

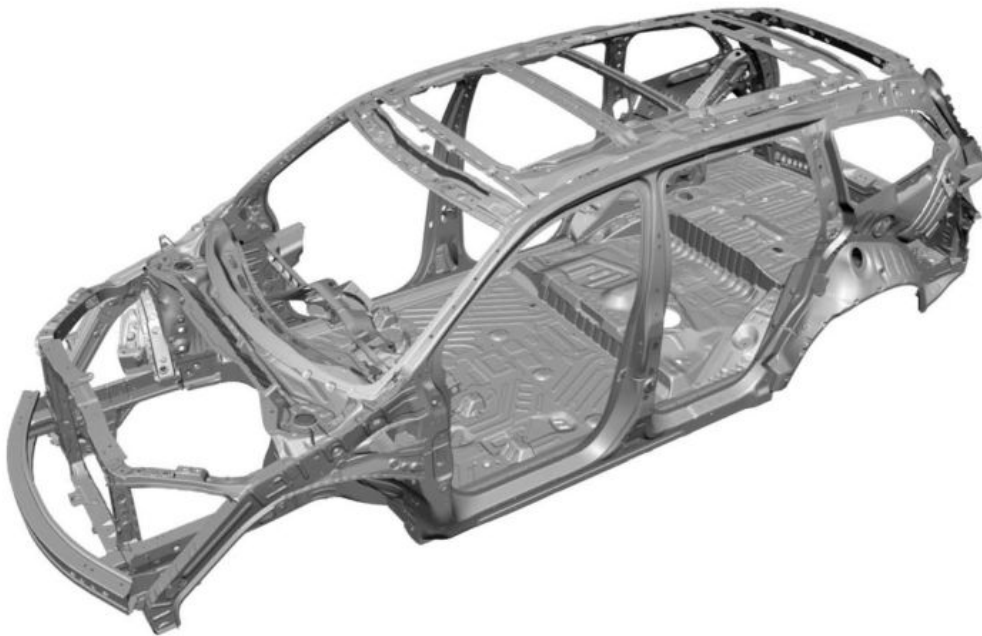
## 2016 Pilot: Body Repair Information

### APPLIES TO

2016 Pilot Model Series

**DISCLAIMER** : This publication contains a summary of body and vehicle technology that may affect collision and other body repairs. Always refer to the appropriate service information and body repair manual for complete repair information. A subscription may be purchased at [techinfo.honda.com](http://techinfo.honda.com).

### OVERVIEW OF BODY FEATURES

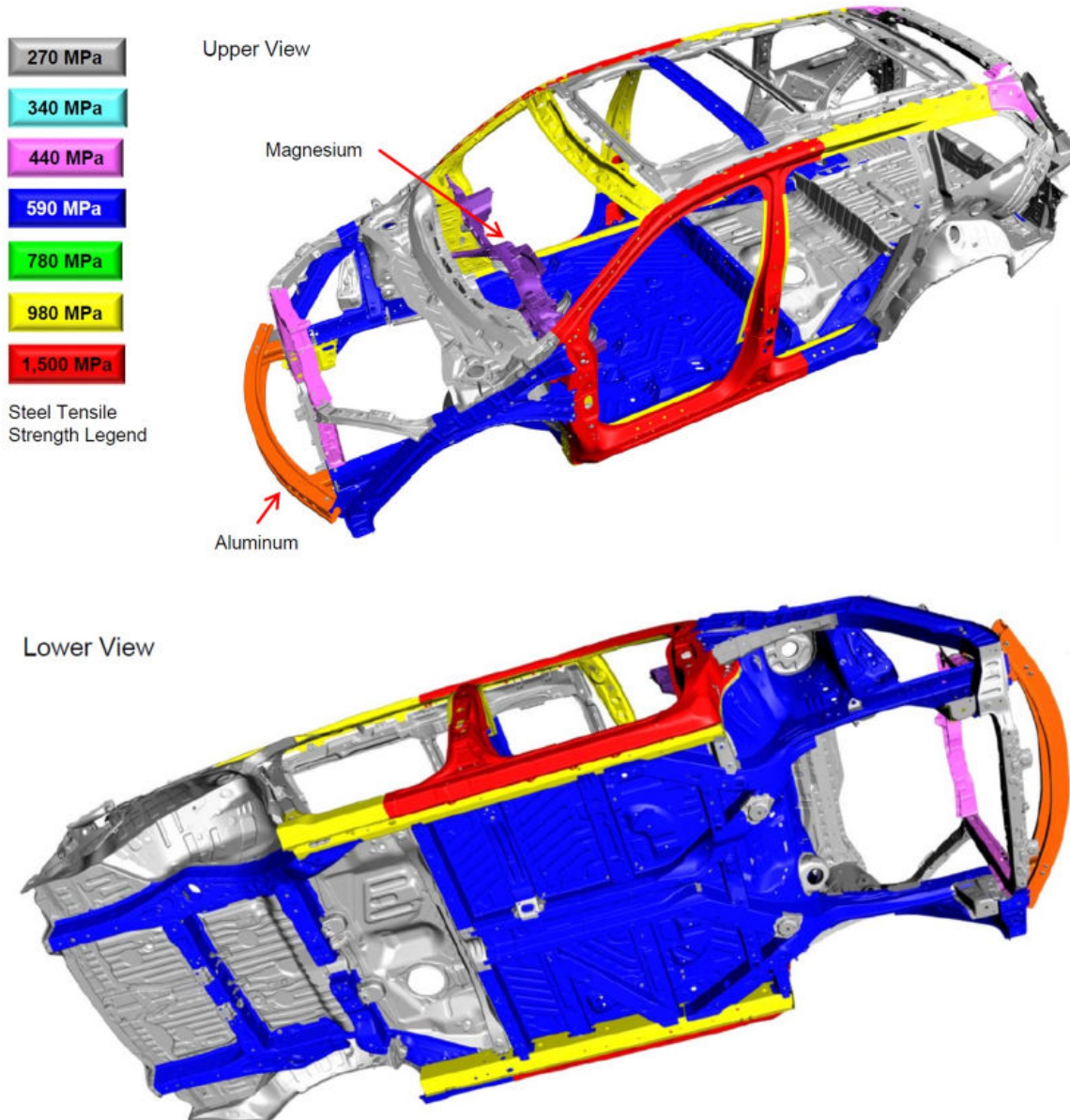


- Next-Generation Advanced Compatibility Engineering™ (ACE™) body structure.
- Body construction using 60% high-tensile-strength steel (HSS), including 21% ultra-high-strength steel (UHSS - 980 MPa and higher).
- Reinforced cabin with 1,500 MPa front door outer stiffener rings and reinforced roof structure.
- 3-bone platform with additional stiffeners.
- Composite body inner structure (CBIS) applied at multiple locations to increase body rigidity and strength.

## BODY TECHNOLOGY

### BODY CONSTRUCTION AND HIGH-STRENGTH STEEL CONTENT

- Steel parts are color-coded based on their tensile strength in megapascals (MPa).
- High strength steel (HSS) is defined as any steel with a tensile strength of 340 MPa or higher.
- Ultra-high-strength steel (UHSS) is defined as any steel with a tensile strength of 980 MPa or higher.
- Steel repair and welding procedures vary depending on the tensile strength of the parts involved.



#### NOTE

These illustrations are for general reference only. Some body parts are constructed from multiple layers of different tensile strength steels. Always refer to the body repair manual body construction section for specific steel tensile strength information.

## 1,500 MPa (HOT STAMP) STEEL LOCATIONS

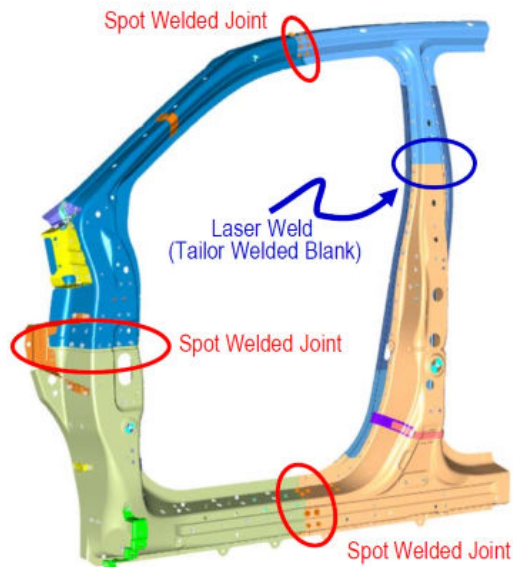
1,500 MPa steel is stronger than ordinary steel, so it can help protect vehicle occupants while reducing overall vehicle weight to improve fuel efficiency.

- The door outer stiffener rings are constructed of 1,500 MPa steel.

### NOTE

The door outer stiffener ring **must** be replaced as a single assembly if it is damaged.

- The stiffener rings are constructed from multiple stampings that are spot welded together at the factory.
- With the door ring assembled and installed, there is no spot welder access to these factory joints, so they **cannot** be repaired.
- The door ring service part is sold as a complete assembly.
- **Do not** substitute MAG welding or MIG brazing for these factory spot welds on the door ring.

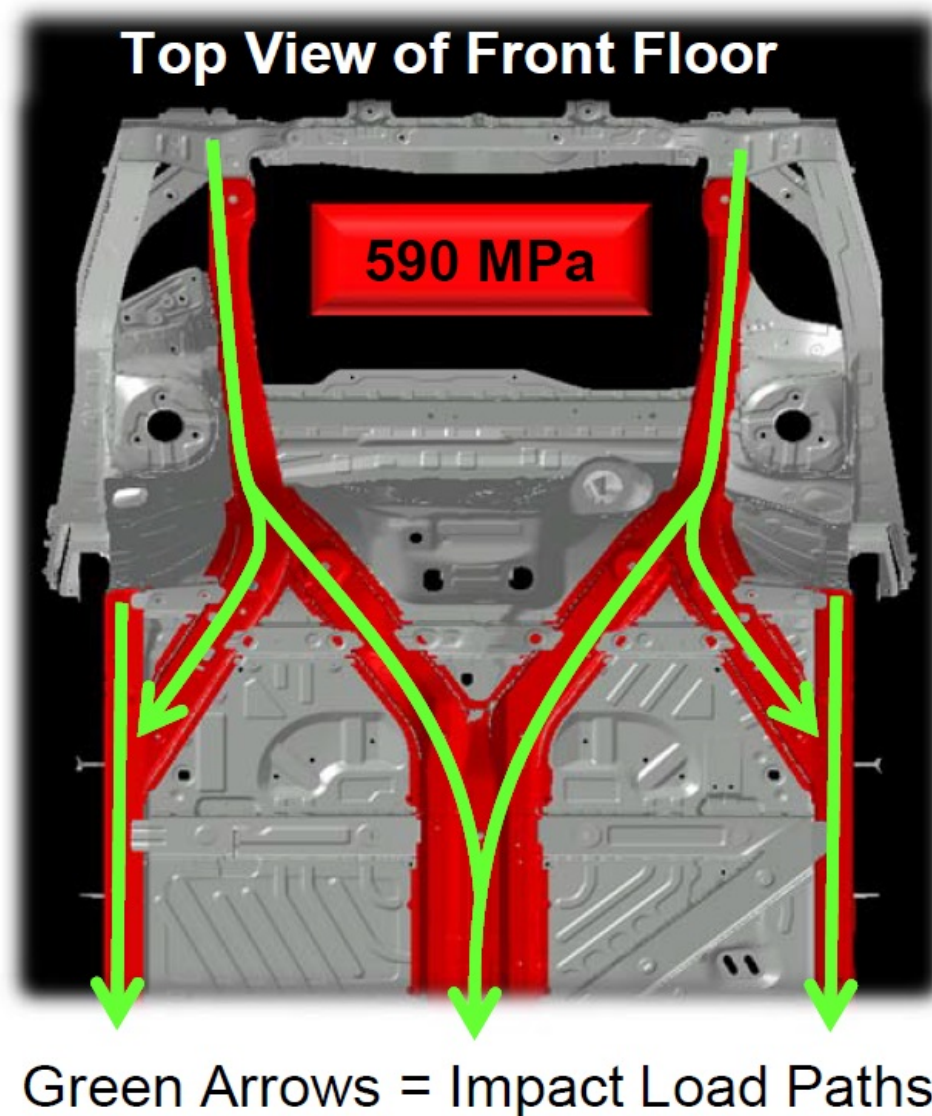


Door Outer Stiffener Ring Construction

### 3-BONE PLATFORM STRUCTURE

A 3-Bone platform structure is used on this vehicle.

- The structure improves impact load management around the cabin while reducing weight.
- Additional floor reinforcements may require replacement or spot weld removal if damaged in a collision.
- Limited sectioning allowed to the front side frame and rear frame B parts. Refer to the body repair manual for complete information.



## ACOUSTIC SIDE DOOR GLASS

Acoustic front side door glass is used for sound isolation on Touring and Elite models.

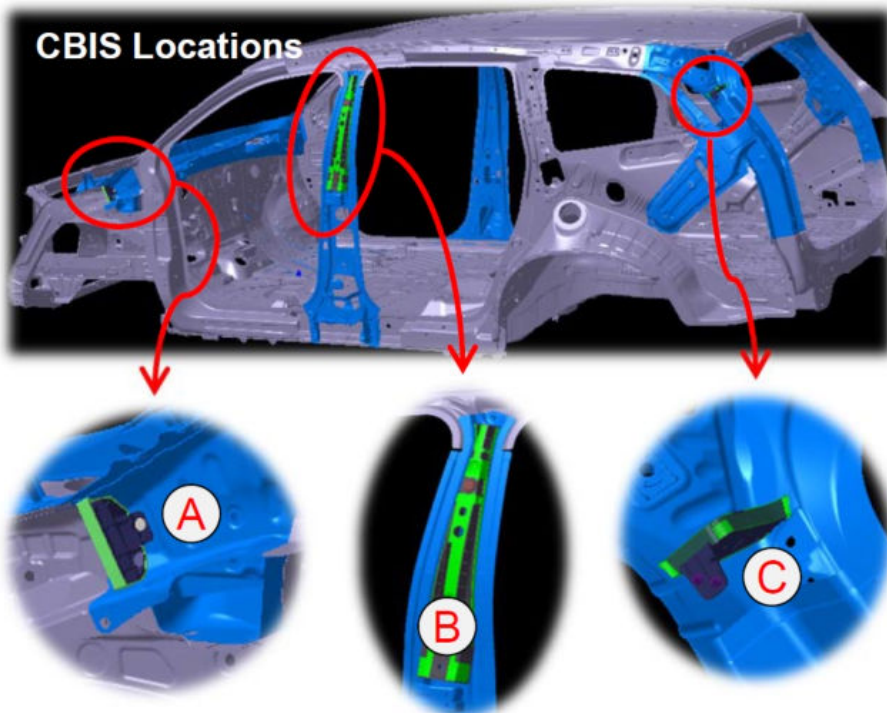
- The glass has a sound insulation layer of polyvinyl butyral (PVB) sandwiched between two layers of semi-tempered glass.
- Acoustic glass is thinner than conventional glass.
- Its construction is similar to laminated windshield glass, so it doesn't shatter like conventional side window glass.
- Provide the VIN when ordering parts to ensure the correct replacement glass is installed.

| Position         | LX, EX & EX-L    | Touring, Elite            |
|------------------|------------------|---------------------------|
| Front Windshield | 4.7 mm laminated | 4.7 mm acoustic laminated |
| Front Door Glass | 5.0 mm laminated | 4.8 mm acoustic laminated |
| Rear Door Glass  | 4.0 mm laminated | 5.0 mm acoustic laminated |

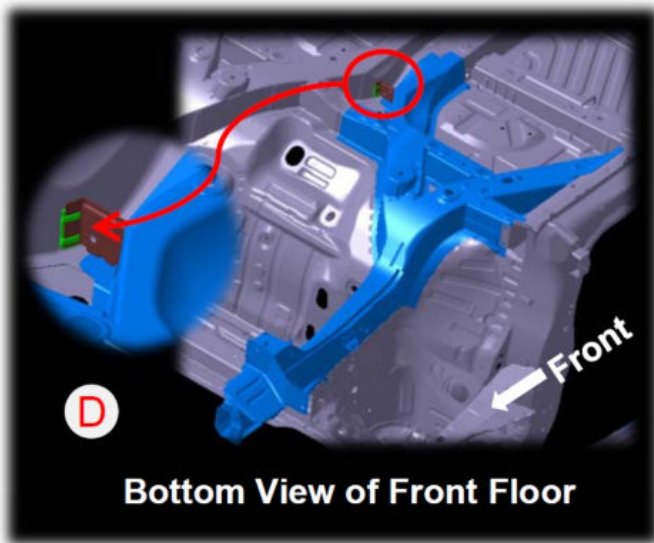
## COMPOSITE BODY INNER STRUCTURE (CBIS)

CBIS is used in strategic body locations to increase global rigidity and local buckling resistance.

- Factory CBIS uses L&L Products L-5520 expanding structural foam (Not commercially available), which expands during the E-coat bake process.
- CBIS is applied at the following locations:
  - Dashboard upper A (Elite models with panoramic roof only).
  - Upper center pillar with composite insert B.
  - Rear pillar upper C.



- Center frame bracket D.



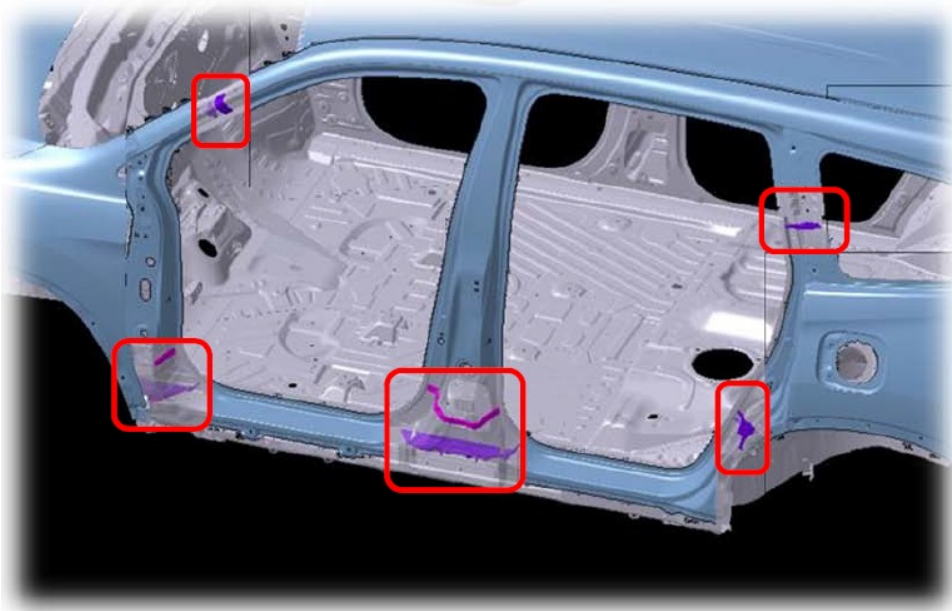
### CBIS Service During Body Repairs

- CBIS locations B & C have the structural foam pre-installed and baked.
- CBIS locations A & D require a special room-temperature cured, 2-part epoxy, expandable structural adhesive (L&L Products L-0504 or equivalent) to replicate these joints.
- Because of their limited shelf life, the adhesive must be ordered at the same time as the replacement parts.
- Once the adhesive/foam is applied, the parts can be assembled and welded. The repair adhesive material will cure at room temperature in 24 hours.

## ACOUSTIC SEPARATOR LOCATIONS

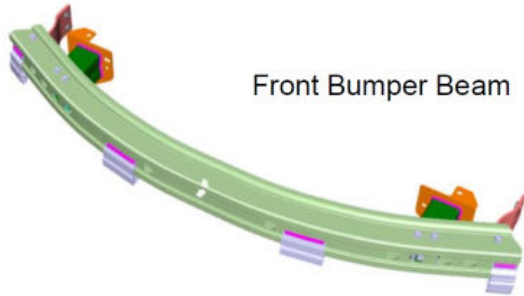
A combination of molded, extruded, and tape acoustic separators are applied in various body locations.

- These are applied within the body pillars.
- They are designed to block the noise paths into the cabin from hollow body cavities.
- Repairs are similar to previous models using commercially available products.



## ALUMINUM PARTS & REPAIRABILITY

All of the parts shown use aluminum alloy construction.



### Repairability Issues

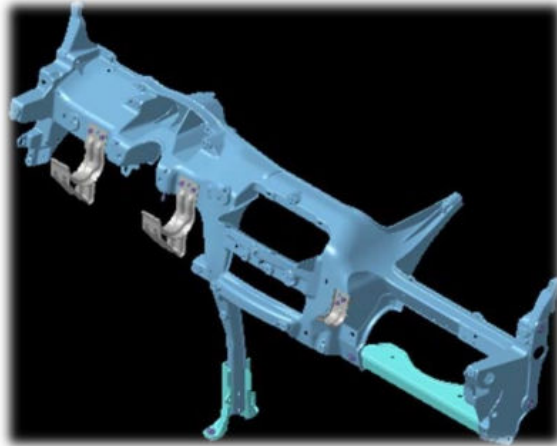
- Do not repair bumper beams if they are damaged.
- Minor damage to the aluminum hood may be repaired by body shops that have dedicated aluminum repair facilities and tools.
- To prevent galvanic corrosion, some fasteners for aluminum parts are considered one-time use and must be replaced if removed.



## MAGNESIUM STEERING HANGER BEAM

The steering hanger beam provides mounting for the steering column and dashboard components.

- The beam is constructed from magnesium alloy for weight savings.
- Do not repair the steering hanger beam if it is damaged.
- Special threaded collar bolts are used in five body mounting locations of the beam to compensate for any variation in body dimensions.
- A specific installation and bolt tightening procedure is required.
- Refer to "Dashboard/Steering Hanger Beam Removal and Installation" in the electronic service manual for complete information.

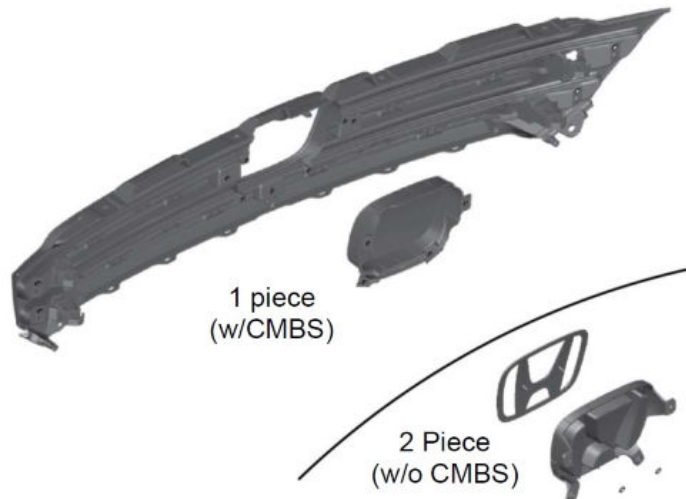


Steering Hanger Beam

## ACC/CMBS GRILLE DIFFERENCES

Models equipped with Adaptive Cruise Control and the Collision Mitigating Braking System™ use a millimeter wave radar unit.

- This unit senses through the front grille emblem base.
- This part, and its Honda emblem, are specially designed to prevent radar interference.
- Installing the wrong front grille emblem base will cause the CMBS indicator to come on and DTC P2583-97 (dust or dirt on the millimeter wave radar) to set.
- The Honda emblem with a flat lens integrated into the base is the correct radar-compatible part.
- The Honda emblem with the raised texture and is a separate part from the emblem base is the incorrect part.



Front Grille Emblem & Bases

## BATTERY JUMP STARTING/CHARGING/TESTING LOCATIONS

This vehicle uses a 12-volt battery sensor on the negative battery cable at the battery terminal.

- This sensor is fragile and can be damaged during jump starting or battery charging/testing procedures.
- To avoid damage to the battery sensor and the chance of electrical sparks, do not use the negative battery post for these procedures. Instead, connect the negative jumper cable or the testing/charging equipment's negative cable to the engine hanger bracket located on the passenger's side of the engine under the plastic engine cover.



12-Volt Battery Under Hood Jump Starting/Charging/Testing Locations