

June 2021

15235-17289 Version 2

# 2021 TLX Model Series: New Body Repair Information

Supersedes Version 1, dated September 2020, to revise the information in yellow.

## **AFFECTED VEHICLES**

2021 TLX Model Series

**DISCLAIMER:** This publication contains a summary of new 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*.

#### **REVISION SUMMARY**

Under REAR WHEEL ARCH FLANGE, information was updated.

## **OVERVIEW OF THE BODY FEATURES**

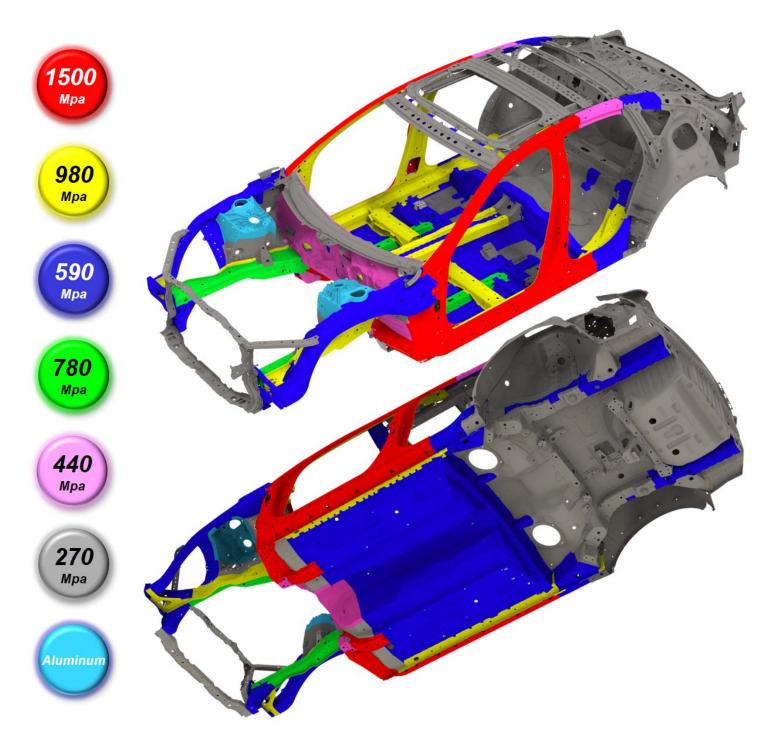




- Next-Generation Advanced Compatibility Engineering<sup>™</sup> (ACE<sup>™</sup>) body structure
- Body construction using high-strength steel and advanced high-strength steel
- Aluminum hood panel, front fender, front damper housing, and front and rear bumper beams for weight reduction and improved fuel efficiency
- Inner and outer door stiffener rings

## BODY CONSTRUCTION AND HIGH-STRENGTH STEEL CONTENT

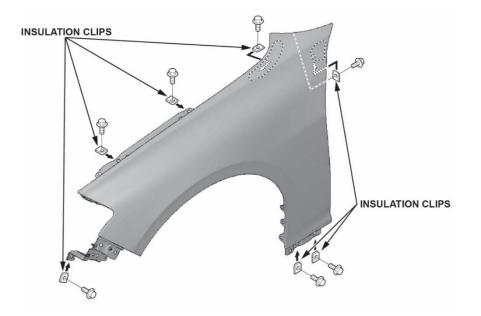
- Steel parts are color coded based on their tensile strength in megapascals (MPa).
- High-strength steel (HSS) is defined as any steel with a tensile strength of 340 MPa or higher.
- Ultra-high-strength steel (UHSS) is defined as any steel with a tensile strength of **980 MPa** or higher.
- Steel repair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

#### FRONT FENDER INSTALLATION

Insulation clips are installed at every mounting point of the front fender to prevent galvanic corrosion. Make sure they are installed when installing the front fender.

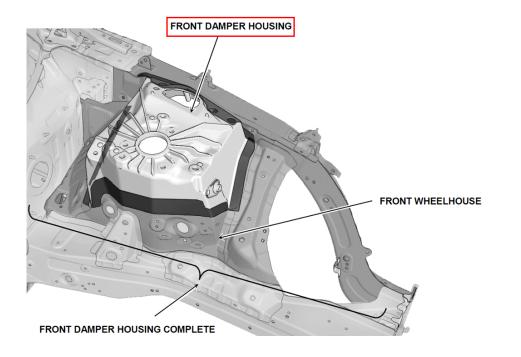


## ALUMINUM DIE CAST FRONT DAMPER HOUSING

The TLX employs an aluminum die cast front damper housing, which can only be replaced as an assembly. The mating surface between the front damper housing and the steel front wheelhouse are coated with high-performance adhesive (HPA) and fastened with self-piercing rivets (SPRs). The SPR will be preset in the replacement damper housing. Dye penetrant should be used for inspection after replacement on vehicles involved in significant front end collisions.

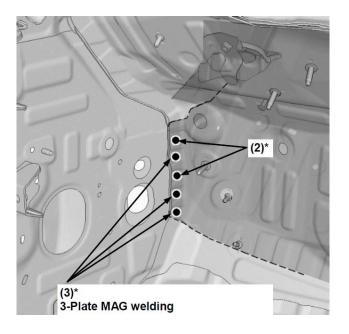
Refer to the following sections of the BRM for additional information:

- Precautions for Replacing Aluminum Die Cast Parts
- Front Side Frame, Front End Parts Replacement
- Front Wheelhouse/Damper Housing Replacement
- Front Side Frame Replacement



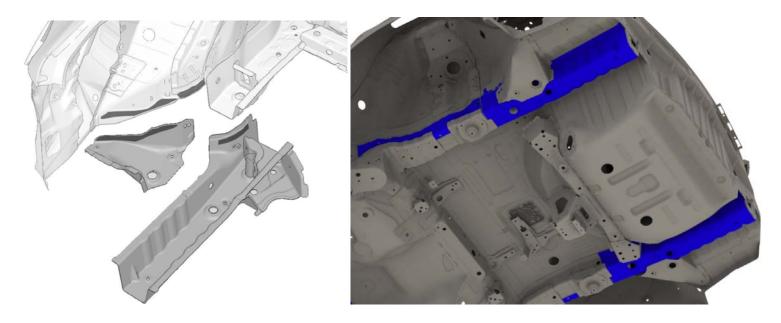
## **NEW WELDING TECHNIQUE**

A new welding technique is being introduced on the TLX called 3-Plate MAG Welding or Weld Two by Two. This technique has you plug weld the first two plates, grind the weld smooth, then plug weld the third plate in the same location.



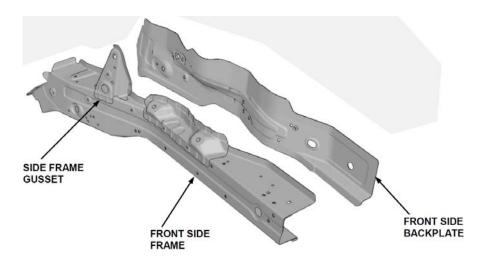
## **590 MPA REAR FRAME RAIL**

The rear section (rear frame C) of the rear frame rails are now comprised of **590 Mpa** and **270 Mpa** and can be replaced separately. Refer to the rear frame replacement for more information.



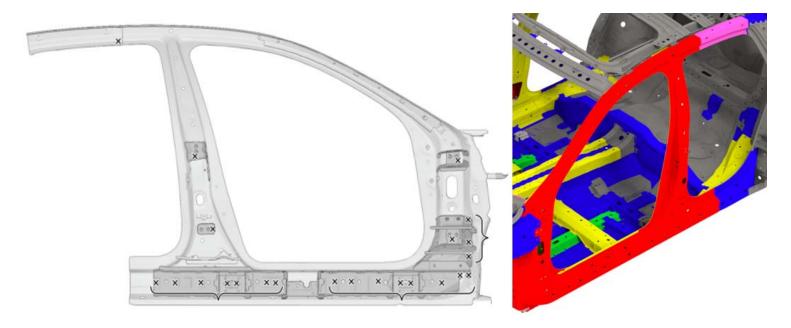
## 780 AND 980 MPA FRONT RAILS

No repairs are allowed and replacements are required. Refer to the front side frame replacement procedure for more information.



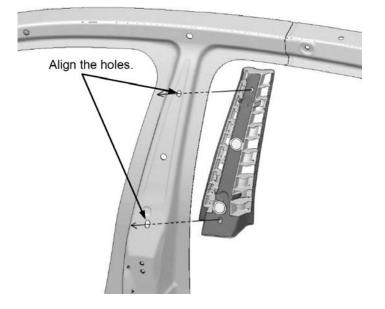
## 1500 MPA OUTER STIFFENER RING (D-RING)

No repairs are allowed and complete replacement is required. Installation requires prewelding in some positions before installation. Refer to the outer stiffener ring replacement procedure for more information.



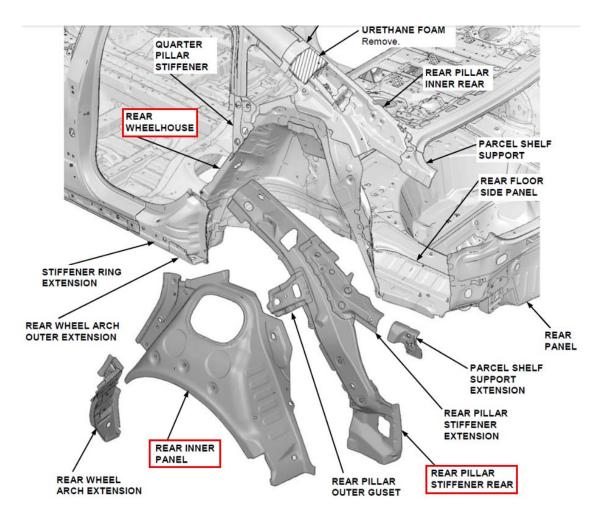
#### **CENTER PILLAR UPPER REINFORCEMENT**

The center pillar upper reinforcement is a separate component and must be installed after replacement of the outer stiffener ring. Refer to the outer stiffener ring replacement procedure for more information.



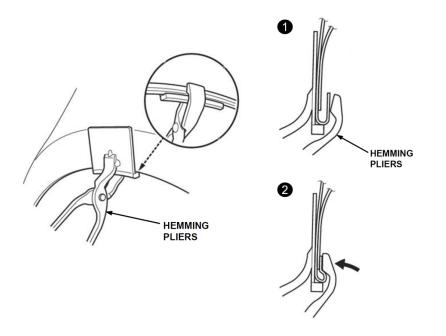
#### **REAR INNER PANEL REPLACEMENT**

Acura now offers the replacement of the rear inner panel, rear wheelhouse, and rear pillar stiffner. Refer to the rear inner panel replacement procedure for more information.



## **REAR WHEEL ARCH FLANGE**

During the replacement of the rear side outer panel, it will be necessary to hem the entire wheel arch using modified, commercially available tools, or Acura special tools. Refer to the outer panel rear side area replacement procedure for additional details including information on how to modify existing hemming pliers.



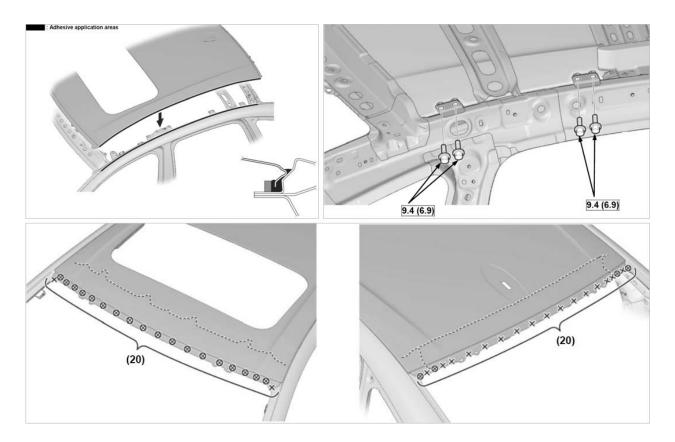
If needed, the Acura special service tool set below is available for purchase from your local Acura dealer.

| Tool Number   | Description       | Note            |
|---------------|-------------------|-----------------|
| 07AAC-TY2A100 | Hemming Plier Set | Three-Piece Set |



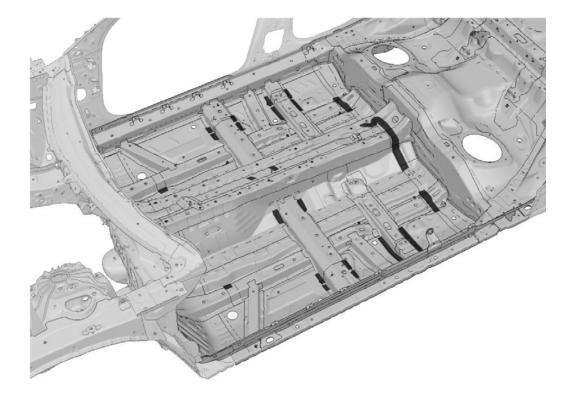
## LASER-BRAZED ROOF PANEL

Laser-brazed roof panels require a combination of welding and use of adhesives and mechanical fasteners for replacement. Refer to the roof panel replacement procedure for more details.



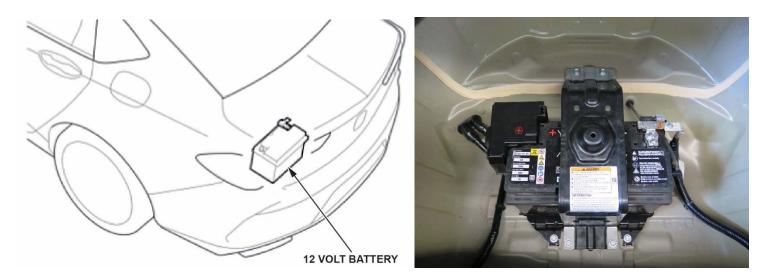
## **IMPACT-RESISTANT STRUCTURAL ADHESIVE**

Impact-resistant structural adhesive is extensively used throughout this vehicle. Acura recommends using 3M 7333 or a commercially available equivalent adhesive.



#### **NEW BATTERY LOCATION**

The TLX now has the 12-volt battery mounted in the trunk. Refer to the 12-volt battery area of the exploded view for the removal and installation procedure.



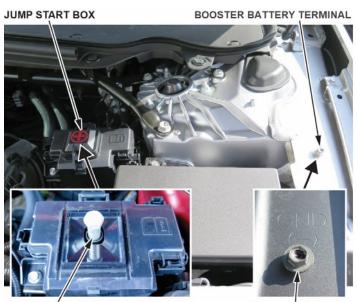
#### **BATTERY TESTING AND JUMP STARTING**

Although the battery location is now in the trunk, there some things to remember.

#### Jump Starting

To jump start the vehicle, open the cover of the jump start box and connect the positive jumper cable to the jump start box terminal and the negative cable to the booster battery terminal.

NOTE: You cannot jump start another vehicle with these terminals.



POSITIVE TERMINAL

NEGATIVE TERMINAL

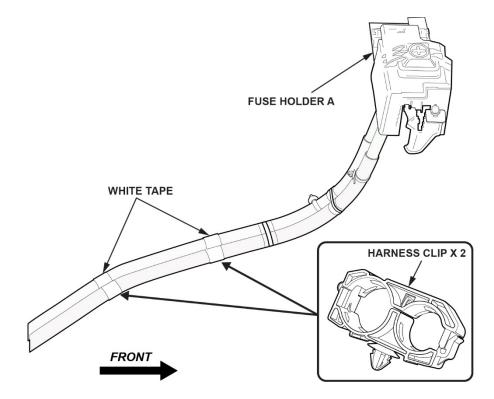
## **Battery Testing**

Although the vehicle is equipped with a positive terminal access in the engine compartment, it must never be used to test the battery. Always test the battery at its location in the trunk.

#### **INSTALLING A NEW BATTERY CABLE**

Due to tight clearances between the firewall and suspension where the battery cable is routed, the two harness clips supplied with the replacement battery cable (P/N 32412-TGV-305) need to be installed after the harness is installed.

Install the harness first, attach the two harness clips over each white tape band as shown, then attached the clips to the body.



FUSE HOLDER A



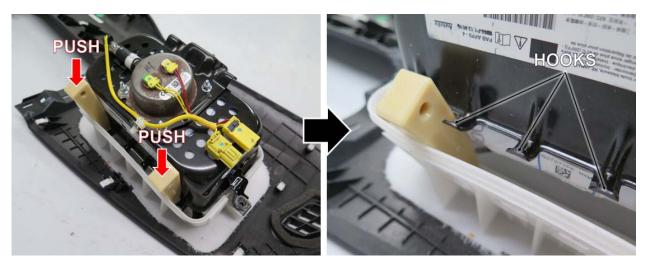
## REMOVING THE PASSENGER'S FRONTAL AIRBAG

To ease the removal of the passenger frontal airbag assembly, use the Airbag Cover Remover (07AAF-TGVA100). For instructions on how to use the tool, refer to service bulletin 20-036, *Passenger's Frontal Airbag Removal*.

| Tool Name            | Tool Number   |
|----------------------|---------------|
| Airbag Cover Remover | 07AAF-TGVA100 |

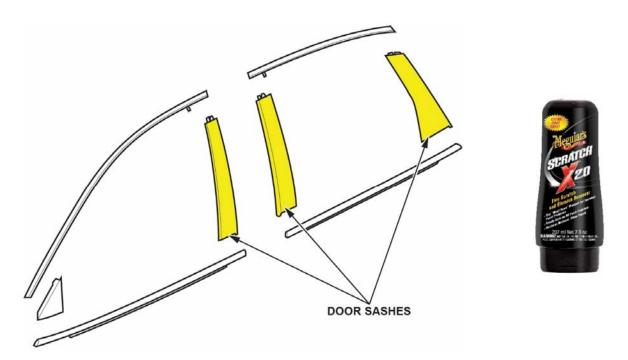
Contact your local Acura dealer to order.





#### DOOR SASH OUTER TRIM

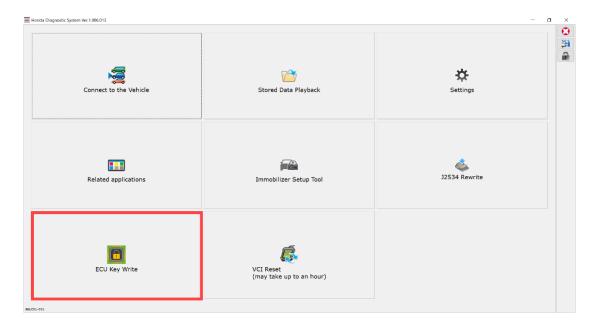
Door sash outer trims come with a high-gloss, mirror finish that can scratch easily. To help hide any scratches, Acura recommends using Meguiar's Scratch X2.0 Fine Scratch and Blemish Remover.



#### ECU KEY WRITE

Beginning with the 2021 TLX, a security key code protocol is being introduced for certain electronic control units (ECUs). This protocol provides secured communication between control units, helping to prevent cyberattacks from outside sources.

When replacing control units like the VSA modulator-control unit, you will need to access the **ECU Key Write** application in the i-HDS. For more information, refer to the job aid, *Using the ECU Key Write Application in the i-HDS*.



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