2015 TLX: New Model Body Repair Information

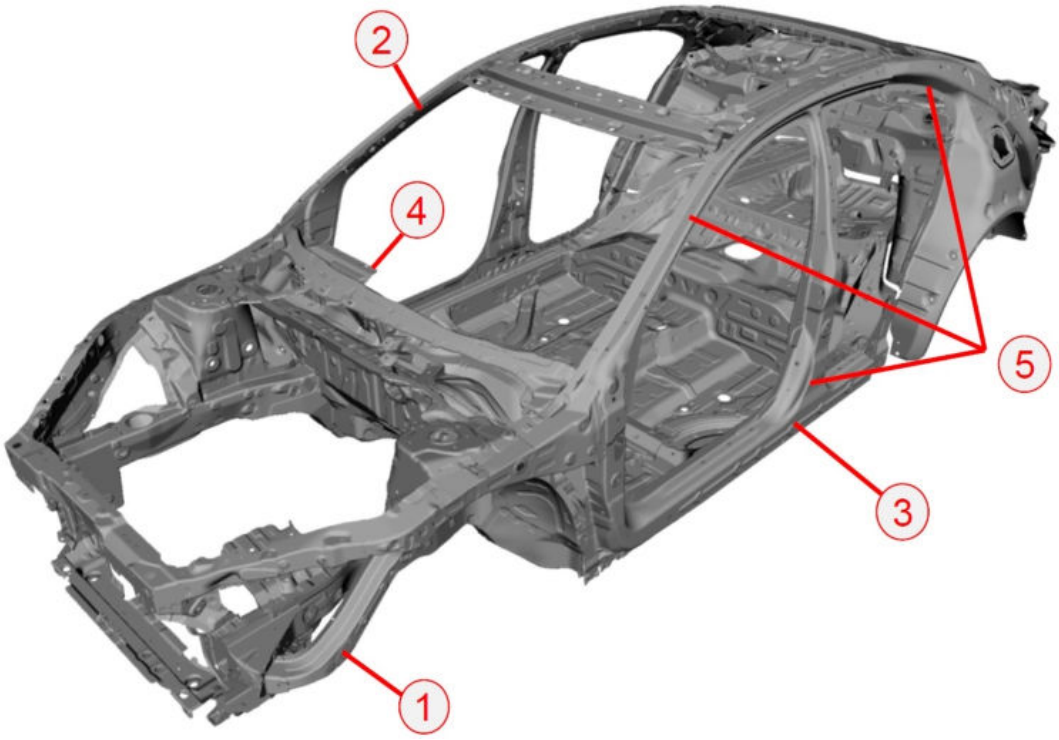
APPLIES TO

2015 TLX 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.acura.com*.

OVERVIEW OF BODY FEATURES

- Next-Generation Advanced Compatibility Engineering™ (ACE™) body structure.

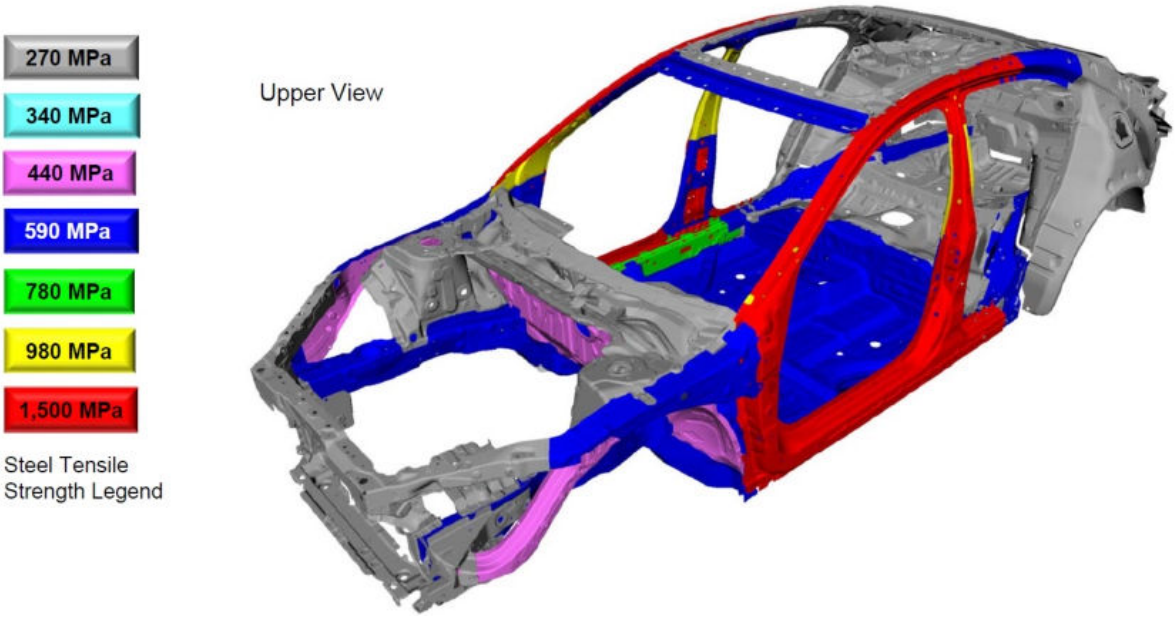


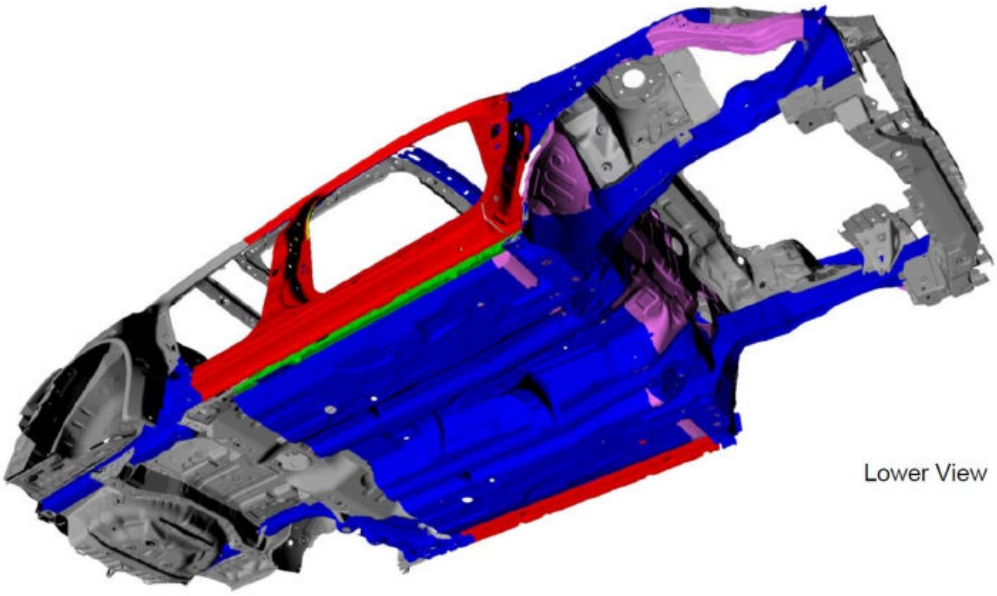
1. Next-Generation Advanced Compatibility Engineering™ (ACE™) body structure.
2. Body construction using 56% high tensile strength steel, including 10% in grades 780, 980, and 1,500 MPa.
3. Reinforced cabin with 1,500 MPa one-piece front door outer stiffener rings.
4. Rigid magnesium steering hanger beam mounts steering column and dashboard components.
5. First Acura use of NVH acoustic spray foam, replacing baked-in acoustic separators.

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.





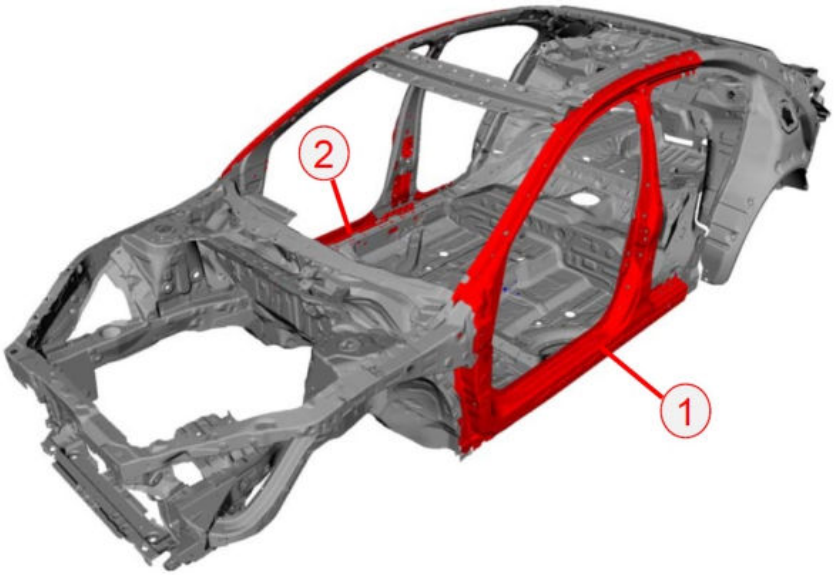
NOTE

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.

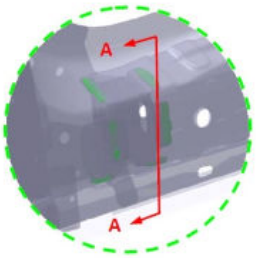
1. Outer Stiffener Ring* (includes):
    - Side Sill Center Stiffener**
    - Center Pillar Lower Reinforcement**
    - Center Pillar Reinforcement**
2. Inside Sill Reinforcement*



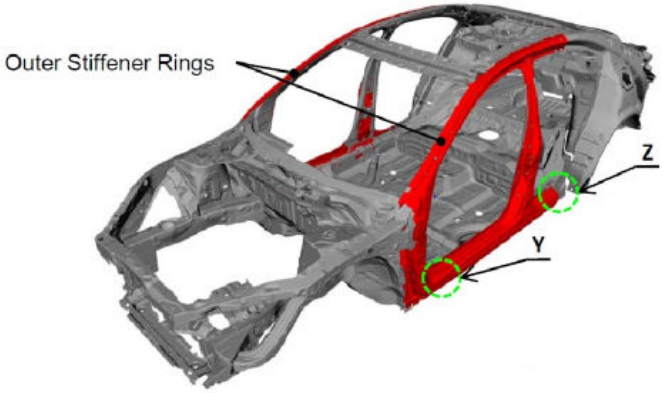
* Constructed from 1,500 MPa steel.
** Can only be serviced as part of the complete outer stiffener ring assembly (1).

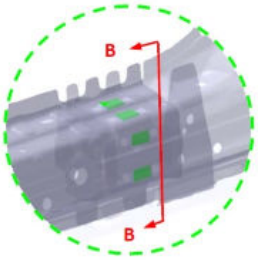
STRUCTURAL ADHESIVE LOCATIONS AND REPAIR

Structural adhesive (foam) is used to improve body stiffness under the outer stiffener ring as shown below.

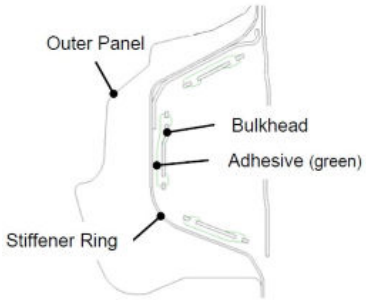


DETAIL Y:
Between outer stiffener ring & bulkhead of front pillar complete

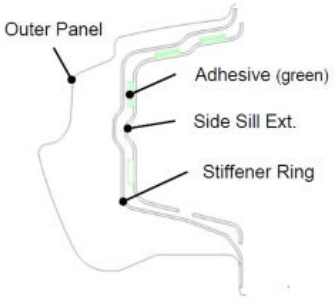




DETAIL Z:
Between outer stiffener ring & side sill reinforcement rear extension



SECTION A-A



SECTION B-B

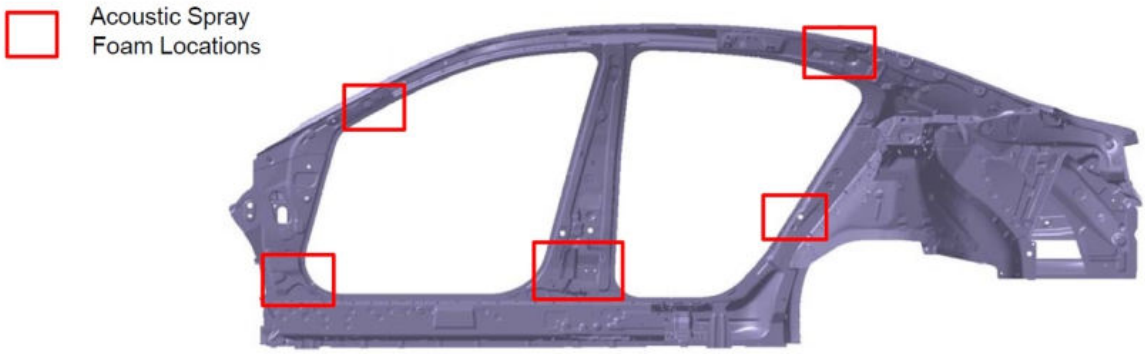
NOTE

When replacing the outer stiffener ring, a special room-temperature cured 2-part epoxy structural adhesive (L&L Products L-0504, 3M 7333 Impact Resistant Structural Adhesive or equivalent) is required to replicate these joints.

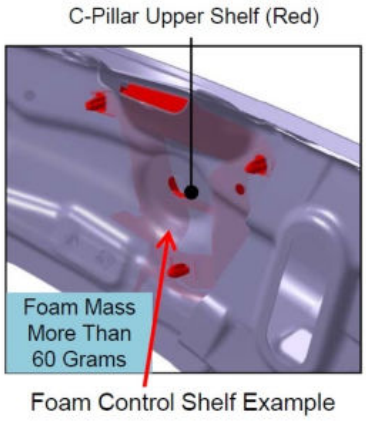
ACOUSTIC SPRAY FOAM

To improve body sealing and reduce NVH, acoustic spray foam is applied. This replaces the traditional baked-in acoustic separators. The foam is factory applied after paint and quickly cures at room temperature.

- Service procedure is the same as factory application. Refer to the Replacement section of the body repair manual.
- If foam replacement is required during body repairs, use a commercially available 2-part polyurethane foam, such as 3M AUTO MIX Flexible Foam 8463, or equivalent.
- Foam is applied through designated holes in the vehicle body structure.



- Plastic foam control shelves installed inside body cavities control foam travel during application.



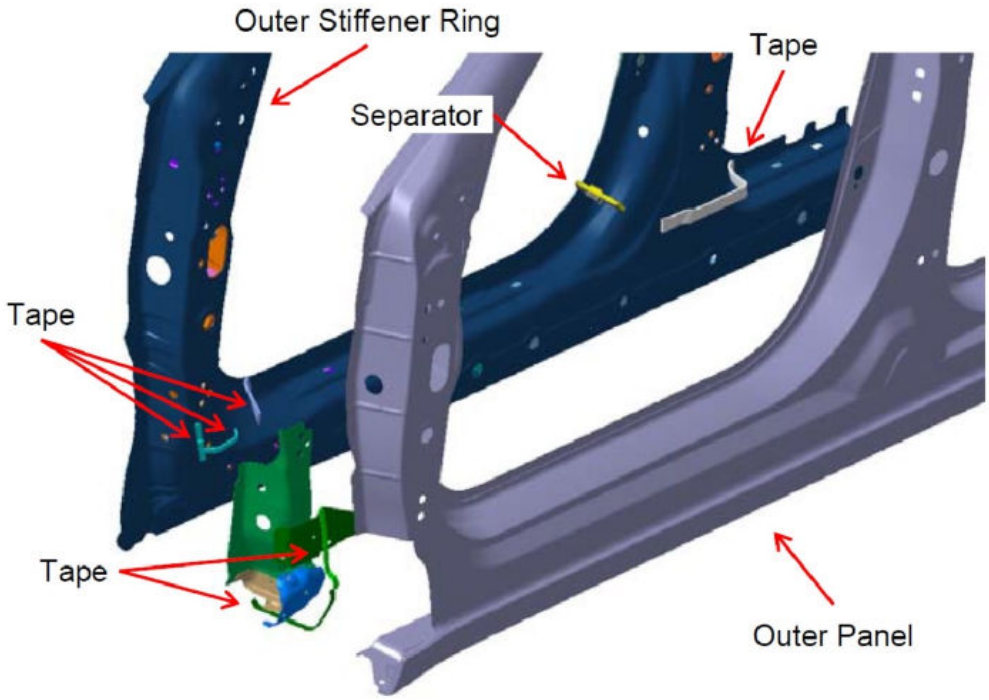
Foam Control Shelf Example

- Replacement shelves are part of the steel parts COMP, or available as separate service parts, depending on location.
- The minimum foam application amount for each location is provided in grams. To determine applied mass, weigh foam containers on a metric scale before and after application. The difference is the amount of foam applied.

NVH SEALER TAPE AND SEPARATORS

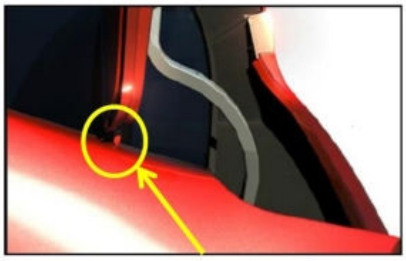
To reduce NVH in areas where acoustic foam is not feasible, NVH sealer tape and separators are applied in certain locations between the outer body panel and outer stiffener ring as shown in the diagram below.

- The factory applied tape expands during the E-coat bake process.
- If sealer tape and/or separator replacement is required during body repairs, use a commercially available urethane body sealer.
- A specialized NVH damping material, such as 3M #04274, or equivalent, may also be used, if available.



TRUNK HINGE CUSHION AND STOPPER

To prevent over-stroke damage to the trunk lid and outer panel, cushions are applied to both trunk hinge arms.

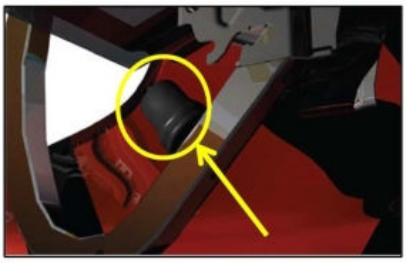


Possible Over-Stroke Contact Area

- In the event a trunk hinge needs to be removed or replaced, always make sure that either the hinge cushion or hinge stopper are installed before allowing the trunk to open.
- Failure to do so will result in damage to the trunk lid and outer panel.
- Service replacement trunk hinges come with a stopper installed to prevent damage during installation.

Service Hinge w/Stopper

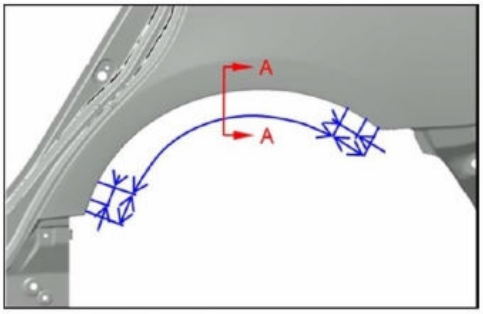
- Be sure to install the cushion on the new trunk hinge arm after replacement.



Trunk Hinge Cushion

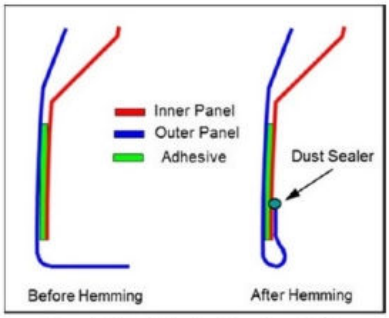
REAR WHEEL ARCH HEM JOINT

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™ use a millimeter wave radar unit.

- This unit senses through the front grille upper molding.
- To prevent radar interference, a special black coating is used on the back side of the molding.
- Installing the wrong front grille molding will cause the CMBS indicator to come on and DTC P2583-97 (dust or dirt on the millimeter wave radar) to set.
- To check for this without removing the bumper, remove the front bulkhead cover and look down at the back side of the front grille upper molding.
- If the back side of the grille molding has a metallic finish, the wrong grille upper molding was installed.

Back Side View of Grille Molding (w/CMBS)

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