

Body Repair News

December 2022 Version 1

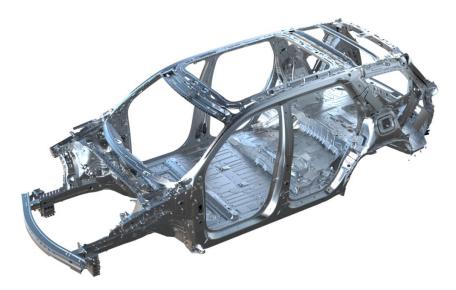
2023 Pilot Model Series: New Body Repair Information

APPLIES TO

2023 Pilot Model Series

NOTE: 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 <u>techinfo.honda.com</u>.

OVERVIEW OF BODY FEATURES



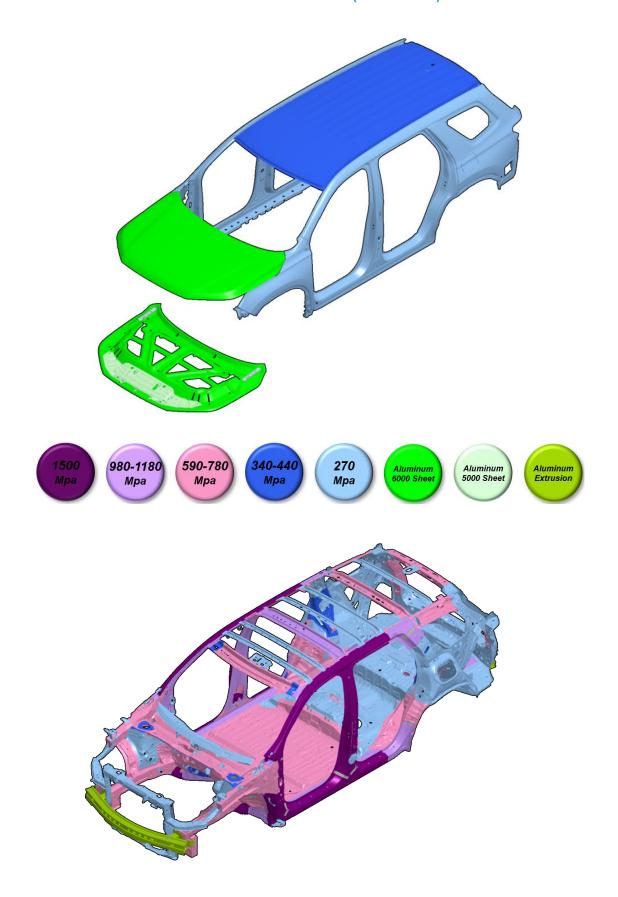
- Next-Generation Advanced Compatibility Engineering[™] (ACE[™]) body structure.
- Body construction using high-strength steel (HSS) and advanced high-strength steel.
- Improved rear suspension load path, including 30% rear lateral rigidity, 30% rear damper torsion, and 20% rear bending.
- Front structure optimized with a rigid subframe, including 60% front lateral rigidity.

BODY CONSTRUCTION AND HIGH STRENGTH STEEL CONTENT

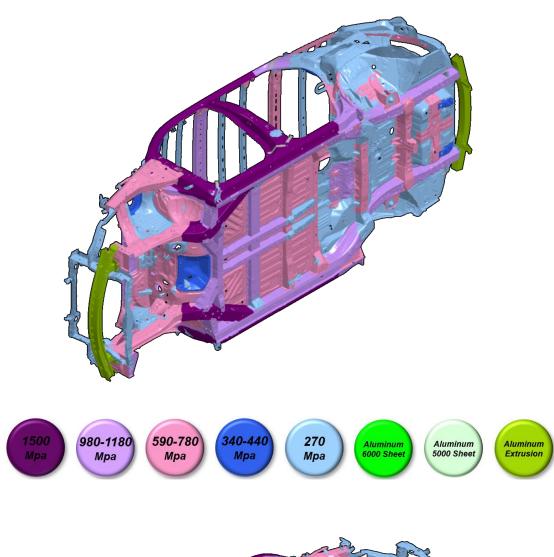
- High-strength steel (HSS) is defined as any steel with a tensile strength of 340-440 MPa.
- Advanced-high-strength steel (AHSS) is defined as any steel with a tensile strength of 590-780 MPa.
- Ultra-high-strength steel (UHSS) is defined as any steel with a tensile strength of 980 MPa or higher.
- Steel repair and welding procedures vary depending on the tensile strength of the parts involved.
- Steel parts are color-coded based on their tensile strength in megapascals (MPa).

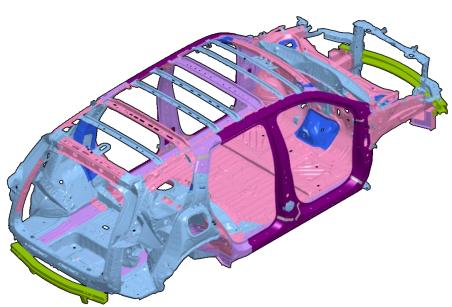
NOTE: Some body parts are constructed from multiple layers of different tensile strength steels. Always refer to the body construction section of the BRM for specific steel tensile strength information.

BODY CONSTRUCTION AND HIGH STRENGTH STEEL CONTENT (CONTINUED)



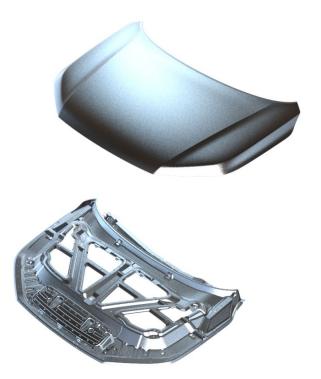
BODY CONSTRUCTION AND HIGH STRENGTH STEEL CONTENT (CONTINUED)





ALUMINUM PARTS & REPAIRABILITY

The hood of the 2023 Pilot model uses aluminum alloy construction. Minor damage to the aluminum hood may be repaired by body shops that have dedicated aluminum repair facilities and tools.



FRONT BULKHEAD

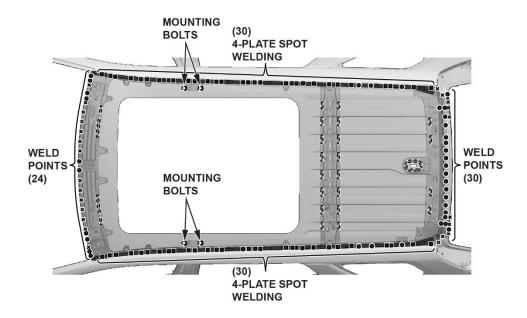
This vehicle has a front bulkhead assembly constructed of steel with a tensile strength of 270 MPa.

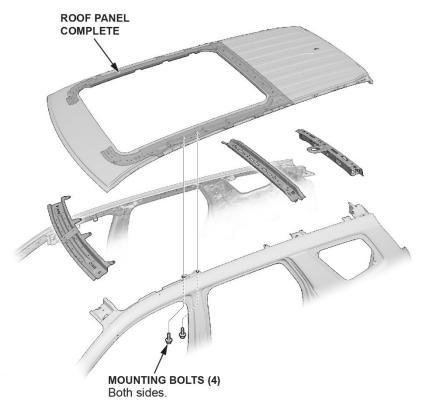


- The bulkhead design improves engine compartment access during factory assembly and service.
- The cooling fans, radiator, A/C condenser, hood lock, outside air temperature sensor, and related piping/components are attached to the front bulkhead.
- A damaged bulkhead must be replaced.
- For more details, refer to front bulkhead replacement in the body repair manual.

LASER-BRAZED ROOF PANEL

Laser brazed roof panels require a combination of welding, and the use of adhesives and mechanical fasteners for replacement. Refer to the Roof Panel Replacement procedure for more details.





NEW DRIVING SUPPORT SYSTEM

Multipurpose Camera Aiming

The 2023 PILOT model series is equipped with a multipurpose camera unit and millimeter wave radar. The multipurpose camera allows both dynamic and static aiming. Technicians now have the option to do either type of aiming depending on what their repair facility allows, or weather and traffic conditions.



Refer to the following procedures for more details:

- Multipurpose Camera Aiming [Static Aiming]
- Multipurpose Camera Aiming [Dynamic Aiming]

Blind Spot Information (BSI) Aiming

The 2023 PILOT model series is also equipped with new style blind spot information (BSI) radar units. Unlike other models, the PILOT does not require the conventional BSI Radar Unit Aiming Inspection procedure. The system is now capable of self-learning while the vehicle is driven at more than **19 mph (30km/h)**. However, it is important that the BSI learning status is reset using the i-HDS whenever the following is done:

- After removing and reinstalling one or both of the BSI radar units.
- After repairing the rear panel where the BSI radar unit mounts.
- When any of the following DTCs are stored:
 - B18B8 Left Side BSI Radar Unit Azimuth Off Alignment
 - B1E68 Right Side BSI Radar Unit Azimuth Off Alignment
 - B18BF Left Side BSI Radar Unit Temporary Azimuth Off Alignment
 - B1E6F Right Side BSI Radar Unit Temporary Azimuth Off Alignment

Refer to the following for more information:

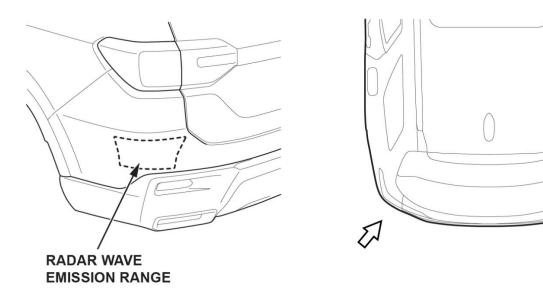
- Blind Spot Information (BSI) System Learning Value Reset
- Blind Spot Information (BSI) System Description

NOTE: When the status is reset, the system is limited to 9.8 ft. (3m) of detection until the self-learning is complete.

Blind spot Information (BSI) Rear Bumper Repair Templates

The 2023 PILOT model series Blind Sport Information radar units behind the rear bumper extend the detection range of previous systems but require extra consideration when repairing the rear bumper.

The radar waves passing through the rear bumper are more affected by the type and location of the repair. Cracks or dents within the radar wave emission range cannot be repaired and will require bumper replacement. Scratches inside or extending into the radar wave emission range will require the whole area to be painted and polished.



To assist technicians in determining where the radar wave emission area is, a printable template is provided in the body repair manual. This template can be taped onto the bumper and will help determine if the bumper can be repaired or will require replacement.

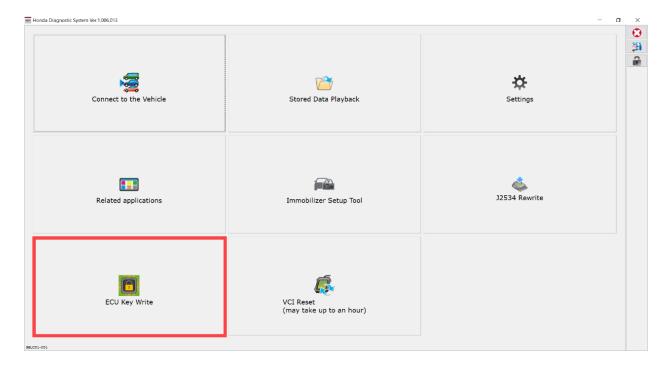
Refer to the following for a printable template and more details:

- Template for Non-Repairable Zone on Bumper Cover [Blind Spot Information System]
- Precautions for Handling Bumpers [Blind Spot Information System]

ECU KEY WRITE

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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