

# **Body Repair News**

July 2019

Version 2

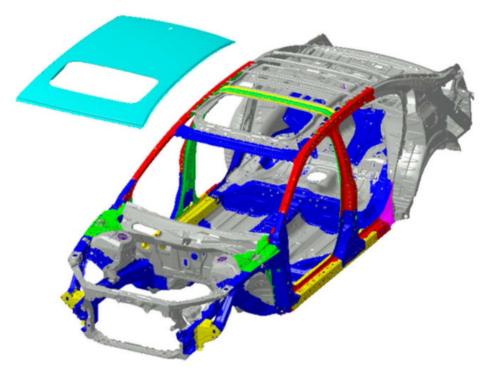
# 2014 RLX & Sport Hybrid Series: Model Body Repair Information

#### **AFFECTED VEHICLES**

2014 RLX & RLX Sport Hybrid Model Series

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

#### **OVERVIEW OF BODY FEATURES**

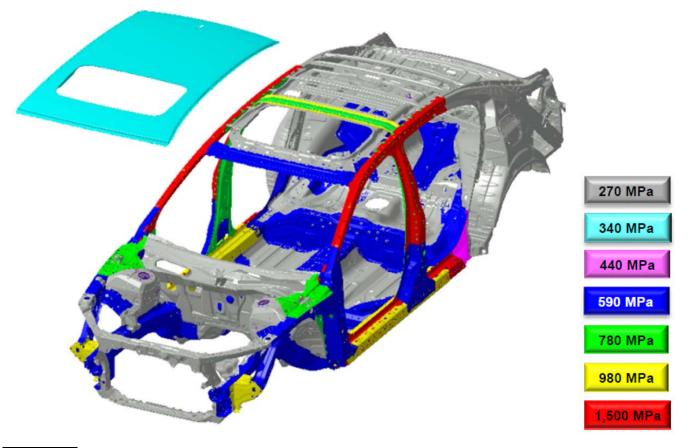


- Next-Generation Advanced Compatibility Engineering<sup>™</sup> (ACE<sup>™</sup>) body structure.
- Body construction using 55% high tensile strength steel, including 20% in grades 780, 980, and 1,500 MPa.
- Extensive aluminum components for weight reduction and improved fuel efficiency (not shown in this view).
- Aluminum hybrid front and rear door construction (not shown in this view).
- Hem-style rear wheel arch panel joint.

#### **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.
- Steel repair and welding procedures vary depending on the tensile strength of the parts involved.

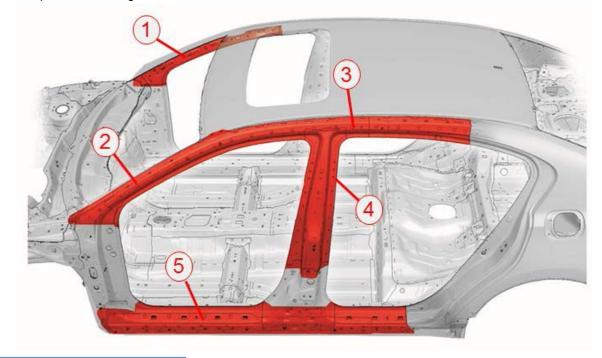


#### NOTE

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.



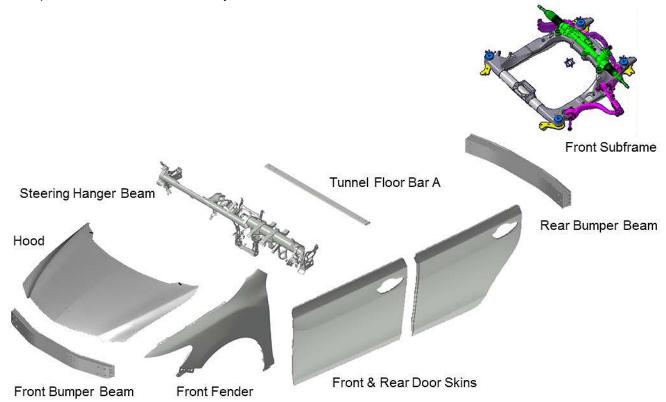
The numbered parts in the diagrams below are constructed of 1,500 MPa steel

#### All Models

- 1 Front Inner Upper Pillar
- 2 Front Pillar Upper Stiffener
- 3 Roof Side Stiffener
- 4 Center Pillar Upper Stiffener
- 5 Side Sill Stiffener

### **ALUMINUM PARTS & REPAIRABILITY**

All of the parts shown use aluminum alloy construction.

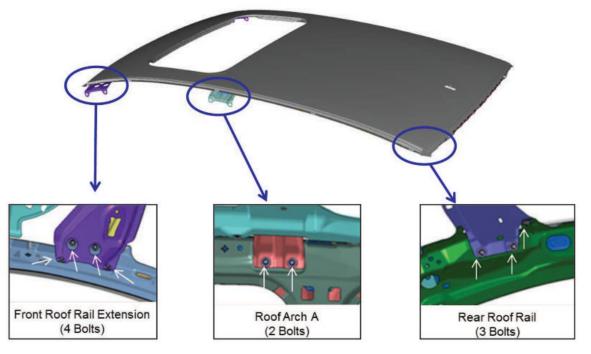


#### **Repairability Issues**

- Do not repair the front subframe or bumper beams if 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.

#### **ROOF PANEL ATTACHMENT**

The roof rail and roof arch extensions are integrated into the roof panel assembly. The roof panel bolts and spot welds must be removed and installed to the inner pillar and roof rail structure using a specific procedure. Refer to the body repair manual section titled "Roof Panel Removal and Installation" for complete information.



## DOOR STRUCTURE

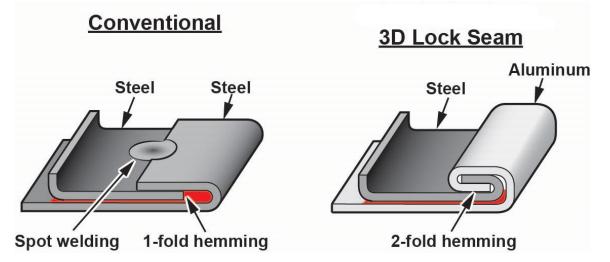
The doors on this vehicle use technology to join steel and aluminum panels.

• This is the world's first application of this technology to a door panel.



- Door panel weight is reduced by approximately **17** percent compared to all-steel doors, improving vehicle handling and fuel efficiency.
- The inner door panel is a conventional steel structure.
- The outer door panel is made of aluminum alloy.

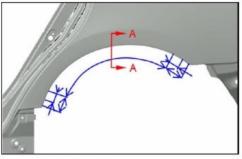
The two panels are joined using adhesive and a special "3D lock seam" joint.



- The outer door panels are not serviced separately.
- Minor damage to aluminum door panels may be repaired by body shops that have a dedicated aluminum repair facility and tools.
- Major damage to the aluminum door panels may require door replacement.

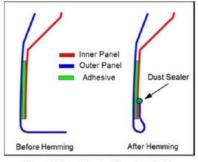
#### REAR WHEEL ARCH HEM JOINT

To improve styling and tire clearance, a hemmed rear wheel arch joint is used.



Rear Wheel Arch Hem Joint Area

• The outer and inner rear panels are joined using adhesive in the wheel opening area.



Rear Wheel Arch (Section A-A)

- The outer panel is then rolled and crimped over the inner panel, similar to a door panel crimp.
- Other vehicle manufacturers have previously used this technology, so rolling and flanging tools are commercially available.
- If the above tools are not available, instructions are provided in the body repair manual to make the set of hemming pliers necessary to complete this joint.
- Refer to the body repair manual section titled "Rear Side Outer Panel Removal and Installation" for complete information.

#### CMBS GRILLE DRIFFERENCES

Models equipped with the Collision Mitigating Braking System<sup>™</sup> use a millimeter wave radar unit.

 Installing the wrong front grille will cause the CMBS indicator to come on and DTC P2583-97 (dust or dirt on the millimeter wave radar) to set.



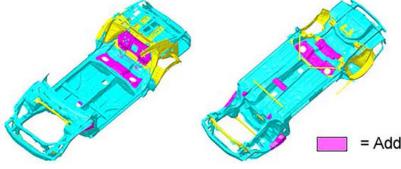
Back Side View of Grille Molding (w/CMBS)



Back Side View of Grille Molding (w/o CMBS)

#### ADDITIONAL BRACING AND HIGH STRENGTH STEEL LOCATIONS (RLX SPORT HYBRID ONLY)

- The body includes additional bolt-in braces to accommodate the high voltage battery and drive components.
- The front pillar, center pillar, and front floor assemblies contain additional **590** and **980** MPa stiffeners.
- Always refer to the correct parts catalog when ordering replacement structural parts.



Sport Hybrid SH-AWD Model Examples of Additional Bracing & High Strength Steel locations

= Additional Bracing & High Strength Steel