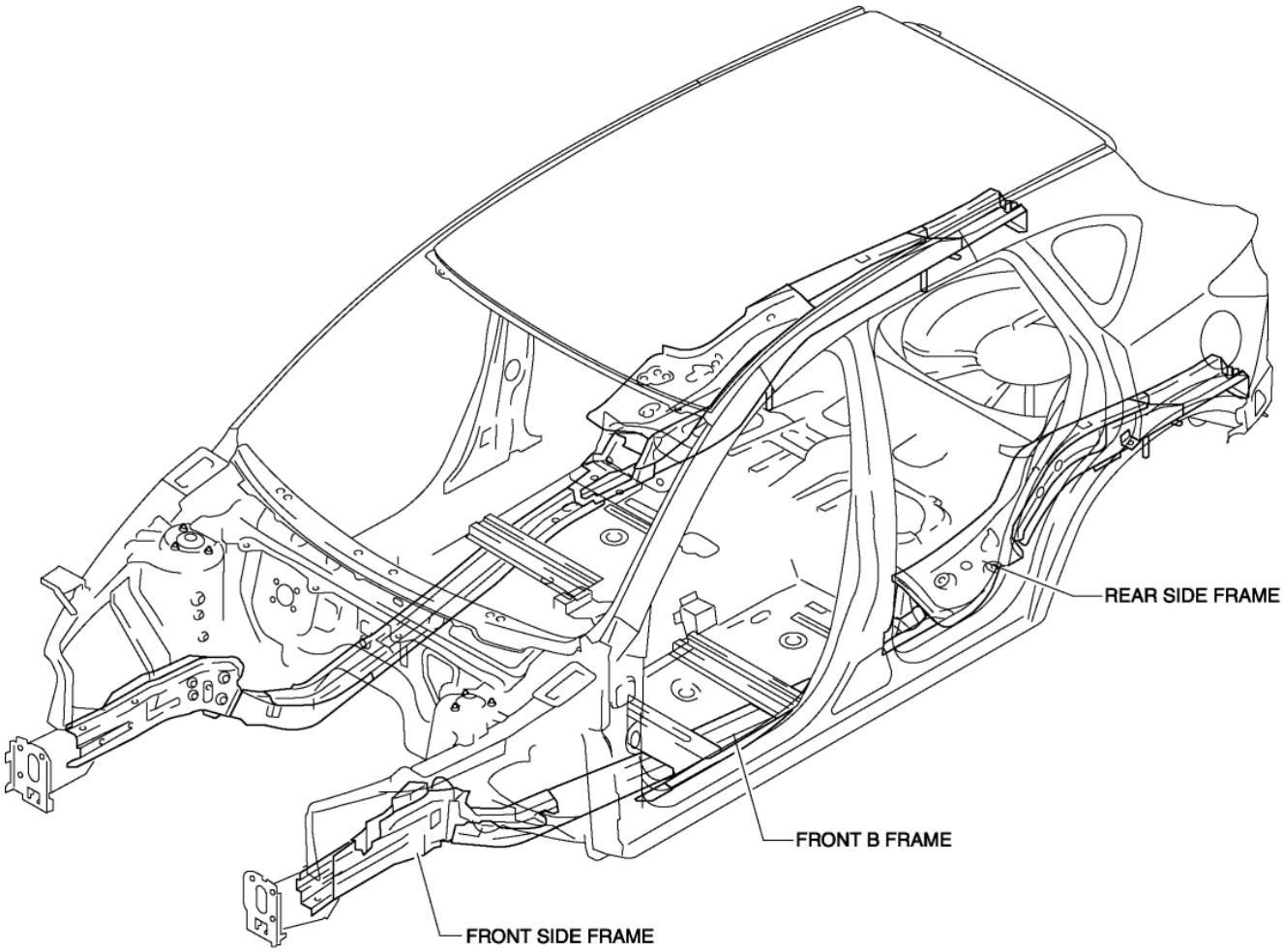
CIRCULARLY LINK



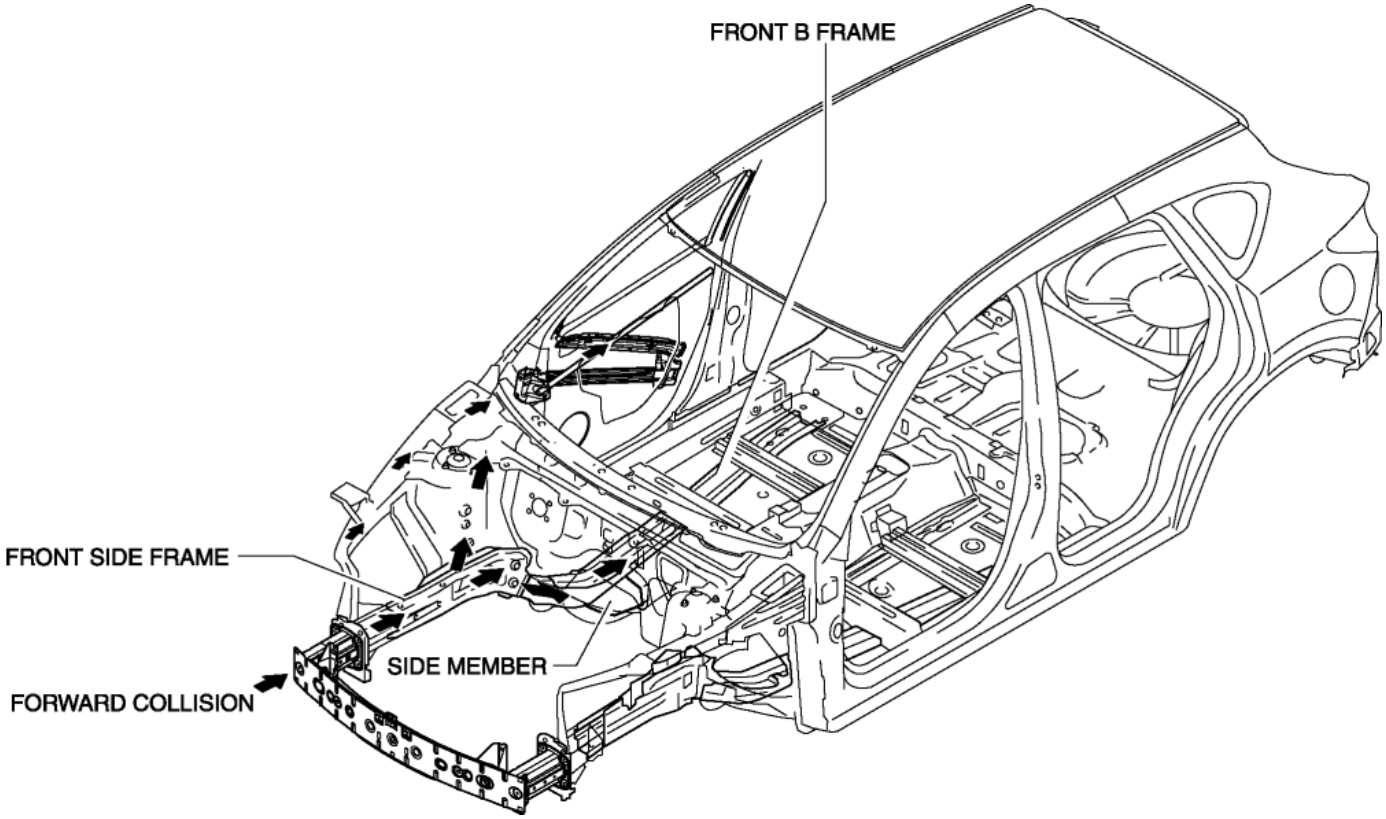
Multi-load path

- The multi-load path is stabilized during a collision, and has set the load distribution load path which carries out energy absorption.

- The front side frame, front B frame and rear side frame are made into straight forms.



- The front side frame is supported by the side sill, front B frame and side member.



2.2.4 Fail-safe

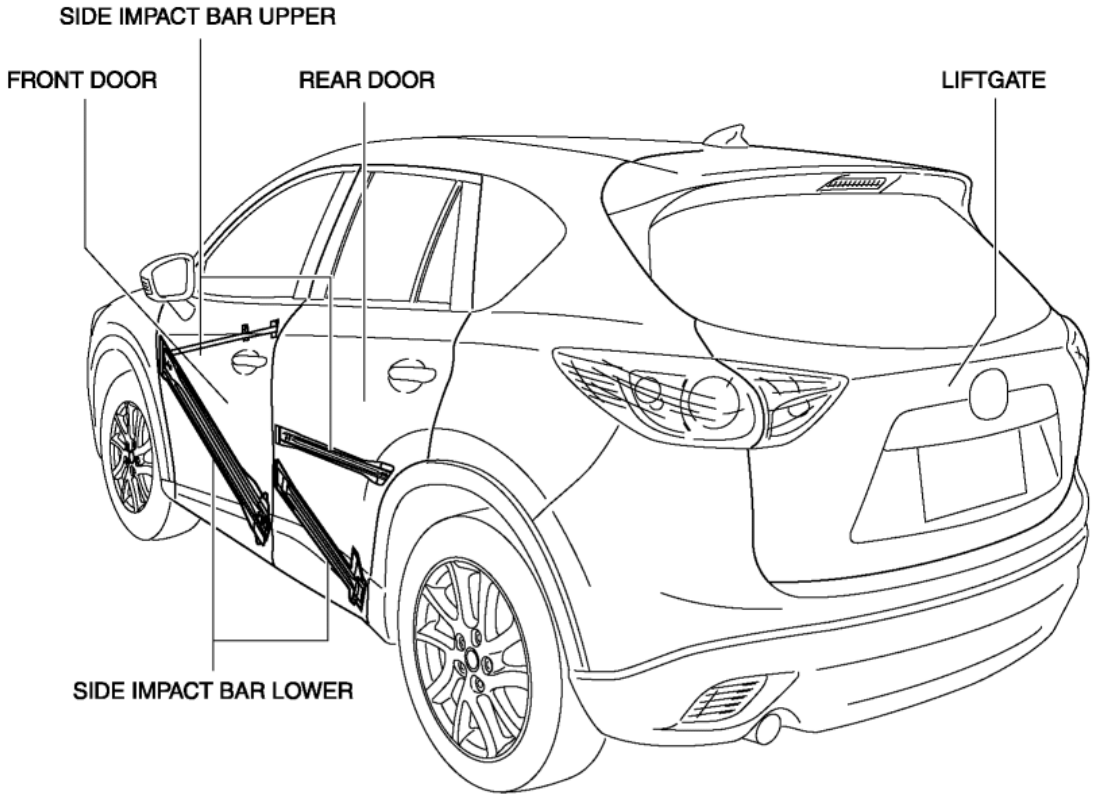
- Function not equipped.

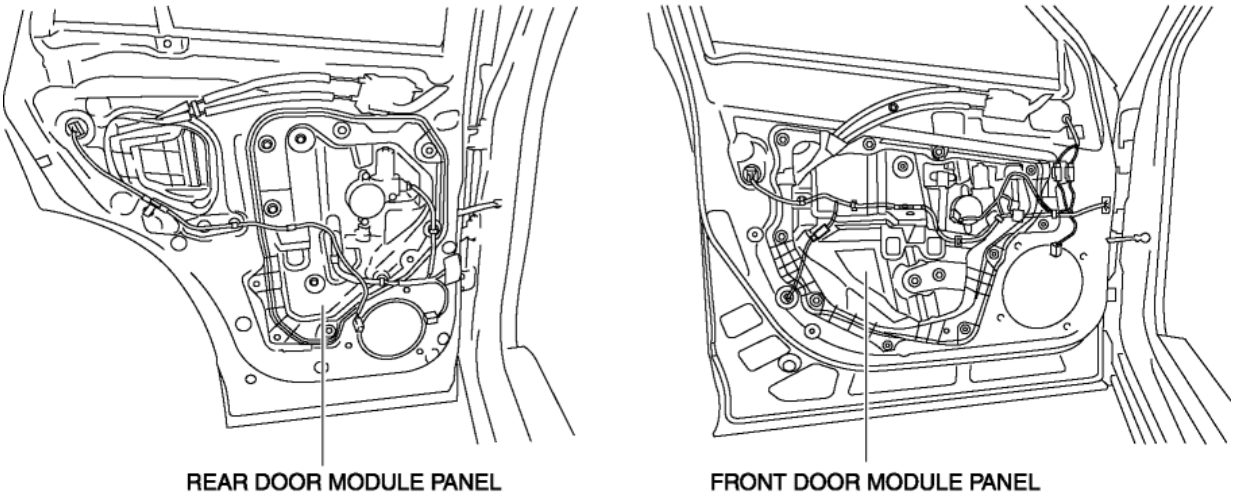
3 DOORS AND LIFTGATE

Outline

- Side impact bars built into the front and rear doors have been adopted.
- Door modules have been adopted on the front and rear doors.

Structural view





4 SIDE IMPACT BAR

Purpose

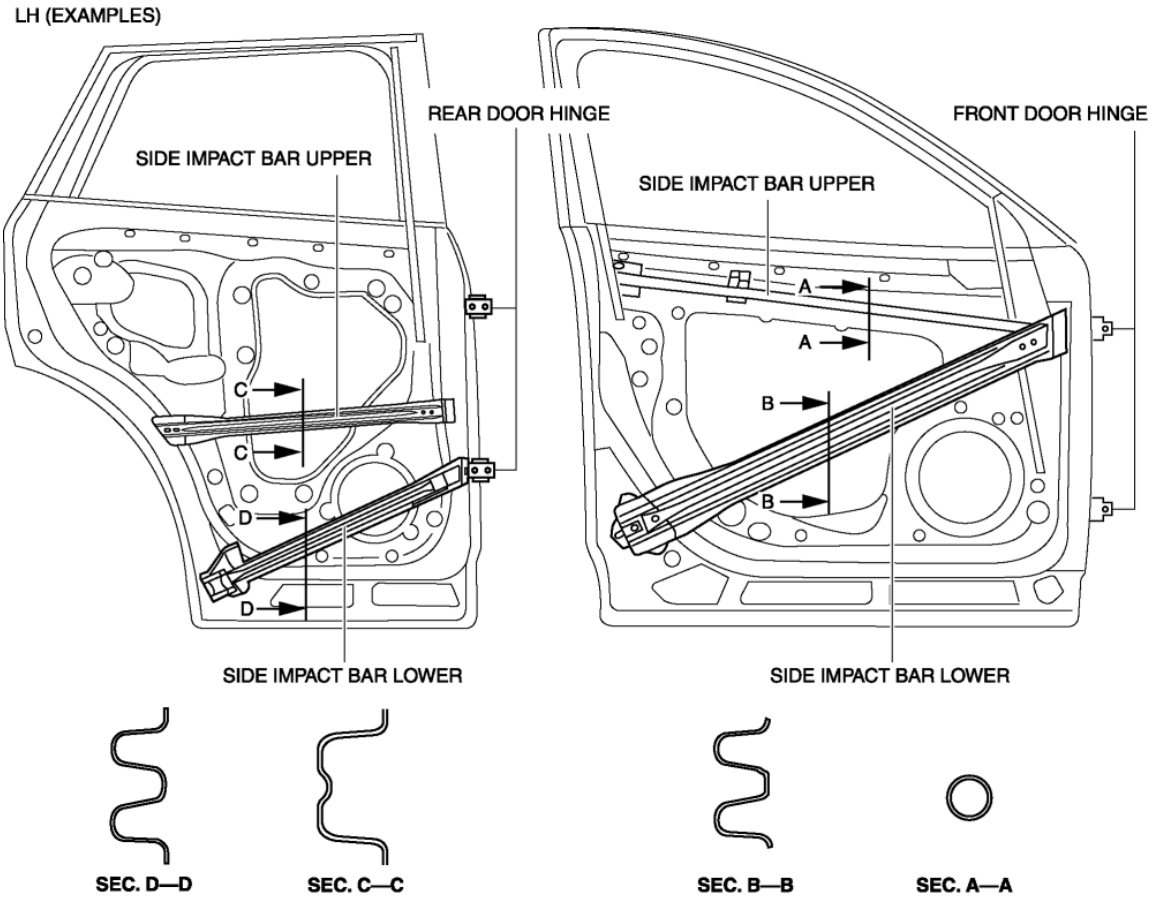
- The side-impact bars prevent the doors from deforming inward to protect passengers during a side-impact.

Function

- The side-impact bars disperse the impact during a side-impact collision.

Construction

- The front door side-impact bar lower is corrugated in shape to assure high rigidity.
- The rear door side-impact bars upper and lower are corrugated in shape to assure high rigidity.
- The side-impact bars are installed in positions which can make use of spring force and tensile force to disperse the impact during a side-impact collision and inhibit door penetration.
    - The front door side-impact bars upper and lower are connected to the front door hinges, and positioned such that they overlap the center pillar.
    - The rear door side-impact bar lower is connected to the rear door hinge, and positioned such that it overlaps the side seal.
    - The rear door side-impact bar upper is positioned such that they overlap the side seal and center pillar.



Operation

- The side-impact bars disperse the impact during a side-impact collision as shown in the figure.